City of Salinas

200 Lincoln Ave., Salinas, CA 93901
www.cityofsalinas.org

Meeting Agenda - Final

Tuesday, September 6, 2022

4:00 PM

SALINAS ROTUNDA

City Council

Mayor Kimbley Craig
Councilmembers:
Carla Viviana González, District 1 - Tony Barrera, District 2
Steve McShane, District 3 - Orlando Osornio, District 4
Christie Cromeenes, District 5 - Anthony Rocha, District 6

Steven S. Carrigan, City Manager
Christopher A. Callihan, City Attorney
City Clerk's Office: (831) 758-7381

PUBLIC NOTICE

This meeting is being conducted consistent with State of California Executive Order N-29-20 dated March 17, 2020, regarding the COVID-19 pandemic. The public may view the meeting on television and/or online and may participate in-person in the Council Chamber.

PLEDGE OF ALLEGIANCE

ROLL CALL

PROCLAMATION

National Library Card Sign-up Month, September 2022
National Recovery Month, September 2022
National Stormwater Awareness Week

PUBLIC COMMENT PROCEDURES

If you wish to make a general public comment or comment on a specific agenda item, you are encouraged to attended the City Council meeting in person. Public comment may also be submitted via email at PublicComment@ci.salinas.ca.us and will be entered into the record.

PUBLIC COMMENT TIME RESTRICTIONS

Public comments generally are limited to two minutes per speaker; the Mayor may further limit the time for public comments depending on the agenda schedule.

GENERAL PUBLIC COMMENTS

Receive public communications on items that are not on the agenda and that are in the City of Salinas' subject matter jurisdiction. Comments on Consent, Consideration, and Closed session items should be held until the items are reached. The public may request that the legislative body consider adding an item for consideration on a future agenda. The public may comment on scheduled agenda items, including closed session items, as they are considered.

PRESENTATION

Councilmember comments on presentations are generally limited to three minutes.

Salinas Regional Sports Authority, Salinas Regional Soccer Complex Project Update

ADMINISTRATIVE REPORTS

ID#22-488 **Mobile Crisis Services**

Recommendation: No action. Receive report from Melanie Rhodes and Kathryn Eckert of Monterey County Behavioral Health.

CONSENT AGENDA

All matters listed under Consent Agenda may be enacted by one motion unless a member of the Council or the public requests discussion or a separate vote.

ID#22-487 **Minutes**

Recommendation: Approve minutes of August 23, 2022.

ID#22-496 **Financial Claims**

Recommendation: Approve financial claims report.

ID#22-433 **Bardin Road Safe Routes to School Improvements Project, CIP 9218**

Recommendation: Approve a Resolution approving Contract Change Order No. 17 to the Don Chapin Company Inc. for the Bardin Road SRTS Project ATPL-5045(031) and authorize the City Manager to execute all necessary documents related to Change Order No. 17.

ID#22-443 **Traffic Signal Encroachment Permit Projects Acceptance**

Recommendation: Approve a Resolution accepting four traffic signal improvement projects delivered through encroachment permits for maintenance and responsibility.

ID#22-453 **Front Street/Sherwood Drive Adaptive Traffic Control System, CIP 9431**

Recommendation: Approve a Resolution approving the plans and specifications for the Front Street/Sherwood Drive Adaptive Traffic Control System Project, CIP 9431; awarding a contract to Bear Electrical Solutions, Inc. for in the amount of $585,870.00; and authorizing the direct purchase of traffic signal equipment in the amount of $219,572.22.

ID#22-460 **2022-2023 Prioritization of Restriping Projects**

Recommendation: Approve a Resolution approving the 2022-2023 Prioritization of Restriping Projects.

ID#22-462 **All Way Stop at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza**

Recommendation: Approve a Resolution approving the plan for an all way stop application at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza.

ID#22-463 **North Main Street Improvement Project, CIP 9278**

Recommendation: Approve a Resolution accepting the North Main Street Improvement Project, CIP 9278 for maintenance and responsibility.

ID#22-473 **65 W. Alisal Gutter Replacement**

Recommendation: Approve a Resolution authorizing an Agreement for Services with Scudder Roofing the replacement of the gutters on the building at 65 W. Alisal at a total cost of $30,560, with a 10% contingency for any price increase.

ID#22-483 **Cal Cities Voting Delegates**

Recommendation: Approve appointment of Mayor Kimbley Craig as the voting delegate and Councilmember Anthony Rocha as the alternate voting delegate for the annual Cal Cities' business meeting.

ID#22-492 **2nd reading, Ordinance Amendment to Article XVI of Chapter 20 (Vendor Ordinance)**

Recommendation: Adopt an Ordinance Amendment amending Article XVI of Chapter 20 of the Salinas Municipal Code updating the regulations governing food trucks, ice cream trucks, nonmotorized pushcarts and street vendors (Vendor Ordinance).

ID#22-493 **FY 22-23 Workforce Allocation Adjustment and Modification to the Classification - Salary Schedule**

Recommendation: Approve a Resolution adjusting the workforce allocation for the Community Development Department and authorize a modification to the Classification - Salary Schedule.

COUNCILMEMBERS' REPORTS, APPOINTMENTS AND FUTURE AGENDA ITEMS

Receive communication from Councilmembers on reports, appointments and future agenda items. Councilmember comments are generally limited to three minutes.

CLOSED SESSION

Receive public communications from the audience on Closed session items.
The City Council will recess to closed session pursuant to:

ID#22-495

a. **Pending Litigation** - California Government Code Section 54956.9(d)(1), conference with legal counsel regarding, Santa Rita Union High School District, et al. v. City of Salinas et al., Monterey County Superior Court Case No. 20CV000242.
b. **Pending Litigation** - California Government Code Section 54956.9(d)(1), conference with legal counsel regarding, Alisal Union School District, et al. v. City of Salinas, et al., Monterey County Superior Court Case No. 20CV00340.
c. **Real Property Negotiations** - California Government Code Section 54956.8, conference with real property negotiators City Manager Steven S. Carrigan, City Attorney Christopher A. Callihan, Community Development Director Megan Hunter, Assistant Community Development Director Lisa Brinton, and Dan Massolo (Massolo Brothers Company) to discuss the terms and sale of real property located at 1 Preston Street, Salinas, California, 93901, APN 003161008000.

ADJOURNMENT

Patricia M. Barajas, City Clerk

AGENDA MATERIAL / ADDENDUM

Any addendums will be posted within 72 hours of regular meetings or 24 hours of special meetings and in accordance with Californian Government Code Section 54954.2, unless otherwise allowed under the Brown Act. City Council agenda item reports may be viewed at the Salinas City Clerk's Office, 200 Lincoln Avenue, Salinas, and are posted on the City's website at www.cityofsalinas.org via the hyperlinks provided on the agenda. The City Council may take action that is different than the proposed action reflected on the

agenda.

Disability-related modification or accommodation, including auxiliary aids or services, may be requested by any person with a disability who requires a modification or accommodation in order to participate in the meeting. Requests should be referred to the City Clerk's Office At 200 Lincoln Avenue, Salinas, 758-7381, as soon as possible but by no later than 5 p.m. of the last business day prior to the meeting. Hearing impaired or TTY/TDD text telephone users may contact the city by dialing 711 for the California Relay Service (CRS) or by telephoning any other service providers' CRS telephone number.

PUBLIC NOTIFICATION

This agenda was posted on Wednesday, August 31, 2022 at the City Clerk's Office, in the Council Rotunda, and the City's website.

Meetings are streamed live at https://salinas.legistar.com/Calendar.aspx and televised live on Channel 25 at 4 p.m. on the date of the regularly scheduled meeting and will be broadcast throughout the day on the Wednesday, Friday, Saturday and Monday following the meeting. For the most up-to-the-minute Broadcast Schedule for The Salinas Channel on Comcast 25, please visit or subscribe to our Google Calendar located at http://tinyurl.com/salinas25. Recent City Council meetings may also be viewed on the Salinas Channel on YouTube at http://www.youtube.com/thesalinaschannel.

File #: ID#22-488, **Version:** 1

Mobile Crisis Services

No action. Receive report from Melanie Rhodes and Kathryn Eckert of Monterey County Behavioral Health.

Mobile Crisis Services

BEHAVIORAL HEALTH BUREAU

MONTEREY COUNTY HEALTH DEPARTMENT

Agenda

- Mobile Crisis Program Overview
- Seneca Children & Youth Mobile Response
- Data Review
- Best Practice Standards
- Challenges & Strategies

Mobile Crisis Operational Period

Staffing: 3.0 FTE PSW licensed / licensed eligible staff and 1.0 Sr. PSW (3 of 4 positions filled)

Location: Based out of Peninsula Region (Monterey PD), Salinas Region (BH outpatient clinic on Natividad campus), South County Region (Greenfield PD)

Hours of operation: Wednesday – Saturday 12:30 – 10:00pm and alternating Tuesdays

Mobile Crisis Program Goals

Provide	Provide	Collaborate	Increase
crisis intervention services and support to individuals and families in psychiatric distress throughout Monterey County.	LE partners and treatment providers with specialized assistance to respond safely and effectively to those in crisis.	with first responder partners and treatment providers to recognize the signs of psychiatric distress and safely de-escalate a mental health crisis.	timely access to available resources and link people to appropriate treatment and community supports as clinically indicated.

Types of Services Provided

- Assess for need for hospitalization (WIC 5150)
- Liaison with first responders & hospital for continuity of care
- Brief crisis intervention & de-escalation
- Referrals & linkage to community resources
- Stabilization in community & diversion from emergency resources
- Non-urgent outreach & follow-up in community
- Consultation & liaison support for LE, BH and community providers

MCBH & Natividad Hospital
Crisis Team Changes - Effective April 1, 2022

BEHAVIORAL HEALTH

- Community facing and responsive BH Crisis Team separate from the hospital & integrated with Mobile Crisis
- Public can reach the BH Crisis Team by calling our 24/7 Access number at **888-258-6029,** selecting the prompt for the Crisis Team
- Hospital Providers can call **888-258-6029** and select prompt 6 for BH support with discharge planning for new clients, Short Doyle authorizations for inpatient care, and collateral.
- There is also an Internal BH and LE only number

NATIVIDAD HOSPITAL

- For individuals who are in Natividad Hospital Emergency Department (ED) or Mental Health Unit (MHU)
- To reach the Natividad Crisis Team or Inpatient MHU, the public and other providers will need to call the hospital operator at **831-755-4111**
- Request to be connected to the hospital's Crisis Team for patients in the ED *or* transferred to the MHU for patients in the inpatient unit.

Mobile Response Team (MRT)

- Program went Live July 13, 2020
- English & Spanish Services provided

Services available for:

Children and Youth Ages 0-21 & their Families

Behavioral Health has contracted with Seneca to provide MRT Services in Monterey County

SENECA

FAMILY OF AGENCIES | UNCONDITIONAL CARE

Service Operations

- *In-Person* crisis support services:
  - **Monday - Friday** 8am-10pm
  - **Saturday - Sunday** 11am-9pm
  - 24 hour/7 day a week Phone support
  - Currently under development: 24/7 *In-Person* response

- The MRT teams include:
  - 2 **mental health clinicians**
  - 1 **family partner**
  - Families are engaged though a **strength-based & trauma informed approach** to assist in de-escalating and stabilizing the situations

What does the MRT do?

Provide crisis counseling and attempt to stabilize out-of-control situations

Assess the need for hospitalization

Work with youth and families to develop safety plans to limit current and future crises

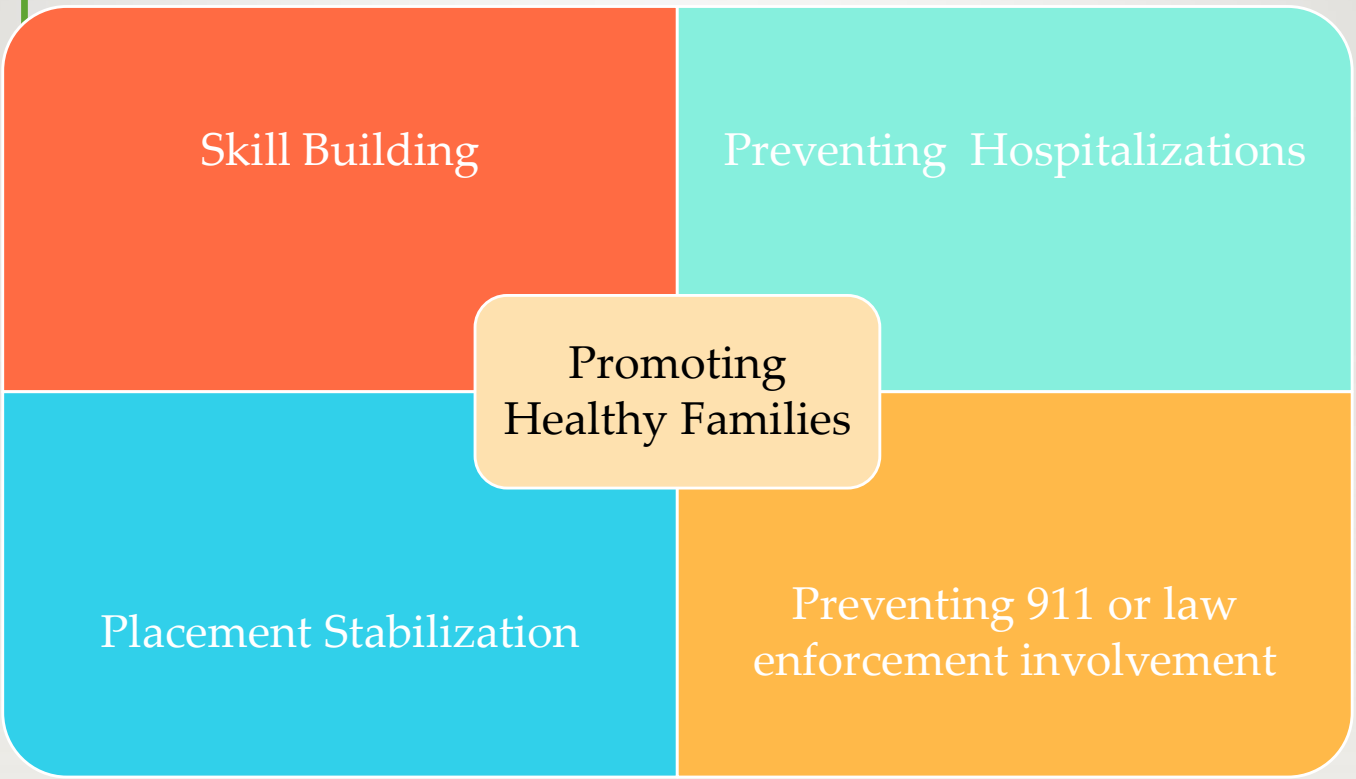
Work collaboratively with any existing services team members

Link the youth to further mental health services when appropriate

When do families call MRT?

- The youth is throwing objects at people and seems out of control.
- The youth is threatening to run away.
- The youth is a danger to themselves or others
- The youth is severely depressed and at risk of a psychiatric hold

Seneca MRT


Skill Building
Preventing Hospitalizations
Promoting Healthy Families
Placement Stabilization
Preventing 911 or law enforcement involvement

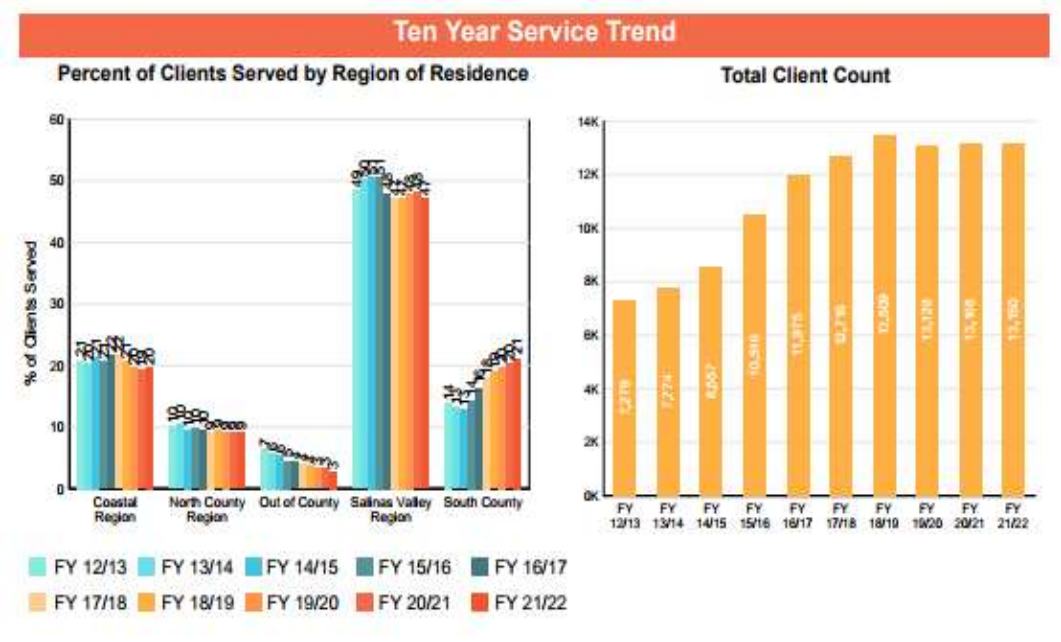
Contacting Seneca MRT

- 24-hour support line: 831-687-4379
- Service Providers with Non-Urgent referrals can email KinshipMRTreferrals@senecacenter.org
- Tina Lehman (805) 423-3219

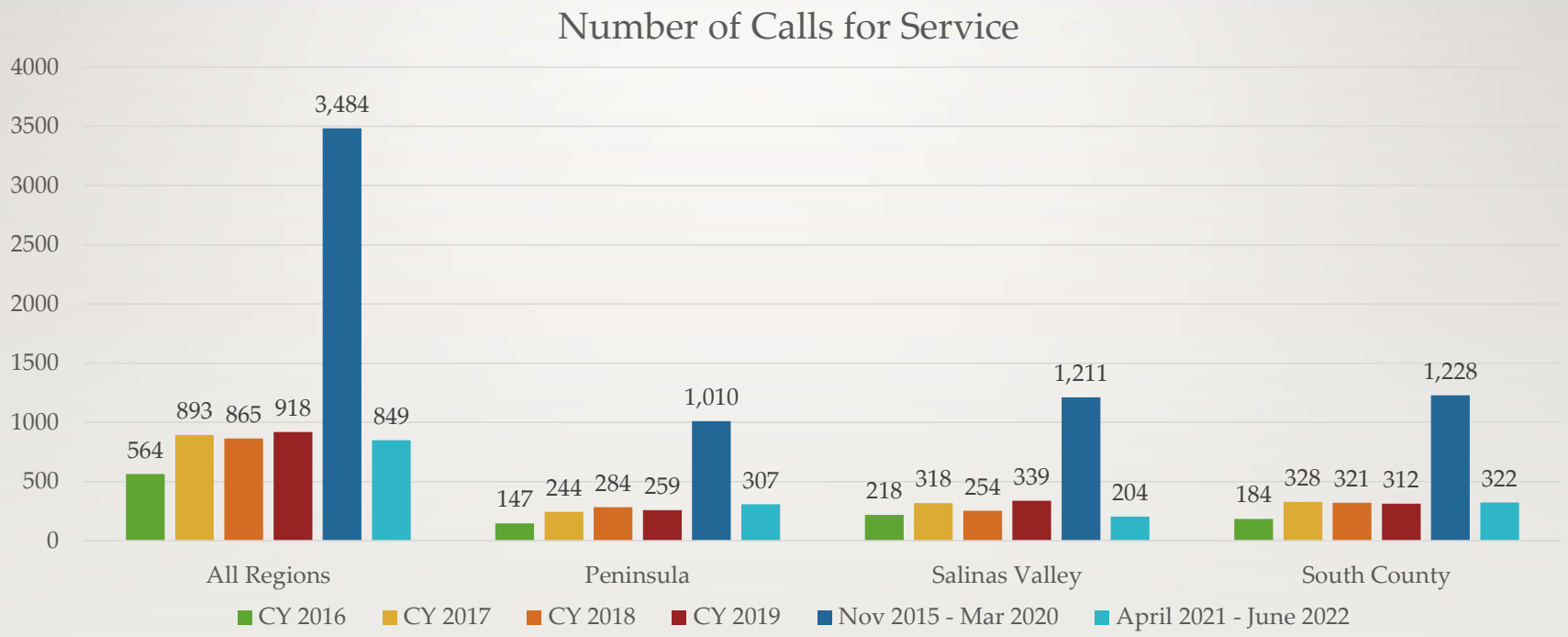
Data

Overall BH System of Care
Ten-year service trend

- In FY 21/221, our system of care served a total of 13,150 clients for a total service value of $102,851,037.80.
- The average service value per client was $7,821.37
- The average age was 30 years old.
- There were 4,389 new clients admitted to the system of care and 7,440 discharged

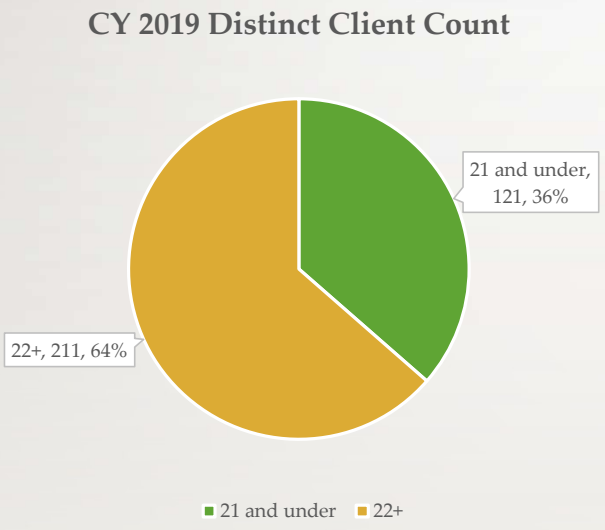


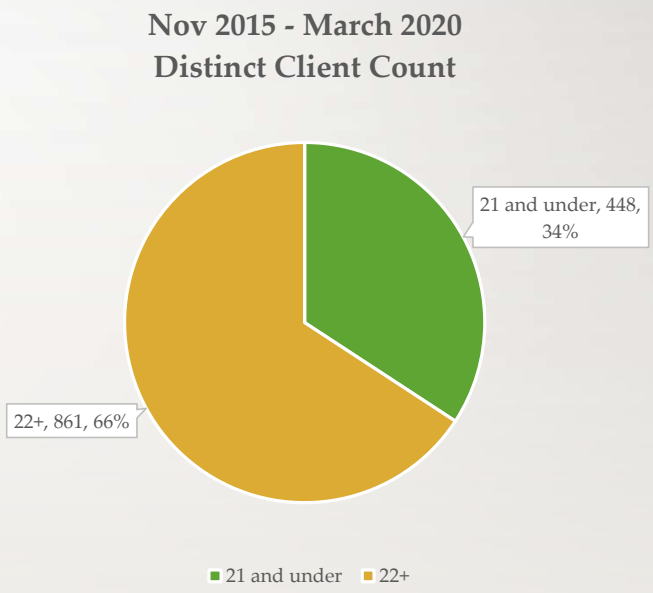
Mobile Crisis Team Program Utilization



Mobile Crisis Calls for Service

(Pre-Covid & before Seneca MRT)

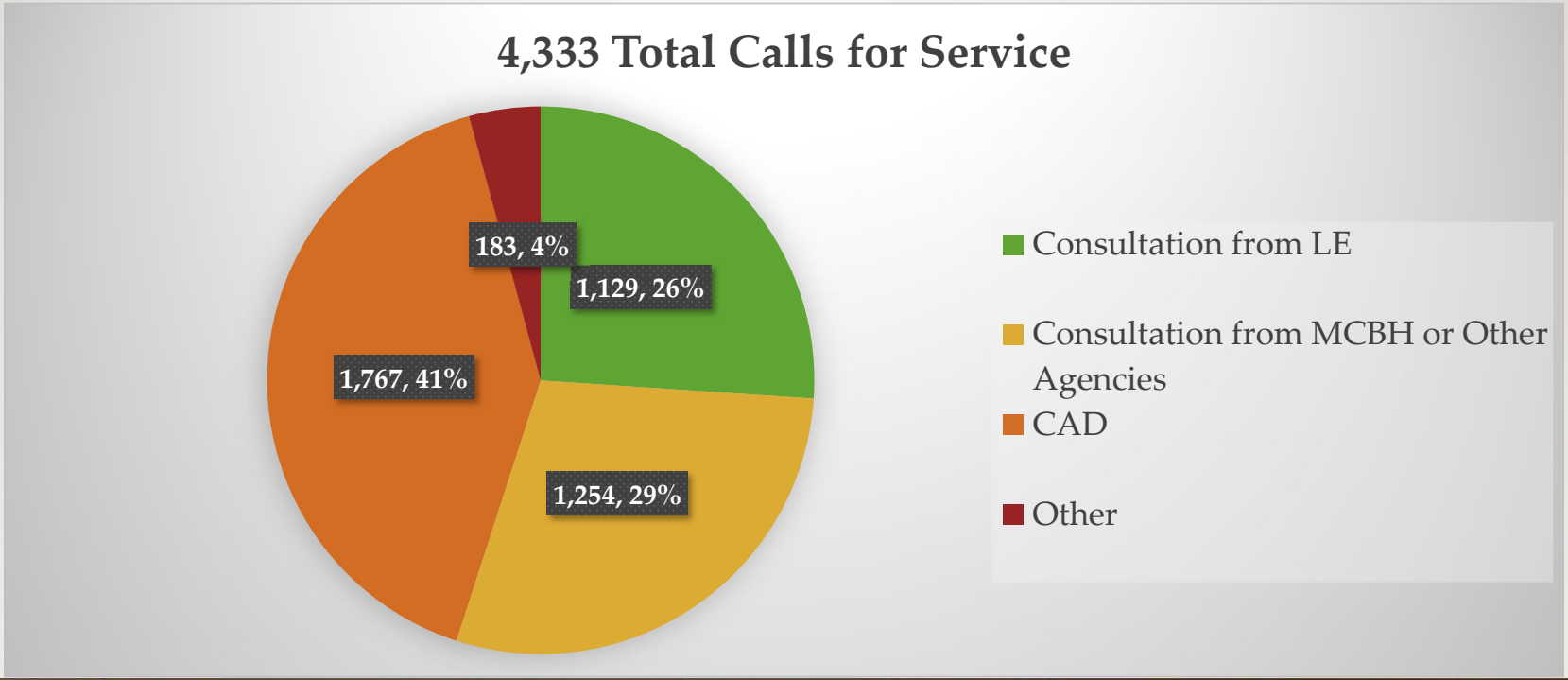




CY 2019 total calls = 918
Distinct client count = 332

Nov 2015 – March 2020 total calls = 3,484
Distinct client count = 1,309

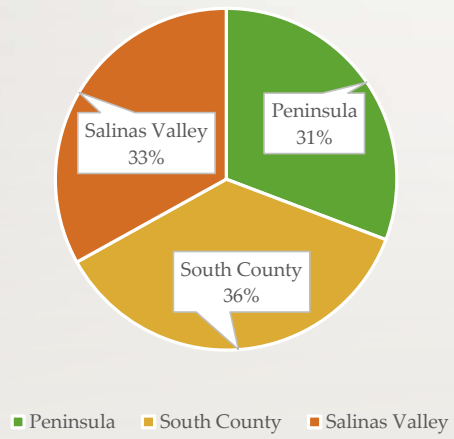
How Calls Are Initiated
All Regions Nov. 2015 – June 2022 (MCT not operational mid-March to April 2021)



Mobile Crisis Team

CALLS FOR SERVICE BY REGION

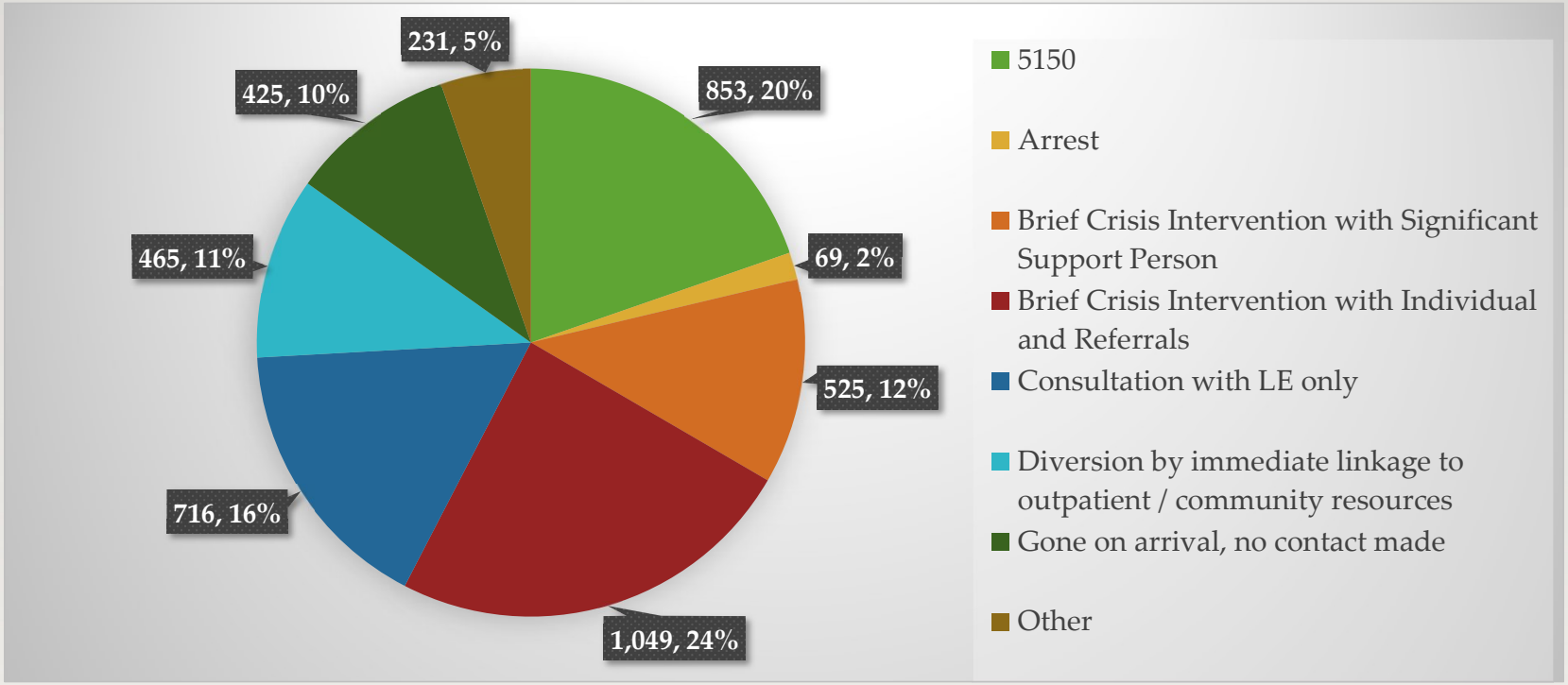
Nov 2015 – June 2022



REFERRALS BY AGENCY

Agency	# Referrals	% Of LE Referrals
Greenfield PD	779	17%
MCSO	624	14%
Salinas PD	486	11%
Monterey PD	357	8%
Marina PD	196	4%
Soledad PD	154	3%
Seaside PD	138	3%
King City PD	95	2%
Pacific Grove PD	82	1%
Gonzales PD	56	1%
Carmel PD	32	<1%
CSUMB PD	10	<1%
Other LE	9	<1%
Sand City PD	8	<1%
Del Rey Oaks PD	2	<1%

Mobile Crisis Overall Call Disposition / Outcome All Regions Nov. 2015 – June 2022 (MCT not operational mid-March to April 2021)

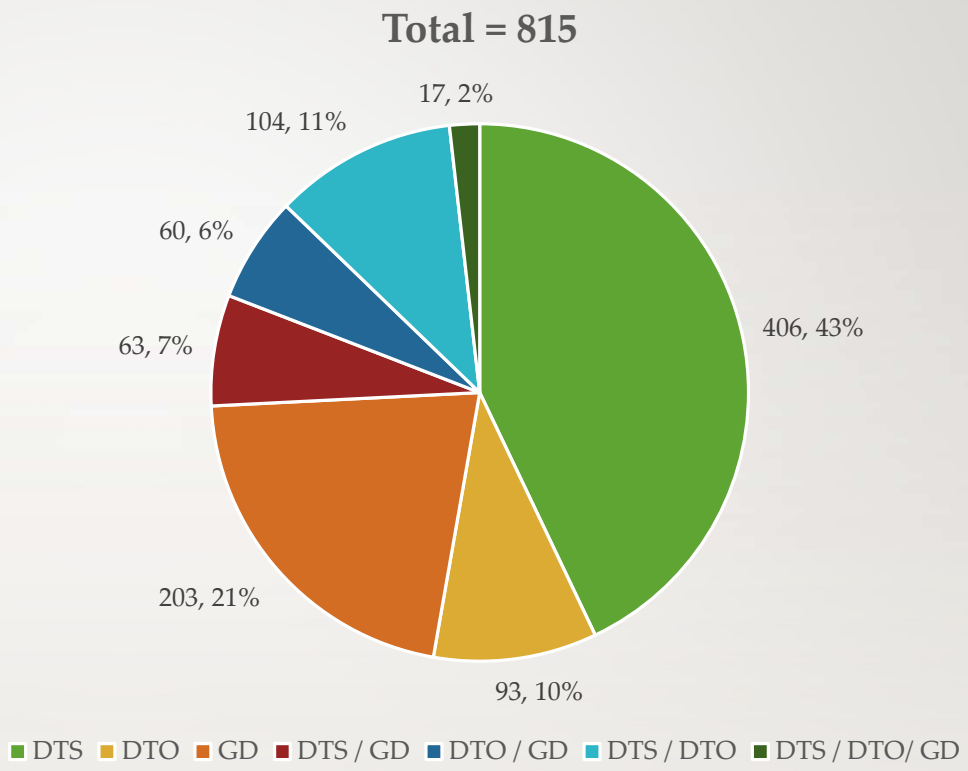


Mobile Crisis
WIC 5150 Reason
Nov. 2015 – June 2022

(MCT not operational mid-March to April 2021)

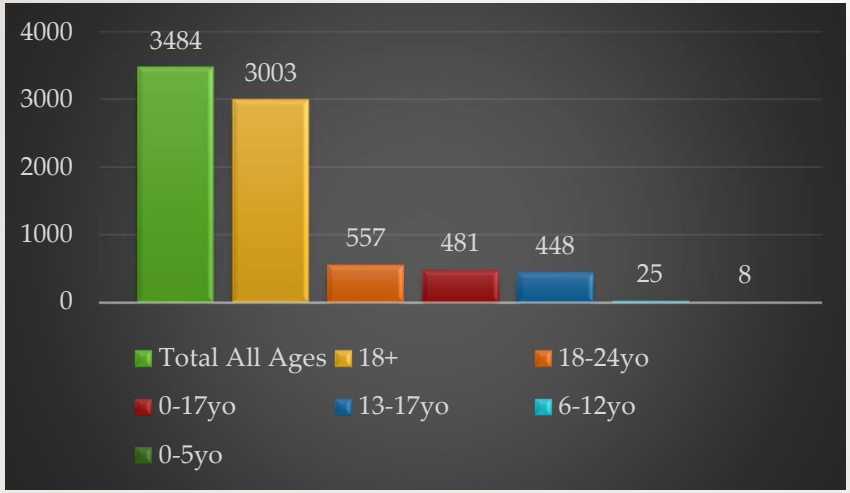
<u>Criteria by frequency</u>:

1. Danger to Self
2. Grave Disability
3. Danger to Self & Others
4. Danger to Others

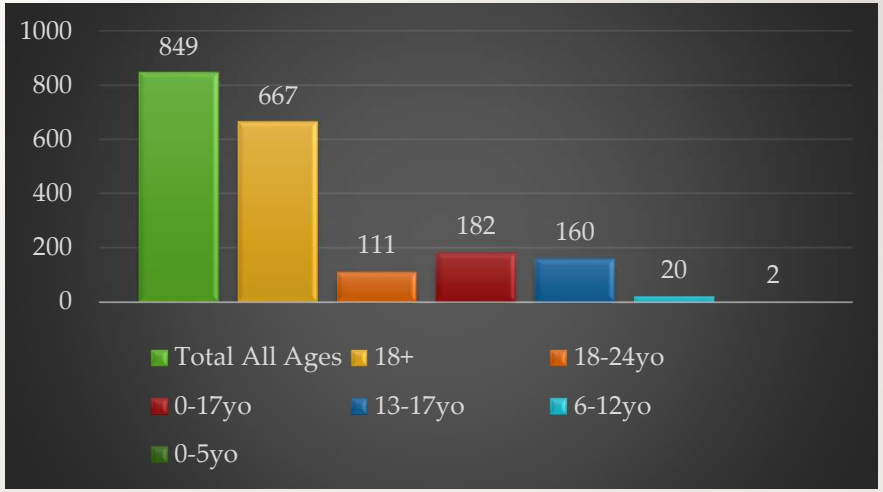


Calls for Service by Age

NOV. 2015 – MAR. 2020



APRIL 2021 – JUNE. 2022



Time Frame	Total Calls	# of Crisis Calls	*Situation Stabilized	Team Dispatched	5585/admitted to Hospital	5150/admitted to Hospital
July 2020 – June 2021	1,502	153	85	12	11	1
July 2021	142	23	15	6	0	0
August 2021	266	97	70	4	0	2
September 2021	257	53	27	3	5	1
October 2021	274	31	12	7	6	0
November 2021	327	65	33	17	4	0
December 2021	308	40	9	12	5	0
January 2022	218	41	8	14	8	0
February 2022	287	40	19	12	4	0
March 2022	421	48	17	14	4	0
April 2022	323	57	16	18	2	0
May 2022	301	52	14	17	3	1
June 2022	159	24	14	9	1	0
Grand Total	4,785	724	339	145	53	9

** Situation Stabilized - The category title varied overtime. Amount is the sum in-person and crisis phone support provided and situation stabilization.*

Seneca MRT
July 2020 – June 2022

Best Practice Standards

SAMHSA NATIONAL GUIDELINES FOR BH CRISIS CARE

Best Practices:
SAMHSA National Guidelines for BH Crisis Care

- Crisis services are for **anyone, anywhere and any time**
- Services Include:
  - Crisis lines accepting all calls and dispatching support based on the assessed need of the caller
  - Mobile crisis teams dispatched to wherever the need is in the community *(not hospital emergency departments)*
  - Crisis receiving and stabilization facilities that serve everyone that comes through their doors from all referral sources

https://www.samhsa.gov/sites/default/files/national-guidelines-for-behavioral-health-crisis-services-executive-summary-02242020.pdf
https://www.samhsa.gov/sites/default/files/national-guidelines-for-behavioral-health-crisis-care-02242020.pdf

Core Services and Best Practices: SAMHSA National Guidelines for BH Crisis Care

Essential Elements within a **no-wrong-door** integrated crisis system:

1. Regional Crisis Call Center – 24/7 clinically staffed hub/crisis call center that provided crisis intervention (phone, text, chat) and quality coordination of crisis care in real-time;
2. Crisis Mobile Team Response – Mobile crisis teams available to reach any person at their home, workplace or any other **community-based** location in a timely manner;
3. Crisis Receiving and Stabilization Facilities – short term (under 24 hours) observation and stabilization services in a home-like, non-hospital environment

Challenges & Strategies

Challenges

WORKFORCE SHORTAGE

FUNDING

988 IMPLEMENTATION & COORDINATION

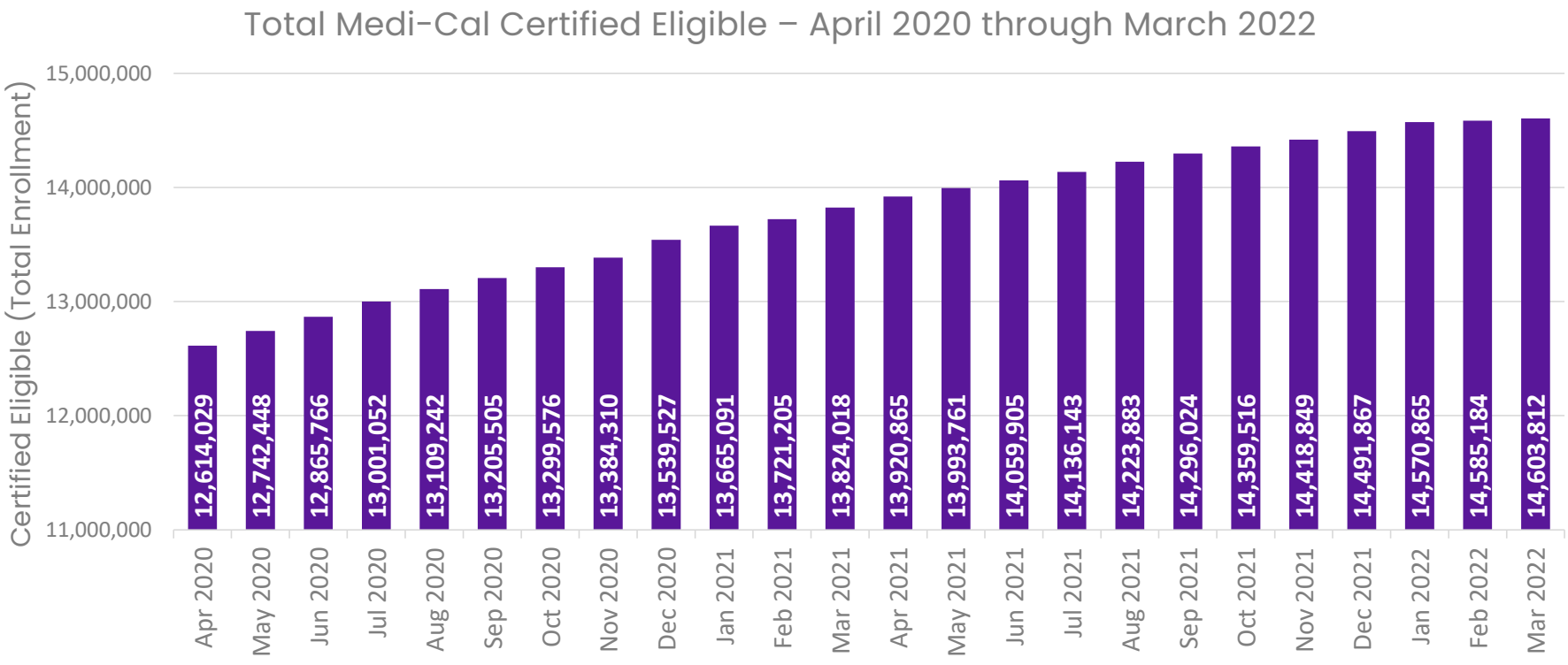
LACK OF ALTERNATIVE PLACEMENTS, GAPS IN CRISIS CONTINUUM

Behavioral Health Workforce Shortage

Source: CalMHSA

BIG PICTURE

Medi-Cal Enrollment Up



Data Source: DHCS Extracted from MS/DSS 11 Apr2022

CalMHSA

STAFFING – DOWN

Cost-Survey Analysis: LPHA Vacancies

- Mental Health
  - 21% of budgeted LPHA positions vacant (957 vacant positions)
  - 23% of counties have MH vacancies over 30% (up to 52%)
- SUD
  - 20% of budgeted SUD positions vacant (38 vacant positions)
  - 9% of counties have SUD vacancies over 30% (up to 100%)

WHEN WE LOOK AT THE WORKFORCE SHORTAGE NUMBERS, THIS MEANS;

1 OUT OF EVERY 5

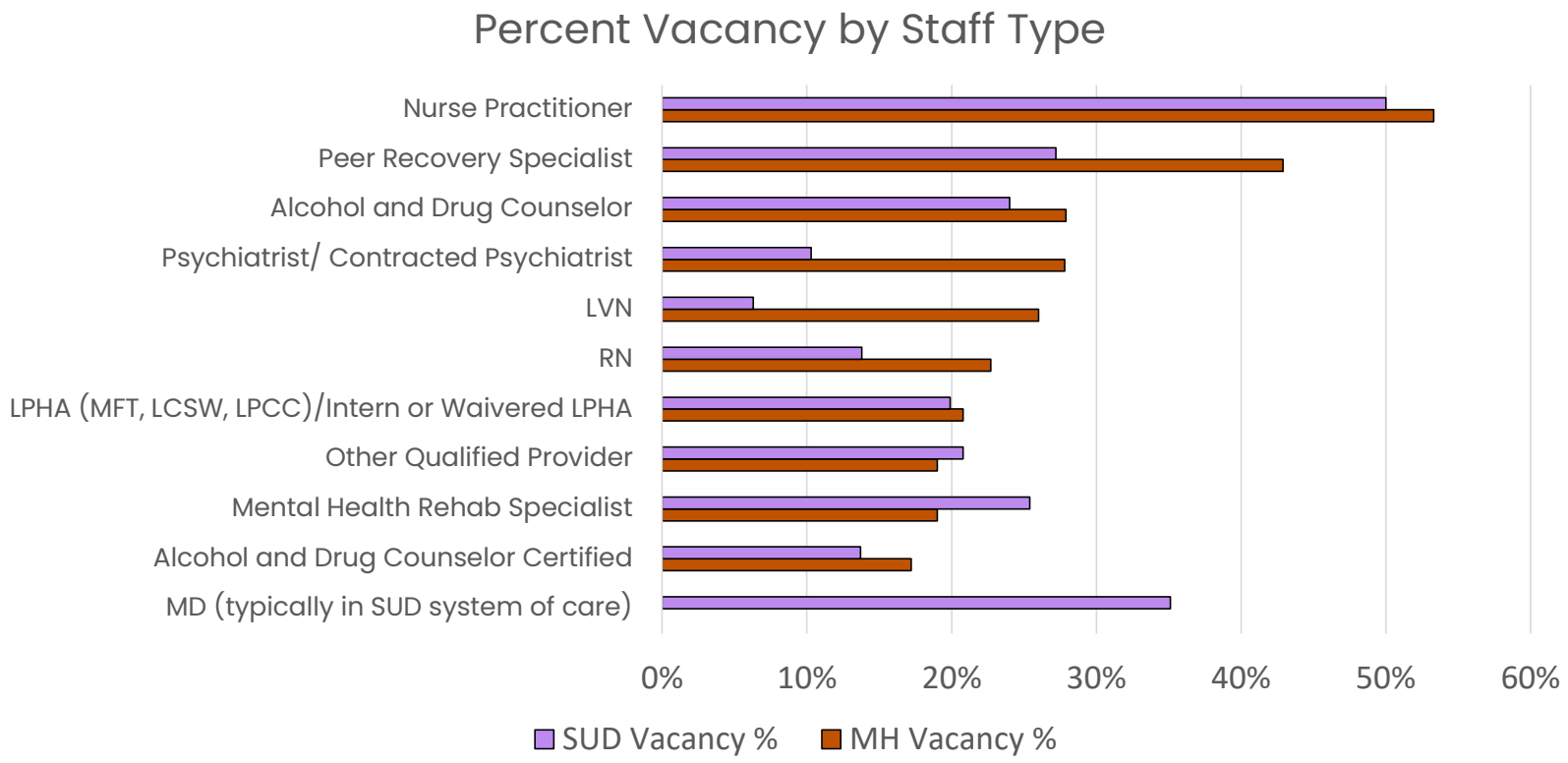
MASTER'S LEVEL STAFFING POSITIONS IS VACANT.

Data Source: Cost Survey 2021

CalMHSA

STAFFING – DOWN (CONTINUED)

Cost-Survey Analysis: % Vacancy by Staff Type



Data Source: CalMHSA Cost Survey 2021

Understanding the different training & expertise of BH clinicians

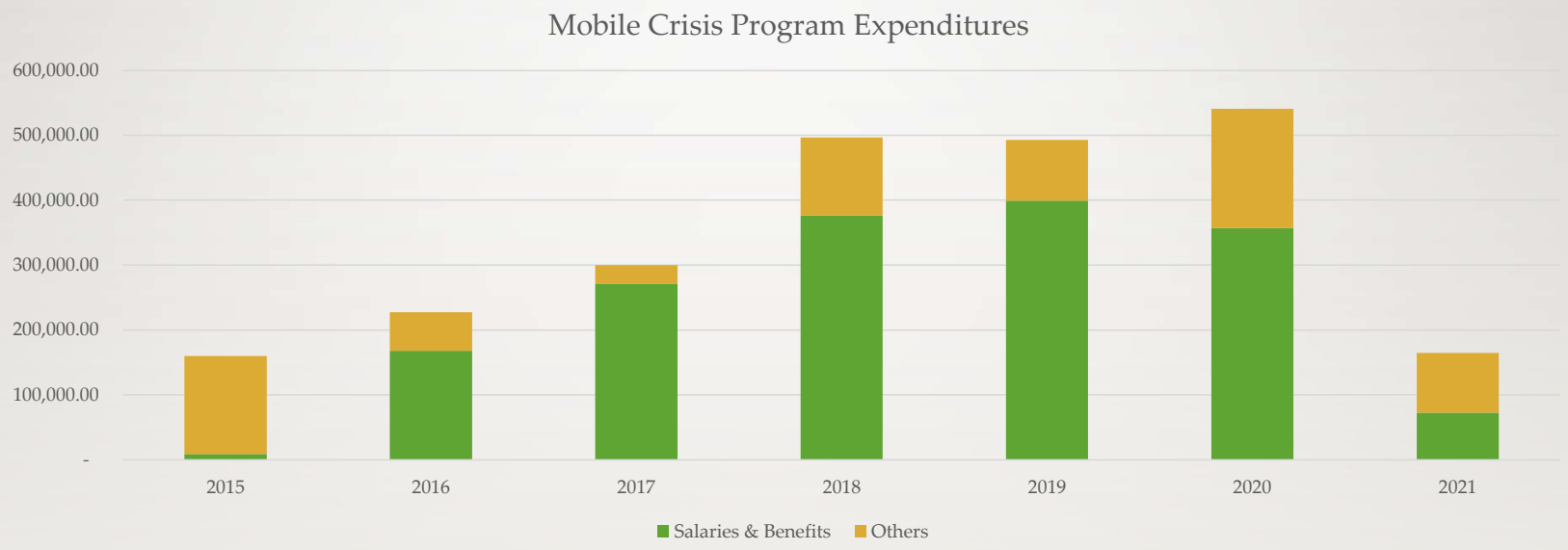
	Outpatient Services	Crisis Team	Mobile Crisis	HNT
Licensed or Licensed Eligible Staff	X	X	X	Licensed staff only
Oriented to entire BH System of Care & referral processes to providers		X	X	X
Oriented primarily to assigned program only within Access, ASOC, CSOC	X			
WIC 5150 / 5585 training and certification	X	X	X	X
Only work with open BH clients	X			
Respond to BH clients & non-clients		X (office based)	X	X
On-Call 24/7 for callout when any of the 3 HNT teams are activated (MCSO, SPD, SRU)				X
Trained in Natividad ED Crisis Team responsibilities and partnerships*		X	X	X
Trained in crisis response in the community in depth			X	X
Receive specific training and guidance on collaborating with LE partners			X	X
Function as BH liaisons with LE partners			X	X
Receive specialized training in Hostage / Crisis Negotiations (Basic, Advanced and Domestic Violence courses)				X
Train regularly with LE partners *(pre-covid)*				X

**Starting 4/1/2022, MCBH is no longer providers of services in Natividad Hospital*

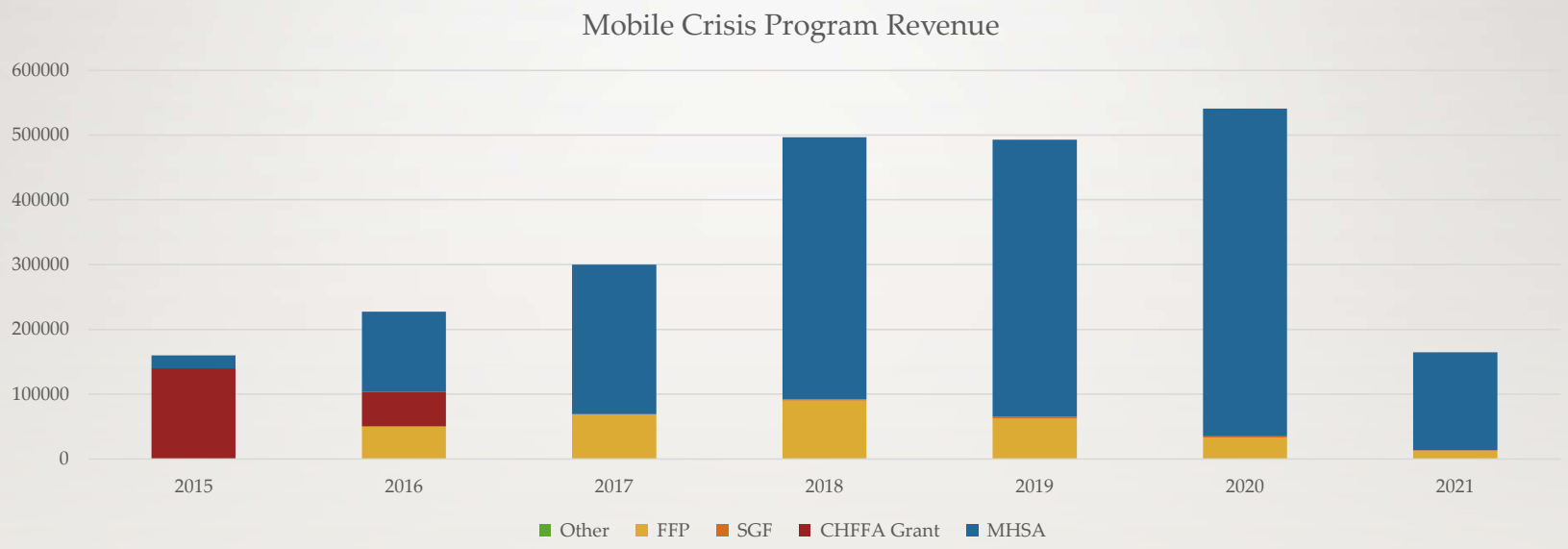
Behavioral Health Mobile Crisis Team Program Funding Sources

- CHAFFA FUNDS (START UP EQUIPMENT ONLY)
- MHSA FUNDS
- MEDI-CAL REIMBURSEMENT
- CRISIS CARE MOBILE UNITS GRANT (INFRASTRUCTURE)

MCBH Mobile Crisis Team Program Actual Expenditures

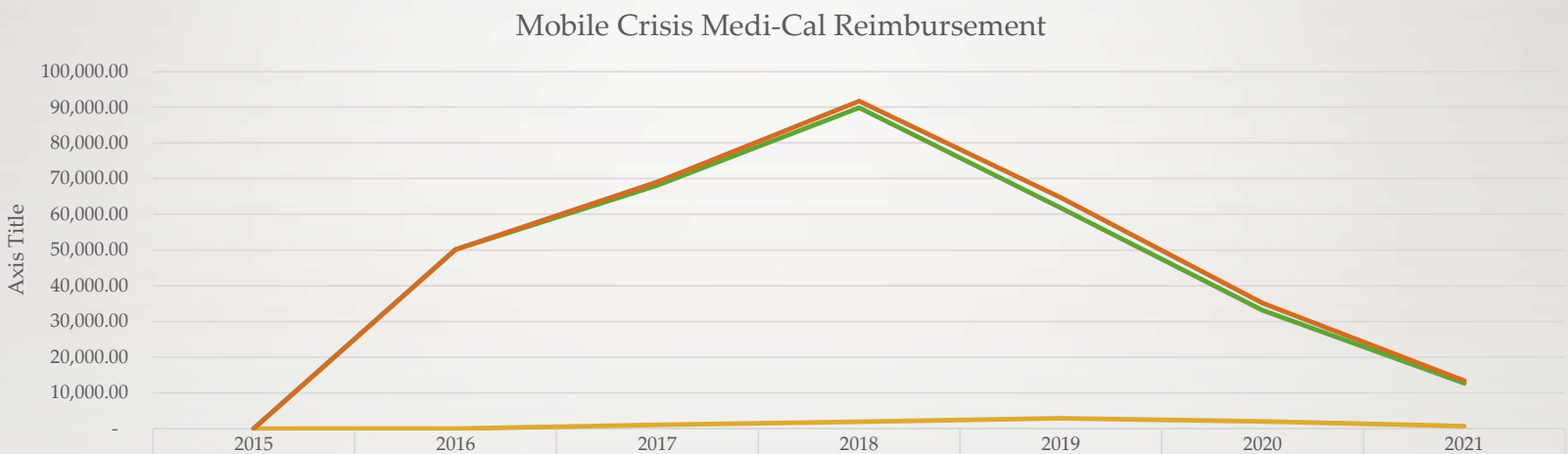


MCBH Mobile Crisis Team Program Actual Revenues



FFP = Federal Financial Participation (Medi-Cal); SGF = State General Fund; CHFFA = California Health Facilities Finance Authority; MHSA = Mental Health Services Act

MCBH Mobile Crisis Team Medi-Cal Reimbursement



	2015	2016	2017	2018	2019	2020	2021
FFP	-	50,112.43	68,113.07	89,882.22	61,784.17	33,146.19	12,710.70
SGF	-	-	994.50	1,868.80	2,906.86	1,987.39	676.24
Total	-	50,112.43	69,107.57	91,751.02	64,691.03	35,133.58	13,386.94

FFP = Federal Financial Participation (Medi-Cal); SGF = State General Fund

Seneca Mobile Response Team (MRT) Program Funding Sources

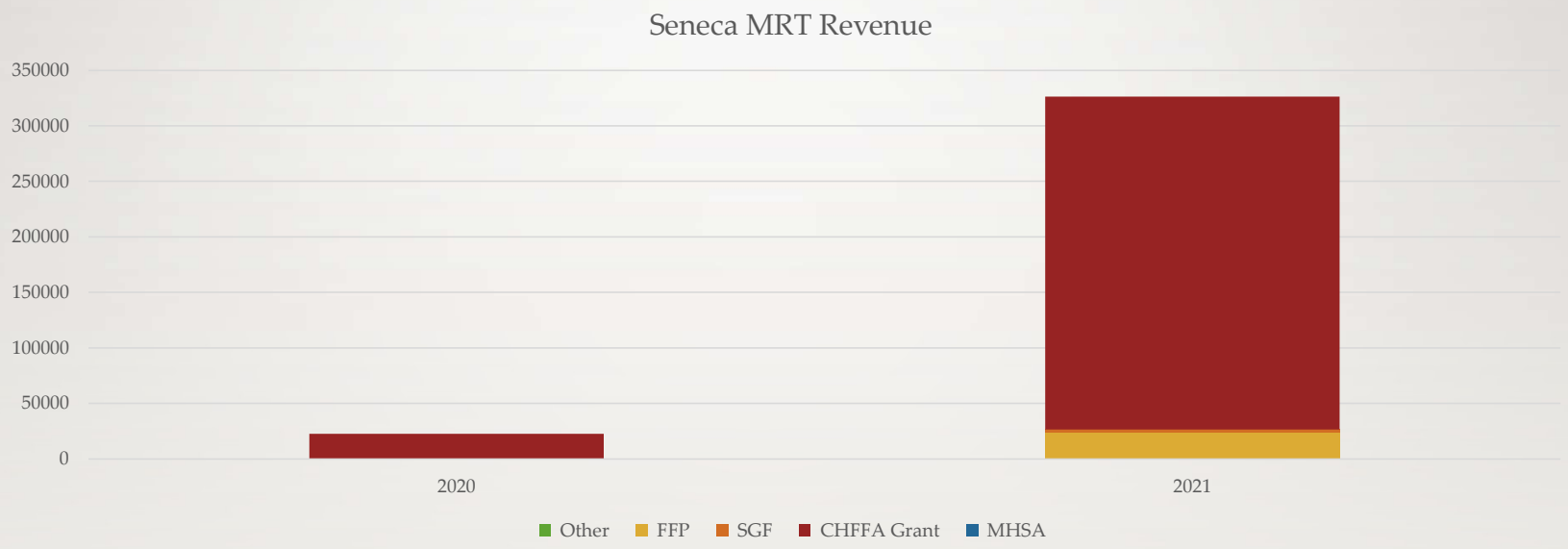
CHFFA GRANT FUNDS

MEDI-CAL REIMBURSEMENT

CHFFA = California Health Facilities Finance Authority

Seneca Mobile Response Team Program Actual Expenditures

Seneca Mobile Response Team Program Actual Revenues



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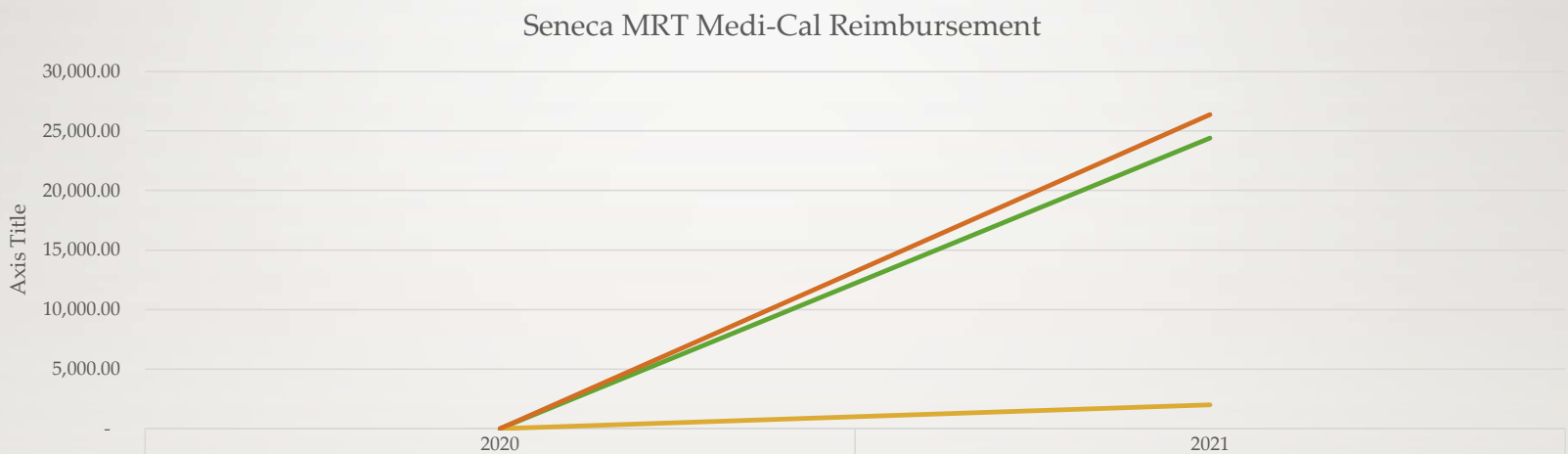
Seneca Mobile Response Team Program Medi-Cal Reimbursement



	2020	2021
FFP	-	24,419.93
SGF	-	1,978.63
Total	-	26,398.56

FFP = Federal Financial Participation (Medi-Cal); SGF = State General Fund

What is 988?

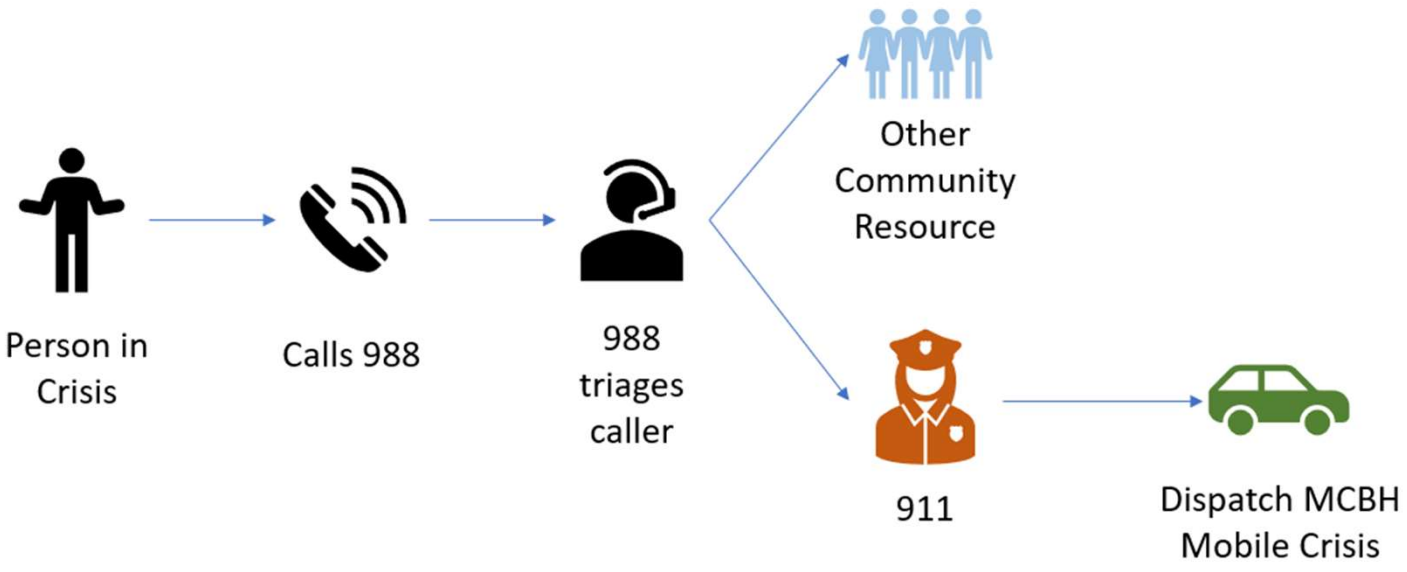
- America's first 3-digit number dedicated to suicide prevention and crisis support. It is a national portal for connecting to local service
- Beginning July 16, 2022, people can access the Lifeline via 988 or by 1-800-273-TALK
- When people call the local line or Lifeline (988), they are connected to trained counselors that are part of the existing National Suicide Prevention Lifeline network. These trained counselors listen, understand how their problems are affecting them, provide support, and connect them to resources.

988 Vision for Behavioral Health Crisis Care Continuum – Short Term Vision

988

988 will strengthen and expanded access to a network of crisis call centers for Monterey County residents to gain access to community resources.

In Monterey County, currently available mobile crisis response and supports will remain the same with a vision to create a more comprehensive system in the next 3-5 years.



988 Vision for Behavioral Health Crisis Care Continuum – Long Term Goal (3-5 years)

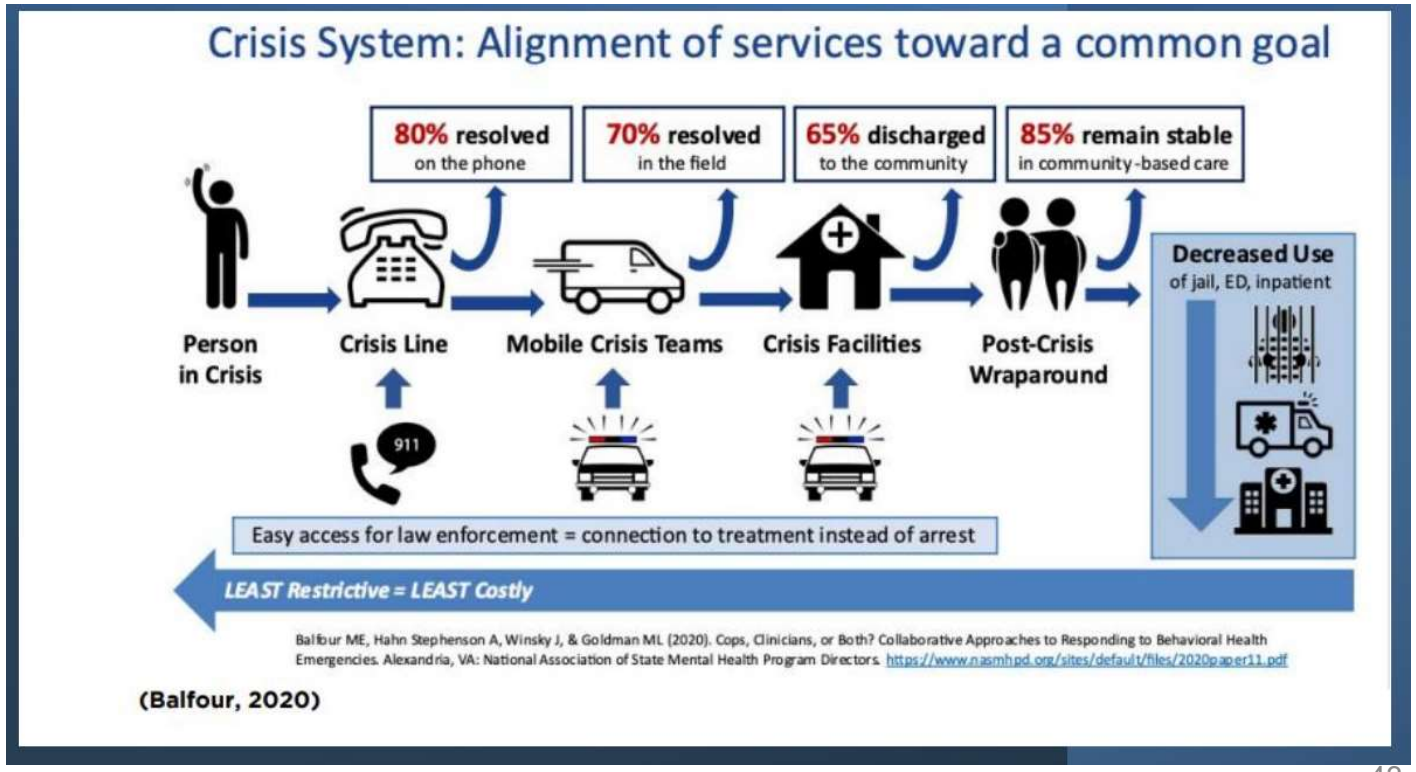
988

The full vision of a transformed crisis care system with 988 at its core will not be built overnight.

Transformation of this scale will take time, and we are all working together to make it happen.

988 SUICIDE & CRISIS LIFELINE

988 LÍNEA DE PREVENCIÓN DEL SUICIDIO Y CRISIS



(Balfour, 2020)

Strategies

- Grant funding opportunities
- BH Crisis Team separate from the hospital & community focused
- Internal Restructuring to integrate BH Crisis and Mobile Crisis Teams
- Ongoing Relationship Building & Collaboration
- Workforce: Growing Our Own
- Stepping Up Initiative

Current Service Gaps

- Mobile Crisis hours are not 24/7/365
- Sobering Center hours are not 24/7/365
- Lack of Crisis Receiving & Stabilization Units
- More alternatives to jail and hospitals are needed

https://crisisnow.com/

Projects under development to enhance the crisis continuum of care

- Child / Adolescent Crisis Stabilization Unit & Crisis Residential Services Facility (Seneca)
- Crisis Stabilization Unit (CHOMP)

Possible Next Steps

Training for First Responders

Explore City / County collaborations

Consider viability of adding Co-Responder Units (LE, FIRE, AMR)

Consider embedding crisis trained staff at County Comm.

Advocate for increased capacity in MSW programs (i.e., CSUMB)

Training for First Responders

Mental Health First Aid (8-hour course)

- **Advocate to add this foundational training to all basic police and fire academies**
- Specialized MHFA modules for Public Safety; Fire and EMS are available
  - https://www.mentalhealthfirstaid.org/population-focused-modules/public-safety/
  - https://www.mentalhealthfirstaid.org/population-focused-modules/fire-and-ems/
- Long Beach Fire implemented this in 2018
  - https://www.longbeach.gov/fire/press-releases/mental-health-first-aid/

Crisis Intervention Team (CIT) Training

- Currently available for law enforcement/dispatchers (40-hour/one week course)
  - Pre-covid offering 3 academies per year with max 35 participants per academy
- Develop CIT for Fire / EMS (24-hour course)?
- CIT now available for 911 dispatchers through CIT International (8-hour online course) in high demand
  - https://www.citinternational.org/CITST911

Ongoing Collaborative Efforts

- Crisis Intervention Team (CIT) Training for LE
- Hostage / Crisis Negotiation Team (HNT)
- Critical Incident Stress Management (CISM)
- BH Mobile Crisis Team Response

Co-Responder Models

- "At its core, the co-responder framework typically features a specially trained team that includes at least one law enforcement officer and one mental health or substance abuse professional responding jointly to situations in which a behavioral health crisis is likely to be involved, often in the same vehicle, or arriving on scene at generally the same time."

Source: https://www.theiacp.org/sites/default/files/SJCResponding%20to%20Individuals.pdf

Co-Responder Model Variations

- Law Enforcement Calls for After-Event Support
- Law Enforcement Obtains Clinical Support Virtually
- Fire Department and/or Emergency Medical Services Join Law Enforcement and Clinicians
- Multi-Professional Teams, Especially for Substance Abuse Intervention
- Law Enforcement Calls for Non-Clinical Support
- Peer Support Workers Join Law Enforcement
- Clinical Staff Advise from Dispatch Centers
- Behavioral Health Navigators Join Law Enforcement at Point of Reentry

https://www.theiacp.org/sites/default/files/SJCResponding%20to%20Individuals.pdf

Additional Resources & Supporting Information

- https://bja.ojp.gov/program/pmhc
- https://www.theiacp.org/sites/default/files/SJCResponding%20to%20Individuals.pdf
- https://whitebirdclinic.org/cahoots/
- https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directory/Public-Health-Environment/Community-Behavioral-Health/Behavioral-Health-Strategies/Support-Team-Assisted-Response-STAR-Program
- https://www.memphistn.gov/news/alliance-healthcare-services-earns-innovation-award-for-care-team-model/

File #: ID#22-487, **Version:** 1

Minutes

Approve minutes of August 23, 2022.

File #: ID#22-496, **Version:** 1

Financial Claims

Approve financial claims report.

City of Salinas

Claim Check Report 460265-460828

From Payment Date: 8/9/2022 - To Payment Date: 8/31/2022

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount
General Account - General Account							
Check							
460265	08/16/2022	Open			Accounts Payable	Ciro Barboza	$134.50
460266	08/16/2022	Open			Accounts Payable	Isaac Garcia	$17.00
460267	08/16/2022	Open			Accounts Payable	John Murray	$192.50
460268	08/16/2022	Open			Accounts Payable	Alliance Career Training Solutions	$395.00
460269	08/16/2022	Open			Accounts Payable	Absolute Court Reporters, LLC	$1,524.90
460270	08/16/2022	Open			Accounts Payable	Acme Car Wash (William Pierce Inc)	$990.00
460271	08/16/2022	Open			Accounts Payable	Adele Frese	$2,370.44
460272	08/16/2022	Open			Accounts Payable	Aladin Properties, LP	$6,000.00
460273	08/16/2022	Open			Accounts Payable	Alhambra and Sierra Spring DS Waters of America LP	$227.70
460274	08/16/2022	Open			Accounts Payable	Alhambra and Sierra Spring DS Waters of America LP	$878.54
460275	08/16/2022	Open			Accounts Payable	Alhambra and Sierra Spring DS Waters of America LP	$186.68
460276	08/16/2022	Open			Accounts Payable	All Safe Security Alarm	$330.00
460277	08/16/2022	Open			Accounts Payable	Amazon.Com	$1,779.93
460278	08/16/2022	Open			Accounts Payable	American Supply Company	$2,051.32
460279	08/16/2022	Open			Accounts Payable	American Textile and Supply Inc	$254.69
460280	08/16/2022	Open			Accounts Payable	Analgesic Services Inc	$258.00
460281	08/16/2022	Open			Accounts Payable	Andrew McLaughlin	$100.00
460282	08/16/2022	Open			Accounts Payable	Anna Woods	$46.13
460283	08/16/2022	Open			Accounts Payable	Aramark Uniform & Career Apparel Group, Inc	$601.72
460284	08/16/2022	Open			Accounts Payable	Asap Alisal Signs And Printing	$31.57
460285	08/16/2022	Open			Accounts Payable	AT and T	$168.13
460286	08/16/2022	Open			Accounts Payable	Baron Augustine	$2,370.44
460287	08/16/2022	Open			Accounts Payable	Bay Property Management	$5,700.00
460288	08/16/2022	Open			Accounts Payable	Bound Tree Medical	$59.76
460289	08/16/2022	Open			Accounts Payable	Brent DeBorde	$100.00
460290	08/16/2022	Open			Accounts Payable	Bruce Bush	$100.00
460291	08/16/2022	Open			Accounts Payable	C&C Monterey PM Inc	$6,530.31
460292	08/16/2022	Open			Accounts Payable	C&C Monterey PM Inc	$7,475.00
460293	08/16/2022	Open			Accounts Payable	Cadence Team, Inc	$18,855.12
460294	08/16/2022	Open			Accounts Payable	California Water Service	$571.85
460295	08/16/2022	Open			Accounts Payable	California Water Service	$386.87
460296	08/16/2022	Open			Accounts Payable	California Water Service	$69,495.14
460297	08/16/2022	Open			Accounts Payable	California Water Service	$269.99
460298	08/16/2022	Open			Accounts Payable	California Water Service	$14.17
460299	08/16/2022	Open			Accounts Payable	Candi Swinscoe	$100.00
460300	08/16/2022	Open			Accounts Payable	Canon Financial Services Inc	$58.59
460301	08/16/2022	Open			Accounts Payable	Carlos Pimentel	$205.00
460302	08/16/2022	Open			Accounts Payable	Carollo Engineers, Inc	$35,131.00
460303	08/16/2022	Open			Accounts Payable	Carr Avenue Limited Partnership, LP dba Vista De	$2,931.00
460304	08/16/2022	Open			Accounts Payable	Cassie McSorley	$100.00
460305	08/16/2022	Open			Accounts Payable	CDW-G	$43,659.19
460306	08/16/2022	Open			Accounts Payable	Central Coast Commercial Tire Center Inc	$100.00
460307	08/16/2022	Open			Accounts Payable	Central Coast YMCA	$14,121.00
460308	08/16/2022	Open			Accounts Payable	Charlie D. Zarza	$416.00
460309	08/16/2022	Open			Accounts Payable	Chicago Title And Trust	$500.00
460310	08/16/2022	Open			Accounts Payable	Chris Lane	$2,199.00
460311	08/16/2022	Open			Accounts Payable	Chris Swinscoe	$100.00
460312	08/16/2022	Open			Accounts Payable	Cintas	$46.79
460313	08/16/2022	Open			Accounts Payable	CMP-1, Llc dba Boronda Manor	$14,962.27
460314	08/16/2022	Open			Accounts Payable	CMP-1, Llc dba Boronda Manor	$21,886.53
460315	08/16/2022	Open			Accounts Payable	CMP-1, LLC dba Cambridge Court Apartments Homes	$3,748.46
460316	08/16/2022	Open			Accounts Payable	CMP-1, Llc dba Laurel Tree Apartment Homes	$6,049.01
460317	08/16/2022	Open			Accounts Payable	Comcast	$2,896.20
460318	08/16/2022	Open			Accounts Payable	Comcast (Business)	$607.06
460319	08/16/2022	Open			Accounts Payable	CONCERN	$2,800.00
460320	08/16/2022	Open			Accounts Payable	Cristina Schlough	$2,433.18
460321	08/16/2022	Open			Accounts Payable	Dana Cornelison	$1,725.00

City of Salinas

Claim Check Report 460265-460828

From Payment Date: 8/9/2022 - To Payment Date: 8/31/2022

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount
General Account - General Account							
Check							
460322	08/16/2022	Open			Accounts Payable	Daniel David Green	$100.00
460323	08/16/2022	Open			Accounts Payable	Danny Madewell	$4,400.00
460324	08/16/2022	Open			Accounts Payable	Dataflow Business Systems Inc	$63,356.55
460325	08/16/2022	Open			Accounts Payable	Dave Shaw	$100.00
460326	08/16/2022	Open			Accounts Payable	Davi Family Partnership dba Village Green Apartmen	$5,840.00
460327	08/16/2022	Open			Accounts Payable	David Blivens dba c/o Century 21 A Property Shoppe	$2,067.00
460328	08/16/2022	Open			Accounts Payable	David L Crabill	$100.00
460329	08/16/2022	Open			Accounts Payable	David Poulin	$100.00
460330	08/16/2022	Open			Accounts Payable	Del Monte MHP LLC	$1,464.66
460331	08/16/2022	Open			Accounts Payable	Demco	$659.09
460332	08/16/2022	Open			Accounts Payable	Direct TV LLC	$93.24
460333	08/16/2022	Open			Accounts Payable	Discount School Supply	$92.24
460334	08/16/2022	Open			Accounts Payable	DOK LLC c/o Backus Properties	$3,200.00
460335	08/16/2022	Open			Accounts Payable	East Bay Tire Company	$573.74
460336	08/16/2022	Open			Accounts Payable	Ed Limbo	$2,584.99
460337	08/16/2022	Open			Accounts Payable	Eda Herrera	$1,871.68
460338	08/16/2022	Open			Accounts Payable	Edges Electrical Group, LLC	$5,446.36
460339	08/16/2022	Open			Accounts Payable	Edilcia Perez dba Ella Fitness	$120.25
460340	08/16/2022	Open			Accounts Payable	Edward P Mercurio Dba Ed Mercurio Biological Consu	$1,950.00
460341	08/16/2022	Open			Accounts Payable	Elizabeth Roberts	$935.84
460342	08/16/2022	Open			Accounts Payable	Enterprise Holdings, Inc dba Ean Services, Llc Ser	$1,478.38
460343	08/16/2022	Open			Accounts Payable	Ernesto Sanchez	$100.00
460344	08/16/2022	Open			Accounts Payable	FAST Services	$250.00
460345	08/16/2022	Open			Accounts Payable	Fed Ex	$90.26
460346	08/16/2022	Open			Accounts Payable	First Alarm	$119.94
460347	08/16/2022	Open			Accounts Payable	First Alarm Security & Patrol Inc dba An Allied Un	$2,829.71
460348	08/16/2022	Open			Accounts Payable	Gabriel Carvey	$2,301.71
460349	08/16/2022	Open			Accounts Payable	Gabriel Hernandez	$100.00
460350	08/16/2022	Open			Accounts Payable	Gavilan Printers LLC	$405.23
460351	08/16/2022	Open			Accounts Payable	Global Water Technology, Inc	$275.00
460352	08/16/2022	Open			Accounts Payable	Granicus Inc	$9,647.03
460353	08/16/2022	Open			Accounts Payable	Green Rubber Kennedy Ag	$281.60
460354	08/16/2022	Open			Accounts Payable	Greens Camera Shop	$187.26
460355	08/16/2022	Open			Accounts Payable	Harden Salinas AR, LP dba Harden Ranch Apartments	$11,721.00
460356	08/16/2022	Open			Accounts Payable	Heath Johnson	$100.00
460357	08/16/2022	Open			Accounts Payable	Hector Cortez	$2,370.44
460358	08/16/2022	Open			Accounts Payable	Henry Gomez	$100.00
460359	08/16/2022	Open			Accounts Payable	Herc Rentals Inc.	$302.69
460360	08/16/2022	Open			Accounts Payable	Home Depot Credit Services	$313.15
460361	08/16/2022	Open			Accounts Payable	Housing Authority of the County of Monterey	$3,711.00
460362	08/16/2022	Open			Accounts Payable	Housing Authority of the County of Monterey	$3,744.00
460363	08/16/2022	Open			Accounts Payable	Hydro Turf	$274.58
460364	08/16/2022	Open			Accounts Payable	Ines Mendoza	$2,604.62
460365	08/16/2022	Open			Accounts Payable	Ingram Book Company	$4,383.52
460366	08/16/2022	Open			Accounts Payable	Jacqueline Pacelli	$100.00
460367	08/16/2022	Open			Accounts Payable	Jahaira Paola Navarro dba Dance Into Fitness with	$877.50
460368	08/16/2022	Open			Accounts Payable	James Knowlton	$100.00
460369	08/16/2022	Open			Accounts Payable	Jan Roehl Dba Jan Roehl Consulting	$3,700.00
460370	08/16/2022	Open			Accounts Payable	Jeff Gibson	$100.00
460371	08/16/2022	Open			Accounts Payable	Jesse And Evan Inc dba La Plaza Bakery	$598.93
460372	08/16/2022	Open			Accounts Payable	Jesse Pinon	$100.00
460373	08/16/2022	Open			Accounts Payable	Jocelyn Lesso Lara	$2,000.00
460374	08/16/2022	Open			Accounts Payable	John Allen dba California Hawaiian Mobile Estates	$2,948.23
460375	08/16/2022	Open			Accounts Payable	Johnson Electronics	$228.00
460376	08/16/2022	Open			Accounts Payable	Jonathan Barnes	$100.00
460377	08/16/2022	Open			Accounts Payable	Jonathan Moore	$299.00
460378	08/16/2022	Open			Accounts Payable	Jose Luis Corral dba Salinas Pizza	$122.18

City of Salinas

Claim Check Report 460265-460828

From Payment Date: 8/9/2022 - To Payment Date: 8/31/2022

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount
General Account - General Account							
Check							
460379	08/16/2022	Open			Accounts Payable	Joseph Albertoni	$1,953.91
460380	08/16/2022	Open			Accounts Payable	Kanco Inc. / Mighty Auto Parts	$356.93
460381	08/16/2022	Open			Accounts Payable	Keith Emery	$2,199.00
460382	08/16/2022	Open			Accounts Payable	Kelly-Moore Paint Company	$250.60
460383	08/16/2022	Open			Accounts Payable	Kenneth Ferrasci dba c/o Backus Properties	$6,000.00
460384	08/16/2022	Open			Accounts Payable	Kevin Skinner	$2,541.88
460385	08/16/2022	Open			Accounts Payable	L.N. Curtis & Sons dba Curtis Blue Line	$3,457.60
460386	08/16/2022	Open			Accounts Payable	Lance Miraco	$200.00
460387	08/16/2022	Open			Accounts Payable	Linda Knowles	$935.84
460388	08/16/2022	Open			Accounts Payable	Loc Van Nguyen	$5,500.00
460389	08/16/2022	Open			Accounts Payable	Los Abuelitos LP dba Los Abuelitos Senior Apartmen	$2,685.00
460390	08/16/2022	Open			Accounts Payable	Lucille J Diaz	$1,400.00
460391	08/16/2022	Open			Accounts Payable	Mangold Property Management, Inc	$4,124.00
460392	08/16/2022	Open			Accounts Payable	Mangold Property Management, Inc	$3,800.00
460393	08/16/2022	Open			Accounts Payable	Maria F Carmo	$5,400.00
460394	08/16/2022	Open			Accounts Payable	Mark Freedman	$100.00
460395	08/16/2022	Open			Accounts Payable	Martin Persijn	$100.00
460396	08/16/2022	Open			Accounts Payable	Mary Ellison	$1,639.65
460397	08/16/2022	Open			Accounts Payable	Matt N. Pressey	$2,604.62
460398	08/16/2022	Open			Accounts Payable	Matthew Maldonado	$2,370.44
460399	08/16/2022	Open			Accounts Payable	MCSI Water Systems Management	$446.33
460400	08/16/2022	Open			Accounts Payable	Metropolitan Transportation Commission	$3,500.00
460401	08/16/2022	Open			Accounts Payable	Michael Elliott	$1,871.68
460402	08/16/2022	Open			Accounts Payable	Michael Groves	$100.00
460403	08/16/2022	Open			Accounts Payable	Michael Spencer dba Tire & Wheel World	$162.35
460404	08/16/2022	Open			Accounts Payable	Michele Lea Vaughn	$2,223.00
460405	08/16/2022	Open			Accounts Payable	Midwest Tape, LLC dba Midwest Tape	$10,594.96
460406	08/16/2022	Open			Accounts Payable	Midwestern Software Solutions, LLC	$1,776.00
460407	08/16/2022	Open			Accounts Payable	MJ Communications, Inc	$343.00
460408	08/16/2022	Open			Accounts Payable	Monterey Bay Air Resources District	$79,966.00
460409	08/16/2022	Open			Accounts Payable	Monterey County Recorders	$20.00
460410	08/16/2022	Open			Accounts Payable	Monterey County Weekly	$360.00
460411	08/16/2022	Open			Accounts Payable	Monterey One Water	$224.64
460412	08/16/2022	Open			Accounts Payable	Monterey Salinas Transit	$1,000.00
460413	08/16/2022	Open			Accounts Payable	Monterey Transfer and Storage Inc	$331.50
460414	08/16/2022	Open			Accounts Payable	Monterra Ranch Of Monterey Home Owner's Associatio	$900.00
460415	08/16/2022	Open			Accounts Payable	MP 21 Soledad Street, L.P.	$852.00
460416	08/16/2022	Open			Accounts Payable	MP 21 Soledad Street, L.P.	$789.00
460417	08/16/2022	Open			Accounts Payable	MP 21 Soledad Street, L.P.	$2,891.00
460418	08/16/2022	Open			Accounts Payable	MP 21 Soledad Street, L.P.	$1,161.00
460419	08/16/2022	Open			Accounts Payable	Nixon-Egli Equipment Company	$63.18
460420	08/16/2022	Open			Accounts Payable	Olivia V Garcia Trustee	$4,659.00
460421	08/16/2022	Open			Accounts Payable	OverDrive, Inc.	$10,000.00
460422	08/16/2022	Open			Accounts Payable	Pacific Coast Battery Service Inc	$412.08
460423	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$6,948.52
460424	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$442.33
460425	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$1,186.37
460426	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$717.89
460427	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$731.99
460428	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$215.37
460429	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$404.69
460430	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$490.72
460431	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$86.32
460432	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$159.86
460433	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$578.68
460434	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$304.17
460435	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$2,264.82

City of Salinas

Claim Check Report 460265-460828

From Payment Date: 8/9/2022 - To Payment Date: 8/31/2022

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount
General Account - General Account							
Check							
460436	08/16/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$221.41
460437	08/16/2022	Open			Accounts Payable	Parkview Apartments One LP	$2,656.00
460438	08/16/2022	Open			Accounts Payable	PARS Retirement Services	$421.63
460439	08/16/2022	Open			Accounts Payable	Patricia J. Moore	$17,285.00
460440	08/16/2022	Open			Accounts Payable	Patricia Lee Horsley	$2,550.00
460441	08/16/2022	Open			Accounts Payable	Patricia Meraz	$240.31
460442	08/16/2022	Open			Accounts Payable	Patrick Haney	$2,199.00
460443	08/16/2022	Open			Accounts Payable	Pedro C Estrada Dba Estrada Janitorial Service	$1,200.00
460444	08/16/2022	Open			Accounts Payable	Pinnacle Medical Group Inc dba Pinnacle Healthcare	$978.00
460445	08/16/2022	Open			Accounts Payable	Plaza Grande LP	$588.00
460446	08/16/2022	Open			Accounts Payable	Plaza Grande LP	$1,527.00
460447	08/16/2022	Open			Accounts Payable	Public Agency Risk Management Association	$150.00
460448	08/16/2022	Open			Accounts Payable	Public Risk Management Assoc Inc dba PRIMA	$385.00
460449	08/16/2022	Open			Accounts Payable	Pure Water	$92.20
460450	08/16/2022	Open			Accounts Payable	Quality Water Enterprises	$47.00
460451	08/16/2022	Open			Accounts Payable	Quinn Company	$532.85
460452	08/16/2022	Open			Accounts Payable	Rancho Cielo Youth Center	$2,500.00
460453	08/16/2022	Open			Accounts Payable	RELX Inc. dba LexisNexis, Division of RELX Inc.	$982.25
460454	08/16/2022	Open			Accounts Payable	Rent-A-Fence.com, Inc	$216.32
460455	08/16/2022	Open			Accounts Payable	Republic Services of Salinas	$340.64
460456	08/16/2022	Open			Accounts Payable	Republic Services of Salinas	$186.78
460457	08/16/2022	Open			Accounts Payable	Republic Services of Salinas	$102.51
460458	08/16/2022	Open			Accounts Payable	Republic Services of Salinas	$389.32
460459	08/16/2022	Open			Accounts Payable	Richard Maldonado	$100.00
460460	08/16/2022	Open			Accounts Payable	Ricky Williams	$100.00
460461	08/16/2022	Open			Accounts Payable	Rigoberto Gonzalez Luna	$2,400.00
460462	08/16/2022	Open			Accounts Payable	Robert Inouye	$11,200.00
460463	08/16/2022	Open			Accounts Payable	RouteSmart Technologies Inc	$2,400.00
460464	08/16/2022	Open			Accounts Payable	Ruth Maria Milla-Leon dba Andersen's Lock & Safe	$19.67
460465	08/16/2022	Open			Accounts Payable	Salinas Valley Solid Waste Authority	$4,139.02
460466	08/16/2022	Open			Accounts Payable	Same Day Shred	$32.50
460467	08/16/2022	Open			Accounts Payable	San Lorenzo Lumber	$808.75
460468	08/16/2022	Open			Accounts Payable	Sayler Legal Service	$272.00
460469	08/16/2022	Open			Accounts Payable	Score American Soccer Company	$3,923.70
460470	08/16/2022	Open			Accounts Payable	Scott Myhre	$100.00
460471	08/16/2022	Open			Accounts Payable	Scott Tyler	$100.00
460472	08/16/2022	Open			Accounts Payable	SCP Distributors LLC dba Lincoln Aquatics	$12,540.05
460473	08/16/2022	Open			Accounts Payable	Sheldon Bryan	$100.00
460474	08/16/2022	Open			Accounts Payable	Simon Jimenez	$100.00
460475	08/16/2022	Open			Accounts Payable	Simon Quintero	$5,699.51
460476	08/16/2022	Open			Accounts Payable	Smart and Final Iris	$1,062.18
460477	08/16/2022	Open			Accounts Payable	Stanley Cooper	$100.00
460478	08/16/2022	Open			Accounts Payable	Sturdy Oil Company	$83,048.98
460479	08/16/2022	Open			Accounts Payable	Suzanne Cottle-Gavalla	$100.00
460480	08/16/2022	Open			Accounts Payable	Sylvia Garcia	$935.84
460481	08/16/2022	Open			Accounts Payable	T-Mobile USA dba T-Mobile	$150.00
460482	08/16/2022	Open			Accounts Payable	TALX UC Express	$910.57
460483	08/16/2022	Open			Accounts Payable	Target Pest Control	$395.00
460484	08/16/2022	Open			Accounts Payable	Ted Koch	$100.00
460485	08/16/2022	Open			Accounts Payable	Tehama Golf Club LLC	$1,200.00
460486	08/16/2022	Open			Accounts Payable	Terry A Currence dba Currence Electric	$1,182.00
460487	08/16/2022	Open			Accounts Payable	Terry Gerhardstein	$100.00
460488	08/16/2022	Open			Accounts Payable	The Bank Of New York Mellon	$1,600.00
460489	08/16/2022	Open			Accounts Payable	Thomson-West/Barclays	$347.69
460490	08/16/2022	Open			Accounts Payable	Timothy James Simpson	$2,115.46
460491	08/16/2022	Open			Accounts Payable	Todd Swinscoe	$100.00
460492	08/16/2022	Open			Accounts Payable	Tri County Fire Protection	$247.59

City of Salinas

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From Payment Date: 8/9/2022 - To Payment Date: 8/31/2022

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount
General Account - General Account							
Check							
460493	08/16/2022	Open			Accounts Payable	Tuscany Enterprises, Inc dba Everclear Hydro-jetti	$284.00
460494	08/16/2022	Open			Accounts Payable	Tynan Village LP dba Tynan Village Apartments	$5,692.00
460495	08/16/2022	Open			Accounts Payable	Tynan Village LP dba Tynan Village Apartments	$4,269.00
460496	08/16/2022	Open			Accounts Payable	U.S. Bank National Association dba U.S. Bank Equip	$398.50
460497	08/16/2022	Open			Accounts Payable	U.S. Bank National Association ND	$13,501.56
460498	08/16/2022	Open			Accounts Payable	United Parcel Service	$405.53
460499	08/16/2022	Open			Accounts Payable	United Site Services	$342.33
460500	08/16/2022	Open			Accounts Payable	US Postmaster	$1,480.00
460501	08/16/2022	Open			Accounts Payable	Valley Saw Shop	$75.98
460502	08/16/2022	Open			Accounts Payable	Verizon Wireless	$38.01
460503	08/16/2022	Open			Accounts Payable	Voyager	$1,794.77
460504	08/16/2022	Open			Accounts Payable	W W Grainger Inc	$84.57
460505	08/16/2022	Open			Accounts Payable	Walmart Community BRC c/o Capitol One	$90.42
460506	08/16/2022	Open			Accounts Payable	Wayne Vance	$100.00
460507	08/16/2022	Open			Accounts Payable	William Feliz	$5,000.00
460508	08/16/2022	Open			Accounts Payable	Wilmington Trust	$2,500.00
460509	08/16/2022	Open			Accounts Payable	Worldpac	$874.35
460545	08/19/2022	Open			Accounts Payable	Community Homeless Solutions	$20,000.00
460546	08/19/2022	Open			Accounts Payable	U.S. Bank National Association ND	$2,284.62
460550	08/23/2022	Open			Accounts Payable	Alejandro Rodriguez	$86.00
460551	08/23/2022	Open			Accounts Payable	Anthony Avila	$86.00
460552	08/23/2022	Open			Accounts Payable	Anthony Rocha	$551.13
460553	08/23/2022	Open			Accounts Payable	Chris Callihan	$544.75
460554	08/23/2022	Open			Accounts Payable	Eduardo Bejarano	$292.75
460555	08/23/2022	Open			Accounts Payable	Ermelinda Reyes	$292.75
460556	08/23/2022	Open			Accounts Payable	Estefania Vargas	$578.50
460557	08/23/2022	Open			Accounts Payable	Froylan Aranda	$86.00
460558	08/23/2022	Open			Accounts Payable	Ichelle Herrera	$180.00
460559	08/23/2022	Open			Accounts Payable	Jared Reyes	$271.00
460560	08/23/2022	Open			Accounts Payable	Jim Pia	$1,314.33
460561	08/23/2022	Open			Accounts Payable	Kayshla Lopez	$65.25
460562	08/23/2022	Open			Accounts Payable	Kimbley Craig	$138.75
460563	08/23/2022	Open			Accounts Payable	Megan Hunter	$602.75
460564	08/23/2022	Open			Accounts Payable	Oscar Solis	$378.75
460565	08/23/2022	Open			Accounts Payable	Raul Rosales	$530.25
460566	08/23/2022	Open			Accounts Payable	Rodolfo Roman	$292.75
460567	08/23/2022	Open			Accounts Payable	Victoria Ramirez	$292.75
460568	08/23/2022	Open			Accounts Payable	American River College	$136.00
460569	08/23/2022	Open			Accounts Payable	Crisis Prevention Institute, Inc	$3,899.00
460572	08/23/2022	Open			Accounts Payable	A.G. Davi Ltd	$8,850.00
460573	08/23/2022	Open			Accounts Payable	Absolute Court Reporters, LLC	$779.95
460574	08/23/2022	Open			Accounts Payable	Alco Water	$1,612.82
460575	08/23/2022	Open			Accounts Payable	Alco Water	$739.50
460576	08/23/2022	Open			Accounts Payable	All Pets Hospital	$1,185.65
460577	08/23/2022	Open			Accounts Payable	Alliant Insurance Services, Inc.	$51,773.68
460578	08/23/2022	Open			Accounts Payable	Amazon.Com	$1,945.36
460579	08/23/2022	Open			Accounts Payable	Applied Maintenance Supplies & Solutions LLC	$992.58
460580	08/23/2022	Open			Accounts Payable	APWA National Headquarters	$527.38
460581	08/23/2022	Open			Accounts Payable	Aramark Uniform & Career Apparel Group, Inc	$601.72
460582	08/23/2022	Open			Accounts Payable	AT&T Mobility	$7,352.06
460583	08/23/2022	Open			Accounts Payable	Baseline Equipment Company	$106.50
460584	08/23/2022	Open			Accounts Payable	Bay Property Management	$4,935.00
460585	08/23/2022	Open			Accounts Payable	Bear Electrical Solutions Inc	$5,970.00
460586	08/23/2022	Open			Accounts Payable	Brian Salazar	$295.00
460587	08/23/2022	Open			Accounts Payable	Brook Joiner Walsh ada Brooklyn Joiner dba Joiner	$8,000.00
460588	08/23/2022	Open			Accounts Payable	California Water Service	$501.30
460589	08/23/2022	Open			Accounts Payable	California Water Service	$429.45

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From Payment Date: 8/9/2022 - To Payment Date: 8/31/2022

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount
General Account - General Account							
Check							
460590	08/23/2022	Open			Accounts Payable	Carroll D Handley dba Town 'N Country Realty	$3,600.00
460591	08/23/2022	Open			Accounts Payable	Casentini Street Apartments, Llc	$11,907.17
460592	08/23/2022	Open			Accounts Payable	Central Coast Systems Inc	$105.00
460593	08/23/2022	Open			Accounts Payable	Cintas	$895.41
460594	08/23/2022	Open			Accounts Payable	Cisco Properties dba c/o Steinbeck Realty, Inc	$18,500.00
460595	08/23/2022	Open			Accounts Payable	CMP-1 Llc dba The Pointe at Westlake	$5,367.00
460596	08/23/2022	Open			Accounts Payable	Coast Automotive Warehouse Inc	$953.69
460597	08/23/2022	Open			Accounts Payable	Coastal Monterey Properties, LLC dba Garden Court	$4,068.00
460598	08/23/2022	Open			Accounts Payable	Comcast (Business)	$58.82
460599	08/23/2022	Open			Accounts Payable	Comcast (Business)	$587.33
460600	08/23/2022	Open			Accounts Payable	Comcast (Business)	$587.33
460601	08/23/2022	Open			Accounts Payable	Comcast (Business)	$250.69
460602	08/23/2022	Open			Accounts Payable	Comcast (Business)	$175.57
460603	08/23/2022	Open			Accounts Payable	Condor Security Of America Inc	$4,173.12
460604	08/23/2022	Open			Accounts Payable	Consolidated Electrical Distributors, Inc.	$85.66
460605	08/23/2022	Open			Accounts Payable	Copware Inc	$3,795.00
460606	08/23/2022	Open			Accounts Payable	CSC Of Salinas	$233.43
460607	08/23/2022	Open			Accounts Payable	Daniel T O'Brien	$4,061.00
460608	08/23/2022	Open			Accounts Payable	Dataflow Business Systems Inc	$26,774.82
460609	08/23/2022	Open			Accounts Payable	Disaster Kleenup Specialist, Inc.	$2,010.54
460610	08/23/2022	Open			Accounts Payable	Don Chapin Inc	$3,446.24
460611	08/23/2022	Open			Accounts Payable	Edges Electrical Group, LLC	$3,781.58
460612	08/23/2022	Open			Accounts Payable	Edilcia Perez dba Ella Fitness	$300.00
460613	08/23/2022	Open			Accounts Payable	Elani Trejo Petty Cash	$82.55
460614	08/23/2022	Open			Accounts Payable	Environmental Systems, Inc of Northern California	$2,145.00
460615	08/23/2022	Open			Accounts Payable	Esbeidy Alejandra Rios Perez	$10,000.00
460616	08/23/2022	Open			Accounts Payable	ESRI	$1,029.00
460617	08/23/2022	Open			Accounts Payable	Eulalio Villegas-Rivera Petty Cash Custodian	$11,000.00
460618	08/23/2022	Open			Accounts Payable	Fastenal Company	$954.94
460619	08/23/2022	Open			Accounts Payable	Fed Ex	$122.51
460620	08/23/2022	Open			Accounts Payable	Ferguson US Hodings, Inc dba Ferguson Enterprises	$106.37
460621	08/23/2022	Open			Accounts Payable	First Alarm Security & Patrol Inc dba An Allied Un	$6,323.69
460622	08/23/2022	Open			Accounts Payable	Gabilan Hills Apartments Partners, LP	$3,471.00
460623	08/23/2022	Open			Accounts Payable	Gold Star Motors dba Gold Star Buick GMC	$185.46
460624	08/23/2022	Open			Accounts Payable	Granite Rock Co	$841.78
460625	08/23/2022	Open			Accounts Payable	Housing Authority of the County of Monterey	$777.00
460626	08/23/2022	Open			Accounts Payable	Imin Lee	$11,440.00
460627	08/23/2022	Open			Accounts Payable	Ingram Book Company	$1,672.22
460628	08/23/2022	Open			Accounts Payable	Interstate Battery System Inc	$622.35
460629	08/23/2022	Open			Accounts Payable	Jesse And Evan Inc dba La Plaza Bakery	$900.13
460630	08/23/2022	Open			Accounts Payable	Joaquin Vasquez Dba Rose Backflow Services	$1,250.00
460631	08/23/2022	Open			Accounts Payable	Jose Luis Corral dba Salinas Pizza	$41.47
460632	08/23/2022	Open			Accounts Payable	Kelly-Moore Paint Company	$687.78
460633	08/23/2022	Open			Accounts Payable	L.N. Curtis & Sons dba Curtis Blue Line	$936.39
460634	08/23/2022	Open			Accounts Payable	Leon De Asis	$2,000.00
460635	08/23/2022	Open			Accounts Payable	LexisNexis Risk Data Management Inc Accurint Acct	$765.25
460636	08/23/2022	Open			Accounts Payable	Manuel Arsiga dba c/o Pruneda Premier Proprties	$21,160.00
460637	08/23/2022	Open			Accounts Payable	MCCLEOA	$300.00
460638	08/23/2022	Open			Accounts Payable	My Jeep	$292.36
460639	08/23/2022	Open			Accounts Payable	New Image Landscape Company	$150.00
460640	08/23/2022	Open			Accounts Payable	O'Reilly Auto Parts	$92.84
460641	08/23/2022	Open			Accounts Payable	Office Depot Business Service Division	$1,444.50
460642	08/23/2022	Open			Accounts Payable	Omega Industrial Supply Inc	$4,048.48
460643	08/23/2022	Open			Accounts Payable	Ouita Martin	$8,800.00
460644	08/23/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$147.04
460645	08/23/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$314.65
460646	08/23/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$446.52

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Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount
General Account - General Account							
Check							
460647	08/23/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$138.13
460648	08/23/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$611.28
460649	08/23/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$6,518.61
460650	08/23/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$826.97
460651	08/23/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$1,524.52
460652	08/23/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$453.04
460653	08/23/2022	Open			Accounts Payable	Pacific Truck Parts Inc	$3,743.60
460654	08/23/2022	Open			Accounts Payable	Pure Water	$11.25
460655	08/23/2022	Open			Accounts Payable	Quality Water Enterprises	$2.33
460656	08/23/2022	Open			Accounts Payable	Refrigeration Supplies Distributor	$426.73
460657	08/23/2022	Open			Accounts Payable	Republic Services of Salinas	$919.68
460658	08/23/2022	Open			Accounts Payable	Republic Services of Salinas	$85.02
460659	08/23/2022	Open			Accounts Payable	Ruth Maria Milla-Leon dba Andersen's Lock & Safe	$447.27
460660	08/23/2022	Open			Accounts Payable	Salinas Valley Ford Inc	$139.95
460661	08/23/2022	Open			Accounts Payable	San Jose Motosport, Inc dba San Jose BMW	$3,707.26
460662	08/23/2022	Open			Accounts Payable	San Lorenzo Lumber	$1,503.63
460663	08/23/2022	Open			Accounts Payable	Sentry Alarm System	$2,049.00
460664	08/23/2022	Open			Accounts Payable	Shepard AV LLC dba McCune Audio Visual Lighting	$787.95
460665	08/23/2022	Open			Accounts Payable	Silver and Wright LLP	$1,604.54
460666	08/23/2022	Open			Accounts Payable	Smart and Final Iris	$1,667.02
460667	08/23/2022	Open			Accounts Payable	Snap-On Tools Corporation	$647.18
460668	08/23/2022	Open			Accounts Payable	Star Sanitation Services	$158.24
460669	08/23/2022	Open			Accounts Payable	Stommel Inc dba Lehr	$1,803.38
460670	08/23/2022	Open			Accounts Payable	Sturdy Oil Company	$7,677.78
460671	08/23/2022	Open			Accounts Payable	Sunlite Auto Glass, Inc	$800.90
460672	08/23/2022	Open			Accounts Payable	Sunstar Media	$25.00
460673	08/23/2022	Open			Accounts Payable	T-Mobile USA dba T-Mobile	$25.00
460674	08/23/2022	Open			Accounts Payable	Target Pest Control	$505.00
460675	08/23/2022	Open			Accounts Payable	Tiffanys Body Shop	$5,631.57
460676	08/23/2022	Open			Accounts Payable	Tri County Concrete and Supply, Inc	$1,321.92
460677	08/23/2022	Open			Accounts Payable	Tri County Fire Protection	$640.00
460678	08/23/2022	Open			Accounts Payable	Valley Fabrication Inc	$61.89
460679	08/23/2022	Open			Accounts Payable	Valley Saw Shop	$2,955.19
460680	08/23/2022	Open			Accounts Payable	Vega Investments, Inc	$5,025.00
460681	08/23/2022	Open			Accounts Payable	Verizon Wireless	$3,497.00
460682	08/23/2022	Open			Accounts Payable	Verizon Wireless	$91.16
460683	08/23/2022	Open			Accounts Payable	Verizon Wireless	$170.00
460684	08/23/2022	Open			Accounts Payable	Verizon Wireless	$3,283.34
460685	08/23/2022	Open			Accounts Payable	Verizon Wireless	$3,021.05
460686	08/23/2022	Open			Accounts Payable	W W Grainger Inc	$1,492.10
460687	08/23/2022	Open			Accounts Payable	WCAF, LLC dba Watsonville Ford	$2,124.05
460688	08/23/2022	Open			Accounts Payable	WCDJR LLC dba Watsonville Chrysler Dodge Jeep Ram	$2,433.23
460689	08/23/2022	Open			Accounts Payable	William R Price dba Law Offices of William R Price	$12,274.51
460690	08/23/2022	Open			Accounts Payable	Witmer Associates Inc	$1,492.05
460691	08/23/2022	Open			Accounts Payable	Worldpac	$534.30
460692	08/23/2022	Open			Accounts Payable	Zhen Guo	$17,850.00
460698	08/26/2022	Open			Accounts Payable	California Coast Uniform Company Inc	$6,038.77
460699	08/26/2022	Open			Accounts Payable	DMV Investigations Division	$23.00
460700	08/26/2022	Open			Accounts Payable	Keystone Engineering & Manufacturing Corp	$54,400.00
460701	08/26/2022	Open			Accounts Payable	Salinas Toyota	$28,807.55
460702	08/26/2022	Open			Accounts Payable	Salinas Toyota	$28,807.55
460703	08/30/2022	Open			Accounts Payable	Cassandra Schmidt	$187.00
460704	08/30/2022	Open			Accounts Payable	Chris Callihan	$214.38
460705	08/30/2022	Open			Accounts Payable	Danny Warner	$365.00
460706	08/30/2022	Open			Accounts Payable	Ermelinda Reyes	$187.00
460707	08/30/2022	Open			Accounts Payable	Jonathan Juarez	$588.00
460708	08/30/2022	Open			Accounts Payable	Joseph Santiago	$588.00

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From Payment Date: 8/9/2022 - To Payment Date: 8/31/2022

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount
General Account - General Account							
Check							
460709	08/30/2022	Open			Accounts Payable	Kayleen Gomez	$187.00
460710	08/30/2022	Open			Accounts Payable	Kimberly Diaz	$187.00
460711	08/30/2022	Open			Accounts Payable	Martha Guizar	$187.00
460712	08/30/2022	Open			Accounts Payable	Ruby Alvarez	$187.00
460713	08/30/2022	Open			Accounts Payable	Sophia Rome	$318.50
460714	08/30/2022	Open			Accounts Payable	Tanya Crawford	$187.00
460715	08/30/2022	Open			Accounts Payable	Victoria Ramirez	$187.00
460716	08/30/2022	Open			Accounts Payable	Alameda County Sheriff's Department	$2,062.00
460717	08/30/2022	Open			Accounts Payable	ABAG Power Purchasing Pool	$24,170.00
460718	08/30/2022	Open			Accounts Payable	Alco Water	$15,374.66
460719	08/30/2022	Open			Accounts Payable	Amazon.Com	$209.65
460720	08/30/2022	Open			Accounts Payable	American Supply Company	$974.31
460721	08/30/2022	Open			Accounts Payable	Applied Maintenance Supplies & Solutions LLC	$585.65
460722	08/30/2022	Open			Accounts Payable	Aramark Uniform & Career Apparel Group, Inc	$601.72
460723	08/30/2022	Open			Accounts Payable	Asap Alisal Signs And Printing	$641.10
460724	08/30/2022	Open			Accounts Payable	AT&T Mobility	$121.38
460725	08/30/2022	Open			Accounts Payable	AT&T Mobility	$21.99
460726	08/30/2022	Open			Accounts Payable	AT&T Mobility	$379.17
460727	08/30/2022	Open			Accounts Payable	Auto Center Imported Cars Inc dba My Nissan Kia	$1,727.17
460728	08/30/2022	Open			Accounts Payable	Bergkamp Incorporated	$965.27
460729	08/30/2022	Open			Accounts Payable	Cadence Team, Inc	$4,475.00
460730	08/30/2022	Open			Accounts Payable	California Water Service	$715.49
460731	08/30/2022	Open			Accounts Payable	CDW-G	$90,933.33
460732	08/30/2022	Open			Accounts Payable	Cintas	$1,610.72
460733	08/30/2022	Open			Accounts Payable	ClientFirst Consulting Group, LLC dba ClientFirst	$1,431.25
460734	08/30/2022	Open			Accounts Payable	Coast Automotive Warehouse Inc	$38.69
460735	08/30/2022	Open			Accounts Payable	Colantuono, Highsmith & Whatley, PC	$3,775.94
460736	08/30/2022	Open			Accounts Payable	Comcast	$2,940.29
460737	08/30/2022	Open			Accounts Payable	CSC Of Salinas	$558.80
460738	08/30/2022	Open			Accounts Payable	CSG Consultants	$19,680.00
460739	08/30/2022	Open			Accounts Payable	Department Of Justice	$603.00
460740	08/30/2022	Open			Accounts Payable	Don Chapin Inc	$1,212.73
460741	08/30/2022	Open			Accounts Payable	Extra Space Management Inc	$340.15
460742	08/30/2022	Open			Accounts Payable	Fastenal Company	$37.95
460743	08/30/2022	Open			Accounts Payable	Fed Ex	$40.88
460744	08/30/2022	Open			Accounts Payable	Ferguson US Hodings, Inc dba Ferguson Enterprises	$169.75
460745	08/30/2022	Open			Accounts Payable	First Alarm Security & Patrol Inc dba An Allied Un	$4,051.93
460746	08/30/2022	Open			Accounts Payable	First Mayors House of Salinas City	$40,000.00
460747	08/30/2022	Open			Accounts Payable	G2Solutions, Inc	$5.25
460748	08/30/2022	Open			Accounts Payable	Granite Rock Co	$173,937.00
460749	08/30/2022	Open			Accounts Payable	Green Valley Industrial Supply	$537.21
460750	08/30/2022	Open			Accounts Payable	HD Supply White Cap Construction Supply	$659.82
460751	08/30/2022	Open			Accounts Payable	Hemi's Landscaping and Concrete Inc	$276,798.65
460752	08/30/2022	Open			Accounts Payable	High Adrenaline Enterprises dba Contra Costa	$26,987.66
460753	08/30/2022	Open			Accounts Payable	High Adrenaline Enterprises dba Contra Costa	$26,987.66
460754	08/30/2022	Open			Accounts Payable	Hydro Turf	$7,535.12
460755	08/30/2022	Open			Accounts Payable	International Institute of Municipal Clerks	$215.00
460756	08/30/2022	Open			Accounts Payable	ISA	$185.00
460757	08/30/2022	Open			Accounts Payable	ISA	$185.00
460758	08/30/2022	Open			Accounts Payable	Jahaira Paola Navarro dba Dance Into Fitness with	$157.50
460759	08/30/2022	Open			Accounts Payable	James Bradley Blesso dba 2-Eleven Shields	$3,190.10
460760	08/30/2022	Open			Accounts Payable	Johnson Associates	$17.46
460761	08/30/2022	Open			Accounts Payable	Kelly-Moore Paint Company	$392.26
460762	08/30/2022	Open			Accounts Payable	L.N. Curtis & Sons dba Curtis Blue Line	$11,062.48
460763	08/30/2022	Open			Accounts Payable	Law Offices of Roy C Gunter III	$3,250.60
460764	08/30/2022	Open			Accounts Payable	LAZ Karp Assoc., LLC dba LAZ Parking California	$41,618.88
460765	08/30/2022	Open			Accounts Payable	Liebert Cassidy Whitmore	$707.50

City of Salinas

Claim Check Report 460265-460828

From Payment Date: 8/9/2022 - To Payment Date: 8/31/2022

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount
General Account - General Account							
Check							
460766	08/30/2022	Open			Accounts Payable	Long Valley Leasing	$815.11
460767	08/30/2022	Open			Accounts Payable	Mackay Motor Parts, Inc dba Napa Auto Parts	$44.27
460768	08/30/2022	Open			Accounts Payable	Makai Solutions	$1,657.91
460769	08/30/2022	Open			Accounts Payable	MNS Engineers, Inc	$6,243.75
460770	08/30/2022	Open			Accounts Payable	Monterey County Sheriffs Office	$567.00
460771	08/30/2022	Open			Accounts Payable	Monterey County The Herald	$489.27
460772	08/30/2022	Open			Accounts Payable	Monterey Rotoco, Inc	$458.80
460773	08/30/2022	Open			Accounts Payable	MP Express	$1,789.50
460774	08/30/2022	Open			Accounts Payable	National Steinbeck Center	$25,000.00
460775	08/30/2022	Open			Accounts Payable	O'Reilly Auto Parts	$248.59
460776	08/30/2022	Open			Accounts Payable	Office Depot Business Service Division	$1,484.69
460777	08/30/2022	Open			Accounts Payable	One Workplace L Ferrari, LLC dba Peninsula Busines	$245.69
460778	08/30/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$3,002.41
460779	08/30/2022	Open			Accounts Payable	Pacific Gas and Electric Company	$103,243.20
460780	08/30/2022	Open			Accounts Payable	Pacific Truck Parts Inc	$1,389.33
460781	08/30/2022	Open			Accounts Payable	Pinnacle Medical Group Inc dba Pinnacle Healthcare	$160.00
460782	08/30/2022	Open			Accounts Payable	QScend Technologies Inc.	$38,838.48
460783	08/30/2022	Open			Accounts Payable	Quality Water Enterprises	$466.81
460784	08/30/2022	Open			Accounts Payable	Rent-A-Fence.com, Inc	$1.77
460785	08/30/2022	Open			Accounts Payable	Republic Services of Salinas	$1,168.14
460786	08/30/2022	Open			Accounts Payable	Robert Half International, Inc dba Accountemps, Of	$6,500.00
460787	08/30/2022	Open			Accounts Payable	Russell Auria Pest Control Services	$440.00
460788	08/30/2022	Open			Accounts Payable	Ruth Maria Milla-Leon dba Andersen's Lock & Safe	$993.95
460789	08/30/2022	Open			Accounts Payable	Ryan James Dowd dba Homeless Training Institute LL	$299.00
460790	08/30/2022	Open			Accounts Payable	Salinas Toyota	$94.11
460791	08/30/2022	Open			Accounts Payable	Salinas Valley Ford Inc	$41,224.11
460792	08/30/2022	Open			Accounts Payable	Salinas Valley Ford Inc	$41,224.11
460793	08/30/2022	Open			Accounts Payable	Salinas Valley Ford Inc	$82,438.94
460794	08/30/2022	Open			Accounts Payable	Salinas Valley Ford Inc	$56,046.76
460795	08/30/2022	Open			Accounts Payable	Salinas Valley Ford Inc	$57,704.09
460796	08/30/2022	Open			Accounts Payable	Salinas Valley Ford Inc	$114,174.98
460797	08/30/2022	Open			Accounts Payable	Salinas Valley Ford Inc	$41,224.11
460798	08/30/2022	Open			Accounts Payable	Salinas Valley Ford Inc	$41,224.11
460799	08/30/2022	Open			Accounts Payable	Salinas Valley Ford Inc	$41,224.11
460800	08/30/2022	Open			Accounts Payable	Salinas Valley Ford Inc	$41,224.11
460801	08/30/2022	Open			Accounts Payable	Same Day Shred	$45.00
460802	08/30/2022	Open			Accounts Payable	San Diego Police Equipment Company	$15,885.83
460803	08/30/2022	Open			Accounts Payable	San Lorenzo Lumber	$495.57
460804	08/30/2022	Open			Accounts Payable	Sergio Ruiz	$160.00
460805	08/30/2022	Open			Accounts Payable	Shepard AV LLC dba McCune Audio Visual Lighting	$1,575.90
460806	08/30/2022	Open			Accounts Payable	Smith and Enright Landscaping	$109,413.00
460807	08/30/2022	Open			Accounts Payable	Smokey Key Service	$240.64
460808	08/30/2022	Open			Accounts Payable	SpeakWrite LLC	$3,329.49
460809	08/30/2022	Open			Accounts Payable	Steven Criste	$354.00
460810	08/30/2022	Open			Accounts Payable	Stifel Nicolaus & Co Inc	$8,462.20
460811	08/30/2022	Open			Accounts Payable	Stommel Inc dba Lehr	$1,292.15
460812	08/30/2022	Open			Accounts Payable	Sturdy Oil Company	$1,161.39
460813	08/30/2022	Open			Accounts Payable	Sturgeon Electric California, LLC	$55,936.01
460814	08/30/2022	Open			Accounts Payable	Target Pest Control	$425.00
460815	08/30/2022	Open			Accounts Payable	The Bank Of New York Mellon	$4,500.00
460816	08/30/2022	Open			Accounts Payable	Thomas Benting	$125.00
460817	08/30/2022	Open			Accounts Payable	U.S. Bank National Association ND	$25,787.57
460818	08/30/2022	Open			Accounts Payable	United Parcel Service	$44.37
460819	08/30/2022	Open			Accounts Payable	Unmanned Vehicle Technologies, LLC	$35,158.84
460820	08/30/2022	Open			Accounts Payable	Valley Fabrication Inc	$18.03
460821	08/30/2022	Open			Accounts Payable	Vals Plumbing and Heating Inc	$1,150.16
460822	08/30/2022	Open			Accounts Payable	W W Grainger Inc	$20.89

City of Salinas

Claim Check Report 460265-460828

From Payment Date: 8/9/2022 - To Payment Date: 8/31/2022

Number	Date	Status	Void Reason	Reconciled/ Voided Date	Source	Payee Name	Transaction Amount
General Account - General Account							
Check							
460823	08/30/2022	Open			Accounts Payable	Walmart Community BRC c/o Capitol One	$55.63
460824	08/30/2022	Open			Accounts Payable	Willdan Financial Services	$500.00
460825	08/30/2022	Open			Accounts Payable	Gavilan View Middle School	$618.80
460826	08/30/2022	Open			Accounts Payable	John Gutierrez Middle School	$338.72
460827	08/30/2022	Open			Accounts Payable	Monterey Peninsula Voices	$167.63
460828	08/30/2022	Open			Accounts Payable	Santo D Tarantino	$1,904.85
Type Check Totals:					623 Transactions		$3,200,038.03
General Account - General Account Totals							

File #: ID#22-433, **Version:** 1

Bardin Road Safe Routes to School Improvements Project, CIP 9218

Approve a Resolution approving Contract Change Order No. 17 to the Don Chapin Company Inc. for the Bardin Road SRTS Project ATPL-5045(031) and authorize the City Manager to execute all necessary documents related to Change Order No. 17.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **SEPTEMBER 6, 2022**

DEPARTMENT: **PUBLIC WORKS DEPARTMENT**

FROM: **DAVID JACOBS, P.E., L.S., PUBLIC WORKS DIRECTOR**

THRU: **ADRIANA ROBLES, P.E., CITY ENGINEER**

BY: **ELISE RAMIREZ, P.E., SENIOR CIVIL ENGINEER**

TITLE: **BARDIN ROAD SAFE ROUTES TO SCHOOL IMPROVEMENTS, PROJECT NO. 9218**

RECOMMENDED MOTION:

A motion to approve a Resolution to:

1) Approve Contract Change Order No. 17 to the Don Chapin Company, Inc. for the Bardin Road Safe Routes to School Improvements, Project No. 9218, Federal Project ATPL-5045(031), in the amount of $586,967.15 and authorize the City Manager to execute all necessary documents related to Change Order No. 17 for a total amount not to exceed of $686,967.15.

RECOMMENDATION:

It is recommended that the City Council approve a resolution for the City Manager to execute Contract Change Order No. 17 to the Don Chapin Company, Inc. for the Bardin Road Safe Routes to School Improvements, Project No. 9218, Federal Project ATPL-5045(031) in the amount of $586,967.15; and authorize the City Manager to execute all necessary documents for Change Order No. 17 for a total amount not to exceed of $686,967.15.

EXECUTIVE SUMMARY:

On November 17, 2020, City Council approved a Resolution No. 22000 awarding a construction contract to the Don Chapin Company, Inc. for the Bardin Road Safe Routes to School Improvements, Project No. 9218 in the amount of $7,941,211.00. Following execution of the contract and initiation of the project, construction of the project commenced on March 15, 2021. The Project is entering the final phase and is anticipated to be completed in the Fall of 2022.

BACKGROUND:

The Bardin Road Safe Routes to School project aims to transform Bardin Road into a multi-modal "complete street" corridor by improving pedestrian, bicycle, and vehicular facilities along Bardin

Road, between Williams Road and Sconberg Parkway. Additionally, the project will improve the existing intersections at Bardin Road/East Alisal Street and Sconberg Parkway/Alisal Road by constructing a double roundabout system in this area. Moreover, the project adds buffered bicycle lanes along Bardin Road, between Williams Road and East Alisal Street, provides pedestrian ramps where none existed, and enhances crosswalks at key locations within the project limits. The pavement at Bardin Road will be rehabilitated and a segment at East Alisal Street (between Tampa Street and just east of Margaret Street) will receive slurry seal. The safety for all road users (pedestrians, bicyclists, and drivers) will improve by installing the above-mentioned improvements.

The Bardin Road Safe Routes to School Project commenced on March 15, 2021 and is currently under construction with an anticipated completion date of Fall 2022. To date, the contractor has completed approximately 85% of the contract work and has utilized approximately 85% of the contract time. The project has executed sixteen (16) Contract Change Orders, totaling a dollar amount of $722,122.35, all within the authorized 10% project contingency, per Resolution No. 22000, see Table 1 below:

Table 1: Contract Change Order Contingency Utilization Log

CCO No.	Amount	Contingency Expended (Cumulative)	Contingency Remaining	New Contract Amount (w/CCOs)
CCO 1	$ 50,000.00	$ 50,000.00	$ 744,121.10	$ 7,991,211.00
*CCO 2	$ -	$ 50,000.00	$ 744,121.10	$ 7,991,211.00
CCO 3	$ 3,500.00	$ 53,500.00	$ 740,621.10	$ 7,994,711.00
CCO 4	$ 4,000.00	$ 57,500.00	$ 736,621.10	$ 7,998,711.00
CCO 5	$ 28,675.00	$ 86,175.00	$ 707,946.10	$ 8,027,386.00
CCO 6	$ 3,800.00	$ 89,975.00	$ 704,146.10	$ 8,031,186.00
CCO 7	$ 1,889.20	$ 91,864.20	$ 702,256.90	$ 8,033,075.20
CCO 8	$ 4,970.00	$ 96,834.20	$ 697,286.90	$ 8,038,045.20
CCO 9	$ 275,244.00	$ 372,078.20	$ 422,042.90	$ 8,313,289.20
CCO 10	$ 184,478.37	$ 556,556.57	$ 237,564.53	$ 8,497,767.57
CCO 11	$ 66,486.01	$ 623,042.58	$ 171,078.52	$ 8,564,253.58
CCO 12	$ 26,106.19	$ 649,148.77	$ 144,972.33	$ 8,590,359.77
CCO 13	$ 28,173.54	$ 677,322.31	$ 116,798.79	$ 8,618,533.31
CCO 14	$ 27,657.93	$ 704,980.24	$ 89,140.86	$ 8,646,191.24
CCO 15	$ 12,748.39	$ 717,728.63	$ 76,392.47	$ 8,658,939.63
CCO 16	$ 4,393.72	$ 722,122.35	$ 71,998.75	$ 8,663,333.35
CCO 17	$ 586,967.15	$1,309,089.50	$ (514,968.40)	$ 9,250,300.50
*No dollar amount associated with CCO.				

Department Policy 75-1, Item 3, states City Council authorization is required for Contract Change Orders of more than $100,000.00, or 10% of the total contract amount. Based on Department Policy 75-1, Contract Change Orders No. 9 and 10 required City Council approval prior to execution by the City Manager and were approved by Council Resolutions No. 22334 and 22335,

respectively. Given Contract Change Order No. 17 (CCO) has an estimated dollar amount of $586,967.15 and also surpasses the previously authorized 10% construction contingencies, CCO No. 17 requires Council approval.

Contract Change Order No. 17:
CCO No. 17 is for a change to the method of pavement rehabilitation treatment work (roadway resurfacing) of Bardin Road between E Alisal St and Williams Rd. The original contract design called for Full Depth Reclamation (FDR) for this segment of roadway. The FDR design was determined to be infeasible due to the discovery of multiple shallow utilities along Bardin Road during the utility potholing operation. The shallow utilities were discovered to have a top of pipe elevation of 1-foot or 12" below the roadway surface. The FDR design called for pulverization of the top 1-foot or 12" of roadway section. The FDR process would not have been able to move forward without protecting or relocating the existing shallow utilities, both of which would add significant unanticipated costs.

The team worked on multiple alternative designs while considering each of their respective costs. Ultimately, pursuing the necessary mitigation measures on the shallow utilities for the original FDR design, resulted in costs well beyond the City's allocation for this Project.

The team determined the best possible alternative would be a 6-inch grind and overlay of Hot Mix Asphalt (HMA) pavement resurfacing. This alternative design will provide a 6-inch clearance between the original roadway surface and the top of pipe for utilities with a top of pipe elevation at a depth of 1-foot or 12". Staff worked with the contractor to determine the contract line items that would be removed and credited from the original contract bid. The total amount of original FDR contract work removed totaled $1,205,608.00 and the total estimated amount of the alternative 6" HMA design is $1,792,575.15. The resultant amount for CCO 17 is estimated to be $586,967.15.

An additional $100,000.00 is also being requested due to the potential for additional unknown items. This amount is being requested at this time to ensure decisions can be made promptly in the field and not delay pavement operations or prolong impacts to the residents and businesses along Bardin Rd. Additionally, the project has encountered unsuitable soils in multiple locations in previous excavations. Staff believes this additional $100,000.00 authorization for CCO 17 will allow rapid response to similar situations, if encountered. The additional $100,000 shall be included in CCO 17 for a total not to exceed amount of $686,967.15.

The Project's remaining work includes the final paving along Bardin Road between E Alisal St and Williams Rd (described above), final paving for the portion of Alisal Road within the County of Monterey right-of-way (Schedule C), final pavement striping, final lighting and power in coordination with PG&E, and final landscaping.

City Staff recommends City Council approve Contract Change Order No. 17 to the Don Chapin Company, Inc. for the Bardin Road Safe Routes to School Improvements, Project No. 9218, Federal Project ATPL-5045(031), in the amount of $586,967.15; and authorize the City Manager to execute all necessary documents related to Change Orders No. 17 up to an amount not to exceed of $686,967.15.

CEQA CONSIDERATION:

Statutory Exemptions. City of Salinas has determined that the project is exempt from the California Environmental Quality Act (CEQA) Guidelines (Section 15301(c) "Existing facilities", Class1) because the project proposes to repair, maintain, and alter existing facilities. Class 1 categorically exempts the repair, maintenance, or minor alteration of existing public facilities involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination. Section 15301(c) of the CEQA Guidelines states that the types of "existing facilities" include, but are not limited to, existing highways and streets, sidewalks, gutters, bicycle and pedestrian trails and similar facilities.

Furthermore, as a result of the federal grant, the project required compliance with the National Environmental Policy Act (NEPA). The State has determined that this project has no significant impacts on the environment as defined by the NEPA, and that there are no unusual circumstances as described in 23 CFR 771.117(b) and in 23 CFR 771.117(c): activity (c)(3).

STRATEGIC PLAN INITIATIVE:

The project supports City Council's Goal of Infrastructure and Environmental Sustainability and Public Safety. These improvements will invest in facilities and infrastructure by enhancing pedestrian safety and increasing connectivity, mobility, and access for transit users and pedestrians, and improves the quality of life of its residents.

DEPARTMENTAL COORDINATION:

Public Works staff and Finance staff have collaborated on the funding of the Bardin Road Safe Routes to School Improvements Project.

FISCAL AND SUSTAINABILITY IMPACT:

	Budget	Expenditures	Encumbrances	Balance
County Fund	$ 535,000.00	$ 47,824.90	$ 299,277.10	$ 187,898.00
SB1 Fund 2511	$ 1,300,000.00	$ 145,966.40	$ 481,930.56	$ 672,103.04
ATP Grant	$ 5,748,983.89	$ 4,537,237.45	$ 1,211,662.26	$ 84.18
MX 2510	$ 606,815.54	$ 470,332.59	$ 64,163.58	$ 72,319.37
MX Bond 5202	$ 2,258,859.37	$ 1,835,056.95	$ 395,538.17	$ 28,264.25
RSTP Grant	$ 1,800,000.00	$ 1,409,816.70	$ 390,183.30	$ -
Total As of 8.10.22	**$ 12,249,658.80**	**$ 8,446,234.99**	**$ 2,842,754.97**	**$ 960,668.84**

There is sufficient funding within the Project financing CIP 9218 to authorize CCO 17 for an estimated amount of $586,967.15 and also authorize an additional $100,000 for construction contingencies related to the work for a total amount not to exceed $686,967.15.

ATTACHMENTS:
Resolution

RESOLUTION NO. _____ (N.C.S.)

BARDIN ROAD SAFE ROUTES TO SCHOOL IMPROVEMENTS, PROJECT NO. 9218, CONTRACT CHANGE ORDER NO. 17

WHEREAS, on November 17, 2020, City Council approved a Resolution No. 22000 awarding a construction contract to the Don Chapin Company, Inc. for the Bardin Road Safe Routes to School Improvements, Project No. 9218 in the amount of $7,941,211.00. The project commenced on March 15, 2022 and is currently 85% complete; and

WHEREAS, Department Policy 75-1, states City Council approval and authorization is required for Contract Change Orders of more than $100,000.00, or 10% of the total contract amount; and

WHEREAS, the project has executed sixteen (16) Contract Change Orders (CCO), totaling a dollar amount of $722,122.35 which are within the signing authority as outlined by Department Policy 75-1 (Resolution No. 21528); and

WHEREAS, based on Department Policy 75-1, Contract Change Orders No. 9 and 10 required City Council approval prior to execution by the City Manager and were approved by Council Resolutions No. 22334 and 22335, respectively; and

WHEREAS, CCO No. 17 adjusts the originally planned roadway pavement treatment of Bardin Road between E Alisal St to Williams Rd from Full Depth Reclamation (FDR) to 6-inch grind and overlay Hot Mix Asphalt (HMA) for a total estimated net cost of $586,967.15; and

WHEREAS, an additional $100,000.00 is also being requested to ensure decisions can be made promptly in the field and not delay pavement operations or prolong construction impacts to the nearby residents, schools, roadway users, and businesses along Bardin Rd; and

WHEREAS, City Staff recommends City Council approve Contract Change Order No. 17 to the Don Chapin Company, Inc. for the Bardin Road Safe Routes to School Improvements, Project No. 9218, Federal Project ATPL-5045(031), for an estimated amount of $586,967.15 and authorize the City Manager to execute all necessary documents related to Change Order No. 17 for a total amount not to exceed $686,967.15.

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council Approves Contract Change Order No. 17 to the Don Chapin Company, Inc. for the Bardin Road Safe Routes to School Improvements, Project No. 9218, Federal Project ATPL-5045(031), for an estimated amount of $586,967.15 and authorizes the City Manager to execute all necessary documents related to Change Order No. 17 for a total amount not to exceed of $686,967.15.

PASSED AND APPROVED this 6th day of September 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____
Kimbley Craig, Mayor

ATTEST:

_____
Patricia M. Barajas, City Clerk

File #: ID#22-443, **Version:** 1

Traffic Signal Encroachment Permit Projects Acceptance

Approve a Resolution accepting four traffic signal improvement projects delivered through encroachment permits for maintenance and responsibility.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **SEPTEMBER 6, 2022**

DEPARTMENT: **PUBLIC WORKS DEPARTMENT**

FROM: **DAVID JACOBS, PUBLIC WORKS DIRECTOR**

BY: **ANDREW EASTERLING, TRAFFIC ENGINEER**

TITLE: **TRAFFIC SIGNAL ENCROACHMENT PERMIT PROJECTS ACCEPTANCE**

RECOMMENDED MOTION:

It is recommended that the City Council approve a Resolution accepting four traffic signal improvement projects delivered through encroachment permits for maintenance and responsibility.

RECOMMENDATION:

Four recently completed traffic signal improvement projects were constructed by private parties through an encroachment permit. The City needs to formalize the acceptance of these projects for maintenance and responsibility to document the dates the operations of the traffic signals transferred from the private contractor to the City. It is recommended that the City Council approve a Resolution accepting four traffic signal improvement projects delivered through encroachment permits for acceptance and maintenance.

BACKGROUND:

Most traffic signal projects are constructed by the City of Salinas, but on occasion a private party may deliver a traffic signal project through an encroachment permit. On City managed projects the City monitors the construction schedule and documents the hand off from the Contractor to the City by formerly issuing a project acceptance and release of maintenance and responsibility letter to the contractor which is passed by a Council Resolution. However, it was recently noted that when a private party delivers a traffic signal project through an encroachment permit there are no records to document this transition. Four recently completed traffic signal improvement projects were constructed by private parties through an encroachment permit, and the City needs to formalize the acceptance of these projects.

Lowe's Traffic Signals

Two new traffic signals were installed at San Juan Grade Road at Northridge Way and Boronda Road at Dartmouth Way, as part of the Cloverfield Retail Center (Lowe's) Project. These improvements were evaluated in the development's Traffic Impact Analysis (Attachment 1) and required as part of the Environmental Impact Report. An encroachment permit issued on May 10, 2017, to construct the Cloverfield Retail Center offsite improvements including the two new traffic signals (Attachment 2). Construction started on May 17, 2017 and the final inspection was on June 15, 2018. Staff recommends a Resolution accepting the Cloverfield Retail Center offsite improvements for maintenance and responsibility effective June 15, 2018.

Harden Ranch Signal

Harden Ranch Management Group prepared a traffic signal warrant study and Traffic Signal Analysis (Attachment 3) for the intersection of North Main Street and Cherokee Drive. On December 19, 2017 the City Council passed Resolution No. 21315 approving the installation of a traffic signal at the North Main Street and Cherokee Drive intersection; and approving a funding agreement with the Salinas Shopping Center Associates Limited Partnership for the installation of said traffic signal. On August 27, 2019 the City Council passed Resolution No. 21696 approving the plans and specifications for the traffic signal and approving an amendment to the funding agreement so that Harden Ranch Shopping Center could deliver the new traffic signal through an encroachment permit. An encroachment permit was issued on June 22, 2020, to construct the new traffic signal (Attachments 4 & 5). Construction started on March 17, 2021 and the final inspection was on December 14, 2021. Staff recommends a Resolution accepting the traffic signal improvements at North Main Street and Cherokee Drive for maintenance and responsibility effective December 14, 2021.

North Davis Road and West Rossi Street Signal Modifications

Traffic signal modifications were installed at North Davis Road and West Rossi Street as part of the Harvest Moon Agricultural Employee Housing Project. These improvements were evaluated in the development's Traffic Impact Analysis (Attachment 6) and required as part of the Initial Study-Mitigated Negative Declaration processed by the County of Monterey. An encroachment permit was issued on August 19, 2020, to construct the offsite improvements within the City's right of way, including the traffic signals modifications (Attachment 7). Construction started on October 12, 2020 and the final inspection was on April 13, 2021. Staff recommends a Resolution accepting the Harvest Moon Agricultural Employee Housing Project offsite improvements for maintenance and responsibility effective April 13, 2021.

East Romie Lane Flashing Beacon

In 2020, the Salinas Valley Memorial Hospital proposed a new mid-block crosswalk on East Romie Lane to improve crossing conditions for hospital staff. The hospital redeveloped some of its buildings, which resulted in hospital staff crossing East Romie Lane in front of the Hospital. The Hospital hired a traffic engineer and prepared plans and specs to meet the City's crosswalk policy and standards. The crosswalk meets the City's crosswalk policy and city standards, therefore, staff recommended the approval of the proposed mid-block crosswalk on East Romie

Lane. On August 4, 2020 City Council approved Resolution No. 21916 approving the proposed mid-block crosswalk on East Romie Lane. An encroachment permit was issued on October 22, 2020, to construct the crosswalk, pedestrian refuge island and rectangular rapid flashing beacon (RRFB) system (Attachment 8). Construction started on November 5, 2020 and the final inspection was on March 24, 2021. Staff recommends a Resolution accepting the crosswalk, pedestrian refuge island and RRFB system improvements for maintenance and responsibility effective March 24, 2021.

In summary, each of the four traffic signal improvement projects were constructed by private parties through an encroachment permit. The City reviewed and approved the construction plans, provided oversight and inspected the installation on all four projects. When the private contractor completed construction and the project passed final inspection the City assumed responsibility for operations and maintenance of the traffic signals. The City needs to formalize the acceptance of these projects for maintenance and responsibility to document the dates the operations of the traffic signals transferred from the contractor to the City.

TRAFFIC AND TRANSPORTATION COMMISSION:

On July 14th 2022, the Traffic and Transportation Commission received a report regarding the consideration to accept traffic signals encroachment permit projects for maintenance and responsibility. The Commission voted unanimously 6-0 to recommend that the City Council approve a Resolution accepting four traffic signal improvement projects delivered through encroachment permits for maintenance and responsibility.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378). In addition, CEQA Guidelines Section 15061 includes the general rule that CEQA applies only to activities which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. Because the proposed action and this matter have no potential to cause any effect on the environment, or because it falls within a category of activities excluded as projects pursuant to CEQA Guidelines section 15378, this matter is not a project. Because the matter does not cause a direct or foreseeable indirect physical change on or in the environment, this matter is not a project. Any subsequent discretionary projects resulting from this action will be assessed for CEQA applicability.

STRATEGIC PLAN INITIATIVE:

This action does not support a specific City Council Goal.

FISCAL AND SUSTAINABILITY IMPACT:

All cost to design, construct and permit these projects were funded by private parties. The City is responsible for the operations and maintenance of the traffic signals once construction is complete and the project passes final inspection. The cost to operate and maintain a traffic signal is estimated to be approximately $5,000 per year. Every fiscal year, the budgeted funding for signal maintenance typically comes from motor vehicle fuel tax and SB1 Road Maintenance Funds.

ATTACHMENTS:

Resolution
Attachment 1: Cloverfield Retail Center Traffic Impact Analysis
Attachment 2: Cloverfield Retail Center Offsite Improvement As-Built Record Drawings
Attachment 3: Harden Ranch Traffic Study
Attachment 4: Main Street and Cherokee Drive Traffic Signal Approved Plans
Attachment 5: Main Street and Cherokee Drive Traffic Signal As-Built Record Drawings
Attachment 6: Harvest Moon Agricultural Employee Housing Project Traffic Impact Analysis
Attachment 7: Harvest Moon Agricultural Employee Housing Project As-Built Records Drawings
Attachment 8: 450 E Romie Ln Approved Encroachment Permit

RESOLUTION NO. _____ (N.C.S.)

A RESOLUTION OF THE SALINAS CITY COUNCIL ACCEPTING FOUR TRAFFIC SIGNAL IMPROVEMENT PROJECTS DELIVERED THROUGH ENCROACHMENT PERMITS FOR MAINTENANCE AND RESPONSIBILITY

WHEREAS, four recently completed traffic signal improvement projects were constructed by private parties through an encroachment permit; and

WHEREAS, The City needs to formalize the acceptance of these projects for maintenance and responsibility to document the dates the operations of the traffic signals transferred from the private contractor to the City; and

WHEREAS, on July 14, 2022, the Traffic and Transportation Commission voted 6-0 to recommend that the City Council approve a Resolution accepting four traffic signal improvement projects delivered through encroachment permits for maintenance and responsibility.

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council hereby accepts the two new traffic signals were installed at San Juan Grade Road at Northridge Way and Boronda Road at Dartmouth Way, as part of the Cloverfield Retail Center, for maintenance and responsibility effective June 15, 2018.

BE IT FURTHER RESOLVED that the Salinas City Council hereby accepts the new traffic signal installed at North Main Street and Cherokee Drive by Harden Ranch Management Group, for maintenance and responsibility effective December 14, 2021; and

BE IT FURTHER RESOLVED that the Salinas City Council hereby accepts the traffic signal modifications at North Davis Road and West Rossi Street as part of the Harvest Moon Agricultural Employee Housing Project, for maintenance and responsibility effective April 13, 2021; and

BE IT FURTHER RESOLVED that the Salinas City Council hereby accepts the new traffic flashing beacon and crosswalk at on East Romie Lane installed by Salinas Valley Memorial Hospital, for maintenance and responsibility effective March 24, 2021.

PASSED AND APPROVED this 6th day of September, 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____
Kimbley Craig, Mayor

ATTEST:

_____
Patricia M. Barajas, City Clerk

Salinas, California:

Salinas (Cloverfield) Retail Center Transportation Impact Analysis

Prepared for: Cloverfield Management, LLC

Prepared by: Fehr & Peers
Transportation Consultants

160 W. Santa Clara St.
Suite 675
San Jose, CA 95113
408.278.1700

December 2010

Final Report

Salinas (Cloverfield) Retail Center Transportation Impact Analysis

Prepared for:

Cloverfield Management, LLC
EMC Planning Group Inc.
and the
City of Salinas

Prepared by:

Fehr & Peers

December 2, 2010

SJ10-1154

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EXECUTIVE SUMMARY

This report presents the results of the transportation impact analysis (TIA) for the proposed 205,848 square foot (s.f.) Salinas retail center located at the northeast corner of East Boronda Road and San Juan Grade Road in Salinas, California.

The impacts of the proposed project to the surrounding transportation system were evaluated following the guidelines of the City of Salinas and Caltrans. The operations of 12 key intersections, four roadway segments and four freeway segments north and south of the US 101/Boronda Road interchange were evaluated with level of service calculations during the weekday evening (PM) and Saturday (SAT) peak period for Existing, Project, Cumulative Without Project, and Cumulative With Project Conditions. This study assumes that a minimal amount of traffic will be generated during the AM peak period and will not substantially affect the surrounding roadways. The Saturday mid-day analysis is presented as an informational scenario because this time period occurs once a week; rather, than a typical midweek (e.g., Tuesday through Thursday) PM peak hour that occurs three times a week.

SALINAS FUTURE GROWTH AREA NORTH OF BORONDA ROAD

The proposed project is consistent with the current General Plan land use and does not conflict with planned roadway improvements. The cumulative analysis conducted for the Cloverfield Retail Center considered approved and pending projects (i.e., projects with applications on file with the City). A focused General Plan AM and PM peak hour analysis was completed to determine if the planned intersection configuration at San Juan Grade Road and East Boronda Road could be modified to exclude a westbound right turn-lane (See **Appendix I**). The effects of long-range cumulative development associated with buildout of the future growth area north of East Boronda Road on the local and regional transportation facilities have been evaluated at the General Plan roadway segment level during the 2002 City General Plan update and the supplemental transportation analysis (see *Final Salinas Sphere of Influence Amendment and Annexation Supplemental TIA*, November 2007). The potential transportation impacts from the long-range cumulative development were also included in the Circulation Element update, environmental documents, and *City of Salinas Traffic Improvement Program* (updated March 2010). Separate environmental review will be conducted for individual specific plan proposed within the future growth area.

PROJECT TRIP ESTIMATES

The proposed project is estimated to generate 826 net new PM peak-hour trips (405 inbound and 421 outbound) and 1,096 net new SAT mid-day peak-hour trips (570 inbound and 526 outbound).

INTERSECTION IMPACTS AND MITIGATION

Project Conditions

The project would have a significant impact at the *East Boronda Road and San Juan Grade Road* intersection based on the existing lane configuration. Mitigation to reduce the project impact to ***less-than-significant*** requires the construction of a second eastbound left turn lane consistent with the City of Salinas Public Works Department active project (No. 9510) to construct double lefts on all approaches. Other secondary impacts will include tree removal, lengthening of crosswalks, and/or modification of signal phasing that could increase the pedestrian crossing distances/times at the intersection.

Mitigation of the significant operational impact for the southbound left-turn lane at the East Boronda Road and San Juan Grade Road intersection requires modification of the San Juan Grade Road and Mobile

Home Driveway intersection to right-in-right-out access only. This driveway modification would require a U-turn movement at the signalized intersections on San Juan Grade Road at both Northridge Drive and East Boronda Road. Under Project Conditions fewer than 10 vehicles make a northbound left into the mobile home driveway during the PM or SAT peak hours. And zero vehicles make an eastbound left turn from the mobile home driveway during the PM and SAT peak hours. The City of Salinas should continue to monitor this location and conduct an engineering study to evaluate the need for turn movement restrictions as appropriate to maintain acceptable intersection operations.

Cumulative With Project Conditions

The *Boronda Road and North Main Street* intersection would be ***less-than-significant*** with the following mitigation:

- Widen the eastbound approach to include a third eastbound through lane.
- Modify the signal timing to include a southbound right-turn overlap phase, which requires prohibition of eastbound u-turns.

In addition to the PM peak hour improvements listed above, the SAT peak hour also requires modification of the westbound shared through-right lane into an exclusive through lane and separate right-turn lane. Widening intersections and/or roadways for infrequent peak demand creates a vehicle oriented street system that increases the exposure of pedestrians and bicyclist to vehicle traffic. Thus, the Saturday peak hour mitigation is provided for informational purposes because this time period occurs less frequently than a typical mid-week PM peak hour.

Under both the PM and SAT peak hours, additional right-of-way may be needed, which would affect existing parking lots and landscape frontages on each corner. These improvements are not included in the Salinas *Traffic Improvement Program (TIP)*. Thus, payment of the city impact fee will not fulfill the project applicants obligations for mitigating this intersection impact to less-than-significant. However, the project applicant may either construct the physical improvements and enter into a reimbursement with the City or the City may update the Salinas *Traffic Improvement Program (TIP)* to include these improvements and payment of the updated city impact fee would fulfill the project applicants obligations for mitigating this cumulative intersection impact to less-than-significant. Unless other funding sources such as contributions from other developers, or city funds are made available, these roadway improvements will not be implemented, and this impact would be ***significant and unavoidable***.

The *East Boronda Road and San Juan Grade Road* intersection would be ***less-than-significant*** with the following mitigation:

- Widen each approach to include a second left-turn lane.

This mitigation is consistent with the City of Salinas Public Works Department active project (No. 9510) to construct double lefts on all approaches.

Mitigation of the significant operational impact for the southbound left-turn lane at the East Boronda Road and San Juan Grade Road intersection requires modification of the San Juan Grade Road and Mobile Home Driveway intersection to right-in-right-out access only. This driveway modification would require a U-turn movement at the signalized intersections on San Juan Grade Road at both Northridge Drive and East Boronda Road. Under Cumulative plus Project Conditions fewer than 10 vehicles make a northbound left into the mobile home driveway during the PM or SAT peak hours. And zero vehicles make an eastbound left turn from the mobile home driveway during the PM and SAT peak hours. The City of Salinas should continue to monitor this location and conduct an engineering study to evaluate the need for turn movement restrictions as appropriate to maintain acceptable intersection operations.

The *East Boronda Road and McKinnon Street* intersection would be ***less-than-significant*** with the following mitigation:

- Widen both the eastbound and westbound directions to provide a second through lane, which is currently being designed by City staff.

Secondary impacts with widening will include tree removal, lengthening of crosswalks, and/or modification of signal phasing that could increase the crossing distance/time for pedestrians.

The unsignalized East Boronda Road and Shopping Center Driveway (Walmart) intersection is expected to operate at unacceptable levels during the SAT peak hour. However, this intersection would not meet the Peak Hour Warrant for traffic signal installation during the peak hour.[1] Based on the impact criteria, the proposed project would have a **less-than-significant** impact at this study unsignalized intersection. The City of Salinas should continue to monitor this location and conduct an engineering study to evaluate the need for turn movement restrictions as appropriate to maintain acceptable intersection operations. Under Cumulative plus Project Conditions fewer than 30 vehicles make a northbound left from the shopping center driveway to East Boronda Road during the PM or SAT peak hours.

ROADWAY SEGMENT IMPACTS AND MITIGATION

Project Conditions and Cumulative with Project Conditions

East Boronda Road between McKinnon Street and Natividad Road – This roadway segment requires widening to a 4-lane arterial to provide acceptable operations (LOS D) and mitigate the impact to ***less-than-significant***.

FREEWAY MAINLINE SEGMENT IMPACTS AND MITIGATION

Project Conditions and Cumulative with Project Conditions

The results of the freeway level of service analysis indicate that the proposed project would create a **significant impact** on the following mixed-flow freeway segments during the PM peak hour:

- US 101 between Laurel Drive and Boronda Road
- US 101 between Boronda Road and Russell Road

The widening of US 101 to 6-lanes between the new Russell Road interchange and Harris Road (*City of Salinas Traffic Improvement Program* Project Number 32) would mitigate the project's impact. The TAMC regional project list does not include the widening of US 101 through the City of Salinas in the regional transportation impact fee, nor does the *2010 Monterey County Constrained Regional Transportation Plan*. Unless completely funded with appropriate agreements to implement the feasible roadway improvements discussed above the impacts would be ***significant and unavoidable***. This conclusion is consistent with the significant and unavoidable impacts identified in the *Final Supplement for the Salinas General Plan Final Program Environmental Impact Report* (2007) for these two US 101 mainline segments. As

[1] The use of peak-hour signal warrants is intended to examine the general correlation between the planned level of future development and the need to install new traffic signals. The traffic analysis presented in the document estimates future development-generated traffic compared against a sub-set (peak-hour warrant) of the standard traffic signal warrants recommended in the Manual of Uniform Traffic Control Devices (MUTCD), Federal Highway Administration 2000 and associated State guidelines. This analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measured traffic data and a thorough study of traffic and roadway conditions by an experienced engineer. Furthermore, the decision to install a signal should not be based solely on the warrants because the installation of signals can lead to certain types of collisions. The responsible state or local agency should undertake regular monitoring of actual traffic conditions and accident data and conduct a timely re-evaluation of the full set of warrants in order to prioritize and program intersections for signalization.

mentioned previously, the proposed project is consistent with land use designations contained in the 2002 General Plan, which were used as a basis for projecting traffic impacts identified in the *Final Supplement for the Salinas General Plan Final Program Environmental Impact Report* (2007). The City made a statement of overriding consideration for these impacts. This conclusion is discussed further in the California Environmental Quality Act (CEQA) documentation for this proposed project.

PEDESTRIAN, BICYCLE, AND TRANSIT IMPACTS AND MITIGATION

Crosswalks will be provided at the signalized driveways of San Juan Grade Road/Northridge Way and East Boronda Road/Dartmouth Way. Access to the project site will be connected from the sidewalk via a short pedestrian path near the Lowe's Home Improvement loading area. A pedestrian path from the East Boronda Road sidewalk to the Lowe's main building entrance will provide a direct connection through the parking lot. Thus, the existing and proposed pedestrian facilities can reasonably accommodate the increased demand and the newly constructed pedestrian facilities will not conflict with planned facilities; therefore, ***less-than-significant*** pedestrian facility impacts are anticipated.

Existing bicycle facilities can accommodate increased demand, and the proposed project will not conflict with existing or planned bicycle facilities. Thus, the project's impacts to the bike facilities are **less-than-significant**. The project should provide bike parking on-site and in highly visible locations to encourage biking and discourage theft.

The project site plan identifies two proposed bus stop locations to accommodate the potential transit ridership demand. No other modification and/or enhancement are identified that conflicts with the existing transit system or planned transit system, hence the proposed project will have a ***less-than-significant*** impact on transit facilities.

SITE ACCESS AND ON-SITE CIRCULATION RECOMMENDATIONS

Primary and secondary access to the site will be provided via driveways on San Juan Grade Road and East Boronda Road. If the main driveways experience significant congestion, the other driveways provide secondary ingress and egress to the site. The site access and on-site circulation is considered adequate with the following recommendations:

Vehicular Access and Circulation

Recommendation 1 - The site plan shows a four legged uncontrolled junction immediately north of the right-in & right out project driveway on East Boronda Road. It is recommended that the uncontrolled junction be reconfigured by removing the east access to Buildings R1 and J1 and removing the west access to buildings R2 and R3. This modification would allow for additional parking spaces.

Recommendation 2 - Reconfigure the north leg of East Boronda Road/Dartmouth Way by removing the inbound left turn lane and extending the outbound left turn lane to provide greater queue storage at the signal to minimize spillback into the parking aisles.

Pedestrian Access and Circulation

Recommendation 3 - All sidewalks both on-site and along the project frontage should be a minimum of eight feet in width.

Recommendation 4 - The pedestrian crossings on-site should have similar crossing treatments.

Bicycle Access and Circulation

Recommendation 5 - Bicycle parking should be provided near the entrances of each building (A1, J1, R1, R2, R3, and P1). The bicycle racks and/or lockers on-site should be placed in highly visible locations to encourage bicycling and discourage theft.

1. INTRODUCTION

This report presents the results of the transportation impact analysis (TIA) for the proposed Salinas retail center located at the northeast corner of East Boronda Road and San Juan Grade Road in Salinas, California. The proposed retail development includes a 120,944- square foot (s.f.) home improvement store with a 31,384 s.f. garden center plus up to 53,520 s.f. of retail outparcels that may include fast food and quality dining uses along the site's street frontage. For orientation purposes, Boronda Road is considered an east-west roadway, while US 101, Main Street and San Juan Grade Road are considered north-south facilities.

The analysis was conducted to identify potential effects of the proposed project on the surrounding transportation system and to recommend appropriate improvements to mitigate any significant impacts. Figure 1 presents the project location, surrounding roadway system, and study intersections. The proposed site plan is shown on Figure 2.

Transportation impacts were estimated following the guidelines of the City of Salinas and incorporate guidelines from Caltrans, and the Transportation Agency for Monterey County (TAMC) as needed. The analysis evaluated the operations of the following twelve (12) key intersections:

1. Russell Road and Van Buren Avenue
2. Russell Road and San Juan Grade Road
3. San Juan Grade Road and Van Buren Avenue
4. San Juan Grade Road and Northridge Way
5. San Juan Grade Road and Mobile Home Driveway
6. Boronda Road and US 101 Southbound Ramps
7. Boronda Road and US 101 Northbound Ramps
8. Boronda Road and Main Street
9. East Boronda Road and San Juan Grade Road
10. East Boronda Road and Driveway 1 (near Home Depot driveway)
11. East Boronda Road and Driveway 2 (Dartmouth Way)
12. East Boronda Road and McKinnon Street

Two-way directional roadway segments were analyzed during the weekday PM and Saturday midday peak hours at the following street segments:

1. Boronda Road between McKinnon Street and El Dorado Drive
2. Boronda Road between El Dorado Drive and Natividad Road

The operations of the study intersections and roadway segments were evaluated during the weekday afternoon (4:00 to 6:00 PM) and Saturday midday (11:00 AM to 1:00 PM) peak periods for:

Scenario 1: *Existing Conditions* – Existing volumes obtained from turning movement counts representing the peak one-hour vehicle flow.

Scenario 2: *Project Conditions* – Existing peak-hour traffic volumes plus the net new traffic generated by the proposed project.

Scenario 3: *Cumulative Without Project Conditions* – Existing peak-hour volumes plus traffic from approved but not yet constructed or occupied developments, and pending projects in the area.

Scenario 4: *Cumulative With Project Conditions* – Cumulative Without Project (Scenario 3) volumes plus net new traffic generated by the proposed project.

While the project will generate some traffic during the AM peak period, the highest volumes will be generated during the weekday PM and Saturday midday hours. Thus, this analysis focused on these latter periods. The Saturday mid-day analysis is presented as an informational scenario because this time period occurs once a week; rather, than a typical midweek (e.g., Tuesday through Thursday) PM peak hour that occurs three times a week.

The freeway mainline was analyzed during the PM peak period at:

1. US 101 between Laurel Drive and Boronda Road
2. US 101 between Boronda Road and Russell Road

On-site vehicle circulation, site access, and parking were reviewed and compared to industry design standards and City code requirements where applicable. The effect of the project on existing and proposed bicycle, pedestrian, and transit facilities and services was also assessed.

The remainder of this report is divided into five chapters. The existing transportation system serving the site and the current operating conditions of the study intersections, roadway segments and freeway segments are described in Chapter 2. Chapter 3 describes Project Conditions, including the method used to estimate the amount of project traffic added to the surrounding roadways and its impact on the transportation system. This chapter also includes a discussion of site access, on-site circulation, and parking. Cumulative scenarios with and without the proposed project are discussed in Chapter 4. Chapter 5 presents the Boronda Road progression analysis.

SALINAS FUTURE GROWTH AREA NORTH OF BORONDA ROAD

The proposed project is consistent with the current General Plan land use and does not conflict with planned roadway improvements. The cumulative analysis conducted for the Cloverfield Retail Center considered approved and pending projects (i.e., projects with applications on file with the City). A focused General Plan AM and PM peak hour analysis was completed to determine if the planned intersection configuration at San Juan Grade Road and East Boronda Road could be modified to exclude a westbound right turn-lane (See **Appendix I**). The effects of long-range cumulative development associated with buildout of the future growth area north of East Boronda Road on the local and regional transportation facilities have been evaluated at the General Plan roadway segment level during the 2002 City General Plan update and the supplemental transportation analysis (see *Final Salinas Sphere of Influence Amendment and Annexation Supplemental TIA*, November 2007). The potential transportation impacts from the long-range cumulative development were also included in the Circulation Element update, environmental documents, and *City of Salinas Traffic Improvement Program* (updated March 2010). Separate environmental review will be conducted for individual specific plan proposed within the future growth area.

Salinas Retail Center TIA

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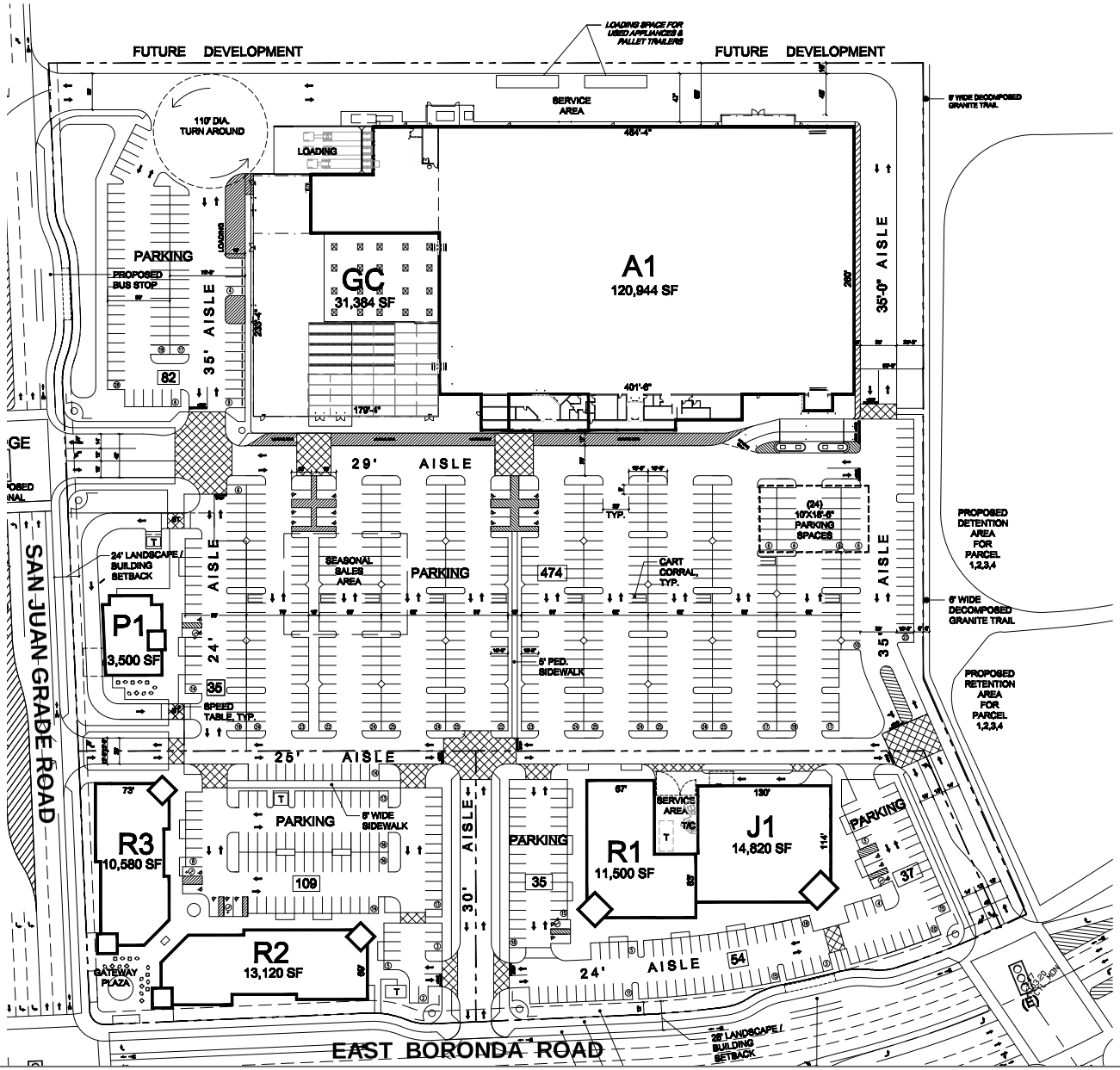
TRANSPORTATION CONSULTANTS

July 2010
SJ10-1154

Project Location and Study Locations

Figure 1



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Site Plan

Figure 2

2. EXISTING CONDITIONS

This chapter describes the existing conditions of the roadway facilities, pedestrian and bicycle facilities, transit service, traffic volumes, and intersection operations within the study area. This chapter also includes a discussion of the method used to quantify intersection operations and the corresponding results.

EXISTING ROADWAY NETWORK

Regional access to the project site is provided by US 101. Local access to the site is provided by Russell Road, Boronda Road Harden Parkway, Alvin Drive, Main Street, San Juan Grade Road, Van Buren Avenue, Dartmouth Way and McKinnon Street. This section describes the existing roadway network, which is illustrated on Figure 1.

North/South Local Roadways

US 101 is a north-south, four-lane freeway extending through the City of Salinas. Except for Russell Road, the intersection of US 101 and major roadways in Salinas are either an interchange or grade separated overpass. US 101 is a four-lane divided highway with a three beam median barrier through Salinas, and a multilane highway immediately north and south of Salinas.

North Main Street is four-lane major arterial south of its intersection with US 101. North of US 101, North Main Street is generally a six-lane divided arterial roadway that intersects East Laurel Drive, San Juan Grade Road, East Boronda Road, and Russell Road with posted speed limits from 35 to 45 mph. North of Boronda Road, N. Main Street is a four-lane major arterial with a center two-way-left-turn-lane. From Market Street to US 101, N. Main Street is designated SR 183. South of Market Street, N. Main Street splits into a one-way couplet (Salinas Street southbound and Monterey Street northbound) until John Street, at which point it becomes S. Main Street. From Blanco Road to John Street, S. Main Street is designated SR 68. Major intersections are controlled by traffic signals.

Van Buren Avenue is a two-lane collector that connects Russell Road and San Juan Grade Road. The posted speed limit is 25 mph.

San Juan Grade Road is a four-lane divided major arterial that runs northeasterly from N. Main Street to East Boronda Road. Leaving the city limits north of East Boronda Road, San Juan Grade Road narrows to a two-lane rural road. San Juan Grade Road passes west of the project site as a two-lane rural roadway and intersects Russell Road, and Rogge Road. The posted speed limit ranges from 35 to 55 mph.

Dartmouth Way is a two-lane local street with a posted speed limit of 25 mph. Posted signs and fencing across Dartmouth Way prevents a vehicle connection with Pennsylvania Drive.

McKinnon Street is a two-lane collector with bicycle lanes that connects with Boronda Road and Alvin Drive. The posted speed limit is 35 mph.

El Dorado Drive is a two-lane collector with bicycle lanes that connects with Boronda Road and Alvin Drive. The posted speed limit is 25 mph.

Natividad Road is a six-lane divided major arterial from East Laurel to East Boronda Road. A portion of Natividad Road, between East Boronda Road and Los Coches Drive, has sound walls on each side of the roadway with a posted speed limit of 45 mph. Natividad Road is a two-lane rural roadway north of East Boronda Road. South of East Bernal Drive, this road is known as Sherwood Drive, a 4-lane arterial.

East/West Local Roadways

Russell Road begins at the Espinosa Road/Russell Road interchange with US 101 and proceeds east to San Juan Grade Road as a two-lane roadway. The posted speed limit ranges from 35 to 45 mph.

Boronda Road begins at the Boronda Road interchange with US 101 as a six-lane major arterial to North Main Street. East of North Main Street, Boronda Road narrows to a four-lane major arterial to San Juan Grade Road. Boronda Road narrows to a two-lane roadway and terminates at Williams Road. Boronda Road intersects all major and minor north-south arterials described above. These major intersections are controlled by traffic signals. East Boronda Road passes to the south of the project site and has a posted speed limit of 45 mph. Boronda Road is a General Plan designated truck route along its entire length.

Harden Parkway is a four-lane divided arterial with bicycle lanes that connects with N. Main Street and El Dorado Drive. The posted speed limit is 35 mph. East of N. Main Street, this road is known as Madrid Street, a 4-lane arterial.

EXISTING PEDESTRIAN FACILITIES

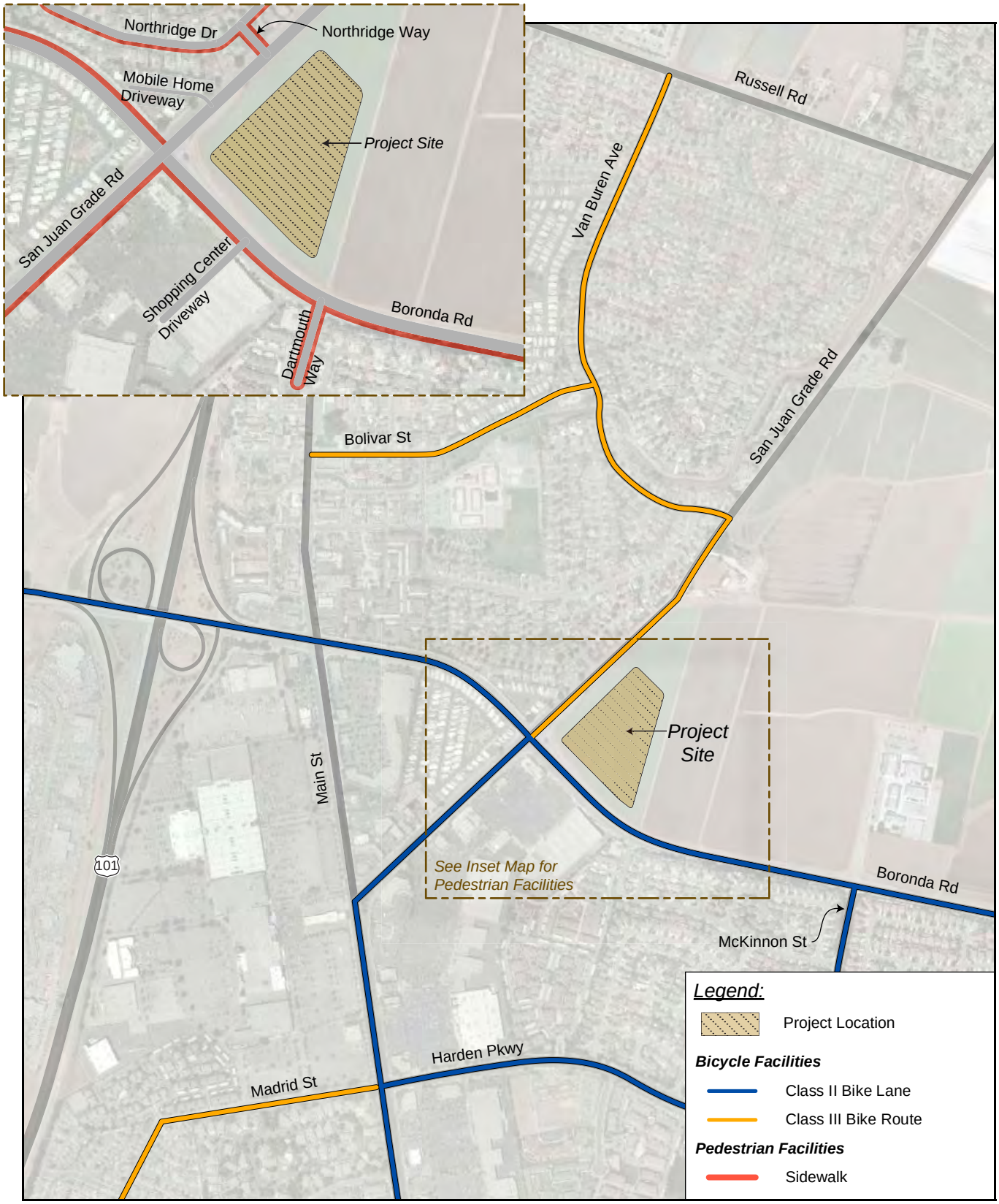
Pedestrian facilities comprise sidewalks, curb ramps, crosswalks, and off-street paths that are meant to provide safe and convenient routes for pedestrians to access destinations such as institutions, businesses, public transportation, and recreation facilities. Pedestrian facilities are typically identified in the jurisdiction's General Plan as part of the transportation or circulation element, along with any proposed improvements or extensions to the existing pedestrian network. The City of Salinas Circulation Element Goal C-5 defines policies and programs relating to walking in the City. Figure 3 shows the existing pedestrian facilities near the project site.

Crosswalks are not provided at the west leg of the intersection of San Juan Grade Road and Van Buren Avenue. Other study intersections provide crosswalks across most legs of the signalized intersections. Sidewalk facilities are provided on the following roadway segments near the project site:

- Southside of East Boronda Road between San Juan Grade Road and Natividad Road
- Northside of East Boronda Road between N. Main Street and San Juan Grade Road
- East Boronda Road between US 101 and N. Main Street
- San Juan Grade Road between N. Main Street and East Boronda Road except the westside along the existing mobile home park
- Van Buren Avenue
- Dartmouth Way

EXISTING BICYCLE FACILITIES

Bicycle facilities comprise paths (Class I), lanes (Class II), and routes (Class III). Bicycle paths are paved trails that are separate from roadways. Bicycle lanes are separate areas on roadways designated for bicycle use by striping, pavement legends, and signs. Bicycle routes are roadways designated for bicycle use by signs only, but may not include substantial width for bicycle travel. Like pedestrian facilities, bicycle networks are typically included in the General Plan, along with any proposed improvements or extensions. The City of Salinas Circulation Element Goal C-4 defines policies and programs relating to walking in the City. Figure 3 shows the existing bicycle facilities near the project site.



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Existing Bicycle and Pedestrian Facilities

Figure 3

EXISTING TRANSIT FACILITIES

Monterey-Salinas Transit (MST) provides fixed-route bus service in Monterey County and in the City of Salinas. As shown in Figure 4, the only bus route along the project frontage is Route 45: East Market Creekbridge. Near the study area, Route 45 has a bus stop on Boronda Road at the driveway to the Harden Ranch Plaza near Dartmouth Way. The Northridge Mall transit center is more than one-half a mile walking distance (measured from center of project site to transit center) from the project site. Table 1 summarizes hours of operation and service frequencies for the bus routes that stop near the site.

TABLE 1
EXISTING TRANSIT SERVICE

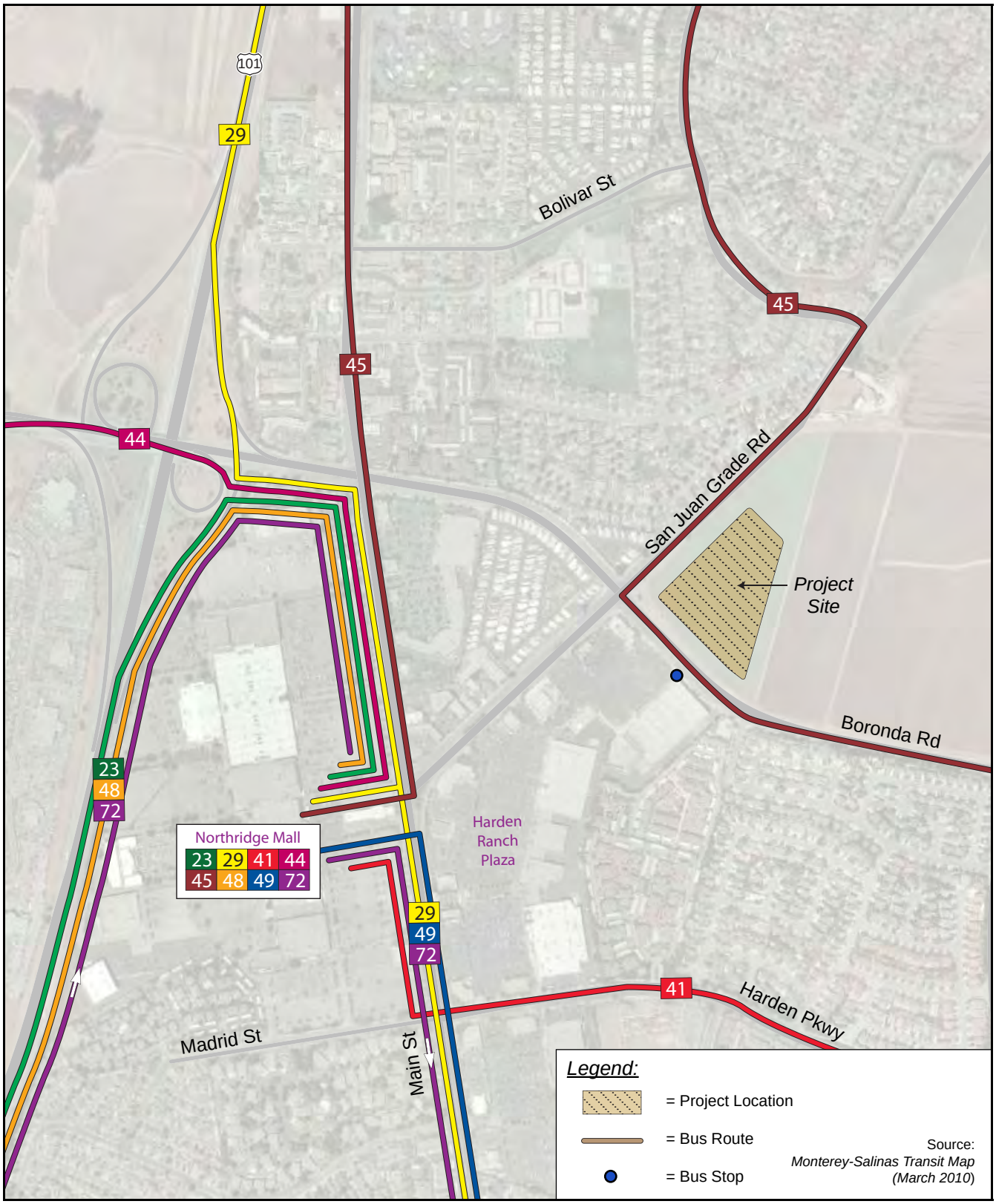
Route	From	To	Weekday and Saturday Operating Hours	Commute Headway[1]
Service to Project Site				
45	Salinas Transit Center	Northridge Mall	6:45 AM – 7:00 PM	60 minutes
Service near the Project Site				
23	Salinas Transit Center	King City	Weekend Service Only 10:00 AM – 6:00 PM	120 minutes
29	Salinas Transit Center	Watsonville Transit Center	7:00 AM – 7:15 PM	60 minutes
41	Salinas Transit Center	Northridge Mall	5:25 AM – 8:25 PM	30 minutes
44	Salinas Transit Center	Northridge Mall	7:40 AM – 6:40 PM	60 minutes
48	Northridge Mall	Salinas Airport Business Center	Special Service	60 minutes
49	Salinas Transit Center	Northridge Mall	6:15 AM – 10:00 PM	60 minutes
72	Salinas Transit Center	Monterey	Weekday Service Only 6:20 AM and 5:45 PM	

[1] Commute headway during PM (4:00 to 6:00 PM) and SAT (11:00AM to 1:00PM) peak periods.
Source: Monterey Salinas Transit, March 2010.

EXISTING VOLUMES AND LANE CONFIGURATIONS

The operations of the key intersections were evaluated during the weekday PM and Saturday peak periods. Intersection operations were evaluated using the highest one-hour volume counted between the peak 4:00 and 6:00 PM weekday, and 11:00 AM and 1:00 PM Saturday peak commute period. Intersection turning movement counts were conducted in February and March 2010. The traffic counts are included in Appendix A.

Figure 5 presents the existing PM and Saturday peak-hour turning movement volumes at the study intersections. Figure 5 also includes the existing intersection lane configurations and traffic control devices.



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Existing Transit Facilities

Figure 4

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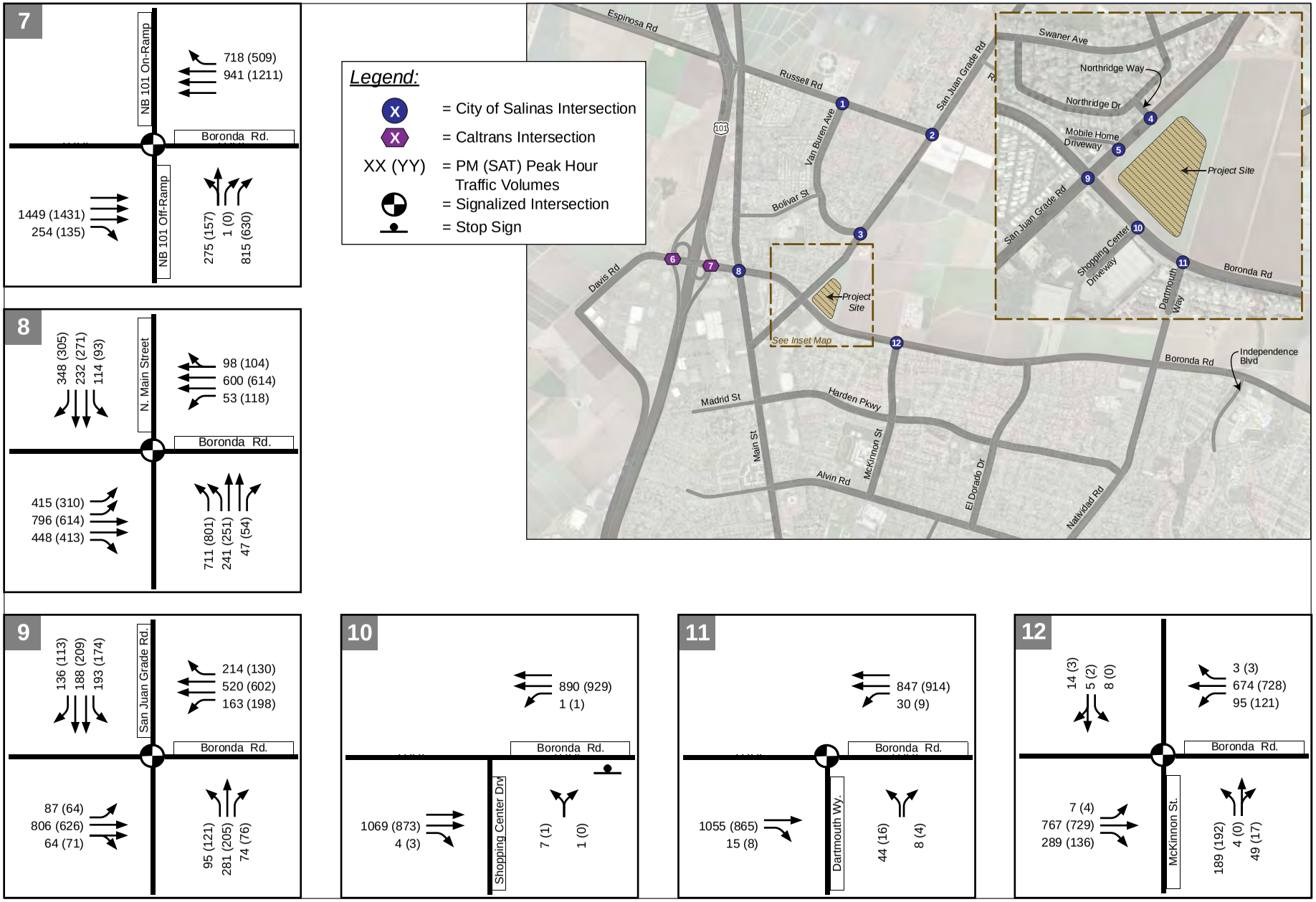
Existing Lane Geometries, Traffic Controls and Peak-Hour Intersection Volumes

Figure 5A



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Existing Lane Geometries, Traffic Controls and Peak-Hour Intersection Volumes

Figure 5B

Level of Service Methods

The operations of roadway facilities are described with the term level of service (LOS). LOS is a qualitative description of traffic flow based on such factors as speed, travel time, delay, and freedom to maneuver. Six levels are defined from LOS A, with the least congested operating conditions, to LOS F, with the most congested operating conditions. LOS E represents "at-capacity" operations. Operations are designated as LOS F when volumes exceed capacity, resulting in stop-and-go conditions.

Signalized Intersections

The LOS method for signalized intersections approved by the City of Salinas analyzes intersection operations based on average control vehicular delay, as described in Chapter 16 of the *2000 Highway Capacity Manual* (*HCM*) by the Transportation Research Board. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for signalized intersections is calculated using Synchro analysis software and is correlated to a LOS designation as shown in Table 2.

The level of service standard (i.e., minimum acceptable operations) for signalized intersections in the City of Salinas is LOS D. The same operations methodology is used by Caltrans to analyze traffic impacts for their facilities. Caltrans' level of service standard, *Guide for the Preparation of Traffic Impact Studies* (December 2002), for signalized intersections is LOS C.

TABLE 2
SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS USING AVERAGE CONTROL VEHICULAR DELAY

Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤ 10.0
B	Operations with low delay occurring with good progression and/or short cycle lengths.	> 10.0 and ≤ 20.0
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	> 20.0 and ≤ 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35.0 and ≤ 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	> 55.0 and ≤ 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0

Source: *Highway Capacity Manual*, Transportation Research Board, 2000.

Unsignalized Intersections

Operations of the unsignalized study intersections (e.g., stop-sign controlled) were evaluated using the methodology contained in Chapter 17 of the *2000 HCM* and calculated using the Synchro analysis software. LOS ratings for stop-sign controlled intersections are based on the average control delay expressed in seconds per vehicle. At two-way or side-street-stop controlled intersections, control delay is

calculated for each movement, not for the intersection as a whole. For approaches composed of a single lane, control delay is computed as the average of all movements in that lane. For all-way stop-controlled locations, a weighted average delay for the entire intersection is presented. Table 3 summarizes the relationship between delay and LOS for unsignalized intersections.

The minimum acceptable LOS for all-way stop controlled intersections in the City of Salinas is LOS D and for two-way stop controlled intersections; the minimum acceptable LOS for the worst approach is LOS E.

TABLE 3
UNSIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS

Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Little or no delay.	≤ 10.0
B	Short traffic delays.	10.1 to 15.0
C	Average traffic delays.	15.1 to 25.0
D	Long traffic delays.	25.1 to 35.0
E	Very long traffic delays.	35.1 to 50.0
F	Extreme traffic delays with intersection capacity exceeded.	> 50.0

Source: *Highway Capacity Manual*, Transportation Research Board, 2000.

Local Roadway Segments

Roadways in Salinas were evaluated using the level of service methodology described in the *2002 Salinas General Plan*, which is the comparison of the peak volume to threshold volumes for various roadway types presented in Table 4. The City of Salinas roadway segment standard (i.e., minimum acceptable LOS) is LOS D.

TABLE 4
LEVEL OF SERVICE THRESHOLD VOLUMES FOR VARIOUS ROADWAY TYPES

Roadway Type	Maximum Peak Hour Volume (both directions)				
	LOS A	LOS B	LOS C	LOS D	LOS E
6-Lane Divided Arterial (w/ left-turn lanes)	3,200	3,800	4,300	4,900	5,400
4-Lane Divided Arterial (w/ left-turn lane)	2,200	2,500	2,900	3,250	3,600
4-Lane Undivided Arterial (no left-turn lane)	1,600	1,900	2,200	2,400	2,700
2-Lane Arterial (with left-turn lane)	1,100	1,250	1,450	1,600	1,800

Notes:
[1] Non-directional peak hour traffic volumes are assumed to be 10% of the daily traffic volume. Directional split is assumed 60/40. All volumes are approximate and assume ideal roadway characteristics.

Source: City of Salinas, *Salinas General Plan*, 2002.

Freeway Mainline Segments

Freeway mainline segments were evaluated using the methods presented in Caltrans' *Guide for the Preparation of Traffic Impact Studies* (December 2002). This method was used for US 101 mainline segments north and south of the US 101/Boronda Road interchange during the PM peak hour. Caltrans' analysis procedure is based on the density of the traffic flow using methods described in the *2000 HCM*. Density is expressed in vehicles per mile per lane (veh/mi/ln). Table 5 presents the range of densities for freeway mainline segment levels of service. Caltrans' level of service standard is LOS C.

TABLE 5
DENSITY-BASED FREEWAY LEVEL OF SERVICE DEFINITIONS

Level of Service	Mainline Density[1]
A	≤ 11.0
B	11.1 to 18.0
C	18.1 to 26.0
D	26.1 to 35.0
E	35.1 to 45.0
F	> 45.0

Note:
[1] Measured in vehicles per mile per lane (veh/mi/ln).
Source: *Highway Capacity Manual*, Transportation Research Board, 2000.

EXISTING INTERSECTION LEVELS OF SERVICE

Existing intersection lane configurations, signal timings, and peak-hour turning movement traffic volumes were used to determine the existing levels of service. The results of the LOS analysis are presented in Table 6. **Appendix B** contains the corresponding calculation sheets.

Measured against the City of Salinas level of service standard, all signalized (LOS D or better) and unsignalized (LOS E or better) study intersections operate at an acceptable level of service during both peak hours under Existing Conditions.

Measured against Caltrans level of service standard, the signalized (LOS C or better) US 101 ramp intersections with Boronda Road operate at an acceptable level of service during both of the peak hours under Existing Conditions.

TABLE 6
EXISTING INTERSECTION LEVELS OF SERVICE

Intersection	Peak Hour[1]	Count Date	Intersection Control	Delay[2]	LOS[3]
1. Russell Road / Van Buren Avenue	PM SAT	02/2010 03/2010	Signal	12.9 12.9	B B
2. Russell Road / San Juan Grade Road	PM SAT	02/2010 03/2010	Signal	15.6 11.0	B B
3. San Juan Grade Road / Van Buren Avenue	PM SAT	02/2010 03/2010	Side-Street Stop	12.5 12.4	B B
4. San Juan Grade Road / Northridge Way	PM SAT	02/2010 03/2010	Side-Street Stop	13.2 12.3	B B
5. San Juan Grade Road / Mobile Home Driveway	PM SAT	02/2010 03/2010	Side-Street Stop	12.1 8.5	B A
6. Boronda Road / SB US 101 Ramps	PM SAT	02/2010 03/2010	Signal	12.1 11.1	B B
7. Boronda Road / NB US 101 Ramps	PM SAT	02/2010 03/2010	Signal	13.3 10.9	B[4] B[4]
8. Boronda Road / N. Main Street	PM SAT	02/2010 03/2010	Signal	42.9 46.9	D D
9. East Boronda Road / San Juan Grade Road	PM SAT	02/2010 03/2010	Signal	42.3 38.5	D D
10. East Boronda Road /Driveway 1 (former Home Depot Driveway)	PM SAT	02/2010 03/2010	Side-Street Stop	21.9 18.8	C C
11. East Boronda Road / Dartmouth Way	PM SAT	02/2010 03/2010	Signal	11.0 5.4	B A
12. East Boronda Road /McKinnon Street	PM SAT	02/2010 03/2010	Signal	24.3 25.7	C C

Notes:

1 PM = evening weekday peak-hour, SAT = Saturday peak hour.

2 Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop intersections using methodology described in the 2000 *Highway Capacity Manual*. For two-way stop controlled unsignalized intersections, total control delay for the worst movement, expressed in seconds per vehicle, is presented. LOS calculations conducted using the Synchro level of service analysis software package.

3 LOS = Level of service

4 Observations at the Boronda Road and Northbound US 101 Ramps intersection indicate that the greater lane utilization of the eastbound curb lane queues to the adjacent intersection ramp (US 101 southbound) during the PM and SAT peak hour. This condition can result in calculated operations that are better than those observed in the field.

Bold text indicates unacceptable operations by jurisdiction standards (LOS E or worse in City of Salinas, and LOS D or worse for Caltrans intersections).

Source: Fehr & Peers, October 2010.

EXISTING ROADWAY SEGMENT LEVELS OF SERVICE

The results of the City of Salinas roadway segment analysis are presented in Table 7.

TABLE 7
EXISTING LOCAL ROADWAY SEGMENT LEVELS OF SERVICE

Roadway Segment	Roadway Type	Peak Hour[1]	Count Date	Volume[2]	LOS[3]
East Boronda Road between McKinnon Street and El Dorado Drive	2-Lane Arterial	PM SAT	02/2010 03/2010	1492 **1615**	D **E**
East Boronda Road between El Dorado Drive and Natividad Road	2-Lane Arterial	PM SAT	02/2010 03/2010	1526 1448	D C

Notes:
1 PM = evening weekday peak-hour, SAT = Saturday peak hour.
2 ADT = Average two-way daily traffic.
3 LOS = Level of service.
Bold text indicates unacceptable operations by City of Salinas LOS standards (LOS E or worse).
Source: Fehr & Peers, October 2010.

Measured against the City of Salinas level of service standard, all local roadway segments operate at an acceptable level of service (LOS D or better) under Existing Conditions except East Boronda Road between McKinnon Street and El Dorado Drive during the Saturday midday peak hour.

EXISTING FREEWAY MAINLINE LEVELS OF SERVICE

The results of the US 101 freeway mainline analysis are presented in Tables 8. The corresponding level of service calculation sheets are contained in **Appendix C**.

TABLE 8
EXISTING US 101 FREEWAY MAINLINE LEVELS OF SERVICE

Travel Direction	Segment	Peak Hour	Count Date[1]	Density[2]	LOS[3, 4]
Southbound	Russell Road to Boronda Road	PM	02/2010	**>45.0**	**F**
	Boronda Road to Laurel Drive	PM	Balanced	**39.5**	**E**
Northbound	Laurel Drive to Boronda Road	PM	Balanced	**38.6**	**E**
	Boronda Road to Russell Road	PM	02/2010	**36.4**	**E**

Notes:
1. Balanced counts derived from Boronda Road ramp volumes and freeway mainline count.
2. Measured in vehicles per mile per lane (veh/mi/ln).
3. LOS = Level of Service.
4. LOS F applies whenever the flow rate exceeds the segment capacity.
Bold text indicates unacceptable operations by Caltrans LOS standards (LOS D or worse).
Source: Fehr & Peers, October 2010.

Measured against the Caltrans level of service standard, all freeway mainline segments operate at an unacceptable level of service (LOS D or worse) under Existing Conditions.

FIELD OBSERVATIONS

Field observations of the study intersections were conducted in February and March 2010 to verify their operations. In general, observations indicated that all of the study intersections are operating at or near the calculated levels of service. Queuing was observed at those signalized intersections with calculated LOS D operations, however, the vehicle queues typically cleared within one cycle. All of the unsignalized intersections were observed to operate acceptably, with side street traffic volumes finding gaps to enter the intersections.

Observations at the Boronda Road and Northbound US 101 Ramps intersection indicate that the greater lane utilization of the eastbound curb lane queues to the adjacent upstream intersection ramp (US 101 southbound) during the PM and SAT peak hours. This condition can result in calculated operations that are better than those observed in the field.

3. PROJECT CONDITIONS

This chapter presents the impacts of the proposed project on the surrounding roadway system. First, the method used to estimate the amount of traffic generated by the project is described. Then, the results of the LOS calculations for Project Conditions are presented. Project Conditions are defined as Existing Conditions plus traffic generated by the proposed project. A comparison of intersection operations under Existing and Project Conditions is presented, and the impacts of the project on the study intersections and freeway system are discussed. Site access and on-site circulation are also addressed in this chapter.

Project conditions were evaluated during the weekday evening (PM) and weekend mid-day peak periods, which is expected to be the worst-case scenario for project trip generation. Therefore, per the City's direction, no quantitative analysis was conducted for the AM peak period. The Saturday mid-day analysis is presented as an informational scenario because this time period occurs once a week; rather, than a typical midweek (e.g., Tuesday through Thursday) PM peak hour that occurs three times a week.

PROJECT TRAFFIC ESTIMATES

The amount of traffic added to the roadway system by the proposed development is estimated using a three-step process: (1) trip generation, (2) trip distribution, and (3) trip assignment. The first step estimates the amount of added traffic to the roadway network. The second step estimates the direction of travel to and from the project site. The trips are assigned to specific street segments and intersection turning movements during the third step. The results of the process for the proposed project are described in the following sections.

Trip Generation

The amount of traffic added to the surrounding roadway system by the proposed project was estimated by applying the applicable trip generation rates to the development proposal. Trip rates for the shopping center land use identified in *Trip Generation (8th Edition)* by the Institute of Transportation Engineers (2008) were used to estimate project trip generation.

The retail trip generation also accounts for pass-by trips. Pass-by trips are trips to the site made by vehicles already traveling by the site on the adjacent street (i.e., these vehicles make an interim stop between their primary origin and destination). Pass-by trips are included in the analysis of traffic that enters and exits the project site, but are not considered "new" trips added to the street system by the project. For this analysis, a 20 percent pass-by trip reduction was applied to the PM and SAT peak-hour retail trip estimates in accordance with the *Trip Generation Handbook (2nd Edition)* by the Institute of Transportation Engineers (2004) and consultation with City staff.

The trip rates, reductions, and resulting project trip generation estimates are presented in Table 9. The proposed project is estimated to generate 826 net new PM peak-hour trips (405 inbound and 421 outbound) and 1,096 net new SAT mid-day peak-hour trips (570 inbound and 526 outbound).

TABLE 9
PROJECT TRIP GENERATION RATES AND ESTIMATES

Land Use	Size[1]	Daily	PM Peak-Hour			Saturday Mid-day Peak-Hour		
			In	Out	Total	In	Out	Total
Project Trip Rates (per 1,000 s.f.)								
Retail[2]	205.848 k.s.f.	52.75	2.45	2.56	5.01	3.46	3.20	6.66
Project Trip Estimates								
Retail[2]	205.848 k.s.f.	10,858	506	526	1,032	712	658	1,370
20% Pass-by Reduction		*2,172*	*101*	*105*	*206*	*142*	*132*	*274*
Total Net New Trips		**8,686**	**405**	**421**	**826**	**570**	**526**	**1,096**

Notes:

1 k.s.f. = thousand (1,000) square feet

2 Shopping center (ITE land use code 820) rate using fitted equation.

Source: *Trip Generation (8th Edition)*, Institute of Transportation Engineers, 2008.

Trip Distribution

The directions of approach and departure for project traffic were estimated based on the existing travel patterns in the area and the relative locations of complementary land uses in the community. The major directions of approach and departure form the trip distribution pattern for the project, as illustrated in Figure 6.

Trip Assignment

The trips generated by the project were assigned to the roadway system based on the directions of approach and departure discussed above. Figure 7 shows the project trips assigned to each turning movement at the study intersections. Project trips were added to existing traffic volumes to establish intersection volumes for Project Conditions, as shown on Figure 8.

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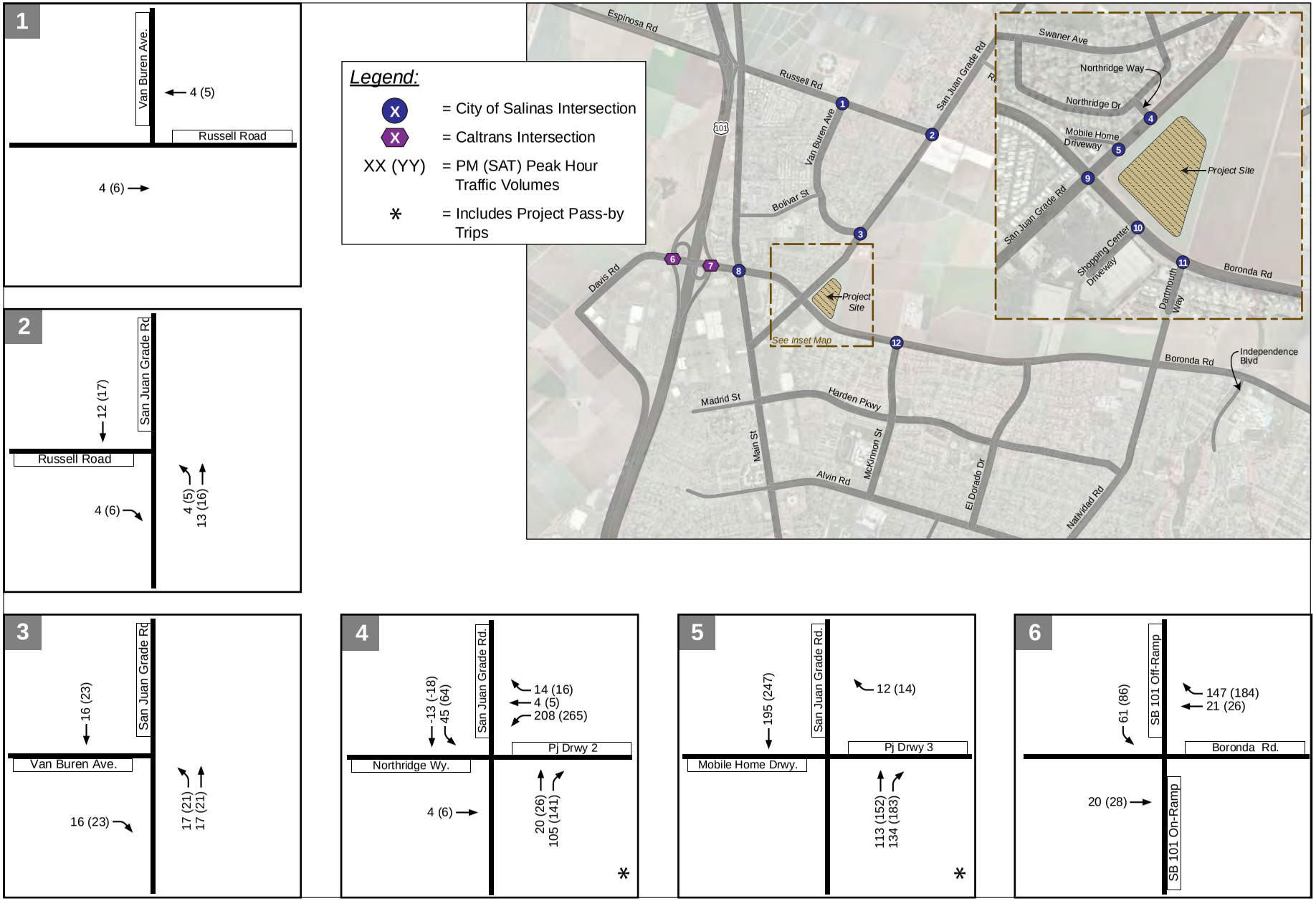
Project Trip Distribution

Figure 6



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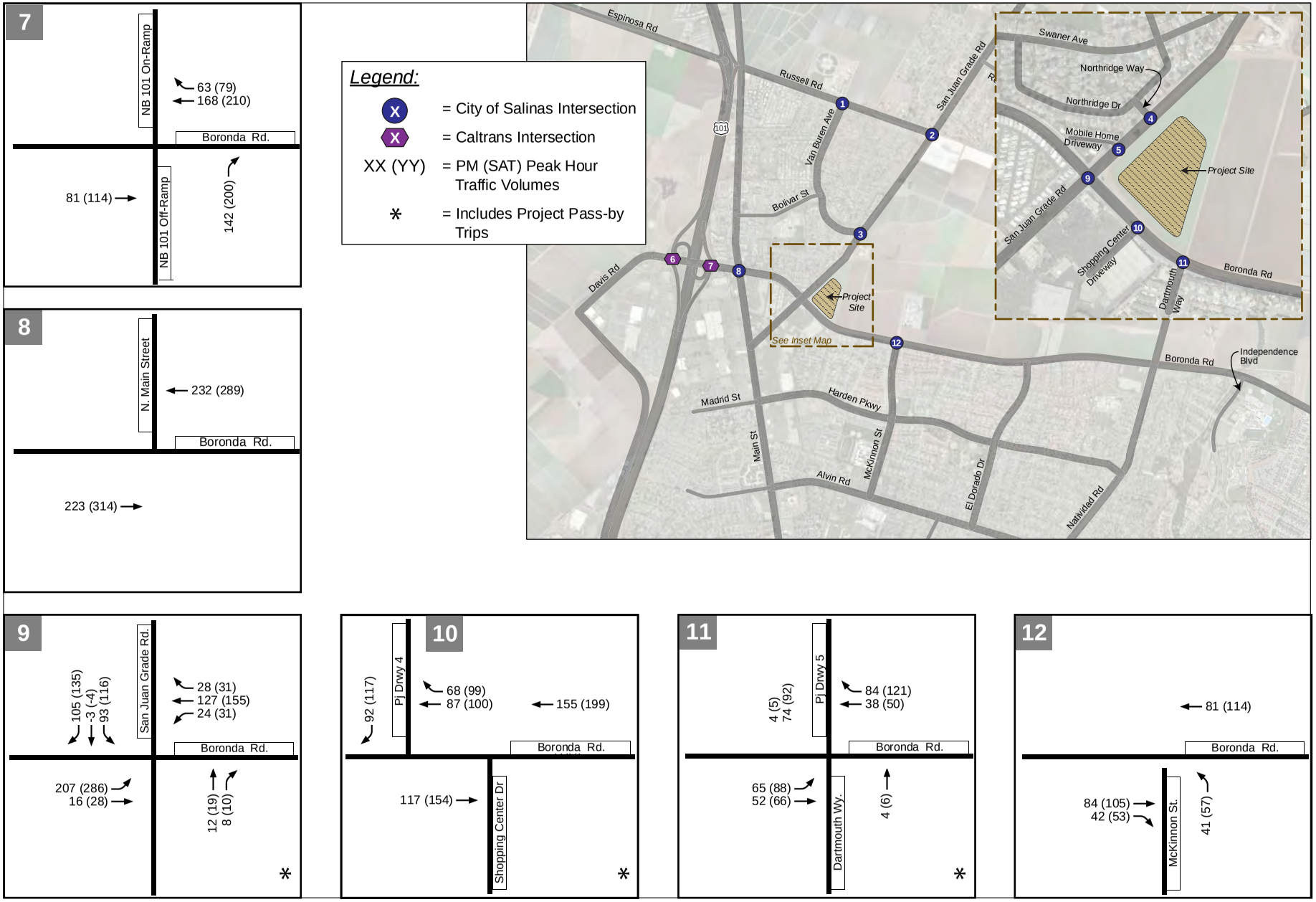
Project Trip Assignment

Figure 7A



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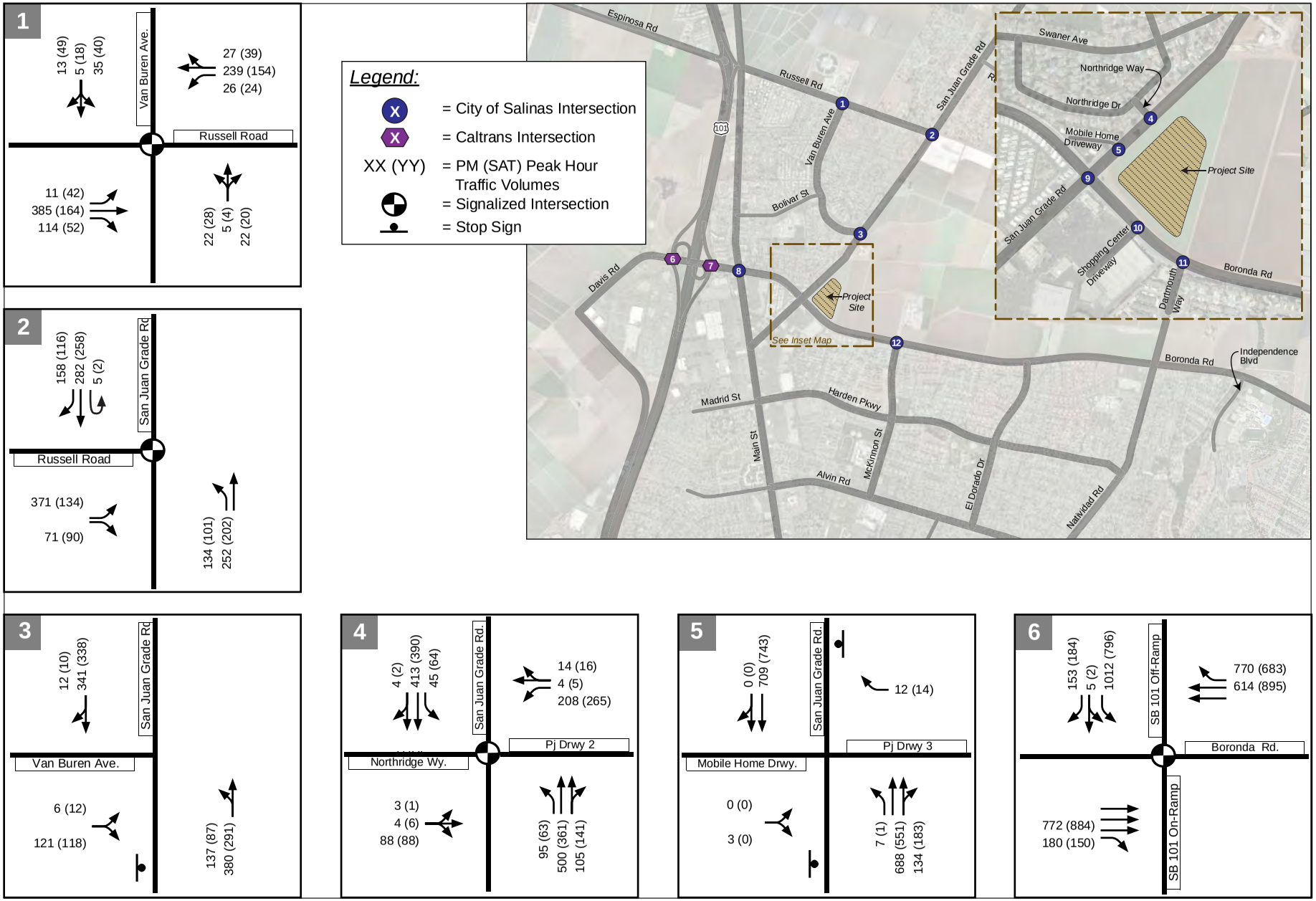
Project Trip Assignment

Figure 7B



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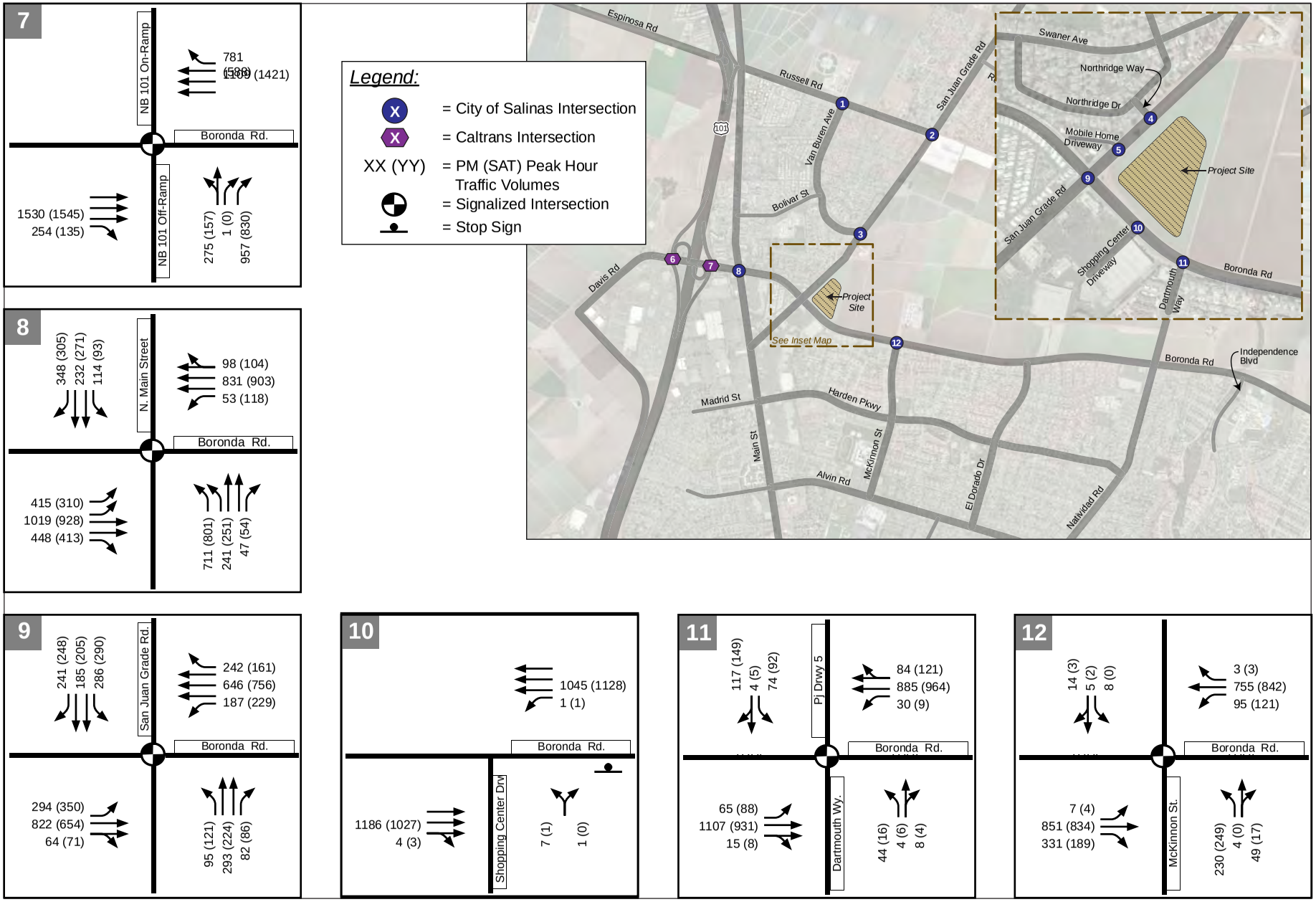
Project Lane Geometries, Traffic Controls and Peak-Hour Intersection Volumes

Figure 8A



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Project Lane Geometries, Traffic Controls and Peak-Hour Intersection Volumes

Figure 8B

PROJECT IMPACT CRITERIA

The determination of significance for project impacts is based on applicable policies, regulations, goals, and guidelines defined by the City of Salinas, and Caltrans. The City of Salinas *General Plan* does not include a policy regarding the analysis of an intersection or roadway that is already operating below standard. However, in recent traffic impact studies prepared for the City, the threshold used states that the addition of any new trips to a facility already exceeding the operating standard is considered a significant impact. A similar criterion is applied to County and Caltrans facilities that are already below operating standards. The impacts of the project were evaluated by comparing the results of the level of service calculations under Project Conditions to the results under Existing Conditions. The detailed impact criteria for this study are presented below.

City of Salinas

Intersections

Significant impacts at signalized intersections are defined to occur when:

- The addition of project traffic causes intersection operations to degrade from an acceptable level (LOS D or better) to an unacceptable level (LOS E or worse), or
- Project traffic is added to an intersection operating at an unacceptable level (LOS E or worse).

Significant impacts at unsignalized intersections are defined to occur when:

- The addition of project traffic causes intersection operations to degrade to an unacceptable level and satisfy the peak-hour signal warrant from the *Manual on Uniform Traffic Control Devices* (MUTCD), or
- The project's access to a major street causes a potentially unsafe situation or requires a new traffic signal based on standard warrant criteria.

Roadways

The LOS standard for City of Salinas roadways is LOS D. Traffic impacts on City facilities are defined to occur when:

- Added project traffic causes roadway segment operations to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or worse); or
- Project traffic is added to a roadway segment operating at an unacceptable (LOS E or worse) level.

Pedestrian and Bicycle Facilities

Significant impacts to pedestrian and bicycle facilities are defined to occur when:

- The project conflicts with existing or planned pedestrian or bicycle facilities, or
- The project creates pedestrian and bicycle demand without providing adequate facilities.

Transit Facilities

Significant impacts to transit facilities are defined to occur when:

- The project conflicts with existing or planned transit facilities, or
- The project generates potential transit trips without providing adequate facilities for pedestrians and bicyclists to access transit routes and stops.

Caltrans

Intersections

Significant impacts at signalized intersections are defined to occur when:

- The addition of project traffic causes intersection operations to degrade from an acceptable level (LOS C or better) to an unacceptable level (LOS D or worse), or
- Project traffic is added to an intersection operating at an unacceptable level (LOS D or worse).

Mainline Freeway Segments

Significant impacts at signalized intersections are defined to occur when:

- The addition of project traffic causes intersection operations to degrade from an acceptable level (LOS C or better) to an unacceptable level (LOS D or worse), or
- Project traffic is added to a freeway mainline segment operating at an unacceptable level (LOS D or worse).

PROJECT ROADWAY IMPROVEMENTS

Project intersection lane configurations and traffic control devices are assumed to be the same under Existing Conditions for all off-site locations except for the intersections along the project frontage. Along San Juan Grade Road the project frontage will accommodate a 4-lane arterial with median and include two driveways to the main parking lot and one driveway to the “back of house” for the anchor retail store. The main full-access project driveway would align with Northridge Way on San Juan Grade Road. While the San Juan Grade Road and Mobile Home Driveway north of East Boronda Road would maintain left-in-left-out access. Along East Boronda Road the project frontage will accommodate a 6-lane arterial with raised median and include a signalized driveway at East Boronda Road/Dartmouth Way and a right-in-right-out driveway between San Juan Grade Road and Dartmouth Way. Conceptual striping plans are included in **Appendix J,** which illustrate vehicle travel lane widths, storage pocket lengths, bicycle lane widths and treatments, locations of pedestrian curb ramps and crosswalks, median refuge island treatments, and merging transitions along and near the project frontage of East Boronda Road and San Juan Grade Road. The Western Bypass and Alvin Drive Extension are listed in the *City of Salinas Traffic Improvement Program (TIP)* as future improvements, but are not included as near-term roadway improvements. The Western Bypass would be a 4-lane roadway extending from the US 101/Boronda Road interchange to the Davis Road and Blanco Road intersection. This improvement would provide parallel capacity to US 101 south of the Boronda Road interchange. Similarly, the planned Alvin Drive extension to the Western Bypass (see the *2002 Salinas General Plan* and *Traffic Improvement Program*, 2010 update) is a potential roadway that provides parallel capacity to Boronda Road.

PROJECT INTERSECTION LEVELS OF SERVICE

Intersection levels of service were calculated with the new traffic added by the project to evaluate the operating conditions and identify potential impacts to the local roadway system. The results of the intersection level of service calculations for Existing and Project Conditions are presented in Table 10. The level of service calculation sheets are included in the **Appendix B**.

Measured against the City of Salinas level of service standard, all signalized (LOS D or better) and unsignalized (LOS E or better) study intersections operate at an acceptable level of service during one or both of the peak hours under Project Conditions except the East Boronda Road and San Juan Grade Road intersection during the PM and SAT peak hours.

Measured against Caltrans level of service standard, the signalized (LOS C or better) US 101 ramp intersections operate at an acceptable level of service during both of the peak hours under Project Conditions.

TABLE 10
EXISTING AND PROJECT INTERSECTION LEVELS OF SERVICE

Intersection	Peak Hour[1]	Intersection Control/ (Existing/Project)	Existing		Project	
			Delay[2]	LOS[3]	Delay[2]	LOS[3]
1. Russell Road / Van Buren Avenue	PM SAT	Side-Street Stop	12.9 12.9	B B	13.1 12.9	B B
2. Russell Road / San Juan Grade Road	PM SAT	Signal	15.6 11.0	B B	15.9 11.2	B B
3. San Juan Grade Road / Van Buren Avenue	PM SAT	Side-Street Stop	12.5 12.4	B B	13.1 13.1	B B
4. San Juan Grade Road / Northridge Way	PM SAT	Side-Street Stop/ Signal	13.2 12.3	B B	21.2 21.9	C C
5. San Juan Grade Road / Mobile Home Driveway	PM SAT	Side-Street Stop	12.1 8.5	B A	10.2 10.2	B B
6. Boronda Road / SB US 101 Ramps	PM SAT	Signal	12.1 11.1	B B	14.0 12.8	B B
7. Boronda Road / NB US 101 Ramps	PM SAT	Signal	13.3 10.9	B[4] B[4]	15.6 13.7	B B
8. Boronda Road / N. Main Street	PM SAT	Signal	42.9 46.9	D D	46.2 52.8	D D
9. East Boronda Road / San Juan Grade Road	PM SAT	Signal	42.3 38.5	D D	**58.8** **65.8**	**E** **E**
10. East Boronda Road / Driveway 1	PM SAT	Side-Street Stop	21.9 18.8	C C	9.8 10.6	A B
11. East Boronda Road / Dartmouth Way	PM SAT	Signal	11.0 5.4	B A	25.8 25.1	C C
12. East Boronda Road / McKinnon Street	PM SAT	Signal	24.3 25.7	C C	32.3 37.7	C D

TABLE 10
EXISTING AND PROJECT INTERSECTION LEVELS OF SERVICE

Intersection	Peak Hour[1]	Intersection Control/ (Existing/Project)	Existing		Project	
			Delay[2]	LOS[3]	Delay[2]	LOS[3]

Notes:

1 PM = evening weekday peak-hour, SAT = Saturday peak hour.

2 Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop intersections using methodology described in the 2000 *Highway Capacity Manual*. For two-way stop controlled unsignalized intersections, total control delay for the worst movement, expressed in seconds per vehicle, is presented. LOS calculations conducted using the Synchro level of service analysis software package.

3 LOS = Level of service

4 Observations at the Boronda Road and Northbound US 101 Ramps intersection indicate that the greater lane utilization of the eastbound curb lane queues to the adjacent intersection ramp (US 101 southbound) during the PM and SAT peak hour. This condition can result in calculated operations that are better than those observed in the field.

Significant impacts are highlighted in **bold** text.

Source: Fehr & Peers, October 2010.

PROJECT ROADWAY SEGMENT LEVELS OF SERVICE

The results of the City of Salinas roadway segment analysis are presented in Tables 11. Measured against the City of Salinas level of service standard, East Boronda Roadway between McKinnon Street and Natividad Road operates at an unacceptable level of service (LOS D or better) under Project Conditions.

TABLE 11
EXISTING AND PROJECT LOCAL ROADWAY SEGMENT LEVELS OF SERVICE

Roadway Segment	Roadway Type	Peak Hour[1]	Existing		Project	
			Volume[2]	LOS[3]	Volume[2]	LOS[3]
East Boronda Road between McKinnon Street and El Dorado Drive	2-Lane Arterial	PM	1492	D	**1657**	**E**
		SAT	**1615**	**E**	**1834**	**F**
East Boronda Road between El Dorado Drive and Natividad Road	2-Lane Arterial	PM	1526	D	**1691**	**E**
		SAT	1448	C	**1667**	**E**

Notes:

1 PM = evening weekday peak-hour, SAT = Saturday peak hour.

2 Volume = Two-way peak hour traffic.

3 LOS = Level of service.

Significant impacts are highlighted in **bold** text.

Source: Fehr & Peers, October 2010.

PROJECT FREEWAY MAINLINE LEVELS OF SERVICE

The results of the US 101 freeway mainline analysis are presented in Tables 12. The corresponding level of service calculation sheets are contained in **Appendix C**. Measured against the Caltrans level of service standard, all freeway mainline segments operate at an unacceptable level of service (LOS D or better) under Project Conditions.

TABLE 12
EXISTING AND PROJECT US 101 FREEWAY MAINLINE LEVELS OF SERVICE

Travel Direction	Segment	Peak Hour	Existing		Project	
			Density[2]	LOS[3, 4]	Density[2]	LOS[3, 4]
Southbound	Russell Road to Boronda Road	PM	**>45.0**	**F**	**>45.0**	**F**
	Boronda Road to Laurel Drive	PM	**39.5**	**E**	**42.6**	**E**
Northbound	Laurel Drive to Boronda Road	PM	**38.6**	**E**	**41.7**	**E**
	Boronda Road to Russell Road	PM	**36.4**	**E**	**37.6**	**E**

Notes:
1. Balanced counts derived from Boronda Road ramp volumes and freeway mainline count.
2. Measured in vehicles per mile per lane (veh/mi/ln).
3. LOS = Level of Service.
4. LOS F applies whenever the flow rate exceeds the segment capacity.

Significant impacts are highlighted in **bold** text.
Source: Fehr & Peers, October 2010.

PROJECT SIGNAL WARRANT ANALYSIS

The peak-hour signal warrant from the *Manual on Uniform Traffic Control Devices* (MUTCD) was evaluated for the unsignalized study intersections that operate unacceptably under Project Conditions to determine if a traffic signal is warranted. The result of the peak-hour warrant analysis indicates that San Juan Grade Road and Northridge Way intersection satisfies peak hour warrant analysis (see **Appendix D**).

This analysis is intended to examine the general correlation between the planned level of future development and the need to install new traffic signals. It estimates future development-generated traffic compared against a sub-set of the standard traffic signal warrants recommended in the Federal Highway Administration *Manual on Uniform Traffic Control Devices* and associated California MUTCD guidelines. This analysis should not serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated by an experienced engineer based on field-measured rather than forecast traffic data and a thorough study of traffic and roadway conditions. Furthermore, the decision to install a signal should not be based solely upon the warrants, since the installation of signals can lead to certain types of collisions. The City of Salinas should undertake regular monitoring of actual traffic conditions and accident data, and timely re-evaluation of the full set of warrants to prioritize and program intersections for signalization.

INTERSECTION IMPACTS AND MITIGATION MEASURES

Based on the City project impact criteria listed above, the proposed project would result in a significant project impact at the East Boronda Road and San Juan Grade Road intersection under Project Conditions with the degradation of intersection operations to an unacceptable level of service during the evening (PM) and midday Saturday (SAT) peak hours. **Appendix F** contains the corresponding mitigation calculation sheets.

East Boronda Road and San Juan Grade Road – Operations at this location are projected to be LOS E with 58.8 seconds of average delay and 65.8 seconds of delay during the PM and SAT peak hours, respectively. This intersection requires a second eastbound left-turn lane to operate acceptably (LOS D or better) during PM and SAT peak hours. This improvement is consistent with the *City of Salinas Traffic Improvement Program (TIP)* Project Number 50 and City of Salinas Public Works Department active

project (No. 9510), which includes two left-turn lanes on all approaches. Thus, payment of the city impact fee will fulfill the project applicants obligations for mitigating this intersection impact to **less-than-significant**. Other secondary impacts will include tree removal, lengthening of crosswalks, and/or modification of signal phasing that could increase the pedestrian crossing distances/times at the intersection.

A recommended storage pocket length of 400 feet is presented in the *East Boronda Road and San Juan Grade Road Intersection Analysis* technical memorandum (see **Appendix I**) for the East Boronda Road and San Juan Grade Road intersection. This left turn storage pocket estimate is based on using the average queue distance (based on average of five (5) SimTraffic micro-simulation runs) plus the deceleration distance at 30 miles per hour (mph). In other words, on average vehicles will be able to decelerate from 30 mph and stop at the back of the average queue for the left turn movement within the length of the storage pocket under Year 2030 Current General Plan Conditions. At 30 mph the Caltrans *Highway Design Manual* (HDM) specifies an approximate deceleration distance of 235 feet and the estimated average storage pocket length is approximately 100 to 200 feet for the southbound left turn lane. Thus, the southbound left turn storage pocket is estimated to be 400 feet.

Maintaining left-in-left out access for the mobile home driveway (intersection 5) would shorten the southbound left-turn lane storage pocket at East Boronda Road and San Juan Grade Road to approximately 150 feet, which will cause southbound left-turn lane vehicles to block southbound through vehicles. Accordingly, this is considered a **significant operational impact** during the PM and SAT peak hours based on SimTraffic queuing analysis of southbound left-turn lane movement at East Boronda Road and San Juan Grade Road intersection. Mitigation of this operational impact requires modification of the San Juan Grade Road and Mobile Home Driveway intersection to right-in-right-out access only. This driveway modification would require a U-turn movement at the signalized intersections on San Juan Grade Road at both Northridge Drive and East Boronda Road. Under Project Conditions fewer than 10 vehicles make a northbound left into the mobile home driveway during the PM or SAT peak hours. And zero vehicles make an eastbound left turn from the mobile home driveway during the PM and SAT peak hours. The City of Salinas should continue to monitor this location and conduct an engineering study to evaluate the need for turn movement restrictions as appropriate to maintain acceptable intersection operations.

ROADWAY IMPACTS AND MITIGATION MEASURES

Based on the impact criteria listed above, the proposed project will have a significant impact on East Boronda Road between McKinnon Street and Natividad Road under Project Conditions.

East Boronda Road between McKinnon Street and Natividad Road – This roadway segment requires widening to a 4-lane arterial to provide acceptable operations (LOS D) during the PM and SAT peak hours. Widening East Boronda Road to 4-lanes is consistent with the Salinas *General Plan Circulation Element* and the Salinas *Traffic Improvement Program (TIP)* Project Number 20. Thus, payment of the city impact fee will fulfill the project applicants obligations for mitigating this intersection impact to **less-than-significant**. City Staff is currently designing the widening of East Boronda Road to have three eastbound lanes and two westbound lanes.

FREEWAY MAINLINE IMPACTS AND MITIGATION MEASURES

The results of the freeway level of service analysis indicate that the proposed project would create a **significant impact** on the following mixed-flow freeway segments during the PM peak hour:

- US 101 between Laurel Drive and Boronda Road
- US 101 between Boronda Road and Russell Road

The widening of US 101 to 6-lanes between the new Russell Road interchange and Harris Road (*City of Salinas Traffic Improvement Program* Project Number 32) would mitigate the project's impact. The TAMC regional project list does not include the widening of US 101 through the City of Salinas in the regional transportation impact fee, nor does the *2010 Monterey County Constrained Regional Transportation Plan*. Unless completely funded with appropriate agreements to implement the feasible roadway improvements discussed above the impacts would be ***significant and unavoidable***. This conclusion is consistent with the significant and unavoidable impacts identified in the *Final Supplement for the Salinas General Plan Final Program Environmental Impact Report* (2007) for these two US 101 mainline segments. As mentioned previously, the proposed project is consistent with land use designations contained in the 2002 General Plan, which were used as a basis for projecting traffic impacts identified in the *Final Supplement for the Salinas General Plan Final Program Environmental Impact Report* (2007). The City made a statement of overriding consideration for these impacts. This conclusion is discussed further in the California Environmental Quality Act (CEQA) documentation for this proposed project.

PEDESTRIAN, BICYCLE, AND TRANSIT IMPACTS AND MITIGATION MEASURES

Pedestrian and Bicycle Impacts

The project is expected to generate some pedestrian demand by patrons and employees that will access nearby bus stops and commercial services on East Boronda Road and San Juan Grade Road. The planned pedestrian and bicycle facilities for the Salinas Retail Center project are shown on Figure 2 of the site plan. Sidewalk will be provided and connect the southern and western edges of the project site. Access to the project site will be connected from the sidewalk via a short pedestrian path near the Lowe's Home Improvement loading area. A pedestrian path from the East Boronda Road sidewalk to the Lowe's main building entrance will provide a direct connection through the parking lot.

As described in the Existing Conditions section, continuous sidewalks do not currently exist along the northern edge of East Boronda Road or eastern edge of San Juan Grade Road. Per City requirements and the site plan, the project is expected to construct sidewalks on the north side of East Boronda Road and on the eastside of San Juan Grade Road along the project frontage. Crosswalks will be provided at the San Juan Grade Road/Northridge Way with signalization and the signalized East Boronda Road/Dartmouth Way intersection. Thus, the existing and proposed pedestrian facilities can reasonably accommodate the increased demand and the newly constructed pedestrian facilities will not conflict with planned facilities; therefore, ***less-than-significant*** pedestrian facility impacts are anticipated.

As shown on the project site plan, bicycle lanes will be provided on East Boronda Road along the southern portion of the project site, and San Juan Grade Road along the western edge of the project site. These designations are consistent with the bicycle path system presented in City of Salinas *General Plan Circulation Element* (September 2002).

Bicycle parking should be provided on-site. Salinas Municipal Code (§37-50.400) requires that the number of bicycle spaces shall be 10 percent of the required auto spaces. The project does not define the number of bicycle parking spaces but is required to provide a minimum of 83 bicycle spaces based on the required number of parking spaces. The existing bicycle facilities can reasonably accommodate the increased demand, and project implementation will not conflict with any planned facility; therefore, ***less-than-significant*** bicycle impacts are anticipated.

Transit Impacts

The project site plan currently proposes two potential locations for bus stops, one of which replaces the existing bus stop on East Boronda Road. No other modifications or enhancements are identified to the existing transit facilities. Nor, does it conflict with the existing transit system or planned transit system.

Based on the project impact criteria listed above, the proposed project will have a ***less-than-significant impact*** on transit facilities.

PROPOSED SITE ACCESS AND ON-SITE CIRCULATION

As proposed, vehicle access into and out of the site would be provided via three driveways on San Juan Grade Road and two driveways on East Boronda Road. The main full-access project driveway would align with Northridge Way on San Juan Grade. While the San Juan Grade Road and Mobile Home Driveway north of East Boronda Road would be limited to right-in/right-out access. A signalized driveway would align with Dartmouth Way on East Boronda Road and a right-in/right-out driveway is proposed between San Juan Grade Road and Dartmouth Way.

Service Vehicle Access

The northern most driveway on San Juan Grade Road will provide access for service vehicles to the back of house for the anchor retail store. Alternatively service vehicles can access the back of house via the East Boronda Road and Dartmouth Way intersection. A 110-foot truck turnaround is provided adjacent to the loading docks for building A1. The path of travel for trucks entering either at East Boronda Road or San Juan Grade Road is acceptable. All trucks are expected to exit the site using the northern most driveway on San Juan Grade Road. The applicant and City should confirm that these paths are feasible and acceptable prior to issuing building permits.

RECOMMENDED SITE PLAN MODIFICATIONS

Recommended modifications to vehicular, pedestrian, and bicycle site access and on-site circulation are presented on Figure 9.

Vehicular Access and Circulation

Recommendation 1 – The site plan shows a four legged uncontrolled junction immediately north of the right-in & right out project driveway on East Boronda Road. It is recommended that the uncontrolled junction be reconfigured by removing the east access to buildings R1 and J1 and removing the west access to buildings R2 and R3. This modification would allow for additional parking spaces.

Recommendation 2 - The egress/ingress driveway that serves as the north leg of East Boronda Road/Dartmouth Way should be reconfigured by removing the inbound left turn lane and extending the outbound left turn lane to provide greater queue storage at the signal. East Boronda Road/Dartmouth Way will be one of the main access gates to the project site and should provide adequate egress storage pocket length to avoid spillback into the parking aisles. Also, the eastbound left-turn pocket (from East Boronda Road to the project driveway) should be at least 200 feet to accommodate the inbound project traffic. This storage pocket length is limited by the nearby westbound left-turn storage pocket (approximately 150 feet) at the unsignalized Walmart driveway (intersection 10).

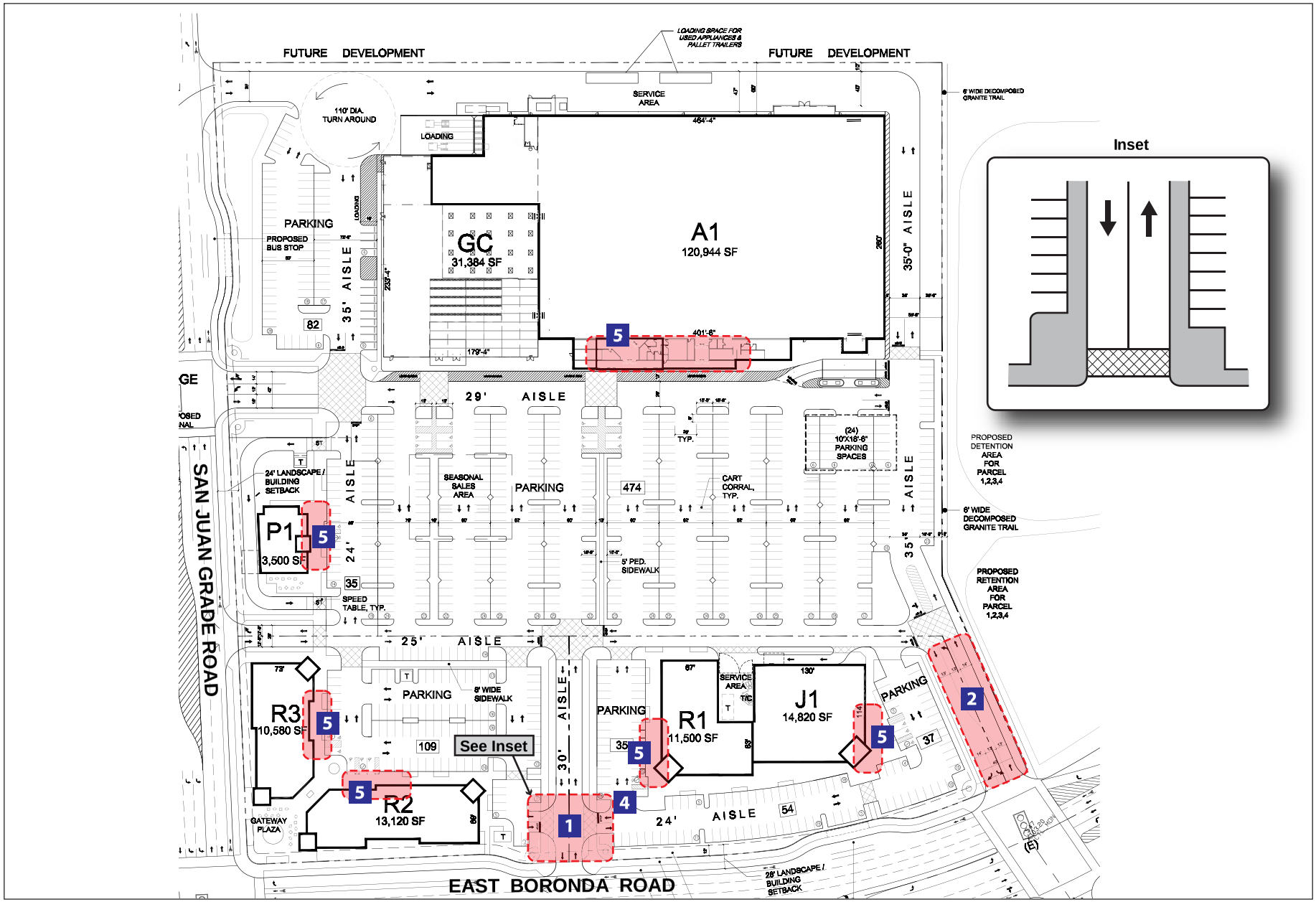
Pedestrian Access and Circulation

Recommendation 3 - All sidewalks both on-site and along the project frontage should be a minimum of eight feet in width.

Recommendation 4 - The pedestrian crossing through the parking lot between the western driveway on Boronda Road and building R1 should have the same treatment similar to the others. Also, the pedestrian crossing near building J1 should have the same treatment similar to the others.

Bicycle Access and Circulation

Recommendation 5 - Bicycle parking should be provided near the entrances of each building (A1, J1, R1, R2, R3, and P1). The bicycle racks and/or lockers on-site should be placed in highly visible locations to encourage bicycling and discourage theft. The bicycle parking should be shown on the site plan.



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Site Plan Recommendations

Figure 9

4. CUMULATIVE CONDITIONS

This chapter discusses the analysis of the two Cumulative scenarios – with and without the proposed project. Cumulative without Project intersection volumes were calculated using traffic from approved but not yet constructed developments, and pending developments in the study area.

CUMULATIVE TRAFFIC VOLUMES

Cumulative Without Project

Cumulative without Project traffic volumes, as shown in Figure 10, were calculated by adding traffic from approved and pending developments located in the City of Salinas and Monterey County to the existing turning movement volumes. Where traffic estimates were not available, traffic was estimated using standard engineering practice for the approved and pending projects listed in **Appendix G**.

Cumulative With Project

The new project trips (see Chapter 3) were added to the Cumulative without Project volumes to represent volumes for Cumulative with Project Conditions as shown on Figure 11.

CUMULATIVE ROADWAY IMPROVEMENTS

No roadway improvements were included under Cumulative Conditions. The Western Bypass and Alvin Drive Extension are listed in the *City of Salinas Traffic Improvement Program (TIP)* as future improvements, but are not included as near-term roadway improvements. The Western Bypass would be a 4-lane roadway extending from the US 101/Boronda Road interchange to the Davis Road and Blanco Road intersection. This improvement would provide parallel capacity to US 101 south of the Boronda Road interchange. Similarly, the planned Alvin Drive extension to the Western Bypass (see the *2002 Salinas General Plan* and *Traffic Improvement Program*, 2010 update) is a potential roadway that provides parallel capacity to Boronda Road.

CUMULATIVE WITHOUT PROJECT LEVELS OF SERVICE

Intersection

Intersection operations were evaluated with level of service calculations under Cumulative without Project Conditions, and the results are summarized in Table 13.

Measured against the City of Salinas level of service standard, all signalized (LOS D or better) and unsignalized (LOS E or better) study intersections operate at an acceptable level of service during one or both of the peak hours under Cumulative without Project Conditions except the East Boronda Road and San Juan Grade Road intersection during the PM and SAT peak hours.

Measured against Caltrans level of service standard, the signalized (LOS C or better) US 101 ramp intersections operate at an acceptable level of service during both of the peak hours under Cumulative without Project Conditions.

TABLE 13
CUMULATIVE INTERSECTION LEVELS OF SERVICE

Intersection	Peak Hour[1]	Intersection Control (Cumulative w/o Project / Cumulative w/ Project)	Cumulative Without Project		Cumulative With Project	
			Delay[2]	LOS[3]	Delay[2]	LOS[3]
1. Russell Road / Van Buren Avenue	PM SAT	Side-Street Stop	13.3 12.8	B B	13.0 12.8	B B
2. Russell Road / San Juan Grade Road	PM SAT	Signal	17.9 10.9	B B	18.3 11.8	B B
3. San Juan Grade Road / Van Buren Avenue	PM SAT	Side-Street Stop	15.4 16.2	C C	17.7 18.8	C C
4. San Juan Grade Road / Northridge Way	PM SAT	Side-Street Stop/Signal	16.7 15.3	C C	22.2 23.4	C C
5. San Juan Grade Road / Mobile Home Driveway	PM SAT	Side-Street Stop	13.8 9.2	B A	10.4 10.5	B B
6. Boronda Road / SB US 101 Ramps	PM SAT	Signal	14.0 12.7	B B	15.8 14.9	B B
7. Boronda Road / NB US 101 Ramps	PM SAT	Signal	15.5 13.3	B B	18.4 16.4	B B
8. Boronda Road / N. Main Street	PM SAT	Signal	48.5 54.0	D D	**59.2** **95.4**	**E** **F**
9. East Boronda Road / San Juan Grade Road	PM SAT	Signal	**71.2** **64.0**	**E** **E**	**86.2** **113.6**	**F** **F**
10. East Boronda Road / Driveway 1	PM SAT	Side-Street Stop	31.0 23.4	D C	31.9 119.4	D F
11. East Boronda Road / Dartmouth Way	PM SAT	Signal	23.9 6.7	C A	26.8 26.3	C C
12. East Boronda Road / McKinnon Street	PM SAT	Signal	39.1 47.0	D D	**64.2** **89.3**	**E** **F**

Notes:

1 PM = evening weekday peak-hour, SAT = Saturday peak hour.

2 Whole intersection weighted average control delay expressed in seconds per vehicle for signalized and all-way stop intersections using methodology described in the 2000 *Highway Capacity Manual*. For two-way stop controlled unsignalized intersections, total control delay for the worst movement, expressed in seconds per vehicle, is presented. LOS calculations conducted using the Synchro level of service analysis software package.

3 LOS = Level of service

4 Observations at the Boronda Road and Northbound US 101 Ramps intersection indicate that the greater lane utilization of the eastbound curb lane queues to the adjacent intersection ramp (US 101 southbound) during the PM and SAT peak hour. This condition can result in calculated operations that are better than those observed in the field.

Significant impacts are highlighted in **bold** text.

Source: Fehr & Peers, October 2010.

Roadway Segment

The results of the City of Salinas roadway segment analysis are presented in **Tables 14**. Measured against the City of Salinas level of service standard, East Boronda Roadway between McKinnon Street and Natividad Road operates at an unacceptable level of service (LOS D or worse) under Cumulative without Project Conditions.

TABLE 14
CUMULATIVE ROADWAY SEGMENT LEVELS OF SERVICE

Roadway Segment	Roadway Type	Peak Hour[1]	Cumulative Without Project		Cumulative With Project	
			Volume[2]	LOS[3]	Volume[2]	LOS[3]
East Boronda Road between McKinnon Street and El Dorado Drive	2-Lane Arterial	PM	**1818**	**F**	**1983**	**F**
		SAT	**1990**	**F**	**2209**	**F**
East Boronda Road between El Dorado Drive and Natividad Road	2-Lane Arterial	PM	**1852**	**F**	**2017**	**F**
		SAT	**1823**	**F**	**2042**	**F**

Notes:
1 PM = evening weekday peak-hour, SAT = Saturday peak hour.
2 Volume = Two-way peak hour traffic.
3 LOS = Level of service.
Significant cumulative impacts are highlighted in **bold** text.
Source: Fehr & Peers, October 2010.

Freeway Mainline

The results of the US 101 freeway mainline analysis are presented in Tables 15. The corresponding level of service calculation sheets are contained in **Appendix B**. Measured against the Caltrans level of service standard, all freeway mainline segments would operate at an unacceptable level of service (LOS D or worse) under Cumulative without Project Conditions.

TABLE 15
CUMULATIVE US 101 FREEWAY MAINLINE LEVELS OF SERVICE

Travel Direction	Segment	Peak Hour	Cumulative Without Project		Cumulative With Project	
			Density[2]	LOS[3, 4]	Density[2]	LOS[3, 4]
Southbound	Russell Road to Boronda Road	PM	**>45**	**F**	**>45**	**F**
	Boronda Road to Laurel Drive	PM	**>45**	**F**	**>45**	**F**
Northbound	Laurel Drive to Boronda Road	PM	**>45**	**F**	**>45**	**F**
	Boronda Road to Russell Road	PM	**>45**	**F**	**>45**	**F**

Notes:
1. Balanced counts derived from Boronda Road ramp volumes and freeway mainline count.
2. Measured in vehicles per mile per lane (veh/mi/ln).
3. LOS = Level of Service.
4. LOS F applies whenever the flow rate exceeds the segment capacity.

Significant cumulative impacts are highlighted in **bold** text.
Source: Fehr & Peers, October 2010.

CUMULATIVE WITH PROJECT LEVELS OF SERVICE

Intersection

Intersection operations were evaluated with level of service calculations under Cumulative with Project Conditions, and the results are summarized in Table 13.

Measured against the City of Salinas level of service standard, all signalized (LOS D or better) and unsignalized (LOS E or better) study intersections operate at an acceptable level of service during one or both of the peak hours under Cumulative with Project Conditions except the following:

8. Boronda Road and N. Main Street (PM and SAT peak hours)

9. East Boronda Road and San Juan Grade Road (PM and SAT peak hours)

12. East Boronda Road and McKinnon Street (PM and SAT peak hours)

Measured against Caltrans level of service standard, the signalized (LOS C or better) US 101 ramp intersections operate at an acceptable level of service during both of the peak hours under Cumulative with Project Conditions.

Roadway Segment

The results of the City of Salinas roadway segment analysis are presented in Tables 14. Measured against the City of Salinas level of service standard, East Boronda Roadway between McKinnon Street and Natividad Road operates at an unacceptable level of service (LOS D or worse) under Cumulative with Project Conditions.

Freeway Mainline

The results of the US 101 freeway mainline analysis are presented in Tables 15. The corresponding level of service calculation sheets are contained in **Appendix B**. Measured against the Caltrans level of service standard, all freeway mainline segments operate at an unacceptable level of service (LOS D or worse) under Cumulative with Project Conditions.

Signal Warrant Analysis

The peak-hour signal warrant from the *Manual on Uniform Traffic Control Devices* (MUTCD) was evaluated for the unsignalized study intersections that operate unacceptably under Cumulative with Project Conditions to determine if a traffic signal is warranted. The result of the peak-hour warrant analysis indicates that San Juan Grade Road and Northridge Way intersection satisfies peak hour warrant analysis (see **Appendix D**).

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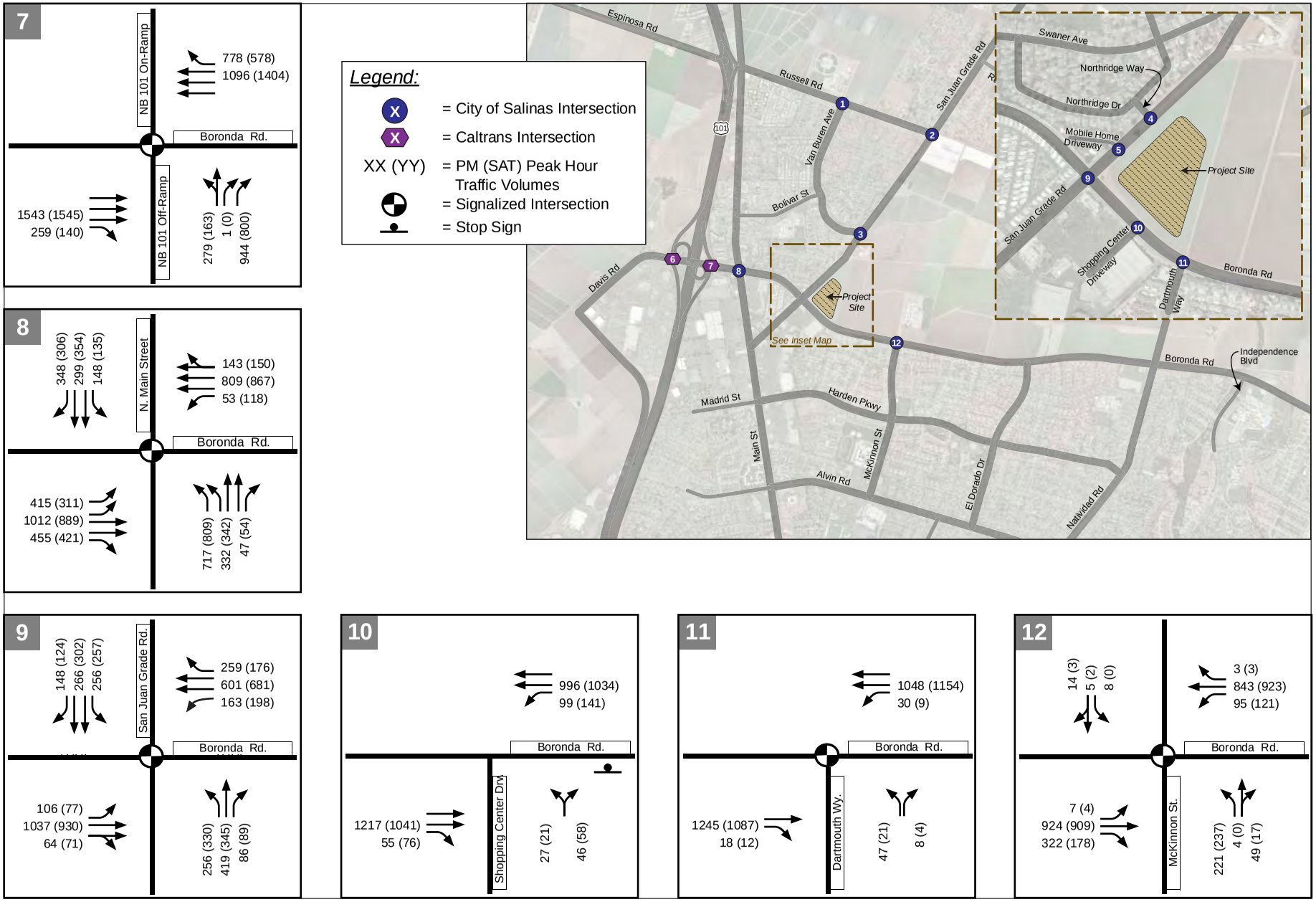
Cumulative Without Project Lane Geometries, Traffic Controls and Peak-Hour Intersection Volumes

Figure 10A



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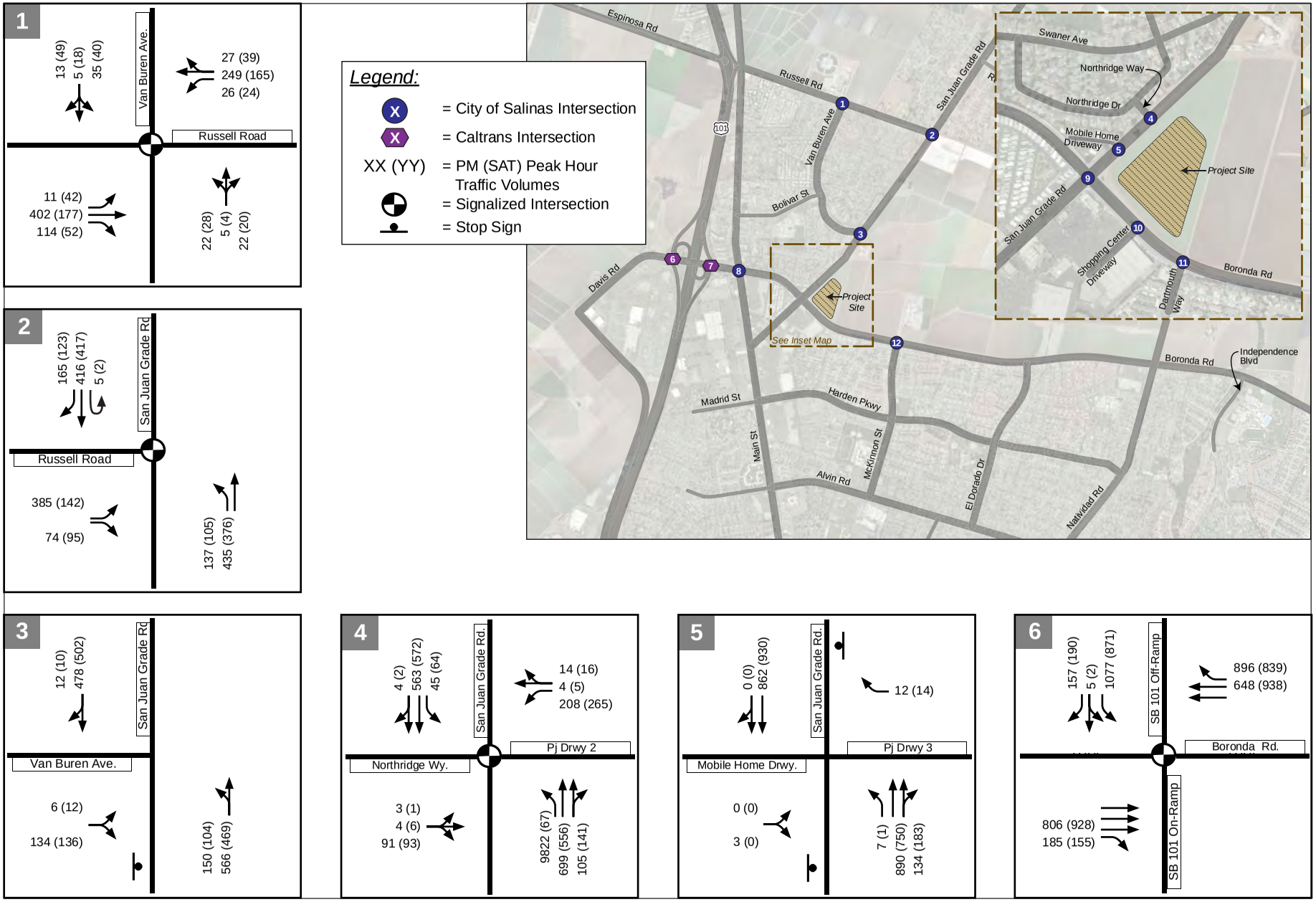
Cumulative Without Project Lane Geometries, Traffic Controls and Peak-Hour Intersection Volumes

Figure 10B



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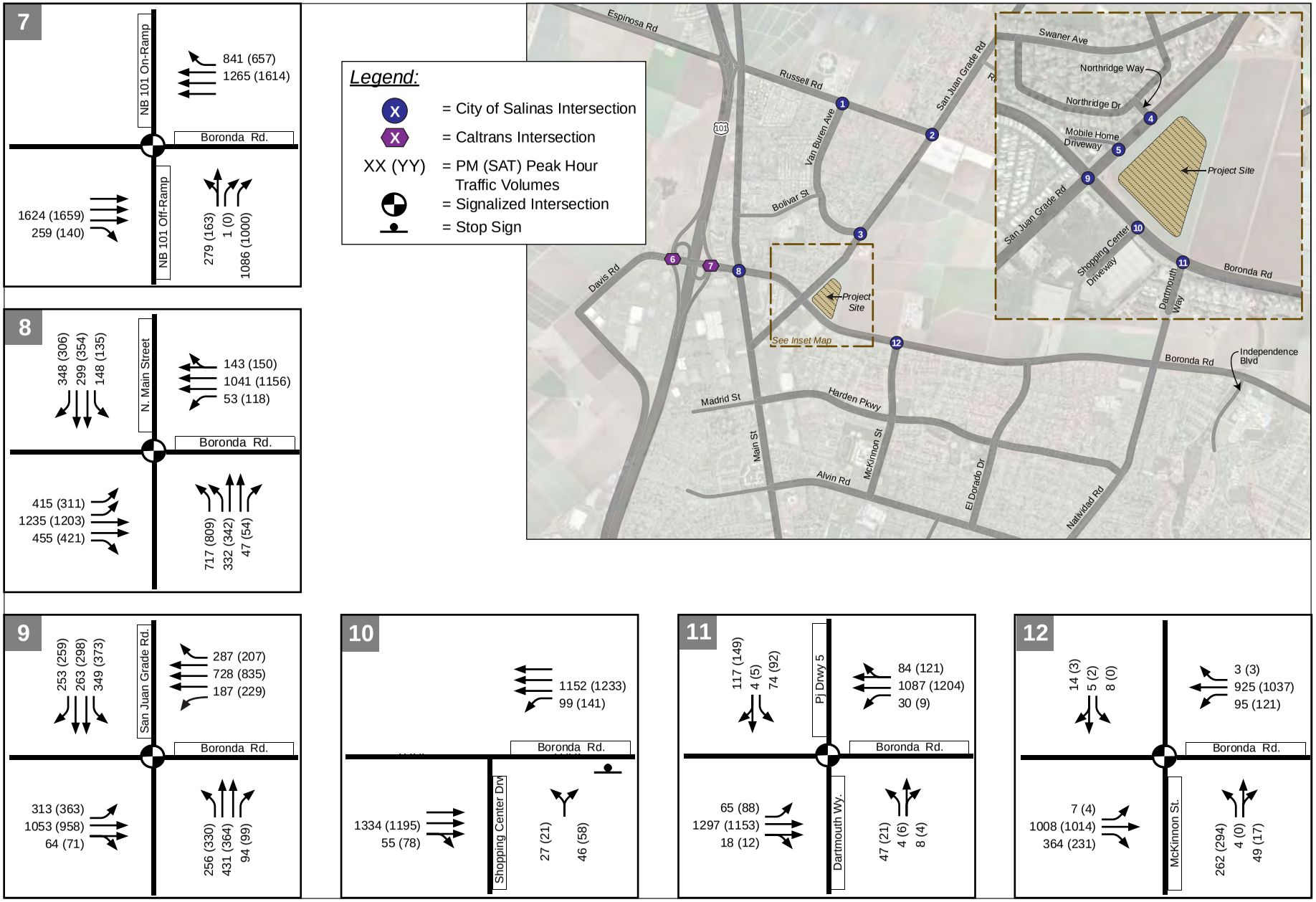
Cumulative With Project Lane Geometries, Traffic Controls and Peak-Hour Intersection Volumes

Figure 11A



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Cumulative With Project Lane Geometries, Traffic Controls and Peak-Hour Intersection Volumes

Figure 11B

CUMULATIVE INTERSECTION IMPACTS AND MITIGATION MEASURES

Based on the City project impact criteria listed above, the following intersections would result in a significant impact under the Cumulative with Project Conditions:

10. Boronda Road and N. Main Street (PM and SAT peak hours)
11. East Boronda Road and San Juan Grade Road (PM and SAT peak hours)
12. East Boronda Road and McKinnon Street (PM and SAT peak hours)

Appendix F contains the corresponding mitigation calculation sheets.

Boronda Road and North Main Street – Operations at this location are projected to be LOS E (59.2 seconds of average delay) and LOS F (95.4 seconds of average delay) during the PM and SAT peak hours, respectively. To operate acceptably (LOS D or better) under the PM peak hour:

- Widen the eastbound approach to include a third eastbound through lane.

Modify the signal timing to include a southbound right-turn overlap phase, which requires prohibition of eastbound u-turns. In addition to the PM peak hour improvements listed above, the SAT peak hour also requires modification of the westbound shared through-right lane into an exclusive through lane and separate right-turn lane. This separate westbound right-turn lane would affect the existing park on the northeast corner and lengthen the pedestrian crossing distance across the east leg of the Boronda Road and North Main Street intersection. Widening intersections and/or roadways for infrequent peak demand creates a vehicle oriented street system that increases the exposure of pedestrians and bicyclist to vehicle traffic. Thus, the Saturday peak hour mitigation is provided for informational purposes because this time period occurs once a week; rather, than a typical mid-week (e.g., Tuesday through Thursday) PM peak hour that occurs three times a week.

Under both the PM and SAT peak hours, additional right-of-way may be needed, which would affect existing parking lots and landscape frontages on each corner. These improvements are not included in the Salinas *Traffic Improvement Program (TIP)*. Thus, payment of the city impact fee will not fulfill the project applicants obligations for mitigating this intersection impact to less-than-significant. The project applicant may either construct the physical improvements and enter into a reimbursement with the City or the City may update the Salinas *Traffic Improvement Program (TIP)* to include these improvements and payment of the updated city impact fee would fulfill the project applicants obligations for mitigating this cumulative intersection impact to less-than-significant. The fair share calculations for this intersection are presented in **Appendix H**. However, unless other funding sources such as contributions from other developers, or city funds are made available, these roadway improvements will not be implemented, and this impact would remain ***significant and unavoidable***. Secondary impacts with widening will include tree removal, lengthening of crosswalks, and/or modification of signal phasing that could increase the crossing distance/time for pedestrians.

East Boronda Road and McKinnon Street – Operations at this location are projected to be LOS E (64.2 sec/veh) and LOS F (89.3 sec/veh) during the PM and SAT peak hours, respectively. To operate acceptably (LOS D or better) and mitigate to ***less-than-significant*** this intersection requires:

- a second through lane in both the eastbound and westbound directions, which is currently being designed by City staff.

This improvement is consistent with the Salinas *General Plan Circulation Element* and the Salinas *Traffic Improvement Program (TIP)* Project Number 20, which widens East Boronda Road to 6-lanes between

San Juan Grade Road and Williams Road. Thus, payment of the city impact fee will fulfill the project applicants obligations for mitigating this intersection impact to **less-than-significant**.

East Boronda Road and San Juan Grade Road – Operations at this location are projected to be LOS F during the PM (86.2 seconds of average delay) and SAT (113.6 seconds of average delay) peak hours. This intersection requires a second left-turn lane on all approaches to mitigate this cumulative impact during PM and SAT peak hours. This improvement is consistent with the *City of Salinas Traffic Improvement Program (TIP)* Project Number 50. Thus, payment of the city impact fee will fulfill the project applicants obligations for mitigating this intersection impact to **less-than-significant**. Secondary impacts with widening will include tree removal, lengthening of crosswalks, and/or modification of signal phasing that could increase the crossing distance/time for pedestrians.

A recommended storage pocket length of 400 feet is presented in the *East Boronda Road and San Juan Grade Road Intersection Analysis* technical memorandum (see **Appendix H**) for the East Boronda Road and San Juan Grade Road intersection. This left turn storage pocket estimate is based on using the average queue distance (based on average of five (5) SimTraffic micro-simulation runs) plus the deceleration distance at 30 miles per hour (mph). In other words, on average vehicles will be able to decelerate from 30 mph and stop at the back of the average queue for the left turn movement within the length of the storage pocket under Year 2030 Current General Plan Conditions. At 30 mph the Caltrans *Highway Design Manual* (HDM) specifies an approximate deceleration distance of 235 feet and the estimated average storage pocket length is approximately 100 to 200 feet for the southbound left turn lane. Thus, the southbound left turn storage pocket is estimated to be 400 feet.

Maintaining left-in-left out access for the mobile home driveway (intersection 5) would shorten the southbound left-turn lane storage pocket at East Boronda Road and San Juan Grade Road to approximately 150 feet, which will cause southbound left-turn lane vehicles to block southbound through vehicles. Accordingly, this is considered a **significant operational impact** during the PM and SAT peak hour. Significant operational impact identified based on SimTraffic queuing analysis of southbound left-turn lane movement at East Boronda Road and San Juan Grade Road intersection. Mitigation of this operational impact requires modification of the San Juan Grade Road and Mobile Home Driveway intersection to right-in-right-out access only. This driveway modification would require a U-turn movement at the signalized intersections on San Juan Grade Road at both Northridge Drive and East Boronda Road. Under Cumulative plus Project Conditions fewer than 10 vehicles make a northbound left into the mobile home driveway during the PM or SAT peak hours. And zero vehicles make an eastbound left turn from the mobile home driveway during the PM and SAT peak hours. The City of Salinas should continue to monitor this location and conduct an engineering study to evaluate the need for turn movement restrictions as appropriate to maintain acceptable intersection operations.

The unsignalized East Boronda Road and Shopping Center Driveway (Walmart) intersection is expected to operate at unacceptable levels during the SAT peak hour. However, this intersection would not meet the Peak Hour Warrant for traffic signal installation during the peak hour. Based on the impact criteria, the proposed project would have a **less-than-significant** impact at this study unsignalized intersection. The City of Salinas should continue to monitor this location and conduct an engineering study to evaluate the need for turn movement restrictions as appropriate to maintain acceptable intersection operations. Under Cumulative plus Project Conditions fewer than 30 vehicles make a northbound left from the shopping center driveway to East Boronda Road during the PM or SAT peak hours.

CUMULATIVE ROADWAY IMPACTS AND MITIGATION MEASURES

Based on the impact criteria listed above, the proposed project will have a significant impact on East Boronda Road between McKinnon Street and Natividad Road under Cumulative with Project Conditions.

East Boronda Road between McKinnon Street and El Dorado Drive – This roadway segment requires widening to a 4-lane arterial to provide acceptable operations (LOS D) during the PM and SAT peak

hours. Widening East Boronda Road to 4-lanes is consistent with the Salinas *General Plan Circulation Element* and the Salinas *Traffic Improvement Program (TIP)* Project Number 20. Thus, payment of the city impact fee will fulfill the project applicants obligations for mitigating this intersection impact to **less-than-significant**.

CUMULATIVE FREEWAY MAINLINE IMPACTS AND MITIGATION MEASURES

The results of the freeway level of service analysis indicate that the proposed project would create a **significant impact** on the following mixed-flow freeway segments during the PM peak hour:

- US 101 between Laurel Drive and Boronda Road
- US 101 between Boronda Road and Russell Road

The widening of US 101 to 6-lanes between the new Russell Road interchange and Harris Road (*City of Salinas Traffic Improvement Program* Project Number 32) would mitigate the project's impact. The TAMC regional project list does not include the widening of US 101 through the City of Salinas in the regional transportation impact fee, nor does the *2010 Monterey County Constrained Regional Transportation Plan*. Unless completely funded with appropriate agreements to implement the feasible roadway improvements discussed above the impacts would be ***significant and unavoidable***. This conclusion is consistent with the significant and unavoidable impacts identified in the *Final Supplement for the Salinas General Plan Final Program Environmental Impact Report* (2007) for these two US 101 mainline segments. As mentioned previously, the proposed project is consistent with land use designations contained in the 2002 General Plan, which were used as a basis for projecting traffic impacts identified in the *Final Supplement for the Salinas General Plan Final Program Environmental Impact Report* (2007). The City made a statement of overriding consideration for these impacts. This conclusion is discussed further in the California Environmental Quality Act (CEQA) documentation for this proposed project.

5. BORONDA ROAD PROGRESSION ANALYSIS

This chapter presents the model calibration and traffic progression estimates on Boronda Road between the US 101 southbound ramps and McKinnon Street during the weekday PM and Saturday midday peak hours under Existing Conditions and Cumulative with Project Conditions and proposed mitigation.

MODEL DEVELOPMENT

Using the *Guidelines for Applying Traffic Microsimulation Modeling Software* (Caltrans, September 2002), the SimTraffic models were validated with respect to traffic volumes, corridor travel times, and queue locations in the Boronda Road corridor near the project site. These models are considered appropriate tools to evaluate the progression on Boronda Road between US 101 and McKinnon Street.

PROGRESSION ANALYSIS

SimTraffic is a stochastic model where different seed numbers generate different driver behaviors (i.e., accepting available gaps for turns, changing lanes, etc.) and system results. Use of a stochastic model allows for the seemingly unpredictable element of individual driver's behavior to be modeled using random scenarios. Multiple runs are needed to account for this variation in the model results and to achieve confidence in the simulated results. Thus, all results presented in this section are the average of five similar model runs out of ten with different seed numbers.

Table 16 compares the Existing travel time estimates to field observations and summarizes the travel time estimates from the SimTraffic model. Existing simulated travel times are similar to existing travel times. With the implementation of the proposed mitigations under the Cumulative With Project, the average travel time increased while the average speed decreased compares to Existing Conditions. Average travel speeds will generally be lower with the proposed mitigations described in Chapter 4 and the increased traffic under Cumulative with Project Conditions compared to Existing Conditions.

TABLE 16
PEAK-HOUR BORONDA ROAD PROGRESSION ANALYSIS

Distance (miles)	Direction	Peak Hour	Field Observed[1]		SimTraffic Model			
					Existing		Cumulative with Project and Proposed Mitigation[1]	
			Average Time (sec)	Average Speed (mph)	Average Time (sec)	Average Speed (mph)	Average Time (sec)	Average Speed (mph)
1.08	WB	PM	212	18.3	261	14.9	362	10.7
		SAT	208	18.7	239	16.3	346	11.2
	EB	PM	285	13.6	325	12.0	334	11.6
		SAT	279	13.9	277	14.0	331	11.7

Notes:
1 Former Home Depot site was under construction during field observations.
2 Proposed cumulative mitigation (see Chapter 4) includes: 1) 4-lane East Boronda Road between Dartmouth Way and Natividad Road, 2) dual left turn lanes on all approaches at East Boronda Road/San Juan Grade Road, 3) 3rd eastbound through lane, separate westbound right turn and southbound right-turn overlap phase at intersection of Boronda Road and North Main Street.

Source: Fehr & Peers, October 2010.

APPENDIX A:
EXISTING TRAFFIC COUNTS

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Groups Printed- Vehicles

	VAN BUREN AVE Southbound					RUSSELL RD Westbound					VAN BUREN AVE Northbound					RUSSELL RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	15	2	4	0	21	4	30	1	0	35	3	0	7	0	10	10	38	10	0	58	124
11:15 AM	6	9	9	0	24	7	39	3	0	49	4	2	8	0	14	10	45	14	0	69	156
11:30 AM	5	1	6	0	12	16	32	1	0	49	9	5	9	0	23	8	44	15	0	67	151
11:45 AM	5	7	16	0	28	12	29	1	0	42	5	1	7	0	13	6	38	13	0	57	140
Total	31	19	35	0	85	39	130	6	0	175	21	8	31	0	60	34	165	52	0	251	571
12:00 PM	5	6	3	0	14	11	31	5	0	47	7	2	1	0	10	7	36	11	0	54	125
12:15 PM	11	3	12	0	26	8	32	3	0	43	3	1	8	0	12	15	42	15	0	72	153
12:30 PM	20	8	14	0	42	10	39	8	0	57	5	1	8	0	14	13	47	7	0	67	180
12:45 PM	13	1	11	0	25	10	44	8	0	62	5	0	11	0	16	17	42	9	0	68	171
Total	49	18	40	0	107	39	146	24	0	209	20	4	28	0	52	52	167	42	0	261	629
Grand Total	80	37	75	0	192	78	276	30	0	384	41	12	59	0	112	86	332	94	0	512	1200
Apprch %	41.7	19.3	39.1	0		20.3	71.9	7.8	0		36.6	10.7	52.7	0		16.8	64.8	18.4	0		
Total %	6.7	3.1	6.2	0	16	6.5	23	2.5	0	32	3.4	1	4.9	0	9.3	7.2	27.7	7.8	0	42.7	

	VAN BUREN AVE Southbound					RUSSELL RD Westbound					VAN BUREN AVE Northbound					RUSSELL RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	5	6	3	0	14	11	31	5	0	47	7	2	1	0	10	7	36	11	0	54	125
12:15 PM	11	3	12	0	26	8	32	3	0	43	3	1	8	0	12	15	42	15	0	72	153
12:30 PM	20	8	14	0	42	10	39	8	0	57	5	1	8	0	14	13	47	7	0	67	180
12:45 PM	13	1	11	0	25	10	44	8	0	62	5	0	11	0	16	17	42	9	0	68	171
Total Volume	49	18	40	0	107	39	146	24	0	209	20	4	28	0	52	52	167	42	0	261	629
% App. Total	45.8	16.8	37.4	0		18.7	69.9	11.5	0		38.5	7.7	53.8	0		19.9	64	16.1	0		
PHF	.613	.563	.714	.000	.637	.886	.830	.750	.000	.843	.714	.500	.636	.000	.813	.765	.888	.700	.000	.906	.874

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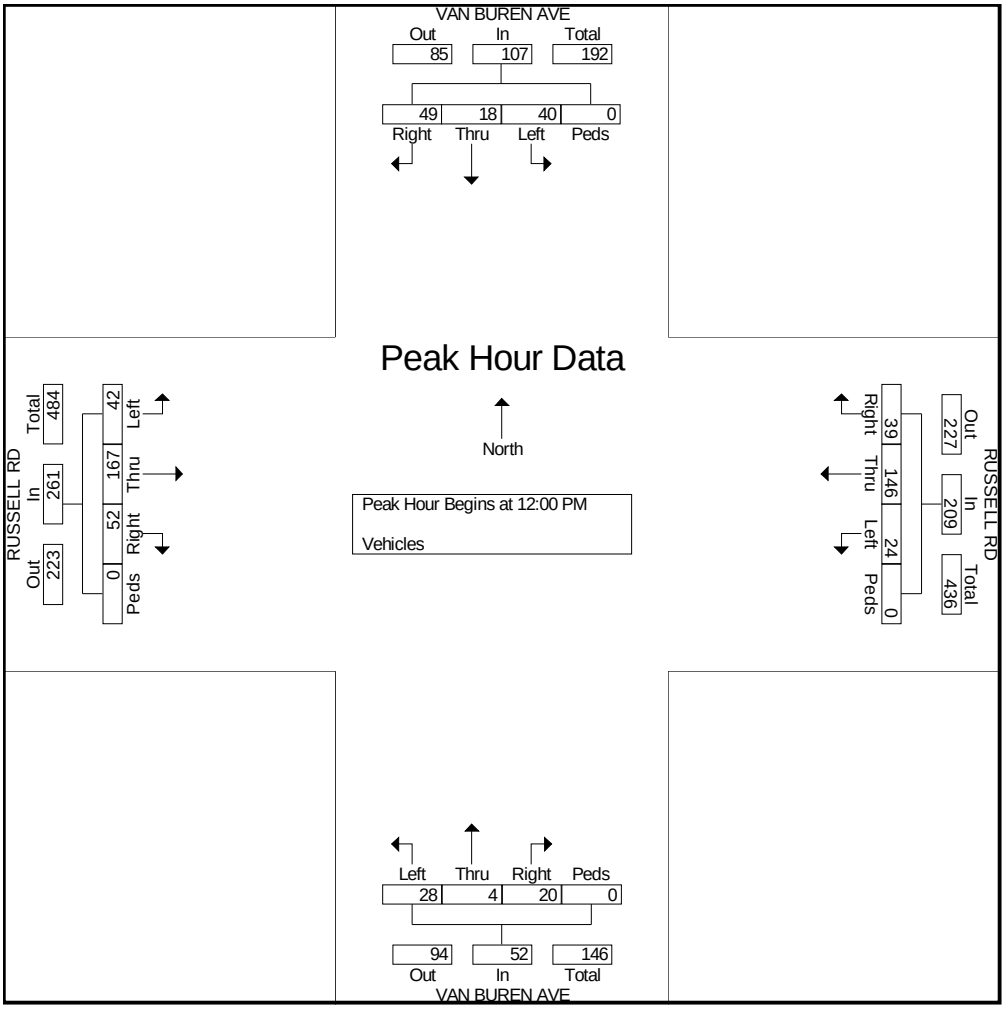

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Groups Printed- Vehicles

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Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	2	2	5	0	9	6	52	7	0	65	2	4	5	0	11	20	71	6	0	97	182
04:15 PM	4	9	10	0	23	13	31	5	0	49	4	6	5	0	15	20	77	3	0	100	187
04:30 PM	3	3	13	0	19	8	34	3	0	45	5	5	8	0	18	27	66	1	0	94	176
04:45 PM	6	1	13	0	20	8	45	4	0	57	7	0	5	0	12	23	68	3	0	94	183
Total	15	15	41	0	71	35	162	19	0	216	18	15	23	0	56	90	282	13	0	385	728
05:00 PM	2	3	10	0	15	8	46	6	0	60	2	2	4	0	8	30	69	2	0	101	184
05:15 PM	3	0	5	0	8	5	36	9	0	50	2	1	7	0	10	38	103	2	0	143	211
05:30 PM	2	1	7	0	10	6	46	7	0	59	11	2	6	0	19	23	82	4	0	109	197
05:45 PM	2	2	9	0	13	9	42	3	0	54	6	1	3	0	10	19	86	3	0	108	185
Total	9	6	31	0	46	28	170	25	0	223	21	6	20	0	47	110	340	11	0	461	777
Grand Total	24	21	72	0	117	63	332	44	0	439	39	21	43	0	103	200	622	24	0	846	1505
Apprch %	20.5	17.9	61.5	0		14.4	75.6	10	0		37.9	20.4	41.7	0		23.6	73.5	2.8	0		
Total %	1.6	1.4	4.8	0	7.8	4.2	22.1	2.9	0	29.2	2.6	1.4	2.9	0	6.8	13.3	41.3	1.6	0	56.2	

	VAN BUREN AVE Southbound					RUSSEL RD Westbound					VAN BUREN AVE Northbound					RUSSEL RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	2	3	10	0	15	8	46	6	0	60	2	2	4	0	8	30	69	2	0	101	184
05:15 PM	3	0	5	0	8	5	36	9	0	50	2	1	7	0	10	38	103	2	0	143	211
05:30 PM	2	1	7	0	10	6	46	7	0	59	11	2	6	0	19	23	82	4	0	109	197
05:45 PM	2	2	9	0	13	9	42	3	0	54	6	1	3	0	10	19	86	3	0	108	185
Total Volume	9	6	31	0	46	28	170	25	0	223	21	6	20	0	47	110	340	11	0	461	777
% App. Total	19.6	13	67.4	0		12.6	76.2	11.2	0		44.7	12.8	42.6	0		23.9	73.8	2.4	0		
PHF	.750	.500	.775	.000	.767	.778	.924	.694	.000	.929	.477	.750	.714	.000	.618	.724	.825	.688	.000	.806	.921

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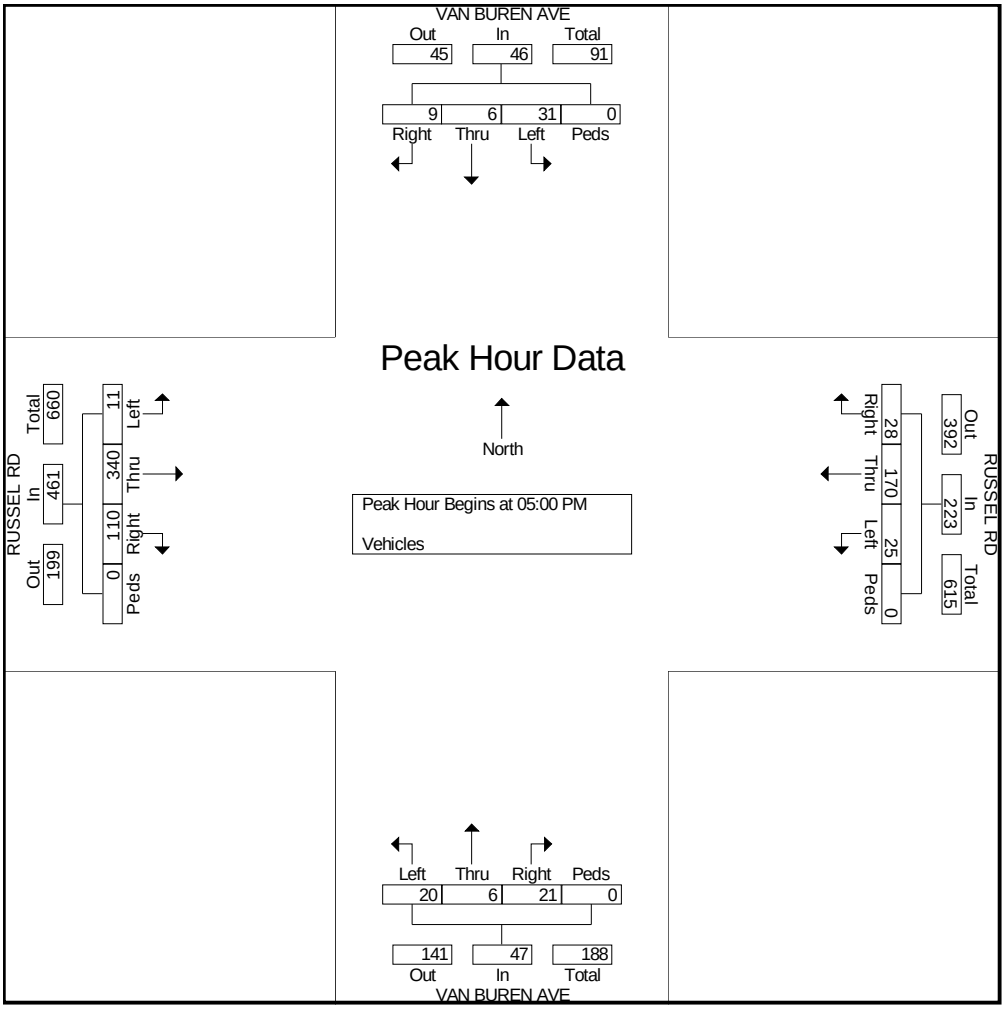

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Groups Printed- Vehicles

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11:00 AM	21	57	1	0	79	0	0	0	0	0	0	45	19	0	64	7	0	28	0	35	178
11:15 AM	25	58	1	0	84	0	0	0	0	0	0	37	21	0	58	13	0	37	0	50	192
11:30 AM	29	56	2	0	87	0	0	0	0	0	0	37	32	0	69	24	0	33	0	57	213
11:45 AM	18	55	2	0	75	0	0	0	0	0	0	47	26	0	73	19	0	26	0	45	193
Total	93	226	6	0	325	0	0	0	0	0	0	166	98	0	264	63	0	124	0	187	776
12:00 PM	27	59	0	0	86	0	0	0	0	0	0	60	28	0	88	15	0	25	0	40	214
12:15 PM	23	66	2	0	91	0	0	0	0	0	0	45	22	0	67	19	0	38	0	57	215
12:30 PM	34	62	0	0	96	0	0	0	0	0	0	34	18	0	52	26	0	36	0	62	210
12:45 PM	32	54	0	0	86	0	0	0	0	0	0	49	28	0	77	21	0	30	0	51	214
Total	116	241	2	0	359	0	0	0	0	0	0	188	96	0	284	81	0	129	0	210	853
Grand Total	209	467	8	0	684	0	0	0	0	0	0	354	194	0	548	144	0	253	0	397	1629
Apprch %	30.6	68.3	1.2	0		0	0	0	0		0	64.6	35.4	0		36.3	0	63.7	0		
Total %	12.8	28.7	0.5	0	42	0	0	0	0	0	0	21.7	11.9	0	33.6	8.8	0	15.5	0	24.4	

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					RUSSELL RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	27	59	0	0	86	0	0	0	0	0	0	60	28	0	88	15	0	25	0	40	214
12:15 PM	23	66	2	0	91	0	0	0	0	0	0	45	22	0	67	19	0	38	0	57	215
12:30 PM	34	62	0	0	96	0	0	0	0	0	0	34	18	0	52	26	0	36	0	62	210
12:45 PM	32	54	0	0	86	0	0	0	0	0	0	49	28	0	77	21	0	30	0	51	214
Total Volume	116	241	2	0	359	0	0	0	0	0	0	188	96	0	284	81	0	129	0	210	853
% App. Total	32.3	67.1	0.6	0		0	0	0	0		0	66.2	33.8	0		38.6	0	61.4	0		
PHF	.853	.913	.250	.000	.935	.000	.000	.000	.000	.000	.000	.783	.857	.000	.807	.779	.000	.849	.000	.847	.992

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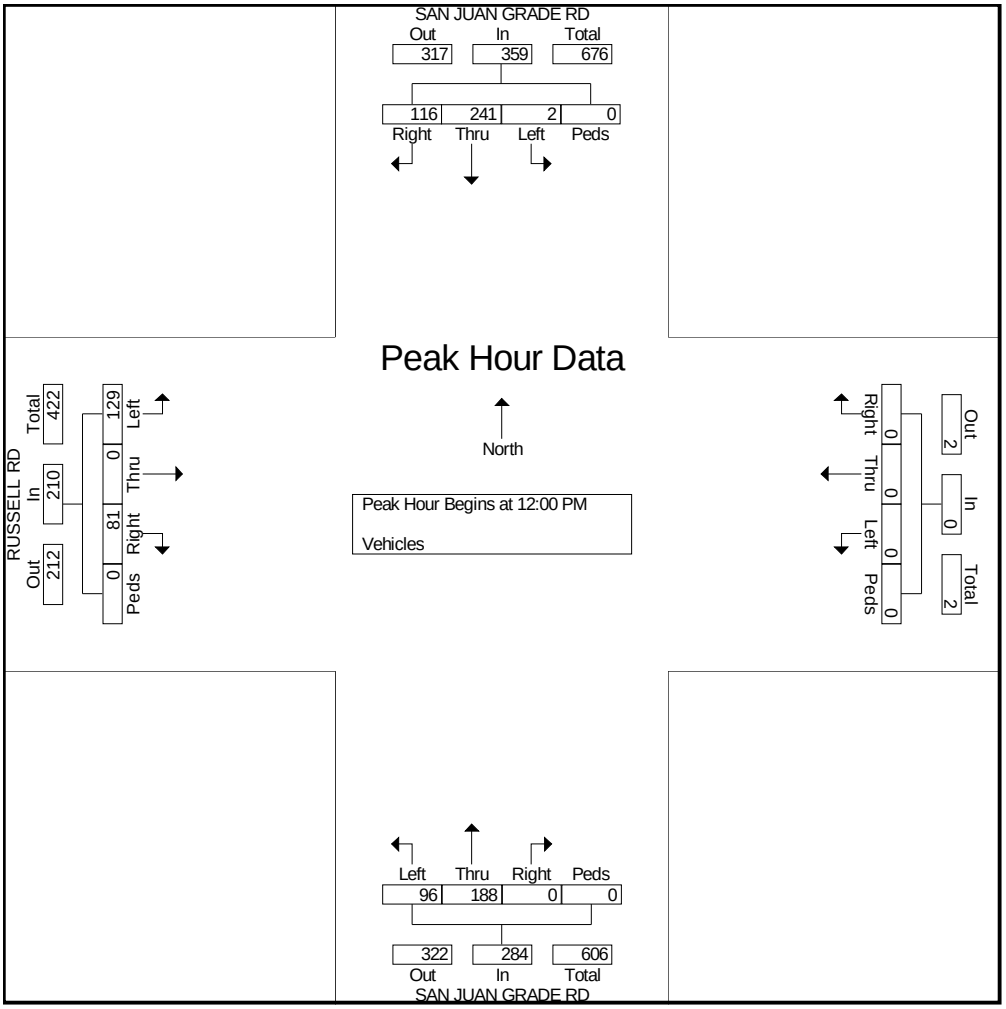

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Groups Printed- Vehicles

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Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	33	56	0	0	89	0	0	0	0	0	0	32	25	0	57	21	0	52	0	73	219
04:15 PM	40	51	1	0	92	0	0	0	0	0	0	35	26	0	61	21	0	66	0	87	240
04:30 PM	26	60	2	0	88	0	0	0	0	0	0	41	26	0	67	29	0	83	0	112	267
04:45 PM	39	83	4	0	126	0	0	0	0	0	0	62	29	0	91	20	0	87	0	107	324
Total	138	250	7	0	395	0	0	0	0	0	0	170	106	0	276	91	0	288	0	379	1050
05:00 PM	39	79	0	0	118	0	0	0	0	0	0	58	27	0	85	17	0	80	0	97	300
05:15 PM	36	71	0	0	107	0	0	0	0	0	0	55	36	0	91	21	0	104	0	125	323
05:30 PM	44	92	1	0	137	2	0	0	0	2	0	74	38	0	112	14	0	100	0	114	365
05:45 PM	50	82	1	0	133	0	0	0	0	0	0	80	20	0	100	25	0	84	0	109	342
Total	169	324	2	0	495	2	0	0	0	2	0	267	121	0	388	77	0	368	0	445	1330
Grand Total	307	574	9	0	890	2	0	0	0	2	0	437	227	0	664	168	0	656	0	824	2380
Apprch %	34.5	64.5	1	0		100	0	0	0		0	65.8	34.2	0		20.4	0	79.6	0		
Total %	12.9	24.1	0.4	0	37.4	0.1	0	0	0	0.1	0	18.4	9.5	0	27.9	7.1	0	27.6	0	34.6	

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					RUSSELL RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	39	79	0	0	118	0	0	0	0	0	0	58	27	0	85	17	0	80	0	97	300
05:15 PM	36	71	0	0	107	0	0	0	0	0	0	55	36	0	91	21	0	104	0	125	323
05:30 PM	44	92	1	0	137	2	0	0	0	2	0	74	38	0	112	14	0	100	0	114	365
05:45 PM	50	82	1	0	133	0	0	0	0	0	0	80	20	0	100	25	0	84	0	109	342
Total Volume	169	324	2	0	495	2	0	0	0	2	0	267	121	0	388	77	0	368	0	445	1330
% App. Total	34.1	65.5	0.4	0		100	0	0	0		0	68.8	31.2	0		17.3	0	82.7	0		
PHF	.845	.880	.500	.000	.903	.250	.000	.000	.000	.250	.000	.834	.796	.000	.866	.770	.000	.885	.000	.890	.911

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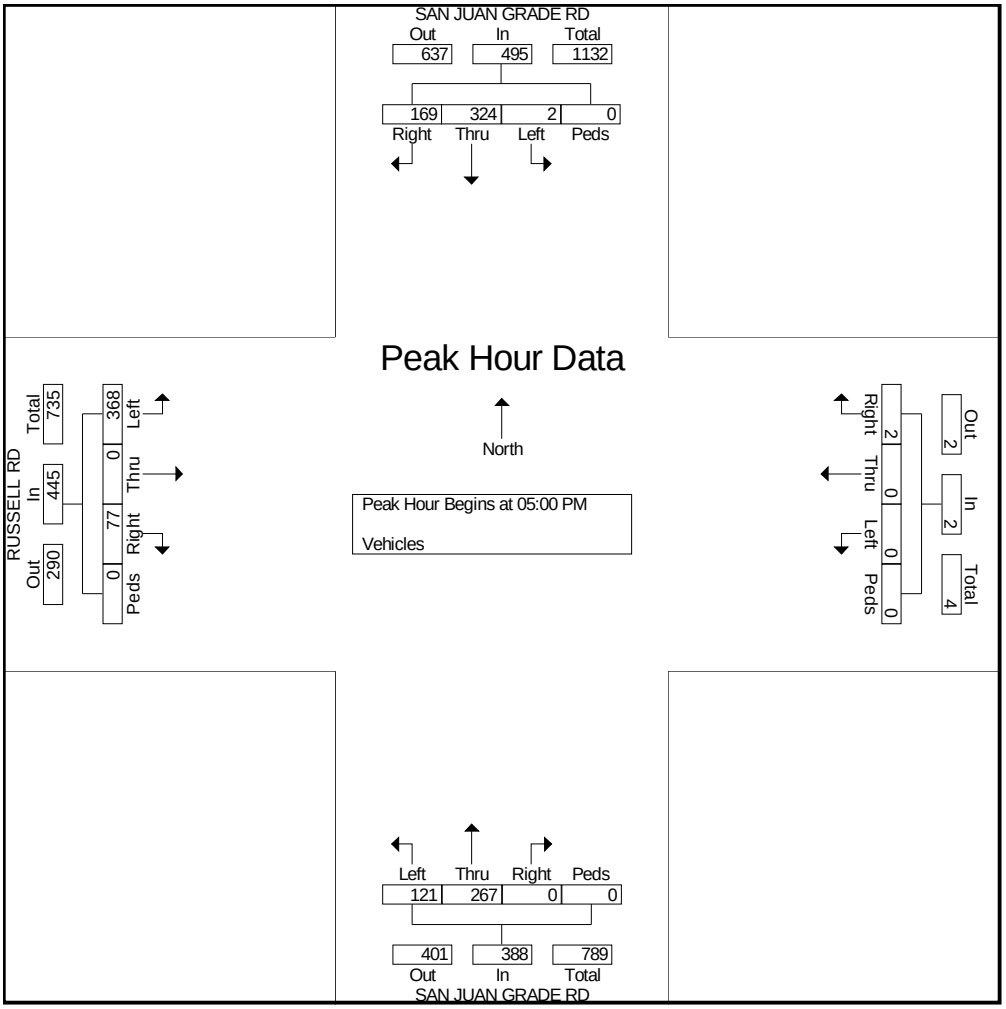

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File Name : 3MID FINAL
Site Code : 00000003
Start Date : 3/13/2010
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Groups Printed- Vehicles

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					VAN BUREN AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	2	59	0	0	61	0	0	0	0	0	0	57	22	0	79	17	0	3	0	20	160
11:15 AM	4	76	0	0	80	0	0	0	0	0	0	57	20	0	77	18	0	1	0	19	176
11:30 AM	5	73	0	0	78	0	0	0	0	0	0	54	17	0	71	21	0	1	0	22	171
11:45 AM	2	74	0	0	76	0	0	0	0	0	0	78	23	0	101	25	0	0	0	25	202
Total	13	282	0	0	295	0	0	0	0	0	0	246	82	0	328	81	0	5	0	86	709
12:00 PM	3	72	0	0	75	0	0	0	0	0	0	84	16	0	100	19	0	3	0	22	197
12:15 PM	4	82	0	0	86	0	0	0	0	0	0	61	20	0	81	21	0	3	0	24	191
12:30 PM	3	79	0	0	82	0	0	0	0	0	0	44	15	0	59	28	0	1	0	29	170
12:45 PM	0	79	0	0	79	0	0	0	0	0	0	72	15	0	87	27	0	5	0	32	198
Total	10	312	0	0	322	0	0	0	0	0	0	261	66	0	327	95	0	12	0	107	756
Grand Total	23	594	0	0	617	0	0	0	0	0	0	507	148	0	655	176	0	17	0	193	1465
Apprch %	3.7	96.3	0	0		0	0	0	0		0	77.4	22.6	0		91.2	0	8.8	0		
Total %	1.6	40.5	0	0	42.1	0	0	0	0	0	0	34.6	10.1	0	44.7	12	0	1.2	0	13.2	

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					VAN BUREN AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:30 AM																					
11:30 AM	5	73	0	0	78	0	0	0	0	0	0	54	17	0	71	21	0	1	0	22	171
11:45 AM	2	74	0	0	76	0	0	0	0	0	0	78	23	0	101	25	0	0	0	25	202
12:00 PM	3	72	0	0	75	0	0	0	0	0	0	84	16	0	100	19	0	3	0	22	197
12:15 PM	4	82	0	0	86	0	0	0	0	0	0	61	20	0	81	21	0	3	0	24	191
Total Volume	14	301	0	0	315	0	0	0	0	0	0	277	76	0	353	86	0	7	0	93	761
% App. Total	4.4	95.6	0	0		0	0	0	0		0	78.5	21.5	0		92.5	0	7.5	0		
PHF	.700	.918	.000	.000	.916	.000	.000	.000	.000	.000	.000	.824	.826	.000	.874	.860	.000	.583	.000	.930	.942

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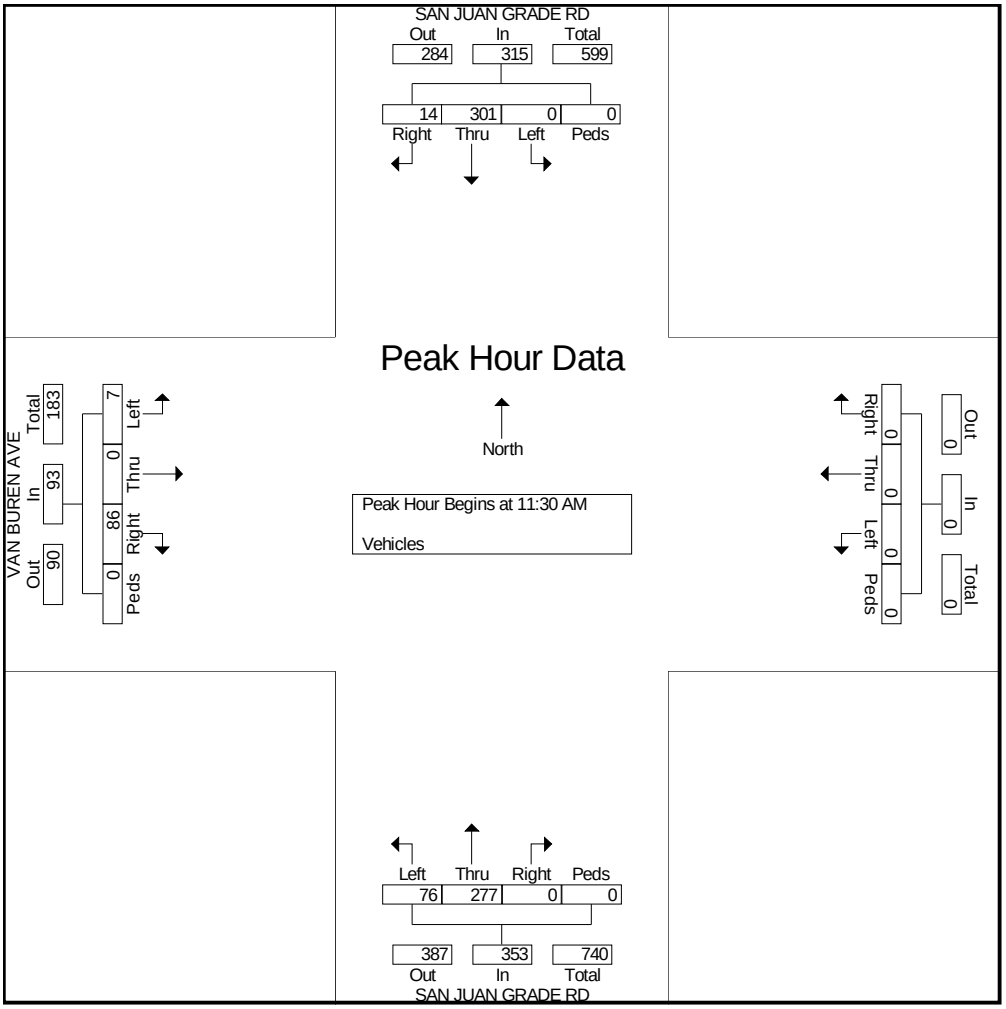

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Groups Printed- Vehicles

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					VAN BUREN AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	5	84	0	0	89	0	0	0	0	0	0	70	33	0	103	27	0	3	0	30	222
04:15 PM	1	66	0	0	67	0	0	0	0	0	0	65	26	0	91	24	0	4	0	28	186
04:30 PM	4	78	0	0	82	0	0	0	0	0	0	57	17	0	74	23	0	1	0	24	180
04:45 PM	5	93	0	0	98	0	0	0	0	0	0	81	28	0	109	22	0	2	0	24	231
Total	15	321	0	0	336	0	0	0	0	0	0	273	104	0	377	96	0	10	0	106	819
05:00 PM	1	84	0	0	85	0	0	0	0	0	0	76	27	0	103	25	0	0	0	25	213
05:15 PM	5	74	0	0	79	0	0	0	0	0	0	97	37	0	134	31	0	2	0	33	246
05:30 PM	1	97	0	0	98	0	0	0	0	0	0	88	28	0	116	27	0	2	0	29	243
05:45 PM	7	93	0	0	100	0	0	0	0	0	0	89	21	0	110	19	0	1	0	20	230
Total	14	348	0	0	362	0	0	0	0	0	0	350	113	0	463	102	0	5	0	107	932
Grand Total	29	669	0	0	698	0	0	0	0	0	0	623	217	0	840	198	0	15	0	213	1751
Apprch %	4.2	95.8	0	0		0	0	0	0		0	74.2	25.8	0		93	0	7	0		
Total %	1.7	38.2	0	0	39.9	0	0	0	0	0	0	35.6	12.4	0	48	11.3	0	0.9	0	12.2	

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					VAN BUREN AVE Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	5	93	0	0	98	0	0	0	0	0	0	81	28	0	109	22	0	2	0	24	231
05:00 PM	1	84	0	0	85	0	0	0	0	0	0	76	27	0	103	25	0	0	0	25	213
05:15 PM	5	74	0	0	79	0	0	0	0	0	0	97	37	0	134	31	0	2	0	33	246
05:30 PM	1	97	0	0	98	0	0	0	0	0	0	88	28	0	116	27	0	2	0	29	243
Total Volume	12	348	0	0	360	0	0	0	0	0	0	342	120	0	462	105	0	6	0	111	933
% App. Total	3.3	96.7	0	0		0	0	0	0		0	74	26	0		94.6	0	5.4	0		
PHF	.600	.897	.000	.000	.918	.000	.000	.000	.000	.000	.000	.881	.811	.000	.862	.847	.000	.750	.000	.841	.948

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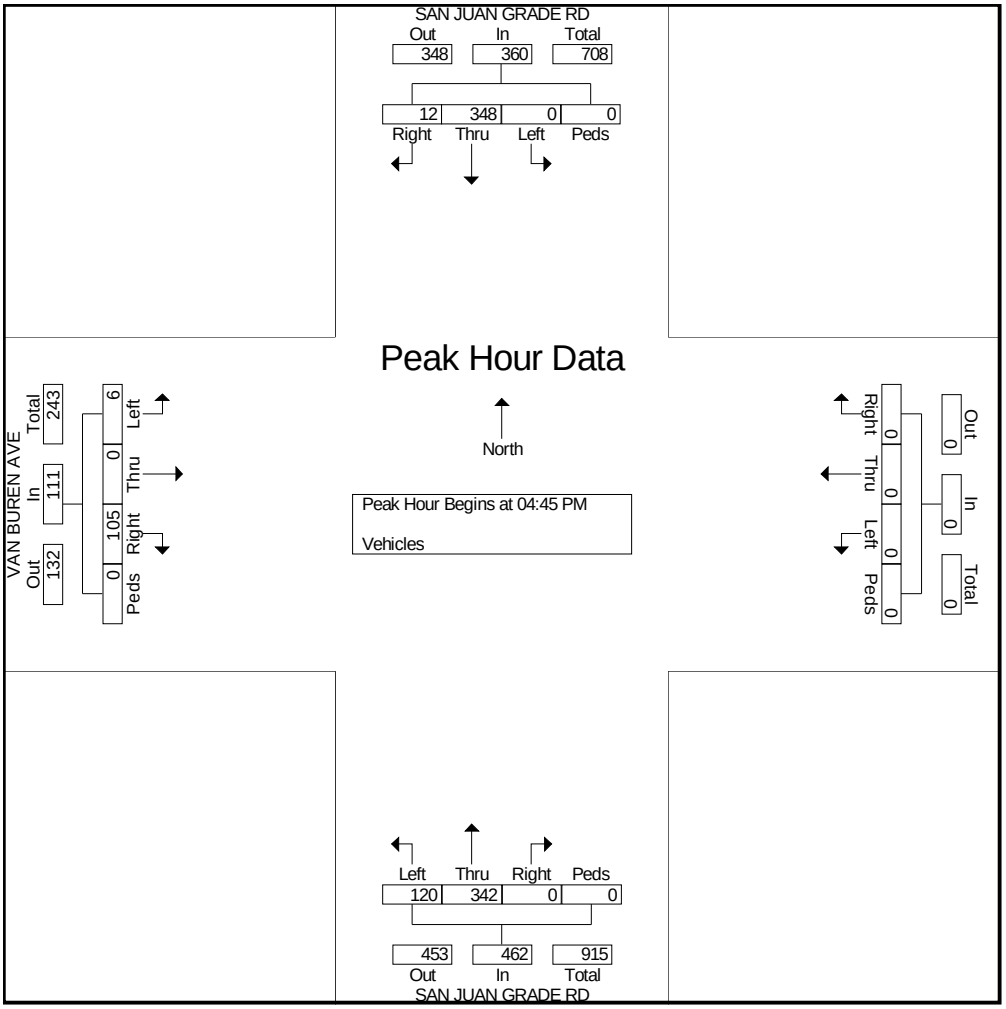

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File Name : 4MID FINAL
Site Code : 00000004
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Groups Printed- Vehicles

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					NORTHRIDGE WY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	89	0	0	89	0	0	0	0	0	0	81	14	0	95	15	0	1	0	16	200
11:15 AM	1	95	0	0	96	0	0	0	0	0	0	78	18	0	96	9	0	0	0	9	201
11:30 AM	2	91	0	0	93	0	0	0	0	0	0	72	20	0	92	20	0	3	0	23	208
11:45 AM	2	97	0	0	99	0	0	0	0	0	0	105	17	0	122	15	0	2	0	17	238
Total	5	372	0	0	377	0	0	0	0	0	0	336	69	0	405	59	0	6	0	65	847
12:00 PM	2	99	0	0	101	0	0	0	0	0	0	90	18	0	108	14	0	0	0	14	223
12:15 PM	0	105	0	0	105	0	0	0	0	0	0	74	14	0	88	25	0	1	0	26	219
12:30 PM	0	100	0	0	100	0	0	0	0	0	0	74	16	0	90	28	0	0	0	28	218
12:45 PM	0	97	0	0	97	0	0	0	0	0	0	81	15	0	96	21	0	0	0	21	214
Total	2	401	0	0	403	0	0	0	0	0	0	319	63	0	382	88	0	1	0	89	874
Grand Total	7	773	0	0	780	0	0	0	0	0	0	655	132	0	787	147	0	7	0	154	1721
Apprch %	0.9	99.1	0	0		0	0	0	0		0	83.2	16.8	0		95.5	0	4.5	0		
Total %	0.4	44.9	0	0	45.3	0	0	0	0	0	0	38.1	7.7	0	45.7	8.5	0	0.4	0	8.9	

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					NORTHRIDGE WY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:30 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	2	97	0	0	99	0	0	0	0	0	0	105	17	0	122	15	0	2	0	17	238
12:00 PM	2	99	0	0	101	0	0	0	0	0	0	90	18	0	108	14	0	0	0	14	223
12:15 PM	0	105	0	0	105	0	0	0	0	0	0	74	14	0	88	25	0	1	0	26	219
12:30 PM	0	100	0	0	100	0	0	0	0	0	0	74	16	0	90	28	0	0	0	28	218
Total Volume	4	401	0	0	405	0	0	0	0	0	0	343	65	0	408	82	0	3	0	85	898
% App. Total	1	99	0	0		0	0	0	0		0	84.1	15.9	0		96.5	0	3.5	0		
PHF	.500	.955	.000	.000	.964	.000	.000	.000	.000	.000	.000	.817	.903	.000	.836	.732	.000	.375	.000	.759	.943

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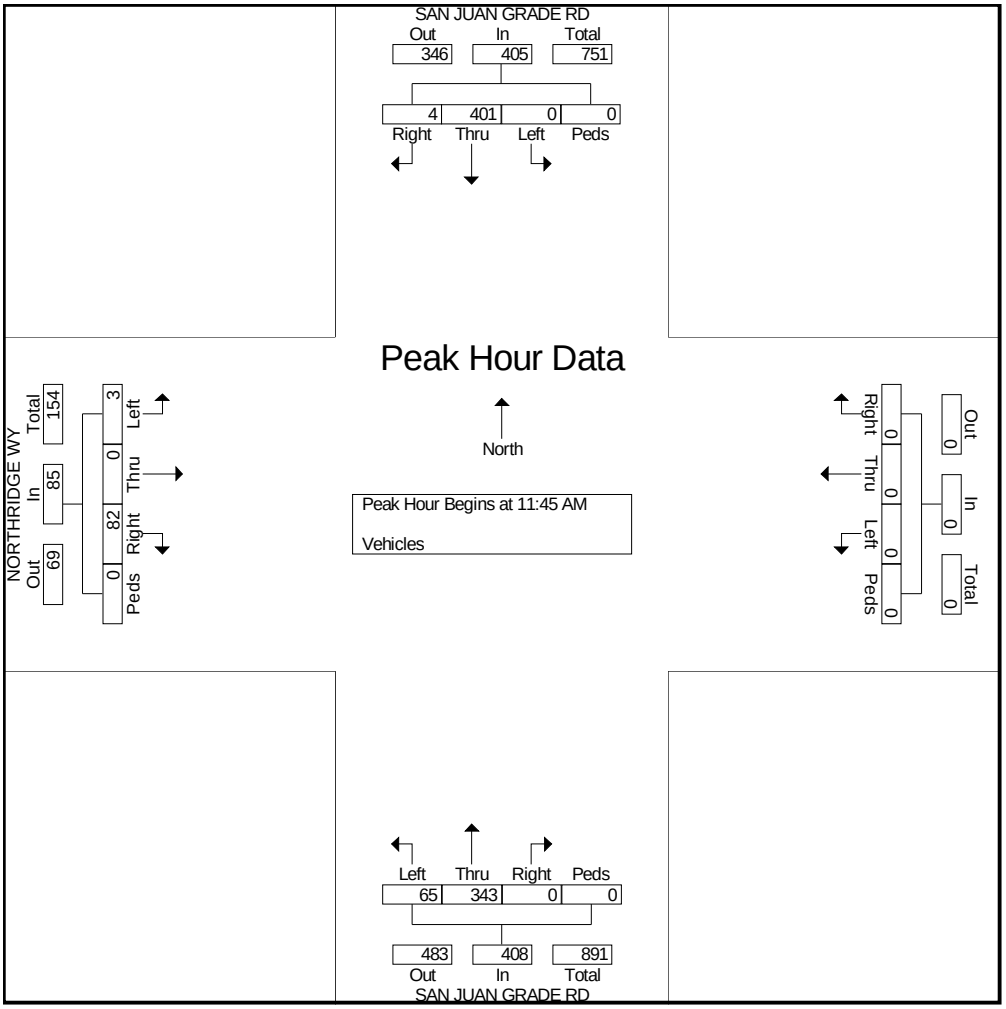

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File Name : 4PM FINAL
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Groups Printed- Vehicles

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					NORTHRIDGE WY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	1	106	0	0	107	0	0	0	0	0	0	104	24	0	128	29	0	1	0	30	265
04:15 PM	0	88	0	0	88	0	0	0	0	0	0	84	32	0	116	18	0	1	0	19	223
04:30 PM	1	92	0	0	93	0	0	0	0	0	0	69	17	0	86	23	0	0	0	23	202
04:45 PM	0	119	0	0	119	0	0	0	0	0	0	99	10	0	109	24	0	0	0	24	252
Total	2	405	0	0	407	0	0	0	0	0	0	356	83	0	439	94	0	2	0	96	942
05:00 PM	2	109	0	0	111	0	0	0	0	0	0	106	34	0	140	16	0	0	0	16	267
05:15 PM	0	99	0	0	99	0	0	0	0	0	0	124	18	0	142	17	0	0	0	17	258
05:30 PM	2	112	0	0	114	0	0	0	0	0	0	109	33	0	142	31	0	3	0	34	290
05:45 PM	1	121	0	0	122	0	0	0	0	0	0	112	26	0	138	37	0	3	0	40	300
Total	5	441	0	0	446	0	0	0	0	0	0	451	111	0	562	101	0	6	0	107	1115
Grand Total	7	846	0	0	853	0	0	0	0	0	0	807	194	0	1001	195	0	8	0	203	2057
Apprch %	0.8	99.2	0	0		0	0	0	0		0	80.6	19.4	0		96.1	0	3.9	0		
Total %	0.3	41.1	0	0	41.5	0	0	0	0	0	0	39.2	9.4	0	48.7	9.5	0	0.4	0	9.9	

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					NORTHRIDGE WY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	2	109	0	0	111	0	0	0	0	0	0	106	34	0	140	16	0	0	0	16	267
05:15 PM	0	99	0	0	99	0	0	0	0	0	0	124	18	0	142	17	0	0	0	17	258
05:30 PM	2	112	0	0	114	0	0	0	0	0	0	109	33	0	142	31	0	3	0	34	290
05:45 PM	1	121	0	0	122	0	0	0	0	0	0	112	26	0	138	37	0	3	0	40	300
Total Volume	5	441	0	0	446	0	0	0	0	0	0	451	111	0	562	101	0	6	0	107	1115
% App. Total	1.1	98.9	0	0		0	0	0	0		0	80.2	19.8	0		94.4	0	5.6	0		
PHF	.625	.911	.000	.000	.914	.000	.000	.000	.000	.000	.000	.909	.816	.000	.989	.682	.000	.500	.000	.669	.929

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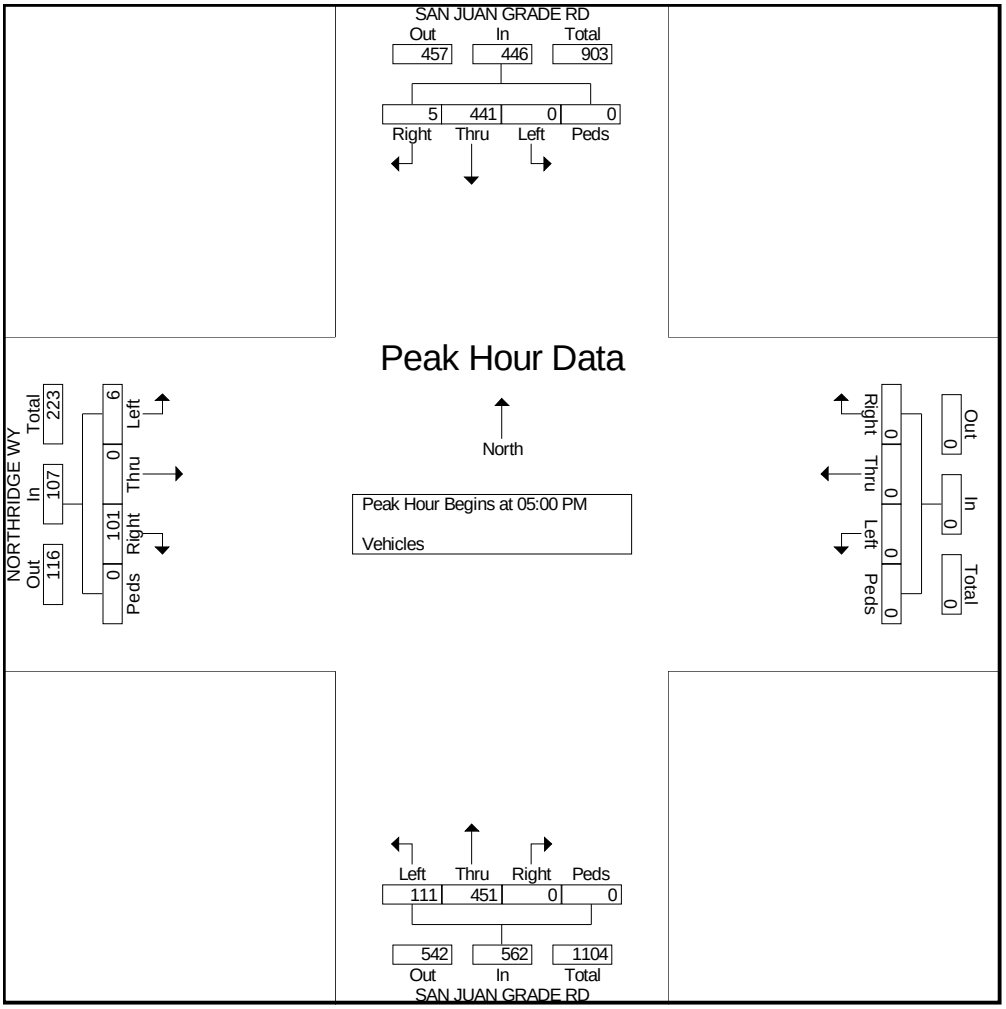

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Groups Printed- Vehicles

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					MOBILE HOME DRIVEWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	101	0	0	101	0	0	0	0	0	0	96	0	0	96	1	0	0	0	1	198
11:15 AM	0	102	0	0	102	0	0	0	0	0	0	92	2	0	94	0	0	1	0	1	197
11:30 AM	0	93	0	0	93	0	0	0	0	0	0	94	1	0	95	1	0	0	0	1	189
11:45 AM	0	115	0	0	115	0	0	0	0	0	0	119	0	0	119	0	0	0	0	0	234
Total	0	411	0	0	411	0	0	0	0	0	0	401	3	0	404	2	0	1	0	3	818
12:00 PM	0	105	0	0	105	0	0	0	0	0	0	111	0	0	111	0	0	0	0	0	216
12:15 PM	0	123	0	0	123	0	0	0	0	0	0	93	0	0	93	0	0	0	0	0	216
12:30 PM	0	136	0	0	136	0	0	0	0	0	0	91	1	0	92	0	0	0	0	0	228
12:45 PM	0	121	0	0	121	0	0	0	0	0	0	98	0	0	98	0	0	0	0	0	219
Total	0	485	0	0	485	0	0	0	0	0	0	393	1	0	394	0	0	0	0	0	879
Grand Total	0	896	0	0	896	0	0	0	0	0	0	794	4	0	798	2	0	1	0	3	1697
Apprch %	0	100	0	0		0	0	0	0		0	99.5	0.5	0		66.7	0	33.3	0		
Total %	0	52.8	0	0	52.8	0	0	0	0	0	0	46.8	0.2	0	47	0.1	0	0.1	0	0.2	

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					MOBILE HOME DRIVEWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	0	115	0	0	115	0	0	0	0	0	0	119	0	0	119	0	0	0	0	0	234
12:00 PM	0	105	0	0	105	0	0	0	0	0	0	111	0	0	111	0	0	0	0	0	216
12:15 PM	0	123	0	0	123	0	0	0	0	0	0	93	0	0	93	0	0	0	0	0	216
12:30 PM	0	136	0	0	136	0	0	0	0	0	0	91	1	0	92	0	0	0	0	0	228
Total Volume	0	479	0	0	479	0	0	0	0	0	0	414	1	0	415	0	0	0	0	0	894
% App. Total	0	100	0	0		0	0	0	0		0	99.8	0.2	0		0	0	0	0		
PHF	.000	.881	.000	.000	.881	.000	.000	.000	.000	.000	.000	.870	.250	.000	.872	.000	.000	.000	.000	.000	.955

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File Name : 5MID FINAL
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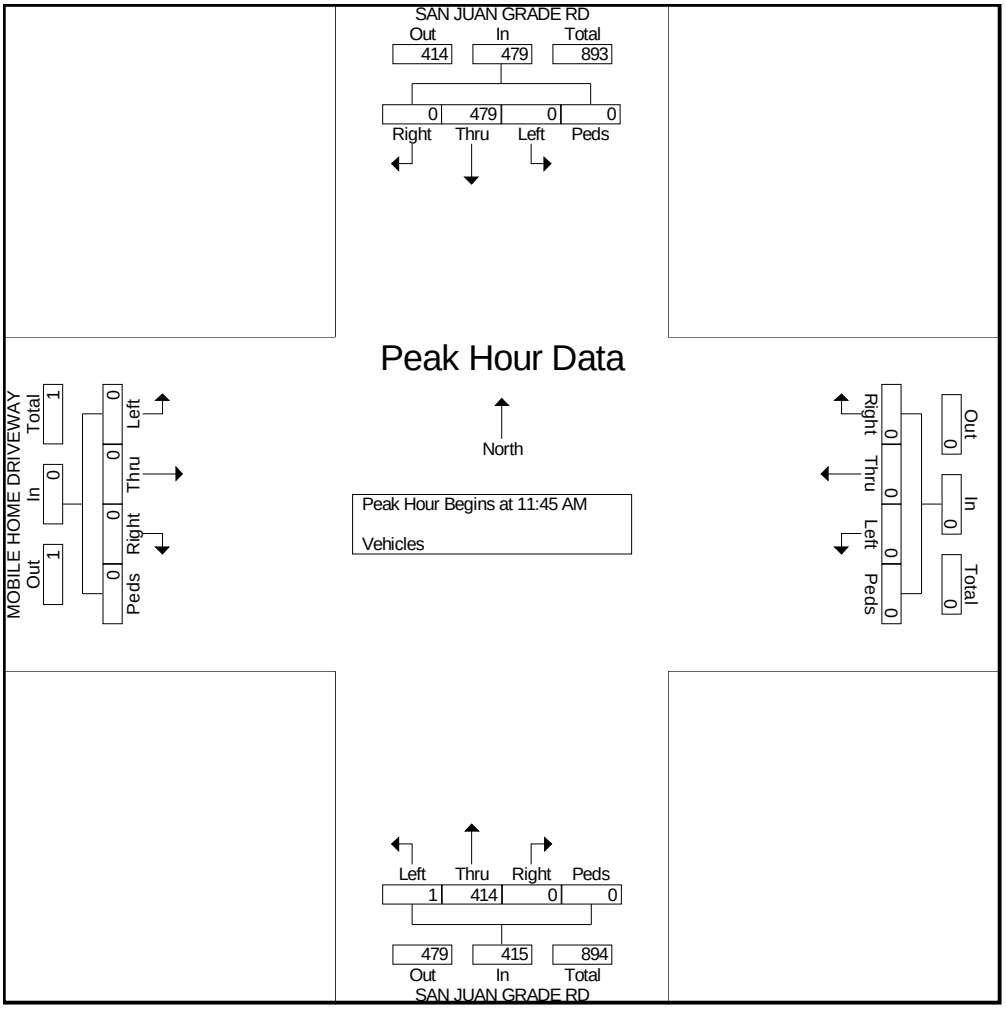

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File Name : 5PM FINAL
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Groups Printed- Vehicles

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					MOBILE HOME DRIVEWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	131	0	0	131	0	0	0	0	0	0	121	0	0	121	0	0	0	0	0	252
04:15 PM	0	108	0	0	108	0	0	0	0	0	0	117	0	0	117	0	0	0	0	0	225
04:30 PM	0	117	0	0	117	0	0	0	0	0	0	91	0	0	91	0	0	3	0	3	211
04:45 PM	0	145	0	0	145	0	0	0	0	0	0	105	3	0	108	0	0	0	0	0	253
Total	0	501	0	0	501	0	0	0	0	0	0	434	3	0	437	0	0	3	0	3	941
05:00 PM	0	126	0	0	126	0	0	0	0	0	0	141	2	0	143	1	0	0	0	1	270
05:15 PM	0	117	0	0	117	0	0	0	0	0	0	133	2	0	135	0	0	0	0	0	252
05:30 PM	0	137	0	0	137	1	0	0	0	1	0	137	0	0	137	2	0	0	0	2	277
05:45 PM	0	161	0	0	161	0	0	0	0	0	0	141	2	0	143	1	0	0	0	1	305
Total	0	541	0	0	541	1	0	0	0	1	0	552	6	0	558	4	0	0	0	4	1104
Grand Total	0	1042	0	0	1042	1	0	0	0	1	0	986	9	0	995	4	0	3	0	7	2045
Apprch %	0	100	0	0		100	0	0	0		0	99.1	0.9	0		57.1	0	42.9	0		
Total %	0	51	0	0	51	0	0	0	0	0	0	48.2	0.4	0	48.7	0.2	0	0.1	0	0.3	

	SAN JUAN GRADE RD Southbound					Westbound					SAN JUAN GRADE RD Northbound					MOBILE HOME DRIVEWAY Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	126	0	0	126	0	0	0	0	0	0	141	2	0	143	1	0	0	0	1	270
05:15 PM	0	117	0	0	117	0	0	0	0	0	0	133	2	0	135	0	0	0	0	0	252
05:30 PM	0	137	0	0	137	1	0	0	0	1	0	137	0	0	137	2	0	0	0	2	277
05:45 PM	0	161	0	0	161	0	0	0	0	0	0	141	2	0	143	1	0	0	0	1	305
Total Volume	0	541	0	0	541	1	0	0	0	1	0	552	6	0	558	4	0	0	0	4	1104
% App. Total	0	100	0	0		100	0	0	0		0	98.9	1.1	0		100	0	0	0		
PHF	.000	.840	.000	.000	.840	.250	.000	.000	.000	.250	.000	.979	.750	.000	.976	.500	.000	.000	.000	.500	.905

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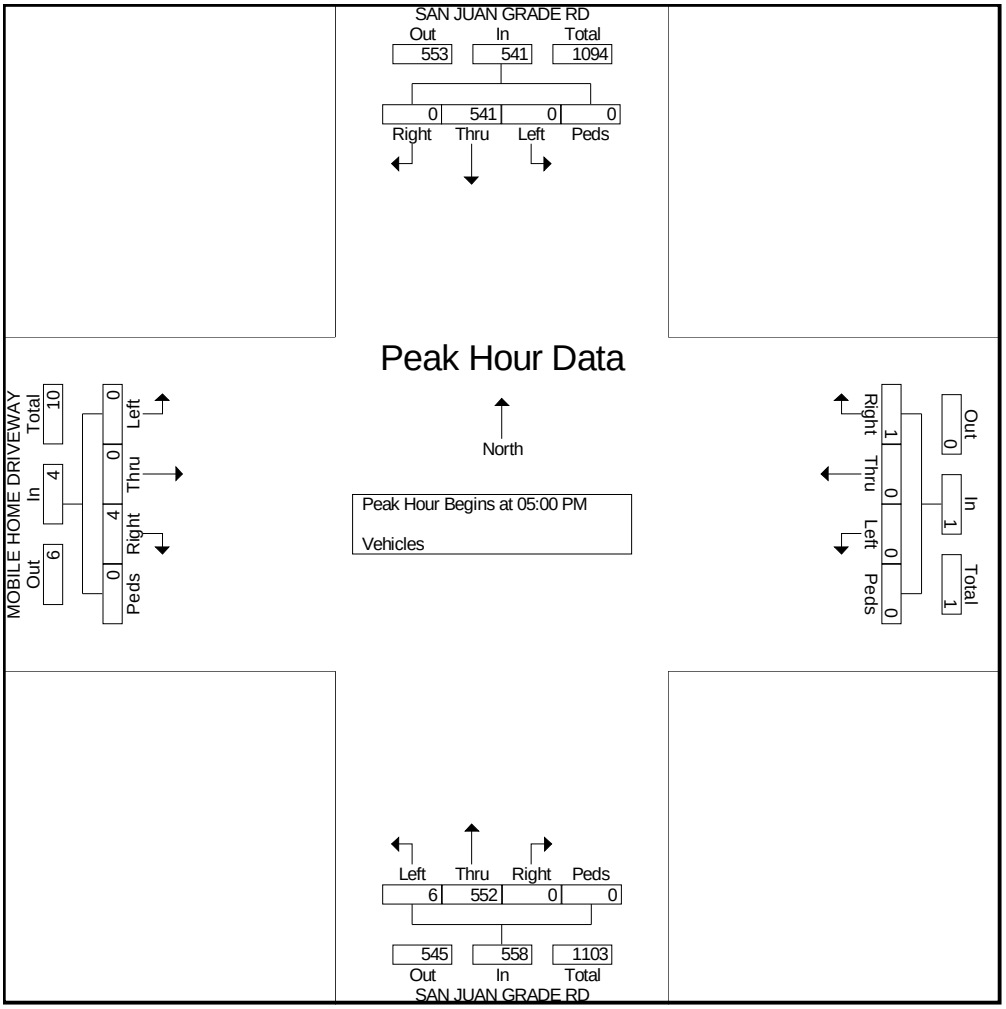

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File Name : 6MID FINAL
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Groups Printed- Vehicles

	US-101 SB RAMPS Southbound					BORONDA RD Westbound					Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	37	1	152	0	190	135	181	0	0	316	0	0	0	0	0	26	153	0	0	179	685
11:15 AM	44	0	155	0	199	132	214	0	0	346	0	0	0	0	0	30	158	0	0	188	733
11:30 AM	61	2	165	0	228	116	199	0	0	315	0	0	0	0	0	30	198	0	0	228	771
11:45 AM	48	0	155	0	203	129	237	0	0	366	0	0	0	0	0	31	205	0	0	236	805
Total	190	3	627	0	820	512	831	0	0	1343	0	0	0	0	0	117	714	0	0	831	2994
12:00 PM	48	1	175	0	224	145	197	0	0	342	0	0	0	0	0	54	224	0	0	278	844
12:15 PM	40	0	181	0	221	121	222	0	0	343	0	0	0	0	0	36	220	0	0	256	820
12:30 PM	54	1	182	0	237	120	220	0	0	340	0	0	0	0	0	30	222	0	0	252	829
12:45 PM	42	0	196	0	238	113	230	0	0	343	0	0	0	0	0	30	215	0	0	245	826
Total	184	2	734	0	920	499	869	0	0	1368	0	0	0	0	0	150	881	0	0	1031	3319
Grand Total	374	5	1361	0	1740	1011	1700	0	0	2711	0	0	0	0	0	267	1595	0	0	1862	6313
Apprch %	21.5	0.3	78.2	0		37.3	62.7	0	0		0	0	0	0		14.3	85.7	0	0		
Total %	5.9	0.1	21.6	0	27.6	16	26.9	0	0	42.9	0	0	0	0	0	4.2	25.3	0	0	29.5	

	US-101 SB RAMPS Southbound					BORONDA RD Westbound					Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	48	1	175	0	224	145	197	0	0	342	0	0	0	0	0	54	224	0	0	278	844
12:15 PM	40	0	181	0	221	121	222	0	0	343	0	0	0	0	0	36	220	0	0	256	820
12:30 PM	54	1	182	0	237	120	220	0	0	340	0	0	0	0	0	30	222	0	0	252	829
12:45 PM	42	0	196	0	238	113	230	0	0	343	0	0	0	0	0	30	215	0	0	245	826
Total Volume	184	2	734	0	920	499	869	0	0	1368	0	0	0	0	0	150	881	0	0	1031	3319
% App. Total	20	0.2	79.8	0		36.5	63.5	0	0		0	0	0	0		14.5	85.5	0	0		
PHF	.852	.500	.936	.000	.966	.860	.945	.000	.000	.997	.000	.000	.000	.000	.000	.694	.983	.000	.000	.927	.983

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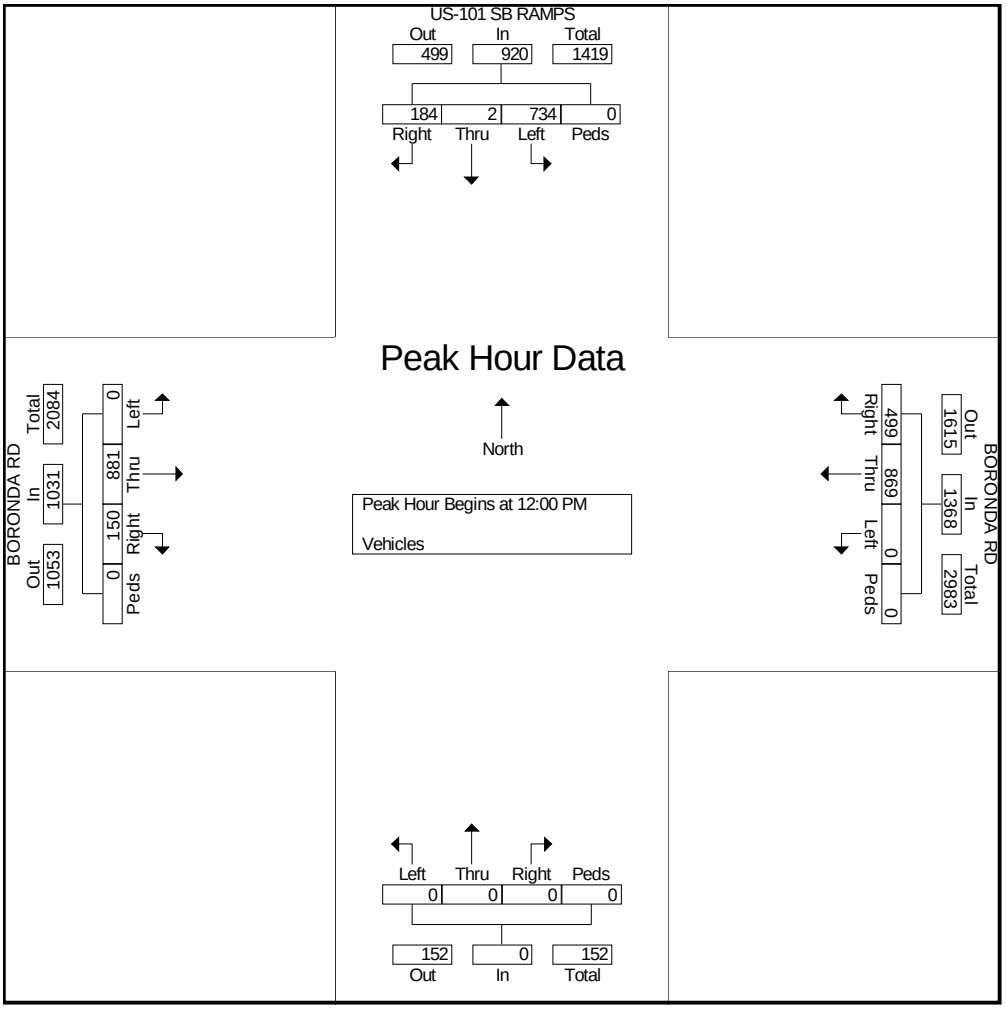

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File Name : 6PM FINAL
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Groups Printed- Vehicles

	US-101 SB RAMPS Southbound					BORONDA RD Westbound					Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	27	6	183	0	216	138	148	0	0	286	0	0	0	0	0	25	154	0	0	179	681
04:15 PM	33	4	200	0	237	159	173	0	0	332	0	0	0	0	0	28	196	0	0	224	793
04:30 PM	43	2	188	0	233	155	150	0	0	305	0	0	0	0	0	39	186	0	0	225	763
04:45 PM	46	1	227	0	274	160	176	0	0	336	0	0	0	0	0	42	194	0	0	236	846
Total	149	13	798	0	960	612	647	0	0	1259	0	0	0	0	0	134	730	0	0	864	3083
05:00 PM	28	3	243	0	274	158	140	0	0	298	0	0	0	0	0	53	194	0	0	247	819
05:15 PM	33	1	247	0	281	175	153	0	0	328	0	0	0	0	0	56	196	0	0	252	861
05:30 PM	46	0	252	0	298	162	144	0	0	306	0	0	0	0	0	29	193	0	0	222	826
05:45 PM	39	1	223	0	263	159	156	0	0	315	0	0	0	0	0	26	198	0	0	224	802
Total	146	5	965	0	1116	654	593	0	0	1247	0	0	0	0	0	164	781	0	0	945	3308
Grand Total	295	18	1763	0	2076	1266	1240	0	0	2506	0	0	0	0	0	298	1511	0	0	1809	6391
Apprch %	14.2	0.9	84.9	0		50.5	49.5	0	0		0	0	0	0		16.5	83.5	0	0		
Total %	4.6	0.3	27.6	0	32.5	19.8	19.4	0	0	39.2	0	0	0	0	0	4.7	23.6	0	0	28.3	

	US-101 SB RAMPS Southbound					BORONDA RD Westbound					Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	46	1	227	0	274	160	176	0	0	336	0	0	0	0	0	42	194	0	0	236	846
05:00 PM	28	3	243	0	274	158	140	0	0	298	0	0	0	0	0	53	194	0	0	247	819
05:15 PM	33	1	247	0	281	175	153	0	0	328	0	0	0	0	0	56	196	0	0	252	861
05:30 PM	46	0	252	0	298	162	144	0	0	306	0	0	0	0	0	29	193	0	0	222	826
Total Volume	153	5	969	0	1127	655	613	0	0	1268	0	0	0	0	0	180	777	0	0	957	3352
% App. Total	13.6	0.4	86	0		51.7	48.3	0	0		0	0	0	0		18.8	81.2	0	0		
PHF	.832	.417	.961	.000	.945	.936	.871	.000	.000	.943	.000	.000	.000	.000	.000	.804	.991	.000	.000	.949	.973

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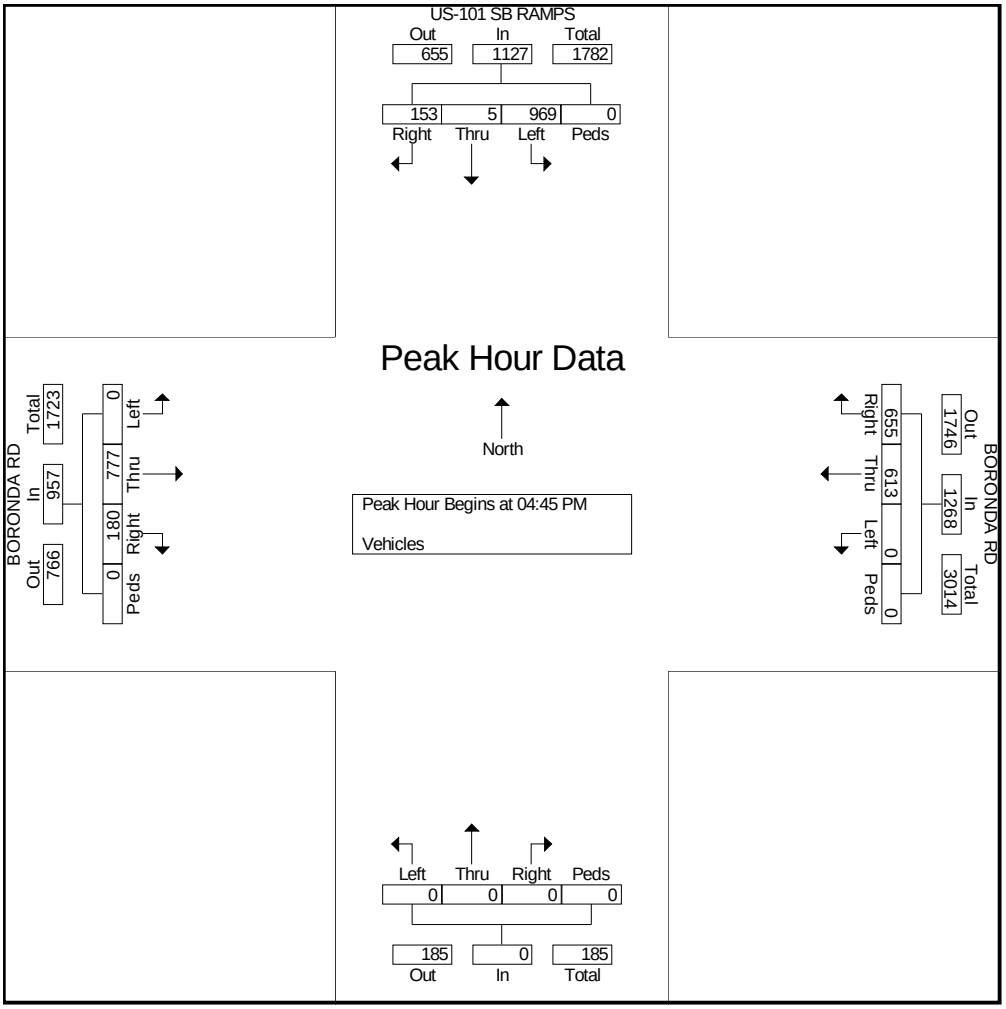

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File Name : 7MID FINAL
Site Code : 00000007
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Groups Printed- Vehicles

	Southbound					BORONDA RD Westbound					US-101 NB RAMPS Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	0	0	0	0	109	274	0	0	383	125	0	33	0	158	24	278	0	0	302	843
11:15 AM	0	0	0	0	0	103	304	0	0	407	151	0	34	0	185	28	264	0	0	292	884
11:30 AM	0	0	0	0	0	93	256	0	0	349	130	0	33	0	163	35	325	0	0	360	872
11:45 AM	0	0	0	0	0	90	304	0	0	394	178	0	38	0	216	36	304	0	0	340	950
Total	0	0	0	0	0	395	1138	0	0	1533	584	0	138	0	722	123	1171	0	0	1294	3549
12:00 PM	0	0	0	0	0	103	290	0	0	393	146	0	39	0	185	32	341	0	0	373	951
12:15 PM	0	0	0	0	0	105	274	0	0	379	166	0	35	0	201	37	353	0	0	390	970
12:30 PM	0	0	0	0	0	127	296	0	0	423	150	0	33	0	183	47	334	0	0	381	987
12:45 PM	0	0	0	0	0	134	298	0	0	432	168	0	50	0	218	19	354	0	0	373	1023
Total	0	0	0	0	0	469	1158	0	0	1627	630	0	157	0	787	135	1382	0	0	1517	3931
Grand Total	0	0	0	0	0	864	2296	0	0	3160	1214	0	295	0	1509	258	2553	0	0	2811	7480
Apprch %	0	0	0	0		27.3	72.7	0	0		80.5	0	19.5	0		9.2	90.8	0	0		
Total %	0	0	0	0	0	11.6	30.7	0	0	42.2	16.2	0	3.9	0	20.2	3.4	34.1	0	0	37.6	

	Southbound					BORONDA RD Westbound					US-101 NB RAMPS Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	0	0	0	0	0	103	290	0	0	393	146	0	39	0	185	32	341	0	0	373	951
12:15 PM	0	0	0	0	0	105	274	0	0	379	166	0	35	0	201	37	353	0	0	390	970
12:30 PM	0	0	0	0	0	127	296	0	0	423	150	0	33	0	183	47	334	0	0	381	987
12:45 PM	0	0	0	0	0	134	298	0	0	432	168	0	50	0	218	19	354	0	0	373	1023
Total Volume	0	0	0	0	0	469	1158	0	0	1627	630	0	157	0	787	135	1382	0	0	1517	3931
% App. Total																					
PHF	.000	.000	.000	.000	.000	.875	.971	.000	.000	.942	.938	.000	.785	.000	.903	.718	.976	.000	.000	.972	.961

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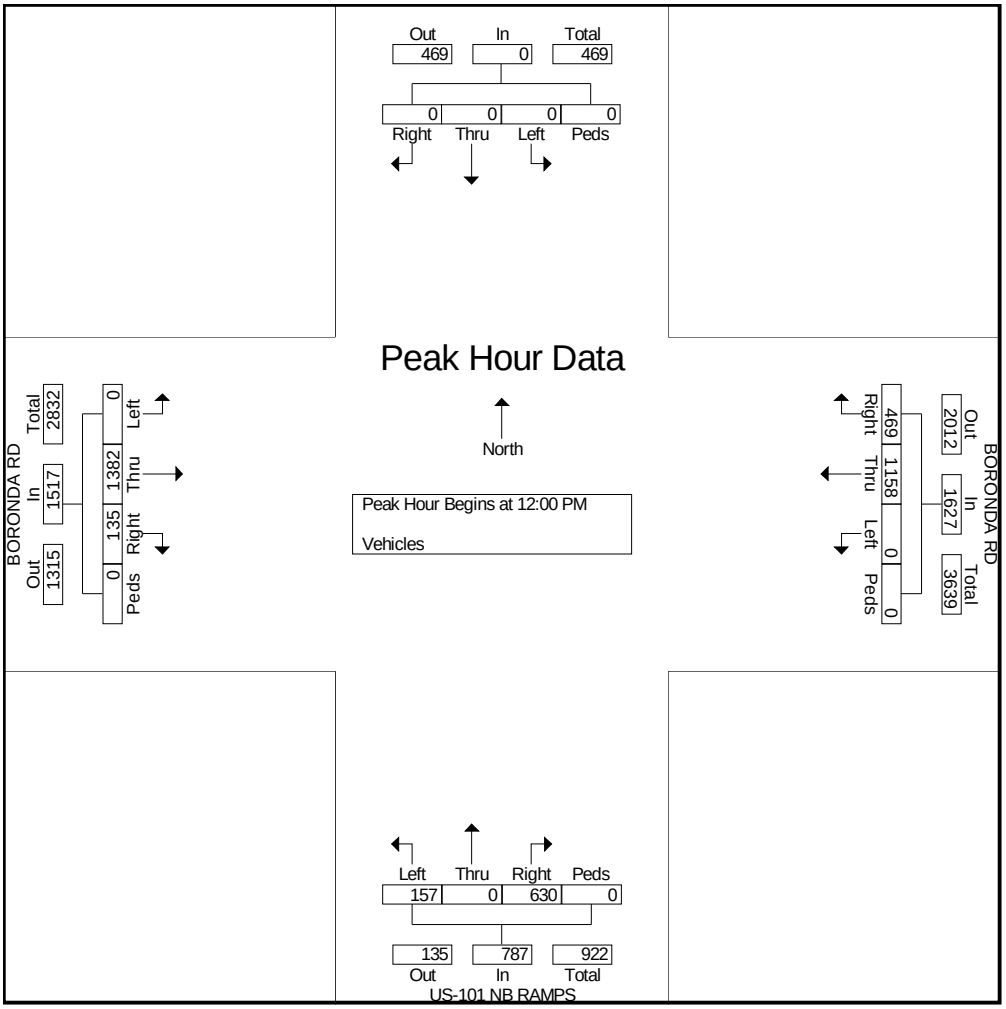

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Groups Printed- Vehicles

	Southbound					BORONDA RD Westbound					US-101 NB RAMPS Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	127	186	0	0	313	182	4	55	0	241	56	246	0	0	302	856
04:15 PM	0	0	0	0	0	154	234	0	0	388	157	6	87	0	250	72	315	0	0	387	1025
04:30 PM	0	0	0	0	0	160	235	0	0	395	173	1	74	0	248	68	297	0	0	365	1008
04:45 PM	0	0	0	0	0	160	240	0	0	400	181	0	93	0	274	53	386	0	0	439	1113
Total	0	0	0	0	0	601	895	0	0	1496	693	11	309	0	1013	249	1244	0	0	1493	4002
05:00 PM	0	0	0	0	0	144	228	0	0	372	217	0	46	0	263	74	339	0	0	413	1048
05:15 PM	0	0	0	0	0	209	210	0	0	419	211	0	61	0	272	51	350	0	0	401	1092
05:30 PM	0	0	0	0	0	195	233	0	0	428	206	1	55	0	262	66	374	0	0	440	1130
05:45 PM	0	0	0	0	0	169	250	0	0	419	181	0	49	0	230	56	343	0	0	399	1048
Total	0	0	0	0	0	717	921	0	0	1638	815	1	211	0	1027	247	1406	0	0	1653	4318
Grand Total	0	0	0	0	0	1318	1816	0	0	3134	1508	12	520	0	2040	496	2650	0	0	3146	8320
Apprch %	0	0	0	0		42.1	57.9	0	0		73.9	0.6	25.5	0		15.8	84.2	0	0		
Total %	0	0	0	0	0	15.8	21.8	0	0	37.7	18.1	0.1	6.2	0	24.5	6	31.9	0	0	37.8	

	Southbound					BORONDA RD Westbound					US-101 NB RAMPS Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	0	0	0	0	160	240	0	0	400	181	0	93	0	274	53	386	0	0	439	1113
05:00 PM	0	0	0	0	0	144	228	0	0	372	217	0	46	0	263	74	339	0	0	413	1048
05:15 PM	0	0	0	0	0	209	210	0	0	419	211	0	61	0	272	51	350	0	0	401	1092
05:30 PM	0	0	0	0	0	195	233	0	0	428	206	1	55	0	262	66	374	0	0	440	1130
Total Volume	0	0	0	0	0	708	911	0	0	1619	815	1	255	0	1071	244	1449	0	0	1693	4383
% App. Total																					
PHF	.000	.000	.000	.000	.000	.847	.949	.000	.000	.946	.939	.250	.685	.000	.977	.824	.938	.000	.000	.962	.970

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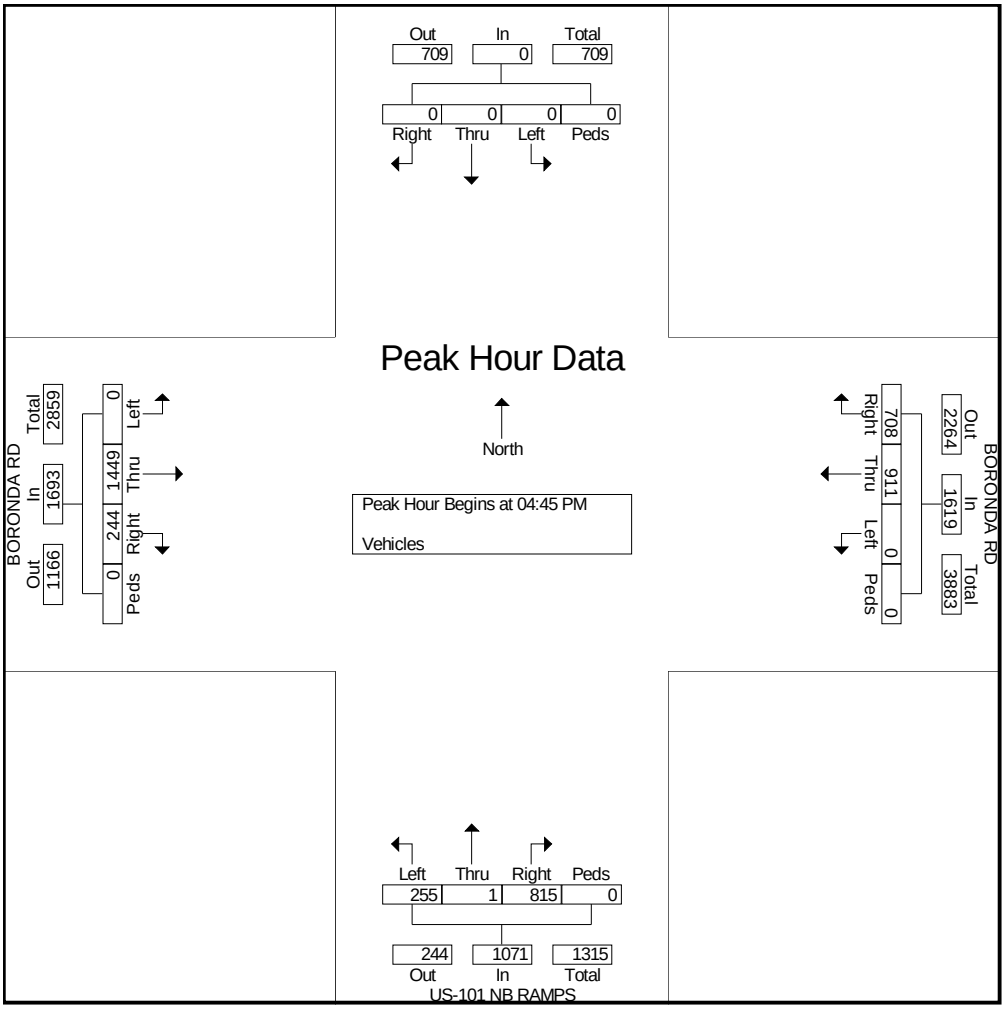

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Site Code : 00000008
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Groups Printed- Vehicles

	MAIN ST Southbound					BORONDA RD Westbound					MAIN ST Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	64	63	34	0	161	32	151	31	0	214	12	58	159	0	229	98	104	38	0	240	844
11:15 AM	91	68	22	0	181	23	143	23	0	189	9	51	171	0	231	83	108	61	0	252	853
11:30 AM	93	64	19	0	176	19	122	24	0	165	9	43	148	0	200	102	121	49	0	272	813
11:45 AM	90	68	25	0	183	28	146	29	0	203	9	72	187	0	268	109	123	66	0	298	952
Total	338	263	100	0	701	102	562	107	0	771	39	224	665	0	928	392	456	214	0	1062	3462
12:00 PM	73	59	27	0	159	22	150	21	0	193	10	60	197	0	267	100	112	86	0	298	917
12:15 PM	79	65	25	0	169	27	142	25	0	194	9	74	199	0	282	100	143	85	0	328	973
12:30 PM	76	81	24	0	181	26	156	33	0	215	14	61	207	0	282	107	142	77	0	326	1004
12:45 PM	80	66	17	0	163	18	133	26	0	177	21	56	204	0	281	106	143	62	0	311	932
Total	308	271	93	0	672	93	581	105	0	779	54	251	807	0	1112	413	540	310	0	1263	3826
Grand Total	646	534	193	0	1373	195	1143	212	0	1550	93	475	1472	0	2040	805	996	524	0	2325	7288
Apprch %	47.1	38.9	14.1	0		12.6	73.7	13.7	0		4.6	23.3	72.2	0		34.6	42.8	22.5	0		
Total %	8.9	7.3	2.6	0	18.8	2.7	15.7	2.9	0	21.3	1.3	6.5	20.2	0	28	11	13.7	7.2	0	31.9	

	MAIN ST Southbound					BORONDA RD Westbound					MAIN ST Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:45 AM																					
11:45 AM	90	68	25	0	183	28	146	29	0	203	9	72	187	0	268	109	123	66	0	298	952
12:00 PM	73	59	27	0	159	22	150	21	0	193	10	60	197	0	267	100	112	86	0	298	917
12:15 PM	79	65	25	0	169	27	142	25	0	194	9	74	199	0	282	100	143	85	0	328	973
12:30 PM	76	81	24	0	181	26	156	33	0	215	14	61	207	0	282	107	142	77	0	326	1004
Total Volume	318	273	101	0	692	103	594	108	0	805	42	267	790	0	1099	416	520	314	0	1250	3846
% App. Total	46	39.5	14.6	0		12.8	73.8	13.4	0		3.8	24.3	71.9	0		33.3	41.6	25.1	0		
PHF	.883	.843	.935	.000	.945	.920	.952	.818	.000	.936	.750	.902	.954	.000	.974	.954	.909	.913	.000	.953	.958

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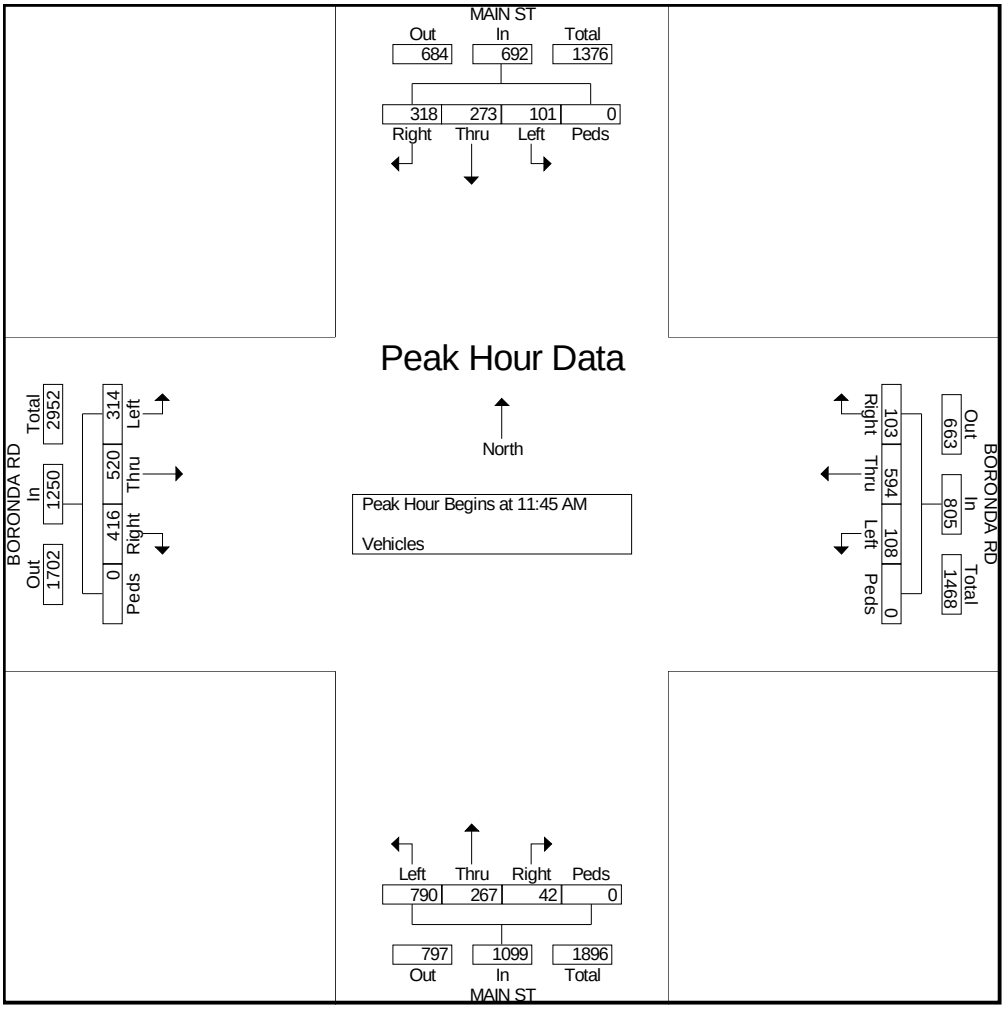

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Groups Printed- Vehicles

	MAIN ST Southbound					BORONDA RD Westbound					MAIN ST Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	75	48	28	0	151	22	143	6	0	171	11	51	163	0	225	82	153	84	0	319	866
04:15 PM	79	46	14	0	139	30	147	22	0	199	8	65	165	0	238	87	160	90	0	337	913
04:30 PM	81	68	17	0	166	16	134	12	0	162	11	73	176	0	260	97	145	87	0	329	917
04:45 PM	65	57	16	0	138	20	152	13	0	185	9	62	164	0	235	84	179	96	0	359	917
Total	300	219	75	0	594	88	576	53	0	717	39	251	668	0	958	350	637	357	0	1344	3613
05:00 PM	85	67	32	0	184	21	129	16	0	166	16	54	169	0	239	113	177	111	0	401	990
05:15 PM	96	61	36	0	193	22	167	14	0	203	12	62	161	0	235	133	192	107	0	432	1063
05:30 PM	92	47	30	0	169	25	122	10	0	157	10	63	192	0	265	118	175	101	0	394	985
05:45 PM	84	40	21	0	145	28	143	13	0	184	6	53	161	0	220	104	180	125	0	409	958
Total	357	215	119	0	691	96	561	53	0	710	44	232	683	0	959	468	724	444	0	1636	3996
Grand Total	657	434	194	0	1285	184	1137	106	0	1427	83	483	1351	0	1917	818	1361	801	0	2980	7609
Apprch %	51.1	33.8	15.1	0		12.9	79.7	7.4	0		4.3	25.2	70.5	0		27.4	45.7	26.9	0		
Total %	8.6	5.7	2.5	0	16.9	2.4	14.9	1.4	0	18.8	1.1	6.3	17.8	0	25.2	10.8	17.9	10.5	0	39.2	

	MAIN ST Southbound					BORONDA RD Westbound					MAIN ST Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	85	67	32	0	184	21	129	16	0	166	16	54	169	0	239	113	177	111	0	401	990
05:15 PM	96	61	36	0	193	22	167	14	0	203	12	62	161	0	235	133	192	107	0	432	1063
05:30 PM	92	47	30	0	169	25	122	10	0	157	10	63	192	0	265	118	175	101	0	394	985
05:45 PM	84	40	21	0	145	28	143	13	0	184	6	53	161	0	220	104	180	125	0	409	958
Total Volume	357	215	119	0	691	96	561	53	0	710	44	232	683	0	959	468	724	444	0	1636	3996
% App. Total	51.7	31.1	17.2	0		13.5	79	7.5	0		4.6	24.2	71.2	0		28.6	44.3	27.1	0		
PHF	.930	.802	.826	.000	.895	.857	.840	.828	.000	.874	.688	.921	.889	.000	.905	.880	.943	.888	.000	.947	.940

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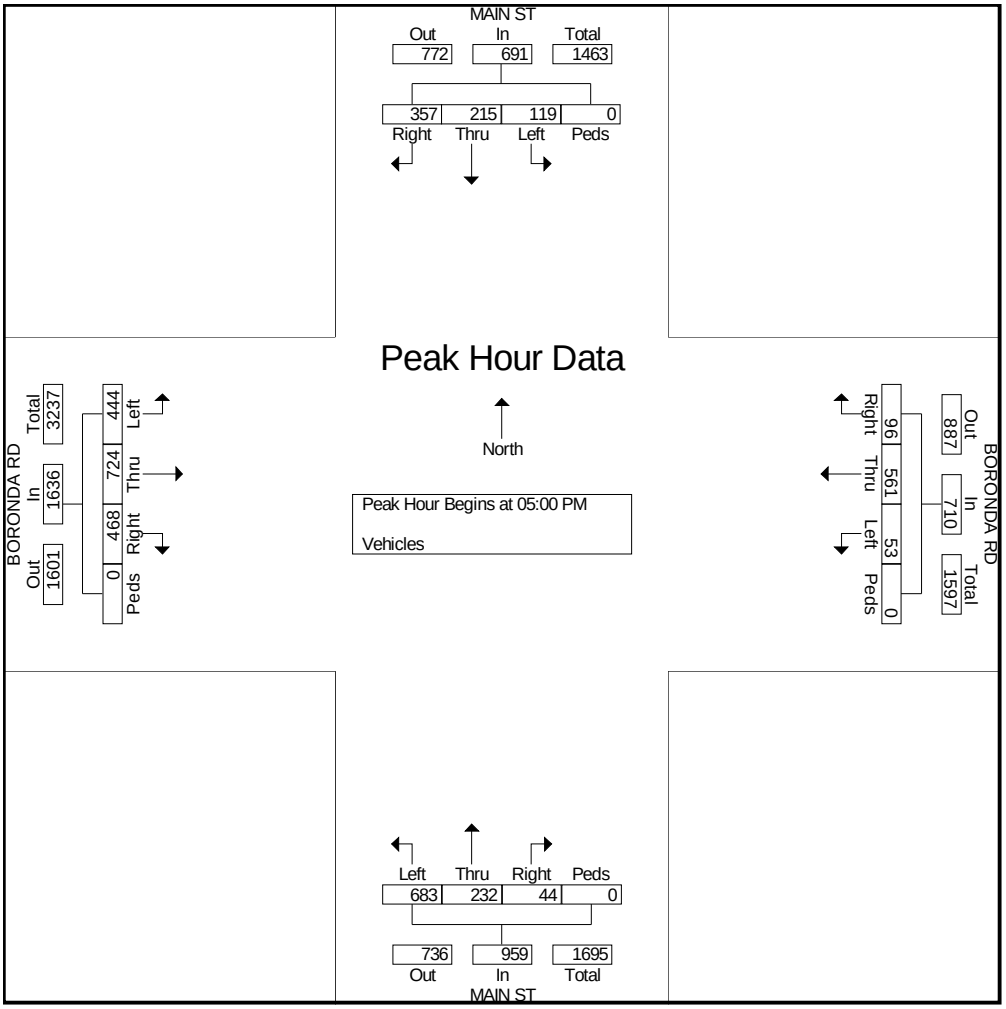

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Groups Printed- Vehicles

	SAN JUAN GRADE RD Southbound					BORONDA RD Westbound					SAN JUAN GRADE RD Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	33	40	40	0	113	25	152	38	0	215	20	49	35	0	104	10	107	27	0	144	576
11:15 AM	27	43	29	0	99	38	152	58	0	248	20	37	30	0	87	14	135	17	0	166	600
11:30 AM	24	44	24	0	92	40	135	35	0	210	14	50	30	0	94	11	128	11	0	150	546
11:45 AM	21	51	33	0	105	28	172	43	0	243	25	63	29	0	117	17	132	17	0	166	631
Total	105	178	126	0	409	131	611	174	0	916	79	199	124	0	402	52	502	72	0	626	2353
12:00 PM	30	41	37	0	108	29	161	45	0	235	23	59	36	0	118	16	142	21	0	179	640
12:15 PM	29	46	44	0	119	33	155	60	0	248	21	42	33	0	96	13	161	10	0	184	647
12:30 PM	37	56	51	0	144	33	150	40	0	223	14	40	27	0	81	21	155	13	0	189	637
12:45 PM	17	58	37	0	112	35	173	53	0	261	18	64	25	0	107	21	168	20	0	209	689
Total	113	201	169	0	483	130	639	198	0	967	76	205	121	0	402	71	626	64	0	761	2613
Grand Total	218	379	295	0	892	261	1250	372	0	1883	155	404	245	0	804	123	1128	136	0	1387	4966
Apprch %	24.4	42.5	33.1	0		13.9	66.4	19.8	0		19.3	50.2	30.5	0		8.9	81.3	9.8	0		
Total %	4.4	7.6	5.9	0	18	5.3	25.2	7.5	0	37.9	3.1	8.1	4.9	0	16.2	2.5	22.7	2.7	0	27.9	

	SAN JUAN GRADE RD Southbound					BORONDA RD Westbound					SAN JUAN GRADE RD Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	30	41	37	0	108	29	161	45	0	235	23	59	36	0	118	16	142	21	0	179	640
12:15 PM	29	46	44	0	119	33	155	60	0	248	21	42	33	0	96	13	161	10	0	184	647
12:30 PM	37	56	51	0	144	33	150	40	0	223	14	40	27	0	81	21	155	13	0	189	637
12:45 PM	17	58	37	0	112	35	173	53	0	261	18	64	25	0	107	21	168	20	0	209	689
Total Volume	113	201	169	0	483	130	639	198	0	967	76	205	121	0	402	71	626	64	0	761	2613
% App. Total	23.4	41.6	35	0		13.4	66.1	20.5	0		18.9	51	30.1	0		9.3	82.3	8.4	0		
PHF	.764	.866	.828	.000	.839	.929	.923	.825	.000	.926	.826	.801	.840	.000	.852	.845	.932	.762	.000	.910	.948

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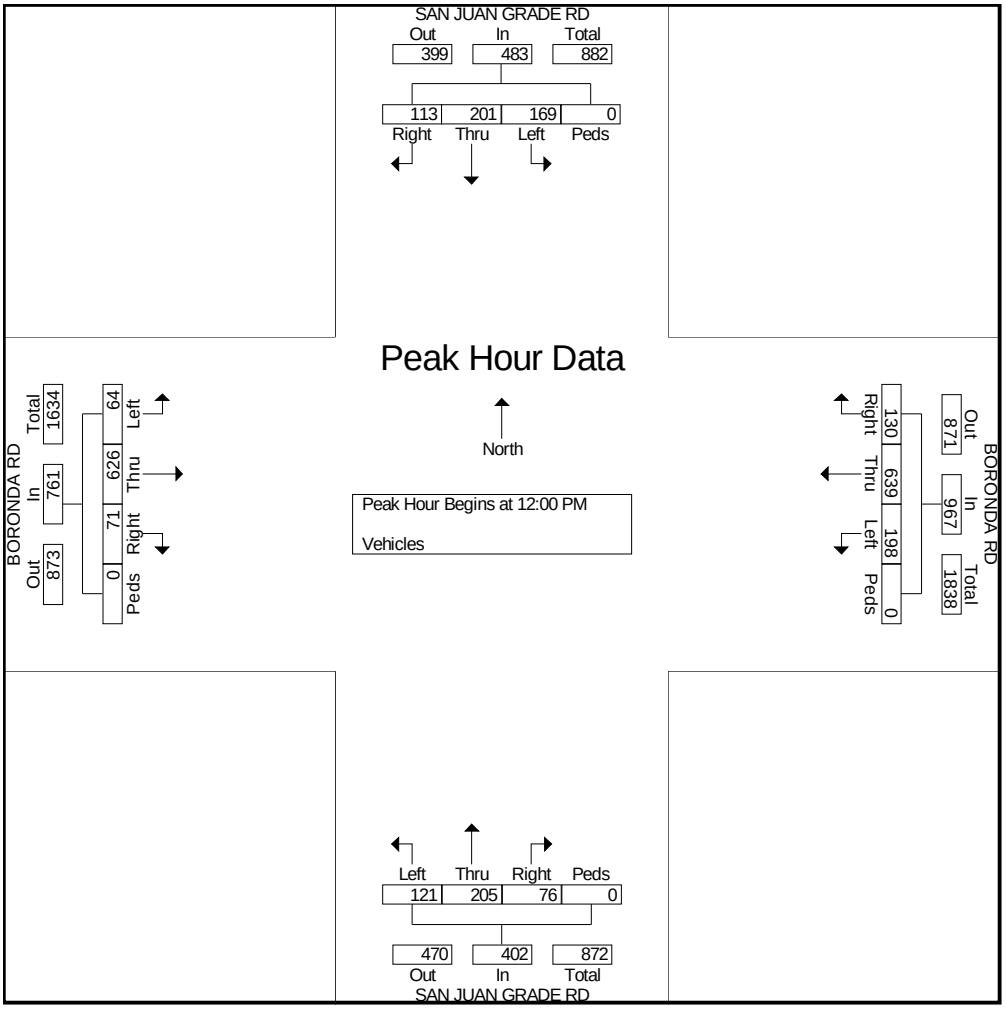

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Groups Printed- Vehicles

	SAN JUAN GRADE RD Southbound					BORONDA RD Westbound					SAN JUAN GRADE RD Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	31	27	42	0	100	32	139	40	0	211	16	45	22	0	83	18	165	33	0	216	610
04:15 PM	43	46	48	0	137	41	133	27	0	201	20	57	27	0	104	14	148	30	0	192	634
04:30 PM	39	57	54	0	150	40	127	41	0	208	18	44	19	0	81	17	154	12	0	183	622
04:45 PM	25	36	41	0	102	50	133	43	0	226	19	73	37	0	129	19	178	23	0	220	677
Total	138	166	185	0	489	163	532	151	0	846	73	219	105	0	397	68	645	98	0	811	2543
05:00 PM	31	33	57	0	121	43	139	38	0	220	18	57	22	0	97	12	197	26	0	235	673
05:15 PM	35	44	37	0	116	42	134	41	0	217	17	64	23	0	104	18	226	15	0	259	696
05:30 PM	35	55	48	0	138	59	127	31	0	217	20	54	23	0	97	15	205	23	0	243	695
05:45 PM	31	39	38	0	108	43	130	41	0	214	25	44	23	0	92	12	196	38	0	246	660
Total	132	171	180	0	483	187	530	151	0	868	80	219	91	0	390	57	824	102	0	983	2724
Grand Total	270	337	365	0	972	350	1062	302	0	1714	153	438	196	0	787	125	1469	200	0	1794	5267
Apprch %	27.8	34.7	37.6	0		20.4	62	17.6	0		19.4	55.7	24.9	0		7	81.9	11.1	0		
Total %	5.1	6.4	6.9	0	18.5	6.6	20.2	5.7	0	32.5	2.9	8.3	3.7	0	14.9	2.4	27.9	3.8	0	34.1	

	SAN JUAN GRADE RD Southbound					BORONDA RD Westbound					SAN JUAN GRADE RD Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	25	36	41	0	102	50	133	43	0	226	19	73	37	0	129	19	178	23	0	220	677
05:00 PM	31	33	57	0	121	43	139	38	0	220	18	57	22	0	97	12	197	26	0	235	673
05:15 PM	35	44	37	0	116	42	134	41	0	217	17	64	23	0	104	18	226	15	0	259	696
05:30 PM	35	55	48	0	138	59	127	31	0	217	20	54	23	0	97	15	205	23	0	243	695
Total Volume	126	168	183	0	477	194	533	153	0	880	74	248	105	0	427	64	806	87	0	957	2741
% App. Total	26.4	35.2	38.4	0		22	60.6	17.4	0		17.3	58.1	24.6	0		6.7	84.2	9.1	0		
PHF	.900	.764	.803	.000	.864	.822	.959	.890	.000	.973	.925	.849	.709	.000	.828	.842	.892	.837	.000	.924	.985

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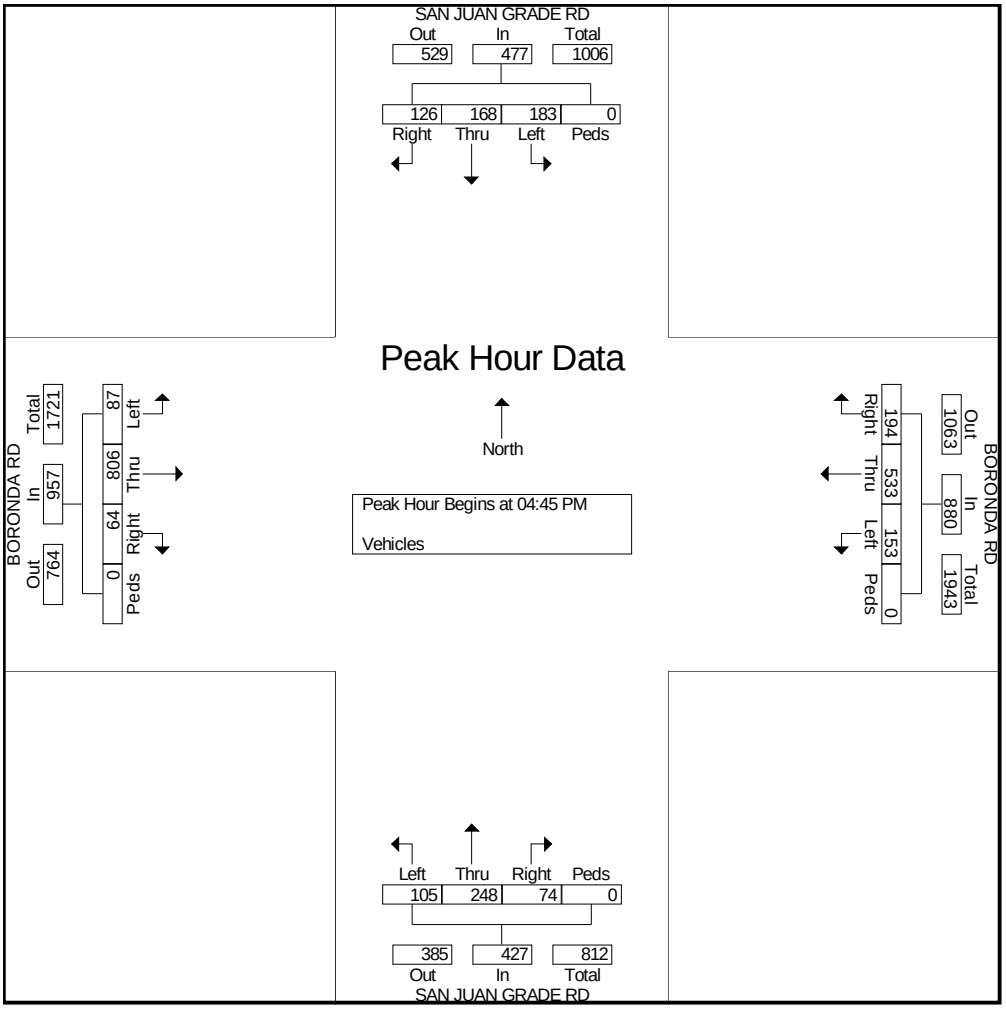

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Groups Printed- Vehicles

	Southbound					BORONDA RD Westbound					HOME DEPOT DRIVEWAY Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	0	0	0	0	0	217	0	0	217	0	0	0	0	0	1	161	0	0	162	379
11:15 AM	0	0	0	0	0	0	234	1	0	235	0	0	2	0	2	0	201	1	0	202	439
11:30 AM	0	0	0	0	0	0	231	0	0	231	0	0	0	0	0	0	188	2	0	190	421
11:45 AM	0	0	0	0	0	0	249	1	0	250	0	0	1	0	1	0	183	2	0	185	436
Total	0	0	0	0	0	0	931	2	0	933	0	0	3	0	3	1	733	5	0	739	1675
12:00 PM	0	0	0	0	0	0	231	0	0	231	0	0	0	0	0	2	211	1	0	214	445
12:15 PM	0	0	0	0	0	0	236	0	0	236	0	0	0	0	0	0	215	0	0	215	451
12:30 PM	0	0	0	0	0	0	235	1	0	236	0	0	1	0	1	0	230	1	0	231	468
12:45 PM	0	0	0	0	0	0	249	0	0	249	0	0	0	0	0	1	231	2	0	234	483
Total	0	0	0	0	0	0	951	1	0	952	0	0	1	0	1	3	887	4	0	894	1847
Grand Total	0	0	0	0	0	0	1882	3	0	1885	0	0	4	0	4	4	1620	9	0	1633	3522
Apprch %	0	0	0	0		0	99.8	0.2	0		0	0	100	0		0.2	99.2	0.6	0		
Total %	0	0	0	0	0	0	53.4	0.1	0	53.5	0	0	0.1	0	0.1	0.1	46	0.3	0	46.4	

	Southbound					BORONDA RD Westbound					HOME DEPOT DRIVEWAY Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	0	0	0	0	0	0	231	0	0	231	0	0	0	0	0	2	211	1	0	214	445
12:15 PM	0	0	0	0	0	0	236	0	0	236	0	0	0	0	0	0	215	0	0	215	451
12:30 PM	0	0	0	0	0	0	235	1	0	236	0	0	1	0	1	0	230	1	0	231	468
12:45 PM	0	0	0	0	0	0	249	0	0	249	0	0	0	0	0	1	231	2	0	234	483
Total Volume	0	0	0	0	0	0	951	1	0	952	0	0	1	0	1	3	887	4	0	894	1847
% App. Total	0	0	0	0		0	99.9	0.1	0		0	0	100	0		0.3	99.2	0.4	0		
PHF	.000	.000	.000	.000	.000	.000	.955	.250	.000	.956	.000	.000	.250	.000	.250	.375	.960	.500	.000	.955	.956

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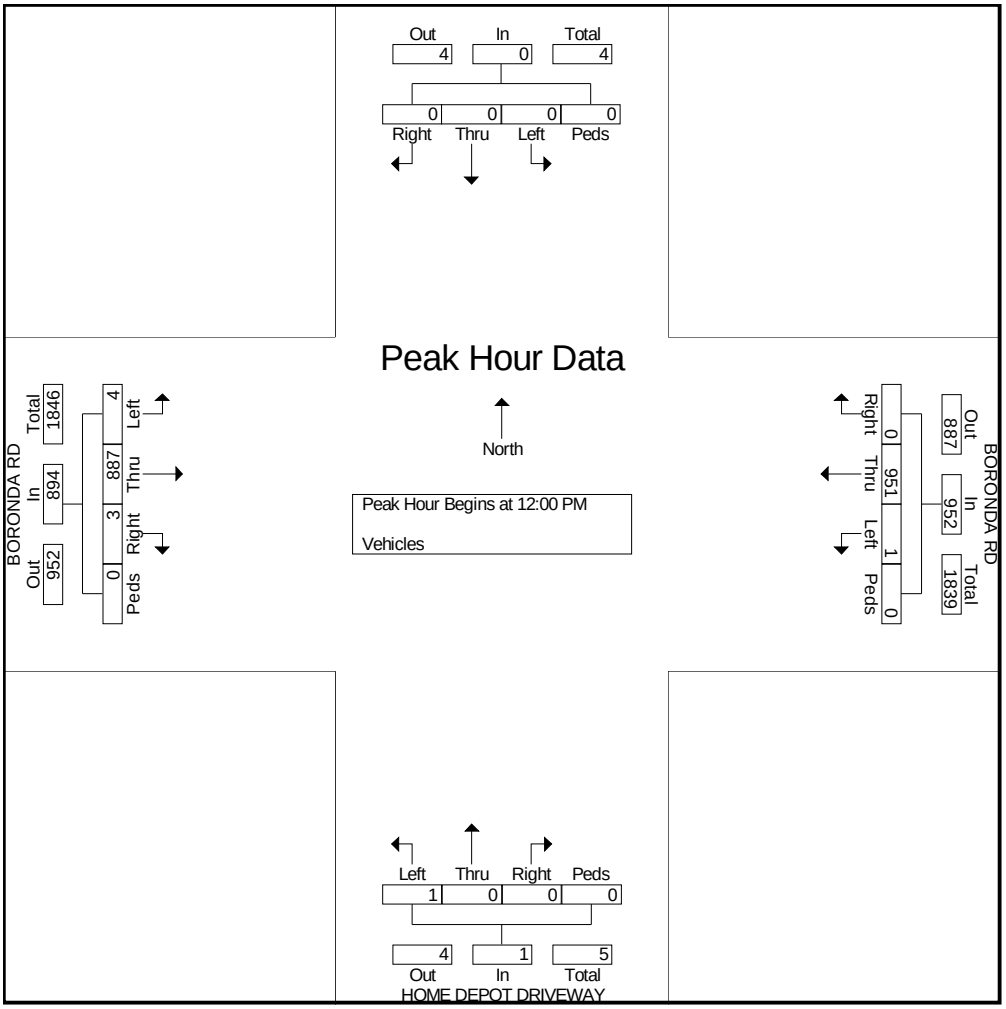

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Groups Printed- Vehicles

	Southbound					BORONDA RD Westbound					HOME DEPOT DRIVEWAY Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	173	1	0	174	1	0	1	0	2	0	191	0	0	191	367
04:15 PM	0	0	0	0	0	0	216	0	0	216	0	0	0	0	0	0	242	0	0	242	458
04:30 PM	0	0	0	0	0	0	218	1	0	219	0	0	1	0	1	0	225	0	0	225	445
04:45 PM	0	0	0	0	0	0	236	0	0	236	0	0	4	0	4	2	261	0	0	263	503
Total	0	0	0	0	0	0	843	2	0	845	1	0	6	0	7	2	919	0	0	921	1773
05:00 PM	0	0	0	0	0	0	248	1	0	249	0	0	1	0	1	0	286	0	0	286	536
05:15 PM	0	0	0	0	0	0	196	0	0	196	1	0	2	0	3	2	285	0	0	287	486
05:30 PM	0	0	0	0	0	0	216	0	0	216	0	0	0	0	0	0	237	0	0	237	453
05:45 PM	0	0	0	0	0	0	200	0	0	200	0	0	1	0	1	3	226	0	0	229	430
Total	0	0	0	0	0	0	860	1	0	861	1	0	4	0	5	5	1034	0	0	1039	1905
Grand Total	0	0	0	0	0	0	1703	3	0	1706	2	0	10	0	12	7	1953	0	0	1960	3678
Apprch %	0	0	0	0		0	99.8	0.2	0		16.7	0	83.3	0		0.4	99.6	0	0		
Total %	0	0	0	0	0	0	46.3	0.1	0	46.4	0.1	0	0.3	0	0.3	0.2	53.1	0	0	53.3	

	Southbound					BORONDA RD Westbound					HOME DEPOT DRIVEWAY Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	0	0	0	0	0	0	236	0	0	236	0	0	4	0	4	2	261	0	0	263	503
05:00 PM	0	0	0	0	0	0	248	1	0	249	0	0	1	0	1	0	286	0	0	286	536
05:15 PM	0	0	0	0	0	0	196	0	0	196	1	0	2	0	3	2	285	0	0	287	486
05:30 PM	0	0	0	0	0	0	216	0	0	216	0	0	0	0	0	0	237	0	0	237	453
Total Volume	0	0	0	0	0	0	896	1	0	897	1	0	7	0	8	4	1069	0	0	1073	1978
% App. Total																					
PHF	.000	.000	.000	.000	.000	.000	.903	.250	.000	.901	.250	.000	.438	.000	.500	.500	.934	.000	.000	.935	.923

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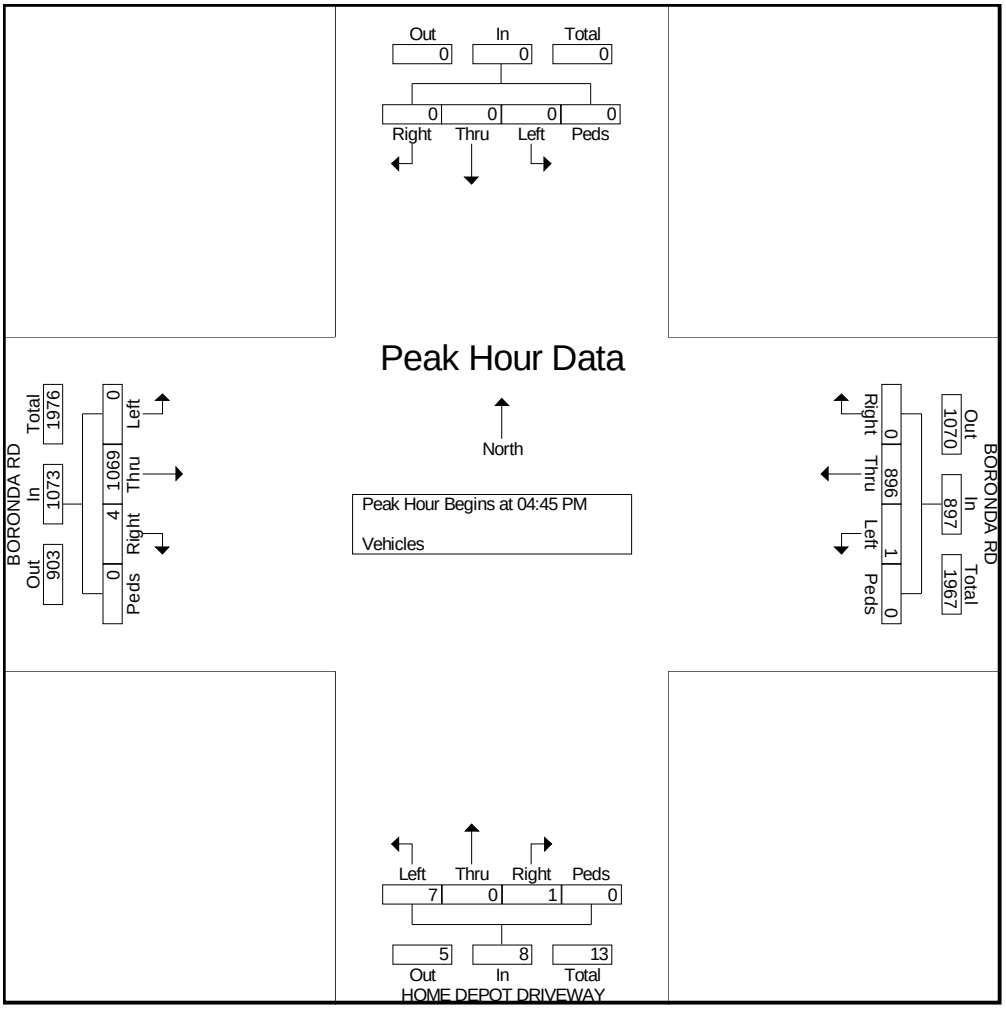

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File Name : 11MID FINAL
Site Code : 00000011
Start Date : 3/13/2010
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Groups Printed- Vehicles

	Southbound					BORONDA RD Westbound					DARTMOUTH WY Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	0	0	0	0	0	0	213	3	0	216	0	0	3	0	3	4	151	0	0	155	374
11:15 AM	0	0	0	0	0	0	236	3	0	239	2	0	4	0	6	2	196	0	0	198	443
11:30 AM	0	0	0	0	0	0	231	4	0	235	1	0	5	0	6	6	191	0	0	197	438
11:45 AM	0	0	0	0	0	0	253	3	0	256	0	0	2	0	2	1	187	0	0	188	446
Total	0	0	0	0	0	0	933	13	0	946	3	0	14	0	17	13	725	0	0	738	1701
12:00 PM	0	0	0	0	0	0	226	4	0	230	0	0	3	0	3	2	196	0	0	198	431
12:15 PM	0	0	0	0	0	0	236	2	0	238	2	0	7	0	9	3	221	0	0	224	471
12:30 PM	0	0	0	0	0	0	241	2	0	243	0	0	3	0	3	2	229	0	0	231	477
12:45 PM	0	0	0	0	0	0	236	1	0	237	2	0	3	0	5	1	228	0	0	229	471
Total	0	0	0	0	0	0	939	9	0	948	4	0	16	0	20	8	874	0	0	882	1850
Grand Total	0	0	0	0	0	0	1872	22	0	1894	7	0	30	0	37	21	1599	0	0	1620	3551
Apprch %	0	0	0	0		0	98.8	1.2	0		18.9	0	81.1	0		1.3	98.7	0	0		
Total %	0	0	0	0	0	0	52.7	0.6	0	53.3	0.2	0	0.8	0	1	0.6	45	0	0	45.6	

	Southbound					BORONDA RD Westbound					DARTMOUTH WY Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	0	0	0	0	0	0	226	4	0	230	0	0	3	0	3	2	196	0	0	198	431
12:15 PM	0	0	0	0	0	0	236	2	0	238	2	0	7	0	9	3	221	0	0	224	471
12:30 PM	0	0	0	0	0	0	241	2	0	243	0	0	3	0	3	2	229	0	0	231	477
12:45 PM	0	0	0	0	0	0	236	1	0	237	2	0	3	0	5	1	228	0	0	229	471
Total Volume	0	0	0	0	0	0	939	9	0	948	4	0	16	0	20	8	874	0	0	882	1850
% App. Total	0	0	0	0		0	99.1	0.9	0		20	0	80	0		0.9	99.1	0	0		
PHF	.000	.000	.000	.000	.000	.000	.974	.563	.000	.975	.500	.000	.571	.000	.556	.667	.954	.000	.000	.955	.970

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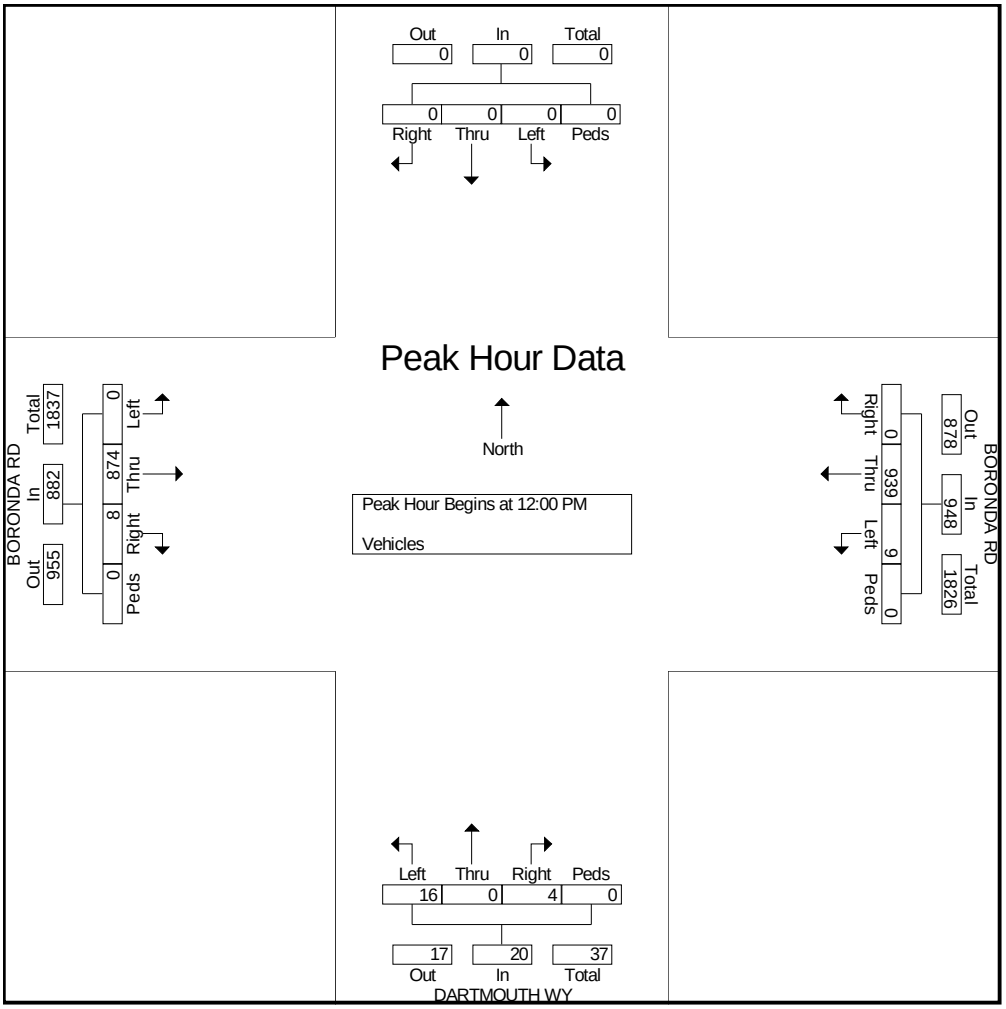

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File Name : 11PM FINAL
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Groups Printed- Vehicles

	Southbound					BORONDA RD Westbound					DARTMOUUTH WY Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	147	3	0	150	3	0	4	0	7	5	174	0	0	179	336
04:15 PM	0	0	0	0	0	0	211	3	0	214	3	0	2	0	5	3	235	0	0	238	457
04:30 PM	0	0	0	0	0	0	215	2	0	217	1	0	6	0	7	5	219	0	0	224	448
04:45 PM	0	0	0	0	0	0	242	12	0	254	2	0	13	0	15	9	284	0	0	293	562
Total	0	0	0	0	0	0	815	20	0	835	9	0	25	0	34	22	912	0	0	934	1803
05:00 PM	0	0	0	0	0	0	221	2	0	223	2	0	12	0	14	3	273	0	0	276	513
05:15 PM	0	0	0	0	0	0	195	10	0	205	3	0	9	0	12	2	277	0	0	279	496
05:30 PM	0	0	0	0	0	0	217	6	0	223	1	0	10	0	11	1	209	0	0	210	444
05:45 PM	0	0	0	0	0	0	199	2	0	201	1	0	12	0	13	11	222	0	0	233	447
Total	0	0	0	0	0	0	832	20	0	852	7	0	43	0	50	17	981	0	0	998	1900
Grand Total	0	0	0	0	0	0	1647	40	0	1687	16	0	68	0	84	39	1893	0	0	1932	3703
Apprch %	0	0	0	0		0	97.6	2.4	0		19	0	81	0		2	98	0	0		
Total %	0	0	0	0	0	0	44.5	1.1	0	45.6	0.4	0	1.8	0	2.3	1.1	51.1	0	0	52.2	

	Southbound					BORONDA RD Westbound					DARTMOUUTH WY Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	0	215	2	0	217	1	0	6	0	7	5	219	0	0	224	448
04:45 PM	0	0	0	0	0	0	242	12	0	254	2	0	13	0	15	9	284	0	0	293	562
05:00 PM	0	0	0	0	0	0	221	2	0	223	2	0	12	0	14	3	273	0	0	276	513
05:15 PM	0	0	0	0	0	0	195	10	0	205	3	0	9	0	12	2	277	0	0	279	496
Total Volume	0	0	0	0	0	0	873	26	0	899	8	0	40	0	48	19	1053	0	0	1072	2019
% App. Total																					
PHF	.000	.000	.000	.000	.000	.000	.902	.542	.000	.885	.667	.000	.769	.000	.800	.528	.927	.000	.000	.915	.898

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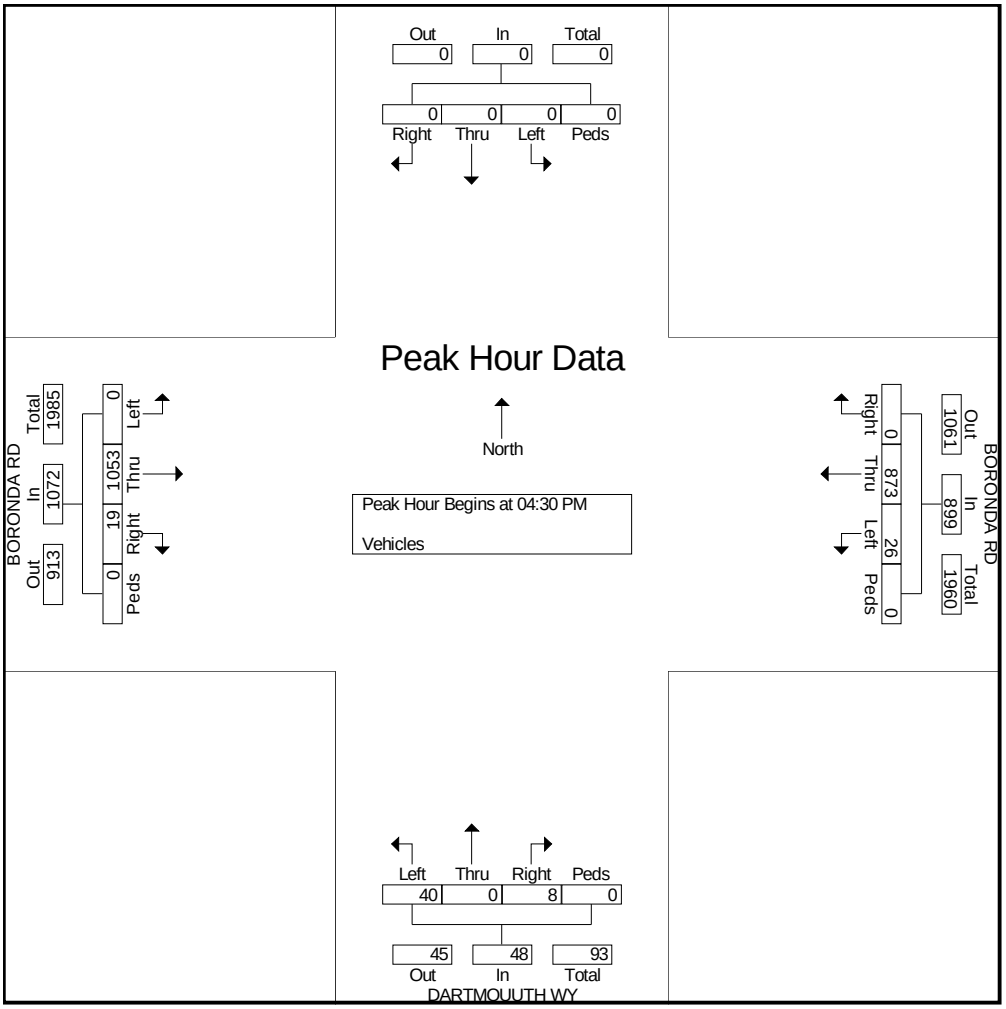

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File Name : 12MID FINAL
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Groups Printed- Vehicles

	MCKINNON ST Southbound					BORONDA RD Westbound					MCKINNON ST Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
11:00 AM	5	0	0	0	5	0	181	17	0	198	15	1	28	0	44	30	131	5	0	166	413
11:15 AM	0	0	0	0	0	0	194	16	0	210	7	0	37	0	44	32	163	0	0	195	449
11:30 AM	1	0	0	0	1	2	185	25	0	212	7	1	63	0	71	36	150	1	0	187	471
11:45 AM	0	0	0	0	0	0	208	18	0	226	2	0	37	0	39	31	151	0	0	182	447
Total	6	0	0	0	6	2	768	76	0	846	31	2	165	0	198	129	595	6	0	730	1780
12:00 PM	2	1	0	0	3	1	166	33	0	200	6	0	38	0	44	39	165	0	0	204	451
12:15 PM	0	0	0	0	0	0	191	33	0	224	7	0	55	0	62	32	197	1	0	230	516
12:30 PM	0	1	0	0	1	0	188	27	0	215	2	0	52	0	54	37	194	1	0	232	502
12:45 PM	1	0	0	0	1	2	182	28	0	212	2	0	47	0	49	28	191	2	0	221	483
Total	3	2	0	0	5	3	727	121	0	851	17	0	192	0	209	136	747	4	0	887	1952
Grand Total	9	2	0	0	11	5	1495	197	0	1697	48	2	357	0	407	265	1342	10	0	1617	3732
Apprch %	81.8	18.2	0	0		0.3	88.1	11.6	0		11.8	0.5	87.7	0		16.4	83	0.6	0		
Total %	0.2	0.1	0	0	0.3	0.1	40.1	5.3	0	45.5	1.3	0.1	9.6	0	10.9	7.1	36	0.3	0	43.3	

	MCKINNON ST Southbound					BORONDA RD Westbound					MCKINNON ST Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	2	1	0	0	3	1	166	33	0	200	6	0	38	0	44	39	165	0	0	204	451
12:15 PM	0	0	0	0	0	0	191	33	0	224	7	0	55	0	62	32	197	1	0	230	516
12:30 PM	0	1	0	0	1	0	188	27	0	215	2	0	52	0	54	37	194	1	0	232	502
12:45 PM	1	0	0	0	1	2	182	28	0	212	2	0	47	0	49	28	191	2	0	221	483
Total Volume	3	2	0	0	5	3	727	121	0	851	17	0	192	0	209	136	747	4	0	887	1952
% App. Total	60	40	0	0		0.4	85.4	14.2	0		8.1	0	91.9	0		15.3	84.2	0.5	0		
PHF	.375	.500	.000	.000	.417	.375	.952	.917	.000	.950	.607	.000	.873	.000	.843	.872	.948	.500	.000	.956	.946

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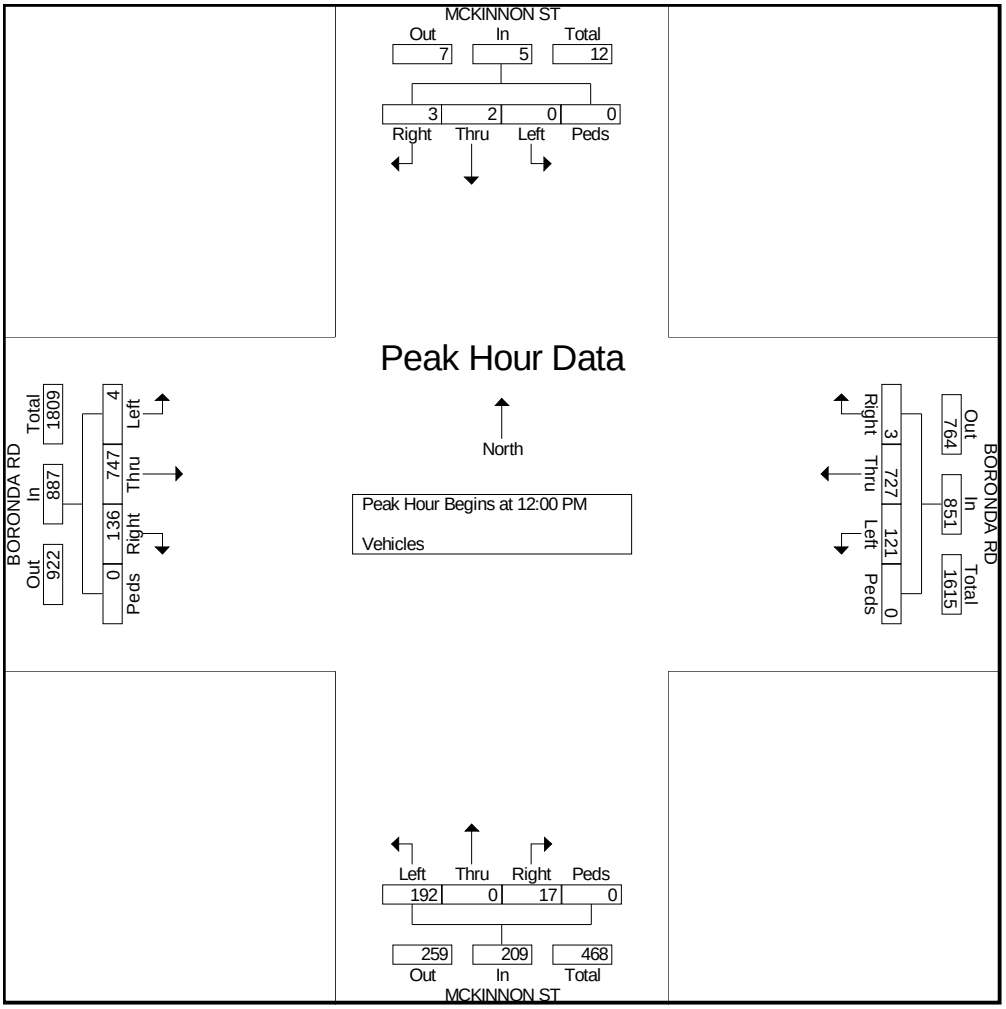

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File Name : 12PM FINAL
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Groups Printed- Vehicles

	McKINNON ST Southbound					BORONDA RD Westbound					McKINNON ST Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	17	14	7	0	38	1	128	17	0	146	9	4	41	0	54	45	119	6	0	170	408
04:15 PM	10	0	1	0	11	2	152	26	0	180	14	1	47	0	62	81	155	4	0	240	493
04:30 PM	0	1	2	0	3	3	152	17	0	172	8	0	49	0	57	65	147	5	0	217	449
04:45 PM	7	4	1	0	12	2	173	31	0	206	9	4	56	0	69	55	201	3	0	259	546
Total	34	19	11	0	64	8	605	91	0	704	40	9	193	0	242	246	622	18	0	886	1896
05:00 PM	3	0	5	0	8	1	150	15	0	166	14	0	47	0	61	84	184	3	0	271	506
05:15 PM	1	1	2	0	4	0	145	22	0	167	15	0	39	0	54	79	176	0	0	255	480
05:30 PM	3	0	0	0	3	0	154	27	0	181	11	0	47	0	58	71	154	1	0	226	468
05:45 PM	2	0	1	0	3	0	153	10	0	163	7	1	39	0	47	54	163	0	0	217	430
Total	9	1	8	0	18	1	602	74	0	677	47	1	172	0	220	288	677	4	0	969	1884
Grand Total	43	20	19	0	82	9	1207	165	0	1381	87	10	365	0	462	534	1299	22	0	1855	3780
Apprch %	52.4	24.4	23.2	0		0.7	87.4	11.9	0		18.8	2.2	79	0		28.8	70	1.2	0		
Total %	1.1	0.5	0.5	0	2.2	0.2	31.9	4.4	0	36.5	2.3	0.3	9.7	0	12.2	14.1	34.4	0.6	0	49.1	

	McKINNON ST Southbound					BORONDA RD Westbound					McKINNON ST Northbound					BORONDA RD Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	7	4	1	0	12	2	173	31	0	206	9	4	56	0	69	55	201	3	0	259	546
05:00 PM	3	0	5	0	8	1	150	15	0	166	14	0	47	0	61	84	184	3	0	271	506
05:15 PM	1	1	2	0	4	0	145	22	0	167	15	0	39	0	54	79	176	0	0	255	480
05:30 PM	3	0	0	0	3	0	154	27	0	181	11	0	47	0	58	71	154	1	0	226	468
Total Volume	14	5	8	0	27	3	622	95	0	720	49	4	189	0	242	289	715	7	0	1011	2000
% App. Total	51.9	18.5	29.6	0		0.4	86.4	13.2	0		20.2	1.7	78.1	0		28.6	70.7	0.7	0		
PHF	.500	.313	.400	.000	.563	.375	.899	.766	.000	.874	.817	.250	.844	.000	.877	.860	.889	.583	.000	.933	.916

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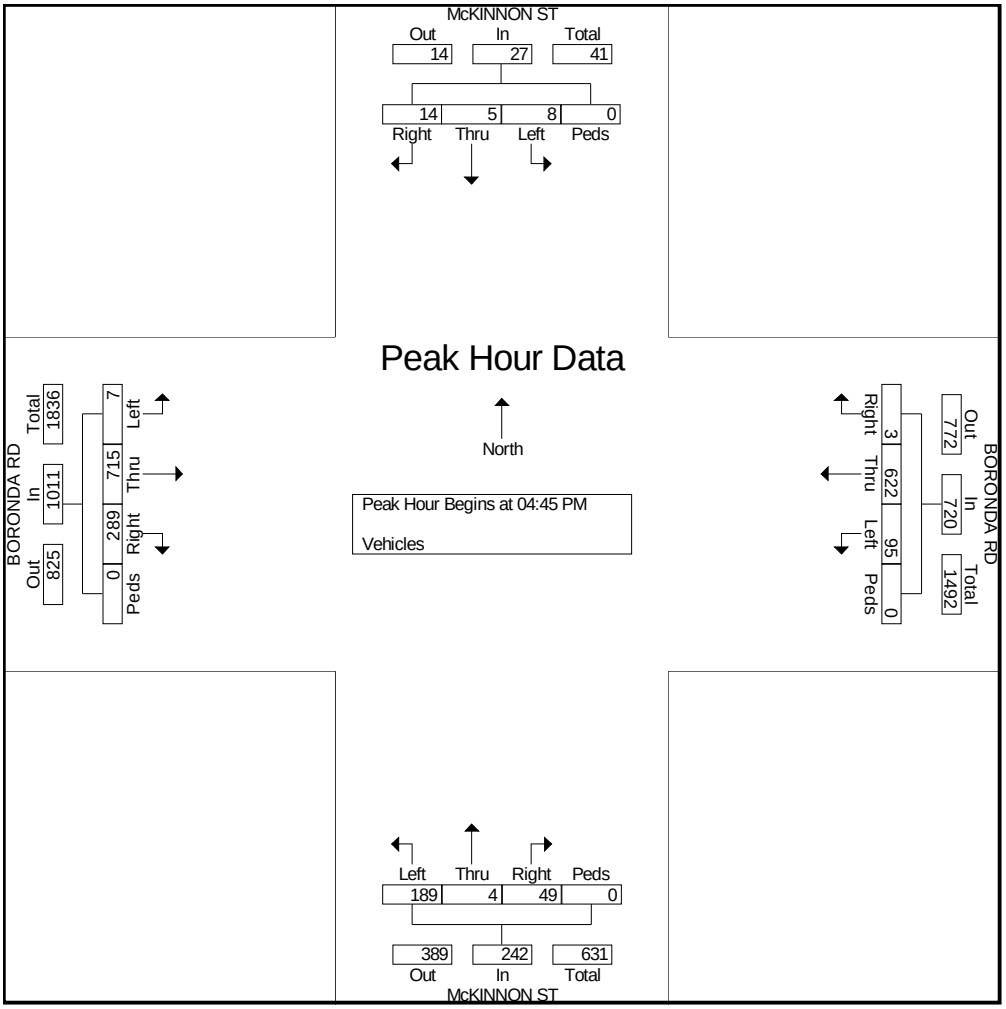


Traffic Data Service
Vehicle Counts

Datasets:

Site: **[1E] EB BORONDA RD BETWEEN EL DORADO & NATIVIDAD**
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: East (bound)
Separation: All - (Headway)
Name: TDS Standard
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Thursday, February 18, 2010 - Total=4400 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**716**	**681**	**731**	**605**	**554**	**431**	**388**	**178**	**116**	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	200	179	200	145	143	120	129	61	40	25
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	174	159	179	173	147	99	110	42	19	17
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	186	168	181	150	134	107	83	42	29	14
-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	156	175	171	137	130	105	66	33	28	19

* Friday, February 19, 2010 - Total=9402, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
75	**50**	**22**	**19**	**30**	**88**	**149**	**410**	**463**	**329**	**372**	**478**	**585**	**610**	**679**	**754**	**706**	**776**	**748**	**630**	**525**	**454**	**268**	**182**	
25	13	3	2	3	14	22	64	153	71	85	105	**167**	166	148	199	190	**201**	177	165	143	131	82	53	39
17	16	5	7	5	21	36	79	105	72	97	120	**137**	144	178	200	178	**210**	169	163	136	116	62	60	28
14	16	5	3	7	20	40	113	107	95	95	116	**141**	148	173	165	169	**180**	213	140	125	104	68	36	26
19	5	9	7	15	33	51	154	98	91	95	**137**	140	152	180	190	169	**185**	189	162	121	103	56	33	26

AM Peak 1145 - 1245 (582), AM PHF=0.87 PM Peak 1700 - 1800 (776), PM PHF=0.92

* Saturday, February 20, 2010 - Total=9185, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
119	**69**	**59**	**36**	**33**	**53**	**95**	**164**	**244**	**371**	**417**	**523**	**674**	**726**	**705**	**757**	**743**	**728**	**668**	**580**	**509**	**441**	**281**	**190**	
39	21	20	9	10	6	9	26	52	93	100	117	**169**	170	189	187	149	**166**	189	170	157	133	90	56	32
28	15	22	10	4	11	25	34	60	73	104	128	**148**	190	176	208	**201**	197	167	138	128	117	75	51	25
26	17	11	10	8	16	33	56	59	97	105	132	**182**	181	158	171	**203**	177	163	134	117	102	58	45	24
26	16	6	7	11	20	28	48	73	108	108	**146**	175	185	182	191	**190**	188	149	138	107	89	58	38	22

AM Peak 1145 - 1245 (645), AM PHF=0.89 PM Peak 1615 - 1715 (760), PM PHF=0.94

* Sunday, February 21, 2010 - Total=7830, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
103	**72**	**64**	**40**	**35**	**39**	**55**	**160**	**186**	**286**	**350**	**411**	**551**	**582**	**720**	**684**	**653**	**637**	**678**	**591**	**387**	**296**	**155**	**95**	
32	28	16	14	8	8	9	21	46	58	92	89	**117**	160	168	**166**	160	162	166	168	111	99	51	31	12
25	16	16	13	8	5	11	47	35	57	76	114	**123**	125	173	**178**	158	156	177	144	104	62	33	17	15
24	9	13	8	7	9	19	40	44	87	88	98	**142**	140	**177**	167	183	147	174	155	93	77	41	20	11
22	19	19	5	12	17	16	52	61	84	94	**110**	169	157	**202**	173	152	172	161	124	79	58	30	27	16

AM Peak 1145 - 1245 (492), AM PHF=0.87 PM Peak 1430 - 1530 (723), PM PHF=0.89

* Monday, February 22, 2010 - Total=8751, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
54	**35**	**29**	**24**	**38**	**71**	**142**	**459**	**438**	**369**	**404**	**479**	**570**	**578**	**689**	**670**	**678**	**752**	**669**	**545**	**447**	**321**	**183**	**107**	
12	9	8	4	6	14	15	75	157	77	86	104	**148**	132	147	168	161	**213**	166	157	130	100	54	38	19
15	9	9	8	6	12	36	80	98	89	99	131	**151**	142	175	195	171	**189**	168	135	115	83	49	29	13
11	8	8	4	12	15	42	137	96	105	106	117	**146**	166	184	148	155	**175**	183	134	96	73	43	21	17
16	9	4	8	14	30	49	167	87	98	113	**127**	125	138	183	159	**191**	175	152	119	106	65	37	19	11

AM Peak 1145 - 1245 (572), AM PHF=0.95 PM Peak 1645 - 1745 (768), PM PHF=0.90

* Tuesday, February 23, 2010 - Total=8094, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
60	**35**	**16**	**16**	**31**	**73**	**170**	**452**	**439**	**294**	**390**	**405**	**548**	**529**	**620**	**644**	**658**	**667**	**606**	**476**	**408**	**294**	**156**	**107**	
19	9	1	2	6	10	25	56	**142**	65	96	88	126	123	164	177	159	**177**	156	139	105	92	42	37	13
13	10	8	7	6	14	35	105	**107**	70	78	97	127	126	157	156	164	**165**	155	108	109	72	36	31	10
17	7	4	1	8	19	64	**111**	101	89	108	106	145	140	146	147	**188**	175	166	114	116	76	48	21	15
11	9	3	6	11	30	46	**180**	89	70	108	114	150	140	153	164	**147**	150	129	115	78	54	30	18	20

AM Peak 0730 - 0830 (540), AM PHF=0.75 PM Peak 1630 - 1730 (677), PM PHF=0.90

* Wednesday, February 24, 2010 - Total=8441, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
58	**31**	**19**	**16**	**23**	**75**	**134**	**386**	**488**	**338**	**382**	**457**	**535**	**656**	**592**	**638**	**627**	**696**	**630**	**562**	**439**	**364**	**173**	**122**	
13	11	0	5	2	13	16	58	121	84	88	89	**117**	159	142	172	138	168	**169**	152	135	114	49	28	18
10	6	7	2	7	15	31	79	100	84	94	124	**119**	181	141	144	161	**182**	165	129	102	80	54	41	16
15	9	3	4	7	21	42	107	143	91	98	118	**159**	209	151	161	177	**177**	147	154	105	90	32	28	30
20	5	9	5	7	26	45	142	124	79	102	**126**	140	107	158	161	151	**169**	149	127	97	80	38	25	14

AM Peak 1145 - 1245 (521), AM PHF=0.82 PM Peak 1715 - 1815 (697), PM PHF=0.96

*** Thursday, February 25, 2010 - Total=1401 (Incomplete) , 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
78	**34**	**24**	**20**	**32**	**80**	**147**	**452**	**448**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
18	17	7	4	3	19	23	57	138	78	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
16	6	9	6	6	11	26	91	104	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
30	9	5	3	9	19	46	134	111	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	2	3	7	14	31	52	170	95	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Traffic Data Service
Vehicle Counts

Datasets:

Site: **[1W] WB BORONDA RD BETWEEN EL DORADO & NATIVIDAD**
Data type: Axle sensors - Paired (Class/Speed/Count)

Profile:

Included classes: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13
Speed range: 0 - 100 mph.
Direction: West (bound)
Separation: All - (Headway)
Name: TDS Standard
Scheme: Vehicle classification (Scheme F)
Units: Non metric (ft, mi, ft/s, mph, lb, ton)

* Thursday, February 18, 2010 - Total=4347 (Incomplete) , 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
-	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**813**	**735**	**803**	**673**	**507**	**344**	**235**	**156**	**81**	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	181	175	209	191	142	95	68	59	20	9
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	226	187	198	164	133	82	76	36	27	8
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	226	176	187	177	116	85	54	25	17	12
-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	180	197	209	141	116	82	37	36	17	8

* Friday, February 19, 2010 - Total=10057, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
37	**24**	**22**	**36**	**94**	**174**	**342**	**513**	**632**	**487**	**532**	**540**	**678**	**623**	**646**	**815**	**694**	**792**	**731**	**567**	**429**	**312**	**233**	**104**	
9	7	7	13	15	45	70	99	**180**	124	127	128	150	174	169	**180**	165	205	221	166	107	78	73	23	20
8	6	4	4	17	37	69	95	**187**	109	139	132	190	151	153	**227**	151	193	189	156	121	86	66	36	16
12	8	8	11	33	41	91	**144**	140	121	130	141	167	159	143	**227**	187	216	169	130	113	75	51	23	15
8	3	3	8	29	51	112	**175**	125	133	136	139	171	139	**181**	181	191	178	152	115	88	73	43	22	19

AM Peak 0730 - 0830 (686), AM PHF=0.92 PM Peak 1445 - 1545 (815), PM PHF=0.90

* Saturday, February 20, 2010 - Total=9882, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
70	**59**	**44**	**42**	**47**	**120**	**198**	**294**	**380**	**508**	**596**	**680**	**734**	**794**	**740**	**725**	**749**	**731**	**651**	**556**	**439**	**344**	**221**	**160**	
20	13	10	13	14	18	47	51	78	91	140	142	**193**	**196**	191	165	184	168	184	152	122	87	63	43	26
16	16	8	6	6	33	51	68	96	140	142	**194**	178	**209**	168	185	198	190	162	134	117	91	63	42	25
15	16	13	14	12	37	51	71	105	119	147	**160**	172	**177**	172	188	183	170	135	148	120	86	54	46	23
19	14	13	9	15	32	49	104	101	158	167	**184**	191	**212**	209	187	184	203	170	122	80	80	41	29	21

AM Peak 1115 - 1215 (731), AM PHF=0.94 PM Peak 1300 - 1400 (794), PM PHF=0.94

* Sunday, February 21, 2010 - Total=8412, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
95	**58**	**59**	**35**	**38**	**82**	**83**	**157**	**260**	**354**	**512**	**551**	**752**	**751**	**757**	**724**	**742**	**696**	**561**	**393**	**334**	**214**	**132**	**72**	
26	19	14	10	4	12	18	29	51	74	98	129	**169**	191	**200**	174	166	197	143	100	107	56	39	20	13
25	11	16	11	12	17	19	46	68	78	110	136	**193**	178	**207**	184	184	160	150	111	81	57	41	21	9
23	15	19	8	9	21	25	40	60	101	135	131	**187**	**185**	185	189	209	168	141	93	78	59	29	12	9
21	13	10	6	13	32	21	42	81	101	169	**155**	203	**197**	165	177	183	171	127	89	68	42	23	19	7

AM Peak 1145 - 1245 (704), AM PHF=0.91 PM Peak 1330 - 1430 (789), PM PHF=0.95

* Monday, February 22, 2010 - Total=9459, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
38	**34**	**25**	**36**	**91**	**181**	**326**	**570**	**618**	**504**	**514**	**522**	**583**	**599**	**597**	**770**	**714**	**766**	**697**	**478**	**364**	**218**	**147**	**67**	
13	8	8	8	18	31	65	103	**175**	108	128	128	131	138	148	164	169	182	**186**	142	107	78	37	24	16
9	8	5	9	15	45	83	99	**167**	101	136	111	131	152	140	204	190	191	**201**	124	85	67	47	14	9
9	13	7	13	25	49	79	**173**	145	130	117	132	188	140	131	217	158	**182**	159	109	83	44	33	10	5
7	5	5	6	33	56	99	**195**	131	165	133	151	133	169	178	185	197	**211**	151	103	89	29	30	19	13

AM Peak 0730 - 0830 (710), AM PHF=0.91 PM Peak 1730 - 1830 (780), PM PHF=0.92

* Tuesday, February 23, 2010 - Total=8752, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
43	**25**	**18**	**23**	**85**	**203**	**332**	**562**	**655**	**442**	**453**	**483**	**543**	**541**	**521**	**732**	**681**	**721**	**552**	**438**	**302**	**234**	**111**	**52**	
16	8	6	2	13	37	69	99	**173**	113	132	125	132	146	128	159	**172**	150	173	150	89	79	35	19	12
9	6	5	5	27	45	86	115	**208**	106	97	111	137	150	115	**199**	158	209	144	100	68	45	26	14	8
5	7	5	7	23	60	82	**166**	154	103	104	128	153	124	124	**223**	152	180	125	105	74	63	29	9	8
13	4	2	9	22	61	95	**182**	120	120	120	119	121	121	154	**151**	199	182	110	83	71	47	21	10	8

AM Peak 0730 - 0830 (729), AM PHF=0.88 PM Peak 1515 - 1615 (745), PM PHF=0.84

* Wednesday, February 24, 2010 - Total=9244, 15 minute drops

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
36	**18**	**23**	**34**	**73**	**174**	**308**	**508**	**571**	**506**	**468**	**510**	**674**	**595**	**572**	**770**	**623**	**762**	**663**	**502**	**351**	**247**	**151**	**105**	
12	5	6	2	14	30	66	91	127	141	154	105	**176**	158	153	172	159	175	**190**	140	108	61	62	32	11
8	6	6	10	17	47	72	115	142	107	93	141	**137**	124	134	224	162	**205**	173	145	86	75	43	23	14
8	5	7	15	22	40	75	146	145	131	101	124	**176**	137	143	223	153	**173**	170	116	85	51	22	31	15
8	2	4	7	20	57	95	156	157	127	120	**140**	185	176	142	151	149	**209**	130	101	72	60	24	19	10

AM Peak 1145 - 1245 (629), AM PHF=0.89 PM Peak 1715 - 1815 (777), PM PHF=0.93

*** Thursday, February 25, 2010 - Total=2056 (Incomplete) , 15 minute drops**

0000	0100	0200	0300	0400	0500	0600	0700	0800	0900	1000	1100	1200	1300	1400	1500	1600	1700	1800	1900	2000	2100	2200	2300	
50	**32**	**33**	**27**	**87**	**183**	**350**	**548**	**647**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
11	12	11	3	11	35	74	108	185	94	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
14	8	7	4	19	36	91	96	191	5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
15	7	4	11	27	49	99	153	147	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10	5	11	9	30	63	86	191	124	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Traffic Data Service
Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 11PM US-101 FREEWAY
Site Code : 00000101
Start Date : 2/18/2010
Page No : 1

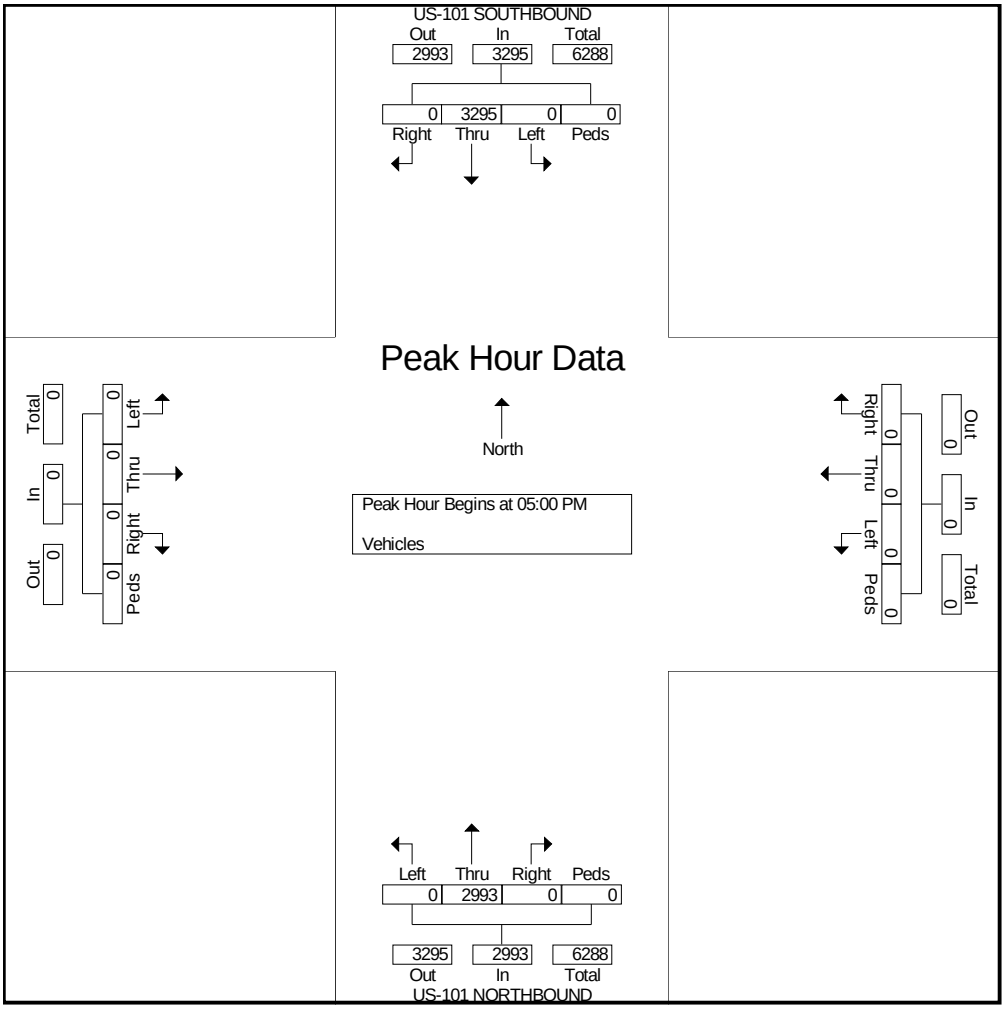
Groups Printed- Vehicles

	US-101 SOUTHBOUND Southbound					Westbound					US-101 NORTHBOUND Northbound					Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	0	534	0	0	534	0	0	0	0	0	0	492	0	0	492	0	0	0	0	0	1026
04:15 PM	0	575	0	0	575	0	0	0	0	0	0	651	0	0	651	0	0	0	0	0	1226
04:30 PM	0	614	0	0	614	0	0	0	0	0	0	624	0	0	624	0	0	0	0	0	1238
04:45 PM	0	799	0	0	799	0	0	0	0	0	0	623	0	0	623	0	0	0	0	0	1422
Total	0	2522	0	0	2522	0	0	0	0	0	0	2390	0	0	2390	0	0	0	0	0	4912
05:00 PM	0	772	0	0	772	0	0	0	0	0	0	817	0	0	817	0	0	0	0	0	1589
05:15 PM	0	816	0	0	816	0	0	0	0	0	0	837	0	0	837	0	0	0	0	0	1653
05:30 PM	0	845	0	0	845	0	0	0	0	0	0	751	0	0	751	0	0	0	0	0	1596
05:45 PM	0	862	0	0	862	0	0	0	0	0	0	588	0	0	588	0	0	0	0	0	1450
Total	0	3295	0	0	3295	0	0	0	0	0	0	2993	0	0	2993	0	0	0	0	0	6288
Grand Total	0	5817	0	0	5817	0	0	0	0	0	0	5383	0	0	5383	0	0	0	0	0	11200
Apprch %	0	100	0	0		0	0	0	0		0	100	0	0		0	0	0	0		
Total %	0	51.9	0	0	51.9	0	0	0	0	0	0	48.1	0	0	48.1	0	0	0	0	0	

	US-101 SOUTHBOUND Southbound					Westbound					US-101 NORTHBOUND Northbound					Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	0	772	0	0	772	0	0	0	0	0	0	817	0	0	817	0	0	0	0	0	1589
05:15 PM	0	816	0	0	816	0	0	0	0	0	0	837	0	0	837	0	0	0	0	0	1653
05:30 PM	0	845	0	0	845	0	0	0	0	0	0	751	0	0	751	0	0	0	0	0	1596
05:45 PM	0	862	0	0	862	0	0	0	0	0	0	588	0	0	588	0	0	0	0	0	1450
Total Volume	0	3295	0	0	3295	0	0	0	0	0	0	2993	0	0	2993	0	0	0	0	0	6288
% App. Total																					
PHF	.000	.956	.000	.000	.956	.000	.000	.000	.000	.000	.000	.894	.000	.000	.894	.000	.000	.000	.000	.000	.951

Traffic Data Service
Campbell, CA
(408) 377-2988
tdsbay@cs.com

File Name : 11PM US-101 FREEWAY
Site Code : 00000101
Start Date : 2/18/2010
Page No : 2



APPENDIX B:
INTERSECTION LEVEL OF SERVICE CALCULATIONS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	381	114	26	235	27	22	5	22	35	5	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00			1.00			0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	0.98			0.94			0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1757	1863	1522	1761	1826			1706			1731	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.87			0.81	
Satd. Flow (perm)	1757	1863	1522	1761	1826			1516			1442	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	12	405	121	28	250	29	23	5	23	37	5	14
RTOR Reduction (vph)	0	0	77	0	4	0	0	17	0	0	11	0
Lane Group Flow (vph)	12	405	44	28	275	0	0	34	0	0	45	0
Confl. Peds. (#/hr)	10		10	10		10	10					10
Confl. Bikes (#/hr)			10			10						
Turn Type	Prot		Perm	Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2				8			4		
Actuated Green, G (s)	0.5	12.4	12.4	0.6	12.5			8.3			8.3	
Effective Green, g (s)	0.5	12.4	12.4	0.6	12.5			8.3			8.3	
Actuated g/C Ratio	0.01	0.36	0.36	0.02	0.37			0.24			0.24	
Clearance Time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0			2.0			2.0	
Lane Grp Cap (vph)	26	677	553	31	669			369			351	
v/s Ratio Prot	0.01	c0.22		c0.02	0.15							
v/s Ratio Perm			0.03					0.02			c0.03	
v/c Ratio	0.46	0.60	0.08	0.90	0.41			0.09			0.13	
Uniform Delay, d1	16.7	8.8	7.1	16.7	8.1			10.0			10.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	4.7	1.0	0.0	119.0	0.1			0.0			0.1	
Delay (s)	21.3	9.8	7.1	135.8	8.2			10.0			10.1	
Level of Service	C	A	A	F	A			B			B	
Approach Delay (s)		9.4			19.8			10.0			10.1	
Approach LOS		A			B			B			B	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	34.1	Sum of lost time (s)	12.8
Intersection Capacity Utilization	38.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	371	67	130	239	5	270	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	0.83	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1532	1770	1863	1465	1863	1512
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1532	1770	1863	1465	1863	1512
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	395	71	138	254	5	287	168
RTOR Reduction (vph)	0	48	0	0	0	0	117
Lane Group Flow (vph)	395	23	138	254	5	287	51
Confl. Peds. (#/hr)	10	10	10		10		10
Confl. Bikes (#/hr)							10
Turn Type		Perm	Prot		Prot		Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	17.0	17.0	6.6	20.8	0.6	15.6	15.6
Effective Green, g (s)	17.0	17.0	6.6	20.8	0.6	15.6	15.6
Actuated g/C Ratio	0.33	0.33	0.13	0.40	0.01	0.30	0.30
Clearance Time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Vehicle Extension (s)	2.0	2.0	1.0	2.0	1.0	2.0	2.0
Lane Grp Cap (vph)	582	504	226	750	17	562	456
v/s Ratio Prot	c0.22		c0.08	0.14	0.00	c0.15	
v/s Ratio Perm		0.02					0.03
v/c Ratio	0.68	0.05	0.61	0.34	0.29	0.51	0.11
Uniform Delay, d1	15.0	11.8	21.3	10.7	25.3	14.9	13.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.5	0.0	3.4	0.1	3.5	0.3	0.0
Delay (s)	17.5	11.8	24.7	10.8	28.8	15.2	13.1
Level of Service	B	B	C	B	C	B	B
Approach Delay (s)	16.6			15.7		14.6	
Approach LOS	B			B		B	

Intersection Summary			
HCM Average Control Delay	15.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	51.7	Sum of lost time (s)	12.5
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	6	105	120	363	325	12
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	6	112	128	386	346	13
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1014	372	369			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1014	372	369			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	83	89			
cM capacity (veh/h)	231	661	1179			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	118	514	359
Volume Left	6	128	0
Volume Right	112	0	13
cSH	601	1179	1700
Volume to Capacity	0.20	0.11	0.21
Queue Length 95th (ft)	18	9	0
Control Delay (s)	12.5	3.0	0.0
Lane LOS	B	A	
Approach Delay (s)	12.5	3.0	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	3.0		
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	3	88	95	480	426	4
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	3	94	101	511	453	4
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				655		
pX, platoon unblocked	0.85					
vC, conflicting volume	1188	475	467			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1133	475	467			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	98	84	91			
cM capacity (veh/h)	170	578	1084			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	97	612	457
Volume Left	3	101	0
Volume Right	94	0	4
cSH	536	1084	1700
Volume to Capacity	0.18	0.09	0.27
Queue Length 95th (ft)	16	8	0
Control Delay (s)	13.2	2.4	0.0
Lane LOS	B	A	
Approach Delay (s)	13.2	2.4	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	68.8%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	3	7	575	514	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	3	7	612	547	0
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				333		
pX, platoon unblocked	0.85					
vC, conflicting volume	1193	567	557			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1139	567	557			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	99			
cM capacity (veh/h)	184	513	1004			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	3	7	612	547
Volume Left	0	7	0	0
Volume Right	3	0	0	0
cSH	513	1004	1700	1700
Volume to Capacity	0.01	0.01	0.36	0.32
Queue Length 95th (ft)	0	1	0	0
Control Delay (s)	12.1	8.6	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	12.1	0.1		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	40.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	752	180	0	593	623	0	0	0	951	5	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	5.3				4.0	4.0	4.0
Lane Util. Factor		0.91	1.00		0.95	1.00				0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.97		1.00	0.96				1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85				1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (prot)		5085	1538		3539	1513				1681	1686	1554
Flt Permitted		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (perm)		5085	1538		3539	1513				1681	1686	1554
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	800	191	0	631	663	0	0	0	1012	5	163
RTOR Reduction (vph)	0	0	0	0	0	418	0	0	0	0	0	87
Lane Group Flow (vph)	0	800	191	0	631	245	0	0	0	506	511	76
Confl. Peds. (#/hr)			10			10						10
Confl. Bikes (#/hr)			10			10						
Turn Type			Free			Perm				Split		Perm
Protected Phases		6			2					8	8	
Permitted Phases			Free			2						8
Actuated Green, G (s)		20.7	56.0		20.7	20.7				24.3	24.3	24.3
Effective Green, g (s)		22.0	56.0		22.0	20.7				26.0	26.0	26.0
Actuated g/C Ratio		0.39	1.00		0.39	0.37				0.46	0.46	0.46
Clearance Time (s)		5.3			5.3	5.3				5.7	5.7	5.7
Vehicle Extension (s)		3.0			3.0	3.0				2.5	2.5	2.5
Lane Grp Cap (vph)		1998	1538		1390	559				780	783	722
v/s Ratio Prot		0.16			c0.18					0.30	c0.30	
v/s Ratio Perm			0.12			0.16						0.05
v/c Ratio		0.40	0.12		0.45	0.44				0.65	0.65	0.10
Uniform Delay, d1		12.2	0.0		12.6	13.3				11.5	11.5	8.4
Progression Factor		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Incremental Delay, d2		0.1	0.2		0.2	0.6				1.7	1.8	0.0
Delay (s)		12.4	0.2		12.8	13.8				13.2	13.3	8.5
Level of Service		B	A		B	B				B	B	A
Approach Delay (s)		10.0			13.3			0.0			12.6	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	56.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1449	254	0	941	718	275	1	815	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.3		4.0	4.0		4.0	4.0			
Lane Util. Factor		0.91	1.00		0.91	1.00		1.00	0.88			
Frpb, ped/bikes		1.00	0.95		1.00	0.97		1.00	1.00			
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00			
Frt		1.00	0.85		1.00	0.85		1.00	0.85			
Flt Protected		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (prot)		5085	1502		5085	1538		1774	2787			
Flt Permitted		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (perm)		5085	1502		5085	1538		1774	2787			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1541	270	0	1001	764	293	1	867	0	0	0
RTOR Reduction (vph)	0	0	92	0	0	0	0	0	2	0	0	0
Lane Group Flow (vph)	0	1541	178	0	1001	764	0	294	865	0	0	0
Confl. Peds. (#/hr)			10			10						
Confl. Bikes (#/hr)			10			10						
Turn Type			Perm			Free	Split		custom			
Protected Phases		6			2		4	4				
Permitted Phases			6			Free			4 5			
Actuated Green, G (s)		33.8	33.8		48.5	79.0		19.5	35.3			
Effective Green, g (s)		35.1	33.8		49.8	79.0		21.2	37.0			
Actuated g/C Ratio		0.44	0.43		0.63	1.00		0.27	0.47			
Clearance Time (s)		5.3	5.3		5.3			5.7				
Vehicle Extension (s)		3.0	3.0		3.0			2.5				
Lane Grp Cap (vph)		2259	643		3205	1538		476	1305			
v/s Ratio Prot		c0.30			0.20			0.17				
v/s Ratio Perm			0.12			0.50			c0.31			
v/c Ratio		0.68	0.28		0.31	0.50		0.62	0.66			
Uniform Delay, d1		17.5	14.7		6.7	0.0		25.3	16.2			
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00			
Incremental Delay, d2		0.9	0.2		0.1	1.1		2.0	1.2			
Delay (s)		18.4	14.9		6.8	1.1		27.4	17.3			
Level of Service		B	B		A	A		C	B			
Approach Delay (s)		17.9			4.3			19.9			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	13.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	79.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	415	796	448	53	600	98	711	241	47	114	232	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.4	4.4	4.2	5.9		4.6	4.4	4.4	4.2	4.4	4.4
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	0.99		1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1529	1770	4952		3433	3539	1519	1770	3539	1521
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1529	1770	4952		3433	3539	1519	1770	3539	1521
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	441	847	477	56	638	104	756	256	50	121	247	370
RTOR Reduction (vph)	0	0	230	0	13	0	0	0	43	0	0	264
Lane Group Flow (vph)	441	847	247	56	729	0	756	256	7	121	247	106
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	28.8	46.0	46.0	7.1	24.3		32.7	15.9	15.9	33.5	16.3	16.3
Effective Green, g (s)	29.8	47.5	47.5	8.1	24.3		33.7	17.4	17.4	34.5	17.8	17.8
Actuated g/C Ratio	0.24	0.38	0.38	0.06	0.19		0.27	0.14	0.14	0.28	0.14	0.14
Clearance Time (s)	5.2	5.9	5.9	5.2	5.9		5.6	5.9	5.9	5.2	5.9	5.9
Vehicle Extension (s)	1.8	4.8	4.8	1.8	2.3		1.8	2.3	2.3	1.8	2.3	2.3
Lane Grp Cap (vph)	820	1348	582	115	965		928	494	212	490	505	217
v/s Ratio Prot	c0.13	c0.24		0.03	c0.15		c0.22	0.07		0.07	c0.07	
v/s Ratio Perm			0.16						0.00			0.07
v/c Ratio	0.54	0.63	0.42	0.49	0.76		0.81	0.52	0.03	0.25	0.49	0.49
Uniform Delay, d1	41.4	31.4	28.5	56.3	47.4		42.6	49.8	46.4	35.0	49.3	49.3
Progression Factor	1.00	1.00	0.99	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	1.3	1.0	1.2	3.2		5.3	0.6	0.0	0.1	0.4	1.0
Delay (s)	41.8	32.7	29.1	57.5	50.6		47.9	50.3	46.4	35.1	49.7	50.3
Level of Service	D	C	C	E	D		D	D	D	D	D	D
Approach Delay (s)		34.0			51.0			48.4			47.6	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM Average Control Delay	42.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	124.7	Sum of lost time (s)	14.9
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	87	806	64	163	520	214	95	281	74	193	188	136
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3493		1770	3539	1506	1770	1863	1533	1770	3539	1532
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3493		1770	3539	1506	1770	1863	1533	1770	3539	1532
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	93	857	68	173	553	228	101	299	79	205	200	145
RTOR Reduction (vph)	0	4	0	0	0	154	0	0	62	0	0	107
Lane Group Flow (vph)	93	921	0	173	553	74	101	299	17	205	200	38
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	10.1	34.5		11.2	35.6	35.6	10.9	23.6	23.6	16.4	29.1	29.1
Effective Green, g (s)	10.1	34.5		11.2	35.6	35.6	10.9	23.6	23.6	16.4	29.1	29.1
Actuated g/C Ratio	0.09	0.31		0.10	0.32	0.32	0.10	0.22	0.22	0.15	0.27	0.27
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	163	1099		181	1148	489	176	401	330	265	939	406
v/s Ratio Prot	0.05	c0.26		c0.10	0.16		0.06	c0.16		c0.12	c0.06	
v/s Ratio Perm						0.05			0.01			0.03
v/c Ratio	0.57	0.84		0.96	0.48	0.15	0.57	0.75	0.05	0.77	0.21	0.09
Uniform Delay, d1	47.7	35.0		49.0	29.7	26.3	47.2	40.2	34.2	44.9	31.4	30.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	5.7		53.2	0.3	0.1	2.8	7.4	0.1	12.0	0.1	0.1
Delay (s)	50.7	40.7		102.2	30.0	26.5	50.0	47.6	34.2	56.9	31.5	30.5
Level of Service	D	D		F	C	C	D	D	C	E	C	C
Approach Delay (s)		41.6			42.2			45.9			40.7	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	42.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	109.7	Sum of lost time (s)	30.0
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1069	4	1	890	7	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	1137	4	1	947	7	1
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	509			423		
pX, platoon unblocked			0.76		0.79	0.76
vC, conflicting volume			1151		1633	589
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			567		945	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		96	100
cM capacity (veh/h)			753		201	808

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	569	569	4	1	473	473	9
Volume Left	0	0	0	1	0	0	7
Volume Right	0	0	4	0	0	0	1
cSH	1700	1700	1700	753	1700	1700	222
Volume to Capacity	0.33	0.33	0.00	0.00	0.28	0.28	0.04
Queue Length 95th (ft)	0	0	0	0	0	0	3
Control Delay (s)	0.0	0.0	0.0	9.8	0.0	0.0	21.9
Lane LOS				A			C
Approach Delay (s)	0.0			0.0			21.9
Approach LOS							C

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	39.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1055	15	30	847	44	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00	0.96	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1526	1770	3539	1770	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1526	1770	3539	1770	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1122	16	32	901	47	9
RTOR Reduction (vph)	0	3	0	0	0	9
Lane Group Flow (vph)	1122	13	32	901	47	0
Confl. Peds. (#/hr)		10				
Turn Type		Perm	Prot			Perm
Protected Phases	2		1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	64.4	64.4	4.5	75.4	4.5	4.5
Effective Green, g (s)	64.4	64.4	4.5	75.4	4.5	4.5
Actuated g/C Ratio	0.70	0.70	0.05	0.82	0.05	0.05
Clearance Time (s)	6.5	6.5	6.5	6.5	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	2.0	2.0
Lane Grp Cap (vph)	1313	1075	87	2919	87	78
v/s Ratio Prot	c0.60		0.02	c0.25	c0.03	
v/s Ratio Perm		0.01				0.00
v/c Ratio	0.85	0.01	0.37	0.31	0.54	0.01
Uniform Delay, d1	10.0	4.0	42.1	1.9	42.4	41.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.6	0.0	2.6	0.1	3.6	0.0
Delay (s)	15.7	4.0	44.7	1.9	46.1	41.3
Level of Service	B	A	D	A	D	D
Approach Delay (s)	15.5			3.4	45.3	
Approach LOS	B			A	D	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	91.4	Sum of lost time (s)	18.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	767	289	95	674	3	189	4	49	8	5	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.95		1.00	0.95	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.86		1.00	0.89	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1504	1770	1863	1505	1770	1523		1744	1575	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.74	1.00		0.72	1.00	
Satd. Flow (perm)	1770	1863	1504	1770	1863	1505	1386	1523		1322	1575	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	7	816	307	101	717	3	201	4	52	9	5	15
RTOR Reduction (vph)	0	0	116	0	0	1	0	42	0	0	12	0
Lane Group Flow (vph)	7	816	191	101	717	2	201	14	0	9	8	0
Confl. Peds. (#/hr)			10			10			10	10		10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Actuated Green, G (s)	1.2	50.3	50.3	8.3	57.4	57.4	18.8	18.8		18.8	18.8	
Effective Green, g (s)	1.2	50.3	50.3	8.3	57.4	57.4	18.8	18.8		18.8	18.8	
Actuated g/C Ratio	0.01	0.53	0.53	0.09	0.60	0.60	0.20	0.20		0.20	0.20	
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	22	982	793	154	1121	906	273	300		261	310	
v/s Ratio Prot	0.00	c0.44		c0.06	c0.38			0.01			0.01	
v/s Ratio Perm			0.13			0.00	c0.14			0.01		
v/c Ratio	0.32	0.83	0.24	0.66	0.64	0.00	0.74	0.05		0.03	0.03	
Uniform Delay, d1	46.7	19.0	12.2	42.2	12.3	7.6	36.0	31.0		31.0	30.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.2	8.1	0.7	9.6	2.8	0.0	9.9	0.1		0.1	0.0	
Delay (s)	54.9	27.1	12.9	51.8	15.1	7.6	45.9	31.1		31.0	30.9	
Level of Service	D	C	B	D	B	A	D	C		C	C	
Approach Delay (s)		23.4			19.6			42.6			31.0	
Approach LOS		C			B			D			C	

Intersection Summary			
HCM Average Control Delay	24.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	95.4	Sum of lost time (s)	24.5
Intersection Capacity Utilization	80.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	158	52	24	149	39	28	4	20	40	18	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	0.99			1.00			0.99	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	0.97			0.95			0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1770	1863	1521	1758	1790			1715			1695	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.82			0.88	
Satd. Flow (perm)	1770	1863	1521	1758	1790			1444			1513	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	45	168	55	26	159	41	30	4	21	43	19	52
RTOR Reduction (vph)	0	0	37	0	11	0	0	15	0	0	28	0
Lane Group Flow (vph)	45	168	18	26	190	0	0	40	0	0	86	0
Confl. Peds. (#/hr)	10		10	10		10	10					10
Confl. Bikes (#/hr)			10			10						
Turn Type	Prot		Perm	Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2				8			4		
Actuated Green, G (s)	1.6	10.9	10.9	0.6	9.9			8.7			8.7	
Effective Green, g (s)	1.6	10.9	10.9	0.6	9.9			8.7			8.7	
Actuated g/C Ratio	0.05	0.33	0.33	0.02	0.30			0.26			0.26	
Clearance Time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0			2.0			2.0	
Lane Grp Cap (vph)	86	615	502	32	537			381			399	
v/s Ratio Prot	c0.03	0.09		0.01	c0.11							
v/s Ratio Perm			0.01					0.03			c0.06	
v/c Ratio	0.52	0.27	0.04	0.81	0.35			0.10			0.22	
Uniform Delay, d1	15.3	8.1	7.5	16.1	9.0			9.2			9.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	2.6	0.1	0.0	81.6	0.1			0.0			0.1	
Delay (s)	18.0	8.2	7.5	97.7	9.2			9.2			9.6	
Level of Service	B	A	A	F	A			A			A	
Approach Delay (s)		9.7			19.4			9.2			9.6	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	33.0	Sum of lost time (s)	12.8
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	134	84	96	186	2	241	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	0.85	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1536	1770	1863	1508	1863	1522
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1536	1770	1863	1508	1863	1522
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	143	89	102	198	2	256	123
RTOR Reduction (vph)	0	72	0	0	0	0	72
Lane Group Flow (vph)	143	17	102	198	2	256	51
Confl. Peds. (#/hr)	10	10	10		10		10
Confl. Bikes (#/hr)							10
Turn Type		Perm	Prot		Prot		Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	7.7	7.7	3.8	19.6	0.5	17.1	17.1
Effective Green, g (s)	7.7	7.7	3.8	19.6	0.5	17.1	17.1
Actuated g/C Ratio	0.19	0.19	0.09	0.48	0.01	0.42	0.42
Clearance Time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Vehicle Extension (s)	2.0	2.0	1.0	2.0	1.0	2.0	2.0
Lane Grp Cap (vph)	332	288	164	888	18	775	633
v/s Ratio Prot	c0.08		c0.06	c0.11	0.00	c0.14	
v/s Ratio Perm		0.01					0.03
v/c Ratio	0.43	0.06	0.62	0.22	0.11	0.33	0.08
Uniform Delay, d1	14.8	13.7	18.0	6.3	20.1	8.1	7.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.0	5.2	0.0	1.0	0.1	0.0
Delay (s)	15.1	13.8	23.1	6.3	21.1	8.2	7.3
Level of Service	B	B	C	A	C	A	A
Approach Delay (s)	14.6			12.1		8.0	
Approach LOS	B			B		A	

Intersection Summary			
HCM Average Control Delay	11.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	41.1	Sum of lost time (s)	18.3
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	12	95	66	270	315	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	13	101	70	287	335	11
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	788	360	356			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	788	360	356			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	85	94			
cM capacity (veh/h)	332	671	1192			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	114	357	346
Volume Left	13	70	0
Volume Right	101	0	11
cSH	602	1192	1700
Volume to Capacity	0.19	0.06	0.20
Queue Length 95th (ft)	17	5	0
Control Delay (s)	12.4	2.1	0.0
Lane LOS	B	A	
Approach Delay (s)	12.4	2.1	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	2.6		
Intersection Capacity Utilization	51.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	1	88	63	335	408	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	1	94	67	356	434	2
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				655		
pX, platoon unblocked	0.90					
vC, conflicting volume	946	455	446			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	882	455	446			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	84	94			
cM capacity (veh/h)	262	594	1103			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	95	423	436
Volume Left	1	67	0
Volume Right	94	0	2
cSH	585	1103	1700
Volume to Capacity	0.16	0.06	0.26
Queue Length 95th (ft)	14	5	0
Control Delay (s)	12.3	1.9	0.0
Lane LOS	B	A	
Approach Delay (s)	12.3	1.9	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	2.1		
Intersection Capacity Utilization	58.2%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	1	398	496	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	0	1	423	528	0
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				333		
pX, platoon unblocked	0.89					
vC, conflicting volume	973	548	538			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	911	548	538			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	267	526	1021			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	0	1	423	528
Volume Left	0	1	0	0
Volume Right	0	0	0	0
cSH	1700	1021	1700	1700
Volume to Capacity	0.00	0.00	0.25	0.31
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	8.5	0.0	0.0
Lane LOS	A	A		
Approach Delay (s)	0.0	0.0		0.0
Approach LOS	A			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	29.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	856	150	0	869	499	0	0	0	710	2	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	5.3				4.0	4.0	4.0
Lane Util. Factor		0.91	1.00		0.95	1.00				0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.97		1.00	0.96				1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85				1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (prot)		5085	1538		3539	1515				1681	1686	1552
Flt Permitted		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (perm)		5085	1538		3539	1515				1681	1686	1552
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	911	160	0	924	531	0	0	0	755	2	196
RTOR Reduction (vph)	0	0	0	0	0	295	0	0	0	0	0	44
Lane Group Flow (vph)	0	911	160	0	924	236	0	0	0	377	380	152
Confl. Peds. (#/hr)			10			10						10
Confl. Bikes (#/hr)			10			10						
Turn Type			Free			Perm				Split		Perm
Protected Phases		6			2					8	8	
Permitted Phases			Free			2						8
Actuated Green, G (s)		25.2	56.8		25.2	25.2				20.6	20.6	20.6
Effective Green, g (s)		26.5	56.8		26.5	25.2				22.3	22.3	22.3
Actuated g/C Ratio		0.47	1.00		0.47	0.44				0.39	0.39	0.39
Clearance Time (s)		5.3			5.3	5.3				5.7	5.7	5.7
Vehicle Extension (s)		3.0			3.0	3.0				2.5	2.5	2.5
Lane Grp Cap (vph)		2372	1538		1651	672				660	662	609
v/s Ratio Prot		0.18			c0.26					0.22	c0.23	
v/s Ratio Perm			0.10			0.16						0.10
v/c Ratio		0.38	0.10		0.56	0.35				0.57	0.57	0.25
Uniform Delay, d1		9.8	0.0		10.9	10.4				13.5	13.5	11.6
Progression Factor		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1		0.4	0.3				1.0	1.0	0.2
Delay (s)		10.0	0.1		11.4	10.7				14.5	14.5	11.8
Level of Service		A	A		B	B				B	B	B
Approach Delay (s)		8.5			11.1			0.0			13.9	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	11.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	56.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1431	135	0	1211	509	157	0	630	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.3		4.0	4.0		4.0	4.0			
Lane Util. Factor		0.91	1.00		0.91	1.00		1.00	0.88			
Frpb, ped/bikes		1.00	0.95		1.00	0.97		1.00	1.00			
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00			
Frt		1.00	0.85		1.00	0.85		1.00	0.85			
Flt Protected		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (prot)		5085	1507		5085	1538		1770	2787			
Flt Permitted		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (perm)		5085	1507		5085	1538		1770	2787			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1522	144	0	1288	541	167	0	670	0	0	0
RTOR Reduction (vph)	0	0	49	0	0	0	0	0	3	0	0	0
Lane Group Flow (vph)	0	1522	95	0	1288	541	0	167	667	0	0	0
Confl. Peds. (#/hr)			10			10						
Confl. Bikes (#/hr)			10			10						
Turn Type			Perm			Free	Split		custom			
Protected Phases		6			2		4	4				
Permitted Phases			6			Free			4 5			
Actuated Green, G (s)		29.8	29.8		40.6	68.4		16.8	28.7			
Effective Green, g (s)		31.1	29.8		41.9	68.4		18.5	30.4			
Actuated g/C Ratio		0.45	0.44		0.61	1.00		0.27	0.44			
Clearance Time (s)		5.3	5.3		5.3			5.7				
Vehicle Extension (s)		3.0	3.0		3.0			2.5				
Lane Grp Cap (vph)		2312	657		3115	1538		479	1239			
v/s Ratio Prot		c0.30			0.25			0.09				
v/s Ratio Perm			0.06			0.35			c0.24			
v/c Ratio		0.66	0.15		0.41	0.35		0.35	0.54			
Uniform Delay, d1		14.5	11.6		6.9	0.0		20.1	13.9			
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00			
Incremental Delay, d2		0.7	0.1		0.1	0.6		0.3	0.4			
Delay (s)		15.2	11.7		7.0	0.6		20.4	14.2			
Level of Service		B	B		A	A		C	B			
Approach Delay (s)		14.9			5.1			15.5			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	68.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	310	614	413	118	614	104	801	251	54	93	271	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.4	4.4	4.2	5.9		4.6	4.4	4.4	4.2	4.4	4.4
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	0.99		1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1525	1770	4947		3433	3539	1519	1770	3539	1525
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1525	1770	4947		3433	3539	1519	1770	3539	1525
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	330	653	439	126	653	111	852	267	57	99	288	324
RTOR Reduction (vph)	0	0	272	0	14	0	0	0	49	0	0	156
Lane Group Flow (vph)	330	653	167	126	750	0	852	267	8	99	288	168
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	22.3	33.8	33.8	13.3	24.8		37.5	16.3	16.3	41.1	19.5	19.5
Effective Green, g (s)	23.3	35.3	35.3	14.3	24.8		38.5	17.8	17.8	42.1	21.0	21.0
Actuated g/C Ratio	0.18	0.28	0.28	0.11	0.20		0.30	0.14	0.14	0.33	0.17	0.17
Clearance Time (s)	5.2	5.9	5.9	5.2	5.9		5.6	5.9	5.9	5.2	5.9	5.9
Vehicle Extension (s)	1.8	4.8	4.8	1.8	2.3		1.8	2.3	2.3	1.8	2.3	2.3
Lane Grp Cap (vph)	631	986	425	200	968		1043	497	213	588	587	253
v/s Ratio Prot	0.10	c0.18		c0.07	c0.15		c0.25	0.08		0.06	0.08	
v/s Ratio Perm			0.11						0.01			c0.11
v/c Ratio	0.52	0.66	0.39	0.63	0.78		0.82	0.54	0.04	0.17	0.49	0.66
Uniform Delay, d1	46.7	40.4	37.0	53.7	48.3		40.8	50.6	47.0	29.9	48.0	49.5
Progression Factor	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	2.1	1.2	4.7	3.7		4.8	0.7	0.0	0.0	0.4	5.5
Delay (s)	47.1	42.6	37.6	58.4	52.0		45.6	51.4	47.1	30.0	48.4	55.0
Level of Service	D	D	D	E	D		D	D	D	C	D	E
Approach Delay (s)		42.1			52.9			47.0			48.8	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	46.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	126.7	Sum of lost time (s)	19.1
Intersection Capacity Utilization	76.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	64	626	71	198	602	130	121	205	76	174	209	113
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3475		1770	3539	1510	1770	1863	1533	1770	3539	1531
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3475		1770	3539	1510	1770	1863	1533	1770	3539	1531
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	68	666	76	211	640	138	129	218	81	185	222	120
RTOR Reduction (vph)	0	6	0	0	0	92	0	0	66	0	0	94
Lane Group Flow (vph)	68	736	0	211	640	46	129	218	15	185	222	26
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	7.1	28.2		11.4	32.5	32.5	11.9	18.4	18.4	14.6	21.1	21.1
Effective Green, g (s)	7.1	28.2		11.4	32.5	32.5	11.9	18.4	18.4	14.6	21.1	21.1
Actuated g/C Ratio	0.07	0.29		0.12	0.34	0.34	0.12	0.19	0.19	0.15	0.22	0.22
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	130	1014		209	1191	508	218	355	292	268	773	334
v/s Ratio Prot	0.04	c0.21		c0.12	c0.18		0.07	c0.12		c0.10	c0.06	
v/s Ratio Perm						0.03			0.01			0.02
v/c Ratio	0.52	0.73		1.01	0.54	0.09	0.59	0.61	0.05	0.69	0.29	0.08
Uniform Delay, d1	43.1	30.7		42.6	26.0	21.9	40.1	35.8	32.0	38.9	31.5	30.0
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.7	2.6		64.7	0.5	0.1	2.9	3.1	0.1	6.1	0.2	0.1
Delay (s)	44.9	33.3		107.3	26.4	22.0	42.9	39.0	32.0	44.9	31.7	30.1
Level of Service	D	C		F	C	C	D	D	C	D	C	C
Approach Delay (s)		34.3			43.1			38.9			36.0	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM Average Control Delay	38.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	96.6	Sum of lost time (s)	36.0
Intersection Capacity Utilization	78.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	873	3	1	929	1	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	929	3	1	988	1	0
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	509			423		
pX, platoon unblocked			0.82		0.86	0.82
vC, conflicting volume			942		1445	484
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			494		821	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			867		262	874

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	464	464	3	1	494	494	1
Volume Left	0	0	0	1	0	0	1
Volume Right	0	0	3	0	0	0	0
cSH	1700	1700	1700	867	1700	1700	262
Volume to Capacity	0.27	0.27	0.00	0.00	0.29	0.29	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	9.2	0.0	0.0	18.8
Lane LOS				A			C
Approach Delay (s)	0.0			0.0			18.8
Approach LOS							C

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	35.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	865	8	9	914	16	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1533	1770	3539	1770	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1533	1770	3539	1770	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	920	9	10	972	17	4
RTOR Reduction (vph)	0	2	0	0	0	4
Lane Group Flow (vph)	920	7	10	972	17	0
Confl. Peds. (#/hr)		10				
Turn Type		Perm	Prot			Perm
Protected Phases	2		1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	47.6	47.6	0.9	55.0	1.9	1.9
Effective Green, g (s)	47.6	47.6	0.9	55.0	1.9	1.9
Actuated g/C Ratio	0.70	0.70	0.01	0.80	0.03	0.03
Clearance Time (s)	6.5	6.5	6.5	6.5	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	2.0	2.0
Lane Grp Cap (vph)	1296	1067	23	2846	49	44
v/s Ratio Prot	c0.49		0.01	c0.27	c0.01	
v/s Ratio Perm		0.00				0.00
v/c Ratio	0.71	0.01	0.43	0.34	0.35	0.00
Uniform Delay, d1	6.3	3.2	33.5	1.8	32.6	32.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.8	0.0	12.6	0.1	1.6	0.0
Delay (s)	8.1	3.2	46.1	1.9	34.2	32.3
Level of Service	A	A	D	A	C	C
Approach Delay (s)	8.0			2.3	33.8	
Approach LOS	A			A	C	

Intersection Summary			
HCM Average Control Delay	5.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	68.4	Sum of lost time (s)	18.0
Intersection Capacity Utilization	60.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	729	136	121	728	3	192	0	17	0	2	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0			5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.95			0.96	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85			0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)	1770	1863	1503	1770	1863	1504	1770	1497			1630	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.75	1.00			1.00	
Satd. Flow (perm)	1770	1863	1503	1770	1863	1504	1405	1497			1630	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	4	776	145	129	774	3	204	0	18	0	2	3
RTOR Reduction (vph)	0	0	59	0	0	1	0	14	0	0	2	0
Lane Group Flow (vph)	4	776	86	129	774	2	204	4	0	0	3	0
Confl. Peds. (#/hr)			10			10			10	10		10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Actuated Green, G (s)	1.2	49.7	49.7	10.9	59.4	59.4	19.0	19.0			19.0	
Effective Green, g (s)	1.2	49.7	49.7	10.9	59.4	59.4	19.0	19.0			19.0	
Actuated g/C Ratio	0.01	0.51	0.51	0.11	0.61	0.61	0.19	0.19			0.19	
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0			5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)	22	949	765	198	1134	915	274	291			317	
v/s Ratio Prot	0.00	c0.42		c0.07	c0.42			0.00			0.00	
v/s Ratio Perm			0.06			0.00	c0.15					
v/c Ratio	0.18	0.82	0.11	0.65	0.68	0.00	0.74	0.01			0.01	
Uniform Delay, d1	47.7	20.1	12.5	41.5	12.8	7.5	37.0	31.7			31.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	4.0	7.8	0.3	7.5	3.3	0.0	10.5	0.0			0.0	
Delay (s)	51.7	27.9	12.8	49.0	16.1	7.5	47.5	31.7			31.7	
Level of Service	D	C	B	D	B	A	D	C			C	
Approach Delay (s)		25.6			20.8			46.2			31.7	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM Average Control Delay	25.7	HCM Level of Service	C
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	97.6	Sum of lost time (s)	24.5
Intersection Capacity Utilization	79.6%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	385	114	26	239	27	22	5	22	35	5	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00			1.00			0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	0.98			0.94			0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1757	1863	1522	1761	1826			1706			1731	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.87			0.81	
Satd. Flow (perm)	1757	1863	1522	1761	1826			1516			1443	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	12	410	121	28	254	29	23	5	23	37	5	14
RTOR Reduction (vph)	0	0	78	0	5	0	0	17	0	0	11	0
Lane Group Flow (vph)	12	410	43	28	279	0	0	34	0	0	45	0
Confl. Peds. (#/hr)	10		10	10		10	10					10
Confl. Bikes (#/hr)			10			10						
Turn Type	Prot		Perm	Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2				8			4		
Actuated Green, G (s)	0.5	11.9	11.9	0.6	12.0			8.3			8.3	
Effective Green, g (s)	0.5	11.9	11.9	0.6	12.0			8.3			8.3	
Actuated g/C Ratio	0.01	0.35	0.35	0.02	0.36			0.25			0.25	
Clearance Time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0			2.0			2.0	
Lane Grp Cap (vph)	26	660	539	31	652			374			356	
v/s Ratio Prot	0.01	c0.22		c0.02	0.15							
v/s Ratio Perm			0.03					0.02			c0.03	
v/c Ratio	0.46	0.62	0.08	0.90	0.43			0.09			0.13	
Uniform Delay, d1	16.4	9.0	7.2	16.5	8.2			9.7			9.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	4.7	1.3	0.0	119.0	0.2			0.0			0.1	
Delay (s)	21.1	10.3	7.2	135.5	8.4			9.8			9.9	
Level of Service	C	B	A	F	A			A			A	
Approach Delay (s)		9.9			19.8			9.8			9.9	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	13.1	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	33.6	Sum of lost time (s)	12.8
Intersection Capacity Utilization	38.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	371	71	134	252	5	282	158
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	0.83	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1531	1770	1863	1465	1863	1512
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1531	1770	1863	1465	1863	1512
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	395	76	143	268	5	300	168
RTOR Reduction (vph)	0	51	0	0	0	0	116
Lane Group Flow (vph)	395	25	143	268	5	300	52
Confl. Peds. (#/hr)	10	10	10		10		10
Confl. Bikes (#/hr)							10
Turn Type		Perm	Prot		Prot		Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	17.2	17.2	6.8	21.6	0.6	16.2	16.2
Effective Green, g (s)	17.2	17.2	6.8	21.6	0.6	16.2	16.2
Actuated g/C Ratio	0.33	0.33	0.13	0.41	0.01	0.31	0.31
Clearance Time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Vehicle Extension (s)	2.0	2.0	1.0	2.0	1.0	2.0	2.0
Lane Grp Cap (vph)	578	500	228	764	17	573	465
v/s Ratio Prot	c0.22		c0.08	0.14	0.00	c0.16	
v/s Ratio Perm		0.02					0.03
v/c Ratio	0.68	0.05	0.63	0.35	0.29	0.52	0.11
Uniform Delay, d1	15.4	12.2	21.7	10.7	25.8	15.1	13.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.7	0.0	3.8	0.1	3.5	0.4	0.0
Delay (s)	18.1	12.2	25.6	10.8	29.3	15.5	13.1
Level of Service	B	B	C	B	C	B	B
Approach Delay (s)	17.1			16.0		14.8	
Approach LOS	B			B		B	

Intersection Summary			
HCM Average Control Delay	15.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	52.7	Sum of lost time (s)	12.5
Intersection Capacity Utilization	54.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	6	121	137	380	341	12
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	6	129	146	404	363	13
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				1267		
pX, platoon unblocked	0.76					
vC, conflicting volume	1085	389	386			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	954	389	386			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	97	80	87			
cM capacity (veh/h)	187	647	1162			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	135	550	376
Volume Left	6	146	0
Volume Right	129	0	13
cSH	579	1162	1700
Volume to Capacity	0.23	0.13	0.22
Queue Length 95th (ft)	22	11	0
Control Delay (s)	13.1	3.3	0.0
Lane LOS	B	A	
Approach Delay (s)	13.1	3.3	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	3.4		
Intersection Capacity Utilization	64.1%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	4	88	208	4	14	95	500	105	45	413	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		5.0	5.0		5.0	5.0	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.87		1.00	0.88		1.00	0.97		1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1626		1770	1642		1770	3447		1770	3533	
Flt Permitted		1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1626		1770	1642		1770	3447		1770	3533	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	3	4	94	221	4	15	101	532	112	48	439	4
RTOR Reduction (vph)	0	84	0	0	12	0	0	16	0	0	1	0
Lane Group Flow (vph)	0	17	0	221	7	0	101	628	0	48	442	0
Confl. Peds. (#/hr)							10					10
Turn Type	Split			Split			Prot			Prot		
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		7.0		14.5	14.5		6.8	21.6		2.6	17.4	
Effective Green, g (s)		7.0		14.5	14.5		6.8	21.6		2.6	17.4	
Actuated g/C Ratio		0.11		0.23	0.23		0.11	0.34		0.04	0.27	
Clearance Time (s)		4.0		4.0	4.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		179		403	374		189	1169		72	965	
v/s Ratio Prot		c0.01		c0.12	0.00		c0.06	c0.18		0.03	0.13	
v/s Ratio Perm												
v/c Ratio		0.10		0.55	0.02		0.53	0.54		0.67	0.46	
Uniform Delay, d1		25.5		21.7	19.1		27.0	17.0		30.1	19.2	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2		1.5	0.0		2.9	0.5		20.9	0.3	
Delay (s)		25.7		23.2	19.1		29.8	17.5		51.0	19.6	
Level of Service		C		C	B		C	B		D	B	
Approach Delay (s)		25.7			22.9			19.2			22.7	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM Average Control Delay	21.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	63.7	Sum of lost time (s)	18.0
Intersection Capacity Utilization	51.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	3	0	0	12	7	688	134	0	709	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	0	3	0	0	13	7	732	143	0	754	0
Pedestrians		10						10			10	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		1						1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								333			322	
pX, platoon unblocked	0.94	0.94	0.90	0.94	0.94	0.92	0.90			0.92		
vC, conflicting volume	1168	1654	397	1208	1582	447	764			874		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	689	1205	118	732	1129	237	524			699		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	98	99			100		
cM capacity (veh/h)	297	169	808	283	187	700	929			825		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	3	13	7	488	387	503	251
Volume Left	0	0	7	0	0	0	0
Volume Right	3	13	0	0	143	0	0
cSH	808	700	929	1700	1700	1700	1700
Volume to Capacity	0.00	0.02	0.01	0.29	0.23	0.30	0.15
Queue Length 95th (ft)	0	1	1	0	0	0	0
Control Delay (s)	9.5	10.2	8.9	0.0	0.0	0.0	0.0
Lane LOS	A	B	A				
Approach Delay (s)	9.5	10.2	0.1			0.0	
Approach LOS	A	B					

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	40.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	772	180	0	614	770	0	0	0	1012	5	153
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	5.3				4.0	4.0	4.0
Lane Util. Factor		0.91	1.00		0.95	1.00				0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.97		1.00	0.95				1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85				1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (prot)		5085	1538		3539	1511				1681	1686	1554
Flt Permitted		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (perm)		5085	1538		3539	1511				1681	1686	1554
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	821	191	0	653	819	0	0	0	1077	5	163
RTOR Reduction (vph)	0	0	0	0	0	503	0	0	0	0	0	86
Lane Group Flow (vph)	0	821	191	0	653	316	0	0	0	538	544	77
Confl. Peds. (#/hr)			10			10						10
Confl. Bikes (#/hr)			10			10						
Turn Type			Free			Perm				Split		Perm
Protected Phases		6			2					8	8	
Permitted Phases			Free			2						8
Actuated Green, G (s)		24.7	64.0		24.7	24.7				28.3	28.3	28.3
Effective Green, g (s)		26.0	64.0		26.0	24.7				30.0	30.0	30.0
Actuated g/C Ratio		0.41	1.00		0.41	0.39				0.47	0.47	0.47
Clearance Time (s)		5.3			5.3	5.3				5.7	5.7	5.7
Vehicle Extension (s)		3.0			3.0	3.0				2.5	2.5	2.5
Lane Grp Cap (vph)		2066	1538		1438	583				788	790	728
v/s Ratio Prot		0.16			0.18					0.32	c0.32	
v/s Ratio Perm			0.12			c0.21						0.05
v/c Ratio		0.40	0.12		0.45	0.54				0.68	0.69	0.11
Uniform Delay, d1		13.5	0.0		13.8	15.3				13.3	13.3	9.5
Progression Factor		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Incremental Delay, d2		0.1	0.2		0.2	1.0				2.2	2.3	0.0
Delay (s)		13.6	0.2		14.1	16.3				15.5	15.6	9.6
Level of Service		B	A		B	B				B	B	A
Approach Delay (s)		11.0			15.3			0.0			14.8	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	64.0	Sum of lost time (s)	9.3
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1530	254	0	1109	781	275	1	957	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.3		4.0	4.0		4.0	4.0			
Lane Util. Factor		0.91	1.00		0.91	1.00		1.00	0.88			
Frpb, ped/bikes		1.00	0.95		1.00	0.97		1.00	1.00			
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00			
Frt		1.00	0.85		1.00	0.85		1.00	0.85			
Flt Protected		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (prot)		5085	1497		5085	1538		1774	2787			
Flt Permitted		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (perm)		5085	1497		5085	1538		1774	2787			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1628	270	0	1180	831	293	1	1018	0	0	0
RTOR Reduction (vph)	0	0	89	0	0	0	0	0	2	0	0	0
Lane Group Flow (vph)	0	1628	181	0	1180	831	0	294	1016	0	0	0
Confl. Peds. (#/hr)			10			10						
Confl. Bikes (#/hr)			10			10						
Turn Type			Perm			Free	Split		custom			
Protected Phases		6			2		4	4				
Permitted Phases			6			Free			4 5			
Actuated Green, G (s)		36.7	36.7		57.6	89.0		20.4	42.4			
Effective Green, g (s)		38.0	36.7		58.9	89.0		22.1	44.1			
Actuated g/C Ratio		0.43	0.41		0.66	1.00		0.25	0.50			
Clearance Time (s)		5.3	5.3		5.3			5.7				
Vehicle Extension (s)		3.0	3.0		3.0			2.5				
Lane Grp Cap (vph)		2171	617		3365	1538		441	1381			
v/s Ratio Prot		c0.32			0.23			0.17				
v/s Ratio Perm			0.12			0.54			c0.36			
v/c Ratio		0.75	0.29		0.35	0.54		0.67	0.74			
Uniform Delay, d1		21.5	17.5		6.6	0.0		30.1	17.8			
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00			
Incremental Delay, d2		1.5	0.3		0.1	1.4		3.4	2.0			
Delay (s)		23.0	17.8		6.7	1.4		33.5	19.8			
Level of Service		C	B		A	A		C	B			
Approach Delay (s)		22.2			4.5			22.9			0.0	
Approach LOS		C			A			C			A	

Intersection Summary			
HCM Average Control Delay	15.6	HCM Level of Service	B
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	89.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	415	1019	448	53	831	98	711	241	47	114	232	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.4	4.4	4.2	5.9		4.6	4.4	4.4	4.2	4.4	4.4
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1528	1770	4986		3433	3539	1516	1770	3539	1519
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1528	1770	4986		3433	3539	1516	1770	3539	1519
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	441	1084	477	56	884	104	756	256	50	121	247	370
RTOR Reduction (vph)	0	0	170	0	8	0	0	0	43	0	0	265
Lane Group Flow (vph)	441	1084	307	56	980	0	756	256	7	121	247	105
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	28.4	53.9	53.9	7.3	32.8		33.1	16.0	16.0	34.0	16.5	16.5
Effective Green, g (s)	29.4	55.4	55.4	8.3	32.8		34.1	17.5	17.5	35.0	18.0	18.0
Actuated g/C Ratio	0.22	0.42	0.42	0.06	0.25		0.26	0.13	0.13	0.26	0.13	0.13
Clearance Time (s)	5.2	5.9	5.9	5.2	5.9		5.6	5.9	5.9	5.2	5.9	5.9
Vehicle Extension (s)	1.8	4.8	4.8	1.8	2.3		1.8	2.3	2.3	1.8	2.3	2.3
Lane Grp Cap (vph)	757	1470	635	110	1226		878	464	199	464	478	205
v/s Ratio Prot	c0.13	c0.31		0.03	0.20		c0.22	0.07		0.07	c0.07	
v/s Ratio Perm			0.20						0.00			0.07
v/c Ratio	0.58	0.74	0.48	0.51	0.80		0.86	0.55	0.03	0.26	0.52	0.51
Uniform Delay, d1	46.5	32.9	28.5	60.6	47.2		47.4	54.3	50.6	39.0	53.7	53.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.7	2.3	1.1	1.3	3.6		8.4	1.0	0.0	0.1	0.6	1.3
Delay (s)	47.3	35.2	29.6	61.9	50.8		55.8	55.3	50.6	39.1	54.2	55.0
Level of Service	D	D	C	E	D		E	E	D	D	D	D
Approach Delay (s)		36.5			51.4			55.4			52.1	
Approach LOS		D			D			E			D	

Intersection Summary			
HCM Average Control Delay	46.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	133.4	Sum of lost time (s)	13.4
Intersection Capacity Utilization	79.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	294	822	64	187	646	242	95	293	82	286	185	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3494		1770	5085	1537	1770	3539	1529	1770	3539	1531
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3494		1770	5085	1537	1770	3539	1529	1770	3539	1531
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	313	874	68	199	687	257	101	312	87	304	197	256
RTOR Reduction (vph)	0	4	0	0	0	182	0	0	73	0	0	195
Lane Group Flow (vph)	313	938	0	199	687	75	101	312	14	304	197	61
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	14.2	33.6		11.2	30.6	30.6	10.6	17.1	17.1	18.3	24.8	24.8
Effective Green, g (s)	14.2	33.6		11.2	30.6	30.6	10.6	17.1	17.1	18.3	24.8	24.8
Actuated g/C Ratio	0.14	0.32		0.11	0.29	0.29	0.10	0.16	0.16	0.18	0.24	0.24
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	241	1127		190	1493	451	180	581	251	311	842	364
v/s Ratio Prot	c0.18	c0.27		0.11	0.14		0.06	c0.09		c0.17	0.06	
v/s Ratio Perm						0.05			0.01			0.04
v/c Ratio	1.30	0.83		1.05	0.46	0.17	0.56	0.54	0.06	0.98	0.23	0.17
Uniform Delay, d1	45.0	32.7		46.5	30.1	27.3	44.6	39.9	36.7	42.7	32.0	31.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	161.5	5.4		78.3	0.2	0.2	2.4	1.0	0.1	44.3	0.1	0.2
Delay (s)	206.5	38.1		124.8	30.3	27.5	47.0	40.9	36.8	87.0	32.2	31.7
Level of Service	F	D		F	C	C	D	D	D	F	C	C
Approach Delay (s)		80.1			46.1			41.4			54.0	
Approach LOS		F			D			D			D	

Intersection Summary			
HCM Average Control Delay	58.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	104.2	Sum of lost time (s)	24.0
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1186	4	1	1045	7	1
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	1262	4	1	1112	7	1
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	509			422		
pX, platoon unblocked			0.82		0.90	0.82
vC, conflicting volume			1276		1657	443
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			580		132	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		99	100
cM capacity (veh/h)			806		752	875

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	505	505	257	1	371	371	371	9
Volume Left	0	0	0	1	0	0	0	7
Volume Right	0	0	4	0	0	0	0	1
cSH	1700	1700	1700	806	1700	1700	1700	765
Volume to Capacity	0.30	0.30	0.15	0.00	0.22	0.22	0.22	0.01
Queue Length 95th (ft)	0	0	0	0	0	0	0	1
Control Delay (s)	0.0	0.0	0.0	9.5	0.0	0.0	0.0	9.8
Lane LOS				A				A
Approach Delay (s)	0.0			0.0				9.8
Approach LOS								A

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	65	1107	15	30	885	84	44	4	8	74	4	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5		6.5	6.5		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99		1.00	0.90		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3530		1770	3493		1770	1669		1770	1592	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3530		1770	3493		1770	1669		1770	1592	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	69	1178	16	32	941	89	47	4	9	79	4	124
RTOR Reduction (vph)	0	1	0	0	5	0	0	8	0	0	106	0
Lane Group Flow (vph)	69	1193	0	32	1025	0	47	5	0	79	22	0
Confl. Peds. (#/hr)			10									
Turn Type	Prot			Prot			Split			Split		
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												
Actuated Green, G (s)	6.9	46.5		3.8	43.4		11.5	11.5		14.7	14.7	
Effective Green, g (s)	6.9	46.5		3.8	43.4		11.5	11.5		14.7	14.7	
Actuated g/C Ratio	0.07	0.47		0.04	0.44		0.12	0.12		0.15	0.15	
Clearance Time (s)	6.5	6.5		6.5	6.5		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	123	1650		68	1524		205	193		261	235	
v/s Ratio Prot	c0.04	c0.34		0.02	0.29		c0.03	0.00		c0.04	0.01	
v/s Ratio Perm												
v/c Ratio	0.56	0.72		0.47	0.67		0.23	0.03		0.30	0.09	
Uniform Delay, d1	44.8	21.3		46.9	22.4		40.0	39.0		37.8	36.7	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	5.7	1.6		5.1	1.2		0.6	0.1		0.7	0.2	
Delay (s)	50.6	22.9		51.9	23.6		40.5	39.1		38.5	36.8	
Level of Service	D	C		D	C		D	D		D	D	
Approach Delay (s)		24.4			24.4			40.2			37.5	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	25.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	99.5	Sum of lost time (s)	23.0
Intersection Capacity Utilization	67.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	851	331	95	755	3	230	4	49	8	5	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.95		1.00	0.96	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.86		1.00	0.89	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1503	1770	1863	1504	1770	1525		1743	1581	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.74	1.00		0.72	1.00	
Satd. Flow (perm)	1770	1863	1503	1770	1863	1504	1386	1525		1322	1581	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	7	905	352	101	803	3	245	4	52	9	5	15
RTOR Reduction (vph)	0	0	125	0	0	1	0	40	0	0	12	0
Lane Group Flow (vph)	7	905	227	101	803	2	245	16	0	9	8	0
Confl. Peds. (#/hr)			10			10			10	10		10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Actuated Green, G (s)	1.2	49.5	49.5	8.3	56.6	56.6	21.7	21.7		21.7	21.7	
Effective Green, g (s)	1.2	49.5	49.5	8.3	56.6	56.6	21.7	21.7		21.7	21.7	
Actuated g/C Ratio	0.01	0.51	0.51	0.09	0.58	0.58	0.22	0.22		0.22	0.22	
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	22	946	763	151	1081	873	308	339		294	352	
v/s Ratio Prot	0.00	c0.49		c0.06	c0.43			0.01			0.01	
v/s Ratio Perm			0.15			0.00	c0.18			0.01		
v/c Ratio	0.32	0.96	0.30	0.67	0.74	0.00	0.80	0.05		0.03	0.02	
Uniform Delay, d1	47.7	23.0	13.9	43.3	15.1	8.6	35.8	29.8		29.7	29.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.2	20.5	1.0	10.7	4.6	0.0	13.2	0.1		0.0	0.0	
Delay (s)	55.9	43.5	14.9	54.0	19.7	8.6	49.0	29.8		29.7	29.6	
Level of Service	E	D	B	D	B	A	D	C		C	C	
Approach Delay (s)		35.6			23.5			45.5			29.7	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM Average Control Delay	32.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	97.5	Sum of lost time (s)	24.5
Intersection Capacity Utilization	86.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	1190	984	68	0	91
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	1266	1047	72	0	97
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		396	535			
pX, platoon unblocked	0.85				0.88	0.85
vC, conflicting volume	1119				1505	385
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	531				0	0
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	90
cM capacity (veh/h)	880				903	924

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	422	422	422	419	419	282	97
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	72	97
cSH	1700	1700	1700	1700	1700	1700	924
Volume to Capacity	0.25	0.25	0.25	0.25	0.25	0.17	0.10
Queue Length 95th (ft)	0	0	0	0	0	0	9
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.4
Lane LOS							A
Approach Delay (s)	0.0			0.0			9.4
Approach LOS							A

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	32.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	517	0	0	462
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	0	550	0	0	491
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			333			
pX, platoon unblocked	0.87	0.87			0.87	
vC, conflicting volume	796	275			550	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	478	0			196	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	451	948			1201	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	0	367	183	0	246	246
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.22	0.11	0.00	0.14	0.14
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	0.0	0.0		0.0		
Approach LOS	A					

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	17.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	164	52	24	154	39	28	4	20	40	18	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	0.99			1.00			0.99	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	0.97			0.95			0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1770	1863	1521	1758	1791			1715			1695	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.82			0.88	
Satd. Flow (perm)	1770	1863	1521	1758	1791			1444			1513	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	45	174	55	26	164	41	30	4	21	43	19	52
RTOR Reduction (vph)	0	0	37	0	11	0	0	15	0	0	28	0
Lane Group Flow (vph)	45	174	18	26	195	0	0	40	0	0	86	0
Confl. Peds. (#/hr)	10		10	10		10	10					10
Confl. Bikes (#/hr)			10			10						
Turn Type	Prot		Perm	Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2				8			4		
Actuated Green, G (s)	1.6	10.9	10.9	0.6	9.9			8.7			8.7	
Effective Green, g (s)	1.6	10.9	10.9	0.6	9.9			8.7			8.7	
Actuated g/C Ratio	0.05	0.33	0.33	0.02	0.30			0.26			0.26	
Clearance Time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0			2.0			2.0	
Lane Grp Cap (vph)	86	615	502	32	537			381			399	
v/s Ratio Prot	c0.03	0.09		0.01	c0.11							
v/s Ratio Perm			0.01					0.03			c0.06	
v/c Ratio	0.52	0.28	0.04	0.81	0.36			0.10			0.22	
Uniform Delay, d1	15.3	8.2	7.5	16.1	9.1			9.2			9.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	2.6	0.1	0.0	81.6	0.2			0.0			0.1	
Delay (s)	18.0	8.3	7.5	97.7	9.2			9.2			9.6	
Level of Service	B	A	A	F	A			A			A	
Approach Delay (s)		9.7			19.2			9.2			9.6	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	33.0	Sum of lost time (s)	12.8
Intersection Capacity Utilization	36.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	134	90	101	202	2	258	116
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	0.85	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1536	1770	1863	1511	1863	1522
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1536	1770	1863	1511	1863	1522
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	143	96	107	215	2	274	123
RTOR Reduction (vph)	0	78	0	0	0	0	72
Lane Group Flow (vph)	143	18	107	215	2	274	51
Confl. Peds. (#/hr)	10	10	10		10		10
Confl. Bikes (#/hr)							10
Turn Type		Perm	Prot		Prot		Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	7.8	7.8	3.9	20.0	0.5	17.4	17.4
Effective Green, g (s)	7.8	7.8	3.9	20.0	0.5	17.4	17.4
Actuated g/C Ratio	0.19	0.19	0.09	0.48	0.01	0.42	0.42
Clearance Time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Vehicle Extension (s)	2.0	2.0	1.0	2.0	1.0	2.0	2.0
Lane Grp Cap (vph)	332	288	166	896	18	779	637
v/s Ratio Prot	c0.08		c0.06	c0.12	0.00	c0.15	
v/s Ratio Perm		0.01					0.03
v/c Ratio	0.43	0.06	0.64	0.24	0.11	0.35	0.08
Uniform Delay, d1	14.9	13.9	18.2	6.3	20.3	8.3	7.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.0	6.3	0.1	1.0	0.1	0.0
Delay (s)	15.3	13.9	24.5	6.4	21.3	8.4	7.3
Level of Service	B	B	C	A	C	A	A
Approach Delay (s)	14.7			12.4		8.1	
Approach LOS	B			B		A	

Intersection Summary			
HCM Average Control Delay	11.2	HCM Level of Service	B
HCM Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	41.6	Sum of lost time (s)	18.3
Intersection Capacity Utilization	40.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	12	118	87	291	338	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	13	126	93	310	360	11
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				1267		
pX, platoon unblocked	0.84					
vC, conflicting volume	880	385	380			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	759	385	380			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	81	92			
cM capacity (veh/h)	283	650	1167			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	138	402	370
Volume Left	13	93	0
Volume Right	126	0	11
cSH	581	1167	1700
Volume to Capacity	0.24	0.08	0.22
Queue Length 95th (ft)	23	6	0
Control Delay (s)	13.1	2.5	0.0
Lane LOS	B	A	
Approach Delay (s)	13.1	2.5	0.0
Approach LOS	B		

Intersection Summary			
Average Delay	3.1		
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	6	88	265	5	16	63	361	141	64	390	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		5.0	5.0		5.0	5.0	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.87		1.00	0.88		1.00	0.96		1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1628		1770	1647		1770	3390		1770	3536	
Flt Permitted		1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1628		1770	1647		1770	3390		1770	3536	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1	6	94	282	5	17	67	384	150	68	415	2
RTOR Reduction (vph)	0	83	0	0	13	0	0	41	0	0	0	0
Lane Group Flow (vph)	0	18	0	282	9	0	67	493	0	68	417	0
Confl. Peds. (#/hr)							10					10
Turn Type	Split			Split			Prot			Prot		
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		7.0		15.8	15.8		3.7	15.7		3.7	15.7	
Effective Green, g (s)		7.0		15.8	15.8		3.7	15.7		3.7	15.7	
Actuated g/C Ratio		0.12		0.26	0.26		0.06	0.26		0.06	0.26	
Clearance Time (s)		4.0		4.0	4.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		189		465	432		109	884		109	922	
v/s Ratio Prot		c0.01		c0.16	0.01		0.04	c0.15		c0.04	0.12	
v/s Ratio Perm												
v/c Ratio		0.09		0.61	0.02		0.61	0.56		0.62	0.45	
Uniform Delay, d1		23.8		19.5	16.5		27.6	19.2		27.6	18.6	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2		2.2	0.0		9.9	0.8		10.6	0.4	
Delay (s)		24.0		21.7	16.5		37.4	20.0		38.2	19.0	
Level of Service		C		C	B		D	C		D	B	
Approach Delay (s)		24.0			21.3			22.0			21.7	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	21.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	60.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	14	1	551	183	0	743	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	0	0	0	0	15	1	586	195	0	790	0
Pedestrians		10						10			10	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		1						1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								333			322	
pX, platoon unblocked	0.94	0.94	0.91	0.94	0.94	0.95	0.91			0.95		
vC, conflicting volume	1121	1583	415	1091	1486	400	800			781		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	731	1225	158	700	1122	250	582			653		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	98	100			100		
cM capacity (veh/h)	276	164	767	300	190	702	891			879		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	0	15	1	391	390	527	263
Volume Left	0	0	1	0	0	0	0
Volume Right	0	15	0	0	195	0	0
cSH	1700	702	891	1700	1700	1700	1700
Volume to Capacity	0.00	0.02	0.00	0.23	0.23	0.31	0.15
Queue Length 95th (ft)	0	2	0	0	0	0	0
Control Delay (s)	0.0	10.2	9.0	0.0	0.0	0.0	0.0
Lane LOS	A	B	A				
Approach Delay (s)	0.0	10.2	0.0			0.0	
Approach LOS	A	B					

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	31.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	884	150	0	895	683	0	0	0	796	2	184
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	5.3				4.0	4.0	4.0
Lane Util. Factor		0.91	1.00		0.95	1.00				0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.97		1.00	0.96				1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85				1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (prot)		5085	1538		3539	1513				1681	1686	1553
Flt Permitted		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (perm)		5085	1538		3539	1513				1681	1686	1553
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	940	160	0	952	727	0	0	0	847	2	196
RTOR Reduction (vph)	0	0	0	0	0	397	0	0	0	0	0	39
Lane Group Flow (vph)	0	940	160	0	952	330	0	0	0	423	426	157
Confl. Peds. (#/hr)			10			10						10
Confl. Bikes (#/hr)			10			10						
Turn Type			Free			Perm				Split		Perm
Protected Phases		6			2					8	8	
Permitted Phases			Free			2						8
Actuated Green, G (s)		29.4	64.8		29.4	29.4				24.4	24.4	24.4
Effective Green, g (s)		30.7	64.8		30.7	29.4				26.1	26.1	26.1
Actuated g/C Ratio		0.47	1.00		0.47	0.45				0.40	0.40	0.40
Clearance Time (s)		5.3			5.3	5.3				5.7	5.7	5.7
Vehicle Extension (s)		3.0			3.0	3.0				2.5	2.5	2.5
Lane Grp Cap (vph)		2409	1538		1677	686				677	679	626
v/s Ratio Prot		0.18			c0.27					0.25	c0.25	
v/s Ratio Perm			0.10			0.22						0.10
v/c Ratio		0.39	0.10		0.57	0.48				0.62	0.63	0.25
Uniform Delay, d1		11.0	0.0		12.3	12.4				15.4	15.5	12.9
Progression Factor		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1		0.4	0.5				1.6	1.6	0.2
Delay (s)		11.1	0.1		12.7	12.9				17.0	17.0	13.0
Level of Service		B	A		B	B				B	B	B
Approach Delay (s)		9.5			12.8			0.0			16.3	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	64.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1545	135	0	1421	588	157	0	830	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.3		4.0	4.0		4.0	4.0			
Lane Util. Factor		0.91	1.00		0.91	1.00		1.00	0.88			
Frpb, ped/bikes		1.00	0.95		1.00	0.97		1.00	1.00			
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00			
Frt		1.00	0.85		1.00	0.85		1.00	0.85			
Flt Protected		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (prot)		5085	1500		5085	1538		1770	2787			
Flt Permitted		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (perm)		5085	1500		5085	1538		1770	2787			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1644	144	0	1512	626	167	0	883	0	0	0
RTOR Reduction (vph)	0	0	47	0	0	0	0	0	2	0	0	0
Lane Group Flow (vph)	0	1644	97	0	1512	626	0	167	881	0	0	0
Confl. Peds. (#/hr)			10			10						
Confl. Bikes (#/hr)			10			10						
Turn Type			Perm			Free	Split		custom			
Protected Phases		6			2		4	4				
Permitted Phases			6			Free			4 5			
Actuated Green, G (s)		33.9	33.9		51.9	82.3		19.4	38.5			
Effective Green, g (s)		35.2	33.9		53.2	82.3		21.1	40.2			
Actuated g/C Ratio		0.43	0.41		0.65	1.00		0.26	0.49			
Clearance Time (s)		5.3	5.3		5.3			5.7				
Vehicle Extension (s)		3.0	3.0		3.0			2.5				
Lane Grp Cap (vph)		2175	618		3287	1538		454	1361			
v/s Ratio Prot		c0.32			0.30			0.09				
v/s Ratio Perm			0.06			0.41			c0.32			
v/c Ratio		0.76	0.16		0.46	0.41		0.37	0.65			
Uniform Delay, d1		19.9	15.2		7.3	0.0		25.1	15.8			
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00			
Incremental Delay, d2		1.5	0.1		0.1	0.8		0.4	0.9			
Delay (s)		21.5	15.3		7.4	0.8		25.5	16.7			
Level of Service		C	B		A	A		C	B			
Approach Delay (s)		21.0			5.5			18.1			0.0	
Approach LOS		C			A			B			A	

Intersection Summary			
HCM Average Control Delay	13.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	82.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	65.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	310	928	413	118	903	104	801	251	54	93	271	305
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.4	4.4	4.2	5.9		4.6	4.4	4.4	4.2	4.4	4.4
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1525	1770	4988		3433	3539	1517	1770	3539	1523
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1525	1770	4988		3433	3539	1517	1770	3539	1523
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	330	987	439	126	961	111	852	267	57	99	288	324
RTOR Reduction (vph)	0	0	175	0	8	0	0	0	49	0	0	155
Lane Group Flow (vph)	330	987	264	126	1064	0	852	267	8	99	288	169
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	19.1	38.0	38.0	13.2	32.1		37.5	16.3	16.3	41.4	19.8	19.8
Effective Green, g (s)	20.1	39.5	39.5	14.2	32.1		38.5	17.8	17.8	42.4	21.3	21.3
Actuated g/C Ratio	0.15	0.30	0.30	0.11	0.24		0.29	0.14	0.14	0.32	0.16	0.16
Clearance Time (s)	5.2	5.9	5.9	5.2	5.9		5.6	5.9	5.9	5.2	5.9	5.9
Vehicle Extension (s)	1.8	4.8	4.8	1.8	2.3		1.8	2.3	2.3	1.8	2.3	2.3
Lane Grp Cap (vph)	526	1066	459	192	1221		1008	481	206	572	575	247
v/s Ratio Prot	c0.10	c0.28		0.07	0.21		c0.25	0.08		0.06	0.08	
v/s Ratio Perm			0.17						0.01			c0.11
v/c Ratio	0.63	0.93	0.58	0.66	0.87		0.85	0.56	0.04	0.17	0.50	0.68
Uniform Delay, d1	52.0	44.4	38.7	56.1	47.5		43.5	52.9	49.2	31.8	50.1	51.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.7	13.7	2.6	6.0	7.0		6.4	1.0	0.0	0.1	0.4	6.6
Delay (s)	53.7	58.1	41.3	62.1	54.5		49.9	53.9	49.3	31.8	50.5	58.4
Level of Service	D	E	D	E	D		D	D	D	C	D	E
Approach Delay (s)		53.0			55.3			50.8			51.5	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM Average Control Delay	52.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	131.1	Sum of lost time (s)	13.4
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	350	654	71	229	756	161	121	224	86	290	205	248
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3477		1770	5085	1536	1770	3539	1529	1770	3539	1532
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3477		1770	5085	1536	1770	3539	1529	1770	3539	1532
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	372	696	76	244	804	171	129	238	91	309	218	264
RTOR Reduction (vph)	0	6	0	0	0	128	0	0	77	0	0	205
Lane Group Flow (vph)	372	766	0	244	804	43	129	238	14	309	218	59
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	14.3	26.8		11.3	23.8	23.8	11.8	14.8	14.8	18.4	21.4	21.4
Effective Green, g (s)	14.3	26.8		11.3	23.8	23.8	11.8	14.8	14.8	18.4	21.4	21.4
Actuated g/C Ratio	0.15	0.28		0.12	0.25	0.25	0.12	0.16	0.16	0.19	0.22	0.22
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	266	978		210	1270	384	219	550	237	342	795	344
v/s Ratio Prot	c0.21	c0.22		0.14	0.16		0.07	c0.07		c0.17	0.06	
v/s Ratio Perm						0.03			0.01			0.04
v/c Ratio	1.40	0.78		1.16	0.63	0.11	0.59	0.43	0.06	0.90	0.27	0.17
Uniform Delay, d1	40.5	31.6		42.0	31.9	27.6	39.5	36.4	34.3	37.6	30.5	29.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	200.6	4.1		112.6	1.0	0.1	2.6	0.5	0.1	25.5	0.2	0.2
Delay (s)	241.1	35.7		154.6	32.9	27.7	42.1	37.0	34.4	63.1	30.7	30.0
Level of Service	F	D		F	C	C	D	D	C	E	C	C
Approach Delay (s)		102.5			56.5			37.9			43.1	
Approach LOS		F			E			D			D	

Intersection Summary			
HCM Average Control Delay	65.8	HCM Level of Service	E
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	95.3	Sum of lost time (s)	24.0
Intersection Capacity Utilization	85.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1027	3	1	1128	1	0
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	1093	3	1	1200	1	0
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	509			422		
pX, platoon unblocked			0.89		0.86	0.89
vC, conflicting volume			1106		1516	386
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			702		212	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			100		100	100
cM capacity (veh/h)			789		640	951

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	437	437	222	1	400	400	400	1
Volume Left	0	0	0	1	0	0	0	1
Volume Right	0	0	3	0	0	0	0	0
cSH	1700	1700	1700	789	1700	1700	1700	640
Volume to Capacity	0.26	0.26	0.13	0.00	0.24	0.24	0.24	0.00
Queue Length 95th (ft)	0	0	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	9.6	0.0	0.0	0.0	10.6
Lane LOS				A				B
Approach Delay (s)	0.0			0.0				10.6
Approach LOS								B

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	31.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	931	8	9	964	121	16	6	4	92	5	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5		6.5	6.5		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.98		1.00	0.94		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3533		1770	3480		1770	1751		1770	1592	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3533		1770	3480		1770	1751		1770	1592	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	94	990	9	10	1026	129	17	6	4	98	5	159
RTOR Reduction (vph)	0	0	0	0	6	0	0	4	0	0	136	0
Lane Group Flow (vph)	94	999	0	10	1149	0	17	6	0	98	28	0
Confl. Peds. (#/hr)			10									
Turn Type	Prot			Prot			Split			Split		
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												
Actuated Green, G (s)	10.8	55.8		0.9	45.9		9.2	9.2		15.4	15.4	
Effective Green, g (s)	10.8	55.8		0.9	45.9		9.2	9.2		15.4	15.4	
Actuated g/C Ratio	0.10	0.53		0.01	0.44		0.09	0.09		0.15	0.15	
Clearance Time (s)	6.5	6.5		6.5	6.5		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	183	1890		15	1531		156	154		261	235	
v/s Ratio Prot	c0.05	c0.28		0.01	c0.33		c0.01	0.00		c0.06	0.02	
v/s Ratio Perm												
v/c Ratio	0.51	0.53		0.67	0.75		0.11	0.04		0.38	0.12	
Uniform Delay, d1	44.3	15.7		51.6	24.4		43.8	43.5		40.1	38.6	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	2.4	0.3		75.9	2.1		0.3	0.1		0.9	0.2	
Delay (s)	46.7	16.0		127.4	26.5		44.1	43.6		41.0	38.8	
Level of Service	D	B		F	C		D	D		D	D	
Approach Delay (s)		18.6			27.4			43.9			39.6	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM Average Control Delay	25.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	104.3	Sum of lost time (s)	29.5
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	834	189	121	842	3	249	0	17	0	2	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0			5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.95			0.97	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85			0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)	1770	1863	1500	1770	1863	1502	1770	1500			1637	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.75	1.00			1.00	
Satd. Flow (perm)	1770	1863	1500	1770	1863	1502	1405	1500			1637	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	4	887	201	129	896	3	265	0	18	0	2	3
RTOR Reduction (vph)	0	0	75	0	0	1	0	14	0	0	2	0
Lane Group Flow (vph)	4	887	126	129	896	2	265	4	0	0	3	0
Confl. Peds. (#/hr)			10			10			10	10		10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Actuated Green, G (s)	1.2	49.8	49.8	10.9	59.5	59.5	23.2	23.2			23.2	
Effective Green, g (s)	1.2	49.8	49.8	10.9	59.5	59.5	23.2	23.2			23.2	
Actuated g/C Ratio	0.01	0.49	0.49	0.11	0.58	0.58	0.23	0.23			0.23	
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0			5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)	21	910	733	189	1088	877	320	342			373	
v/s Ratio Prot	0.00	c0.48		c0.07	c0.48			0.00			0.00	
v/s Ratio Perm			0.08			0.00	c0.19					
v/c Ratio	0.19	0.97	0.17	0.68	0.82	0.00	0.83	0.01			0.01	
Uniform Delay, d1	49.9	25.4	14.5	43.8	17.0	8.8	37.5	30.5			30.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	4.4	24.3	0.5	9.7	7.1	0.0	16.0	0.0			0.0	
Delay (s)	54.3	49.7	15.0	53.6	24.1	8.8	53.4	30.5			30.4	
Level of Service	D	D	B	D	C	A	D	C			C	
Approach Delay (s)		43.4			27.7			52.0			30.4	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM Average Control Delay	37.7	HCM Level of Service	D
HCM Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	101.9	Sum of lost time (s)	24.5
Intersection Capacity Utilization	87.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	1030	1030	99	0	116
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	1096	1096	105	0	123
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		396	535			
pX, platoon unblocked	0.83				0.89	0.83
vC, conflicting volume	1201				1514	418
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	523				207	0
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	86
cM capacity (veh/h)	862				681	900

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	365	365	365	438	438	324	123
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	105	123
cSH	1700	1700	1700	1700	1700	1700	900
Volume to Capacity	0.21	0.21	0.21	0.26	0.26	0.19	0.14
Queue Length 95th (ft)	0	0	0	0	0	0	12
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	9.6
Lane LOS							A
Approach Delay (s)	0.0			0.0			9.6
Approach LOS							A

Intersection Summary			
Average Delay	0.5		
Intersection Capacity Utilization	36.0%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	378	0	0	456
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	0	402	0	0	485
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			333			
pX, platoon unblocked	0.91	0.91			0.91	
vC, conflicting volume	645	201			402	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	425	0			160	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	510	992			1296	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	0	268	134	0	243	243
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.16	0.08	0.00	0.14	0.14
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	0.0	0.0		0.0		
Approach LOS	A					

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	15.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	398	114	26	245	27	22	5	22	35	5	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00			1.00			0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	0.98			0.94			0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1757	1863	1522	1761	1827			1706			1731	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.87			0.81	
Satd. Flow (perm)	1757	1863	1522	1761	1827			1517			1443	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	12	423	121	28	261	29	23	5	23	37	5	14
RTOR Reduction (vph)	0	0	74	0	4	0	0	17	0	0	11	0
Lane Group Flow (vph)	12	423	47	28	286	0	0	34	0	0	45	0
Confl. Peds. (#/hr)	10		10	10		10	10					10
Confl. Bikes (#/hr)			10			10						
Turn Type	Prot		Perm	Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2				8			4		
Actuated Green, G (s)	0.5	12.9	12.9	0.6	13.0			8.4			8.4	
Effective Green, g (s)	0.5	12.9	12.9	0.6	13.0			8.4			8.4	
Actuated g/C Ratio	0.01	0.37	0.37	0.02	0.37			0.24			0.24	
Clearance Time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0			2.0			2.0	
Lane Grp Cap (vph)	25	693	566	30	684			367			349	
v/s Ratio Prot	0.01	c0.23		c0.02	0.16							
v/s Ratio Perm			0.03					0.02			c0.03	
v/c Ratio	0.48	0.61	0.08	0.93	0.42			0.09			0.13	
Uniform Delay, d1	17.0	8.9	7.1	17.0	8.0			10.2			10.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	5.2	1.1	0.0	134.2	0.2			0.0			0.1	
Delay (s)	22.2	10.0	7.1	151.2	8.2			10.2			10.4	
Level of Service	C	A	A	F	A			B			B	
Approach Delay (s)		9.6			20.8			10.2			10.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM Average Control Delay	13.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	34.7	Sum of lost time (s)	12.8
Intersection Capacity Utilization	38.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	385	70	133	422	5	403	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	0.85	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1529	1770	1863	1503	1863	1512
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1529	1770	1863	1503	1863	1512
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	410	74	141	449	5	429	176
RTOR Reduction (vph)	0	50	0	0	0	0	114
Lane Group Flow (vph)	410	24	141	449	5	429	62
Confl. Peds. (#/hr)	10	10	10		10		10
Confl. Bikes (#/hr)							10
Turn Type		Perm	Prot		Prot		Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	19.0	19.0	7.1	26.5	0.6	20.8	20.8
Effective Green, g (s)	19.0	19.0	7.1	26.5	0.6	20.8	20.8
Actuated g/C Ratio	0.32	0.32	0.12	0.45	0.01	0.35	0.35
Clearance Time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Vehicle Extension (s)	2.0	2.0	1.0	2.0	1.0	2.0	2.0
Lane Grp Cap (vph)	566	489	212	831	15	652	529
v/s Ratio Prot	c0.23		c0.08	0.24	0.00	c0.23	
v/s Ratio Perm		0.02					0.04
v/c Ratio	0.72	0.05	0.67	0.54	0.33	0.66	0.12
Uniform Delay, d1	17.9	14.0	25.0	12.0	29.2	16.3	13.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.9	0.0	6.0	0.4	4.7	1.8	0.0
Delay (s)	21.8	14.0	31.0	12.4	33.9	18.1	13.1
Level of Service	C	B	C	B	C	B	B
Approach Delay (s)	20.6			16.8		16.8	
Approach LOS	C			B		B	

Intersection Summary			
HCM Average Control Delay	17.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	59.4	Sum of lost time (s)	12.5
Intersection Capacity Utilization	60.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	6	118	133	549	462	12
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	6	126	141	584	491	13
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1385	518	514			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1385	518	514			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	95	77	86			
cM capacity (veh/h)	134	547	1041			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	132	726	504
Volume Left	6	141	0
Volume Right	126	0	13
cSH	476	1041	1700
Volume to Capacity	0.28	0.14	0.30
Queue Length 95th (ft)	28	12	0
Control Delay (s)	15.4	3.3	0.0
Lane LOS	C	A	
Approach Delay (s)	15.4	3.3	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	3.2		
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	3	91	98	679	576	4
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	3	97	104	722	613	4
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				655		
pX, platoon unblocked	0.77					
vC, conflicting volume	1566	635	627			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1586	635	627			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	96	79	89			
cM capacity (veh/h)	80	469	946			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	100	827	617
Volume Left	3	104	0
Volume Right	97	0	4
cSH	406	946	1700
Volume to Capacity	0.25	0.11	0.36
Queue Length 95th (ft)	24	9	0
Control Delay (s)	16.7	2.7	0.0
Lane LOS	C	A	
Approach Delay (s)	16.7	2.7	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	2.5		
Intersection Capacity Utilization	87.5%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	3	7	777	667	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	3	7	827	710	0
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				333		
pX, platoon unblocked	0.77					
vC, conflicting volume	1571	730	720			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1593	730	720			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	99	99			
cM capacity (veh/h)	88	415	873			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	3	7	827	710
Volume Left	0	7	0	0
Volume Right	3	0	0	0
cSH	415	873	1700	1700
Volume to Capacity	0.01	0.01	0.49	0.42
Queue Length 95th (ft)	1	1	0	0
Control Delay (s)	13.8	9.2	0.0	0.0
Lane LOS	B	A		
Approach Delay (s)	13.8	0.1		0.0
Approach LOS	B			

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	50.9%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	786	185	0	626	749	0	0	0	1016	5	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	5.3				4.0	4.0	4.0
Lane Util. Factor		0.91	1.00		0.95	1.00				0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.97		1.00	0.95				1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85				1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (prot)		5085	1538		3539	1510				1681	1686	1554
Flt Permitted		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (perm)		5085	1538		3539	1510				1681	1686	1554
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	836	197	0	666	797	0	0	0	1081	5	167
RTOR Reduction (vph)	0	0	0	0	0	490	0	0	0	0	0	82
Lane Group Flow (vph)	0	836	197	0	666	307	0	0	0	540	546	85
Confl. Peds. (#/hr)			10			10						10
Confl. Bikes (#/hr)			10			10						
Turn Type			Free			Perm				Split		Perm
Protected Phases		6			2					8	8	
Permitted Phases			Free			2						8
Actuated Green, G (s)		24.7	64.2		24.7	24.7				28.5	28.5	28.5
Effective Green, g (s)		26.0	64.2		26.0	24.7				30.2	30.2	30.2
Actuated g/C Ratio		0.40	1.00		0.40	0.38				0.47	0.47	0.47
Clearance Time (s)		5.3			5.3	5.3				5.7	5.7	5.7
Vehicle Extension (s)		3.0			3.0	3.0				2.5	2.5	2.5
Lane Grp Cap (vph)		2059	1538		1433	581				791	793	731
v/s Ratio Prot		0.16			0.19					0.32	c0.32	
v/s Ratio Perm			0.13			c0.20						0.05
v/c Ratio		0.41	0.13		0.46	0.53				0.68	0.69	0.12
Uniform Delay, d1		13.6	0.0		14.0	15.2				13.3	13.3	9.5
Progression Factor		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Incremental Delay, d2		0.1	0.2		0.2	0.9				2.2	2.3	0.1
Delay (s)		13.7	0.2		14.2	16.1				15.5	15.6	9.6
Level of Service		B	A		B	B				B	B	A
Approach Delay (s)		11.1			15.3			0.0			14.8	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	14.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	64.2	Sum of lost time (s)	9.3
Intersection Capacity Utilization	52.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1543	259	0	1096	778	279	1	944	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.3		4.0	4.0		4.0	4.0			
Lane Util. Factor		0.91	1.00		0.91	1.00		1.00	0.88			
Frpb, ped/bikes		1.00	0.95		1.00	0.97		1.00	1.00			
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00			
Frt		1.00	0.85		1.00	0.85		1.00	0.85			
Flt Protected		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (prot)		5085	1498		5085	1538		1774	2787			
Flt Permitted		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (perm)		5085	1498		5085	1538		1774	2787			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1641	276	0	1166	828	297	1	1004	0	0	0
RTOR Reduction (vph)	0	0	89	0	0	0	0	0	2	0	0	0
Lane Group Flow (vph)	0	1641	187	0	1166	828	0	298	1002	0	0	0
Confl. Peds. (#/hr)			10			10						
Confl. Bikes (#/hr)			10			10						
Turn Type			Perm			Free	Split		custom			
Protected Phases		6			2		4	4				
Permitted Phases			6			Free			4 5			
Actuated Green, G (s)		36.8	36.8		57.0	88.4		20.4	41.7			
Effective Green, g (s)		38.1	36.8		58.3	88.4		22.1	43.4			
Actuated g/C Ratio		0.43	0.42		0.66	1.00		0.25	0.49			
Clearance Time (s)		5.3	5.3		5.3			5.7				
Vehicle Extension (s)		3.0	3.0		3.0			2.5				
Lane Grp Cap (vph)		2192	624		3354	1538		444	1368			
v/s Ratio Prot		c0.32			0.23			0.17				
v/s Ratio Perm			0.12			0.54			c0.36			
v/c Ratio		0.75	0.30		0.35	0.54		0.67	0.73			
Uniform Delay, d1		21.1	17.2		6.6	0.0		29.9	17.9			
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00			
Incremental Delay, d2		1.4	0.3		0.1	1.4		3.6	1.9			
Delay (s)		22.6	17.5		6.7	1.4		33.5	19.8			
Level of Service		C	B		A	A		C	B			
Approach Delay (s)		21.8			4.5			23.0			0.0	
Approach LOS		C			A			C			A	

Intersection Summary			
HCM Average Control Delay	15.5	HCM Level of Service	B
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	88.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	415	1012	455	53	809	143	717	332	47	148	299	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.4	4.4	4.2	5.9		4.6	4.4	4.4	4.2	4.4	4.4
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	0.99		1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1527	1770	4944		3433	3539	1519	1770	3539	1520
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1527	1770	4944		3433	3539	1519	1770	3539	1520
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	441	1077	484	56	861	152	763	353	50	157	318	370
RTOR Reduction (vph)	0	0	176	0	14	0	0	0	42	0	0	260
Lane Group Flow (vph)	441	1077	308	56	999	0	763	353	8	157	318	110
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	28.5	53.9	53.9	7.3	32.7		34.0	19.3	19.3	33.7	18.6	18.6
Effective Green, g (s)	29.5	55.4	55.4	8.3	32.7		35.0	20.8	20.8	34.7	20.1	20.1
Actuated g/C Ratio	0.22	0.41	0.41	0.06	0.24		0.26	0.15	0.15	0.25	0.15	0.15
Clearance Time (s)	5.2	5.9	5.9	5.2	5.9		5.6	5.9	5.9	5.2	5.9	5.9
Vehicle Extension (s)	1.8	4.8	4.8	1.8	2.3		1.8	2.3	2.3	1.8	2.3	2.3
Lane Grp Cap (vph)	742	1437	620	108	1185		881	540	232	450	522	224
v/s Ratio Prot	c0.13	c0.30		0.03	c0.20		c0.22	0.10		0.09	c0.09	
v/s Ratio Perm			0.20						0.01			0.07
v/c Ratio	0.59	0.75	0.50	0.52	0.84		0.87	0.65	0.03	0.35	0.61	0.49
Uniform Delay, d1	48.1	34.6	30.1	62.1	49.4		48.5	54.4	49.2	41.6	54.5	53.4
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.9	2.6	1.2	1.7	5.5		8.6	2.4	0.0	0.2	1.6	1.0
Delay (s)	48.9	37.1	31.3	63.9	54.9		57.1	56.8	49.3	41.8	56.0	54.4
Level of Service	D	D	C	E	D		E	E	D	D	E	D
Approach Delay (s)		38.3			55.4			56.7			52.7	
Approach LOS		D			E			E			D	

Intersection Summary			
HCM Average Control Delay	48.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	136.4	Sum of lost time (s)	14.9
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	106	1037	64	163	601	259	256	419	86	256	266	148
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3502		1770	3539	1501	1770	1863	1534	1770	3539	1526
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3502		1770	3539	1501	1770	1863	1534	1770	3539	1526
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	113	1103	68	173	639	276	272	446	91	272	283	157
RTOR Reduction (vph)	0	3	0	0	0	190	0	0	63	0	0	122
Lane Group Flow (vph)	113	1168	0	173	639	86	272	446	28	272	283	35
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	11.5	40.1		11.0	39.6	39.6	23.9	34.5	34.5	18.0	28.6	28.6
Effective Green, g (s)	11.5	40.1		11.0	39.6	39.6	23.9	34.5	34.5	18.0	28.6	28.6
Actuated g/C Ratio	0.09	0.31		0.09	0.31	0.31	0.19	0.27	0.27	0.14	0.22	0.22
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	160	1101		153	1098	466	332	504	415	250	793	342
v/s Ratio Prot	0.06	c0.33		c0.10	0.18		0.15	c0.24		c0.15	0.08	
v/s Ratio Perm						0.06			0.02			0.02
v/c Ratio	0.71	1.06		1.13	0.58	0.18	0.82	0.88	0.07	1.09	0.36	0.10
Uniform Delay, d1	56.4	43.8		58.3	37.0	32.2	49.8	44.6	34.6	54.8	41.7	39.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.0	44.7		112.2	0.8	0.2	13.8	16.8	0.1	82.4	0.3	0.1
Delay (s)	67.4	88.4		170.5	37.8	32.4	63.6	61.4	34.7	137.2	42.0	39.4
Level of Service	E	F		F	D	C	E	E	C	F	D	D
Approach Delay (s)		86.6			57.5			59.1			77.8	
Approach LOS		F			E			E			E	

Intersection Summary			
HCM Average Control Delay	71.2	HCM Level of Service	E
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	127.6	Sum of lost time (s)	18.0
Intersection Capacity Utilization	97.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1217	55	99	996	27	46
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	1295	59	105	1060	29	49
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	509			423		
pX, platoon unblocked			0.70		0.74	0.70
vC, conflicting volume			1363		2055	667
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			662		1267	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			84		70	93
cM capacity (veh/h)			640		97	745

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	647	647	59	105	530	530	78
Volume Left	0	0	0	105	0	0	29
Volume Right	0	0	59	0	0	0	49
cSH	1700	1700	1700	640	1700	1700	215
Volume to Capacity	0.38	0.38	0.03	0.16	0.31	0.31	0.36
Queue Length 95th (ft)	0	0	0	15	0	0	39
Control Delay (s)	0.0	0.0	0.0	11.7	0.0	0.0	31.0
Lane LOS				B			D
Approach Delay (s)	0.0			1.1			31.0
Approach LOS							D

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1245	18	30	1048	47	8
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00	0.96	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1526	1770	3539	1770	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1526	1770	3539	1770	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1324	19	32	1115	50	9
RTOR Reduction (vph)	0	3	0	0	0	9
Lane Group Flow (vph)	1324	16	32	1115	50	0
Confl. Peds. (#/hr)		10				
Turn Type		Perm	Prot			Perm
Protected Phases	2		1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	64.2	64.2	4.5	75.2	4.6	4.6
Effective Green, g (s)	64.2	64.2	4.5	75.2	4.6	4.6
Actuated g/C Ratio	0.70	0.70	0.05	0.82	0.05	0.05
Clearance Time (s)	6.5	6.5	6.5	6.5	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	2.0	2.0
Lane Grp Cap (vph)	1310	1073	87	2915	89	80
v/s Ratio Prot	c0.71		0.02	c0.32	c0.03	
v/s Ratio Perm		0.01				0.00
v/c Ratio	1.01	0.01	0.37	0.38	0.56	0.01
Uniform Delay, d1	13.5	4.1	42.0	2.1	42.4	41.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	27.5	0.0	2.6	0.1	4.8	0.0
Delay (s)	41.1	4.1	44.6	2.2	47.1	41.2
Level of Service	D	A	D	A	D	D
Approach Delay (s)	40.5			3.3	46.2	
Approach LOS	D			A	D	

Intersection Summary			
HCM Average Control Delay	23.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	91.3	Sum of lost time (s)	18.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	924	322	95	843	3	221	4	49	8	5	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.95		1.00	0.96	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.86		1.00	0.89	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1503	1770	1863	1504	1770	1525		1743	1579	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.74	1.00		0.72	1.00	
Satd. Flow (perm)	1770	1863	1503	1770	1863	1504	1386	1525		1322	1579	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	7	983	343	101	897	3	235	4	52	9	5	15
RTOR Reduction (vph)	0	0	110	0	0	1	0	41	0	0	12	0
Lane Group Flow (vph)	7	983	233	101	897	2	235	15	0	9	8	0
Confl. Peds. (#/hr)			10			10			10	10		10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Actuated Green, G (s)	1.2	49.7	49.7	8.2	56.7	56.7	20.8	20.8		20.8	20.8	
Effective Green, g (s)	1.2	49.7	49.7	8.2	56.7	56.7	20.8	20.8		20.8	20.8	
Actuated g/C Ratio	0.01	0.51	0.51	0.08	0.59	0.59	0.22	0.22		0.22	0.22	
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	22	958	772	150	1092	882	298	328		284	340	
v/s Ratio Prot	0.00	c0.53		c0.06	c0.48			0.01			0.01	
v/s Ratio Perm			0.15			0.00	c0.17			0.01		
v/c Ratio	0.32	1.03	0.30	0.67	0.82	0.00	0.79	0.05		0.03	0.02	
Uniform Delay, d1	47.3	23.5	13.5	43.0	16.0	8.3	35.9	30.1		30.0	29.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	8.2	35.9	1.0	11.3	7.0	0.0	12.9	0.1		0.0	0.0	
Delay (s)	55.5	59.4	14.5	54.3	22.9	8.3	48.8	30.1		30.0	30.0	
Level of Service	E	E	B	D	C	A	D	C		C	C	
Approach Delay (s)		47.8			26.1			45.2			30.0	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM Average Control Delay	39.1	HCM Level of Service	D
HCM Volume to Capacity ratio	1.03		
Actuated Cycle Length (s)	96.7	Sum of lost time (s)	24.5
Intersection Capacity Utilization	89.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	171	52	24	160	39	28	4	20	40	18	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	0.99			1.00			0.99	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	0.97			0.95			0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1770	1863	1521	1758	1793			1715			1695	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.82			0.88	
Satd. Flow (perm)	1770	1863	1521	1758	1793			1444			1513	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	45	182	55	26	170	41	30	4	21	43	19	52
RTOR Reduction (vph)	0	0	37	0	10	0	0	15	0	0	28	0
Lane Group Flow (vph)	45	182	18	26	201	0	0	40	0	0	86	0
Confl. Peds. (#/hr)	10		10	10		10	10					10
Confl. Bikes (#/hr)			10			10						
Turn Type	Prot		Perm	Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2				8			4		
Actuated Green, G (s)	1.6	11.0	11.0	0.6	10.0			8.7			8.7	
Effective Green, g (s)	1.6	11.0	11.0	0.6	10.0			8.7			8.7	
Actuated g/C Ratio	0.05	0.33	0.33	0.02	0.30			0.26			0.26	
Clearance Time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0			2.0			2.0	
Lane Grp Cap (vph)	86	619	505	32	542			380			398	
v/s Ratio Prot	c0.03	0.10		0.01	c0.11							
v/s Ratio Perm			0.01					0.03			c0.06	
v/c Ratio	0.52	0.29	0.04	0.81	0.37			0.10			0.22	
Uniform Delay, d1	15.4	8.2	7.5	16.2	9.1			9.2			9.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	2.6	0.1	0.0	81.6	0.2			0.0			0.1	
Delay (s)	18.0	8.3	7.5	97.8	9.2			9.3			9.6	
Level of Service	B	A	A	F	A			A			A	
Approach Delay (s)		9.7			18.9			9.3			9.6	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	33.1	Sum of lost time (s)	12.8
Intersection Capacity Utilization	37.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	142	89	100	360	2	400	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	0.87	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1533	1770	1863	1531	1863	1520
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1533	1770	1863	1531	1863	1520
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	151	95	106	383	2	426	131
RTOR Reduction (vph)	0	79	0	0	0	0	71
Lane Group Flow (vph)	151	16	106	383	2	426	60
Confl. Peds. (#/hr)	10	10	10		10		10
Confl. Bikes (#/hr)							10
Turn Type		Perm	Prot		Prot		Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	8.2	8.2	5.6	26.5	0.5	22.2	22.2
Effective Green, g (s)	8.2	8.2	5.6	26.5	0.5	22.2	22.2
Actuated g/C Ratio	0.17	0.17	0.12	0.55	0.01	0.46	0.46
Clearance Time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Vehicle Extension (s)	2.0	2.0	1.0	2.0	1.0	2.0	2.0
Lane Grp Cap (vph)	299	259	204	1018	16	853	696
v/s Ratio Prot	c0.09		c0.06	0.21	0.00	c0.23	
v/s Ratio Perm		0.01					0.04
v/c Ratio	0.51	0.06	0.52	0.38	0.12	0.50	0.09
Uniform Delay, d1	18.3	16.9	20.2	6.3	23.8	9.2	7.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.0	0.9	0.1	1.3	0.2	0.0
Delay (s)	18.8	17.0	21.1	6.4	25.1	9.4	7.4
Level of Service	B	B	C	A	C	A	A
Approach Delay (s)	18.1			9.6		9.0	
Approach LOS	B			A		A	

Intersection Summary			
HCM Average Control Delay	10.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	48.5	Sum of lost time (s)	12.5
Intersection Capacity Utilization	47.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	12	113	83	448	479	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	13	120	88	477	510	11
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume	1188	535	530			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1188	535	530			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	93	78	91			
cM capacity (veh/h)	186	535	1027			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	133	565	520
Volume Left	13	88	0
Volume Right	120	0	11
cSH	454	1027	1700
Volume to Capacity	0.29	0.09	0.31
Queue Length 95th (ft)	30	7	0
Control Delay (s)	16.2	2.3	0.0
Lane LOS	C	A	
Approach Delay (s)	16.2	2.3	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	2.8		
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	1	93	67	530	590	2
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	1	99	71	564	628	2
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				655		
pX, platoon unblocked	0.81					
vC, conflicting volume	1355	649	640			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1321	649	640			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	99	79	92			
cM capacity (veh/h)	127	461	935			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	100	635	630
Volume Left	1	71	0
Volume Right	99	0	2
cSH	448	935	1700
Volume to Capacity	0.22	0.08	0.37
Queue Length 95th (ft)	21	6	0
Control Delay (s)	15.3	2.0	0.0
Lane LOS	C	A	
Approach Delay (s)	15.3	2.0	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	2.0		
Intersection Capacity Utilization	78.6%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	0	0	1	597	683	0
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	0	1	635	727	0
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				333		
pX, platoon unblocked	0.81					
vC, conflicting volume	1384	747	737			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1357	747	737			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	100	100	100			
cM capacity (veh/h)	131	405	861			

Direction, Lane #	EB 1	NB 1	NB 2	SB 1
Volume Total	0	1	635	727
Volume Left	0	1	0	0
Volume Right	0	0	0	0
cSH	1700	861	1700	1700
Volume to Capacity	0.00	0.00	0.37	0.43
Queue Length 95th (ft)	0	0	0	0
Control Delay (s)	0.0	9.2	0.0	0.0
Lane LOS	A	A		
Approach Delay (s)	0.0	0.0		0.0
Approach LOS	A			

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	39.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	900	155	0	912	655	0	0	0	785	2	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	5.3				4.0	4.0	4.0
Lane Util. Factor		0.91	1.00		0.95	1.00				0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.97		1.00	0.96				1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85				1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (prot)		5085	1538		3539	1513				1681	1686	1553
Flt Permitted		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (perm)		5085	1538		3539	1513				1681	1686	1553
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	957	165	0	970	697	0	0	0	835	2	202
RTOR Reduction (vph)	0	0	0	0	0	378	0	0	0	0	0	37
Lane Group Flow (vph)	0	957	165	0	970	319	0	0	0	417	420	165
Confl. Peds. (#/hr)			10			10						10
Confl. Bikes (#/hr)			10			10						
Turn Type			Free			Perm				Split		Perm
Protected Phases		6			2					8	8	
Permitted Phases			Free			2						8
Actuated Green, G (s)		29.7	64.9		29.7	29.7				24.2	24.2	24.2
Effective Green, g (s)		31.0	64.9		31.0	29.7				25.9	25.9	25.9
Actuated g/C Ratio		0.48	1.00		0.48	0.46				0.40	0.40	0.40
Clearance Time (s)		5.3			5.3	5.3				5.7	5.7	5.7
Vehicle Extension (s)		3.0			3.0	3.0				2.5	2.5	2.5
Lane Grp Cap (vph)		2429	1538		1690	692				671	673	620
v/s Ratio Prot		0.19			c0.27					0.25	c0.25	
v/s Ratio Perm			0.11			0.21						0.11
v/c Ratio		0.39	0.11		0.57	0.46				0.62	0.62	0.27
Uniform Delay, d1		10.9	0.0		12.2	12.1				15.6	15.6	13.1
Progression Factor		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1		0.5	0.5				1.6	1.6	0.2
Delay (s)		11.0	0.1		12.7	12.6				17.1	17.2	13.3
Level of Service		B	A		B	B				B	B	B
Approach Delay (s)		9.4			12.6			0.0			16.4	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	12.7	HCM Level of Service	B
HCM Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	64.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1545	140	0	1404	578	163	0	800	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.3		4.0	4.0		4.0	4.0			
Lane Util. Factor		0.91	1.00		0.91	1.00		1.00	0.88			
Frpb, ped/bikes		1.00	0.95		1.00	0.97		1.00	1.00			
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00			
Frt		1.00	0.85		1.00	0.85		1.00	0.85			
Flt Protected		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (prot)		5085	1501		5085	1538		1770	2787			
Flt Permitted		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (perm)		5085	1501		5085	1538		1770	2787			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1644	149	0	1494	615	173	0	851	0	0	0
RTOR Reduction (vph)	0	0	48	0	0	0	0	0	2	0	0	0
Lane Group Flow (vph)	0	1644	101	0	1494	615	0	173	849	0	0	0
Confl. Peds. (#/hr)			10			10						
Confl. Bikes (#/hr)			10			10						
Turn Type			Perm			Free	Split		custom			
Protected Phases		6			2		4	4				
Permitted Phases			6			Free			4 5			
Actuated Green, G (s)		33.9	33.9		50.4	80.7		19.3	36.9			
Effective Green, g (s)		35.2	33.9		51.7	80.7		21.0	38.6			
Actuated g/C Ratio		0.44	0.42		0.64	1.00		0.26	0.48			
Clearance Time (s)		5.3	5.3		5.3			5.7				
Vehicle Extension (s)		3.0	3.0		3.0			2.5				
Lane Grp Cap (vph)		2218	631		3258	1538		461	1333			
v/s Ratio Prot		c0.32			0.29			0.10				
v/s Ratio Perm			0.07			0.40			c0.30			
v/c Ratio		0.74	0.16		0.46	0.40		0.38	0.64			
Uniform Delay, d1		19.0	14.5		7.4	0.0		24.5	15.8			
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00			
Incremental Delay, d2		1.4	0.1		0.1	0.8		0.4	0.9			
Delay (s)		20.3	14.7		7.5	0.8		24.8	16.7			
Level of Service		C	B		A	A		C	B			
Approach Delay (s)		19.9			5.5			18.1			0.0	
Approach LOS		B			A			B			A	

Intersection Summary			
HCM Average Control Delay	13.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	80.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	311	889	421	118	867	150	809	342	54	135	354	306
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.4	4.4	4.2	5.9		4.6	4.4	4.4	4.2	4.4	4.4
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	0.99		1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1524	1770	4946		3433	3539	1520	1770	3539	1524
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1524	1770	4946		3433	3539	1520	1770	3539	1524
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	331	946	448	126	922	160	861	364	57	144	377	326
RTOR Reduction (vph)	0	0	188	0	13	0	0	0	48	0	0	152
Lane Group Flow (vph)	331	946	260	126	1069	0	861	364	9	144	377	174
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	19.1	37.8	37.8	13.3	32.0		38.5	19.5	19.5	40.8	21.4	21.4
Effective Green, g (s)	20.1	39.3	39.3	14.3	32.0		39.5	21.0	21.0	41.8	22.9	22.9
Actuated g/C Ratio	0.15	0.29	0.29	0.11	0.24		0.30	0.16	0.16	0.31	0.17	0.17
Clearance Time (s)	5.2	5.9	5.9	5.2	5.9		5.6	5.9	5.9	5.2	5.9	5.9
Vehicle Extension (s)	1.8	4.8	4.8	1.8	2.3		1.8	2.3	2.3	1.8	2.3	2.3
Lane Grp Cap (vph)	516	1041	448	189	1185		1015	556	239	554	607	261
v/s Ratio Prot	c0.10	c0.27		0.07	0.22		c0.25	0.10		0.08	0.11	
v/s Ratio Perm			0.17						0.01			c0.11
v/c Ratio	0.64	0.91	0.58	0.67	0.90		0.85	0.65	0.04	0.26	0.62	0.66
Uniform Delay, d1	53.4	45.4	40.1	57.4	49.3		44.2	52.9	47.7	34.3	51.3	51.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.0	11.9	2.8	6.7	9.6		6.5	2.3	0.0	0.1	1.6	5.3
Delay (s)	55.4	57.3	42.8	64.1	58.9		50.7	55.2	47.8	34.4	52.9	57.1
Level of Service	E	E	D	E	E		D	E	D	C	D	E
Approach Delay (s)		53.2			59.4			51.8			51.4	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM Average Control Delay	54.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	133.6	Sum of lost time (s)	13.4
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	77	930	71	198	681	176	330	345	89	257	302	124
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.95	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3494		1770	3539	1504	1770	1863	1533	1770	3539	1521
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3494		1770	3539	1504	1770	1863	1533	1770	3539	1521
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	82	989	76	211	724	187	351	367	95	273	321	132
RTOR Reduction (vph)	0	4	0	0	0	121	0	0	72	0	0	108
Lane Group Flow (vph)	82	1061	0	211	724	66	351	367	23	273	321	24
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	8.6	41.5		11.0	43.9	43.9	27.6	29.5	29.5	18.1	20.0	20.0
Effective Green, g (s)	8.6	41.5		11.0	43.9	43.9	27.6	29.5	29.5	18.1	20.0	20.0
Actuated g/C Ratio	0.07	0.33		0.09	0.35	0.35	0.22	0.24	0.24	0.15	0.16	0.16
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	123	1168		157	1252	532	394	443	364	258	570	245
v/s Ratio Prot	0.05	c0.30		c0.12	0.20		c0.20	c0.20		0.15	0.09	
v/s Ratio Perm						0.04			0.01			0.02
v/c Ratio	0.67	0.91		1.34	0.58	0.12	0.89	0.83	0.06	1.06	0.56	0.10
Uniform Delay, d1	56.4	39.5		56.5	32.6	27.1	46.8	44.9	36.6	53.0	48.0	44.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	10.1	10.3		191.1	0.7	0.1	21.0	12.1	0.1	72.2	1.3	0.2
Delay (s)	66.4	49.8		247.6	33.2	27.2	67.8	57.0	36.7	125.2	49.3	44.5
Level of Service	E	D		F	C	C	E	E	D	F	D	D
Approach Delay (s)		51.0			72.5			59.3			77.0	
Approach LOS		D			E			E			E	

Intersection Summary			
HCM Average Control Delay	64.0	HCM Level of Service	E
HCM Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	124.1	Sum of lost time (s)	24.0
Intersection Capacity Utilization	94.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1041	76	141	1034	21	58
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	1107	81	150	1100	22	62
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	509			423		
pX, platoon unblocked			0.73		0.77	0.73
vC, conflicting volume			1198		1977	574
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			539		1243	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			80		78	92
cM capacity (veh/h)			744		100	779

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1
Volume Total	554	554	81	150	550	550	84
Volume Left	0	0	0	150	0	0	22
Volume Right	0	0	81	0	0	0	62
cSH	1700	1700	1700	744	1700	1700	278
Volume to Capacity	0.33	0.33	0.05	0.20	0.32	0.32	0.30
Queue Length 95th (ft)	0	0	0	19	0	0	31
Control Delay (s)	0.0	0.0	0.0	11.1	0.0	0.0	23.4
Lane LOS				B			C
Approach Delay (s)	0.0			1.3			23.4
Approach LOS							C

Intersection Summary			
Average Delay	1.4		
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (vph)	1087	12	9	1154	21	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00	0.96	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (prot)	1863	1527	1770	3539	1770	1583
Flt Permitted	1.00	1.00	0.95	1.00	0.95	1.00
Satd. Flow (perm)	1863	1527	1770	3539	1770	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1156	13	10	1228	22	4
RTOR Reduction (vph)	0	2	0	0	0	4
Lane Group Flow (vph)	1156	11	10	1228	22	0
Confl. Peds. (#/hr)		10				
Turn Type		Perm	Prot			Perm
Protected Phases	2		1	6	8	
Permitted Phases		2				8
Actuated Green, G (s)	68.7	68.7	1.3	76.5	2.5	2.5
Effective Green, g (s)	68.7	68.7	1.3	76.5	2.5	2.5
Actuated g/C Ratio	0.76	0.76	0.01	0.85	0.03	0.03
Clearance Time (s)	6.5	6.5	6.5	6.5	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	2.0	2.0
Lane Grp Cap (vph)	1414	1159	25	2992	49	44
v/s Ratio Prot	c0.62		0.01	c0.35	c0.01	
v/s Ratio Perm		0.01				0.00
v/c Ratio	0.82	0.01	0.40	0.41	0.45	0.00
Uniform Delay, d1	6.9	2.6	44.2	1.7	43.3	42.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.8	0.0	10.2	0.1	2.4	0.0
Delay (s)	10.7	2.6	54.4	1.8	45.7	42.8
Level of Service	B	A	D	A	D	D
Approach Delay (s)	10.6			2.2	45.2	
Approach LOS	B			A	D	

Intersection Summary			
HCM Average Control Delay	6.7	HCM Level of Service	A
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	90.5	Sum of lost time (s)	18.0
Intersection Capacity Utilization	71.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	909	178	121	923	3	237	0	17	0	2	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0			5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.95			0.96	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85			0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)	1770	1863	1501	1770	1863	1503	1770	1499			1635	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.75	1.00			1.00	
Satd. Flow (perm)	1770	1863	1501	1770	1863	1503	1405	1499			1635	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	4	967	189	129	982	3	252	0	18	0	2	3
RTOR Reduction (vph)	0	0	64	0	0	0	0	14	0	0	2	0
Lane Group Flow (vph)	4	967	125	129	982	3	252	4	0	0	3	0
Confl. Peds. (#/hr)			10			10			10	10		10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Actuated Green, G (s)	1.2	49.7	49.7	10.9	59.4	59.4	22.1	22.1			22.1	
Effective Green, g (s)	1.2	49.7	49.7	10.9	59.4	59.4	22.1	22.1			22.1	
Actuated g/C Ratio	0.01	0.49	0.49	0.11	0.59	0.59	0.22	0.22			0.22	
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0			5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)	21	919	741	192	1099	887	308	329			359	
v/s Ratio Prot	0.00	c0.52		c0.07	c0.53			0.00			0.00	
v/s Ratio Perm			0.08			0.00	c0.18					
v/c Ratio	0.19	1.05	0.17	0.67	0.89	0.00	0.82	0.01			0.01	
Uniform Delay, d1	49.3	25.5	14.1	43.2	17.9	8.5	37.4	30.8			30.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	4.4	44.4	0.5	8.9	11.2	0.0	15.4	0.0			0.0	
Delay (s)	53.7	69.9	14.6	52.1	29.1	8.5	52.8	30.8			30.7	
Level of Service	D	E	B	D	C	A	D	C			C	
Approach Delay (s)		60.8			31.7			51.3			30.7	
Approach LOS		E			C			D			C	

Intersection Summary			
HCM Average Control Delay	47.0	HCM Level of Service	D
HCM Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	100.7	Sum of lost time (s)	24.5
Intersection Capacity Utilization	90.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	11	402	114	26	249	27	22	5	22	35	5	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00			1.00			0.99	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	0.99			0.94			0.97	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.98			0.97	
Satd. Flow (prot)	1757	1863	1522	1761	1828			1706			1731	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.87			0.81	
Satd. Flow (perm)	1757	1863	1522	1761	1828			1516			1442	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	12	428	121	28	265	29	23	5	23	37	5	14
RTOR Reduction (vph)	0	0	74	0	4	0	0	17	0	0	11	0
Lane Group Flow (vph)	12	428	47	28	290	0	0	34	0	0	45	0
Confl. Peds. (#/hr)	10		10	10		10	10					10
Confl. Bikes (#/hr)			10			10						
Turn Type	Prot		Perm	Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2				8			4		
Actuated Green, G (s)	0.5	12.3	12.3	0.6	12.4			8.3			8.3	
Effective Green, g (s)	0.5	12.3	12.3	0.6	12.4			8.3			8.3	
Actuated g/C Ratio	0.01	0.36	0.36	0.02	0.36			0.24			0.24	
Clearance Time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0			2.0			2.0	
Lane Grp Cap (vph)	26	674	551	31	667			370			352	
v/s Ratio Prot	0.01	c0.23		c0.02	0.16							
v/s Ratio Perm			0.03					0.02			c0.03	
v/c Ratio	0.46	0.64	0.09	0.90	0.44			0.09			0.13	
Uniform Delay, d1	16.6	9.0	7.1	16.7	8.2			9.9			10.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	4.7	1.4	0.0	119.0	0.2			0.0			0.1	
Delay (s)	21.3	10.4	7.2	135.7	8.3			10.0			10.1	
Level of Service	C	B	A	F	A			A			B	
Approach Delay (s)		10.0			19.4			10.0			10.1	
Approach LOS		A			B			A			B	

Intersection Summary			
HCM Average Control Delay	13.0	HCM Level of Service	B
HCM Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	34.0	Sum of lost time (s)	12.8
Intersection Capacity Utilization	38.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	385	74	137	435	5	416	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	1.00	0.95
Flpb, ped/bikes	1.00	1.00	1.00	1.00	0.85	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1528	1770	1863	1504	1863	1512
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1528	1770	1863	1504	1863	1512
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	410	79	146	463	5	443	176
RTOR Reduction (vph)	0	54	0	0	0	0	114
Lane Group Flow (vph)	410	25	146	463	5	443	62
Confl. Peds. (#/hr)	10	10	10		10		10
Confl. Bikes (#/hr)							10
Turn Type		Perm	Prot		Prot		Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	19.2	19.2	7.4	27.1	0.7	21.2	21.2
Effective Green, g (s)	19.2	19.2	7.4	27.1	0.7	21.2	21.2
Actuated g/C Ratio	0.32	0.32	0.12	0.45	0.01	0.35	0.35
Clearance Time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Vehicle Extension (s)	2.0	2.0	1.0	2.0	1.0	2.0	2.0
Lane Grp Cap (vph)	564	487	217	837	17	655	532
v/s Ratio Prot	c0.23		c0.08	0.25	0.00	c0.24	
v/s Ratio Perm		0.02					0.04
v/c Ratio	0.73	0.05	0.67	0.55	0.29	0.68	0.12
Uniform Delay, d1	18.2	14.2	25.3	12.2	29.6	16.6	13.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	0.0	6.3	0.5	3.5	2.2	0.0
Delay (s)	22.2	14.3	31.6	12.6	33.0	18.8	13.3
Level of Service	C	B	C	B	C	B	B
Approach Delay (s)	20.9			17.2		17.4	
Approach LOS	C			B		B	

Intersection Summary			
HCM Average Control Delay	18.3	HCM Level of Service	B
HCM Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	60.3	Sum of lost time (s)	12.5
Intersection Capacity Utilization	61.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	6	134	150	566	478	12
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	6	143	160	602	509	13
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				1267		
pX, platoon unblocked	0.65					
vC, conflicting volume	1456	535	531			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1433	535	531			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	92	73	84			
cM capacity (veh/h)	80	535	1026			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	149	762	521
Volume Left	6	160	0
Volume Right	143	0	13
cSH	430	1026	1700
Volume to Capacity	0.35	0.16	0.31
Queue Length 95th (ft)	38	14	0
Control Delay (s)	17.7	3.7	0.0
Lane LOS	C	A	
Approach Delay (s)	17.7	3.7	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	3.8		
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	3	4	91	208	4	14	98	699	105	45	563	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		5.0	5.0		5.0	5.0	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.87		1.00	0.88		1.00	0.98		1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1626		1770	1642		1770	3470		1770	3535	
Flt Permitted		1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1626		1770	1642		1770	3470		1770	3535	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	3	4	97	221	4	15	104	744	112	48	599	4
RTOR Reduction (vph)	0	87	0	0	12	0	0	10	0	0	1	0
Lane Group Flow (vph)	0	17	0	221	7	0	104	846	0	48	602	0
Confl. Peds. (#/hr)							10					10
Turn Type	Split			Split			Prot			Prot		
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		7.2		14.7	14.7		6.9	26.5		2.6	22.2	
Effective Green, g (s)		7.2		14.7	14.7		6.9	26.5		2.6	22.2	
Actuated g/C Ratio		0.10		0.21	0.21		0.10	0.38		0.04	0.32	
Clearance Time (s)		4.0		4.0	4.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		170		377	350		177	1333		67	1137	
v/s Ratio Prot		c0.01		c0.12	0.00		c0.06	c0.24		0.03	0.17	
v/s Ratio Perm												
v/c Ratio		0.10		0.59	0.02		0.59	0.63		0.72	0.53	
Uniform Delay, d1		28.0		24.4	21.5		29.7	17.3		32.8	19.1	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.3		2.3	0.0		4.9	1.0		30.4	0.4	
Delay (s)		28.2		26.7	21.5		34.6	18.3		63.2	19.6	
Level of Service		C		C	C		C	B		E	B	
Approach Delay (s)		28.2			26.3			20.1			22.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	22.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	69.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	3	0	0	12	7	890	134	0	862	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	0	3	0	0	13	7	947	143	0	917	0
Pedestrians		10						10			10	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		1						1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								333			322	
pX, platoon unblocked	0.92	0.92	0.86	0.92	0.92	0.88	0.86			0.88		
vC, conflicting volume	1438	2031	479	1505	1960	555	927			1089		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	737	1380	82	809	1302	231	601			836		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	98	99			100		
cM capacity (veh/h)	269	130	814	244	144	675	832			701		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	3	13	7	631	458	611	306
Volume Left	0	0	7	0	0	0	0
Volume Right	3	13	0	0	143	0	0
cSH	814	675	832	1700	1700	1700	1700
Volume to Capacity	0.00	0.02	0.01	0.37	0.27	0.36	0.18
Queue Length 95th (ft)	0	1	1	0	0	0	0
Control Delay (s)	9.4	10.4	9.4	0.0	0.0	0.0	0.0
Lane LOS	A	B	A				
Approach Delay (s)	9.4	10.4	0.1			0.0	
Approach LOS	A	B					

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	806	185	0	648	896	0	0	0	1077	5	157
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	5.3				4.0	4.0	4.0
Lane Util. Factor		0.91	1.00		0.95	1.00				0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.97		1.00	0.95				1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85				1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (prot)		5085	1538		3539	1509				1681	1686	1554
Flt Permitted		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (perm)		5085	1538		3539	1509				1681	1686	1554
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	857	197	0	689	953	0	0	0	1146	5	167
RTOR Reduction (vph)	0	0	0	0	0	570	0	0	0	0	0	78
Lane Group Flow (vph)	0	857	197	0	689	383	0	0	0	573	578	89
Confl. Peds. (#/hr)			10			10						10
Confl. Bikes (#/hr)			10			10						
Turn Type			Free			Perm				Split		Perm
Protected Phases		6			2					8	8	
Permitted Phases			Free			2						8
Actuated Green, G (s)		28.0	69.7		28.0	28.0				30.7	30.7	30.7
Effective Green, g (s)		29.3	69.7		29.3	28.0				32.4	32.4	32.4
Actuated g/C Ratio		0.42	1.00		0.42	0.40				0.46	0.46	0.46
Clearance Time (s)		5.3			5.3	5.3				5.7	5.7	5.7
Vehicle Extension (s)		3.0			3.0	3.0				2.5	2.5	2.5
Lane Grp Cap (vph)		2138	1538		1488	606				781	784	722
v/s Ratio Prot		0.17			0.19					0.34	c0.34	
v/s Ratio Perm			0.13			c0.25						0.06
v/c Ratio		0.40	0.13		0.46	0.63				0.73	0.74	0.12
Uniform Delay, d1		14.1	0.0		14.5	16.7				15.1	15.2	10.6
Progression Factor		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Incremental Delay, d2		0.1	0.2		0.2	2.2				3.4	3.4	0.1
Delay (s)		14.2	0.2		14.8	18.9				18.5	18.6	10.6
Level of Service		B	A		B	B				B	B	B
Approach Delay (s)		11.6			17.1			0.0			17.6	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	15.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	69.7	Sum of lost time (s)	9.3
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1624	259	0	1265	841	279	1	1086	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.3		4.0	4.0		4.0	4.0			
Lane Util. Factor		0.91	1.00		0.91	1.00		1.00	0.88			
Frpb, ped/bikes		1.00	0.94		1.00	0.97		1.00	1.00			
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00			
Frt		1.00	0.85		1.00	0.85		1.00	0.85			
Flt Protected		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (prot)		5085	1492		5085	1538		1774	2787			
Flt Permitted		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (perm)		5085	1492		5085	1538		1774	2787			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1728	276	0	1346	895	297	1	1155	0	0	0
RTOR Reduction (vph)	0	0	88	0	0	0	0	0	1	0	0	0
Lane Group Flow (vph)	0	1728	188	0	1346	895	0	298	1154	0	0	0
Confl. Peds. (#/hr)			10			10						
Confl. Bikes (#/hr)			10			10						
Turn Type			Perm			Free	Split		custom			
Protected Phases		6			2		4	4				
Permitted Phases			6			Free			4 5			
Actuated Green, G (s)		39.0	39.0		67.5	98.8		20.3	49.9			
Effective Green, g (s)		40.3	39.0		68.8	98.8		22.0	51.6			
Actuated g/C Ratio		0.41	0.39		0.70	1.00		0.22	0.52			
Clearance Time (s)		5.3	5.3		5.3			5.7				
Vehicle Extension (s)		3.0	3.0		3.0			2.5				
Lane Grp Cap (vph)		2074	589		3541	1538		395	1456			
v/s Ratio Prot		c0.34			0.26			0.17				
v/s Ratio Perm			0.13			0.58			c0.41			
v/c Ratio		0.83	0.32		0.38	0.58		0.75	0.79			
Uniform Delay, d1		26.2	20.7		6.2	0.0		35.9	19.2			
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00			
Incremental Delay, d2		3.0	0.3		0.1	1.6		7.6	2.9			
Delay (s)		29.3	21.0		6.3	1.6		43.5	22.2			
Level of Service		C	C		A	A		D	C			
Approach Delay (s)		28.1			4.4			26.6			0.0	
Approach LOS		C			A			C			A	

Intersection Summary			
HCM Average Control Delay	18.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	98.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	415	1235	455	53	1041	143	717	332	47	148	299	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.4	4.4	4.2	5.9		4.6	4.4	4.4	4.2	4.4	4.4
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1527	1770	4971		3433	3539	1519	1770	3539	1520
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1527	1770	4971		3433	3539	1519	1770	3539	1520
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	441	1314	484	56	1107	152	763	353	50	157	318	370
RTOR Reduction (vph)	0	0	144	0	10	0	0	0	42	0	0	260
Lane Group Flow (vph)	441	1314	340	56	1249	0	763	353	8	157	318	110
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	28.7	54.1	54.1	7.3	32.7		34.0	19.2	19.2	33.7	18.5	18.5
Effective Green, g (s)	29.7	55.6	55.6	8.3	32.7		35.0	20.7	20.7	34.7	20.0	20.0
Actuated g/C Ratio	0.22	0.41	0.41	0.06	0.24		0.26	0.15	0.15	0.25	0.15	0.15
Clearance Time (s)	5.2	5.9	5.9	5.2	5.9		5.6	5.9	5.9	5.2	5.9	5.9
Vehicle Extension (s)	1.8	4.8	4.8	1.8	2.3		1.8	2.3	2.3	1.8	2.3	2.3
Lane Grp Cap (vph)	747	1442	622	108	1191		880	537	230	450	519	223
v/s Ratio Prot	c0.13	c0.37		0.03	c0.25		c0.22	0.10		0.09	c0.09	
v/s Ratio Perm			0.22						0.00			0.07
v/c Ratio	0.59	0.91	0.55	0.52	1.05		0.87	0.66	0.03	0.35	0.61	0.49
Uniform Delay, d1	47.9	38.1	30.8	62.2	51.9		48.5	54.6	49.4	41.7	54.6	53.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	9.4	1.6	1.7	39.9		8.7	2.4	0.0	0.2	1.7	1.0
Delay (s)	48.8	47.5	32.4	63.9	91.8		57.2	57.0	49.4	41.8	56.3	54.6
Level of Service	D	D	C	E	F		E	E	D	D	E	D
Approach Delay (s)		44.5			90.6			56.8			52.9	
Approach LOS		D			F			E			D	

Intersection Summary			
HCM Average Control Delay	59.2	HCM Level of Service	E
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	136.5	Sum of lost time (s)	14.9
Intersection Capacity Utilization	85.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	313	1053	64	187	728	287	256	431	94	349	263	253
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3503		1770	5085	1536	1770	3539	1531	1770	3539	1522
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3503		1770	5085	1536	1770	3539	1531	1770	3539	1522
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	333	1120	68	199	774	305	272	459	100	371	280	269
RTOR Reduction (vph)	0	3	0	0	0	207	0	0	80	0	0	216
Lane Group Flow (vph)	333	1185	0	199	774	98	272	459	20	371	280	53
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	14.1	40.2		11.1	37.2	37.2	22.0	22.7	22.7	18.1	18.8	18.8
Effective Green, g (s)	14.1	40.2		11.1	37.2	37.2	22.0	22.7	22.7	18.1	18.8	18.8
Actuated g/C Ratio	0.12	0.35		0.10	0.32	0.32	0.19	0.20	0.20	0.16	0.16	0.16
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	215	1213		169	1629	492	335	692	299	276	573	246
v/s Ratio Prot	c0.19	c0.34		0.11	0.15		0.15	c0.13		c0.21	0.08	
v/s Ratio Perm						0.06			0.01			0.03
v/c Ratio	1.55	0.98		1.18	0.48	0.20	0.81	0.66	0.07	1.34	0.49	0.21
Uniform Delay, d1	51.0	37.5		52.5	31.6	28.6	45.1	43.2	38.1	49.0	44.3	42.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	268.7	20.2		125.0	0.2	0.2	13.2	2.4	0.1	177.2	0.7	0.4
Delay (s)	319.7	57.7		177.5	31.8	28.8	58.3	45.6	38.1	226.2	44.9	42.7
Level of Service	F	E		F	C	C	E	D	D	F	D	D
Approach Delay (s)		115.1			53.8			48.8			117.4	
Approach LOS		F			D			D			F	

Intersection Summary			
HCM Average Control Delay	86.2	HCM Level of Service	F
HCM Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	116.1	Sum of lost time (s)	24.0
Intersection Capacity Utilization	97.5%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1334	55	99	1152	27	46
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	1419	59	105	1226	29	49
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	509			422		
pX, platoon unblocked			0.76		0.76	0.76
vC, conflicting volume			1488		2088	522
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			556		1341	0
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			86		69	94
cM capacity (veh/h)			765		93	812

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	568	568	342	105	409	409	409	78
Volume Left	0	0	0	105	0	0	0	29
Volume Right	0	0	59	0	0	0	0	49
cSH	1700	1700	1700	765	1700	1700	1700	210
Volume to Capacity	0.33	0.33	0.20	0.14	0.24	0.24	0.24	0.37
Queue Length 95th (ft)	0	0	0	12	0	0	0	40
Control Delay (s)	0.0	0.0	0.0	10.5	0.0	0.0	0.0	31.9
Lane LOS				B				D
Approach Delay (s)	0.0			0.8				31.9
Approach LOS								D

Intersection Summary			
Average Delay	1.2		
Intersection Capacity Utilization	46.8%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	65	1297	18	30	1087	84	47	4	8	74	4	117
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5		6.5	6.5		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99		1.00	0.90		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3530		1770	3501		1770	1669		1770	1592	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3530		1770	3501		1770	1669		1770	1592	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	69	1380	19	32	1156	89	50	4	9	79	4	124
RTOR Reduction (vph)	0	0	0	0	3	0	0	8	0	0	108	0
Lane Group Flow (vph)	69	1399	0	32	1242	0	50	5	0	79	20	0
Confl. Peds. (#/hr)			10									
Turn Type	Prot			Prot			Split			Split		
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												
Actuated Green, G (s)	7.0	58.5		3.9	55.4		12.3	12.3		14.8	14.8	
Effective Green, g (s)	7.0	58.5		3.9	55.4		12.3	12.3		14.8	14.8	
Actuated g/C Ratio	0.06	0.52		0.03	0.49		0.11	0.11		0.13	0.13	
Clearance Time (s)	6.5	6.5		6.5	6.5		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	110	1836		61	1724		194	182		233	209	
v/s Ratio Prot	c0.04	c0.40		0.02	0.35		c0.03	0.00		c0.04	0.01	
v/s Ratio Perm												
v/c Ratio	0.63	0.76		0.52	0.72		0.26	0.03		0.34	0.10	
Uniform Delay, d1	51.5	21.5		53.4	22.5		45.9	44.8		44.4	43.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	10.7	1.9		7.9	1.5		0.7	0.1		0.9	0.2	
Delay (s)	62.1	23.4		61.3	24.0		46.6	44.8		45.3	43.2	
Level of Service	E	C		E	C		D	D		D	D	
Approach Delay (s)		25.2			24.9			46.3			44.0	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	26.8	HCM Level of Service	C
HCM Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	112.5	Sum of lost time (s)	23.0
Intersection Capacity Utilization	73.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	1008	364	95	925	3	262	4	49	8	5	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.95		1.00	0.96	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.86		1.00	0.89	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	1863	1501	1770	1863	1503	1770	1527		1742	1585	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.74	1.00		0.72	1.00	
Satd. Flow (perm)	1770	1863	1501	1770	1863	1503	1386	1527		1321	1585	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	7	1072	387	101	984	3	279	4	52	9	5	15
RTOR Reduction (vph)	0	0	119	0	0	0	0	39	0	0	11	0
Lane Group Flow (vph)	7	1072	268	101	984	3	279	17	0	9	9	0
Confl. Peds. (#/hr)			10			10			10	10		10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Actuated Green, G (s)	1.2	49.1	49.1	8.3	56.2	56.2	24.5	24.5		24.5	24.5	
Effective Green, g (s)	1.2	49.1	49.1	8.3	56.2	56.2	24.5	24.5		24.5	24.5	
Actuated g/C Ratio	0.01	0.49	0.49	0.08	0.56	0.56	0.25	0.25		0.25	0.25	
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	21	916	738	147	1048	846	340	374		324	389	
v/s Ratio Prot	0.00	c0.58		c0.06	c0.53			0.01			0.01	
v/s Ratio Perm			0.18			0.00	c0.20			0.01		
v/c Ratio	0.33	1.17	0.36	0.69	0.94	0.00	0.82	0.04		0.03	0.02	
Uniform Delay, d1	49.0	25.4	15.7	44.5	20.3	9.6	35.6	28.8		28.6	28.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	9.1	88.4	1.4	12.5	16.5	0.0	14.6	0.0		0.0	0.0	
Delay (s)	58.1	113.8	17.1	57.1	36.8	9.6	50.2	28.8		28.7	28.6	
Level of Service	E	F	B	E	D	A	D	C		C	C	
Approach Delay (s)		88.0			38.6			46.6			28.6	
Approach LOS		F			D			D			C	

Intersection Summary			
HCM Average Control Delay	64.2	HCM Level of Service	E
HCM Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	99.9	Sum of lost time (s)	24.5
Intersection Capacity Utilization	95.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	1389	1111	68	0	91
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	1478	1182	72	0	97
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		396	535			
pX, platoon unblocked					0.74	
vC, conflicting volume	1254				1711	430
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1254				756	430
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	83
cM capacity (veh/h)	550				256	573

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	493	493	493	473	473	309	97
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	72	97
cSH	1700	1700	1700	1700	1700	1700	573
Volume to Capacity	0.29	0.29	0.29	0.28	0.28	0.18	0.17
Queue Length 95th (ft)	0	0	0	0	0	0	15
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	12.6
Lane LOS							B
Approach Delay (s)	0.0			0.0			12.6
Approach LOS							B

Intersection Summary			
Average Delay	0.4		
Intersection Capacity Utilization	35.3%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	716	0	0	612
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	0	762	0	0	651
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			333			
pX, platoon unblocked	0.81	0.81			0.81	
vC, conflicting volume	1087	381			762	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	649	0			249	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	328	882			1069	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	0	508	254	0	326	326
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.30	0.15	0.00	0.19	0.19
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	0.0	0.0		0.0		
Approach LOS	A					

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	23.1%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	42	177	52	24	165	39	28	4	20	40	18	49
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	0.99			1.00			0.99	
Flpb, ped/bikes	1.00	1.00	1.00	0.99	1.00			1.00			1.00	
Frt	1.00	1.00	0.85	1.00	0.97			0.95			0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.97			0.98	
Satd. Flow (prot)	1770	1863	1521	1758	1795			1715			1695	
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.82			0.88	
Satd. Flow (perm)	1770	1863	1521	1758	1795			1444			1513	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	45	188	55	26	176	41	30	4	21	43	19	52
RTOR Reduction (vph)	0	0	37	0	10	0	0	15	0	0	28	0
Lane Group Flow (vph)	45	188	18	26	207	0	0	40	0	0	86	0
Confl. Peds. (#/hr)	10		10	10		10	10					10
Confl. Bikes (#/hr)			10			10						
Turn Type	Prot		Perm	Prot			Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2				8			4		
Actuated Green, G (s)	1.6	11.0	11.0	0.6	10.0			8.7			8.7	
Effective Green, g (s)	1.6	11.0	11.0	0.6	10.0			8.7			8.7	
Actuated g/C Ratio	0.05	0.33	0.33	0.02	0.30			0.26			0.26	
Clearance Time (s)	3.5	5.3	5.3	3.5	5.3			4.0			4.0	
Vehicle Extension (s)	1.0	1.0	1.0	1.0	1.0			2.0			2.0	
Lane Grp Cap (vph)	86	619	505	32	542			380			398	
v/s Ratio Prot	c0.03	0.10		0.01	c0.12							
v/s Ratio Perm			0.01					0.03			c0.06	
v/c Ratio	0.52	0.30	0.04	0.81	0.38			0.10			0.22	
Uniform Delay, d1	15.4	8.2	7.5	16.2	9.1			9.2			9.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00			1.00	
Incremental Delay, d2	2.6	0.1	0.0	81.6	0.2			0.0			0.1	
Delay (s)	18.0	8.3	7.5	97.8	9.3			9.3			9.6	
Level of Service	B	A	A	F	A			A			A	
Approach Delay (s)		9.7			18.7			9.3			9.6	
Approach LOS		A			B			A			A	

Intersection Summary			
HCM Average Control Delay	12.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	33.1	Sum of lost time (s)	12.8
Intersection Capacity Utilization	37.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBU	SBT	SBR
Lane Configurations							
Volume (vph)	142	95	105	376	2	417	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	0.97	1.00	1.00	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	0.86	1.00	1.00
Frt	1.00	0.85	1.00	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1532	1770	1863	1529	1863	1519
Flt Permitted	0.95	1.00	0.95	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	1532	1770	1863	1529	1863	1519
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	151	101	112	400	2	444	131
RTOR Reduction (vph)	0	81	0	0	0	0	75
Lane Group Flow (vph)	151	20	112	400	2	444	56
Confl. Peds. (#/hr)	10	10	10		10		10
Confl. Bikes (#/hr)							10
Turn Type		Perm	Prot		Prot		Perm
Protected Phases	4		5	2	1	6	
Permitted Phases		4					6
Actuated Green, G (s)	10.0	10.0	6.0	26.3	0.5	21.6	21.6
Effective Green, g (s)	10.0	10.0	6.0	26.3	0.5	21.6	21.6
Actuated g/C Ratio	0.20	0.20	0.12	0.52	0.01	0.43	0.43
Clearance Time (s)	4.0	4.0	3.5	5.8	3.5	5.0	5.0
Vehicle Extension (s)	2.0	2.0	1.0	2.0	1.0	2.0	2.0
Lane Grp Cap (vph)	353	306	212	978	15	803	655
v/s Ratio Prot	c0.09		c0.06	0.21	0.00	c0.24	
v/s Ratio Perm		0.01					0.04
v/c Ratio	0.43	0.07	0.53	0.41	0.13	0.55	0.09
Uniform Delay, d1	17.5	16.3	20.7	7.2	24.6	10.6	8.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.3	0.0	1.1	0.1	1.5	0.5	0.0
Delay (s)	17.9	16.3	21.8	7.3	26.1	11.1	8.4
Level of Service	B	B	C	A	C	B	A
Approach Delay (s)	17.2			10.5		10.6	
Approach LOS	B			B		B	

Intersection Summary			
HCM Average Control Delay	11.8	HCM Level of Service	B
HCM Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	50.1	Sum of lost time (s)	12.5
Intersection Capacity Utilization	49.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Volume (veh/h)	12	136	104	469	502	10
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	13	145	111	499	534	11
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				1267		
pX, platoon unblocked	0.72					
vC, conflicting volume	1280	559	555			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1194	559	555			
tC, single (s)	6.4	6.2	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	90	72	89			
cM capacity (veh/h)	130	518	1006			

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total	157	610	545
Volume Left	13	111	0
Volume Right	145	0	11
cSH	417	1006	1700
Volume to Capacity	0.38	0.11	0.32
Queue Length 95th (ft)	43	9	0
Control Delay (s)	18.8	2.8	0.0
Lane LOS	C	A	
Approach Delay (s)	18.8	2.8	0.0
Approach LOS	C		

Intersection Summary			
Average Delay	3.5		
Intersection Capacity Utilization	76.6%	ICU Level of Service	D
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	1	6	93	265	5	16	67	556	141	64	572	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		5.0	5.0		5.0	5.0	
Lane Util. Factor		1.00		1.00	1.00		1.00	0.95		1.00	0.95	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt		0.87		1.00	0.88		1.00	0.97		1.00	1.00	
Flt Protected		1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)		1627		1770	1647		1770	3432		1770	3537	
Flt Permitted		1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)		1627		1770	1647		1770	3432		1770	3537	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1	6	99	282	5	17	71	591	150	68	609	2
RTOR Reduction (vph)	0	88	0	0	13	0	0	20	0	0	0	0
Lane Group Flow (vph)	0	18	0	282	9	0	71	721	0	68	611	0
Confl. Peds. (#/hr)							10					10
Turn Type	Split			Split			Prot			Prot		
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases												
Actuated Green, G (s)		7.3		15.8	15.8		3.7	21.5		3.7	21.5	
Effective Green, g (s)		7.3		15.8	15.8		3.7	21.5		3.7	21.5	
Actuated g/C Ratio		0.11		0.24	0.24		0.06	0.32		0.06	0.32	
Clearance Time (s)		4.0		4.0	4.0		5.0	5.0		5.0	5.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)		179		422	392		99	1113		99	1147	
v/s Ratio Prot		c0.01		c0.16	0.01		c0.04	c0.21		0.04	0.17	
v/s Ratio Perm												
v/c Ratio		0.10		0.67	0.02		0.72	0.65		0.69	0.53	
Uniform Delay, d1		26.5		22.9	19.3		30.8	19.2		30.7	18.3	
Progression Factor		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2		0.2		4.0	0.0		21.8	1.3		18.0	0.5	
Delay (s)		26.8		26.9	19.4		52.6	20.5		48.7	18.8	
Level of Service		C		C	B		D	C		D	B	
Approach Delay (s)		26.8			26.3			23.3			21.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM Average Control Delay	23.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	66.3	Sum of lost time (s)	18.0
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	0	0	0	0	14	1	750	183	0	930	0
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	0	0	0	0	15	1	798	195	0	989	0
Pedestrians		10						10			10	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		3.5						3.5			3.5	
Percent Blockage		1						1			1	
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								333			322	
pX, platoon unblocked	0.91	0.91	0.86	0.91	0.91	0.91	0.86			0.91		
vC, conflicting volume	1425	1994	515	1402	1897	506	999			993		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	809	1435	119	783	1328	252	681			788		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	100	100	100	98	100			100		
cM capacity (veh/h)	235	119	771	253	138	672	776			751		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2
Volume Total	0	15	1	532	461	660	330
Volume Left	0	0	1	0	0	0	0
Volume Right	0	15	0	0	195	0	0
cSH	1700	672	776	1700	1700	1700	1700
Volume to Capacity	0.00	0.02	0.00	0.31	0.27	0.39	0.19
Queue Length 95th (ft)	0	2	0	0	0	0	0
Control Delay (s)	0.0	10.5	9.6	0.0	0.0	0.0	0.0
Lane LOS	A	B	A				
Approach Delay (s)	0.0	10.5	0.0			0.0	
Approach LOS	A	B					

Intersection Summary			
Average Delay	0.1		
Intersection Capacity Utilization	36.6%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	928	155	0	938	839	0	0	0	871	2	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	5.3				4.0	4.0	4.0
Lane Util. Factor		0.91	1.00		0.95	1.00				0.95	0.95	1.00
Frpb, ped/bikes		1.00	0.97		1.00	0.95				1.00	1.00	0.98
Flpb, ped/bikes		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Frt		1.00	0.85		1.00	0.85				1.00	1.00	0.85
Flt Protected		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (prot)		5085	1538		3539	1509				1681	1686	1553
Flt Permitted		1.00	1.00		1.00	1.00				0.95	0.95	1.00
Satd. Flow (perm)		5085	1538		3539	1509				1681	1686	1553
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	987	165	0	998	893	0	0	0	927	2	202
RTOR Reduction (vph)	0	0	0	0	0	480	0	0	0	0	0	34
Lane Group Flow (vph)	0	987	165	0	998	413	0	0	0	463	466	168
Confl. Peds. (#/hr)			10			10						10
Confl. Bikes (#/hr)			10			10						
Turn Type			Free			Perm				Split		Perm
Protected Phases		6			2					8	8	
Permitted Phases			Free			2						8
Actuated Green, G (s)		33.9	73.3		33.9	33.9				28.4	28.4	28.4
Effective Green, g (s)		35.2	73.3		35.2	33.9				30.1	30.1	30.1
Actuated g/C Ratio		0.48	1.00		0.48	0.46				0.41	0.41	0.41
Clearance Time (s)		5.3			5.3	5.3				5.7	5.7	5.7
Vehicle Extension (s)		3.0			3.0	3.0				2.5	2.5	2.5
Lane Grp Cap (vph)		2442	1538		1699	698				690	692	638
v/s Ratio Prot		0.19			c0.28					0.28	c0.28	
v/s Ratio Perm			0.11			0.27						0.11
v/c Ratio		0.40	0.11		0.59	0.59				0.67	0.67	0.26
Uniform Delay, d1		12.3	0.0		13.8	14.6				17.6	17.6	14.3
Progression Factor		1.00	1.00		1.00	1.00				1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1		0.5	1.4				2.3	2.4	0.2
Delay (s)		12.4	0.1		14.3	15.9				19.9	20.0	14.4
Level of Service		B	A		B	B				B	B	B
Approach Delay (s)		10.6			15.1			0.0			18.9	
Approach LOS		B			B			A			B	

Intersection Summary			
HCM Average Control Delay	14.9	HCM Level of Service	B
HCM Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	73.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	0	1659	140	0	1614	657	163	0	1000	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	5.3		4.0	4.0		4.0	4.0			
Lane Util. Factor		0.91	1.00		0.91	1.00		1.00	0.88			
Frpb, ped/bikes		1.00	0.94		1.00	0.97		1.00	1.00			
Flpb, ped/bikes		1.00	1.00		1.00	1.00		1.00	1.00			
Frt		1.00	0.85		1.00	0.85		1.00	0.85			
Flt Protected		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (prot)		5085	1494		5085	1538		1770	2787			
Flt Permitted		1.00	1.00		1.00	1.00		0.95	1.00			
Satd. Flow (perm)		5085	1494		5085	1538		1770	2787			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1765	149	0	1717	699	173	0	1064	0	0	0
RTOR Reduction (vph)	0	0	46	0	0	0	0	0	1	0	0	0
Lane Group Flow (vph)	0	1765	103	0	1717	699	0	173	1063	0	0	0
Confl. Peds. (#/hr)			10			10						
Confl. Bikes (#/hr)			10			10						
Turn Type			Perm			Free	Split		custom			
Protected Phases		6			2		4	4				
Permitted Phases			6			Free			4 5			
Actuated Green, G (s)		38.4	38.4		63.6	94.8		20.2	46.5			
Effective Green, g (s)		39.7	38.4		64.9	94.8		21.9	48.2			
Actuated g/C Ratio		0.42	0.41		0.68	1.00		0.23	0.51			
Clearance Time (s)		5.3	5.3		5.3			5.7				
Vehicle Extension (s)		3.0	3.0		3.0			2.5				
Lane Grp Cap (vph)		2129	605		3481	1538		409	1417			
v/s Ratio Prot		c0.35			0.34			0.10				
v/s Ratio Perm			0.07			0.45			c0.38			
v/c Ratio		0.83	0.17		0.49	0.45		0.42	0.75			
Uniform Delay, d1		24.5	18.0		7.1	0.0		31.1	18.5			
Progression Factor		1.00	1.00		1.00	1.00		1.00	1.00			
Incremental Delay, d2		2.8	0.1		0.1	1.0		0.5	2.2			
Delay (s)		27.3	18.2		7.2	1.0		31.6	20.7			
Level of Service		C	B		A	A		C	C			
Approach Delay (s)		26.6			5.4			22.2			0.0	
Approach LOS		C			A			C			A	

Intersection Summary			
HCM Average Control Delay	16.4	HCM Level of Service	B
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	94.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	311	1203	421	118	1156	150	809	342	54	135	354	306
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.4	4.4	4.2	5.9		4.6	4.4	4.4	4.2	4.4	4.4
Lane Util. Factor	0.97	0.95	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3539	1524	1770	4977		3433	3539	1520	1770	3539	1524
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3539	1524	1770	4977		3433	3539	1520	1770	3539	1524
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	331	1280	448	126	1230	160	861	364	57	144	377	326
RTOR Reduction (vph)	0	0	138	0	9	0	0	0	48	0	0	152
Lane Group Flow (vph)	331	1280	310	126	1381	0	861	364	9	144	377	174
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4						2			6
Actuated Green, G (s)	19.1	37.8	37.8	13.3	32.0		38.5	19.5	19.5	40.8	21.4	21.4
Effective Green, g (s)	20.1	39.3	39.3	14.3	32.0		39.5	21.0	21.0	41.8	22.9	22.9
Actuated g/C Ratio	0.15	0.29	0.29	0.11	0.24		0.30	0.16	0.16	0.31	0.17	0.17
Clearance Time (s)	5.2	5.9	5.9	5.2	5.9		5.6	5.9	5.9	5.2	5.9	5.9
Vehicle Extension (s)	1.8	4.8	4.8	1.8	2.3		1.8	2.3	2.3	1.8	2.3	2.3
Lane Grp Cap (vph)	516	1041	448	189	1192		1015	556	239	554	607	261
v/s Ratio Prot	c0.10	c0.36		0.07	0.28		c0.25	0.10		0.08	0.11	
v/s Ratio Perm			0.20						0.01			c0.11
v/c Ratio	0.64	1.23	0.69	0.67	1.16		0.85	0.65	0.04	0.26	0.62	0.66
Uniform Delay, d1	53.4	47.1	41.8	57.4	50.8		44.2	52.9	47.7	34.3	51.3	51.8
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.0	111.9	5.6	6.7	81.0		6.5	2.3	0.0	0.1	1.6	5.3
Delay (s)	55.4	159.0	47.3	64.1	131.8		50.7	55.2	47.8	34.4	52.9	57.1
Level of Service	E	F	D	E	F		D	E	D	C	D	E
Approach Delay (s)		118.1			126.2			51.8			51.4	
Approach LOS		F			F			D			D	

Intersection Summary			
HCM Average Control Delay	95.4	HCM Level of Service	F
HCM Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	133.6	Sum of lost time (s)	13.4
Intersection Capacity Utilization	91.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	363	958	71	229	835	207	330	364	99	373	298	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	0.95		1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3495		1770	5085	1535	1770	3539	1532	1770	3539	1519
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1770	3495		1770	5085	1535	1770	3539	1532	1770	3539	1519
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	386	1019	76	244	888	220	351	387	105	397	317	276
RTOR Reduction (vph)	0	4	0	0	0	152	0	0	82	0	0	191
Lane Group Flow (vph)	386	1091	0	244	888	68	351	387	23	397	317	85
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	14.1	40.3		11.1	37.3	37.3	27.3	26.6	26.6	18.1	17.4	17.4
Effective Green, g (s)	14.1	40.3		11.1	37.3	37.3	27.3	26.6	26.6	18.1	17.4	17.4
Actuated g/C Ratio	0.12	0.34		0.09	0.31	0.31	0.23	0.22	0.22	0.15	0.14	0.14
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	208	1173		164	1579	477	402	784	339	267	513	220
v/s Ratio Prot	c0.22	c0.31		0.14	0.17		c0.20	0.11		c0.22	c0.09	
v/s Ratio Perm						0.04			0.02			0.06
v/c Ratio	1.86	0.93		1.49	0.56	0.14	0.87	0.49	0.07	1.49	0.62	0.39
Uniform Delay, d1	53.0	38.5		54.5	34.6	29.9	44.7	40.9	37.0	51.0	48.2	46.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	403.0	12.9		249.0	0.5	0.1	18.0	0.5	0.1	238.1	2.2	1.1
Delay (s)	456.0	51.4		303.5	35.0	30.0	62.7	41.4	37.0	289.1	50.4	47.7
Level of Service	F	D		F	D	C	E	D	D	F	D	D
Approach Delay (s)		156.9			82.7			49.7			145.4	
Approach LOS		F			F			D			F	

Intersection Summary			
HCM Average Control Delay	113.6	HCM Level of Service	F
HCM Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	120.1	Sum of lost time (s)	24.0
Intersection Capacity Utilization	97.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Volume (veh/h)	1195	76	141	1233	21	58
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	1271	81	150	1312	22	62
Pedestrians	10			10	10	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	3.5			3.5	3.5	
Percent Blockage	1			1	1	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)	509			422		
pX, platoon unblocked						
vC, conflicting volume			1362		2069	484
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			1362		2069	484
tC, single (s)			4.1		6.8	6.9
tC, 2 stage (s)						
tF (s)			2.2		3.5	3.3
p0 queue free %			70		30	88
cM capacity (veh/h)			496		32	519

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	WB 4	NB 1
Volume Total	509	509	335	150	437	437	437	84
Volume Left	0	0	0	150	0	0	0	22
Volume Right	0	0	81	0	0	0	0	62
cSH	1700	1700	1700	496	1700	1700	1700	103
Volume to Capacity	0.30	0.30	0.20	0.30	0.26	0.26	0.26	0.82
Queue Length 95th (ft)	0	0	0	32	0	0	0	114
Control Delay (s)	0.0	0.0	0.0	15.4	0.0	0.0	0.0	119.4
Lane LOS				C				F
Approach Delay (s)	0.0			1.6				119.4
Approach LOS								F

Intersection Summary			
Average Delay	4.3		
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	88	1153	12	9	1204	121	21	6	4	92	5	149
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5		6.5	6.5		5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	0.95		1.00	0.95		1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00		1.00	0.99		1.00	0.94		1.00	0.85	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3532		1770	3491		1770	1751		1770	1592	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (perm)	1770	3532		1770	3491		1770	1751		1770	1592	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	94	1227	13	10	1281	129	22	6	4	98	5	159
RTOR Reduction (vph)	0	0	0	0	4	0	0	4	0	0	138	0
Lane Group Flow (vph)	94	1240	0	10	1406	0	22	6	0	98	26	0
Confl. Peds. (#/hr)			10									
Turn Type	Prot			Prot			Split			Split		
Protected Phases	5	2		1	6		8	8		4	4	
Permitted Phases												
Actuated Green, G (s)	10.2	67.3		1.0	58.1		10.2	10.2		15.3	15.3	
Effective Green, g (s)	10.2	67.3		1.0	58.1		10.2	10.2		15.3	15.3	
Actuated g/C Ratio	0.09	0.58		0.01	0.50		0.09	0.09		0.13	0.13	
Clearance Time (s)	6.5	6.5		6.5	6.5		5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	155	2035		15	1737		155	153		232	209	
v/s Ratio Prot	c0.05	c0.35		0.01	c0.40		c0.01	0.00		c0.06	0.02	
v/s Ratio Perm												
v/c Ratio	0.61	0.61		0.67	0.81		0.14	0.04		0.42	0.12	
Uniform Delay, d1	51.4	16.2		57.7	24.7		49.3	48.8		46.7	44.8	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	6.6	0.5		75.9	2.9		0.4	0.1		1.2	0.3	
Delay (s)	57.9	16.7		133.6	27.6		49.7	48.9		47.9	45.1	
Level of Service	E	B		F	C		D	D		D	D	
Approach Delay (s)		19.6			28.3			49.4			46.2	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM Average Control Delay	26.3	HCM Level of Service	C
HCM Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	116.8	Sum of lost time (s)	29.5
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1014	231	121	1037	3	294	0	17	0	2	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0			5.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.95			0.97	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85			0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)	1770	1863	1498	1770	1863	1500	1770	1502			1641	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.75	1.00			1.00	
Satd. Flow (perm)	1770	1863	1498	1770	1863	1500	1405	1502			1641	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	4	1079	246	129	1103	3	313	0	18	0	2	3
RTOR Reduction (vph)	0	0	79	0	0	0	0	13	0	0	2	0
Lane Group Flow (vph)	4	1079	167	129	1103	3	313	5	0	0	3	0
Confl. Peds. (#/hr)			10			10			10	10		10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Actuated Green, G (s)	1.2	49.8	49.8	11.0	59.6	59.6	27.4	27.4			27.4	
Effective Green, g (s)	1.2	49.8	49.8	11.0	59.6	59.6	27.4	27.4			27.4	
Actuated g/C Ratio	0.01	0.47	0.47	0.10	0.56	0.56	0.26	0.26			0.26	
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0			5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)	20	874	702	183	1046	842	362	388			423	
v/s Ratio Prot	0.00	c0.58		c0.07	c0.59			0.00			0.00	
v/s Ratio Perm			0.11			0.00	c0.22					
v/c Ratio	0.20	1.23	0.24	0.70	1.05	0.00	0.86	0.01			0.01	
Uniform Delay, d1	52.0	28.2	16.9	46.0	23.3	10.2	37.6	29.3			29.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	4.9	115.5	0.8	11.7	43.4	0.0	18.8	0.0			0.0	
Delay (s)	56.9	143.7	17.7	57.7	66.7	10.2	56.5	29.3			29.3	
Level of Service	E	F	B	E	E	B	E	C			C	
Approach Delay (s)		120.1			65.6			55.0			29.3	
Approach LOS		F			E			D			C	

Intersection Summary			
HCM Average Control Delay	89.3	HCM Level of Service	F
HCM Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	106.2	Sum of lost time (s)	24.5
Intersection Capacity Utilization	98.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Intersection has too many lanes per leg.

HCM All-Way analysis is limited to two lanes per leg.

Channelized right turn lanes are not counted.

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Volume (veh/h)	0	1271	1155	99	0	116
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	1352	1229	105	0	123
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (ft)		396	535			
pX, platoon unblocked						
vC, conflicting volume	1334				1732	462
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1334				1732	462
tC, single (s)	4.1				6.8	6.9
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	100				100	77
cM capacity (veh/h)	513				79	546

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	SB 1
Volume Total	451	451	451	491	491	351	123
Volume Left	0	0	0	0	0	0	0
Volume Right	0	0	0	0	0	105	123
cSH	1700	1700	1700	1700	1700	1700	546
Volume to Capacity	0.27	0.27	0.27	0.29	0.29	0.21	0.23
Queue Length 95th (ft)	0	0	0	0	0	0	22
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	13.5
Lane LOS							B
Approach Delay (s)	0.0			0.0			13.5
Approach LOS							B

Intersection Summary			
Average Delay	0.6		
Intersection Capacity Utilization	38.4%	ICU Level of Service	A
Analysis Period (min)	15		

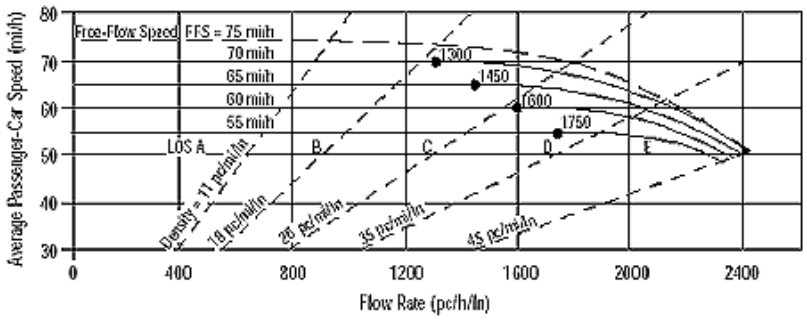
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Volume (veh/h)	0	0	573	0	0	638
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Hourly flow rate (vph)	0	0	610	0	0	679
Pedestrians						
Lane Width (ft)						
Walking Speed (ft/s)						
Percent Blockage						
Right turn flare (veh)						
Median type			None			None
Median storage veh)						
Upstream signal (ft)			333			
pX, platoon unblocked	0.84	0.84			0.84	
vC, conflicting volume	949	305			610	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	566	0			163	
tC, single (s)	6.8	6.9			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	100	100			100	
cM capacity (veh/h)	383	914			1191	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2	SB 3
Volume Total	0	406	203	0	339	339
Volume Left	0	0	0	0	0	0
Volume Right	0	0	0	0	0	0
cSH	1700	1700	1700	1700	1700	1700
Volume to Capacity	0.00	0.24	0.12	0.00	0.20	0.20
Queue Length 95th (ft)	0	0	0	0	0	0
Control Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	A					
Approach Delay (s)	0.0	0.0		0.0		
Approach LOS	A					

Intersection Summary			
Average Delay	0.0		
Intersection Capacity Utilization	21.0%	ICU Level of Service	A
Analysis Period (min)	15		

APPENDIX C:
FREEWAY MAINLINE LEVEL OF SERVICE CALCULATIONS

BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information / Site Information

Analyst	***KC***	Highway/Direction of Travel	***US 101 NB***
Agency or Company	***Fehr & Peers***	From/To	***Boronda to Russell***
Date Performed	***July 2010***	Jurisdiction	***Salinas***
Analysis Time Period	***PM Peak Hour***	Analysis Year	***2010***

Project Description Existing Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***3737***	veh/h	Peak-Hour Factor, PHF	***0.91***
AADT		veh/day	%Trucks and Buses, P_T	***5***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.976***

Speed Inputs / Calc Speed Adj and FFS

Lane Width	***12.0***	ft	f_{LW}	***0.0***	mi/h
Rt-Shoulder Lat. Clearance	***6.0***	ft	f_{LC}	***0.0***	mi/h
Interchange Density	***1.12***	I/mi	f_{ID}	***3.1***	mi/h
Number of Lanes, N	***2***		f_N	***4.5***	mi/h
FFS (measured)		mi/h	FFS	***62.4***	mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h			

LOS and Performance Measures / Design (N)

Operational (LOS)			Design (N)	
			Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2105***	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	***57.8***	mi/h	S	mi/h
D = v_p / S	***36.4***	pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	***E***		Required Number of Lanes, N	

Glossary / Factor Location

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

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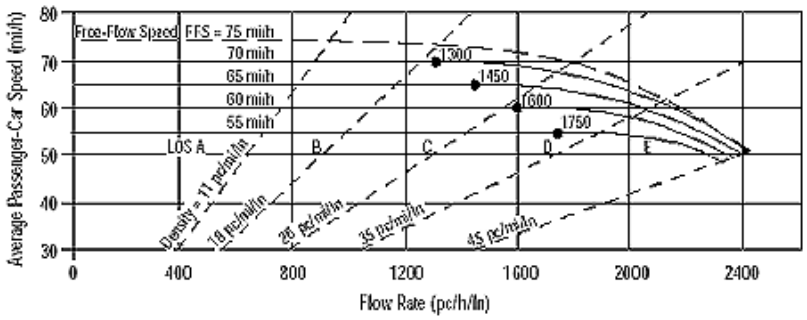
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	***KC***
Agency or Company	***Fehr & Peers***
Date Performed	***July 2010***
Analysis Time Period	***PM Peak Hour***

Site Information

Highway/Direction of Travel	***US 101 NB***
From/To	***Laurel to Boronda***
Jurisdiction	***Salinas***
Analysis Year	***2010***

Project Description Existing Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***3855***	veh/h	Peak-Hour Factor, PHF	***0.91***
AADT		veh/day	%Trucks and Buses, P_T	***5***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.976***

Speed Inputs

Lane Width	***12.0***	ft
Rt-Shoulder Lat. Clearance	***6.0***	ft
Interchange Density	***1.12***	I/mi
Number of Lanes, N	***2***	
FFS (measured)		mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h

Calc Speed Adj and FFS

f_{LW}	***0.0***	mi/h
f_{LC}	***0.0***	mi/h
f_{ID}	***3.1***	mi/h
f_N	***4.5***	mi/h
FFS	***62.4***	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2171***	pc/h/ln
S	***56.2***	mi/h
D = v_p / S	***38.6***	pc/mi/ln
LOS	***E***	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	mi/h
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

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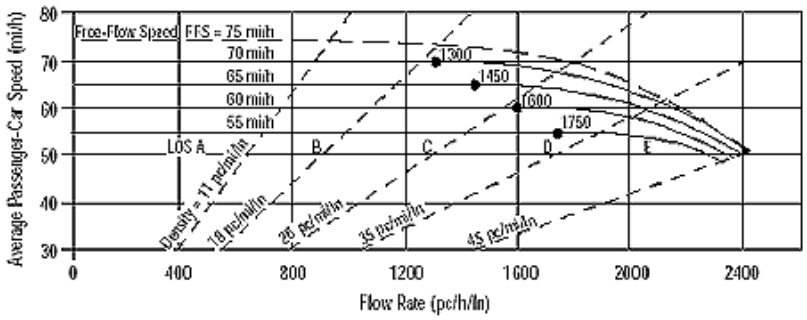
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information / Site Information

Analyst	***KC***	Highway/Direction of Travel	***US 101 SB***
Agency or Company	***Fehr & Peers***	From/To	***Boronda to Laurel***
Date Performed	***July 2010***	Jurisdiction	***Salinas***
Analysis Time Period	***PM Peak Hour***	Analysis Year	***2010***

Project Description Existing Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***4072***	veh/h	Peak-Hour Factor, PHF	***0.96***
AADT		veh/day	%Trucks and Buses, P_T	***7***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.966***

Speed Inputs / Calc Speed Adj and FFS

Lane Width	***12.0***	ft	f_{LW}	***0.0***	mi/h
Rt-Shoulder Lat. Clearance	***6.0***	ft	f_{LC}	***0.0***	mi/h
Interchange Density	***1.12***	I/mi	f_{ID}	***3.1***	mi/h
Number of Lanes, N	***2***		f_N	***4.5***	mi/h
FFS (measured)		mi/h	FFS	***62.4***	mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h			

LOS and Performance Measures / Design (N)

Operational (LOS)			Design (N)	
			Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2195***	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	***55.6***	mi/h	S	mi/h
D = v_p / S	***39.5***	pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	***E***		Required Number of Lanes, N	

Glossary / Factor Location

N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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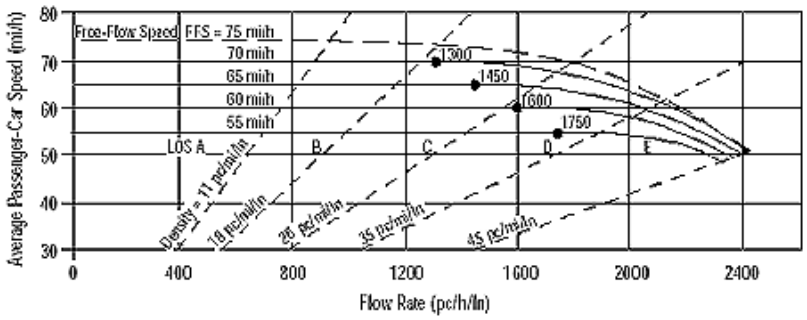
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information		***Site Information***	
Analyst	***KC***	Highway/Direction of Travel	***US 101 SB***
Agency or Company	***Fehr & Peers***	From/To	***Russell to Boronda***
Date Performed	***July 2010***	Jurisdiction	***Salinas***
Analysis Time Period	***PM Peak Hour***	Analysis Year	***2010***

Project Description Existing Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs				
Volume, V	***4359***	veh/h	Peak-Hour Factor, PHF	***0.96***
AADT		veh/day	%Trucks and Buses, P_T	***7***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments			
f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.966***

Speed Inputs			**Calc Speed Adj and FFS**		
Lane Width	***12.0***	ft	f_{LW}	***0.0***	mi/h
Rt-Shoulder Lat. Clearance	***6.0***	ft	f_{LC}	***0.0***	mi/h
Interchange Density	***1.12***	I/mi	f_{ID}	***3.1***	mi/h
Number of Lanes, N	***2***		f_N	***4.5***	mi/h
FFS (measured)		mi/h	FFS	***62.4***	mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h			

LOS and Performance Measures			**Design (N)**	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2350***	pc/h/ln	Design LOS	
			v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S		mi/h	S	mi/h
D = v_p / S		pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	***F***		Required Number of Lanes, N	

Glossary		**Factor Location**	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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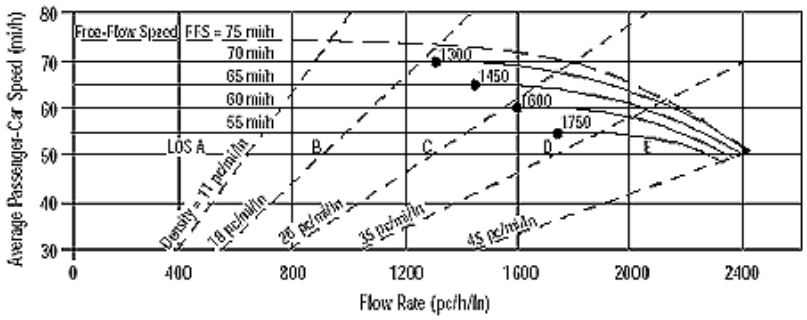
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	***KC***
Agency or Company	***Fehr & Peers***
Date Performed	***July 2010***
Analysis Time Period	***PM Peak Hour***

Site Information

Highway/Direction of Travel	***US 101 NB***
From/To	***Boronda to Russell***
Jurisdiction	***Salinas***
Analysis Year	***2010***

Project Description Project Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***3800***	veh/h	Peak-Hour Factor, PHF	***0.91***
AADT		veh/day	%Trucks and Buses, P_T	***5***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.976***

Speed Inputs

Lane Width	***12.0***	ft
Rt-Shoulder Lat. Clearance	***6.0***	ft
Interchange Density	***1.12***	I/mi
Number of Lanes, N	***2***	
FFS (measured)		mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h

Calc Speed Adj and FFS

f_{LW}	***0.0***	mi/h
f_{LC}	***0.0***	mi/h
f_{ID}	***3.1***	mi/h
f_N	***4.5***	mi/h
FFS	***62.4***	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2140***	pc/h/ln
S	***57.0***	mi/h
D = v_p / S	***37.6***	pc/mi/ln
LOS	***E***	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	mi/h
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

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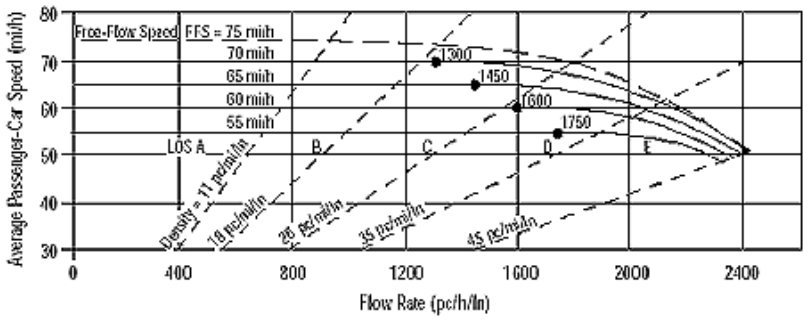
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	***KC***
Agency or Company	***Fehr & Peers***
Date Performed	***July 2010***
Analysis Time Period	***PM Peak Hour***

Site Information

Highway/Direction of Travel	***US 101 NB***
From/To	***Laurel to Boronda***
Jurisdiction	***Salinas***
Analysis Year	***2010***

Project Description Project Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***3997***	veh/h	Peak-Hour Factor, PHF	***0.91***
AADT		veh/day	%Trucks and Buses, P_T	***5***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.976***

Speed Inputs

Lane Width	***12.0***	ft
Rt-Shoulder Lat. Clearance	***6.0***	ft
Interchange Density	***1.12***	I/mi
Number of Lanes, N	***2***	
FFS (measured)		mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h

Calc Speed Adj and FFS

f_{LW}	***0.0***	mi/h
f_{LC}	***0.0***	mi/h
f_{ID}	***3.1***	mi/h
f_N	***4.5***	mi/h
FFS	***62.4***	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2251***	pc/h/ln
S	***54.0***	mi/h
D = v_p / S	***41.7***	pc/mi/ln
LOS	***E***	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	mi/h
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

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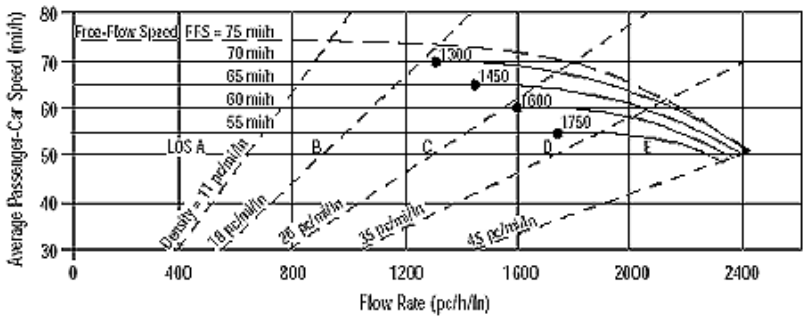
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	***KC***
Agency or Company	***Fehr & Peers***
Date Performed	***July 2010***
Analysis Time Period	***PM Peak Hour***

Site Information

Highway/Direction of Travel	***US 101 SB***
From/To	***Boronda to Laurel***
Jurisdiction	***Salinas***
Analysis Year	***2010***

Project Description Project Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***4219***	veh/h	Peak-Hour Factor, PHF	***0.96***
AADT		veh/day	%Trucks and Buses, P_T	***7***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.966***

Speed Inputs

Lane Width	***12.0***	ft
Rt-Shoulder Lat. Clearance	***6.0***	ft
Interchange Density	***1.12***	I/mi
Number of Lanes, N	***2***	
FFS (measured)		mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h

Calc Speed Adj and FFS

f_{LW}	***0.0***	mi/h
f_{LC}	***0.0***	mi/h
f_{ID}	***3.1***	mi/h
f_N	***4.5***	mi/h
FFS	***62.4***	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2274***	pc/h/ln
S	***53.3***	mi/h
D = v_p / S	***42.6***	pc/mi/ln
LOS	***E***	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	mi/h
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

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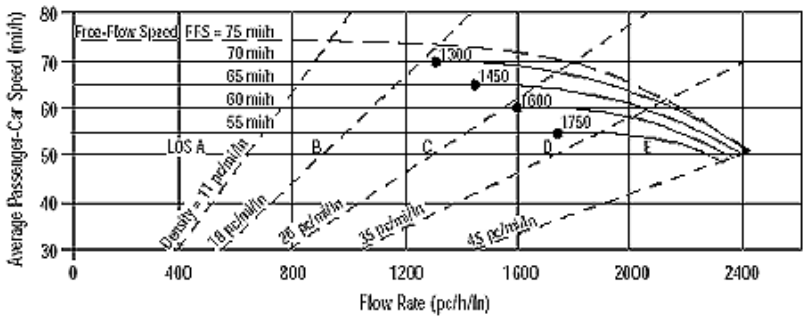
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information / Site Information

General Information		Site Information	
Analyst	***KC***	Highway/Direction of Travel	***US 101 SB***
Agency or Company	***Fehr & Peers***	From/To	***Russell to Boronda***
Date Performed	***July 2010***	Jurisdiction	***Salinas***
Analysis Time Period	***PM Peak Hour***	Analysis Year	***2010***

Project Description Project Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***4420***	veh/h	Peak-Hour Factor, PHF	***0.96***
AADT		veh/day	%Trucks and Buses, P_T	***7***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.966***

Speed Inputs / Calc Speed Adj and FFS

Speed Inputs			Calc Speed Adj and FFS		
Lane Width	***12.0***	ft	f_{LW}	***0.0***	mi/h
Rt-Shoulder Lat. Clearance	***6.0***	ft	f_{LC}	***0.0***	mi/h
Interchange Density	***1.12***	I/mi	f_{ID}	***3.1***	mi/h
Number of Lanes, N	***2***		f_N	***4.5***	mi/h
FFS (measured)		mi/h	FFS	***62.4***	mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h			

LOS and Performance Measures / Design (N)

LOS and Performance Measures			Design (N)	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2383***	pc/h/ln	Design LOS	
			v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S		mi/h	S	mi/h
D = v_p / S		pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	***F***		Required Number of Lanes, N	

Glossary / Factor Location

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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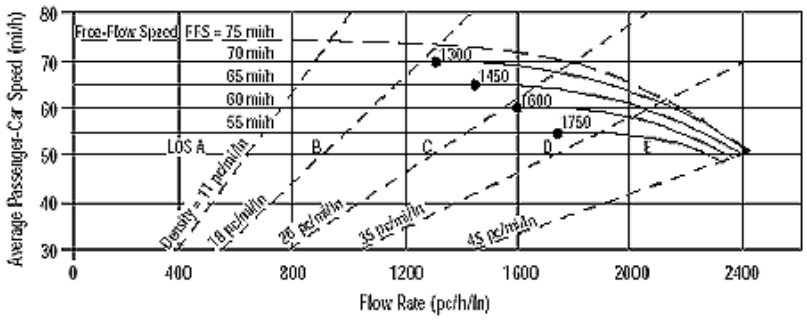
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information / Site Information

General Information		Site Information	
Analyst	***KC***	Highway/Direction of Travel	***US 101 NB***
Agency or Company	***Fehr & Peers***	From/To	***Boronda to Russell***
Date Performed	***July 2010***	Jurisdiction	***Salinas***
Analysis Time Period	***PM Peak Hour***	Analysis Year	

Project Description Cumulative Without Project Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***4904***	veh/h	Peak-Hour Factor, PHF	***0.91***
AADT		veh/day	%Trucks and Buses, P_T	***5***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.976***

Speed Inputs / Calc Speed Adj and FFS

Speed Inputs			Calc Speed Adj and FFS		
Lane Width	***12.0***	ft	f_{LW}	***0.0***	mi/h
Rt-Shoulder Lat. Clearance	***6.0***	ft	f_{LC}	***0.0***	mi/h
Interchange Density	***1.12***	I/mi	f_{ID}	***3.1***	mi/h
Number of Lanes, N	***2***		f_N	***4.5***	mi/h
FFS (measured)		mi/h	FFS	***62.4***	mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h			

LOS and Performance Measures / Design (N)

LOS and Performance Measures			Design (N)	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2762***	pc/h/ln	Design LOS	
S		mi/h	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
D = v_p / S		pc/mi/ln	S	mi/h
LOS	***F***		D = v_p / S	pc/mi/ln
			Required Number of Lanes, N	

Glossary / Factor Location

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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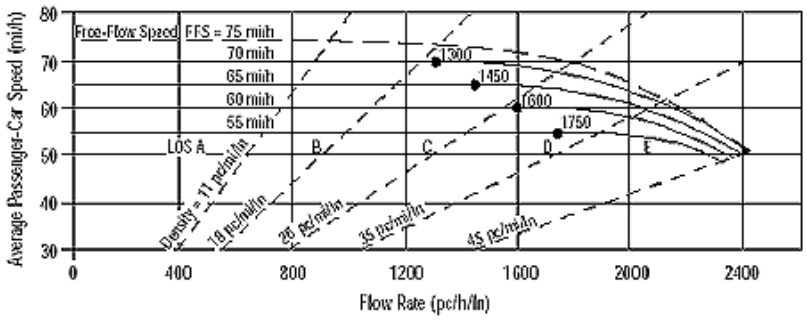
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information / Site Information

General Information		Site Information	
Analyst	***KC***	Highway/Direction of Travel	***US 101 NB***
Agency or Company	***Fehr & Peers***	From/To	***Laurel to Boronda***
Date Performed	***July 2010***	Jurisdiction	***Salinas***
Analysis Time Period	***PM Peak Hour***	Analysis Year	***Cumulative Scenario***

Project Description Cumulative Without Project Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***5090***	veh/h	Peak-Hour Factor, PHF	***0.91***
AADT		veh/day	%Trucks and Buses, P_T	***5***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.976***

Speed Inputs / Calc Speed Adj and FFS

Speed Inputs			Calc Speed Adj and FFS		
Lane Width	***12.0***	ft	f_{LW}	***0.0***	mi/h
Rt-Shoulder Lat. Clearance	***6.0***	ft	f_{LC}	***0.0***	mi/h
Interchange Density	***1.12***	I/mi	f_{ID}	***3.1***	mi/h
Number of Lanes, N	***2***		f_N	***4.5***	mi/h
FFS (measured)		mi/h	FFS	***62.4***	mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h			

LOS and Performance Measures / Design (N)

LOS and Performance Measures			Design (N)	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2867***	pc/h/ln	Design LOS	
			v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S		mi/h	S	mi/h
D = v_p / S		pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	***F***		Required Number of Lanes, N	

Glossary / Factor Location

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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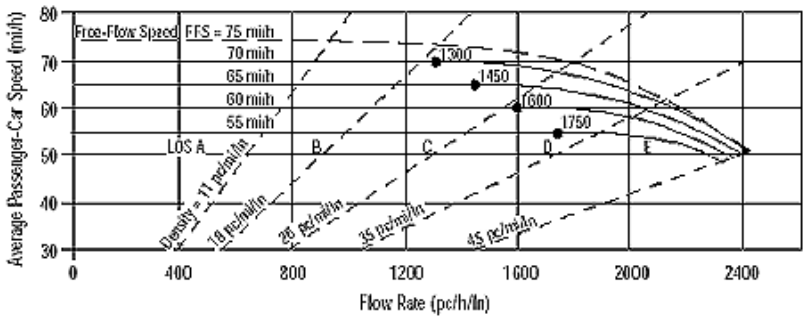
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information / Site Information

Analyst	***KC***	Highway/Direction of Travel	***US 101 SB***
Agency or Company	***Fehr & Peers***	From/To	***Boronda to Laurel***
Date Performed	***July 2010***	Jurisdiction	***Salinas***
Analysis Time Period	***PM Peak Hour***	Analysis Year	***Cumulative Scenario***

Project Description Cumulative Without Project Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***4863***	veh/h	Peak-Hour Factor, PHF	***0.96***
AADT		veh/day	%Trucks and Buses, P_T	***7***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.966***

Speed Inputs / Calc Speed Adj and FFS

Lane Width	***12.0***	ft	f_{LW}	***0.0***	mi/h
Rt-Shoulder Lat. Clearance	***6.0***	ft	f_{LC}	***0.0***	mi/h
Interchange Density	***1.12***	I/mi	f_{ID}	***3.1***	mi/h
Number of Lanes, N	***2***		f_N	***4.5***	mi/h
FFS (measured)		mi/h	FFS	***62.4***	mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h			

LOS and Performance Measures / Design (N)

Operational (LOS)			Design (N)	
			Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2621***	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S		mi/h	S	mi/h
D = v_p / S		pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	***F***		Required Number of Lanes, N	

Glossary / Factor Location

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

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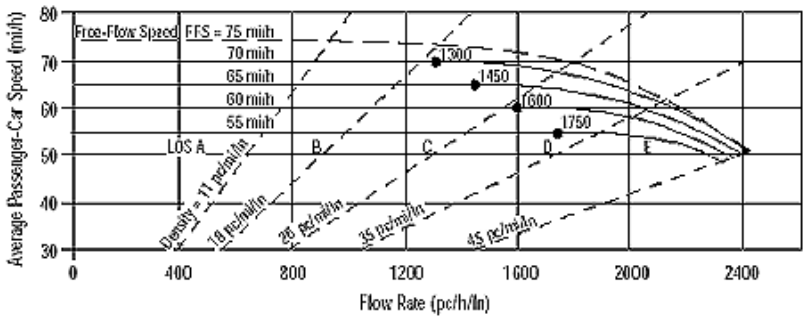
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information

Analyst	***KC***
Agency or Company	***Fehr & Peers***
Date Performed	***July 2010***
Analysis Time Period	***PM Peak Hour***

Site Information

Highway/Direction of Travel	***US 101 SB***
From/To	***Russell to Boronda***
Jurisdiction	***Salinas***
Analysis Year	***Cumulative Scenario***

Project Description Cumulative Without Project Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***5088***	veh/h	Peak-Hour Factor, PHF	***0.96***
AADT		veh/day	%Trucks and Buses, P_T	***7***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.966***

Speed Inputs

Lane Width	***12.0***	ft
Rt-Shoulder Lat. Clearance	***6.0***	ft
Interchange Density	***1.12***	I/mi
Number of Lanes, N	***2***	
FFS (measured)		mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h

Calc Speed Adj and FFS

f_{LW}	***0.0***	mi/h
f_{LC}	***0.0***	mi/h
f_{ID}	***3.1***	mi/h
f_N	***4.5***	mi/h
FFS	***62.4***	mi/h

LOS and Performance Measures

Operational (LOS)

v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2743***	pc/h/ln
S		mi/h
D = v_p / S		pc/mi/ln
LOS	***F***	

Design (N)

Design (N)

Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S	mi/h
D = v_p / S	pc/mi/ln
Required Number of Lanes, N	

Glossary

N - Number of lanes	S - Speed
V - Hourly volume	D - Density
v_p - Flow rate	FFS - Free-flow speed
LOS - Level of service	BFFS - Base free-flow speed
DDHV - Directional design hour volume	

Factor Location

E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
f_p - Page 23-12	f_N - Exhibit 23-6
LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7

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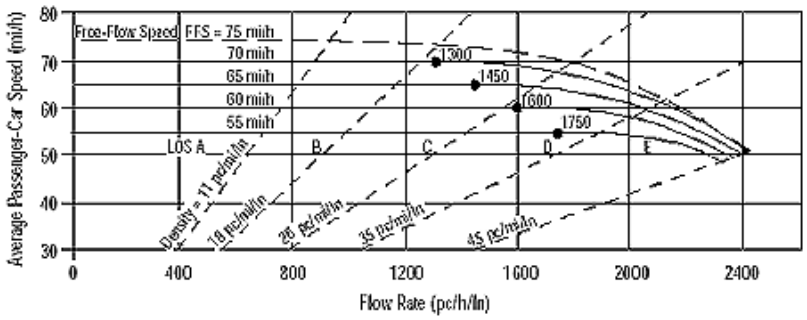
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information / Site Information

Analyst	***KC***	Highway/Direction of Travel	***US 101 NB***
Agency or Company	***Fehr & Peers***	From/To	***Boronda to Russell***
Date Performed	***July 2010***	Jurisdiction	***Salinas***
Analysis Time Period	***PM Peak Hour***	Analysis Year	***Cumulative Scenario***

Project Description Cumulative With Project Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***4967***	veh/h	Peak-Hour Factor, PHF	***0.91***
AADT		veh/day	%Trucks and Buses, P_T	***5***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.976***

Speed Inputs / Calc Speed Adj and FFS

Lane Width	***12.0***	ft	f_{LW}	***0.0***	mi/h
Rt-Shoulder Lat. Clearance	***6.0***	ft	f_{LC}	***0.0***	mi/h
Interchange Density	***1.12***	I/mi	f_{ID}	***3.1***	mi/h
Number of Lanes, N	***2***		f_N	***4.5***	mi/h
FFS (measured)		mi/h	FFS	***62.4***	mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h			

LOS and Performance Measures / Design (N)

Operational (LOS)			Design (N)	
			Design LOS	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2797***	pc/h/ln	v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S		mi/h	S	mi/h
D = v_p / S		pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	***F***		Required Number of Lanes, N	

Glossary / Factor Location

N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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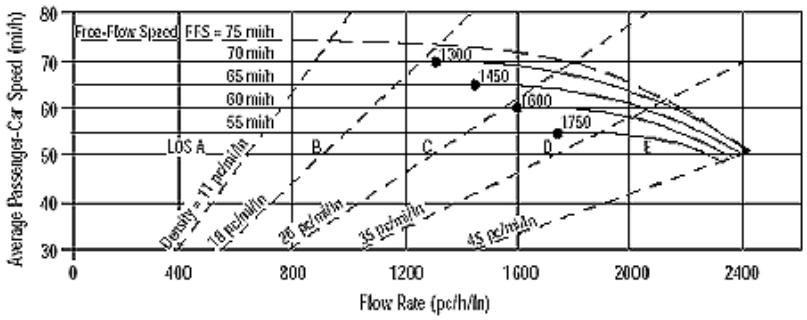
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information / Site Information

General Information		Site Information	
Analyst	***KC***	Highway/Direction of Travel	***US 101 NB***
Agency or Company	***Fehr & Peers***	From/To	***Laurel to Boronda***
Date Performed	***July 2010***	Jurisdiction	***Salinas***
Analysis Time Period	***PM Peak Hour***	Analysis Year	***Cumulative Scenario***

Project Description Cumulative With Project Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***5232***	veh/h	Peak-Hour Factor, PHF	***0.91***
AADT		veh/day	%Trucks and Buses, P_T	***5***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.976***

Speed Inputs / Calc Speed Adj and FFS

Speed Inputs			Calc Speed Adj and FFS		
Lane Width	***12.0***	ft	f_{LW}	***0.0***	mi/h
Rt-Shoulder Lat. Clearance	***6.0***	ft	f_{LC}	***0.0***	mi/h
Interchange Density	***1.12***	I/mi	f_{ID}	***3.1***	mi/h
Number of Lanes, N	***2***		f_N	***4.5***	mi/h
FFS (measured)		mi/h	FFS	***62.4***	mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h			

LOS and Performance Measures / Design (N)

LOS and Performance Measures			Design (N)	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2947***	pc/h/ln	Design LOS	
			v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S		mi/h	S	mi/h
D = v_p / S		pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	***F***		Required Number of Lanes, N	

Glossary / Factor Location

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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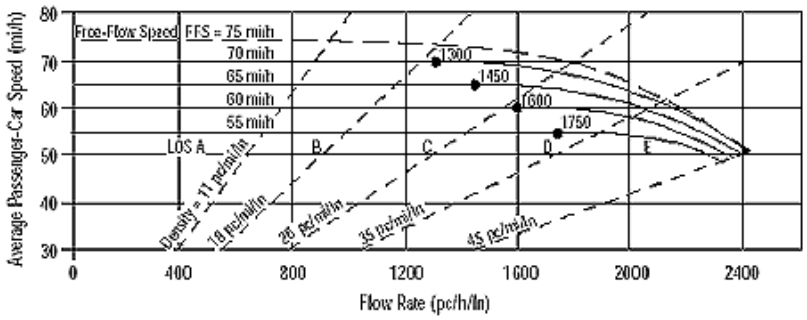
BASIC FREEWAY SEGMENTS WORKSHEET



Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information / Site Information

General Information		Site Information	
Analyst	***KC***	Highway/Direction of Travel	***US 101 SB***
Agency or Company	***Fehr & Peers***	From/To	***Boronda to Laurel***
Date Performed	***July 2010***	Jurisdiction	***Salinas***
Analysis Time Period	***PM Peak Hour***	Analysis Year	***Cumulative Scenario***

Project Description Cumulative With Project Conditions

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs

Volume, V	***5010***	veh/h	Peak-Hour Factor, PHF	***0.96***
AADT		veh/day	%Trucks and Buses, P_T	***7***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments

f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.966***

Speed Inputs / Calc Speed Adj and FFS

Speed Inputs			Calc Speed Adj and FFS		
Lane Width	***12.0***	ft	f_{LW}	***0.0***	mi/h
Rt-Shoulder Lat. Clearance	***6.0***	ft	f_{LC}	***0.0***	mi/h
Interchange Density	***1.12***	I/mi	f_{ID}	***3.1***	mi/h
Number of Lanes, N	***2***		f_N	***4.5***	mi/h
FFS (measured)		mi/h	FFS	***62.4***	mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h			

LOS and Performance Measures / Design (N)

LOS and Performance Measures			Design (N)	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2701***	pc/h/ln	Design LOS	
			v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S		mi/h	S	mi/h
D = v_p / S		pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	***F***		Required Number of Lanes, N	

Glossary / Factor Location

Glossary		Factor Location	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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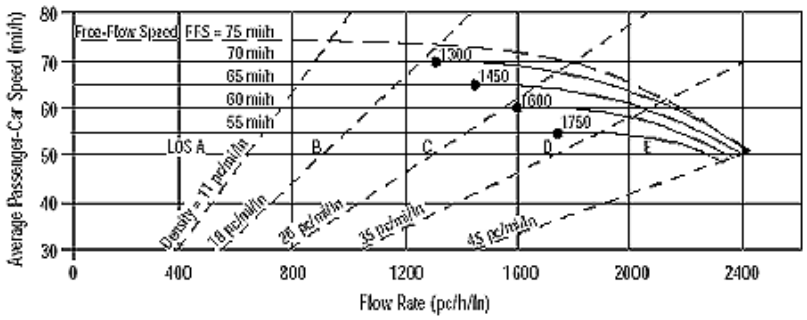

Application	Input	Output
Operational (LOS)	FFS, N, v_p	LOS, S, D
Design (N)	FFS, LOS, v_p	N, S, D
Design (v_p)	FFS, LOS, N	v_p, S, D
Planning (LOS)	FFS, N, AADT	LOS, S, D
Planning (N)	FFS, LOS, AADT	N, S, D
Planning (v_p)	FFS, LOS, N	v_p, S, D

General Information		***Site Information***	
Analyst	***KC***	Highway/Direction of Travel	***US 101 SB***
Agency or Company	***Fehr & Peers***	From/To	***Russell to Boronda***
Date Performed	***July 2010***	Jurisdiction	***Salinas***
Analysis Time Period	***PM Peak Hour***	Analysis Year	***Cumulative Scenario***

Project Description

☑ Oper.(LOS) ☐ Des.(N) ☐ Planning Data

Flow Inputs				
Volume, V	***5149***	veh/h	Peak-Hour Factor, PHF	***0.96***
AADT		veh/day	%Trucks and Buses, P_T	***7***
Peak-Hr Prop. of AADT, K			%RVs, P_R	***0***
Peak-Hr Direction Prop, D			General Terrain:	***Level***
DDHV = AADT x K x D		veh/h	Grade % Length	***mi***
Driver type adjustment	***1.00***		Up/Down %	

Calculate Flow Adjustments			
f_p	***1.00***	E_R	***1.2***
E_T	***1.5***	$f_{HV} = 1/[1+P_T(E_T - 1) + P_R(E_R - 1)]$	***0.966***

Speed Inputs			**Calc Speed Adj and FFS**		
Lane Width	***12.0***	ft	f_{LW}	***0.0***	mi/h
Rt-Shoulder Lat. Clearance	***6.0***	ft	f_{LC}	***0.0***	mi/h
Interchange Density	***1.12***	I/mi	f_{ID}	***3.1***	mi/h
Number of Lanes, N	***2***		f_N	***4.5***	mi/h
FFS (measured)		mi/h	FFS	***62.4***	mi/h
Base free-flow Speed, BFFS	***70.0***	mi/h			

LOS and Performance Measures			**Design (N)**	
Operational (LOS)			Design (N)	
v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	***2776***	pc/h/ln	Design LOS	
			v_p = (V or DDHV) / (PHF x N x f_{HV} x f_p)	pc/h
S		mi/h	S	mi/h
D = v_p / S		pc/mi/ln	D = v_p / S	pc/mi/ln
LOS	***F***		Required Number of Lanes, N	

Glossary		**Factor Location**	
N - Number of lanes	S - Speed	E_R - Exhibits23-8, 23-10	f_{LW} - Exhibit 23-4
V - Hourly volume	D - Density	E_T - Exhibits 23-8, 23-10, 23-11	f_{LC} - Exhibit 23-5
v_p - Flow rate	FFS - Free-flow speed	f_p - Page 23-12	f_N - Exhibit 23-6
LOS - Level of service	BFFS - Base free-flow speed	LOS, S, FFS, v_p - Exhibits 23-2, 23-3	f_{ID} - Exhibit 23-7
DDHV - Directional design hour volume			

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APPENDIX D:
PEAK-HOUR SIGNAL WARRANTS

Warrant 3B: Peak Hour Volume

The peak hour volume warrant is satisfied when the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour of the higher volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) of an average day falls above the curve in Figure 4-5 for the existing combination of approach lanes.

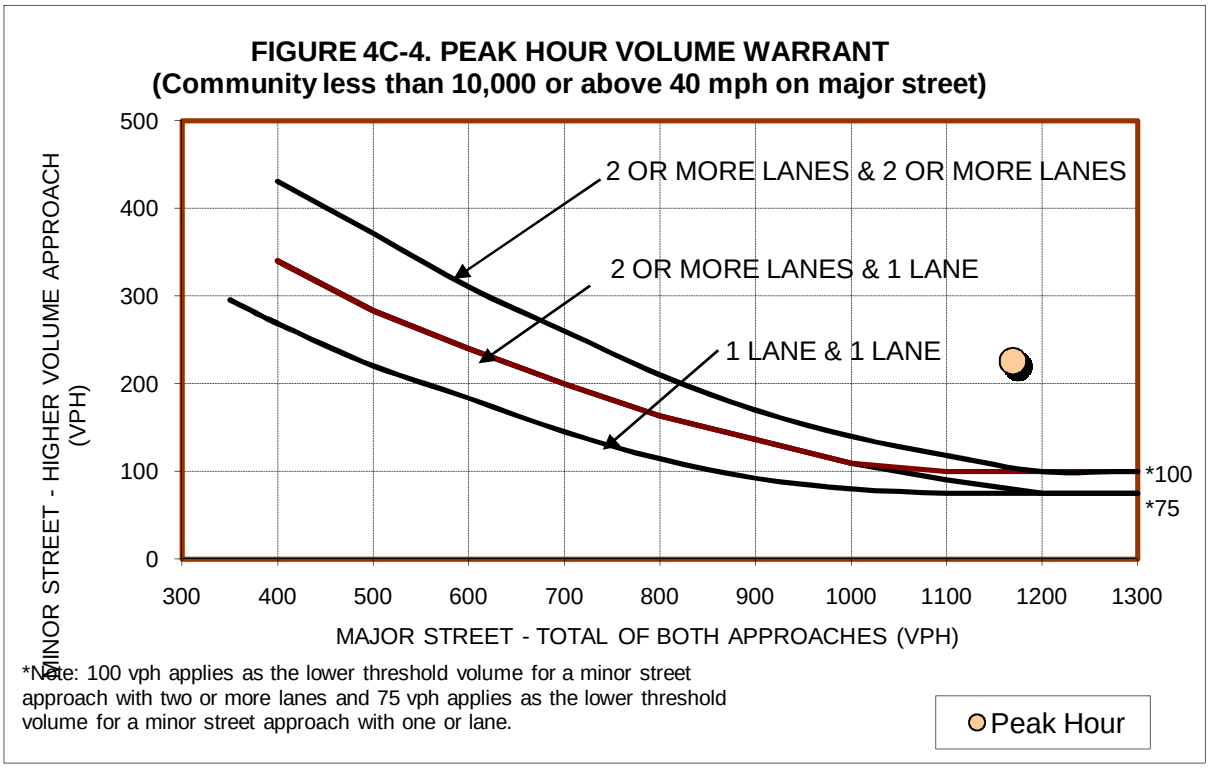
When the 85-percentile speed of the major street traffic exceeds 40 mile per hour or when the intersection lies within a built-up area of an isolated community having a population less than 10,000, the peak hour volume requirement is satisfied when the plotted point referred to above falls above the curve in Figure 4-6 for the existing combination of approach lanes.

Analysis

	No of lanes
Major Street	2
Minor Street	1

Peak Hour

Time	Vehicles Per Hour	
	Major Street (Sum of both approaches)	Minor street (High volume approach)
5:00 PM	1,169	226



Warrant	***Met***

Warrant 3B: Peak Hour Volume

The peak hour volume warrant is satisfied when the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour of the higher volume minor street approach (one direction only) for one hour (any four consecutive 15-minute periods) of an average day falls above the curve in Figure 4-5 for the existing combination of approach lanes.

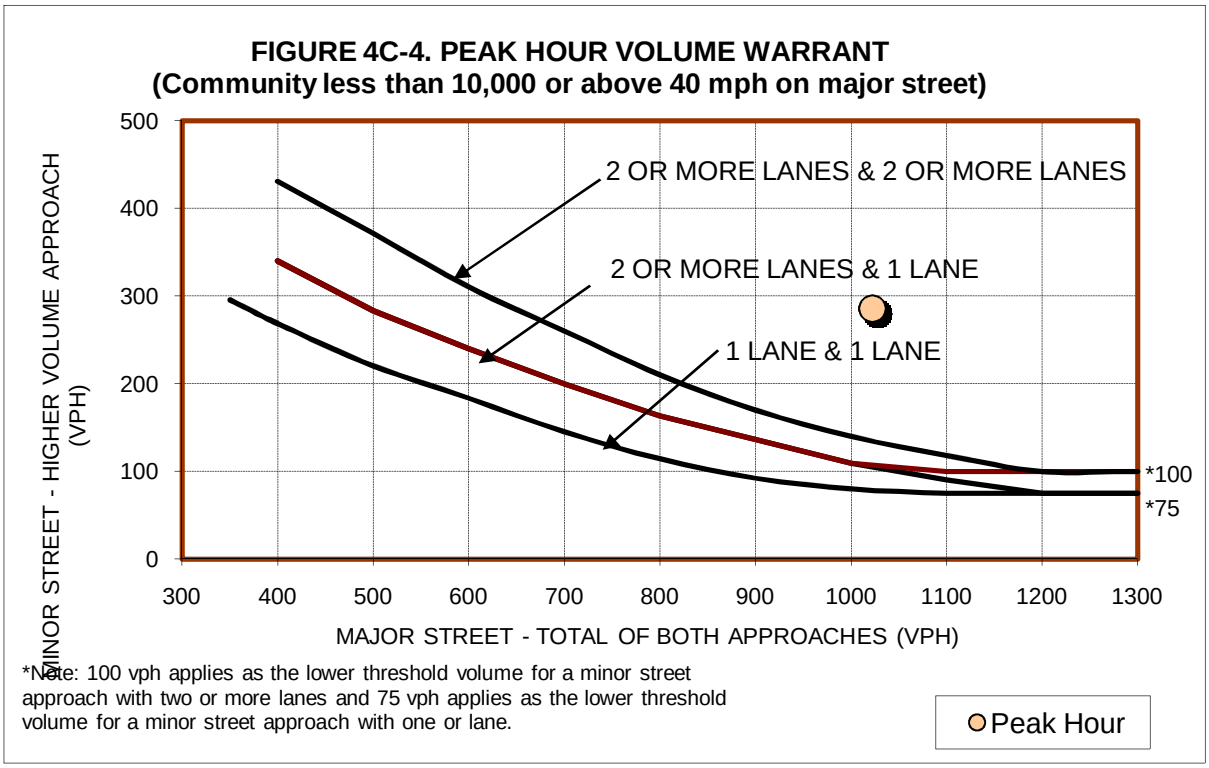
When the 85-percentile speed of the major street traffic exceeds 40 mile per hour or when the intersection lies within a built-up area of an isolated community having a population less than 10,000, the peak hour volume requirement is satisfied when the plotted point referred to above falls above the curve in Figure 4-6 for the existing combination of approach lanes.

Analysis

	No of lanes
Major Street	2
Minor Street	1

Peak Hour

Time	Vehicles Per Hour	
	Major Street (Sum of both approaches)	Minor street (High volume approach)
12:00 PM	1,022	286



Warrant	***Met***

APPENDIX E:
INTERSECTION QUEUE REPORTS

Intersection: 1: Russell Road & Van Buren Ave.

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	R	L	TR	LTR	LTR
Maximum Queue (ft)	58	218	110	68	150	58	73
Average Queue (ft)	8	90	35	19	63	22	26
95th Queue (ft)	36	167	83	53	120	52	55
Link Distance (ft)		1144			2135	476	661
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	125		125	125			
Storage Blk Time (%)		2	0		1		
Queuing Penalty (veh)		2	0		0		

Intersection: 2: Russell Road & San Juan Grade Rd.

Movement	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	U	T	R
Maximum Queue (ft)	175	312	157	236	35	329	108
Average Queue (ft)	135	82	74	106	5	161	45
95th Queue (ft)	195	243	130	209	24	271	82
Link Distance (ft)		2135		2705		6431	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	150		260		175		525
Storage Blk Time (%)	7			0		5	
Queuing Penalty (veh)	6			0		9	

Intersection: 3: Van Buren Ave. & San Juan Grade Rd.

Movement	EB	NB	SB
Directions Served	LR	LT	TR
Maximum Queue (ft)	118	360	5
Average Queue (ft)	48	96	0
95th Queue (ft)	95	251	4
Link Distance (ft)	366	883	2705
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Northridge Wy. & San Juan Grade Rd.

Movement	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	105	192	38	124	295	317	124	260	249
Average Queue (ft)	42	103	11	70	137	166	42	112	112
95th Queue (ft)	74	169	37	123	258	287	94	221	208
Link Distance (ft)	433	368	368		261	261		267	267
Upstream Blk Time (%)					1	2		1	0
Queuing Penalty (veh)					5	8		2	1
Storage Bay Dist (ft)				100			100		
Storage Blk Time (%)				3	13		0	11	
Queuing Penalty (veh)				12	12		0	5	

Intersection: 5: Mobile Home Drwy. & San Juan Grade Rd.

Movement	EB	WB	NB	NB	NB	SB	SB
Directions Served	LR	R	L	T	TR	T	TR
Maximum Queue (ft)	36	42	32	38	48	89	11
Average Queue (ft)	3	9	4	1	2	7	0
95th Queue (ft)	18	33	22	28	29	52	8
Link Distance (ft)	202	271		233	233	261	261
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			60				
Storage Blk Time (%)				0			
Queuing Penalty (veh)				0			

Intersection: 6: Boronda Rd. & SB 101 Off-Ramp

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	R	L	LT	R
Maximum Queue (ft)	145	355	486	199	208	750	701	394	532	232
Average Queue (ft)	59	115	210	45	114	152	25	192	237	53
95th Queue (ft)	124	255	378	181	192	371	263	351	421	167
Link Distance (ft)		1085	1085		855	855	855		1625	
Upstream Blk Time (%)						0	0			
Queuing Penalty (veh)						1	1			
Storage Bay Dist (ft)	135			175				575		400
Storage Blk Time (%)	0	1	11	0				0	1	0
Queuing Penalty (veh)	0	2	20	0				1	9	0

Intersection: 7: Boronda Rd. & NB 101 On-Ramp

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	T	R	T	T	T	R	LT	R	R
Maximum Queue (ft)	733	780	885	175	164	205	238	175	199	188	198
Average Queue (ft)	273	393	567	61	23	67	81	17	90	126	132
95th Queue (ft)	591	709	934	197	87	162	181	102	165	175	187
Link Distance (ft)	855	855	855		290	290	290		1581		
Upstream Blk Time (%)	0	0	5		0	0	0				
Queuing Penalty (veh)	0	0	32		0	0	1				
Storage Bay Dist (ft)				150				150		375	375
Storage Blk Time (%)			35	0			1	0			
Queuing Penalty (veh)			90	1			6	0			

Intersection: 8: Boronda Rd. & N. Main Street

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	B34
Directions Served	L	L	T	T	T	R	L	T	T	T	R	T
Maximum Queue (ft)	233	228	250	244	234	218	349	657	672	676	175	268
Average Queue (ft)	163	180	205	196	187	67	71	521	555	568	99	50
95th Queue (ft)	240	246	268	274	256	167	218	734	746	765	216	213
Link Distance (ft)	158	158	158	158	158	158		588	588	588		791
Upstream Blk Time (%)	22	29	26	20	20	1		14	19	22		
Queuing Penalty (veh)	76	101	91	69	69	3		57	78	92		
Storage Bay Dist (ft)							325				150	
Storage Blk Time (%)							0	42		64	0	
Queuing Penalty (veh)							0	22		91	1	

Intersection: 8: Boronda Rd. & N. Main Street

Movement	B34	B34	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	T	T	L	L	T	T	R	L	T	T	R
Maximum Queue (ft)	298	353	596	609	664	426	174	150	442	520	150
Average Queue (ft)	68	80	464	464	263	180	27	115	225	297	146
95th Queue (ft)	246	282	670	690	693	324	130	178	413	490	163
Link Distance (ft)	791	791			1301	1301			2224	2224	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)			650	650			150	125			125
Storage Blk Time (%)			2	4		22	0	17	23	21	36
Queuing Penalty (veh)			3	6		10	0	25	34	75	53

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	EB	EB	EB	EB	B34	B34	B34	WB	WB	WB	WB	WB
Directions Served	L	L	T	TR	T	T		L	L	T	T	T
Maximum Queue (ft)	234	314	872	864	365	365	339	135	149	244	256	294
Average Queue (ft)	123	176	544	570	115	142	80	63	78	112	129	149
95th Queue (ft)	200	329	959	965	353	391	310	116	128	208	228	255
Link Distance (ft)			791	791	588	588	588			303	303	303
Upstream Blk Time (%)			9	10						0	0	0
Queuing Penalty (veh)			64	71						1	0	2
Storage Bay Dist (ft)	290	290						300	300			
Storage Blk Time (%)		0	31							0		1
Queuing Penalty (veh)		0	96							1		2

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R	L	L	T	T	R
Maximum Queue (ft)	252	143	168	230	251	160	186	200	313	244	125
Average Queue (ft)	98	73	98	127	141	36	142	159	117	108	87
95th Queue (ft)	215	128	152	204	217	81	210	224	272	207	145
Link Distance (ft)				1336	1336				233	233	
Upstream Blk Time (%)									4	1	
Queuing Penalty (veh)									18	3	
Storage Bay Dist (ft)	250	325	325			250	175	175			100
Storage Blk Time (%)	0				0	0	4	11	0	8	5
Queuing Penalty (veh)	1				0	0	5	14	0	20	6

Intersection: 10: Boronda Rd. & Shopping Center Drwy.

Movement	EB	EB	EB	WB	WB	WB	WB	NB
Directions Served	T	T	TR	L	T	T	T	LR
Maximum Queue (ft)	78	124	130	123	83	39	38	164
Average Queue (ft)	9	44	57	61	3	1	1	65
95th Queue (ft)	52	119	132	117	44	29	27	135
Link Distance (ft)	53	53	53		362	362	362	388
Upstream Blk Time (%)	1	10	13					
Queuing Penalty (veh)	6	47	59					
Storage Bay Dist (ft)				100				
Storage Blk Time (%)				5				
Queuing Penalty (veh)				19				

Intersection: 11: Boronda Rd. & Project Drwy

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	155	376	403	124	576	647	121	42	74	203
Average Queue (ft)	61	218	262	38	278	351	47	11	50	70
95th Queue (ft)	130	413	455	97	507	594	103	37	87	155
Link Distance (ft)		362	362		1443	1443		352		265
Upstream Blk Time (%)		2	8							0
Queuing Penalty (veh)		13	52							0
Storage Bay Dist (ft)	140			100			150		50	
Storage Blk Time (%)	1	15		1	25		0		24	11
Queuing Penalty (veh)	4	10		6	7		0		29	8

Intersection: 12: Boronda Rd. & McKinnon St.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	L	TR
Maximum Queue (ft)	48	458	514	325	157	236	267	12	175	349	31	54
Average Queue (ft)	9	186	202	94	69	113	135	1	135	77	7	12
95th Queue (ft)	35	372	399	241	129	215	238	10	197	246	26	37
Link Distance (ft)		1443	1443			2924	2924			1639		1064
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (ft)	400			300	350			225	150		325	
Storage Blk Time (%)		1	2	0			1		11			
Queuing Penalty (veh)		0	9	0			0		6			

Intersection: 16: Boronda Rd. &

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	NB
Directions Served	T	T	T	T	T	R	T	T	T	R
Maximum Queue (ft)	154	222	264	286	276	254	151	204	203	78
Average Queue (ft)	26	42	87	70	73	25	29	122	120	25
95th Queue (ft)	135	181	240	216	220	150	113	203	179	65
Link Distance (ft)		290	290	290	290		158	158	158	241
Upstream Blk Time (%)	0	1	1	0	0	0	0	1	1	
Queuing Penalty (veh)	0	4	4	1	3	0	0	8	5	
Storage Bay Dist (ft)	250					250				
Storage Blk Time (%)	1	1			0	1				
Queuing Penalty (veh)	2	5			3	3				

Intersection: 17: Boronda Rd. & Project Drwy

Movement	EB	EB	EB	WB	WB	WB	SB
Directions Served	T	T	T	T	T	TR	R
Maximum Queue (ft)	50	86	95	8	14	47	95
Average Queue (ft)	2	7	12	0	0	2	43
95th Queue (ft)	24	44	57	5	8	22	80
Link Distance (ft)	303	303	303	53	53	53	286
Upstream Blk Time (%)				0	0	0	
Queuing Penalty (veh)				0	0	1	
Storage Bay Dist (ft)							
Storage Blk Time (%)							
Queuing Penalty (veh)							

Intersection: 32: Project Drwy & San Juan Grade Rd.

Movement	NB	NB	SB	SB
Directions Served	T	TR	T	T
Maximum Queue (ft)	173	178	44	45
Average Queue (ft)	35	37	3	2
95th Queue (ft)	110	117	29	24
Link Distance (ft)	267	267		883
Upstream Blk Time (%)	0	0		
Queuing Penalty (veh)	0	0		
Storage Bay Dist (ft)			100	
Storage Blk Time (%)			0	0
Queuing Penalty (veh)			0	0

Network Summary

Network wide Queuing Penalty: 1804

Intersection: 1: Russell Road & Van Buren Ave.

Movement	EB	EB	EB	WB	WB	NB	SB
Directions Served	L	T	R	L	TR	LTR	LTR
Maximum Queue (ft)	92	116	62	62	128	67	80
Average Queue (ft)	28	43	21	17	58	24	36
95th Queue (ft)	64	91	53	50	104	54	65
Link Distance (ft)		1144			2135	476	661
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	125		125	125			
Storage Blk Time (%)		0	0		0		
Queuing Penalty (veh)		0	0		0		

Intersection: 2: Russell Road & San Juan Grade Rd.

Movement	EB	EB	NB	NB	SB	SB	SB
Directions Served	L	R	L	T	U	T	R
Maximum Queue (ft)	136	70	114	200	32	276	80
Average Queue (ft)	66	37	55	67	2	125	33
95th Queue (ft)	112	66	98	152	15	230	65
Link Distance (ft)		2135		2705		6431	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)	150		260		175		525
Storage Blk Time (%)	0					2	
Queuing Penalty (veh)	0					3	

Intersection: 3: Van Buren Ave. & San Juan Grade Rd.

Movement	EB	NB
Directions Served	LR	LT
Maximum Queue (ft)	127	239
Average Queue (ft)	56	68
95th Queue (ft)	102	179
Link Distance (ft)	366	883
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Northridge Wy. & San Juan Grade Rd.

Movement	EB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	LTR	L	TR	L	T	TR	L	T	TR
Maximum Queue (ft)	90	278	42	124	293	300	124	263	226
Average Queue (ft)	44	126	13	51	130	162	51	117	109
95th Queue (ft)	74	212	39	109	251	279	106	217	197
Link Distance (ft)	433	368	368		261	261		267	267
Upstream Blk Time (%)					1	2		0	0
Queuing Penalty (veh)					5	7		1	0
Storage Bay Dist (ft)				100			100		
Storage Blk Time (%)				4	13		2	12	
Queuing Penalty (veh)				11	9		5	8	

Intersection: 5: Mobile Home Drwy. & San Juan Grade Rd.

Movement	WB	NB	NB	NB	SB	SB
Directions Served	R	L	T	TR	T	TR
Maximum Queue (ft)	38	12	21	52	228	124
Average Queue (ft)	14	1	1	3	20	9
95th Queue (ft)	40	8	11	29	111	61
Link Distance (ft)	271		232	232	261	261
Upstream Blk Time (%)					0	
Queuing Penalty (veh)					1	
Storage Bay Dist (ft)		60				
Storage Blk Time (%)			0			
Queuing Penalty (veh)			0			

Intersection: 6: Boronda Rd. & SB 101 Off-Ramp

Movement	EB	EB	EB	EB	WB	WB	WB	SB	SB	SB
Directions Served	T	T	T	R	T	T	R	L	LT	R
Maximum Queue (ft)	159	258	314	198	316	341	332	285	305	162
Average Queue (ft)	79	105	144	7	161	182	12	163	181	65
95th Queue (ft)	145	201	248	68	277	302	174	266	278	119
Link Distance (ft)		1085	1085		855	855	855		1625	
Upstream Blk Time (%)										
Queuing Penalty (veh)										
Storage Bay Dist (ft)	135			175				575		400
Storage Blk Time (%)	1	2	3	0						
Queuing Penalty (veh)	3	6	4	0						

Intersection: 7: Boronda Rd. & NB 101 On-Ramp

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB
Directions Served	T	T	T	R	T	T	T	R	LT	R	R
Maximum Queue (ft)	656	732	780	175	241	344	326	175	159	230	219
Average Queue (ft)	274	358	437	59	81	126	127	38	61	147	157
95th Queue (ft)	533	664	728	195	189	263	262	155	130	198	204
Link Distance (ft)	855	855	855		290	290	290		1581		
Upstream Blk Time (%)			0		0	1	0				
Queuing Penalty (veh)			1		0	4	3				
Storage Bay Dist (ft)				150				150		375	375
Storage Blk Time (%)			39	0			2	0			
Queuing Penalty (veh)			55	1			14	1			

Intersection: 8: Boronda Rd. & N. Main Street

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	B34
Directions Served	L	L	T	T	T	R	L	T	T	T	R	T
Maximum Queue (ft)	227	230	244	239	237	231	349	650	655	660	175	224
Average Queue (ft)	146	166	221	215	204	64	148	488	522	534	84	39
95th Queue (ft)	227	244	252	259	247	163	298	707	726	740	198	206
Link Distance (ft)	158	158	158	158	158	158		581	581	581		791
Upstream Blk Time (%)	14	21	33	26	27	0		9	12	15		
Queuing Penalty (veh)	45	67	106	84	86	1		43	59	69		
Storage Bay Dist (ft)							325				150	
Storage Blk Time (%)							0	33		54	2	
Queuing Penalty (veh)							0	38		82	6	

Intersection: 8: Boronda Rd. & N. Main Street

Movement	B34	B34	NB	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	T	T	L	L	T	T	R	L	T	T	R
Maximum Queue (ft)	248	255	450	438	298	314	175	150	623	689	150
Average Queue (ft)	50	61	357	350	160	175	39	106	311	386	146
95th Queue (ft)	227	254	442	431	257	272	157	179	564	653	165
Link Distance (ft)	791	791			1301	1301			2224	2224	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)			650	650			150	125			125
Storage Blk Time (%)						21	0	13	36	29	43
Queuing Penalty (veh)						11	0	22	49	89	76

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	EB	EB	EB	EB	B34	B34	B34	WB	WB	WB	WB	WB
Directions Served	L	L	T	TR	T	T		L	L	T	T	T
Maximum Queue (ft)	300	314	834	838	411	412	321	179	209	254	284	328
Average Queue (ft)	184	217	536	555	136	167	91	85	101	146	159	179
95th Queue (ft)	296	344	879	886	391	433	301	155	170	240	256	291
Link Distance (ft)			791	791	581	581	581			303	303	303
Upstream Blk Time (%)			3	4						0	0	1
Queuing Penalty (veh)			23	28						0	0	4
Storage Bay Dist (ft)	290	290						300	300			
Storage Blk Time (%)	1	5	24							0		2
Queuing Penalty (veh)	6	24	85							0		4

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	WB	NB	NB	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	R	L	L	T	T	R	L	L	T	T	R
Maximum Queue (ft)	255	191	236	209	228	119	186	200	311	306	125
Average Queue (ft)	84	107	129	103	122	37	146	163	165	149	96
95th Queue (ft)	210	174	199	177	197	77	211	228	323	270	154
Link Distance (ft)				1336	1336				232	232	
Upstream Blk Time (%)									7	3	
Queuing Penalty (veh)									34	14	
Storage Bay Dist (ft)	250	325	325			250	175	175			100
Storage Blk Time (%)	0				0	0	6	14	2	16	7
Queuing Penalty (veh)	0				0	0	9	21	7	41	11

Intersection: 10: Boronda Rd. & Shopping Center Drwy.

Movement	EB	EB	EB	WB	WB	WB	WB	NB
Directions Served	T	T	TR	L	T	T	T	LR
Maximum Queue (ft)	77	115	119	124	306	295	106	246
Average Queue (ft)	6	25	39	78	35	14	4	83
95th Queue (ft)	40	82	115	137	185	115	57	218
Link Distance (ft)	53	53	53		362	362	362	388
Upstream Blk Time (%)	0	4	8		0	0		1
Queuing Penalty (veh)	2	16	33		1	0		0
Storage Bay Dist (ft)				100				
Storage Blk Time (%)				11				
Queuing Penalty (veh)				43				

Intersection: 11: Boronda Rd. & Project Drwy

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	TR	L	TR	L	TR
Maximum Queue (ft)	164	384	394	94	872	944	73	47	74	269
Average Queue (ft)	77	210	254	13	464	522	20	11	58	101
95th Queue (ft)	140	426	452	54	873	944	57	37	90	208
Link Distance (ft)		362	362		1443	1443		352		265
Upstream Blk Time (%)		1	4							1
Queuing Penalty (veh)		6	26							0
Storage Bay Dist (ft)	140			100			150		50	
Storage Blk Time (%)	2	12			37				30	16
Queuing Penalty (veh)	11	10			3				47	14

Intersection: 12: Boronda Rd. & McKinnon St.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB
Directions Served	L	T	T	R	L	T	T	R	L	TR	TR
Maximum Queue (ft)	30	547	575	325	213	291	303	17	175	330	23
Average Queue (ft)	4	241	263	102	93	149	158	1	153	96	3
95th Queue (ft)	20	460	499	283	164	263	278	8	204	296	15
Link Distance (ft)		1443	1443			2924	2924			1639	1064
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (ft)	400			300	350			225	150		
Storage Blk Time (%)		2	6	0		0	2		15		
Queuing Penalty (veh)		0	14	0		0	0		3		

Intersection: 16: Boronda Rd. &

Movement	EB	EB	EB	EB	EB	EB	WB	WB	WB	NB
Directions Served	T	T	T	T	T	R	T	T	T	R
Maximum Queue (ft)	128	214	281	358	364	275	201	221	184	97
Average Queue (ft)	11	26	110	100	128	49	26	94	89	28
95th Queue (ft)	75	132	245	262	302	217	119	188	161	88
Link Distance (ft)		290	290	290	290		158	158	158	241
Upstream Blk Time (%)		0	0	0	1	0	0	1	0	
Queuing Penalty (veh)		0	1	2	7	0	1	6	3	
Storage Bay Dist (ft)	250					250				
Storage Blk Time (%)		0			1	2				
Queuing Penalty (veh)		0			9	6				

Intersection: 17: Boronda Rd. & Project Drwy

Movement	EB	EB	EB	WB	SB
Directions Served	T	T	T	TR	R
Maximum Queue (ft)	30	51	93	58	146
Average Queue (ft)	1	3	8	2	57
95th Queue (ft)	17	25	48	23	111
Link Distance (ft)	303	303	303	53	286
Upstream Blk Time (%)				0	
Queuing Penalty (veh)				1	
Storage Bay Dist (ft)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 32: Project Drwy & San Juan Grade Rd.

Movement	NB	NB	SB	SB
Directions Served	T	TR	T	T
Maximum Queue (ft)	99	112	12	11
Average Queue (ft)	15	20	0	0
95th Queue (ft)	61	74	6	8
Link Distance (ft)	267	267		883
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			100	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Network Summary

Network wide Queuing Penalty: 1653

APPENDIX F:
MITIGATED INTERSECTION LEVEL OF SERVICE CALCULATIONS

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	294	822	64	187	646	242	95	293	82	286	185	241
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3494		1770	5085	1537	1770	3539	1529	1770	3539	1531
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3494		1770	5085	1537	1770	3539	1529	1770	3539	1531
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	313	874	68	199	687	257	101	312	87	304	197	256
RTOR Reduction (vph)	0	4	0	0	0	179	0	0	73	0	0	195
Lane Group Flow (vph)	313	938	0	199	687	78	101	312	14	304	197	61
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	13.3	33.6		11.2	31.5	31.5	10.6	17.1	17.1	18.3	24.8	24.8
Effective Green, g (s)	13.3	33.6		11.2	31.5	31.5	10.6	17.1	17.1	18.3	24.8	24.8
Actuated g/C Ratio	0.13	0.32		0.11	0.30	0.30	0.10	0.16	0.16	0.18	0.24	0.24
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	438	1127		190	1537	465	180	581	251	311	842	364
v/s Ratio Prot	0.09	c0.27		c0.11	0.14		0.06	c0.09		c0.17	0.06	
v/s Ratio Perm						0.05			0.01			0.04
v/c Ratio	0.71	0.83		1.05	0.45	0.17	0.56	0.54	0.06	0.98	0.23	0.17
Uniform Delay, d1	43.6	32.7		46.5	29.3	26.7	44.6	39.9	36.7	42.7	32.0	31.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.6	5.4		78.3	0.2	0.2	2.4	1.0	0.1	44.3	0.1	0.2
Delay (s)	48.2	38.1		124.8	29.5	26.9	47.0	40.9	36.8	87.0	32.2	31.7
Level of Service	D	D		F	C	C	D	D	D	F	C	C
Approach Delay (s)		40.6			45.5			41.4			54.0	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM Average Control Delay	45.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	104.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	85.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	350	654	71	229	756	161	121	224	86	290	205	248
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95		1.00	0.91	1.00	1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3477		1770	5085	1536	1770	3539	1529	1770	3539	1532
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3477		1770	5085	1536	1770	3539	1529	1770	3539	1532
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	372	696	76	244	804	171	129	238	91	309	218	264
RTOR Reduction (vph)	0	6	0	0	0	128	0	0	77	0	0	205
Lane Group Flow (vph)	372	766	0	244	804	43	129	238	14	309	218	59
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	14.3	26.8		11.3	23.8	23.8	11.8	14.8	14.8	18.4	21.4	21.4
Effective Green, g (s)	14.3	26.8		11.3	23.8	23.8	11.8	14.8	14.8	18.4	21.4	21.4
Actuated g/C Ratio	0.15	0.28		0.12	0.25	0.25	0.12	0.16	0.16	0.19	0.22	0.22
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	515	978		210	1270	384	219	550	237	342	795	344
v/s Ratio Prot	0.11	c0.22		c0.14	0.16		0.07	c0.07		c0.17	0.06	
v/s Ratio Perm						0.03			0.01			0.04
v/c Ratio	0.72	0.78		1.16	0.63	0.11	0.59	0.43	0.06	0.90	0.27	0.17
Uniform Delay, d1	38.6	31.6		42.0	31.9	27.6	39.5	36.4	34.3	37.6	30.5	29.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.2	4.1		112.6	1.0	0.1	2.6	0.5	0.1	25.5	0.2	0.2
Delay (s)	42.8	35.7		154.6	32.9	27.7	42.1	37.0	34.4	63.1	30.7	30.0
Level of Service	D	D		F	C	C	D	D	C	E	C	C
Approach Delay (s)		38.0			56.5			37.9			43.1	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM Average Control Delay	45.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	95.3	Sum of lost time (s)	24.0
Intersection Capacity Utilization	83.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Improvements include SBR overlap phase, third eastbound through lane, and separate westbound right turn lane.

HCM Signalized Intersection Capacity Analysis
8: Boronda Rd. & N. Main Street

Cum With Prj_PM Mitiigation
7/17/2010

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	415	1235	455	53	1041	143	717	332	47	148	299	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.4	4.4	4.2	5.9	5.9	4.6	4.4	4.4	4.2	4.4	3.7
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.96	1.00	1.00	0.96	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1526	1770	5085	1526	3433	3539	1517	1770	3539	1563
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1526	1770	5085	1526	3433	3539	1517	1770	3539	1563
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	441	1314	484	56	1107	152	763	353	50	157	318	370
RTOR Reduction (vph)	0	0	225	0	0	59	0	0	43	0	0	6
Lane Group Flow (vph)	441	1314	259	56	1107	93	763	353	7	157	318	364
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	28.5	60.1	60.1	6.9	38.5	38.5	35.8	20.0	20.0	35.5	19.3	47.8
Effective Green, g (s)	29.5	61.6	61.6	7.9	38.5	38.5	36.8	21.5	21.5	36.5	20.8	50.8
Actuated g/C Ratio	0.20	0.43	0.43	0.05	0.27	0.27	0.25	0.15	0.15	0.25	0.14	0.35
Clearance Time (s)	5.2	5.9	5.9	5.2	5.9	5.9	5.6	5.9	5.9	5.2	5.9	5.2
Vehicle Extension (s)	1.8	4.8	4.8	1.8	2.3	2.3	1.8	2.3	2.3	1.8	2.3	1.8
Lane Grp Cap (vph)	700	2165	650	97	1353	406	873	526	225	446	509	549
v/s Ratio Prot	0.13	0.26		0.03	c0.22		c0.22	0.10		0.09	0.09	c0.14
v/s Ratio Perm			0.17			0.06			0.00			0.10
v/c Ratio	0.63	0.61	0.40	0.58	0.82	0.23	0.87	0.67	0.03	0.35	0.62	0.66
Uniform Delay, d1	52.6	32.2	28.7	66.8	49.8	41.5	51.7	58.3	52.7	44.4	58.3	39.7
Progression Factor	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	0.7	0.8	5.1	3.8	0.2	9.4	2.9	0.0	0.2	1.9	2.3
Delay (s)	54.0	32.9	29.3	71.9	53.6	41.7	61.1	61.1	52.7	44.6	60.2	42.1
Level of Service	D	C	C	E	D	D	E	E	D	D	E	D
Approach Delay (s)		36.3			53.0			60.8			49.4	
Approach LOS		D			D			E			D	

Intersection Summary			
HCM Average Control Delay	47.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	144.7	Sum of lost time (s)	17.9
Intersection Capacity Utilization	82.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Improvements include SBR overlap phase, third eastbound through lane, and separate westbound right turn lane.

HCM Signalized Intersection Capacity Analysis
8: Boronda Rd. & N. Main Street

Cum With Prj_SAT Mitigation
7/17/2010

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	311	1203	421	118	1156	150	809	342	54	135	354	306
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.4	4.4	4.2	5.9	5.9	4.6	4.4	4.4	4.2	4.4	3.7
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.96	1.00	1.00	0.96	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1522	1770	5085	1524	3433	3539	1515	1770	3539	1558
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1522	1770	5085	1524	3433	3539	1515	1770	3539	1558
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	331	1280	448	126	1230	160	861	364	57	144	377	326
RTOR Reduction (vph)	0	0	213	0	0	54	0	0	49	0	0	6
Lane Group Flow (vph)	331	1280	235	126	1230	106	861	364	8	144	377	320
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot		Perm	Prot		Perm	Prot		pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	24.4	54.9	54.9	14.0	44.5	44.5	42.3	21.2	21.2	43.6	22.1	46.5
Effective Green, g (s)	25.4	56.4	56.4	15.0	44.5	44.5	43.3	22.7	22.7	44.6	23.6	49.5
Actuated g/C Ratio	0.16	0.36	0.36	0.10	0.29	0.29	0.28	0.15	0.15	0.29	0.15	0.32
Clearance Time (s)	5.2	5.9	5.9	5.2	5.9	5.9	5.6	5.9	5.9	5.2	5.9	5.2
Vehicle Extension (s)	1.8	4.8	4.8	1.8	2.3	2.3	1.8	2.3	2.3	1.8	2.3	1.8
Lane Grp Cap (vph)	559	1840	551	170	1451	435	953	515	221	506	536	495
v/s Ratio Prot	0.10	c0.25		0.07	c0.24		c0.25	0.10		0.08	c0.11	c0.11
v/s Ratio Perm			0.15			0.07			0.01			0.10
v/c Ratio	0.59	0.70	0.43	0.74	0.85	0.24	0.90	0.71	0.04	0.28	0.70	0.65
Uniform Delay, d1	60.5	42.4	37.6	68.6	52.5	42.8	54.3	63.4	57.2	43.3	62.8	45.7
Progression Factor	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	1.4	1.0	14.1	4.7	0.2	11.5	3.9	0.0	0.1	3.7	2.2
Delay (s)	61.6	43.9	38.4	82.6	57.2	43.0	65.8	67.3	57.3	43.4	66.5	47.9
Level of Service	E	D	D	F	E	D	E	E	E	D	E	D
Approach Delay (s)		45.5			57.8			65.8			55.4	
Approach LOS		D			E			E			E	

Intersection Summary			
HCM Average Control Delay	54.8	HCM Level of Service	D
HCM Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	155.9	Sum of lost time (s)	14.9
Intersection Capacity Utilization	84.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Improvements include SBR overlap phase and third eastbound through lane.

HCM Signalized Intersection Capacity Analysis
8: Boronda Rd. & N. Main Street

Cum With Prj_PM Mitiigation
8/9/2010

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	415	1235	455	53	1041	143	717	332	47	148	299	348
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.4	4.4	4.2	5.9		4.6	4.4	4.4	4.2	4.4	3.7
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1525	1770	4971		3433	3539	1517	1770	3539	1561
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1525	1770	4971		3433	3539	1517	1770	3539	1561
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	441	1314	484	56	1107	152	763	353	50	157	318	370
RTOR Reduction (vph)	0	0	223	0	11	0	0	0	43	0	0	6
Lane Group Flow (vph)	441	1314	261	56	1248	0	763	353	7	157	318	364
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4						2			6
Actuated Green, G (s)	26.1	61.2	61.2	7.0	42.1		36.0	20.0	20.0	35.7	19.3	45.4
Effective Green, g (s)	27.1	62.7	62.7	8.0	42.1		37.0	21.5	21.5	36.7	20.8	48.4
Actuated g/C Ratio	0.19	0.43	0.43	0.05	0.29		0.25	0.15	0.15	0.25	0.14	0.33
Clearance Time (s)	5.2	5.9	5.9	5.2	5.9		5.6	5.9	5.9	5.2	5.9	5.2
Vehicle Extension (s)	1.8	4.8	4.8	1.8	2.3		1.8	2.3	2.3	1.8	2.3	1.8
Lane Grp Cap (vph)	637	2182	654	97	1432		869	521	223	445	504	517
v/s Ratio Prot	0.13	0.26		0.03	c0.25		c0.22	0.10		0.09	0.09	c0.13
v/s Ratio Perm			0.17						0.00			0.10
v/c Ratio	0.69	0.60	0.40	0.58	0.87		0.88	0.68	0.03	0.35	0.63	0.70
Uniform Delay, d1	55.6	32.1	28.7	67.4	49.4		52.4	59.0	53.4	44.9	59.0	42.6
Progression Factor	1.00	1.00	0.99	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.6	0.7	0.8	5.1	6.0		9.7	3.0	0.0	0.2	2.1	3.5
Delay (s)	58.2	32.8	29.3	72.5	55.5		62.1	62.0	53.4	45.1	61.1	46.2
Level of Service	E	C	C	E	E		E	E	D	D	E	D
Approach Delay (s)		37.0			56.2			61.7			51.6	
Approach LOS		D			E			E			D	

Intersection Summary			
HCM Average Control Delay	48.9	HCM Level of Service	D
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	146.1	Sum of lost time (s)	17.9
Intersection Capacity Utilization	84.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Improvements include SBR overlap phase and third eastbound through lane.

HCM Signalized Intersection Capacity Analysis
8: Boronda Rd. & N. Main Street

Cum With Prj_SAT Mitigation
8/9/2010

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	311	1203	421	118	1156	150	809	342	54	135	354	306
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.2	4.4	4.4	4.2	5.9		4.6	4.4	4.4	4.2	4.4	3.7
Lane Util. Factor	0.97	0.91	1.00	1.00	0.91		0.97	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1522	1770	4976		3433	3539	1515	1770	3539	1555
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1522	1770	4976		3433	3539	1515	1770	3539	1555
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	331	1280	448	126	1230	160	861	364	57	144	377	326
RTOR Reduction (vph)	0	0	213	0	10	0	0	0	49	0	0	6
Lane Group Flow (vph)	331	1280	235	126	1380	0	861	364	8	144	377	320
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot			Prot		Perm	Prot		pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases			4						2			6
Actuated Green, G (s)	20.4	54.9	54.9	14.0	48.5		42.3	21.2	21.2	43.6	22.1	42.5
Effective Green, g (s)	21.4	56.4	56.4	15.0	48.5		43.3	22.7	22.7	44.6	23.6	45.5
Actuated g/C Ratio	0.14	0.36	0.36	0.10	0.31		0.28	0.15	0.15	0.29	0.15	0.29
Clearance Time (s)	5.2	5.9	5.9	5.2	5.9		5.6	5.9	5.9	5.2	5.9	5.2
Vehicle Extension (s)	1.8	4.8	4.8	1.8	2.3		1.8	2.3	2.3	1.8	2.3	1.8
Lane Grp Cap (vph)	471	1840	551	170	1548		953	515	221	506	536	454
v/s Ratio Prot	0.10	c0.25		0.07	c0.28		c0.25	0.10		0.08	0.11	c0.10
v/s Ratio Perm			0.15						0.01			0.11
v/c Ratio	0.70	0.70	0.43	0.74	0.89		0.90	0.71	0.04	0.28	0.70	0.70
Uniform Delay, d1	64.2	42.4	37.6	68.6	51.2		54.3	63.4	57.2	43.3	62.8	49.2
Progression Factor	1.00	1.00	0.99	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.9	1.4	1.0	14.1	6.8		11.5	3.9	0.0	0.1	3.7	4.0
Delay (s)	68.1	43.9	38.4	82.6	58.0		65.8	67.3	57.3	43.4	66.5	53.2
Level of Service	E	D	D	F	E		E	E	E	D	E	D
Approach Delay (s)		46.6			60.1			65.8			57.5	
Approach LOS		D			E			E			E	

Intersection Summary			
HCM Average Control Delay	56.1	HCM Level of Service	E
HCM Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	155.9	Sum of lost time (s)	14.2
Intersection Capacity Utilization	87.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	313	1053	64	187	728	287	256	431	94	349	263	253
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95		0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3503		3433	5085	1537	3433	3539	1531	3433	3539	1528
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3503		3433	5085	1537	3433	3539	1531	3433	3539	1528
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	333	1120	68	199	774	305	272	459	100	371	280	269
RTOR Reduction (vph)	0	3	0	0	0	205	0	0	81	0	0	203
Lane Group Flow (vph)	333	1185	0	199	774	100	272	459	19	371	280	66
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	13.7	40.3		10.0	36.6	36.6	13.3	21.1	21.1	15.7	23.5	23.5
Effective Green, g (s)	13.7	40.3		10.0	36.6	36.6	13.3	21.1	21.1	15.7	23.5	23.5
Actuated g/C Ratio	0.12	0.36		0.09	0.33	0.33	0.12	0.19	0.19	0.14	0.21	0.21
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	423	1271		309	1675	506	411	672	291	485	749	323
v/s Ratio Prot	c0.10	c0.34		0.06	0.15		0.08	c0.13		c0.11	0.08	
v/s Ratio Perm						0.07			0.01			0.04
v/c Ratio	0.79	0.93		0.64	0.46	0.20	0.66	0.68	0.07	0.76	0.37	0.20
Uniform Delay, d1	47.3	34.1		48.8	29.5	26.7	46.7	41.9	36.9	45.9	37.5	36.1
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.7	12.3		3.4	0.2	0.2	3.1	2.9	0.1	6.4	0.3	0.3
Delay (s)	55.9	46.4		52.3	29.7	26.9	49.8	44.8	37.0	52.3	37.8	36.4
Level of Service	E	D		D	C	C	D	D	D	D	D	D
Approach Delay (s)		48.5			32.5			45.5			43.2	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM Average Control Delay	42.4	HCM Level of Service	D
HCM Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	111.1	Sum of lost time (s)	24.0
Intersection Capacity Utilization	83.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	363	958	71	229	835	207	330	364	99	373	298	259
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95		0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3496		3433	5085	1537	3433	3539	1529	3433	3539	1525
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3496		3433	5085	1537	3433	3539	1529	3433	3539	1525
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	386	1019	76	244	888	220	351	387	105	397	317	276
RTOR Reduction (vph)	0	4	0	0	0	147	0	0	87	0	0	183
Lane Group Flow (vph)	386	1091	0	244	888	73	351	387	18	397	317	93
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	14.1	40.3		10.7	36.9	36.9	15.7	19.2	19.2	16.4	19.9	19.9
Effective Green, g (s)	14.1	40.3		10.7	36.9	36.9	15.7	19.2	19.2	16.4	19.9	19.9
Actuated g/C Ratio	0.13	0.36		0.10	0.33	0.33	0.14	0.17	0.17	0.15	0.18	0.18
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	438	1274		332	1697	513	487	614	265	509	637	274
v/s Ratio Prot	c0.11	c0.31		0.07	0.17		0.10	c0.11		c0.12	0.09	
v/s Ratio Perm						0.05			0.01			0.06
v/c Ratio	0.88	0.86		0.73	0.52	0.14	0.72	0.63	0.07	0.78	0.50	0.34
Uniform Delay, d1	47.4	32.5		48.6	29.7	25.8	45.4	42.4	38.2	45.4	40.8	39.6
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	17.9	5.9		7.1	0.3	0.1	4.4	2.1	0.1	6.8	0.6	0.7
Delay (s)	65.3	38.4		55.7	30.0	25.9	49.8	44.5	38.3	52.2	41.5	40.4
Level of Service	E	D		E	C	C	D	D	D	D	D	D
Approach Delay (s)		45.4			34.0			45.9			45.4	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM Average Control Delay	42.2	HCM Level of Service	D
HCM Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	110.6	Sum of lost time (s)	24.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	7	1008	364	95	925	3	262	4	49	8	5	14
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0		5.0	5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00		1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97		1.00	0.98	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		0.99	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.86		1.00	0.89	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1770	3539	1501	1770	3539	1503	1770	1558		1753	1612	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.74	1.00		0.72	1.00	
Satd. Flow (perm)	1770	3539	1501	1770	3539	1503	1386	1558		1330	1612	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	7	1072	387	101	984	3	279	4	52	9	5	15
RTOR Reduction (vph)	0	0	197	0	0	1	0	39	0	0	11	0
Lane Group Flow (vph)	7	1072	190	101	984	2	279	17	0	9	9	0
Confl. Peds. (#/hr)			10			10			10	10		10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Actuated Green, G (s)	1.2	49.1	49.1	8.3	56.2	56.2	24.5	24.5		24.5	24.5	
Effective Green, g (s)	1.2	49.1	49.1	8.3	56.2	56.2	24.5	24.5		24.5	24.5	
Actuated g/C Ratio	0.01	0.49	0.49	0.08	0.56	0.56	0.25	0.25		0.25	0.25	
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0		5.0	5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	21	1739	738	147	1991	846	340	382		326	395	
v/s Ratio Prot	0.00	c0.30		c0.06	c0.28			0.01			0.01	
v/s Ratio Perm			0.13			0.00	c0.20			0.01		
v/c Ratio	0.33	0.62	0.26	0.69	0.49	0.00	0.82	0.04		0.03	0.02	
Uniform Delay, d1	49.0	18.5	14.8	44.5	13.2	9.6	35.6	28.8		28.6	28.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Incremental Delay, d2	9.1	1.6	0.8	12.5	0.9	0.0	14.6	0.0		0.0	0.0	
Delay (s)	58.1	20.2	15.6	57.1	14.1	9.6	50.2	28.8		28.7	28.6	
Level of Service	E	C	B	E	B	A	D	C		C	C	
Approach Delay (s)		19.2			18.1			46.6			28.6	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM Average Control Delay	22.0	HCM Level of Service	C
HCM Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	99.9	Sum of lost time (s)	24.5
Intersection Capacity Utilization	70.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	4	1014	231	121	1037	3	294	0	17	0	2	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0			5.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	1.00	1.00			1.00	
Frpb, ped/bikes	1.00	1.00	0.95	1.00	1.00	0.95	1.00	0.97			0.98	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85			0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)	1770	3539	1498	1770	3539	1500	1770	1534			1663	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.75	1.00			1.00	
Satd. Flow (perm)	1770	3539	1498	1770	3539	1500	1405	1534			1663	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	4	1079	246	129	1103	3	313	0	18	0	2	3
RTOR Reduction (vph)	0	0	131	0	0	1	0	13	0	0	2	0
Lane Group Flow (vph)	4	1079	115	129	1103	2	313	5	0	0	3	0
Confl. Peds. (#/hr)			10			10			10	10		10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot		Perm	Prot		Perm	Perm			Perm		
Protected Phases	5	2		1	6			8			4	
Permitted Phases			2			6	8			4		
Actuated Green, G (s)	1.2	49.8	49.8	11.0	59.6	59.6	27.4	27.4			27.4	
Effective Green, g (s)	1.2	49.8	49.8	11.0	59.6	59.6	27.4	27.4			27.4	
Actuated g/C Ratio	0.01	0.47	0.47	0.10	0.56	0.56	0.26	0.26			0.26	
Clearance Time (s)	6.5	6.5	6.5	6.5	6.5	6.5	5.0	5.0			5.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)	20	1660	702	183	1986	842	362	396			429	
v/s Ratio Prot	0.00	c0.30		c0.07	0.31			0.00			0.00	
v/s Ratio Perm			0.08			0.00	c0.22					
v/c Ratio	0.20	0.65	0.16	0.70	0.56	0.00	0.86	0.01			0.01	
Uniform Delay, d1	52.0	21.5	16.2	46.0	14.9	10.2	37.6	29.3			29.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2	4.9	2.0	0.5	11.7	1.1	0.0	18.8	0.0			0.0	
Delay (s)	56.9	23.5	16.7	57.7	16.0	10.2	56.5	29.3			29.3	
Level of Service	E	C	B	E	B	B	E	C			C	
Approach Delay (s)		22.4			20.3			55.0			29.3	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM Average Control Delay	25.2	HCM Level of Service	C
HCM Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	106.2	Sum of lost time (s)	18.0
Intersection Capacity Utilization	73.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

APPENDIX G:
APPROVED AND PENDING PROJECTS

Map #	Development	Description	Size	Unit
	Approved			
	Rogge Road	Residential Development	123	SFU
			48	APT
	Applied Technology Building at Hartnell College East Campus	College Campus	750	students
	Hartnell College Expansion	College Campus	3,000	students
	Monta Bella Subdivision	Single-Family Detached Housing	550	units
	Boronda Crossing			
		New Car Sales (Bldg. A2)	12,000	sq-ft
		New Car Sales (Bldg. A3)	15,000	sq-ft
		New Car Sales (Bldg. A4)	15,000	sq-ft
	Butterfly Village			
	Unikool Ag-Industrial Center		257	Acres
	Walmart	Shopping Center	102,180	sq-ft
	Pending			
	Fresh Express Expansion	Manufacturing Unit	283	ksf
	Salinas Jet Center			
		Office	60,000	sq-ft
		Hangar Space	100,000	sq-ft
		Hotel	100	rooms
		Restaurant	4,000	sq-ft
	Nestech-Boronda Meadows	General/Executive Office	51,345	sq-ft
		Mixed-Use Retail and Residential	13,156	sq-ft
			74	units
		Mixed-Use Retail and Residential	87,995	sq-ft
			48	units
		Car Wash, Mini-Mart w/food, and Pump Is	7,079	sq-ft
		Commercial Retail and Offices	28,854	sq-ft
			9,618	sq-ft
		Commercial/Restaurant	8,886	sq-ft
		Commercial Retail and Offices	21,591	sq-ft
			7,197	sq-ft
		Neighborhood II	87	units
		Neighborhood III	105	units
		Neighborhood IV	165	units
		Neighborhood V	150	units
		Total		

APPENDIX H:
FAIR SHARE CALCULATIONS AT THE INTERSECTION OF BORONDA ROAD AND MAIN STREET

Salinas (Cloverfield) Retail Center Fair-Share Contribution at Boronda Road and Main Street

Cumulative-Level Impact Contributions

Study Int #	Intersection	Juristiction	Peak Hour	Total Existing Intersection Volume (V_E)	Total Cumulative Intersection Volume (V_T)	Project Trips (V_P)	Percent Contribution of Growth $V_P/(V_T-V_E)$	Percent Contribution of Total Traffic (V_P/V_T)	Salinas (Cloverfield) Retail Center TIA Recommended Mitigation
8	Boronda Road and Main Street	Salinas	PM	4103	5233	455	40.27%	8.69%	1) Add a third eastbound through, 2) Conversion of the westbound through-right lane into an exclusive through lane (SAT only), 3) A separate westbound right-turn lane (SAT only), and 4) southbound right-turn overlap phase.
			SAT	3948	5359	603	42.74%	11.25%	

Notes:

1 Other impacted intersection mitigated with payment of Traffic Impact Fees.

APPENDIX I:
EAST BORONDA ROAD AND SAN JUAN GRADE ROAD INTERSECTION ANALYSIS MEMORANDUM

FEHR & PEERS
TRANSPORTATION CONSULTANTS

MEMORANDUM

Date: April 15, 2010

To: Rob Russell, City of Salinas
Tara Hullinger, City of Salinas

From: Daniel Rubins, P.E. and Kevin Chen

Subject: ***East Boronda Road and San Juan Grade Road Intersection Analysis***
SJ10-1154

Fehr & Peers was retained to evaluate the traffic operations at the East Boronda Road / San Juan Grade Road intersection. The analysis considered both the AM and PM peak hour conditions under Year 2030 Current General Plan Conditions. The study was completed to identify the appropriate geometric design for the westbound right turn-lane and to inform the site developer regarding project site driveway placement on East Boronda Road. For this study, Boronda Road is considered east-west, while San Juan Grade Road is considered north-south.

BACKGROUND

The proposed Salinas Retail Center located at the northeast corner of Boronda Road and San Juan Grade Road in Salinas, California is consistent with the current General Plan land use, but conflicts with the planned roadway improvements at San Juan Grade Road and Boronda Road. Specifically the proposed site plan would only accommodate a westbound shared through-right lane. The City of Salinas Public Works Department has an active project (No. 9510) to construct double lefts on all approaches and maintain the sweeping westbound right-turn lane.

Three *City of Traffic Improvement Program* (TIP) projects planned at or near the East Boronda Road and San Juan Grade Road intersection include:

TIP Project 13: San Juan Grade Road (north/south roadway) widened to a 4-lane divided arterial with bicycle lanes between East Boronda Road and Rogge Road. This roadway will serve an estimated 14,900 vehicles per day with construction of the future growth area north of East Boronda Road. The posted speed limit will be 35 to 40 mph.

TIP Project 20: East Boronda Road (east/west roadway) widened to a 6-lane divided arterial between San Juan Grade Road and Williams Road. This roadway will serve an estimated 57,200 daily vehicles with construction of the future growth area north of East Boronda Road. The posted speed limit will be 40 to 45 mph.

TIP Project 50: Turning movements at the East Boronda Road / San Juan Grade Road intersection includes two lefts, two or three through lanes, and separate right-turn lanes for all approaches. Bicycle lanes are planned on all four approaches.

GEOMETRIC ALTERNATIVES CONSIDERED

This study evaluated five geometric configurations which are shown on **Figure 1** and summarized below:

- **Intersection Configuration 1**: Intersection turning movement configuration and design based on City Public Works Project 9510 with a sweeping westbound right-turn lane, and two eastbound through lanes (i.e., not widening East Boronda Road between Main Street and San Juan Grade Road).
- **Intersection Configuration 2**: Same as intersection configuration 1 except replaced sweeping westbound right turn lane with a separate westbound right-turn lane without a "pork-chop" pedestrian island (i.e., smaller corner curb-return).
- **Intersection Configuration 3**: Same as intersection configuration 1 except replaced sweeping westbound right turn lane with a westbound shared through-right turn lane.
- **Intersection Configuration 4**: Same as intersection configuration 2, except eastbound approach includes a third eastbound through lane, and the southbound approach includes a shared through-right lane, through lane and two left turn lanes.
- **Intersection Configuration 5**: Same as intersection configuration 3, except eastbound approach includes a third eastbound through lane and the southbound approach includes a shared through right lane, through lane and two left turn lanes.

FORECAST METHOD

The AM and PM peak hour intersection turning movement forecasts were developed based on the guidelines published in *National Cooperative Highway Research Program (NCHRP) Report 255*[1], which were applied to refine the raw model forecasts. This method uses the difference between counts and model volumes and adjusts the existing volume to provide reasonable future forecasts. The Year 2030 Current General Plan Conditions for the five (5) intersection configurations described above are presented in **Figure 1**.

LEVEL OF SERVICE METHOD

The operations of roadway facilities are described with the term level of service (LOS). LOS is a qualitative description of traffic flow based on such factors as speed, travel time, delay, and freedom to maneuver. Six levels are defined from LOS A, with the least congested operating conditions, to LOS F, with the most congested operating conditions. LOS E represents "at-capacity" operations. Operations are designated as LOS F when volumes exceed capacity, resulting in stop-and-go conditions.

[1] National Cooperative Highway Research Program (NCHRP). *Report 255: Highway Traffic Data for Urbanized Area Project Planning and Design.* Washington, D.C.: National Academy Press, 1982.

Signalized Intersections

The LOS method for signalized intersections approved by the City of Salinas analyzes intersection operations based on average control vehicular delay, as described in Chapter 16 of the *2000 Highway Capacity Manual* (*HCM*) by the Transportation Research Board. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. The average control delay for signalized intersections is calculated using Synchro analysis software and is correlated to a LOS designation as shown in **Table 1**.

The level of service standard (i.e., minimum acceptable operations) for signalized intersections in the City of Salinas is LOS D.

TABLE 1
SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS
USING AVERAGE CONTROL VEHICULAR DELAY

Level of Service	Description	Average Control Delay Per Vehicle (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle lengths.	≤ 10.0
B	Operations with low delay occurring with good progression and/ or short cycle lengths.	> 10.0 and ≤ 20.0
C	Operations with average delays resulting from fair progression and/ or longer cycle lengths. Individual cycle failures begin to appear.	> 20.0 and ≤ 35.0
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, and high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	> 35.0 and ≤ 55.0
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences.	> 55.0 and ≤ 80.0
F	Operations with delays unacceptable to most drivers occurring due to over-saturation, poor progression, or very long cycle lengths.	> 80.0

Source: *Highway Capacity Manual*, Transportation Research Board, 2000.

YEAR 2030 CURRENT GENERAL PLAN INTERSECTION LEVELS OF SERVICE

Year 2030 Current General Plan intersection lane configurations, signal timings, and peak-hour turning movement traffic volumes were used to determine the levels of service. The results are presented in **Table 2**. The corresponding calculation sheets are attached.

The East Boronda Road intersection with San Juan Grade Road will operate at an unacceptable LOS F during the PM peak hour in Year 2030. The intersection LOS can be improved to “D” if East Boranda Road is widened to six (6) lanes through the San Juan Grade intersection.

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TABLE 2
YEAR 2030 INTERSECTION LEVELS OF SERVICE

Intersection Configuration Description	Peak Hour[1]	5-Lane E. Boronda Road[2]		6-Lane E. Boronda Road[3]	
		Delay[4]	LOS[5]	Delay[4]	LOS[5]
Separate Right-Turn Lane with Large Pedestrian "Pork Chop" Island	AM	34.4	C	33.9	C
	PM	**121.0**	**F**	50.1	D
Separate Right-Turn Lane	AM	34.4	C	33.9	C
	PM	**121.0**	**F**	50.1	D
Shared Through-Right Turn Lane	AM	45.3	D	45.1	D
	PM	**122.4**	**F**	51.5	D

Notes:

1 AM = morning weekday peak-hour, PM = evening weekday peak-hour

2 East Boronda Road is a 5-lane divided arterial between Main Street and San Juan Grade Road

3 East Boronda Road is a 6-lane divided arterial between Main Street and San Juan Grade Road

4 Whole intersection weighted average control delay expressed in seconds per vehicle for signalized intersections using methodology described in the 2000 *Highway Capacity Manual*. LOS calculations conducted using the Synchro level of service analysis software package.

5 LOS = Level of service

Bold text indicates unacceptable operations by City of Salinas standards (LOS E or worse).

Source: Fehr & Peers, April 2010.

YEAR 2030 CURRENT GENERAL PLAN INTERSECTION STORAGE POCKET LENGHTS

The Synchro files were converted to SimTraffic, a micro-simulation tool used to calculate vehicle storage requirements at intersections. **Figure 1** shows the storage pocket estimates (calculated in feet) for the left and right turn lanes at the East Boronda Road / San Juan Grade Road intersection. The corresponding calculation sheets are attached.

Left turn storage pockets are typically sized to the greater of the maximum queue of the left turn movement or through movement queue. However, during the AM and PM peak hours, the left-turn lane will be blocked by the through vehicles (westbound in AM peak hour and eastbound in PM peak hour) with maximum queues greater than 600 feet in the AM peak hour westbound directions and greater than 1,000 feet in the PM peak hour eastbound direction. Using the typical approach would yield excessively long left-turn storage pockets. To avoid excessively long pocket lengths, the left turn storage pockets were estimated using the average queue distance (based on average of five (5) micro-simulation runs) plus the deceleration distance at 30 miles per hour (mph). In other words, on average vehicles will be able to decelerate from 30 mph and stop at the back of the average queue for the left turn movement within the length of the storage pocket. At 30 mph the Caltrans *Highway Design Manual* (HDM) specifies an approximate deceleration distance of 235 feet and the estimated average storage pocket length is approximately 100 to 200 feet under the five intersection configurations for the left turn approaches. Thus, the left turn storage pockets are estimated to be 350 to 400 feet.

The 250 foot right-turn lane storage pockets were sized for vehicles to merge across the bicycle lane and slow within the length of the storage pocket from 30 mile per hour (i.e., right-turn vehicles will begin to decelerate prior to the storage pocket). On East Boronda Road, the through movement queue will block the right-turn lane during the red phase, but maintain separation from

the through vehicles as the right turn vehicles slow to make the right turn during the green phase. The Salinas retail center driveway should be placed more than 400 feet east of the East Boronda Road and San Juan Grade Road intersection to accommodate the right turn lane storage distance and lane taper.

BICYCLE LANE TREATMENTS

Issues for pedestrians and bicyclist at intersections are typically focused on long crossing distances, turning conflicts, and high vehicle speeds. The widening of the East Boronda Road / San Juan Grade Road intersection can exacerbate these conditions. The *California Manual of Uniform Traffic Control Devices* (CAMUTCD) provides guidance on striping bicycle lanes at intersections. **Figure 2** illustrates bicycle lane treatments that clarify right-of-way, manage vehicle turning speeds and minimize the crossing distance to the extent possible for the westbound approach. The advantages and disadvantages of each treatment are described in **Table 3**.

TABLE 3
BICYCLE LANE TREATMENTS WITH AND WITHOUT A RIGHT-TURN LANE
(EAST BORONDA ROAD AND SAN JUAN GRADE ROAD INTERSECTION)

Description	Advantages	Disadvantages
Sweeping Right-Turn Lane with Large Pedestrian Island	• Right-turn lane vehicles do not conflict with bicyclist at intersection. • Shorter pedestrian crossing distance of east leg than separate right-turn lane at intersection.	• Vehicles enter San Juan Grade Road at higher speeds. • Pedestrians crossing of right-turn lane is uncontrolled
Separate Right Turn Lane (Recommended)	• Guides bicyclist to correct position at intersections with a separate right-turn lane. • Encourages motorist maneuvering into the dedicated right-turn lane to look for and yield to bicyclists. • Defines the transition point for both bicyclist and motorists. • Minimizes conflict between right-turn vehicles and through movement bicyclist. • Right-turn lane vehicles do not conflict with bicyclist at intersection.	• For long right-turn lanes, bicyclist may be overtaken on both sides by motorists. • On high-speed facilities, a long transition area is needed, increasing the length of the potential conflict area.
Shared Through-Right Lane	• Encourages motorist maneuvering into the shared lane to look for and yield to bicyclist. • Defines the transition point for both bicyclist and motorists. • Right turn vehicle speeds lower than sweeping right turn. • Shorter pedestrian crossing distance of east leg than separate right-turn lane at intersection.	• Right hooking conflict between right-turn vehicles and through movement bicyclist not addressed.

Source: Fehr & Peers, April 2010.

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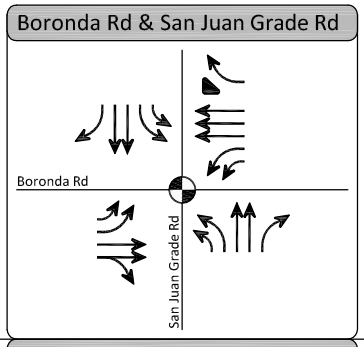
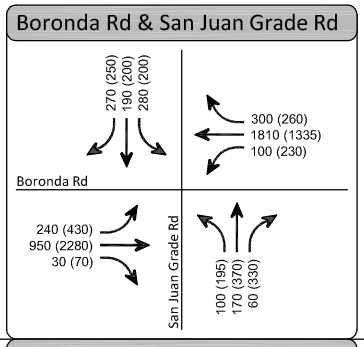
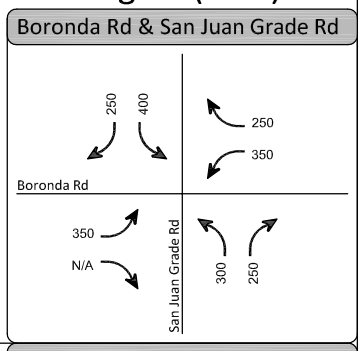
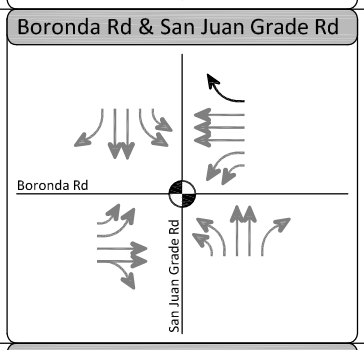
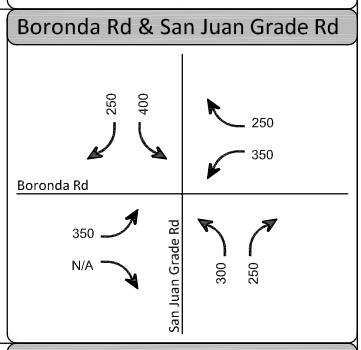
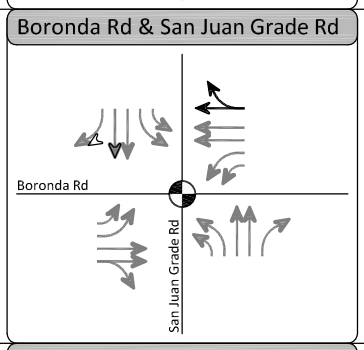
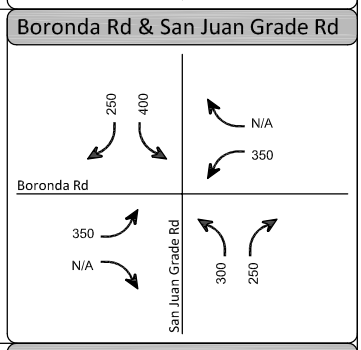
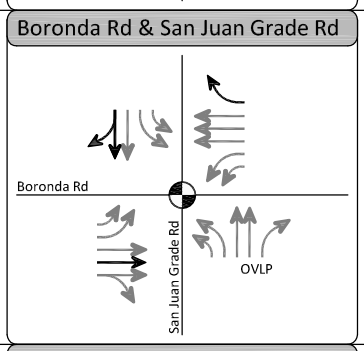
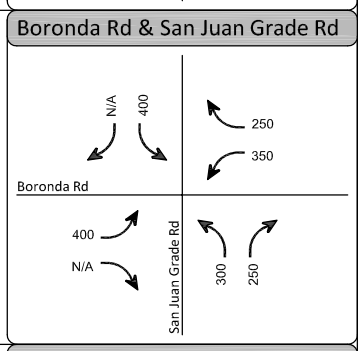
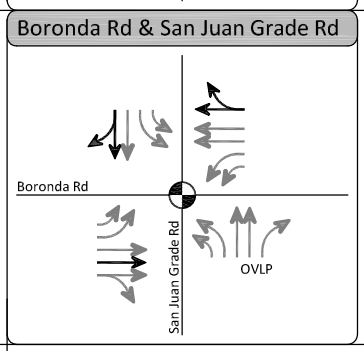
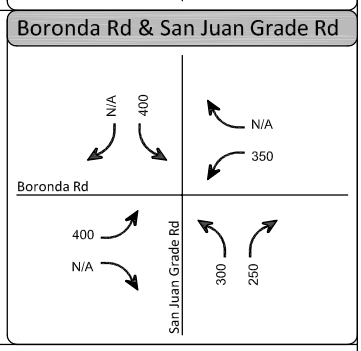
CONCLUSION

The separate right-turn lane without a pedestrian pork-chop island and bicycle lane meets City of Salinas level of service standards in Year 2030 with Current General Plan Conditions. This separate right-turn lane with a bicycle lane clarifies right-of-way, manages vehicle turning speeds and minimizes the crossing distance to the extent possible for the westbound approach.

Attachments

Intersection Configuration Description	Geometry	Forecast Volumes	Storage Pocket Lengths (Feet)
1. Current city design (Project 9510) with sweeping westbound right-turn lane			
2. Current city design with westbound right-turn lane		Same as Intersection Configuration #1	
3. Current city design with westbound shared through-right lane		Same as Intersection Configuration #1	
4. 6-Lane E. Boronda Rd between Main St & San Juan Grade Rd with westbound right-turn lane		Same as Intersection Configuration #1	
5. 6-Lane E. Boronda Rd between Main St & San Juan Grade Rd with westbound shared through-right lane		Same as Intersection Configuration #1	

LEGEND:

= Lane Geometry

= Unchanged Lane Geometry

= Pork-Chop Pedestrian Island

XX (YY) = AM (PM) Volume

OVLP = Right-Turn Overlap Phase

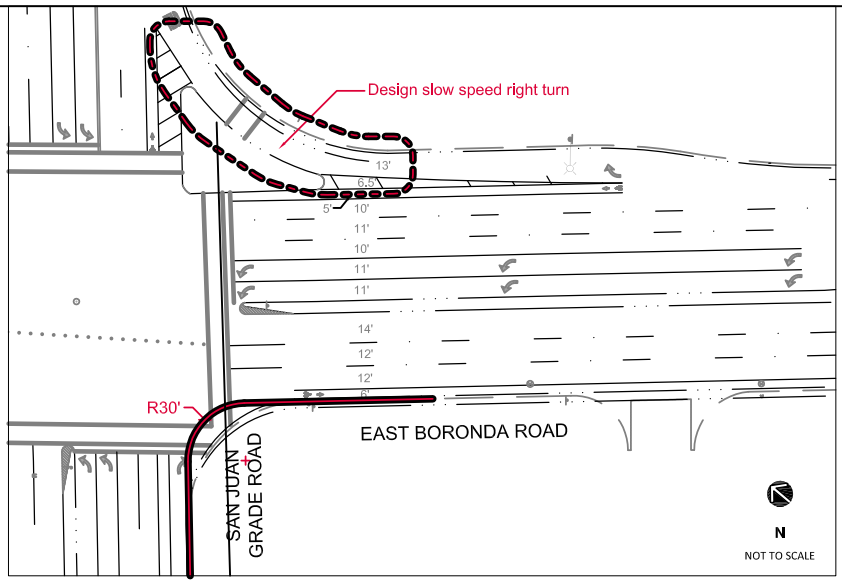
= Signal

FEHR & PEERS
TRANSPORTATION CONSULTANTS

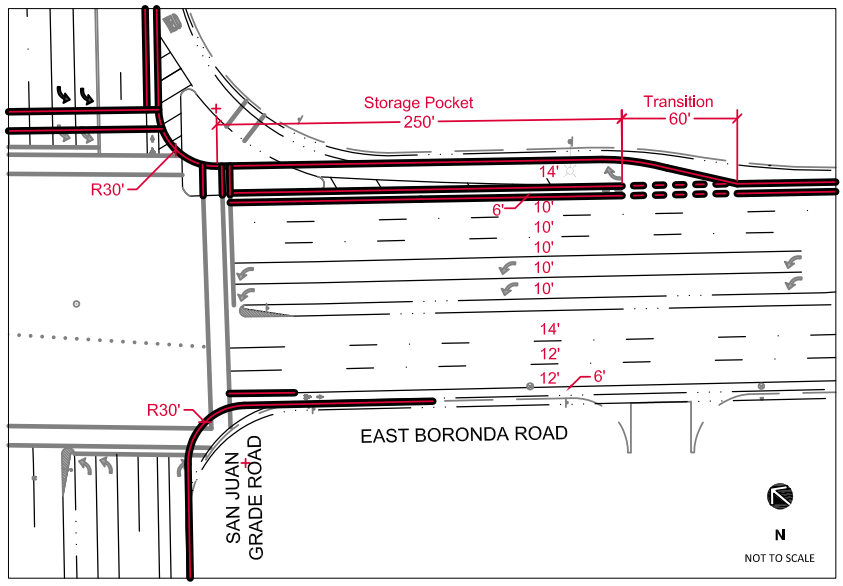
Year 2030 Current General Plan Conditions
Geometry, Lenghts, Volumes, and Storage Pocket

Apr 14, 2010
\\Fpsj1\data\Projects_SJ10_Projects\SJ10_1154_Salinas_Lowes\Data\SJG_Boronda_Improvement\Striping Plan_KLS_2010-03-12.dwg

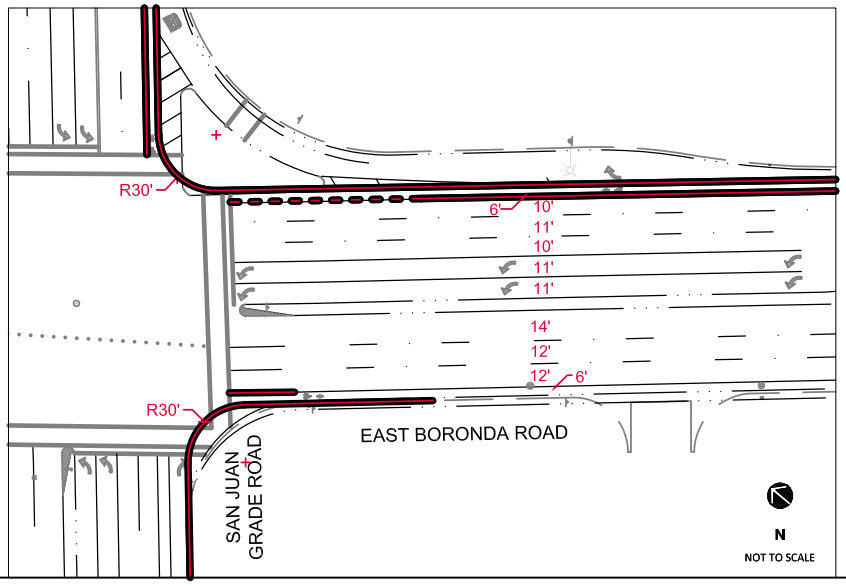
Figure 1



Current City Design (Project 9510) with sweeping west bound right-turn lane



Current City Design with west bound right-turn lane



Current City Design with west bound shared through-right lane

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Apr 15, 2010
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Bicycle Lane Treatments
With & Without Right-Turn Lanes

Figure 2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	240	950	30	100	1810	300	100	170	60	280	190	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95		0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3520		3433	5085	1540	3433	3539	1523	3433	3539	1526
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3520		3433	5085	1540	3433	3539	1523	3433	3539	1526
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	1011	32	106	1926	319	106	181	64	298	202	287
RTOR Reduction (vph)	0	2	0	0	0	168	0	0	55	0	0	118
Lane Group Flow (vph)	255	1041	0	106	1926	151	106	181	9	298	202	169
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	10.1	52.3		7.2	49.4	49.4	7.3	14.9	14.9	12.6	20.2	20.2
Effective Green, g (s)	10.1	52.3		7.2	49.4	49.4	7.3	14.9	14.9	12.6	20.2	20.2
Actuated g/C Ratio	0.09	0.47		0.06	0.45	0.45	0.07	0.13	0.13	0.11	0.18	0.18
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	312	1659		223	2263	685	226	475	204	390	644	278
v/s Ratio Prot	c0.07	c0.30		0.03	c0.38		0.03	0.05		c0.09	0.06	
v/s Ratio Perm						0.10			0.01			c0.11
v/c Ratio	0.82	0.63		0.48	0.85	0.22	0.47	0.38	0.04	0.76	0.31	0.61
Uniform Delay, d1	49.5	22.0		50.1	27.5	19.0	50.0	43.8	41.8	47.8	39.4	41.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.4	0.8		0.6	3.3	0.2	0.6	0.5	0.1	7.8	0.3	3.7
Delay (s)	64.0	22.8		50.7	30.8	19.1	50.5	44.4	41.9	55.6	39.7	45.5
Level of Service	E	C		D	C	B	D	D	D	E	D	D
Approach Delay (s)		30.9			30.1			45.8			47.8	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	34.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	111.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	TR	L	L	T	T	T	R	L	L
Maximum Queue (ft)	197	206	393	436	80	89	564	641	709	375	66	95
Average Queue (ft)	112	118	217	251	24	32	298	340	370	72	23	41
95th Queue (ft)	185	194	347	379	59	71	496	571	613	313	54	78
Link Distance (ft)			1492	1492			821	821	821			
Upstream Blk Time (%)								0	0			
Queuing Penalty (veh)								0	1			
Storage Bay Dist (ft)	600	600			600	600				350	250	250
Storage Blk Time (%)							0		8	0		
Queuing Penalty (veh)							0		23	0		

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	R
Maximum Queue (ft)	112	128	65	169	194	126	135	232
Average Queue (ft)	49	64	27	98	119	51	67	119
95th Queue (ft)	95	111	55	156	177	96	116	202
Link Distance (ft)	1328	1328				961	961	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			350	400	400			250
Storage Blk Time (%)								0
Queuing Penalty (veh)								0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	240	950	30	100	1810	300	100	170	60	280	190	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95		0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3520		3433	5085	1540	3433	3539	1523	3433	3539	1526
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3520		3433	5085	1540	3433	3539	1523	3433	3539	1526
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	1011	32	106	1926	319	106	181	64	298	202	287
RTOR Reduction (vph)	0	2	0	0	0	168	0	0	55	0	0	118
Lane Group Flow (vph)	255	1041	0	106	1926	151	106	181	9	298	202	169
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	10.1	52.3		7.2	49.4	49.4	7.3	14.9	14.9	12.6	20.2	20.2
Effective Green, g (s)	10.1	52.3		7.2	49.4	49.4	7.3	14.9	14.9	12.6	20.2	20.2
Actuated g/C Ratio	0.09	0.47		0.06	0.45	0.45	0.07	0.13	0.13	0.11	0.18	0.18
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	312	1659		223	2263	685	226	475	204	390	644	278
v/s Ratio Prot	c0.07	c0.30		0.03	c0.38		0.03	0.05		c0.09	0.06	
v/s Ratio Perm						0.10			0.01			c0.11
v/c Ratio	0.82	0.63		0.48	0.85	0.22	0.47	0.38	0.04	0.76	0.31	0.61
Uniform Delay, d1	49.5	22.0		50.1	27.5	19.0	50.0	43.8	41.8	47.8	39.4	41.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.4	0.8		0.6	3.3	0.2	0.6	0.5	0.1	7.8	0.3	3.7
Delay (s)	64.0	22.8		50.7	30.8	19.1	50.5	44.4	41.9	55.6	39.7	45.5
Level of Service	E	C		D	C	B	D	D	D	E	D	D
Approach Delay (s)		30.9			30.1			45.8			47.8	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	34.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	111.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	81.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	TR	L	L	T	T	T	R	L	L
Maximum Queue (ft)	201	213	381	417	87	101	554	674	716	375	73	89
Average Queue (ft)	110	129	210	244	29	42	322	366	401	139	25	41
95th Queue (ft)	193	207	335	373	68	82	488	564	621	373	58	76
Link Distance (ft)			1492	1492			822	822	822			
Upstream Blk Time (%)									0			
Queuing Penalty (veh)									0			
Storage Bay Dist (ft)	600	600			600	600				350	250	250
Storage Blk Time (%)							0		9	0		
Queuing Penalty (veh)							0		28	1		

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	R
Maximum Queue (ft)	111	131	62	201	221	129	126	227
Average Queue (ft)	43	70	25	105	126	55	69	126
95th Queue (ft)	88	118	51	173	195	104	115	211
Link Distance (ft)	1328	1328				962	962	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			350	400	400			250
Storage Blk Time (%)								0
Queuing Penalty (veh)								0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	240	950	30	100	1810	300	100	170	60	280	190	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95		0.97	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3520		3433	4958		3433	3539	1523	3433	3539	1526
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3520		3433	4958		3433	3539	1523	3433	3539	1526
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	1011	32	106	1926	319	106	181	64	298	202	287
RTOR Reduction (vph)	0	2	0	0	16	0	0	0	55	0	0	118
Lane Group Flow (vph)	255	1041	0	106	2229	0	106	181	9	298	202	169
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	10.1	52.3		7.2	49.4		7.3	14.9	14.9	12.6	20.2	20.2
Effective Green, g (s)	10.1	52.3		7.2	49.4		7.3	14.9	14.9	12.6	20.2	20.2
Actuated g/C Ratio	0.09	0.47		0.06	0.45		0.07	0.13	0.13	0.11	0.18	0.18
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	312	1659		223	2207		226	475	204	390	644	278
v/s Ratio Prot	c0.07	c0.30		0.03	c0.45		0.03	0.05		c0.09	0.06	
v/s Ratio Perm									0.01			c0.11
v/c Ratio	0.82	0.63		0.48	1.01		0.47	0.38	0.04	0.76	0.31	0.61
Uniform Delay, d1	49.5	22.0		50.1	30.8		50.0	43.8	41.8	47.8	39.4	41.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	14.4	0.8		0.6	21.7		0.6	0.5	0.1	7.8	0.3	3.7
Delay (s)	64.0	22.8		50.7	52.5		50.5	44.4	41.9	55.6	39.7	45.5
Level of Service	E	C		D	D		D	D	D	E	D	D
Approach Delay (s)		30.9			52.4			45.8			47.8	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM Average Control Delay	45.3	HCM Level of Service	D
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	111.0	Sum of lost time (s)	30.0
Intersection Capacity Utilization	88.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	TR	L	L	T	T	TR	L	L	T
Maximum Queue (ft)	211	222	397	419	88	624	842	891	875	65	96	109
Average Queue (ft)	107	118	209	244	23	112	752	783	790	24	43	46
95th Queue (ft)	177	192	344	368	59	441	1033	1039	1003	55	81	89
Link Distance (ft)			1492	1492			821	821	821			1328
Upstream Blk Time (%)							25	26	31			
Queuing Penalty (veh)							181	189	230			
Storage Bay Dist (ft)	600	600			600	600				250	250	
Storage Blk Time (%)						0	35					
Queuing Penalty (veh)						0	35					

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	T	R
Maximum Queue (ft)	134	64	192	222	125	171	206
Average Queue (ft)	62	26	106	123	53	70	83
95th Queue (ft)	110	54	172	190	99	129	154
Link Distance (ft)	1328				961	961	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		350	400	400			250
Storage Blk Time (%)							0
Queuing Penalty (veh)							0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	240	950	30	100	1810	300	100	170	60	280	190	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5058		3433	5085	1540	3433	3539	1548	3433	3159	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5058		3433	5085	1540	3433	3539	1548	3433	3159	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	1011	32	106	1926	319	106	181	64	298	202	287
RTOR Reduction (vph)	0	2	0	0	0	168	0	0	23	0	118	0
Lane Group Flow (vph)	255	1041	0	106	1926	151	106	181	41	298	371	0
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		pm+ov	Prot		
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	10.1	52.3		7.2	49.4	49.4	7.3	15.1	22.3	12.6	20.4	
Effective Green, g (s)	10.1	52.3		7.2	49.4	49.4	7.3	15.1	22.3	12.6	20.4	
Actuated g/C Ratio	0.09	0.47		0.06	0.44	0.44	0.07	0.14	0.20	0.11	0.18	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	2.0	2.0	3.0	
Lane Grp Cap (vph)	312	2379		222	2259	684	225	481	394	389	580	
v/s Ratio Prot	c0.07	c0.21		0.03	c0.38		0.03	0.05	0.01	c0.09	c0.12	
v/s Ratio Perm						0.10			0.02			
v/c Ratio	0.82	0.44		0.48	0.85	0.22	0.47	0.38	0.10	0.77	0.64	
Uniform Delay, d1	49.6	19.6		50.2	27.6	19.0	50.1	43.8	36.3	47.9	42.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	14.4	0.1		0.6	3.3	0.2	0.6	0.5	0.0	7.9	2.4	
Delay (s)	64.1	19.8		50.8	31.0	19.2	50.7	44.3	36.3	55.8	44.4	
Level of Service	E	B		D	C	B	D	D	D	E	D	
Approach Delay (s)		28.5			30.3			44.7			48.7	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM Average Control Delay	33.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	111.2	Sum of lost time (s)	30.0
Intersection Capacity Utilization	83.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	TR	L	L	T	T	T	R	L
Maximum Queue (ft)	275	298	230	258	288	100	185	625	710	778	375	80
Average Queue (ft)	149	167	121	146	178	27	42	366	410	453	139	29
95th Queue (ft)	283	295	201	229	260	66	81	584	647	718	371	66
Link Distance (ft)			1504	1504	1504			822	822	822		
Upstream Blk Time (%)								0	0	0		
Queuing Penalty (veh)								0	0	3		
Storage Bay Dist (ft)	600	600				600	600				350	250
Storage Blk Time (%)							0	1		13	0	
Queuing Penalty (veh)							0	1		41	1	

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	T	T	R	L	L	T	TR
Maximum Queue (ft)	101	126	143	71	208	226	222	297
Average Queue (ft)	45	45	71	27	118	138	86	171
95th Queue (ft)	85	95	120	57	191	210	167	271
Link Distance (ft)		1329	1329				963	963
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250			400	450	450		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	240	950	30	100	1810	300	100	170	60	280	190	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	0.97	0.91		0.97	0.91		0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	0.98		1.00	1.00	0.85	1.00	0.91	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5058		3433	4957		3433	3539	1548	3433	3159	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5058		3433	4957		3433	3539	1548	3433	3159	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	1011	32	106	1926	319	106	181	64	298	202	287
RTOR Reduction (vph)	0	2	0	0	16	0	0	0	23	0	118	0
Lane Group Flow (vph)	255	1041	0	106	2229	0	106	181	41	298	371	0
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	10.1	52.3		7.2	49.4		7.3	15.1	22.3	12.6	20.4	
Effective Green, g (s)	10.1	52.3		7.2	49.4		7.3	15.1	22.3	12.6	20.4	
Actuated g/C Ratio	0.09	0.47		0.06	0.44		0.07	0.14	0.20	0.11	0.18	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0	2.0	2.0	3.0	
Lane Grp Cap (vph)	312	2379		222	2202		225	481	394	389	580	
v/s Ratio Prot	c0.07	c0.21		0.03	c0.45		0.03	0.05	0.01	c0.09	c0.12	
v/s Ratio Perm									0.02			
v/c Ratio	0.82	0.44		0.48	1.01		0.47	0.38	0.10	0.77	0.64	
Uniform Delay, d1	49.6	19.6		50.2	30.9		50.1	43.8	36.3	47.9	42.0	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	14.4	0.1		0.6	22.3		0.6	0.5	0.0	7.9	2.4	
Delay (s)	64.1	19.8		50.8	53.2		50.7	44.3	36.3	55.8	44.4	
Level of Service	E	B		D	D		D	D	D	E	D	
Approach Delay (s)		28.5			53.1			44.7			48.7	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM Average Control Delay	45.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	111.2	Sum of lost time (s)	30.0
Intersection Capacity Utilization	90.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	TR	L	L	T	T	TR	L	L
Maximum Queue (ft)	196	196	237	282	311	81	674	854	892	875	71	90
Average Queue (ft)	107	116	124	148	177	22	127	784	813	814	27	45
95th Queue (ft)	177	185	213	243	272	58	497	972	976	954	58	81
Link Distance (ft)			1504	1504	1504			821	821	821		
Upstream Blk Time (%)								28	27	32		
Queuing Penalty (veh)								206	201	237		
Storage Bay Dist (ft)	600	600				650	650				250	250
Storage Blk Time (%)							0	37				
Queuing Penalty (veh)							0	37				

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	NB	NB	NB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	TR
Maximum Queue (ft)	111	132	62	187	212	222	326
Average Queue (ft)	50	64	27	115	132	91	171
95th Queue (ft)	88	112	53	185	199	177	281
Link Distance (ft)	1329	1329				963	963
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			400	450	450		
Storage Blk Time (%)							
Queuing Penalty (veh)							

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	430	2280	70	230	1335	260	195	370	330	200	200	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95		0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3521		3433	5085	1536	3433	3539	1526	3433	3539	1517
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3521		3433	5085	1536	3433	3539	1526	3433	3539	1517
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	457	2426	74	245	1420	277	207	394	351	213	213	266
RTOR Reduction (vph)	0	2	0	0	0	124	0	0	145	0	0	226
Lane Group Flow (vph)	457	2498	0	245	1420	153	207	394	206	213	213	40
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	21.6	66.3		12.2	56.9	56.9	11.5	23.6	23.6	8.0	20.1	20.1
Effective Green, g (s)	21.6	66.3		12.2	56.9	56.9	11.5	23.6	23.6	8.0	20.1	20.1
Actuated g/C Ratio	0.16	0.49		0.09	0.42	0.42	0.09	0.18	0.18	0.06	0.15	0.15
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	553	1741		312	2158	652	294	623	269	205	530	227
v/s Ratio Prot	c0.13	c0.71		0.07	0.28		0.06	0.11		c0.06	0.06	
v/s Ratio Perm						0.10			c0.13			0.03
v/c Ratio	0.83	1.44		0.79	0.66	0.24	0.70	0.63	0.77	1.04	0.40	0.18
Uniform Delay, d1	54.4	33.9		59.7	30.8	24.7	59.6	51.2	52.6	63.0	51.6	49.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.4	199.1		11.3	0.7	0.2	6.1	2.1	12.2	73.5	0.5	0.4
Delay (s)	63.8	233.0		71.0	31.6	24.9	65.8	53.3	64.8	136.5	52.1	50.1
Level of Service	E	F		E	C	C	E	D	E	F	D	D
Approach Delay (s)		206.9			35.6			60.3			77.3	
Approach LOS		F			D			E			E	

Intersection Summary			
HCM Average Control Delay	121.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	134.1	Sum of lost time (s)	24.0
Intersection Capacity Utilization	112.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	TR	L	L	T	T	T	R	L	L
Maximum Queue (ft)	215	625	1520	1518	190	185	390	421	466	285	165	176
Average Queue (ft)	118	291	1503	1502	91	104	210	233	257	27	76	91
95th Queue (ft)	191	688	1516	1518	157	169	325	355	390	179	135	149
Link Distance (ft)			1489	1489			826	826	826			
Upstream Blk Time (%)			26	26								
Queuing Penalty (veh)			0	0								
Storage Bay Dist (ft)	600	600			400	400				350	250	250
Storage Blk Time (%)		0	41				0		1	0		
Queuing Penalty (veh)		0	177				0		3	0		

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	R
Maximum Queue (ft)	219	233	306	264	272	151	163	214
Average Queue (ft)	131	146	133	133	153	69	84	109
95th Queue (ft)	204	225	247	255	265	122	137	187
Link Distance (ft)	1333	1333				966	966	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			350	400	400			250
Storage Blk Time (%)	0		0	0	0			0
Queuing Penalty (veh)	0		0	0	0			0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	430	2280	70	230	1335	260	195	370	330	200	200	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95		0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3521		3433	5085	1536	3433	3539	1526	3433	3539	1517
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3521		3433	5085	1536	3433	3539	1526	3433	3539	1517
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	457	2426	74	245	1420	277	207	394	351	213	213	266
RTOR Reduction (vph)	0	2	0	0	0	124	0	0	145	0	0	226
Lane Group Flow (vph)	457	2498	0	245	1420	153	207	394	206	213	213	40
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases						8			2			6
Actuated Green, G (s)	21.6	66.3		12.2	56.9	56.9	11.5	23.6	23.6	8.0	20.1	20.1
Effective Green, g (s)	21.6	66.3		12.2	56.9	56.9	11.5	23.6	23.6	8.0	20.1	20.1
Actuated g/C Ratio	0.16	0.49		0.09	0.42	0.42	0.09	0.18	0.18	0.06	0.15	0.15
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	553	1741		312	2158	652	294	623	269	205	530	227
v/s Ratio Prot	c0.13	c0.71		0.07	0.28		0.06	0.11		c0.06	0.06	
v/s Ratio Perm						0.10			c0.13			0.03
v/c Ratio	0.83	1.44		0.79	0.66	0.24	0.70	0.63	0.77	1.04	0.40	0.18
Uniform Delay, d1	54.4	33.9		59.7	30.8	24.7	59.6	51.2	52.6	63.0	51.6	49.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.4	199.1		11.3	0.7	0.2	6.1	2.1	12.2	73.5	0.5	0.4
Delay (s)	63.8	233.0		71.0	31.6	24.9	65.8	53.3	64.8	136.5	52.1	50.1
Level of Service	E	F		E	C	C	E	D	E	F	D	D
Approach Delay (s)		206.9			35.6			60.3			77.3	
Approach LOS		F			D			E			E	

Intersection Summary			
HCM Average Control Delay	121.0	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	134.1	Sum of lost time (s)	24.0
Intersection Capacity Utilization	112.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	TR	L	L	T	T	T	R	L	L
Maximum Queue (ft)	206	624	1518	1512	205	223	362	425	445	373	166	170
Average Queue (ft)	111	274	1500	1497	107	121	225	257	277	84	80	97
95th Queue (ft)	185	653	1537	1545	187	202	329	379	399	223	138	153
Link Distance (ft)			1489	1489			826	826	826			
Upstream Blk Time (%)			26	25								
Queuing Penalty (veh)			0	0								
Storage Bay Dist (ft)	600	600			400	400				350	250	250
Storage Blk Time (%)		0	42				0		2	0		
Queuing Penalty (veh)		0	179				0		4	0		

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	NB	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	T	R
Maximum Queue (ft)	236	261	273	320	338	200	156	235
Average Queue (ft)	135	163	126	192	210	77	84	114
95th Queue (ft)	214	239	231	350	363	166	136	195
Link Distance (ft)	1333	1333				966	966	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)			350	400	400			250
Storage Blk Time (%)	0		0	0	1			0
Queuing Penalty (veh)	0		0	0	1			0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	430	2280	70	230	1335	260	195	370	330	200	200	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	0.97	0.95		0.97	0.91		0.97	0.95	1.00	0.97	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.96	1.00	1.00	0.96
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	3521		3433	4937		3433	3539	1526	3433	3539	1517
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	3521		3433	4937		3433	3539	1526	3433	3539	1517
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	457	2426	74	245	1420	277	207	394	351	213	213	266
RTOR Reduction (vph)	0	2	0	0	18	0	0	0	145	0	0	226
Lane Group Flow (vph)	457	2498	0	245	1679	0	207	394	206	213	213	40
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot			Prot		Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	21.6	66.3		12.2	56.9		11.5	23.6	23.6	8.0	20.1	20.1
Effective Green, g (s)	21.6	66.3		12.2	56.9		11.5	23.6	23.6	8.0	20.1	20.1
Actuated g/C Ratio	0.16	0.49		0.09	0.42		0.09	0.18	0.18	0.06	0.15	0.15
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0	3.0	2.0	3.0	3.0
Lane Grp Cap (vph)	553	1741		312	2095		294	623	269	205	530	227
v/s Ratio Prot	c0.13	c0.71		0.07	0.34		0.06	0.11		c0.06	0.06	
v/s Ratio Perm									c0.13			0.03
v/c Ratio	0.83	1.44		0.79	0.80		0.70	0.63	0.77	1.04	0.40	0.18
Uniform Delay, d1	54.4	33.9		59.7	33.7		59.6	51.2	52.6	63.0	51.6	49.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.4	199.1		11.3	2.3		6.1	2.1	12.2	73.5	0.5	0.4
Delay (s)	63.8	233.0		71.0	36.0		65.8	53.3	64.8	136.5	52.1	50.1
Level of Service	E	F		E	D		E	D	E	F	D	D
Approach Delay (s)		206.9			40.4			60.3			77.3	
Approach LOS		F			D			E			E	

Intersection Summary			
HCM Average Control Delay	122.4	HCM Level of Service	F
HCM Volume to Capacity ratio	1.22		
Actuated Cycle Length (s)	134.1	Sum of lost time (s)	24.0
Intersection Capacity Utilization	112.9%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB	NB
Directions Served	L	L	T	TR	L	L	T	T	TR	L	L	T
Maximum Queue (ft)	198	625	1512	1508	178	200	515	548	586	165	192	256
Average Queue (ft)	113	290	1503	1500	98	114	291	350	404	83	97	139
95th Queue (ft)	181	677	1514	1521	166	184	438	504	556	144	158	220
Link Distance (ft)			1489	1489			826	826	826			1333
Upstream Blk Time (%)			26	24								
Queuing Penalty (veh)			0	0								
Storage Bay Dist (ft)	600	600			400	400				250	250	
Storage Blk Time (%)		0	42				1					0
Queuing Penalty (veh)		0	179				1					0

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	NB	NB	SB	SB	SB	SB	SB
Directions Served	T	R	L	L	T	T	R
Maximum Queue (ft)	265	256	303	319	309	231	153
Average Queue (ft)	154	122	186	205	96	86	75
95th Queue (ft)	238	220	359	375	327	197	128
Link Distance (ft)	1333				966	966	
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)		350	400	400			250
Storage Blk Time (%)			2	5			
Queuing Penalty (veh)			2	5			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	430	2280	70	230	1335	260	195	370	330	200	200	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	0.97	0.91		0.97	0.91	1.00	0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.97	1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5059		3433	5085	1536	3433	3539	1551	3433	3168	
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5059		3433	5085	1536	3433	3539	1551	3433	3168	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	457	2426	74	245	1420	277	207	394	351	213	213	266
RTOR Reduction (vph)	0	2	0	0	0	123	0	0	1	0	169	0
Lane Group Flow (vph)	457	2498	0	245	1420	154	207	394	350	213	310	0
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot		Perm	Prot		pm+ov	Prot		
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases						8			2			
Actuated Green, G (s)	21.5	66.3		12.2	57.0	57.0	11.5	22.6	34.8	8.0	19.1	
Effective Green, g (s)	21.5	66.3		12.2	57.0	57.0	11.5	22.6	34.8	8.0	19.1	
Actuated g/C Ratio	0.16	0.50		0.09	0.43	0.43	0.09	0.17	0.26	0.06	0.14	
Clearance Time (s)	6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	2.0	3.0		2.0	3.0	3.0	2.0	3.0	2.0	2.0	3.0	
Lane Grp Cap (vph)	555	2520		315	2178	658	297	601	475	206	455	
v/s Ratio Prot	c0.13	c0.49		0.07	0.28		0.06	0.11	c0.07	c0.06	0.10	
v/s Ratio Perm						0.10			0.16			
v/c Ratio	0.82	0.99		0.78	0.65	0.23	0.70	0.66	0.74	1.03	0.68	
Uniform Delay, d1	54.0	33.1		59.1	30.2	24.2	59.1	51.6	45.0	62.5	54.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.2	15.9		10.5	0.7	0.2	5.6	2.6	5.1	71.9	4.2	
Delay (s)	63.1	49.0		69.6	30.9	24.4	64.8	54.2	50.1	134.4	58.3	
Level of Service	E	D		E	C	C	E	D	D	F	E	
Approach Delay (s)		51.2			34.8			55.0			81.7	
Approach LOS		D			C			D			F	

Intersection Summary			
HCM Average Control Delay	50.1	HCM Level of Service	D
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	133.1	Sum of lost time (s)	24.0
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	WB	NB
Directions Served	L	L	T	T	TR	L	L	T	T	T	R	L
Maximum Queue (ft)	301	625	1507	1491	1493	202	217	399	448	517	374	160
Average Queue (ft)	187	343	1163	1180	1198	107	124	254	285	310	114	82
95th Queue (ft)	280	672	1707	1676	1665	179	195	368	401	441	287	142
Link Distance (ft)			1501	1501	1501			826	826	826		
Upstream Blk Time (%)			5	3	4							
Queuing Penalty (veh)			0	0	0							
Storage Bay Dist (ft)	600	600				400	400				350	250
Storage Blk Time (%)		0	28					0		3	0	0
Queuing Penalty (veh)		0	120					0		7	0	0

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	NB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	T	T	R	L	L	T	TR
Maximum Queue (ft)	187	237	254	339	268	278	275	362
Average Queue (ft)	98	138	161	187	142	155	120	214
95th Queue (ft)	159	216	235	306	262	277	216	328
Link Distance (ft)		1333	1333				968	968
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (ft)	250			400	450	450		
Storage Blk Time (%)	0	0		0				
Queuing Penalty (veh)	0	0		0				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (vph)	430	2280	70	230	1335	260	195	370	330	200	200	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	
Lane Util. Factor	0.97	0.91		0.97	0.91		0.97	0.95	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	0.98	
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	0.98		1.00	1.00	0.85	1.00	0.92	
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3433	5059		3433	4937		3433	3539	1551	3433	3168	
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	3433	5059		3433	4937		3433	3539	1551	3433	3168	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	457	2426	74	245	1420	277	207	394	351	213	213	266
RTOR Reduction (vph)	0	2	0	0	18	0	0	0	1	0	169	0
Lane Group Flow (vph)	457	2498	0	245	1679	0	207	394	350	213	310	0
Confl. Peds. (#/hr)			10			10			10			10
Confl. Bikes (#/hr)			10			10			10			10
Turn Type	Prot			Prot			Prot		pm+ov	Prot		
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases									2			
Actuated Green, G (s)	21.5	66.3		12.2	57.0		11.5	22.6	34.8	8.0	19.1	
Effective Green, g (s)	21.5	66.3		12.2	57.0		11.5	22.6	34.8	8.0	19.1	
Actuated g/C Ratio	0.16	0.50		0.09	0.43		0.09	0.17	0.26	0.06	0.14	
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	
Vehicle Extension (s)	2.0	3.0		2.0	3.0		2.0	3.0	2.0	2.0	3.0	
Lane Grp Cap (vph)	555	2520		315	2114		297	601	475	206	455	
v/s Ratio Prot	c0.13	c0.49		0.07	0.34		0.06	0.11	c0.07	c0.06	0.10	
v/s Ratio Perm									0.16			
v/c Ratio	0.82	0.99		0.78	0.79		0.70	0.66	0.74	1.03	0.68	
Uniform Delay, d1	54.0	33.1		59.1	33.0		59.1	51.6	45.0	62.5	54.1	
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.2	15.9		10.5	2.1		5.6	2.6	5.1	71.9	4.2	
Delay (s)	63.1	49.0		69.6	35.1		64.8	54.2	50.1	134.4	58.3	
Level of Service	E	D		E	D		E	D	D	F	E	
Approach Delay (s)		51.2			39.5			55.0			81.7	
Approach LOS		D			D			D			F	

Intersection Summary			
HCM Average Control Delay	51.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	133.1	Sum of lost time (s)	24.0
Intersection Capacity Utilization	94.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

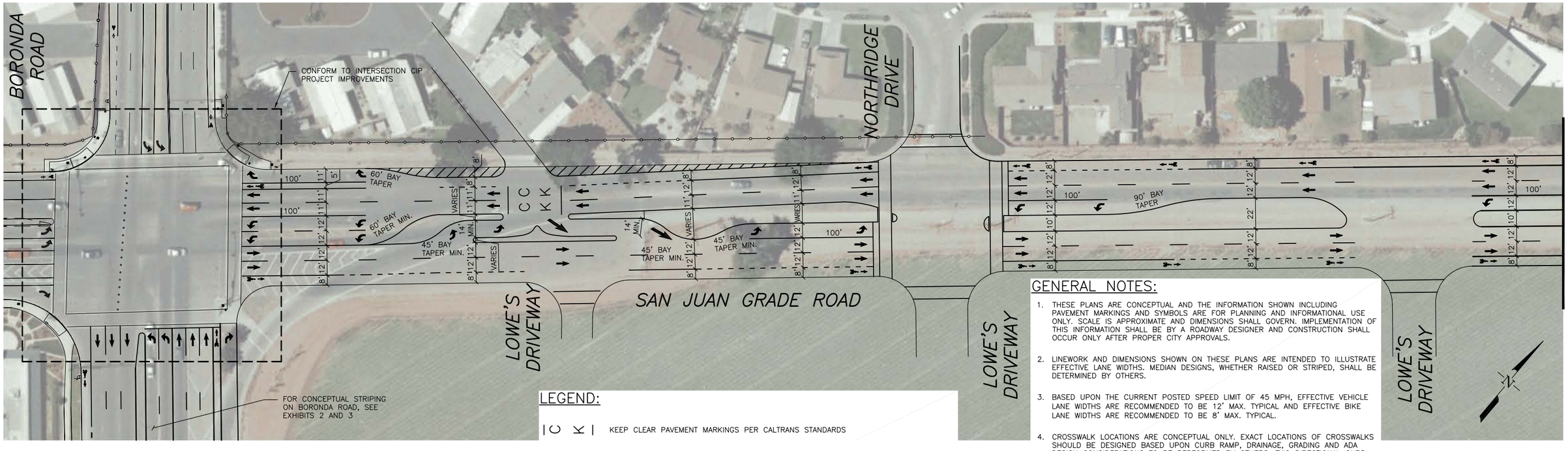
Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	EB	EB	EB	EB	EB	WB	WB	WB	WB	WB	NB	NB
Directions Served	L	L	T	T	TR	L	L	T	T	TR	L	L
Maximum Queue (ft)	300	625	1502	1505	1514	182	392	569	665	728	157	182
Average Queue (ft)	182	306	1135	1148	1177	105	146	336	403	453	84	98
95th Queue (ft)	275	628	1734	1695	1684	173	288	506	601	641	143	155
Link Distance (ft)			1501	1501	1501			826	826	826		
Upstream Blk Time (%)			6	4	5				0	0		
Queuing Penalty (veh)			0	0	0				0	0		
Storage Bay Dist (ft)	600	600				400	400				250	250
Storage Blk Time (%)		0	27				0	3				
Queuing Penalty (veh)		0	115				0	6				

Intersection: 9: Boronda Rd. & San Juan Grade Rd.

Movement	NB	NB	NB	SB	SB	SB	SB
Directions Served	T	T	R	L	L	T	TR
Maximum Queue (ft)	239	249	305	324	333	236	402
Average Queue (ft)	135	150	180	195	210	109	199
95th Queue (ft)	206	222	294	336	349	197	320
Link Distance (ft)	1333	1333				968	968
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (ft)			400	450	450		
Storage Blk Time (%)	0						
Queuing Penalty (veh)	0						

APPENDIX J:
EAST BORONDA ROAD AND SAN JUAN GRADE ROAD CONCEPTUAL STRIPING PLANS

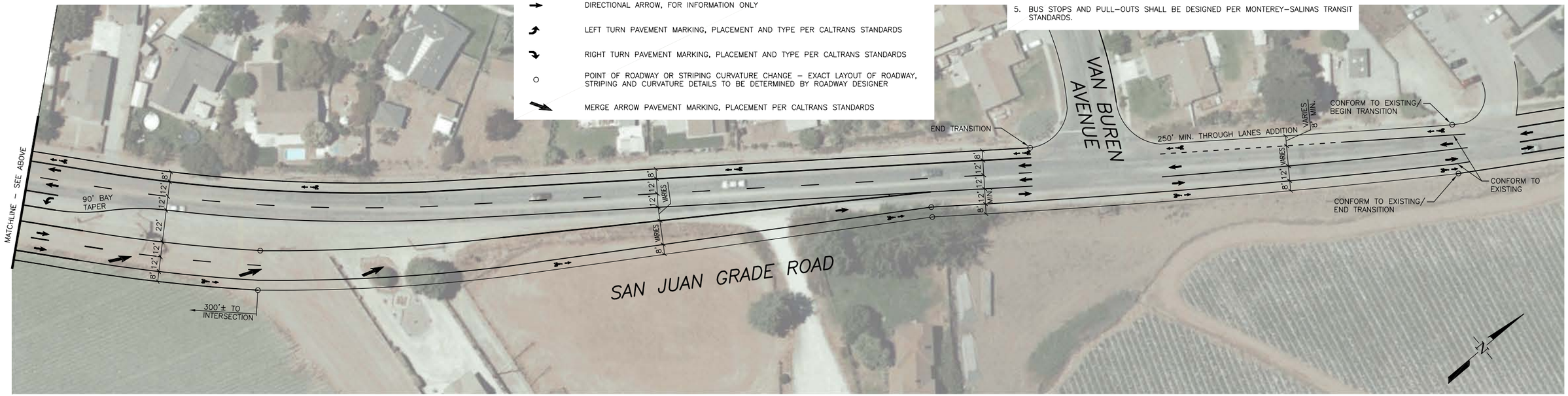


GENERAL NOTES:

1. THESE PLANS ARE CONCEPTUAL AND THE INFORMATION SHOWN INCLUDING PAVEMENT MARKINGS AND SYMBOLS ARE FOR PLANNING AND INFORMATIONAL USE ONLY. SCALE IS APPROXIMATE AND DIMENSIONS SHALL GOVERN. IMPLEMENTATION OF THIS INFORMATION SHALL BE BY A ROADWAY DESIGNER AND CONSTRUCTION SHALL OCCUR ONLY AFTER PROPER CITY APPROVALS.
2. LINEWORK AND DIMENSIONS SHOWN ON THESE PLANS ARE INTENDED TO ILLUSTRATE EFFECTIVE LANE WIDTHS. MEDIAN DESIGNS, WHETHER RAISED OR STRIPED, SHALL BE DETERMINED BY OTHERS.
3. BASED UPON THE CURRENT POSTED SPEED LIMIT OF 45 MPH, EFFECTIVE VEHICLE LANE WIDTHS ARE RECOMMENDED TO BE 12' MAX. TYPICAL AND EFFECTIVE BIKE LANE WIDTHS ARE RECOMMENDED TO BE 8' MAX. TYPICAL.
4. CROSSWALK LOCATIONS ARE CONCEPTUAL ONLY. EXACT LOCATIONS OF CROSSWALKS SHOULD BE DESIGNED BASED UPON CURB RAMP, DRAINAGE, GRADING AND ADA DESIGN CONSIDERATIONS TO BE PERFORMED BY OTHERS. TWO DIRECTIONAL CURB RAMPS PER CORNER ARE RECOMMENDED.
5. BUS STOPS AND PULL–OUTS SHALL BE DESIGNED PER MONTEREY–SALINAS TRANSIT STANDARDS.

LEGEND:

- KEEP CLEAR PAVEMENT MARKINGS PER CALTRANS STANDARDS
- BICYCLE LANE PAVEMENT MARKING, PER CALTRANS STANDARDS, SPACING PER CAMUTCD
- DIRECTIONAL ARROW, FOR INFORMATION ONLY
- LEFT TURN PAVEMENT MARKING, PLACEMENT AND TYPE PER CALTRANS STANDARDS
- RIGHT TURN PAVEMENT MARKING, PLACEMENT AND TYPE PER CALTRANS STANDARDS
- POINT OF ROADWAY OR STRIPING CURVATURE CHANGE – EXACT LAYOUT OF ROADWAY, STRIPING AND CURVATURE DETAILS TO BE DETERMINED BY ROADWAY DESIGNER
- MERGE ARROW PAVEMENT MARKING, PLACEMENT PER CALTRANS STANDARDS



40 0 40 80
1" = 40' GRAPHIC SCALE

REVISIONS			
NO.	DESCRIPTION	DATE	BY

FEHR & PEERS
TRANSPORTATION CONSULTANTS

Designed By: KC
Drawn By: DD/KC
Checked By: AO
Drawing No.: SJ10–1154
Date: SEPT. 2010

SALINAS (CLOVERFIELD) RETAIL CENTER

EXHIBIT 1

CONCEPTUAL STRIPING – SAN JUAN GRADE ROAD

SHEET 1 OF 3

CADD FILE: N:\Projects_SJ10_Projects\SJ10_1154_Salinas_Lowes\CAD\1154 intersection-Sheet 1_3.dwg
Oct 05, 2010

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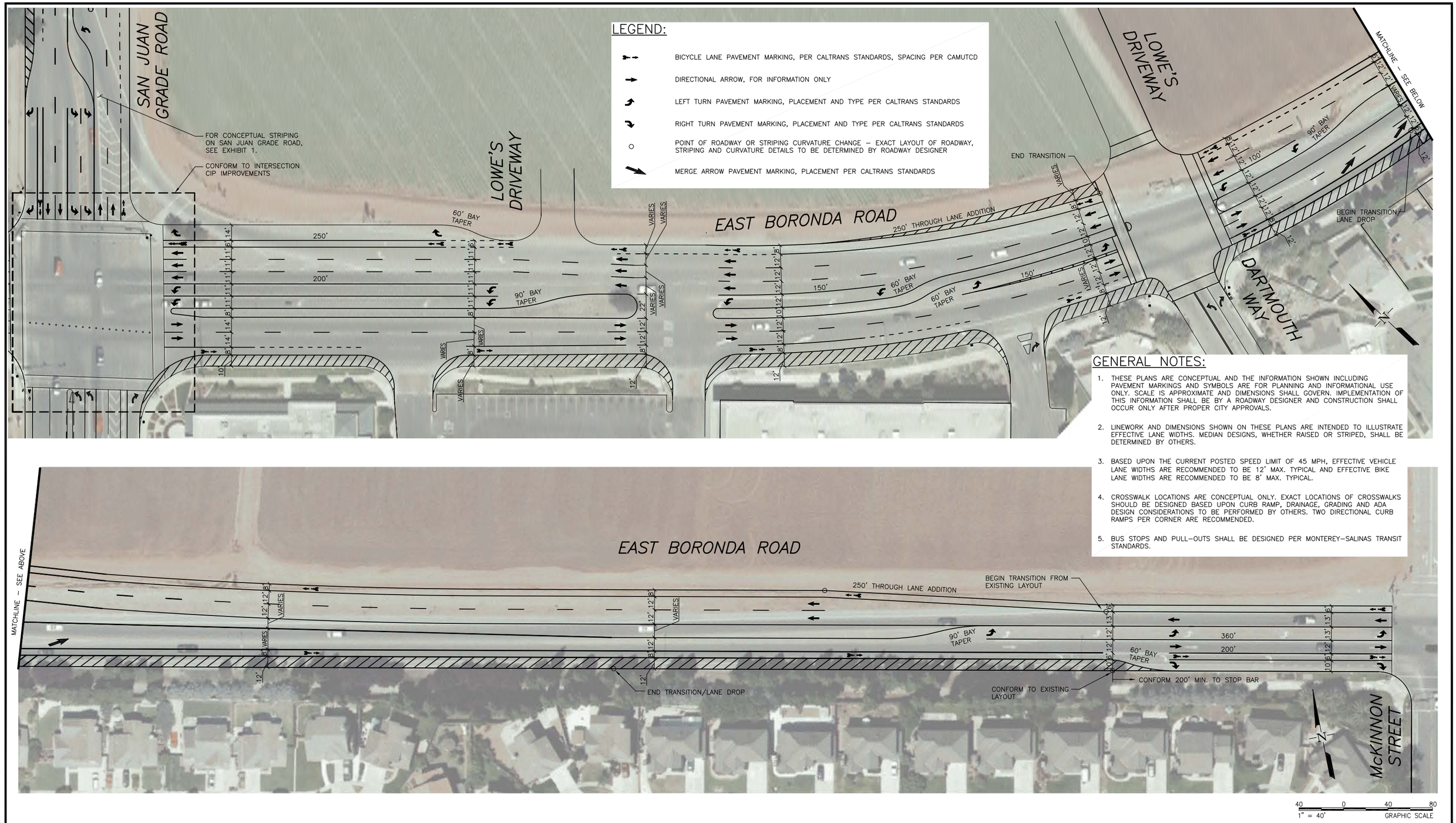

LEGEND:

- BICYCLE LANE PAVEMENT MARKING, PER CALTRANS STANDARDS, SPACING PER CAMUTCD
- DIRECTIONAL ARROW, FOR INFORMATION ONLY
- LEFT TURN PAVEMENT MARKING, PLACEMENT AND TYPE PER CALTRANS STANDARDS
- RIGHT TURN PAVEMENT MARKING, PLACEMENT AND TYPE PER CALTRANS STANDARDS
- POINT OF ROADWAY OR STRIPING CURVATURE CHANGE – EXACT LAYOUT OF ROADWAY, STRIPING AND CURVATURE DETAILS TO BE DETERMINED BY ROADWAY DESIGNER
- MERGE ARROW PAVEMENT MARKING, PLACEMENT PER CALTRANS STANDARDS

GENERAL NOTES:

1. THESE PLANS ARE CONCEPTUAL AND THE INFORMATION SHOWN INCLUDING PAVEMENT MARKINGS AND SYMBOLS ARE FOR PLANNING AND INFORMATIONAL USE ONLY. SCALE IS APPROXIMATE AND DIMENSIONS SHALL GOVERN. IMPLEMENTATION OF THIS INFORMATION SHALL BE BY A ROADWAY DESIGNER AND CONSTRUCTION SHALL OCCUR ONLY AFTER PROPER CITY APPROVALS.
2. LINEWORK AND DIMENSIONS SHOWN ON THESE PLANS ARE INTENDED TO ILLUSTRATE EFFECTIVE LANE WIDTHS. MEDIAN DESIGNS, WHETHER RAISED OR STRIPED, SHALL BE DETERMINED BY OTHERS.
3. BASED UPON THE CURRENT POSTED SPEED LIMIT OF 45 MPH, EFFECTIVE VEHICLE LANE WIDTHS ARE RECOMMENDED TO BE 12' MAX. TYPICAL AND EFFECTIVE BIKE LANE WIDTHS ARE RECOMMENDED TO BE 8' MAX. TYPICAL.
4. CROSSWALK LOCATIONS ARE CONCEPTUAL ONLY. EXACT LOCATIONS OF CROSSWALKS SHOULD BE DESIGNED BASED UPON CURB RAMP, DRAINAGE, GRADING AND ADA DESIGN CONSIDERATIONS TO BE PERFORMED BY OTHERS. TWO DIRECTIONAL CURB RAMPS PER CORNER ARE RECOMMENDED.
5. BUS STOPS AND PULL-OUTS SHALL BE DESIGNED PER MONTEREY-SALINAS TRANSIT STANDARDS.

REVISIONS

NO.	DESCRIPTION	DATE	BY

FEHR & PEERS
TRANSPORTATION CONSULTANTS

Designed By: KC
Drawn By: DD/KC
Checked By: AO
Drawing No.: SJ10-1154
Date: SEPT. 2010

SALINAS (CLOVERFIELD) RETAIL CENTER

EXHIBIT 2

CONCEPTUAL STRIPING – EAST BORONDA ROAD – INTERIM

SHEET 2 OF 3

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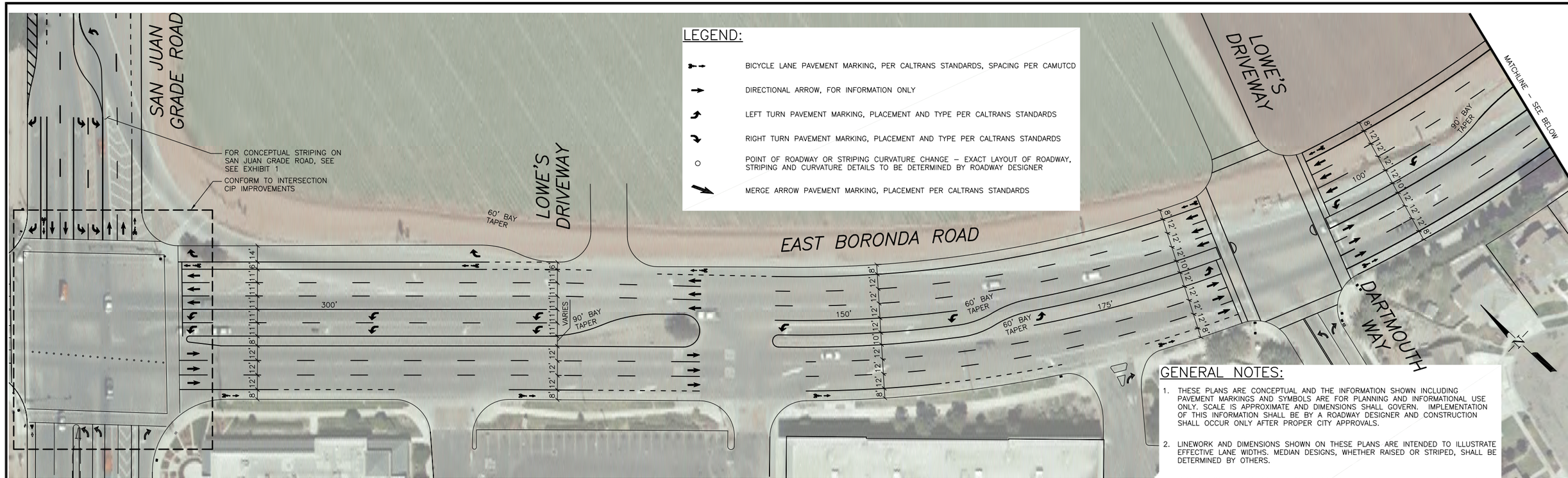

LEGEND:

- BICYCLE LANE PAVEMENT MARKING, PER CALTRANS STANDARDS, SPACING PER CAMUTCD
- DIRECTIONAL ARROW, FOR INFORMATION ONLY
- LEFT TURN PAVEMENT MARKING, PLACEMENT AND TYPE PER CALTRANS STANDARDS
- RIGHT TURN PAVEMENT MARKING, PLACEMENT AND TYPE PER CALTRANS STANDARDS
- POINT OF ROADWAY OR STRIPING CURVATURE CHANGE – EXACT LAYOUT OF ROADWAY, STRIPING AND CURVATURE DETAILS TO BE DETERMINED BY ROADWAY DESIGNER
- MERGE ARROW PAVEMENT MARKING, PLACEMENT PER CALTRANS STANDARDS

GENERAL NOTES:

1. THESE PLANS ARE CONCEPTUAL AND THE INFORMATION SHOWN INCLUDING PAVEMENT MARKINGS AND SYMBOLS ARE FOR PLANNING AND INFORMATIONAL USE ONLY. SCALE IS APPROXIMATE AND DIMENSIONS SHALL GOVERN. IMPLEMENTATION OF THIS INFORMATION SHALL BE BY A ROADWAY DESIGNER AND CONSTRUCTION SHALL OCCUR ONLY AFTER PROPER CITY APPROVALS.
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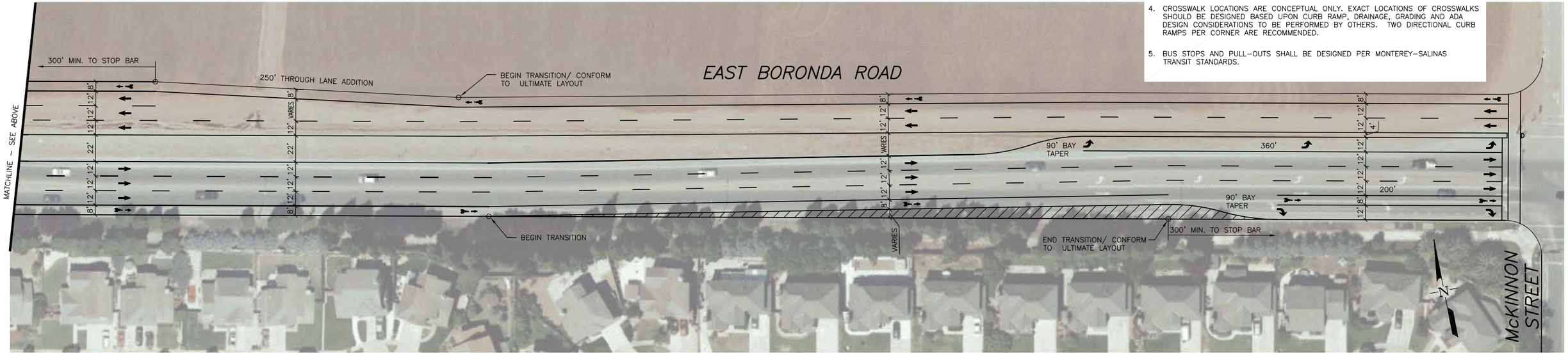

40 0 40 80
1" = 40' GRAPHIC SCALE

REVISIONS

NO.	DESCRIPTION	DATE	BY

FEHR & PEERS
TRANSPORTATION CONSULTANTS

Designed By: KC
Drawn By: DD/KC
Checked By: AO
Drawing No.: SJ10–1154
Date: SEPT. 2010

SALINAS (CLOVERFIELD) RETAIL CENTER

EXHIBIT 3

CONCEPTUAL STRIPING – EAST BORONDA ROAD – ULTIMATE

SHEET 3 OF 3

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Oct 05, 2010

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ASSOCIATED TRANSPORTATION ENGINEERS
100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 • (805) 687-4418 • FAX (805) 682-8509
Since 1978

Richard L. Pool, P.E.
Scott A. Schell, AICP, PTP

October 2, 2017 16019.01L01

Mr. Fred Goldsmith
PGI Management
1606 North Main Street
Salinas, CA

HARDEN RANCH PLAZA TRAFFIC SIGNAL ANALYSIS, CITY OF SALINAS

Associated Transportation Engineers (ATE) is providing the following traffic signal analysis for the Main Street/Harden Ranch Plaza driveway opposite Cherokee Drive.

The existing Main Street/Cherokee Drive-Harden Ranch Plaza intersection is unsignalized with restricted turning movements due to the raised median on Main Street. The raised median restricts the eastbound Cherokee Drive approach to right-turns inbound and outbound only. The westbound Harden Ranch Plaza driveway approach allows left-turns and right-turns inbound and outbound. However no through traffic movements are allowed to or from Cherokee Drive at the intersection.

Main Street is a 6-lane north-south divided arterial roadway with a posted speed of 35 m.p.h. in the study-area. Main Street is a commercial corridor with traffic signals that require coordination in order to provide good progression within the corridor. In the study-area, the Madrid Street/Harden Parkway and Alvin Drive signals are programmed as part of the corridor and the timing set to work with the signals within the corridor.

ATE evaluated the operation of the Main Street/Cherokee Drive-Harden Ranch Plaza intersection with the existing STOP-sign control and with traffic signals installed at the intersection. The existing trips were redistributed through the Main Street corridor assuming full access at the Main Street/Cherokee Drive-Harden Ranch Plaza intersection as shown on the conceptual Improvement Plan illustrated on Figure 1.

The "Synchro" traffic analysis software program was used to review operations of the Main Street corridor from Madrid Street-Harden Parkway to Alvin Drive. "Synchro" is a complete software package for modeling and optimizing traffic signal timings, and is the only interactive software package to model actuated signals. "Synchro" implements the operations methods of the Highway Capacity Manual (Chapter 9) for signalized intersections, performing the

industry standard evaluation of intersection performance based on Webster delays. In addition to calculating capacity, "Synchro" also optimizes cycle lengths, splits and offsets (similar to TRANSYT).

Arterials such as Main Street can be programmed as an actuated-coordinated system to allow "Synchro" to find the optimal timing plan for the corridor. "Synchro" calculates the effects of coordination automatically and accurately. The results not only show intersection levels of service, but other important data such as progression and vehicle platooning within the network as well as queuing at individual intersections within the network.

Table 1 shows the levels of service for the Main Street/Cherokee Drive-Harden Ranch Plaza driveway intersection without and with traffic signals and the adjacent intersections of Madrid Street/Harden Parkway and Alvin Drive. As shown, the Harden Ranch Plaza driveway and the adjacent intersections would operate at LOS "C" or better.

Table 1
Main Street Corridor Intersection LOS

Intersection	Weekday	Weekday w/Signal	Weekend	Weekend w/Signal
Main St./Harden Pkwy.	28.8 sec./LOS C	24.3 sec./LOS C	32.5 sec./LOS C	26.3 sec./LOS C
Main St./Cherokee Dr.	>50.0 sec./LOS F	15.5 sec./LOS B	>50.0 sec./LOS F	15.1 sec./LOS B
Main St./Alvin Dr.	24.2 sec./LOS C	22.3 sec./LOS C	20.6 sec./LOS C	18.1 sec./LOS B

The "SimTraffic" model was employed for the Main Street corridor from Madrid Street/Harden Parkway to Alvin Drive, including Cherokee Drive to visually review its operations and affects. The results indicate that there would be adequate gaps in the Main Street through traffic flow. The "Synchro" and the companion "SimTraffic" files are available for review upon request.

ATE also utilized the "Synchro" software to evaluate the queues at the three study-area intersections. Table 2 shows the 95th percentile queue lengths for the northbound left-turn, through and right-turn movements at the Main Street/Madrid Street-Harden Parkway intersection with the weekday and weekend P.M. peak hour volumes. The 95th percentile queue length is the queue that is exceeded 5% of the time during the peak hour. For example, the Main Street/Madrid Street-Harden Parkway intersection runs at a 90-second cycle length, or 40 cycles per hour. The 95th percentile queue length would occur 2 times during the peak hour (40 cycles x 5% = 1.5 cycles) at this location.

Table 2
Storage Requirements at the Main Street/Madrid Street-Harden Parkway Intersection With Traffic Signal

Movement	Existing Storage	95% Queue Length	
		Weekday P.M. Peak Hour	Weekend P.M. Peak Hour
Northbound Left-Turn	200 feet	130 feet	200 feet
Northbound Through	500 feet	175 feet	90 feet
Northbound Right-Turn	140 feet	65 feet	15 feet

The queuing analysis found that there is sufficient distance northbound between the Madrid Street/Harden Parkway and the Cherokee Drive-Harden Ranch Plaza driveway intersection to store vehicles during red phases. The existing storage provided for left-turns and right-turns was determined to also be sufficient.

Table 3 shows the 95th percentile queue lengths for the northbound, southbound, eastbound and westbound approach movements at the Main Street/Cherokee Drive intersection with the weekday and weekend P.M. peak hour volumes.

Table 3
Storage Requirements at the Main Street/Cherokee Drive Intersection With Traffic Signal

Movement	Existing Storage	95% Queue Length	
		Weekday P.M. Peak Hour	Weekend P.M. Peak Hour
Northbound Left-Turn	150 feet	45 feet	50 feet
Northbound Through	1,300 feet	75 feet	140 feet
Northbound Right-Turn	100 feet	5 feet	5 feet
Eastbound Through	550 feet	210 feet	250 feet
Westbound Left-Turn	250 feet	75 feet	90 feet
Westbound Through	125 feet	120 feet	100 feet
Southbound Left-Turn	180 feet	60 feet	35 feet
Southbound Through	500 feet	120 feet	95 feet

The queuing analysis found that there is sufficient distance between the Madrid Street/Harden Parkway, Alvin Drive and the Cherokee Drive-Harden Ranch Plaza driveway intersection to store vehicles during red phases. The existing storage provided for left-turns and right-turns was determined to also be sufficient. The westbound approach queue of the shopping center driveway would be accommodated by the existing driveway throat.

Table 4 shows the 95th percentile queue lengths for the southbound left-turn, through and right-turn movements at the Main Street/Alvin Drive intersection with the weekday and weekend P.M. peak hour volumes.

Table 4
Storage Requirements at the Main Street/Alvin Drive Intersection
With Traffic Signal

Movement	Existing Storage	95% Queue Length	
		Weekday P.M. Peak Hour	Weekend P.M. Peak Hour
Southbound Left-Turn	430 feet	80 feet	50 feet
Southbound Through	1,300 feet	220 feet	110 feet
Southbound Right-Turn	215 feet	20 feet	10 feet

The queuing analysis found that there is sufficient distance southbound between the Alvin Drive and the Cherokee Drive-Harden Ranch Plaza driveway intersection to store vehicles during red phases. The existing storage provided for left-turns and right-turns was determined to also be sufficient.

Associated Transportation Engineers

Richard L .Pool, P.E.
President

REGISTERED PROFESSIONAL ENGINEER
RICHARD L. POOL
C 18030
CIVIL
STATE OF CALIFORNIA

RLP/DFN

Attachments: Figure 1- Conceptual Improvement Plan

PAVEMENT DELINEATION LEGEND

- [R] REMOVE EXISTING STRIPING.
- [LL] INSTALL 12" WHITE LIMIT LINE, AS SHOWN.
- [CW] INSTALL 12" WHITE CROSSWALK LINES, 10' BETWEEN LINES (11' ON-CENTER), AS SHOWN.

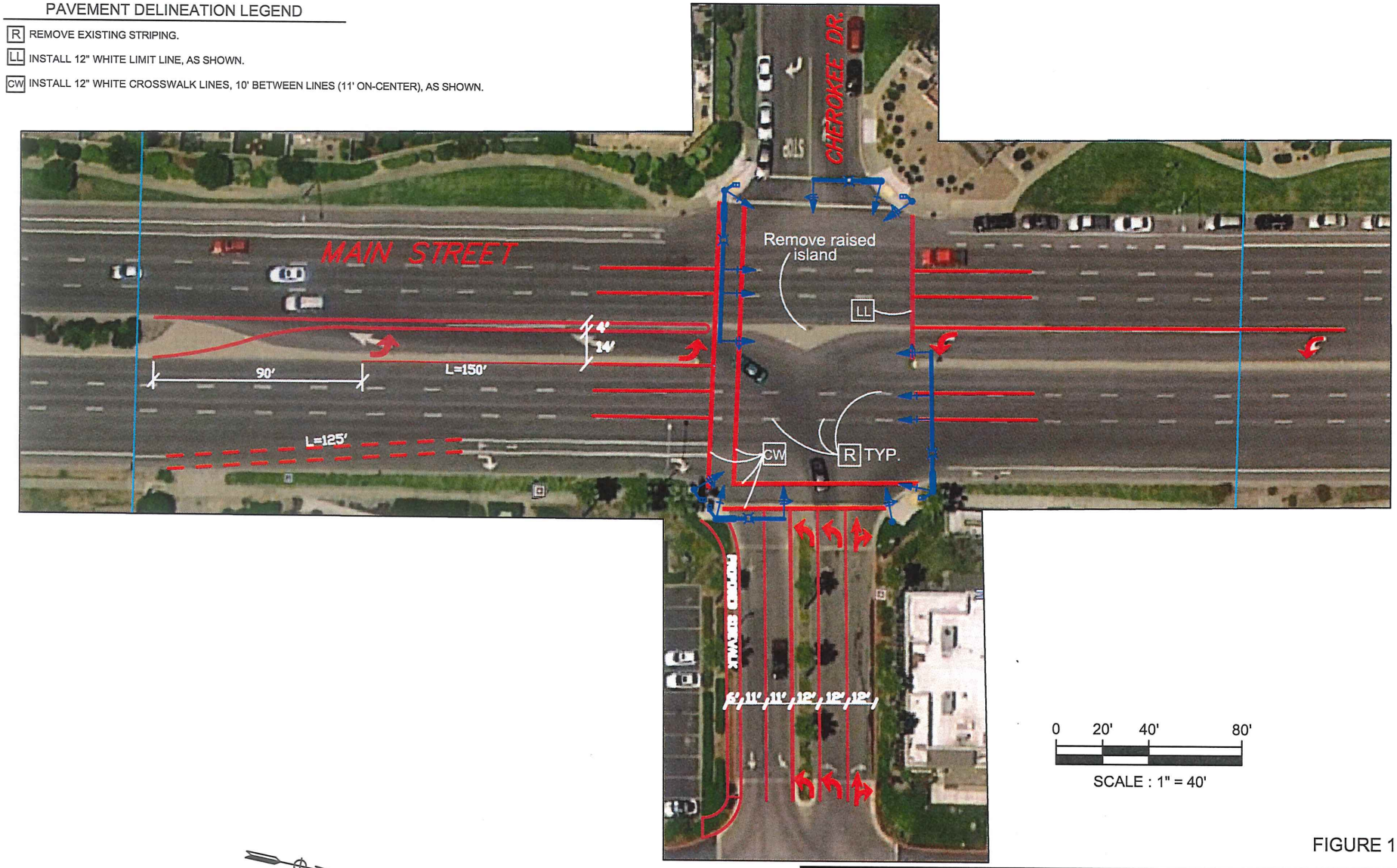


FIGURE 1

ASSOCIATED TRANSPORTATION ENGINEERS
100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 · (805)687-4418

CONCEPTUAL PLAN

DATE 08/11/17

MAIN STREET & CHEROKEE DRIVE
TRAFFIC SIGNAL CONCEPTUAL PLAN

DESIGNED BY:	DRAWN BY:	CHECKED BY:	JOB NUMBER:	SCALE:	SHEET:
LRM	LRM	RLP	16019.01	1"=40'	1 OF 1

Technical Memorandum

To: File
From: Darryl F. Nelson

October 2, 2017 16019.01MEM.01

Associated Transportation Engineers (ATE) developed trip generation for 704,508 square feet of retail commercial space in the Harden Ranch Plaza shopping center and 1,068 residential dwelling units (single family and townhouse/condominium) west of Main Street that would be served by Cherokee Drive based on rates published in the Institute of Transportation Engineers (ITE), Trip Generation, 9th Edition.

Based on the trip generation for the shopping center and the trip generation for the residential dwelling units approximately10 percent of the traffic for the Harden Ranch Plaza shopping center would originate in the residential area west of Main Street. These trips from the residential area west of Main Street were redistributed to the Main Street corridor and the Harden Ranch Plaza shopping center via Madrid Street, Alvin Drive and Cherokee Drive with the full access and traffic signals.

Attachments: Synchro LOS Worksheets described in the Harden Ranch Plaza Traffic Signal Analysis

Harden Plaza South Harden Road Parking

SHOPPING CENTER A						
		Square Footage	Trips	Entering	Exiting	ITE Book
1	AutoZone	8,004	48	23	24	843
2	Olive Garden	9,000	100	52	48	932
3	Chase Bank	9,500	115	51	65	911
4	Safeway	52,686	553	282	271	850
5	subway	1,100	29	15	14	933
6	Perfect Brow	700	1	0	1	918
7	Dynasty Court	2,200	41	22	19	932
8	Dr. Kristiano	1,200	4	1	3	720
9	Harden Salon & Spa	1,216	3	1	2	814
10	Jewelers	1,549	4	2	2	814
11	Jamba Juice	1,231	32	16	16	933
12	Viva Espresso	1,125	29	15	14	933
13	Little Ceasars	1,200	31	16	15	933
14	Pizza	960	25	13	12	933
15	Nails Sportclips	960	3	1	1	814
16	Tapioca	1,241	32	17	16	933
17	Sees Candies	1,124	29	15	14	933
18	PC Metro	1,060	3	1	2	814
19	Monterrey Credit U	1,655	20	9	11	911
20	Cleaners	1,600	4	2	2	814
21	Taqueria	1,600	42	21	21	933
22	Salon	850	2	1	1	814
23	Discovery Shop	2,325	6	3	4	814
24	Walgreens	14,000	59	59	30	880
25	Pier 1 Imports	8,013	22	10	12	814
26	Ross	25,258	68	30	38	814
27	Factory 2-U	16,000	43	19	24	814
28	In-Shape-Gym	36,000	127	64	64	946
		203,357	**1,479**	**761**	**747**	

Harden Plaza (North)

SHOPPING CENTER B						
		Square Footage	Trips	Entering	Exiting	ITE Book
1	TARGET	115,300	2,306	1,222	1,084	869
2	Chef Lees Rest.	5,000	56	29	27	932
3	Optometry	1,400	5	1	4	720
4	Available	1,086				
5	Spa	3,114	8	4	5	814
6	AT&T	3,750	10	4	6	814
7	Career Center	3,300	9	4	5	814
8	Tyllys	8,750	24	10	13	814
9	Shoe Store	7,000	19	8	11	814
10	Gamestop	1,524	9	5	5	896
11	Salon	1,600	4	2	2	814
12	Beauty Supply	1,600	4	2	2	814
13	Shoe Store	3,200	9	4	5	814
14	Pizza	2,000	52	27	26	933
15	Weight Watchers	1,600	42	21	21	933
16	Ciaoi	1,600	4	2	2	814
17	Marshalls	27,000	73	32	41	814
18	One Main Financial	1,600	2	1	1	814
19	Styles for Less	3,200	9	4	5	814
20	Party City	12,000	75	34	40	879
21	Furniture Store	56,098	25	12	13	890
22	Tech Guys	1,197	3	1	2	814
23	On Q Financial	1,156	3	1	2	814
24	Michaels	24,113	150	69	81	879
25	Tire Co.	8,700	31	13	18	848
26	Pet Fun	6,286	21	11	11	866
27	USA Career Center	2,394	6	3	4	814
28	Pinnacle Tax	1,057	3	1	2	814
29	Outdoor Garden	28,328	291	131	160	417
30	Walmart	102,180	2,044	1,083	960	869
31	Sprint	2,794	8	3	4	814
32	Ikes Lair	1,129	30	15	14	933
33	Insurance	1,587	4	2	2	814
34	Available	1,539				
35	Pizza	2,900	76	39	37	933
36	Jack In the Box	2,625	89	46	43	934
37	Foot Mart	2,000	28	14	14	946
38	Physical Therapy	3,200	11	3	8	720
39	Urgent Care	3,200	11	3	8	720
40	Dentist	1,600	6	1	4	720
41	Chipotle	2,520	66	34	32	933
42	Total Nutrition	1,260	3	2	2	814
43	Yogurt Land	1540	40	21	20	933
44	Five Burgers	3014	79	40	39	933

45	Sushi	3490	39	20	19	932
46	Bjs	8686	97	50	46	932
47	Red Lobster	7300	81	42	39	932
48	European Wax	1400	4	2	2	814
49	Available	5600				
50	PGI Management	1555	4	2	2	814
51	Sleep Train	7625	3	2	2	890
		503,697	**5,976**	**3,083**	**2,893**	

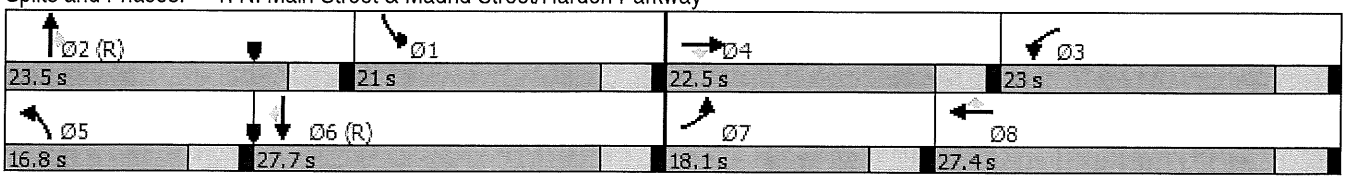
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	128	134	150	307	128	143	160	607	244	260	754	137
Future Volume (vph)	128	134	150	307	128	143	160	607	244	260	754	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		125	240		0	200		140	230		150
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	1770	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			182			182			265			149
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		499			545			600			293	
Travel Time (s)		11.3			12.4			11.7			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	139	146	163	334	139	155	174	660	265	283	820	149
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	18.1	22.5	22.5	23.0	27.4	27.4	16.8	23.5	23.5	21.0	27.7	27.7
Total Split (%)	20.1%	25.0%	25.0%	25.6%	30.4%	30.4%	18.7%	26.1%	26.1%	23.3%	30.8%	30.8%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	11.5	12.5	12.5	21.0	21.9	21.9	11.7	22.1	22.1	16.5	26.9	26.9
Actuated g/C Ratio	0.13	0.14	0.14	0.23	0.24	0.24	0.13	0.25	0.25	0.18	0.30	0.30
v/c Ratio	0.62	0.57	0.43	0.81	0.31	0.30	0.76	0.53	0.45	0.87	0.54	0.26
Control Delay	48.9	44.2	7.8	41.8	21.4	5.1	48.6	21.6	4.0	63.8	29.0	6.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.9	44.2	7.8	41.8	21.4	5.1	48.6	21.6	4.0	63.8	29.0	6.0
LOS	D	D	A	D	C	A	D	C	A	E	C	A
Approach Delay		32.4			28.3			21.7			34.2	
Approach LOS		C			C			C			C	
Queue Length 50th (ft)	75	79	0	193	49	8	96	131	24	158	151	0
Queue Length 95th (ft)	133	130	41	#358	82	30	#181	115	10	#299	194	45
Internal Link Dist (ft)		419			465			520			213	
Turn Bay Length (ft)	130		125	240			200		140	230		150
Base Capacity (vph)	267	372	462	415	479	542	241	1246	588	324	1517	576
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.52	0.39	0.35	0.80	0.29	0.29	0.72	0.53	0.45	0.87	0.54	0.26

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 28.8 Intersection LOS: C
Intersection Capacity Utilization 65.2% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: N. Main Street & Madrid Street/Harden Parkway



Intersection	
Int Delay, s/veh	55.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	29	183	0	155	0	925	301	82	1124	70
Future Vol, veh/h	0	0	29	183	0	155	0	925	301	82	1124	70
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	0	-	0	-	-	100	180	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	32	199	0	168	0	1005	327	89	1222	76

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1840	2443	649	1672	2481	503	1298	0	0	1005	0	0
Stage 1	1438	1438	-	1005	1005	-	-	-	-	-	-	-
Stage 2	402	1005	-	667	1476	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	80	31	354	~ 101	29	440	280	-	-	389	-	-
Stage 1	98	197	-	~ 197	317	-	-	-	-	-	-	-
Stage 2	545	317	-	377	189	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	41	24	354	~ 76	22	440	280	-	-	389	-	-
Mov Cap-2 Maneuver	41	24	-	~ 76	22	-	-	-	-	-	-	-
Stage 1	98	152	-	~ 197	317	-	-	-	-	-	-	-
Stage 2	336	317	-	265	146	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	16.2	$ 468.6	0	1.1
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	280	-	-	354	76	440	389	-	-
HCM Lane V/C Ratio	-	-	-	0.089	2.617	0.383	0.229	-	-
HCM Control Delay (s)	0	-	-	16.2	$ 850.1	18.2	17	-	-
HCM Lane LOS	A	-	-	C	F	C	C	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	19.2	1.8	0.9	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

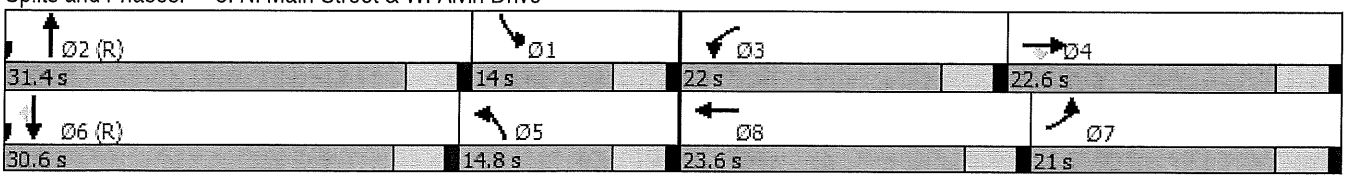
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	192	192	65	178	205	194	87	772	212	199	850	172
Future Volume (vph)	192	192	65	178	205	194	87	772	212	199	850	172
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	115		120	190		198	100		0	215		215
Storage Lanes	1		1	1		0	1		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3281	0	1770	4923	0	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3281	0	1770	4923	0	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127		211			79				187
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		1060			1052			368			1380	
Travel Time (s)		24.1			23.9			7.2			26.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	209	209	71	193	434	0	95	1069	0	216	924	187
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									6
Detector Phase	7	4	4	3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	22.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	21.0	22.6	22.6	22.0	23.6		14.8	31.4		14.0	30.6	30.6
Total Split (%)	23.3%	25.1%	25.1%	24.4%	26.2%		16.4%	34.9%		15.6%	34.0%	34.0%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead		Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	15.1	12.9	12.9	14.4	12.2		9.5	35.6		9.2	37.4	37.4
Actuated g/C Ratio	0.17	0.14	0.14	0.16	0.14		0.11	0.40		0.10	0.42	0.42
v/c Ratio	0.71	0.41	0.21	0.68	0.69		0.51	0.54		0.62	0.44	0.24
Control Delay	48.2	36.6	2.4	48.0	24.4		47.8	21.8		41.3	13.3	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	48.2	36.6	2.4	48.0	24.4		47.8	21.8		41.3	13.3	2.2
LOS	D	D	A	D	C		D	C		D	B	A
Approach Delay		36.6			31.6			24.0			16.3	
Approach LOS		D			C			C			B	
Queue Length 50th (ft)	112	57	0	104	63		51	156		67	88	6
Queue Length 95th (ft)	181	85	7	170	105		100	231		m97	117	m16
Internal Link Dist (ft)		980			972			288			1300	
Turn Bay Length (ft)	115		120	190			100			215		215
Base Capacity (vph)	336	711	419	344	862		202	1992		362	2113	767
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.62	0.29	0.17	0.56	0.50		0.47	0.54		0.60	0.44	0.24

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 31 (34%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.71
Intersection Signal Delay: 24.2 Intersection LOS: C
Intersection Capacity Utilization 62.9% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: N. Main Street & W. Alvin Drive



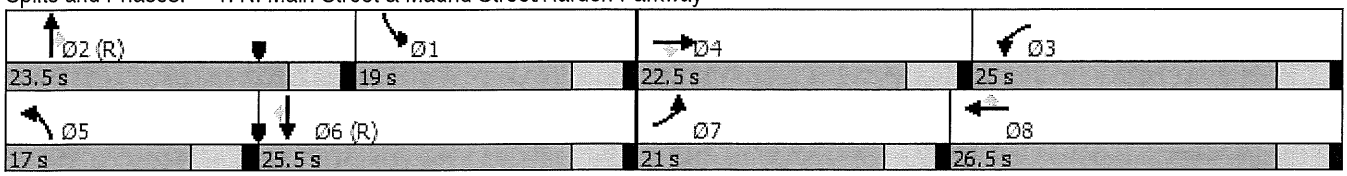
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	163	149	224	341	111	196	203	719	224	225	835	92
Future Volume (vph)	163	149	224	341	111	196	203	719	224	225	835	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		125	240		0	200		140	230		150
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	1770	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			243			213			243			127
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		499			545			600			293	
Travel Time (s)		11.3			12.4			11.7			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	177	162	243	371	121	213	221	782	243	245	908	100
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	21.0	22.5	22.5	25.0	26.5	26.5	17.0	23.5	23.5	19.0	25.5	25.5
Total Split (%)	23.3%	25.0%	25.0%	27.8%	29.4%	29.4%	18.9%	26.1%	26.1%	21.1%	28.3%	28.3%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	13.6	13.3	13.3	22.3	21.9	21.9	13.3	22.0	22.0	14.5	23.1	23.1
Actuated g/C Ratio	0.15	0.15	0.15	0.25	0.24	0.24	0.15	0.24	0.24	0.16	0.26	0.26
v/c Ratio	0.66	0.59	0.55	0.85	0.27	0.39	0.84	0.63	0.43	0.86	0.69	0.20
Control Delay	48.0	44.1	9.6	48.4	26.8	6.5	58.1	26.5	5.1	65.7	34.3	4.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.0	44.1	9.6	48.4	26.8	6.5	58.1	26.5	5.1	65.7	34.3	4.2
LOS	D	D	A	D	C	A	E	C	A	E	C	A
Approach Delay		30.9			32.0			27.9			38.0	
Approach LOS		C			C			C			D	
Queue Length 50th (ft)	95	87	0	124	39	7	127	157	30	137	176	0
Queue Length 95th (ft)	159	142	61	#383	76	40	m#259	202	m34	#268	225	26
Internal Link Dist (ft)		419			465			520			213	
Turn Bay Length (ft)	130		125	240			200		140	230		150
Base Capacity (vph)	324	372	511	443	468	557	262	1241	570	285	1307	501
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.44	0.48	0.84	0.26	0.38	0.84	0.63	0.43	0.86	0.69	0.20

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.86
Intersection Signal Delay: 32.5 Intersection LOS: C
Intersection Capacity Utilization 69.1% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: N. Main Street & Madrid Street/Harden Parkway



Intersection	
Int Delay, s/veh	102.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	0	0	26	221	0	154	0	1032	275	78	1126	35
Future Vol, veh/h	0	0	26	221	0	154	0	1032	275	78	1126	35
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	0	0	-	0	-	-	100	180	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	28	240	0	167	0	1122	299	85	1224	38

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1861	2534	631	1781	2554	561	1262	0	0	1122	0	0
Stage 1	1412	1412	-	1122	1122	-	-	-	-	-	-	-
Stage 2	449	1122	-	659	1432	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	77	27	363	~ 87	26	403	292	-	-	342	-	-
Stage 1	102	203	-	~ 164	279	-	-	-	-	-	-	-
Stage 2	511	279	-	381	198	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	36	20	363	~ 65	20	403	292	-	-	342	-	-
Mov Cap-2 Maneuver	36	20	-	~ 65	20	-	-	-	-	-	-	-
Stage 1	102	153	-	~ 164	279	-	-	-	-	-	-	-
Stage 2	299	279	-	264	149	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	15.8	$ 801	0	1.2
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	292	-	-	363	65	403	342	-	-
HCM Lane V/C Ratio	-	-	-	0.078	3.696	0.415	0.248	-	-
HCM Control Delay (s)	0	-	-	15.$	1345.1	20.1	19	-	-
HCM Lane LOS	A	-	-	C	F	C	C	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	25.4	2	1	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

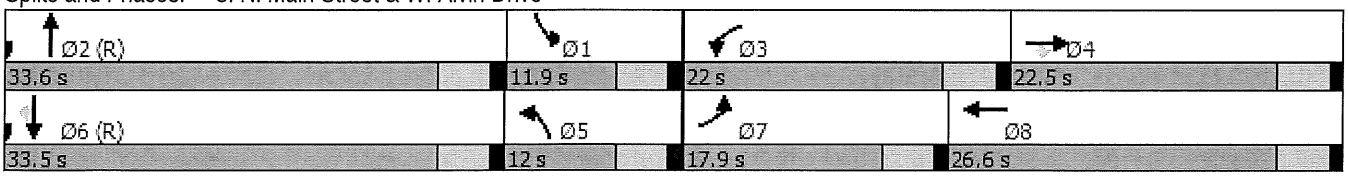
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	124	84	198	135	155	62	807	150	124	1100	218
Future Volume (vph)	170	124	84	198	135	155	62	807	150	124	1100	218
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	115		120	190		198	100		0	215		215
Storage Lanes	1		1	1		0	1		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3256	0	1770	4963	0	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3256	0	1770	4963	0	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			127		168			44				237
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		1060			1052			368			1380	
Travel Time (s)		24.1			23.9			7.2			26.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	185	135	91	215	315	0	67	1040	0	135	1196	237
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									6
Detector Phase	7	4	4	3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	22.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	17.9	22.5	22.5	22.0	26.6		12.0	33.6		11.9	33.5	33.5
Total Split (%)	19.9%	25.0%	25.0%	24.4%	29.6%		13.3%	37.3%		13.2%	37.2%	37.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lead		Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	12.5	8.8	8.8	15.0	11.3		7.1	41.0		7.2	43.1	43.1
Actuated g/C Ratio	0.14	0.10	0.10	0.17	0.13		0.08	0.46		0.08	0.48	0.48
v/c Ratio	0.76	0.39	0.34	0.73	0.57		0.48	0.46		0.49	0.49	0.27
Control Delay	57.3	41.0	6.6	50.1	20.5		51.5	17.6		39.8	10.8	1.6
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	57.3	41.0	6.6	50.1	20.5		51.5	17.6		39.8	10.8	1.6
LOS	E	D	A	D	C		D	B		D	B	A
Approach Delay		40.7			32.5			19.7			11.9	
Approach LOS		D			C			B			B	
Queue Length 50th (ft)	101	38	0	115	41		37	141		42	107	5
Queue Length 95th (ft)	#194	65	23	188	77		79	193		m60	137	m16
Internal Link Dist (ft)		980			972			288			1300	
Turn Bay Length (ft)	115		120	190			100			215		215
Base Capacity (vph)	263	707	418	344	926		147	2283		282	2435	881
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.70	0.19	0.22	0.63	0.34		0.46	0.46		0.48	0.49	0.27

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 31 (34%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 20.6 Intersection LOS: C
Intersection Capacity Utilization 58.6% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: N. Main Street & W. Alvin Drive



Weekend with Traffic Signal
1: N. Main Street & Madrid Street/Harden Parkway 9/28/2017

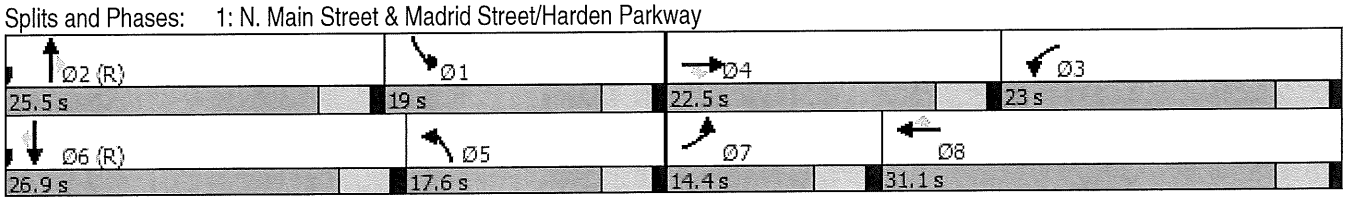
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	78	134	190	291	75	196	169	859	224	225	835	92
Future Volume (vph)	78	134	190	291	75	196	169	859	224	225	835	92
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		125	240		0	200		140	230		150
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	1770	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			207			213			243			182
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		499			550			600			293	
Travel Time (s)		11.3			12.5			11.7			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	85	146	207	316	82	213	184	934	243	245	908	100
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5
Total Split (s)	14.4	22.5	22.5	23.0	31.1	31.1	17.6	25.5	25.5	19.0	26.9	26.9
Total Split (%)	16.0%	25.0%	25.0%	25.6%	34.6%	34.6%	19.6%	28.3%	28.3%	21.1%	29.9%	29.9%
Maximum Green (s)	9.9	18.0	18.0	18.5	26.6	26.6	13.1	21.0	21.0	14.5	22.4	22.4
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lag	Lead	Lead	Lag	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0	7.0		7.0	7.0		7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0	11.0		11.0	11.0		11.0	11.0
Pedestrian Calls (#/hr)		0	0		0	0		0	0		0	0
Act Effct Green (s)	8.7	12.5	12.5	19.9	25.7	25.7	12.8	25.5	25.5	14.2	26.9	26.9
Actuated g/C Ratio	0.10	0.14	0.14	0.22	0.29	0.29	0.14	0.28	0.28	0.16	0.30	0.30

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.50	0.57	0.52	0.81	0.15	0.35	0.73	0.65	0.39	0.88	0.60	0.17
Control Delay	48.6	44.2	9.9	42.4	17.5	5.4	45.0	15.8	1.9	69.0	30.0	0.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	48.6	44.2	9.9	42.4	17.5	5.4	45.0	15.8	1.9	69.0	30.0	0.6
LOS	D	D	A	D	B	A	D	B	A	E	C	A
Approach Delay		28.9			26.2			17.2			35.3	
Approach LOS		C			C			B			D	
Queue Length 50th (ft)	46	79	0	187	27	11	113	63	0	137	168	0
Queue Length 95th (ft)	92	130	57	#331	52	42	m#201	91	m13	#268	220	1
Internal Link Dist (ft)		419			470			520			213	
Turn Bay Length (ft)	130		125	240			200		140	230		150
Base Capacity (vph)	194	372	482	401	556	621	257	1439	622	285	1518	600
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.44	0.39	0.43	0.79	0.15	0.34	0.72	0.65	0.39	0.86	0.60	0.17

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 26.3 Intersection LOS: C
Intersection Capacity Utilization 67.2% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: N. Main Street & Madrid Street/Harden Parkway



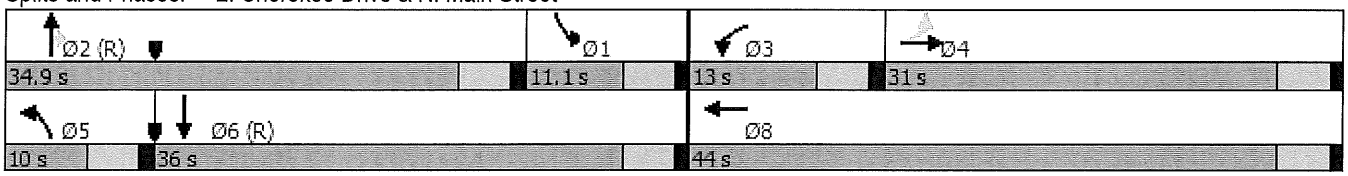
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	140	84	26	180	89	150	44	972	245	44	1076	121
Future Volume (vph)	140	84	26	180	89	150	44	972	245	44	1076	121
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		100	180		0
Storage Lanes	0		0	2		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1787	0	3433	1688	0	1770	5085	1583	1770	5009	0
Flt Permitted		0.689		0.950			0.950			0.950		
Satd. Flow (perm)	0	1265	0	3433	1688	0	1770	5085	1583	1770	5009	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7			120				208		24	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		406			172			1380			600	
Travel Time (s)		9.2			3.9			26.9			11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	271	0	196	260	0	48	1057	266	48	1302	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			36			36	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Perm	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4								2			
Detector Phase	4	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	
Total Split (s)	31.0	31.0		13.0	44.0		10.0	34.9	34.9	11.1	36.0	
Total Split (%)	34.4%	34.4%		14.4%	48.9%		11.1%	38.8%	38.8%	12.3%	40.0%	
Maximum Green (s)	26.5	26.5		8.5	39.5		5.5	30.4	30.4	6.6	31.5	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lag	Lag		Lead			Lead	Lead	Lead	Lag	Lag	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes	Yes	Yes	Yes	
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	
Walk Time (s)	7.0	7.0			7.0			7.0	7.0		7.0	
Flash Dont Walk (s)	11.0	11.0			11.0			11.0	11.0		11.0	
Pedestrian Calls (#/hr)	0	0			0			0	0		0	
Act Effct Green (s)		22.6		8.3	35.4		6.2	38.9	38.9	6.4	39.2	
Actuated g/C Ratio		0.25		0.09	0.39		0.07	0.43	0.43	0.07	0.44	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio		0.84		0.62	0.35		0.40	0.48	0.33	0.38	0.59	
Control Delay		53.4		48.4	10.5		50.5	12.7	2.2	26.5	5.9	
Queue Delay		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay		53.4		48.4	10.5		50.5	12.7	2.2	26.5	5.9	
LOS		D		D	B		D	B	A	C	A	
Approach Delay		53.4			26.8			12.0			6.7	
Approach LOS		D			C			B			A	
Queue Length 50th (ft)		139		56	49		16	185	2	24	95	
Queue Length 95th (ft)		#248		91	100		m48	137	3	m34	95	
Internal Link Dist (ft)		326			92			1300			520	
Turn Bay Length (ft)									100	180		
Base Capacity (vph)		377		324	808		121	2199	802	129	2192	
Starvation Cap Reductn		0		0	0		0	0	0	0	0	
Spillback Cap Reductn		0		0	0		0	0	0	0	0	
Storage Cap Reductn		0		0	0		0	0	0	0	0	
Reduced v/c Ratio		0.72		0.60	0.32		0.40	0.48	0.33	0.37	0.59	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 15.1 Intersection LOS: B
Intersection Capacity Utilization 70.3% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Cherokee Drive & N. Main Street



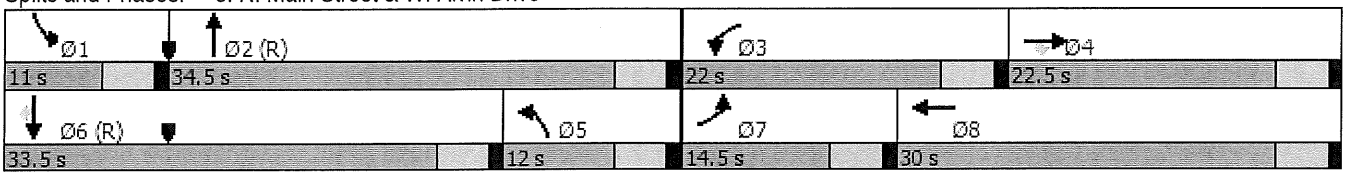
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	80	124	84	198	135	155	62	851	150	124	1100	133
Future Volume (vph)	80	124	84	198	135	155	62	851	150	124	1100	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	115		120	190		198	100		0	215		215
Storage Lanes	1		1	1		0	1		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3256	0	1770	4973	0	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3256	0	1770	4973	0	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			236		168			41				182
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		1060			1052			368			1380	
Travel Time (s)		24.1			23.9			7.2			26.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	87	135	91	215	315	0	67	1088	0	135	1196	145
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									6
Detector Phase	7	4	4	3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	22.5
Total Split (s)	14.5	22.5	22.5	22.0	30.0		12.0	34.5		11.0	33.5	33.5
Total Split (%)	16.1%	25.0%	25.0%	24.4%	33.3%		13.3%	38.3%		12.2%	37.2%	37.2%
Maximum Green (s)	10.0	18.0	18.0	17.5	25.5		7.5	30.0		6.5	29.0	29.0
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	3.0
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Walk Time (s)		7.0	7.0		7.0			7.0			7.0	7.0
Flash Dont Walk (s)		11.0	11.0		11.0			11.0			11.0	11.0
Pedestrian Calls (#/hr)		0	0		0			0			0	0
Act Effct Green (s)	8.8	8.8	8.8	15.0	17.1		7.1	39.3		8.9	43.1	43.1
Actuated g/C Ratio	0.10	0.10	0.10	0.17	0.19		0.08	0.44		0.10	0.48	0.48

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.51	0.39	0.25	0.73	0.42		0.48	0.50		0.40	0.49	0.17
Control Delay	48.7	41.0	1.6	50.1	16.6		51.5	19.5		42.2	5.4	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	48.7	41.0	1.6	50.1	16.6		51.5	19.5		42.2	5.4	1.0
LOS	D	D	A	D	B		D	B		D	A	A
Approach Delay		31.7			30.2			21.4			8.3	
Approach LOS		C			C			C			A	
Queue Length 50th (ft)	47	38	0	115	38		37	155		28	15	0
Queue Length 95th (ft)	94	65	0	188	74		79	220		m51	109	m9
Internal Link Dist (ft)		980			972			288			1300	
Turn Bay Length (ft)	115		120	190			100			215		215
Base Capacity (vph)	196	707	505	344	1042		147	2195		338	2435	852
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.44	0.19	0.18	0.63	0.30		0.46	0.50		0.40	0.49	0.17

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 53 (59%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.73
Intersection Signal Delay: 18.1 Intersection LOS: B
Intersection Capacity Utilization 55.6% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: N. Main Street & W. Alvin Drive



Weekday with Traffic Signal
1: N. Main Street & Madrid Street/Harden Parkway

9/28/2017

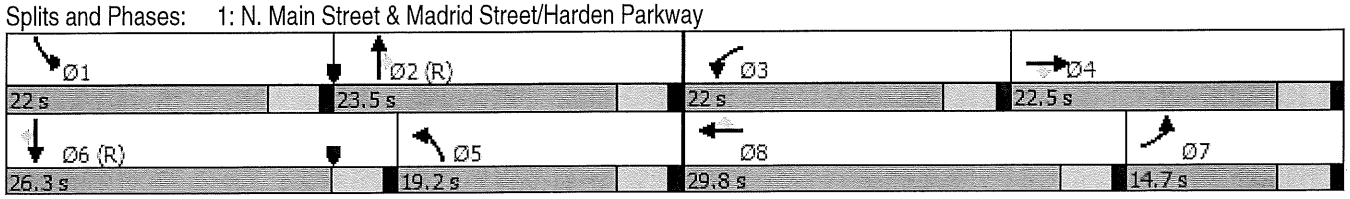
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	119	120	247	92	143	130	707	244	260	754	137
Future Volume (vph)	84	119	120	247	92	143	130	707	244	260	754	137
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	130		125	240		0	200		140	230		150
Storage Lanes	1		1	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	1770	5085	1583	1770	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	1863	1583	1770	1863	1583	1770	5085	1583	1770	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130			155			265			182
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		499			550			600			293	
Travel Time (s)		11.3			12.5			11.7			5.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	91	129	130	268	100	155	141	768	265	283	820	149
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0	0	0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6	20	20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Detector Phase	7	4	4	3	8	8	5	2	2	1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5	9.5	22.5	22.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	14.7	22.5	22.5	22.0	29.8	29.8	19.2	23.5	23.5	22.0	26.3	26.3
Total Split (%)	16.3%	25.0%	25.0%	24.4%	33.1%	33.1%	21.3%	26.1%	26.1%	24.4%	29.2%	29.2%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Lead/Lag	Lag	Lag	Lag	Lead	Lead	Lead	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	16.2	11.5	11.5	16.4	13.8	13.8	14.7	25.3	25.3	18.8	29.4	29.4
Actuated g/C Ratio	0.18	0.13	0.13	0.18	0.15	0.15	0.16	0.28	0.28	0.21	0.33	0.33
v/c Ratio	0.29	0.54	0.41	0.83	0.35	0.42	0.49	0.54	0.42	0.76	0.49	0.23
Control Delay	32.7	44.7	10.5	47.1	25.4	8.6	25.1	16.7	5.3	47.9	26.5	3.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.7	44.7	10.5	47.1	25.4	8.6	25.1	16.7	5.3	47.9	26.5	3.3
LOS	C	D	B	D	C	A	C	B	A	D	C	A
Approach Delay		28.9			31.6			15.1			28.6	
Approach LOS		C			C			B			C	
Queue Length 50th (ft)	44	70	0	162	34	11	78	153	44	149	138	0
Queue Length 95th (ft)	85	119	47	#275	72	33	m120	173	66	#261	191	29
Internal Link Dist (ft)		419			470			520			213	
Turn Bay Length (ft)	130		125	240			200		140	230		150
Base Capacity (vph)	335	372	420	344	523	556	289	1428	635	384	1661	639
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.35	0.31	0.78	0.19	0.28	0.49	0.54	0.42	0.74	0.49	0.23

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 0 (0%), Referenced to phase 2:NBT and 6:SBT, Start of Green, Master Intersection
Natural Cycle: 90
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.83
Intersection Signal Delay: 24.3 Intersection LOS: C
Intersection Capacity Utilization 59.7% ICU Level of Service B
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: N. Main Street & Madrid Street/Harden Parkway



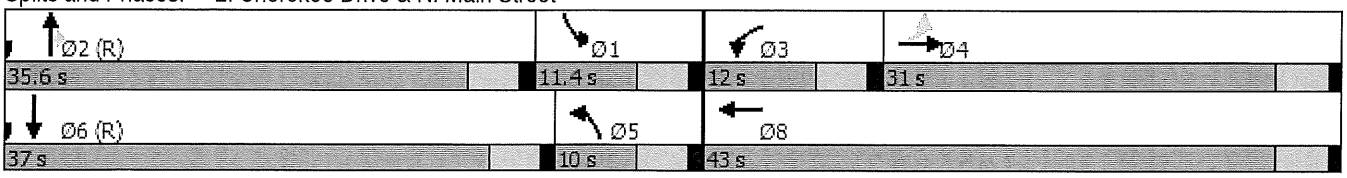
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	124	81	29	147	102	149	37	875	262	46	1064	166
Future Volume (vph)	124	81	29	147	102	149	37	875	262	46	1064	166
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0		0	0		0	0		100	180		0
Storage Lanes	0		0	2		0	1		1	1		0
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	0	1783	0	3433	1697	0	1770	5085	1583	1770	4984	0
Flt Permitted		0.695		0.950			0.950			0.950		
Satd. Flow (perm)	0	1273	0	3433	1697	0	1770	5085	1583	1770	4984	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		8			102				250		36	
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		406			172			1380			600	
Travel Time (s)		9.2			3.9			26.9			11.7	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	0	255	0	160	273	0	40	951	285	50	1337	0
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		24			24			36			36	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2		1	2	1	1	2	
Detector Template	Left	Thru		Left	Thru		Left	Thru	Right	Left	Thru	
Leading Detector (ft)	20	100		20	100		20	100	20	20	100	
Trailing Detector (ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Position(ft)	0	0		0	0		0	0	0	0	0	
Detector 1 Size(ft)	20	6		20	6		20	6	20	20	6	
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Queue (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 1 Delay (s)	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Perm	NA		Prot	NA		Prot	NA	Perm	Prot	NA	
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4								2			
Detector Phase	4	4		3	8		5	2	2	1	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	
Minimum Split (s)	22.5	22.5		9.5	22.5		9.5	22.5	22.5	9.5	22.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	31.0	31.0		12.0	43.0		10.0	35.6	35.6	11.4	37.0	
Total Split (%)	34.4%	34.4%		13.3%	47.8%		11.1%	39.6%	39.6%	12.7%	41.1%	
Yellow Time (s)	3.5	3.5		3.5	3.5		3.5	3.5	3.5	3.5	3.5	
All-Red Time (s)	1.0	1.0		1.0	1.0		1.0	1.0	1.0	1.0	1.0	
Lost Time Adjust (s)		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)		4.5		4.5	4.5		4.5	4.5	4.5	4.5	4.5	
Lead/Lag	Lag	Lag		Lead			Lag	Lead	Lead	Lag	Lead	
Lead-Lag Optimize?	Yes	Yes		Yes			Yes	Yes	Yes	Yes	Yes	
Recall Mode	None	None		None	None		None	C-Max	C-Max	None	C-Max	
Act Effct Green (s)		21.7		7.6	33.7		5.5	40.4	40.4	6.6	41.3	
Actuated g/C Ratio		0.24		0.08	0.37		0.06	0.45	0.45	0.07	0.46	
v/c Ratio		0.82		0.56	0.39		0.37	0.42	0.34	0.39	0.58	
Control Delay		51.4		47.5	13.3		42.0	11.8	1.6	42.3	9.2	
Queue Delay		0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	
Total Delay		51.4		47.5	13.3		42.0	11.8	1.6	42.3	9.2	
LOS		D		D	B		D	B	A	D	A	
Approach Delay		51.4			25.9			10.4			10.4	
Approach LOS		D			C			B			B	
Queue Length 50th (ft)		131		45	65		22	93	0	31	94	
Queue Length 95th (ft)		211		77	118		m46	77	6	m59	119	
Internal Link Dist (ft)		326			92			1300			520	
Turn Bay Length (ft)									100	180		
Base Capacity (vph)		380		293	784		108	2284	848	135	2305	
Starvation Cap Reductn		0		0	0		0	0	0	0	0	
Spillback Cap Reductn		0		0	0		0	0	0	0	0	
Storage Cap Reductn		0		0	0		0	0	0	0	0	
Reduced v/c Ratio		0.67		0.55	0.35		0.37	0.42	0.34	0.37	0.58	

Intersection Summary

Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 69 (77%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 65
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.82
Intersection Signal Delay: 15.5 Intersection LOS: B
Intersection Capacity Utilization 70.8% ICU Level of Service C
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Cherokee Drive & N. Main Street



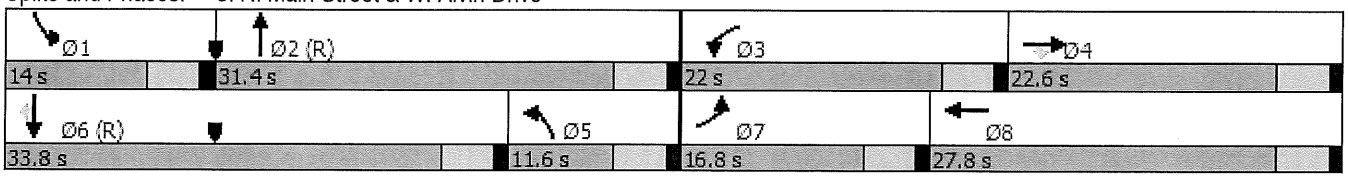
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	103	192	65	178	205	194	50	809	212	199	850	76
Future Volume (vph)	103	192	65	178	205	194	50	809	212	199	850	76
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	115		120	190		198	100		0	215		215
Storage Lanes	1		1	1		0	1		0	2		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3539	1583	1770	3281	0	1770	4928	0	3433	5085	1583
Flt Permitted	0.950			0.950			0.950			0.950		
Satd. Flow (perm)	1770	3539	1583	1770	3281	0	1770	4928	0	3433	5085	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			236		211			75				182
Link Speed (mph)		30			30			35			35	
Link Distance (ft)		1060			1052			368			1380	
Travel Time (s)		24.1			23.9			7.2			26.9	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	112	209	71	193	434	0	54	1109	0	216	924	83
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			24			24	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2	1	1	2		1	2		1	2	1
Detector Template	Left	Thru	Right	Left	Thru		Left	Thru		Left	Thru	Right
Leading Detector (ft)	20	100	20	20	100		20	100		20	100	20
Trailing Detector (ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Position(ft)	0	0	0	0	0		0	0		0	0	0
Detector 1 Size(ft)	20	6	20	20	6		20	6		20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA		Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4									6
Detector Phase	7	4	4	3	8		5	2		1	6	6
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	5.0
Minimum Split (s)	9.5	22.5	22.5	9.5	22.5		9.5	22.5		9.5	22.5	22.5

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Split (s)	16.8	22.6	22.6	22.0	27.8		11.6	31.4		14.0	33.8	33.8
Total Split (%)	18.7%	25.1%	25.1%	24.4%	30.9%		12.9%	34.9%		15.6%	37.6%	37.6%
Yellow Time (s)	3.5	3.5	3.5	3.5	3.5		3.5	3.5		3.5	3.5	3.5
All-Red Time (s)	1.0	1.0	1.0	1.0	1.0		1.0	1.0		1.0	1.0	1.0
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	4.5	4.5	4.5	4.5		4.5	4.5		4.5	4.5	4.5
Lead/Lag	Lead	Lag	Lag	Lead	Lag		Lag	Lag		Lead	Lead	Lead
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes		Yes	Yes		Yes	Yes	Yes
Recall Mode	None	None	None	None	None		None	C-Max		None	C-Max	C-Max
Act Effct Green (s)	10.3	10.6	10.6	14.4	16.9		6.8	36.1		10.9	42.3	42.3
Actuated g/C Ratio	0.11	0.12	0.12	0.16	0.19		0.08	0.40		0.12	0.47	0.47
v/c Ratio	0.55	0.50	0.18	0.68	0.55		0.41	0.55		0.52	0.39	0.10
Control Delay	47.9	41.1	1.0	48.0	19.7		49.1	21.8		24.1	12.9	2.7
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	0.0
Total Delay	47.9	41.1	1.0	48.0	19.7		49.1	21.8		24.1	12.9	2.7
LOS	D	D	A	D	B		D	C		C	B	A
Approach Delay		35.8			28.4			23.1			14.2	
Approach LOS		D			C			C			B	
Queue Length 50th (ft)	61	59	0	104	61		30	163		55	166	5
Queue Length 95th (ft)	112	91	0	170	103		67	242		m78	222	m21
Internal Link Dist (ft)		980			972			288			1300	
Turn Bay Length (ft)	115		120	190			100			215		215
Base Capacity (vph)	241	711	506	344	1005		139	2022		428	2387	839
Starvation Cap Reductn	0	0	0	0	0		0	0		0	0	0
Spillback Cap Reductn	0	0	0	0	0		0	0		0	0	0
Storage Cap Reductn	0	0	0	0	0		0	0		0	0	0
Reduced v/c Ratio	0.46	0.29	0.14	0.56	0.43		0.39	0.55		0.50	0.39	0.10

Intersection Summary

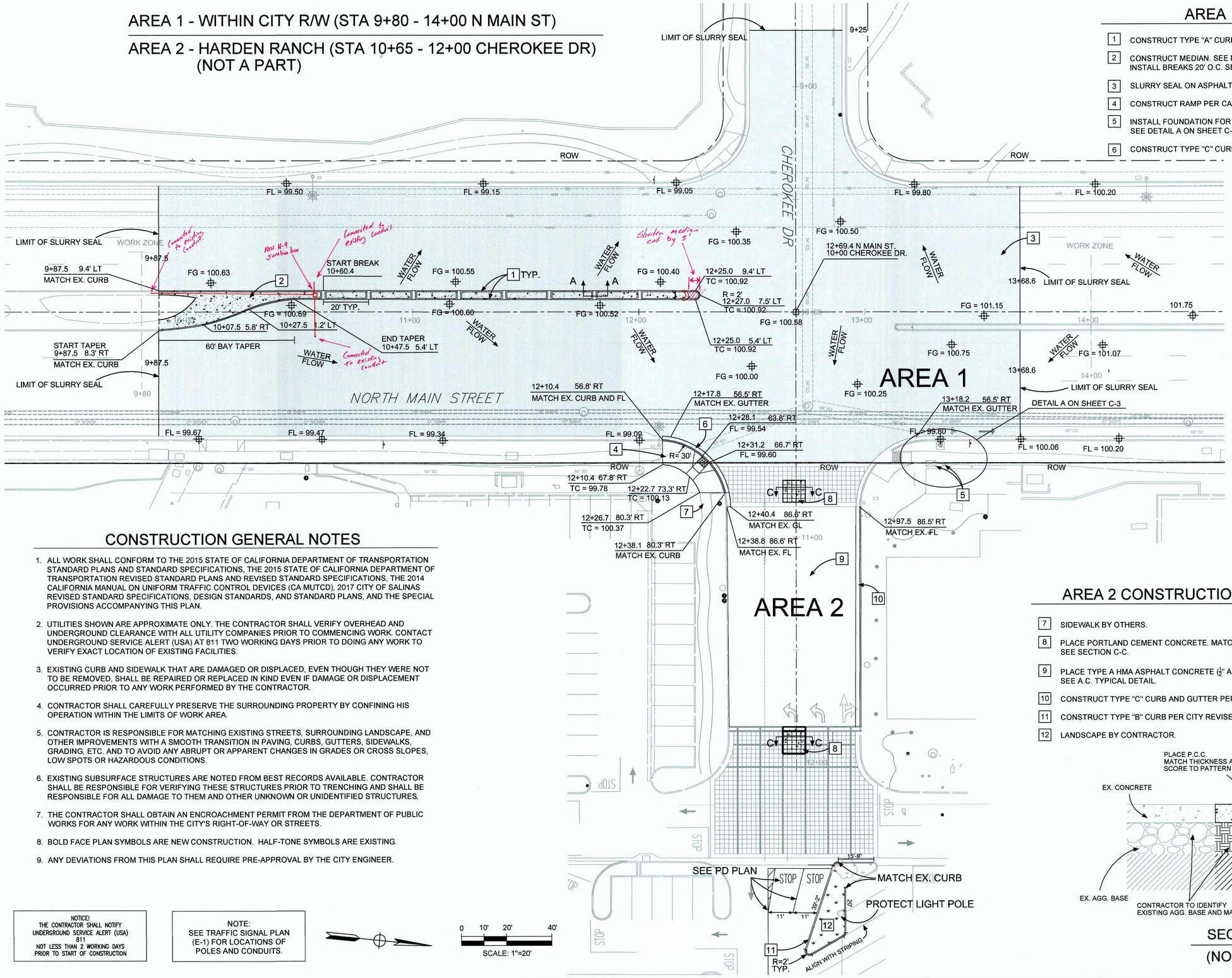
Area Type: Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 44 (49%), Referenced to phase 2:NBT and 6:SBT, Start of Green
Natural Cycle: 70
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.68
Intersection Signal Delay: 22.3 Intersection LOS: C
Intersection Capacity Utilization 58.6% ICU Level of Service B
Analysis Period (min) 15
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 3: N. Main Street & W. Alvin Drive



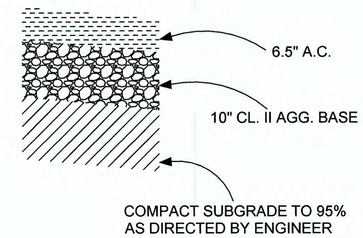
AREA 1 - WITHIN CITY R/W (STA 9+80 - 14+00 N MAIN ST)

AREA 2 - HARDEN RANCH (STA 10+65 - 12+00 CHEROKEE DR) (NOT A PART)



AREA 1 CONSTRUCTION NOTES

1. CONSTRUCT TYPE "A" CURB PER CITY REVISED STANDARD PLAN 1.
2. CONSTRUCT MEDIAN. SEE MEDIAN DETAIL ON SHEET C-3. INSTALL BREAKS 20' O.C. SEE SECTION A-A ON SHEET C-3.
3. SLURRY SEAL ON ASPHALT CONCRETE PAVEMENT. SLURRY SEAL AREA.
4. CONSTRUCT RAMP PER CASE A AND DETAIL B OF CALTRANS REVISED STANDARD RSP PLAN A88A.
5. INSTALL FOUNDATION FOR CONTROLLER AND SERVICE PEDESTAL. SEE DETAIL A ON SHEET C-3.3
6. CONSTRUCT TYPE "C" CURB AND GUTTER PER CITY REVISED STANDARD PLAN 1.



A.C. TYPICAL DETAIL

(NOT A PART)

CONSTRUCTION GENERAL NOTES

1. ALL WORK SHALL CONFORM TO THE 2015 STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND STANDARD SPECIFICATIONS, THE 2015 STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION REVISED STANDARD PLANS AND REVISED STANDARD SPECIFICATIONS, THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD), 2017 CITY OF SALINAS REVISED STANDARD SPECIFICATIONS, DESIGN STANDARDS, AND STANDARD PLANS, AND THE SPECIAL PROVISIONS ACCOMPANYING THIS PLAN.
2. UTILITIES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY OVERHEAD AND UNDERGROUND CLEARANCE WITH ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK. CONTACT UNDERGROUND SERVICE ALERT (USA) AT 811 TWO WORKING DAYS PRIOR TO DOING ANY WORK TO VERIFY EXACT LOCATION OF EXISTING FACILITIES.
3. EXISTING CURB AND SIDEWALK THAT ARE DAMAGED OR DISPLACED, EVEN THOUGH THEY WERE NOT TO BE REMOVED, SHALL BE REPAIRED OR REPLACED IN KIND EVEN IF DAMAGE OR DISPLACEMENT OCCURRED PRIOR TO ANY WORK PERFORMED BY THE CONTRACTOR.
4. CONTRACTOR SHALL CAREFULLY PRESERVE THE SURROUNDING PROPERTY BY CONFINING HIS OPERATION WITHIN THE LIMITS OF WORK AREA.
5. CONTRACTOR IS RESPONSIBLE FOR MATCHING EXISTING STREETS, SURROUNDING LANDSCAPE, AND OTHER IMPROVEMENTS WITH A SMOOTH TRANSITION IN PAVING, CURBS, GUTTERS, SIDEWALKS, GRADING, ETC. AND TO AVOID ANY ABRUPT OR APPARENT CHANGES IN GRADES OR CROSS SLOPES, LOW SPOTS OR HAZARDOUS CONDITIONS.
6. EXISTING SUBSURFACE STRUCTURES ARE NOTED FROM BEST RECORDS AVAILABLE. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THESE STRUCTURES PRIOR TO TRENCHING AND SHALL BE RESPONSIBLE FOR ALL DAMAGE TO THEM AND OTHER UNKNOWN OR UNIDENTIFIED STRUCTURES.
7. THE CONTRACTOR SHALL OBTAIN AN ENCROACHMENT PERMIT FROM THE DEPARTMENT OF PUBLIC WORKS FOR ANY WORK WITHIN THE CITY'S RIGHT-OF-WAY OR STREETS.
8. BOLD FACE PLAN SYMBOLS ARE NEW CONSTRUCTION. HALF-TONE SYMBOLS ARE EXISTING.
9. ANY DEVIATIONS FROM THIS PLAN SHALL REQUIRE PRE-APPROVAL BY THE CITY ENGINEER.

NOTICE!
THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) 811 NOT LESS THAN 2 WORKING DAYS PRIOR TO START OF CONSTRUCTION

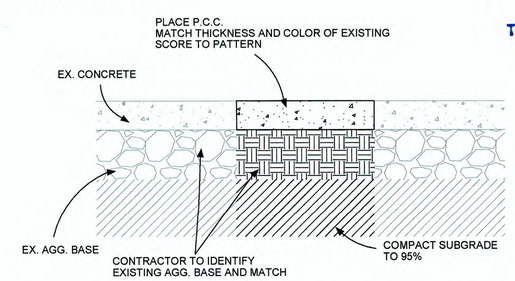
NOTE:
SEE TRAFFIC SIGNAL PLAN (E-1) FOR LOCATIONS OF POLES AND CONDUITS.

0 10' 20' 40'
SCALE: 1"=20'

AREA 2 CONSTRUCTION NOTES (NOT A PART)

7. SIDEWALK BY OTHERS.
8. PLACE PORTLAND CEMENT CONCRETE. MATCH EXISTING CONCRETE PATTERN. SEE SECTION C-C.
9. PLACE TYPE A HMA ASPHALT CONCRETE (½" AGGREGATE) AND CLASS II AGGREGATE BASE. SEE A.C. TYPICAL DETAIL.
10. CONSTRUCT TYPE "C" CURB AND GUTTER PER CITY REVISED STANDARD PLAN 1.
11. CONSTRUCT TYPE "B" CURB PER CITY REVISED STANDARD PLAN 1.
12. LANDSCAPE BY CONTRACTOR.

AS BUILT
N. Reyes
THE DON CHAPIN COMPANY
7/12/21



SECTION C-C

(NOT A PART)

CITY OF SALINAS
APPROVED
SET
Adriana Rocha
Accepted by
6/15/2020
Date
DEVELOPMENT ENGINEERING

C-2

CITY OF SALINAS PUBLIC WORKS DEPARTMENT	PREPARED BY: ASSOCIATED TRANSPORTATION ENGINEERS, 100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 (805)687-4418 — Job 18011, R.C.E. 18030, DATE 09/05/20	DESIGNED BY: JH CAD BY: JH PROJECT ENGINEER: RLP	REVIEWED BY: DATE ANDREW EASTERLING, P.E. TRAFFIC ENGINEER	REVIEWED BY: DATE DAVID JACOBS, P.E., L.S. PUBLIC WORKS DIRECTOR	DATE / REVISION / APP.	NORTH MAIN ST./ CHEROKEE DR. HARDEN PLAZA CONSTRUCTION PLAN	PROJ. NO(S) / FILE NO.	SHEET NO. 3 / OF 6

TRAFFIC SIGNAL GENERAL NOTES

1. ALL SIGNAL AND LIGHTING WORK SHALL CONFORM TO THE 2015 STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD PLANS AND STANDARD SPECIFICATIONS, THE 2015 STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION REVISED STANDARD PLANS AND REVISED STANDARD SPECIFICATIONS, THE 2014 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (CA MUTCD), 2017 CITY OF SALINAS REVISED STANDARD PLANS, AND THE SPECIAL PROVISIONS ACCOMPANYING THIS PLAN.
2. UTILITIES SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY OVERHEAD AND UNDERGROUND CLEARANCE WITH ALL UTILITY COMPANIES PRIOR TO COMMENCING WORK. CONTACT UNDERGROUND SERVICE ALERT (USA) AT 811 TWO WORKING DAYS PRIOR TO DOING ANY WORK TO VERIFY EXACT LOCATION OF EXISTING FACILITIES.
3. THE LOCATIONS OF ALL ELECTRICAL EQUIPMENT TO BE INSTALLED BY THE CONTRACTOR SHALL BE APPROVED BY THE ENGINEER PRIOR TO FINAL PLACEMENT.
4. NEW CONDUIT SHALL BE "TYPE 3", 4" RIGID NON-METALLIC.
5. ALL NEW VEHICULAR SIGNAL HEADS SHALL BE 12" WITH TUNNEL VISORS AND BACKPLATES. PEDESTRIAN SIGNALS SHALL BE THE LED COUNTDOWN TYPE.
6. BOLD FACE PLAN SYMBOLS ARE NEW CONSTRUCTION. HALF-TONE SYMBOLS ARE EXISTING.
7. ANY DEVIATIONS FROM THIS PLAN SHALL REQUIRE APPROVAL BY THE ENGINEER.
8. CONTRACTOR SHALL PROVIDE AND INSTALL PEDESTRIAN SIGNAL HEADS LED COUNTDOWN TYPE. PEDESTRIAN PUSH-BUTTONS SHALL BE ACCESSIBLE PEDESTRIAN SIGNALS (APS).

POLE & EQUIPMENT SCHEDULE

LOC	STANDARDS TYPE	STANDARDS SIG. M.A.	STANDARDS L.M.A.	VEH. SIG. MTG. M.A.	VEH. SIG. MTG. POLE	PED. SIG. MOUNTING	PPB Ø	PPB ARROW	PPB QUAD.	LED LUMINAIRE	IISNS LEGEND FRONT	IISNS LEGEND BACK	LOCATION(*) A	LOCATION(*) B	LOCATION(*) C	REMARKS
Ⓐ	61-5-100	60' F_1=20', F_2=12'	15'	3-MAS	SV-1-T	SP-1-T	6	→	E	154 W	← Cherokee Dr Harden Plaza →	Cherokee Dr → ← Harden Plaza	8.8'	-	3.8'	4 7 8
Ⓑ	1-A-10'	-	-	-	TV-1-T	SP-1-T	-	-	-	-	-		11.3'	-	4.3'	
Ⓒ	19-4-100	30', F_1=12'	15'	2-MAS	SV-1-T	-	2	←	E	154 W	N MAIN ST		11.8'	-	7.1'	4 7 9
Ⓓ	1-A-10'	-	-	-	TV-1-T	SP-1-T	2	→	E	-	-		9.9'	-	8.1'	
Ⓔ	61-5-100	65' F_1=20', F_2=12'	15'	3-MAS	SV-1-T	SP-1-T	8	←	N	154 W	Cherokee Dr → ← Harden Plaza	← Cherokee Dr Harden Plaza →	10.6'	-	9.0'	4 7 8
Ⓕ	PPB POST	-	-	-	-	-	8	→	N	-	-		14.3'	-	4.8'	
Ⓖ	19-3-100	30'	15'	MAS	SV-1-T	SP-1-T	6	←	W	154 W	N Main St		13.0'	-	5.7'	4 7
Ⓗ	1-A-10'	-	-	-	TV-1-T	SP-1-T	-	-	-	-	-		3.4'	-	3.6'	

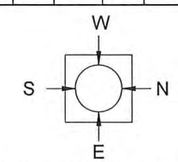
NOTES:
ALL EQUIPMENT IS NEW (N).

CONSTRUCTION NOTES

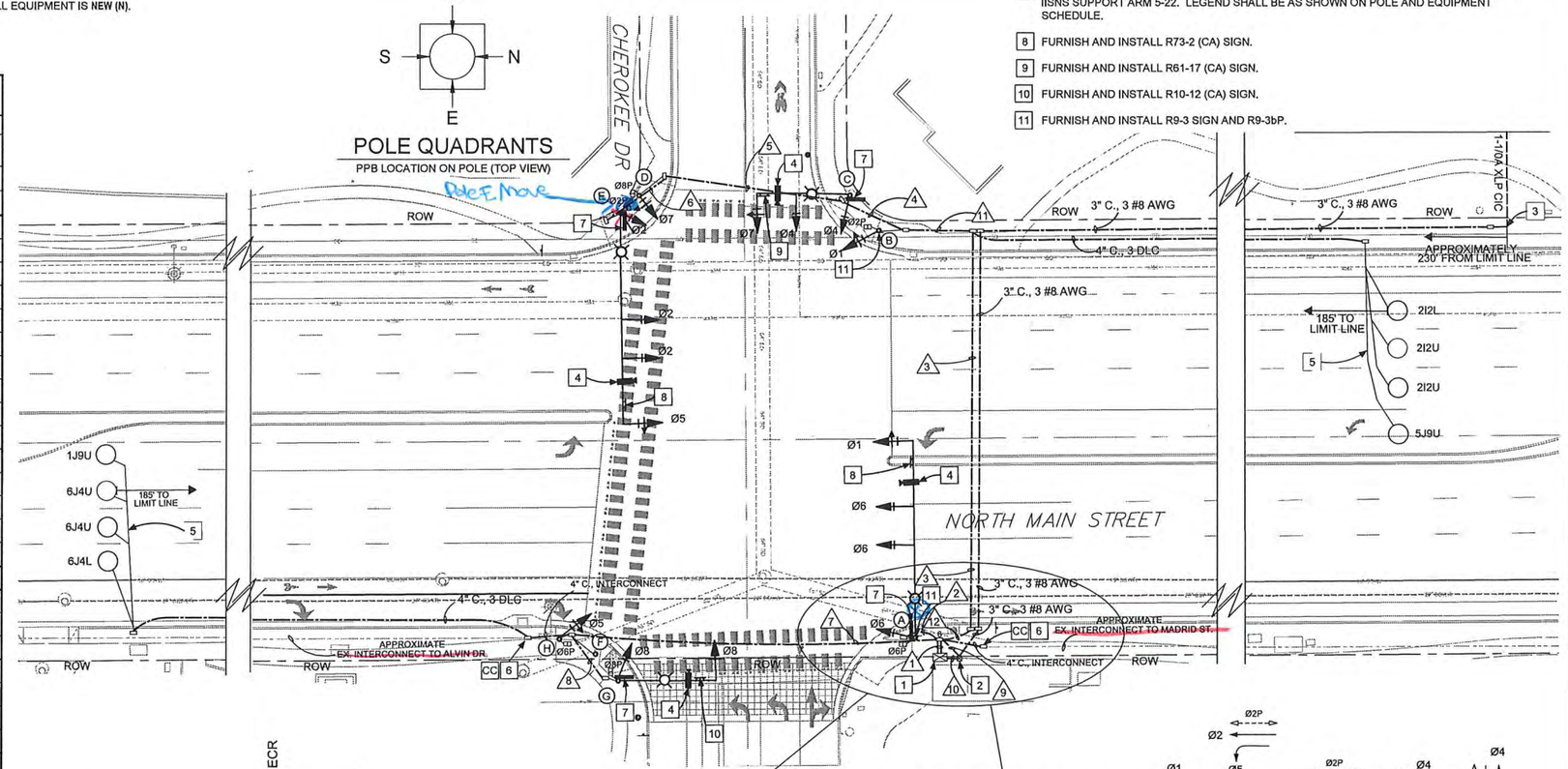
1. FURNISH AND INSTALL 2003 NEMA TS2-2, SP STYLE WESTERN SYSTEMS PART #3015010500 CABINET ASSEMBLY PER SPECIAL PROVISIONS. INSTALL BATTERY BACK UP SYSTEM COMPLETE.
2. FURNISH AND INSTALL TYPE III-AF SERVICE PEDESTAL PER RSP ES-2D. COORDINATE SERVICE CONNECTION WITH PG&E REPRESENTATIVE.
3. SERVICE POINT LOCATED APPROXIMATELY 230 FEET FROM LIMIT LINE. VERIFY WITH PG&E.
4. FURNISH AND INSTALL RHYTHM INSYNC VIDEO CAMERA WITH ADAPTIVE SYSTEM PER SPECIAL PROVISIONS ON MAST ARM PER MANUFACTURER'S SPECIFICATION. VIDEO DETECTION ZONES SHALL BE DETERMINED BY THE ENGINEER. SEE SPECIAL PROVISIONS FOR INSTALLATION AND SPECIFICATIONS.
5. INSTALL TYPE E LOOP DETECTORS CENTERED IN LANES PER RSP ES-5B.
6. CONTRACTOR TO LOCATE AND INTERCEPT EX. INTERCONNECT CONDUIT, CONTINUOUS BETWEEN CONTROLLERS. INSTALL PULL BOX OVER IT AND CONNECT TO INDICATED PULL BOX. NO SPLICES ALLOWED. REPLACE DAMAGED CONDUIT AS NECESSARY. SEE SPECIAL PROVISIONS.
7. FURNISH AND INSTALL ILLUMINATED STREET NAME SIGN ON SIGNAL POLE WITH VALMONT IISNS SUPPORT ARM 5-22. LEGEND SHALL BE AS SHOWN ON POLE AND EQUIPMENT SCHEDULE.
8. FURNISH AND INSTALL R73-2 (CA) SIGN.
9. FURNISH AND INSTALL R61-17 (CA) SIGN.
10. FURNISH AND INSTALL R10-12 (CA) SIGN.
11. FURNISH AND INSTALL R9-3 SIGN AND R9-3bP.

CONDUIT AND CONDUCTOR SCHEDULE

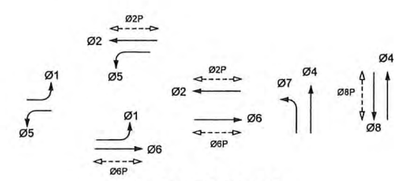
AWG or CABLE	CONDUCTOR RUN	1	2	3	4	5	6	7	8	9	10	11	12
	CONDUIT	2-4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"	4"
#14 AWG	Ø1 SIGNALS	6	3	3								3	3
	Ø2 "	3		3	3	3	3					3	3
	Ø4 "	3		3	3							3	3
	Ø5 "	6		3	3	3	3	3				3	3
	Ø6 "	3	3										
	Ø7 "	6		6	6	3						6	6
	Ø8 "	3						3	3				
	Ø2P SIGNALS	4		4	2	2	2					4	4
	Ø6P "	4	2					2					
	Ø8P "	4		2	2	2		2	2			2	2
	Ø2 PPB	2		2	2	1						2	2
	Ø6 "	2	1					1	1				
	Ø8 "	2		1	1	1	1	1				1	1
	PPB COMMON	1	1	1	1	1	1	1	1			1	1
	SPARES	6	3	3	3	3	3	3	3			3	3
	TOTAL #14	55	10	31	26	19	13	16	10			31	31
#10 AWG	SIGNAL COMMON		1	1	1	1	1	1	1	1		1	1
	LUMINAIRES		2	2	2	2	2	2	2	6		2	2
	TOTAL #10		3	3	3	3	3	3	3	7		3	3
DLC	Ø1	1						1					
	Ø2	2		2									2
	Ø5	1		1									1
	Ø6	2						2					
	DLC TOTAL	6		3				3					3
6 PR #19 AWG	SIGNAL INTERCONNECT	1						1					
#2 AWG	SERVICE										2		
CABLE	VIDEO CAMERA	4	2	2	2	2	2	2	2			2	2
3 CSC	VIDEO POWER	2	1	1	1	1	1	1	1			1	1
% FILL		10.7%	4.5%	11.3%	7.1%	6.0%	5.0%	10.3%	4.5%	1.7%	2.3%	7.9%	11.3%



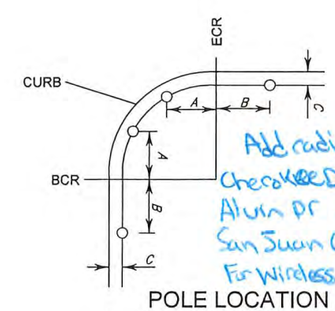
POLE QUADRANTS
PPB LOCATION ON POLE (TOP VIEW)



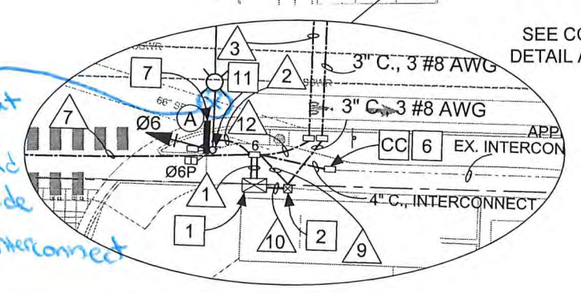
SEE CONSTRUCTION DETAIL A ON SHEET C-3



PHASE DIAGRAM



POLE LOCATION



Add radio at Cherokee Dr, Alvin Dr and San Juan Grade for Wireless Interconnect

NOTICE!
THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (USA) 811
NOT LESS THAN 2 WORKING DAYS PRIOR TO START OF CONSTRUCTION

0' 10' 20' 40'
SCALE: 1"=20'

THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY.

CITY OF SALINAS APPROVED SET Accepted by 6/15/2020 Date DEVELOPMENT ENGINEER, TCE

E-1

CITY OF SALINAS
PUBLIC WORKS DEPARTMENT

PREPARED BY: ASSOCIATED TRANSPORTATION ENGINEERS, 100 N. Hope Avenue, Suite 4, Santa Barbara, CA 93110 - (805)687-4418
Job 18011
R.C.E. 18030 DATE 06/05/20
DESIGNED BY: JH
CAD BY: JH
PROJECT ENGINEER: RLP
REVIEWED BY: DATE — ANDREW EASTERLING, P.E., TRAFFIC ENGINEER
REVIEWED BY: DATE — DAVID JACOBS, P.E., L.S., PUBLIC WORKS DIRECTOR

DATE	REVISION	APP.

NORTH MAIN ST./ CHEROKEE DR. HARDEN PLAZA
TRAFFIC SIGNAL PLAN
PROJ. NO(S) — FILE NO.
SHEET NO. 5 OF 6

Keith Higgins

Traffic Engineer

HARVEST MOON AGRICULTURAL EMPLOYEE HOUSING PROJECT

(QUATTRIN RANCH)

TRAFFIC IMPACT ANALYSIS

DRAFT REPORT

MONTEREY COUNTY, CALIFORNIA

Prepared for
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February 28, 2020

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PREFACE

This report was originally completed November 11, 2019. There has since been a change in the California Environmental Quality Act (CEQA regarding determination of transportation impacts as well as a reduction in the size of the Project Apartment Alternative. These two changes are discussed below.

1. **Change in California Environmental Quality Act (CEQA) Transportation Impact Criteria**

In accordance with California Senate Bill 743, transportation impacts are now being determined by Vehicle Miles Traveled (VMT) rather than level of service (LOS). This change occurred subsequent to the preparation of this traffic study in November 2019. Section 12 of this study provides an analysis of VMT for CEQA purposes. The County of Monterey and City of Salinas have not adopted methodologies or thresholds of significance at this time. However, the determination of impacts can be made based on the estimates included herein.

Impacts identified in this report based on LOS are no longer CEQA impacts. However, analysis does identify locations where traffic operations will not conform to City of Salinas, County of Monterey or Caltrans policies. The need for project contribution toward improvements in traffic operations recommended in this report are therefore now determined by these agencies without needing to consider whether the improvements or lack thereof would result in full mitigation of anticipated impacts.

2. **Change in Description of Project Apartment Alternative**

The following traffic study is based on a preliminary project description that included two project alternatives. The first was a 1,200-bed agricultural employee (H2A) housing facility. The second was 200 standard apartments. Subsequent to the preparation of the study, the apartment alternative was reduced to 150 standard apartments.

The analysis of the 1,200-bed H2A housing facility continues to reflect the current proposal. The analysis of the 200-unit apartment alternative overstates the trip generation and resulting impacts at the study intersections. The locations where the 200-unit Apartment alternative were expected to result in traffic operations below acceptable levels in County, City or Caltrans policies will not change for the 150-unit Apartment alternative. This is because the locations are already operating worse than acceptable levels or are expected to in the future without the project, the Apartment alternative would add traffic above the historic significance threshold and Transportation Demand Management (TDM) measures alone would not eliminate the impact.

1 INTRODUCTION

The proposed Quattrin Ranch project would be located in the Boronda Area of Monterey County, California. The project site covers approximately 7 acres on the west side of North Davis Road at West Rossi Street. The project has two possible alternatives:

1. 1,200 beds for agricultural employee housing; OR
2. 200 standard apartments.

Both alternatives are analyzed in this report.

The locations of the Project site and study area are indicated in **Exhibit 1**. The project site plan is shown in **Exhibit 2**.

This report summarizes the analysis of potential traffic impacts associated with both alternatives of the proposed Project as well as cumulative impacts. Existing, Background and Cumulative conditions are also analyzed with and without the Project. Vehicular, pedestrian, bicycle and transit circulation are evaluated at the Project site and the immediate surrounding street network.

1.1 Scope of Work

This report addresses the following topics:

1. Existing vehicular, pedestrian and bicycle circulation on the surrounding street network.
2. Assessment of potential impacts to vehicular, pedestrian, bicycle and transit circulation due to the Project, and recommendations to minimize or alleviate those impacts.
3. Assessment of potential background and cumulative traffic impacts.
4. Site access and on-site circulation assessment.
5. Estimation of the project's Vehicle Miles Traveled (VMT).

1.2 Study Network

The AM and PM peak periods were analyzed at the following six intersections, which includes the agency having jurisdiction. Their locations are indicated on **Exhibit 1**.

1. Intersection 1 – Adams Street / West Laurel Drive (City of Salinas)
2. Intersection 2 – US 101 Northbound Ramps / West Laurel Drive (Caltrans)
3. Intersection 3 – US 101 Southbound Offramp / West Laurel Drive (Caltrans)
4. Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive (City of Salinas)
5. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe (Monterey County)
6. Intersection 6 – North Davis Road / Post Drive – Commercial Driveway (City of Salinas)
7. Intersection 7 – North Davis Road / West Rossi Street (City of Salinas)
8. Intersection 8 – North Main Street (State Route 183) / Rossi Street (Caltrans)
9. Intersection 9 – Davis Road Southbound Ramps – Market Circle / West Market Street (State Route 183) (Caltrans)
10. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) (Caltrans)
11. Intersection 11 – Davis Road / Blanco Road (Monterey County)
12. Intersection 12 – North Main Street / Alvin Drive (City of Salinas)
13. Intersection 13 – North Main Street / Laurel Drive (City of Salinas)

1.3 Analysis Scenarios

Traffic operations for the following analysis scenarios were analyzed:

1. Existing Conditions
2. Existing Plus Project Conditions (both project alternatives)
3. Background Conditions
4. Background Plus Project Conditions (both project alternatives)
5. Cumulative Without Project Conditions

6. Cumulative Plus Project Conditions (both project alternatives)

Improvements recommended to mitigate impacts for each development scenario are recommended where warranted.

1.4 Traffic Operation Evaluation Methodologies

Intersection traffic operations were evaluated based upon the level of service (LOS) concept. LOS is a qualitative description of an intersection's operations, ranging from LOS A to LOS F. Level of Service "A" represents free flow uncongested traffic conditions. Level of Service "F" represents highly congested traffic conditions with unacceptable delay to vehicles at intersections. The intermediate levels of service represent incremental levels of congestion and delay between these two extremes. LOS descriptions for each type of existing traffic control at the study intersections (i.e., signal, all-way stop and one-/two-way stop) are included as **Appendix A**.

Intersection traffic operations were evaluated using the Synchro© traffic analysis software (Version 10) using both the 2010 and 2000 Highway Capacity Manual (HCM) methodologies. The average delay is then correlated to a level of service. For two-way stop-controlled intersections, only the vehicle delay for side street traffic is analyzed. LOS for each side street movement is based on the distribution of gaps in the major street traffic stream and driver judgment in selecting gaps. Improvements are warranted when a side street approach reaches LOS F for two-way stop-controlled intersections. When using the HCM 2010 and 2000 methods for the analysis of signalized and all-way stop-controlled intersections, the overall intersection delay is used to determine LOS.

Intersections 1 and 2 (Adams Street / West Laurel Drive and US 101 Northbound Ramps / West Laurel Drive are operated by the same signal controller. The HCM 2010 cannot analyze intersections that share a controller. Hence, these two intersections are analyzed using the HCM 2000 methodologies. The remaining four study intersections are analyzed using the HCM 2010 methodologies.

Also, traffic signals at Intersections 12 and 13 North Main Street / Alvin Drive and North Main Street / Laurel Drive are coordinated using the InSync adaptive traffic control system. This system optimizes the signal phase lengths and their sequence and also coordinates traffic flow between adjacent InSync-controlled signals. Currently, there is no process to model InSync signal operations in computerized operations software; hence the HCM 2010 methodologies are used to assess operations at these intersections. This analysis therefore constitutes a conservative assessment of operations at these two intersections.

1.5 Level of Service Standards - Study Network

This study assesses operations at intersections under three different jurisdictions – City of Salinas, Monterey County and Caltrans. Both the City of Salinas and Monterey County have an overall level of service (LOS) standard of LOS D. The overall Caltrans level of service is the transition between LOS C and LOS D, abbreviated herein as LOS C-D.

As noted in Section 1.4, the Highway Capacity Manual does not provide overall levels of service for one-way stop-controlled intersections; rather, it only provides side-street operations for this

type of traffic control. Side-street operations represent delay for the entire stop-controlled approach, regardless of the number of lanes. For the purposes of this analysis, a standard of LOS E is applied to side-street operations at these intersections, given that intersection improvements such as signalization and channelization are generally not warranted until the side street LOS is F. Also, side street traffic volumes are typically much lower than volumes on the major street and only represent a small portion of the overall intersection operations.

1.6 Significance Criteria

According to the California Environmental Quality Act (CEQA) guidelines, a Project may have a significant effect on the environment if it would cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. The following significance criteria have been used within this study:

1.6.1 Monterey County

For the purposes of this analysis, a significant impact would occur at any intersection under the jurisdiction of Monterey County in the following circumstances:

Signalized Intersection (Intersection 11):

- A significant impact would occur if an intersection operating at LOS A, B, C, or D pre-Project degrades to E or F with the addition of Project traffic.
- For intersections already operating at unacceptable level E or F pre-Project, any increase (one vehicle) in traffic is considered significant.

One- or Two-Way Stop-Controlled Intersection (Intersection 5):

- A significant impact would occur if the side-street at an intersection operating at LOS A, B, C, D or E pre-Project degrades to LOS F with Project traffic; or
- If any traffic signal warrant is met with the addition of Project traffic; or
- For side-streets already operating at LOS F pre-Project, the addition of any Project traffic during the deficient peak hour would be considered significant, regardless of its effects on delay.

1.6.2 City of Salinas

For the purposes of this analysis, a significant impact would occur at any study intersection under the jurisdiction of the City of Salinas in the following circumstances:

Signalized Intersection (Intersections 1, 4, 6-7, 12-13):

- A significant impact would occur if an intersection operating at LOS A, B, C, or D pre-Project degrades to E or F with the addition of Project traffic.
- For intersections already operating at unacceptable level E or F pre-Project, any increase (one vehicle) in traffic is considered significant.

1.6.3 Caltrans

For the purposes of this analysis, a significant impact would occur at any intersection or roadway segment under the jurisdictions of Caltrans in the following circumstances:

Signalized Intersection (Intersections 2-3, 8-10):

- A significant impact would occur if an intersection operating at LOS A, B, or C pre-Project degrades to D, E or F with the addition of Project traffic; or
- For intersections already operating at LOS D, E, or F pre-Project, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds.

1.7 Impact Fees

1.7.1 Transportation Agency for Monterey County

The Transportation Agency for Monterey County (TAMC) and its member jurisdictions have adopted a county-wide, regional development impact fee to cover the costs for studies and construction of many roadway improvements throughout Monterey County. This impact fee, which went into effect on August 27, 2008, is applied to new development within Monterey County. The governing document for the fee is the *Regional Impact Fee Nexus Study Update* (March 26, 2008) prepared by Kimley-Horn Associates, Inc. *The Regional Impact Fee Nexus Study Update* was updated in October 2018 by Wood Rodgers.

TAMC, Monterey County and Caltrans have agreed that the payment of the TAMC fee satisfies the Project's fair share contribution to cumulative impact mitigation throughout the regional highway system. This includes highways that will operate deficiently but no capital improvement Project is programmed to correct the deficiency. Projects partially funded by the TAMC fee in North Monterey County and the vicinity of Salinas include the following. Additional funding will be provided by Measure X, the Transportation Sales Tax measure. These local funding sources are anticipated to leverage State and federal funding sources to fully fund the improvements. Toll roads are also being considered as a funding source.

1. TAMC Improvement 2 – SR 156 Widening from US 101 to Castroville Boulevard
2. TAMC Improvement 4 - Davis Road North from Blanco Road to Market Street (SR183)
3. TAMC Improvement 5 – Davis Road South from Blanco Road to Reservation Road, including replacement of bridge over Salinas River
4. TAMC Improvement 10 – US 101 Widening from Airport Boulevard to Boronda Road

1.7.2 Monterey County Traffic Impact Fee

Monterey County is developing a traffic impact fee. It is expected to be adopted in late 2019. A list of improvements and the amount of the impact fee are not currently available. The fee is would not be applicable to the Project unless the fee program is adopted by Monterey County before the Project is approved. This fee is not able to be imposed at this time.

1.7.3 Salinas Traffic Improvement Program

The City of Salinas Traffic Improvement Program – 2010 Update, Wood Rodgers, March 2010, is the technical document used to establish the Salinas Traffic Fee Ordinance (TFO), which is the

primary funding source for transportation improvements to mitigate impacts of cumulative development as the City builds out its current General Plan. A traffic impact fee is assessed to new development within the City of Salinas to off-set its cumulative impacts on the circulation system that is under the City's jurisdiction. As the project site is not located in the City of Salinas, the TFO fee would not be applicable to the Project.

Improvements with TFO funding included in the Traffic Improvement Program that are located in the vicinity of the Project site are listed below along with their individual Traffic Improvement Program project number. as follows.

1. TFO 26 – Western Bypass. This improvement will construct a new six-lane divided arterial between the Boronda Road / US 101 interchange and Blanco Road, mostly west of Boronda Road, Davis Road and the Boronda community.
2. TFO 27 – Alvin Drive Extension. This improvement will extend Alvin Drive westward over US 101 and to the Western Bypass as a four-lane arterial.
3. TFO 28A and 28B – Laurel / US 101 Widening (Davis to Adams) and Laurel Improvements (Adams to Main). These improvements will widen West Laurel Drive to six lanes between North Davis Road and Adams Street, and add left turn lanes in both directions between Adams Street and North Main Street.
4. TFO 29 – Rossi Street Extension. This improvement extends Rossi Street as a two-lane minor arterial west of North Davis Road to the Westside Bypass, thus creating a new access to the Boronda community near the project site.
5. TFO 31 – Main Street Widening (Expressway Type II). This improvement widens Main Street from a four to six-lane arterial between Casentini Street and Market Street.
6. TFO 73 – Davis Road / Blanco Road Intersection. This improvement widens the intersection to add the following lanes:
    a. Second northbound Davis Road left turn lane;
    b. Northbound Davis Road right turn lane;
    c. Second southbound Davis Road through lane;
    d. Eastbound Blanco Road right turn lane;
    e. Second westbound Blanco Road left turn lane.

1.8 Unique Project Traffic Characteristics

The Quattrin H2A project will provide farmworker housing, which will assist in alleviating overcrowding in farmworker households. According to the "Farmworker Housing Study and Action Plan for Salinas Valley and Pajaro Valley," California Institute for Rural Studies, June 2018, farmworker households have an occupancy rate of 7.00 persons per dwelling unit. These are scattered throughout the City of Salinas and surrounding communities. Farmworkers at these scattered locations must use private cars (many in carpools) to commute to and from work as well as shopping and personal trips.

Residents of the Quattrin H2A housing project will be prohibited from having a car and will be transported to and from work and all other destinations by bus. Vehicle occupancy will increase from 2 to 3 persons per vehicle to over 20 persons per vehicle. There will be a corresponding reduction in traffic volumes on the street systems in Salinas and surrounding area. The project will thus have a positive city-wide impact on traffic congestion, which will likely more than offset any increase in traffic at nearby intersections. This is not possible to quantify but could easily be several times the increase anticipated in this study. This study does not provide any credit for this phenomenon, except for qualifying the determination of whether the project creates a significant impact at individual intersections.

The apartment alternative may have some similar traffic benefits. However, because the apartments will be available to the general public, they are analyzed as standard apartments. No credit is given in the analysis of determination of impact significance.

2 EXISTING TRAFFIC CONDITIONS

This chapter evaluates Existing traffic conditions and includes a description of the Project setting.

2.1 Existing Traffic Network

The Project site is located on the west side of North Davis Road at West Rossi Street in unincorporated Monterey County. The project site is located adjacent to the City of Salinas, which lies just east of West Davis Road from the project site.

The key roadways in the vicinity of the proposed project include US 101, Davis Road, Laurel Drive, Main Street, Market Street, Blanco Road, Alvin Drive, Rossi Street, Calle Del Adobe, Post Drive, Adams Street and El Rancho Way. These facilities are described below, in alphabetical order:

Adams Street is a two-lane collector street providing access to neighborhoods north of West Laurel Drive and east of US 101. The posted speed limit is 35 miles per hour (mph).

Alvin Drive is a four-lane minor arterial street in northern Salinas, providing access to adjacent residential neighborhoods and schools. The posted speed limit is 35 mph.

Blanco Road is a two- to four-lane roadway in Monterey County and southern Salinas, connecting Marina and Salinas via Reservation Road. As such, it is a major commute corridor between the Monterey Peninsula and the Salinas Valley. The posted speed limit is 55 mph west of Davis Road and 50 mph east of Davis Road.

Calle Del Adobe provides the primary access to the Boronda area from North Davis Road. It is a two-lane east-west arterial that extends from the Davis Road/Laurel Drive intersection to Boronda Road. The posted speed limit is 45 mph between Boronda Road and Post Drive and 35 miles per hour between Post Drive and North Davis Road.

Davis Road extends along the easterly boundary of the Boronda area and generally represents the western limit line for the City of Salinas in the vicinity of the planning area. It extends from Reservation Road – near the unincorporated Toro Park neighborhood south of Salinas – to Boronda Road in northwestern Salinas. In the study area, Davis Road is a four-lane major arterial. The posted speed limit in the study area is 35 mph north of Larkin Street, 45 miles per hour between Larkin Street and Blanco Road, and 55 mph south of Blanco Road.

El Rancho Way provides access to a residential neighborhood and a hotel. The posted speed limit is 25 mph.

Laurel Drive is a major four-lane east-west arterial in the city of Salinas. Laurel Drive extends easterly from North Davis Road and has an interchange with US 101. It continues east through most of the northerly portion of the City of Salinas and is one of the major east-west arterials serving the city of Salinas. The posted speed limit is 35 mph.

Main Street is a four- to six-lane north-south major arterial in southern, central and northern Salinas. It provides primary access to the Downtown from the north and south, as well as to northbound and southbound US 101 approximately one-half mile north of Rossi Street. In the study area, commercial and residential land uses line Main Street. Between US 101 and Market

Street, Main Street is also State Route 183. In the study area, the posted speed limit is 35 mph north of US 101 and 40 mph south of US 101.

Market Street is a four-lane east-west major arterial in the City of Salinas. the vicinity of the project site, connecting the Downtown with eastern and western Salinas. It provides direct access to commercial and industrial land uses along its frontage. West of Main Street, Market Street is also Sate Route 183, which continues west towards Castroville. The posted speed limit is 25 mph east of Main Street, 40 mph between Main Street and Davis Road, and 55 mph west of Davis Road.

Market Circle is a two-lane local street providing access to agricultural fields and rural residences. The presumed speed limit is 25 mph.

Rossi Street is a two-lane east-west minor arterial in western and central Salinas. It provides access to residential and commercial land uses. The posted speed limit is 40 mph west of North Main Street and 25 mph east of North Main Street.

Post Drive is a four-lane commercial collector street that runs in a quarter circle between North Davis Road and Calle Del Adobe. The presumed speed limit is 35 mph.

US 101 is a regional north-south facility through the city of Salinas. It is currently a four-lane roadway with interchanges in the city. The posted speed limit through the city is 65 mph. The nearest interchange access points to the project from US 101 are the Laurel Drive interchange and the partial Main Street interchange.

2.2 Existing Pedestrian Network

There are no sidewalks along the Project frontage of North Davis Road, although a sidewalk does exist on this side of North Davis Road just north of the project site. Sidewalks are present on the east frontage of North Davis Road. Both sidewalks are continuous to the north and east of the project site, including onto West Laurel Drive, Calle Del Adobe, Post Drive, Adam Street, West Rossi Street and West Market Street (State Route 183). These connections allow continuous travel for pedestrians to various commercial and industrial areas in western and downtown Salinas.

There are marked crosswalks present at all study intersections.

2.3 Existing Bicycle Network

There are four types of bicycle facilities defined by Caltrans. Each type is described below:

1. Bike path (Class I) – A separate right-of-way designed for the exclusive use of bicycle and pedestrian traffic with crossflow minimized.
2. Bike lane (Class II) – A striped lane for one-way bike travel on a street or highway, typically including signs placed along the street segment.
3. Bike route (Class III) – Provides a shared use with pedestrian or motor vehicle traffic. Typically, these facilities are city streets with signage designating the segment for Bike Route without additional striping or facilities.

4. Separated Bikeways (Class IV) – A bikeway for the exclusive use of bicycles and includes a separation between the bikeway and the through vehicular traffic. The separation may include, but is not limited to, grade separation, flexible posts, inflexible posts, inflexible barriers, or on-street parking.

A bicycle network map for Monterey County is included in **Appendix B**. This map is cited from *Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan,* Alta Planning + Design, December 2011 ("TAMC Bicycle and Pedestrian Master Plan").

Bicycle facilities are provided along the following roadways in the study network:

- Bike Path (Class I):
  a. Rossi-Rico Parkway: between North Davis Road (north of West Rossi Street) and West Rossi Street (east of Sansome Street)
- Bike Lane (Class II):
  a. North Davis Road: between Blanco Road and Post Drive and between West Laurel Drive and Boronda Road (both directions)
  b. West Rossi Street: between North Davis Road and Sherwood Drive (both directions)
  c. Blanco Road: between Reservation Road in Marina and Luther Way in Salinas (both directions)
  d. North Main Street: between Alvin Drive and San Juan Grade Road
  e. Alvin Drive: between North Main Street and Kip Drive

2.4 Existing Transit Service

Monterey-Salinas Transit (MST) provides fixed-route bus service in Monterey County and Peninsula cities. Thirteen MST bus lines provides service to the study area:

- Line 20 (Salinas – Monterey). This line provides weekday and weekend service roughly every 30 minutes between roughly 5:00 AM – 3:00 AM the following morning.
- Line 21 (Pebble Beach – Salinas Express). This line provides via just six runs per day (three in each direction) on weekdays and weekends.
- Line 23 (Salinas – King City). This line provides weekday and weekend service roughly every two hours between roughly 4:00 AM – 10:30 PM.
- Line 25 (CSUMB – Salinas). This line provides weekday and weekend service every 60 minutes between roughly 6:30 AM – 10:30 PM.
- Line 28 (Watsonville – Salinas via Castroville). This line provides weekday and weekend service every two hours between roughly 6:30 AM – 10:00 PM.
- Line 29 (Watsonville – Salinas via Prunedale). This line provides weekday and weekend service every two hours 90 minutes between roughly 6:00 AM – 8:00 PM.
- Line 42 (Westridge – Alisal). This line provides only weekend service every 90 minutes between roughly 9:00 AM – 9:00 PM.

- Line 44 (Northridge – Salinas). This line provides daily service every 75 minutes between roughly 6:30 AM – 6:30 PM.
- Line 46 (Salinas – Natividad). This line provides only weekday service every 60-120 minutes between roughly 7:00 AM – 6:00 PM.
- Line 61 (Salinas – VA-DOD Clinic). This line provides weekday and weekend service every 60 minutes between roughly 6:00 AM – 10:30 PM.
- Line 72 (Presidio – North Salinas). This line provides weekday service via just four runs (two AM runs and two PM runs).
- Line 86 (King City – San Jose/SJ Airport). This line provides just four weekday runs (two in each direction) and eight weekend runs (four in each direction).
- Line 95 (Williams Ranch – Northridge). This line provides weekday and weekend service every two hours between roughly 7:00 AM – 5:00 PM.

The nearest bus stops to the Project site (served by Line 72 only) are located on West Rossi Street east of North Davis Road (both directions). These stops located at approximately a six-minute walk from the project site. Bus stops are also located on North Davis Road south of Post Drive (served by Lines 44 and 72), which are more than a 13-minute walk away from the project site. Additional bus stops are located even further away from the project site.

2.5 Existing Conditions Traffic Circulation

2.5.1 Intersection Operations

Traffic volumes counts at the study intersections were collected during the AM (7:00 – 9:00 AM) and PM (4:00 – 6:00) peak hours on Wednesday, May 22, 2019 (Intersections 1 through 6) and Tuesday, September 24, 2019 (Intersections 7 through 13). Traffic data was collected for cars, trucks, buses, bicyclists, and pedestrians. From these counts, the AM and PM peak hour volumes were derived. **Exhibit 3** depicts the peak turning movement volumes for the study intersections under Existing Conditions. **Appendix C** contains the traffic count data collected at these study intersections.

Appendix D contains a comparison of the May 2019 and September 2019 volumes at Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive, where data was collected during both count periods in order to verify if there were significant variation in the volumes from the two count periods. The exhibit shows that the September 2019 volumes at this intersection were between approximately 3% - 7% higher than those collected in May 2019. After balancing of the volumes along the adjacent West Laurel Drive intersections, the difference lowers to between approximately 1 – 2%. Both sets of percentages are below the typical day-to-day volume variation of 10% experienced at intersections. Therefore, it is concluded that the September 2019 volumes do not significantly differ from the May 2019 volumes.

Existing intersection lane configurations, traffic controls and levels of service at the study intersections are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Existing conditions can be found in **Appendix E**.

Most of the study intersections currently operate at or better than their respective level of service standards. However, the following three intersections operate below their respective standards under Existing conditions:

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (AM).
2. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS D (AM and PM).
3. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS D (PM)

2.5.2 Pedestrian Circulation

All study intersections nearest the project site have less than 10 pedestrians crossing each approach leg during the AM and PM peak hours. This low level of pedestrian activity also occurs at most of the study intersections. However, the three North Main Street intersections all have moderate to high levels of pedestrian crossings, averaging 66 AM and 57 PM pedestrian crossings between them.

2.5.3 Bicycle Circulation

There is little to no bicycle traffic at the study intersections. The highest amount of bicycle traffic was on Laurel Drive, which had one (AM) and two (PM) through bicyclists during the study peak periods.

3 EXISTING PLUS PROJECT CONDITIONS – AG HOUSING

3.1 Ag Housing Project Description

This section of the report focuses on Existing Plus Project conditions with Project Alternative 1 – agricultural employee housing.

Project Alternative 1 would build six residential buildings providing a total of 1,200 beds for 1,200 employees without dependents. All employees housed on site would be H2A Visa workers, i.e., seasonal employees who are US residents or reside permanently outside of the United States.

None of the employees would have their own vehicles. Instead, the employees would be bussed or carpooled to agricultural fields throughout Monterey County. All outbound bus/vanpool trips would occur between 2:00 – 5:00 AM and all inbound bus/vanpool trips would occur between 12:00 – 4:00 PM.

Both buses and vans will be used for employee bussing and vanpools. The buses would be stored offsite and driven to and from the site each day, while the vans would be stored onsite. During weekday evenings and weekends, bus service into Salinas would be provided to the employees, as necessary, to transport employees to shopping, recreation and religious services.

The Project would only be occupied eight-and-a-half months of the year, from mid-March through November.

All project access would be via a westerly extension of West Rossi Street. This extension would only provide access to the project site and the adjacent agricultural fields; the West Rossi Street extension would not be connected to other roadways in Salinas or Boronda by the project.

3.2 Project Trip Generation – Ag Housing With Casa Boronda Data

Trip generation estimates are typically based on rates from *Trip Generation Manual,* 10th Edition, published by the Institute of Traffic Engineers in 2017 (Trip Generation Manual). However, this publication does not include trip rates for agricultural employee housing projects. Instead, as requested by Monterey County staff, the Project trip generation was derived using trip activity at an existing agricultural employee housing facility in Monterey County. Inbound and outbound traffic at the Casa Boronda agricultural housing facility on Madison Lane in the Boronda Area – just west of Salinas, was collected during the peak agricultural season on Tuesday, April 16, 2019 between 7:00 – 9:00 AM and 4:00 – 6:00 PM. The collected traffic data can be found in **Appendix F**. From this data, the AM and PM one-hour peak volumes were derived and converted into trips per employee using the roughly 600 employees that reside at that facility. The derived rates were used to estimate the AM and PM peak hour traffic generated by the proposed project.

The Casa Boronda project generates 4 AM peak hour trips and 43 PM peak hour trips. This is about two times the peak hour volume estimates of 2 AM peak hour trips and 22 PM peak hour trips based on operator forecasts at the time of preparation of the *Casa Boronda Agricultural Employee Housing Project Traffic Impact Analysis,* Keith Higgins Traffic Engineer, July 3, 2017.

A comparison of the estimated trip generation in the traffic study to the actual driveway counts is provided in **Exhibit 5**.

Much of the increase appears to be associated with a higher number of bus trips than originally anticipated. During observations of driveway traffic at Casa Boronda in May 2018, it was noted that the buses routinely carried 20 or fewer workers, which was less than half of their capacity. This appeared to result in two times as many buses entered and exited the site as were originally forecasted. They were often followed by pickup trucks that often left with the buses after the workers disembarked. Foremen were assumed to arrive at Casa Boronda in their own vehicles and ride the bus to the fields with the workers. Apparently, many foremen drive separate vehicles to the fields. The traffic count was conducted on a single random day. Farm operations may vary from day to day, resulting in fewer buses being needed with a corresponding reduction in project trips. However, this is the only actual count data available. Previous traffic studies of farmworker housing projects were based on estimates by the project applicant.

Traffic volumes during off-peak hours, except for the early morning project peak hour when workers are leaving for the fields, are expected to the same as estimated in the Casa Boronda traffic study. This is because project occupants are generally not allowed to have personal vehicles. Typical residential trips such as shopping, school and recreation will not occur. The PM peak hour would then represent about 25% of the daily total.

Exhibit 5 summarizes the Project trip generation for the ag employee housing alternative. The Project is estimated to generate 346 weekday daily trips, with 8 trips (6 in, 2 out) during the AM peak hour and 86 trips (44 in, 42 out) during the PM peak hour. This is the trip activity used to evaluated potential project traffic impacts on the surrounding street system.

3.3 Unique Project Trip Generation Characteristics

The Project will only be occupied eight-and-a-half months out of the year, which is typical of most H2A housing projects in the Salinas area. Therefore, the project trip generation estimate in the prior paragraph will only occur when the project is open. The project would generate zero trips when closed. As a result, a seasonally adjusted trip generation is also included on **Exhibit 5**, to account for the project only being open approximately 71% of the year. The seasonally adjusted project trip generation would be 245 daily trips, with 6 trips (4 in, 2 out) during the AM peak hour and 61 trips (31 in, 30 out) during the PM peak hour. This is a factor that should be considered in the determination of project H2A traffic impact significance determination.

The use of the Casa Boronda traffic counts to project the project trip activity is a conservative estimate of the ag employee housing trips, as nearly all of the project bussing and vanpooling is anticipated to occur outside of the AM and PM street peak hours. Specifically, the project applicant anticipates that all morning bussing and vanpools will occur between 2:00 – 5:00 AM and between 12:00 – 4:00 PM. Restricting the hours of the bussing and vanpools outside of the peak hours is a form of Transportation Demand Management (TDM), and is described as such in this analysis. As noted on **Exhibit 6**, the project trip generation with the bussing and vanpools could constitute only 20% of the Casa Boronda traffic counts. The effects of the TDM measures on the project impacts for the ag employee housing project are addressed at each intersection

with deficient operations for all Ag Employee Housing analysis scenarios in this report. Operations with the TDM measures are also indicated on **Exhibit 4A**.

Exhibit 6 depicts the trip distribution for the Project. The trip distribution was combined with the Project trip generation to derive the Project trip assignment depicted in **Exhibit 7**.

3.4 Project Access Improvements

The project's vehicular access is on an extension of West Rossi Street west of North Davis Road. This will require modifications to the lane configuration and existing traffic signal at the North Davis Road / West Rossi Street intersection. The analysis for Existing Plus Project, Background Plus Project and Cumulative Plus Project all assume the following intersection modifications, all of which the project will be responsible for implementation:

1. Construct eastbound West Rossi Street as one left turn lane and one shared through-right turn lane.
2. Remove and reconstruct the existing median on West Rossi Street east of North Davis Road to remove one eastbound through lane leaving the intersection and add a new westbound through lane at the intersection. This improvement would also retain the existing dual westbound left turn lanes and single westbound right turn lane.
3. Add a northbound West Davis Road left turn lane.
4. Revise the existing signal infrastructure and signal phasing to reflect the above lane configuration modifications.

3.5 Existing Plus Project Condition Traffic Circulation – Ag Housing

3.5.1 Intersection Operations

The Project trip assignment for the ag employee housing alternative (**Exhibit 7**) was added to the existing traffic volumes in **Exhibit 3** to create the Existing Plus Project – Ag Housing volumes depicted in **Exhibit 8**.

Existing Plus Project – Ag Housing condition intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Existing Plus Project – Ag Housing conditions can be found in **Appendix G**.

Most of the study intersections would operate at or better than their respective level of service standards under Existing Plus Project – Ag Housing conditions. However, the following three intersections would operate continue to operate below their standards:

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (AM).
2. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS D (AM and PM).
3. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS D (PM)

Below is a discussion of the recommended improvements at the study intersections operating under deficient operations that would be needed to improve operations to acceptable or better level of service.

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe:

   The side-street levels of service under AM conditions would be LOS F, compared to LOS F without the Project. The project would not add any traffic to this intersection. Per the significance criteria in Section 1.6, the Project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

2. Intersection 8 – North Main Street (State Route 183) / Rossi Street:

   The level of service under AM and PM conditions would be LOS D, compared to LOS D without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and two trips (PM) to this intersection. This is a de minimis increase in traffic. This also does not account for the reduction in City-wide traffic resulting from the project as discussed in Section 1.8 of this report. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

3. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183):

   The level of service under PM conditions would be LOS D, compared to LOS D without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add one trip (AM) and one trip (PM) to this intersection. This is a de minimis increase in traffic. This also does not account for the reduction in City-wide traffic resulting from the project as discussed in Section 1.8 of this report. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

3.5.2 Pedestrian Circulation

The Project is anticipated to generate a small to moderate amount of pedestrian traffic. This would include pedestrian trips to the existing commercial areas on North Davis Road and to Downtown Salinas. There are existing and continuous sidewalks between the project site and these locations, thus providing adequate capacity for the additional pedestrian traffic. Therefore, the Project would not represent a significant impact to pedestrian circulation.

3.5.3 Bicycle Circulation

The Project is anticipated to generate a small amount of bicycle traffic. The existing bike lanes and shoulders on the study street network will be adequate to accommodate this additional bicycle traffic. Therefore, the Project would not represent a significant impact to bicycle circulation.

3.5.4 Transit Circulation

The Project is anticipated to generate little or no transit demand. Therefore, the Project would not represent a significant impact to transit service.

3.6 Impact Fees

The Project would be subject to the TAMC Regional Development Impact Fee and the Salinas Traffic Improvement Program fee. The Project may also be subject to a Monterey County transportation impact fee, if one is adopted prior to approval of the study Project by Monterey County.

4 EXISTING PLUS PROJECT CONDITIONS – APARTMENTS

4.1 Project Alternative Description

This section of the report focuses on Existing Plus Project conditions with Project Alternative 2 – standard apartments. Although the initial project is anticipated to be the agricultural employee housing, the project may be converted into standard apartments in the future, hence its inclusion within this analysis.

The Project Alternative 2 would build the same six residential buildings as Project Alternative 1.However, the buildings would be modified to provide up to 200 standard apartment units.

The trip generation estimate for Project Alternative 2 is based on rates from *Trip Generation Manual,* 10th Edition, published by the Institute of Traffic Engineers in 2017 (Trip Generation Manual).

Project access for the apartment alternative would be the same as the H2A project alternative, with all project driveways located along a westerly extension of West Rossi Street. Under the Existing Plus Project scenario, this extension would only provide access to the project site and the adjacent agricultural fields; the West Rossi Street extension would not be connected to other roadways in Salinas or Boronda by the project.

4.2 Project Trip Generation – Apartments

Exhibit 5 provides the trip generation estimate for the apartment alternative. The Project is estimated to generate 1,464 weekday daily trips, with 92 trips (21 in, 71 out) during the AM peak hour and 112 trips (71 in, 41 out) during the PM peak hour. This is the trip activity used to evaluated potential project traffic impacts on the surrounding street system.

4.3 Project Trip Distribution and Assignment – Apartments

Exhibit 9 depicts the trip distribution for the Project. The trip distribution was combined with the Project trip generation to derive the Project trip assignment depicted in **Exhibit 10**.

4.4 Project Access Improvements

As with the project's ag employee housing alternative, vehicular access for the apartments alternative would be via an extension of West Rossi Street west of North Davis Road. This will require modifications to the lane configuration and existing traffic signal at the North Davis Road / West Rossi Street intersection. The analysis for Existing Plus Project, Background Plus Project and Cumulative Plus Project with the apartment alternative all assume the same North Davis Road / West Rossi Street intersection modifications as previously described under the ag employee housing alternative, all of which the project will be responsible for implementation.

4.5 Existing Plus Project Condition Traffic Circulation – Apartments

4.5.1 Intersection Operations

The Project trip assignment for the apartments (**Exhibit 10**) was added to the existing traffic volumes in **Exhibit 3** to estimate the Existing Plus Project – Apartment volumes depicted in **Exhibit 11**.

Existing Plus Project – Apartment condition intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Existing Plus Project – Apartment conditions can be found in **Appendix H**.

Most of the study intersections would operate at or better than their respective level of service standards under Existing Plus Project – Apartment conditions. However, the following three intersections would continue to operate below their standards:

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (AM).
2. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS D (AM and PM).
3. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS D (PM)

Below is a discussion of the recommended improvements at the study intersections operating under deficient operations that would be needed to improve operations to acceptable or better level of service.

1. <u>Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe:</u>

   The side-street levels of service under AM conditions would be LOS F, compared to LOS F without the Project. The project would not add any traffic to this intersection. Per the significance criteria in Section 1.6, the Project would <u>not</u> result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

2. <u>Intersection 8 – North Main Street (State Route 183) / Rossi Street:</u>

   The level of service under AM and PM conditions would be LOS D, compared to LOS D without the Project. It would result in an increase of 0.9 seconds of delay in the AM peak hour and 0.4 seconds of delay in the PM peak hour. For intersections already operating at LOS D, E, or F pre-Project, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection. However, if this intersection was under City of Salinas jurisdiction, the project would not have an insignificant impact. This is because the City of Salinas has a standard of LOS D.

   - Recommendation: Implement the following:
     1. Add a third northbound and third southbound through lane on North Main Street. This improvement is Salinas TFO Improvement 31.
   - Operations after Implementation of Improvement: LOS C (AM and PM).

- Responsibility for Improvement: Payment of Salinas TFO would constitute the project's responsibility towards improvement.

3. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183):

   The level of service under PM conditions would be LOS D, compared to LOS D without the Project. It would result in an increase of 0.2 seconds of delay in the AM peak hour and 0.9 seconds of delay in the PM peak hour. For intersections already operating at LOS D, E, or F pre-Project, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection. However, if this intersection was under City of Salinas jurisdiction, the project would not have an insignificant impact. This is because the City of Salinas has a standard of LOS D.

   - Recommendation: Implement the following:
     1. Add an eastbound right turn lane on West Market Street.
   - Operations after Implementation of Improvement: LOS B (AM) and LOS C (PM).
   - Responsibility for Improvement: The study project should implement this improvement.

4.5.2 Pedestrian Circulation

The Project is anticipated to generate a small to moderate amount of pedestrian traffic. This would include pedestrian trips to the existing Boronda Meadows Elementary School, commercial areas on North Davis Road and to Downtown Salinas. There are existing and continuous sidewalks between the project site and these locations, thus providing adequate capacity for the additional pedestrian traffic. Therefore, the Project would not represent a significant impact to pedestrian circulation.

4.5.3 Bicycle Circulation

The Project is anticipated to generate a small amount of bicycle traffic. The existing bike lanes and shoulders on the study street network will be adequate to accommodate this additional bicycle traffic. Therefore, the Project would not represent a significant impact to bicycle circulation.

4.5.4 Transit Circulation

The Project is anticipated to generate little or no transit demand. Therefore, the Project would not represent a significant impact to transit service.

4.6 Impact Fees

The Project would be subject to the TAMC Regional Development Impact Fee and the Salinas Traffic Improvement Program fee. The Project may also be subject to a Monterey County transportation impact fee, if one is adopted prior to approval of the study Project by Monterey County.

Note that the project's fees applicable to the apartments would be different compared to the fees applicable for the ag employee housing.

5 BACKGROUND CONDITIONS

This section describes Background traffic conditions. It accounts for traffic growth on the study network over a five-year period but does not include trips from the Project.

5.1 Derivation of Background Condition Traffic Volumes

Weekday AM and PM peak hour traffic generated by projects approved for development but not yet constructed or occupied was estimated based on a growth rate of 2% per year for five years (i.e., 10% increase in traffic). This is consistent with a review of traffic volumes at the study intersections over the past five years, referenced from past traffic studies[1] and data collected for this analysis. This review found traffic volume growth of approximately 2% per year at the study intersections which is summarized in **Appendix I**.

Exhibit 12 contains the Background AM and PM traffic volumes at the study intersections.

5.2 Background Traffic Conditions

5.2.1 Intersection Operations

Background intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Background traffic conditions can be found in **Appendix J**.

Most of the study intersections would operate at or better than their respective level of service standards under Background conditions. However, the following four intersections will operate below their respective standards:

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (AM).
2. Intersection 6 – North Davis Road / Post Drive – Commercial Driveway – LOS E (AM and PM)
3. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS E (AM) and LOS D (PM).
4. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS D (PM)

5.2.2 Pedestrian Circulation

Pedestrian demand is not anticipated to increase significantly under Background conditions. There are no planned pedestrian infrastructure improvements in the study area under Background conditions.

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[1] Traffic Studies:

1. *Casa Boronda Agricultural Employee Housing Project,* Keith Higgins Traffic Engineer, July 3, 2017. Existing volumes from 2014.
2. *The Draft West Area Specific Plan Transportation Impact Analysis,* Fehr & Peers, June 2018. Existing volumes from 2016.

5.2.3 Bicycle Circulation

Bicycle traffic is not anticipated to increase significantly under Background conditions. There are no planned bicycle infrastructure improvements in the study area under Background conditions.

5.2.4 Transit Circulation

There are no planned transit circulation improvements in the study area under Background conditions.

6 BACKGROUND PLUS PROJECT CONDITIONS – AG HOUSING

This section describes the analysis results for Background Plus Project – Ag Housing traffic conditions, which combines Project Alternative 1 traffic with the Background volumes.

6.1 Derivation of Background Plus Project – Ag Housing Condition Traffic Volumes

The Project trip assignment for the ag employee housing (**Exhibit 7**) was combined with the Background volumes (**Exhibit 12**) to estimate the Background Plus Project – Ag Housing intersection volumes depicted in **Exhibit 13**.

6.2 Background Plus Project Traffic Conditions – Ag Housing

6.2.1 Intersection Operations

Background Plus Project – Ag Housing intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Background Plus Project – Ag Housing traffic conditions can be found in **Appendix K**.

Most of the study intersections would operate at or better than their respective level of service standards under Background Plus Project – Ag Housing conditions. However, the following five intersections would operate below their standards:

1. Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive – LOS E (PM)
2. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (AM).
3. Intersection 6 – North Davis Road / Post Drive – Commercial Driveway – LOS E (AM and PM)
4. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS E (AM and PM).
5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS D (PM)

Below is a discussion of the recommended improvements at the study intersections operating under deficient operations that would be needed to improve operations to acceptable or better level of service.

1. <u>Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive:</u>

   No change would occur in the Background LOS C at this intersection. However, the level of service under PM conditions would be LOS E, compared to LOS D without the Project due to an increase in delay of 1.7 seconds. LOS E is an unacceptable level of service. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the addition of the Project trips and the TDM measures described in Section 3.3, the intersection operations would remain at LOS D. Therefore, the project would <u>not</u> result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

2. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe:

   The side-street levels of service under AM conditions would be LOS F, compared to LOS F without the Project. The project would not add any traffic to this intersection. Per the significance criteria in Section 1.6, the Project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

3. Intersection 6 – North Davis Road / Post Drive – Commercial Driveway:

   The level of service under AM and PM conditions would be LOS E, compared to LOS E without the Project. The H2A Project would result in an increase of 0.1 seconds of delay in the AM peak hour and 1.7 seconds of delay in the PM peak hour. For intersections already operating at LOS D, E, or F pre-Project, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and four trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

4. Intersection 8 – North Main Street (State Route 183) / Rossi Street:

   The level of service under AM and PM conditions would be LOS E, compared to LOS E (AM) and LOS D (PM) without the Project. The H2A Project would result in an increase of 0.1 seconds of delay in the AM peak hour and 0.3 seconds of delay in the PM peak hour. For intersections already operating at LOS D, E, or F pre-Project, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and two trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183):

   The level of service under PM conditions would be LOS D, compared to LOS D without the Project. The level of service under PM conditions would be LOS D, compared to LOS D without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add one trip (AM) and one trip (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection. Also, if this intersection was

under City of Salinas jurisdiction, the project would not have an insignificant impact. This is because the City of Salinas has a standard of LOS D.

6.2.2 Pedestrian Circulation

Pedestrian demand is not anticipated to increase significantly under Background Plus Project conditions as compared to Background conditions. Therefore, the Project would not represent a significant impact to pedestrian circulation under Background Plus Project conditions.

6.2.3 Bicycle Circulation

Bicycle demand is not anticipated to increase significantly under Background Plus Project conditions as compared to Background conditions. Therefore, the Project would not represent a significant impact to bicycle circulation under Background Plus Project conditions.

6.2.4 Transit Circulation

Transit demand from the Project is not anticipated to increase significantly over Existing Plus Project conditions, due to the lack of bus stops near the Project site. As such, the Project would not represent a significant impact to transit circulation under Background Plus Project conditions.

7 BACKGROUND PLUS PROJECT CONDITIONS – APARTMENTS

This section describes the analysis results for Background Plus Project – Apartments traffic conditions, which combines Project Alternative 2 traffic with the Background volumes.

7.1 Derivation of Background Plus Project Condition Traffic Volumes – Apartments

The Project trip assignment for the apartments (**Exhibit 10**) was combined with the Background volumes (**Exhibit 12**) to estimate the Background Plus Project – Apartments intersection volumes depicted in **Exhibit 11**.

7.2 Background Plus Project Traffic Conditions – Apartments

7.2.1 Intersection Operations

Background Plus Project – Apartments intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Background Plus Project – Apartments traffic conditions can be found in **Appendix L**.

Most of the study intersections would operate at or better than their respective level of service standards under Background Plus Project – Apartments conditions. However, the following five intersections would operate below their standards:

1. Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive – LOS E (PM)
2. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (AM).
3. Intersection 6 – North Davis Road / Post Drive – Commercial Driveway – LOS E (AM and PM)
4. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS E (AM and PM).
5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS D (PM)

Below is a discussion of the recommended improvements at the study intersections operating under deficient operations that would be needed to improve operations to acceptable or better level of service.

1. <u>Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive:</u>

   The level of service under PM conditions would be LOS E, compared to LOS D without the Project due to an increase in delay of 3.8 seconds. LOS E is an unacceptable level of service. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

   - Recommendation: Implement either of the following groups of improvements:
     1. Add a third westbound left turn lane on West Laurel Drive and a third southbound receiving lane on North Davis Road leaving the intersection; OR

2. Implement the following improvements, both of which are incorporated into the recommendations at this intersection under Cumulative Plus Project – Apartments conditions:
   a. Implement the Western Bypass. This roadway, proposed by the Salinas TFO, would be a new arterial roadway parallel to and west of North Davis Road. As shown under Cumulative Plus Project – Apartment conditions, the Western Bypass would divert traffic off of West Davis Road, reducing the total traffic through this intersection. This improvement is Salinas TFO Improvement 26.
   b. Optimize the signal timing at the North Davis Road / Calle Del Adobe – West Laurel Drive intersection.

- Operations after Implementation of Improvement options: LOS C (AM) and LOS D (PM) for both improvement options.
- Responsibility for Improvement: The project would be responsible for implementation of Improvement Option 1. Payment of Salinas TFO would constitute project's responsibility towards Improvement Option 2.

2. <u>Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe:</u>

   The side-street levels of service under AM conditions would be LOS F, compared to LOS F without the Project. The project would not add any traffic to this intersection. Per the significance criteria in Section 1.6, the Project would <u>not</u> result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

3. <u>Intersection 6 – North Davis Road / Post Drive – Commercial Driveway:</u>

   The level of service under AM and PM conditions would be LOS E, compared to LOS E without the Project. The Project would result in an increase in delay of 0.7 seconds in the AM peak hour and 3.9 seconds in the PM peak hour. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement either of the following groups of improvements:
  1. Implement the following:
     a. Restripe eastbound Post Drive as one left lane, one through lane and one right turn lane.
     b. Convert the east/west left turn signal phasing on Post Drive – Commercial Driveway to permitted phasing (as opposed to the current split phasing); OR
  2. Implement the Western Bypass. This roadway, proposed by the Salinas TFO, would be a new arterial roadway parallel to and west of North Davis Road. As shown under Cumulative Plus Project – Apartment conditions, the Western Bypass would divert traffic away from West Davis Road, reducing the total traffic through this intersection. This improvement is Salinas TFO Improvement 26.
- Operations after Implementation of Improvement options: LOS C (AM and PM) for Improvement Option 1 or LOS D (AM and PM) for Improvement Option 2.

- Responsibility for Improvement: The project would be responsible for implementation of Improvement Option 1. Payment of Salinas TFO would constitute the project's responsibility towards Improvement Option 2.

4. Intersection 8 – North Main Street (State Route 183) / Rossi Street:

   The level of service under AM and PM conditions would be LOS E, compared to LOS E (AM) and LOS D (PM) without the Project. The Project would result in an increase in delay of 1.2 seconds in the AM peak hour and 0.5 seconds in the PM peak hour. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

   - Recommendation: Implement the following:
     1. Add a third northbound and third southbound through lane on North Main Street. This improvement is Salinas TFO Improvement 31. This is the same improvement as previously recommended under Existing Plus Project – Apartment conditions.
   - Operations after Implementation of Improvement: LOS D (AM and PM).
   - Responsibility for Improvement: Payment of Salinas TFO would constitute the project's responsibility towards improvement.

5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183):

   The level of service under PM conditions would be LOS D, compared to LOS D without the Project. It would result in an increase of 0.1 seconds of delay in the AM peak hour and 1.4 seconds of delay in the PM peak hour. For intersections already operating at LOS D, E, or F pre-Project, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection. However, if this intersection was under City of Salinas jurisdiction, the project would not have an insignificant impact. This is because the City of Salinas has a standard of LOS D.

   - Recommendation: Implement the following:
     1. Add an eastbound right turn lane on West Market Street. This is the same improvement as previously recommended under Existing Plus Project – Apartment conditions.
   - Operations after Implementation of Improvement: LOS B (AM) and LOS C (PM).
   - Responsibility for Improvement: The study project should implement this improvement.

7.2.2 Pedestrian Circulation

Pedestrian demand is not anticipated to increase significantly under Background Plus Project conditions as compared to Background conditions. Therefore, the Project would not represent a significant impact to pedestrian circulation under Background Plus Project conditions.

7.2.3 Bicycle Circulation

Bicycle demand is not anticipated to increase significantly under Background Plus Project conditions as compared to Background conditions. Therefore, the Project would not represent a significant impact to bicycle circulation under Background Plus Project conditions.

7.2.4 Transit Circulation

Transit demand from the Project is not anticipated to increase significantly over Existing Plus Project conditions, due to the lack of bus stops near the Project site. As such, the Project would not represent a significant impact to transit circulation under Background Plus Project conditions.

8 CUMULATIVE WITHOUT PROJECT CONDITIONS

This section describes the analysis results under Cumulative Without Project traffic conditions, which forecasts traffic conditions at buildout of the City of Salinas and Monterey County General Plans. This scenario does not include trips from the study Project. This condition represents conditions in approximately the Year 2045.

8.1 Derivation of Cumulative Without Project Condition Volumes

Traffic volumes under Cumulative Without Project conditions were estimated using volume forecasts from six prior traffic studies that analyzed the study network:

1. *Casa Boronda Agricultural Employee Housing Project,* Keith Higgins Traffic Engineer, July 3, 2017.
2. *The Draft West Area Specific Plan Transportation Impact Analysis,* Fehr & Peers, June 2018.
3. *Rodeo Property Traffic Impact Analysis,* Mott MacDonald, June 12, 2019.
4. *El Rancho Toro Agricultural Employee Housing Project Traffic Impact Analysis,* Keith Higgins Traffic Engineer, June 6, 2019.
5. *City of Salinas General Plan Circulation Element and Environmental Impact Report Traffic Study,* Higgins Associates, June 11, 2002.
6. *2007 Monterey County General Plan Draft Environmental Impact Report,* ICF Jones & Stokes, September 2008.

8.2 Network Modifications under Cumulative Conditions

Cumulative Without Project and Cumulative Plus Project conditions include multiple street network modifications near the study network. These modifications will divert traffic away from the study network. All improvements are in the City of Salinas Traffic Fee Ordinance.

The network modifications are:

1. TFO 26 – Western Bypass. This improvement will construct a new six-lane divided arterial between the Boronda Road / US 101 interchange and Blanco Road, mostly west of Boronda Road, Davis Road and the Boronda community.
2. TFO 27 – Alvin Drive Extension. This improvement will extend Alvin Drive westward over US 101 and to the Western Bypass as a four-lane arterial.
3. TFO 29 – Rossi Street Extension. This improvement extends Rossi Street as a two-lane minor arterial west of North Davis Road to the Westside Bypass, thus creating a new access to the Boronda community near the project site.

Please see Section 1.7.3 for a more detailed description of these improvements.

The analyzed traffic volumes for Cumulative Without Project and Cumulative Plus Project reflect the traffic diversions that would occur due to these network modifications.

With regards to the Western Bypass, its alignment between Blanco Road and West Market Street (State Route 183) is not defined. City staff has confirmed that there are no formal designs of the roadway south of West Market Street (State Route 183) beyond the conceptual alignment identified in the Salinas TFO, which indicates that it will run parallel to South Davis Road at approximately 800 feet to the west. This would mean that the Western Bypass would have an interchange or grade separation with SR 183 and an intersection with Blanco Road between South Davis Road and Hitchcock Road. Therefore, the traffic forecasts at the South Davis Road / Blanco Road intersection are taken from the traffic study for the West Area Specific Plan, whose cumulative traffic forecasts are consistent with the TFO alignment of the Western Bypass.

In addition, the improvements at the North Davis Road / West Rossi Street intersection previously discussed in Section 3.3 – as associated with the project's westward extension of West Rossi Street – are also assumed in place under Cumulative Without Project conditions. This is due to the Rossi Street Extension (TFO 29).

8.3 Cumulative Without Project Traffic Conditions

8.3.1 Intersection Operations

Cumulative Without Project traffic volumes are depicted on **Exhibit 15**. Cumulative Without Project intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Cumulative Without Project traffic conditions can be found in **Appendix M**.

Some of the study intersections will operate at or better than their respective level of service standards. However, the following eight intersections operate below their respective standards under Cumulative Without Project conditions:

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (PM).
2. Intersection 7 – North Davis Road / West Rossi Street – LOS F (PM).
3. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS E (AM and PM).
4. Intersection 9 – Davis Road Southbound Ramps – Market Circle / West Market Street (State Route 183) – LOS D (PM).
5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS E (PM).
6. Intersection 11 – Davis Road / Blanco Road – LOS F (AM and PM).
7. Intersection 12 – North Main Street / Alvin Drive – LOS E (PM).
8. Intersection 13 – North Main Street / Laurel Drive – LOS F (PM).

8.3.2 Pedestrian Circulation

There are no planned pedestrian improvements in the study area under Cumulative Without Project conditions other than to construct sidewalks along future streets where appropriate and to close gaps in existing sidewalks.

8.3.3 Bicycle Circulation

The TAMC bike and ped plan proposes the following future bicycle improvements in the study area.

- Bike Lane (Class II):
  a. Davis Road: between West Laurel Drive and Post Street and between Blanco Road and Reservation Road (both directions)
  b. Calle Del Adobe: between North Davis Road and Boronda Road (both directions)
  c. West Rossi Street: between North Davis Road and Boronda Road (both directions)
  d. Alvin Drive: between North Main Street and North Davis Road and between Kip Drive and Natividad Road (both directions)
- Bike Path (Class III):
  a. West Laurel Drive: between North Davis Road and Adams Street
  b. Adams Street: between West Laurel Drive and Tulane Street

8.3.4 Transit Circulation

There are no anticipated transit improvements in the study area.

9 CUMULATIVE PLUS PROJECT CONDITIONS – AG HOUSING

This section describes the analysis results under Cumulative Plus Project traffic conditions, which combines the Cumulative Without Project volumes with the Project Alternative 1 trips.

9.1 Derivation of Cumulative Plus Project Condition Traffic Volumes – Ag Housing

The Project trip assignment for the ag employee housing (**Exhibit 7**) was added to the Cumulative Without Project volumes (**Exhibit 15**) to estimate Cumulative Plus Project – Ag Housing traffic volumes, which are depicted on **Exhibit 16.**

Note: The Rossi Street Extension is not anticipated to modify the project trip assignment.

9.2 Cumulative Plus Project Traffic Conditions – Ag Housing

9.2.1 Intersection Operations

Cumulative Plus Project – Ag Housing intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Cumulative Plus Project – Ag Housing traffic conditions can be found in **Appendix N**.

Most of the study intersections would operate at or better than their respective level of service standards under Cumulative Plus Project – Ag Housing conditions. However, the following eight intersections would operate below their standards. These are the same intersections that will be deficient without the Project.

1. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (PM).
2. Intersection 7 – North Davis Road / West Rossi Street – LOS F (PM).
3. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS E (AM and PM).
4. Intersection 9 – Davis Road Southbound Ramps – Market Circle / West Market Street (State Route 183) – LOS D (PM).
5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS E (PM).
6. Intersection 11 – Davis Road / Blanco Road – LOS F (AM and PM).
7. Intersection 12 – North Main Street / Alvin Drive – LOS E (PM).
8. Intersection 13 – North Main Street / Laurel Drive – LOS F (PM).

Below is a discussion of the recommended improvements at the study intersections operating under deficient operations that would be needed to improve operations to acceptable or better level of service.

1. <u>Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe:</u>

   The side-street levels of service under AM conditions would be LOS F, compared to LOS F without the Project. The project would not add any traffic to this intersection. Per the

significance criteria in Section 1.6, the Project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

2. Intersection 7 – North Davis Road / West Rossi Street:

   The level of service under PM conditions would be LOS F, compared to LOS F without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. With the TDM measures, the Project would add two trips (AM) and twelve trips (PM) to this intersection. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection both with and without the TDM measures.

   - Recommendation: Implement the following:
     1. Add a second eastbound left turn lane on West Rossi Street
     2. Add an eastbound right turn lane on West Rossi Street
     3. Add a southbound right turn lane on North Davis Road
     4. Add a northbound right turn overlap signal phase on North Davis Road.
   - Operations after Implementation of Improvement: LOS C (AM) and LOS D (PM).
   - Responsibility for Improvement: The City of Salinas would be responsible for implementation of these improvements, in conjunction with the West Rossi Street extension to Boronda Road. The project would be responsible for preserving the necessary right-of-way for these improvements where implementation would occur along the project frontage.

3. Intersection 8 – North Main Street (State Route 183) / Rossi Street:

   The level of service under AM and PM conditions would be LOS E, compared to LOS E (AM) and LOS D (PM) without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and two trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

4. Intersection 9 – Davis Road Southbound Ramps – Market Circle / West Market Street (State Route 183):

   The level of service under PM conditions would be LOS D, compared to LOS D without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add one trip (AM) and two trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183):

   The level of service under PM conditions would be LOS E, compared to LOS E without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add one trip (AM) and one trip (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

   Intersection 11 – Davis Road / Blanco Road:

   The level of service under AM and PM conditions would be LOS F, compared to LOS F without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and four trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

6. Intersection 12 – North Main Street / Alvin Drive:

   The level of service under PM conditions would be LOS E, compared to LOS E without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and two trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

7. Intersection 13 – North Main Street / Laurel Drive:

   The level of service under PM conditions would be LOS F, compared to LOS F without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection with the Casa Boronda-based trip generation. However, with the TDM measures, the Project would only add zero trips (AM) and two trips (PM) to this intersection. This is a de minimis increase in traffic. Therefore, the project would not result in a significant impact at this intersection. The H2A project could have a beneficial (mitigative) effect at this intersection. The project would not be responsible for any improvements at this intersection.

9.2.2 Pedestrian Circulation

Pedestrian activity is not anticipated to increase significantly under Cumulative Plus Project conditions as compared to Cumulative Without Project conditions. Therefore, the Project would not represent a significant impact to pedestrian circulation under Cumulative Plus Project conditions.

9.2.3 Bicycle Circulation

Bicycle activity is not anticipated to increase significantly under Cumulative Plus Project conditions as compared to Cumulative Without Project conditions. Therefore, the Project would not represent a significant impact to bicycle circulation under Cumulative Plus Project conditions.

9.2.4 Transit Circulation

Transit demand from the Project is not anticipated to increase significantly under Cumulative Plus Project conditions. As such, the Project would not represent a significant cumulative impact to transit circulation.

10 CUMULATIVE PLUS PROJECT CONDITIONS – APARTMENTS

This section describes the analysis results under Cumulative Plus Project traffic conditions, which combines the Cumulative Without Project volumes with trips from the Project Alternative 2.

10.1 Derivation of Cumulative Plus Project Condition Traffic Volumes – Apartments

The Project trip assignment for the apartments (**Exhibit 10**) was added to the Cumulative Without Project volumes (**Exhibit 15**) to create the Cumulative Plus Project – Apartments traffic volumes depicted on **Exhibit 17.**

Note: The Rossi Street Extension is not anticipated to modify the project trip assignment.

10.2 Cumulative Plus Project Traffic Conditions – Apartments

10.2.1 Intersection Operations

Cumulative Plus Project – Apartments intersection levels of service are summarized in **Exhibit 4A**. Recommended intersection improvements are summarized in **Exhibit 4B**. The LOS calculation sheets for Cumulative Plus Project – Apartments traffic conditions can be found in **Appendix O**.

Most of the study intersections would operate at or better than their respective level of service standards under Cumulative Plus Project – Apartments conditions. However, the following nine intersections would operate below their standards. These are the same as Cumulative Plus Project with the addition of Intersection 4 – North Davis Road / Called del Adobe – West Laurel Drive.

1. Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive – LOS E (PM)
2. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe – Side-Street LOS F (PM).
3. Intersection 7 – North Davis Road / West Rossi Street – LOS E (AM) and LOS F (PM)
4. Intersection 8 – North Main Street (State Route 183) / Rossi Street – LOS E (AM and PM).
5. Intersection 9 – Davis Road Southbound Ramps – Market Circle / West Market Street (State Route 183) – LOS D (PM).
6. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183) – LOS E (PM)
7. Intersection 11 – Davis Road / Blanco Road – LOS F (AM and PM).
8. Intersection 12 – North Main Street / Alvin Drive – LOS E (PM).
9. Intersection 13 – North Main Street / Laurel Drive – LOS F (PM).

Below is a discussion of the recommended improvements at the study intersections operating under deficient operations that would be needed to improve operations to acceptable or better level of service.

1. Intersection 4 – North Davis Road / Calle Del Adobe – West Laurel Drive:

   The level of service under PM conditions would be LOS E, compared to LOS D without the Project due to an increase in delay of 1.6 seconds. LOS E is an unacceptable level of service. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

   - Recommendation: Implement the following:
     1. Optimize the current intersection signal timing.
   - Operations after Implementation of Improvement: LOS C (AM) and LOS D (PM).
   - Responsibility for Improvement: The City of Salinas would be responsible for implementation of this improvement, as part of its typical signal operations management.

2. Intersection 5 – Post Drive – El Rancho Way / Calle Del Adobe:

   The side-street levels of service under AM conditions would be LOS F, compared to LOS F without the Project. The project would not add any traffic to this intersection. Per the significance criteria in Section 1.6, the Project would not result in a significant impact at this intersection. The project would not be responsible for any improvements at this intersection.

3. Intersection 7 – North Davis Road / West Rossi Street:

   The level of service under would be LOS E (AM) and LOS F (PM), compared to LOS D (AM) and LOS F (PM) without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

   - Recommendation: Implement the following, which are the same improvements as previously recommended under Cumulative Plus Project – Ag Housing conditions:
     1. Add a second eastbound left turn lane on West Rossi Street
     2. Add an eastbound right turn lane on West Rossi Street
     3. Add a southbound right turn lane on North Davis Road
     4. Add a northbound right turn overlap signal phase on North Davis Road.
   - Operations after Implementation of Improvement: LOS C (AM) and LOS D (PM).
   - Responsibility for Improvement: The City of Salinas would be responsible for implementation of these improvements, in conjunction with the West Rossi Street extension to Boronda Road. The project would be responsible for preserving the necessary right-of-way for these improvements where implementation would occur on the project site or project frontage.

4. Intersection 8 – North Main Street (State Route 183) / Rossi Street:

   The level of service under AM and PM conditions would be LOS E, compared to LOS E (AM) and LOS D (PM) without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement the following:
  1. Add a third northbound and third southbound through lane on North Main Street. This improvement is Salinas TFO Improvement 31. This is the same improvement as previously recommended under Existing Plus Project – Apartment conditions.
- Operations after Implementation of Improvement: LOS D (AM and PM).
- Responsibility for Improvement: Payment of Salinas TFO would constitute the project's responsibility towards improvement.

8. Intersection 9 – Davis Road Southbound Ramps – Market Circle / West Market Street (State Route 183):

   The level of service under PM conditions would be LOS D, compared to LOS D without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement the following:
  1. Optimize the current intersection signal timing. This is the same improvement as previously recommended under Cumulative Plus Project – Ag Housing conditions.
- Operations after Implementation of Improvement: LOS B (AM) and LOS C (PM).
- Responsibility for Improvement: The City of Salinas would be responsible for implementation of this improvement, as part of its typical signal operations management.

5. Intersection 10 – Davis Road Northbound Ramps – Private Driveway / West Market Street (State Route 183):

   The level of service under PM conditions would be LOS E, compared to LOS E without the Project. The Project would add 1.9 seconds of delay. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement the following:
  1. Add an eastbound right turn lane on West Market Street. This is the same improvement as previously recommended under Existing Plus Project – Apartment conditions.
- Operations after Implementation of Improvement: LOS B (AM) and LOS C (PM).
- Responsibility for Improvement: The Project should implement this improvement.

6. Intersection 11 – Davis Road / Blanco Road:

   The level of service under AM and PM conditions would be LOS F, compared to LOS F without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

- Recommendation: Implement the following, all of which are part of Salinas TFO Improvement 73 and are the same improvements as previously recommended under Cumulative Plus Project – Ag Housing conditions.:

1. Add a second northbound left turn lane and a northbound right turn lane on Davis Road
2. Add a second southbound through lane on Davis Road
3. Add an eastbound right turn lane on Blanco Road
4. Add a second westbound left turn lane on Blanco Road

- Operations after Implementation of Improvement: LOS E (AM) and LOS F (PM).
- Responsibility for Improvement: Payment of Salinas TFO would constitute project's responsibility towards improvement.

7. Intersection 12 – North Main Street / Alvin Drive:

   The level of service under PM conditions would be LOS E, compared to LOS E without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

   - Recommendation: Implement the following:
     1. Optimize the current intersection signal timing. This is the same improvement as previously recommended under Cumulative Plus Project – Ag Housing conditions.
   - Operations after Implementation of Improvement: LOS D (AM and PM).
   - Responsibility for Improvement: The City of Salinas would be responsible for implementation of this improvement, as part of its typical maintenance schedule for signal operations.

8. Intersection 13 – North Main Street / Laurel Drive:

   The level of service under PM conditions would be LOS F, compared to LOS F without the Project. Per the significance criteria in Section 1.6, the Project would result in a significant impact at this intersection.

   - Recommendation: Implement the following:
     1. Optimize the current intersection signal timing. This is the same improvement as previously recommended under Cumulative Plus Project – Ag Housing conditions.
   - Operations after Implementation of Improvement: LOS D (AM) and LOS F (PM). LOS F would continue to be a deficient condition. Cumulative impacts with and without the Project will be significant and unavoidable.
   - Responsibility for Improvement: The City of Salinas would be responsible for implementation of this improvement, as part of its typical maintenance schedule for signal operations.

10.2.2 Pedestrian Circulation

Pedestrian activity is not anticipated to increase significantly under Cumulative Plus Project conditions as compared to Cumulative Without Project conditions. Therefore, the Project would not represent a significant impact to pedestrian circulation under Cumulative Plus Project conditions.

10.2.3 Bicycle Circulation

Bicycle activity is not anticipated to increase significantly under Cumulative Plus Project conditions as compared to Cumulative Without Project conditions. Therefore, the Project would not represent a significant impact to bicycle circulation under Cumulative Plus Project conditions.

10.2.4 Transit Circulation

Transit demand from the Project is not anticipated to increase significantly under Cumulative Plus Project conditions. As such, the Project would not represent a significant cumulative impact to transit circulation.

11 SITE ACCESS AND INTERNAL CIRCULATION

This section summarizes the site access and internal circulation analysis, including Project driveway operations, based on the site plan included as **Exhibit 2**.

11.1 Vehicle Circulation

The onsite parking areas have direct access to the West Rossi Street extension. All project site traffic would travel on the Rossi Street Extension, which is the future west leg of the North Davis Road / West Rossi Street intersection. This intersection will operate acceptably through Background Plus Project conditions with the improvements previously described in Section 3.3 of this report. It will continue to operate acceptably through Cumulative Plus Project conditions with the following lane configuration..

1. NB Davis: 2 lefts, 2 throughs, 1 right with a right turn overlap
2. SB Davis: 1 left, 2 throughs, 1 right
3. EB Rossi: 2 lefts, 1 through, 1 right
4. WB Rossi: 2 lefts, 1 through, 1 right

The project driveways on the West Rossi Street extension will all operate acceptably through Background Plus Project conditions. This is primarily due to the low cross traffic on West Rossi Street without the full westward extension of this roadway to Boronda Road.

Under Cumulative Plus Project conditions, the two eastbound Rossi Street left turns at Davis Road will each require approximately 425 feet of storage length. The westbound left turn lane into the driveway serving the south half of the project should be a minimum of 100 feet in length. There will also b a 90-foot bay taper in the median between the eastbound left turn lane at Davis Road and the westbound left turn lane serving the project driveway. A total clear distance of about 615 feet should therefore be provided between the project driveway and Davis Road.

Driveways between the westerly main driveways should ultimately be limited to right turns in and out.

The bus loading area should accommodate bus geometrics, such as wide bus turning movements, and have a pavement section that can accommodate regular bus travel.

11.2 Pedestrian Circulation

A meandering trail is proposed along the North Davis Road frontage of the project site. This trail would be located within a 50-foot setback of the street. It would also connect to the existing sidewalk on North Davis Road north of the project site. This trail will provide good connectivity for pedestrians between the project site and the surrounding area. It is assumed that driveways will be provided within the Project and along Rossi Street to connect with the trail along the west side of North Davis Road.

11.3 Bicycle Circulation

It is recommended that on-site bicycle racks or other storage facilities be provided, per City of Salinas standards.

12 VEHICLE MILES TRAVELED

This section summarizes the calculation of the total vehicle miles traveled by Project traffic.

Vehicle Miles Traveled (VMT) represents the total number of miles traveled per weekday by all vehicles while traveling to and from a Project site. VMT has been quantified for both project alternatives.

12.1 Ag Housing VMT

Exhibit 18A summarizes the total Vehicle Miles Traveled (VMT) for the ag employee housing project alternative. This alternative would house up to 1,200 workers. These are to be comprised of H-2A Visa farmworkers. They will be transported to and from a variety of agricultural fields throughout the Salinas Valley by buses and vanpools. The buses will have a seating capacity of 32 people per bus and the vans will have a seating capacity of 15 people per van. This would result in approximately 33 round-trip bus trips and 8 round-trip van trips, or 82 trips per day when shuttling employees to and from the fields. Assuming an average of 15 miles each way, a total of about 1,230 vehicle-miles-travelled (VMT) will be generated per day.

The buses would be stored at a location 6 miles away from the project site, adding an additional 66 daily trips to and from the site. The vans would be stored on the project site and would not generate additional trips beyond employee transportation. The buses will generate an estimated 400 VMT per day between the storage yard and project site. The total VMT for the ag employee housing project alternative will be about 1,630 miles per day.

By comparison, if these workers traveled by car to and from home and the work location, they would generate a much higher VMT. Assuming two persons per vehicle, 600 cars must travel between home and work, which is a total of 18,000 VMT each day.

The agricultural season, as estimated by the project applicant, spans about eight-and-a-half months, with a six-day work week, or roughly 200 days. The proposed project will annually generate about 326,000 VMT per year compared to 3,600,000 VMT per year if the employees drove themselves. The proposed project will save 3,274,000 VMT annually, with corresponding reductions in congestion, emissions and fuel consumption. There will also be reduced congestion and a lower risk exposure for vehicle collisions.

12.2 Apartment VMT

Exhibit 18B summarizes the total Vehicle Miles Traveled (VMT) for the apartment project alternative. The VMT was calculated using the project trip generation and project trip distribution, as well as the approximate distances between the project site and the destinations of the residents traveling to and from the project site. These distances and the percentage of project trips traveling to/from those locations are also shown on **Exhibit 18B**.

Per the publication *Technical Advisory on Evaluating Transportation Impacts in CEQA,* State of California Governor's Office of Planning and Research, December 2018, VMT for apartments is measured in VMT per resident. The project would have an estimated VMT of 16.5 miles per resident. The project average trip length would be approximately 8.4 miles, slightly lower than

the regional average of 8.9 miles, per 2017 California Emissions Estimator Model (CalEEMod) data. Quantification of the regional average trip length can be found in **Appendix P**.

13 SUMMARY OF PROJECT RESPONSIBILITIES

The following is a summary of the Project responsibilities regarding traffic issues and impacts, based upon the recommendations discussed earlier in this report.

It is important to note that the H2A project will reduce trips by replacing existing private automobile trips with bus trips at a much higher vehicle occupancy. The H2A project will also operate only 8 and a half months per year. It will have virtually no impacts during winter months. The analysis does not give credit for these unique project characteristics. The analysis assumes much more conservative Project peak hour trip generation rates identical to the recently constructed Casa Boronda H2A project. The work schedule anticipated by Project representatives would result in almost no project trips generated during street peak hours. Even with the conservative assumptions the H2A project alternative would result in de minimus impacts.

The potential future conversion of the Project to standard apartments is assumed to result in standard apartment trip generation rates. Travel demand management strategies cannot be implemented for this Project alternative.

1. Pay the TAMC Regional Development Impact Fee and the City of Salinas Traffic Fee Ordinance fee. Monterey County and City of Salinas staff will quantify the applicable fees to the Project at the time of development. The fees applicable to each project alternative will vary; hence, conversion of ag employee housing to apartments will require payment of additional fees.
2. Pay the County of Monterey Traffic Impact Fee, if adopted prior to approval of the Project by Monterey County. Monterey County staff will quantify the applicable fee to the Project at the time of development. The Project will not be responsible for the payment of a fee if one is not in place at the time of Project approval.
3. Implement the following at the North Davis Road / Rossi Street intersection for both project alternatives. These are required to add the west leg of Rossi Street.
    i. Modify the existing northbound Davis Road median to provide a northbound left turn lane.
    ii. Modify the east leg of Rossi Street to provide a westbound through lane.
    iii. Add west leg as a part of the Rossi Street extension that will include one eastbound left turn lane and a through/right lane.
    iv. Modify the existing traffic signal.
    v. Preserve right-of-way on project site and project frontage for future improvements at the North Davis Road / West Rossi Street intersection to be made by the City of Salinas as part of the West Rossi Street extension to Blanco Road. These include the following.
        1. NB Davis: 2 lefts, 2 throughs, 1 right with a right turn overlap
        2. SB Davis: 1 left, 2 throughs, 1 right
        3. EB Rossi: 2 lefts, 1 through, 1 right
        4. WB Rossi: 2 lefts, 1 through, 1 right

4. Implement the following improvements with the conversion of the project site to standard apartments. These are not required for the H2A project alternative.
    a. Add an eastbound right turn lane on West Market Street (State Route 183) at the Davis Road northbound ramps.
    b. Implement the following for the North Davis Road / Calle Del Adobe – West Laurel Drive intersection:
        i. Pay the Salinas TFO AND optimize the signal timing at this intersection. Payment of the TFO constitutes the project's contribution towards the construction of the Western Bypass (TFO Project 26).
    c. Implement the following for the North Davis Road / Post Drive – Commercial Driveway intersection:
        i. Pay the Salinas TFO, which constitutes the project's contribution towards the construction of the Western Bypass.

5. The bus loading area should accommodate bus geometrics, such as wide bus turning movements, and have a pavement section that can accommodate regular bus travel.
6. Provide sidewalks or walkways on the project site that connect the project buildings to West Rossi Street, the proposed trail that will extend from the existing sidewalk near Boronda Meadows Elementary School along the entire project frontage.
7. The site plan does not indicate locations for bicycle racks or other storage facilities. It is recommended that these facilities be provided, per City of Salinas standards.

14 REFERENCES

14.1 List of References

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2. *2000 Highway Capacity Manual,* Transportation Research Board, 2000.
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5. *Guide for the Preparation of Traffic Impact Studies, California Department of Transportation (Caltrans), December 2002.*
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7. *The Regional Impact Fee Program Nexus Study Update 2018,* Wood Rodgers, October 2018.
8. *The City of Salinas Traffic Improvement Program – 2010 Update*, Wood Rodgers, March 2010
9. *Casa Boronda Agricultural Employee Housing Project,* Keith Higgins Traffic Engineer, July 3, 2017.
10. *Highway Design Manual,* 6th Edition, California Department of Transportation (Caltrans), November 20, 2017.
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14. *California Manual on Uniform Traffic Control Devices,* California Department of Transportation (Caltrans), April 2017.
15. *Rodeo Property Traffic Impact Analysis,* Mott MacDonald, June 12, 2019.
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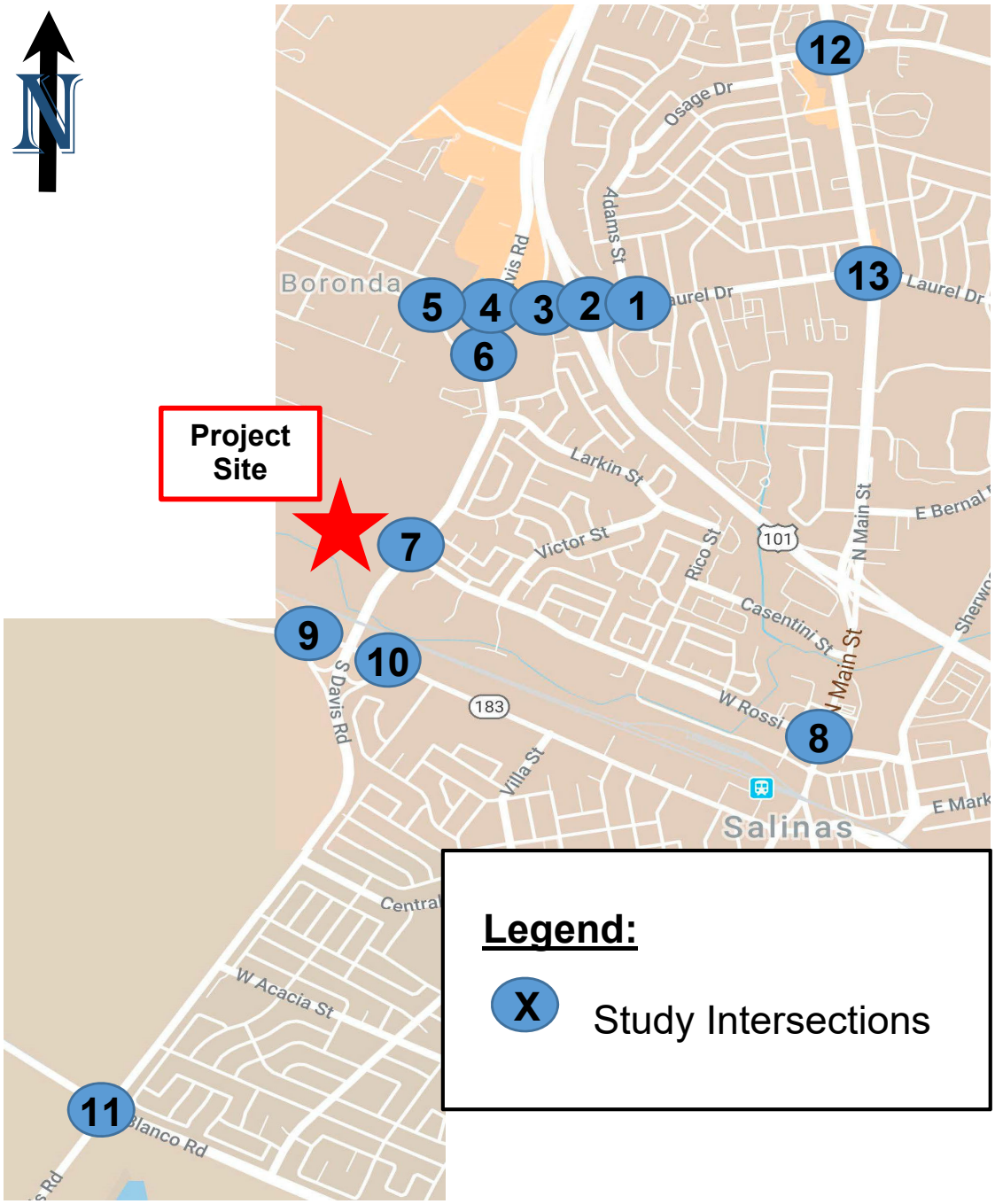
19. Google Maps, http://www.google.com/maps. Accessed October 18, 2019.

20. *Technical Advisory on Evaluating Transportation Impacts in CEQA,* State of California Governor's Office of Planning and Research, December 2018

14.2 List of Contacts

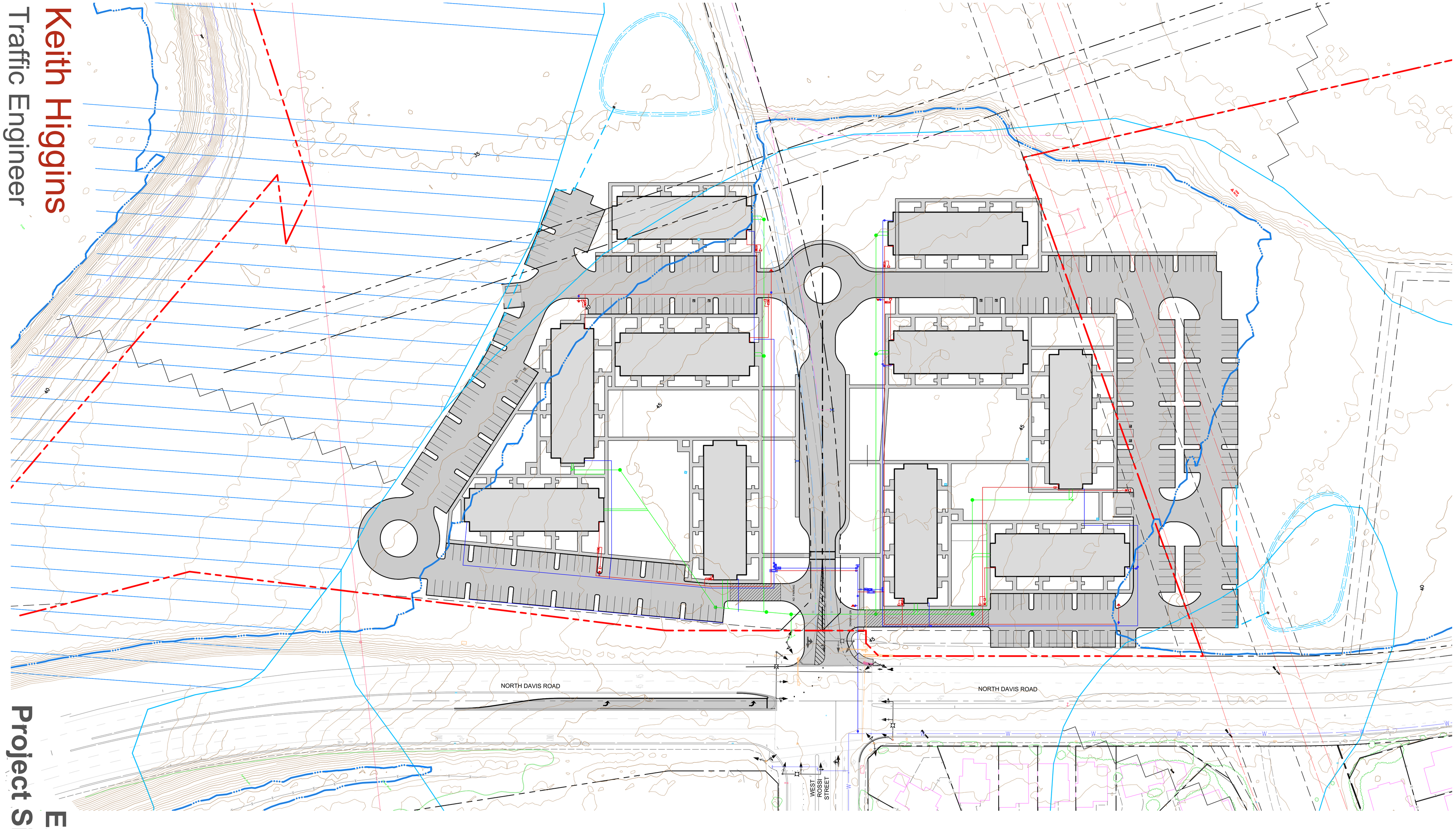
1. Vic Montgomery and Tim Walters, RRM Design Group, San Luis Obispo, California.
2. Andrew Easterling, City of Salinas Traffic Engineer, Salinas, California.



Basemap Source: Google Maps, 2019.

Keith Higgins
Traffic Engineer

Exhibit 1
Project Location Map
and Study Area



Keith Higgins
Traffic Engineer

Exhibit 2
Project Site Plan

CIVIL SITE PLAN

HARVEST MOON AGRICULTURAL EMPLOYEE HOUSING PROJECT

SALINAS, CALIFORNIA

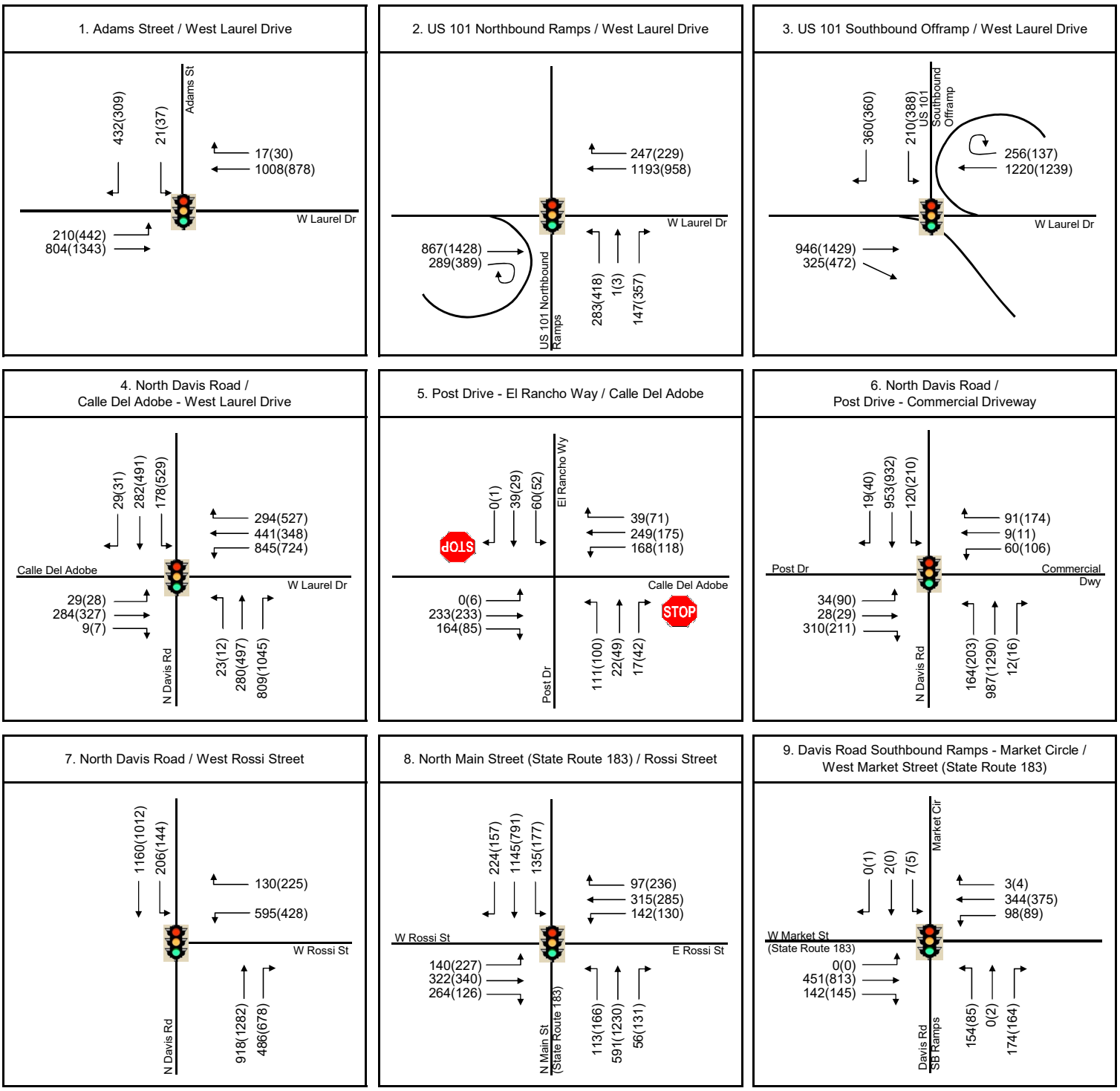
50 0 50 100 150 Feet
SCALE: 1" = 50'

2 / 2 4 / 2 0
Project No.:3970.00

Whitson ENGINEERS

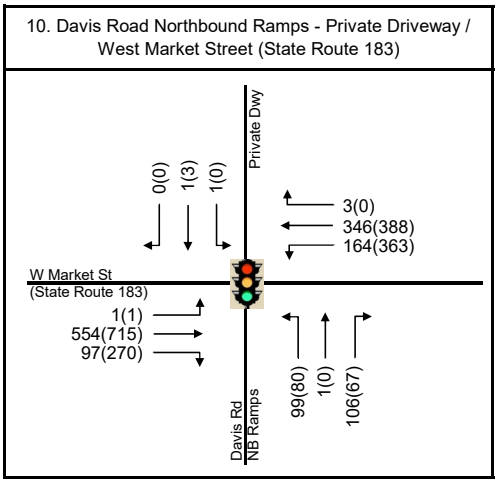
Civil Engineering
Land Surveying
6 Harris Court
Monterey, California
831.649.5225
whitsonengineers.com

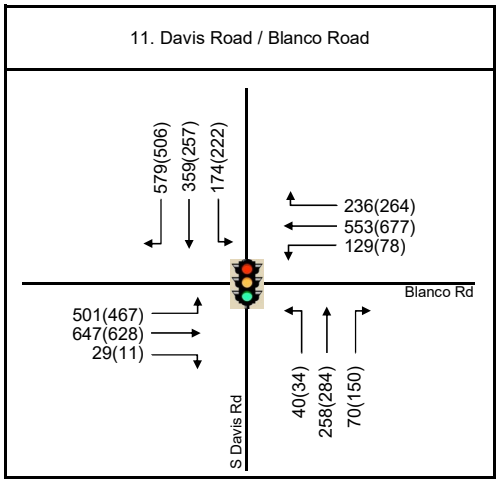
Sheet 1 of 1

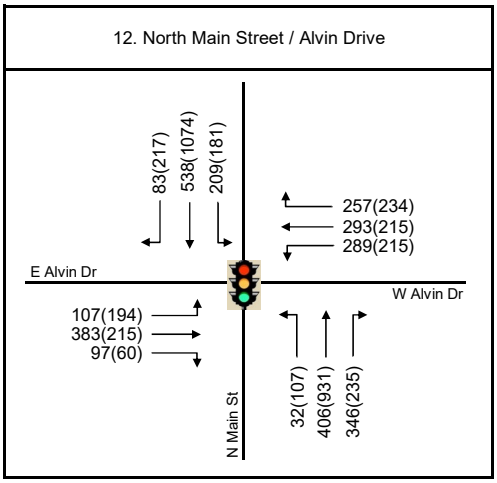


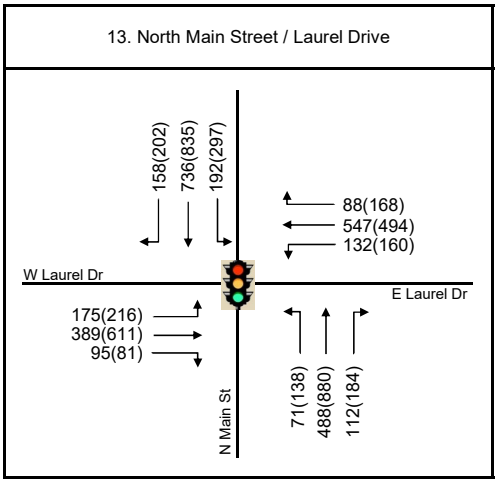
Keith Higgins
Traffic Engineer

Exhibit 3
Existing Conditions
AM & PM Peak Hour Volumes
(Page 1 of 2)









Keith Higgins
Traffic Engineer

Exhibit 3
Existing Conditions
AM & PM Peak Hour Volumes
(Page 2 of 2)

	N-S Street	E-W Street	Jurisdiction	Existing Lane Configuration	Existing Intersection Control	LOS Standard	Peak Hour	Existing Conditions		Existing Plus Project (Ag) Conditions		Existing Plus Project (Apt) Conditions		Background Conditions		Background Plus Project (Ag) Conditions		Background Plus Project (Apt) Conditions		Cumulative Without Project Conditions		Cumulative Plus Project (Ag) Conditions		Cumulative Plus Project (Apt) Conditions	
								Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Adams Street	W Laurel Drive	City of Salinas	SB 1-L, 1-R EB 1-L, 2-T WB 1-T, 1-T/R	Signal	D	AM	16.6	B	16.6	B	16.7	B	22.6	C	22.7	C	22.9	C	47.7	D	47.7	D	47.7	D
							PM	15.2	B	15.4	B	15.5	B	22.0	C	22.3	C	22.5	C	21.3	C	21.6	C	21.8	C
2	US 101 Northbound Ramps	W Laurel Drive	Caltrans	NB 1-L, 1-L/T, 1-R EB 2-T WB 1-T, 1-T/R	Signal	C-D	AM	13.9	B	13.9	B	14.0	B	18.0	B	17.9	B	18.0	B	28.4	C	28.4	C	28.6	C
							PM	17.9	B	18.0	B	18.1	B	22.1	C	22.3	C	22.5	C	20.6	C	20.7	C	20.9	C
3	US 101 Southbound Offramp	W Laurel Drive	Caltrans	SB 2-L, 1-R EB 2-T WB 2-T	Signal	C-D	AM	10.1	B	10.1	B	10.2	B	12.9	A	13.0	B	13.2	B	14.9	B	14.9	B	15.6	B
							PM	10.9	B	11.1	B	11.3	B	14.2	B	14.6	B	14.9	B	15.0	B	15.4	B	15.7	B
4	N Davis Road	Calle Del Adobe - W Laurel Drive	City of Salinas	NB 1-L, 2-T, 2-R SB 2-L, 1-T, 1-T/R EB 1-L, 1-T, 1-T/R WB 2-L, 2-T, 1-R	Signal	D	AM	25.0	C	25.0	C	25.1	C	28.3	C	28.3	C	28.6	C	26.6	C	26.6	C	26.8	C
							PM	39.7	D	40.8	D	42.0	D	54.4	D	56.1	E	58.2	E	53.6	D	54.2	D	55.2	E
					With TDM Measures		*AM*									*28.3*	*C*								
							PM									*54.6*	*D*								
					With Improvement		*AM*											*25.3*	*C*					*26.8*	*C*
							PM											*44.5*	*D*					*53.4*	*D*
5	Post Drive - El Rancho Way	Calle Del Adobe	Monterey County	NB 1-L, 1-T/R SB 1-L/T, 1-R EB 1-L, 1-T, 1-R WB 1-L, 1-T, 1-R	Two-Way Stop	E/E	AM	77.1/74.7	F/F	77.1/74.7	F/F	77.1/74.7	F/F	176.5/148.6	F/F	176.5/148.6	F/F	176.5/148.6	F/F	28.8/46.7	D/E	28.8/46.7	D/E	28.8/46.7	D/E
							PM	21.9/26.5	C/D	21.9/26.5	C/D	21.9/26.5	C/D	27.5/34.5	D/D	27.5/34.5	D/D	27.5/34.5	D/D	34.7/72.0	D/F	34.7/72.0	D/F	34.7/72.0	D/F
					With Improvement		*AM*																		
							PM																		
6	N Davis Road	Post Drive - Commercial Driveway	City of Salinas	NB 1-L, 2-T, 1-T/R SB 1-L, 2-T, 1-R EB 1-L, 1-L/T, 1-R WB 1-L/T, 1-R		D	AM	43.4	D	43.4	D	43.7	D	56.0	E	56.1	E	56.7	E	47.3	D	47.4	D	47.5	D
							PM	44.3	D	44.9	D	45.6	D	61.2	E	62.9	E	65.1	E	37.6	D	37.9	D	38.2	D
					With TDM Measures		*AM*									*56.0*	*E*								
							PM									*61.4*	*E*								
					With Improvement		*AM*											*29.9*	*C*						
							PM											*28.8*	*C*						
7	N Davis Road	W Rossi Street	City of Salinas	NB 2-T, 1-R SB 1-L, 2-T WB 2-L, 1-R	Signal	D	AM	17.7	B	29.8	C	30.7	C	22.9	C	37.2	D	38.0	D	52.2	D	52.8	D	59.0	E
							PM	22.9	C	35.3	D	35.4	D	34.9	C	51.7	D	51.9	D	88.8	F	94.7	F	95.7	F
					With TDM Measures		*AM*															*52.3*	*D*		
							PM															*89.2*	*F*		
					With Improvement		*AM*															*30.6*	*C*	*32.3*	*C*
							PM															*38.2*	*D*	*40.2*	*D*
8	N Main Street (State Route 183)	Rossi Street	Caltrans	NB 1-L, 2-T, 1-R SB 1-L, 2-T, 1-R EB 2-L, 1-T, 1-R WB 1-L, 1-T, 1-R	Signal	C-D	AM	44.0	D	44.0	D	44.9	D	58.9	E	59.0	E	60.1	E	66.0	E	66.1	E	67.4	E
							PM	41.7	D	41.8	D	42.1	D	54.8	D	55.1	E	55.3	E	70.3	E	71.3	E	71.6	E
					With TDM Measures		*AM*			*44.0*	*D*					*58.9*	*E*					*66.0*	*E*		
							PM			*41.8*	*D*					*54.9*	*D*					*70.5*	*E*		
					With Improvement		*AM*					*32.4*	*C*					*38.9*	*D*					*41.6*	*D*
							PM					*34.0*	*C*					*41.8*	*D*					*42.4*	*D*
9	Davis Road Southbound Ramps - Market Circle	W Market Street (State Route 183)	Caltrans	NB 1-L/T, 1-R SB 1-L/T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	C-D	AM	17.1	B	17.2	B	17.2	B	18.8	B	18.8	B	18.8	B	22.4	C	22.4	C	22.4	C
							PM	20.9	C	21.0	C	21.1	C	25.1	C	25.3	C	25.4	C	35.2	D	35.9	D	36.0	D
					With TDM Measures		*AM*															*22.4*	*C*		
							PM															*35.3*	*D*		
					With Improvement		*AM*																	*19.5*	*B*
							PM																	*23.3*	*C*

Keith Higgins
Traffic Engineer

Exhibit 4A
Intersection
Levels of Service
(Page 1 of 2)

	N-S Street	E-W Street	Jurisdiction	Existing Lane Configuration	Existing Intersection Control	LOS Standard	Peak Hour	Existing Conditions		Existing Plus Project (Ag) Conditions		Existing Plus Project (Apts) Conditions		Background Conditions		Background Plus Project (Ag) Conditions		Background Plus Project (Apts) Conditions		Cumulative Without Project Conditions		Cumulative Plus Project (Ag) Conditions		Cumulative Plus Project (Apts) Conditions	
								Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
10	Davis Road Northbound Ramps - Private Driveway	W Market Street (State Route 183)	Caltrans	NB 1-L/T, 1-R SB 1-L/T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	C-D	AM	20.6	C	20.7	C	20.8	C	23.3	C	23.4	C	23.4	C	25.5	C	25.5	C	25.8	C
							PM	37.6	D	38.4	D	38.5	D	53.5	D	54.7	D	54.9	D	61.6	E	63.3	E	63.5	E
					With TDM Measures		*AM*			*20.7*	*C*					*23.4*	*C*					*25.5*	*C*		
							PM			*37.7*	*D*					*53.6*	*D*					*61.8*	*E*		
					With Improvement		*AM*					*17.8*	*B*					*19.0*	*B*					*19.3*	*B*
							PM					*24.7*	*C*					*27.8*	*C*					*26.3*	*C*
11	Davis Road	Blanco Road	Monterey County	NB 1-L, 1-T, 1-T/R SB 1-L, 1-T, 1-R EB 2-L, 1-T, 1-T/R WB 1-L, 2-T, 1-R	Signal	D	AM	32.5	C	32.5	C	33.0	C	37.2	D	37.2	D	37.3	D	357.2	F	357.2	F	356.8	F
							PM	37.8	D	38.5	D	38.6	D	46.7	D	47.8	D	47.9	D	239.8	F	240.1	F	240.2	F
					With TDM Measures		*AM*															*357.2*	*F*		
							PM															*239.8*	*F*		
				WB	*With Improvement*		*AM*																	*73.7*	*E*
							PM																	*111.9*	*F*
12	N Main Street	Alvin Drive	City of Salinas	NB 1-L, 2-T, 1-T/R SB 2-L, 3-T, 1-R EB 1-L, 2-T, 1-R WB 1-L, 1-T, 1-R	Signal	D	AM	35.3	D	35.3	D	35.6	D	43.2	D	43.2	D	43.5	D	35.8	D	35.8	D	36.1	D
							PM	29.1	C	29.2	C	29.2	C	34.7	C	34.8	C	34.8	C	64.3	E	65.0	E	65.0	E
					With TDM Measures		*AM*															*35.8*	*D*		
							PM															*64.4*	*E*		
				WB	*With Improvement*		*AM*																	*35.5*	*D*
							PM																	*39.2*	*D*
13	N Main Street	Laurel Drive	City of Salinas	NB 2-L, 2-T, 1-R SB 2-L, 2-T, 1-T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	D	AM	29.9	C	29.9	C	30.1	C	34.4	C	34.4	C	34.7	C	38.2	D	38.2	D	38.7	D
							PM	37.5	D	37.6	D	37.8	D	45.7	D	45.9	D	46.1	D	259.3	F	259.6	F	260.3	F
					With TDM Measures		*AM*															*38.2*	*D*		
							PM															*259.5*	*F*		
				WB	*With Improvement*		*AM*																	*38.4*	*D*
							PM																	*185.0*	*F*

Notes:

1. L, T, R = Left, Through, Right.
2. NB, SB, EB, WB = Left, Through, Right, Northbound, Southbound, Eastbound, Westbound.
3. Overall Caltrans level of service standard is the transition between LOS C and LOS D, abbreviated as "LOS C-D".
   City of Salinas and Monterey County overall levels of service standard is LOS D. Side-street standard is assumed as LOS E.
4. For signalized intersection analysis, delay is average overall delay in seconds per vehicle (sec/veh). For one- and two-way stop intersections, delays are side-street approach operations, also in seconds per vehicle (sec/veh).
5. Analysis performed using 2010 and 2000 Highway Capacity Manual methodologies.
6. Level of service calculations can be found in **Appendices E, G - H, and J - O.**
7. LOS highlighted in **red** indicates intersection operating below level of service standard.
8. LOS with a thick black border represents a significant impact. Resulting levels of service with recommended improveme recommended improvements noted under "With Improvements". A list of applied improvements can be found on **Exhibit 4B**.
9. Transportation Demand Management (TDM) measures include bussing and vanpools for ag employees.

Keith Higgins
Traffic Engineer

Exhibit 4A
Intersection
Levels of Service
(Page 2 of 2)

	N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project (Ag) Conditions	Existing Plus Project (Apts) Conditions	Background Plus Project (Ag) Conditions	Background Plus Project (Apts) Conditions	Cumulative Plus Project (Ag) Conditions	Cumulative Plus Project (Apts) Conditions
1	Adams Street	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
2	US 101 Northbound Ramps	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
3	US 101 Southbound Offramp	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
4	N Davis Road	Calle Del Adobe - W Laurel Drive	Signal	None Required	None Required	None Required	1. Add 3rd WB L and 3rd Receiving Lane on N Davis Leaving Intersection; OR 2a. Implement Western Bypass (TFO 26) 2b. Optimize Signal Timing	None Required	Optimize Signal Timing
5	Post Drive - El Rancho Way	Calle Del Adobe	Two-Way Stop	None Required	None Required	None Required	None Required	None Required	None Required
6	N Davis Road	Post Drive - Commercial Driveway	Signal	None Required	None Required	None Required	1a. Restripe EB as 1-L, 1-T, 1-R 1b. Convert EB/WB left turn signal phasing to permitted phasing; OR 2. Implement Western Bypass	None Required	None Required
7	N Davis Road	W Rossi Street	Signal	a. Add NB L b. Add WB T c. Add EB with 1-L, 1-T/R	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	a. Add 2nd EB L b. Add EB R c. Add SB R d. Add NB RTO Signal Phase	a. Add 2nd EB L b. Add EB R c. Add SB R d. Add NB RTO Signal Phase
8	N Main Street (State Route 183)	Rossi Street	Signal	None Required	Add 3rd NB T, 3rd SB T (TFO 31)	None Required	Add 3rd NB T, 3rd SB T (TFO 31)	None Required	Add 3rd NB T, 3rd SB T (TFO 31)
9	Davis Road Southbound Ramps	W Market Street (State Route 183)	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing

Exhibit 4B
Recommended
Intersection Improvements
(Page 1 of 2)

Keith Higgins
Traffic Engineer

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	N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project (Ag) Conditions	Existing Plus Project (Apts) Conditions	Background Plus Project (Ag) Conditions	Background Plus Project (Apts) Conditions	Cumulative Plus Project (Ag) Conditions	Cumulative Plus Project (Apts) Conditions
10	Davis Road Northbound Ramps	W Market Street (State Route 183)	Signal	None Required	Add EB R	None Required	Add EB R	None Required	Add EB R
11	S Davis Road	Blanco Road	Siignal	None Required	None Required	None Required	None Required	None Required	a. Add 2nd NB L, NB R b. Add 2nd SB T c. Add EB R d. Add 2nd WB L (TFO 73)
12	N Main Street	Alvin Drive	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing
13	N Main Street	Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing

Notes:

1. L, T, R = Left, Through, Right.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. RTO = Right Turn Overlap Signal Phase

Exhibit 4B
Recommended
Intersection Improvements
(Page 2 of 2)

Quatrrin Agricultural Employee Housing Trip Generation

PROPOSED PROJECT - AGRICULTURAL EMPLOYEE HOUSING

A. Project Trip Rates

REFERENCE USE	EXISTING SIZE	DAILY TRIPS	AM PEAK HOUR PEAK HOUR TRIPS	AM PEAK HOUR % OF ADT	AM PEAK HOUR % IN	AM PEAK HOUR % OUT	PM PEAK HOUR PEAK HOUR TRIPS	PM PEAK HOUR % OF ADT	PM PEAK HOUR % IN	PM PEAK HOUR % OUT
Casa Boronda Ag. Employee Housing Driveway Count[1]	600 beds	N.A.	4		3	1	43		22	21
Trip Rates (per employee):[2]		**0.288**	**0.007**		**75%**	**25%**	**0.072**		**51%**	**49%**

B. Project Trip Generation

PROPOSED USE	PROJECT SIZE	DAILY TRIPS	AM PEAK HOUR PEAK HOUR TRIPS	AM PEAK HOUR % OF ADT	AM PEAK HOUR TRIPS IN	AM PEAK HOUR TRIPS OUT	PM PEAK HOUR PEAK HOUR TRIPS	PM PEAK HOUR % OF ADT	PM PEAK HOUR TRIPS IN	PM PEAK HOUR TRIPS OUT
Agricultural Employee Housing	1,200 beds	346	8	2%	6	2	86	25%	44	42
Raw (Peak Hour) Total (used in analysis):		**346**	**8**		**6**	**2**	**86**		**44**	**42**
Annual Average Total:		**245**	**6**		**4**	**2**	**61**		**31**	**30**
With TDM Work Schedule:[5]		**49**	**1**		**1**	**0**	**12**		**6**	**6**

Notes:
1. AM and PM peak hour traffic at Casa Boronda was collected Tuesday, April 16, 2019. This data can be found in **Appendix C**.
2. Daily trip rate derived by assuming that PM peak rate is 25% of the daily trip rate.
3. Estimated trip generation for Casa Boronda project cited from *Casa Boronda Agricultural Employee Housing Project Traffic Impact Analysis,* Keith Higgins Traffic Engineer, July 3, 2017.
4. Seasonal adjustment reflects that project is open for just 8.5 months of the year (i.e., approximately 71% of a year).
5. Project Traffic Demand Management (TDM) program proposes use of employee buses and vans largely outside of AM and PM peak hours.

ALTERNATIVE PROPOSED PROJECT - APARTMENTS

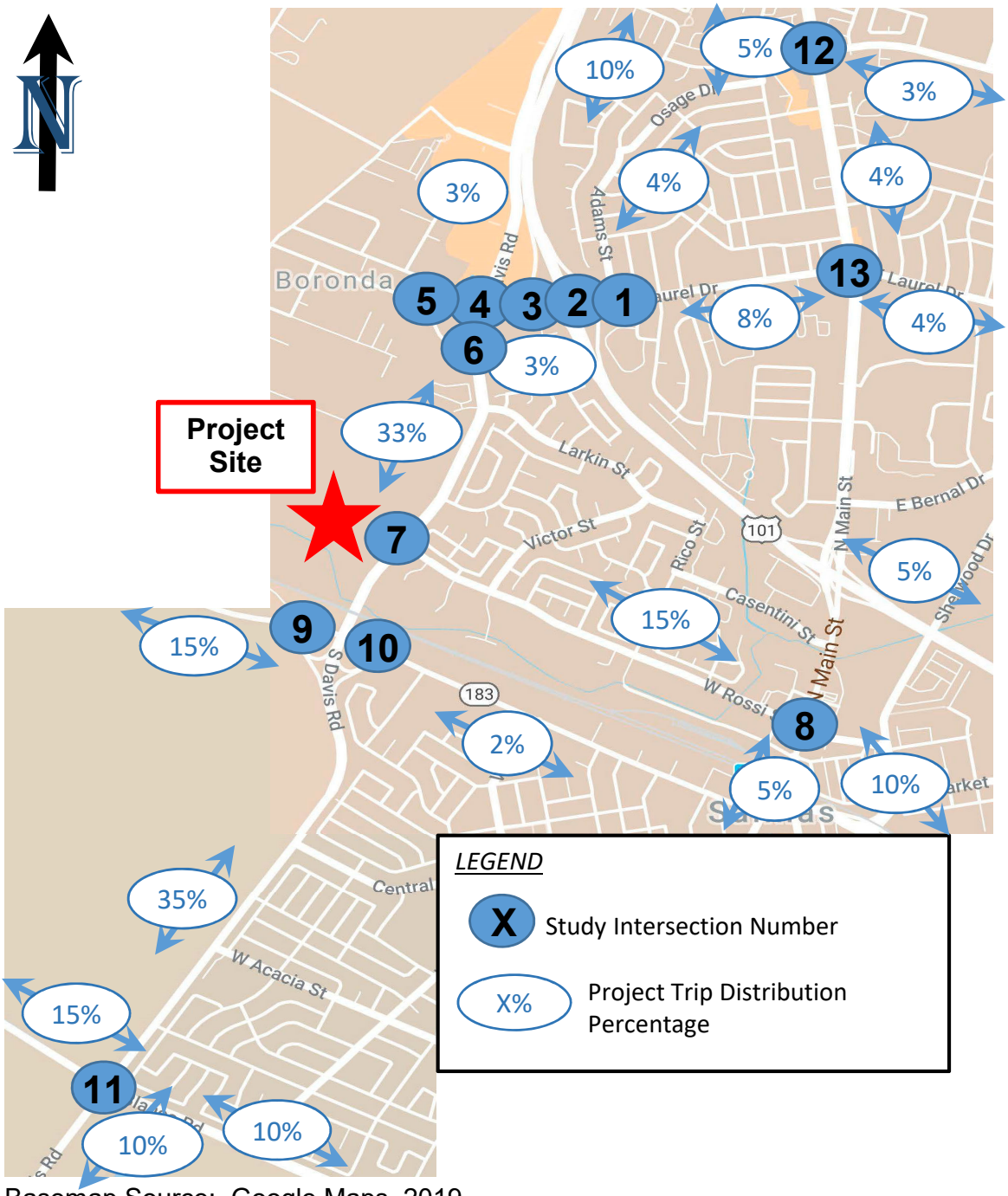
A. Project Trip Rates

TRIP GENERATION RATES	ITE LAND USE CODE	DAILY TRIP RATE	AM PEAK HOUR PEAK HOUR RATE	AM PEAK HOUR % OF ADT	AM PEAK HOUR % IN	AM PEAK HOUR % OUT	PM PEAK HOUR PEAK HOUR RATE	PM PEAK HOUR % OF ADT	PM PEAK HOUR % IN	PM PEAK HOUR % OUT
Multifamily Housing (Low-Rise) (per unit)	220	7.32	0.46	6%	23%	77%	0.56	8%	63%	37%

B. Project Trip Generation

PROPOSED USE	PROJECT SIZE	DAILY TRIPS	AM PEAK HOUR PEAK HOUR TRIPS	AM PEAK HOUR % OF ADT	AM PEAK HOUR TRIPS IN	AM PEAK HOUR TRIPS OUT	PM PEAK HOUR PEAK HOUR TRIPS	PM PEAK HOUR % OF ADT	PM PEAK HOUR TRIPS IN	PM PEAK HOUR TRIPS OUT
Apartments	200 units	1,464	92	6%	21	71	112	8%	71	41
Total:										

Notes:
1. Trip generation rates published by Institute of Transportation Engineers (ITE), *Trip Generation Manual,* 10th Edition, 2017.
2. sq. ft. = square feet



Basemap Source: Google Maps, 2019.

Keith Higgins
Traffic Engineer

Exhibit 6
Project Trip Distribution
(Ag Employee Housing)

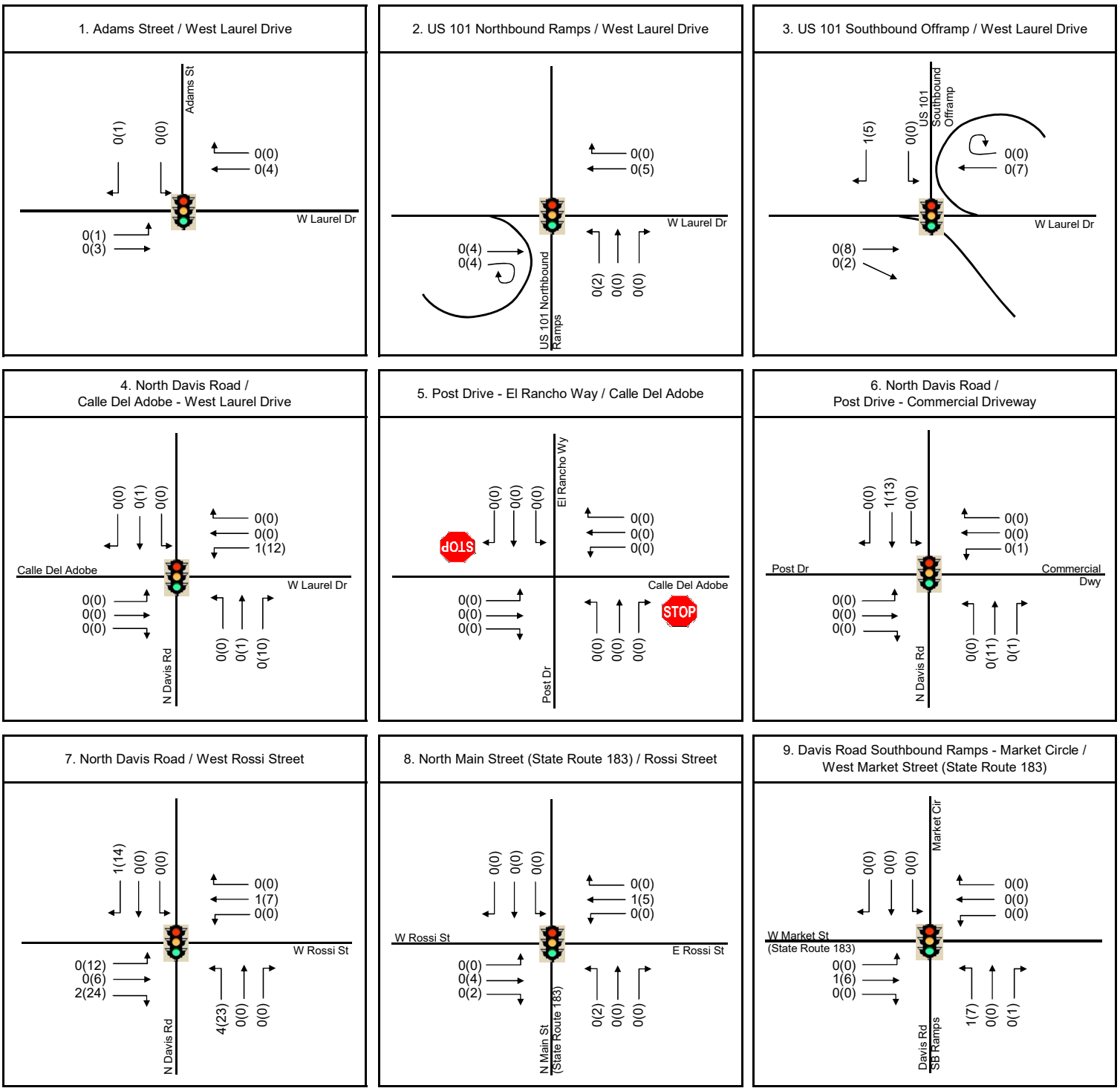
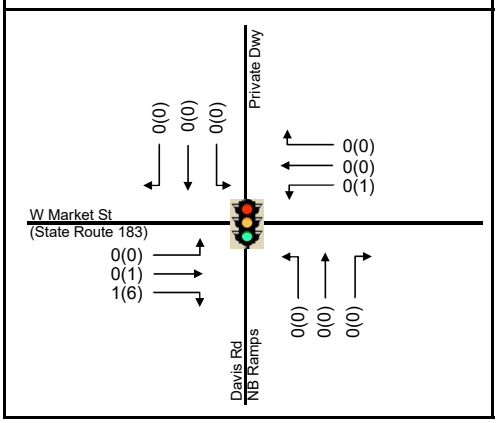


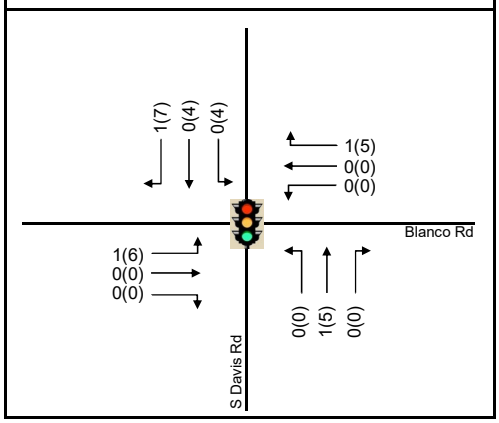
Exhibit 7
Project Trip Assignment
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)

Keith Higgins
Traffic Engineer

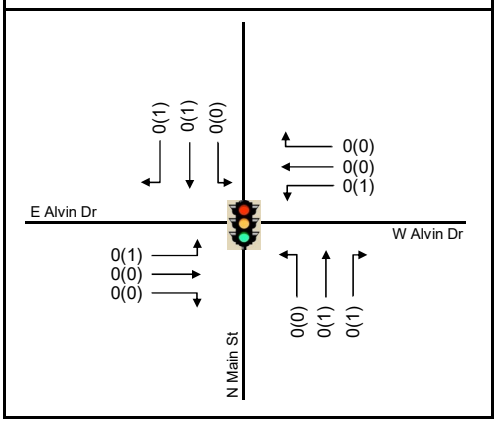
10. Davis Road Northbound Ramps - Private Driveway / West Market Street (State Route 183)



11. Davis Road / Blanco Road



12. North Main Street / Alvin Drive



13. North Main Street / Laurel Drive

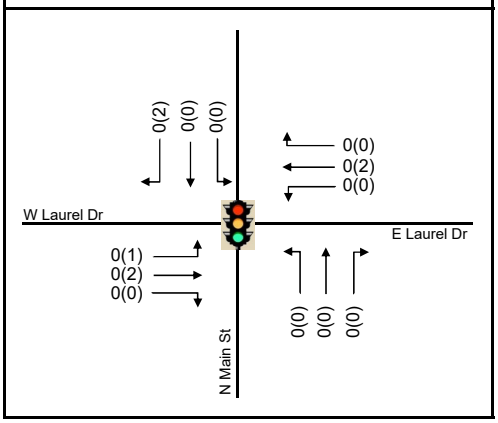


Exhibit 7
Project Trip Assignment
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)

Keith Higgins
Traffic Engineer

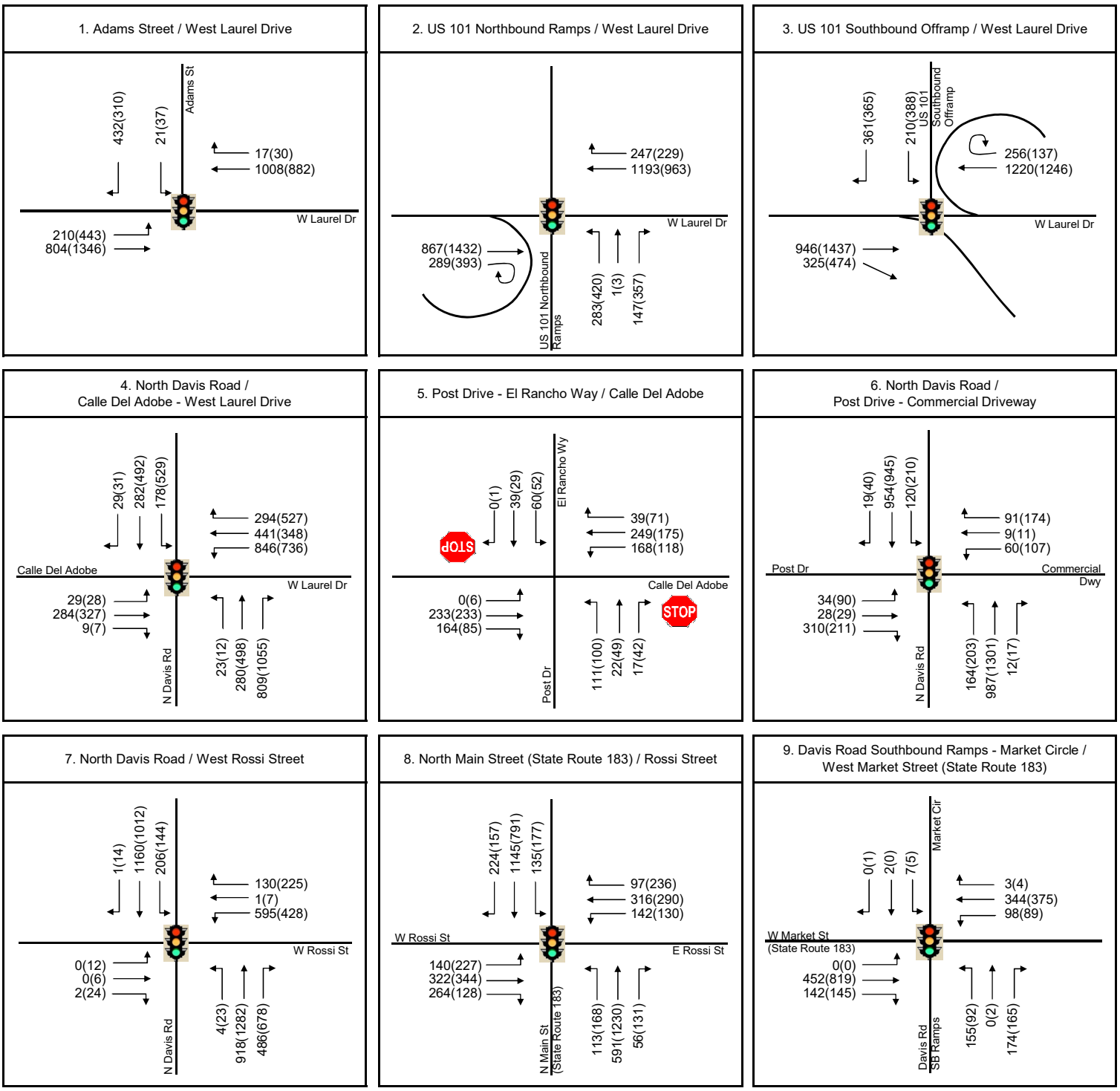
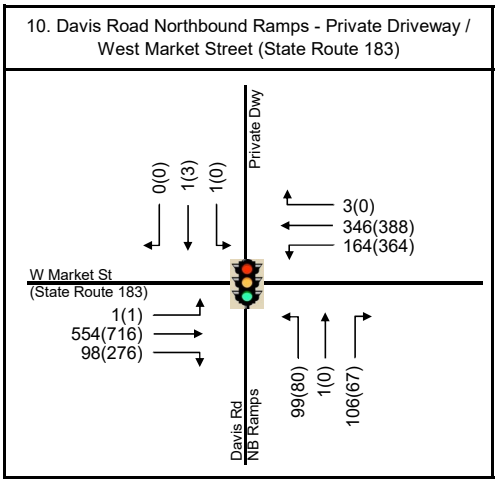
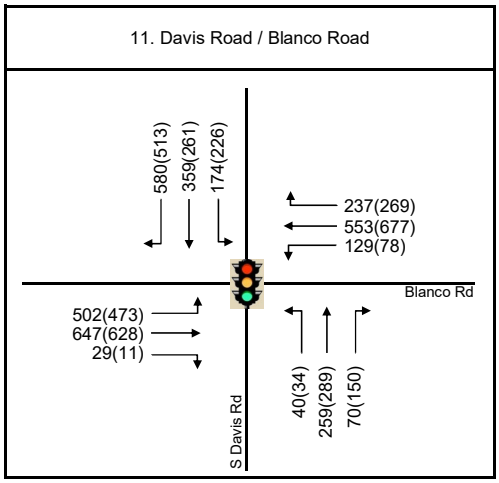
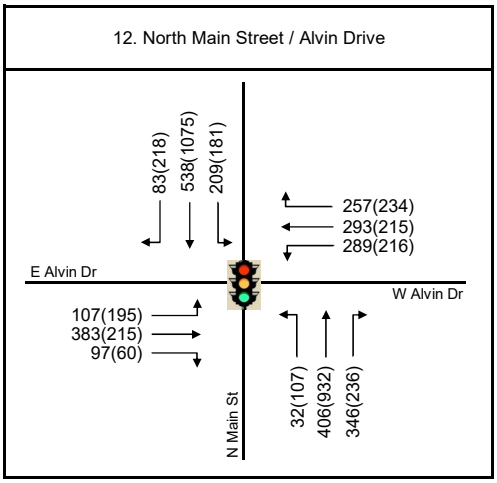


Exhibit 8
Existing Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)

Keith Higgins
Traffic Engineer







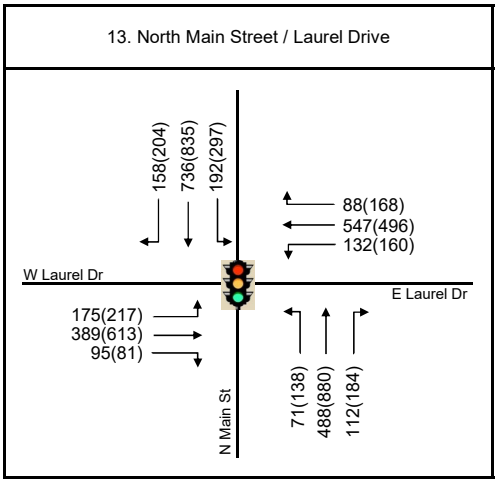
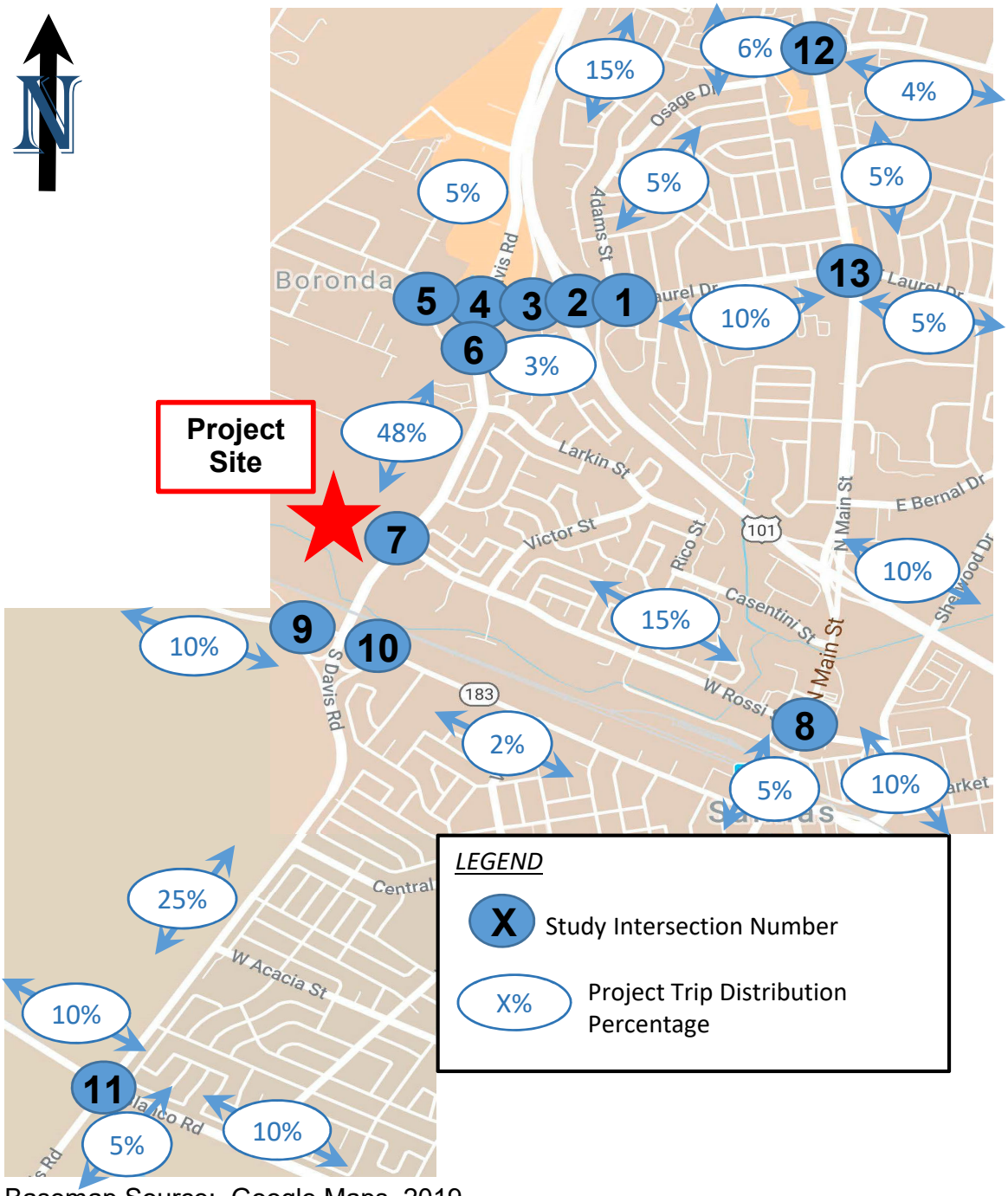


Exhibit 8
Existing Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)

Keith Higgins
Traffic Engineer



Basemap Source: Google Maps, 2019.

Keith Higgins
Traffic Engineer

Exhibit 9
Project Trip Distribution
(Apartments)

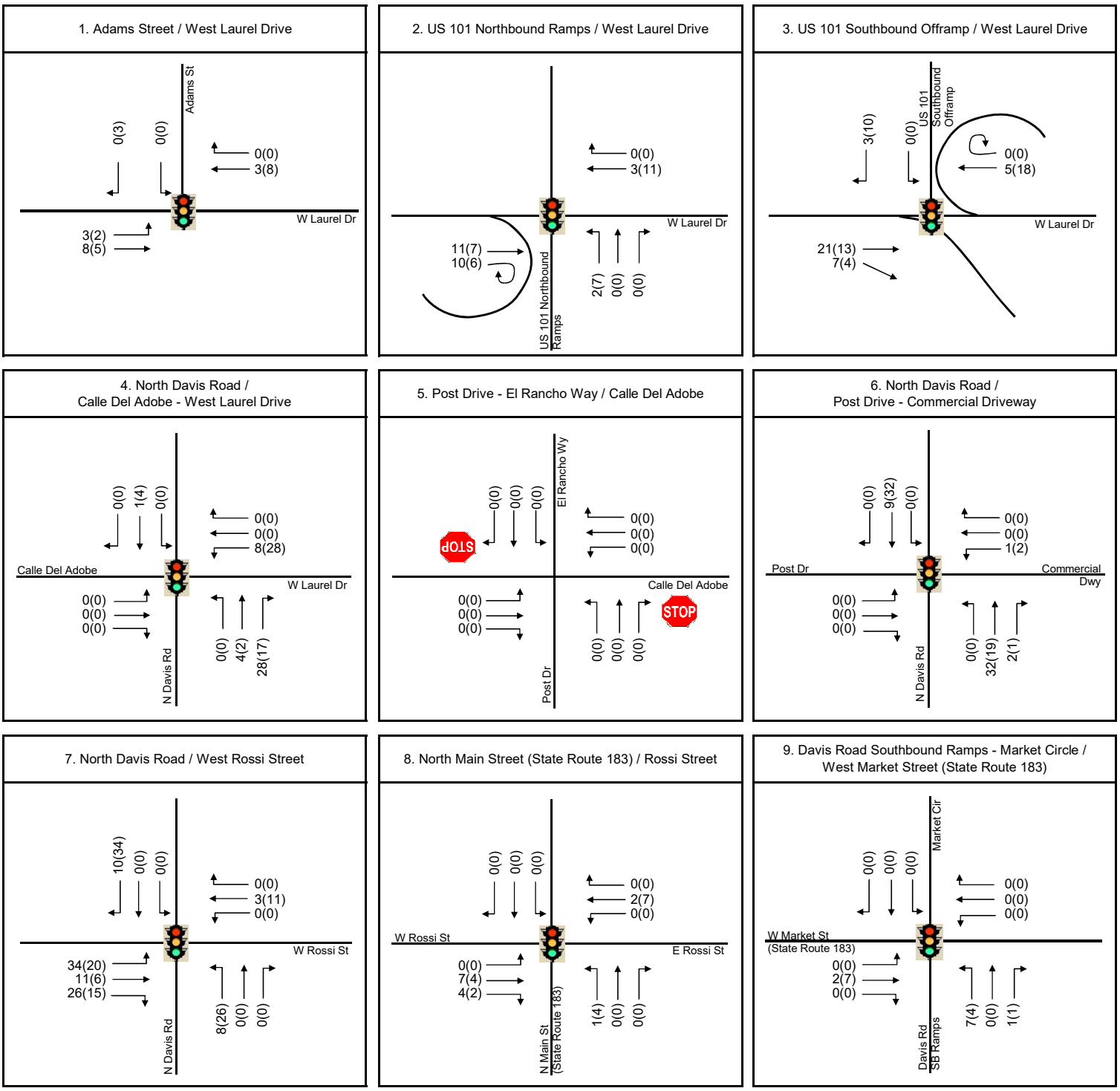
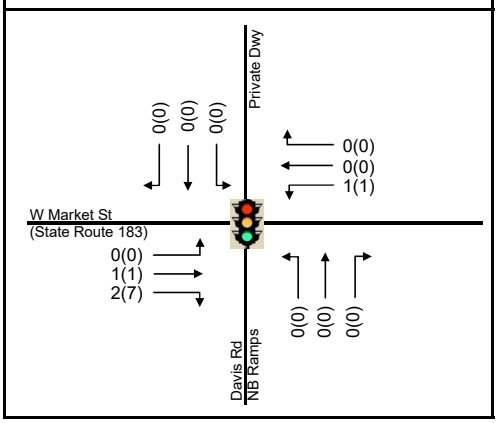


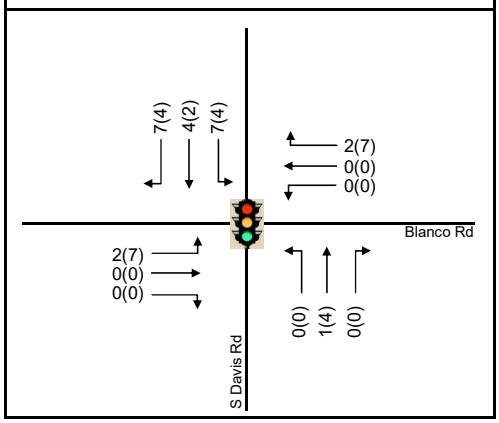
Exhibit 10
Project Trip Assignment
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)

Keith Higgins
Traffic Engineer

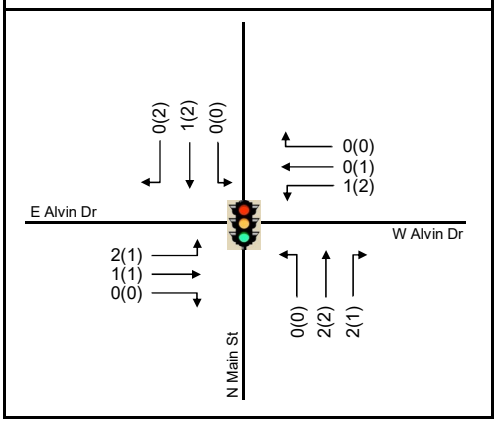
10. Davis Road Northbound Ramps - Private Driveway / West Market Street (State Route 183)



11. Davis Road / Blanco Road



12. North Main Street / Alvin Drive



13. North Main Street / Laurel Drive

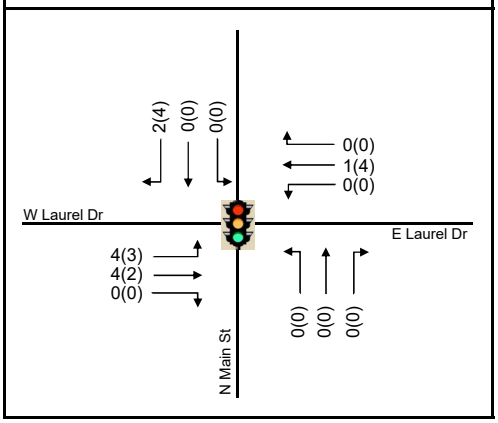


Exhibit 10
Project Trip Assignment
Apartments
AM & PM Peak Hour Volumes
(Page 2 of 2)

Keith Higgins
Traffic Engineer

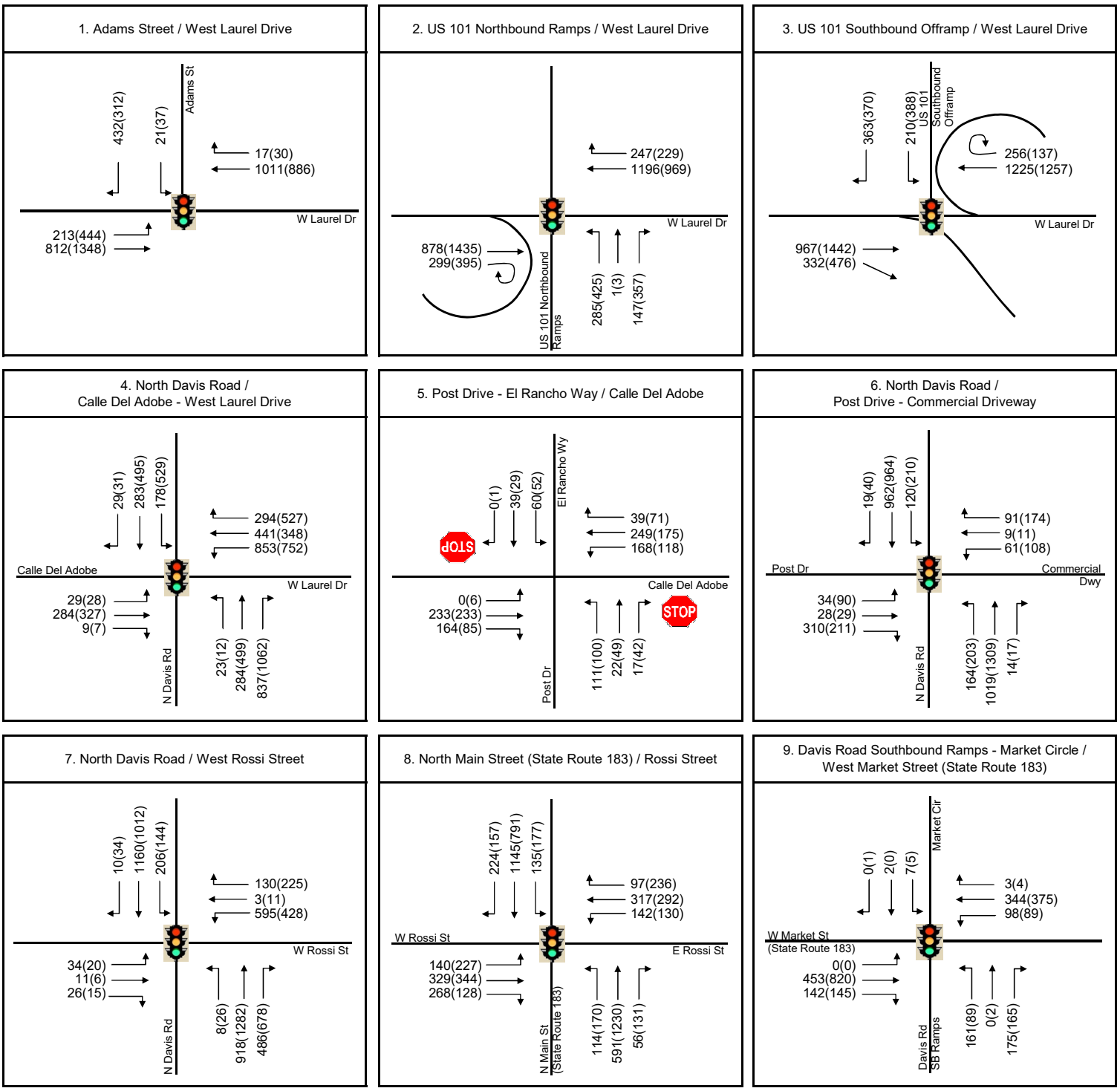
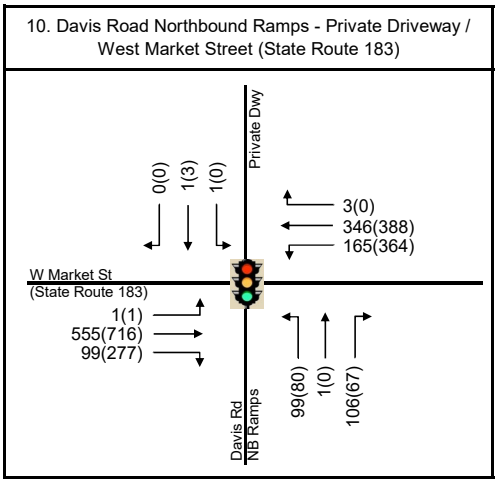
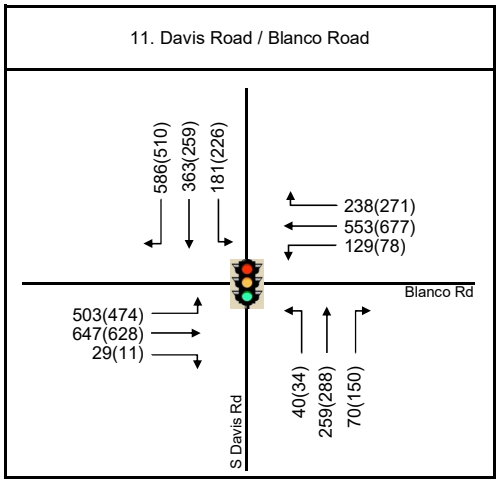
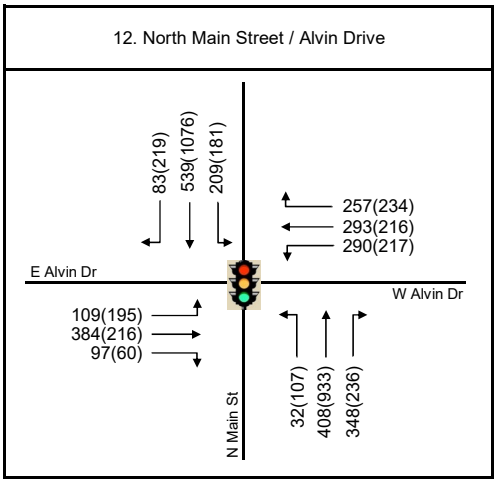


Exhibit 11
Existing Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)

Keith Higgins
Traffic Engineer







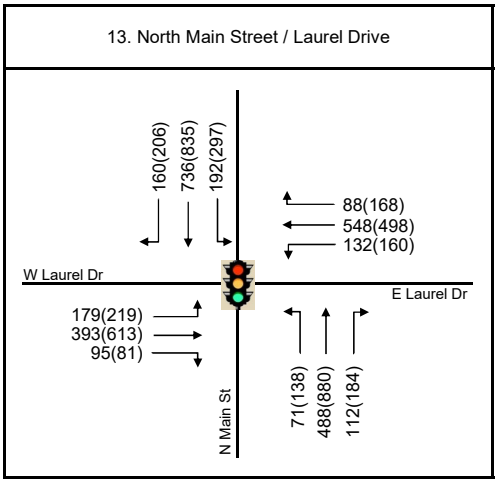
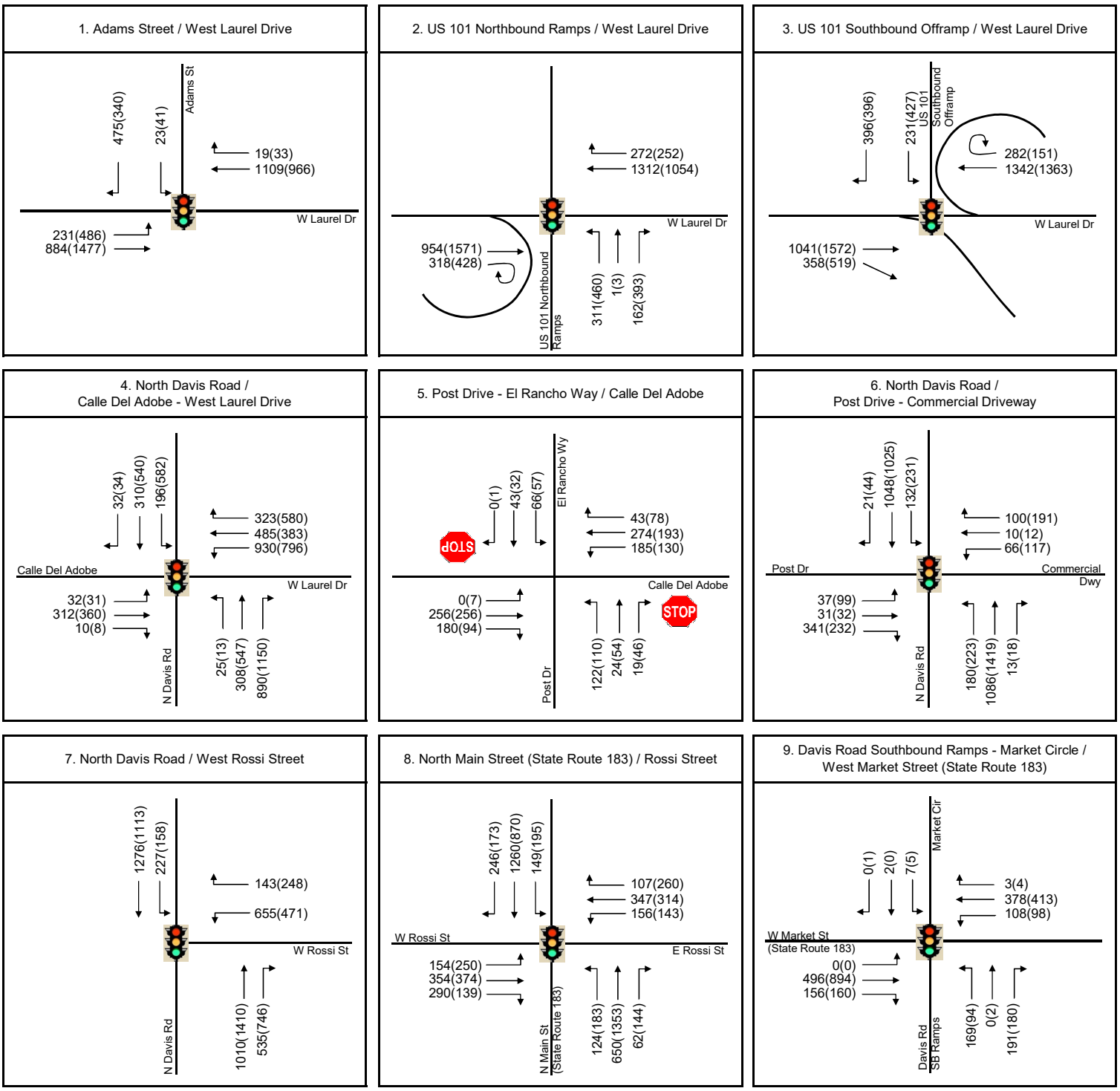


Exhibit 11
Existing Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 2 of 2)

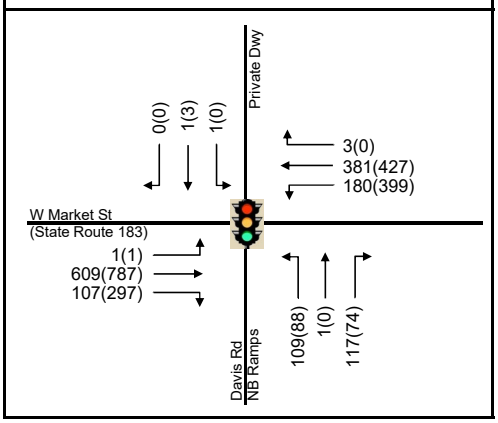
Keith Higgins
Traffic Engineer



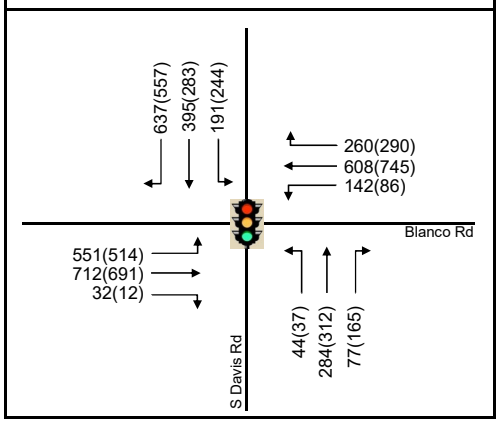
Keith Higgins
Traffic Engineer

Exhibit 12
Background Conditions
AM & PM Peak Hour Volumes
(Page 1 of 2)

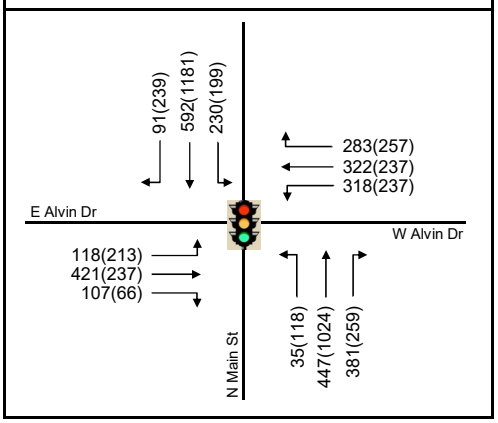
10. Davis Road Northbound Ramps - Private Driveway / West Market Street (State Route 183)



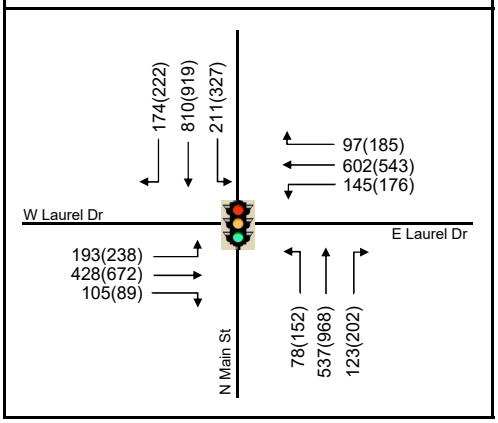
11. Davis Road / Blanco Road



12. North Main Street / Alvin Drive



13. North Main Street / Laurel Drive



Keith Higgins
Traffic Engineer

Exhibit 12
Background Conditions
AM & PM Peak Hour Volumes
(Page 2 of 2)

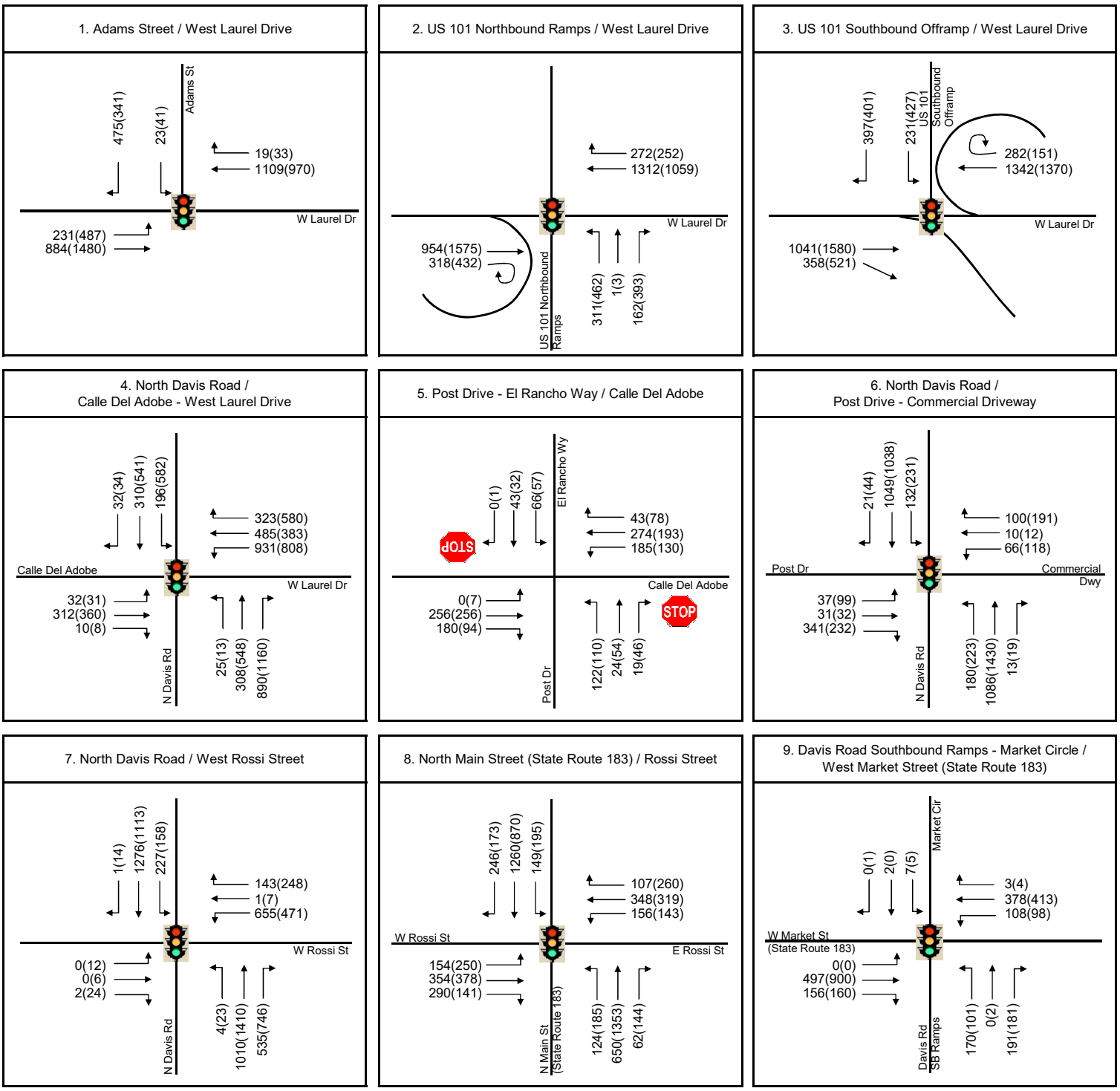
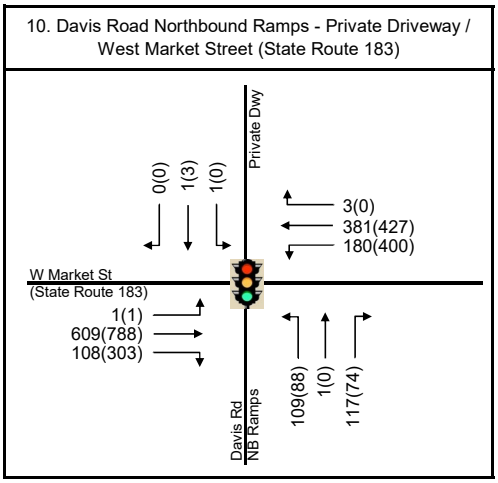
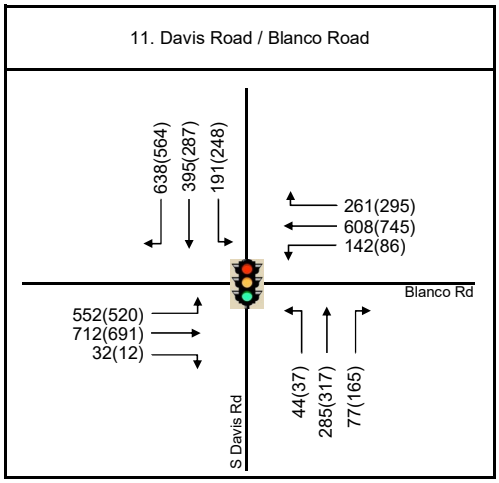
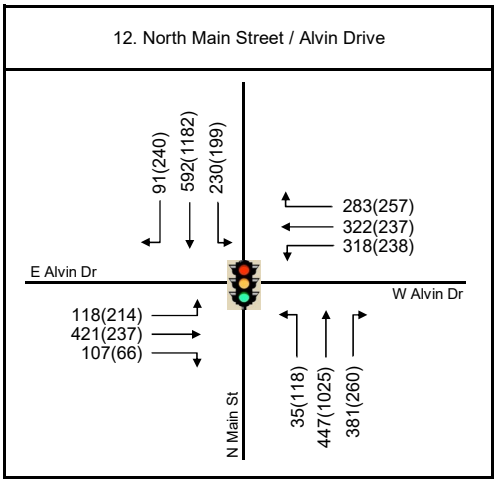


Exhibit 13
Background Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)

Keith Higgins
Traffic Engineer







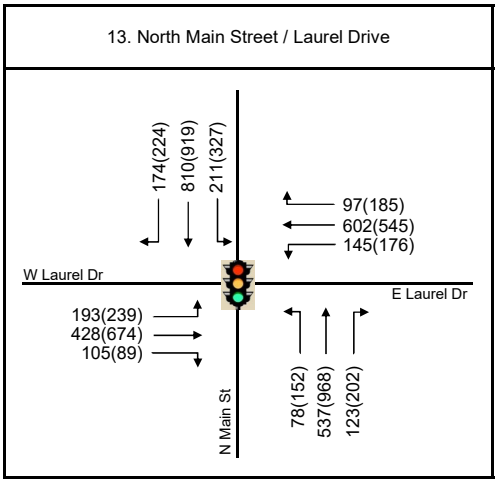


Exhibit 13
Background Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)

Keith Higgins
Traffic Engineer

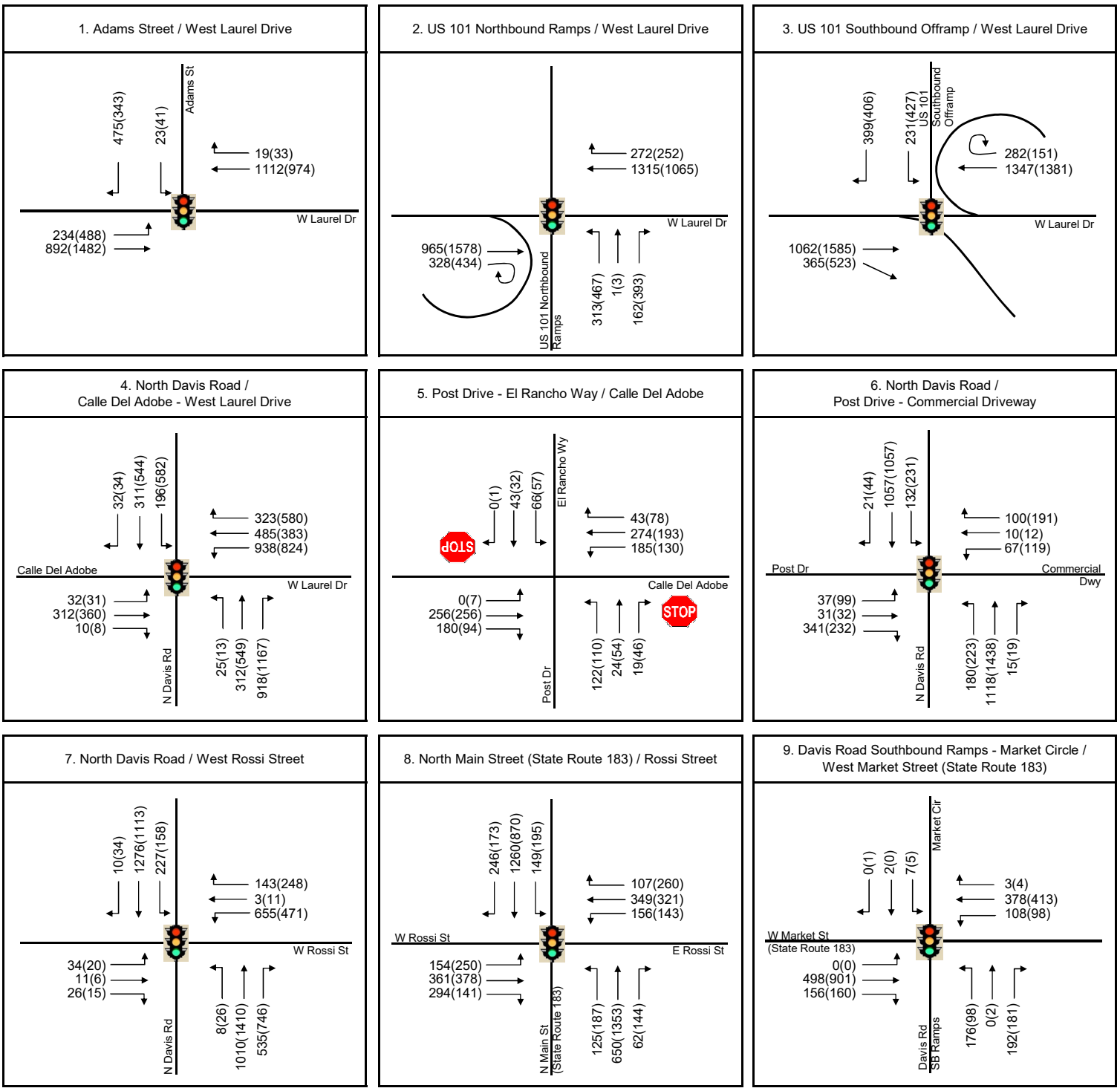
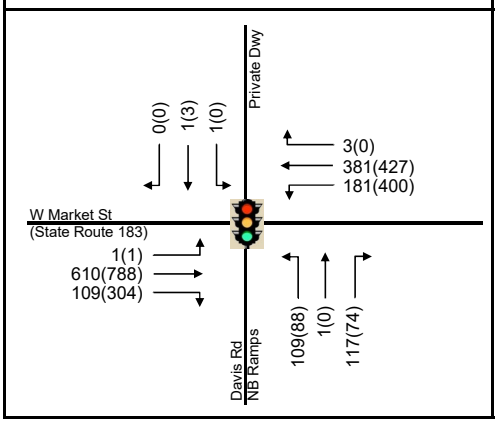


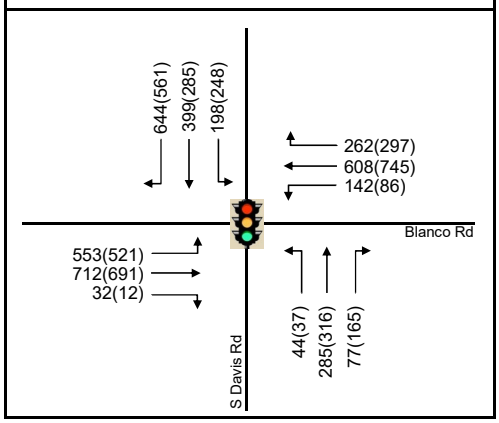
Exhibit 14
Background Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)

Keith Higgins
Traffic Engineer

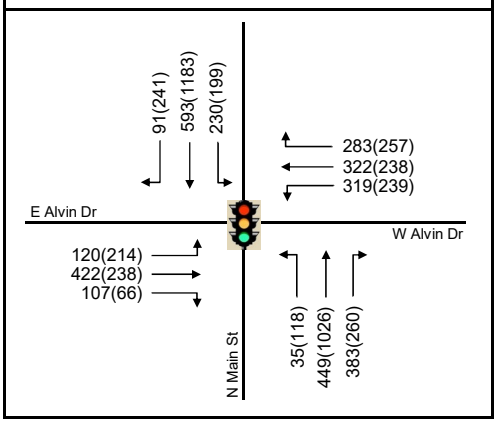
10. Davis Road Northbound Ramps - Private Driveway / West Market Street (State Route 183)



11. Davis Road / Blanco Road



12. North Main Street / Alvin Drive



13. North Main Street / Laurel Drive

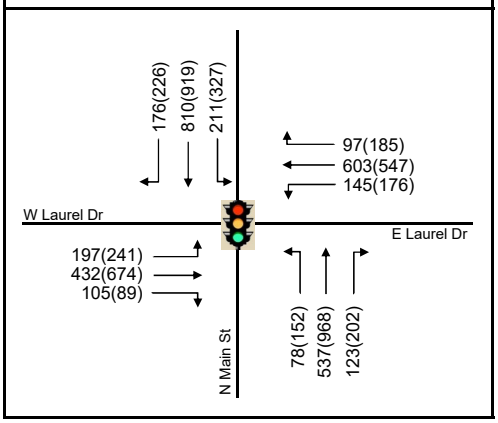


Exhibit 14
Background Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 2 of 2)

Keith Higgins
Traffic Engineer

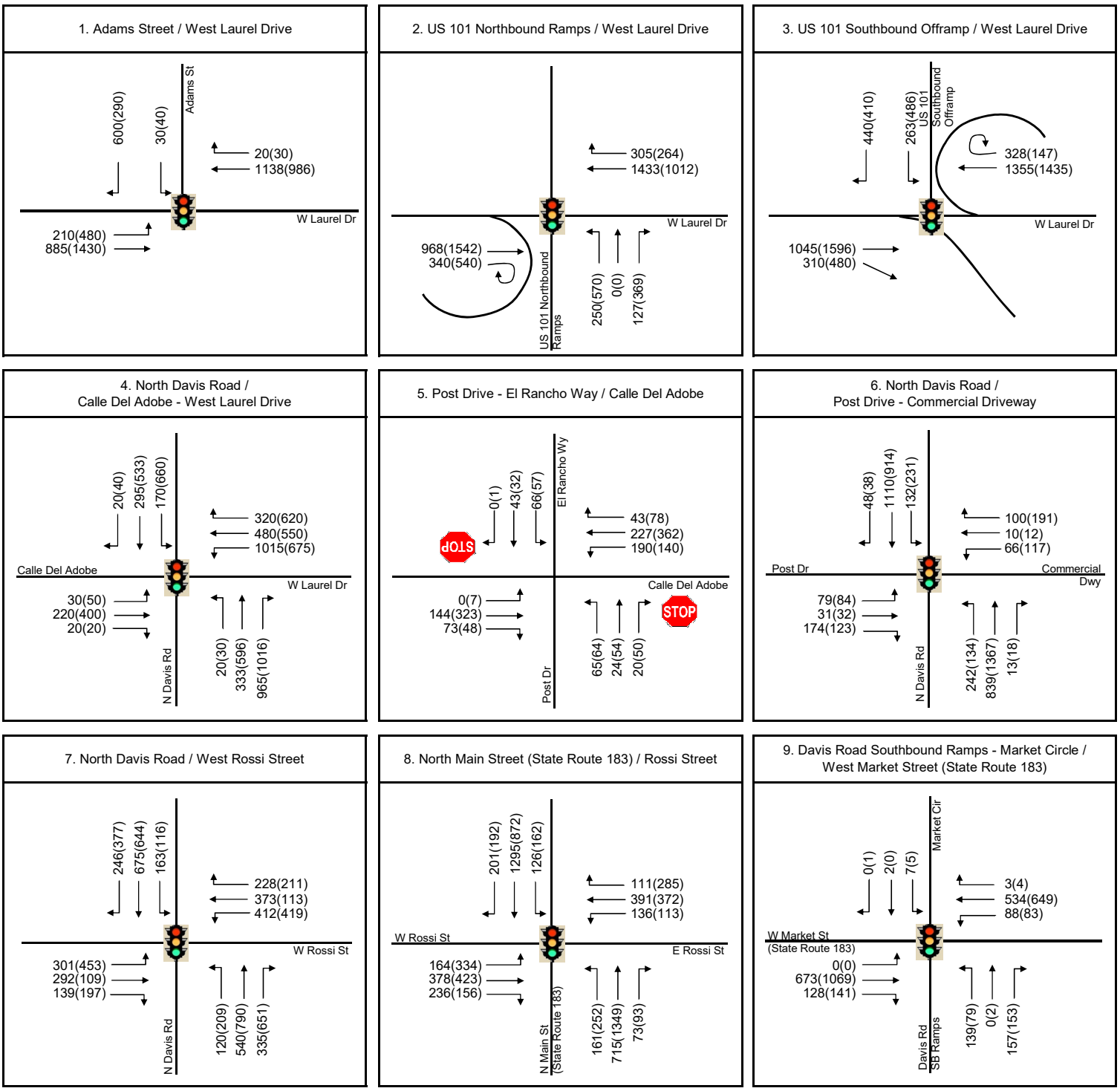


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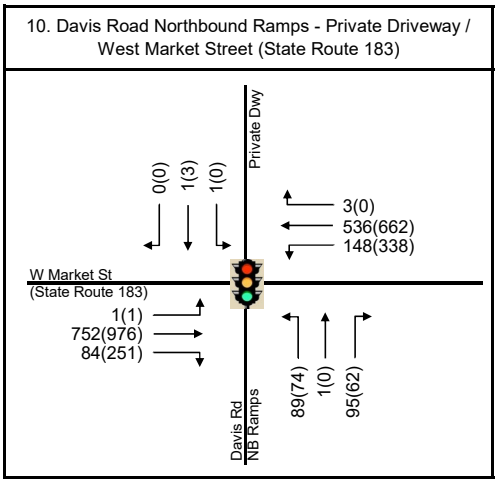
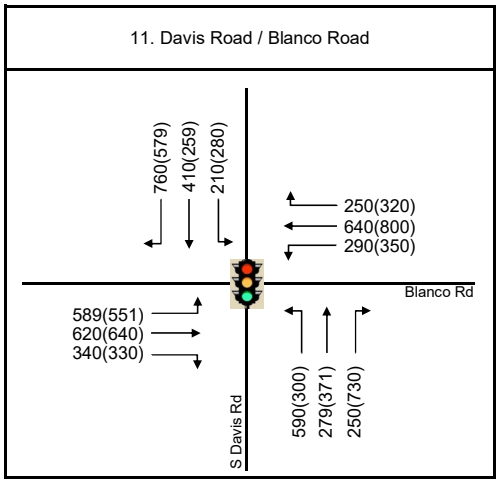
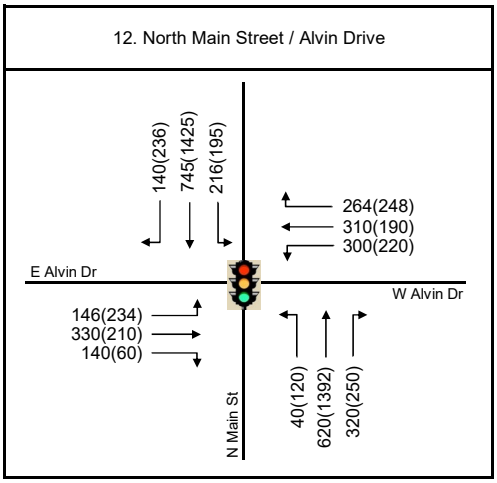
Exhibit 15
Cumulative Without Project Conditions
AM & PM Peak Hour Volumes
(Page 1 of 2)







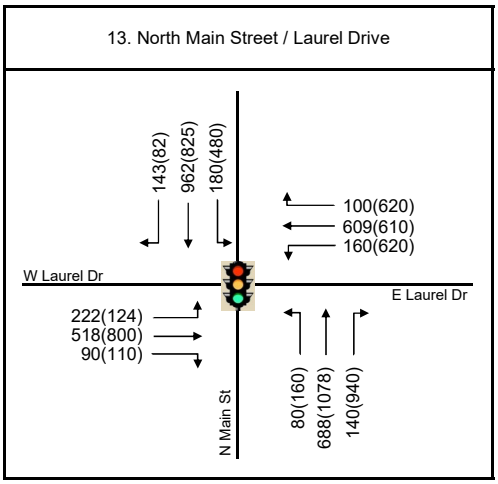


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Exhibit 15
Cumulative Without Project Conditions
AM & PM Peak Hour Volumes
(Page 2 of 2)

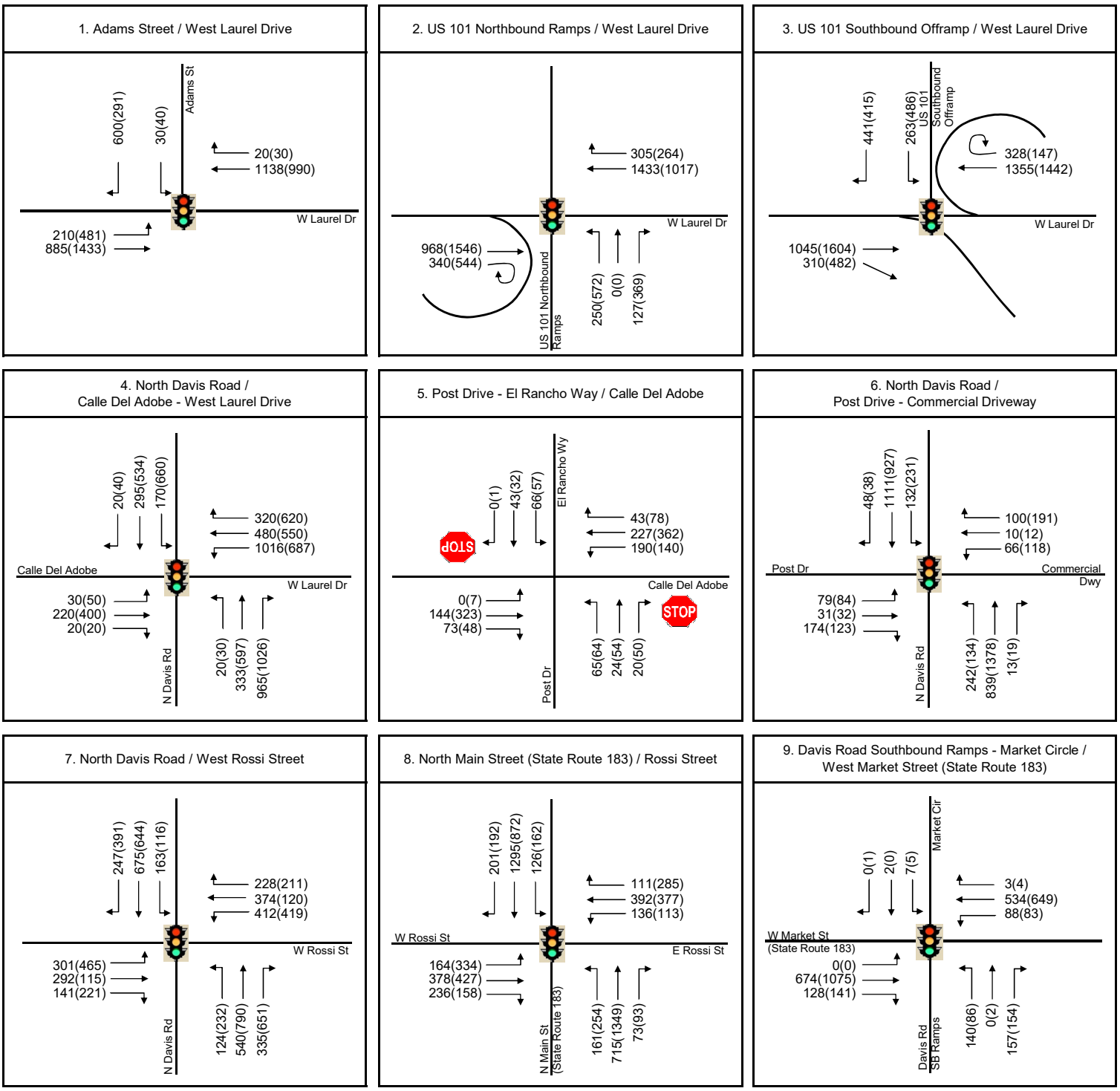

Exhibit 16
Cumulative Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)

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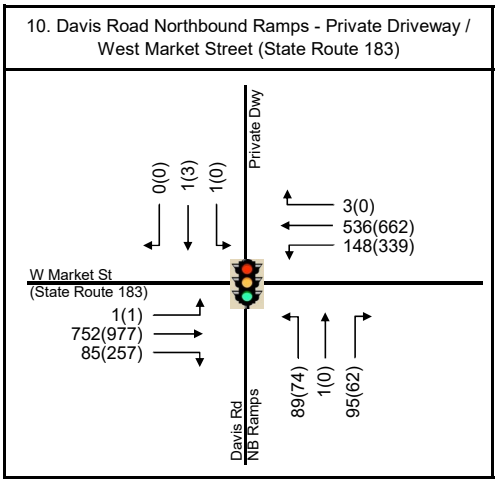
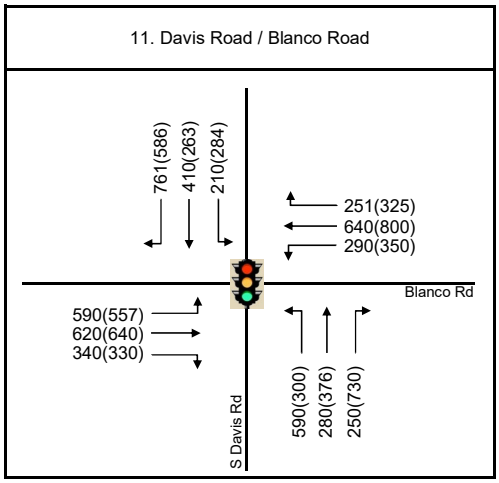
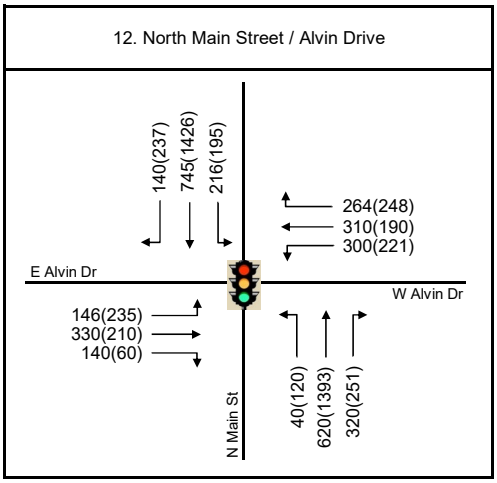
Traffic Engineer







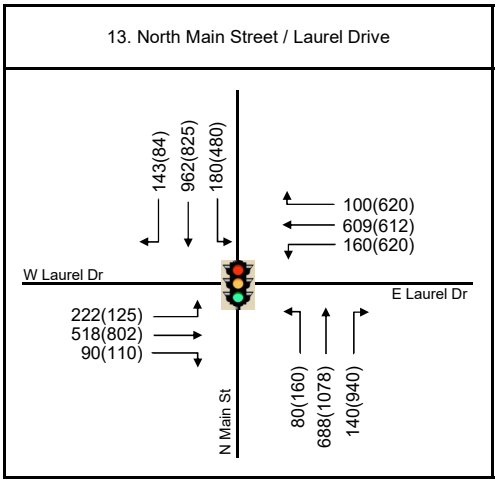


Exhibit 16
Cumulative Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)

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Traffic Engineer

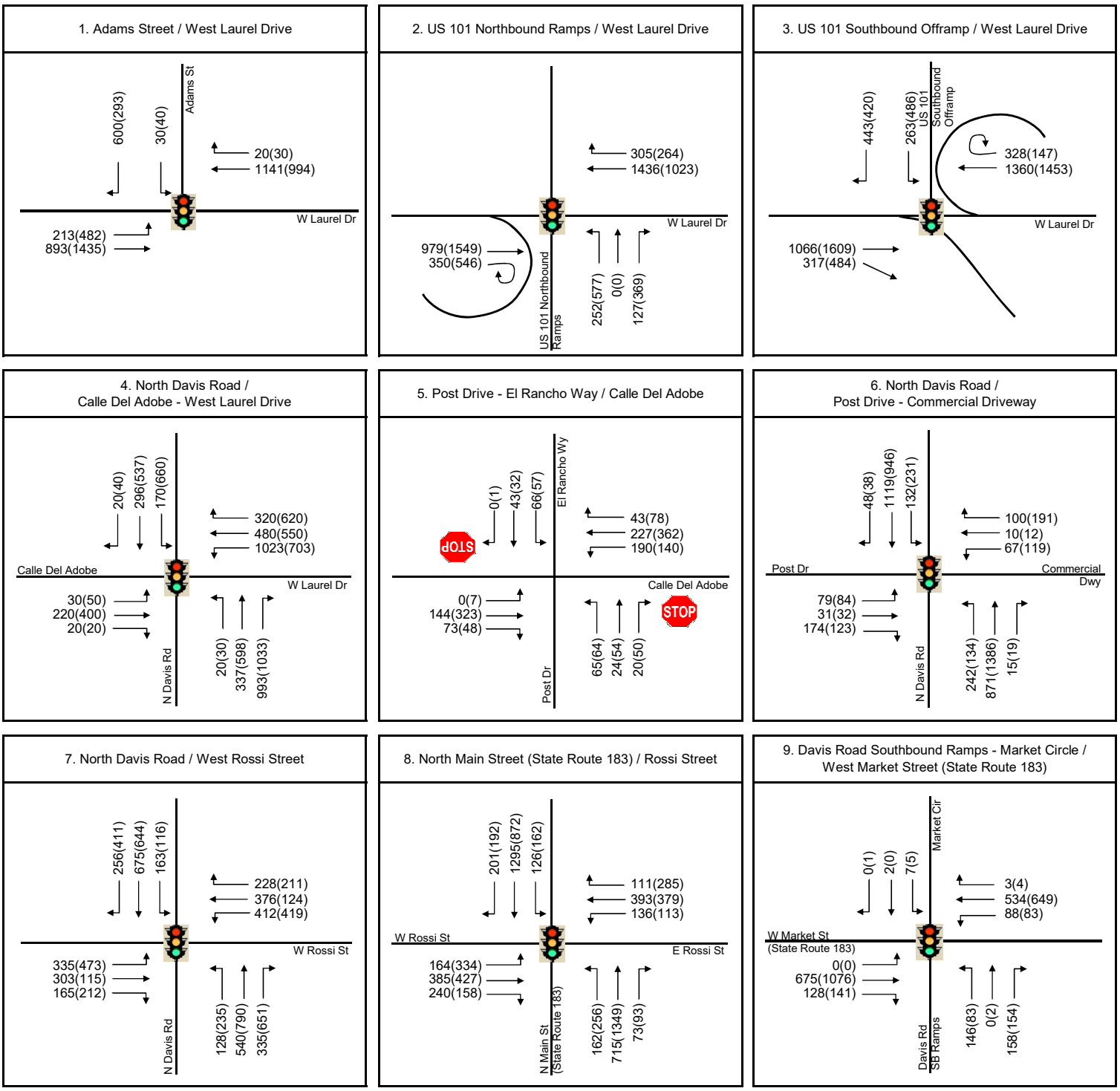

Exhibit 17
Cumulative Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)

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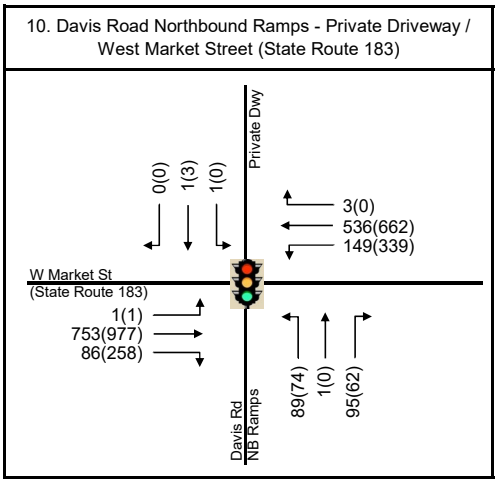
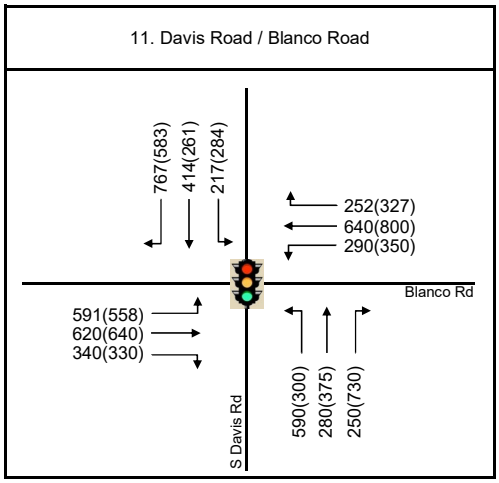
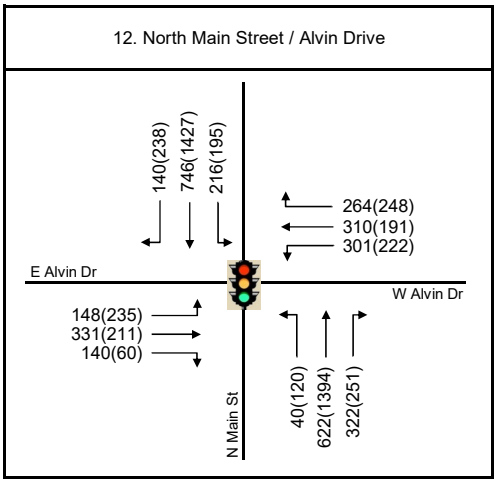
Traffic Engineer







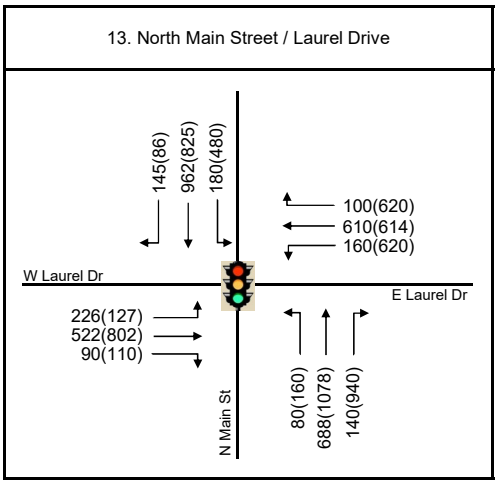


Exhibit 17
Cumulative Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 2 of 2)

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Vehicle Trips - Ag Employee Housing Project Alternative

Employee Shuttles

Vehicle Type	Seating Capacity	Total Vehicles	Total Trips	Distance Traveled per Trip		Total VMT
Bus	32	33	66	15	miles	990
Van	15	8	16	15	miles	240
					Subtotal:	***1,230***

Shuttle Trips Between Project Site and Storage Area

Vehicle Type	Total Vehicles	Total Trips	Distance Traveled per Trip		Total VMT
Bus	33	66	6	miles	400
Van	8	0	0	miles	0
				Subtotal:	***400***

Total VMT: 1,630 per day
326,000 per year

If all ag employees drove personal cars (assuming two person per vehicle):
Driving VMT: 18,000 per day
3,600,000 per year

Notes:
1. Number of buses and vans provided by project applicant.
2. Fields are assumed to be an average of 15 miles from the project site.
3. Per the project applicant, buses will be stored at a location 6 miles away and vans will be stored on the project site.
4. VMT per year estimated using 200 working days per year.
5. Estimate for driving employee comparision assumes two employees per vehicles, which is equivalent to 600 total vehicles per the project definition.

Vehicle Miles Traveled - Apartments Project Alternative

Location	Percent of Net Project Traffic	Daily Project Traffic	Distance from Project (miles)	Vehicle Miles Traveled
Salinas	57%	834	2.50	2,085
Marina	5%	73	9.00	657
Seaside	3%	44	15.00	660
Monterey	10%	146	18.00	2,628
Prunedale	7%	102	8.00	816
Castroville	5%	73	8.00	584
Watsonville	4%	59	19.00	1,121
Gonzales	1%	14	19.00	266
Soledad	1%	15	28.00	420
Greenfield	1%	15	37.00	555
San Benito County	3%	44	27.00	1,188
Santa Clara County	3%	44	30.00	1,320
Total:	**100%**	**1,463**		**12,300**

Project Average Trip Length	**8.4**
Regional Average Home-Based Trip Length	**8.9**
Project Percent of Regional Average Home-Based Trip Length	**94%**
Apartment Occupants per Unit	3.73
Number of Apartments	200
Number of People Living in Apartments	**746**
Average Residential Vehicle-Miles Traveled (miles/resident):	**16.5**

Average AMBAG Region VMT per Capita	**21.66**
Project Percent of Regional VMT per Capita	**76%**

Notes:
1. Total daily net project residential trips cited from trip generation on **Exhibit 5**.
2. Apartment Occupants per Unit is average household size in Salinas in 2010 US Census, per the 2010 US Census (factfinder.census.gov).

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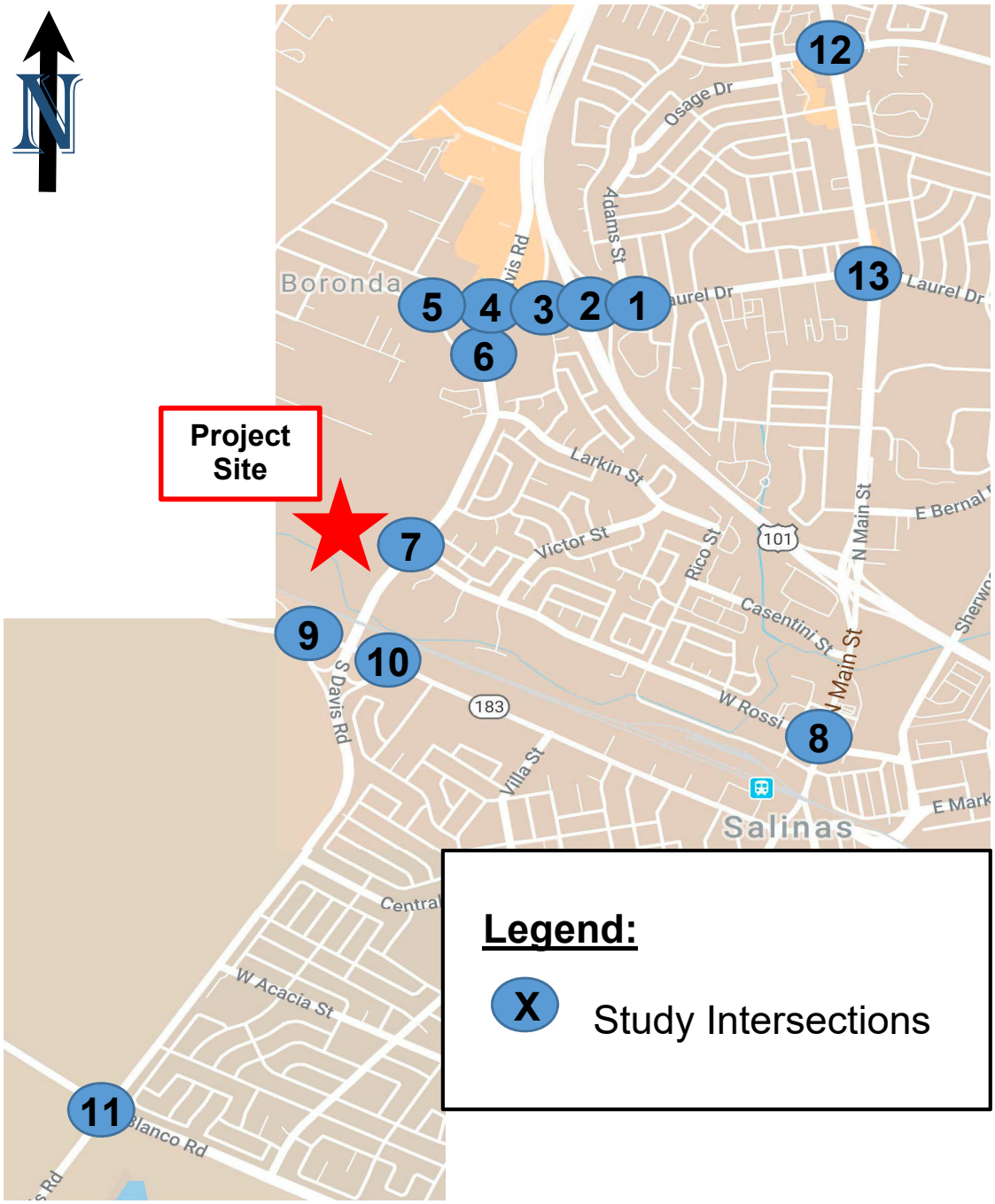
Exhibit 18B
Project Vehicle Miles Traveled Calculation (Apartments)



Basemap Source: Google Maps, 2019.

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Exhibit 1
Project Location Map
and Study Area

Source: RRM Design Group, 10/29/19.

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Traffic Engineer

Exhibit 2
Project SIte Plan

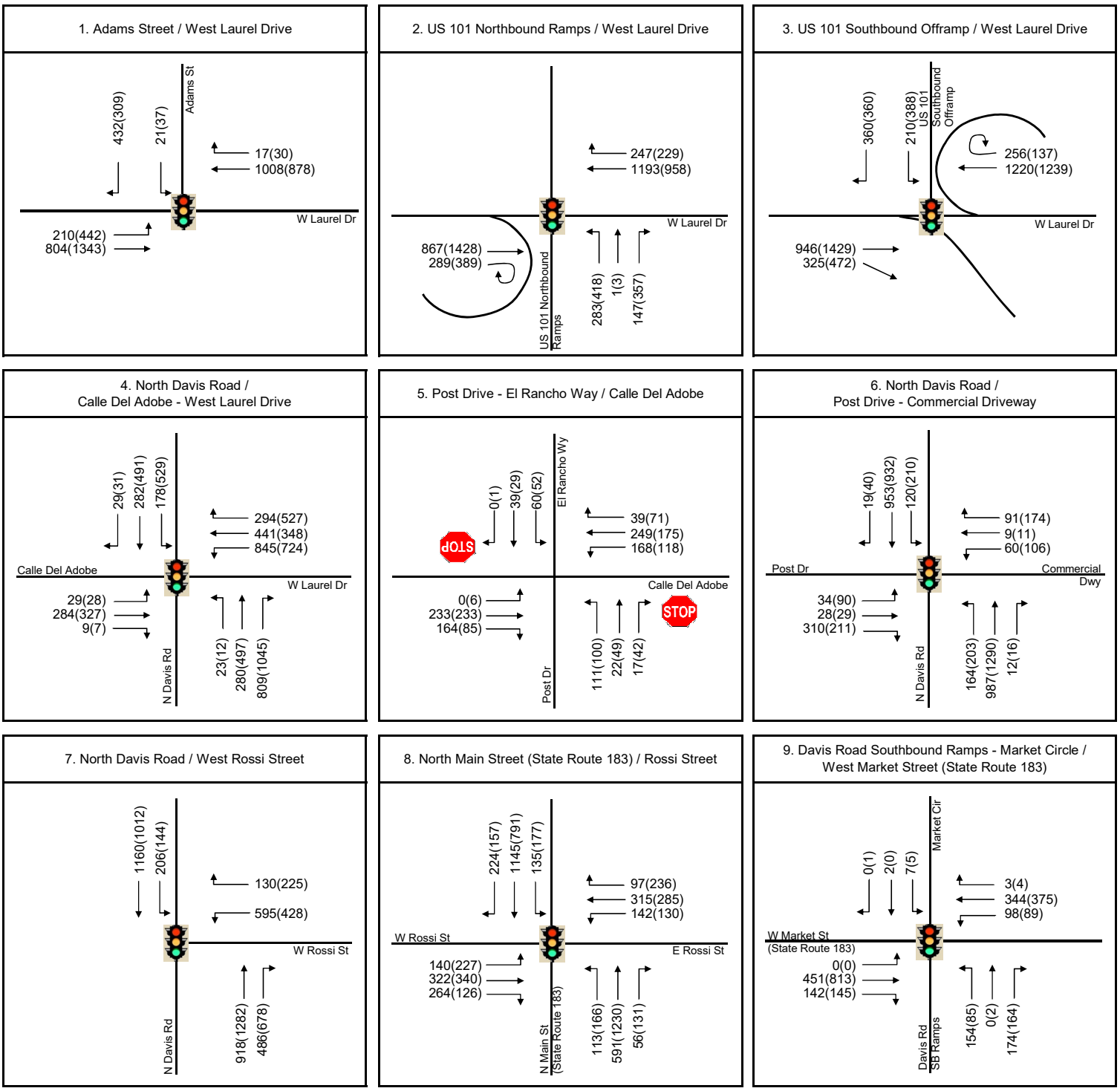

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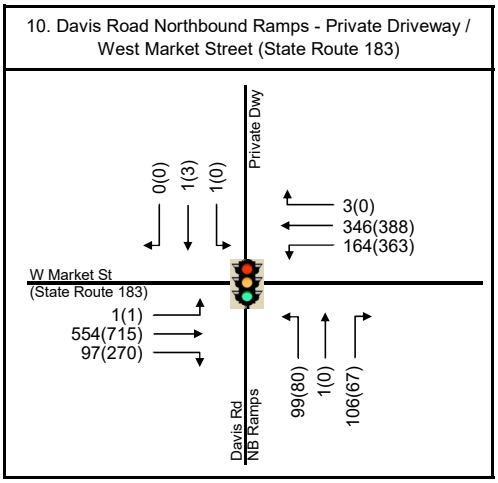
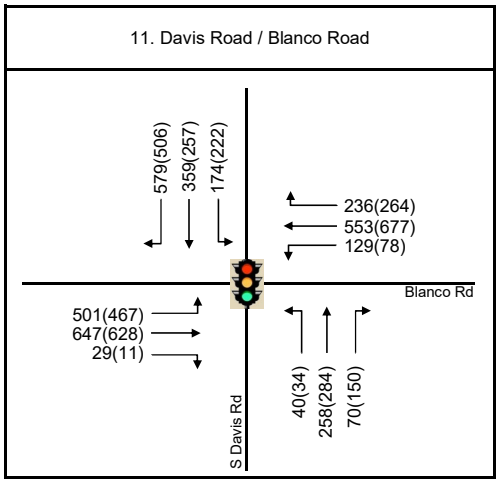
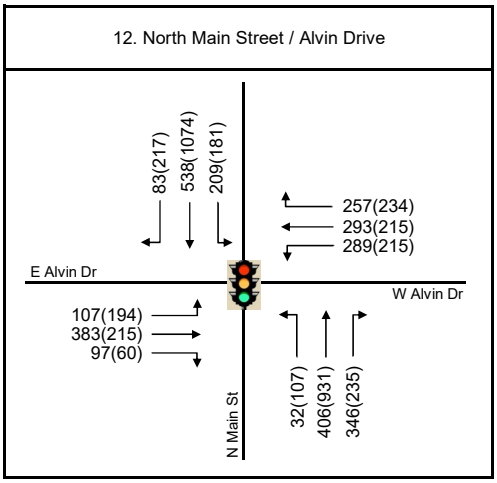
Exhibit 3
Existing Conditions
AM & PM Peak Hour Volumes
(Page 1 of 2)







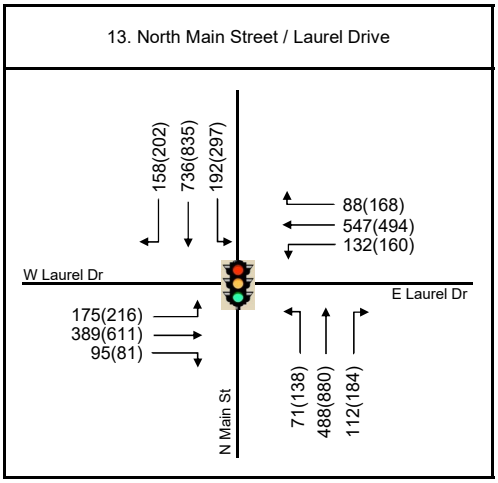


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Exhibit 3
Existing Conditions
AM & PM Peak Hour Volumes
(Page 2 of 2)

	N-S Street	E-W Street	Jurisdiction	Existing Lane Configuration	Existing Intersection Control	LOS Standard	Peak Hour	Existing Conditions		Existing Plus Project (Ag) Conditions		Existing Plus Project (Apt) Conditions		Background Conditions		Background Plus Project (Ag) Conditions		Background Plus Project (Apt) Conditions		Cumulative Without Project Conditions		Cumulative Plus Project (Ag) Conditions		Cumulative Plus Project (Apt) Conditions	
								Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
1	Adams Street	W Laurel Drive	City of Salinas	SB 1-L, 1-R EB 1-L, 2-T WB 1-T, 1-T/R	Signal	D	AM	16.6	B	16.6	B	16.7	B	22.6	C	22.7	C	22.9	C	47.7	D	47.7	D	47.7	D
							PM	15.2	B	15.4	B	15.5	B	22.0	C	22.3	C	22.5	C	21.3	C	21.6	C	21.8	C
2	US 101 Northbound Ramps	W Laurel Drive	Caltrans	NB 1-L, 1-L/T, 1-R EB 2-T WB 1-T, 1-T/R	Signal	C-D	AM	13.9	B	13.9	B	14.0	B	18.0	B	17.9	B	18.0	B	28.4	C	28.4	C	28.6	C
							PM	17.9	B	18.0	B	18.1	B	22.1	C	22.3	C	22.5	C	20.6	C	20.7	C	20.9	C
3	US 101 Southbound Offramp	W Laurel Drive	Caltrans	SB 2-L, 1-R EB 2-T WB 2-T	Signal	C-D	AM	10.1	B	10.1	B	10.2	B	12.9	A	13.0	B	13.2	B	14.9	B	14.9	B	15.6	B
							PM	10.9	B	11.1	B	11.3	B	14.2	B	14.6	B	14.9	B	15.0	B	15.4	B	15.7	B
4	N Davis Road	Calle Del Adobe - W Laurel Drive	City of Salinas	NB 1-L, 2-T, 2-R SB 2-L, 1-T, 1-T/R EB 1-L, 1-T, 1-T/R WB 2-L, 2-T, 1-R	Signal	D	AM	25.0	C	25.0	C	25.1	C	28.3	C	28.3	C	28.6	C	26.6	C	26.6	C	26.8	C
							PM	39.7	D	40.8	D	42.0	D	54.4	D	56.1	E	58.2	E	53.6	D	54.2	D	55.2	E
					With TDM Measures		*AM*									*28.3*	*C*								
							PM									*54.6*	*D*								
					With Improvement		*AM*											*25.3*	*C*					*26.8*	*C*
							PM											*44.5*	*D*					*53.4*	*D*
5	Post Drive - El Rancho Way	Calle Del Adobe	Monterey County	NB 1-L, 1-T/R SB 1-L/T, 1-R EB 1-L, 1-T, 1-R WB 1-L, 1-T, 1-R	Two-Way Stop	E/E	AM	77.1/74.7	F/F	77.1/74.7	F/F	77.1/74.7	F/F	176.5/148.6	F/F	176.5/148.6	F/F	176.5/148.6	F/F	28.8/46.7	D/E	28.8/46.7	D/E	28.8/46.7	D/E
							PM	21.9/26.5	C/D	21.9/26.5	C/D	21.9/26.5	C/D	27.5/34.5	D/D	27.5/34.5	D/D	27.5/34.5	D/D	34.7/72.0	D/F	34.7/72.0	D/F	34.7/72.0	D/F
					With Improvement		*AM*																		
							PM																		
6	N Davis Road	Post Drive - Commercial Driveway	City of Salinas	NB 1-L, 2-T, 1-T/R SB 1-L, 2-T, 1-R EB 1-L, 1-L/T, 1-R WB 1-L/T, 1-R		D	AM	43.4	D	43.4	D	43.7	D	56.0	E	56.1	E	56.7	E	47.3	D	47.4	D	47.5	D
							PM	44.3	D	44.9	D	45.6	D	61.2	E	62.9	E	65.1	E	37.6	D	37.9	D	38.2	D
					With TDM Measures		*AM*									*56.0*	*E*								
							PM									*61.4*	*E*								
					With Improvement		*AM*											*29.9*	*C*						
							PM											*28.8*	*C*						
7	N Davis Road	W Rossi Street	City of Salinas	NB 2-T, 1-R SB 1-L, 2-T WB 2-L, 1-R	Signal	D	AM	17.7	B	29.8	C	30.7	C	22.9	C	37.2	D	38.0	D	52.2	D	52.8	D	59.0	E
							PM	22.9	C	35.3	D	35.4	D	34.9	C	51.7	D	51.9	D	88.8	F	94.7	F	95.7	F
					With TDM Measures		*AM*															*52.3*	*D*		
							PM															*89.2*	*F*		
					With Improvement		*AM*															*30.6*	*C*	*32.3*	*C*
							PM															*38.2*	*D*	*40.2*	*D*
8	N Main Street (State Route 183)	Rossi Street	Caltrans	NB 1-L, 2-T, 1-R SB 1-L, 2-T, 1-R EB 2-L, 1-T, 1-R WB 1-L, 1-T, 1-R	Signal	C-D	AM	44.0	D	44.0	D	44.9	D	58.9	E	59.0	E	60.1	E	66.0	E	66.1	E	67.4	E
							PM	41.7	D	41.8	D	42.1	D	54.8	D	55.1	E	55.3	E	70.3	E	71.3	E	71.6	E
					With TDM Measures		*AM*			*44.0*	*D*					*58.9*	*E*					*66.0*	*E*		
							PM			*41.8*	*D*					*54.9*	*D*					*70.5*	*E*		
					With Improvement		*AM*					*32.4*	*C*					*38.9*	*D*					*41.6*	*D*
							PM					*34.0*	*C*					*41.8*	*D*					*42.4*	*D*
9	Davis Road Southbound Ramps - Market Circle	W Market Street (State Route 183)	Caltrans	NB 1-L/T, 1-R SB 1-L/T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	C-D	AM	17.1	B	17.2	B	17.2	B	18.8	B	18.8	B	18.8	B	22.4	C	22.4	C	22.4	C
							PM	20.9	C	21.0	C	21.1	C	25.1	C	25.3	C	25.4	C	35.2	D	35.9	D	36.0	D
					With TDM Measures		*AM*															*22.4*	*C*		
							PM															*35.3*	*D*		
					With Improvement		*AM*																	*19.5*	*B*
							PM																	*23.3*	*C*

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Traffic Engineer

Exhibit 4A
Intersection
Levels of Service
(Page 1 of 2)

	N-S Street	E-W Street	Jurisdiction	Existing Lane Configuration	Existing Intersection Control	LOS Standard	Peak Hour	Existing Conditions		Existing Plus Project (Ag) Conditions		Existing Plus Project (Apts) Conditions		Background Conditions		Background Plus Project (Ag) Conditions		Background Plus Project (Apts) Conditions		Cumulative Without Project Conditions		Cumulative Plus Project (Ag) Conditions		Cumulative Plus Project (Apts) Conditions	
								Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS	Delay	LOS
10	Davis Road Northbound Ramps - Private Driveway	W Market Street (State Route 183)	Caltrans	NB 1-L/T, 1-R SB 1-L/T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	C-D	AM	20.6	C	20.7	C	20.8	C	23.3	C	23.4	C	23.4	C	25.5	C	25.5	C	25.8	C
							PM	37.6	D	38.4	D	38.5	D	53.5	D	54.7	D	54.9	D	61.6	E	63.3	E	63.5	E
					With TDM Measures		*AM*			*20.7*	*C*					*23.4*	*C*					*25.5*	*C*		
							PM			*37.7*	*D*					*53.6*	*D*					*61.8*	*E*		
					With Improvement		*AM*					*17.8*	*B*					*19.0*	*B*					*19.3*	*B*
							PM					*24.7*	*C*					*27.8*	*C*					*26.3*	*C*
11	Davis Road	Blanco Road	Monterey County	NB 1-L, 1-T, 1-T/R SB 1-L, 1-T, 1-R EB 2-L, 1-T, 1-T/R WB 1-L, 2-T, 1-R	Signal	D	AM	32.5	C	32.5	C	33.0	C	37.2	D	37.2	D	37.3	D	357.2	F	357.2	F	356.8	F
							PM	37.8	D	38.5	D	38.6	D	46.7	D	47.8	D	47.9	D	239.8	F	240.1	F	240.2	F
					With TDM Measures		*AM*															*357.2*	*F*		
							PM															*239.8*	*F*		
				WB	*With Improvement*		*AM*																	*73.7*	*E*
							PM																	*111.9*	*F*
12	N Main Street	Alvin Drive	City of Salinas	NB 1-L, 2-T, 1-T/R SB 2-L, 3-T, 1-R EB 1-L, 2-T, 1-R WB 1-L, 1-T, 1-R	Signal	D	AM	35.3	D	35.3	D	35.6	D	43.2	D	43.2	D	43.5	D	35.8	D	35.8	D	36.1	D
							PM	29.1	C	29.2	C	29.2	C	34.7	C	34.8	C	34.8	C	64.3	E	65.0	E	65.0	E
					With TDM Measures		*AM*															*35.8*	*D*		
							PM															*64.4*	*E*		
				WB	*With Improvement*		*AM*																	*35.5*	*D*
							PM																	*39.2*	*D*
13	N Main Street	Laurel Drive	City of Salinas	NB 2-L, 2-T, 1-R SB 2-L, 2-T, 1-T/R EB 1-L, 1-T, 1-T/R WB 1-L, 1-T, 1-T/R	Signal	D	AM	29.9	C	29.9	C	30.1	C	34.4	C	34.4	C	34.7	C	38.2	D	38.2	D	38.7	D
							PM	37.5	D	37.6	D	37.8	D	45.7	D	45.9	D	46.1	D	259.3	F	259.6	F	260.3	F
					With TDM Measures		*AM*															*38.2*	*D*		
							PM															*259.5*	*F*		
				WB	*With Improvement*		*AM*																	*38.4*	*D*
							PM																	*185.0*	*F*

Notes:

1. L, T, R = Left, Through, Right.
2. NB, SB, EB, WB = Left, Through, Right, Northbound, Southbound, Eastbound, Westbound.
3. Overall Caltrans level of service standard is the transition between LOS C and LOS D, abbreviated as "LOS C-D".
   City of Salinas and Monterey County overall levels of service standard is LOS D. Side-street standard is assumed as LOS E.
4. For signalized intersection analysis, delay is average overall delay in seconds per vehicle (sec/veh). For one- and two-way stop intersections, delays are side-street approach operations, also in seconds per vehicle (sec/veh).
5. Analysis performed using 2010 and 2000 Highway Capacity Manual methodologies.
6. Level of service calculations can be found in **Appendices E, G - H, and J - O.**
7. LOS highlighted in **red** indicates intersection operating below level of service standard.
8. LOS with a thick black border represents a significant impact. Resulting levels of service with recommended improveme recommended improvements noted under "With Improvements". A list of applied improvements can be found on **Exhibit 4B**.
9. Transportation Demand Management (TDM) measures include bussing and vanpools for ag employees.

Keith Higgins
Traffic Engineer

Exhibit 4A
Intersection
Levels of Service
(Page 2 of 2)

	N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project (Ag) Conditions	Existing Plus Project (Apts) Conditions	Background Plus Project (Ag) Conditions	Background Plus Project (Apts) Conditions	Cumulative Plus Project (Ag) Conditions	Cumulative Plus Project (Apts) Conditions
1	Adams Street	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
2	US 101 Northbound Ramps	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
3	US 101 Southbound Offramp	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
4	N Davis Road	Calle Del Adobe - W Laurel Drive	Signal	None Required	None Required	None Required	1. Add 3rd WB L and 3rd Receiving Lane on N Davis Leaving Intersection; OR 2a. Implement Western Bypass (TFO 26) 2b. Optimize Signal Timing	None Required	Optimize Signal Timing
5	Post Drive - El Rancho Way	Calle Del Adobe	Two-Way Stop	None Required	None Required	None Required	None Required	None Required	None Required
6	N Davis Road	Post Drive - Commercial Driveway	Signal	None Required	None Required	None Required	1a. Restripe EB as 1-L, 1-T, 1-R 1b. Convert EB/WB left turn signal phasing to permitted phasing; OR 2. Implement Western Bypass	None Required	None Required
7	N Davis Road	W Rossi Street	Signal	a. Add NB L b. Add WB T c. Add EB with 1-L, 1-T/R	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	a. Add 2nd EB L b. Add EB R c. Add SB R d. Add NB RTO Signal Phase	a. Add 2nd EB L b. Add EB R c. Add SB R d. Add NB RTO Signal Phase
8	N Main Street (State Route 183)	Rossi Street	Signal	None Required	Add 3rd NB T, 3rd SB T (TFO 31)	None Required	Add 3rd NB T, 3rd SB T (TFO 31)	None Required	Add 3rd NB T, 3rd SB T (TFO 31)
9	Davis Road Southbound Ramps	W Market Street (State Route 183)	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing

Exhibit 4B
Recommended
Intersection Improvements
(Page 1 of 2)

Keith Higgins
Traffic Engineer

	N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project (Ag) Conditions	Existing Plus Project (Apts) Conditions	Background Plus Project (Ag) Conditions	Background Plus Project (Apts) Conditions	Cumulative Plus Project (Ag) Conditions	Cumulative Plus Project (Apts) Conditions
1	Adams Street	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
2	US 101 Northbound Ramps	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
3	US 101 Southbound Offramp	W Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	None Required
4	N Davis Road	Calle Del Adobe - W Laurel Drive	Signal	None Required	None Required	None Required	1. Add 3rd WB L and 3rd Receiving Lane on N Davis Leaving Intersection; OR 2a. Implement Western Bypass 2b. Optimize Signal Timing	None Required	Optimize Signal Timing
5	Post Drive - El Rancho Way	Calle Del Adobe	Two-Way Stop	None Required	None Required	None Required	None Required	None Required	None Required
6	N Davis Road	Post Drive - Commercial Driveway	Signal	None Required	None Required	None Required	1a. Restripe EB as 1-L, 1-T, 1-R 1b. Convert EB/WB left turn signal phasing to permitted phasing; OR 2. Implement Western Bypass	None Required	None Required
7	N Davis Road	W Rossi Street	Signal	a. Add NB L b. Add WB T	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	Same as Existing Plus Project (Ag)	a. Add 2nd EB L b. Add EB R c. Add SB R d. Add NB RTO Signal Phase
8	N Main Street (State Route 183)	Rossi Street	Signal	None Required	Add 3rd NB T, 3rd SB T (TFO 31)	None Required	Add 3rd NB T, 3rd SB T (TFO 31)	None Required	Add 3rd NB T, 3rd SB T (TFO 31)
9	Davis Road Southbound Ramps	W Market Street (State Route 183)	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing

Exhibit 4B
Recommended
Intersection Improvements
(Page 1 of 2)

Keith Higgins
Traffic Engineer

	N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project (Ag) Conditions	Existing Plus Project (Apts) Conditions	Background Plus Project (Ag) Conditions	Background Plus Project (Apts) Conditions	Cumulative Plus Project (Ag) Conditions	Cumulative Plus Project (Apts) Conditions
10	Davis Road Northbound Ramps	W Market Street (State Route 183)	Signal	None Required	Add EB R	None Required	Add EB R	None Required	Add EB R
11	S Davis Road	Blanco Road	Siignal	None Required	None Required	None Required	None Required	None Required	a. Add 2nd NB L, NB R b. Add 2nd SB T c. Add EB R d. Add 2nd WB L (TFO 73)
12	N Main Street	Alvin Drive	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing
13	N Main Street	Laurel Drive	Signal	None Required	None Required	None Required	None Required	None Required	Optimize Signal Timing

Notes:

1. L, T, R = Left, Through, Right.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. RTO = Right Turn Overlap Signal Phase

Exhibit 4B
Recommended
Intersection Improvements
(Page 2 of 2)

Quatrrin Agricultural Employee Housing Trip Generation

PROPOSED PROJECT - AGRICULTURAL EMPLOYEE HOUSING

A. Project Trip Rates

REFERENCE USE	EXISTING SIZE	DAILY TRIPS	AM PEAK HOUR PEAK HOUR TRIPS	AM PEAK HOUR % OF ADT	AM PEAK HOUR % IN	AM PEAK HOUR % OUT	PM PEAK HOUR PEAK HOUR TRIPS	PM PEAK HOUR % OF ADT	PM PEAK HOUR % IN	PM PEAK HOUR % OUT
Casa Boronda Ag. Employee Housing Driveway Count[1]	600 beds	N.A.	4		3	1	43		22	21
Trip Rates (per employee):[2]		**0.288**	**0.007**		**75%**	**25%**	**0.072**		**51%**	**49%**

B. Project Trip Generation

PROPOSED USE	PROJECT SIZE	DAILY TRIPS	AM PEAK HOUR PEAK HOUR TRIPS	AM PEAK HOUR % OF ADT	AM PEAK HOUR TRIPS IN	AM PEAK HOUR TRIPS OUT	PM PEAK HOUR PEAK HOUR TRIPS	PM PEAK HOUR % OF ADT	PM PEAK HOUR TRIPS IN	PM PEAK HOUR TRIPS OUT
Agricultural Employee Housing	1,200 beds	346	8	2%	6	2	86	25%	44	42
Raw (Peak Hour) Total (used in analysis):		**346**	**8**		**6**	**2**	**86**		**44**	**42**
Annual Average Total:		**245**	**6**		**4**	**2**	**61**		**31**	**30**
With TDM Work Schedule:[5]		**49**	**1**		**1**	**0**	**12**		**6**	**6**

Notes:
1. AM and PM peak hour traffic at Casa Boronda was collected Tuesday, April 16, 2019. This data can be found in **Appendix C**.
2. Daily trip rate derived by assuming that PM peak rate is 25% of the daily trip rate.
3. Estimated trip generation for Casa Boronda project cited from *Casa Boronda Agricultural Employee Housing Project Traffic Impact Analysis,* Keith Higgins Traffic Engineer, July 3, 2017.
4. Seasonal adjustment reflects that project is open for just 8.5 months of the year (i.e., approximately 71% of a year).
5. Project Traffic Demand Management (TDM) program proposes use of employee buses and vans largely outside of AM and PM peak hours.

ALTERNATIVE PROPOSED PROJECT - APARTMENTS

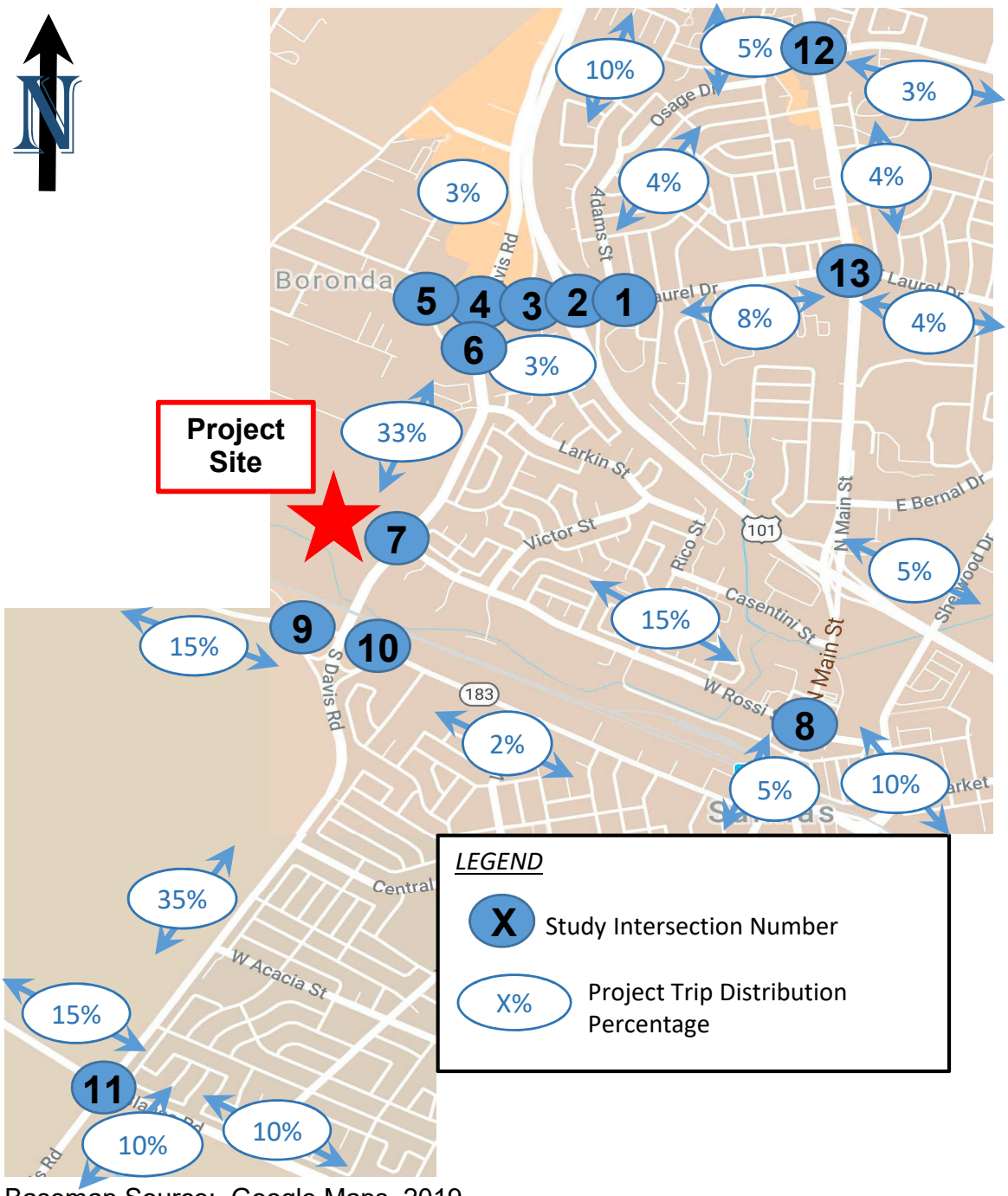
A. Project Trip Rates

TRIP GENERATION RATES	ITE LAND USE CODE	DAILY TRIP RATE	AM PEAK HOUR PEAK HOUR RATE	AM PEAK HOUR % OF ADT	AM PEAK HOUR % IN	AM PEAK HOUR % OUT	PM PEAK HOUR PEAK HOUR RATE	PM PEAK HOUR % OF ADT	PM PEAK HOUR % IN	PM PEAK HOUR % OUT
Multifamily Housing (Low-Rise) (per unit)	220	7.32	0.46	6%	23%	77%	0.56	8%	63%	37%

B. Project Trip Generation

PROPOSED USE	PROJECT SIZE	DAILY TRIPS	AM PEAK HOUR PEAK HOUR TRIPS	AM PEAK HOUR % OF ADT	AM PEAK HOUR TRIPS IN	AM PEAK HOUR TRIPS OUT	PM PEAK HOUR PEAK HOUR TRIPS	PM PEAK HOUR % OF ADT	PM PEAK HOUR TRIPS IN	PM PEAK HOUR TRIPS OUT
Apartments	200 units	1,464	92	6%	21	71	112	8%	71	41
Total:										

Notes:
1. Trip generation rates published by Institute of Transportation Engineers (ITE), *Trip Generation Manual,* 10th Edition, 2017.
2. sq. ft. = square feet



Basemap Source: Google Maps, 2019.

Keith Higgins
Traffic Engineer

Exhibit 6
Project Trip Distribution
(Ag Employee Housing)

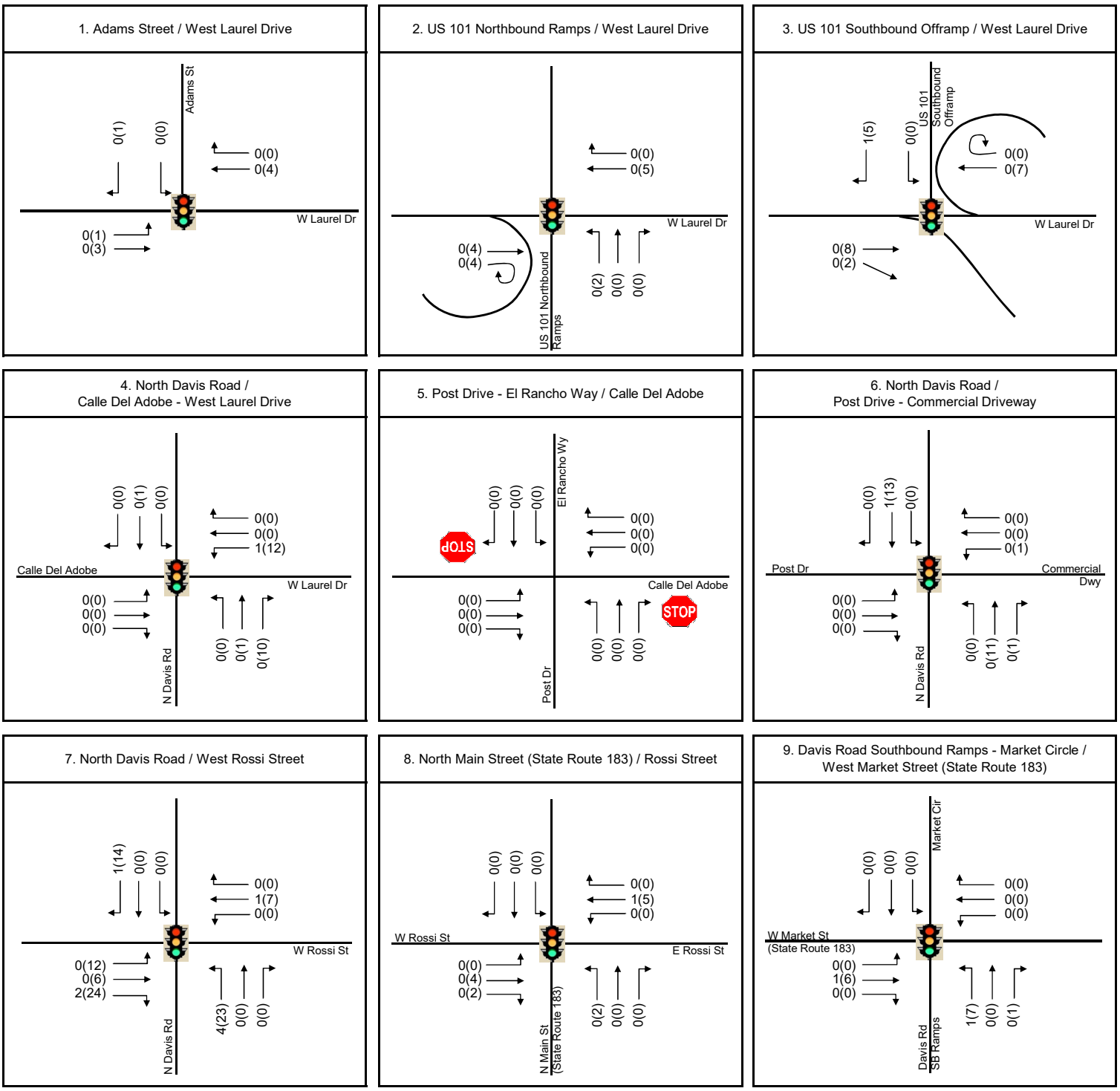
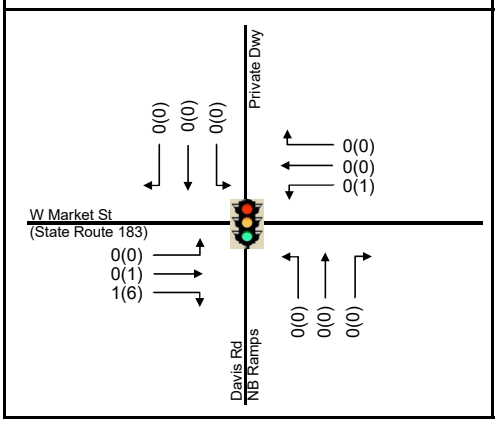


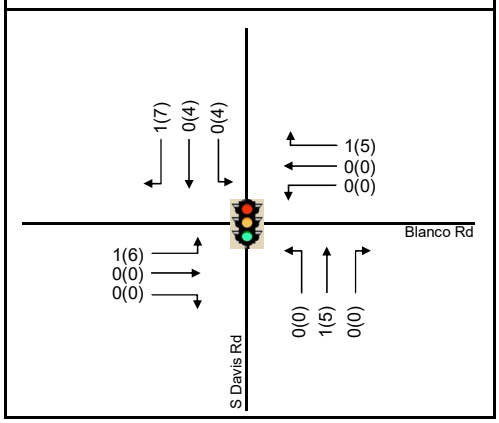
Exhibit 7
Project Trip Assignment
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)

Keith Higgins
Traffic Engineer

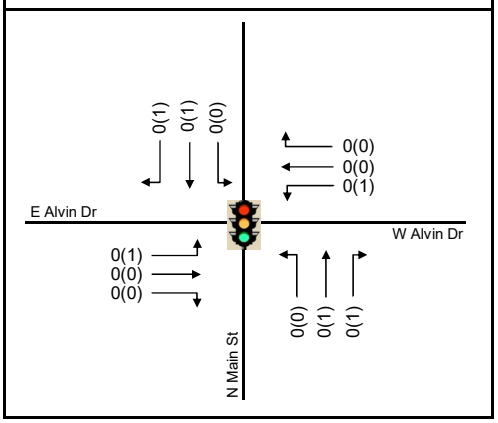
10. Davis Road Northbound Ramps - Private Driveway / West Market Street (State Route 183)



11. Davis Road / Blanco Road



12. North Main Street / Alvin Drive



13. North Main Street / Laurel Drive

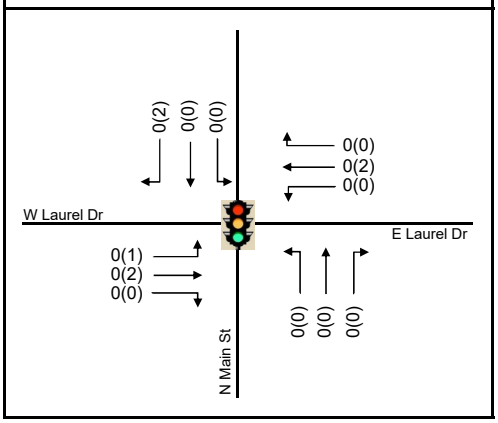


Exhibit 7
Project Trip Assignment
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)

Keith Higgins
Traffic Engineer

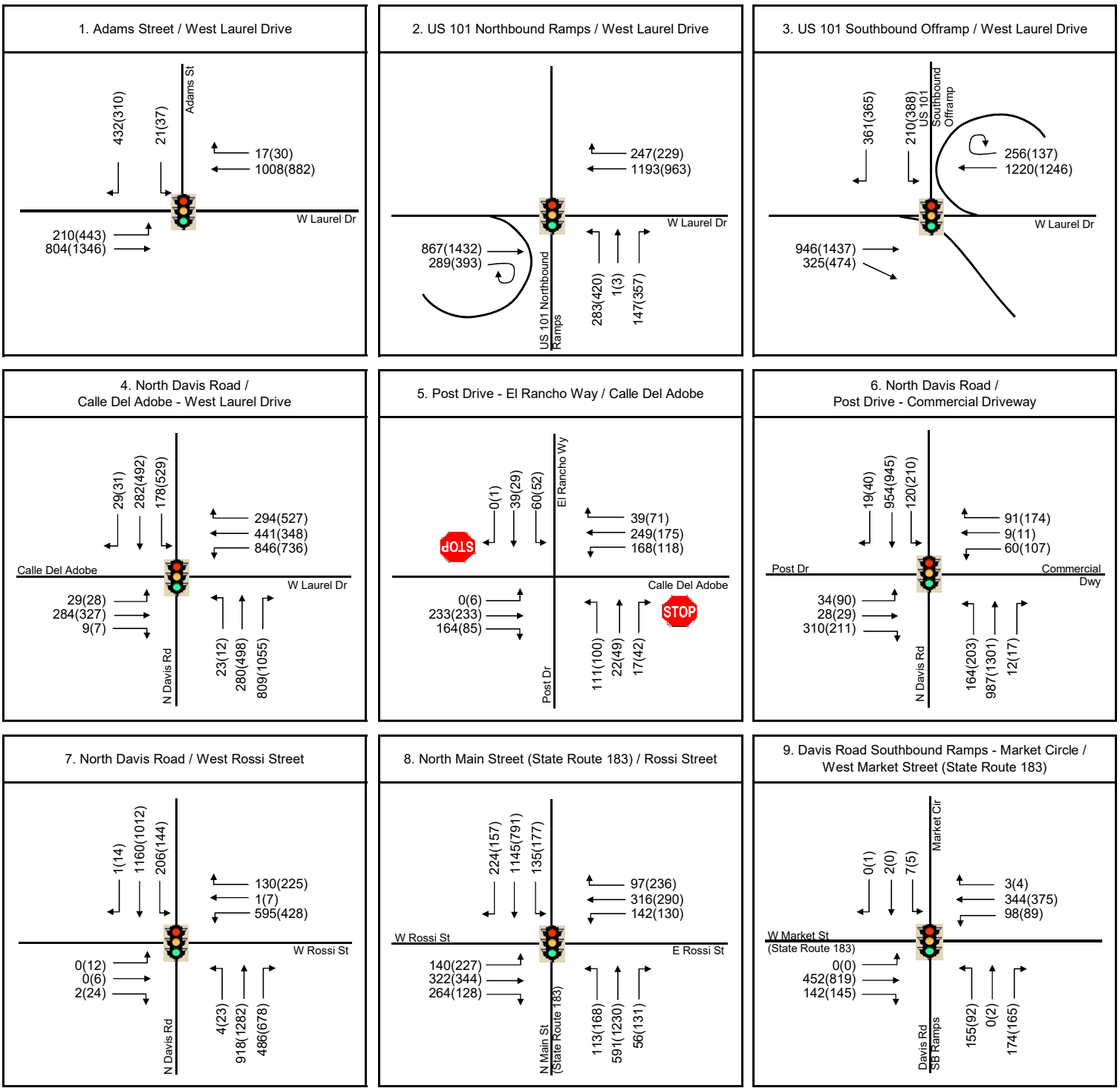
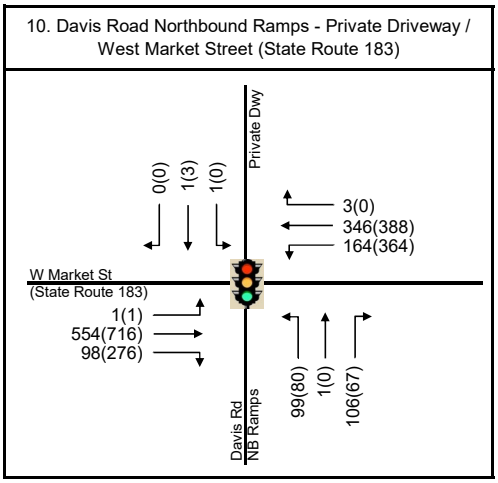
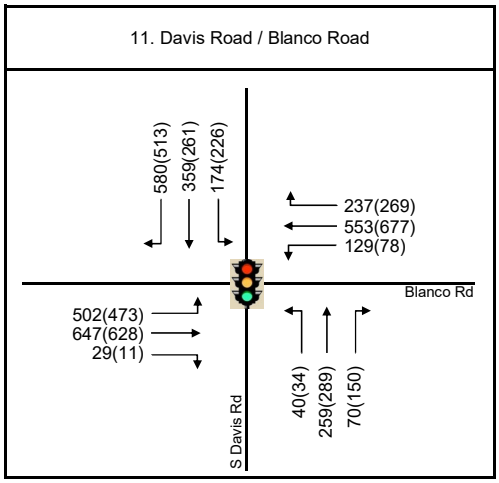
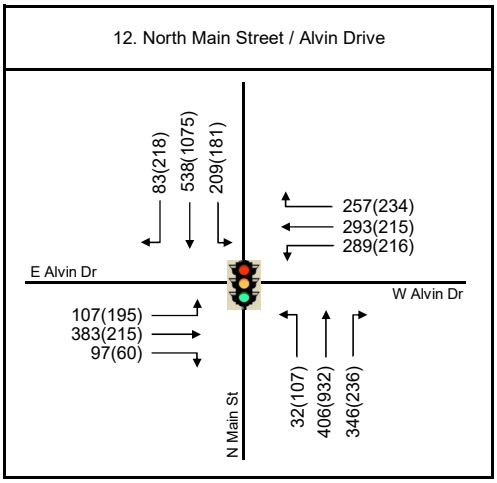


Exhibit 8
Existing Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)

Keith Higgins
Traffic Engineer







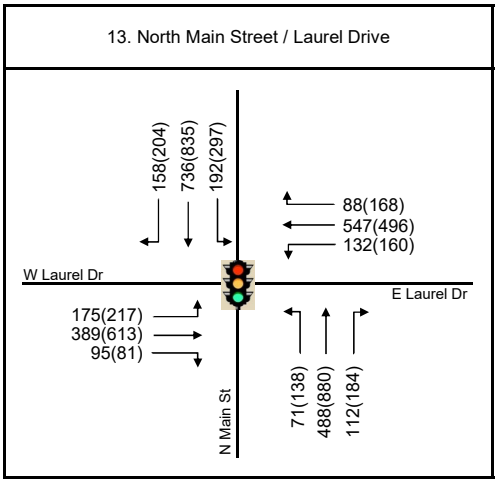
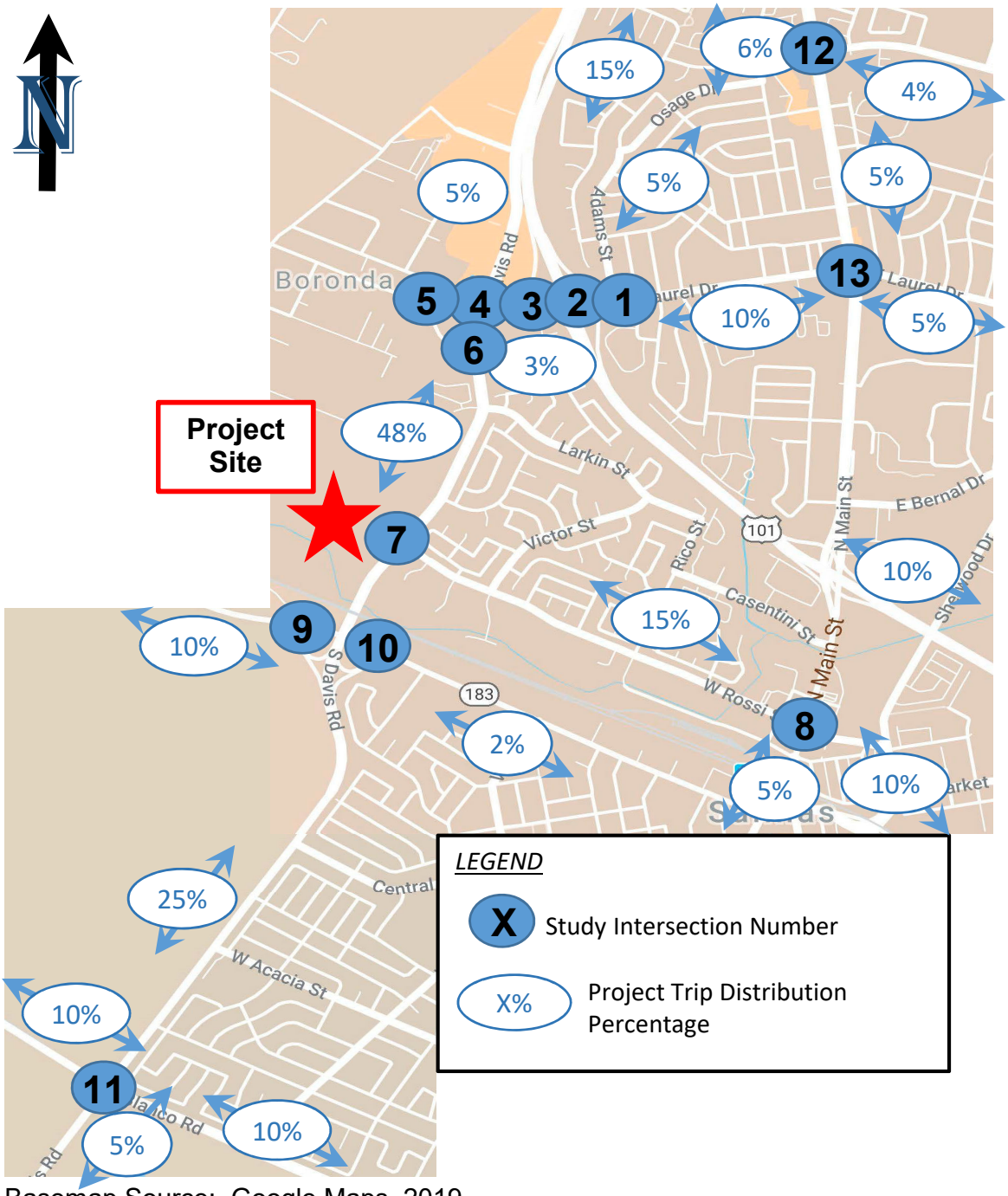


Exhibit 8
Existing Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)

Keith Higgins
Traffic Engineer



Basemap Source: Google Maps, 2019.

Keith Higgins
Traffic Engineer

Exhibit 9
Project Trip Distribution
(Apartments)

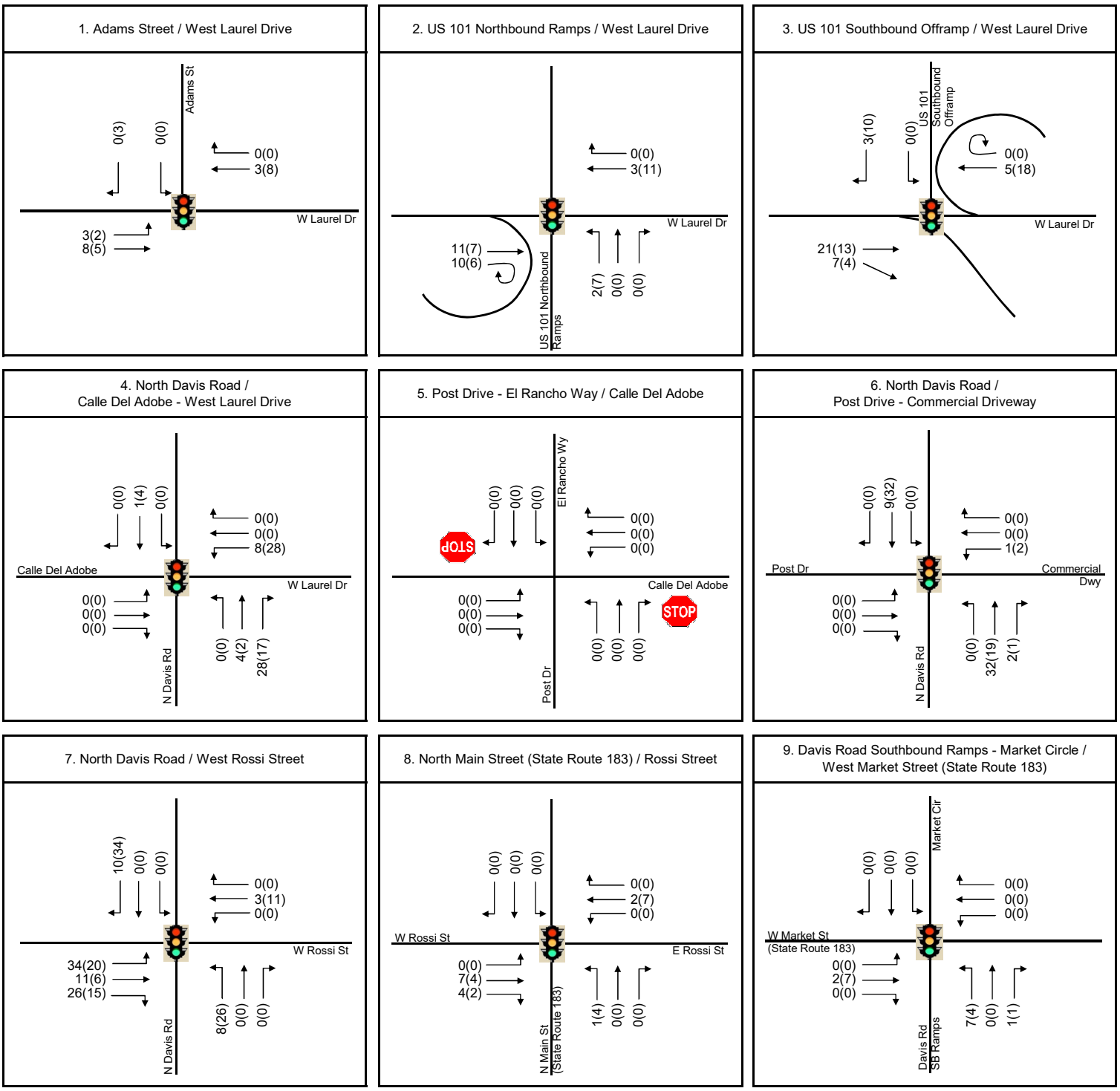
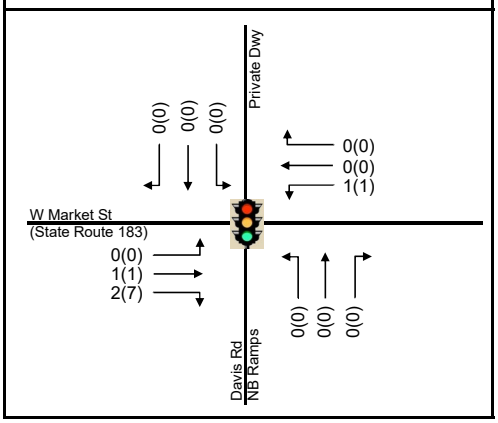


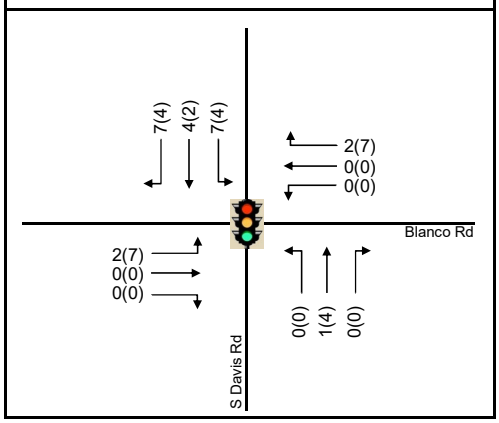
Exhibit 10
Project Trip Assignment
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)

Keith Higgins
Traffic Engineer

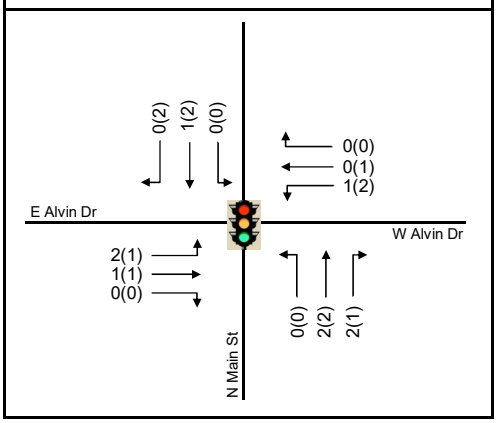
10. Davis Road Northbound Ramps - Private Driveway / West Market Street (State Route 183)



11. Davis Road / Blanco Road



12. North Main Street / Alvin Drive



13. North Main Street / Laurel Drive

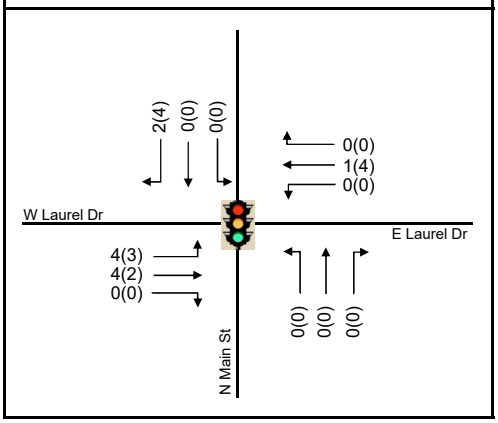


Exhibit 10
Project Trip Assignment
Apartments
AM & PM Peak Hour Volumes
(Page 2 of 2)

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Traffic Engineer

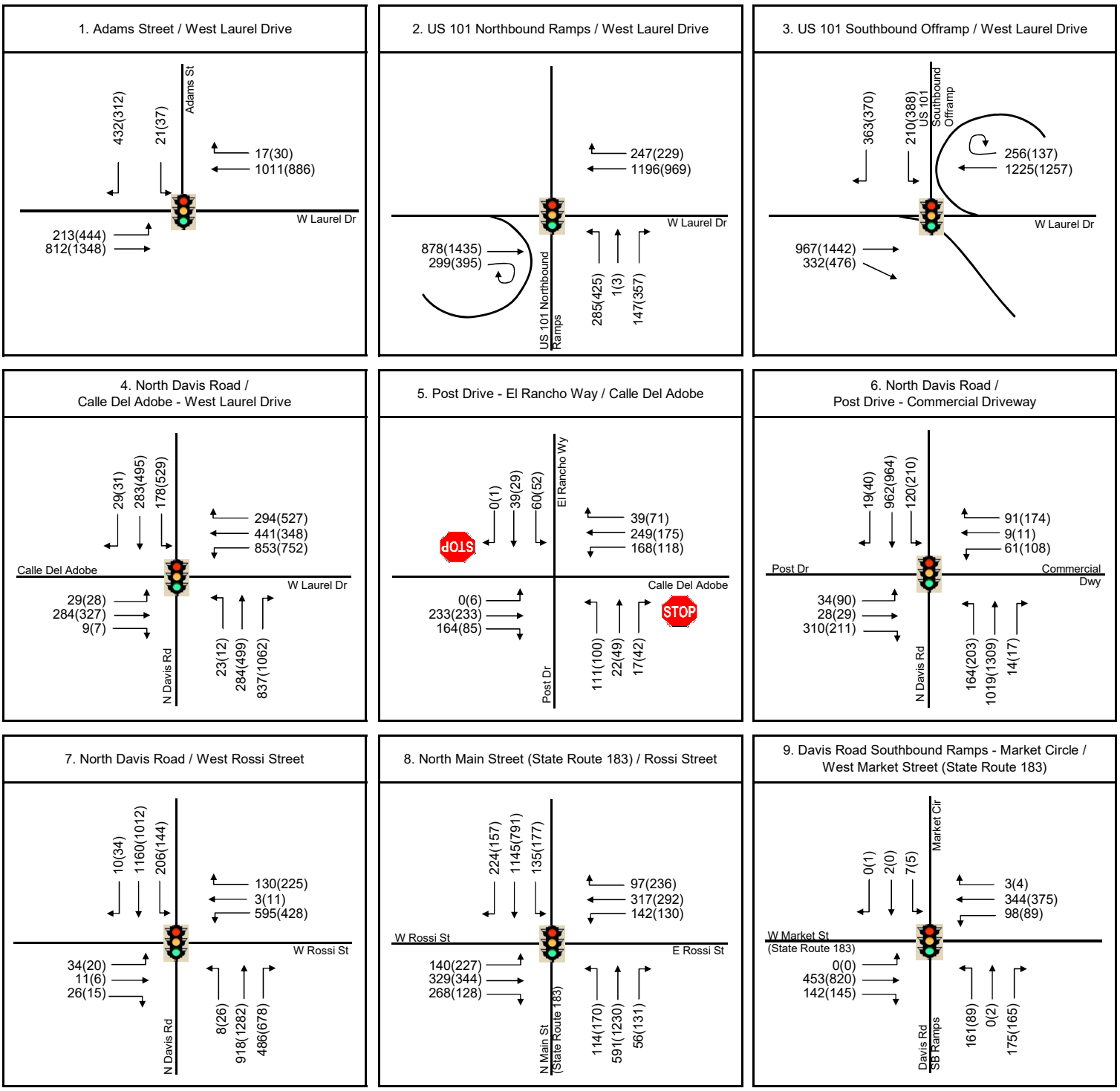
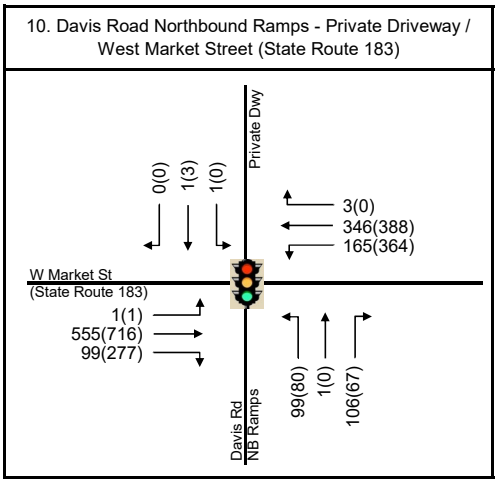
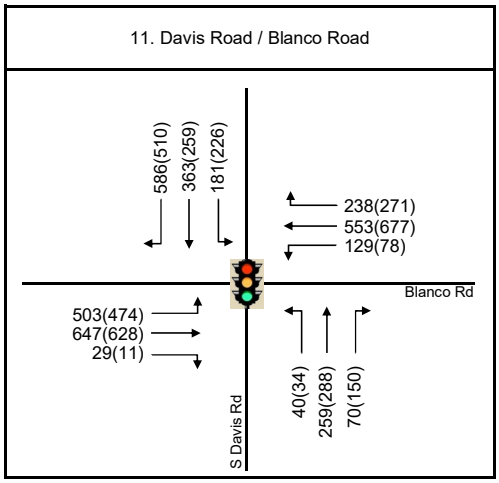
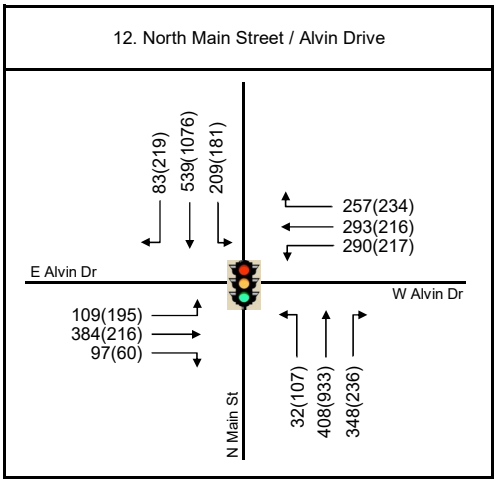


Exhibit 11
Existing Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)

Keith Higgins
Traffic Engineer







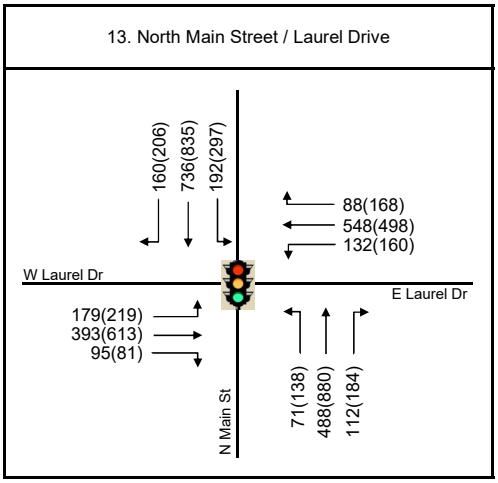


Exhibit 11
Existing Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 2 of 2)

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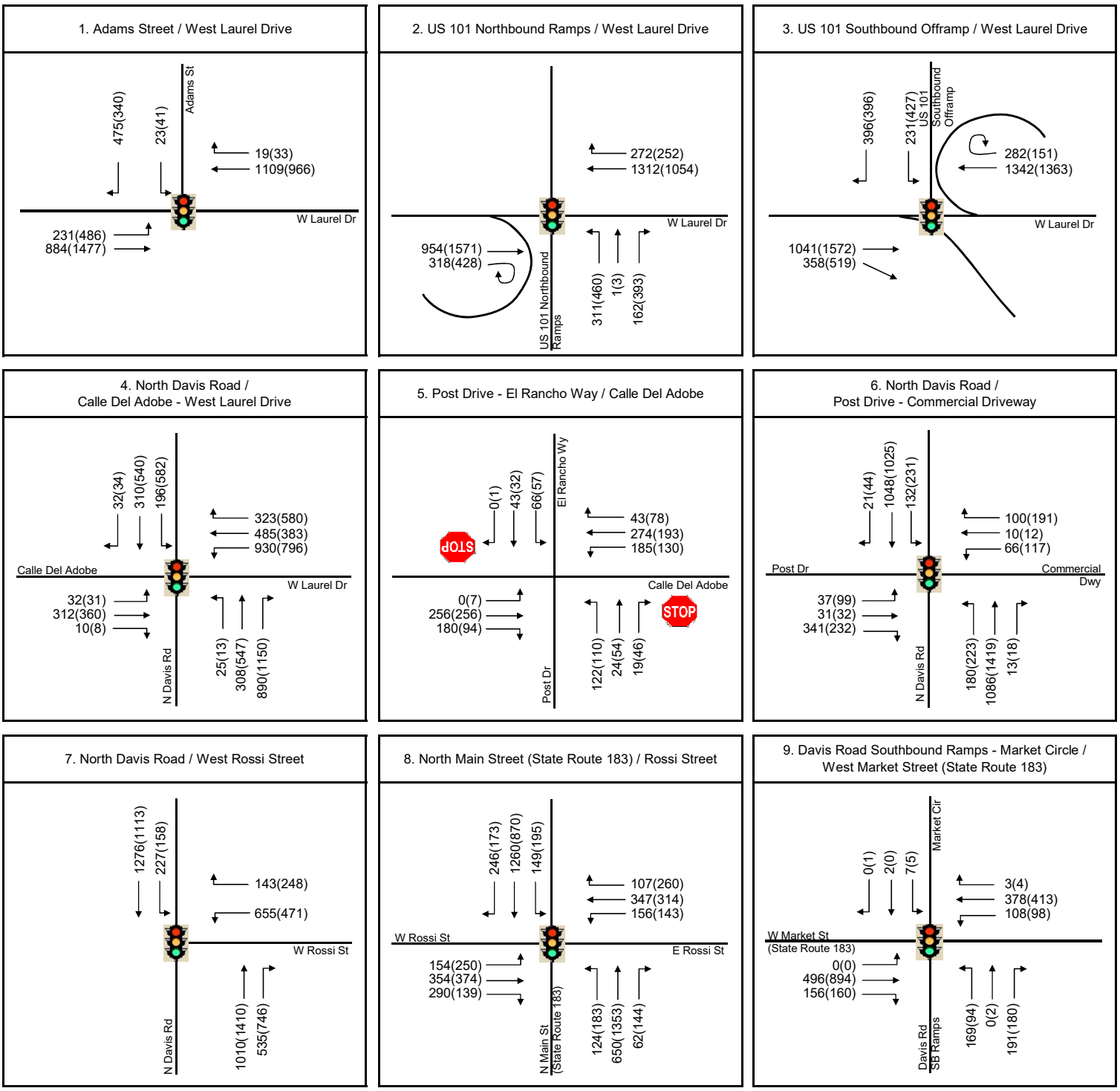
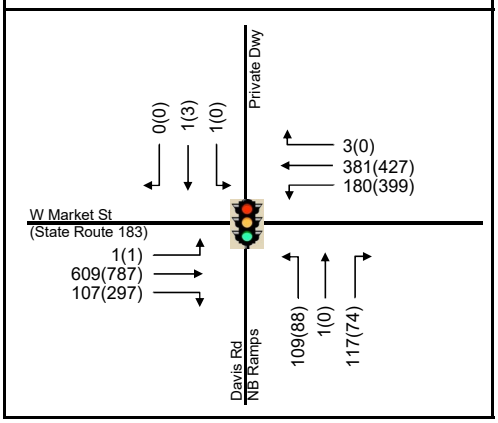
Traffic Engineer



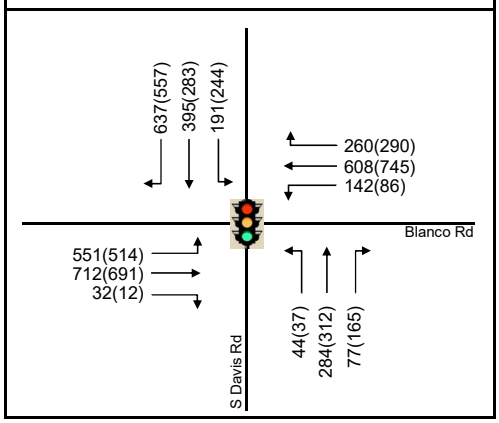
Keith Higgins
Traffic Engineer

Exhibit 12
Background Conditions
AM & PM Peak Hour Volumes
(Page 1 of 2)

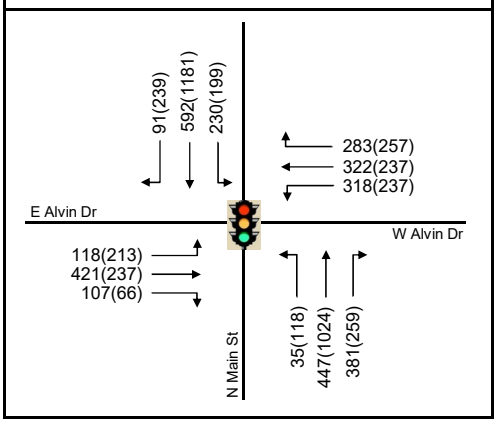
10. Davis Road Northbound Ramps - Private Driveway / West Market Street (State Route 183)



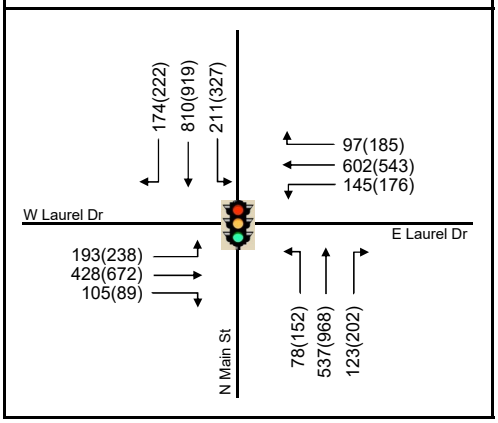
11. Davis Road / Blanco Road



12. North Main Street / Alvin Drive



13. North Main Street / Laurel Drive



Keith Higgins
Traffic Engineer

Exhibit ?
Background Conditions
AM & PM Peak Hour Volumes
(Page 2 of 2)

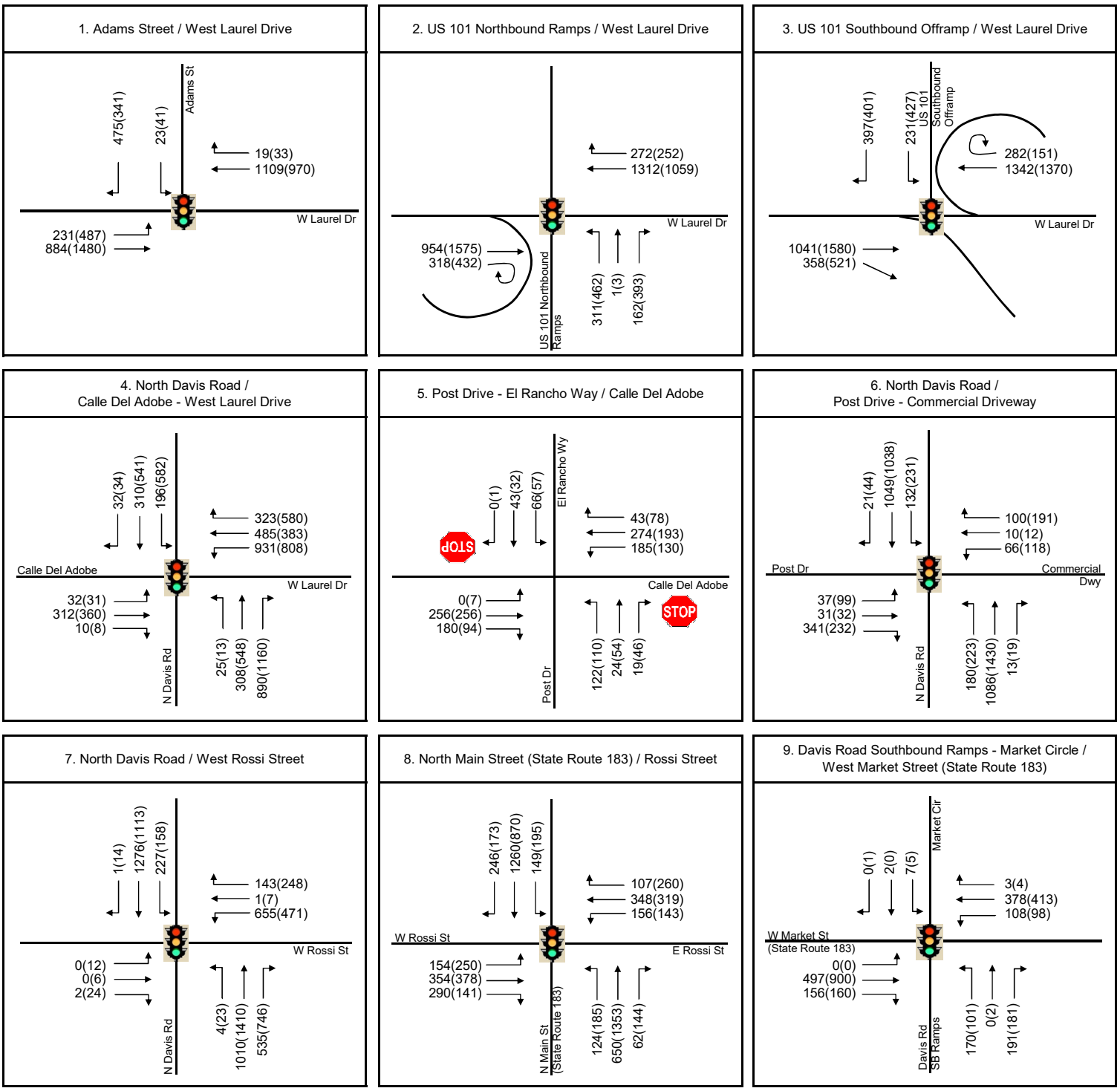
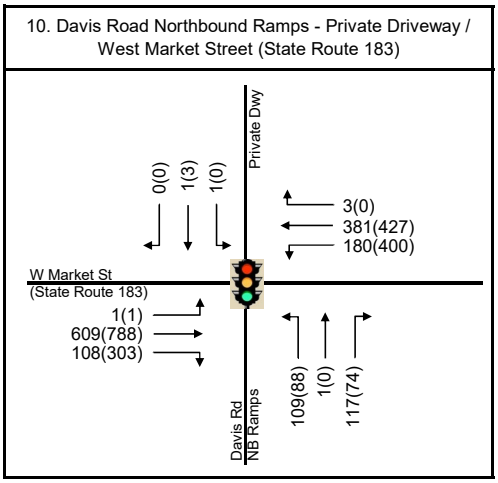
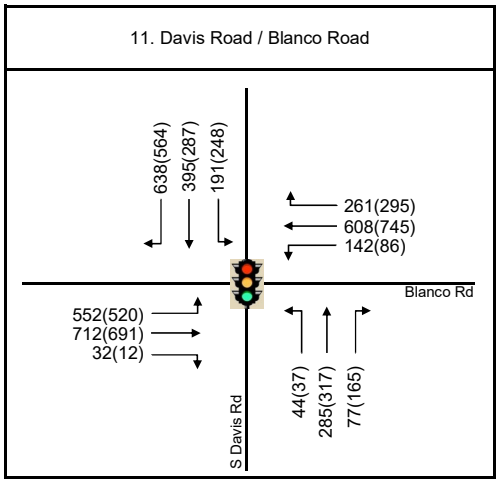
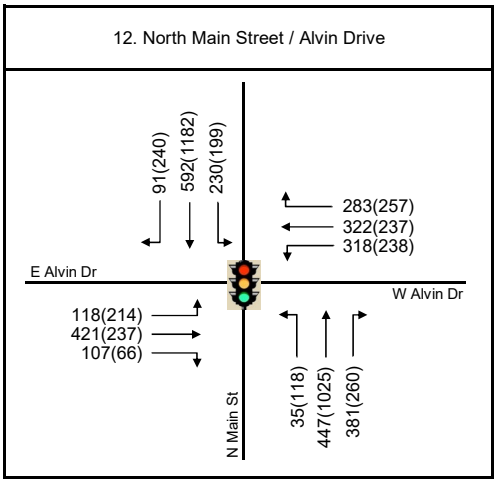


Exhibit 13
Background Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)

Keith Higgins
Traffic Engineer







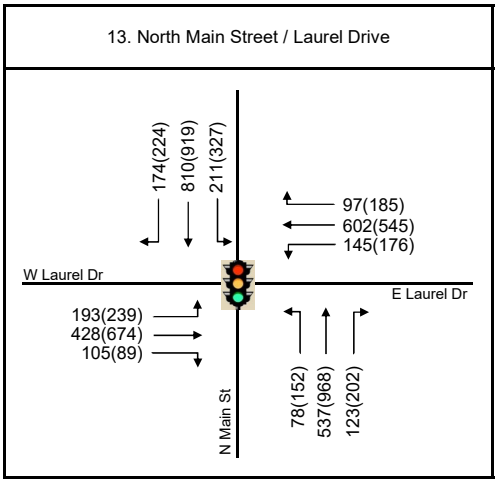


Exhibit 13
Background Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)

Keith Higgins
Traffic Engineer

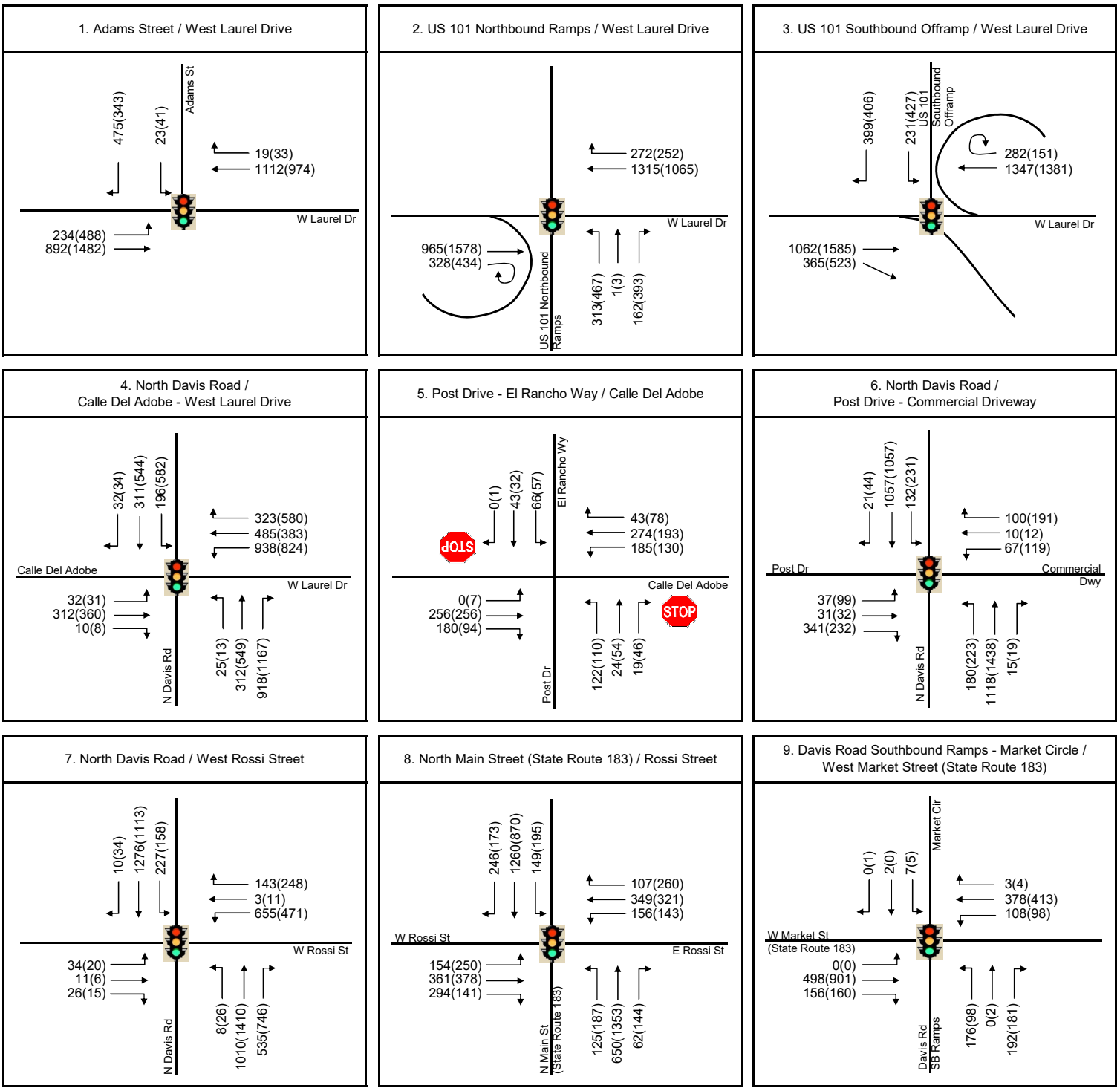


Exhibit 14
Background Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)

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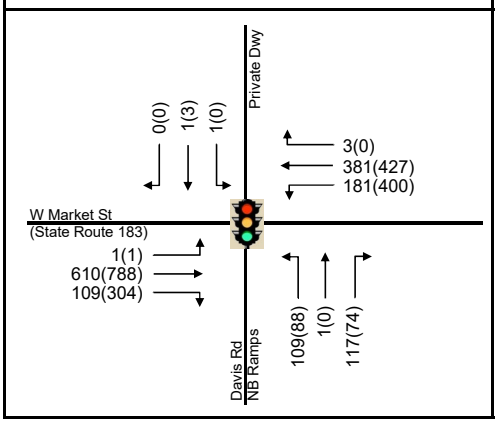
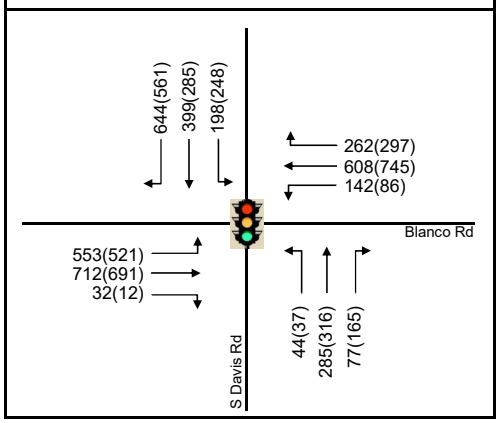
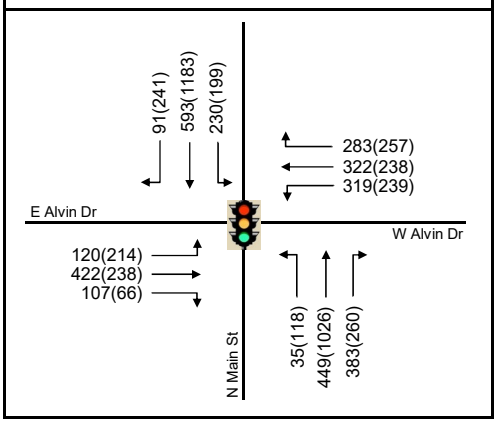
10. Davis Road Northbound Ramps - Private Driveway / West Market Street (State Route 183)



11. Davis Road / Blanco Road



12. North Main Street / Alvin Drive



13. North Main Street / Laurel Drive

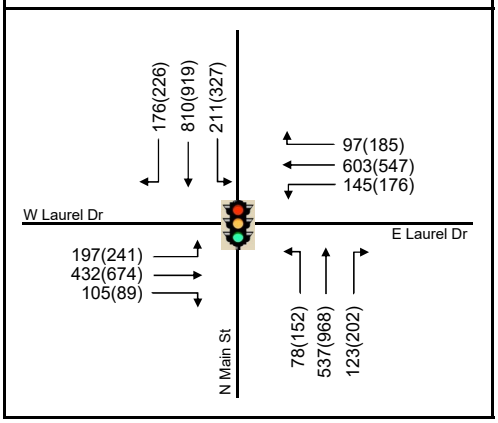


Exhibit 14
Background Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 2 of 2)

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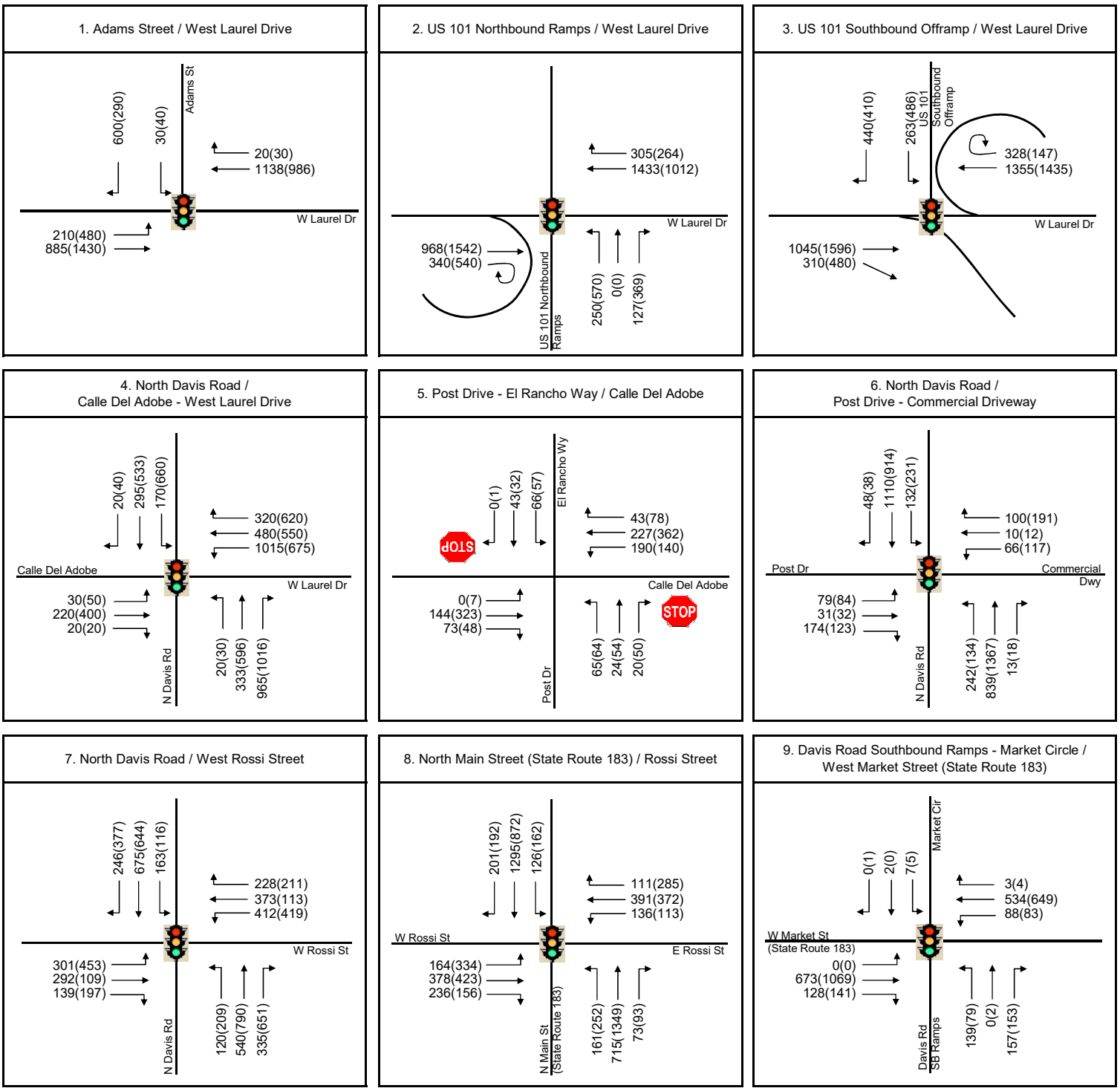

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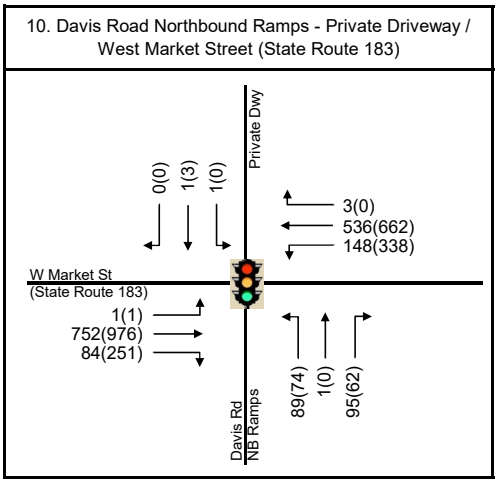
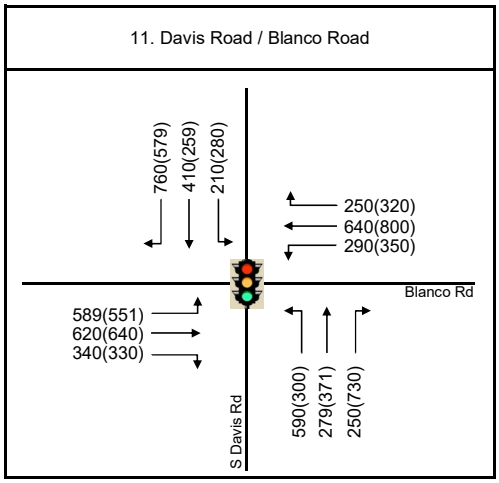
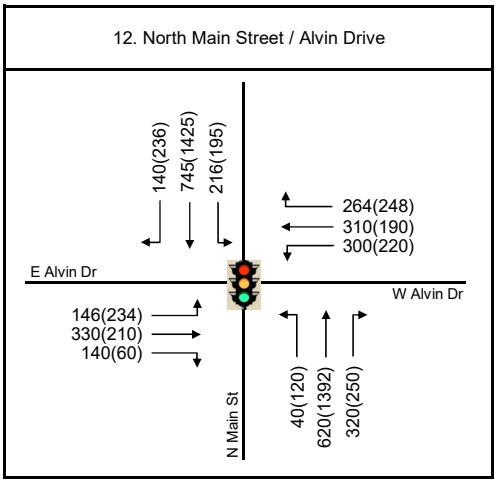
Exhibit 15
Cumulative Without Project Conditions
AM & PM Peak Hour Volumes
(Page 1 of 2)







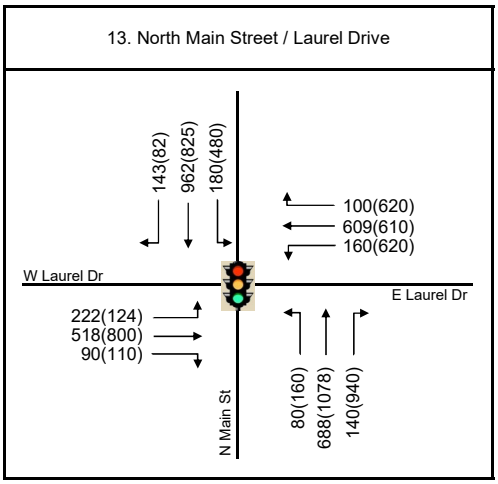


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Exhibit 15
Cumulative Without Project Conditions
AM & PM Peak Hour Volumes
(Page 2 of 2)

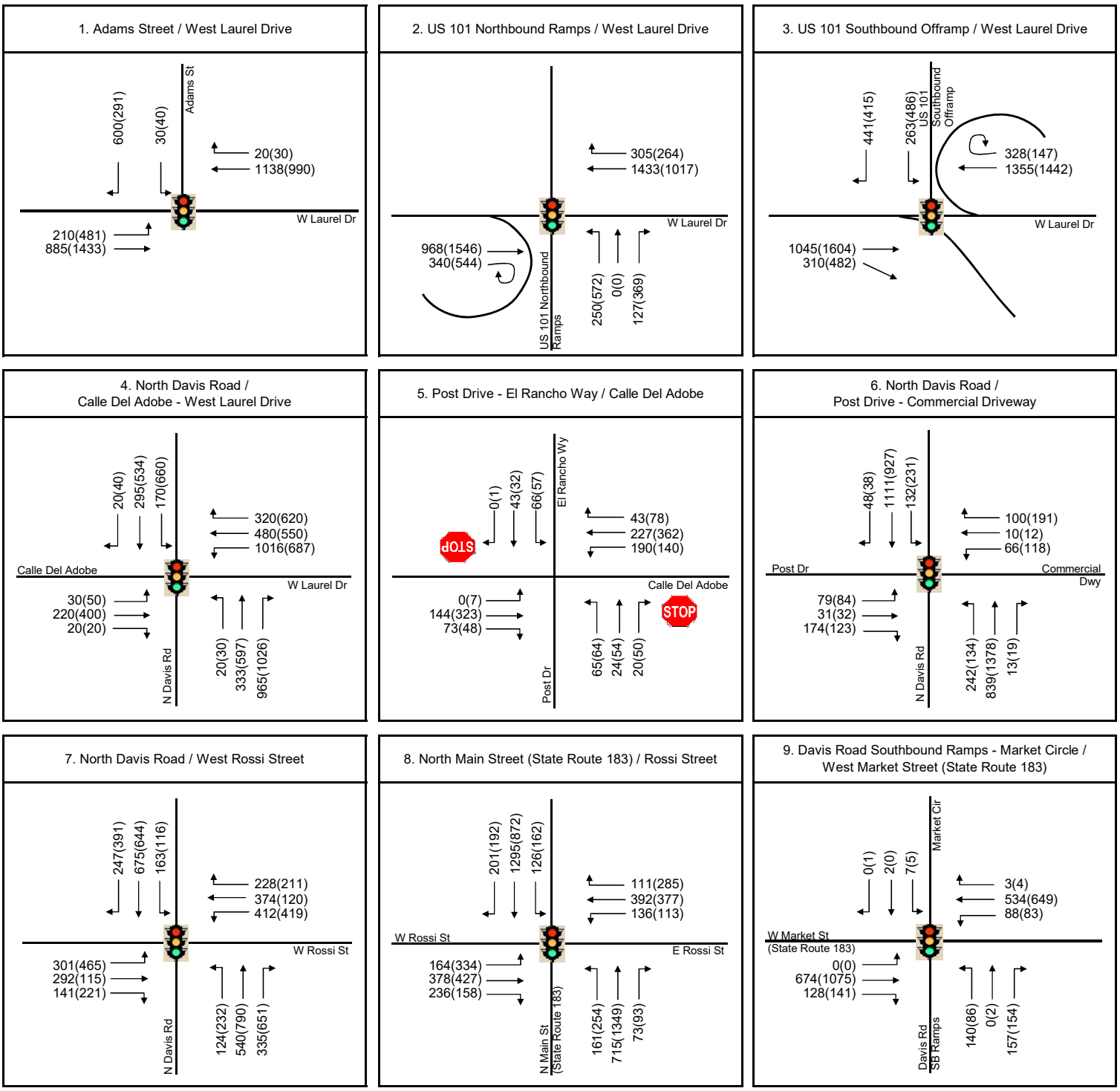
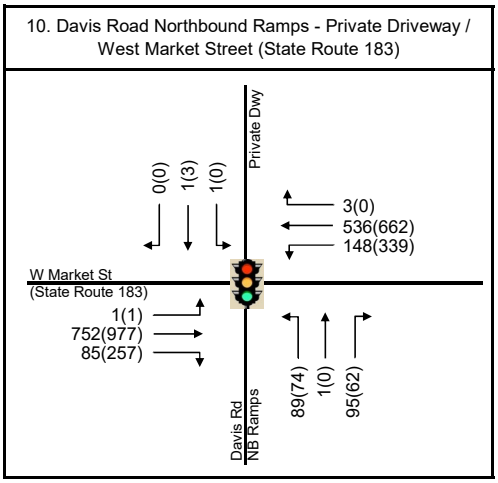
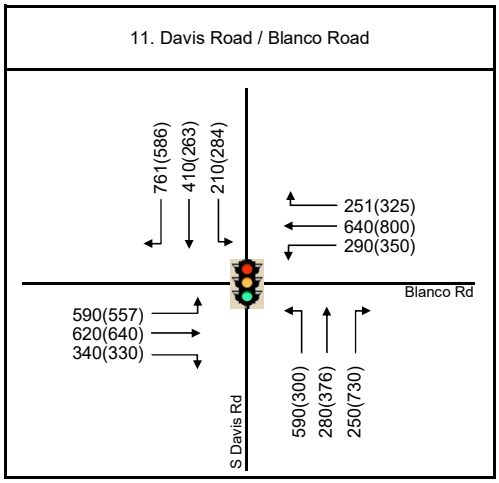
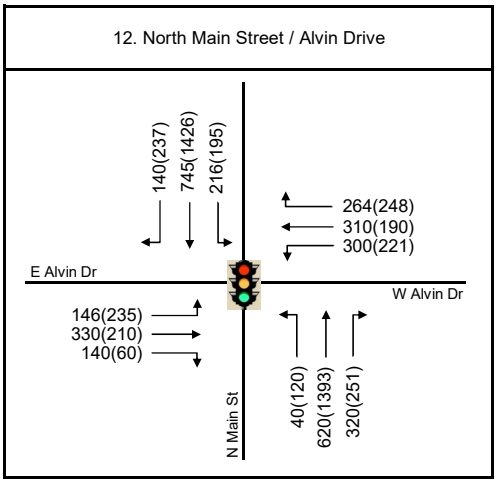


Exhibit 16
Cumulative Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 1 of 2)

Keith Higgins
Traffic Engineer







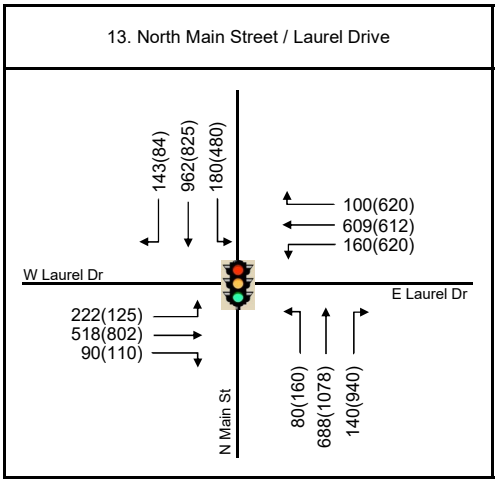


Exhibit 16
Cumulative Plus Project Conditions
Ag Employee Housing
AM & PM Peak Hour Volumes
(Page 2 of 2)

Keith Higgins
Traffic Engineer

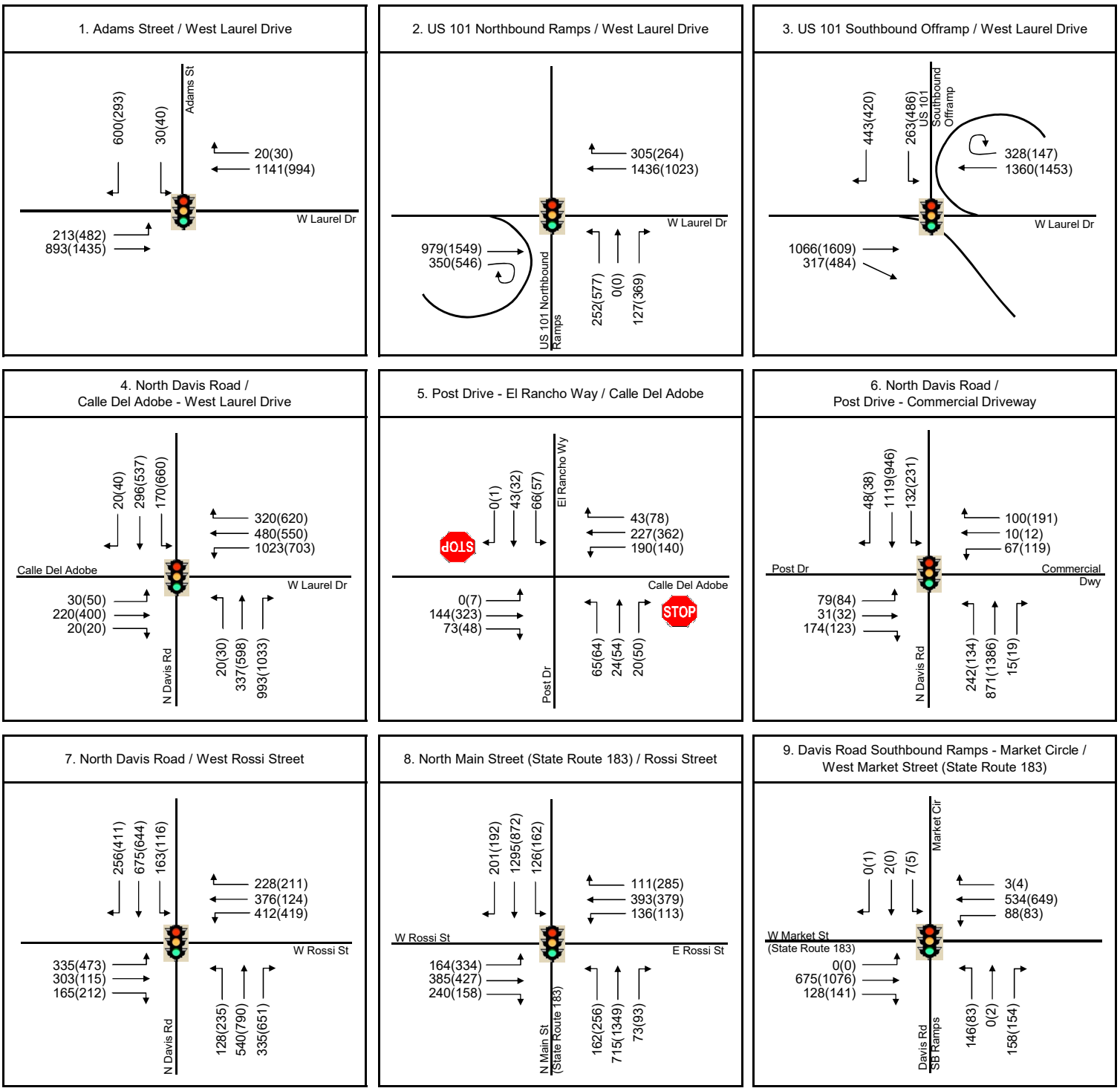
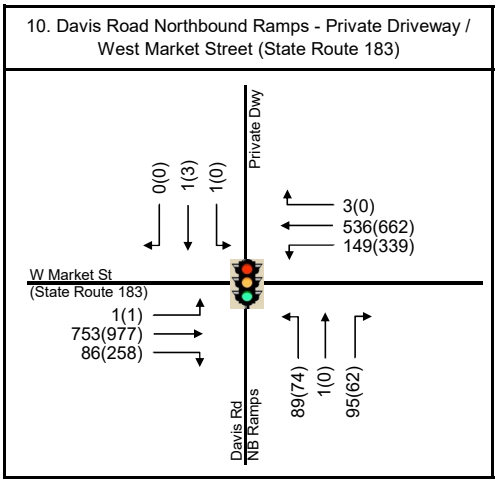
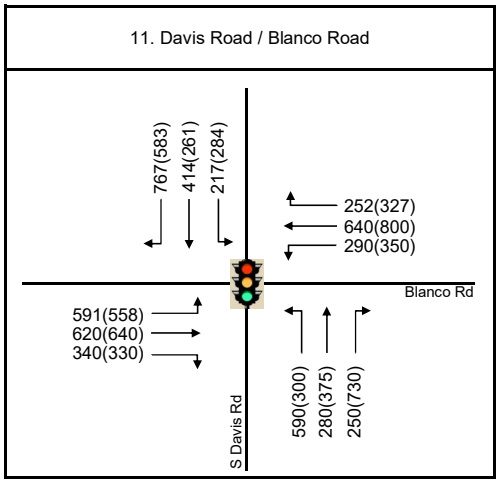
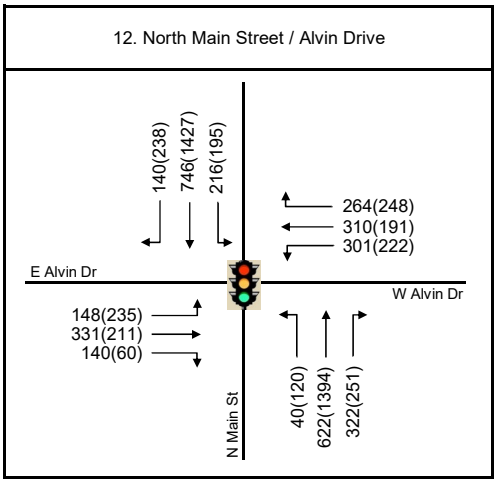


Exhibit 17
Cumulative Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 1 of 2)

Keith Higgins
Traffic Engineer







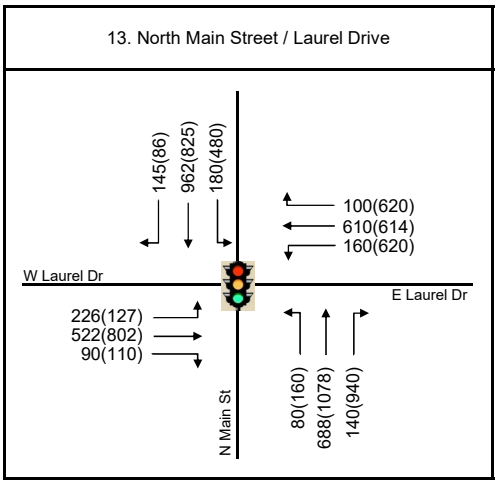


Exhibit 17
Cumulative Plus Project Conditions
Apartments
AM & PM Peak Hour Volumes
(Page 2 of 2)

Keith Higgins
Traffic Engineer

Vehicle Trips - Ag Employee Housing Project Alternative

Employee Shuttles

Vehicle Type	Seating Capacity	Total Vehicles	Total Trips	Distance Traveled per Trip		Total VMT
Bus	32	33	66	15	miles	990
Van	15	8	16	15	miles	240
					Subtotal:	***1,230***

Shuttle Trips Between Project Site and Storage Area

Vehicle Type	Total Vehicles	Total Trips	Distance Traveled per Trip		Total VMT
Bus	33	66	6	miles	400
Van	8	0	0	miles	0
				Subtotal:	***400***

Total VMT: 1,630 per day
326,000 per year

If all ag employees drove personal cars (assuming two person per vehicle):
Driving VMT: 18,000 per day
3,600,000 per year

Notes:
1. Number of buses and vans provided by project applicant.
2. Fields are assumed to be an average of 15 miles from the project site.
3. Per the project applicant, buses will be stored at a location 6 miles away and vans will be stored on the project site.
4. VMT per year estimated using 200 working days per year.
5. Estimate for driving employee comparision assumes two employees per vehicles, which is equivalent to 600 total vehicles per the project definition.

Vehicle Miles Traveled - Apartments Project Alternative

Location	Percent of Net Project Traffic	Daily Project Traffic	Distance from Project (miles)	Vehicle Miles Traveled
Salinas	57%	834	2.50	2,085
Marina	5%	73	9.00	657
Seaside	3%	44	15.00	660
Monterey	10%	146	18.00	2,628
Prunedale	7%	102	8.00	816
Castroville	5%	73	8.00	584
Watsonville	4%	59	19.00	1,121
Gonzales	1%	14	19.00	266
Soledad	1%	15	28.00	420
Greenfield	1%	15	37.00	555
San Benito County	3%	44	27.00	1,188
Santa Clara County	3%	44	30.00	1,320
Total:	**100%**	**1,463**		**12,300**

Project Average Trip Length	**8.4**
Regional Average Home-Based Trip Length	**8.9**
Project Percent of Regional Average Home-Based Trip Length	**94%**
Apartment Occupants per Unit	3.73
Number of Apartments	200
Number of People Living in Apartments	**746**
Average Residential Vehicle-Miles Traveled (miles/resident):	**16.5**

Average AMBAG Region VMT per Capita	**21.66**
Project Percent of Regional VMT per Capita	**76%**

Notes:
1. Total daily net project residential trips cited from trip generation on **Exhibit 5**.
2. Apartment Occupants per Unit is average household size in Salinas in 2010 US Census, per the 2010 US Census (factfinder.census.gov).

Keith Higgins
Traffic Engineer

Exhibit 18B
Project Vehicle Miles Traveled Calculation (Apartments)

Appendix A

Level of Service

Descriptions

APPENDIX A1

LEVEL OF SERVICE (LOS) DESCRIPTION
SIGNALIZED INTERSECTIONS

The capacity of an urban street is related primarily to the signal timing and the geometric characteristics of the facility as well as to the composition of traffic on the facility. Geometrics are a fixed characteristic of a facility. Thus, while traffic composition may vary somewhat over time, the capacity of a facility is generally a stable value that can be significantly improved only by initiating geometric improvements. A traffic signal essentially allocates time among conflicting traffic movements that seek to use the same space. The way in which time is allocated significantly affects the operation and the capacity of the intersection and its approaches.

The methodology for signalized intersection is designed to consider individual intersection approaches and individual lane groups within approaches. A lane group consists of one or more lanes on an intersection approach. The outputs from application of the method described in the HCM 2000 and 2010 are reported on the basis of each lane. For a given lane group at a signalized intersection, three indications are displayed: green, yellow and red. The red indication may include a short period during which all indications are red, referred to as an all-red interval and the yellow indication forms the change and clearance interval between two green phases.

The methodology for analyzing the capacity and level of service must consider a wide variety of prevailing conditions, including the amount and distribution of traffic movements, traffic composition, geometric characteristics, and details of intersection signalization. The methodology addresses the capacity, LOS, and other performance measures for lane groups and the intersection approaches and the LOS for the intersection as a whole.

Capacity is evaluated in terms of the ratio of demand flow rate to capacity (v/c ratio), whereas LOS is evaluated on the basis of control delay per vehicle (in seconds per vehicle). The methodology does not take into account the potential impact of downstream congestion on intersection operation, nor does the methodology detect and adjust for the impacts of turn-pocket overflows on through traffic and intersection operation.

LEVEL OF SERVICE (LOS) CRITERIA FOR SIGNALIZED INTERSECTIONS

(Reference 2000 and 2010 Highway Capacity Manuals)

Level of Service	Control Delay (seconds / vehicle)
A	**<10**
B	**>10 - 20**
C	**>20 - 35**
D	**>35 - 55**
E	**>55 - 80**
F	**>80**

APPENDIX A2

LEVEL OF SERVICE (LOS) DESCRIPTION
UNSIGNALIZED INTERSECTIONS WITH TWO-WAY STOP CONTROL (TWSC)

TWSC intersections are widely used and stop signs are used to control vehicle movements at such intersections. At TWSC intersections, the stop-controlled approaches are referred to as the minor street approaches; they can be either public streets or private driveways. The intersection approaches that are not controlled by stop signs are referred to as the major street approaches. A three-leg intersection is considered to be a standard type of TWSC intersection if the single minor street approach (i.e. the stem of the T configuration) is controlled by a stop sign. Three-leg intersections where two of the three approaches are controlled by stop signs are a special form of unsignalized intersection control.

At TWSC intersections, drivers on the controlled approaches are required to select gaps in the major street flow through which to execute crossing or turning maneuvers on the basis of judgment. In the presence of a queue, each driver on the controlled approach must use some time to move into the front-of-queue position and prepare to evaluate gaps in the major street flow. Capacity analysis at TWSC intersections depends on a clear description and understanding of the interaction of drivers on the minor or stop-controlled approach with drivers on the major street. Both gap acceptance and empirical models have been developed to describe this interaction.

Thus, the capacity of the controlled legs is based on three factors:

- the distribution of gaps in the major street traffic stream;
- driver judgment in selecting gaps through which to execute the desired maneuvers; and
- the follow-up time required by each driver in a queue.

The delay experienced by a motorist is made up of a number of factors that relate to control, geometrics, traffic and incidents. Total delay is the difference between the travel time actually experienced and the reference travel time that would result during base conditions, in the absence of incident, control, traffic or geometric delay. Average control delay for any particular minor movement is a function of the capacity of the approach and the degree of saturation and referred to as level of service.

LEVEL OF SERVICE (LOS) CRITERIA FOR TWSC INTERSECTIONS

(Reference 2010 Highway Capacity Manual)

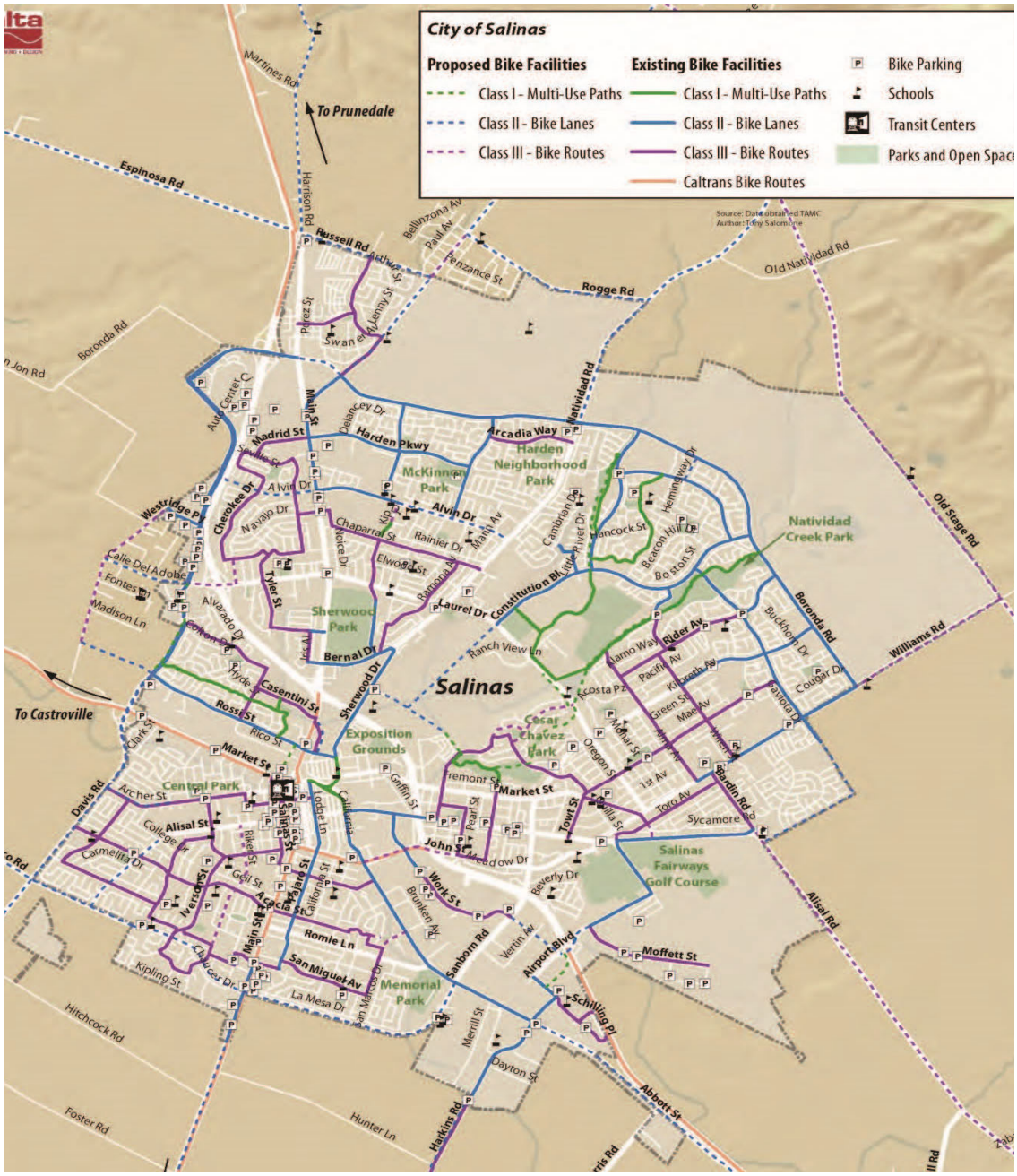
Level of Service	Control Delay (seconds / vehicle)
A	0 - 10
B	>10 - 15
C	>15 - 25
D	>25 - 35
E	>35 - 50
F	>50

Appendix B

Existing and Proposed

Bicycle Facilities

near Project Site



Source: *Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan,* Alta Planning + Design, December 2011.

Appendix C

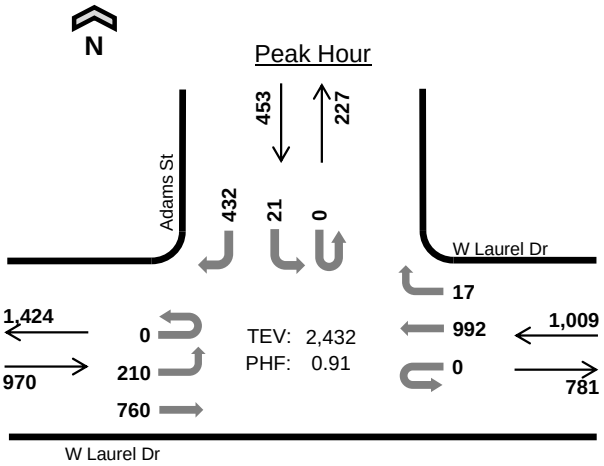
Intersection

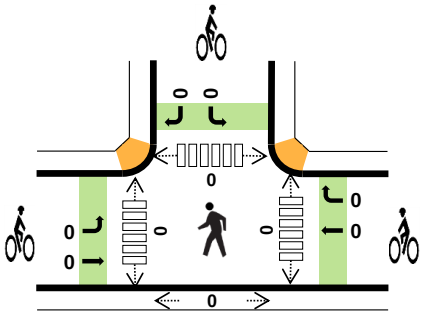
Traffic Volume

Counts

Adams St
W Laurel Dr

Date: 05-22-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	1.9%	0.91
WB	1.4%	0.88
NB	-	-
SB	0.2%	0.89
TOTAL	1.4%	0.91

Two-Hour Count Summaries

Interval Start		W Laurel Dr Eastbound				W Laurel Dr Westbound				n/a Northbound				Adams St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	24	110	0	0	0	181	4	0	0	0	0	0	5	0	86	410	0
7:15 AM		0	37	121	0	0	0	202	1	0	0	0	0	0	4	0	89	454	0
7:30 AM		**0**	**35**	**159**	**0**	**0**	**0**	**225**	**4**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**116**	**544**	0
7:45 AM		**0**	**63**	**188**	**0**	**0**	**0**	**285**	**2**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**120**	**665**	2,073
8:00 AM		**0**	**49**	**210**	**0**	**0**	**0**	**270**	**6**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**115**	**655**	2,318
8:15 AM		**0**	**63**	**203**	**0**	**0**	**0**	**212**	**5**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**81**	**568**	**2,432**
8:30 AM		0	58	173	0	0	0	163	1	0	0	0	0	0	5	0	77	477	2,365
8:45 AM		1	38	167	0	0	0	195	4	0	0	0	0	0	5	0	74	484	2,184
Count Total		1	367	1,331	0	0	0	1,733	27	0	0	0	0	0	40	0	758	4,257	0
Peak Hour	**All**	**0**	**210**	**760**	**0**	**0**	**0**	**992**	**17**	**0**	**0**	**0**	**0**	**0**	**21**	**0**	**432**	**2,432**	**0**
	HV	**0**	**0**	**18**	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**33**	**0**
	HV%	**-**	**0%**	**2%**	**-**	**-**	**-**	**1%**	**0%**	**-**	**-**	**-**	**-**	**-**	**5%**	**-**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	6	1	0	2	*9*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	6	2	0	2	*10*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**4**	**2**	**0**	**1**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**6**	**5**	**0**	**0**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**4**	**5**	**0**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**4**	**2**	**0**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	4	3	0	0	*7*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	4	7	0	1	*12*	1	1	0	0	*2*	0	0	0	0	*0*
Count Total	38	27	0	6	*71*	1	1	0	0	*2*	0	0	0	0	*0*
Peak Hr	**18**	**14**	**0**	**1**	***33***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	W Laurel Dr				W Laurel Dr				n/a				Adams St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	5	0	0	0	1	0	0	0	0	0	0	0	0	2	9	0
7:15 AM	0	1	5	0	0	0	2	0	0	0	0	0	0	0	0	2	10	0
7:30 AM	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**7**	0
7:45 AM	**0**	**0**	**6**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	37
8:00 AM	**0**	**0**	**4**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	37
8:15 AM	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**33**
8:30 AM	0	1	3	0	0	0	3	0	0	0	0	0	0	0	0	0	7	33
8:45 AM	0	1	3	0	0	0	7	0	0	0	0	0	0	0	0	1	12	34
Count Total	0	4	34	0	0	0	27	0	0	0	0	0	0	1	0	5	71	0
Peak Hour	**0**	**0**	**18**	**0**	**0**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**33**	**0**

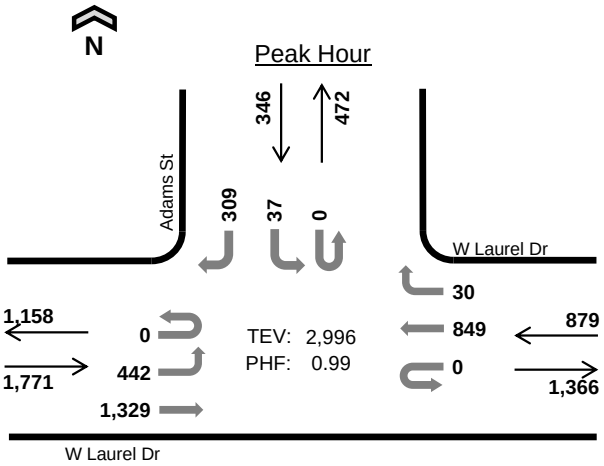
Two-Hour Count Summaries - Bikes

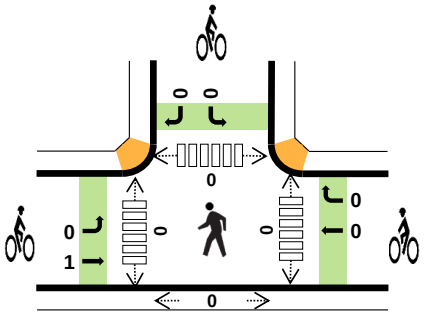
Interval Start	W Laurel Dr			W Laurel Dr			n/a			Adams St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	1	0	0	0	0	0	0	2	2
Count Total	0	1	0	0	0	1	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Adams St
W Laurel Dr

Date: 05-22-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	0.3%	0.96
WB	0.3%	0.95
NB	-	-
SB	0.3%	0.91
TOTAL	0.3%	0.99

Two-Hour Count Summaries

Interval Start		W Laurel Dr Eastbound				W Laurel Dr Westbound				n/a Northbound				Adams St Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	78	269	0	0	0	207	5	0	0	0	0	0	9	0	73	641	0
4:15 PM		0	100	289	0	0	0	199	5	0	0	0	0	0	7	0	73	673	0
4:30 PM		0	108	352	0	0	0	237	1	0	0	0	0	0	6	0	63	767	0
4:45 PM		0	110	322	0	0	0	204	6	0	0	0	0	0	11	0	71	724	2,805
5:00 PM		**0**	**114**	**329**	**0**	**0**	**0**	**213**	**9**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**77**	**751**	2,915
5:15 PM		**0**	**121**	**340**	**0**	**0**	**0**	**207**	**6**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**70**	**753**	2,995
5:30 PM		**0**	**106**	**332**	**0**	**0**	**0**	**228**	**3**	**0**	**0**	**0**	**0**	**0**	**11**	**0**	**75**	**755**	2,983
5:45 PM		**0**	**101**	**328**	**0**	**0**	**0**	**201**	**12**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**87**	**737**	**2,996**
Count Total		0	838	2,561	0	0	0	1,696	47	0	0	0	0	0	70	0	589	5,801	0
Peak Hour	**All**	**0**	**442**	**1,329**	**0**	**0**	**0**	**849**	**30**	**0**	**0**	**0**	**0**	**0**	**37**	**0**	**309**	**2,996**	**0**
	HV	**0**	**1**	**4**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	**0**
	HV%	**-**	**0%**	**0%**	**-**	**-**	**-**	**0%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	2	2	0	1	*5*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	2	3	0	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	1	4	0	0	*5*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	1	1	0	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**2**	**2**	**0**	**0**	***4***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:45 PM	**2**	**0**	**0**	**1**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
Count Total	11	13	0	2	*26*	1	0	0	0	*1*	0	0	0	0	*0*
Peak Hr	**5**	**3**	**0**	**1**	***9***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	W Laurel Dr				W Laurel Dr				n/a				Adams St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	0	0	0	2	0	0	0	0	0	0	0	0	1	5	0
4:15 PM	0	1	1	0	0	0	3	0	0	0	0	0	0	0	0	0	5	0
4:30 PM	0	0	1	0	0	0	4	0	0	0	0	0	0	0	0	0	5	0
4:45 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	17
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	13
5:15 PM	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	12
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	8
5:45 PM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**9**
Count Total	0	2	9	0	0	0	13	0	0	0	0	0	0	0	0	2	26	0
Peak Hour	**0**	**1**	**4**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	**0**

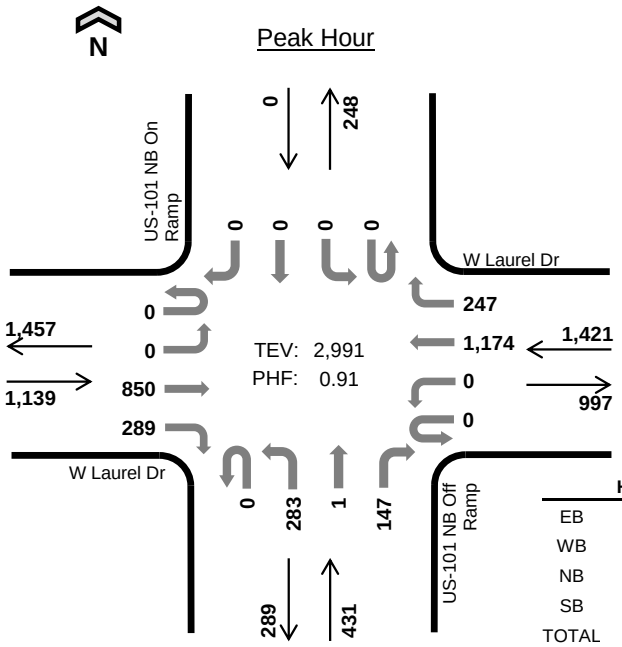
Two-Hour Count Summaries - Bikes

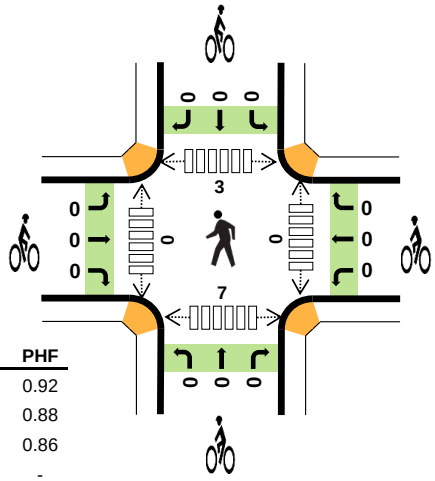
Interval Start	W Laurel Dr			W Laurel Dr			n/a			Adams St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

US-101 NB Off Ramp
W Laurel Dr

Date: 05-22-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM





	HV %:	PHF
EB	3.1%	0.92
WB	1.1%	0.88
NB	3.7%	0.86
SB	-	-
TOTAL	2.2%	0.91

Two-Hour Count Summaries

Interval Start	W Laurel Dr Eastbound UT	LT	TH	RT	W Laurel Dr Westbound UT	LT	TH	RT	US-101 NB Off Ramp Northbound UT	LT	TH	RT	US-101 NB On Ramp Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	0	118	50	0	0	199	74	0	30	0	19	0	0	0	0	490	0
7:15 AM	0	0	132	61	0	0	217	76	0	49	0	20	0	0	0	0	555	0
7:30 AM	**0**	**0**	**165**	**78**	**0**	**0**	**260**	**77**	**0**	**45**	**0**	**33**	**0**	**0**	**0**	**0**	**658**	0
7:45 AM	**0**	**0**	**236**	**64**	**0**	**0**	**346**	**60**	**0**	**80**	**0**	**36**	**0**	**0**	**0**	**0**	**822**	2,525
8:00 AM	**0**	**0**	**224**	**61**	**0**	**0**	**316**	**61**	**0**	**86**	**1**	**39**	**0**	**0**	**0**	**0**	**788**	2,823
8:15 AM	**0**	**0**	**225**	**86**	**0**	**0**	**252**	**49**	**0**	**72**	**0**	**39**	**0**	**0**	**0**	**0**	**723**	**2,991**
8:30 AM	0	0	193	77	0	0	180	52	0	55	0	34	0	0	0	0	591	2,924
8:45 AM	0	0	196	60	0	0	197	41	0	74	1	31	0	0	0	0	600	2,702
Count Total	0	0	1,489	537	0	0	1,967	490	0	491	2	251	0	0	0	0	5,227	0
Peak Hour All	**0**	**0**	**850**	**289**	**0**	**0**	**1,174**	**247**	**0**	**283**	**1**	**147**	**0**	**0**	**0**	**0**	**2,991**	**0**
Peak Hour HV	**0**	**0**	**16**	**19**	**0**	**0**	**14**	**2**	**0**	**13**	**0**	**3**	**0**	**0**	**0**	**0**	**67**	**0**
Peak Hour HV%	**-**	**-**	**2%**	**7%**	**-**	**-**	**1%**	**1%**	**-**	**5%**	**0%**	**2%**	**-**	**-**	**-**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	9	3	2	0	*14*	0	0	0	0	*0*	0	0	1	0	*1*
7:15 AM	5	4	3	0	*12*	0	0	0	0	*0*	0	0	0	1	*1*
7:30 AM	**6**	**2**	**2**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**4**	*4*
7:45 AM	**11**	**5**	**5**	**0**	***21***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	*2*
8:00 AM	**7**	**6**	**6**	**0**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	*2*
8:15 AM	**11**	**3**	**3**	**0**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	***2***
8:30 AM	12	4	3	0	*19*	0	0	0	0	*0*	0	0	0	1	*1*
8:45 AM	7	8	4	0	*19*	1	0	0	0	*1*	0	0	2	1	*3*
Count Total	68	35	28	0	*131*	1	0	0	0	*1*	0	0	6	10	*16*
Peak Hour	**35**	**16**	**16**	**0**	***67***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**3**	**7**	***10***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	W Laurel Dr				W Laurel Dr				US-101 NB Off Ramp				US-101 NB On Ramp				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	6	3	0	0	3	0	0	2	0	0	0	0	0	0	14	0
7:15 AM	0	0	5	0	0	0	2	2	0	3	0	0	0	0	0	0	12	0
7:30 AM	**0**	**0**	**3**	**3**	**0**	**0**	**1**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**10**	0
7:45 AM	**0**	**0**	**5**	**6**	**0**	**0**	**5**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**21**	57
8:00 AM	**0**	**0**	**2**	**5**	**0**	**0**	**5**	**1**	**0**	**4**	**0**	**2**	**0**	**0**	**0**	**0**	**19**	62
8:15 AM	**0**	**0**	**6**	**5**	**0**	**0**	**3**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	**67**
8:30 AM	0	0	5	7	0	0	2	2	0	3	0	0	0	0	0	0	19	76
8:45 AM	0	0	5	2	0	0	3	5	0	4	0	0	0	0	0	0	19	74
Count Total	0	0	37	31	0	0	24	11	0	25	0	3	0	0	0	0	131	0
Peak Hour	**0**	**0**	**16**	**19**	**0**	**0**	**14**	**2**	**0**	**13**	**0**	**3**	**0**	**0**	**0**	**0**	**67**	**0**

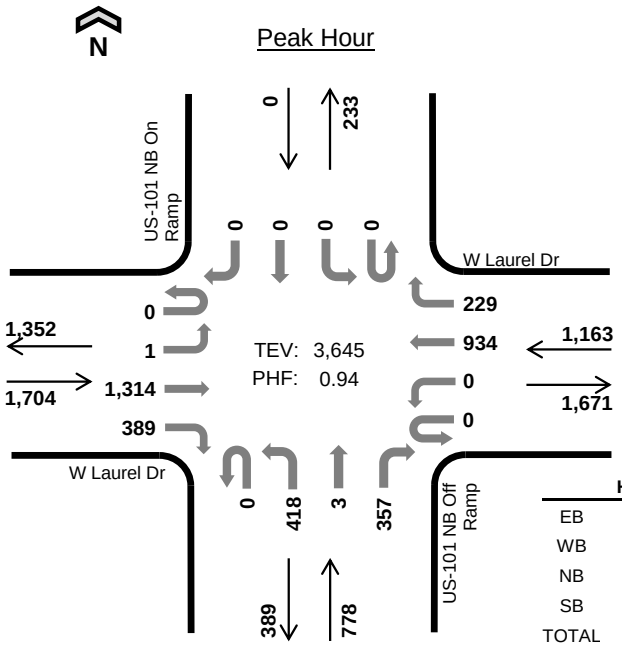
Two-Hour Count Summaries - Bikes

Interval Start	W Laurel Dr			W Laurel Dr			US-101 NB Off Ramp			US-101 NB On Ramp			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	1
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

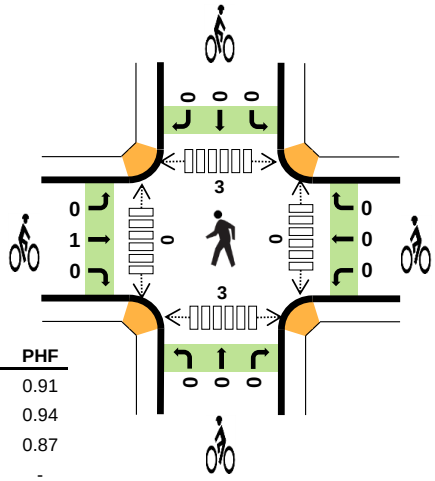
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

US-101 NB Off Ramp
W Laurel Dr

Date: 05-22-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	1.0%	0.91
WB	0.3%	0.94
NB	2.3%	0.87
SB	-	-
TOTAL	1.1%	0.94



Two-Hour Count Summaries

Interval Start		W Laurel Dr Eastbound UT	LT	TH	RT	W Laurel Dr Westbound UT	LT	TH	RT	US-101 NB Off Ramp Northbound UT	LT	TH	RT	US-101 NB On Ramp Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	0	288	90	0	0	235	54	0	114	0	67	0	0	0	0	848	0
4:15 PM		0	0	245	76	0	0	211	52	0	93	1	65	0	0	0	0	743	0
4:30 PM		0	0	257	93	0	0	209	73	0	109	1	84	0	0	0	0	826	0
4:45 PM		0	0	292	83	0	0	231	55	0	117	0	94	0	0	0	0	872	3,289
5:00 PM		**0**	**0**	**280**	**96**	**0**	**0**	**242**	**44**	**0**	**115**	**2**	**96**	**0**	**0**	**0**	**0**	**875**	3,316
5:15 PM		**0**	**0**	**345**	**122**	**0**	**0**	**209**	**72**	**0**	**122**	**0**	**102**	**0**	**0**	**0**	**0**	**972**	3,545
5:30 PM		**0**	**1**	**335**	**93**	**0**	**0**	**244**	**64**	**0**	**93**	**1**	**85**	**0**	**0**	**0**	**0**	**916**	3,635
5:45 PM		**0**	**0**	**354**	**78**	**0**	**0**	**239**	**49**	**0**	**88**	**0**	**74**	**0**	**0**	**0**	**0**	**882**	**3,645**
Count Total		0	1	2,396	731	0	0	1,820	463	0	851	5	667	0	0	0	0	6,934	0
Peak Hour	**All**	**0**	**1**	**1,314**	**389**	**0**	**0**	**934**	**229**	**0**	**418**	**3**	**357**	**0**	**0**	**0**	**0**	**3,645**	**0**
	HV	**0**	**0**	**5**	**12**	**0**	**0**	**4**	**0**	**0**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**39**	**0**
	HV%	**-**	**0%**	**0%**	**3%**	**-**	**-**	**0%**	**0%**	**-**	**4%**	**0%**	**0%**	**-**	**-**	**-**	**-**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	2	4	5	0	*11*	0	0	0	0	*0*	0	0	1	3	*4*
4:15 PM	4	3	2	0	*9*	0	0	0	0	*0*	0	0	1	3	*4*
4:30 PM	3	4	5	0	*12*	0	0	0	0	*0*	0	0	1	1	*2*
4:45 PM	2	1	6	0	*9*	0	0	0	0	*0*	0	0	1	0	*1*
5:00 PM	**7**	**0**	**9**	**0**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	*2*
5:15 PM	**4**	**2**	**4**	**0**	***10***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	*1*
5:30 PM	**3**	**1**	**2**	**0**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	*2*
5:45 PM	**3**	**1**	**3**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
Count Total	28	16	36	0	*80*	1	0	0	0	*1*	0	0	7	10	*17*
Peak Hour	**17**	**4**	**18**	**0**	***39***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**3**	**3**	***6***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	W Laurel Dr				W Laurel Dr				US-101 NB Off Ramp				US-101 NB On Ramp				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	1	0	0	4	0	0	4	0	1	0	0	0	0	11	0
4:15 PM	0	0	2	2	0	0	3	0	0	2	0	0	0	0	0	0	9	0
4:30 PM	0	0	1	2	0	0	2	2	0	5	0	0	0	0	0	0	12	0
4:45 PM	0	0	1	1	0	0	1	0	0	6	0	0	0	0	0	0	9	41
5:00 PM	**0**	**0**	**2**	**5**	**0**	**0**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**16**	46
5:15 PM	**0**	**0**	**1**	**3**	**0**	**0**	**2**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	47
5:30 PM	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	41
5:45 PM	**0**	**0**	**2**	**1**	**0**	**0**	**1**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**39**
Count Total	0	0	10	18	0	0	14	2	0	35	0	1	0	0	0	0	80	0
Peak Hour	**0**	**0**	**5**	**12**	**0**	**0**	**4**	**0**	**0**	**18**	**0**	**0**	**0**	**0**	**0**	**0**	**39**	**0**

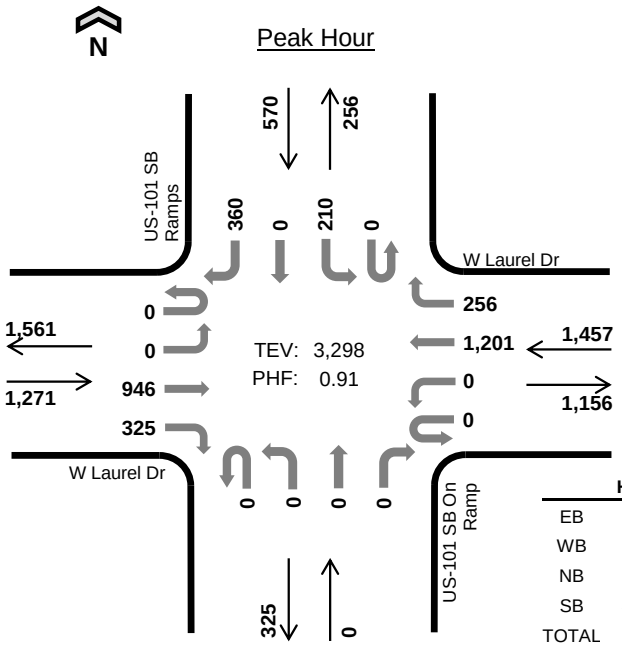
Two-Hour Count Summaries - Bikes

Interval Start	W Laurel Dr			W Laurel Dr			US-101 NB Off Ramp			US-101 NB On Ramp			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

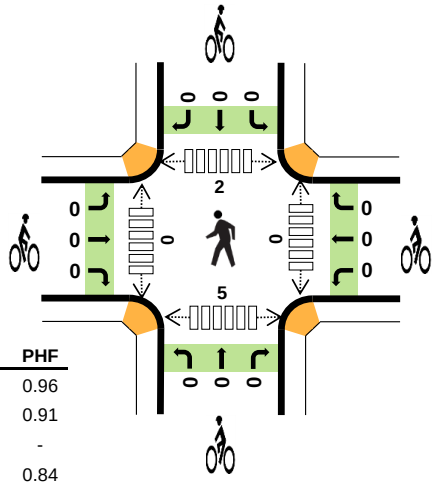
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

US-101 SB On Ramp
W Laurel Dr

Date: 05-22-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	3.9%	0.96
WB	1.7%	0.91
NB	-	-
SB	4.0%	0.84
TOTAL	2.9%	0.91



Two-Hour Count Summaries

Interval Start		W Laurel Dr Eastbound				W Laurel Dr Westbound				US-101 SB On Ramp Northbound				US-101 SB Ramps Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	122	57	0	0	182	44	0	0	0	0	0	45	0	63	513	0
7:15 AM		0	0	154	67	0	0	205	54	0	0	0	0	0	46	0	79	605	0
7:30 AM		**0**	**0**	**208**	**88**	**0**	**0**	**232**	**71**	**0**	**0**	**0**	**0**	**0**	**38**	**0**	**95**	**732**	0
7:45 AM		**0**	**0**	**240**	**92**	**0**	**0**	**314**	**87**	**0**	**0**	**0**	**0**	**0**	**64**	**0**	**106**	**903**	2,753
8:00 AM		**0**	**0**	**237**	**76**	**0**	**0**	**335**	**51**	**0**	**0**	**0**	**0**	**0**	**57**	**0**	**91**	**847**	3,087
8:15 AM		**0**	**0**	**261**	**69**	**0**	**0**	**320**	**47**	**0**	**0**	**0**	**0**	**0**	**51**	**0**	**68**	**816**	**3,298**
8:30 AM		0	0	240	54	0	0	209	31	0	0	0	0	0	41	0	80	655	3,221
8:45 AM		0	0	204	76	0	0	227	35	0	0	0	0	0	44	0	64	650	2,968
Count Total		0	0	1,666	579	0	0	2,024	420	0	0	0	0	0	386	0	646	5,721	0
Peak Hour	**All**	**0**	**0**	**946**	**325**	**0**	**0**	**1,201**	**256**	**0**	**0**	**0**	**0**	**0**	**210**	**0**	**360**	**3,298**	**0**
	HV	**0**	**0**	**31**	**18**	**0**	**0**	**25**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**22**	**97**	**0**
	HV%	**-**	**-**	**3%**	**6%**	**-**	**-**	**2%**	**0%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**6%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	6	4	0	9	*19*	0	0	0	0	*0*	0	0	3	0	*3*
7:15 AM	8	6	0	6	*20*	0	0	0	0	*0*	0	0	0	3	*3*
7:30 AM	**11**	**2**	**0**	**0**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	*2*
7:45 AM	**11**	**9**	**0**	**7**	***27***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	*2*
8:00 AM	**16**	**9**	**0**	**6**	***31***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
8:15 AM	**11**	**5**	**0**	**10**	***26***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	***2***
8:30 AM	17	4	0	10	*31*	0	0	0	0	*0*	0	0	0	1	*1*
8:45 AM	14	7	0	4	*25*	0	0	0	0	*0*	0	0	1	1	*2*
Count Total	94	46	0	52	*192*	0	0	0	0	*0*	0	0	6	10	*16*
Peak Hour	**49**	**25**	**0**	**23**	***97***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**5**	***7***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	W Laurel Dr				W Laurel Dr				US-101 SB On Ramp				US-101 SB Ramps				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	6	0	0	0	3	1	0	0	0	0	0	4	0	5	19	0
7:15 AM	0	0	4	4	0	0	6	0	0	0	0	0	0	2	0	4	20	0
7:30 AM	**0**	**0**	**8**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	0
7:45 AM	**0**	**0**	**7**	**4**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**6**	**27**	79
8:00 AM	**0**	**0**	**8**	**8**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**31**	91
8:15 AM	**0**	**0**	**8**	**3**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**26**	**97**
8:30 AM	0	0	10	7	0	0	4	0	0	0	0	0	0	2	0	8	31	115
8:45 AM	0	0	7	7	0	0	7	0	0	0	0	0	0	0	0	4	25	113
Count Total	0	0	58	36	0	0	45	1	0	0	0	0	0	9	0	43	192	0
Peak Hour	**0**	**0**	**31**	**18**	**0**	**0**	**25**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**22**	**97**	**0**

Two-Hour Count Summaries - Bikes

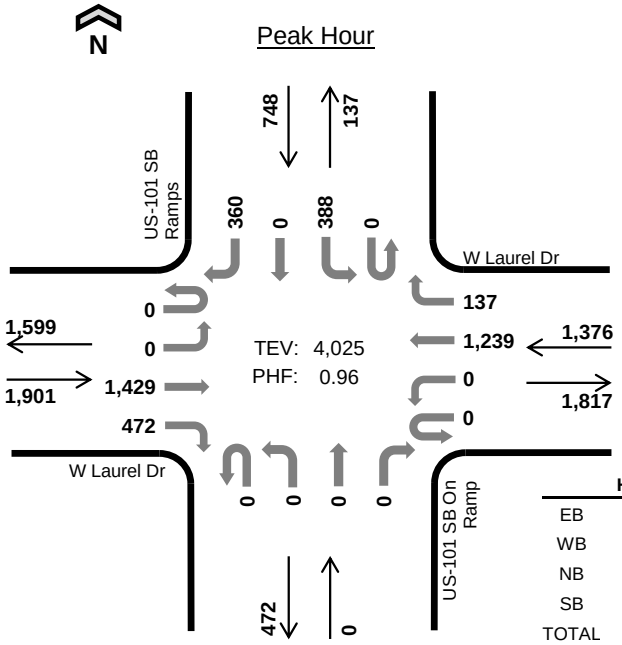
Interval Start	W Laurel Dr			W Laurel Dr			US-101 SB On Ramp			US-101 SB Ramps			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

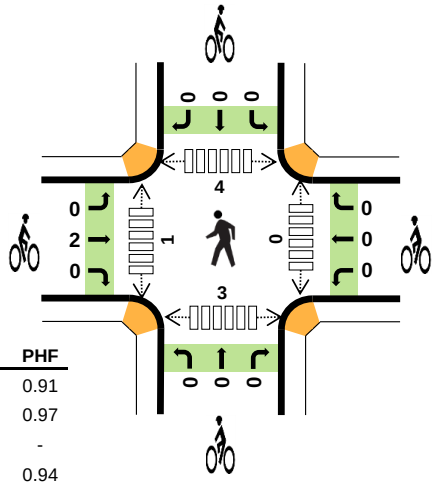
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

US-101 SB On Ramp
W Laurel Dr

Date: 05-22-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

Peak Hour





	HV %:	PHF
EB	2.0%	0.91
WB	1.7%	0.97
NB	-	-
SB	1.7%	0.94
TOTAL	1.9%	0.96

Two-Hour Count Summaries

Interval Start		W Laurel Dr Eastbound UT	LT	TH	RT	W Laurel Dr Westbound UT	LT	TH	RT	US-101 SB On Ramp Northbound UT	LT	TH	RT	US-101 SB Ramps Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	0	286	108	0	0	330	45	0	0	0	0	0	94	0	91	954	0
4:15 PM		0	0	309	132	0	0	282	29	0	0	0	0	0	98	0	68	918	0
4:30 PM		0	0	366	110	0	0	276	31	0	0	0	0	0	99	0	77	959	0
4:45 PM		0	0	300	92	0	0	303	42	0	0	0	0	0	110	0	102	949	3,780
5:00 PM		**0**	**0**	**359**	**115**	**0**	**0**	**315**	**35**	**0**	**0**	**0**	**0**	**0**	**104**	**0**	**94**	**1,022**	3,848
5:15 PM		**0**	**0**	**396**	**129**	**0**	**0**	**324**	**30**	**0**	**0**	**0**	**0**	**0**	**91**	**0**	**78**	**1,048**	3,978
5:30 PM		**0**	**0**	**329**	**109**	**0**	**0**	**306**	**37**	**0**	**0**	**0**	**0**	**0**	**100**	**0**	**88**	**969**	3,988
5:45 PM		**0**	**0**	**345**	**119**	**0**	**0**	**294**	**35**	**0**	**0**	**0**	**0**	**0**	**93**	**0**	**100**	**986**	**4,025**
Count Total		0	0	2,690	914	0	0	2,430	284	0	0	0	0	0	789	0	698	7,805	0
Peak Hour	**All**	**0**	**0**	**1,429**	**472**	**0**	**0**	**1,239**	**137**	**0**	**0**	**0**	**0**	**0**	**388**	**0**	**360**	**4,025**	**0**
	HV	**0**	**0**	**16**	**22**	**0**	**0**	**22**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**12**	**75**	**0**
	HV%	**-**	**-**	**1%**	**5%**	**-**	**-**	**2%**	**1%**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**3%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	7	9	0	3	*19*	0	0	0	0	*0*	0	0	1	0	*1*
4:15 PM	8	5	0	2	*15*	0	0	0	0	*0*	0	0	1	2	*3*
4:30 PM	6	7	0	3	*16*	0	0	0	0	*0*	0	0	2	1	*3*
4:45 PM	4	7	0	5	*16*	0	0	0	0	*0*	0	0	0	0	*0*
5:00 PM	**15**	**8**	**0**	**6**	***29***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
5:15 PM	**10**	**7**	**0**	**2**	***19***	**2**	**0**	**0**	**0**	***2***	**0**	**1**	**1**	**2**	*4*
5:30 PM	**8**	**4**	**0**	**1**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	*2*
5:45 PM	**5**	**5**	**0**	**4**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
Count Total	63	52	0	26	*141*	2	0	0	0	*2*	0	1	8	6	*15*
Peak Hour	**38**	**24**	**0**	**13**	***75***	**2**	**0**	**0**	**0**	***2***	**0**	**1**	**4**	**3**	***8***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	W Laurel Dr				W Laurel Dr				US-101 SB On Ramp				US-101 SB Ramps				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	2	5	0	0	8	1	0	0	0	0	0	1	0	2	19	0
4:15 PM	0	0	4	4	0	0	5	0	0	0	0	0	0	0	0	2	15	0
4:30 PM	0	0	2	4	0	0	7	0	0	0	0	0	0	1	0	2	16	0
4:45 PM	0	0	2	2	0	0	6	1	0	0	0	0	0	0	0	5	16	66
5:00 PM	**0**	**0**	**7**	**8**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**29**	76
5:15 PM	**0**	**0**	**4**	**6**	**0**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**19**	80
5:30 PM	**0**	**0**	**2**	**6**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**13**	77
5:45 PM	**0**	**0**	**3**	**2**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**14**	**75**
Count Total	0	0	26	37	0	0	48	4	0	0	0	0	0	3	0	23	141	0
Peak Hour	**0**	**0**	**16**	**22**	**0**	**0**	**22**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**12**	**75**	**0**

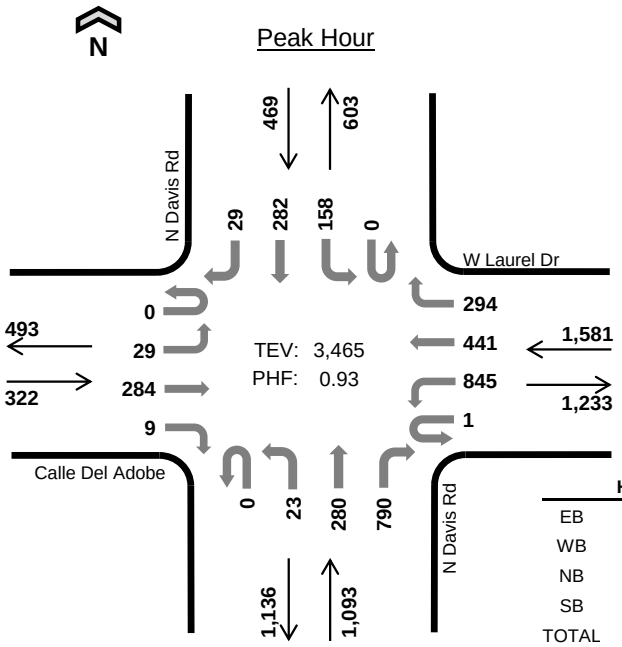
Two-Hour Count Summaries - Bikes

Interval Start	W Laurel Dr			W Laurel Dr			US-101 SB On Ramp			US-101 SB Ramps			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	2
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Count Total	0	2	0	0	0	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**

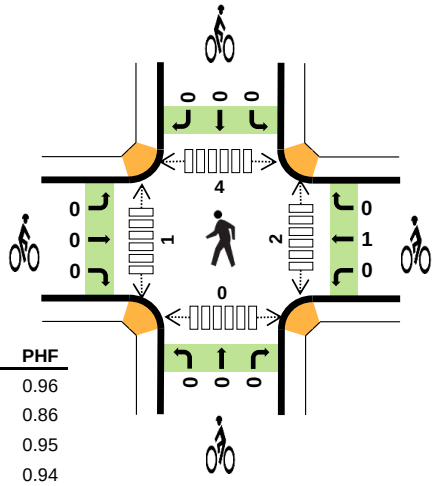
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

N Davis Rd
Calle Del Adobe

Date: 05-22-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	8.1%	0.96
WB	2.7%	0.86
NB	2.8%	0.95
SB	3.6%	0.94
TOTAL	3.4%	0.93



Two-Hour Count Summaries

Interval Start		Calle Del Adobe Eastbound UT	LT	TH	RT	W Laurel Dr Westbound UT	LT	TH	RT	N Davis Rd Northbound UT	LT	TH	RT	N Davis Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM		0	0	36	1	0	161	48	39	0	1	29	124	0	20	46	3	508	0
7:15 AM		0	2	54	0	0	164	46	52	0	4	55	131	0	33	47	4	592	0
7:30 AM		**0**	**5**	**68**	**0**	**1**	**194**	**66**	**50**	**0**	**4**	**57**	**202**	**0**	**31**	**75**	**12**	**765**	0
7:45 AM		**0**	**8**	**74**	**2**	**0**	**233**	**144**	**69**	**0**	**8**	**72**	**209**	**0**	**34**	**78**	**4**	**935**	2,800
8:00 AM		**0**	**7**	**74**	**2**	**0**	**236**	**140**	**81**	**0**	**11**	**70**	**172**	**0**	**44**	**60**	**6**	**903**	3,195
8:15 AM		**0**	**9**	**68**	**5**	**0**	**182**	**91**	**94**	**0**	**0**	**81**	**207**	**0**	**49**	**69**	**7**	**862**	**3,465**
8:30 AM		0	4	49	2	0	169	63	62	0	1	82	187	0	37	47	4	707	3,407
8:45 AM		0	5	50	2	0	147	71	73	0	4	62	173	0	51	69	4	711	3,183
Count Total		0	40	473	14	1	1,486	669	520	0	33	508	1,405	0	299	491	44	5,983	0
Peak Hour	**All**	**0**	**29**	**284**	**9**	**1**	**845**	**441**	**294**	**0**	**23**	**280**	**790**	**0**	**158**	**282**	**29**	**3,465**	**0**
	HV	**0**	**1**	**23**	**2**	**0**	**18**	**16**	**9**	**0**	**1**	**6**	**24**	**0**	**10**	**6**	**1**	**117**	**0**
	HV%	**-**	**3%**	**8%**	**22%**	**0%**	**2%**	**4%**	**3%**	**-**	**4%**	**2%**	**3%**	**-**	**6%**	**2%**	**3%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	3	10	3	0	*16*	0	0	0	1	*1*	1	0	0	0	*1*
7:15 AM	3	8	4	2	*17*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**11**	**4**	**4**	**3**	***22***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**0**	*2*
7:45 AM	**4**	**14**	**10**	**6**	***34***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**2**	**0**	*4*
8:00 AM	**6**	**14**	**11**	**7**	***38***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**5**	**11**	**6**	**1**	***23***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***
8:30 AM	5	13	7	4	*29*	0	0	0	0	*0*	1	2	1	2	*6*
8:45 AM	5	8	8	4	*25*	0	0	0	0	*0*	0	0	2	1	*3*
Count Total	42	82	53	27	*204*	0	1	0	1	*2*	4	3	7	3	*17*
Peak Hour	**26**	**43**	**31**	**17**	***117***	**0**	**1**	**0**	**0**	***1***	**2**	**1**	**4**	**0**	***7***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Calle Del Adobe				W Laurel Dr				N Davis Rd				N Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	3	0	0	4	3	3	0	0	0	3	0	0	0	0	16	0
7:15 AM	0	0	3	0	0	6	2	0	0	0	1	3	0	2	0	0	17	0
7:30 AM	**0**	**1**	**10**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**2**	**0**	**22**	0
7:45 AM	**0**	**0**	**4**	**0**	**0**	**3**	**6**	**5**	**0**	**1**	**2**	**7**	**0**	**4**	**2**	**0**	**34**	89
8:00 AM	**0**	**0**	**5**	**1**	**0**	**7**	**7**	**0**	**0**	**0**	**1**	**10**	**0**	**5**	**1**	**1**	**38**	111
8:15 AM	**0**	**0**	**4**	**1**	**0**	**6**	**1**	**4**	**0**	**0**	**1**	**5**	**0**	**0**	**1**	**0**	**23**	**117**
8:30 AM	0	0	5	0	0	9	2	2	0	0	1	6	0	2	1	1	29	124
8:45 AM	0	0	5	0	0	2	5	1	0	1	0	7	0	4	0	0	25	115
Count Total	0	1	39	2	0	39	28	15	0	2	8	43	0	18	7	2	204	0
Peak Hour	**0**	**1**	**23**	**2**	**0**	**18**	**16**	**9**	**0**	**1**	**6**	**24**	**0**	**10**	**6**	**1**	**117**	**0**

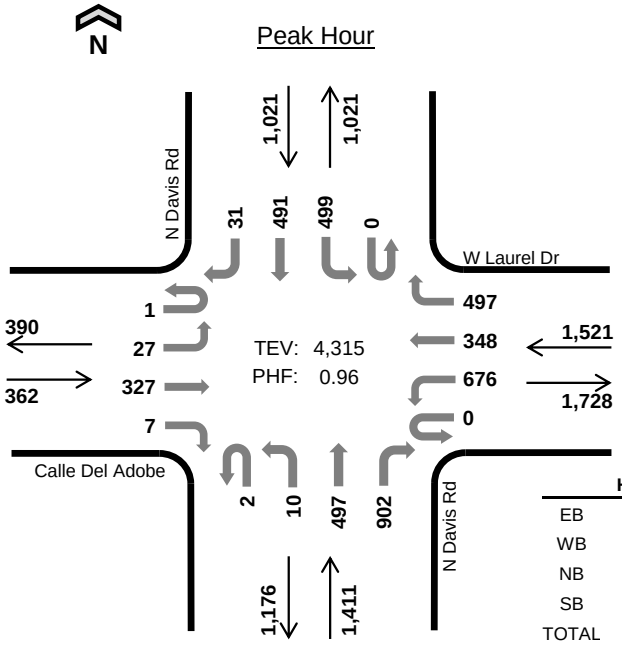
Two-Hour Count Summaries - Bikes

Interval Start	Calle Del Adobe			W Laurel Dr			N Davis Rd			N Davis Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	1	0	0	0	0	0	0	1	2	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

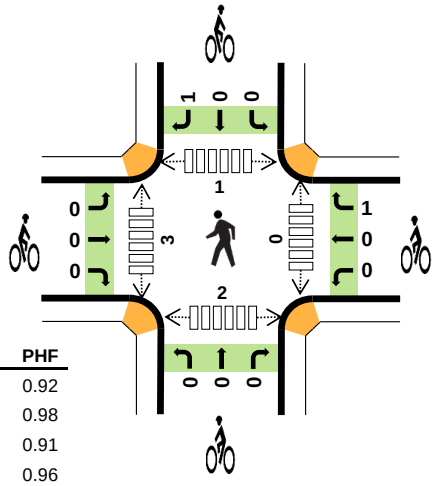
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

N Davis Rd
Calle Del Adobe

Date: 05-22-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM



	HV %:	PHF
EB	6.4%	0.92
WB	2.6%	0.98
NB	1.3%	0.91
SB	0.9%	0.96
TOTAL	2.1%	0.96



Two-Hour Count Summaries

Interval Start		Calle Del Adobe Eastbound UT	LT	TH	RT	W Laurel Dr Westbound UT	LT	TH	RT	N Davis Rd Northbound UT	LT	TH	RT	N Davis Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	4	62	4	0	175	97	135	0	5	125	200	0	108	122	6	1,043	0
4:15 PM		0	18	79	2	0	186	78	116	0	3	123	214	0	136	130	18	1,103	0
4:30 PM		0	7	74	1	0	133	77	122	0	2	126	247	0	124	106	8	1,027	0
4:45 PM		0	6	52	0	0	187	89	117	0	3	94	116	0	101	118	8	891	4,064
5:00 PM		**0**	**7**	**80**	**0**	**0**	**176**	**92**	**105**	**1**	**2**	**110**	**204**	**0**	**122**	**132**	**6**	**1,037**	4,058
5:15 PM		**0**	**7**	**79**	**1**	**0**	**165**	**83**	**141**	**0**	**2**	**130**	**254**	**0**	**132**	**119**	**10**	**1,123**	4,078
5:30 PM		**1**	**7**	**86**	**4**	**0**	**165**	**90**	**130**	**0**	**3**	**139**	**225**	**0**	**118**	**112**	**3**	**1,083**	4,134
5:45 PM		**0**	**6**	**82**	**2**	**0**	**170**	**83**	**121**	**1**	**3**	**118**	**219**	**0**	**127**	**128**	**12**	**1,072**	**4,315**
Count Total		1	62	594	14	0	1,357	689	987	2	23	965	1,679	0	968	967	71	8,379	0
Peak Hour	**All**	**1**	**27**	**327**	**7**	**0**	**676**	**348**	**497**	**2**	**10**	**497**	**902**	**0**	**499**	**491**	**31**	**4,315**	**0**
	HV	**0**	**0**	**21**	**2**	**0**	**7**	**28**	**4**	**0**	**0**	**0**	**18**	**0**	**3**	**6**	**0**	**89**	**0**
	HV%	**0%**	**0%**	**6%**	**29%**	**-**	**1%**	**8%**	**1%**	**0%**	**0%**	**0%**	**2%**	**-**	**1%**	**1%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	4	7	2	0	*13*	0	0	0	0	*0*	0	3	2	1	*6*
4:15 PM	1	7	10	3	*21*	0	0	0	0	*0*	1	0	1	0	*2*
4:30 PM	3	10	2	2	*17*	0	0	0	0	*0*	1	2	0	1	*4*
4:45 PM	3	13	2	2	*20*	0	0	0	1	*1*	4	1	0	0	*5*
5:00 PM	**7**	**14**	**6**	**4**	***31***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
5:15 PM	**7**	**13**	**3**	**2**	***25***	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**0**	**2**	*3*
5:30 PM	**7**	**4**	**4**	**3**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
5:45 PM	**2**	**8**	**5**	**0**	***15***	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**0**	**0**	***1***
Count Total	34	76	34	16	*160*	0	1	0	2	*3*	6	9	4	4	*23*
Peak Hour	**23**	**39**	**18**	**9**	***89***	**0**	**1**	**0**	**1**	***2***	**0**	**3**	**1**	**2**	***6***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Calle Del Adobe				W Laurel Dr				N Davis Rd				N Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	4	0	0	1	6	0	0	0	0	2	0	0	0	0	13	0
4:15 PM	0	0	1	0	0	2	5	0	0	0	1	9	0	0	2	1	21	0
4:30 PM	0	0	3	0	0	1	9	0	0	0	0	2	0	1	1	0	17	0
4:45 PM	0	0	3	0	0	4	8	1	0	0	0	2	0	0	1	1	20	71
5:00 PM	**0**	**0**	**7**	**0**	**0**	**2**	**12**	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**2**	**0**	**31**	89
5:15 PM	**0**	**0**	**7**	**0**	**0**	**4**	**6**	**3**	**0**	**0**	**0**	**3**	**0**	**0**	**2**	**0**	**25**	93
5:30 PM	**0**	**0**	**5**	**2**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**4**	**0**	**1**	**2**	**0**	**18**	94
5:45 PM	**0**	**0**	**2**	**0**	**0**	**0**	**7**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**15**	**89**
Count Total	0	0	32	2	0	15	56	5	0	0	1	33	0	4	10	2	160	0
Peak Hour	**0**	**0**	**21**	**2**	**0**	**7**	**28**	**4**	**0**	**0**	**0**	**18**	**0**	**3**	**6**	**0**	**89**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Calle Del Adobe			W Laurel Dr			N Davis Rd			N Davis Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**
Count Total	0	0	0	0	0	1	0	0	0	1	0	1	3	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**

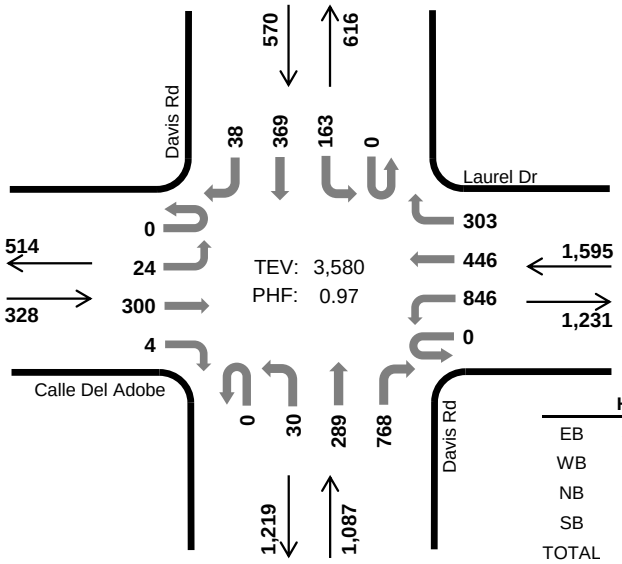
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Davis Rd
Calle Del Adobe

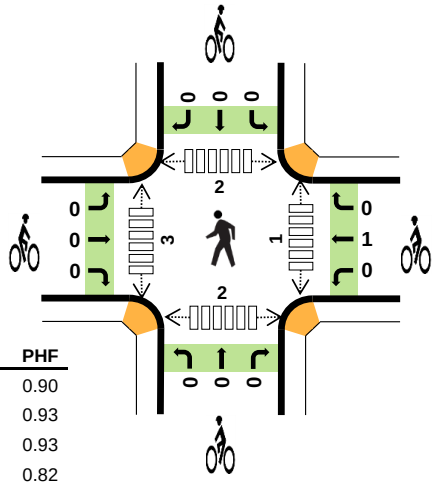
Date: 09-24-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

N

Peak Hour



	HV %:	PHF
EB	4.9%	0.90
WB	3.1%	0.93
NB	2.2%	0.93
SB	2.1%	0.82
TOTAL	2.8%	0.97



Two-Hour Count Summaries

Interval Start		Calle Del Adobe Eastbound UT	LT	TH	RT	Laurel Dr Westbound UT	LT	TH	RT	Davis Rd Northbound UT	LT	TH	RT	Davis Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM		0	1	44	2	0	153	56	29	0	3	45	115	0	11	35	2	496	0
7:15 AM		0	5	45	3	0	181	62	48	0	1	57	155	0	22	62	3	644	0
7:30 AM		**0**	**3**	**82**	**1**	**0**	**236**	**102**	**48**	**0**	**3**	**58**	**207**	**0**	**33**	**66**	**6**	**845**	0
7:45 AM		**0**	**6**	**71**	**1**	**0**	**198**	**119**	**57**	**0**	**8**	**77**	**207**	**0**	**38**	**120**	**16**	**918**	2,903
8:00 AM		**0**	**6**	**66**	**1**	**0**	**207**	**136**	**84**	**0**	**14**	**83**	**176**	**0**	**35**	**105**	**12**	**925**	3,332
8:15 AM		**0**	**9**	**81**	**1**	**0**	**205**	**89**	**114**	**0**	**5**	**71**	**178**	**0**	**57**	**78**	**4**	**892**	**3,580**
8:30 AM		0	9	46	2	0	161	58	66	0	2	97	213	0	40	65	6	765	3,500
8:45 AM		0	6	33	2	0	167	64	78	0	3	94	135	0	49	65	3	699	3,281
Count Total		0	45	468	13	0	1,508	686	524	0	39	582	1,386	0	285	596	52	6,184	0
Peak Hour	**All**	**0**	**24**	**300**	**4**	**0**	**846**	**446**	**303**	**0**	**30**	**289**	**768**	**0**	**163**	**369**	**38**	**3,580**	**0**
	HV	**0**	**1**	**15**	**0**	**0**	**27**	**17**	**5**	**0**	**3**	**4**	**17**	**0**	**3**	**8**	**1**	**101**	**0**
	HV%	**-**	**4%**	**5%**	**0%**	**-**	**3%**	**4%**	**2%**	**-**	**10%**	**1%**	**2%**	**-**	**2%**	**2%**	**3%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	4	7	2	3	*16*	0	0	0	0	*0*	0	1	1	0	*2*
7:15 AM	8	11	3	3	*25*	0	0	0	0	*0*	0	0	0	1	*1*
7:30 AM	**7**	**4**	**9**	**2**	***22***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	*2*
7:45 AM	**2**	**11**	**6**	**3**	***22***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	*2*
8:00 AM	**2**	**14**	**6**	**4**	***26***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
8:15 AM	**5**	**20**	**3**	**3**	***31***	**0**	**1**	**0**	**0**	***1***	**1**	**0**	**2**	**0**	***3***
8:30 AM	6	10	3	2	*21*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	3	6	3	5	*17*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	37	83	35	25	*180*	0	1	0	0	*1*	1	4	3	3	*11*
Peak Hour	**16**	**49**	**24**	**12**	***101***	**0**	**1**	**0**	**0**	***1***	**1**	**3**	**2**	**2**	***8***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Calle Del Adobe				Laurel Dr				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	4	0	0	5	1	1	0	1	1	0	0	1	2	0	16	0
7:15 AM	0	0	8	0	0	8	3	0	0	0	1	2	0	3	0	0	25	0
7:30 AM	**0**	**0**	**7**	**0**	**0**	**2**	**1**	**1**	**0**	**1**	**2**	**6**	**0**	**1**	**1**	**0**	**22**	0
7:45 AM	**0**	**0**	**2**	**0**	**0**	**7**	**3**	**1**	**0**	**1**	**1**	**4**	**0**	**0**	**2**	**1**	**22**	85
8:00 AM	**0**	**0**	**2**	**0**	**0**	**3**	**10**	**1**	**0**	**1**	**1**	**4**	**0**	**1**	**3**	**0**	**26**	95
8:15 AM	**0**	**1**	**4**	**0**	**0**	**15**	**3**	**2**	**0**	**0**	**0**	**3**	**0**	**1**	**2**	**0**	**31**	**101**
8:30 AM	0	0	5	1	0	7	3	0	0	1	0	2	0	0	2	0	21	100
8:45 AM	0	0	3	0	0	4	1	1	0	1	1	1	0	1	4	0	17	95
Count Total	0	1	35	1	0	51	25	7	0	6	7	22	0	8	16	1	180	0
Peak Hour	**0**	**1**	**15**	**0**	**0**	**27**	**17**	**5**	**0**	**3**	**4**	**17**	**0**	**3**	**8**	**1**	**101**	**0**

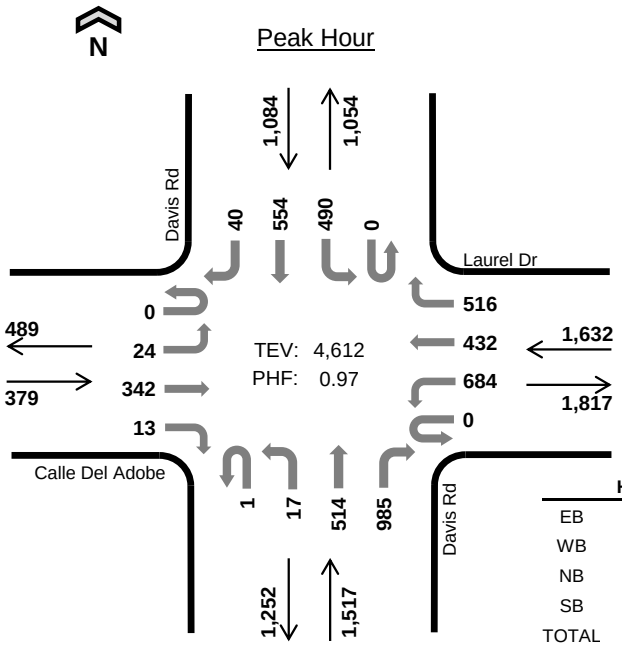
Two-Hour Count Summaries - Bikes

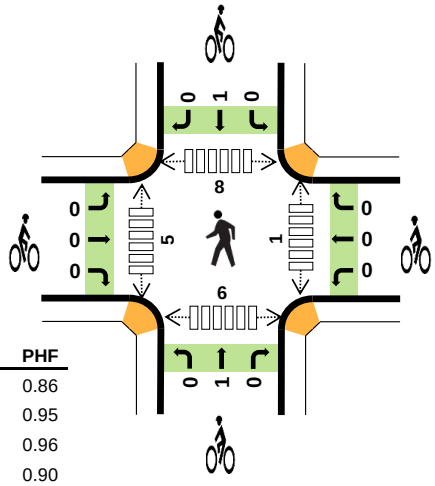
Interval Start	Calle Del Adobe			Laurel Dr			Davis Rd			Davis Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Davis Rd
Calle Del Adobe

Date: 09-24-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	3.4%	0.86
WB	1.4%	0.95
NB	0.6%	0.96
SB	1.1%	0.90
TOTAL	1.2%	0.97

Two-Hour Count Summaries

Interval Start		Calle Del Adobe Eastbound UT	LT	TH	RT	Laurel Dr Westbound UT	LT	TH	RT	Davis Rd Northbound UT	LT	TH	RT	Davis Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	10	70	5	0	159	77	124	0	2	128	207	1	119	132	6	1,040	0
4:15 PM		0	6	71	1	0	185	84	124	0	2	116	244	0	97	132	9	1,071	0
4:30 PM		0	3	78	5	0	168	81	125	0	3	113	208	0	123	129	13	1,049	0
4:45 PM		**0**	**5**	**81**	**3**	**0**	**167**	**108**	**155**	**0**	**5**	**128**	**241**	**0**	**130**	**126**	**8**	**1,157**	4,317
5:00 PM		**0**	**6**	**103**	**1**	**0**	**180**	**111**	**123**	**1**	**7**	**124**	**251**	**0**	**104**	**119**	**10**	**1,140**	4,417
5:15 PM		**0**	**5**	**74**	**2**	**0**	**156**	**106**	**121**	**0**	**3**	**125**	**237**	**0**	**122**	**167**	**13**	**1,131**	4,477
5:30 PM		**0**	**8**	**84**	**7**	**0**	**181**	**107**	**117**	**0**	**2**	**137**	**256**	**0**	**134**	**142**	**9**	**1,184**	**4,612**
5:45 PM		0	9	61	3	0	190	77	104	0	4	117	266	0	130	121	6	1,088	4,543
Count Total		0	52	622	27	0	1,386	751	993	1	28	988	1,910	1	959	1,068	74	8,860	0
Peak Hour	**All**	**0**	**24**	**342**	**13**	**0**	**684**	**432**	**516**	**1**	**17**	**514**	**985**	**0**	**490**	**554**	**40**	**4,612**	**0**
	HV	**0**	**0**	**13**	**0**	**0**	**9**	**12**	**2**	**0**	**0**	**3**	**6**	**0**	**2**	**10**	**0**	**57**	**0**
	HV%	**-**	**0%**	**4%**	**0%**	**-**	**1%**	**3%**	**0%**	**0%**	**0%**	**1%**	**1%**	**-**	**0%**	**2%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	3	12	7	4	*26*	0	0	0	0	*0*	1	1	1	0	*3*
4:15 PM	5	14	5	3	*27*	0	0	0	0	*0*	1	5	1	1	*8*
4:30 PM	8	7	0	4	*19*	0	0	2	0	*2*	2	2	0	2	*6*
4:45 PM	**4**	**7**	**2**	**2**	***15***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**1**	**1**	*4*
5:00 PM	**3**	**6**	**3**	**2**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**2**	**0**	*5*
5:15 PM	**3**	**4**	**2**	**7**	***16***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**2**	**4**	*6*
5:30 PM	**3**	**6**	**2**	**1**	***12***	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**3**	**1**	***5***
5:45 PM	4	6	13	3	*26*	0	0	0	0	*0*	3	0	0	1	*4*
Count Total	33	62	34	26	*155*	0	0	3	1	*4*	8	13	10	10	*41*
Peak Hour	**13**	**23**	**9**	**12**	***57***	**0**	**0**	**1**	**1**	***2***	**1**	**5**	**8**	**6**	***20***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Calle Del Adobe				Laurel Dr				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	3	0	0	0	11	1	0	0	3	4	0	0	4	0	26	0
4:15 PM	0	0	5	0	0	2	11	1	0	1	0	4	0	1	2	0	27	0
4:30 PM	0	0	7	1	0	2	5	0	0	0	0	0	0	2	2	0	19	0
4:45 PM	**0**	**0**	**4**	**0**	**0**	**2**	**5**	**0**	**0**	**0**	**0**	**2**	**0**	**1**	**1**	**0**	**15**	87
5:00 PM	**0**	**0**	**3**	**0**	**0**	**3**	**3**	**0**	**0**	**0**	**1**	**2**	**0**	**1**	**1**	**0**	**14**	75
5:15 PM	**0**	**0**	**3**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**7**	**0**	**16**	64
5:30 PM	**0**	**0**	**3**	**0**	**0**	**2**	**2**	**2**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**12**	**57**
5:45 PM	0	1	3	0	0	2	3	1	0	1	4	8	0	1	2	0	26	68
Count Total	0	1	31	1	0	15	42	5	0	2	10	22	0	6	20	0	155	0
Peak Hour	**0**	**0**	**13**	**0**	**0**	**9**	**12**	**2**	**0**	**0**	**3**	**6**	**0**	**2**	**10**	**0**	**57**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Calle Del Adobe			Laurel Dr			Davis Rd			Davis Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	0	0	2	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	3
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**2**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	0	0	0	0	3	0	0	1	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	**0**

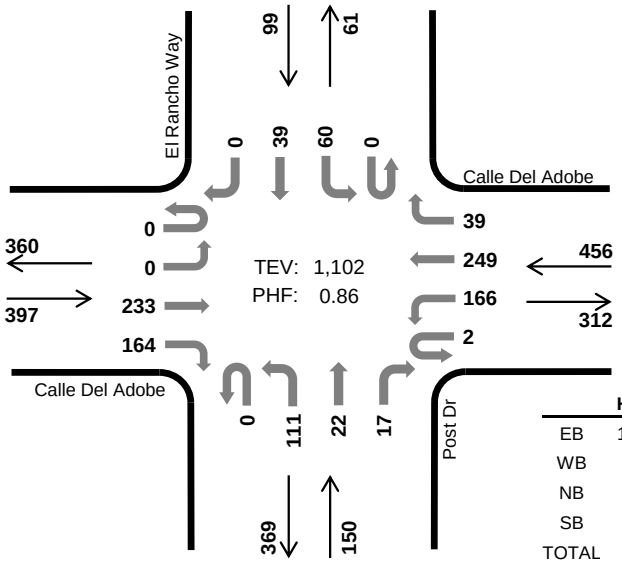
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Post Dr
Calle Del Adobe

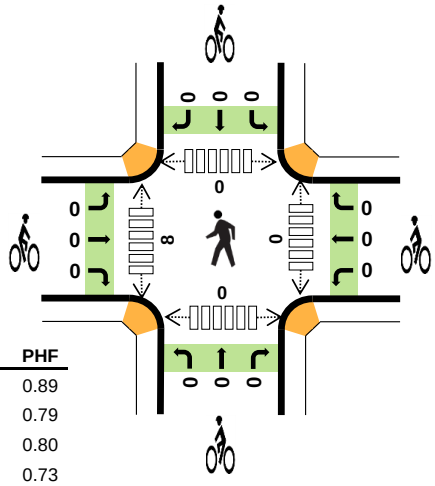
Date: 05-22-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

N

Peak Hour



	HV %:	PHF
EB	10.6%	0.89
WB	3.9%	0.79
NB	4.0%	0.80
SB	0.0%	0.73
TOTAL	6.0%	0.86



Two-Hour Count Summaries

Interval Start		Calle Del Adobe Eastbound				Calle Del Adobe Westbound				Post Dr Northbound				El Rancho Way Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	19	16	0	11	36	4	0	15	1	2	0	18	10	0	132	0
7:15 AM		0	0	29	19	1	22	26	5	0	10	2	1	0	18	6	0	139	0
7:30 AM		**0**	**0**	**44**	**36**	**0**	**29**	**39**	**11**	**0**	**22**	**0**	**2**	**0**	**25**	**9**	**0**	**217**	0
7:45 AM		**0**	**0**	**59**	**37**	**1**	**66**	**65**	**5**	**0**	**31**	**5**	**8**	**0**	**18**	**6**	**0**	**301**	789
8:00 AM		**0**	**0**	**69**	**41**	**1**	**31**	**99**	**13**	**0**	**32**	**10**	**5**	**0**	**10**	**9**	**0**	**320**	977
8:15 AM		**0**	**0**	**61**	**50**	**0**	**40**	**46**	**10**	**0**	**26**	**7**	**2**	**0**	**7**	**15**	**0**	**264**	**1,102**
8:30 AM		0	0	35	22	0	18	33	9	0	18	11	4	0	9	7	1	167	1,052
8:45 AM		0	0	29	17	0	22	39	11	0	13	4	3	0	16	3	0	157	908
Count Total		0	0	345	238	3	239	383	68	0	167	40	27	0	121	65	1	1,697	0
Peak Hour	**All**	**0**	**0**	**233**	**164**	**2**	**166**	**249**	**39**	**0**	**111**	**22**	**17**	**0**	**60**	**39**	**0**	**1,102**	**0**
	HV	**0**	**0**	**25**	**17**	**0**	**3**	**12**	**3**	**0**	**2**	**1**	**3**	**0**	**0**	**0**	**0**	**66**	**0**
	HV%	**-**	**-**	**11%**	**10%**	**0%**	**2%**	**5%**	**8%**	**-**	**2%**	**5%**	**18%**	**-**	**0%**	**0%**	**-**	**6%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	5	2	0	0	*7*	0	0	1	0	*1*	0	0	0	0	*0*
7:15 AM	5	3	0	0	*8*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**16**	**2**	**1**	**0**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**6**	**6**	**3**	**0**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
8:00 AM	**13**	**10**	**2**	**0**	***25***	**0**	**0**	**0**	**0**	***0***	**0**	**7**	**0**	**0**	*7*
8:15 AM	**7**	**0**	**0**	**0**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
8:30 AM	5	1	1	0	*7*	0	0	0	0	*0*	0	2	0	1	*3*
8:45 AM	6	7	2	1	*16*	0	0	0	0	*0*	0	2	0	0	*2*
Count Total	63	31	9	1	*104*	0	0	1	0	*1*	0	12	0	1	*13*
Peak Hour	**42**	**18**	**6**	**0**	***66***	**0**	**0**	**0**	**0**	***0***	**0**	**8**	**0**	**0**	***8***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Calle Del Adobe				Calle Del Adobe				Post Dr				El Rancho Way				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	3	2	0	0	2	0	0	0	0	0	0	0	0	0	7	0
7:15 AM	0	0	3	2	0	2	1	0	0	0	0	0	0	0	0	0	8	0
7:30 AM	**0**	**0**	**10**	**6**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**19**	0
7:45 AM	**0**	**0**	**3**	**3**	**0**	**1**	**5**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**15**	49
8:00 AM	**0**	**0**	**6**	**7**	**0**	**2**	**7**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**25**	67
8:15 AM	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**66**
8:30 AM	0	0	4	1	0	0	1	0	0	1	0	0	0	0	0	0	7	54
8:45 AM	0	0	4	2	0	0	7	0	0	2	0	0	0	1	0	0	16	55
Count Total	0	0	39	24	0	5	23	3	0	5	1	3	0	1	0	0	104	0
Peak Hour	**0**	**0**	**25**	**17**	**0**	**3**	**12**	**3**	**0**	**2**	**1**	**3**	**0**	**0**	**0**	**0**	**66**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Calle Del Adobe			Calle Del Adobe			Post Dr			El Rancho Way			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

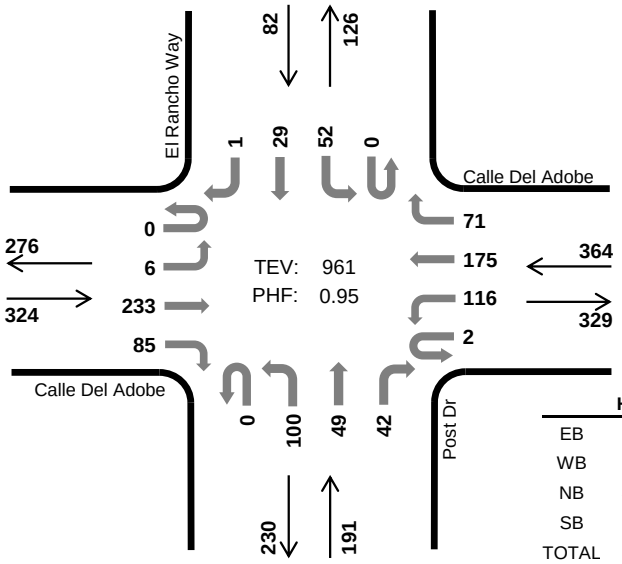
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Post Dr
Calle Del Adobe

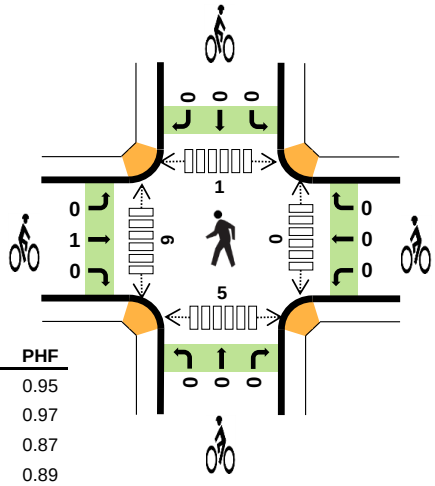
Date: 05-22-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour



	HV %:	PHF
EB	9.3%	0.95
WB	7.1%	0.97
NB	4.2%	0.87
SB	0.0%	0.89
TOTAL	6.7%	0.95



Two-Hour Count Summaries

Interval Start		Calle Del Adobe Eastbound UT	LT	TH	RT	Calle Del Adobe Westbound UT	LT	TH	RT	Post Dr Northbound UT	LT	TH	RT	El Rancho Way Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	1	47	23	1	24	46	24	0	23	10	3	0	17	6	1	226	0
4:15 PM		0	2	47	23	2	28	45	19	0	25	17	13	0	21	6	0	248	0
4:30 PM		0	1	47	23	0	38	26	15	0	23	14	15	0	13	4	0	219	0
4:45 PM		**0**	**1**	**50**	**21**	**0**	**26**	**48**	**13**	**0**	**28**	**17**	**10**	**0**	**10**	**10**	**0**	**234**	927
5:00 PM		**0**	**1**	**56**	**26**	**1**	**28**	**41**	**21**	**0**	**23**	**6**	**11**	**0**	**14**	**6**	**0**	**234**	935
5:15 PM		**0**	**0**	**65**	**19**	**1**	**29**	**43**	**19**	**0**	**23**	**11**	**11**	**0**	**14**	**5**	**0**	**240**	927
5:30 PM		**0**	**4**	**62**	**19**	**0**	**33**	**43**	**18**	**0**	**26**	**15**	**10**	**0**	**14**	**8**	**1**	**253**	**961**
5:45 PM		0	1	46	17	2	21	30	20	0	18	13	7	0	21	9	0	205	932
Count Total		0	11	420	171	7	227	322	149	0	189	103	80	0	124	54	2	1,859	0
Peak Hour	**All**	**0**	**6**	**233**	**85**	**2**	**116**	**175**	**71**	**0**	**100**	**49**	**42**	**0**	**52**	**29**	**1**	**961**	**0**
	HV	**0**	**0**	**23**	**7**	**0**	**3**	**23**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**64**	**0**
	HV%	**-**	**0%**	**10%**	**8%**	**0%**	**3%**	**13%**	**0%**	**-**	**8%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**7%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	5	6	2	0	*13*	0	0	0	0	*0*	0	0	0	1	*1*
4:15 PM	5	8	1	0	*14*	0	0	0	0	*0*	0	1	1	0	*2*
4:30 PM	3	6	2	0	*11*	1	0	0	0	*1*	0	0	0	1	*1*
4:45 PM	**4**	**6**	**2**	**0**	***12***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
5:00 PM	**11**	**11**	**3**	**0**	***25***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	*2*
5:15 PM	**12**	**7**	**0**	**0**	***19***	**1**	**0**	**0**	**0**	***1***	**0**	**7**	**0**	**1**	*8*
5:30 PM	**3**	**2**	**3**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**2**	***4***
5:45 PM	2	3	0	0	*5*	0	1	0	0	*1*	0	0	0	0	*0*
Count Total	45	49	13	0	*107*	2	1	0	0	*3*	0	10	2	7	*19*
Peak Hour	**30**	**26**	**8**	**0**	***64***	**1**	**0**	**0**	**0**	***1***	**0**	**9**	**1**	**5**	***15***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Calle Del Adobe				Calle Del Adobe				Post Dr				El Rancho Way				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	4	1	0	0	6	0	0	2	0	0	0	0	0	0	13	0
4:15 PM	0	0	3	2	0	0	8	0	0	1	0	0	0	0	0	0	14	0
4:30 PM	0	0	2	1	0	0	6	0	0	2	0	0	0	0	0	0	11	0
4:45 PM	**0**	**0**	**3**	**1**	**0**	**0**	**6**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	50
5:00 PM	**0**	**0**	**9**	**2**	**0**	**1**	**10**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**25**	62
5:15 PM	**0**	**0**	**8**	**4**	**0**	**2**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**19**	67
5:30 PM	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**64**
5:45 PM	0	0	1	1	0	0	3	0	0	0	0	0	0	0	0	0	5	57
Count Total	0	0	33	12	0	3	46	0	0	13	0	0	0	0	0	0	107	0
Peak Hour	**0**	**0**	**23**	**7**	**0**	**3**	**23**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**64**	**0**

Two-Hour Count Summaries - Bikes

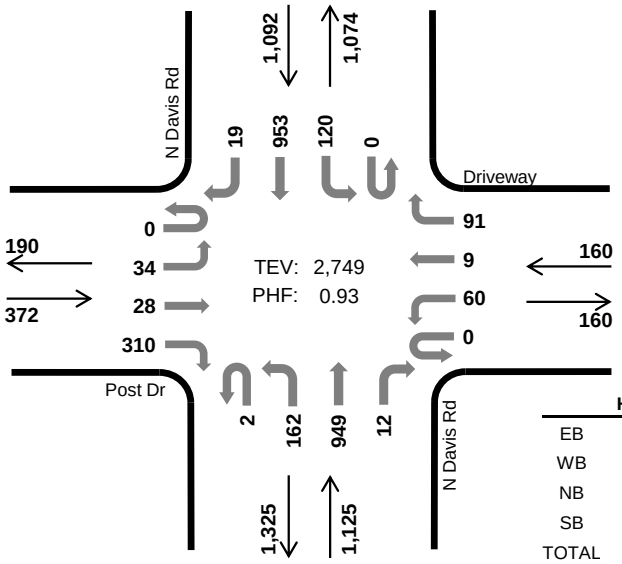
Interval Start	Calle Del Adobe			Calle Del Adobe			Post Dr			El Rancho Way			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:15 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	2
Count Total	1	1	0	0	1	0	0	0	0	0	0	0	3	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

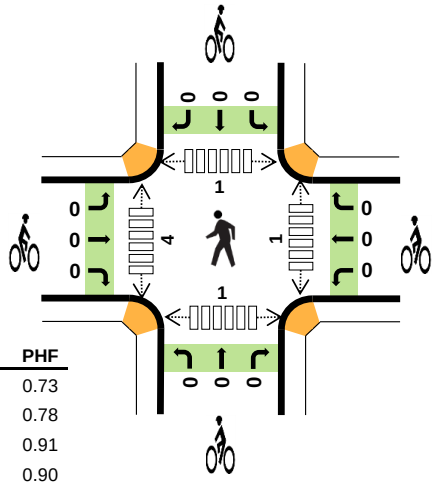
N Davis Rd
Post Dr

Date: 05-22-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour



	HV %:	PHF
EB	5.9%	0.73
WB	3.1%	0.78
NB	2.5%	0.91
SB	2.2%	0.90
TOTAL	2.9%	0.93



Two-Hour Count Summaries

Interval Start		Post Dr Eastbound UT	LT	TH	RT	Driveway Westbound UT	LT	TH	RT	N Davis Rd Northbound UT	LT	TH	RT	N Davis Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM		0	2	3	20	0	12	1	26	0	25	121	1	0	21	168	3	403	0
7:15 AM		0	7	3	44	0	10	1	18	0	18	166	5	0	25	184	2	483	0
7:30 AM		**0**	**6**	**8**	**54**	**0**	**7**	**0**	**34**	**0**	**29**	**227**	**1**	**0**	**21**	**227**	**5**	**619**	0
7:45 AM		**0**	**5**	**7**	**79**	**0**	**13**	**3**	**18**	**0**	**52**	**255**	**2**	**0**	**32**	**271**	**1**	**738**	2,243
8:00 AM		**0**	**11**	**6**	**69**	**0**	**16**	**3**	**15**	**1**	**44**	**220**	**1**	**0**	**34**	**228**	**5**	**653**	2,493
8:15 AM		**0**	**12**	**7**	**108**	**0**	**24**	**3**	**24**	**1**	**37**	**247**	**8**	**0**	**33**	**227**	**8**	**739**	**2,749**
8:30 AM		0	10	7	43	0	15	5	28	0	47	244	4	0	35	164	9	611	2,741
8:45 AM		0	22	0	38	0	11	2	23	0	40	200	10	1	24	147	21	539	2,542
Count Total		0	75	41	455	0	108	18	186	2	292	1,680	32	1	225	1,616	54	4,785	0
Peak Hour	**All**	**0**	**34**	**28**	**310**	**0**	**60**	**9**	**91**	**2**	**162**	**949**	**12**	**0**	**120**	**953**	**19**	**2,749**	**0**
	HV	**0**	**2**	**2**	**18**	**0**	**0**	**0**	**5**	**0**	**4**	**24**	**0**	**0**	**3**	**20**	**1**	**79**	**0**
	HV%	**-**	**6%**	**7%**	**6%**	**-**	**0%**	**0%**	**5%**	**0%**	**2%**	**3%**	**0%**	**-**	**3%**	**2%**	**5%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	1	0	1	2	*4*	0	0	0	0	*0*	0	0	1	0	*1*
7:15 AM	3	0	5	5	*13*	0	0	0	0	*0*	0	1	0	0	*1*
7:30 AM	**6**	**2**	**3**	**3**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**0**	**0**	*3*
7:45 AM	**5**	**1**	**12**	**5**	***23***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**0**	*2*
8:00 AM	**9**	**2**	**6**	**10**	***27***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
8:15 AM	**2**	**0**	**7**	**6**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
8:30 AM	1	0	9	10	*20*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	1	1	10	2	*14*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	28	6	53	43	*130*	0	0	0	0	*0*	1	5	2	1	*9*
Peak Hour	**22**	**5**	**28**	**24**	***79***	**0**	**0**	**0**	**0**	***0***	**1**	**4**	**1**	**1**	***7***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Post Dr				Driveway				N Davis Rd				N Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2	0	4	0
7:15 AM	0	0	1	2	0	0	0	0	0	0	5	0	0	0	5	0	13	0
7:30 AM	**0**	**0**	**1**	**5**	**0**	**0**	**0**	**2**	**0**	**1**	**2**	**0**	**0**	**1**	**2**	**0**	**14**	0
7:45 AM	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**1**	**0**	**3**	**9**	**0**	**0**	**1**	**4**	**0**	**23**	54
8:00 AM	**0**	**2**	**0**	**7**	**0**	**0**	**0**	**2**	**0**	**0**	**6**	**0**	**0**	**1**	**8**	**1**	**27**	77
8:15 AM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**0**	**6**	**0**	**15**	**79**
8:30 AM	0	0	0	1	0	0	0	0	0	2	7	0	0	1	9	0	20	85
8:45 AM	0	0	0	1	0	0	1	0	0	1	7	2	0	0	2	0	14	76
Count Total	0	2	3	23	0	0	1	5	0	7	44	2	0	4	38	1	130	0
Peak Hour	**0**	**2**	**2**	**18**	**0**	**0**	**0**	**5**	**0**	**4**	**24**	**0**	**0**	**3**	**20**	**1**	**79**	**0**

Two-Hour Count Summaries - Bikes

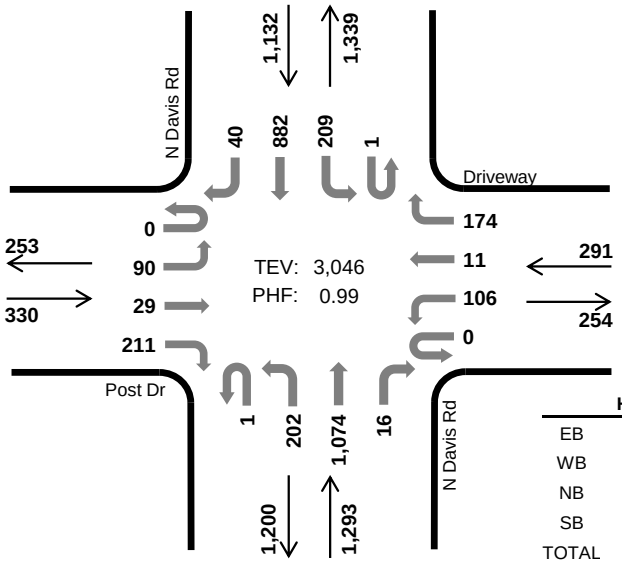
Interval Start	Post Dr			Driveway			N Davis Rd			N Davis Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

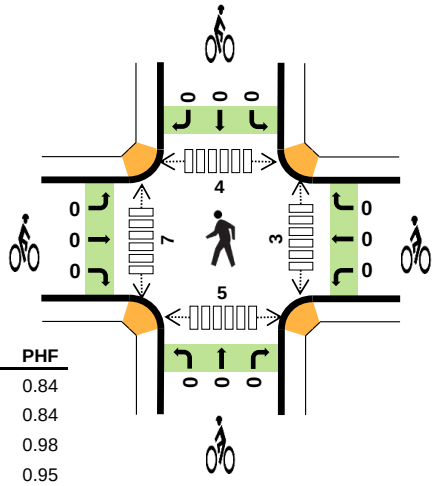
N Davis Rd
Post Dr

Date: 05-22-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

Peak Hour



	HV %:	PHF
EB	2.7%	0.84
WB	0.7%	0.84
NB	1.5%	0.98
SB	1.4%	0.95
TOTAL	1.5%	0.99



Two-Hour Count Summaries

Interval Start		Post Dr Eastbound UT	LT	TH	RT	Driveway Westbound UT	LT	TH	RT	N Davis Rd Northbound UT	LT	TH	RT	N Davis Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	16	8	44	0	27	3	49	0	41	281	9	0	58	217	18	771	0
4:15 PM		0	22	10	42	0	27	7	47	1	56	261	7	0	47	199	14	740	0
4:30 PM		0	36	8	38	0	10	2	43	1	52	298	7	1	52	162	14	724	0
4:45 PM		**0**	**20**	**4**	**53**	**0**	**26**	**3**	**37**	**0**	**62**	**246**	**9**	**0**	**51**	**229**	**18**	**758**	2,993
5:00 PM		**0**	**37**	**10**	**51**	**0**	**32**	**3**	**17**	**0**	**40**	**288**	**1**	**0**	**51**	**224**	**7**	**761**	2,983
5:15 PM		**0**	**18**	**10**	**48**	**0**	**29**	**1**	**57**	**0**	**47**	**277**	**3**	**1**	**54**	**214**	**7**	**766**	3,009
5:30 PM		**0**	**15**	**5**	**59**	**0**	**19**	**4**	**63**	**1**	**53**	**263**	**3**	**0**	**53**	**215**	**8**	**761**	**3,046**
5:45 PM		0	21	8	45	0	13	2	51	2	39	239	9	0	66	222	2	719	3,007
Count Total		0	185	63	380	0	183	25	364	5	390	2,153	48	2	432	1,682	88	6,000	0
Peak Hour	**All**	**0**	**90**	**29**	**211**	**0**	**106**	**11**	**174**	**1**	**202**	**1,074**	**16**	**1**	**209**	**882**	**40**	**3,046**	**0**
	HV	**0**	**0**	**1**	**8**	**0**	**0**	**0**	**2**	**0**	**8**	**11**	**0**	**0**	**1**	**15**	**0**	**46**	**0**
	HV%	**-**	**0%**	**3%**	**4%**	**-**	**0%**	**0%**	**1%**	**0%**	**4%**	**1%**	**0%**	**0%**	**0%**	**2%**	**0%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	1	1	4	4	*10*	0	0	0	0	*0*	3	1	0	0	*4*
4:15 PM	1	1	13	3	*18*	0	0	0	0	*0*	0	1	0	0	*1*
4:30 PM	4	0	4	1	*9*	0	0	0	0	*0*	1	2	0	1	*4*
4:45 PM	**1**	**0**	**2**	**4**	***7***	**0**	**0**	**0**	**0**	***0***	**2**	**4**	**1**	**4**	*11*
5:00 PM	**3**	**1**	**8**	**4**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
5:15 PM	**5**	**0**	**2**	**3**	***10***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**2**	**0**	*3*
5:30 PM	**0**	**1**	**7**	**5**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**1**	**1**	***4***
5:45 PM	0	0	5	0	*5*	0	0	0	0	*0*	0	2	0	1	*3*
Count Total	15	4	45	24	*88*	0	0	0	0	*0*	7	13	4	7	*31*
Peak Hour	**9**	**2**	**19**	**16**	***46***	**0**	**0**	**0**	**0**	***0***	**3**	**7**	**4**	**5**	***19***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Post Dr				Driveway				N Davis Rd				N Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	1	0	0	1	3	0	0	0	4	0	10	0
4:15 PM	0	0	0	1	0	0	0	1	0	4	8	1	0	0	3	0	18	0
4:30 PM	0	2	1	1	0	0	0	0	0	3	1	0	0	0	1	0	9	0
4:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**4**	**0**	**7**	44
5:00 PM	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**1**	**0**	**3**	**5**	**0**	**0**	**1**	**3**	**0**	**16**	50
5:15 PM	**0**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**10**	42
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**4**	**0**	**0**	**0**	**5**	**0**	**13**	**46**
5:45 PM	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	5	44
Count Total	0	2	3	10	0	0	1	3	0	17	27	1	0	1	23	0	88	0
Peak Hour	**0**	**0**	**1**	**8**	**0**	**0**	**0**	**2**	**0**	**8**	**11**	**0**	**0**	**1**	**15**	**0**	**46**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Post Dr			Driveway			N Davis Rd			N Davis Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

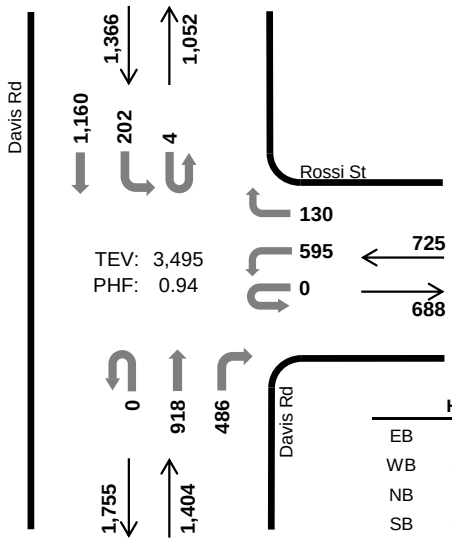
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Davis Rd
Rossi St

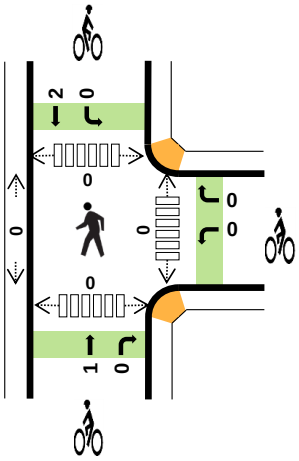
Date: 09-24-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

N

Peak Hour



	HV %:	PHF
EB	-	-
WB	2.6%	0.81
NB	1.9%	0.92
SB	3.0%	0.91
TOTAL	2.5%	0.94



Two-Hour Count Summaries

Interval Start		0				Rossi St				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
		Eastbound				Westbound				Northbound				Southbound					
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	0	0	0	134	0	16	0	0	126	50	0	16	173	0	515	0
7:15 AM		0	0	0	0	0	115	0	19	0	0	180	83	1	27	241	0	666	0
7:30 AM		**0**	**0**	**0**	**0**	**0**	**146**	**0**	**25**	**0**	**0**	**200**	**96**	**2**	**36**	**338**	**0**	**843**	0
7:45 AM		**0**	**0**	**0**	**0**	**0**	**149**	**0**	**24**	**0**	**0**	**254**	**129**	**0**	**60**	**316**	**0**	**932**	2,956
8:00 AM		**0**	**0**	**0**	**0**	**0**	**179**	**0**	**45**	**0**	**0**	**215**	**132**	**0**	**46**	**257**	**0**	**874**	3,315
8:15 AM		**0**	**0**	**0**	**0**	**0**	**121**	**0**	**36**	**0**	**0**	**249**	**129**	**2**	**60**	**249**	**0**	**846**	**3,495**
8:30 AM		0	0	0	0	0	101	0	19	0	0	228	79	1	51	215	0	694	3,346
8:45 AM		0	0	0	0	0	82	0	50	0	0	198	86	0	44	200	0	660	3,074
Count Total		0	0	0	0	0	1,027	0	234	0	0	1,650	784	6	340	1,989	0	6,030	0
Peak Hour	**All**	**0**	**0**	**0**	**0**	**0**	**595**	**0**	**130**	**0**	**0**	**918**	**486**	**4**	**202**	**1,160**	**0**	**3,495**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**5**	**0**	**0**	**19**	**8**	**0**	**4**	**37**	**0**	**87**	**0**
	HV%	**-**	**-**	**-**	**-**	**-**	**2%**	**-**	**4%**	**-**	**-**	**2%**	**2%**	**0%**	**2%**	**3%**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	0	5	7	5	*17*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	0	2	12	12	*26*	0	0	0	0	*0*	1	0	0	0	*1*
7:30 AM	**0**	**3**	**4**	**9**	***16***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**4**	**6**	**8**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**0**	**6**	**7**	**5**	***18***	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**6**	**10**	**19**	***35***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***
8:30 AM	0	2	5	16	*23*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	0	3	9	10	*22*	0	0	0	1	*1*	1	0	0	0	*1*
Count Total	0	31	60	84	*175*	0	0	1	3	*4*	2	0	0	0	*2*
Peak Hr	**0**	**19**	**27**	**41**	***87***	**0**	**0**	**1**	**2**	***3***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				Rossi St				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	4	0	1	0	0	5	2	0	0	5	0	17	0
7:15 AM	0	0	0	0	0	1	0	1	0	0	11	1	0	2	10	0	26	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**2**	**2**	**0**	**0**	**9**	**0**	**16**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**5**	**1**	**0**	**0**	**8**	**0**	**18**	77
8:00 AM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**6**	**1**	**0**	**1**	**4**	**0**	**18**	78
8:15 AM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**0**	**0**	**6**	**4**	**0**	**3**	**16**	**0**	**35**	**87**
8:30 AM	0	0	0	0	0	2	0	0	0	0	5	0	0	3	13	0	23	94
8:45 AM	0	0	0	0	0	3	0	0	0	0	6	3	0	1	9	0	22	98
Count Total	0	0	0	0	0	24	0	7	0	0	46	14	0	10	74	0	175	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**14**	**0**	**5**	**0**	**0**	**19**	**8**	**0**	**4**	**37**	**0**	**87**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	0			Rossi St			Davis Rd			Davis Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	2
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**3**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	4
Count Total	0	0	0	0	0	0	0	1	0	1	2	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**3**	**0**

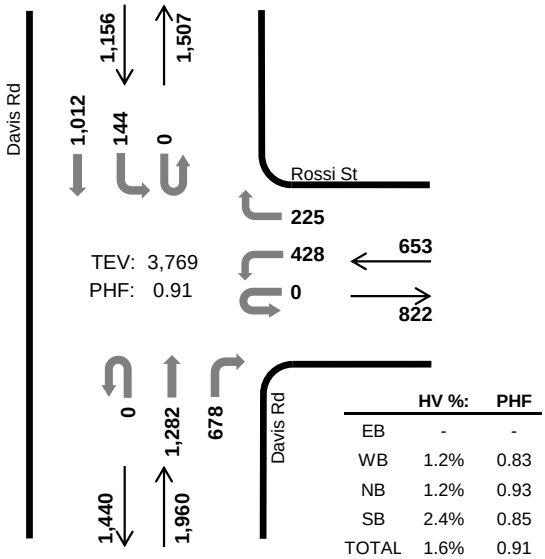
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Davis Rd
Rossi St

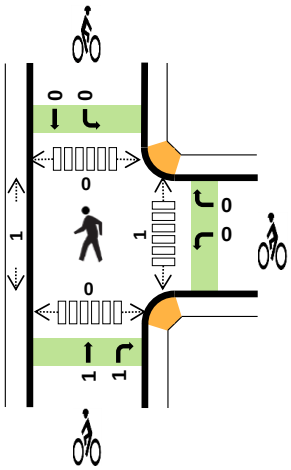
Date: 09-24-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM

N

Peak Hour



	HV %:	PHF
EB	-	-
WB	1.2%	0.83
NB	1.2%	0.93
SB	2.4%	0.85
TOTAL	1.6%	0.91



Two-Hour Count Summaries

Interval Start	0 Eastbound UT	LT	TH	RT	Rossi St Westbound UT	LT	TH	RT	Davis Rd Northbound UT	LT	TH	RT	Davis Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	0	0	0	0	73	0	54	0	0	274	123	1	44	244	0	813	0
4:15 PM	0	0	0	0	0	83	0	49	0	0	287	126	6	29	234	0	814	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**81**	**0**	**66**	**0**	**0**	**280**	**148**	**0**	**37**	**250**	**0**	**862**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**81**	**0**	**60**	**0**	**0**	**343**	**152**	**0**	**37**	**241**	**0**	**914**	3,403
5:00 PM	**0**	**0**	**0**	**0**	**0**	**138**	**0**	**59**	**0**	**0**	**331**	**178**	**0**	**29**	**221**	**0**	**956**	3,546
5:15 PM	**0**	**0**	**0**	**0**	**0**	**128**	**0**	**40**	**0**	**0**	**328**	**200**	**0**	**41**	**300**	**0**	**1,037**	**3,769**
5:30 PM	0	0	0	0	0	93	0	47	0	0	282	156	0	41	243	0	862	3,769
5:45 PM	0	0	0	0	0	85	0	30	0	0	251	150	1	32	253	0	802	3,657
Count Total	0	0	0	0	0	762	0	405	0	0	2,376	1,233	8	290	1,986	0	7,060	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**428**	**0**	**225**	**0**	**0**	**1,282**	**678**	**0**	**144**	**1,012**	**0**	**3,769**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**0**	**0**	**14**	**10**	**0**	**10**	**18**	**0**	**60**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**1%**	**-**	**1%**	**-**	**-**	**1%**	**1%**	**-**	**7%**	**2%**	**-**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	0	4	13	8	*25*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	1	9	5	*15*	0	0	1	0	*1*	0	1	0	0	*1*
4:30 PM	**0**	**1**	**4**	**5**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**0**	**1**	**5**	**4**	***10***	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**4**	**7**	**6**	***17***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**0**	*1*
5:15 PM	**0**	**2**	**8**	**13**	***23***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***
5:30 PM	0	3	10	4	*17*	0	0	0	0	*0*	2	1	0	0	*3*
5:45 PM	0	2	8	5	*15*	0	0	1	0	*1*	0	0	0	0	*0*
Count Total	0	18	64	50	*132*	0	0	4	0	*4*	3	3	0	0	*6*
Peak Hr	**0**	**8**	**24**	**28**	***60***	**0**	**0**	**2**	**0**	***2***	**1**	**1**	**0**	**0**	***2***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				Rossi St				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	3	0	1	0	0	12	1	1	2	5	0	25	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	9	0	0	1	4	0	15	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**3**	**2**	**0**	**10**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**3**	**0**	**2**	**2**	**0**	**10**	60
5:00 PM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**5**	**2**	**0**	**3**	**3**	**0**	**17**	52
5:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**4**	**4**	**0**	**2**	**11**	**0**	**23**	**60**
5:30 PM	0	0	0	0	0	3	0	0	0	0	8	2	0	1	3	0	17	67
5:45 PM	0	0	0	0	0	1	0	1	0	0	6	2	0	1	4	0	15	72
Count Total	0	0	0	0	0	14	0	4	0	0	49	15	1	15	34	0	132	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**0**	**0**	**14**	**10**	**0**	**10**	**18**	**0**	**60**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	0			Rossi St			Davis Rd			Davis Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	3
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	1
Count Total	0	0	0	0	0	0	0	3	1	0	0	0	4	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	**0**

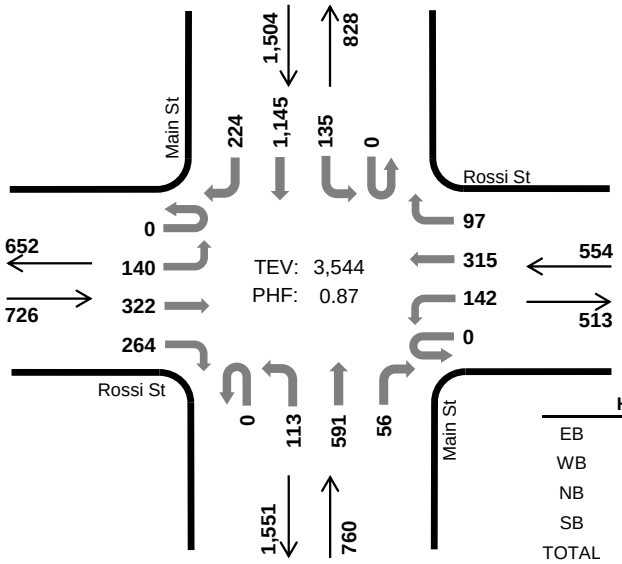
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Main St
Rossi St

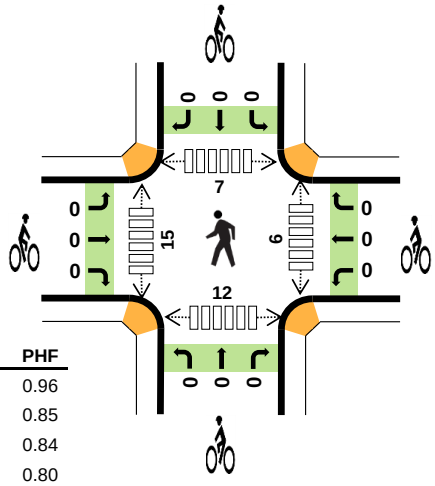
Date: 09-24-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

N

Peak Hour



	HV %:	PHF
EB	1.5%	0.96
WB	3.4%	0.85
NB	2.1%	0.84
SB	1.7%	0.80
TOTAL	2.0%	0.87



Two-Hour Count Summaries

Interval Start		Rossi St Eastbound UT	LT	TH	RT	Rossi St Westbound UT	LT	TH	RT	Main St Northbound UT	LT	TH	RT	Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM		0	20	35	28	0	31	70	21	0	10	104	13	0	22	136	44	534	0
7:15 AM		0	31	59	45	0	42	75	19	0	20	95	13	0	18	175	50	642	0
7:30 AM		**0**	**33**	**89**	**67**	**0**	**36**	**85**	**21**	**0**	**21**	**108**	**8**	**0**	**30**	**282**	**42**	**822**	0
7:45 AM		**0**	**38**	**68**	**84**	**0**	**36**	**73**	**24**	**0**	**33**	**174**	**19**	**0**	**39**	**390**	**43**	**1,021**	3,019
8:00 AM		**0**	**34**	**86**	**67**	**0**	**41**	**91**	**30**	**0**	**32**	**156**	**14**	**0**	**34**	**256**	**70**	**911**	3,396
8:15 AM		**0**	**35**	**79**	**46**	**0**	**29**	**66**	**22**	**0**	**27**	**153**	**15**	**0**	**32**	**217**	**69**	**790**	**3,544**
8:30 AM		0	26	65	57	0	30	53	42	0	22	134	15	0	24	202	38	708	3,430
8:45 AM		0	29	63	30	0	39	52	49	0	30	152	10	0	25	212	33	724	3,133
Count Total		0	246	544	424	0	284	565	228	0	195	1,076	107	0	224	1,870	389	6,152	0
Peak Hour	**All**	**0**	**140**	**322**	**264**	**0**	**142**	**315**	**97**	**0**	**113**	**591**	**56**	**0**	**135**	**1,145**	**224**	**3,544**	**0**
	HV	**0**	**0**	**6**	**5**	**0**	**3**	**12**	**4**	**0**	**4**	**9**	**3**	**0**	**4**	**16**	**5**	**71**	**0**
	HV%	**-**	**0%**	**2%**	**2%**	**-**	**2%**	**4%**	**4%**	**-**	**4%**	**2%**	**5%**	**-**	**3%**	**1%**	**2%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	1	1	4	2	*8*	0	0	1	0	*1*	2	2	1	2	*7*
7:15 AM	4	8	6	4	*22*	0	0	0	0	*0*	0	0	0	5	*5*
7:30 AM	**4**	**7**	**3**	**4**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**5**	**1**	**4**	*10*
7:45 AM	**2**	**4**	**4**	**4**	***14***	**0**	**0**	**0**	**0**	***0***	**3**	**3**	**4**	**7**	*17*
8:00 AM	**1**	**4**	**3**	**7**	***15***	**0**	**0**	**0**	**0**	***0***	**3**	**5**	**2**	**1**	*11*
8:15 AM	**4**	**4**	**6**	**10**	***24***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	***2***
8:30 AM	9	2	6	7	*24*	0	0	0	0	*0*	3	1	2	1	*7*
8:45 AM	3	3	1	4	*11*	0	0	0	1	*1*	3	4	1	1	*9*
Count Total	28	33	33	42	*136*	0	0	1	1	*2*	14	22	11	21	*68*
Peak Hour	**11**	**19**	**16**	**25**	***71***	**0**	**0**	**0**	**0**	***0***	**6**	**15**	**7**	**12**	***40***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Rossi St				Rossi St				Main St				Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	0	1	0	0	3	1	0	1	1	0	8	0
7:15 AM	0	0	3	1	0	2	3	3	0	2	3	1	0	2	2	0	22	0
7:30 AM	**0**	**0**	**3**	**1**	**0**	**0**	**5**	**2**	**0**	**1**	**1**	**1**	**0**	**1**	**3**	**0**	**18**	0
7:45 AM	**0**	**0**	**2**	**0**	**0**	**1**	**2**	**1**	**0**	**2**	**2**	**0**	**0**	**1**	**2**	**1**	**14**	62
8:00 AM	**0**	**0**	**0**	**1**	**0**	**1**	**2**	**1**	**0**	**0**	**3**	**0**	**0**	**2**	**3**	**2**	**15**	69
8:15 AM	**0**	**0**	**1**	**3**	**0**	**1**	**3**	**0**	**0**	**1**	**3**	**2**	**0**	**0**	**8**	**2**	**24**	**71**
8:30 AM	0	3	3	3	0	1	1	0	0	0	4	2	0	1	5	1	24	77
8:45 AM	0	0	2	1	0	3	0	0	0	0	1	0	0	1	3	0	11	74
Count Total	0	3	15	10	0	9	16	8	0	6	20	7	0	9	27	6	136	0
Peak Hour	**0**	**0**	**6**	**5**	**0**	**3**	**12**	**4**	**0**	**4**	**9**	**3**	**0**	**4**	**16**	**5**	**71**	**0**

Two-Hour Count Summaries - Bikes

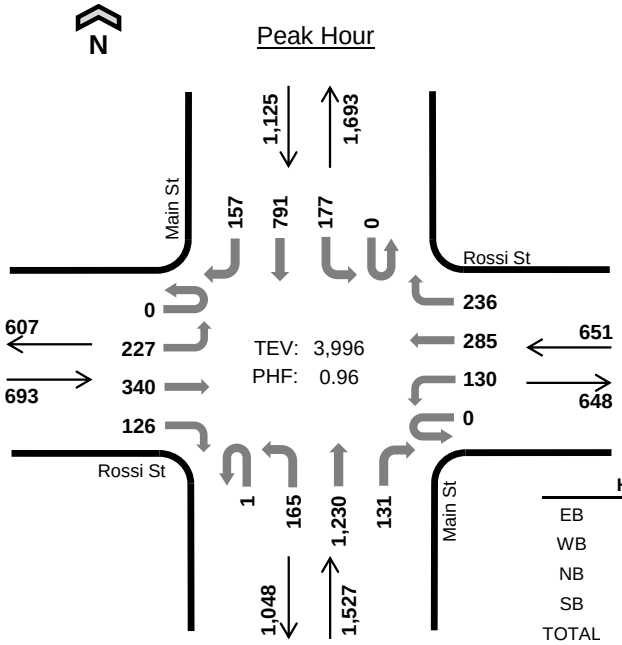
Interval Start	Rossi St			Rossi St			Main St			Main St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Count Total	0	0	0	0	0	0	0	0	1	1	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

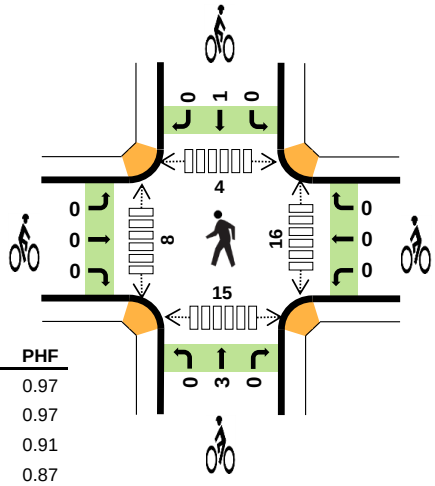
Main St
Rossi St

Date: 09-24-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

Peak Hour



	HV %:	PHF
EB	1.3%	0.97
WB	1.1%	0.97
NB	0.6%	0.91
SB	0.8%	0.87
TOTAL	0.9%	0.96



Two-Hour Count Summaries

Interval Start		Rossi St Eastbound UT	LT	TH	RT	Rossi St Westbound UT	LT	TH	RT	Main St Northbound UT	LT	TH	RT	Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	50	85	37	0	33	68	56	0	49	279	20	0	44	199	37	957	0
4:15 PM		0	52	80	33	0	35	73	77	0	44	263	18	0	49	200	42	966	0
4:30 PM		0	54	91	36	0	38	58	65	0	43	302	13	0	44	205	37	986	0
4:45 PM		**0**	**65**	**81**	**28**	**0**	**35**	**73**	**55**	**0**	**42**	**287**	**33**	**0**	**48**	**178**	**32**	**957**	3,866
5:00 PM		**0**	**50**	**90**	**33**	**0**	**36**	**66**	**66**	**0**	**45**	**335**	**39**	**0**	**38**	**187**	**54**	**1,039**	3,948
5:15 PM		**0**	**52**	**83**	**32**	**0**	**31**	**68**	**61**	**1**	**37**	**296**	**29**	**0**	**51**	**227**	**44**	**1,012**	3,994
5:30 PM		**0**	**60**	**86**	**33**	**0**	**28**	**78**	**54**	**0**	**41**	**312**	**30**	**0**	**40**	**199**	**27**	**988**	**3,996**
5:45 PM		0	63	87	28	0	34	56	56	0	34	264	22	0	50	214	33	941	3,980
Count Total		0	446	683	260	0	270	540	490	1	335	2,338	204	0	364	1,609	306	7,846	0
Peak Hour	**All**	**0**	**227**	**340**	**126**	**0**	**130**	**285**	**236**	**1**	**165**	**1,230**	**131**	**0**	**177**	**791**	**157**	**3,996**	**0**
	HV	**0**	**1**	**1**	**7**	**0**	**1**	**4**	**2**	**0**	**1**	**7**	**1**	**0**	**1**	**7**	**1**	**34**	**0**
	HV%	**-**	**0%**	**0%**	**6%**	**-**	**1%**	**1%**	**1%**	**0%**	**1%**	**1%**	**1%**	**-**	**1%**	**1%**	**1%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	0	3	3	3	*9*	1	0	2	0	*3*	1	5	3	3	*12*
4:15 PM	4	4	8	1	*17*	0	0	1	0	*1*	3	3	0	8	*14*
4:30 PM	1	4	4	3	*12*	0	0	0	0	*0*	4	3	1	3	*11*
4:45 PM	**4**	**3**	**0**	**2**	***9***	**0**	**0**	**0**	**0**	***0***	**4**	**3**	**2**	**6**	*15*
5:00 PM	**2**	**1**	**4**	**3**	***10***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**1**	**0**	*3*
5:15 PM	**1**	**2**	**4**	**2**	***9***	**0**	**0**	**2**	**1**	***3***	**7**	**3**	**1**	**2**	*13*
5:30 PM	**2**	**1**	**1**	**2**	***6***	**0**	**0**	**1**	**0**	***1***	**3**	**2**	**0**	**7**	***12***
5:45 PM	2	1	4	1	*8*	0	0	0	0	*0*	5	3	4	7	*19*
Count Total	16	19	28	17	*80*	1	0	6	1	*8*	29	22	12	36	*99*
Peak Hour	**9**	**7**	**9**	**9**	***34***	**0**	**0**	**3**	**1**	***4***	**16**	**8**	**4**	**15**	***43***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Rossi St				Rossi St				Main St				Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	0	0	3	0	0	0	1	1	1	0	0	2	1	9	0
4:15 PM	0	1	3	0	0	2	2	0	0	3	4	1	0	0	1	0	17	0
4:30 PM	0	0	0	1	0	2	2	0	0	1	2	1	0	0	1	2	12	0
4:45 PM	**0**	**1**	**1**	**2**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**9**	47
5:00 PM	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**1**	**3**	**0**	**0**	**0**	**3**	**0**	**10**	48
5:15 PM	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**4**	**0**	**0**	**0**	**2**	**0**	**9**	40
5:30 PM	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**6**	**34**
5:45 PM	0	0	2	0	0	0	1	0	0	2	2	0	0	0	1	0	8	33
Count Total	0	2	6	8	0	8	9	2	0	8	16	4	0	1	12	4	80	0
Peak Hour	**0**	**1**	**1**	**7**	**0**	**1**	**4**	**2**	**0**	**1**	**7**	**1**	**0**	**1**	**7**	**1**	**34**	**0**

Two-Hour Count Summaries - Bikes

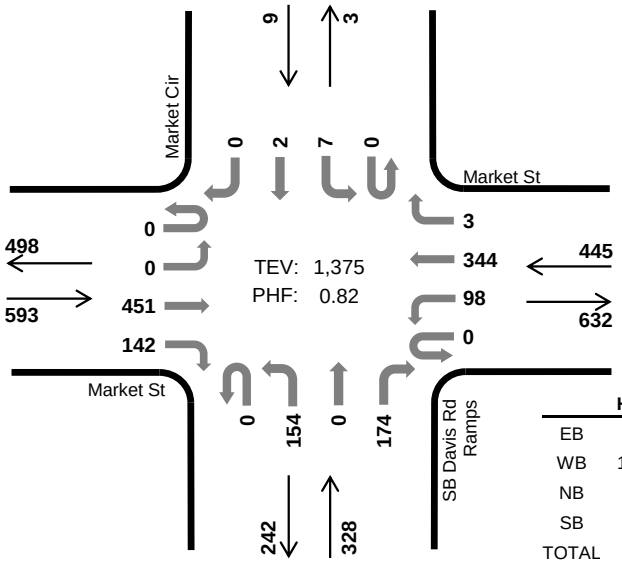
Interval Start	Rossi St			Rossi St			Main St			Main St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	1	0	0	0	0	2	0	0	0	0	3	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**3**	3
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**4**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	0	0	1	0	0	0	0	6	0	0	1	0	8	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**4**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

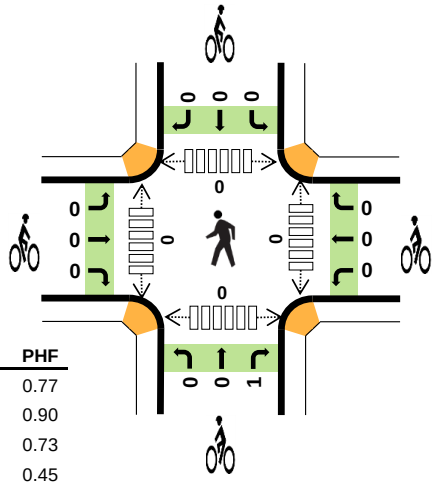
SB Davis Rd Ramps
Market St

Date: 09-26-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour



	HV %:	PHF
EB	4.9%	0.77
WB	11.2%	0.90
NB	3.4%	0.73
SB	0.0%	0.45
TOTAL	6.5%	0.82



Two-Hour Count Summaries

Interval Start		Market St Eastbound				Market St Westbound				SB Davis Rd Ramps Northbound				Market Cir Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	1	48	18	0	29	89	0	0	60	0	23	0	1	1	0	270	0
7:15 AM		0	0	68	26	0	22	83	0	0	47	0	24	0	0	0	0	270	0
7:30 AM		**0**	**0**	**110**	**32**	**0**	**28**	**95**	**0**	**0**	**47**	**0**	**41**	**0**	**1**	**0**	**0**	**354**	0
7:45 AM		**0**	**0**	**152**	**41**	**0**	**21**	**85**	**2**	**0**	**49**	**0**	**63**	**0**	**4**	**1**	**0**	**418**	1,312
8:00 AM		**0**	**0**	**81**	**39**	**0**	**27**	**86**	**0**	**0**	**29**	**0**	**40**	**0**	**0**	**0**	**0**	**302**	1,344
8:15 AM		**0**	**0**	**108**	**30**	**0**	**22**	**78**	**1**	**0**	**29**	**0**	**30**	**0**	**2**	**1**	**0**	**301**	**1,375**
8:30 AM		0	0	88	32	0	30	72	1	0	18	0	44	0	0	0	0	285	1,306
8:45 AM		0	0	91	37	0	27	68	1	0	20	0	24	0	1	0	1	270	1,158
Count Total		0	1	746	255	0	206	656	5	0	299	0	289	0	9	3	1	2,470	0
Peak Hour	**All**	**0**	**0**	**451**	**142**	**0**	**98**	**344**	**3**	**0**	**154**	**0**	**174**	**0**	**7**	**2**	**0**	**1,375**	**0**
	HV	**0**	**0**	**21**	**8**	**0**	**13**	**37**	**0**	**0**	**4**	**0**	**7**	**0**	**0**	**0**	**0**	**90**	**0**
	HV%	**-**	**-**	**5%**	**6%**	**-**	**13%**	**11%**	**0%**	**-**	**3%**	**-**	**4%**	**-**	**0%**	**0%**	**-**	**7%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	1	7	3	0	*11*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	9	9	3	0	*21*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**11**	**10**	**3**	**0**	***24***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**5**	**13**	**2**	**0**	***20***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**5**	**11**	**3**	**0**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**8**	**16**	**3**	**0**	***27***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
8:30 AM	11	10	8	0	*29*	0	0	0	0	*0*	0	0	0	0	*0*
8:45 AM	15	12	6	0	*33*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	65	88	31	0	*184*	0	0	1	0	*1*	0	0	0	0	*0*
Peak Hour	**29**	**50**	**11**	**0**	***90***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Market St				Market St				SB Davis Rd Ramps				Market Cir				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	0	7	0	0	2	0	1	0	0	0	0	11	0
7:15 AM	0	0	6	3	0	2	7	0	0	3	0	0	0	0	0	0	21	0
7:30 AM	**0**	**0**	**6**	**5**	**0**	**2**	**8**	**0**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**24**	0
7:45 AM	**0**	**0**	**4**	**1**	**0**	**2**	**11**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**20**	76
8:00 AM	**0**	**0**	**4**	**1**	**0**	**3**	**8**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**19**	84
8:15 AM	**0**	**0**	**7**	**1**	**0**	**6**	**10**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**27**	**90**
8:30 AM	0	0	7	4	0	1	9	0	0	0	0	8	0	0	0	0	29	95
8:45 AM	0	0	9	6	0	1	11	0	0	2	0	4	0	0	0	0	33	108
Count Total	0	0	44	21	0	17	71	0	0	11	0	20	0	0	0	0	184	0
Peak Hour	**0**	**0**	**21**	**8**	**0**	**13**	**37**	**0**	**0**	**4**	**0**	**7**	**0**	**0**	**0**	**0**	**90**	**0**

Two-Hour Count Summaries - Bikes

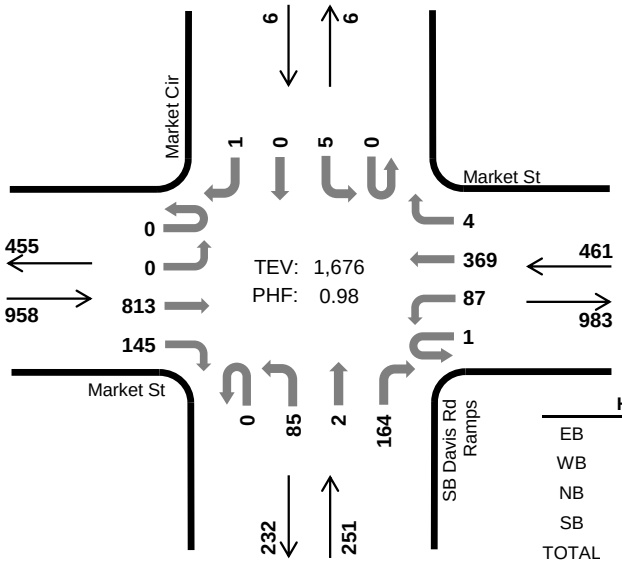
Interval Start	Market St			Market St			SB Davis Rd Ramps			Market Cir			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

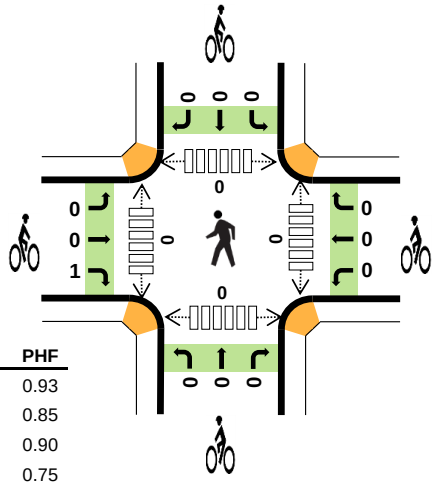
SB Davis Rd Ramps
Market St

Date: 09-26-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM

Peak Hour



	HV %:	PHF
EB	7.3%	0.93
WB	7.8%	0.85
NB	6.0%	0.90
SB	0.0%	0.75
TOTAL	7.2%	0.98



Two-Hour Count Summaries

Interval Start		Market St Eastbound				Market St Westbound				SB Davis Rd Ramps Northbound				Market Cir Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	169	33	0	24	78	1	0	24	0	44	0	2	0	0	375	0
4:15 PM		0	0	171	35	0	22	78	1	0	21	0	38	0	1	0	0	367	0
4:30 PM		**0**	**0**	**181**	**32**	**0**	**24**	**109**	**2**	**0**	**27**	**0**	**38**	**0**	**2**	**0**	**0**	**415**	0
4:45 PM		**0**	**0**	**207**	**43**	**0**	**21**	**96**	**0**	**0**	**14**	**1**	**35**	**0**	**0**	**0**	**0**	**417**	1,574
5:00 PM		**0**	**0**	**207**	**31**	**1**	**24**	**84**	**1**	**0**	**21**	**1**	**44**	**0**	**1**	**0**	**1**	**416**	1,615
5:15 PM		**0**	**0**	**218**	**39**	**0**	**18**	**80**	**1**	**0**	**23**	**0**	**47**	**0**	**2**	**0**	**0**	**428**	**1,676**
5:30 PM		0	0	175	30	0	26	77	3	0	14	0	34	0	3	0	0	362	1,623
5:45 PM		0	0	145	44	0	27	73	0	0	15	0	34	0	0	0	0	338	1,544
Count Total		0	0	1,473	287	1	186	675	9	0	159	2	314	0	11	0	1	3,118	0
Peak Hour	**All**	**0**	**0**	**813**	**145**	**1**	**87**	**369**	**4**	**0**	**85**	**2**	**164**	**0**	**5**	**0**	**1**	**1,676**	**0**
	HV	**0**	**0**	**50**	**20**	**0**	**4**	**32**	**0**	**0**	**3**	**0**	**12**	**0**	**0**	**0**	**0**	**121**	**0**
	HV%	**-**	**-**	**6%**	**14%**	**0%**	**5%**	**9%**	**0%**	**-**	**4%**	**0%**	**7%**	**-**	**0%**	**-**	**0%**	**7%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	14	8	7	0	*29*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	7	11	11	0	*29*	0	1	0	0	*1*	0	0	1	0	*1*
4:30 PM	**18**	**9**	**3**	**0**	***30***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**18**	**15**	**2**	**0**	***35***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**21**	**6**	**3**	**0**	***30***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**13**	**6**	**7**	**0**	***26***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:30 PM	18	6	6	0	*30*	0	0	0	0	*0*	0	0	0	0	*0*
5:45 PM	21	13	2	0	*36*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	130	74	41	0	*245*	1	1	0	0	*2*	0	0	1	0	*1*
Peak Hour	**70**	**36**	**15**	**0**	***121***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Market St				Market St				SB Davis Rd Ramps				Market Cir				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	12	2	0	3	5	0	0	1	0	6	0	0	0	0	29	0
4:15 PM	0	0	4	3	0	1	10	0	0	2	0	9	0	0	0	0	29	0
4:30 PM	**0**	**0**	**15**	**3**	**0**	**1**	**8**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**30**	0
4:45 PM	**0**	**0**	**11**	**7**	**0**	**2**	**13**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**35**	123
5:00 PM	**0**	**0**	**17**	**4**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**30**	124
5:15 PM	**0**	**0**	**7**	**6**	**0**	**1**	**5**	**0**	**0**	**2**	**0**	**5**	**0**	**0**	**0**	**0**	**26**	**121**
5:30 PM	0	0	12	6	0	0	6	0	0	0	0	6	0	0	0	0	30	121
5:45 PM	0	0	14	7	0	1	12	0	0	1	0	1	0	0	0	0	36	122
Count Total	0	0	92	38	0	9	65	0	0	7	0	34	0	0	0	0	245	0
Peak Hour	**0**	**0**	**50**	**20**	**0**	**4**	**32**	**0**	**0**	**3**	**0**	**12**	**0**	**0**	**0**	**0**	**121**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Market St			Market St			SB Davis Rd Ramps			Market Cir			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	1	0	1	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

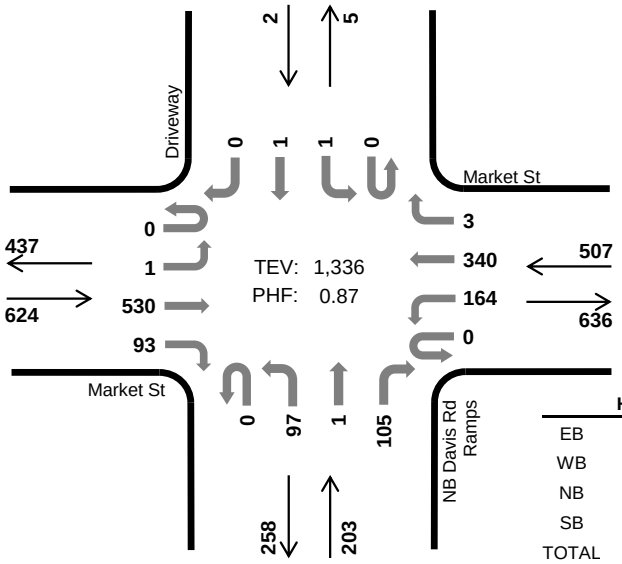
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

NB Davis Rd Ramps
Market St

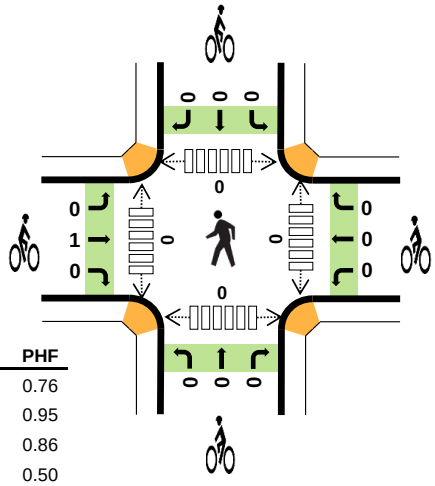
Date: 09-26-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

N

Peak Hour



	HV %:	PHF
EB	4.6%	0.76
WB	8.7%	0.95
NB	7.4%	0.86
SB	0.0%	0.50
TOTAL	6.6%	0.87



Two-Hour Count Summaries

Interval Start		Market St Eastbound				Market St Westbound				NB Davis Rd Ramps Northbound				Driveway Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	0	62	7	0	19	107	1	0	10	0	26	0	1	0	0	233	0
7:15 AM		0	1	92	14	0	22	85	0	0	25	1	23	0	0	0	0	263	0
7:30 AM		**0**	**0**	**130**	**23**	**0**	**34**	**95**	**1**	**0**	**22**	**0**	**22**	**0**	**0**	**0**	**0**	**327**	0
7:45 AM		**0**	**0**	**179**	**27**	**0**	**41**	**85**	**1**	**0**	**25**	**1**	**26**	**0**	**0**	**0**	**0**	**385**	1,208
8:00 AM		**0**	**1**	**105**	**16**	**0**	**51**	**82**	**1**	**0**	**28**	**0**	**31**	**0**	**1**	**0**	**0**	**316**	1,291
8:15 AM		**0**	**0**	**116**	**27**	**0**	**38**	**78**	**0**	**0**	**22**	**0**	**26**	**0**	**0**	**1**	**0**	**308**	**1,336**
8:30 AM		0	0	112	16	0	30	87	0	0	16	0	32	0	0	0	0	293	1,302
8:45 AM		0	0	96	20	0	46	83	0	0	17	0	20	0	0	0	0	282	1,199
Count Total		0	2	892	150	0	281	702	4	0	165	2	206	0	2	1	0	2,407	0
Peak Hour	**All**	**0**	**1**	**530**	**93**	**0**	**164**	**340**	**3**	**0**	**97**	**1**	**105**	**0**	**1**	**1**	**0**	**1,336**	**0**
	HV	**0**	**0**	**25**	**4**	**0**	**5**	**38**	**1**	**0**	**10**	**0**	**5**	**0**	**0**	**0**	**0**	**88**	**0**
	HV%	**-**	**0%**	**5%**	**4%**	**-**	**3%**	**11%**	**33%**	**-**	**10%**	**0%**	**5%**	**-**	**0%**	**0%**	**-**	**7%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	2	11	0	1	*14*	0	0	0	0	*0*	0	0	1	0	*1*
7:15 AM	7	12	3	0	*22*	0	0	0	0	*0*	0	0	1	1	*2*
7:30 AM	**6**	**10**	**2**	**0**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**6**	**9**	**3**	**0**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**7**	**10**	**5**	**0**	***22***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**10**	**15**	**5**	**0**	***30***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
8:30 AM	16	10	6	0	*32*	0	0	0	0	*0*	0	0	1	1	*2*
8:45 AM	10	14	6	0	*30*	0	0	0	0	*0*	0	0	2	0	*2*
Count Total	64	91	30	1	*186*	1	0	0	0	*1*	0	0	5	2	*7*
Peak Hour	**29**	**44**	**15**	**0**	***88***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Market St				Market St				NB Davis Rd Ramps				Driveway				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	2	0	0	4	7	0	0	0	0	0	0	1	0	0	14	0
7:15 AM	0	0	7	0	0	4	8	0	0	2	0	1	0	0	0	0	22	0
7:30 AM	**0**	**0**	**6**	**0**	**0**	**2**	**8**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**18**	0
7:45 AM	**0**	**0**	**5**	**1**	**0**	**0**	**9**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	72
8:00 AM	**0**	**0**	**6**	**1**	**0**	**1**	**8**	**1**	**0**	**3**	**0**	**2**	**0**	**0**	**0**	**0**	**22**	80
8:15 AM	**0**	**0**	**8**	**2**	**0**	**2**	**13**	**0**	**0**	**3**	**0**	**2**	**0**	**0**	**0**	**0**	**30**	**88**
8:30 AM	0	0	15	1	0	2	8	0	0	1	0	5	0	0	0	0	32	102
8:45 AM	0	0	10	0	0	4	10	0	0	4	0	2	0	0	0	0	30	114
Count Total	0	0	59	5	0	19	71	1	0	17	0	13	0	1	0	0	186	0
Peak Hour	**0**	**0**	**25**	**4**	**0**	**5**	**38**	**1**	**0**	**10**	**0**	**5**	**0**	**0**	**0**	**0**	**88**	**0**

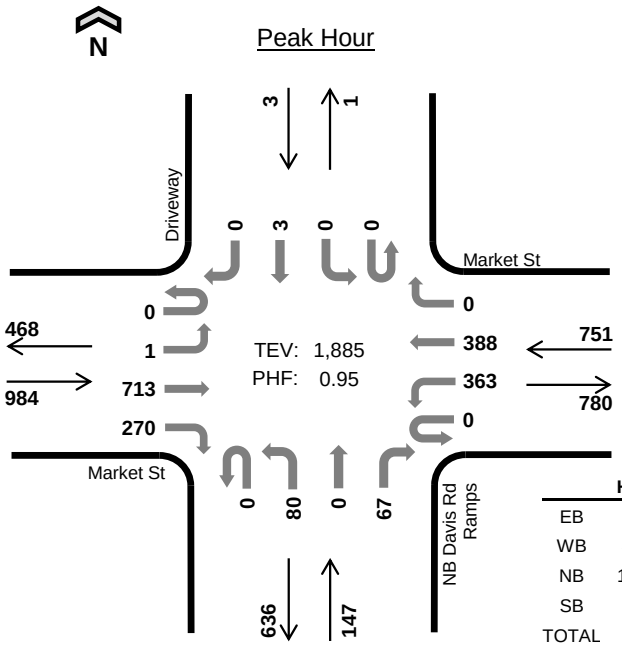
Two-Hour Count Summaries - Bikes

Interval Start	Market St			Market St			NB Davis Rd Ramps			Driveway			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

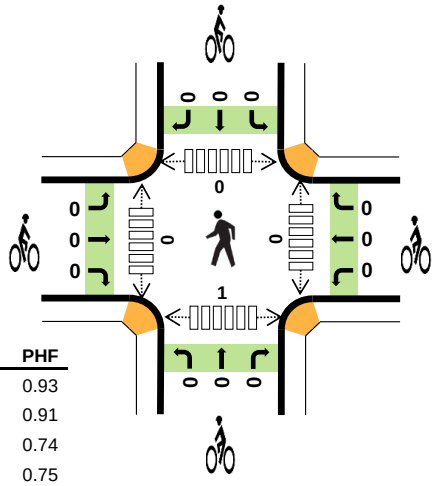
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

NB Davis Rd Ramps
Market St

Date: 09-26-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM



	HV %:	PHF
EB	6.4%	0.93
WB	4.3%	0.91
NB	10.9%	0.74
SB	0.0%	0.75
TOTAL	5.9%	0.95



Two-Hour Count Summaries

Interval Start		Market St Eastbound				Market St Westbound				NB Davis Rd Ramps Northbound				Driveway Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM		0	0	167	45	0	63	78	0	0	20	0	17	0	0	0	0	390	0
4:15 PM		0	0	150	59	0	61	92	0	0	13	0	13	0	1	0	0	389	0
4:30 PM		**0**	**1**	**170**	**52**	**0**	**67**	**119**	**0**	**0**	**16**	**0**	**29**	**0**	**0**	**1**	**0**	**455**	0
4:45 PM		**0**	**0**	**166**	**70**	**0**	**65**	**93**	**0**	**0**	**29**	**0**	**21**	**0**	**0**	**1**	**0**	**445**	1,679
5:00 PM		**0**	**0**	**193**	**72**	**0**	**116**	**91**	**0**	**0**	**18**	**0**	**7**	**0**	**0**	**1**	**0**	**498**	1,787
5:15 PM		**0**	**0**	**184**	**76**	**0**	**115**	**85**	**0**	**0**	**17**	**0**	**10**	**0**	**0**	**0**	**0**	**487**	**1,885**
5:30 PM		0	0	158	59	0	85	87	1	0	12	0	17	0	0	0	0	419	1,849
5:45 PM		0	0	135	42	0	63	80	0	0	21	0	28	0	1	0	0	370	1,774
Count Total		0	1	1,323	475	0	635	725	1	0	146	0	142	0	2	3	0	3,453	0
Peak Hour	**All**	**0**	**1**	**713**	**270**	**0**	**363**	**388**	**0**	**0**	**80**	**0**	**67**	**0**	**0**	**3**	**0**	**1,885**	**0**
	HV	**0**	**0**	**58**	**5**	**0**	**7**	**25**	**0**	**0**	**10**	**0**	**6**	**0**	**0**	**0**	**0**	**111**	**0**
	HV%	**-**	**0%**	**8%**	**2%**	**-**	**2%**	**6%**	**-**	**-**	**13%**	**-**	**9%**	**-**	**-**	**0%**	**-**	**6%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
4:00 PM	18	6	6	0	*30*	0	0	0	0	*0*	0	0	1	0	*1*
4:15 PM	12	11	5	0	*28*	0	0	1	0	*1*	0	0	0	0	*0*
4:30 PM	**17**	**7**	**5**	**0**	***29***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
4:45 PM	**14**	**11**	**8**	**0**	***33***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**21**	**8**	**2**	**0**	***31***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**11**	**6**	**1**	**0**	***18***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
5:30 PM	19	10	2	0	*31*	0	0	0	0	*0*	0	0	0	2	*2*
5:45 PM	14	10	9	0	*33*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	126	69	38	0	*233*	0	0	1	0	*1*	0	0	1	3	*4*
Peak Hour	**63**	**32**	**16**	**0**	***111***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Market St				Market St				NB Davis Rd Ramps				Driveway				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	16	2	0	2	4	0	0	3	0	3	0	0	0	0	30	0
4:15 PM	0	0	11	1	0	3	8	0	0	3	0	2	0	0	0	0	28	0
4:30 PM	**0**	**0**	**16**	**1**	**0**	**1**	**6**	**0**	**0**	**3**	**0**	**2**	**0**	**0**	**0**	**0**	**29**	0
4:45 PM	**0**	**0**	**12**	**2**	**0**	**1**	**10**	**0**	**0**	**5**	**0**	**3**	**0**	**0**	**0**	**0**	**33**	120
5:00 PM	**0**	**0**	**20**	**1**	**0**	**3**	**5**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**31**	121
5:15 PM	**0**	**0**	**10**	**1**	**0**	**2**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**18**	**111**
5:30 PM	0	0	16	3	0	4	5	1	0	2	0	0	0	0	0	0	31	113
5:45 PM	0	0	13	1	0	2	8	0	0	6	0	3	0	0	0	0	33	113
Count Total	0	0	114	12	0	18	50	1	0	24	0	14	0	0	0	0	233	0
Peak Hour	**0**	**0**	**58**	**5**	**0**	**7**	**25**	**0**	**0**	**10**	**0**	**6**	**0**	**0**	**0**	**0**	**111**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Market St			Market St			NB Davis Rd Ramps			Driveway			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

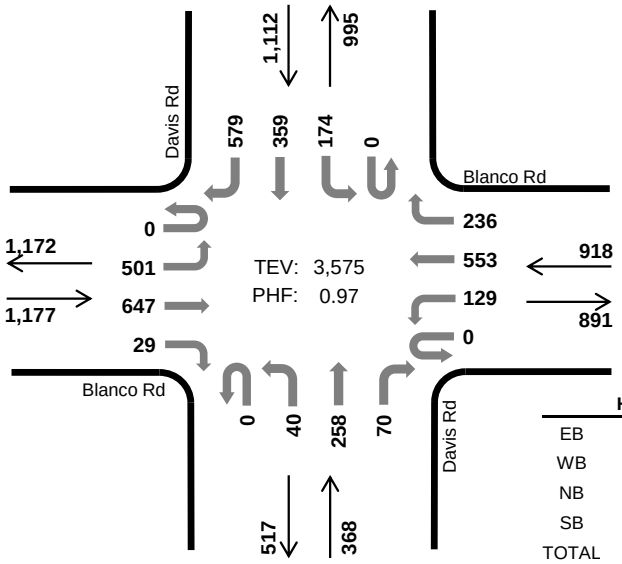
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Davis Rd
Blanco Rd

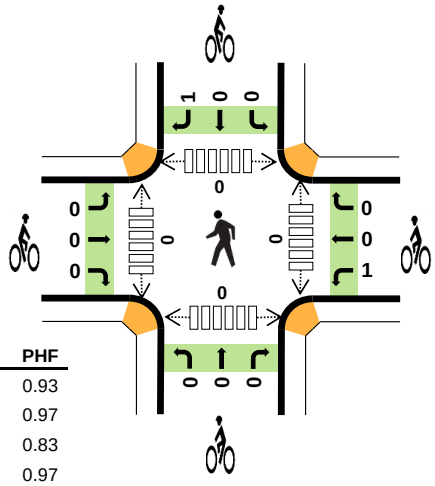
Date: 09-26-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

N

Peak Hour



	HV %:	PHF
EB	2.0%	0.93
WB	3.6%	0.97
NB	4.3%	0.83
SB	2.7%	0.97
TOTAL	2.9%	0.97



Two-Hour Count Summaries

Interval Start		Blanco Rd Eastbound				Blanco Rd Westbound				Davis Rd Northbound				Davis Rd Southbound				15-min Total	Rolling One Hour
		UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM		0	73	56	2	0	50	151	38	0	6	33	11	0	18	103	181	722	0
7:15 AM		0	104	87	4	0	33	115	44	0	7	68	5	0	23	93	164	747	0
7:30 AM		**0**	**142**	**148**	**3**	**0**	**39**	**129**	**63**	**0**	**14**	**59**	**22**	**0**	**34**	**91**	**159**	**903**	0
7:45 AM		**0**	**127**	**180**	**7**	**0**	**24**	**125**	**66**	**0**	**9**	**85**	**17**	**0**	**45**	**85**	**132**	**902**	3,274
8:00 AM		**0**	**141**	**163**	**12**	**0**	**39**	**138**	**59**	**0**	**11**	**57**	**18**	**0**	**49**	**98**	**140**	**925**	3,477
8:15 AM		**0**	**91**	**156**	**7**	**0**	**27**	**161**	**48**	**0**	**6**	**57**	**13**	**0**	**46**	**85**	**148**	**845**	**3,575**
8:30 AM		0	87	109	4	1	11	126	58	0	9	70	11	0	51	65	151	753	3,425
8:45 AM		0	91	128	1	0	15	126	54	0	4	42	16	0	43	57	116	693	3,216
Count Total		0	856	1,027	40	1	238	1,071	430	0	66	471	113	0	309	677	1,191	6,490	0
Peak Hour	**All**	**0**	**501**	**647**	**29**	**0**	**129**	**553**	**236**	**0**	**40**	**258**	**70**	**0**	**174**	**359**	**579**	**3,575**	**0**
	HV	**0**	**3**	**15**	**5**	**0**	**3**	**21**	**9**	**0**	**6**	**10**	**0**	**0**	**5**	**13**	**12**	**102**	**0**
	HV%	**-**	**1%**	**2%**	**17%**	**-**	**2%**	**4%**	**4%**	**-**	**15%**	**4%**	**0%**	**-**	**3%**	**4%**	**2%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals					Bicycles					Pedestrians (Crossing Leg)				
	EB	WB	NB	SB	Total	EB	WB	NB	SB	Total	East	West	North	South	Total
7:00 AM	6	7	1	5	*19*	0	0	0	0	*0*	1	0	0	0	*1*
7:15 AM	4	10	5	7	*26*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**6**	**9**	**4**	**14**	***33***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**5**	**6**	**4**	**5**	***20***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**3**	**10**	**3**	**6**	***22***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**9**	**8**	**5**	**5**	***27***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***
8:30 AM	4	10	7	11	*32*	0	0	0	1	*1*	0	0	0	0	*0*
8:45 AM	5	11	6	10	*32*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	42	71	35	63	*211*	0	1	0	2	*3*	1	0	0	0	*1*
Peak Hour	**23**	**33**	**16**	**30**	***102***	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Blanco Rd				Blanco Rd				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	6	0	0	0	6	1	0	1	0	0	0	2	3	0	19	0
7:15 AM	0	2	1	1	0	0	6	4	0	4	1	0	0	0	4	3	26	0
7:30 AM	**0**	**0**	**5**	**1**	**0**	**2**	**5**	**2**	**0**	**2**	**2**	**0**	**0**	**3**	**8**	**3**	**33**	0
7:45 AM	**0**	**0**	**3**	**2**	**0**	**1**	**3**	**2**	**0**	**2**	**2**	**0**	**0**	**0**	**3**	**2**	**20**	98
8:00 AM	**0**	**0**	**3**	**0**	**0**	**0**	**8**	**2**	**0**	**2**	**1**	**0**	**0**	**1**	**1**	**4**	**22**	101
8:15 AM	**0**	**3**	**4**	**2**	**0**	**0**	**5**	**3**	**0**	**0**	**5**	**0**	**0**	**1**	**1**	**3**	**27**	**102**
8:30 AM	0	2	2	0	0	0	7	3	0	0	6	1	0	4	6	1	32	101
8:45 AM	0	2	3	0	0	0	7	4	0	3	3	0	0	2	4	4	32	113
Count Total	0	9	27	6	0	3	47	21	0	14	20	1	0	13	30	20	211	0
Peak Hour	**0**	**3**	**15**	**5**	**0**	**3**	**21**	**9**	**0**	**6**	**10**	**0**	**0**	**5**	**13**	**12**	**102**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Blanco Rd			Blanco Rd			Davis Rd			Davis Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	3
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	1	0	0	0	0	0	0	0	2	3	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**

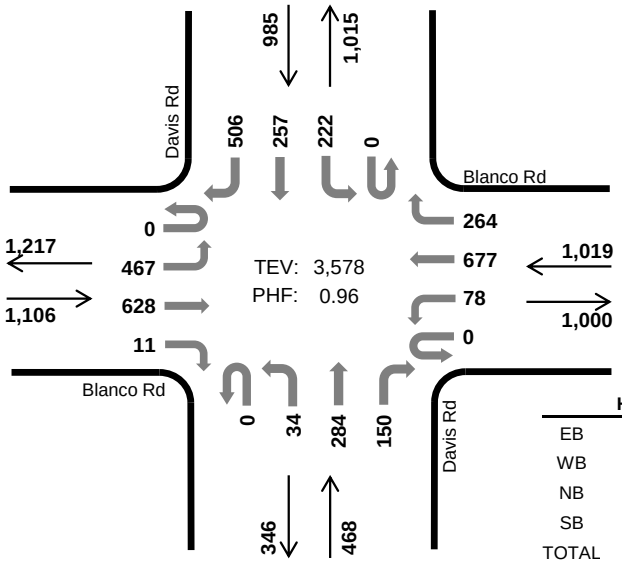
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Davis Rd
Blanco Rd

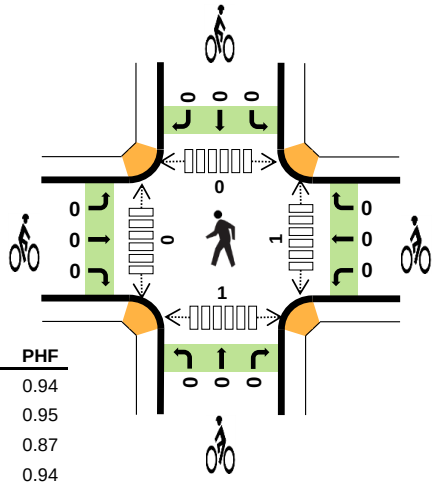
Date: 09-26-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour



	HV %:	PHF
EB	2.4%	0.94
WB	2.6%	0.95
NB	3.0%	0.87
SB	3.2%	0.94
TOTAL	2.8%	0.96



Two-Hour Count Summaries

Interval Start	Blanco Rd Eastbound UT	LT	TH	RT	Blanco Rd Westbound UT	LT	TH	RT	Davis Rd Northbound UT	LT	TH	RT	Davis Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	112	143	4	0	13	128	70	0	7	67	31	0	53	74	124	826	0
4:15 PM	0	172	164	3	0	19	113	59	0	11	52	48	0	53	56	114	864	0
4:30 PM	0	158	150	2	0	23	131	46	0	6	67	32	0	40	68	125	848	0
4:45 PM	**0**	**138**	**153**	**2**	**0**	**18**	**154**	**86**	**0**	**8**	**68**	**33**	**0**	**39**	**55**	**125**	**879**	3,417
5:00 PM	**0**	**105**	**165**	**3**	**0**	**15**	**183**	**59**	**0**	**4**	**90**	**28**	**0**	**62**	**75**	**118**	**907**	3,498
5:15 PM	**0**	**111**	**152**	**2**	**0**	**27**	**185**	**56**	**0**	**12**	**73**	**49**	**0**	**53**	**75**	**134**	**929**	3,563
5:30 PM	**0**	**113**	**158**	**4**	**0**	**18**	**155**	**63**	**0**	**10**	**53**	**40**	**0**	**68**	**52**	**129**	**863**	**3,578**
5:45 PM	0	133	131	3	0	20	103	50	0	6	68	37	0	64	69	120	804	3,503
Count Total	0	1,042	1,216	23	0	153	1,152	489	0	64	538	298	0	432	524	989	6,920	0
Peak Hour All	**0**	**467**	**628**	**11**	**0**	**78**	**677**	**264**	**0**	**34**	**284**	**150**	**0**	**222**	**257**	**506**	**3,578**	**0**
Peak Hour HV	**0**	**8**	**17**	**1**	**0**	**2**	**16**	**9**	**0**	**9**	**5**	**0**	**0**	**11**	**18**	**3**	**99**	**0**
Peak Hour HV%	**-**	**2%**	**3%**	**9%**	**-**	**3%**	**2%**	**3%**	**-**	**26%**	**2%**	**0%**	**-**	**5%**	**7%**	**1%**	**3%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	5	7	6	9	*27*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	13	9	7	9	*38*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	7	6	2	6	*21*	0	0	0	0	*0*	0	0	0	0	*0*
4:45 PM	**7**	**9**	**6**	**5**	***27***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**6**	**3**	**2**	**9**	***20***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:15 PM	**4**	**7**	**1**	**6**	***18***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**1**	*2*
5:30 PM	**9**	**8**	**5**	**12**	***34***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***
5:45 PM	6	8	3	11	*28*	0	0	0	0	*0*	0	0	0	0	*0*
Count Total	57	57	32	67	*213*	0	0	0	0	*0*	1	0	0	1	*2*
Peak Hour	**26**	**27**	**14**	**32**	***99***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**1**	***2***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Blanco Rd				Blanco Rd				Davis Rd				Davis Rd				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	1	1	3	0	0	4	3	0	2	4	0	0	4	4	1	27	0
4:15 PM	0	3	8	2	0	1	7	1	0	4	2	1	0	3	5	1	38	0
4:30 PM	0	1	6	0	0	0	5	1	0	1	1	0	0	4	2	0	21	0
4:45 PM	**0**	**5**	**2**	**0**	**0**	**1**	**5**	**3**	**0**	**5**	**1**	**0**	**0**	**0**	**3**	**2**	**27**	113
5:00 PM	**0**	**0**	**6**	**0**	**0**	**0**	**2**	**1**	**0**	**1**	**1**	**0**	**0**	**3**	**5**	**1**	**20**	106
5:15 PM	**0**	**1**	**3**	**0**	**0**	**1**	**4**	**2**	**0**	**1**	**0**	**0**	**0**	**2**	**4**	**0**	**18**	86
5:30 PM	**0**	**2**	**6**	**1**	**0**	**0**	**5**	**3**	**0**	**2**	**3**	**0**	**0**	**6**	**6**	**0**	**34**	**99**
5:45 PM	0	2	2	2	0	0	6	2	0	2	1	0	0	4	7	0	28	100
Count Total	0	15	34	8	0	3	38	16	0	18	13	1	0	26	36	5	213	0
Peak Hour	**0**	**8**	**17**	**1**	**0**	**2**	**16**	**9**	**0**	**9**	**5**	**0**	**0**	**11**	**18**	**3**	**99**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Blanco Rd			Blanco Rd			Davis Rd			Davis Rd			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

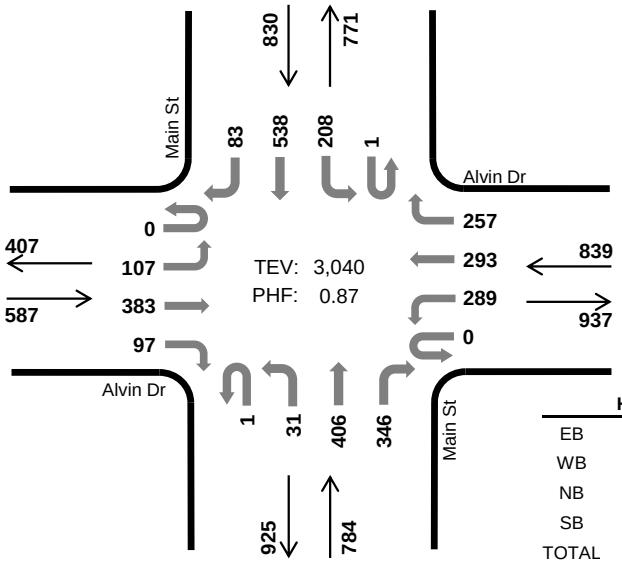
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Main St
Alvin Dr

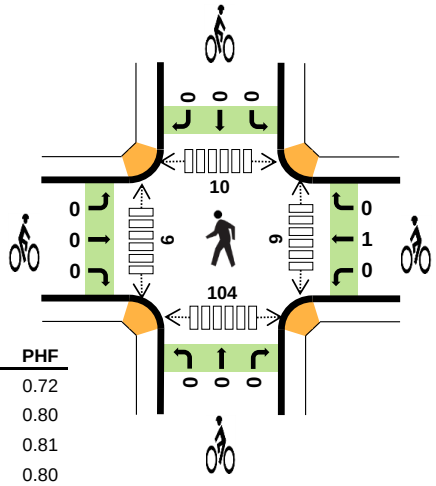
Date: 09-26-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

N

Peak Hour



	HV %:	PHF
EB	1.0%	0.72
WB	1.3%	0.80
NB	1.8%	0.81
SB	1.1%	0.80
TOTAL	1.3%	0.87



Two-Hour Count Summaries

Interval Start		Alvin Dr Eastbound UT	LT	TH	RT	Alvin Dr Westbound UT	LT	TH	RT	Main St Northbound UT	LT	TH	RT	Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM		0	13	29	16	0	48	25	22	0	7	47	33	0	12	75	10	337	0
7:15 AM		0	27	38	28	0	62	30	21	3	8	46	40	0	18	94	13	428	0
7:30 AM		**0**	**28**	**81**	**32**	**0**	**78**	**44**	**57**	**0**	**5**	**71**	**76**	**0**	**49**	**114**	**16**	**651**	0
7:45 AM		**0**	**25**	**149**	**30**	**0**	**72**	**90**	**57**	**1**	**4**	**84**	**104**	**0**	**73**	**168**	**18**	**875**	2,291
8:00 AM		**0**	**29**	**84**	**20**	**0**	**78**	**97**	**88**	**0**	**14**	**122**	**105**	**1**	**55**	**145**	**32**	**870**	2,824
8:15 AM		**0**	**25**	**69**	**15**	**0**	**61**	**62**	**55**	**0**	**8**	**129**	**61**	**0**	**31**	**111**	**17**	**644**	**3,040**
8:30 AM		0	16	40	19	0	79	51	43	1	6	112	62	1	33	127	15	605	2,994
8:45 AM		0	25	24	15	0	58	29	22	2	7	116	52	1	20	138	23	532	2,651
Count Total		0	188	514	175	0	536	428	365	7	59	727	533	3	291	972	144	4,942	0
Peak Hour	**All**	**0**	**107**	**383**	**97**	**0**	**289**	**293**	**257**	**1**	**31**	**406**	**346**	**1**	**208**	**538**	**83**	**3,040**	**0**
	HV	**0**	**1**	**2**	**3**	**0**	**3**	**5**	**3**	**0**	**1**	**7**	**6**	**0**	**3**	**6**	**0**	**40**	**0**
	HV%	**-**	**1%**	**1%**	**3%**	**-**	**1%**	**2%**	**1%**	**0%**	**3%**	**2%**	**2%**	**0%**	**1%**	**1%**	**0%**	**1%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	1	5	4	2	*12*	0	0	0	0	*0*	0	2	4	1	*7*
7:15 AM	3	3	1	4	*11*	0	0	0	0	*0*	2	0	2	9	*13*
7:30 AM	**2**	**4**	**5**	**2**	***13***	**0**	**0**	**0**	**0**	***0***	**1**	**2**	**0**	**29**	*32*
7:45 AM	**1**	**5**	**3**	**3**	***12***	**0**	**0**	**0**	**0**	***0***	**3**	**1**	**5**	**50**	*59*
8:00 AM	**1**	**2**	**1**	**1**	***5***	**0**	**1**	**0**	**0**	***1***	**4**	**1**	**3**	**15**	*23*
8:15 AM	**2**	**0**	**5**	**3**	***10***	**0**	**0**	**0**	**0**	***0***	**1**	**2**	**2**	**10**	***15***
8:30 AM	2	6	4	1	*13*	0	0	0	1	*1*	4	1	3	1	*9*
8:45 AM	0	3	4	0	*7*	0	0	0	0	*0*	0	1	0	5	*6*
Count Total	12	28	27	16	*83*	0	1	0	1	*2*	15	10	19	120	*164*
Peak Hour	**6**	**11**	**14**	**9**	***40***	**0**	**1**	**0**	**0**	***1***	**9**	**6**	**10**	**104**	***129***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Alvin Dr				Alvin Dr				Main St				Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	1	0	0	2	1	2	0	0	1	3	0	1	0	1	12	0
7:15 AM	0	0	1	2	0	0	2	1	0	0	1	0	0	2	2	0	11	0
7:30 AM	**0**	**0**	**1**	**1**	**0**	**2**	**1**	**1**	**0**	**0**	**1**	**4**	**0**	**2**	**0**	**0**	**13**	0
7:45 AM	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**2**	**0**	**0**	**3**	**0**	**0**	**1**	**2**	**0**	**12**	48
8:00 AM	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**5**	41
8:15 AM	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**2**	**0**	**0**	**3**	**0**	**10**	**40**
8:30 AM	0	0	0	2	0	3	2	1	0	0	3	1	0	1	0	0	13	40
8:45 AM	0	0	0	0	0	3	0	0	0	0	4	0	0	0	0	0	7	35
Count Total	0	1	4	7	0	11	10	7	0	1	16	10	0	7	8	1	83	0
Peak Hour	**0**	**1**	**2**	**3**	**0**	**3**	**5**	**3**	**0**	**1**	**7**	**6**	**0**	**3**	**6**	**0**	**40**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Alvin Dr			Alvin Dr			Main St			Main St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	1
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	0	1	0	0	0	0	0	0	1	2	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**

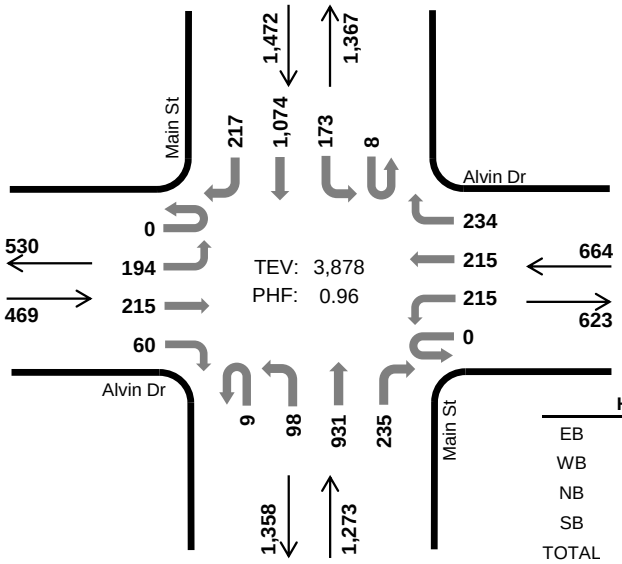
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Main St
Alvin Dr

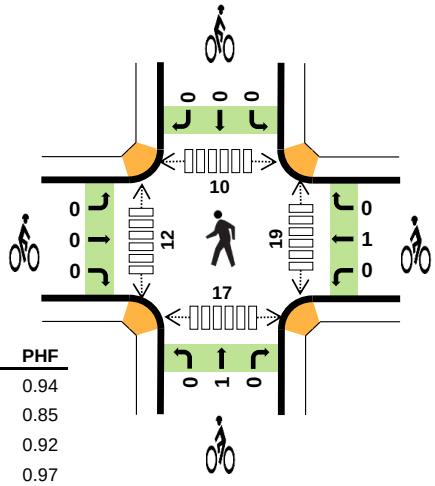
Date: 09-26-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM

N

Peak Hour



	HV %:	PHF
EB	0.2%	0.94
WB	0.2%	0.85
NB	0.2%	0.92
SB	0.9%	0.97
TOTAL	0.5%	0.96



Two-Hour Count Summaries

Interval Start		Alvin Dr Eastbound UT	LT	TH	RT	Alvin Dr Westbound UT	LT	TH	RT	Main St Northbound UT	LT	TH	RT	Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	42	36	22	0	61	50	45	3	24	217	50	1	42	190	51	834	0
4:15 PM		0	40	44	16	0	58	38	50	3	15	228	53	0	37	241	47	870	0
4:30 PM		**0**	**58**	**44**	**13**	**0**	**54**	**42**	**43**	**3**	**33**	**242**	**56**	**1**	**48**	**273**	**58**	**968**	0
4:45 PM		**0**	**48**	**52**	**13**	**0**	**48**	**50**	**62**	**2**	**23**	**223**	**47**	**3**	**42**	**271**	**44**	**928**	3,600
5:00 PM		**0**	**45**	**58**	**13**	**0**	**61**	**71**	**64**	**2**	**17**	**223**	**57**	**2**	**42**	**251**	**61**	**967**	3,733
5:15 PM		**0**	**43**	**61**	**21**	**0**	**52**	**52**	**65**	**2**	**25**	**243**	**75**	**2**	**41**	**279**	**54**	**1,015**	**3,878**
5:30 PM		0	51	44	29	0	59	56	38	2	24	263	59	2	49	251	40	967	3,877
5:45 PM		0	70	51	21	0	56	46	48	2	24	218	61	0	44	212	52	905	3,854
Count Total		0	397	390	148	0	449	405	415	19	185	1,857	458	11	345	1,968	407	7,454	0
Peak Hour	**All**	**0**	**194**	**215**	**60**	**0**	**215**	**215**	**234**	**9**	**98**	**931**	**235**	**8**	**173**	**1,074**	**217**	**3,878**	**0**
	HV	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**12**	**0**	**18**	**0**
	HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**1%**	**1%**	**0%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	1	0	1	2	*4*	0	0	2	0	*2*	1	7	8	7	*23*
4:15 PM	1	0	0	7	*8*	0	0	0	0	*0*	6	3	7	7	*23*
4:30 PM	**0**	**1**	**2**	**3**	***6***	**0**	**0**	**0**	**0**	***0***	**5**	**4**	**6**	**6**	*21*
4:45 PM	**1**	**0**	**1**	**4**	***6***	**0**	**0**	**0**	**0**	***0***	**13**	**4**	**3**	**5**	*25*
5:00 PM	**0**	**0**	**0**	**3**	***3***	**0**	**1**	**1**	**0**	***2***	**1**	**2**	**0**	**2**	*5*
5:15 PM	**0**	**0**	**0**	**3**	***3***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**1**	**4**	***7***
5:30 PM	0	0	0	2	*2*	0	0	0	0	*0*	3	6	5	4	*18*
5:45 PM	0	0	1	0	*1*	1	0	0	1	*2*	4	2	1	2	*9*
Count Total	3	1	5	24	*33*	1	1	3	1	*6*	33	30	31	37	*131*
Peak Hour	**1**	**1**	**3**	**13**	***18***	**0**	**1**	**1**	**0**	***2***	**19**	**12**	**10**	**17**	***58***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Alvin Dr				Alvin Dr				Main St				Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	2	0	4	0
4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	1	5	1	8	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**3**	**0**	**6**	0
4:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**6**	24
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**3**	23
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**18**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	14
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	9
Count Total	0	0	1	2	0	0	1	0	0	0	5	0	0	2	21	1	33	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**12**	**0**	**18**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Alvin Dr			Alvin Dr			Main St			Main St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	1	1	0	0	0	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	2
5:00 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	2
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:45 PM	0	1	0	0	0	0	0	0	0	0	1	0	2	4
Count Total	0	1	0	0	1	0	1	2	0	0	1	0	6	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**0**

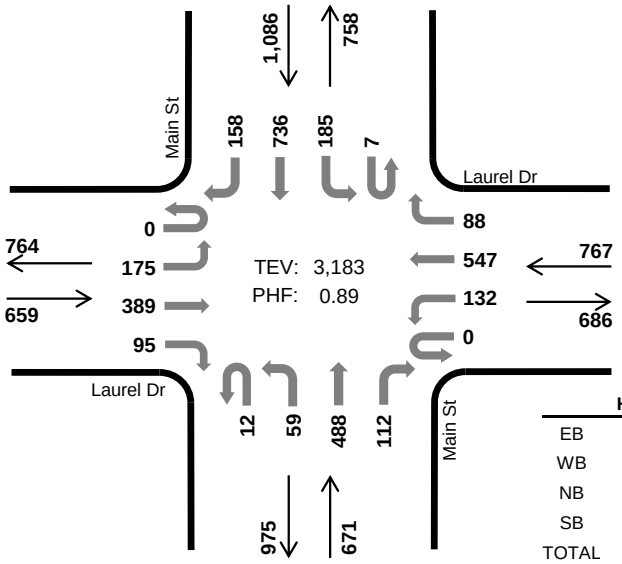
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Main St
Laurel Dr

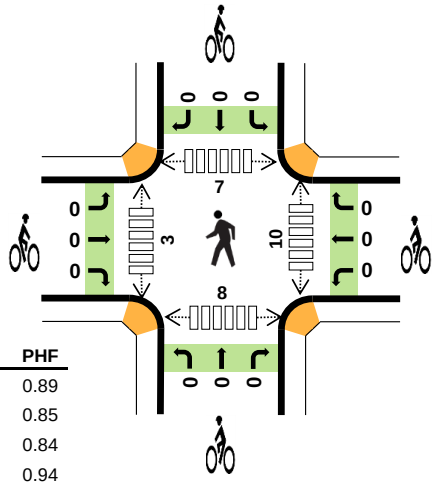
Date: 09-26-2019
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

N

Peak Hour



	HV %:	PHF
EB	2.1%	0.89
WB	1.2%	0.85
NB	3.3%	0.84
SB	1.1%	0.94
TOTAL	1.8%	0.89



Two-Hour Count Summaries

Interval Start		Laurel Dr Eastbound UT	LT	TH	RT	Laurel Dr Westbound UT	LT	TH	RT	Main St Northbound UT	LT	TH	RT	Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM		0	22	52	13	0	16	82	11	1	13	58	12	0	9	94	42	425	0
7:15 AM		0	16	83	21	0	16	104	4	0	8	73	24	1	17	145	31	543	0
7:30 AM		**0**	**46**	**92**	**25**	**0**	**31**	**116**	**14**	**2**	**7**	**104**	**26**	**1**	**46**	**197**	**32**	**739**	0
7:45 AM		**0**	**41**	**124**	**21**	**0**	**33**	**167**	**17**	**3**	**14**	**152**	**31**	**0**	**55**	**195**	**40**	**893**	2,600
8:00 AM		**0**	**42**	**83**	**18**	**0**	**39**	**159**	**28**	**2**	**17**	**112**	**30**	**4**	**52**	**172**	**47**	**805**	2,980
8:15 AM		**0**	**46**	**90**	**31**	**0**	**29**	**105**	**29**	**5**	**21**	**120**	**25**	**2**	**32**	**172**	**39**	**746**	**3,183**
8:30 AM		0	46	81	14	0	25	87	27	3	16	111	14	1	28	153	25	631	3,075
8:45 AM		0	24	69	15	0	22	89	24	9	16	140	21	1	29	157	40	656	2,838
Count Total		0	283	674	158	0	211	909	154	25	112	870	183	10	268	1,285	296	5,438	0
Peak Hour	**All**	**0**	**175**	**389**	**95**	**0**	**132**	**547**	**88**	**12**	**59**	**488**	**112**	**7**	**185**	**736**	**158**	**3,183**	**0**
	HV	**0**	**4**	**6**	**4**	**0**	**2**	**5**	**2**	**1**	**4**	**16**	**1**	**0**	**2**	**9**	**1**	**57**	**0**
	HV%	**-**	**2%**	**2%**	**4%**	**-**	**2%**	**1%**	**2%**	**8%**	**7%**	**3%**	**1%**	**0%**	**1%**	**1%**	**1%**	**2%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
7:00 AM	4	2	4	4	*14*	0	0	0	0	*0*	0	1	0	1	*2*
7:15 AM	4	0	3	2	*9*	0	0	0	0	*0*	0	2	1	2	*5*
7:30 AM	**4**	**1**	**4**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**1**	**2**	*5*
7:45 AM	**4**	**1**	**6**	**5**	***16***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**4**	**2**	*8*
8:00 AM	**3**	**4**	**4**	**3**	***14***	**0**	**0**	**0**	**0**	***0***	**5**	**2**	**2**	**1**	*10*
8:15 AM	**3**	**3**	**8**	**4**	***18***	**0**	**0**	**0**	**0**	***0***	**2**	**0**	**0**	**3**	***5***
8:30 AM	2	2	1	3	*8*	0	0	0	0	*0*	1	0	0	1	*2*
8:45 AM	1	3	6	4	*14*	0	0	0	0	*0*	1	0	1	2	*4*
Count Total	25	16	36	25	*102*	0	0	0	0	*0*	12	6	9	14	*41*
Peak Hour	**14**	**9**	**22**	**12**	***57***	**0**	**0**	**0**	**0**	***0***	**10**	**3**	**7**	**8**	***28***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Laurel Dr				Laurel Dr				Main St				Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	1	1	2	0	0	2	0	0	0	4	0	0	1	1	2	14	0
7:15 AM	0	0	3	1	0	0	0	0	0	2	1	0	0	0	2	0	9	0
7:30 AM	**0**	**2**	**1**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**9**	0
7:45 AM	**0**	**0**	**2**	**2**	**0**	**0**	**1**	**0**	**0**	**2**	**4**	**0**	**0**	**2**	**2**	**1**	**16**	48
8:00 AM	**0**	**0**	**3**	**0**	**0**	**2**	**1**	**1**	**0**	**2**	**1**	**1**	**0**	**0**	**3**	**0**	**14**	48
8:15 AM	**0**	**2**	**0**	**1**	**0**	**0**	**2**	**1**	**1**	**0**	**7**	**0**	**0**	**0**	**4**	**0**	**18**	**57**
8:30 AM	0	0	2	0	0	1	1	0	0	0	1	0	0	0	3	0	8	56
8:45 AM	0	0	0	1	0	1	2	0	0	0	6	0	0	1	3	0	14	54
Count Total	0	5	12	8	0	4	10	2	1	6	28	1	0	4	18	3	102	0
Peak Hour	**0**	**4**	**6**	**4**	**0**	**2**	**5**	**2**	**1**	**4**	**16**	**1**	**0**	**2**	**9**	**1**	**57**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Laurel Dr			Laurel Dr			Main St			Main St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

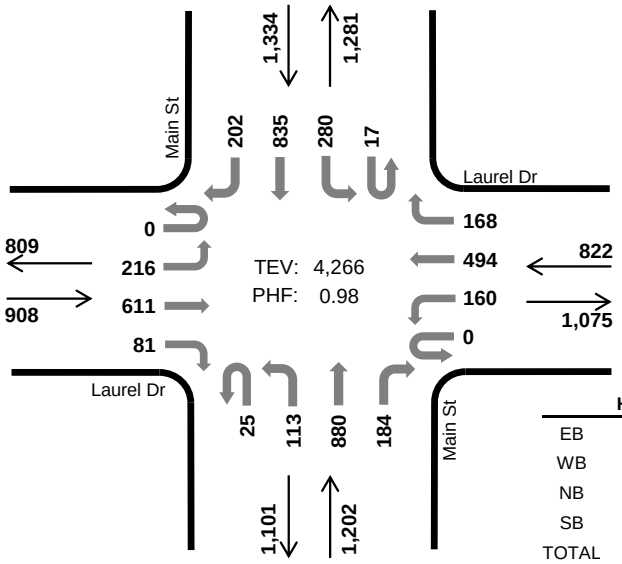
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Main St
Laurel Dr

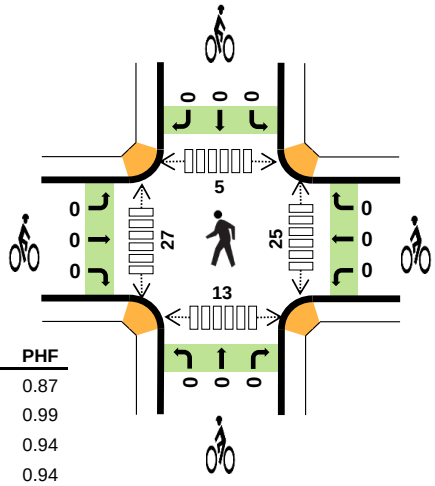
Date: 09-26-2019
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

N

Peak Hour



	HV %:	PHF
EB	0.2%	0.87
WB	0.4%	0.99
NB	0.2%	0.94
SB	0.7%	0.94
TOTAL	0.4%	0.98



Two-Hour Count Summaries

Interval Start		Laurel Dr Eastbound UT	LT	TH	RT	Laurel Dr Westbound UT	LT	TH	RT	Main St Northbound UT	LT	TH	RT	Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	51	141	31	0	40	131	48	8	22	190	41	2	63	177	42	987	0
4:15 PM		0	53	141	16	0	50	103	52	5	31	217	50	2	75	212	57	1,064	0
4:30 PM		0	43	140	32	0	35	116	46	9	28	201	40	1	85	219	62	1,057	0
4:45 PM		**0**	**61**	**129**	**12**	**0**	**44**	**117**	**46**	**6**	**27**	**187**	**46**	**6**	**68**	**218**	**53**	**1,020**	4,128
5:00 PM		**0**	**60**	**149**	**21**	**0**	**41**	**124**	**42**	**8**	**36**	**232**	**41**	**4**	**68**	**196**	**59**	**1,081**	4,222
5:15 PM		**0**	**30**	**163**	**23**	**0**	**37**	**128**	**37**	**9**	**19**	**234**	**38**	**3**	**67**	**241**	**44**	**1,073**	4,231
5:30 PM		**0**	**65**	**170**	**25**	**0**	**38**	**125**	**43**	**2**	**31**	**227**	**59**	**4**	**77**	**180**	**46**	**1,092**	**4,266**
5:45 PM		0	56	160	33	0	30	128	46	4	34	167	49	2	74	171	40	994	4,240
Count Total		0	419	1,193	193	0	315	972	360	51	228	1,655	364	24	577	1,614	403	8,368	0
Peak Hour	**All**	**0**	**216**	**611**	**81**	**0**	**160**	**494**	**168**	**25**	**113**	**880**	**184**	**17**	**280**	**835**	**202**	**4,266**	**0**
	HV	**0**	**0**	**2**	**0**	**0**	**1**	**2**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**7**	**3**	**17**	**0**
	HV%	**-**	**0%**	**0%**	**0%**	**-**	**1%**	**0%**	**0%**	**0%**	**1%**	**0%**	**0%**	**0%**	**0%**	**1%**	**1%**	**0%**	**0**

Note: Two-hour count summary volumes include heavy vehicles but exclude bicycles in overall count.

Interval Start	Heavy Vehicle Totals EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	4	1	0	5	*10*	0	0	0	0	*0*	7	3	3	3	*16*
4:15 PM	0	2	2	4	*8*	0	0	0	0	*0*	3	9	2	2	*16*
4:30 PM	0	0	2	2	*4*	1	0	0	0	*1*	8	8	5	7	*28*
4:45 PM	**0**	**2**	**2**	**3**	***7***	**0**	**0**	**0**	**0**	***0***	**6**	**5**	**1**	**6**	*18*
5:00 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**0**	***0***	**9**	**5**	**1**	**0**	*15*
5:15 PM	**2**	**1**	**0**	**4**	***7***	**0**	**0**	**0**	**0**	***0***	**7**	**9**	**2**	**3**	*21*
5:30 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**3**	**8**	**1**	**4**	***16***
5:45 PM	7	0	1	0	*8*	0	1	0	0	*1*	7	7	2	4	*20*
Count Total	13	6	7	21	*47*	1	1	0	0	*2*	50	54	17	29	*150*
Peak Hour	**2**	**3**	**2**	**10**	***17***	**0**	**0**	**0**	**0**	***0***	**25**	**27**	**5**	**13**	***70***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Laurel Dr				Laurel Dr				Main St				Main St				15-min Total	Rolling One Hour
	Eastbound				Westbound				Northbound				Southbound					
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
4:00 PM	0	0	1	3	0	0	1	0	0	0	0	0	0	1	2	2	10	0
4:15 PM	0	0	0	0	0	0	2	0	0	1	1	0	0	2	2	0	8	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	4	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**3**	**7**	29
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	21
5:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**7**	20
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**17**
5:45 PM	0	0	6	1	0	0	0	0	0	0	1	0	0	0	0	0	8	18
Count Total	0	0	9	4	0	1	5	0	0	3	4	0	0	3	13	5	47	0
Peak Hour	**0**	**0**	**2**	**0**	**0**	**1**	**2**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**7**	**3**	**17**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Laurel Dr			Laurel Dr			Main St			Main St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	1
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	1
Count Total	0	1	0	0	1	0	0	0	0	0	0	0	2	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Appendix D

Volume Count

Comparison

Volume Comparison

Intersection 4 - North Davis Road / Calle Del Adobe - West Laurel Drive

	AM													
	Northbound			*Southbound*			*Eastbound*			*Westbound*				%
Count	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	*Total*	*Difference*
5/22/2019	23	280	790	158	282	29	29	284	9	846	441	294	3,465	
9/24/2019	30	289	768	163	369	38	24	300	4	846	446	303	3,580	
Difference	**7**	**9**	**-22**	**5**	**87**	**9**	**-5**	**16**	**-5**	**0**	**5**	**9**	**115**	**3.32%**
Balanced	23	280	809	178	282	29	29	284	9	845	441	294	3,503	
Difference	**7**	**9**	**-41**	**-15**	**87**	**9**	**-5**	**16**	**-5**	**1**	**5**	**9**	**77**	**2.20%**

	PM													
	Northbound			*Southbound*			*Eastbound*			*Westbound*				%
Count	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	*Total*	*Difference*
5/22/2019	12	497	902	499	491	31	28	327	7	676	348	497	4,315	
9/24/2019	18	514	985	490	554	40	24	342	13	684	432	516	4,612	
Difference	**6**	**17**	**83**	**-9**	**63**	**9**	**-4**	**15**	**6**	**8**	**84**	**19**	**297**	**6.88%**
Balanced	12	497	1,045	529	491	31	28	327	7	724	348	527	4,566	
Difference	**6**	**17**	**-60**	**-39**	**63**	**9**	**-4**	**15**	**6**	**-40**	**84**	**-11**	**46**	**1.01%**

Appendix E

Level of Service

Calculations

Existing

Conditions

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	210	804	1008	17	21	432
Future Volume (vph)	210	804	1008	17	21	432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.15	1.00	1.00		0.95	1.00
Satd. Flow (perm)	282	3504	3477		1770	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	231	884	1108	19	23	475
RTOR Reduction (vph)	0	0	0	0	0	174
Lane Group Flow (vph)	231	884	1127	0	23	301
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	58.0	58.0	44.9		18.0	18.0
Effective Green, g (s)	58.7	59.1	46.0		18.7	19.1
Actuated g/C Ratio	0.69	0.70	0.54		0.22	0.23
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	354	2442	1886		390	356
v/s Ratio Prot	c0.07	0.25	0.32		0.01	
v/s Ratio Perm	c0.38					c0.19
v/c Ratio	0.65	0.36	0.60		0.06	0.85
Uniform Delay, d1	9.1	5.2	13.1		26.1	31.4
Progression Factor	1.84	0.38	1.00		1.00	1.00
Incremental Delay, d2	4.0	0.1	0.6		0.0	16.5
Delay (s)	20.7	2.1	13.7		26.1	48.0
Level of Service	C	A	B		C	D
Approach Delay (s)		5.9	13.7		46.9	
Approach LOS		A	B		D	

Intersection Summary

HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	84.8	Sum of lost time (s)	11.6
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	867	0	0	1193	247	283	1	147	0	0	0
Future Volume (vph)	0	867	0	0	1193	247	283	1	147	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3397		1624	1629	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3397		1624	1629	1530			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	953	0	0	1311	271	311	1	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	126	0	0	0
Lane Group Flow (vph)	0	953	0	0	1582	0	155	157	36	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		58.0			44.9		18.0	18.0	18.0			
Effective Green, g (s)		59.1			46.0		18.7	18.7	18.7			
Actuated g/C Ratio		0.70			0.54		0.22	0.22	0.22			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2405			1842		358	359	337			
v/s Ratio Prot		c0.28			c0.47		0.10	c0.10				
v/s Ratio Perm									0.02			
v/c Ratio		0.40			0.86		0.43	0.44	0.11			
Uniform Delay, d1		5.4			16.6		28.5	28.5	26.4			
Progression Factor		1.00			0.67		1.00	1.00	1.00			
Incremental Delay, d2		0.1			3.4		0.8	0.9	0.1			
Delay (s)		5.5			14.5		29.3	29.4	26.5			
Level of Service		A			B		C	C	C			
Approach Delay (s)		5.5			14.5			28.4			0.0	
Approach LOS		A			B			C			A	

Intersection Summary

HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	84.8	Sum of lost time (s)	12.3
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	946	1220	0	210	360
Future Volume (veh/h)	0	946	1220	0	210	360
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800
Adj Flow Rate, veh/h	0	1040	1341	0	231	396
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	4	2	0	4	4
Cap, veh/h	0	1656	1689	0	1119	515
Arrive On Green	0.00	0.48	0.48	0.00	0.34	0.34
Sat Flow, veh/h	0	3599	3670	0	3325	1530
Grp Volume(v), veh/h	0	1040	1341	0	231	396
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530
Q Serve(g_s), s	0.0	9.7	13.9	0.0	2.1	10.0
Cycle Q Clear(g_c), s	0.0	9.7	13.9	0.0	2.1	10.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1656	1689	0	1119	515
V/C Ratio(X)	0.00	0.63	0.79	0.00	0.21	0.77
Avail Cap(c_a), veh/h	0	2455	2503	0	1653	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.2	9.3	0.0	10.2	12.8
Incr Delay (d2), s/veh	0.0	0.1	0.6	0.0	0.1	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.5	6.7	0.0	1.0	4.5
LnGrp Delay(d),s/veh	0.0	8.4	9.9	0.0	10.2	15.0
LnGrp LOS		A	A		B	B
Approach Vol, veh/h		1040	1341		627	
Approach Delay, s/veh		8.4	9.9		13.2	
Approach LOS		A	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		25.0		18.1		25.0		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		11.7		12.0		15.9		
Green Ext Time (p_c), s		3.1		1.5		4.0		

Intersection Summary	
HCM 2010 Ctrl Delay	10.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	284	9	845	441	294	23	280	809	178	282	29
Future Volume (veh/h)	29	284	9	845	441	294	23	280	809	178	282	29
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	31	305	10	909	474	0	25	301	870	191	303	31
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	464	15	1144	1545	815	54	632	1421	266	728	74
Arrive On Green	0.04	0.14	0.15	0.34	0.45	0.00	0.03	0.18	0.18	0.08	0.23	0.24
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2717	3342	3150	320
Grp Volume(v), veh/h	31	154	161	909	474	0	25	301	870	191	164	170
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	1.7	8.0	8.1	22.3	8.0	0.0	1.3	7.1	6.3	5.1	7.4	7.5
Cycle Q Clear(g_c), s	1.7	8.0	8.1	22.3	8.0	0.0	1.3	7.1	6.3	5.1	7.4	7.5
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	59	235	245	1144	1545	815	54	632	1421	266	397	405
V/C Ratio(X)	0.52	0.66	0.66	0.79	0.31	0.00	0.47	0.48	0.61	0.72	0.41	0.42
Avail Cap(c_a), veh/h	132	827	861	1366	2862	1404	114	1321	1961	329	710	724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	37.1	37.1	27.3	16.3	0.0	43.6	33.5	4.2	41.1	29.9	29.8
Incr Delay (d2), s/veh	2.6	6.5	6.3	3.7	0.2	0.0	2.3	0.6	0.4	8.8	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.1	4.3	10.9	3.9	0.0	0.7	3.4	3.2	2.7	3.6	3.7
LnGrp Delay(d),s/veh	45.9	43.6	43.4	31.1	16.5	0.0	45.9	34.0	4.6	49.9	30.6	30.5
LnGrp LOS	D	D	D	C	B		D	C	A	D	C	C
Approach Vol, veh/h		346			1383			1196			525	
Approach Delay, s/veh		43.7			26.1			12.9			37.6	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.0	18.5	8.8	27.1	8.8	46.7	13.3	22.7
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8
Max Q Clear Time (g_c+I1), s	24.3	10.1	3.3	9.5	3.7	10.0	7.1	9.1
Green Ext Time (p_c), s	6.7	2.9	0.0	1.3	0.0	5.4	0.2	6.9

Intersection Summary	
HCM 2010 Ctrl Delay	25.0
HCM 2010 LOS	C

Intersection												
Int Delay, s/veh	18.6											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	233	164	168	249	39	111	22	17	60	39	0
Future Vol, veh/h	0	233	164	168	249	39	111	22	17	60	39	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	271	191	195	290	45	129	26	20	70	45	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	335	0	0	462	0	0	996	996	271	1070	1142	290
Stage 1	-	-	-	-	-	-	271	271	-	680	680	-
Stage 2	-	-	-	-	-	-	725	725	-	390	462	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1176	-	-	1089	-	-	221	242	763	199	200	749
Stage 1	-	-	-	-	-	-	730	682	-	441	451	-
Stage 2	-	-	-	-	-	-	413	427	-	634	565	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1176	-	-	1089	-	-	151	199	763	151	164	749
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	199	-	151	164	-
Stage 1	-	-	-	-	-	-	730	682	-	441	370	-
Stage 2	-	-	-	-	-	-	297	351	-	594	565	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.3	77.1	74.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	151	294	1176	-	-	1089	-	-	156	-
HCM Lane V/C Ratio	0.855	0.154	-	-	-	0.179	-	-	0.738	-
HCM Control Delay (s)	97.3	19.5	0	-	-	9	-	-	74.7	0
HCM Lane LOS	F	C	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	5.7	0.5	0	-	-	0.7	-	-	4.5	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	28	310	60	9	91	164	987	12	120	953	19
Future Volume (veh/h)	34	28	310	60	9	91	164	987	12	120	953	19
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	34	35	333	65	10	98	176	1061	13	129	1025	20
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	388	407	346	140	21	142	190	1700	21	160	1111	495
Arrive On Green	0.23	0.23	0.23	0.11	0.09	0.09	0.11	0.33	0.33	0.09	0.31	0.31
Sat Flow, veh/h	1707	1792	1522	1532	236	1563	1757	5128	63	1774	3539	1577
Grp Volume(v), veh/h	34	35	333	75	0	98	176	695	379	129	1025	20
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1833	1774	1770	1577
Q Serve(g_s), s	1.5	1.4	20.0	3.7	0.0	5.6	9.2	16.1	16.1	6.6	25.9	0.8
Cycle Q Clear(g_c), s	1.5	1.4	20.0	3.7	0.0	5.6	9.2	16.1	16.1	6.6	25.9	0.8
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	388	407	346	161	0	142	190	1113	608	160	1111	495
V/C Ratio(X)	0.09	0.09	0.96	0.47	0.00	0.69	0.93	0.62	0.62	0.80	0.92	0.04
Avail Cap(c_a), veh/h	388	407	346	478	0	423	190	1113	608	211	1149	512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	28.2	35.3	39.2	0.0	40.7	40.8	26.0	26.0	41.2	30.6	22.0
Incr Delay (d2), s/veh	0.1	0.1	38.6	2.1	0.0	5.8	44.7	1.1	2.0	15.3	12.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.7	12.1	1.9	0.0	2.7	6.8	7.6	8.5	3.9	14.4	0.4
LnGrp Delay(d),s/veh	28.3	28.2	73.9	41.3	0.0	46.5	85.6	27.1	28.0	56.5	42.6	22.1
LnGrp LOS	C	C	E	D		D	F	C	C	E	D	C
Approach Vol, veh/h		402			173			1250			1174	
Approach Delay, s/veh		66.1			44.3			35.6			43.8	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.0	16.0	35.0		14.4	14.4	36.6
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0
Max Q Clear Time (g_c+I1), s		22.0	11.2	27.9		7.6	8.6	18.1
Green Ext Time (p_c), s		0.0	0.0	1.2		0.6	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	43.4
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	595	0	130	0	918	486	206	1160	0
Future Volume (veh/h)	0	0	0	595	0	130	0	918	486	206	1160	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1845	1845	1900	0	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	0	0	0	633	0	138	0	977	517	219	1234	0
Adj No. of Lanes	0	1	0	2	1	0	0	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	0	2	2	3	3	3
Cap, veh/h	0	452	0	1106	0	380	0	1316	589	268	2110	0
Arrive On Green	0.00	0.00	0.00	0.24	0.00	0.24	0.00	0.37	0.37	0.15	0.60	0.00
Sat Flow, veh/h	0	1863	0	3408	0	1568	0	3632	1583	1757	3597	0
Grp Volume(v), veh/h	0	0	0	633	0	138	0	977	517	219	1234	0
Grp Sat Flow(s),veh/h/ln	0	1863	0	1704	0	1568	0	1770	1583	1757	1752	0
Q Serve(g_s), s	0.0	0.0	0.0	8.9	0.0	3.8	0.0	12.3	15.7	6.2	11.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	8.9	0.0	3.8	0.0	12.3	15.7	6.2	11.1	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	452	0	1106	0	380	0	1316	589	268	2110	0
V/C Ratio(X)	0.00	0.00	0.00	0.57	0.00	0.36	0.00	0.74	0.88	0.82	0.58	0.00
Avail Cap(c_a), veh/h	0	579	0	1339	0	487	0	1316	589	273	2110	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.1	0.0	16.2	0.0	14.0	15.1	21.1	6.3	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.5	0.0	0.6	0.0	3.8	16.9	17.1	1.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	4.2	0.0	1.7	0.0	6.7	9.5	4.3	5.7	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	18.6	0.0	16.8	0.0	17.8	31.9	38.2	7.5	0.0
LnGrp LOS				B		B		B	C	D	A	
Approach Vol, veh/h		0			771			1494			1453	
Approach Delay, s/veh		0.0			18.3			22.7			12.1	
Approach LOS					B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	11.9	23.1		16.5		35.0		16.5
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s	8.0	19.0		16.0		31.0		16.0
Max Q Clear Time (g_c+I1), s	8.2	17.7		0.0		13.1		10.9
Green Ext Time (p_c), s	0.0	1.0		0.0		8.5		1.6

Intersection Summary	
HCM 2010 Ctrl Delay	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	322	264	142	315	97	113	591	56	135	1145	224
Future Volume (veh/h)	140	322	264	142	315	97	113	591	56	135	1145	224
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	161	370	303	163	362	0	130	679	64	155	1316	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.11	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	161	370	303	163	362	0	130	679	64	155	1316	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.1	17.5	17.1	8.2	16.2	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Cycle Q Clear(g_c), s	4.1	17.5	17.1	8.2	16.2	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
V/C Ratio(X)	0.81	0.94	0.92	0.87	0.76	0.00	0.86	0.51	0.11	0.81	0.94	0.00
Avail Cap(c_a), veh/h	200	393	329	186	478	406	151	1324	588	305	1423	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.7	34.8	34.6	39.4	30.6	0.0	40.4	21.7	18.3	39.1	25.9	0.0
Incr Delay (d2), s/veh	20.9	30.7	30.5	33.8	6.8	0.0	37.0	0.3	0.1	8.5	11.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	12.3	10.1	5.7	9.2	0.0	4.7	6.6	1.0	4.2	17.8	0.0
LnGrp Delay(d),s/veh	62.6	65.5	65.1	73.2	37.4	0.0	77.5	22.0	18.4	47.6	37.8	0.0
LnGrp LOS	E	E	E	E	D		E	C	B	D	D	
Approach Vol, veh/h		834			525			873			1471	
Approach Delay, s/veh		64.8			48.5			30.0			38.8	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	38.0	14.0	23.4	12.1	40.0	9.7	27.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2
Max Q Clear Time (g_c+I1), s	9.6	15.3	10.2	19.5	8.5	34.0	6.1	18.2
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	1.6	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	44.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	451	142	98	344	3	154	0	174	7	2	0
Future Volume (veh/h)	0	451	142	98	344	3	154	0	174	7	2	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	550	173	120	420	4	188	0	212	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	719	225	151	1514	14	680	0	576	425	82	0
Arrive On Green	0.00	0.28	0.28	0.09	0.46	0.46	0.37	0.00	0.37	0.37	0.37	0.00
Sat Flow, veh/h	1723	2578	808	1630	3301	31	1471	0	1568	812	224	0
Grp Volume(v), veh/h	0	366	357	120	207	217	188	0	212	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1667	1630	1626	1706	1471	0	1568	1036	0	0
Q Serve(g_s), s	0.0	10.1	10.2	3.7	4.1	4.1	0.0	0.0	5.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.1	10.2	3.7	4.1	4.1	3.9	0.0	5.1	4.0	0.0	0.0
Prop In Lane	1.00		0.48	1.00		0.02	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	480	465	151	746	782	680	0	576	507	0	0
V/C Ratio(X)	0.00	0.76	0.77	0.80	0.28	0.28	0.28	0.00	0.37	0.02	0.00	0.00
Avail Cap(c_a), veh/h	167	598	580	299	746	782	680	0	576	507	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.1	17.1	23.0	8.7	8.7	11.6	0.0	12.0	10.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.5	4.8	9.2	0.2	0.2	1.0	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.4	5.3	2.1	1.8	1.9	2.1	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	21.6	21.9	32.2	8.9	8.9	12.6	0.0	13.8	10.6	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		723			544			400			11	
Approach Delay, s/veh		21.8			14.0			13.2			10.6	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.5	9.3	18.9		23.5	0.0	28.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5
Max Q Clear Time (g_c+I1), s		7.1	5.7	12.2		6.0	0.0	6.1
Green Ext Time (p_c), s		1.4	0.1	2.3		0.0	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	17.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	554	97	164	346	3	99	1	106	1	1	0
Future Volume (veh/h)	1	554	97	164	346	3	99	1	106	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	637	111	189	398	3	114	1	122	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	808	141	233	1398	11	597	5	508	316	285	0
Arrive On Green	0.00	0.28	0.28	0.14	0.42	0.42	0.34	0.34	0.34	0.34	0.34	0.00
Sat Flow, veh/h	1723	2929	510	1660	3369	25	1383	14	1509	644	847	0
Grp Volume(v), veh/h	1	373	375	189	196	205	115	0	122	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1720	1660	1656	1739	1397	0	1509	1491	0	0
Q Serve(g_s), s	0.0	11.0	11.0	6.0	4.3	4.3	0.0	0.0	3.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.0	11.0	6.0	4.3	4.3	2.6	0.0	3.2	2.6	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	474	475	233	687	722	601	0	508	601	0	0
V/C Ratio(X)	0.32	0.79	0.79	0.81	0.28	0.28	0.19	0.00	0.24	0.00	0.00	0.00
Avail Cap(c_a), veh/h	158	566	566	307	700	735	601	0	508	601	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.3	18.3	18.3	22.8	10.6	10.6	12.9	0.0	13.1	12.0	0.0	0.0
Incr Delay (d2), s/veh	49.4	6.2	6.3	11.6	0.2	0.2	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.0	6.0	3.5	2.0	2.1	1.3	0.0	1.5	0.0	0.0	0.0
LnGrp Delay(d),s/veh	76.6	24.5	24.6	34.4	10.8	10.8	13.6	0.0	14.2	12.1	0.0	0.0
LnGrp LOS	E	C	C	C	B	B	B		B	B		
Approach Vol, veh/h		749			590			237			2	
Approach Delay, s/veh		24.6			18.4			13.9			12.1	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	12.2	19.6		22.9	4.6	27.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.2	8.0	13.0		4.6	2.0	6.3
Green Ext Time (p_c), s		0.8	0.1	2.1		0.0	0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	501	647	29	129	553	236	40	258	70	174	359	579
Future Volume (veh/h)	501	647	29	129	553	236	40	258	70	174	359	579
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	516	667	30	133	570	0	41	266	72	179	370	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	609	982	44	167	706	316	67	691	183	217	627	533
Arrive On Green	0.18	0.28	0.28	0.10	0.20	0.00	0.04	0.25	0.25	0.12	0.34	0.00
Sat Flow, veh/h	3442	3450	155	1740	3471	1553	1740	2714	721	1757	1845	1568
Grp Volume(v), veh/h	516	342	355	133	570	0	41	168	170	179	370	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1835	1740	1736	1553	1740	1736	1700	1757	1845	1568
Q Serve(g_s), s	10.8	12.8	12.8	5.6	11.7	0.0	1.7	6.0	6.2	7.4	12.4	0.0
Cycle Q Clear(g_c), s	10.8	12.8	12.8	5.6	11.7	0.0	1.7	6.0	6.2	7.4	12.4	0.0
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	609	504	522	167	706	316	67	442	433	217	627	533
V/C Ratio(X)	0.85	0.68	0.68	0.80	0.81	0.00	0.61	0.38	0.39	0.82	0.59	0.00
Avail Cap(c_a), veh/h	669	545	565	221	837	374	117	442	433	247	627	533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.7	23.7	23.7	33.0	28.3	0.0	35.3	23.0	23.0	31.9	20.3	0.0
Incr Delay (d2), s/veh	9.2	3.1	3.0	13.8	5.0	0.0	8.8	2.5	2.7	17.9	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	6.6	6.8	3.3	6.0	0.0	1.0	3.2	3.2	4.7	7.0	0.0
LnGrp Delay(d),s/veh	39.0	26.7	26.7	46.8	33.4	0.0	44.2	25.5	25.7	49.8	24.4	0.0
LnGrp LOS	D	C	C	D	C		D	C	C	D	C	
Approach Vol, veh/h		1213			703			379			549	
Approach Delay, s/veh		31.9			35.9			27.6			32.7	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	23.5	11.7	25.8	7.4	29.9	17.7	19.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0
Max Q Clear Time (g_c+I1), s	9.4	8.2	7.6	14.8	3.7	14.4	12.8	13.7
Green Ext Time (p_c), s	0.1	1.4	0.1	2.7	0.0	1.6	0.4	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	32.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	383	97	289	293	257	32	406	346	209	538	83
Future Volume (veh/h)	107	383	97	289	293	257	32	406	346	209	538	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	123	440	111	332	337	295	37	467	398	240	618	95
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	757	289	373	626	527	63	839	388	323	1555	479
Arrive On Green	0.09	0.21	0.21	0.21	0.34	0.34	0.04	0.25	0.25	0.09	0.31	0.31
Sat Flow, veh/h	1774	3539	1352	1774	1863	1569	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	123	440	111	332	337	295	37	467	398	240	618	95
Grp Sat Flow(s),veh/h/ln	1774	1770	1352	1774	1863	1569	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	5.2	8.6	5.4	14.0	11.3	11.8	1.6	9.2	19.0	5.2	7.4	3.4
Cycle Q Clear(g_c), s	5.2	8.6	5.4	14.0	11.3	11.8	1.6	9.2	19.0	5.2	7.4	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	757	289	373	626	527	63	839	388	323	1555	479
V/C Ratio(X)	0.79	0.58	0.38	0.89	0.54	0.56	0.59	0.56	1.03	0.74	0.40	0.20
Avail Cap(c_a), veh/h	254	830	317	405	626	527	136	839	388	336	1555	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	27.1	25.8	29.5	20.7	20.8	36.5	25.2	28.9	33.9	21.0	19.7
Incr Delay (d2), s/veh	8.4	0.9	0.8	20.1	0.9	1.3	8.4	2.7	52.6	8.3	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	4.2	2.1	8.9	6.0	5.3	0.9	4.6	13.7	2.8	3.5	1.6
LnGrp Delay(d),s/veh	42.6	27.9	26.7	49.5	21.6	22.2	44.8	27.8	81.5	42.2	21.8	20.6
LnGrp LOS	D	C	C	D	C	C	D	C	F	D	C	C
Approach Vol, veh/h		674			964			902			953	
Approach Delay, s/veh		30.4			31.4			52.2			26.8	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	23.5	20.6	20.9	7.2	28.0	11.3	30.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5
Max Q Clear Time (g_c+I1), s	7.2	21.0	16.0	10.6	3.6	9.4	7.2	13.8
Green Ext Time (p_c), s	0.0	0.0	0.2	2.0	0.0	3.5	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	35.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	389	95	132	547	88	71	488	112	192	736	158
Future Volume (veh/h)	175	389	95	132	547	88	71	488	112	192	736	158
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	197	437	107	148	615	99	80	548	126	216	827	178
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	238	768	186	186	741	119	195	976	432	277	1267	271
Arrive On Green	0.13	0.27	0.27	0.10	0.24	0.24	0.06	0.28	0.28	0.08	0.30	0.30
Sat Flow, veh/h	1774	2820	685	1774	3051	490	3408	3505	1551	3442	4195	897
Grp Volume(v), veh/h	197	273	271	148	356	358	80	548	126	216	667	338
Grp Sat Flow(s),veh/h/ln	1774	1770	1735	1774	1770	1771	1704	1752	1551	1721	1695	1701
Q Serve(g_s), s	7.4	9.1	9.2	5.6	13.0	13.1	1.5	9.1	4.4	4.2	11.7	11.8
Cycle Q Clear(g_c), s	7.4	9.1	9.2	5.6	13.0	13.1	1.5	9.1	4.4	4.2	11.7	11.8
Prop In Lane	1.00		0.39	1.00		0.28	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	238	482	472	186	430	430	195	976	432	277	1024	514
V/C Ratio(X)	0.83	0.57	0.57	0.80	0.83	0.83	0.41	0.56	0.29	0.78	0.65	0.66
Avail Cap(c_a), veh/h	247	482	473	231	467	467	250	976	432	277	1024	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	21.4	21.4	29.8	24.5	24.5	31.0	21.0	19.3	30.8	20.7	20.7
Incr Delay (d2), s/veh	19.7	1.5	1.7	14.3	11.2	11.4	1.4	2.3	1.7	13.1	3.2	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	4.6	4.6	3.4	7.7	7.7	0.8	4.7	2.1	2.5	5.9	6.5
LnGrp Delay(d),s/veh	48.4	22.9	23.1	44.1	35.7	35.9	32.4	23.4	21.0	43.9	23.9	27.2
LnGrp LOS	D	C	C	D	D	D	C	C	C	D	C	C
Approach Vol, veh/h		741			862			754			1221	
Approach Delay, s/veh		29.8			37.2			23.9			28.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	23.5	11.6	23.1	8.4	25.1	13.7	21.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0
Max Q Clear Time (g_c+I1), s	6.2	11.1	7.6	11.2	3.5	13.8	9.4	15.1
Green Ext Time (p_c), s	0.0	2.5	0.0	2.0	0.0	3.1	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	29.9
HCM 2010 LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	442	1343	878	30	37	309
Future Volume (vph)	442	1343	878	30	37	309
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3469		1770	1583
Flt Permitted	0.18	1.00	1.00		0.95	1.00
Satd. Flow (perm)	326	3504	3469		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	446	1357	887	30	37	312
RTOR Reduction (vph)	0	0	0	0	0	238
Lane Group Flow (vph)	446	1357	917	0	37	74
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	58.4	58.4	37.3		19.6	19.6
Effective Green, g (s)	59.1	59.5	38.4		20.3	20.7
Actuated g/C Ratio	0.68	0.69	0.44		0.23	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	504	2401	1534		413	377
v/s Ratio Prot	c0.18	0.39	0.26		0.02	
v/s Ratio Perm	c0.43					c0.05
v/c Ratio	0.88	0.57	0.60		0.09	0.20
Uniform Delay, d1	17.0	7.0	18.3		26.0	26.4
Progression Factor	1.10	0.56	1.00		1.00	1.00
Incremental Delay, d2	13.1	0.3	0.7		0.1	0.2
Delay (s)	31.8	4.2	19.1		26.1	26.6
Level of Service	C	A	B		C	C
Approach Delay (s)		11.0	19.1		26.5	
Approach LOS		B	B		C	

Intersection Summary

HCM 2000 Control Delay	15.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	86.8	Sum of lost time (s)	11.6
Intersection Capacity Utilization	65.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1428	0	0	958	229	418	3	357	0	0	0
Future Volume (vph)	0	1428	0	0	958	229	418	3	357	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3366		1656	1661	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3366		1656	1661	1560			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1519	0	0	1019	244	445	3	380	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1519	0	0	1263	0	222	226	323	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		58.4			37.3		19.6	19.6	19.6			
Effective Green, g (s)		59.5			38.4		20.3	20.3	20.3			
Actuated g/C Ratio		0.69			0.44		0.23	0.23	0.23			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2389			1489		387	388	364			
v/s Ratio Prot		c0.44			c0.38		0.13	0.14				
v/s Ratio Perm									c0.21			
v/c Ratio		0.64			0.85		0.57	0.58	0.89			
Uniform Delay, d1		7.6			21.6		29.4	29.5	32.1			
Progression Factor		1.00			0.45		1.00	1.00	1.00			
Incremental Delay, d2		0.6			4.3		2.1	2.2	21.8			
Delay (s)		8.2			13.9		31.5	31.7	53.9			
Level of Service		A			B		C	C	D			
Approach Delay (s)		8.2			13.9			41.9			0.0	
Approach LOS		A			B			D			A	

Intersection Summary

HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	86.8	Sum of lost time (s)	12.3
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1429	1239	0	388	360
Future Volume (veh/h)	0	1429	1239	0	388	360
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835
Adj Flow Rate, veh/h	0	1489	1291	0	404	375
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1816	1816	0	1062	489
Arrive On Green	0.00	0.52	0.52	0.00	0.31	0.31
Sat Flow, veh/h	0	3670	3670	0	3390	1560
Grp Volume(v), veh/h	0	1489	1291	0	404	375
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560
Q Serve(g_s), s	0.0	16.6	13.1	0.0	4.3	10.1
Cycle Q Clear(g_c), s	0.0	16.6	13.1	0.0	4.3	10.1
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1816	1816	0	1062	489
V/C Ratio(X)	0.00	0.82	0.71	0.00	0.38	0.77
Avail Cap(c_a), veh/h	0	2546	2546	0	1344	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.3	8.5	0.0	12.4	14.4
Incr Delay (d2), s/veh	0.0	1.1	0.2	0.0	0.2	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.1	6.2	0.0	2.0	4.8
LnGrp Delay(d),s/veh	0.0	10.4	8.7	0.0	12.6	18.4
LnGrp LOS		B	A		B	B
Approach Vol, veh/h		1489	1291		779	
Approach Delay, s/veh		10.4	8.7		15.4	
Approach LOS		B	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.3		18.1		28.3		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		18.6		12.1		15.1		
Green Ext Time (p_c), s		4.6		1.5		4.1		

Intersection Summary	
HCM 2010 Ctrl Delay	10.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	327	7	724	348	527	12	497	1045	529	491	31
Future Volume (veh/h)	28	327	7	724	348	527	12	497	1045	529	491	31
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	29	341	7	754	362	0	12	518	1089	551	511	32
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	54	504	10	773	1203	812	29	835	1290	601	1333	83
Arrive On Green	0.03	0.15	0.16	0.23	0.35	0.00	0.02	0.24	0.24	0.18	0.40	0.41
Sat Flow, veh/h	1690	3379	69	3374	3470	1552	1756	3504	2759	3407	3349	209
Grp Volume(v), veh/h	29	170	178	754	362	0	12	518	1089	551	267	276
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	1.9	10.8	10.9	25.2	8.6	0.0	0.8	15.0	17.0	18.0	12.3	12.3
Cycle Q Clear(g_c), s	1.9	10.8	10.9	25.2	8.6	0.0	0.8	15.0	17.0	18.0	12.3	12.3
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	54	251	263	773	1203	812	29	835	1290	601	697	719
V/C Ratio(X)	0.54	0.68	0.68	0.98	0.30	0.00	0.41	0.62	0.84	0.92	0.38	0.38
Avail Cap(c_a), veh/h	104	691	722	773	2003	1170	93	1050	1459	601	741	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	45.7	45.7	43.4	27.0	0.0	55.2	38.6	8.6	45.9	24.3	24.2
Incr Delay (d2), s/veh	3.1	6.6	6.4	26.5	0.3	0.0	3.4	0.8	4.3	19.8	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	5.5	5.8	14.6	4.2	0.0	0.4	7.4	7.1	10.1	6.0	6.2
LnGrp Delay(d),s/veh	57.3	52.3	52.0	69.9	27.3	0.0	58.6	39.4	12.9	65.7	24.6	24.6
LnGrp LOS	E	D	D	E	C		E	D	B	E	C	C
Approach Vol, veh/h		377			1116			1619			1094	
Approach Delay, s/veh		52.5			56.1			21.7			45.3	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	22.4	7.9	51.2	9.1	45.3	26.0	33.0
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0
Max Q Clear Time (g_c+I1), s	27.2	12.9	2.8	14.3	3.9	10.6	20.0	19.0
Green Ext Time (p_c), s	0.0	3.2	0.0	2.2	0.0	3.9	0.0	7.7

Intersection Summary	
HCM 2010 Ctrl Delay	39.7
HCM 2010 LOS	D

Intersection												
Int Delay, s/veh	7.7											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	233	85	118	175	71	100	49	42	52	29	1
Future Vol, veh/h	6	233	85	118	175	71	100	49	42	52	29	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	6	245	89	124	184	75	105	52	44	55	31	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	260	0	0	340	0	0	757	771	251	783	785	194
Stage 1	-	-	-	-	-	-	263	263	-	433	433	-
Stage 2	-	-	-	-	-	-	494	508	-	350	352	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1265	-	-	1192	-	-	322	328	783	311	325	847
Stage 1	-	-	-	-	-	-	738	687	-	601	582	-
Stage 2	-	-	-	-	-	-	553	535	-	666	632	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1264	-	-	1186	-	-	268	290	779	233	288	840
Mov Cap-2 Maneuver	-	-	-	-	-	-	268	290	-	233	288	-
Stage 1	-	-	-	-	-	-	731	680	-	597	520	-
Stage 2	-	-	-	-	-	-	462	478	-	578	626	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.7	21.9	26.5
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	268	408	1264	-	-	1186	-	-	250	840
HCM Lane V/C Ratio	0.393	0.235	0.005	-	-	0.105	-	-	0.341	0.001
HCM Control Delay (s)	26.9	16.5	7.9	-	-	8.4	-	-	26.7	9.3
HCM Lane LOS	D	C	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	1.8	0.9	0	-	-	0.4	-	-	1.5	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	29	211	106	11	174	203	1290	16	210	932	40
Future Volume (veh/h)	90	29	211	106	11	174	203	1290	16	210	932	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	60	72	213	107	11	176	205	1303	16	212	941	40
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	291	306	258	237	24	231	239	1490	18	245	1032	458
Arrive On Green	0.17	0.17	0.17	0.16	0.15	0.15	0.13	0.29	0.29	0.14	0.29	0.29
Sat Flow, veh/h	1757	1845	1554	1616	166	1570	1774	5178	64	1774	3539	1572
Grp Volume(v), veh/h	60	72	213	118	0	176	205	853	466	212	941	40
Grp Sat Flow(s),veh/h/ln	1757	1845	1554	1782	0	1570	1774	1695	1851	1774	1770	1572
Q Serve(g_s), s	2.7	3.1	12.2	5.5	0.0	9.9	10.4	22.0	22.0	10.7	23.6	1.7
Cycle Q Clear(g_c), s	2.7	3.1	12.2	5.5	0.0	9.9	10.4	22.0	22.0	10.7	23.6	1.7
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	291	306	258	262	0	231	239	976	533	245	1032	458
V/C Ratio(X)	0.21	0.24	0.83	0.45	0.00	0.76	0.86	0.87	0.87	0.86	0.91	0.09
Avail Cap(c_a), veh/h	382	401	338	485	0	427	251	1033	564	251	1078	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.1	33.3	37.1	35.2	0.0	37.7	38.9	31.1	31.1	38.7	31.4	23.7
Incr Delay (d2), s/veh	0.3	0.4	12.1	1.2	0.0	5.2	23.7	8.2	13.8	25.0	11.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.6	6.1	2.8	0.0	4.6	6.6	11.4	13.3	6.9	13.1	0.7
LnGrp Delay(d),s/veh	33.4	33.7	49.2	36.4	0.0	42.8	62.6	39.3	44.9	63.8	42.7	23.7
LnGrp LOS	C	C	D	D		D	E	D	D	E	D	C
Approach Vol, veh/h		345			294			1524			1193	
Approach Delay, s/veh		43.2			40.2			44.2			45.8	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		21.2	18.4	32.8		19.5	18.7	32.4
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0
Max Q Clear Time (g_c+I1), s		14.2	12.4	25.6		11.9	12.7	24.0
Green Ext Time (p_c), s		0.7	0.0	1.2		1.0	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	44.3
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	428	0	225	0	1282	676	144	1012	0
Future Volume (veh/h)	0	0	0	428	0	225	0	1282	676	144	1012	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	0	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	470	0	247	0	1409	743	158	1112	0
Adj No. of Lanes	0	1	0	2	1	0	0	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	2
Cap, veh/h	0	396	0	990	0	337	0	1646	736	190	2279	0
Arrive On Green	0.00	0.00	0.00	0.21	0.00	0.21	0.00	0.47	0.47	0.11	0.64	0.00
Sat Flow, veh/h	0	1863	0	3442	0	1583	0	3632	1583	1774	3632	0
Grp Volume(v), veh/h	0	0	0	470	0	247	0	1409	743	158	1112	0
Grp Sat Flow(s),veh/h/ln	0	1863	0	1721	0	1583	0	1770	1583	1774	1770	0
Q Serve(g_s), s	0.0	0.0	0.0	7.0	0.0	8.1	0.0	19.8	26.0	4.9	9.1	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	7.0	0.0	8.1	0.0	19.8	26.0	4.9	9.1	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	396	0	990	0	337	0	1646	736	190	2279	0
V/C Ratio(X)	0.00	0.00	0.00	0.47	0.00	0.73	0.00	0.86	1.01	0.83	0.49	0.00
Avail Cap(c_a), veh/h	0	533	0	1243	0	453	0	1646	736	190	2279	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	20.1	0.0	20.5	0.0	13.3	14.9	24.4	5.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	4.1	0.0	5.9	35.4	25.4	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	3.3	0.0	3.9	0.0	10.9	18.3	3.7	4.6	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	20.4	0.0	24.6	0.0	19.2	50.3	49.8	5.9	0.0
LnGrp LOS				C		C		B	F	D	A	
Approach Vol, veh/h		0			717			2152			1270	
Approach Delay, s/veh		0.0			21.8			30.0			11.4	
Approach LOS					C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.0	30.0		15.9		40.0		15.9
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s	6.0	26.0		16.0		36.0		16.0
Max Q Clear Time (g_c+I1), s	6.9	28.0		0.0		11.1		10.1
Green Ext Time (p_c), s	0.0	0.0		0.0		8.8		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	22.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	340	126	130	285	236	166	1230	131	177	791	157
Future Volume (veh/h)	227	340	126	130	285	236	166	1230	131	177	791	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	236	354	131	135	297	0	173	1281	136	184	824	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	385	320	156	399	339	207	1370	600	208	1371	613
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.12	0.39	0.39	0.12	0.39	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	236	354	131	135	297	0	173	1281	136	184	824	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.1	16.7	6.6	6.7	13.3	0.0	8.5	31.1	5.3	9.2	16.7	0.0
Cycle Q Clear(g_c), s	6.1	16.7	6.6	6.7	13.3	0.0	8.5	31.1	5.3	9.2	16.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	385	320	156	399	339	207	1370	600	208	1371	613
V/C Ratio(X)	0.85	0.92	0.41	0.86	0.74	0.00	0.83	0.94	0.23	0.88	0.60	0.00
Avail Cap(c_a), veh/h	277	385	320	156	399	339	242	1387	608	208	1371	613
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.7	34.8	30.8	40.3	32.9	0.0	38.7	26.4	18.4	38.9	21.9	0.0
Incr Delay (d2), s/veh	21.9	26.9	0.8	35.9	7.4	0.0	19.2	11.8	0.2	33.2	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	11.4	2.9	4.9	7.7	0.0	5.3	17.4	2.3	6.4	8.3	0.0
LnGrp Delay(d),s/veh	62.5	61.8	31.6	76.2	40.3	0.0	57.9	38.2	18.6	72.1	22.6	0.0
LnGrp LOS	E	E	C	E	D		E	D	B	E	C	
Approach Vol, veh/h		721			432			1590			1008	
Approach Delay, s/veh		56.5			51.5			38.7			31.7	
Approach LOS		E			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	39.2	12.4	23.0	15.0	39.2	11.7	23.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2
Max Q Clear Time (g_c+I1), s	11.2	33.1	8.7	18.7	10.5	18.7	8.1	15.3
Green Ext Time (p_c), s	0.0	1.5	0.0	0.0	0.1	5.1	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	41.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	813	145	89	375	4	85	2	164	5	0	1
Future Volume (veh/h)	0	813	145	89	375	4	85	2	164	5	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	830	148	91	383	4	87	2	167	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	986	176	114	1673	17	598	12	524	443	11	67
Arrive On Green	0.00	0.34	0.34	0.07	0.49	0.49	0.34	0.34	0.34	0.34	0.00	0.34
Sat Flow, veh/h	1691	2862	510	1675	3389	35	1365	36	1524	941	32	194
Grp Volume(v), veh/h	0	489	489	91	189	198	89	0	167	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1686	1675	1671	1753	1401	0	1524	1167	0	0
Q Serve(g_s), s	0.0	14.9	14.9	3.0	3.6	3.6	0.0	0.0	4.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.9	14.9	3.0	3.6	3.6	2.0	0.0	4.5	2.0	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.02	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	581	581	114	825	865	611	0	524	521	0	0
V/C Ratio(X)	0.00	0.84	0.84	0.80	0.23	0.23	0.15	0.00	0.32	0.01	0.00	0.00
Avail Cap(c_a), veh/h	152	635	635	196	825	865	611	0	524	521	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	16.8	16.8	25.5	8.0	8.0	12.6	0.0	13.4	12.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.3	9.3	12.0	0.1	0.1	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.3	8.3	1.7	1.7	1.7	1.0	0.0	2.1	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	26.1	26.1	37.5	8.2	8.2	13.1	0.0	15.0	12.0	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		978			478			256			6	
Approach Delay, s/veh		26.1			13.7			14.3			12.0	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.6	8.3	23.6		23.6	0.0	31.9
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4
Max Q Clear Time (g_c+I1), s		6.5	5.0	16.9		4.0	0.0	5.6
Green Ext Time (p_c), s		0.8	0.0	2.3		0.0	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	20.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	715	270	363	388	0	80	0	67	0	3	0
Future Volume (veh/h)	1	715	270	363	388	0	80	0	67	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	753	284	382	408	0	84	0	71	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	811	306	421	1998	0	414	0	364	0	465	0
Arrive On Green	0.00	0.33	0.33	0.24	0.58	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2420	913	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	530	507	382	408	0	84	0	71	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1630	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	23.4	23.4	16.6	4.4	0.0	4.1	0.0	3.0	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	23.4	23.4	16.6	4.4	0.0	4.2	0.0	3.0	0.0	0.1	0.0
Prop In Lane	1.00		0.56	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	570	546	421	1998	0	414	0	364	0	465	0
V/C Ratio(X)	0.43	0.93	0.93	0.91	0.20	0.00	0.20	0.00	0.20	0.00	0.01	0.00
Avail Cap(c_a), veh/h	109	578	553	457	1998	0	414	0	364	0	465	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.9	25.0	25.1	28.7	8.0	0.0	23.6	0.0	23.1	0.0	22.0	0.0
Incr Delay (d2), s/veh	91.1	21.4	22.2	20.7	0.0	0.0	1.1	0.0	1.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	14.3	13.8	10.4	2.1	0.0	1.6	0.0	1.3	0.0	0.1	0.0
LnGrp Delay(d),s/veh	130.0	46.5	47.2	49.4	8.0	0.0	24.7	0.0	24.3	0.0	22.0	0.0
LnGrp LOS	F	D	D	D	A		C		C		C	
Approach Vol, veh/h		1038			790			155			3	
Approach Delay, s/veh		46.9			28.0			24.5			22.0	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	23.4	30.6		24.0	4.6	49.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		6.2	18.6	25.4		2.1	2.0	6.4
Green Ext Time (p_c), s		0.5	0.3	0.7		0.0	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	467	628	11	78	677	264	34	284	150	222	257	506
Future Volume (veh/h)	467	628	11	78	677	264	34	284	150	222	257	506
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	486	654	11	81	705	0	35	296	156	231	268	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	541	1156	19	104	793	355	59	550	283	254	657	558
Arrive On Green	0.16	0.32	0.32	0.06	0.23	0.00	0.03	0.25	0.25	0.14	0.36	0.00
Sat Flow, veh/h	3442	3562	60	1757	3505	1568	1757	2242	1152	1757	1845	1568
Grp Volume(v), veh/h	486	325	340	81	705	0	35	230	222	231	268	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1852	1757	1752	1568	1757	1752	1641	1757	1845	1568
Q Serve(g_s), s	11.0	12.1	12.1	3.6	15.5	0.0	1.6	9.1	9.4	10.3	8.7	0.0
Cycle Q Clear(g_c), s	11.0	12.1	12.1	3.6	15.5	0.0	1.6	9.1	9.4	10.3	8.7	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	541	574	601	104	793	355	59	430	403	254	657	558
V/C Ratio(X)	0.90	0.57	0.57	0.78	0.89	0.00	0.59	0.53	0.55	0.91	0.41	0.00
Avail Cap(c_a), veh/h	541	574	601	144	816	365	113	430	403	254	657	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.9	22.2	22.2	36.9	29.8	0.0	37.8	26.0	26.2	33.5	19.3	0.0
Incr Delay (d2), s/veh	17.7	1.3	1.2	16.8	11.6	0.0	8.9	4.7	5.4	33.4	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	6.1	6.3	2.2	8.7	0.0	0.9	4.9	4.9	7.4	4.7	0.0
LnGrp Delay(d),s/veh	50.6	23.5	23.4	53.7	41.4	0.0	46.8	30.7	31.5	66.8	21.1	0.0
LnGrp LOS	D	C	C	D	D		D	C	C	E	C	
Approach Vol, veh/h		1151			786			487			499	
Approach Delay, s/veh		34.9			42.7			32.3			42.3	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	24.0	9.2	30.3	7.2	32.8	17.0	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	19.5	6.5	24.5	5.1	25.9	12.5	18.5
Max Q Clear Time (g_c+I1), s	12.3	11.4	5.6	14.1	3.6	10.7	13.0	17.5
Green Ext Time (p_c), s	0.0	1.7	0.0	3.0	0.0	1.3	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	37.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	215	60	215	215	234	107	931	235	181	1074	217
Future Volume (veh/h)	194	215	60	215	215	234	107	931	235	181	1074	217
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	202	224	62	224	224	244	111	970	245	189	1119	226
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	246	696	303	269	390	327	141	1241	313	277	1567	479
Arrive On Green	0.14	0.20	0.20	0.15	0.21	0.21	0.08	0.31	0.31	0.08	0.31	0.31
Sat Flow, veh/h	1774	3539	1542	1774	1863	1561	1774	4035	1016	3442	5085	1553
Grp Volume(v), veh/h	202	224	62	224	224	244	111	815	400	189	1119	226
Grp Sat Flow(s),veh/h/ln	1774	1770	1542	1774	1863	1561	1774	1695	1661	1721	1695	1553
Q Serve(g_s), s	7.6	3.7	2.3	8.4	7.4	10.0	4.2	15.0	15.0	3.6	13.3	8.0
Cycle Q Clear(g_c), s	7.6	3.7	2.3	8.4	7.4	10.0	4.2	15.0	15.0	3.6	13.3	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	246	696	303	269	390	327	141	1043	511	277	1567	479
V/C Ratio(X)	0.82	0.32	0.20	0.83	0.57	0.75	0.78	0.78	0.78	0.68	0.71	0.47
Avail Cap(c_a), veh/h	312	933	407	325	505	423	169	1043	511	277	1567	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	23.5	23.0	28.1	24.2	25.3	30.8	21.5	21.6	30.5	20.9	19.1
Incr Delay (d2), s/veh	12.9	0.3	0.3	14.3	1.3	5.2	18.1	5.8	11.4	6.7	2.8	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	1.8	1.0	5.2	3.9	4.7	2.8	7.7	8.5	2.0	6.6	3.8
LnGrp Delay(d),s/veh	41.5	23.8	23.3	42.5	25.6	30.5	48.9	27.4	33.0	37.2	23.8	22.4
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		488			692			1326			1534	
Approach Delay, s/veh		31.0			32.8			30.9			25.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.5	14.9	17.9	9.9	25.5	14.0	18.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5
Max Q Clear Time (g_c+I1), s	5.6	17.0	10.4	5.7	6.2	15.3	9.6	12.0
Green Ext Time (p_c), s	0.0	2.7	0.1	1.2	0.0	3.2	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	216	611	81	160	494	168	138	880	184	297	835	202
Future Volume (veh/h)	216	611	81	160	494	168	138	880	184	297	835	202
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	220	623	83	163	504	171	141	898	188	303	852	206
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	802	107	194	573	193	215	1067	466	368	1410	339
Arrive On Green	0.14	0.26	0.26	0.11	0.22	0.22	0.06	0.30	0.30	0.11	0.35	0.35
Sat Flow, veh/h	1774	3134	417	1774	2595	876	3442	3539	1544	3442	4074	978
Grp Volume(v), veh/h	220	351	355	163	343	332	141	898	188	303	708	350
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1701	1721	1770	1544	1721	1695	1662
Q Serve(g_s), s	9.6	14.7	14.7	7.2	14.9	15.0	3.2	18.9	7.7	6.9	13.7	13.9
Cycle Q Clear(g_c), s	9.6	14.7	14.7	7.2	14.9	15.0	3.2	18.9	7.7	6.9	13.7	13.9
Prop In Lane	1.00		0.23	1.00		0.51	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	256	453	456	194	391	376	215	1067	466	368	1173	575
V/C Ratio(X)	0.86	0.78	0.78	0.84	0.88	0.88	0.66	0.84	0.40	0.82	0.60	0.61
Avail Cap(c_a), veh/h	256	463	466	194	400	385	238	1067	466	368	1173	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	27.5	27.5	34.8	30.0	30.0	36.5	26.0	22.1	34.8	21.5	21.6
Incr Delay (d2), s/veh	24.0	7.9	8.0	26.7	19.0	20.6	5.6	8.0	2.6	14.1	2.3	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	8.1	8.2	4.9	9.3	9.2	1.7	10.4	3.6	4.0	6.8	7.1
LnGrp Delay(d),s/veh	57.2	35.4	35.5	61.5	48.9	50.6	42.0	34.0	24.7	48.9	23.8	26.3
LnGrp LOS	E	D	D	E	D	D	D	C	C	D	C	C
Approach Vol, veh/h		926			838			1227			1361	
Approach Delay, s/veh		40.6			52.0			33.5			30.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	28.5	13.2	24.9	9.5	32.0	16.0	22.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0
Max Q Clear Time (g_c+I1), s	8.9	20.9	9.2	16.7	5.2	15.9	11.6	17.0
Green Ext Time (p_c), s	0.0	1.9	0.0	1.6	0.0	5.3	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	37.5
HCM 2010 LOS	D

Appendix F

Casa Boronda

Driveway Counts

Casa Boronda Driveway Volumes
Driveway In's & Out's
16/Apr
IDAX Data Solutions

	West Driveway		East Driveway		Hourly Totals			Peak Hour	
Time	In's	Out's	In's	Out's				IB	OB
7:00	1	0	0	0	-				
7:15	1	0	0	0	-				
7:30	0	0	0	1	-				
7:45	1	0	0	0	4	<--	Peak:	3	1
8:00	0	0	0	0	3				
8:15	0	0	0	0	2				
8:30	0	0	0	0	1				
8:45	1	0	0	0	1				
16:00	4	1	0	3	-				
16:15	1	2	0	2	-				
16:30	5	1	0	0	-				
16:45	4	0	0	5	28				
17:00	4	0	0	3	27				
17:15	9	1	0	11	43	<--	Peak:	22	21
17:30	2	1	0	2	42				
17:45	5	2	0	1	41				
AM Total	4	0	0	1					
PM Total	34	8	0	27					
Total	38	8	0	28					

Appendix G

Level of Service

Calculations

Existing Plus Project

Ag Housing

Conditions

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	210	804	1008	17	21	432
Future Volume (vph)	210	804	1008	17	21	432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.15	1.00	1.00		0.95	1.00
Satd. Flow (perm)	282	3504	3477		1770	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	231	884	1108	19	23	475
RTOR Reduction (vph)	0	0	0	0	0	174
Lane Group Flow (vph)	231	884	1127	0	23	301
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	58.0	58.0	44.9		18.0	18.0
Effective Green, g (s)	58.7	59.1	46.0		18.7	19.1
Actuated g/C Ratio	0.69	0.70	0.54		0.22	0.23
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	354	2442	1886		390	356
v/s Ratio Prot	c0.07	0.25	0.32		0.01	
v/s Ratio Perm	c0.38					c0.19
v/c Ratio	0.65	0.36	0.60		0.06	0.85
Uniform Delay, d1	9.1	5.2	13.1		26.1	31.4
Progression Factor	1.84	0.38	1.00		1.00	1.00
Incremental Delay, d2	4.0	0.1	0.6		0.0	16.5
Delay (s)	20.7	2.1	13.7		26.1	48.0
Level of Service	C	A	B		C	D
Approach Delay (s)		5.9	13.7		46.9	
Approach LOS		A	B		D	

Intersection Summary

HCM 2000 Control Delay	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	84.8	Sum of lost time (s)	11.6
Intersection Capacity Utilization	61.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	867	0	0	1193	247	283	1	147	0	0	0
Future Volume (vph)	0	867	0	0	1193	247	283	1	147	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3397		1624	1629	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3397		1624	1629	1530			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	953	0	0	1311	271	311	1	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	126	0	0	0
Lane Group Flow (vph)	0	953	0	0	1582	0	155	157	36	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		58.0			44.9		18.0	18.0	18.0			
Effective Green, g (s)		59.1			46.0		18.7	18.7	18.7			
Actuated g/C Ratio		0.70			0.54		0.22	0.22	0.22			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2405			1842		358	359	337			
v/s Ratio Prot		c0.28			c0.47		0.10	c0.10				
v/s Ratio Perm									0.02			
v/c Ratio		0.40			0.86		0.43	0.44	0.11			
Uniform Delay, d1		5.4			16.6		28.5	28.5	26.4			
Progression Factor		1.00			0.67		1.00	1.00	1.00			
Incremental Delay, d2		0.1			3.4		0.8	0.9	0.1			
Delay (s)		5.5			14.5		29.3	29.4	26.5			
Level of Service		A			B		C	C	C			
Approach Delay (s)		5.5			14.5			28.4			0.0	
Approach LOS		A			B			C			A	

Intersection Summary

HCM 2000 Control Delay	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	84.8	Sum of lost time (s)	12.3
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	946	1220	0	210	361
Future Volume (veh/h)	0	946	1220	0	210	361
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800
Adj Flow Rate, veh/h	0	1040	1341	0	231	397
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	4	2	0	4	4
Cap, veh/h	0	1656	1688	0	1121	516
Arrive On Green	0.00	0.48	0.48	0.00	0.34	0.34
Sat Flow, veh/h	0	3599	3670	0	3325	1530
Grp Volume(v), veh/h	0	1040	1341	0	231	397
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530
Q Serve(g_s), s	0.0	9.7	13.9	0.0	2.1	10.0
Cycle Q Clear(g_c), s	0.0	9.7	13.9	0.0	2.1	10.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1656	1688	0	1121	516
V/C Ratio(X)	0.00	0.63	0.79	0.00	0.21	0.77
Avail Cap(c_a), veh/h	0	2451	2499	0	1651	759
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.2	9.3	0.0	10.2	12.8
Incr Delay (d2), s/veh	0.0	0.1	0.6	0.0	0.1	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.5	6.7	0.0	1.0	4.5
LnGrp Delay(d),s/veh	0.0	8.4	9.9	0.0	10.2	15.1
LnGrp LOS		A	A		B	B
Approach Vol, veh/h		1040	1341		628	
Approach Delay, s/veh		8.4	9.9		13.3	
Approach LOS		A	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		25.0		18.1		25.0		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		11.7		12.0		15.9		
Green Ext Time (p_c), s		3.1		1.5		4.0		

Intersection Summary	
HCM 2010 Ctrl Delay	10.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	284	9	846	441	294	23	280	809	178	282	29
Future Volume (veh/h)	29	284	9	846	441	294	23	280	809	178	282	29
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	31	305	10	910	474	0	25	301	870	191	303	31
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	464	15	1145	1546	815	54	632	1422	266	728	74
Arrive On Green	0.04	0.14	0.15	0.34	0.45	0.00	0.03	0.18	0.18	0.08	0.23	0.24
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2717	3342	3150	320
Grp Volume(v), veh/h	31	154	161	910	474	0	25	301	870	191	164	170
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	1.7	8.0	8.1	22.3	8.0	0.0	1.3	7.1	6.3	5.1	7.4	7.5
Cycle Q Clear(g_c), s	1.7	8.0	8.1	22.3	8.0	0.0	1.3	7.1	6.3	5.1	7.4	7.5
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	59	235	245	1145	1546	815	54	632	1422	266	397	405
V/C Ratio(X)	0.52	0.66	0.66	0.79	0.31	0.00	0.47	0.48	0.61	0.72	0.41	0.42
Avail Cap(c_a), veh/h	132	827	861	1365	2861	1403	114	1320	1961	329	710	724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	37.1	37.1	27.3	16.3	0.0	43.6	33.5	4.2	41.1	29.9	29.9
Incr Delay (d2), s/veh	2.6	6.5	6.3	3.8	0.2	0.0	2.3	0.6	0.4	8.8	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.1	4.3	11.0	3.9	0.0	0.7	3.4	3.2	2.7	3.6	3.7
LnGrp Delay(d),s/veh	46.0	43.6	43.4	31.1	16.5	0.0	45.9	34.1	4.6	49.9	30.6	30.6
LnGrp LOS	D	D	D	C	B		D	C	A	D	C	C
Approach Vol, veh/h		346			1384			1196			525	
Approach Delay, s/veh		43.7			26.1			12.9			37.6	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.0	18.5	8.8	27.1	8.8	46.7	13.3	22.7
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8
Max Q Clear Time (g_c+I1), s	24.3	10.1	3.3	9.5	3.7	10.0	7.1	9.1
Green Ext Time (p_c), s	6.7	2.9	0.0	1.3	0.0	5.4	0.2	6.9

Intersection Summary	
HCM 2010 Ctrl Delay	25.0
HCM 2010 LOS	C

Intersection												
Int Delay, s/veh	18.6											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	233	164	168	249	39	111	22	17	60	39	0
Future Vol, veh/h	0	233	164	168	249	39	111	22	17	60	39	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	271	191	195	290	45	129	26	20	70	45	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	335	0	0	462	0	0	996	996	271	1070	1142	290
Stage 1	-	-	-	-	-	-	271	271	-	680	680	-
Stage 2	-	-	-	-	-	-	725	725	-	390	462	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1176	-	-	1089	-	-	221	242	763	199	200	749
Stage 1	-	-	-	-	-	-	730	682	-	441	451	-
Stage 2	-	-	-	-	-	-	413	427	-	634	565	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1176	-	-	1089	-	-	151	199	763	151	164	749
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	199	-	151	164	-
Stage 1	-	-	-	-	-	-	730	682	-	441	370	-
Stage 2	-	-	-	-	-	-	297	351	-	594	565	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.3	77.1	74.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	151	294	1176	-	-	1089	-	-	156	-
HCM Lane V/C Ratio	0.855	0.154	-	-	-	0.179	-	-	0.738	-
HCM Control Delay (s)	97.3	19.5	0	-	-	9	-	-	74.7	0
HCM Lane LOS	F	C	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	5.7	0.5	0	-	-	0.7	-	-	4.5	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	28	310	60	9	91	164	987	12	120	954	19
Future Volume (veh/h)	34	28	310	60	9	91	164	987	12	120	954	19
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	34	35	333	65	10	98	176	1061	13	129	1026	20
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	388	407	346	140	21	142	190	1701	21	160	1111	495
Arrive On Green	0.23	0.23	0.23	0.11	0.09	0.09	0.11	0.33	0.33	0.09	0.31	0.31
Sat Flow, veh/h	1707	1792	1522	1532	236	1563	1757	5128	63	1774	3539	1577
Grp Volume(v), veh/h	34	35	333	75	0	98	176	695	379	129	1026	20
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1833	1774	1770	1577
Q Serve(g_s), s	1.5	1.4	20.0	3.7	0.0	5.6	9.2	16.1	16.1	6.6	25.9	0.8
Cycle Q Clear(g_c), s	1.5	1.4	20.0	3.7	0.0	5.6	9.2	16.1	16.1	6.6	25.9	0.8
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	388	407	346	161	0	142	190	1114	608	160	1111	495
V/C Ratio(X)	0.09	0.09	0.96	0.47	0.00	0.69	0.93	0.62	0.62	0.80	0.92	0.04
Avail Cap(c_a), veh/h	388	407	346	478	0	423	190	1114	608	211	1148	512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	28.2	35.3	39.2	0.0	40.7	40.9	26.0	26.0	41.2	30.6	22.0
Incr Delay (d2), s/veh	0.1	0.1	38.6	2.1	0.0	5.8	44.8	1.1	2.0	15.3	12.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.7	12.1	1.9	0.0	2.7	6.8	7.6	8.5	3.9	14.5	0.4
LnGrp Delay(d),s/veh	28.3	28.3	74.0	41.3	0.0	46.5	85.6	27.1	28.0	56.5	42.7	22.1
LnGrp LOS	C	C	E	D		D	F	C	C	E	D	C
Approach Vol, veh/h		402			173			1250			1175	
Approach Delay, s/veh		66.1			44.3			35.6			43.8	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.0	16.0	35.0		14.4	14.4	36.7
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0
Max Q Clear Time (g_c+I1), s		22.0	11.2	27.9		7.6	8.6	18.1
Green Ext Time (p_c), s		0.0	0.0	1.1		0.6	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	43.4
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	2	595	1	130	4	918	486	206	1160	1
Future Volume (veh/h)	0	0	2	595	1	130	4	918	486	206	1160	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	0	0	2	633	1	138	4	977	517	219	1234	1
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	3	0	85	731	600	510	8	1372	614	202	1790	1
Arrive On Green	0.00	0.00	0.05	0.21	0.33	0.33	0.00	0.39	0.39	0.11	0.50	0.50
Sat Flow, veh/h	1774	0	1583	3408	1845	1568	1774	3539	1583	1757	3594	3
Grp Volume(v), veh/h	0	0	2	633	1	138	4	977	517	219	602	633
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1704	1845	1568	1774	1770	1583	1757	1752	1844
Q Serve(g_s), s	0.0	0.0	0.1	12.5	0.0	4.5	0.2	16.3	20.7	8.0	18.3	18.3
Cycle Q Clear(g_c), s	0.0	0.0	0.1	12.5	0.0	4.5	0.2	16.3	20.7	8.0	18.3	18.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	3	0	85	731	600	510	8	1372	614	202	873	919
V/C Ratio(X)	0.00	0.00	0.02	0.87	0.00	0.27	0.53	0.71	0.84	1.09	0.69	0.69
Avail Cap(c_a), veh/h	102	0	91	783	600	510	102	1372	614	202	873	919
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	31.2	26.4	15.9	17.4	34.6	18.1	19.4	30.8	13.4	13.4
Incr Delay (d2), s/veh	0.0	0.0	0.1	9.6	0.0	0.3	46.8	3.2	13.2	88.0	4.4	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	6.9	0.0	2.0	0.2	8.5	11.3	8.7	9.8	10.2
LnGrp Delay(d),s/veh	0.0	0.0	31.3	36.1	15.9	17.7	81.5	21.2	32.6	118.9	17.8	17.6
LnGrp LOS			C	D	B	B	F	C	C	F	B	B
Approach Vol, veh/h		2			772			1498			1454	
Approach Delay, s/veh		31.3			32.7			25.3			32.9	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	31.0	18.9	7.7	4.3	38.7	0.0	26.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	27.0	16.0	4.0	4.0	31.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	10.0	22.7	14.5	2.1	2.2	20.3	0.0	6.5
Green Ext Time (p_c), s	0.0	3.0	0.4	0.0	0.0	5.7	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	29.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	322	264	142	316	97	113	591	56	135	1145	224
Future Volume (veh/h)	140	322	264	142	316	97	113	591	56	135	1145	224
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	161	370	303	163	363	0	130	679	64	155	1316	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.11	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	161	370	303	163	363	0	130	679	64	155	1316	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.1	17.5	17.1	8.2	16.2	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Cycle Q Clear(g_c), s	4.1	17.5	17.1	8.2	16.2	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
V/C Ratio(X)	0.81	0.94	0.92	0.87	0.76	0.00	0.86	0.51	0.11	0.81	0.94	0.00
Avail Cap(c_a), veh/h	200	393	329	186	478	406	151	1324	588	305	1423	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.7	34.8	34.6	39.4	30.6	0.0	40.4	21.7	18.3	39.1	25.9	0.0
Incr Delay (d2), s/veh	20.9	30.7	30.5	33.8	7.0	0.0	37.0	0.3	0.1	8.5	11.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	12.3	10.1	5.7	9.2	0.0	4.7	6.6	1.0	4.2	17.8	0.0
LnGrp Delay(d),s/veh	62.6	65.5	65.1	73.2	37.5	0.0	77.5	22.0	18.4	47.6	37.8	0.0
LnGrp LOS	E	E	E	E	D		E	C	B	D	D	
Approach Vol, veh/h		834			526			873			1471	
Approach Delay, s/veh		64.8			48.6			30.0			38.8	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	38.0	14.0	23.4	12.1	40.0	9.7	27.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2
Max Q Clear Time (g_c+I1), s	9.6	15.3	10.2	19.5	8.5	34.0	6.1	18.2
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	1.6	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	44.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	452	142	98	344	3	155	0	174	7	2	0
Future Volume (veh/h)	0	452	142	98	344	3	155	0	174	7	2	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	551	173	120	420	4	189	0	212	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	720	225	151	1514	14	680	0	576	424	82	0
Arrive On Green	0.00	0.28	0.28	0.09	0.46	0.46	0.37	0.00	0.37	0.37	0.37	0.00
Sat Flow, veh/h	1723	2579	807	1630	3301	31	1471	0	1568	810	224	0
Grp Volume(v), veh/h	0	367	357	120	207	217	189	0	212	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1667	1630	1626	1706	1471	0	1568	1034	0	0
Q Serve(g_s), s	0.0	10.1	10.2	3.7	4.1	4.1	0.0	0.0	5.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.1	10.2	3.7	4.1	4.1	3.9	0.0	5.1	4.0	0.0	0.0
Prop In Lane	1.00		0.48	1.00		0.02	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	480	466	151	746	783	680	0	576	506	0	0
V/C Ratio(X)	0.00	0.76	0.77	0.80	0.28	0.28	0.28	0.00	0.37	0.02	0.00	0.00
Avail Cap(c_a), veh/h	167	598	580	299	746	783	680	0	576	506	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.1	17.1	23.0	8.7	8.7	11.6	0.0	12.0	10.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.6	4.9	9.2	0.2	0.2	1.0	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.4	5.3	2.1	1.9	2.0	2.1	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	21.6	22.0	32.2	8.9	8.9	12.6	0.0	13.8	10.6	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		724			544			401			11	
Approach Delay, s/veh		21.8			14.0			13.2			10.6	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.5	9.3	18.9		23.5	0.0	28.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5
Max Q Clear Time (g_c+I1), s		7.1	5.7	12.2		6.0	0.0	6.1
Green Ext Time (p_c), s		1.4	0.1	2.3		0.0	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	17.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	554	98	164	346	3	99	1	106	1	1	0
Future Volume (veh/h)	1	554	98	164	346	3	99	1	106	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	637	113	189	398	3	114	1	122	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	807	143	233	1400	11	596	5	508	315	285	0
Arrive On Green	0.00	0.28	0.28	0.14	0.42	0.42	0.34	0.34	0.34	0.34	0.34	0.00
Sat Flow, veh/h	1723	2920	517	1660	3369	25	1383	14	1509	644	847	0
Grp Volume(v), veh/h	1	375	375	189	196	205	115	0	122	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1718	1660	1656	1739	1397	0	1509	1491	0	0
Q Serve(g_s), s	0.0	11.0	11.1	6.0	4.3	4.3	0.0	0.0	3.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.0	11.1	6.0	4.3	4.3	2.6	0.0	3.2	2.6	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	475	475	233	688	722	601	0	508	600	0	0
V/C Ratio(X)	0.32	0.79	0.79	0.81	0.28	0.28	0.19	0.00	0.24	0.00	0.00	0.00
Avail Cap(c_a), veh/h	158	566	565	306	699	734	601	0	508	600	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.3	18.3	18.3	22.8	10.6	10.6	12.9	0.0	13.1	12.1	0.0	0.0
Incr Delay (d2), s/veh	49.5	6.2	6.3	11.6	0.2	0.2	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.0	6.1	3.5	2.0	2.1	1.3	0.0	1.5	0.0	0.0	0.0
LnGrp Delay(d),s/veh	76.7	24.5	24.7	34.4	10.8	10.8	13.6	0.0	14.2	12.1	0.0	0.0
LnGrp LOS	E	C	C	C	B	B	B		B	B		
Approach Vol, veh/h		751			590			237			2	
Approach Delay, s/veh		24.7			18.4			13.9			12.1	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	12.2	19.6		22.9	4.6	27.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.2	8.0	13.1		4.6	2.0	6.3
Green Ext Time (p_c), s		0.8	0.1	2.1		0.0	0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	502	647	29	129	553	237	40	259	70	174	359	580
Future Volume (veh/h)	502	647	29	129	553	237	40	259	70	174	359	580
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	518	667	30	133	570	0	41	267	72	179	370	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	611	983	44	167	706	316	67	691	183	217	627	533
Arrive On Green	0.18	0.29	0.29	0.10	0.20	0.00	0.04	0.25	0.25	0.12	0.34	0.00
Sat Flow, veh/h	3442	3450	155	1740	3471	1553	1740	2717	719	1757	1845	1568
Grp Volume(v), veh/h	518	342	355	133	570	0	41	169	170	179	370	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1835	1740	1736	1553	1740	1736	1700	1757	1845	1568
Q Serve(g_s), s	10.9	12.8	12.8	5.6	11.7	0.0	1.7	6.0	6.2	7.4	12.4	0.0
Cycle Q Clear(g_c), s	10.9	12.8	12.8	5.6	11.7	0.0	1.7	6.0	6.2	7.4	12.4	0.0
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	611	504	523	167	706	316	67	441	432	217	627	533
V/C Ratio(X)	0.85	0.68	0.68	0.80	0.81	0.00	0.61	0.38	0.39	0.82	0.59	0.00
Avail Cap(c_a), veh/h	668	545	565	221	836	374	116	441	432	247	627	533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	29.7	23.7	23.7	33.1	28.4	0.0	35.4	23.0	23.1	31.9	20.4	0.0
Incr Delay (d2), s/veh	9.4	3.1	3.0	13.8	5.0	0.0	8.8	2.5	2.7	17.9	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	6.7	6.9	3.3	6.1	0.0	1.0	3.2	3.2	4.7	7.0	0.0
LnGrp Delay(d),s/veh	39.1	26.7	26.6	46.9	33.4	0.0	44.2	25.5	25.8	49.8	24.4	0.0
LnGrp LOS	D	C	C	D	C		D	C	C	D	C	
Approach Vol, veh/h		1215			703			380			549	
Approach Delay, s/veh		32.0			35.9			27.6			32.7	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	23.5	11.7	25.8	7.4	29.9	17.8	19.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0
Max Q Clear Time (g_c+I1), s	9.4	8.2	7.6	14.8	3.7	14.4	12.9	13.7
Green Ext Time (p_c), s	0.1	1.4	0.1	2.7	0.0	1.6	0.4	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	32.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	383	97	289	293	257	32	406	346	209	538	83
Future Volume (veh/h)	107	383	97	289	293	257	32	406	346	209	538	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	123	440	111	332	337	295	37	467	398	240	618	95
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	757	289	373	626	527	63	839	388	323	1555	479
Arrive On Green	0.09	0.21	0.21	0.21	0.34	0.34	0.04	0.25	0.25	0.09	0.31	0.31
Sat Flow, veh/h	1774	3539	1352	1774	1863	1569	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	123	440	111	332	337	295	37	467	398	240	618	95
Grp Sat Flow(s),veh/h/ln	1774	1770	1352	1774	1863	1569	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	5.2	8.6	5.4	14.0	11.3	11.8	1.6	9.2	19.0	5.2	7.4	3.4
Cycle Q Clear(g_c), s	5.2	8.6	5.4	14.0	11.3	11.8	1.6	9.2	19.0	5.2	7.4	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	757	289	373	626	527	63	839	388	323	1555	479
V/C Ratio(X)	0.79	0.58	0.38	0.89	0.54	0.56	0.59	0.56	1.03	0.74	0.40	0.20
Avail Cap(c_a), veh/h	254	830	317	405	626	527	136	839	388	336	1555	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	27.1	25.8	29.5	20.7	20.8	36.5	25.2	28.9	33.9	21.0	19.7
Incr Delay (d2), s/veh	8.4	0.9	0.8	20.1	0.9	1.3	8.4	2.7	52.6	8.3	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	4.2	2.1	8.9	6.0	5.3	0.9	4.6	13.7	2.8	3.5	1.6
LnGrp Delay(d),s/veh	42.6	27.9	26.7	49.5	21.6	22.2	44.8	27.8	81.5	42.2	21.8	20.6
LnGrp LOS	D	C	C	D	C	C	D	C	F	D	C	C
Approach Vol, veh/h		674			964			902			953	
Approach Delay, s/veh		30.4			31.4			52.2			26.8	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	23.5	20.6	20.9	7.2	28.0	11.3	30.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5
Max Q Clear Time (g_c+I1), s	7.2	21.0	16.0	10.6	3.6	9.4	7.2	13.8
Green Ext Time (p_c), s	0.0	0.0	0.2	2.0	0.0	3.5	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	35.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	389	95	132	547	88	71	488	112	192	736	158
Future Volume (veh/h)	175	389	95	132	547	88	71	488	112	192	736	158
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	197	437	107	148	615	99	80	548	126	216	827	178
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	238	768	186	186	741	119	195	976	432	277	1267	271
Arrive On Green	0.13	0.27	0.27	0.10	0.24	0.24	0.06	0.28	0.28	0.08	0.30	0.30
Sat Flow, veh/h	1774	2820	685	1774	3051	490	3408	3505	1551	3442	4195	897
Grp Volume(v), veh/h	197	273	271	148	356	358	80	548	126	216	667	338
Grp Sat Flow(s),veh/h/ln	1774	1770	1735	1774	1770	1771	1704	1752	1551	1721	1695	1701
Q Serve(g_s), s	7.4	9.1	9.2	5.6	13.0	13.1	1.5	9.1	4.4	4.2	11.7	11.8
Cycle Q Clear(g_c), s	7.4	9.1	9.2	5.6	13.0	13.1	1.5	9.1	4.4	4.2	11.7	11.8
Prop In Lane	1.00		0.39	1.00		0.28	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	238	482	472	186	430	430	195	976	432	277	1024	514
V/C Ratio(X)	0.83	0.57	0.57	0.80	0.83	0.83	0.41	0.56	0.29	0.78	0.65	0.66
Avail Cap(c_a), veh/h	247	482	473	231	467	467	250	976	432	277	1024	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	21.4	21.4	29.8	24.5	24.5	31.0	21.0	19.3	30.8	20.7	20.7
Incr Delay (d2), s/veh	19.7	1.5	1.7	14.3	11.2	11.4	1.4	2.3	1.7	13.1	3.2	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	4.6	4.6	3.4	7.7	7.7	0.8	4.7	2.1	2.5	5.9	6.5
LnGrp Delay(d),s/veh	48.4	22.9	23.1	44.1	35.7	35.9	32.4	23.4	21.0	43.9	23.9	27.2
LnGrp LOS	D	C	C	D	D	D	C	C	C	D	C	C
Approach Vol, veh/h		741			862			754			1221	
Approach Delay, s/veh		29.8			37.2			23.9			28.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	23.5	11.6	23.1	8.4	25.1	13.7	21.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0
Max Q Clear Time (g_c+I1), s	6.2	11.1	7.6	11.2	3.5	13.8	9.4	15.1
Green Ext Time (p_c), s	0.0	2.5	0.0	2.0	0.0	3.1	0.0	1.3

Intersection Summary	
HCM 2010 Ctrl Delay	29.9
HCM 2010 LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	443	1346	882	30	37	310
Future Volume (vph)	443	1346	882	30	37	310
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3469		1770	1583
Flt Permitted	0.18	1.00	1.00		0.95	1.00
Satd. Flow (perm)	323	3504	3469		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	447	1360	891	30	37	313
RTOR Reduction (vph)	0	0	0	0	0	238
Lane Group Flow (vph)	447	1360	921	0	37	75
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	58.5	58.5	37.4		19.6	19.6
Effective Green, g (s)	59.2	59.6	38.5		20.3	20.7
Actuated g/C Ratio	0.68	0.69	0.44		0.23	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	502	2403	1536		413	377
v/s Ratio Prot	c0.18	0.39	0.27		0.02	
v/s Ratio Perm	c0.43					c0.05
v/c Ratio	0.89	0.57	0.60		0.09	0.20
Uniform Delay, d1	17.2	7.0	18.4		26.1	26.5
Progression Factor	1.10	0.56	1.00		1.00	1.00
Incremental Delay, d2	13.9	0.3	0.7		0.1	0.2
Delay (s)	32.7	4.2	19.1		26.1	26.7
Level of Service	C	A	B		C	C
Approach Delay (s)		11.3	19.1		26.6	
Approach LOS		B	B		C	

Intersection Summary

HCM 2000 Control Delay	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	86.9	Sum of lost time (s)	11.6
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1432	0	0	963	229	420	3	357	0	0	0
Future Volume (vph)	0	1432	0	0	963	229	420	3	357	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3367		1656	1661	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3367		1656	1661	1560			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1523	0	0	1024	244	447	3	380	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1523	0	0	1268	0	223	227	323	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		58.5			37.4		19.6	19.6	19.6			
Effective Green, g (s)		59.6			38.5		20.3	20.3	20.3			
Actuated g/C Ratio		0.69			0.44		0.23	0.23	0.23			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2390			1491		386	388	364			
v/s Ratio Prot		c0.44			c0.38		0.13	0.14				
v/s Ratio Perm									c0.21			
v/c Ratio		0.64			0.85		0.58	0.59	0.89			
Uniform Delay, d1		7.6			21.6		29.5	29.6	32.2			
Progression Factor		1.00			0.45		1.00	1.00	1.00			
Incremental Delay, d2		0.6			4.4		2.1	2.2	21.8			
Delay (s)		8.3			14.0		31.6	31.8	54.0			
Level of Service		A			B		C	C	D			
Approach Delay (s)		8.3			14.0			41.9			0.0	
Approach LOS		A			B			D			A	

Intersection Summary

HCM 2000 Control Delay	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	86.9	Sum of lost time (s)	12.3
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1437	1246	0	388	365
Future Volume (veh/h)	0	1437	1246	0	388	365
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835
Adj Flow Rate, veh/h	0	1497	1298	0	404	380
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1818	1818	0	1066	491
Arrive On Green	0.00	0.52	0.52	0.00	0.31	0.31
Sat Flow, veh/h	0	3670	3670	0	3390	1560
Grp Volume(v), veh/h	0	1497	1298	0	404	380
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560
Q Serve(g_s), s	0.0	16.9	13.3	0.0	4.4	10.4
Cycle Q Clear(g_c), s	0.0	16.9	13.3	0.0	4.4	10.4
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1818	1818	0	1066	491
V/C Ratio(X)	0.00	0.82	0.71	0.00	0.38	0.77
Avail Cap(c_a), veh/h	0	2515	2515	0	1327	611
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.4	8.6	0.0	12.5	14.6
Incr Delay (d2), s/veh	0.0	1.2	0.3	0.0	0.2	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.2	6.4	0.0	2.0	5.0
LnGrp Delay(d),s/veh	0.0	10.6	8.8	0.0	12.7	19.0
LnGrp LOS		B	A		B	B
Approach Vol, veh/h		1497	1298		784	
Approach Delay, s/veh		10.6	8.8		15.8	
Approach LOS		B	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.6		18.4		28.6		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		18.9		12.4		15.3		
Green Ext Time (p_c), s		4.6		1.4		4.1		

Intersection Summary	
HCM 2010 Ctrl Delay	11.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	327	7	736	348	527	12	498	1055	529	492	31
Future Volume (veh/h)	28	327	7	736	348	527	12	498	1055	529	492	31
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	29	341	7	767	362	0	12	519	1099	551	512	32
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	53	504	10	771	1201	810	29	840	1292	599	1337	83
Arrive On Green	0.03	0.15	0.16	0.23	0.35	0.00	0.02	0.24	0.24	0.18	0.40	0.41
Sat Flow, veh/h	1690	3379	69	3374	3470	1552	1756	3504	2759	3407	3350	209
Grp Volume(v), veh/h	29	170	178	767	362	0	12	519	1099	551	267	277
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	1.9	10.8	10.9	25.8	8.7	0.0	0.8	15.0	17.2	18.1	12.3	12.3
Cycle Q Clear(g_c), s	1.9	10.8	10.9	25.8	8.7	0.0	0.8	15.0	17.2	18.1	12.3	12.3
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	53	251	263	771	1201	810	29	840	1292	599	699	721
V/C Ratio(X)	0.54	0.68	0.68	0.99	0.30	0.00	0.41	0.62	0.85	0.92	0.38	0.38
Avail Cap(c_a), veh/h	104	689	720	771	1998	1167	93	1048	1456	599	739	763
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	45.8	45.8	43.8	27.1	0.0	55.4	38.6	8.6	46.1	24.2	24.2
Incr Delay (d2), s/veh	3.1	6.6	6.4	30.9	0.3	0.0	3.4	0.7	4.6	20.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	5.5	5.8	15.2	4.2	0.0	0.4	7.4	7.2	10.2	6.0	6.2
LnGrp Delay(d),s/veh	57.4	52.4	52.2	74.7	27.4	0.0	58.8	39.3	13.2	66.2	24.6	24.5
LnGrp LOS	E	D	D	E	C		E	D	B	E	C	C
Approach Vol, veh/h		377			1129			1630			1095	
Approach Delay, s/veh		52.7			59.6			21.8			45.5	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	22.5	7.9	51.4	9.1	45.4	26.0	33.3
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0
Max Q Clear Time (g_c+I1), s	27.8	12.9	2.8	14.3	3.9	10.7	20.1	19.2
Green Ext Time (p_c), s	0.0	3.2	0.0	2.2	0.0	3.9	0.0	7.7

Intersection Summary	
HCM 2010 Ctrl Delay	40.8
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	7.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	233	85	118	175	71	100	49	42	52	29	1
Future Vol, veh/h	6	233	85	118	175	71	100	49	42	52	29	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	6	245	89	124	184	75	105	52	44	55	31	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	260	0	0	340	0	0	757	771	251	783	785	194
Stage 1	-	-	-	-	-	-	263	263	-	433	433	-
Stage 2	-	-	-	-	-	-	494	508	-	350	352	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1265	-	-	1192	-	-	322	328	783	311	325	847
Stage 1	-	-	-	-	-	-	738	687	-	601	582	-
Stage 2	-	-	-	-	-	-	553	535	-	666	632	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1264	-	-	1186	-	-	268	290	779	233	288	840
Mov Cap-2 Maneuver	-	-	-	-	-	-	268	290	-	233	288	-
Stage 1	-	-	-	-	-	-	731	680	-	597	520	-
Stage 2	-	-	-	-	-	-	462	478	-	578	626	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.7	21.9	26.5
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	268	408	1264	-	-	1186	-	-	250	840
HCM Lane V/C Ratio	0.393	0.235	0.005	-	-	0.105	-	-	0.341	0.001
HCM Control Delay (s)	26.9	16.5	7.9	-	-	8.4	-	-	26.7	9.3
HCM Lane LOS	D	C	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	1.8	0.9	0	-	-	0.4	-	-	1.5	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	29	211	107	11	174	203	1301	17	210	945	40
Future Volume (veh/h)	90	29	211	107	11	174	203	1301	17	210	945	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	60	72	213	108	11	176	205	1314	17	212	955	40
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	291	305	257	237	24	230	239	1499	19	245	1038	461
Arrive On Green	0.17	0.17	0.17	0.16	0.15	0.15	0.13	0.29	0.29	0.14	0.29	0.29
Sat Flow, veh/h	1757	1845	1554	1617	165	1570	1774	5174	67	1774	3539	1572
Grp Volume(v), veh/h	60	72	213	119	0	176	205	861	470	212	955	40
Grp Sat Flow(s),veh/h/ln	1757	1845	1554	1782	0	1570	1774	1695	1851	1774	1770	1572
Q Serve(g_s), s	2.7	3.1	12.2	5.6	0.0	9.9	10.4	22.3	22.3	10.8	24.1	1.7
Cycle Q Clear(g_c), s	2.7	3.1	12.2	5.6	0.0	9.9	10.4	22.3	22.3	10.8	24.1	1.7
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	291	305	257	261	0	230	239	982	536	245	1038	461
V/C Ratio(X)	0.21	0.24	0.83	0.46	0.00	0.76	0.86	0.88	0.88	0.86	0.92	0.09
Avail Cap(c_a), veh/h	380	399	336	482	0	425	250	1028	561	250	1073	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	33.5	37.3	35.4	0.0	37.9	39.1	31.2	31.2	39.0	31.6	23.7
Incr Delay (d2), s/veh	0.3	0.4	12.3	1.2	0.0	5.2	24.0	8.4	14.2	25.3	12.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.6	6.2	2.8	0.0	4.6	6.7	11.6	13.5	7.0	13.6	0.7
LnGrp Delay(d),s/veh	33.6	33.9	49.6	36.6	0.0	43.1	63.1	39.7	45.4	64.3	43.9	23.7
LnGrp LOS	C	C	D	D		D	E	D	D	E	D	C
Approach Vol, veh/h		345			295			1536			1207	
Approach Delay, s/veh		43.5			40.5			44.6			46.8	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		21.3	18.4	33.1		19.6	18.8	32.8
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0
Max Q Clear Time (g_c+I1), s		14.2	12.4	26.1		11.9	12.8	24.3
Green Ext Time (p_c), s		0.7	0.0	1.0		1.0	0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	44.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	6	24	428	7	225	23	1282	678	144	1012	14
Future Volume (veh/h)	12	6	24	428	7	225	23	1282	678	144	1012	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	13	7	26	470	8	247	25	1409	745	158	1112	15
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	23	21	78	572	398	339	40	1556	696	161	1818	25
Arrive On Green	0.01	0.06	0.06	0.17	0.21	0.21	0.02	0.44	0.44	0.09	0.51	0.51
Sat Flow, veh/h	1774	347	1288	3442	1863	1583	1774	3539	1583	1774	3576	48
Grp Volume(v), veh/h	13	0	33	470	8	247	25	1409	745	158	550	577
Grp Sat Flow(s),veh/h/ln	1774	0	1635	1721	1863	1583	1774	1770	1583	1774	1770	1854
Q Serve(g_s), s	0.5	0.0	1.3	8.7	0.2	9.6	0.9	24.4	29.0	5.9	14.6	14.6
Cycle Q Clear(g_c), s	0.5	0.0	1.3	8.7	0.2	9.6	0.9	24.4	29.0	5.9	14.6	14.6
Prop In Lane	1.00		0.79	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	23	0	99	572	398	339	40	1556	696	161	900	943
V/C Ratio(X)	0.57	0.00	0.33	0.82	0.02	0.73	0.63	0.91	1.07	0.98	0.61	0.61
Avail Cap(c_a), veh/h	108	0	198	626	452	384	108	1556	696	161	900	943
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	0.0	29.7	26.5	20.5	24.1	32.0	17.2	18.5	29.9	11.6	11.6
Incr Delay (d2), s/veh	20.5	0.0	2.0	8.0	0.0	6.0	15.5	9.1	54.4	64.4	3.1	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.6	4.7	0.1	4.7	0.6	13.7	23.1	5.7	7.8	8.1
LnGrp Delay(d),s/veh	52.8	0.0	31.7	34.5	20.5	30.2	47.4	26.3	72.9	94.3	14.7	14.5
LnGrp LOS	D		C	C	C	C	D	C	F	F	B	B
Approach Vol, veh/h		46			725			2179			1285	
Approach Delay, s/veh		37.7			32.9			42.5			24.4	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	33.0	15.0	8.0	5.5	37.5	4.8	18.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	29.0	12.0	8.0	4.0	31.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	7.9	31.0	10.7	3.3	2.9	16.6	2.5	11.6
Green Ext Time (p_c), s	0.0	0.0	0.3	0.0	0.0	6.2	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	35.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	340	128	130	290	236	168	1230	131	177	791	157
Future Volume (veh/h)	227	340	128	130	290	236	168	1230	131	177	791	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	236	354	133	135	302	0	175	1281	136	184	824	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	385	320	156	399	339	210	1370	600	208	1367	612
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.12	0.39	0.39	0.12	0.39	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	236	354	133	135	302	0	175	1281	136	184	824	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.1	16.7	6.7	6.7	13.6	0.0	8.6	31.1	5.3	9.2	16.7	0.0
Cycle Q Clear(g_c), s	6.1	16.7	6.7	6.7	13.6	0.0	8.6	31.1	5.3	9.2	16.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	385	320	156	399	339	210	1370	600	208	1367	612
V/C Ratio(X)	0.85	0.92	0.42	0.86	0.76	0.00	0.84	0.94	0.23	0.88	0.60	0.00
Avail Cap(c_a), veh/h	277	385	320	156	399	339	242	1387	608	208	1367	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.7	34.8	30.8	40.3	33.0	0.0	38.6	26.4	18.4	38.9	22.0	0.0
Incr Delay (d2), s/veh	21.9	26.9	0.9	35.9	8.1	0.0	19.6	11.8	0.2	33.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	11.4	2.9	4.9	7.9	0.0	5.4	17.4	2.3	6.4	8.3	0.0
LnGrp Delay(d),s/veh	62.5	61.8	31.7	76.2	41.0	0.0	58.2	38.2	18.6	72.1	22.7	0.0
LnGrp LOS	E	E	C	E	D		E	D	B	E	C	
Approach Vol, veh/h		723			437			1592			1008	
Approach Delay, s/veh		56.5			51.9			38.7			31.8	
Approach LOS		E			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	39.2	12.4	23.0	15.1	39.1	11.7	23.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2
Max Q Clear Time (g_c+I1), s	11.2	33.1	8.7	18.7	10.6	18.7	8.1	15.6
Green Ext Time (p_c), s	0.0	1.5	0.0	0.0	0.1	5.1	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	41.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	819	145	89	375	4	92	2	165	5	0	1
Future Volume (veh/h)	0	819	145	89	375	4	92	2	165	5	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	836	148	91	383	4	94	2	168	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	990	175	114	1675	17	599	11	524	439	11	66
Arrive On Green	0.00	0.35	0.35	0.07	0.49	0.49	0.34	0.34	0.34	0.34	0.00	0.34
Sat Flow, veh/h	1691	2866	507	1675	3389	35	1370	33	1524	931	32	192
Grp Volume(v), veh/h	0	492	492	91	189	198	96	0	168	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1686	1675	1671	1753	1404	0	1524	1155	0	0
Q Serve(g_s), s	0.0	15.0	15.0	3.0	3.6	3.6	0.0	0.0	4.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.0	15.0	3.0	3.6	3.6	2.2	0.0	4.5	2.2	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.02	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	583	582	114	826	866	611	0	524	516	0	0
V/C Ratio(X)	0.00	0.84	0.84	0.80	0.23	0.23	0.16	0.00	0.32	0.01	0.00	0.00
Avail Cap(c_a), veh/h	152	635	634	196	826	866	611	0	524	516	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	16.8	16.8	25.5	8.0	8.0	12.7	0.0	13.4	12.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.6	9.6	12.1	0.1	0.1	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.4	8.4	1.7	1.7	1.7	1.1	0.0	2.1	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	26.4	26.4	37.6	8.1	8.1	13.2	0.0	15.1	12.1	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		984			478			264			6	
Approach Delay, s/veh		26.4			13.7			14.4			12.1	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.6	8.3	23.7		23.6	0.0	32.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4
Max Q Clear Time (g_c+I1), s		6.5	5.0	17.0		4.2	0.0	5.6
Green Ext Time (p_c), s		0.8	0.0	2.2		0.0	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	21.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	716	276	364	388	0	80	0	67	0	3	0
Future Volume (veh/h)	1	716	276	364	388	0	80	0	67	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	754	291	383	408	0	84	0	71	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	807	311	422	2002	0	413	0	363	0	464	0
Arrive On Green	0.00	0.34	0.34	0.24	0.58	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2403	927	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	534	511	383	408	0	84	0	71	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1627	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	23.8	23.8	16.7	4.4	0.0	4.1	0.0	3.0	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	23.8	23.8	16.7	4.4	0.0	4.2	0.0	3.0	0.0	0.1	0.0
Prop In Lane	1.00		0.57	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	572	546	422	2002	0	413	0	363	0	464	0
V/C Ratio(X)	0.43	0.93	0.94	0.91	0.20	0.00	0.20	0.00	0.20	0.00	0.01	0.00
Avail Cap(c_a), veh/h	109	577	551	456	2002	0	413	0	363	0	464	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.0	25.2	25.2	28.8	7.9	0.0	23.7	0.0	23.2	0.0	22.1	0.0
Incr Delay (d2), s/veh	91.1	22.5	23.4	20.9	0.0	0.0	1.1	0.0	1.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	14.7	14.2	10.4	2.1	0.0	1.6	0.0	1.3	0.0	0.1	0.0
LnGrp Delay(d),s/veh	130.1	47.7	48.5	49.7	8.0	0.0	24.8	0.0	24.4	0.0	22.1	0.0
LnGrp LOS	F	D	D	D	A		C		C		C	
Approach Vol, veh/h		1046			791			155			3	
Approach Delay, s/veh		48.2			28.2			24.6			22.1	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	23.5	30.8		24.0	4.6	49.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		6.2	18.7	25.8		2.1	2.0	6.4
Green Ext Time (p_c), s		0.5	0.3	0.5		0.0	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	38.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	473	628	11	78	677	269	34	289	150	226	261	513
Future Volume (veh/h)	473	628	11	78	677	269	34	289	150	226	261	513
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	493	654	11	81	705	0	35	301	156	235	272	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	541	1156	19	104	793	355	59	553	280	254	657	558
Arrive On Green	0.16	0.32	0.32	0.06	0.23	0.00	0.03	0.25	0.25	0.14	0.36	0.00
Sat Flow, veh/h	3442	3562	60	1757	3505	1568	1757	2255	1141	1757	1845	1568
Grp Volume(v), veh/h	493	325	340	81	705	0	35	232	225	235	272	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1852	1757	1752	1568	1757	1752	1643	1757	1845	1568
Q Serve(g_s), s	11.2	12.1	12.1	3.6	15.5	0.0	1.6	9.2	9.5	10.5	8.9	0.0
Cycle Q Clear(g_c), s	11.2	12.1	12.1	3.6	15.5	0.0	1.6	9.2	9.5	10.5	8.9	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.69	1.00		1.00
Lane Grp Cap(c), veh/h	541	574	601	104	793	355	59	430	403	254	657	558
V/C Ratio(X)	0.91	0.57	0.57	0.78	0.89	0.00	0.59	0.54	0.56	0.92	0.41	0.00
Avail Cap(c_a), veh/h	541	574	601	144	816	365	113	430	403	254	657	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.9	22.2	22.2	36.9	29.8	0.0	37.8	26.1	26.2	33.6	19.3	0.0
Incr Delay (d2), s/veh	19.6	1.3	1.2	16.8	11.6	0.0	8.9	4.8	5.5	36.7	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	6.1	6.3	2.2	8.7	0.0	0.9	5.0	4.9	7.7	4.8	0.0
LnGrp Delay(d),s/veh	52.6	23.5	23.4	53.7	41.4	0.0	46.8	30.9	31.7	70.3	21.2	0.0
LnGrp LOS	D	C	C	D	D		D	C	C	E	C	
Approach Vol, veh/h		1158			786			492			507	
Approach Delay, s/veh		35.9			42.7			32.4			44.0	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	24.0	9.2	30.3	7.2	32.8	17.0	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	19.5	6.5	24.5	5.1	25.9	12.5	18.5
Max Q Clear Time (g_c+I1), s	12.5	11.5	5.6	14.1	3.6	10.9	13.2	17.5
Green Ext Time (p_c), s	0.0	1.7	0.0	3.0	0.0	1.3	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	38.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	215	60	216	215	234	107	932	236	181	1075	218
Future Volume (veh/h)	195	215	60	216	215	234	107	932	236	181	1075	218
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	203	224	62	225	224	244	111	971	246	189	1120	227
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	696	303	270	390	327	141	1239	313	277	1566	478
Arrive On Green	0.14	0.20	0.20	0.15	0.21	0.21	0.08	0.31	0.31	0.08	0.31	0.31
Sat Flow, veh/h	1774	3539	1542	1774	1863	1561	1774	4032	1019	3442	5085	1552
Grp Volume(v), veh/h	203	224	62	225	224	244	111	816	401	189	1120	227
Grp Sat Flow(s),veh/h/ln	1774	1770	1542	1774	1863	1561	1774	1695	1660	1721	1695	1552
Q Serve(g_s), s	7.6	3.7	2.3	8.4	7.4	10.0	4.2	15.0	15.1	3.7	13.4	8.1
Cycle Q Clear(g_c), s	7.6	3.7	2.3	8.4	7.4	10.0	4.2	15.0	15.1	3.7	13.4	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	247	696	303	270	390	327	141	1042	510	277	1566	478
V/C Ratio(X)	0.82	0.32	0.20	0.83	0.57	0.75	0.78	0.78	0.79	0.68	0.72	0.47
Avail Cap(c_a), veh/h	312	932	406	324	504	422	169	1042	510	277	1566	478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	23.5	23.0	28.1	24.3	25.3	30.9	21.6	21.6	30.6	21.0	19.2
Incr Delay (d2), s/veh	13.0	0.3	0.3	14.5	1.3	5.2	18.1	5.9	11.6	6.7	2.8	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	1.8	1.0	5.2	3.9	4.7	2.8	7.9	8.5	2.0	6.6	3.9
LnGrp Delay(d),s/veh	41.6	23.8	23.3	42.6	25.6	30.5	49.0	27.5	33.2	37.3	23.8	22.5
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		489			693			1328			1536	
Approach Delay, s/veh		31.1			32.9			31.0			25.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.5	14.9	17.9	10.0	25.5	14.0	18.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5
Max Q Clear Time (g_c+I1), s	5.7	17.1	10.4	5.7	6.2	15.4	9.6	12.0
Green Ext Time (p_c), s	0.0	2.6	0.1	1.2	0.0	3.2	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	29.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	613	81	160	496	168	138	880	184	297	835	204
Future Volume (veh/h)	217	613	81	160	496	168	138	880	184	297	835	204
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	221	626	83	163	506	171	141	898	188	303	852	208
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	804	106	194	574	193	215	1067	466	368	1406	341
Arrive On Green	0.14	0.26	0.26	0.11	0.22	0.22	0.06	0.30	0.30	0.11	0.35	0.35
Sat Flow, veh/h	1774	3136	415	1774	2598	873	3442	3539	1544	3442	4065	986
Grp Volume(v), veh/h	221	353	356	163	344	333	141	898	188	303	710	350
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1702	1721	1770	1544	1721	1695	1661
Q Serve(g_s), s	9.7	14.7	14.8	7.2	14.9	15.1	3.2	18.9	7.7	6.9	13.8	13.9
Cycle Q Clear(g_c), s	9.7	14.7	14.8	7.2	14.9	15.1	3.2	18.9	7.7	6.9	13.8	13.9
Prop In Lane	1.00		0.23	1.00		0.51	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	256	453	457	194	391	376	215	1067	466	368	1173	574
V/C Ratio(X)	0.86	0.78	0.78	0.84	0.88	0.89	0.66	0.84	0.40	0.82	0.61	0.61
Avail Cap(c_a), veh/h	256	462	466	194	400	385	238	1067	466	368	1173	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	27.5	27.5	34.8	30.0	30.0	36.5	26.0	22.1	34.8	21.5	21.6
Incr Delay (d2), s/veh	24.7	8.1	8.2	26.7	19.2	20.9	5.6	8.0	2.6	14.1	2.3	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	8.2	8.3	4.9	9.3	9.2	1.7	10.4	3.6	4.0	6.8	7.1
LnGrp Delay(d),s/veh	57.9	35.6	35.7	61.5	49.2	50.9	42.1	34.1	24.7	49.0	23.9	26.4
LnGrp LOS	E	D	D	E	D	D	D	C	C	D	C	C
Approach Vol, veh/h		930			840			1227			1363	
Approach Delay, s/veh		40.9			52.3			33.5			30.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	28.5	13.2	24.9	9.5	32.0	16.0	22.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0
Max Q Clear Time (g_c+I1), s	8.9	20.9	9.2	16.8	5.2	15.9	11.7	17.1
Green Ext Time (p_c), s	0.0	1.9	0.0	1.6	0.0	5.3	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	37.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	322	264	142	315	97	113	591	56	135	1145	224
Future Volume (veh/h)	140	322	264	142	315	97	113	591	56	135	1145	224
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	161	370	303	163	362	0	130	679	64	155	1316	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.11	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	161	370	303	163	362	0	130	679	64	155	1316	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.1	17.5	17.1	8.2	16.2	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Cycle Q Clear(g_c), s	4.1	17.5	17.1	8.2	16.2	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
V/C Ratio(X)	0.81	0.94	0.92	0.87	0.76	0.00	0.86	0.51	0.11	0.81	0.94	0.00
Avail Cap(c_a), veh/h	200	393	329	186	478	406	151	1324	588	305	1423	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.7	34.8	34.6	39.4	30.6	0.0	40.4	21.7	18.3	39.1	25.9	0.0
Incr Delay (d2), s/veh	20.9	30.7	30.5	33.8	6.8	0.0	37.0	0.3	0.1	8.5	11.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	12.3	10.1	5.7	9.2	0.0	4.7	6.6	1.0	4.2	17.8	0.0
LnGrp Delay(d),s/veh	62.6	65.5	65.1	73.2	37.4	0.0	77.5	22.0	18.4	47.6	37.8	0.0
LnGrp LOS	E	E	E	E	D		E	C	B	D	D	
Approach Vol, veh/h		834			525			873			1471	
Approach Delay, s/veh		64.8			48.5			30.0			38.8	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	38.0	14.0	23.4	12.1	40.0	9.7	27.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2
Max Q Clear Time (g_c+I1), s	9.6	15.3	10.2	19.5	8.5	34.0	6.1	18.2
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	1.6	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	44.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	554	98	164	346	3	99	1	106	1	1	0
Future Volume (veh/h)	1	554	98	164	346	3	99	1	106	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	637	113	189	398	3	114	1	122	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	807	143	233	1400	11	596	5	508	315	285	0
Arrive On Green	0.00	0.28	0.28	0.14	0.42	0.42	0.34	0.34	0.34	0.34	0.34	0.00
Sat Flow, veh/h	1723	2920	517	1660	3369	25	1383	14	1509	644	847	0
Grp Volume(v), veh/h	1	375	375	189	196	205	115	0	122	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1718	1660	1656	1739	1397	0	1509	1491	0	0
Q Serve(g_s), s	0.0	11.0	11.1	6.0	4.3	4.3	0.0	0.0	3.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.0	11.1	6.0	4.3	4.3	2.6	0.0	3.2	2.6	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	475	475	233	688	722	601	0	508	600	0	0
V/C Ratio(X)	0.32	0.79	0.79	0.81	0.28	0.28	0.19	0.00	0.24	0.00	0.00	0.00
Avail Cap(c_a), veh/h	158	566	565	306	699	734	601	0	508	600	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.3	18.3	18.3	22.8	10.6	10.6	12.9	0.0	13.1	12.1	0.0	0.0
Incr Delay (d2), s/veh	49.5	6.2	6.3	11.6	0.2	0.2	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.0	6.1	3.5	2.0	2.1	1.3	0.0	1.5	0.0	0.0	0.0
LnGrp Delay(d),s/veh	76.7	24.5	24.7	34.4	10.8	10.8	13.6	0.0	14.2	12.1	0.0	0.0
LnGrp LOS	E	C	C	C	B	B	B		B	B		
Approach Vol, veh/h		751			590			237			2	
Approach Delay, s/veh		24.7			18.4			13.9			12.1	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	12.2	19.6		22.9	4.6	27.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.2	8.0	13.1		4.6	2.0	6.3
Green Ext Time (p_c), s		0.8	0.1	2.1		0.0	0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	341	126	130	286	236	166	1230	131	177	791	157
Future Volume (veh/h)	227	341	126	130	286	236	166	1230	131	177	791	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	236	355	131	135	298	0	173	1281	136	184	824	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	385	320	156	399	339	207	1370	600	208	1371	613
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.12	0.39	0.39	0.12	0.39	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	236	355	131	135	298	0	173	1281	136	184	824	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.1	16.7	6.6	6.7	13.4	0.0	8.5	31.1	5.3	9.2	16.7	0.0
Cycle Q Clear(g_c), s	6.1	16.7	6.6	6.7	13.4	0.0	8.5	31.1	5.3	9.2	16.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	385	320	156	399	339	207	1370	600	208	1371	613
V/C Ratio(X)	0.85	0.92	0.41	0.86	0.75	0.00	0.83	0.94	0.23	0.88	0.60	0.00
Avail Cap(c_a), veh/h	277	385	320	156	399	339	242	1387	608	208	1371	613
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.7	34.8	30.8	40.3	32.9	0.0	38.7	26.4	18.4	38.9	21.9	0.0
Incr Delay (d2), s/veh	21.9	27.4	0.8	35.9	7.5	0.0	19.2	11.8	0.2	33.2	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	11.5	2.9	4.9	7.7	0.0	5.3	17.4	2.3	6.4	8.3	0.0
LnGrp Delay(d),s/veh	62.5	62.3	31.6	76.2	40.4	0.0	57.9	38.2	18.6	72.1	22.6	0.0
LnGrp LOS	E	E	C	E	D		E	D	B	E	C	
Approach Vol, veh/h		722			433			1590			1008	
Approach Delay, s/veh		56.8			51.6			38.7			31.7	
Approach LOS		E			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	39.2	12.4	23.0	15.0	39.2	11.7	23.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2
Max Q Clear Time (g_c+I1), s	11.2	33.1	8.7	18.7	10.5	18.7	8.1	15.4
Green Ext Time (p_c), s	0.0	1.5	0.0	0.0	0.1	5.1	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	41.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	715	271	363	388	0	80	0	67	0	3	0
Future Volume (veh/h)	1	715	271	363	388	0	80	0	67	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	753	285	382	408	0	84	0	71	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	810	307	421	1999	0	414	0	363	0	465	0
Arrive On Green	0.00	0.34	0.34	0.24	0.58	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2418	915	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	530	508	382	408	0	84	0	71	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1629	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	23.5	23.5	16.6	4.4	0.0	4.1	0.0	3.0	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	23.5	23.5	16.6	4.4	0.0	4.2	0.0	3.0	0.0	0.1	0.0
Prop In Lane	1.00		0.56	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	571	546	421	1999	0	414	0	363	0	465	0
V/C Ratio(X)	0.43	0.93	0.93	0.91	0.20	0.00	0.20	0.00	0.20	0.00	0.01	0.00
Avail Cap(c_a), veh/h	109	578	553	457	1999	0	414	0	363	0	465	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.9	25.1	25.1	28.7	8.0	0.0	23.6	0.0	23.1	0.0	22.0	0.0
Incr Delay (d2), s/veh	91.1	21.5	22.3	20.7	0.0	0.0	1.1	0.0	1.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	14.3	13.8	10.4	2.1	0.0	1.6	0.0	1.3	0.0	0.1	0.0
LnGrp Delay(d),s/veh	130.0	46.6	47.4	49.4	8.0	0.0	24.7	0.0	24.3	0.0	22.0	0.0
LnGrp LOS	F	D	D	D	A		C		C		C	
Approach Vol, veh/h		1039			790			155			3	
Approach Delay, s/veh		47.0			28.0			24.5			22.0	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	23.4	30.7		24.0	4.6	49.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		6.2	18.6	25.5		2.1	2.0	6.4
Green Ext Time (p_c), s		0.5	0.3	0.7		0.0	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.7
HCM 2010 LOS	D

Appendix H

Level of Service

Calculations

Existing Plus Project

Apartments

Conditions

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	213	812	1011	17	21	432
Future Volume (vph)	213	812	1011	17	21	432
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.15	1.00	1.00		0.95	1.00
Satd. Flow (perm)	280	3504	3477		1770	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	234	892	1111	19	23	475
RTOR Reduction (vph)	0	0	0	0	0	173
Lane Group Flow (vph)	234	892	1130	0	23	302
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	58.0	58.0	44.9		18.1	18.1
Effective Green, g (s)	58.7	59.1	46.0		18.8	19.2
Actuated g/C Ratio	0.69	0.70	0.54		0.22	0.23
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	353	2439	1883		391	357
v/s Ratio Prot	c0.07	0.25	0.32		0.01	
v/s Ratio Perm	c0.39					c0.19
v/c Ratio	0.66	0.37	0.60		0.06	0.85
Uniform Delay, d1	9.2	5.3	13.2		26.1	31.4
Progression Factor	1.86	0.38	1.00		1.00	1.00
Incremental Delay, d2	4.4	0.1	0.6		0.0	16.5
Delay (s)	21.5	2.1	13.8		26.1	47.9
Level of Service	C	A	B		C	D
Approach Delay (s)		6.1	13.8		46.9	
Approach LOS		A	B		D	

Intersection Summary

HCM 2000 Control Delay	16.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	84.9	Sum of lost time (s)	11.6
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	878	0	0	1198	247	285	1	147	0	0	0
Future Volume (vph)	0	878	0	0	1198	247	285	1	147	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3397		1624	1629	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3397		1624	1629	1530			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	965	0	0	1316	271	313	1	162	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	126	0	0	0
Lane Group Flow (vph)	0	965	0	0	1587	0	156	158	36	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		58.0			44.9		18.1	18.1	18.1			
Effective Green, g (s)		59.1			46.0		18.8	18.8	18.8			
Actuated g/C Ratio		0.70			0.54		0.22	0.22	0.22			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2402			1840		359	360	338			
v/s Ratio Prot		c0.28			c0.47		0.10	c0.10				
v/s Ratio Perm									0.02			
v/c Ratio		0.40			0.86		0.43	0.44	0.11			
Uniform Delay, d1		5.4			16.7		28.5	28.5	26.4			
Progression Factor		1.00			0.67		1.00	1.00	1.00			
Incremental Delay, d2		0.2			3.5		0.8	0.9	0.1			
Delay (s)		5.6			14.8		29.3	29.4	26.5			
Level of Service		A			B		C	C	C			
Approach Delay (s)		5.6			14.8			28.4			0.0	
Approach LOS		A			B			C			A	

Intersection Summary

HCM 2000 Control Delay	14.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	84.9	Sum of lost time (s)	12.3
Intersection Capacity Utilization	55.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	967	1225	0	210	363
Future Volume (veh/h)	0	967	1225	0	210	363
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800
Adj Flow Rate, veh/h	0	1063	1346	0	231	399
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	4	2	0	4	4
Cap, veh/h	0	1658	1690	0	1123	516
Arrive On Green	0.00	0.48	0.48	0.00	0.34	0.34
Sat Flow, veh/h	0	3599	3670	0	3325	1530
Grp Volume(v), veh/h	0	1063	1346	0	231	399
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530
Q Serve(g_s), s	0.0	10.1	14.1	0.0	2.1	10.1
Cycle Q Clear(g_c), s	0.0	10.1	14.1	0.0	2.1	10.1
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1658	1690	0	1123	516
V/C Ratio(X)	0.00	0.64	0.80	0.00	0.21	0.77
Avail Cap(c_a), veh/h	0	2435	2483	0	1640	755
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	8.4	9.4	0.0	10.2	12.9
Incr Delay (d2), s/veh	0.0	0.2	0.7	0.0	0.1	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.8	6.7	0.0	1.0	4.6
LnGrp Delay(d),s/veh	0.0	8.5	10.0	0.0	10.3	15.3
LnGrp LOS		A	B		B	B
Approach Vol, veh/h		1063	1346		630	
Approach Delay, s/veh		8.5	10.0		13.5	
Approach LOS		A	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		25.1		18.2		25.1		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		12.1		12.1		16.1		
Green Ext Time (p_c), s		3.2		1.5		4.0		

Intersection Summary	
HCM 2010 Ctrl Delay	10.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	284	9	853	441	294	23	284	837	178	283	29
Future Volume (veh/h)	29	284	9	853	441	294	23	284	837	178	283	29
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	31	305	10	917	474	0	25	305	900	191	304	31
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	463	15	1146	1546	815	54	641	1430	266	736	74
Arrive On Green	0.04	0.14	0.15	0.34	0.45	0.00	0.03	0.18	0.18	0.08	0.23	0.24
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2717	3342	3151	319
Grp Volume(v), veh/h	31	154	161	917	474	0	25	305	900	191	165	170
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	1.7	8.1	8.2	22.7	8.1	0.0	1.3	7.3	6.6	5.1	7.5	7.6
Cycle Q Clear(g_c), s	1.7	8.1	8.2	22.7	8.1	0.0	1.3	7.3	6.6	5.1	7.5	7.6
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	59	234	244	1146	1546	815	54	641	1430	266	401	409
V/C Ratio(X)	0.52	0.66	0.66	0.80	0.31	0.00	0.47	0.48	0.63	0.72	0.41	0.42
Avail Cap(c_a), veh/h	131	819	853	1353	2835	1392	113	1308	1953	326	704	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	37.5	37.5	27.6	16.4	0.0	44.0	33.6	4.2	41.5	30.0	30.0
Incr Delay (d2), s/veh	2.7	6.5	6.4	3.9	0.2	0.0	2.3	0.5	0.5	9.0	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.1	4.3	11.2	3.9	0.0	0.7	3.5	3.3	2.7	3.6	3.8
LnGrp Delay(d),s/veh	46.4	44.0	43.9	31.6	16.7	0.0	46.3	34.2	4.7	50.5	30.7	30.6
LnGrp LOS	D	D	D	C	B		D	C	A	D	C	C
Approach Vol, veh/h		346			1391			1230			526	
Approach Delay, s/veh		44.2			26.5			12.8			37.8	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	37.3	18.6	8.8	27.5	8.8	47.1	13.3	23.0
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8
Max Q Clear Time (g_c+I1), s	24.7	10.2	3.3	9.6	3.7	10.1	7.1	9.3
Green Ext Time (p_c), s	6.6	2.9	0.0	1.3	0.0	5.4	0.2	7.1

Intersection Summary	
HCM 2010 Ctrl Delay	25.1
HCM 2010 LOS	C

Intersection												
Int Delay, s/veh	18.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	233	164	168	249	39	111	22	17	60	39	0
Future Vol, veh/h	0	233	164	168	249	39	111	22	17	60	39	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	271	191	195	290	45	129	26	20	70	45	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	335	0	0	462	0	0	996	996	271	1070	1142	290
Stage 1	-	-	-	-	-	-	271	271	-	680	680	-
Stage 2	-	-	-	-	-	-	725	725	-	390	462	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1176	-	-	1089	-	-	221	242	763	199	200	749
Stage 1	-	-	-	-	-	-	730	682	-	441	451	-
Stage 2	-	-	-	-	-	-	413	427	-	634	565	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1176	-	-	1089	-	-	151	199	763	151	164	749
Mov Cap-2 Maneuver	-	-	-	-	-	-	151	199	-	151	164	-
Stage 1	-	-	-	-	-	-	730	682	-	441	370	-
Stage 2	-	-	-	-	-	-	297	351	-	594	565	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.3	77.1	74.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	151	294	1176	-	-	1089	-	-	156	-
HCM Lane V/C Ratio	0.855	0.154	-	-	-	0.179	-	-	0.738	-
HCM Control Delay (s)	97.3	19.5	0	-	-	9	-	-	74.7	0
HCM Lane LOS	F	C	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	5.7	0.5	0	-	-	0.7	-	-	4.5	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	28	310	60	9	91	164	1019	14	120	962	19
Future Volume (veh/h)	34	28	310	60	9	91	164	1019	14	120	962	19
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	34	35	333	65	10	98	176	1096	15	129	1034	20
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	387	406	345	140	21	142	190	1703	23	160	1115	497
Arrive On Green	0.23	0.23	0.23	0.11	0.09	0.09	0.11	0.33	0.33	0.09	0.32	0.32
Sat Flow, veh/h	1707	1792	1522	1532	236	1563	1757	5119	70	1774	3539	1577
Grp Volume(v), veh/h	34	35	333	75	0	98	176	719	392	129	1034	20
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1832	1774	1770	1577
Q Serve(g_s), s	1.5	1.4	20.1	3.7	0.0	5.6	9.2	16.8	16.8	6.6	26.2	0.8
Cycle Q Clear(g_c), s	1.5	1.4	20.1	3.7	0.0	5.6	9.2	16.8	16.8	6.6	26.2	0.8
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	387	406	345	161	0	142	190	1117	609	160	1115	497
V/C Ratio(X)	0.09	0.09	0.97	0.47	0.00	0.69	0.93	0.64	0.64	0.80	0.93	0.04
Avail Cap(c_a), veh/h	387	406	345	477	0	422	190	1117	609	211	1146	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	28.2	35.4	39.3	0.0	40.8	41.0	26.2	26.2	41.3	30.7	22.0
Incr Delay (d2), s/veh	0.1	0.1	39.1	2.1	0.0	5.8	45.2	1.3	2.3	15.4	12.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.7	12.1	1.9	0.0	2.7	6.8	8.0	8.9	3.9	14.7	0.4
LnGrp Delay(d),s/veh	28.3	28.3	74.6	41.4	0.0	46.6	86.2	27.5	28.6	56.7	43.3	22.0
LnGrp LOS	C	C	E	D		D	F	C	C	E	D	C
Approach Vol, veh/h		402			173			1287			1183	
Approach Delay, s/veh		66.6			44.4			35.9			44.4	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.0	16.0	35.2		14.4	14.4	36.8
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0
Max Q Clear Time (g_c+I1), s		22.1	11.2	28.2		7.6	8.6	18.8
Green Ext Time (p_c), s		0.0	0.0	1.0		0.6	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	43.7
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1	26	595	3	130	8	918	486	206	1160	10
Future Volume (veh/h)	34	1	26	595	3	130	8	918	486	206	1160	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	36	1	28	633	3	138	9	977	517	219	1234	11
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	51	3	86	730	446	379	16	1367	612	201	1750	16
Arrive On Green	0.03	0.06	0.06	0.21	0.24	0.24	0.01	0.39	0.39	0.11	0.49	0.49
Sat Flow, veh/h	1774	55	1537	3408	1845	1568	1774	3539	1583	1757	3560	32
Grp Volume(v), veh/h	36	0	29	633	3	138	9	977	517	219	607	638
Grp Sat Flow(s),veh/h/ln	1774	0	1592	1704	1845	1568	1774	1770	1583	1757	1752	1839
Q Serve(g_s), s	1.4	0.0	1.2	12.5	0.1	5.1	0.4	16.4	20.8	8.0	18.8	18.9
Cycle Q Clear(g_c), s	1.4	0.0	1.2	12.5	0.1	5.1	0.4	16.4	20.8	8.0	18.8	18.9
Prop In Lane	1.00		0.97	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	51	0	89	730	446	379	16	1367	612	201	861	904
V/C Ratio(X)	0.71	0.00	0.32	0.87	0.01	0.36	0.55	0.71	0.85	1.09	0.71	0.71
Avail Cap(c_a), veh/h	102	0	91	780	446	379	102	1367	612	201	861	904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	0.0	31.7	26.5	20.1	22.0	34.5	18.2	19.5	30.9	13.8	13.8
Incr Delay (d2), s/veh	16.2	0.0	2.1	9.8	0.0	0.6	26.2	3.2	13.5	89.2	4.8	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.6	6.9	0.0	2.3	0.3	8.5	11.3	8.8	10.1	10.5
LnGrp Delay(d),s/veh	49.9	0.0	33.8	36.3	20.1	22.6	60.6	21.4	33.0	120.2	18.6	18.4
LnGrp LOS	D		C	D	C	C	E	C	C	F	B	B
Approach Vol, veh/h		65			774			1503			1464	
Approach Delay, s/veh		42.7			33.8			25.6			33.7	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	31.0	19.0	7.9	4.6	38.4	6.0	20.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	27.0	16.0	4.0	4.0	31.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	10.0	22.8	14.5	3.2	2.4	20.9	3.4	7.1
Green Ext Time (p_c), s	0.0	2.9	0.4	0.0	0.0	5.6	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	30.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	329	268	142	317	97	114	591	56	135	1145	224
Future Volume (veh/h)	140	329	268	142	317	97	114	591	56	135	1145	224
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	161	378	308	163	364	0	131	679	64	155	1316	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.11	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	161	378	308	163	364	0	131	679	64	155	1316	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.1	18.0	17.4	8.2	16.3	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Cycle Q Clear(g_c), s	4.1	18.0	17.4	8.2	16.3	0.0	6.5	13.3	2.4	7.6	32.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	200	393	329	186	478	406	151	1324	588	191	1404	628
V/C Ratio(X)	0.81	0.96	0.94	0.87	0.76	0.00	0.87	0.51	0.11	0.81	0.94	0.00
Avail Cap(c_a), veh/h	200	393	329	186	478	406	151	1324	588	305	1423	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.7	35.0	34.7	39.4	30.6	0.0	40.5	21.7	18.3	39.1	25.9	0.0
Incr Delay (d2), s/veh	20.9	35.3	33.7	33.8	7.1	0.0	38.4	0.3	0.1	8.5	11.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	13.1	10.6	5.7	9.2	0.0	4.8	6.6	1.0	4.2	17.8	0.0
LnGrp Delay(d),s/veh	62.6	70.2	68.4	73.2	37.7	0.0	78.9	22.0	18.4	47.6	37.8	0.0
LnGrp LOS	E	E	E	E	D		E	C	B	D	D	
Approach Vol, veh/h		847			527			874			1471	
Approach Delay, s/veh		68.1			48.7			30.3			38.8	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	38.0	14.0	23.4	12.1	40.0	9.7	27.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2
Max Q Clear Time (g_c+I1), s	9.6	15.3	10.2	20.0	8.5	34.0	6.1	18.3
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	1.6	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay	44.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	453	142	98	344	3	161	0	175	7	2	0
Future Volume (veh/h)	0	453	142	98	344	3	161	0	175	7	2	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	552	173	120	420	4	196	0	213	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	721	225	151	1515	14	680	0	576	420	81	0
Arrive On Green	0.00	0.28	0.28	0.09	0.46	0.46	0.37	0.00	0.37	0.37	0.37	0.00
Sat Flow, veh/h	1723	2580	806	1630	3301	31	1474	0	1568	800	221	0
Grp Volume(v), veh/h	0	367	358	120	207	217	196	0	213	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1667	1630	1626	1706	1474	0	1568	1022	0	0
Q Serve(g_s), s	0.0	10.1	10.2	3.7	4.1	4.1	0.0	0.0	5.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.1	10.2	3.7	4.1	4.1	4.1	0.0	5.1	4.1	0.0	0.0
Prop In Lane	1.00		0.48	1.00		0.02	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	480	466	151	746	783	680	0	576	502	0	0
V/C Ratio(X)	0.00	0.76	0.77	0.80	0.28	0.28	0.29	0.00	0.37	0.02	0.00	0.00
Avail Cap(c_a), veh/h	167	598	580	299	746	783	680	0	576	502	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.1	17.1	23.0	8.7	8.7	11.7	0.0	12.0	10.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	4.6	4.9	9.2	0.2	0.2	1.1	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.4	5.3	2.1	1.8	1.9	2.2	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	21.7	22.0	32.2	8.9	8.9	12.7	0.0	13.8	10.6	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		725			544			409			11	
Approach Delay, s/veh		21.8			14.0			13.3			10.6	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.5	9.3	19.0		23.5	0.0	28.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5
Max Q Clear Time (g_c+I1), s		7.1	5.7	12.2		6.1	0.0	6.1
Green Ext Time (p_c), s		1.5	0.1	2.3		0.0	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	17.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	555	99	165	346	3	99	1	106	1	1	0
Future Volume (veh/h)	1	555	99	165	346	3	99	1	106	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	638	114	190	398	3	114	1	122	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	807	144	234	1403	11	595	5	507	315	284	0
Arrive On Green	0.00	0.28	0.28	0.14	0.42	0.42	0.34	0.34	0.34	0.34	0.34	0.00
Sat Flow, veh/h	1723	2916	520	1660	3369	25	1383	14	1509	644	846	0
Grp Volume(v), veh/h	1	376	376	190	196	205	115	0	122	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1718	1660	1656	1739	1397	0	1509	1490	0	0
Q Serve(g_s), s	0.0	11.1	11.1	6.1	4.3	4.3	0.0	0.0	3.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.1	11.1	6.1	4.3	4.3	2.7	0.0	3.2	2.7	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	476	475	234	690	724	600	0	507	599	0	0
V/C Ratio(X)	0.32	0.79	0.79	0.81	0.28	0.28	0.19	0.00	0.24	0.00	0.00	0.00
Avail Cap(c_a), veh/h	157	565	564	306	698	733	600	0	507	599	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.3	18.3	18.4	22.8	10.6	10.6	13.0	0.0	13.1	12.1	0.0	0.0
Incr Delay (d2), s/veh	49.6	6.3	6.4	11.8	0.2	0.2	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.1	6.1	3.6	2.0	2.1	1.3	0.0	1.5	0.0	0.0	0.0
LnGrp Delay(d),s/veh	76.9	24.7	24.8	34.6	10.8	10.8	13.7	0.0	14.3	12.1	0.0	0.0
LnGrp LOS	E	C	C	C	B	B	B		B	B		
Approach Vol, veh/h		753			591			237			2	
Approach Delay, s/veh		24.8			18.4			14.0			12.1	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	12.2	19.7		22.9	4.6	27.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.2	8.1	13.1		4.7	2.0	6.3
Green Ext Time (p_c), s		0.8	0.1	2.0		0.0	0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	20.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	503	647	29	129	553	238	40	259	70	181	363	586
Future Volume (veh/h)	503	647	29	129	553	238	40	259	70	181	363	586
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	519	667	30	133	570	0	41	267	72	187	374	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	610	981	44	167	704	315	67	686	181	225	632	537
Arrive On Green	0.18	0.28	0.28	0.10	0.20	0.00	0.04	0.25	0.25	0.13	0.34	0.00
Sat Flow, veh/h	3442	3450	155	1740	3471	1553	1740	2717	719	1757	1845	1568
Grp Volume(v), veh/h	519	342	355	133	570	0	41	169	170	187	374	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1835	1740	1736	1553	1740	1736	1700	1757	1845	1568
Q Serve(g_s), s	11.0	12.9	12.9	5.6	11.8	0.0	1.7	6.1	6.3	7.8	12.6	0.0
Cycle Q Clear(g_c), s	11.0	12.9	12.9	5.6	11.8	0.0	1.7	6.1	6.3	7.8	12.6	0.0
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	610	503	522	167	704	315	67	438	429	225	632	537
V/C Ratio(X)	0.85	0.68	0.68	0.80	0.81	0.00	0.62	0.39	0.40	0.83	0.59	0.00
Avail Cap(c_a), veh/h	663	541	561	220	830	371	116	438	429	245	632	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.0	23.9	23.9	33.3	28.6	0.0	35.7	23.3	23.4	32.0	20.4	0.0
Incr Delay (d2), s/veh	9.7	3.1	3.1	14.1	5.2	0.0	8.9	2.5	2.7	19.5	4.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	6.7	7.0	3.3	6.1	0.0	1.0	3.2	3.3	5.0	7.0	0.0
LnGrp Delay(d),s/veh	39.7	27.0	27.0	47.4	33.8	0.0	44.6	25.8	26.1	51.5	24.5	0.0
LnGrp LOS	D	C	C	D	C		D	C	C	D	C	
Approach Vol, veh/h		1216			703			380			561	
Approach Delay, s/veh		32.4			36.4			28.0			33.5	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	23.5	11.7	25.9	7.4	30.3	17.8	19.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0
Max Q Clear Time (g_c+I1), s	9.8	8.3	7.6	14.9	3.7	14.6	13.0	13.8
Green Ext Time (p_c), s	0.0	1.4	0.1	2.7	0.0	1.6	0.4	1.5

Intersection Summary	
HCM 2010 Ctrl Delay	33.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	384	97	290	293	257	32	408	348	209	539	83
Future Volume (veh/h)	109	384	97	290	293	257	32	408	348	209	539	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	125	441	111	333	337	295	37	469	400	240	620	95
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	757	289	374	624	526	63	839	387	323	1554	479
Arrive On Green	0.09	0.21	0.21	0.21	0.33	0.33	0.04	0.25	0.25	0.09	0.31	0.31
Sat Flow, veh/h	1774	3539	1352	1774	1863	1569	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	125	441	111	333	337	295	37	469	400	240	620	95
Grp Sat Flow(s),veh/h/ln	1774	1770	1352	1774	1863	1569	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	5.3	8.6	5.4	14.0	11.3	11.8	1.6	9.3	19.0	5.2	7.4	3.4
Cycle Q Clear(g_c), s	5.3	8.6	5.4	14.0	11.3	11.8	1.6	9.3	19.0	5.2	7.4	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	757	289	374	624	526	63	839	387	323	1554	479
V/C Ratio(X)	0.79	0.58	0.38	0.89	0.54	0.56	0.59	0.56	1.03	0.74	0.40	0.20
Avail Cap(c_a), veh/h	254	829	317	404	624	526	136	839	387	336	1554	479
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	27.1	25.8	29.5	20.7	20.9	36.5	25.2	28.9	33.9	21.1	19.7
Incr Delay (d2), s/veh	8.3	0.9	0.8	20.2	0.9	1.4	8.4	2.7	54.3	8.3	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	4.3	2.1	8.9	6.0	5.3	0.9	4.7	13.9	2.8	3.6	1.6
LnGrp Delay(d),s/veh	42.6	28.0	26.7	49.7	21.7	22.3	44.9	27.9	83.2	42.2	21.9	20.6
LnGrp LOS	D	C	C	D	C	C	D	C	F	D	C	C
Approach Vol, veh/h		677			965			906			955	
Approach Delay, s/veh		30.5			31.5			53.0			26.9	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	23.5	20.7	20.9	7.2	28.0	11.4	30.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5
Max Q Clear Time (g_c+I1), s	7.2	21.0	16.0	10.6	3.6	9.4	7.3	13.8
Green Ext Time (p_c), s	0.0	0.0	0.2	2.0	0.0	3.5	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	35.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	393	95	132	548	88	71	488	112	192	736	160
Future Volume (veh/h)	179	393	95	132	548	88	71	488	112	192	736	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	201	442	107	148	616	99	80	548	126	216	827	180
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	775	186	186	740	119	195	973	431	277	1259	272
Arrive On Green	0.14	0.27	0.27	0.10	0.24	0.24	0.06	0.28	0.28	0.08	0.30	0.30
Sat Flow, veh/h	1774	2827	679	1774	3052	489	3408	3505	1551	3442	4185	905
Grp Volume(v), veh/h	201	275	274	148	357	358	80	548	126	216	669	338
Grp Sat Flow(s),veh/h/ln	1774	1770	1736	1774	1770	1771	1704	1752	1551	1721	1695	1700
Q Serve(g_s), s	7.6	9.2	9.3	5.6	13.1	13.1	1.6	9.2	4.4	4.2	11.8	11.9
Cycle Q Clear(g_c), s	7.6	9.2	9.3	5.6	13.1	13.1	1.6	9.2	4.4	4.2	11.8	11.9
Prop In Lane	1.00		0.39	1.00		0.28	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	242	485	476	186	429	430	195	973	431	277	1020	511
V/C Ratio(X)	0.83	0.57	0.57	0.80	0.83	0.83	0.41	0.56	0.29	0.78	0.66	0.66
Avail Cap(c_a), veh/h	246	485	476	231	465	466	249	973	431	277	1020	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	21.3	21.4	29.9	24.6	24.6	31.2	21.2	19.4	30.9	20.8	20.9
Incr Delay (d2), s/veh	20.4	1.5	1.7	14.4	11.4	11.6	1.4	2.4	1.7	13.4	3.3	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	4.6	4.6	3.5	7.7	7.8	0.8	4.7	2.1	2.5	5.9	6.5
LnGrp Delay(d),s/veh	49.2	22.9	23.1	44.3	36.0	36.2	32.5	23.5	21.2	44.3	24.1	27.5
LnGrp LOS	D	C	C	D	D	D	C	C	C	D	C	C
Approach Vol, veh/h		750			863			754			1223	
Approach Delay, s/veh		30.0			37.5			24.1			28.6	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	23.5	11.7	23.3	8.4	25.1	13.8	21.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0
Max Q Clear Time (g_c+I1), s	6.2	11.2	7.6	11.3	3.6	13.9	9.6	15.1
Green Ext Time (p_c), s	0.0	2.5	0.0	2.0	0.0	3.1	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	30.1
HCM 2010 LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	444	1348	886	30	37	312
Future Volume (vph)	444	1348	886	30	37	312
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3469		1770	1583
Flt Permitted	0.17	1.00	1.00		0.95	1.00
Satd. Flow (perm)	321	3504	3469		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	448	1362	895	30	37	315
RTOR Reduction (vph)	0	0	0	0	0	240
Lane Group Flow (vph)	448	1362	925	0	37	75
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	58.5	58.5	37.4		19.6	19.6
Effective Green, g (s)	59.2	59.6	38.5		20.3	20.7
Actuated g/C Ratio	0.68	0.69	0.44		0.23	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	501	2403	1536		413	377
v/s Ratio Prot	c0.18	0.39	0.27		0.02	
v/s Ratio Perm	c0.43					c0.05
v/c Ratio	0.89	0.57	0.60		0.09	0.20
Uniform Delay, d1	17.4	7.0	18.4		26.1	26.5
Progression Factor	1.10	0.56	1.00		1.00	1.00
Incremental Delay, d2	14.2	0.3	0.8		0.1	0.2
Delay (s)	33.4	4.2	19.2		26.1	26.7
Level of Service	C	A	B		C	C
Approach Delay (s)		11.4	19.2		26.6	
Approach LOS		B	B		C	

Intersection Summary

HCM 2000 Control Delay	15.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	86.9	Sum of lost time (s)	11.6
Intersection Capacity Utilization	65.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1435	0	0	969	229	425	3	357	0	0	0
Future Volume (vph)	0	1435	0	0	969	229	425	3	357	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3368		1656	1661	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3368		1656	1661	1560			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1527	0	0	1031	244	452	3	380	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1527	0	0	1275	0	226	229	323	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		58.5			37.4		19.6	19.6	19.6			
Effective Green, g (s)		59.6			38.5		20.3	20.3	20.3			
Actuated g/C Ratio		0.69			0.44		0.23	0.23	0.23			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2390			1492		386	388	364			
v/s Ratio Prot		c0.44			c0.38		0.14	0.14				
v/s Ratio Perm									c0.21			
v/c Ratio		0.64			0.85		0.59	0.59	0.89			
Uniform Delay, d1		7.6			21.7		29.6	29.6	32.2			
Progression Factor		1.00			0.45		1.00	1.00	1.00			
Incremental Delay, d2		0.6			4.5		2.3	2.4	21.8			
Delay (s)		8.3			14.2		31.8	32.0	54.0			
Level of Service		A			B		C	C	D			
Approach Delay (s)		8.3			14.2			42.0			0.0	
Approach LOS		A			B			D			A	

Intersection Summary

HCM 2000 Control Delay	18.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	86.9	Sum of lost time (s)	12.3
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1442	1257	0	388	370
Future Volume (veh/h)	0	1442	1257	0	388	370
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835
Adj Flow Rate, veh/h	0	1502	1309	0	404	385
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1819	1819	0	1072	493
Arrive On Green	0.00	0.52	0.52	0.00	0.32	0.32
Sat Flow, veh/h	0	3670	3670	0	3390	1560
Grp Volume(v), veh/h	0	1502	1309	0	404	385
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560
Q Serve(g_s), s	0.0	17.2	13.7	0.0	4.4	10.6
Cycle Q Clear(g_c), s	0.0	17.2	13.7	0.0	4.4	10.6
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1819	1819	0	1072	493
V/C Ratio(X)	0.00	0.83	0.72	0.00	0.38	0.78
Avail Cap(c_a), veh/h	0	2490	2490	0	1314	605
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.5	8.7	0.0	12.6	14.7
Incr Delay (d2), s/veh	0.0	1.2	0.3	0.0	0.2	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.5	6.4	0.0	2.0	5.2
LnGrp Delay(d),s/veh	0.0	10.8	9.0	0.0	12.8	19.6
LnGrp LOS		B	A		B	B
Approach Vol, veh/h		1502	1309		789	
Approach Delay, s/veh		10.8	9.0		16.1	
Approach LOS		B	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.9		18.6		28.9		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		19.2		12.6		15.7		
Green Ext Time (p_c), s		4.6		1.4		4.1		

Intersection Summary	
HCM 2010 Ctrl Delay	11.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	327	7	752	348	527	12	499	1062	529	495	31
Future Volume (veh/h)	28	327	7	752	348	527	12	499	1062	529	495	31
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	29	341	7	783	362	0	12	520	1106	551	516	32
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	53	503	10	770	1199	809	29	844	1294	598	1340	83
Arrive On Green	0.03	0.15	0.16	0.23	0.35	0.00	0.02	0.24	0.24	0.18	0.40	0.41
Sat Flow, veh/h	1690	3379	69	3374	3470	1552	1756	3504	2759	3407	3351	207
Grp Volume(v), veh/h	29	170	178	783	362	0	12	520	1106	551	269	279
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	1.9	10.9	10.9	26.0	8.7	0.0	0.8	15.1	17.4	18.1	12.4	12.5
Cycle Q Clear(g_c), s	1.9	10.9	10.9	26.0	8.7	0.0	0.8	15.1	17.4	18.1	12.4	12.5
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	53	251	263	770	1199	809	29	844	1294	598	700	722
V/C Ratio(X)	0.54	0.68	0.68	1.02	0.30	0.00	0.41	0.62	0.85	0.92	0.38	0.39
Avail Cap(c_a), veh/h	104	688	719	770	1995	1165	93	1046	1453	598	738	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	45.9	45.9	43.9	27.2	0.0	55.4	38.5	8.7	46.2	24.2	24.2
Incr Delay (d2), s/veh	3.2	6.6	6.4	36.6	0.3	0.0	3.4	0.7	4.8	20.4	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	5.5	5.8	15.9	4.2	0.0	0.4	7.4	7.3	10.2	6.1	6.3
LnGrp Delay(d),s/veh	57.5	52.5	52.3	80.6	27.5	0.0	58.8	39.3	13.4	66.6	24.6	24.6
LnGrp LOS	E	D	D	F	C		E	D	B	E	C	C
Approach Vol, veh/h		377			1145			1638			1099	
Approach Delay, s/veh		52.8			63.8			22.0			45.6	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	22.5	7.9	51.5	9.1	45.4	26.0	33.4
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0
Max Q Clear Time (g_c+I1), s	28.0	12.9	2.8	14.5	3.9	10.7	20.1	19.4
Green Ext Time (p_c), s	0.0	3.2	0.0	2.2	0.0	3.9	0.0	7.7

Intersection Summary	
HCM 2010 Ctrl Delay	42.0
HCM 2010 LOS	D

Intersection												
Int Delay, s/veh	7.7											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	233	85	118	175	71	100	49	42	52	29	1
Future Vol, veh/h	6	233	85	118	175	71	100	49	42	52	29	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	6	245	89	124	184	75	105	52	44	55	31	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	260	0	0	340	0	0	757	771	251	783	785	194
Stage 1	-	-	-	-	-	-	263	263	-	433	433	-
Stage 2	-	-	-	-	-	-	494	508	-	350	352	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1265	-	-	1192	-	-	322	328	783	311	325	847
Stage 1	-	-	-	-	-	-	738	687	-	601	582	-
Stage 2	-	-	-	-	-	-	553	535	-	666	632	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1264	-	-	1186	-	-	268	290	779	233	288	840
Mov Cap-2 Maneuver	-	-	-	-	-	-	268	290	-	233	288	-
Stage 1	-	-	-	-	-	-	731	680	-	597	520	-
Stage 2	-	-	-	-	-	-	462	478	-	578	626	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.7	21.9	26.5
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	268	408	1264	-	-	1186	-	-	250	840
HCM Lane V/C Ratio	0.393	0.235	0.005	-	-	0.105	-	-	0.341	0.001
HCM Control Delay (s)	26.9	16.5	7.9	-	-	8.4	-	-	26.7	9.3
HCM Lane LOS	D	C	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	1.8	0.9	0	-	-	0.4	-	-	1.5	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	29	211	108	11	174	203	1309	17	210	964	40
Future Volume (veh/h)	90	29	211	108	11	174	203	1309	17	210	964	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	60	72	213	109	11	176	205	1322	17	212	974	40
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	305	257	237	24	230	238	1511	19	245	1046	465
Arrive On Green	0.17	0.17	0.17	0.16	0.15	0.15	0.13	0.29	0.29	0.14	0.30	0.30
Sat Flow, veh/h	1757	1845	1554	1618	163	1570	1774	5174	67	1774	3539	1572
Grp Volume(v), veh/h	60	72	213	120	0	176	205	866	473	212	974	40
Grp Sat Flow(s),veh/h/ln	1757	1845	1554	1782	0	1570	1774	1695	1851	1774	1770	1572
Q Serve(g_s), s	2.7	3.2	12.3	5.7	0.0	10.0	10.5	22.6	22.6	10.9	24.9	1.7
Cycle Q Clear(g_c), s	2.7	3.2	12.3	5.7	0.0	10.0	10.5	22.6	22.6	10.9	24.9	1.7
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	290	305	257	261	0	230	238	990	540	245	1046	465
V/C Ratio(X)	0.21	0.24	0.83	0.46	0.00	0.76	0.86	0.88	0.88	0.87	0.93	0.09
Avail Cap(c_a), veh/h	378	397	334	479	0	422	248	1021	557	248	1066	474
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	33.7	37.5	35.7	0.0	38.1	39.4	31.3	31.3	39.2	31.8	23.7
Incr Delay (d2), s/veh	0.3	0.4	12.6	1.3	0.0	5.2	24.4	8.4	14.2	25.7	13.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.6	6.2	2.9	0.0	4.7	6.7	11.7	13.7	7.0	14.1	0.8
LnGrp Delay(d),s/veh	33.9	34.1	50.1	36.9	0.0	43.4	63.8	39.7	45.5	64.9	45.7	23.7
LnGrp LOS	C	C	D	D		D	E	D	D	E	D	C
Approach Vol, veh/h		345			296			1544			1226	
Approach Delay, s/veh		44.0			40.8			44.7			48.3	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		21.4	18.5	33.5		19.6	18.8	33.1
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0
Max Q Clear Time (g_c+I1), s		14.3	12.5	26.9		12.0	12.9	24.6
Green Ext Time (p_c), s		0.7	0.0	0.6		1.0	0.0	2.0

Intersection Summary

HCM 2010 Ctrl Delay	45.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	6	15	428	11	225	26	1282	678	144	1012	34
Future Volume (veh/h)	20	6	15	428	11	225	26	1282	678	144	1012	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	22	7	16	470	12	247	29	1409	745	158	1112	37
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	31	70	572	385	327	44	1556	696	161	1768	59
Arrive On Green	0.02	0.06	0.06	0.17	0.21	0.21	0.02	0.44	0.44	0.09	0.51	0.51
Sat Flow, veh/h	1774	505	1154	3442	1863	1583	1774	3539	1583	1774	3496	116
Grp Volume(v), veh/h	22	0	23	470	12	247	29	1409	745	158	563	586
Grp Sat Flow(s),veh/h/ln	1774	0	1659	1721	1863	1583	1774	1770	1583	1774	1770	1842
Q Serve(g_s), s	0.8	0.0	0.9	8.7	0.3	9.7	1.1	24.4	29.0	5.9	15.2	15.2
Cycle Q Clear(g_c), s	0.8	0.0	0.9	8.7	0.3	9.7	1.1	24.4	29.0	5.9	15.2	15.2
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	36	0	100	572	385	327	44	1556	696	161	895	932
V/C Ratio(X)	0.62	0.00	0.23	0.82	0.03	0.76	0.65	0.91	1.07	0.98	0.63	0.63
Avail Cap(c_a), veh/h	108	0	201	626	452	384	108	1556	696	161	895	932
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.1	0.0	29.5	26.5	20.9	24.6	31.9	17.2	18.5	29.9	11.8	11.8
Incr Delay (d2), s/veh	16.0	0.0	1.2	8.0	0.0	7.0	15.1	9.1	54.4	64.4	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.4	4.7	0.2	4.8	0.7	13.7	23.1	5.7	8.2	8.5
LnGrp Delay(d),s/veh	48.1	0.0	30.7	34.5	20.9	31.6	47.0	26.3	72.9	94.3	15.2	15.0
LnGrp LOS	D		C	C	C	C	D	C	F	F	B	B
Approach Vol, veh/h		45			729			2183			1307	
Approach Delay, s/veh		39.2			33.3			42.5			24.7	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	33.0	15.0	8.0	5.6	37.4	5.3	17.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	29.0	12.0	8.0	4.0	31.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	7.9	31.0	10.7	2.9	3.1	17.2	2.8	11.7
Green Ext Time (p_c), s	0.0	0.0	0.3	0.0	0.0	6.2	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	35.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	344	128	130	292	236	170	1230	131	177	791	157
Future Volume (veh/h)	227	344	128	130	292	236	170	1230	131	177	791	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	236	358	133	135	304	0	177	1281	136	184	824	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	385	320	156	399	339	212	1370	600	208	1363	610
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.12	0.39	0.39	0.12	0.39	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	236	358	133	135	304	0	177	1281	136	184	824	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.1	16.9	6.7	6.7	13.7	0.0	8.7	31.1	5.3	9.2	16.7	0.0
Cycle Q Clear(g_c), s	6.1	16.9	6.7	6.7	13.7	0.0	8.7	31.1	5.3	9.2	16.7	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	277	385	320	156	399	339	212	1370	600	208	1363	610
V/C Ratio(X)	0.85	0.93	0.42	0.86	0.76	0.00	0.84	0.94	0.23	0.88	0.60	0.00
Avail Cap(c_a), veh/h	277	385	320	156	399	339	242	1387	608	208	1363	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.7	34.9	30.8	40.3	33.0	0.0	38.6	26.4	18.4	38.9	22.1	0.0
Incr Delay (d2), s/veh	21.9	29.0	0.9	35.9	8.4	0.0	19.9	11.8	0.2	33.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	11.7	2.9	4.9	7.9	0.0	5.4	17.4	2.3	6.4	8.3	0.0
LnGrp Delay(d),s/veh	62.5	63.9	31.7	76.2	41.4	0.0	58.5	38.2	18.6	72.1	22.8	0.0
LnGrp LOS	E	E	C	E	D		E	D	B	E	C	
Approach Vol, veh/h		727			439			1594			1008	
Approach Delay, s/veh		57.6			52.1			38.8			31.8	
Approach LOS		E			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	39.2	12.4	23.0	15.2	39.0	11.7	23.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2
Max Q Clear Time (g_c+I1), s	11.2	33.1	8.7	18.9	10.7	18.7	8.1	15.7
Green Ext Time (p_c), s	0.0	1.5	0.0	0.0	0.1	5.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	42.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	820	145	89	375	4	89	2	165	5	0	1
Future Volume (veh/h)	0	820	145	89	375	4	89	2	165	5	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	837	148	91	383	4	91	2	168	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	990	175	114	1675	17	598	12	524	440	11	66
Arrive On Green	0.00	0.35	0.35	0.07	0.49	0.49	0.34	0.34	0.34	0.34	0.00	0.34
Sat Flow, veh/h	1691	2866	507	1675	3389	35	1368	34	1524	934	32	193
Grp Volume(v), veh/h	0	493	492	91	189	198	93	0	168	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1686	1675	1671	1753	1403	0	1524	1159	0	0
Q Serve(g_s), s	0.0	15.0	15.0	3.0	3.6	3.6	0.0	0.0	4.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.0	15.0	3.0	3.6	3.6	2.1	0.0	4.5	2.1	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.02	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	583	583	114	826	867	610	0	524	517	0	0
V/C Ratio(X)	0.00	0.85	0.85	0.80	0.23	0.23	0.15	0.00	0.32	0.01	0.00	0.00
Avail Cap(c_a), veh/h	152	634	634	196	826	867	610	0	524	517	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	16.8	16.8	25.5	8.0	8.0	12.7	0.0	13.5	12.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.6	9.6	12.1	0.1	0.1	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.5	8.5	1.7	1.7	1.7	1.1	0.0	2.1	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	26.4	26.4	37.6	8.1	8.1	13.2	0.0	15.1	12.1	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		985			478			261			6	
Approach Delay, s/veh		26.4			13.8			14.4			12.1	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.6	8.3	23.7		23.6	0.0	32.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4
Max Q Clear Time (g_c+I1), s		6.5	5.0	17.0		4.1	0.0	5.6
Green Ext Time (p_c), s		0.8	0.0	2.2		0.0	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay	21.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	716	277	364	388	0	80	0	67	0	3	0
Future Volume (veh/h)	1	716	277	364	388	0	80	0	67	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	754	292	383	408	0	84	0	71	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	806	312	422	2003	0	413	0	363	0	464	0
Arrive On Green	0.00	0.34	0.34	0.24	0.58	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2400	929	1740	3563	0	1287	0	1455	0	1863	0
Grp Volume(v), veh/h	1	535	511	383	408	0	84	0	71	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1627	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	23.8	23.8	16.7	4.4	0.0	4.1	0.0	3.0	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	23.8	23.8	16.7	4.4	0.0	4.2	0.0	3.0	0.0	0.1	0.0
Prop In Lane	1.00		0.57	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	572	546	422	2003	0	413	0	363	0	464	0
V/C Ratio(X)	0.43	0.94	0.94	0.91	0.20	0.00	0.20	0.00	0.20	0.00	0.01	0.00
Avail Cap(c_a), veh/h	109	577	551	456	2003	0	413	0	363	0	464	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.0	25.2	25.2	28.8	7.9	0.0	23.7	0.0	23.2	0.0	22.1	0.0
Incr Delay (d2), s/veh	91.1	22.7	23.5	20.9	0.0	0.0	1.1	0.0	1.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	14.7	14.2	10.4	2.1	0.0	1.6	0.0	1.3	0.0	0.1	0.0
LnGrp Delay(d),s/veh	130.1	47.8	48.7	49.7	8.0	0.0	24.8	0.0	24.4	0.0	22.1	0.0
LnGrp LOS	F	D	D	D	A		C		C		C	
Approach Vol, veh/h		1047			791			155			3	
Approach Delay, s/veh		48.3			28.2			24.6			22.1	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	23.5	30.8		24.0	4.6	49.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		6.2	18.7	25.8		2.1	2.0	6.4
Green Ext Time (p_c), s		0.5	0.3	0.5		0.0	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	38.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	474	628	11	78	677	271	34	288	150	226	259	510
Future Volume (veh/h)	474	628	11	78	677	271	34	288	150	226	259	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	494	654	11	81	705	0	35	300	156	235	270	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	541	1156	19	104	793	355	59	553	280	254	657	558
Arrive On Green	0.16	0.32	0.32	0.06	0.23	0.00	0.03	0.25	0.25	0.14	0.36	0.00
Sat Flow, veh/h	3442	3562	60	1757	3505	1568	1757	2252	1143	1757	1845	1568
Grp Volume(v), veh/h	494	325	340	81	705	0	35	232	224	235	270	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1852	1757	1752	1568	1757	1752	1643	1757	1845	1568
Q Serve(g_s), s	11.2	12.1	12.1	3.6	15.5	0.0	1.6	9.1	9.5	10.5	8.8	0.0
Cycle Q Clear(g_c), s	11.2	12.1	12.1	3.6	15.5	0.0	1.6	9.1	9.5	10.5	8.8	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	541	574	601	104	793	355	59	430	403	254	657	558
V/C Ratio(X)	0.91	0.57	0.57	0.78	0.89	0.00	0.59	0.54	0.56	0.92	0.41	0.00
Avail Cap(c_a), veh/h	541	574	601	144	816	365	113	430	403	254	657	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.0	22.2	22.2	36.9	29.8	0.0	37.8	26.1	26.2	33.6	19.3	0.0
Incr Delay (d2), s/veh	19.9	1.3	1.2	16.8	11.6	0.0	8.9	4.8	5.4	36.7	1.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	6.1	6.3	2.2	8.7	0.0	0.9	4.9	4.9	7.7	4.8	0.0
LnGrp Delay(d),s/veh	52.9	23.5	23.4	53.7	41.4	0.0	46.8	30.9	31.7	70.3	21.2	0.0
LnGrp LOS	D	C	C	D	D		D	C	C	E	C	
Approach Vol, veh/h		1159			786			491			505	
Approach Delay, s/veh		36.0			42.7			32.4			44.0	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	24.0	9.2	30.3	7.2	32.8	17.0	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	19.5	6.5	24.5	5.1	25.9	12.5	18.5
Max Q Clear Time (g_c+I1), s	12.5	11.5	5.6	14.1	3.6	10.8	13.2	17.5
Green Ext Time (p_c), s	0.0	1.7	0.0	3.0	0.0	1.3	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	38.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	216	60	217	216	234	107	933	236	181	1078	219
Future Volume (veh/h)	195	216	60	217	216	234	107	933	236	181	1078	219
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	203	225	62	226	225	244	111	972	246	189	1123	228
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	247	694	302	271	390	327	141	1239	313	277	1566	478
Arrive On Green	0.14	0.20	0.20	0.15	0.21	0.21	0.08	0.31	0.31	0.08	0.31	0.31
Sat Flow, veh/h	1774	3539	1542	1774	1863	1561	1774	4033	1018	3442	5085	1552
Grp Volume(v), veh/h	203	225	62	226	225	244	111	817	401	189	1123	228
Grp Sat Flow(s),veh/h/ln	1774	1770	1542	1774	1863	1561	1774	1695	1660	1721	1695	1552
Q Serve(g_s), s	7.6	3.7	2.3	8.5	7.4	10.0	4.2	15.0	15.1	3.7	13.4	8.1
Cycle Q Clear(g_c), s	7.6	3.7	2.3	8.5	7.4	10.0	4.2	15.0	15.1	3.7	13.4	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	247	694	302	271	390	327	141	1042	510	277	1566	478
V/C Ratio(X)	0.82	0.32	0.20	0.83	0.58	0.75	0.78	0.78	0.79	0.68	0.72	0.48
Avail Cap(c_a), veh/h	312	932	406	324	504	422	169	1042	510	277	1566	478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	23.6	23.0	28.1	24.3	25.3	30.9	21.6	21.6	30.6	21.0	19.2
Incr Delay (d2), s/veh	13.0	0.3	0.3	14.6	1.3	5.2	18.1	5.9	11.6	6.7	2.9	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	1.8	1.0	5.2	4.0	4.7	2.8	7.9	8.6	2.0	6.7	3.9
LnGrp Delay(d),s/veh	41.6	23.8	23.3	42.7	25.6	30.5	49.0	27.5	33.2	37.3	23.9	22.6
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		490			695			1329			1540	
Approach Delay, s/veh		31.1			32.9			31.0			25.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.5	14.9	17.9	10.0	25.5	14.0	18.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5
Max Q Clear Time (g_c+I1), s	5.7	17.1	10.5	5.7	6.2	15.4	9.6	12.0
Green Ext Time (p_c), s	0.0	2.6	0.1	1.2	0.0	3.1	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay	29.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	613	81	160	498	168	138	880	184	297	835	206
Future Volume (veh/h)	219	613	81	160	498	168	138	880	184	297	835	206
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	223	626	83	163	508	171	141	898	188	303	852	210
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	804	106	194	576	193	215	1067	465	367	1403	343
Arrive On Green	0.14	0.26	0.26	0.11	0.22	0.22	0.06	0.30	0.30	0.11	0.35	0.35
Sat Flow, veh/h	1774	3136	415	1774	2601	871	3442	3539	1544	3442	4057	993
Grp Volume(v), veh/h	223	353	356	163	345	334	141	898	188	303	711	351
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1702	1721	1770	1544	1721	1695	1659
Q Serve(g_s), s	9.8	14.7	14.8	7.2	15.0	15.1	3.2	18.9	7.7	6.9	13.8	14.0
Cycle Q Clear(g_c), s	9.8	14.7	14.8	7.2	15.0	15.1	3.2	18.9	7.7	6.9	13.8	14.0
Prop In Lane	1.00		0.23	1.00		0.51	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	256	454	457	194	392	377	215	1067	465	367	1172	574
V/C Ratio(X)	0.87	0.78	0.78	0.84	0.88	0.89	0.66	0.84	0.40	0.82	0.61	0.61
Avail Cap(c_a), veh/h	256	462	466	194	400	385	238	1067	465	367	1172	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.3	27.5	27.5	34.8	30.0	30.0	36.5	26.0	22.1	34.8	21.6	21.6
Incr Delay (d2), s/veh	26.0	8.0	8.1	26.8	19.5	21.1	5.6	8.1	2.6	14.2	2.3	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	8.2	8.3	5.0	9.4	9.3	1.7	10.4	3.6	4.0	6.8	7.1
LnGrp Delay(d),s/veh	59.3	35.5	35.6	61.6	49.4	51.1	42.1	34.1	24.7	49.0	23.9	26.4
LnGrp LOS	E	D	D	E	D	D	D	C	C	D	C	C
Approach Vol, veh/h		932			842			1227			1365	
Approach Delay, s/veh		41.3			52.5			33.6			30.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	28.5	13.2	24.9	9.5	32.0	16.0	22.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0
Max Q Clear Time (g_c+I1), s	8.9	20.9	9.2	16.8	5.2	16.0	11.8	17.1
Green Ext Time (p_c), s	0.0	1.9	0.0	1.6	0.0	5.3	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	37.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	329	268	142	317	97	114	591	56	135	1145	224
Future Volume (veh/h)	140	329	268	142	317	97	114	591	56	135	1145	224
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	161	378	308	163	364	0	131	679	64	155	1316	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	240	431	360	196	504	428	164	1473	138	194	1670	0
Arrive On Green	0.07	0.23	0.23	0.11	0.27	0.00	0.09	0.31	0.31	0.11	0.33	0.00
Sat Flow, veh/h	3442	1863	1559	1757	1845	1568	1774	4728	442	1774	5253	0
Grp Volume(v), veh/h	161	378	308	163	364	0	131	485	258	155	1316	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1559	1757	1845	1568	1774	1695	1780	1774	1695	0
Q Serve(g_s), s	3.5	14.9	14.4	6.9	13.6	0.0	5.5	8.8	8.9	6.5	17.9	0.0
Cycle Q Clear(g_c), s	3.5	14.9	14.4	6.9	13.6	0.0	5.5	8.8	8.9	6.5	17.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.00
Lane Grp Cap(c), veh/h	240	431	360	196	504	428	164	1056	554	194	1670	0
V/C Ratio(X)	0.67	0.88	0.85	0.83	0.72	0.00	0.80	0.46	0.46	0.80	0.79	0.00
Avail Cap(c_a), veh/h	271	452	379	196	509	432	168	1056	554	310	1856	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.6	28.2	28.1	33.1	25.1	0.0	33.9	21.1	21.1	33.1	23.2	0.0
Incr Delay (d2), s/veh	5.3	17.0	16.6	25.0	5.0	0.0	22.8	0.3	0.6	7.4	2.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	9.7	7.9	4.7	7.6	0.0	3.7	4.2	4.5	3.6	8.6	0.0
LnGrp Delay(d),s/veh	39.9	45.2	44.6	58.2	30.0	0.0	56.7	21.4	21.7	40.5	25.3	0.0
LnGrp LOS	D	D	D	E	C		E	C	C	D	C	
Approach Vol, veh/h		847			527			874			1471	
Approach Delay, s/veh		44.0			38.7			26.8			26.9	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	28.2	13.0	22.1	11.5	29.5	9.8	25.3
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	13.3	21.7	8.5	18.5	7.2	27.8	6.0	21.0
Max Q Clear Time (g_c+I1), s	8.5	10.9	8.9	16.9	7.5	19.9	5.5	15.6
Green Ext Time (p_c), s	0.2	3.6	0.0	0.6	0.0	5.2	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	555	99	165	346	3	99	1	106	1	1	0
Future Volume (veh/h)	1	555	99	165	346	3	99	1	106	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	638	114	190	398	3	114	1	122	1	1	0
Adj No. of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	885	396	235	1339	10	614	5	523	327	295	0
Arrive On Green	0.00	0.26	0.26	0.14	0.40	0.40	0.35	0.35	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	3438	1538	1660	3369	25	1381	14	1509	649	851	0
Grp Volume(v), veh/h	1	638	114	190	196	205	115	0	122	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1538	1660	1656	1739	1395	0	1509	1501	0	0
Q Serve(g_s), s	0.0	9.0	3.2	5.9	4.3	4.3	0.0	0.0	3.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	9.0	3.2	5.9	4.3	4.3	2.5	0.0	3.0	2.5	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	885	396	235	658	691	619	0	523	622	0	0
V/C Ratio(X)	0.31	0.72	0.29	0.81	0.30	0.30	0.19	0.00	0.23	0.00	0.00	0.00
Avail Cap(c_a), veh/h	162	1166	522	316	721	757	619	0	523	622	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.5	18.0	15.8	22.1	10.9	10.9	12.1	0.0	12.3	11.3	0.0	0.0
Incr Delay (d2), s/veh	46.4	1.5	0.4	10.8	0.2	0.2	0.7	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	4.4	1.4	3.4	2.0	2.1	1.3	0.0	1.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	72.8	19.5	16.2	32.8	11.2	11.2	12.8	0.0	13.4	11.4	0.0	0.0
LnGrp LOS	E	B	B	C	B	B	B		B	B		
Approach Vol, veh/h		753			591			237			2	
Approach Delay, s/veh		19.1			18.1			13.1			11.3	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	12.0	18.2		22.9	4.6	25.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.0	7.9	11.0		4.5	2.0	6.3
Green Ext Time (p_c), s		0.8	0.1	2.7		0.0	0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	17.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	344	128	130	292	236	170	1230	131	177	791	157
Future Volume (veh/h)	227	344	128	130	292	236	170	1230	131	177	791	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	236	358	133	135	304	0	177	1281	136	184	824	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	318	413	344	168	417	355	216	1517	161	221	1670	0
Arrive On Green	0.09	0.22	0.22	0.09	0.22	0.00	0.12	0.33	0.33	0.12	0.33	0.00
Sat Flow, veh/h	3442	1863	1551	1774	1863	1583	1774	4657	494	1774	5253	0
Grp Volume(v), veh/h	236	358	133	135	304	0	177	933	484	184	824	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1551	1774	1863	1583	1774	1695	1761	1774	1695	0
Q Serve(g_s), s	5.2	14.3	5.6	5.8	11.7	0.0	7.5	19.7	19.7	7.8	10.0	0.0
Cycle Q Clear(g_c), s	5.2	14.3	5.6	5.8	11.7	0.0	7.5	19.7	19.7	7.8	10.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.28	1.00		0.00
Lane Grp Cap(c), veh/h	318	413	344	168	417	355	216	1104	573	221	1670	0
V/C Ratio(X)	0.74	0.87	0.39	0.80	0.73	0.00	0.82	0.84	0.84	0.83	0.49	0.00
Avail Cap(c_a), veh/h	335	447	372	172	447	380	264	1160	603	221	1670	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.1	28.9	25.6	34.2	27.8	0.0	33.1	24.2	24.2	33.0	20.8	0.0
Incr Delay (d2), s/veh	8.1	15.5	0.7	22.7	5.5	0.0	15.4	5.7	10.3	23.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	9.1	2.5	3.9	6.6	0.0	4.6	10.1	11.2	5.2	4.7	0.0
LnGrp Delay(d),s/veh	42.2	44.5	26.3	56.9	33.3	0.0	48.5	29.9	34.5	56.1	21.0	0.0
LnGrp LOS	D	D	C	E	C		D	C	C	E	C	
Approach Vol, veh/h		727			439			1594			1008	
Approach Delay, s/veh		40.4			40.6			33.3			27.4	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	29.6	11.8	21.6	13.9	29.8	11.6	21.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	9.6	26.4	7.5	18.5	11.5	24.5	7.5	18.5
Max Q Clear Time (g_c+I1), s	9.8	21.7	7.8	16.3	9.5	12.0	7.2	13.7
Green Ext Time (p_c), s	0.0	3.4	0.0	0.6	0.1	4.6	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	34.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	716	277	364	388	0	80	0	67	0	3	0
Future Volume (veh/h)	1	716	277	364	388	0	80	0	67	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	754	292	383	408	0	84	0	71	0	3	0
Adj No. of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	994	444	429	1864	0	452	0	397	0	508	0
Arrive On Green	0.00	0.29	0.29	0.25	0.54	0.00	0.27	0.00	0.27	0.00	0.27	0.00
Sat Flow, veh/h	1707	3406	1521	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	754	292	383	408	0	84	0	71	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1521	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	14.4	12.0	15.2	4.4	0.0	3.6	0.0	2.7	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	14.4	12.0	15.2	4.4	0.0	3.7	0.0	2.7	0.0	0.1	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	994	444	429	1864	0	452	0	397	0	508	0
V/C Ratio(X)	0.42	0.76	0.66	0.89	0.22	0.00	0.19	0.00	0.18	0.00	0.01	0.00
Avail Cap(c_a), veh/h	119	1262	564	499	2039	0	452	0	397	0	508	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	35.7	23.0	22.2	26.0	8.7	0.0	20.3	0.0	19.9	0.0	18.9	0.0
Incr Delay (d2), s/veh	87.9	2.1	1.9	16.6	0.1	0.0	0.9	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.0	5.3	9.2	2.1	0.0	1.4	0.0	1.2	0.0	0.0	0.0
LnGrp Delay(d),s/veh	123.5	25.1	24.1	42.6	8.7	0.0	21.2	0.0	20.9	0.0	19.0	0.0
LnGrp LOS	F	C	C	D	A		C		C		B	
Approach Vol, veh/h		1047			791			155			3	
Approach Delay, s/veh		24.9			25.1			21.0			19.0	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	22.1	25.4		24.0	4.6	42.9
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		5.7	17.2	16.4		2.1	2.0	6.4
Green Ext Time (p_c), s		0.5	0.4	4.5		0.0	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay	24.7
HCM 2010 LOS	C

Appendix I

Background Growth

Derivation

Background Growth Derivation

Int	Source	Year	AM Peak Hour NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R	Total	Net Change Total	Net Change Per Year	% Change Total	% Change Per Year	Average/yr
1. Adams Street / West Laurel Drive																				
	KHTE Counts	2019	0	0	0	21	0	432	210	804	0	0	1,008	17	2,492					
	Casa Boronda	2014	0	0	0	40	0	465	193	660	0	0	874	18	2,250	242	48	10.756%	2.151%	2.319%
	WASP	2016	0	0	0	25	0	495	174	722	0	0	887	16	2,319	173	58	7.460%	2.487%	
2. US 101 Northbound Ramps / West Laurel Drive																				
	KHTE Counts	2019	283	1	147	0	0	0	0	867	289	0	1,193	247	3,027					
	Casa Boronda	2014	197	0	137	0	0	0	0	716	291	0	1,136	203	2,680	347	69	12.948%	2.590%	3.074%
	WASP	2016	244	0	116	0	0	0	0	778	227	0	1,156	214	2,735	292	97	10.676%	3.559%	
3. US 101 Southbound Offramp / West Laurel Drive																				
	KHTE Counts	2019	0	0	0	210	0	360	0	946	325	0	1,220	256	3,317					
	Casa Boronda	2014	0	0	0	185	0	361	0	822	245	0	1,066	267	2,946	371	74	12.593%	2.519%	1.939%
	WASP	2016	0	0	0	191	0	360	0	844	255	0	1,155	382	3,187	130	43	4.079%	1.360%	
4. North Davis Road / Calle Del Adobe - West Laurel Drive																				
	KHTE Counts	2019	23	280	809	178	282	29	29	284	9	845	441	294	3,503					
	Casa Boronda	2014	14	276	707	167	224	16	19	193	10	807	306	314	3,053	450	90	14.740%	2.948%	5.831%
	WASP	2016	13	265	784	138	227	16	20	214	16	821	1	262	2,777	726	242	26.143%	8.714%	
5. Post Drive - El Rancho Way / Calle Del Adobe																				
	KHTE Counts	2019	111	22	17	60	39	0	0	233	164	168	249	39	1,102					
	Casa Boronda	2014	88	26	17	48	41	1	2	129	103	128	132	42	757	345	69	45.575%	9.115%	
6. North Davis Road / Post Drive - Commercial Driveway																				
	KHTE Counts	2019	164	987	12	120	953	19	34	28	310	60	9	91	2,787					
	Casa Boronda	2014	120	911	8	106	917	26	29	18	264	42	13	56	2,510	277	55	11.036%	2.207%	

Int	Source	Year	PM Peak Hour NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R	Total	Net Change Total	Net Change Per Year	% Change Total	% Change Per Year	Average/yr
1. Adams Street / West Laurel Drive																				
	KHTE Counts	2019	0	0	0	37	0	309	442	1,343	0	0	878	30	3,039					
	Casa Boronda	2014	0	0	0	36	0	316	471	1,334	0	0	841	31	3,029	10	2	0.330%	0.066%	0.547%
	WASP	2016	0	0	0	34	0	285	471	1,320	0	0	813	25	2,948	91	30	3.087%	1.029%	
2. US 101 Northbound Ramps / West Laurel Drive																				
	KHTE Counts	2019	418	3	357	0	0	0	0	1,428	389	0	958	229	3,782					
	Casa Boronda	2014	406	0	348	0	0	0	0	1,457	369	0	939	218	3,737	45	9	1.204%	0.241%	0.638%
	WASP	2016	361	0	348	0	0	0	0	1,414	460	0	866	219	3,668	114	38	3.108%	1.036%	
3. US 101 Southbound Offramp / West Laurel Drive																				
	KHTE Counts	2019	0	0	0	388	0	360	0	1,429	472	0	1,239	137	4,025					
	Casa Boronda	2014	0	0	0	342	0	347	0	1,484	401	0	1,193	152	3,919	106	21	2.705%	0.541%	1.147%
	WASP	2016	0	0	0	356	0	339	0	1,518	364	0	1,150	97	3,824	201	67	5.256%	1.752%	
4. North Davis Road / Calle Del Adobe - West Laurel Drive																				
	KHTE Counts	2019	12	497	1,045	529	491	31	28	327	7	724	348	527	4,566					
	Casa Boronda	2014	17	476	1,040	545	487	32	35	300	12	696	309	535	4,484	82	16	1.829%	0.366%	0.970%
	WASP	2016	22	472	994	571	450	36	42	300	10	645	308	510	4,360	206	69	4.725%	1.575%	
5. Post Drive - El Rancho Way / Calle Del Adobe																				
	KHTE Counts	2019	100	49	42	52	29	1	6	233	85	118	175	71	961					
	Casa Boronda	2014	88	53	32	74	25	1	2	175	63	119	134	79	845	116	23	13.728%	2.746%	
6. North Davis Road / Post Drive - Commercial Driveway																				
	KHTE Counts	2019	203	1,290	16	210	932	40	90	29	211	106	11	174	3,312					
	Casa Boronda	2014	201	911	8	106	917	26	29	18	264	42	13	56	2,591	721	144	27.827%	5.565%	

Notes:

1. Data Sources:
   KHTE Counts - May 2019 traffic counts from Keith Higgins Traffic Engineer - see **Appendix C** for this data.
   Casa Boronda - *Casa Boronda Agricultural Employee Housing Project,* Keith Higgins Traffic Engineer, July 3, 2017.
   WASP - *The Draft West Area Specific Plan Transportation Impact Analysis,* Fehr & Peers, June 2018.
2. Red text is estimated from adjacent intersection.

Appendix J

Level of Service

Calculations

Background

Conditions

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	231	884	1106	19	23	475
Future Volume (vph)	231	884	1106	19	23	475
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.12	1.00	1.00		0.95	1.00
Satd. Flow (perm)	227	3504	3477		1770	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	254	971	1215	21	25	522
RTOR Reduction (vph)	0	0	0	0	0	158
Lane Group Flow (vph)	254	971	1236	0	25	364
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	47.4		20.6	20.6
Effective Green, g (s)	61.1	61.5	48.5		21.3	21.7
Actuated g/C Ratio	0.68	0.68	0.54		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	308	2399	1877		419	382
v/s Ratio Prot	c0.08	0.28	0.36		0.01	
v/s Ratio Perm	c0.48					c0.23
v/c Ratio	0.82	0.40	0.66		0.06	0.95
Uniform Delay, d1	15.3	6.2	14.7		26.5	33.5
Progression Factor	1.74	0.38	1.00		1.00	1.00
Incremental Delay, d2	15.1	0.1	0.9		0.0	33.5
Delay (s)	41.7	2.5	15.7		26.5	67.1
Level of Service	D	A	B		C	E
Approach Delay (s)		10.6	15.7		65.2	
Approach LOS		B	B		E	

Intersection Summary

HCM 2000 Control Delay	22.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	89.8	Sum of lost time (s)	11.6
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	954	0	0	1312	272	311	1	162	0	0	0
Future Volume (vph)	0	954	0	0	1312	272	311	1	162	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3396		1624	1629	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3396		1624	1629	1530			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1048	0	0	1442	299	342	1	178	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	111	0	0	0
Lane Group Flow (vph)	0	1048	0	0	1741	0	171	172	67	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			47.4		20.6	20.6	20.6			
Effective Green, g (s)		61.5			48.5		21.3	21.3	21.3			
Actuated g/C Ratio		0.68			0.54		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2364			1834		385	386	362			
v/s Ratio Prot		c0.30			c0.51		0.11	c0.11				
v/s Ratio Perm									0.04			
v/c Ratio		0.44			0.95		0.44	0.45	0.19			
Uniform Delay, d1		6.4			19.5		29.2	29.2	27.3			
Progression Factor		1.00			0.69		1.00	1.00	1.00			
Incremental Delay, d2		0.2			8.0		0.8	0.8	0.3			
Delay (s)		6.6			21.4		30.0	30.0	27.6			
Level of Service		A			C		C	C	C			
Approach Delay (s)		6.6			21.4			29.2			0.0	
Approach LOS		A			C			C			A	

Intersection Summary

HCM 2000 Control Delay	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	89.8	Sum of lost time (s)	12.3
Intersection Capacity Utilization	60.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1041	1342	0	231	396
Future Volume (veh/h)	0	1041	1342	0	231	396
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800
Adj Flow Rate, veh/h	0	1144	1475	0	254	435
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	4	2	0	4	4
Cap, veh/h	0	1712	1746	0	1149	529
Arrive On Green	0.00	0.50	0.50	0.00	0.35	0.35
Sat Flow, veh/h	0	3599	3670	0	3325	1530
Grp Volume(v), veh/h	0	1144	1475	0	254	435
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530
Q Serve(g_s), s	0.0	12.6	18.4	0.0	2.7	13.0
Cycle Q Clear(g_c), s	0.0	12.6	18.4	0.0	2.7	13.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1712	1746	0	1149	529
V/C Ratio(X)	0.00	0.67	0.84	0.00	0.22	0.82
Avail Cap(c_a), veh/h	0	2107	2149	0	1419	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.4	10.8	0.0	11.6	15.0
Incr Delay (d2), s/veh	0.0	0.3	2.3	0.0	0.1	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.0	9.2	0.0	1.2	6.4
LnGrp Delay(d),s/veh	0.0	9.7	13.1	0.0	11.7	21.4
LnGrp LOS		A	B		B	C
Approach Vol, veh/h		1144	1475		689	
Approach Delay, s/veh		9.7	13.1		17.8	
Approach LOS		A	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		29.2		20.9		29.2		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		14.6		15.0		20.4		
Green Ext Time (p_c), s		3.4		1.3		3.8		

Intersection Summary	
HCM 2010 Ctrl Delay	12.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	312	10	930	485	323	25	308	890	196	310	32
Future Volume (veh/h)	32	312	10	930	485	323	25	308	890	196	310	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	34	335	11	1000	522	0	27	331	957	211	333	34
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	61	488	16	1162	1585	838	55	654	1453	277	755	77
Arrive On Green	0.04	0.15	0.16	0.34	0.46	0.00	0.03	0.19	0.19	0.08	0.24	0.25
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2718	3342	3151	320
Grp Volume(v), veh/h	34	169	177	1000	522	0	27	331	957	211	181	186
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	2.0	9.7	9.7	27.6	9.6	0.0	1.5	8.6	7.8	6.2	8.9	9.0
Cycle Q Clear(g_c), s	2.0	9.7	9.7	27.6	9.6	0.0	1.5	8.6	7.8	6.2	8.9	9.0
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	61	247	257	1162	1585	838	55	654	1453	277	412	420
V/C Ratio(X)	0.56	0.68	0.69	0.86	0.33	0.00	0.49	0.51	0.66	0.76	0.44	0.44
Avail Cap(c_a), veh/h	121	757	788	1249	2618	1300	104	1209	1887	301	650	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	40.3	40.3	30.5	17.3	0.0	47.6	36.4	4.8	44.9	32.3	32.2
Incr Delay (d2), s/veh	3.0	7.0	6.8	6.8	0.3	0.0	2.5	0.6	0.5	12.6	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	4.9	5.1	13.9	4.6	0.0	0.8	4.1	4.1	3.3	4.3	4.4
LnGrp Delay(d),s/veh	50.3	47.3	47.1	37.3	17.6	0.0	50.1	37.0	5.3	57.5	33.0	33.0
LnGrp LOS	D	D	D	D	B		D	D	A	E	C	C
Approach Vol, veh/h		380			1522			1315			578	
Approach Delay, s/veh		47.4			30.6			14.2			41.9	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	40.4	20.4	9.2	29.9	9.2	51.6	14.3	24.8
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8
Max Q Clear Time (g_c+I1), s	29.6	11.7	3.5	11.0	4.0	11.6	8.2	10.6
Green Ext Time (p_c), s	4.8	3.2	0.0	1.4	0.0	6.1	0.1	7.6

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Intersection												
Int Delay, s/veh	38.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	256	180	185	274	43	122	24	19	66	43	0
Future Vol, veh/h	0	256	180	185	274	43	122	24	19	66	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	298	209	215	319	50	142	28	22	77	50	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	369	0	0	507	0	0	1097	1097	298	1177	1256	319
Stage 1	-	-	-	-	-	-	298	298	-	749	749	-
Stage 2	-	-	-	-	-	-	799	799	-	428	507	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1142	-	-	1048	-	-	189	211	737	168	171	722
Stage 1	-	-	-	-	-	-	706	663	-	404	419	-
Stage 2	-	-	-	-	-	-	376	395	-	605	539	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1142	-	-	1048	-	-	~ 115	168	737	120	136	722
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 115	168	-	120	136	-
Stage 1	-	-	-	-	-	-	706	663	-	404	333	-
Stage 2	-	-	-	-	-	-	254	314	-	562	539	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	176.5	148.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	115	255	1142	-	-	1048	-	-	126	-
HCM Lane V/C Ratio	1.234	0.196	-	-	-	0.205	-	-	1.006	-
HCM Control Delay (s)	230.8	22.5	0	-	-	9.3	-	-	148.6	0
HCM Lane LOS	F	C	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	9.2	0.7	0	-	-	0.8	-	-	6.9	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	31	341	66	10	100	180	1086	13	132	1048	21
Future Volume (veh/h)	37	31	341	66	10	100	180	1086	13	132	1048	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	36	38	367	71	11	108	194	1168	14	142	1127	23
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	381	400	339	149	23	152	187	1676	20	174	1128	503
Arrive On Green	0.22	0.22	0.22	0.11	0.10	0.10	0.11	0.33	0.33	0.10	0.32	0.32
Sat Flow, veh/h	1707	1792	1522	1531	237	1563	1757	5130	61	1774	3539	1577
Grp Volume(v), veh/h	36	38	367	82	0	108	194	764	418	142	1127	23
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1834	1774	1770	1577
Q Serve(g_s), s	1.6	1.6	21.0	4.1	0.0	6.3	10.0	18.7	18.7	7.4	30.0	0.9
Cycle Q Clear(g_c), s	1.6	1.6	21.0	4.1	0.0	6.3	10.0	18.7	18.7	7.4	30.0	0.9
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	381	400	339	172	0	152	187	1097	599	174	1128	503
V/C Ratio(X)	0.09	0.10	1.08	0.48	0.00	0.71	1.04	0.70	0.70	0.82	1.00	0.05
Avail Cap(c_a), veh/h	381	400	339	469	0	415	187	1097	599	207	1128	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	29.0	36.6	39.6	0.0	41.2	42.1	27.6	27.6	41.6	32.1	22.2
Incr Delay (d2), s/veh	0.1	0.1	72.4	2.0	0.0	6.0	76.7	1.9	3.5	19.0	26.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	15.6	2.1	0.0	3.0	8.8	8.9	10.0	4.5	18.7	0.4
LnGrp Delay(d),s/veh	29.1	29.1	109.0	41.6	0.0	47.2	118.9	29.6	31.2	60.7	58.7	22.2
LnGrp LOS	C	C	F	D		D	F	C	C	E	E	C
Approach Vol, veh/h		441			190			1376			1292	
Approach Delay, s/veh		95.6			44.8			42.7			58.3	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.0	16.0	36.0		15.2	15.2	36.8
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0
Max Q Clear Time (g_c+I1), s		23.0	12.0	32.0		8.3	9.4	20.7
Green Ext Time (p_c), s		0.0	0.0	0.0		0.6	0.1	3.6

Intersection Summary

HCM 2010 Ctrl Delay	56.0
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	655	0	143	0	1010	535	227	1276	0
Future Volume (veh/h)	0	0	0	655	0	143	0	1010	535	227	1276	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1845	1845	1900	0	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	0	0	0	697	0	152	0	1074	569	241	1357	0
Adj No. of Lanes	0	1	0	2	1	0	0	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	0	2	2	3	3	3
Cap, veh/h	0	479	0	1150	0	403	0	1281	573	268	2070	0
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.00	0.36	0.36	0.15	0.59	0.00
Sat Flow, veh/h	0	1863	0	3408	0	1568	0	3632	1583	1757	3597	0
Grp Volume(v), veh/h	0	0	0	697	0	152	0	1074	569	241	1357	0
Grp Sat Flow(s),veh/h/ln	0	1863	0	1704	0	1568	0	1770	1583	1757	1752	0
Q Serve(g_s), s	0.0	0.0	0.0	10.0	0.0	4.2	0.0	14.6	18.8	7.1	13.6	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	10.0	0.0	4.2	0.0	14.6	18.8	7.1	13.6	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	479	0	1150	0	403	0	1281	573	268	2070	0
V/C Ratio(X)	0.00	0.00	0.00	0.61	0.00	0.38	0.00	0.84	0.99	0.90	0.66	0.00
Avail Cap(c_a), veh/h	0	568	0	1313	0	478	0	1281	573	268	2070	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	18.2	0.0	16.0	0.0	15.3	16.7	21.9	7.2	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.6	0.0	0.6	0.0	6.7	35.9	30.4	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	4.7	0.0	1.9	0.0	8.2	13.8	5.7	6.9	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	18.8	0.0	16.6	0.0	22.0	52.5	52.3	8.8	0.0
LnGrp LOS				B		B		C	D	D	A	
Approach Vol, veh/h		0			849			1643			1598	
Approach Delay, s/veh		0.0			18.5			32.6			15.4	
Approach LOS					B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	12.0	23.0		17.5		35.0		17.5
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s	8.0	19.0		16.0		31.0		16.0
Max Q Clear Time (g_c+I1), s	9.1	20.8		0.0		15.6		12.0
Green Ext Time (p_c), s	0.0	0.0		0.0		8.6		1.5

Intersection Summary	
HCM 2010 Ctrl Delay	22.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	354	290	156	347	107	124	650	62	149	1260	246
Future Volume (veh/h)	154	354	290	156	347	107	124	650	62	149	1260	246
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	177	407	333	179	399	0	143	747	71	171	1448	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.12	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1570	1774	3539	1583
Grp Volume(v), veh/h	177	407	333	179	399	0	143	747	71	171	1448	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1570	1774	1770	1583
Q Serve(g_s), s	4.6	18.9	18.9	9.1	18.4	0.0	7.2	15.2	2.7	8.5	36.0	0.0
Cycle Q Clear(g_c), s	4.6	18.9	18.9	9.1	18.4	0.0	7.2	15.2	2.7	8.5	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
V/C Ratio(X)	0.89	1.04	1.02	0.97	0.84	0.00	0.95	0.57	0.12	0.82	1.02	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1301	577	304	1416	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.1	35.5	35.5	40.1	31.6	0.0	41.0	22.8	18.8	38.8	27.0	0.0
Incr Delay (d2), s/veh	35.4	56.4	54.7	55.8	12.6	0.0	59.8	0.6	0.1	11.3	29.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	15.8	13.1	7.3	11.0	0.0	6.0	7.5	1.2	4.8	23.4	0.0
LnGrp Delay(d),s/veh	77.5	92.0	90.3	95.9	44.2	0.0	100.8	23.4	18.9	50.1	56.9	0.0
LnGrp LOS	E	F	F	F	D		F	C	B	D	F	
Approach Vol, veh/h		917			578			961			1619	
Approach Delay, s/veh		88.6			60.2			34.6			56.2	
Approach LOS		F			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	37.6	14.0	23.4	12.1	40.5	9.7	27.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2
Max Q Clear Time (g_c+I1), s	10.5	17.2	11.1	20.9	9.2	38.0	6.6	20.4
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	58.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	496	156	108	378	3	169	0	191	7	2	0
Future Volume (veh/h)	0	496	156	108	378	3	169	0	191	7	2	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	605	190	132	461	4	206	0	233	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	752	236	166	1578	14	655	0	556	388	74	0
Arrive On Green	0.00	0.29	0.29	0.10	0.48	0.48	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2578	808	1630	3304	29	1467	0	1568	749	210	0
Grp Volume(v), veh/h	0	403	392	132	227	238	206	0	233	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1667	1630	1626	1707	1467	0	1568	959	0	0
Q Serve(g_s), s	0.0	11.6	11.7	4.2	4.5	4.5	0.0	0.0	6.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.6	11.7	4.2	4.5	4.5	4.9	0.0	6.0	4.9	0.0	0.0
Prop In Lane	1.00		0.48	1.00		0.02	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	502	487	166	776	815	655	0	556	462	0	0
V/C Ratio(X)	0.00	0.80	0.81	0.80	0.29	0.29	0.31	0.00	0.42	0.02	0.00	0.00
Avail Cap(c_a), veh/h	161	577	560	289	776	815	655	0	556	462	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	17.6	23.5	8.5	8.5	12.7	0.0	13.1	11.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	7.1	7.5	8.4	0.2	0.2	1.3	0.0	2.3	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.5	6.3	2.3	2.1	2.2	2.5	0.0	2.9	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	24.7	25.0	32.0	8.7	8.7	14.0	0.0	15.4	11.5	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		795			597			439			11	
Approach Delay, s/veh		24.9			13.8			14.7			11.5	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.5	9.9	20.1		23.5	0.0	30.1
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5
Max Q Clear Time (g_c+I1), s		8.0	6.2	13.7		6.9	0.0	6.5
Green Ext Time (p_c), s		1.5	0.1	2.0		0.0	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	609	107	180	381	3	109	1	117	1	1	0
Future Volume (veh/h)	1	609	107	180	381	3	109	1	117	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	700	123	207	438	3	125	1	134	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	841	148	251	1475	10	577	4	488	296	267	0
Arrive On Green	0.00	0.29	0.29	0.15	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	2924	514	1660	3372	23	1393	13	1509	622	824	0
Grp Volume(v), veh/h	1	411	412	207	215	226	126	0	134	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1719	1660	1656	1739	1405	0	1509	1446	0	0
Q Serve(g_s), s	0.0	12.7	12.8	6.9	4.8	4.8	0.0	0.0	3.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	12.7	12.8	6.9	4.8	4.8	3.1	0.0	3.7	3.1	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	494	494	251	725	761	581	0	488	563	0	0
V/C Ratio(X)	0.33	0.83	0.83	0.82	0.30	0.30	0.22	0.00	0.27	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	544	544	295	725	761	581	0	488	563	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.4	19.0	19.0	23.4	10.3	10.3	14.1	0.0	14.3	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.6	9.8	9.9	15.0	0.2	0.2	0.9	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.4	7.4	4.2	2.2	2.3	1.6	0.0	1.7	0.0	0.0	0.0
LnGrp Delay(d),s/veh	82.0	28.8	28.9	38.4	10.6	10.6	14.9	0.0	15.7	13.0	0.0	0.0
LnGrp LOS	F	C	C	D	B	B	B		B	B		
Approach Vol, veh/h		824			648			260			2	
Approach Delay, s/veh		28.9			19.4			15.3			13.0	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	13.1	20.8		22.9	4.6	29.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.7	8.9	14.8		5.1	2.0	6.8
Green Ext Time (p_c), s		0.9	0.1	1.6		0.0	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	23.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	551	712	32	142	608	260	44	284	77	191	395	637
Future Volume (veh/h)	551	712	32	142	608	260	44	284	77	191	395	637
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	568	734	33	146	627	0	45	293	79	197	407	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	635	1009	45	180	735	329	69	656	174	234	618	525
Arrive On Green	0.18	0.29	0.29	0.10	0.21	0.00	0.04	0.24	0.24	0.13	0.34	0.00
Sat Flow, veh/h	3442	3450	155	1740	3471	1553	1740	2716	720	1757	1845	1568
Grp Volume(v), veh/h	568	376	391	146	627	0	45	185	187	197	407	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1835	1740	1736	1553	1740	1736	1700	1757	1845	1568
Q Serve(g_s), s	12.7	15.0	15.0	6.5	13.7	0.0	2.0	7.1	7.3	8.6	14.8	0.0
Cycle Q Clear(g_c), s	12.7	15.0	15.0	6.5	13.7	0.0	2.0	7.1	7.3	8.6	14.8	0.0
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	635	518	537	180	735	329	69	420	411	234	618	525
V/C Ratio(X)	0.89	0.73	0.73	0.81	0.85	0.00	0.65	0.44	0.45	0.84	0.66	0.00
Avail Cap(c_a), veh/h	635	518	537	210	795	356	111	420	411	235	618	525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.3	25.0	25.0	34.5	29.8	0.0	37.2	25.3	25.4	33.3	22.3	0.0
Incr Delay (d2), s/veh	15.2	5.1	4.9	18.3	8.4	0.0	9.8	3.4	3.6	23.2	5.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	8.0	8.3	4.0	7.4	0.0	1.2	3.8	3.8	5.7	8.4	0.0
LnGrp Delay(d),s/veh	46.5	30.1	29.9	52.8	38.3	0.0	47.0	28.7	29.0	56.5	27.7	0.0
LnGrp LOS	D	C	C	D	D		D	C	C	E	C	
Approach Vol, veh/h		1335			773			417			604	
Approach Delay, s/veh		37.0			41.0			30.8			37.1	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	23.5	12.6	27.5	7.6	30.8	19.0	21.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0
Max Q Clear Time (g_c+I1), s	10.6	9.3	8.5	17.0	4.0	16.8	14.7	15.7
Green Ext Time (p_c), s	0.0	1.5	0.0	2.4	0.0	1.5	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	421	107	318	322	283	35	447	381	230	592	91
Future Volume (veh/h)	118	421	107	318	322	283	35	447	381	230	592	91
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	136	484	123	366	370	325	40	514	438	264	680	105
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	755	288	394	631	532	66	817	377	328	1522	469
Arrive On Green	0.10	0.21	0.21	0.22	0.34	0.34	0.04	0.24	0.24	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1352	1774	1863	1569	1774	3390	1566	3442	5085	1567
Grp Volume(v), veh/h	136	484	123	366	370	325	40	514	438	264	680	105
Grp Sat Flow(s),veh/h/ln	1774	1770	1352	1774	1863	1569	1774	1695	1566	1721	1695	1567
Q Serve(g_s), s	5.9	9.8	6.2	15.9	12.9	13.6	1.8	10.7	19.0	5.9	8.5	4.0
Cycle Q Clear(g_c), s	5.9	9.8	6.2	15.9	12.9	13.6	1.8	10.7	19.0	5.9	8.5	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	755	288	394	631	532	66	817	377	328	1522	469
V/C Ratio(X)	0.80	0.64	0.43	0.93	0.59	0.61	0.61	0.63	1.16	0.81	0.45	0.22
Avail Cap(c_a), veh/h	248	808	309	394	631	532	133	817	377	328	1522	469
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	28.3	26.8	30.0	21.5	21.7	37.4	26.8	29.9	34.9	22.3	20.7
Incr Delay (d2), s/veh	10.8	1.6	1.0	28.2	1.4	2.0	8.8	3.7	97.7	13.7	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	4.9	2.4	10.9	6.8	6.2	1.0	5.4	18.3	3.4	4.1	1.8
LnGrp Delay(d),s/veh	45.6	29.8	27.8	58.3	22.9	23.8	46.2	30.4	127.6	48.7	23.3	21.8
LnGrp LOS	D	C	C	E	C	C	D	C	F	D	C	C
Approach Vol, veh/h		743			1061			992			1049	
Approach Delay, s/veh		32.4			35.4			74.0			29.5	
Approach LOS		C			D			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	23.5	22.0	21.3	7.4	28.1	12.1	31.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5
Max Q Clear Time (g_c+I1), s	7.9	21.0	17.9	11.8	3.8	10.5	7.9	15.6
Green Ext Time (p_c), s	0.0	0.0	0.0	1.9	0.0	3.6	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	43.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	428	105	145	602	97	78	537	123	211	810	174
Future Volume (veh/h)	193	428	105	145	602	97	78	537	123	211	810	174
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	217	481	118	163	676	109	88	603	138	237	910	196
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	774	189	202	768	124	200	958	424	272	1231	264
Arrive On Green	0.14	0.27	0.27	0.11	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	2817	687	1774	3050	491	3408	3505	1551	3442	4192	899
Grp Volume(v), veh/h	217	301	298	163	392	393	88	603	138	237	735	371
Grp Sat Flow(s),veh/h/ln	1774	1770	1734	1774	1770	1771	1704	1752	1551	1721	1695	1701
Q Serve(g_s), s	8.4	10.3	10.5	6.2	14.8	14.8	1.7	10.5	4.9	4.7	13.6	13.7
Cycle Q Clear(g_c), s	8.4	10.3	10.5	6.2	14.8	14.8	1.7	10.5	4.9	4.7	13.6	13.7
Prop In Lane	1.00		0.40	1.00		0.28	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	242	486	477	202	446	446	200	958	424	272	996	500
V/C Ratio(X)	0.89	0.62	0.63	0.81	0.88	0.88	0.44	0.63	0.33	0.87	0.74	0.74
Avail Cap(c_a), veh/h	242	486	477	227	458	459	245	958	424	272	996	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	22.0	22.1	30.1	25.0	25.0	31.6	22.2	20.1	31.7	22.1	22.2
Incr Delay (d2), s/veh	31.6	2.4	2.6	17.4	17.3	17.5	1.5	3.1	2.0	24.8	4.9	9.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	5.3	5.3	4.0	9.3	9.4	0.9	5.4	2.3	3.2	7.0	7.7
LnGrp Delay(d),s/veh	61.2	24.4	24.6	47.4	42.3	42.5	33.1	25.3	22.2	56.4	27.0	31.8
LnGrp LOS	E	C	C	D	D	D	C	C	C	E	C	C
Approach Vol, veh/h		816			948			829			1343	
Approach Delay, s/veh		34.3			43.2			25.6			33.5	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	23.5	12.4	23.6	8.6	24.9	14.0	22.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0
Max Q Clear Time (g_c+I1), s	6.7	12.5	8.2	12.5	3.7	15.7	10.4	16.8
Green Ext Time (p_c), s	0.0	2.4	0.0	1.9	0.0	2.4	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	34.4
HCM 2010 LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	486	1477	966	33	41	340
Future Volume (vph)	486	1477	966	33	41	340
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3469		1770	1583
Flt Permitted	0.15	1.00	1.00		0.95	1.00
Satd. Flow (perm)	272	3504	3469		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	491	1492	976	33	41	343
RTOR Reduction (vph)	0	0	0	0	0	259
Lane Group Flow (vph)	491	1492	1009	0	41	84
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.3	60.3	39.3		20.8	20.8
Effective Green, g (s)	61.0	61.4	40.4		21.5	21.9
Actuated g/C Ratio	0.68	0.68	0.45		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	466	2393	1558		423	385
v/s Ratio Prot	c0.20	0.43	0.29		0.02	
v/s Ratio Perm	c0.51					c0.05
v/c Ratio	1.05	0.62	0.65		0.10	0.22
Uniform Delay, d1	22.5	7.9	19.2		26.6	27.2
Progression Factor	1.13	0.55	1.00		1.00	1.00
Incremental Delay, d2	48.2	0.4	1.0		0.1	0.2
Delay (s)	73.7	4.7	20.3		26.7	27.4
Level of Service	E	A	C		C	C
Approach Delay (s)		21.8	20.3		27.3	
Approach LOS		C	C		C	

Intersection Summary

HCM 2000 Control Delay	22.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	89.9	Sum of lost time (s)	11.6
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1571	0	0	1054	252	460	3	393	0	0	0
Future Volume (vph)	0	1571	0	0	1054	252	460	3	393	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3366		1656	1661	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3366		1656	1661	1560			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1671	0	0	1121	268	489	3	418	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1671	0	0	1389	0	244	248	361	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.3			39.3		20.8	20.8	20.8			
Effective Green, g (s)		61.4			40.4		21.5	21.5	21.5			
Actuated g/C Ratio		0.68			0.45		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2380			1512		396	397	373			
v/s Ratio Prot		c0.48			c0.41		0.15	0.15				
v/s Ratio Perm									c0.23			
v/c Ratio		0.70			0.92		0.62	0.62	0.97			
Uniform Delay, d1		8.7			23.2		30.5	30.6	33.9			
Progression Factor		1.00			0.44		1.00	1.00	1.00			
Incremental Delay, d2		1.0			7.9		2.8	3.1	37.7			
Delay (s)		9.7			18.2		33.4	33.6	71.5			
Level of Service		A			B		C	C	E			
Approach Delay (s)		9.7			18.2			51.0			0.0	
Approach LOS		A			B			D			A	

Intersection Summary

HCM 2000 Control Delay	22.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	89.9	Sum of lost time (s)	12.3
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1572	1363	0	427	396
Future Volume (veh/h)	0	1572	1363	0	427	396
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835
Adj Flow Rate, veh/h	0	1638	1420	0	445	412
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1883	1883	0	1073	494
Arrive On Green	0.00	0.54	0.54	0.00	0.32	0.32
Sat Flow, veh/h	0	3670	3670	0	3390	1560
Grp Volume(v), veh/h	0	1638	1420	0	445	412
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560
Q Serve(g_s), s	0.0	21.9	17.0	0.0	5.5	13.2
Cycle Q Clear(g_c), s	0.0	21.9	17.0	0.0	5.5	13.2
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1883	1883	0	1073	494
V/C Ratio(X)	0.00	0.87	0.75	0.00	0.41	0.83
Avail Cap(c_a), veh/h	0	2201	2201	0	1162	535
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	10.7	9.6	0.0	14.4	17.0
Incr Delay (d2), s/veh	0.0	3.2	1.0	0.0	0.2	10.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.1	8.2	0.0	2.6	7.0
LnGrp Delay(d),s/veh	0.0	13.9	10.6	0.0	14.6	27.0
LnGrp LOS		B	B		B	C
Approach Vol, veh/h		1638	1420		857	
Approach Delay, s/veh		13.9	10.6		20.6	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		33.1		20.6		33.1		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		23.9		15.2		19.0		
Green Ext Time (p_c), s		4.1		0.8		4.3		

Intersection Summary	
HCM 2010 Ctrl Delay	14.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	360	8	796	383	580	13	547	1150	582	540	34
Future Volume (veh/h)	31	360	8	796	383	580	13	547	1150	582	540	34
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	32	375	8	829	399	0	14	570	1198	606	562	35
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	56	538	11	745	1204	802	33	879	1301	578	1346	84
Arrive On Green	0.03	0.16	0.17	0.22	0.35	0.00	0.02	0.25	0.25	0.17	0.40	0.41
Sat Flow, veh/h	1690	3375	72	3374	3470	1552	1756	3504	2759	3407	3350	208
Grp Volume(v), veh/h	32	187	196	829	399	0	14	570	1198	606	293	304
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.0	20.0	14.2	14.2
Cycle Q Clear(g_c), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.0	20.0	14.2	14.2
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	56	269	281	745	1204	802	33	879	1301	578	704	726
V/C Ratio(X)	0.57	0.70	0.70	1.11	0.33	0.00	0.43	0.65	0.92	1.05	0.42	0.42
Avail Cap(c_a), veh/h	100	665	695	745	1929	1126	89	1011	1405	578	714	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	46.8	46.8	45.9	28.4	0.0	57.2	39.5	9.5	48.9	25.3	25.3
Incr Delay (d2), s/veh	3.4	6.8	6.5	68.7	0.3	0.0	3.2	1.2	9.7	50.5	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	6.3	6.6	19.1	4.8	0.0	0.5	8.5	9.2	13.4	6.9	7.2
LnGrp Delay(d),s/veh	59.6	53.6	53.4	114.6	28.7	0.0	60.4	40.7	19.2	99.5	25.7	25.7
LnGrp LOS	E	D	D	F	C		E	D	B	F	C	C
Approach Vol, veh/h		415			1228			1782			1203	
Approach Delay, s/veh		53.9			86.7			26.4			62.9	
Approach LOS		D			F			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	24.3	8.2	53.3	9.4	46.9	26.0	35.5
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0
Max Q Clear Time (g_c+I1), s	28.0	14.4	2.9	16.2	4.2	12.0	22.0	22.0
Green Ext Time (p_c), s	0.0	3.5	0.0	2.4	0.0	4.4	0.0	7.4

Intersection Summary	
HCM 2010 Ctrl Delay	54.4
HCM 2010 LOS	D

Intersection												
Int Delay, s/veh	9.5											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	256	94	130	193	78	110	54	46	57	32	1
Future Vol, veh/h	7	256	94	130	193	78	110	54	46	57	32	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	7	269	99	137	203	82	116	57	48	60	34	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	286	0	0	374	0	0	833	849	275	863	866	213
Stage 1	-	-	-	-	-	-	289	289	-	478	478	-
Stage 2	-	-	-	-	-	-	544	560	-	385	388	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1237	-	-	1158	-	-	286	296	759	275	291	827
Stage 1	-	-	-	-	-	-	714	669	-	568	556	-
Stage 2	-	-	-	-	-	-	520	507	-	638	609	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1236	-	-	1152	-	-	230	258	755	194	253	820
Mov Cap-2 Maneuver	-	-	-	-	-	-	230	258	-	194	253	-
Stage 1	-	-	-	-	-	-	706	662	-	565	489	-
Stage 2	-	-	-	-	-	-	423	446	-	543	602	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.8	27.5	34.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	230	370	1236	-	-	1152	-	-	212	820
HCM Lane V/C Ratio	0.503	0.284	0.006	-	-	0.119	-	-	0.442	0.001
HCM Control Delay (s)	35.5	18.6	7.9	-	-	8.5	-	-	34.8	9.4
HCM Lane LOS	E	C	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	2.6	1.2	0	-	-	0.4	-	-	2.1	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	32	232	117	12	191	223	1419	18	231	1025	44
Future Volume (veh/h)	99	32	232	117	12	191	223	1419	18	231	1025	44
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	66	80	234	118	12	193	225	1433	18	233	1035	44
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	323	272	251	26	244	238	1493	19	238	1021	453
Arrive On Green	0.18	0.18	0.18	0.17	0.16	0.16	0.13	0.29	0.29	0.13	0.29	0.29
Sat Flow, veh/h	1757	1845	1555	1617	164	1571	1774	5176	65	1774	3539	1572
Grp Volume(v), veh/h	66	80	234	130	0	193	225	939	512	233	1035	44
Grp Sat Flow(s),veh/h/ln	1757	1845	1555	1782	0	1571	1774	1695	1851	1774	1770	1572
Q Serve(g_s), s	3.1	3.6	14.2	6.4	0.0	11.5	12.2	26.5	26.5	12.7	28.0	2.0
Cycle Q Clear(g_c), s	3.1	3.6	14.2	6.4	0.0	11.5	12.2	26.5	26.5	12.7	28.0	2.0
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	308	323	272	277	0	244	238	978	534	238	1021	453
V/C Ratio(X)	0.21	0.25	0.86	0.47	0.00	0.79	0.95	0.96	0.96	0.98	1.01	0.10
Avail Cap(c_a), veh/h	362	380	320	459	0	405	238	978	534	238	1021	453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	34.5	38.9	36.7	0.0	39.5	41.7	34.0	34.0	41.9	34.5	25.3
Incr Delay (d2), s/veh	0.3	0.4	18.1	1.2	0.0	5.7	43.8	19.8	29.0	52.8	31.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.9	7.5	3.2	0.0	5.4	8.9	15.1	17.8	9.7	18.1	0.9
LnGrp Delay(d),s/veh	34.7	34.9	57.0	37.9	0.0	45.2	85.6	53.8	63.0	94.8	66.3	25.4
LnGrp LOS	C	C	E	D		D	F	D	E	F	F	C
Approach Vol, veh/h		380			323			1676			1312	
Approach Delay, s/veh		48.5			42.3			60.9			70.0	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.0	19.0	34.0		21.1	19.0	34.0
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0
Max Q Clear Time (g_c+I1), s		16.2	14.2	30.0		13.5	14.7	28.5
Green Ext Time (p_c), s		0.6	0.0	0.0		1.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	61.2
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	471	0	248	0	1410	746	158	1113	0
Future Volume (veh/h)	0	0	0	471	0	248	0	1410	746	158	1113	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1900	0	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	518	0	273	0	1549	820	174	1223	0
Adj No. of Lanes	0	1	0	2	1	0	0	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	0	2	2	2	2	2
Cap, veh/h	0	422	0	1032	0	358	0	1618	724	187	2240	0
Arrive On Green	0.00	0.00	0.00	0.23	0.00	0.23	0.00	0.46	0.46	0.11	0.63	0.00
Sat Flow, veh/h	0	1863	0	3442	0	1583	0	3632	1583	1774	3632	0
Grp Volume(v), veh/h	0	0	0	518	0	273	0	1549	820	174	1223	0
Grp Sat Flow(s),veh/h/ln	0	1863	0	1721	0	1583	0	1770	1583	1774	1770	0
Q Serve(g_s), s	0.0	0.0	0.0	7.8	0.0	9.2	0.0	24.0	26.0	5.5	11.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	7.8	0.0	9.2	0.0	24.0	26.0	5.5	11.0	0.0
Prop In Lane	0.00		0.00	1.00		1.00	0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	0	422	0	1032	0	358	0	1618	724	187	2240	0
V/C Ratio(X)	0.00	0.00	0.00	0.50	0.00	0.76	0.00	0.96	1.13	0.93	0.55	0.00
Avail Cap(c_a), veh/h	0	524	0	1222	0	445	0	1618	724	187	2240	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	20.0	0.0	20.6	0.0	14.9	15.4	25.2	5.9	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.4	0.0	6.0	0.0	14.3	76.3	46.1	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	3.7	0.0	4.5	0.0	14.8	26.4	5.1	5.6	0.0
LnGrp Delay(d),s/veh	0.0	0.0	0.0	20.4	0.0	26.6	0.0	29.2	91.8	71.3	6.8	0.0
LnGrp LOS				C		C		C	F	E	A	
Approach Vol, veh/h		0			791			2369			1397	
Approach Delay, s/veh		0.0			22.5			50.9			14.8	
Approach LOS					C			D			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		8
Phs Duration (G+Y+Rc), s	10.0	30.0		16.9		40.0		16.9
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s	6.0	26.0		16.0		36.0		16.0
Max Q Clear Time (g_c+I1), s	7.5	28.0		0.0		13.0		11.2
Green Ext Time (p_c), s	0.0	0.0		0.0		9.5		1.7

Intersection Summary	
HCM 2010 Ctrl Delay	34.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	374	139	143	314	260	183	1353	144	195	870	173
Future Volume (veh/h)	250	374	139	143	314	260	183	1353	144	195	870	173
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	260	390	145	149	327	0	191	1409	150	203	906	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	383	318	156	397	338	225	1380	605	207	1344	601
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.13	0.39	0.39	0.12	0.38	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	260	390	145	149	327	0	191	1409	150	203	906	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.8	18.5	7.4	7.5	15.1	0.0	9.5	35.1	5.9	10.3	19.2	0.0
Cycle Q Clear(g_c), s	6.8	18.5	7.4	7.5	15.1	0.0	9.5	35.1	5.9	10.3	19.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	383	318	156	397	338	225	1380	605	207	1344	601
V/C Ratio(X)	0.94	1.02	0.46	0.96	0.82	0.00	0.85	1.02	0.25	0.98	0.67	0.00
Avail Cap(c_a), veh/h	275	383	318	156	397	338	240	1380	605	207	1344	601
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.2	35.8	31.3	40.9	33.8	0.0	38.4	27.4	18.5	39.6	23.3	0.0
Incr Delay (d2), s/veh	39.4	50.8	1.0	59.1	13.1	0.0	22.7	29.6	0.2	56.9	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	14.9	3.3	6.2	9.2	0.0	6.0	22.7	2.5	8.3	9.6	0.0
LnGrp Delay(d),s/veh	80.6	86.6	32.4	100.0	46.8	0.0	61.2	57.0	18.7	96.5	24.6	0.0
LnGrp LOS	F	F	C	F	D		E	F	B	F	C	
Approach Vol, veh/h		795			476			1750			1109	
Approach Delay, s/veh		74.7			63.5			54.2			37.8	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	39.6	12.4	23.0	15.9	38.7	11.7	23.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2
Max Q Clear Time (g_c+I1), s	12.3	37.1	9.5	20.5	11.5	21.2	8.8	17.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	54.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	894	160	98	413	4	94	2	180	5	0	1
Future Volume (veh/h)	0	894	160	98	413	4	94	2	180	5	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	912	163	100	421	4	96	2	184	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1017	182	125	1727	16	583	11	509	419	11	63
Arrive On Green	0.00	0.36	0.36	0.07	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	2861	511	1675	3393	32	1374	33	1524	911	32	188
Grp Volume(v), veh/h	0	538	537	100	207	218	98	0	184	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1685	1675	1671	1754	1406	0	1524	1131	0	0
Q Serve(g_s), s	0.0	17.3	17.3	3.4	4.0	4.0	0.0	0.0	5.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.3	17.3	3.4	4.0	4.0	2.3	0.0	5.2	2.3	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.02	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	600	599	125	851	893	594	0	509	493	0	0
V/C Ratio(X)	0.00	0.90	0.90	0.80	0.24	0.24	0.17	0.00	0.36	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	616	616	190	851	893	594	0	509	493	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.4	17.5	26.0	7.9	7.9	13.5	0.0	14.4	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.6	15.7	12.7	0.1	0.1	0.6	0.0	2.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.5	10.5	2.0	1.9	2.0	1.2	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	33.0	33.1	38.7	8.0	8.0	14.1	0.0	16.4	12.8	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		1075			525			282			6	
Approach Delay, s/veh		33.1			13.9			15.6			12.8	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.6	8.8	24.8		23.6	0.0	33.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4
Max Q Clear Time (g_c+I1), s		7.2	5.4	19.3		4.3	0.0	6.0
Green Ext Time (p_c), s		0.9	0.0	1.1		0.0	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	787	297	399	427	0	88	0	74	0	3	0
Future Volume (veh/h)	1	787	297	399	427	0	88	0	74	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	828	313	420	449	0	93	0	78	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	802	302	446	2035	0	404	0	355	0	454	0
Arrive On Green	0.00	0.33	0.33	0.26	0.59	0.00	0.24	0.00	0.24	0.00	0.24	0.00
Sat Flow, veh/h	1707	2420	913	1740	3563	0	1287	0	1455	0	1863	0
Grp Volume(v), veh/h	1	582	559	420	449	0	93	0	78	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1630	1740	1736	0	1287	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	18.9	4.9	0.0	4.7	0.0	3.4	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	18.9	4.9	0.0	4.8	0.0	3.4	0.0	0.1	0.0
Prop In Lane	1.00		0.56	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	564	540	446	2035	0	404	0	355	0	454	0
V/C Ratio(X)	0.43	1.03	1.04	0.94	0.22	0.00	0.23	0.00	0.22	0.00	0.01	0.00
Avail Cap(c_a), veh/h	107	564	540	446	2035	0	404	0	355	0	454	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.9	26.7	26.8	29.2	7.9	0.0	24.7	0.0	24.2	0.0	22.9	0.0
Incr Delay (d2), s/veh	91.1	46.4	48.1	28.5	0.1	0.0	1.3	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	19.7	19.1	12.6	2.3	0.0	1.8	0.0	1.5	0.0	0.1	0.0
LnGrp Delay(d),s/veh	131.1	73.2	74.8	57.7	7.9	0.0	26.1	0.0	25.6	0.0	22.9	0.0
LnGrp LOS	F	F	F	E	A		C		C		C	
Approach Vol, veh/h		1142			869			171			3	
Approach Delay, s/veh		74.0			32.0			25.8			22.9	
Approach LOS		E			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	25.0	31.0		24.0	4.6	51.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		6.8	20.9	28.5		2.1	2.0	6.9
Green Ext Time (p_c), s		0.5	0.0	0.0		0.0	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	53.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	514	691	12	86	745	290	37	312	165	244	283	557
Future Volume (veh/h)	514	691	12	86	745	290	37	312	165	244	283	557
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	535	720	12	90	776	0	39	325	172	254	295	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	1148	19	115	810	363	64	545	282	253	648	551
Arrive On Green	0.16	0.32	0.32	0.07	0.23	0.00	0.04	0.24	0.24	0.14	0.35	0.00
Sat Flow, veh/h	3442	3562	59	1757	3505	1568	1757	2235	1158	1757	1845	1568
Grp Volume(v), veh/h	535	358	374	90	776	0	39	253	244	254	295	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1852	1757	1752	1568	1757	1752	1640	1757	1845	1568
Q Serve(g_s), s	12.4	13.7	13.7	4.0	17.5	0.0	1.8	10.2	10.6	11.5	9.9	0.0
Cycle Q Clear(g_c), s	12.4	13.7	13.7	4.0	17.5	0.0	1.8	10.2	10.6	11.5	9.9	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.71	1.00		1.00
Lane Grp Cap(c), veh/h	538	570	597	115	810	363	64	427	400	253	648	551
V/C Ratio(X)	0.99	0.63	0.63	0.78	0.96	0.00	0.61	0.59	0.61	1.01	0.46	0.00
Avail Cap(c_a), veh/h	538	570	597	143	810	363	112	427	400	253	648	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.7	23.0	23.0	36.8	30.4	0.0	38.0	26.7	26.9	34.3	20.0	0.0
Incr Delay (d2), s/veh	37.4	2.2	2.1	19.9	21.8	0.0	9.2	6.0	6.8	58.1	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	7.0	7.3	2.6	10.9	0.0	1.0	5.6	5.5	9.6	5.4	0.0
LnGrp Delay(d),s/veh	71.1	25.2	25.1	56.7	52.2	0.0	47.2	32.7	33.6	92.4	22.3	0.0
LnGrp LOS	E	C	C	E	D		D	C	C	F	C	
Approach Vol, veh/h		1267			866			536			549	
Approach Delay, s/veh		44.6			52.6			34.2			54.7	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	24.0	9.7	30.3	7.4	32.6	17.0	23.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	19.5	6.5	24.5	5.1	25.9	12.5	18.5
Max Q Clear Time (g_c+I1), s	13.5	12.6	6.0	15.7	3.8	11.9	14.4	19.5
Green Ext Time (p_c), s	0.0	1.7	0.0	3.0	0.0	1.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	213	237	66	237	237	257	118	1024	259	199	1181	239
Future Volume (veh/h)	213	237	66	237	237	257	118	1024	259	199	1181	239
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	222	247	69	247	247	268	123	1067	270	207	1230	249
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	723	315	290	406	341	156	1203	304	269	1469	448
Arrive On Green	0.15	0.20	0.20	0.16	0.22	0.22	0.09	0.30	0.30	0.08	0.29	0.29
Sat Flow, veh/h	1774	3539	1544	1774	1863	1562	1774	4030	1019	3442	5085	1550
Grp Volume(v), veh/h	222	247	69	247	247	268	123	897	440	207	1230	249
Grp Sat Flow(s),veh/h/ln	1774	1770	1544	1774	1863	1562	1774	1695	1660	1721	1695	1550
Q Serve(g_s), s	8.6	4.2	2.6	9.5	8.4	11.4	4.8	17.8	17.8	4.2	16.0	9.6
Cycle Q Clear(g_c), s	8.6	4.2	2.6	9.5	8.4	11.4	4.8	17.8	17.8	4.2	16.0	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.61	1.00		1.00
Lane Grp Cap(c), veh/h	265	723	315	290	406	341	156	1012	495	269	1469	448
V/C Ratio(X)	0.84	0.34	0.22	0.85	0.61	0.79	0.79	0.89	0.89	0.77	0.84	0.56
Avail Cap(c_a), veh/h	303	905	395	315	490	411	164	1012	495	269	1469	448
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	24.0	23.3	28.6	24.8	26.0	31.5	23.6	23.6	31.8	23.5	21.2
Incr Delay (d2), s/veh	16.6	0.3	0.3	18.4	1.5	8.2	21.7	11.4	20.5	12.7	5.8	4.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	2.1	1.1	6.2	4.5	5.7	3.3	9.8	10.9	2.4	8.2	4.7
LnGrp Delay(d),s/veh	45.7	24.2	23.7	47.0	26.3	34.1	53.1	35.0	44.0	44.5	29.3	26.1
LnGrp LOS	D	C	C	D	C	C	D	C	D	D	C	C
Approach Vol, veh/h		538			762			1460			1686	
Approach Delay, s/veh		33.0			35.8			39.2			30.7	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.5	16.0	18.9	10.7	24.8	15.0	19.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5
Max Q Clear Time (g_c+I1), s	6.2	19.8	11.5	6.2	6.8	18.0	10.6	13.4
Green Ext Time (p_c), s	0.0	0.9	0.1	1.3	0.0	1.6	0.1	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	34.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	672	89	176	543	185	152	968	202	327	919	222
Future Volume (veh/h)	238	672	89	176	543	185	152	968	202	327	919	222
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	243	686	91	180	554	189	155	988	206	334	938	227
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	815	108	193	583	198	230	1062	463	366	1382	333
Arrive On Green	0.14	0.26	0.26	0.11	0.22	0.22	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3136	416	1774	2590	880	3442	3539	1544	3442	4070	981
Grp Volume(v), veh/h	243	387	390	180	378	365	155	988	206	334	781	384
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1700	1721	1770	1544	1721	1695	1661
Q Serve(g_s), s	10.9	16.6	16.6	8.1	16.8	16.9	3.5	21.7	8.6	7.7	15.8	15.9
Cycle Q Clear(g_c), s	10.9	16.6	16.6	8.1	16.8	16.9	3.5	21.7	8.6	7.7	15.8	15.9
Prop In Lane	1.00		0.23	1.00		0.52	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	255	460	463	193	398	383	230	1062	463	366	1151	564
V/C Ratio(X)	0.95	0.84	0.84	0.93	0.95	0.95	0.67	0.93	0.44	0.91	0.68	0.68
Avail Cap(c_a), veh/h	255	460	463	193	398	383	237	1062	463	366	1151	564
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	28.0	28.0	35.4	30.6	30.6	36.5	27.2	22.6	35.4	22.7	22.7
Incr Delay (d2), s/veh	43.4	13.1	13.2	46.0	32.3	34.2	7.1	15.3	3.1	26.6	3.2	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	9.7	9.8	6.4	11.8	11.5	1.9	12.8	4.1	5.0	7.9	8.3
LnGrp Delay(d),s/veh	77.4	41.1	41.2	81.4	62.8	64.8	43.6	42.4	25.7	62.0	25.9	29.2
LnGrp LOS	E	D	D	F	E	E	D	D	C	E	C	C
Approach Vol, veh/h		1020			923			1349			1499	
Approach Delay, s/veh		49.8			67.2			40.0			34.8	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	28.5	13.2	25.3	9.8	31.7	16.0	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0
Max Q Clear Time (g_c+I1), s	9.7	23.7	10.1	18.6	5.5	17.9	12.9	18.9
Green Ext Time (p_c), s	0.0	0.2	0.0	1.1	0.0	5.1	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.7
HCM 2010 LOS	D

Appendix K

Level of Service

Calculations

Background Plus Project

Ag Housing

Conditions

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	231	884	1109	19	23	475
Future Volume (vph)	231	884	1109	19	23	475
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.12	1.00	1.00		0.95	1.00
Satd. Flow (perm)	225	3504	3477		1770	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	254	971	1219	21	25	522
RTOR Reduction (vph)	0	0	0	0	0	158
Lane Group Flow (vph)	254	971	1240	0	25	364
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	47.4		20.6	20.6
Effective Green, g (s)	61.1	61.5	48.5		21.3	21.7
Actuated g/C Ratio	0.68	0.68	0.54		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	307	2399	1877		419	382
v/s Ratio Prot	c0.08	0.28	0.36		0.01	
v/s Ratio Perm	c0.48					c0.23
v/c Ratio	0.83	0.40	0.66		0.06	0.95
Uniform Delay, d1	15.5	6.2	14.8		26.5	33.5
Progression Factor	1.74	0.38	1.00		1.00	1.00
Incremental Delay, d2	15.3	0.1	1.0		0.0	33.5
Delay (s)	42.2	2.5	15.7		26.5	67.1
Level of Service	D	A	B		C	E
Approach Delay (s)		10.7	15.7		65.2	
Approach LOS		B	B		E	

Intersection Summary

HCM 2000 Control Delay	22.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	89.8	Sum of lost time (s)	11.6
Intersection Capacity Utilization	67.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	954	0	0	1312	272	311	1	162	0	0	0
Future Volume (vph)	0	954	0	0	1312	272	311	1	162	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3396		1624	1629	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3396		1624	1629	1530			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1048	0	0	1442	299	342	1	178	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	111	0	0	0
Lane Group Flow (vph)	0	1048	0	0	1741	0	171	172	67	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			47.4		20.6	20.6	20.6			
Effective Green, g (s)		61.5			48.5		21.3	21.3	21.3			
Actuated g/C Ratio		0.68			0.54		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2364			1834		385	386	362			
v/s Ratio Prot		c0.30			c0.51		0.11	c0.11				
v/s Ratio Perm									0.04			
v/c Ratio		0.44			0.95		0.44	0.45	0.19			
Uniform Delay, d1		6.4			19.5		29.2	29.2	27.3			
Progression Factor		1.00			0.68		1.00	1.00	1.00			
Incremental Delay, d2		0.2			8.0		0.8	0.8	0.3			
Delay (s)		6.6			21.3		30.0	30.0	27.6			
Level of Service		A			C		C	C	C			
Approach Delay (s)		6.6			21.3			29.2			0.0	
Approach LOS		A			C			C			A	

Intersection Summary

HCM 2000 Control Delay	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	89.8	Sum of lost time (s)	12.3
Intersection Capacity Utilization	60.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1041	1342	0	231	397
Future Volume (veh/h)	0	1041	1342	0	231	397
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800
Adj Flow Rate, veh/h	0	1144	1475	0	254	436
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	4	2	0	4	4
Cap, veh/h	0	1712	1745	0	1150	529
Arrive On Green	0.00	0.50	0.50	0.00	0.35	0.35
Sat Flow, veh/h	0	3599	3670	0	3325	1530
Grp Volume(v), veh/h	0	1144	1475	0	254	436
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530
Q Serve(g_s), s	0.0	12.6	18.4	0.0	2.7	13.1
Cycle Q Clear(g_c), s	0.0	12.6	18.4	0.0	2.7	13.1
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1712	1745	0	1150	529
V/C Ratio(X)	0.00	0.67	0.85	0.00	0.22	0.82
Avail Cap(c_a), veh/h	0	2104	2145	0	1417	652
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.4	10.9	0.0	11.6	15.0
Incr Delay (d2), s/veh	0.0	0.3	2.3	0.0	0.1	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.0	9.2	0.0	1.2	6.4
LnGrp Delay(d),s/veh	0.0	9.7	13.2	0.0	11.7	21.5
LnGrp LOS		A	B		B	C
Approach Vol, veh/h		1144	1475		690	
Approach Delay, s/veh		9.7	13.2		17.9	
Approach LOS		A	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		29.2		21.0		29.2		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		14.6		15.1		20.4		
Green Ext Time (p_c), s		3.4		1.3		3.7		

Intersection Summary	
HCM 2010 Ctrl Delay	13.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	312	10	931	485	323	25	308	890	196	310	32
Future Volume (veh/h)	32	312	10	931	485	323	25	308	890	196	310	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	34	335	11	1001	522	0	27	331	957	211	333	34
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	61	488	16	1162	1585	838	55	654	1453	277	755	77
Arrive On Green	0.04	0.15	0.16	0.34	0.46	0.00	0.03	0.19	0.19	0.08	0.24	0.25
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2718	3342	3151	320
Grp Volume(v), veh/h	34	169	177	1001	522	0	27	331	957	211	181	186
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	2.0	9.7	9.7	27.6	9.6	0.0	1.5	8.6	7.8	6.2	8.9	9.0
Cycle Q Clear(g_c), s	2.0	9.7	9.7	27.6	9.6	0.0	1.5	8.6	7.8	6.2	8.9	9.0
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	61	247	257	1162	1585	838	55	654	1453	277	412	420
V/C Ratio(X)	0.56	0.68	0.69	0.86	0.33	0.00	0.49	0.51	0.66	0.76	0.44	0.44
Avail Cap(c_a), veh/h	121	757	788	1249	2618	1300	104	1208	1887	301	650	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	40.3	40.3	30.5	17.3	0.0	47.6	36.4	4.8	44.9	32.3	32.3
Incr Delay (d2), s/veh	3.0	7.0	6.8	6.8	0.3	0.0	2.5	0.6	0.5	12.6	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	4.9	5.1	13.9	4.6	0.0	0.8	4.1	4.1	3.3	4.3	4.4
LnGrp Delay(d),s/veh	50.3	47.3	47.1	37.4	17.6	0.0	50.1	37.0	5.3	57.5	33.0	33.0
LnGrp LOS	D	D	D	D	B		D	D	A	E	C	C
Approach Vol, veh/h		380			1523			1315			578	
Approach Delay, s/veh		47.5			30.6			14.2			42.0	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	40.4	20.4	9.2	29.9	9.2	51.7	14.3	24.8
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8
Max Q Clear Time (g_c+I1), s	29.6	11.7	3.5	11.0	4.0	11.6	8.2	10.6
Green Ext Time (p_c), s	4.8	3.2	0.0	1.4	0.0	6.1	0.1	7.6

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Intersection												
Int Delay, s/veh	38.8											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	256	180	185	274	43	122	24	19	66	43	0
Future Vol, veh/h	0	256	180	185	274	43	122	24	19	66	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	298	209	215	319	50	142	28	22	77	50	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	369	0	0	507	0	0	1097	1097	298	1177	1256	319
Stage 1	-	-	-	-	-	-	298	298	-	749	749	-
Stage 2	-	-	-	-	-	-	799	799	-	428	507	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1142	-	-	1048	-	-	189	211	737	168	171	722
Stage 1	-	-	-	-	-	-	706	663	-	404	419	-
Stage 2	-	-	-	-	-	-	376	395	-	605	539	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1142	-	-	1048	-	-	~ 115	168	737	120	136	722
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 115	168	-	120	136	-
Stage 1	-	-	-	-	-	-	706	663	-	404	333	-
Stage 2	-	-	-	-	-	-	254	314	-	562	539	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	176.5	148.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	115	255	1142	-	-	1048	-	-	126	-
HCM Lane V/C Ratio	1.234	0.196	-	-	-	0.205	-	-	1.006	-
HCM Control Delay (s)	230.8	22.5	0	-	-	9.3	-	-	148.6	0
HCM Lane LOS	F	C	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	9.2	0.7	0	-	-	0.8	-	-	6.9	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	31	341	66	10	100	180	1086	13	132	1049	21
Future Volume (veh/h)	37	31	341	66	10	100	180	1086	13	132	1049	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	36	38	367	71	11	108	194	1168	14	142	1128	23
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	381	400	339	149	23	152	187	1676	20	174	1128	503
Arrive On Green	0.22	0.22	0.22	0.11	0.10	0.10	0.11	0.33	0.33	0.10	0.32	0.32
Sat Flow, veh/h	1707	1792	1522	1531	237	1563	1757	5130	61	1774	3539	1577
Grp Volume(v), veh/h	36	38	367	82	0	108	194	764	418	142	1128	23
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1834	1774	1770	1577
Q Serve(g_s), s	1.6	1.6	21.0	4.1	0.0	6.3	10.0	18.7	18.7	7.4	30.0	0.9
Cycle Q Clear(g_c), s	1.6	1.6	21.0	4.1	0.0	6.3	10.0	18.7	18.7	7.4	30.0	0.9
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	381	400	339	172	0	152	187	1097	599	174	1128	503
V/C Ratio(X)	0.09	0.10	1.08	0.48	0.00	0.71	1.04	0.70	0.70	0.82	1.00	0.05
Avail Cap(c_a), veh/h	381	400	339	469	0	415	187	1097	599	207	1128	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	29.0	36.6	39.6	0.0	41.2	42.1	27.6	27.6	41.6	32.1	22.2
Incr Delay (d2), s/veh	0.1	0.1	72.4	2.0	0.0	6.0	76.7	1.9	3.5	19.0	26.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	15.6	2.1	0.0	3.0	8.8	8.9	10.0	4.5	18.8	0.4
LnGrp Delay(d),s/veh	29.1	29.1	109.0	41.6	0.0	47.2	118.9	29.6	31.2	60.7	59.0	22.2
LnGrp LOS	C	C	F	D		D	F	C	C	E	F	C
Approach Vol, veh/h		441			190			1376			1293	
Approach Delay, s/veh		95.6			44.8			42.7			58.5	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.0	16.0	36.0		15.2	15.2	36.8
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0
Max Q Clear Time (g_c+I1), s		23.0	12.0	32.0		8.3	9.4	20.7
Green Ext Time (p_c), s		0.0	0.0	0.0		0.6	0.1	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	56.1
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	2	655	1	143	4	1010	535	227	1276	1
Future Volume (veh/h)	0	0	2	655	1	143	4	1010	535	227	1276	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	0	0	2	697	1	152	4	1074	569	241	1357	1
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	3	0	85	770	620	527	8	1350	604	198	1761	1
Arrive On Green	0.00	0.00	0.05	0.23	0.34	0.34	0.00	0.38	0.38	0.11	0.49	0.49
Sat Flow, veh/h	1774	0	1583	3408	1845	1568	1774	3539	1583	1757	3594	3
Grp Volume(v), veh/h	0	0	2	697	1	152	4	1074	569	241	662	696
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1704	1845	1568	1774	1770	1583	1757	1752	1844
Q Serve(g_s), s	0.0	0.0	0.1	14.1	0.0	5.0	0.2	19.1	24.6	8.0	21.9	21.9
Cycle Q Clear(g_c), s	0.0	0.0	0.1	14.1	0.0	5.0	0.2	19.1	24.6	8.0	21.9	21.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	3	0	85	770	620	527	8	1350	604	198	859	904
V/C Ratio(X)	0.00	0.00	0.02	0.91	0.00	0.29	0.53	0.80	0.94	1.21	0.77	0.77
Avail Cap(c_a), veh/h	100	0	89	770	620	527	100	1350	604	198	859	904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	31.7	26.7	15.6	17.3	35.2	19.5	21.2	31.4	14.8	14.8
Incr Delay (d2), s/veh	0.0	0.0	0.1	14.2	0.0	0.3	46.9	4.9	24.9	133.5	6.6	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	8.1	0.0	2.2	0.2	10.2	14.9	11.2	12.1	12.6
LnGrp Delay(d),s/veh	0.0	0.0	31.8	40.9	15.6	17.6	82.1	24.4	46.1	164.9	21.4	21.1
LnGrp LOS			C	D	B	B	F	C	D	F	C	C
Approach Vol, veh/h		2			850			1647			1599	
Approach Delay, s/veh		31.8			36.7			32.0			42.9	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	31.0	20.0	7.8	4.3	38.7	0.0	27.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	27.0	16.0	4.0	4.0	31.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	10.0	26.6	16.1	2.1	2.2	23.9	0.0	7.0
Green Ext Time (p_c), s	0.0	0.3	0.0	0.0	0.0	4.6	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	37.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	354	290	156	348	107	124	650	62	149	1260	246
Future Volume (veh/h)	154	354	290	156	348	107	124	650	62	149	1260	246
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	177	407	333	179	400	0	143	747	71	171	1448	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.12	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1570	1774	3539	1583
Grp Volume(v), veh/h	177	407	333	179	400	0	143	747	71	171	1448	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1570	1774	1770	1583
Q Serve(g_s), s	4.6	18.9	18.9	9.1	18.5	0.0	7.2	15.2	2.7	8.5	36.0	0.0
Cycle Q Clear(g_c), s	4.6	18.9	18.9	9.1	18.5	0.0	7.2	15.2	2.7	8.5	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
V/C Ratio(X)	0.89	1.04	1.02	0.97	0.84	0.00	0.95	0.57	0.12	0.82	1.02	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1301	577	304	1416	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.1	35.5	35.5	40.1	31.7	0.0	41.0	22.8	18.8	38.8	27.0	0.0
Incr Delay (d2), s/veh	35.4	56.4	54.7	55.8	12.8	0.0	59.8	0.6	0.1	11.3	29.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	15.8	13.1	7.3	11.1	0.0	6.0	7.5	1.2	4.8	23.4	0.0
LnGrp Delay(d),s/veh	77.5	92.0	90.3	95.9	44.4	0.0	100.8	23.4	18.9	50.1	56.9	0.0
LnGrp LOS	E	F	F	F	D		F	C	B	D	F	
Approach Vol, veh/h		917			579			961			1619	
Approach Delay, s/veh		88.6			60.3			34.6			56.2	
Approach LOS		F			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	37.6	14.0	23.4	12.1	40.5	9.7	27.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2
Max Q Clear Time (g_c+I1), s	10.5	17.2	11.1	20.9	9.2	38.0	6.6	20.5
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	59.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	497	156	108	378	3	170	0	191	7	2	0
Future Volume (veh/h)	0	497	156	108	378	3	170	0	191	7	2	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	606	190	132	461	4	207	0	233	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	753	236	166	1578	14	654	0	556	387	74	0
Arrive On Green	0.00	0.29	0.29	0.10	0.48	0.48	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2579	807	1630	3304	29	1467	0	1568	747	210	0
Grp Volume(v), veh/h	0	404	392	132	227	238	207	0	233	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1667	1630	1626	1707	1467	0	1568	956	0	0
Q Serve(g_s), s	0.0	11.6	11.7	4.2	4.5	4.5	0.0	0.0	6.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.6	11.7	4.2	4.5	4.5	4.9	0.0	6.0	4.9	0.0	0.0
Prop In Lane	1.00		0.48	1.00		0.02	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	502	487	166	777	815	654	0	556	461	0	0
V/C Ratio(X)	0.00	0.80	0.81	0.80	0.29	0.29	0.32	0.00	0.42	0.02	0.00	0.00
Avail Cap(c_a), veh/h	161	577	560	289	777	815	654	0	556	461	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.6	17.6	23.5	8.5	8.5	12.7	0.0	13.1	11.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	7.2	7.5	8.4	0.2	0.2	1.3	0.0	2.3	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.5	6.4	2.3	2.1	2.2	2.5	0.0	2.9	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	24.7	25.1	32.0	8.7	8.7	14.0	0.0	15.4	11.5	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		796			597			440			11	
Approach Delay, s/veh		24.9			13.8			14.8			11.5	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.5	9.9	20.2		23.5	0.0	30.1
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5
Max Q Clear Time (g_c+I1), s		8.0	6.2	13.7		6.9	0.0	6.5
Green Ext Time (p_c), s		1.5	0.1	2.0		0.0	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	609	108	180	381	3	109	1	117	1	1	0
Future Volume (veh/h)	1	609	108	180	381	3	109	1	117	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	700	124	207	438	3	125	1	134	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	840	149	251	1476	10	577	4	488	296	267	0
Arrive On Green	0.00	0.29	0.29	0.15	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	2920	517	1660	3372	23	1393	13	1509	622	824	0
Grp Volume(v), veh/h	1	412	412	207	215	226	126	0	134	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1718	1660	1656	1739	1405	0	1509	1446	0	0
Q Serve(g_s), s	0.0	12.8	12.8	6.9	4.8	4.8	0.0	0.0	3.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	12.8	12.8	6.9	4.8	4.8	3.1	0.0	3.7	3.1	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	495	494	251	725	761	581	0	488	563	0	0
V/C Ratio(X)	0.33	0.83	0.83	0.82	0.30	0.30	0.22	0.00	0.27	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	544	544	295	725	761	581	0	488	563	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.4	19.0	19.0	23.4	10.3	10.3	14.1	0.0	14.3	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.7	9.9	10.0	15.0	0.2	0.2	0.9	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.4	7.4	4.2	2.2	2.3	1.6	0.0	1.7	0.0	0.0	0.0
LnGrp Delay(d),s/veh	82.0	28.9	29.0	38.4	10.6	10.5	14.9	0.0	15.7	13.1	0.0	0.0
LnGrp LOS	F	C	C	D	B	B	B		B	B		
Approach Vol, veh/h		825			648			260			2	
Approach Delay, s/veh		29.0			19.4			15.3			13.1	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	13.1	20.9		22.9	4.6	29.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.7	8.9	14.8		5.1	2.0	6.8
Green Ext Time (p_c), s		0.9	0.1	1.6		0.0	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	23.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	552	712	32	142	608	261	44	285	77	191	395	638
Future Volume (veh/h)	552	712	32	142	608	261	44	285	77	191	395	638
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	569	734	33	146	627	0	45	294	79	197	407	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	635	1009	45	180	735	329	69	657	174	234	618	525
Arrive On Green	0.18	0.29	0.29	0.10	0.21	0.00	0.04	0.24	0.24	0.13	0.34	0.00
Sat Flow, veh/h	3442	3450	155	1740	3471	1553	1740	2718	718	1757	1845	1568
Grp Volume(v), veh/h	569	376	391	146	627	0	45	186	187	197	407	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1835	1740	1736	1553	1740	1736	1700	1757	1845	1568
Q Serve(g_s), s	12.7	15.0	15.0	6.5	13.7	0.0	2.0	7.2	7.4	8.6	14.8	0.0
Cycle Q Clear(g_c), s	12.7	15.0	15.0	6.5	13.7	0.0	2.0	7.2	7.4	8.6	14.8	0.0
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	635	518	537	180	735	329	69	420	411	234	618	525
V/C Ratio(X)	0.90	0.73	0.73	0.81	0.85	0.00	0.65	0.44	0.46	0.84	0.66	0.00
Avail Cap(c_a), veh/h	635	518	537	210	795	356	111	420	411	235	618	525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.3	25.0	25.0	34.5	29.8	0.0	37.2	25.3	25.4	33.3	22.3	0.0
Incr Delay (d2), s/veh	15.4	5.1	4.9	18.3	8.4	0.0	9.8	3.4	3.6	23.2	5.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	8.0	8.3	4.0	7.4	0.0	1.2	3.8	3.8	5.7	8.4	0.0
LnGrp Delay(d),s/veh	46.7	30.1	29.9	52.8	38.3	0.0	47.0	28.7	29.0	56.5	27.7	0.0
LnGrp LOS	D	C	C	D	D		D	C	C	E	C	
Approach Vol, veh/h		1336			773			418			604	
Approach Delay, s/veh		37.1			41.0			30.8			37.1	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	23.5	12.6	27.5	7.6	30.8	19.0	21.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0
Max Q Clear Time (g_c+I1), s	10.6	9.4	8.5	17.0	4.0	16.8	14.7	15.7
Green Ext Time (p_c), s	0.0	1.5	0.0	2.4	0.0	1.5	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	118	421	107	318	322	283	35	447	381	230	592	91
Future Volume (veh/h)	118	421	107	318	322	283	35	447	381	230	592	91
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	136	484	123	366	370	325	40	514	438	264	680	105
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	755	288	394	631	532	66	817	377	328	1522	469
Arrive On Green	0.10	0.21	0.21	0.22	0.34	0.34	0.04	0.24	0.24	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1352	1774	1863	1569	1774	3390	1566	3442	5085	1567
Grp Volume(v), veh/h	136	484	123	366	370	325	40	514	438	264	680	105
Grp Sat Flow(s),veh/h/ln	1774	1770	1352	1774	1863	1569	1774	1695	1566	1721	1695	1567
Q Serve(g_s), s	5.9	9.8	6.2	15.9	12.9	13.6	1.8	10.7	19.0	5.9	8.5	4.0
Cycle Q Clear(g_c), s	5.9	9.8	6.2	15.9	12.9	13.6	1.8	10.7	19.0	5.9	8.5	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	755	288	394	631	532	66	817	377	328	1522	469
V/C Ratio(X)	0.80	0.64	0.43	0.93	0.59	0.61	0.61	0.63	1.16	0.81	0.45	0.22
Avail Cap(c_a), veh/h	248	808	309	394	631	532	133	817	377	328	1522	469
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	28.3	26.8	30.0	21.5	21.7	37.4	26.8	29.9	34.9	22.3	20.7
Incr Delay (d2), s/veh	10.8	1.6	1.0	28.2	1.4	2.0	8.8	3.7	97.7	13.7	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	4.9	2.4	10.9	6.8	6.2	1.0	5.4	18.3	3.4	4.1	1.8
LnGrp Delay(d),s/veh	45.6	29.8	27.8	58.3	22.9	23.8	46.2	30.4	127.6	48.7	23.3	21.8
LnGrp LOS	D	C	C	E	C	C	D	C	F	D	C	C
Approach Vol, veh/h		743			1061			992			1049	
Approach Delay, s/veh		32.4			35.4			74.0			29.5	
Approach LOS		C			D			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	23.5	22.0	21.3	7.4	28.1	12.1	31.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5
Max Q Clear Time (g_c+I1), s	7.9	21.0	17.9	11.8	3.8	10.5	7.9	15.6
Green Ext Time (p_c), s	0.0	0.0	0.0	1.9	0.0	3.6	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	43.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	193	428	105	145	602	97	78	537	123	211	810	174
Future Volume (veh/h)	193	428	105	145	602	97	78	537	123	211	810	174
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	217	481	118	163	676	109	88	603	138	237	910	196
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	774	189	202	768	124	200	958	424	272	1231	264
Arrive On Green	0.14	0.27	0.27	0.11	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	2817	687	1774	3050	491	3408	3505	1551	3442	4192	899
Grp Volume(v), veh/h	217	301	298	163	392	393	88	603	138	237	735	371
Grp Sat Flow(s),veh/h/ln	1774	1770	1734	1774	1770	1771	1704	1752	1551	1721	1695	1701
Q Serve(g_s), s	8.4	10.3	10.5	6.2	14.8	14.8	1.7	10.5	4.9	4.7	13.6	13.7
Cycle Q Clear(g_c), s	8.4	10.3	10.5	6.2	14.8	14.8	1.7	10.5	4.9	4.7	13.6	13.7
Prop In Lane	1.00		0.40	1.00		0.28	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	242	486	477	202	446	446	200	958	424	272	996	500
V/C Ratio(X)	0.89	0.62	0.63	0.81	0.88	0.88	0.44	0.63	0.33	0.87	0.74	0.74
Avail Cap(c_a), veh/h	242	486	477	227	458	459	245	958	424	272	996	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	22.0	22.1	30.1	25.0	25.0	31.6	22.2	20.1	31.7	22.1	22.2
Incr Delay (d2), s/veh	31.6	2.4	2.6	17.4	17.3	17.5	1.5	3.1	2.0	24.8	4.9	9.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	5.3	5.3	4.0	9.3	9.4	0.9	5.4	2.3	3.2	7.0	7.7
LnGrp Delay(d),s/veh	61.2	24.4	24.6	47.4	42.3	42.5	33.1	25.3	22.2	56.4	27.0	31.8
LnGrp LOS	E	C	C	D	D	D	C	C	C	E	C	C
Approach Vol, veh/h		816			948			829			1343	
Approach Delay, s/veh		34.3			43.2			25.6			33.5	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	23.5	12.4	23.6	8.6	24.9	14.0	22.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0
Max Q Clear Time (g_c+I1), s	6.7	12.5	8.2	12.5	3.7	15.7	10.4	16.8
Green Ext Time (p_c), s	0.0	2.4	0.0	1.9	0.0	2.4	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	34.4
HCM 2010 LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	487	1480	970	33	41	341
Future Volume (vph)	487	1480	970	33	41	341
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3469		1770	1583
Flt Permitted	0.15	1.00	1.00		0.95	1.00
Satd. Flow (perm)	270	3504	3469		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	492	1495	980	33	41	344
RTOR Reduction (vph)	0	0	0	0	0	260
Lane Group Flow (vph)	492	1495	1013	0	41	84
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	39.4		20.8	20.8
Effective Green, g (s)	61.1	61.5	40.5		21.5	21.9
Actuated g/C Ratio	0.68	0.68	0.45		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	464	2394	1561		422	385
v/s Ratio Prot	c0.20	0.43	0.29		0.02	
v/s Ratio Perm	c0.52					c0.05
v/c Ratio	1.06	0.62	0.65		0.10	0.22
Uniform Delay, d1	22.5	7.9	19.2		26.7	27.2
Progression Factor	1.14	0.55	1.00		1.00	1.00
Incremental Delay, d2	50.4	0.4	1.1		0.1	0.2
Delay (s)	76.0	4.7	20.3		26.8	27.4
Level of Service	E	A	C		C	C
Approach Delay (s)		22.3	20.3		27.3	
Approach LOS		C	C		C	

Intersection Summary

HCM 2000 Control Delay	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1575	0	0	1059	252	462	3	393	0	0	0
Future Volume (vph)	0	1575	0	0	1059	252	462	3	393	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3367		1656	1661	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3367		1656	1661	1560			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1676	0	0	1127	268	491	3	418	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1676	0	0	1395	0	245	249	361	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			39.4		20.8	20.8	20.8			
Effective Green, g (s)		61.5			40.5		21.5	21.5	21.5			
Actuated g/C Ratio		0.68			0.45		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2382			1515		395	396	372			
v/s Ratio Prot		c0.48			c0.41		0.15	0.15				
v/s Ratio Perm									c0.23			
v/c Ratio		0.70			0.92		0.62	0.63	0.97			
Uniform Delay, d1		8.7			23.2		30.6	30.7	33.9			
Progression Factor		1.00			0.44		1.00	1.00	1.00			
Incremental Delay, d2		1.0			8.1		3.0	3.1	38.6			
Delay (s)		9.7			18.4		33.6	33.8	72.6			
Level of Service		A			B		C	C	E			
Approach Delay (s)		9.7			18.4			51.5			0.0	
Approach LOS		A			B			D			A	

Intersection Summary

HCM 2000 Control Delay	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.3
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1580	1370	0	427	401
Future Volume (veh/h)	0	1580	1370	0	427	401
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835
Adj Flow Rate, veh/h	0	1646	1427	0	445	418
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1884	1884	0	1078	496
Arrive On Green	0.00	0.54	0.54	0.00	0.32	0.32
Sat Flow, veh/h	0	3670	3670	0	3390	1560
Grp Volume(v), veh/h	0	1646	1427	0	445	418
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560
Q Serve(g_s), s	0.0	22.3	17.3	0.0	5.6	13.6
Cycle Q Clear(g_c), s	0.0	22.3	17.3	0.0	5.6	13.6
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1884	1884	0	1078	496
V/C Ratio(X)	0.00	0.87	0.76	0.00	0.41	0.84
Avail Cap(c_a), veh/h	0	2177	2177	0	1149	529
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	10.9	9.7	0.0	14.5	17.3
Incr Delay (d2), s/veh	0.0	3.4	1.1	0.0	0.2	11.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.4	8.4	0.0	2.6	7.3
LnGrp Delay(d),s/veh	0.0	14.3	10.8	0.0	14.7	28.2
LnGrp LOS		B	B		B	C
Approach Vol, veh/h		1646	1427		863	
Approach Delay, s/veh		14.3	10.8		21.3	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		33.4		20.9		33.4		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		24.3		15.6		19.3		
Green Ext Time (p_c), s		4.0		0.7		4.3		

Intersection Summary	
HCM 2010 Ctrl Delay	14.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	360	8	808	383	580	13	548	1160	582	541	34
Future Volume (veh/h)	31	360	8	808	383	580	13	548	1160	582	541	34
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	32	375	8	842	399	0	14	571	1208	606	564	35
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	56	538	11	743	1202	801	33	883	1303	577	1350	84
Arrive On Green	0.03	0.16	0.17	0.22	0.35	0.00	0.02	0.25	0.25	0.17	0.40	0.41
Sat Flow, veh/h	1690	3375	72	3374	3470	1552	1756	3504	2759	3407	3351	208
Grp Volume(v), veh/h	32	187	196	842	399	0	14	571	1208	606	294	305
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.3	20.0	14.2	14.3
Cycle Q Clear(g_c), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.3	20.0	14.2	14.3
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	56	268	281	743	1202	801	33	883	1303	577	706	728
V/C Ratio(X)	0.57	0.70	0.70	1.13	0.33	0.00	0.43	0.65	0.93	1.05	0.42	0.42
Avail Cap(c_a), veh/h	100	664	694	743	1925	1124	89	1009	1402	577	712	735
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	46.9	46.9	46.0	28.5	0.0	57.3	39.5	9.5	49.0	25.3	25.3
Incr Delay (d2), s/veh	3.4	6.8	6.6	76.1	0.3	0.0	3.2	1.2	10.4	51.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	6.3	6.6	19.9	4.9	0.0	0.5	8.5	9.4	13.5	6.9	7.2
LnGrp Delay(d),s/veh	59.7	53.7	53.5	122.1	28.8	0.0	60.5	40.6	20.0	100.2	25.7	25.7
LnGrp LOS	E	D	D	F	C		E	D	B	F	C	C
Approach Vol, veh/h		415			1241			1793			1205	
Approach Delay, s/veh		54.1			92.1			26.9			63.2	
Approach LOS		D			F			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	24.3	8.2	53.5	9.4	46.9	26.0	35.8
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0
Max Q Clear Time (g_c+I1), s	28.0	14.4	2.9	16.3	4.2	12.0	22.0	22.3
Green Ext Time (p_c), s	0.0	3.5	0.0	2.4	0.0	4.4	0.0	7.3

Intersection Summary	
HCM 2010 Ctrl Delay	56.1
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	256	94	130	193	78	110	54	46	57	32	1
Future Vol, veh/h	7	256	94	130	193	78	110	54	46	57	32	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	7	269	99	137	203	82	116	57	48	60	34	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	286	0	0	374	0	0	833	849	275	863	866	213
Stage 1	-	-	-	-	-	-	289	289	-	478	478	-
Stage 2	-	-	-	-	-	-	544	560	-	385	388	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1237	-	-	1158	-	-	286	296	759	275	291	827
Stage 1	-	-	-	-	-	-	714	669	-	568	556	-
Stage 2	-	-	-	-	-	-	520	507	-	638	609	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1236	-	-	1152	-	-	230	258	755	194	253	820
Mov Cap-2 Maneuver	-	-	-	-	-	-	230	258	-	194	253	-
Stage 1	-	-	-	-	-	-	706	662	-	565	489	-
Stage 2	-	-	-	-	-	-	423	446	-	543	602	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.8	27.5	34.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	230	370	1236	-	-	1152	-	-	212	820
HCM Lane V/C Ratio	0.503	0.284	0.006	-	-	0.119	-	-	0.442	0.001
HCM Control Delay (s)	35.5	18.6	7.9	-	-	8.5	-	-	34.8	9.4
HCM Lane LOS	E	C	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	2.6	1.2	0	-	-	0.4	-	-	2.1	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	32	232	118	12	191	223	1430	19	231	1038	44
Future Volume (veh/h)	99	32	232	118	12	191	223	1430	19	231	1038	44
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	66	80	234	119	12	193	225	1444	19	233	1048	44
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	323	272	252	25	244	238	1492	20	238	1021	453
Arrive On Green	0.18	0.18	0.18	0.17	0.16	0.16	0.13	0.29	0.29	0.13	0.29	0.29
Sat Flow, veh/h	1757	1845	1555	1619	163	1571	1774	5172	68	1774	3539	1572
Grp Volume(v), veh/h	66	80	234	131	0	193	225	946	517	233	1048	44
Grp Sat Flow(s),veh/h/ln	1757	1845	1555	1782	0	1571	1774	1695	1850	1774	1770	1572
Q Serve(g_s), s	3.1	3.6	14.2	6.4	0.0	11.5	12.2	26.8	26.8	12.7	28.0	2.0
Cycle Q Clear(g_c), s	3.1	3.6	14.2	6.4	0.0	11.5	12.2	26.8	26.8	12.7	28.0	2.0
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	308	323	272	277	0	244	238	978	534	238	1021	453
V/C Ratio(X)	0.21	0.25	0.86	0.47	0.00	0.79	0.95	0.97	0.97	0.98	1.03	0.10
Avail Cap(c_a), veh/h	362	380	320	459	0	405	238	978	534	238	1021	453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	34.5	38.9	36.7	0.0	39.5	41.7	34.1	34.1	41.9	34.5	25.3
Incr Delay (d2), s/veh	0.3	0.4	18.1	1.3	0.0	5.7	43.9	21.3	30.9	52.9	35.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.9	7.5	3.3	0.0	5.4	8.9	15.4	18.2	9.7	18.6	0.9
LnGrp Delay(d),s/veh	34.7	34.9	57.0	38.0	0.0	45.1	85.6	55.5	65.0	94.8	69.8	25.4
LnGrp LOS	C	C	E	D		D	F	E	E	F	F	C
Approach Vol, veh/h		380			324			1688			1325	
Approach Delay, s/veh		48.5			42.3			62.4			72.7	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.0	19.0	34.0		21.1	19.0	34.0
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0
Max Q Clear Time (g_c+I1), s		16.2	14.2	30.0		13.5	14.7	28.8
Green Ext Time (p_c), s		0.6	0.0	0.0		1.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	62.9
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	6	24	471	7	248	23	1410	746	158	1113	14
Future Volume (veh/h)	12	6	24	471	7	248	23	1410	746	158	1113	14
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	13	7	26	518	8	273	25	1549	820	174	1223	15
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	23	21	77	608	417	354	39	1537	687	159	1797	22
Arrive On Green	0.01	0.06	0.06	0.18	0.22	0.22	0.02	0.43	0.43	0.09	0.50	0.50
Sat Flow, veh/h	1774	347	1288	3442	1863	1583	1774	3539	1583	1774	3581	44
Grp Volume(v), veh/h	13	0	33	518	8	273	25	1549	820	174	604	634
Grp Sat Flow(s),veh/h/ln	1774	0	1635	1721	1863	1583	1774	1770	1583	1774	1770	1855
Q Serve(g_s), s	0.5	0.0	1.3	9.7	0.2	10.8	0.9	29.0	29.0	6.0	17.3	17.3
Cycle Q Clear(g_c), s	0.5	0.0	1.3	9.7	0.2	10.8	0.9	29.0	29.0	6.0	17.3	17.3
Prop In Lane	1.00		0.79	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	23	0	98	608	417	354	39	1537	687	159	888	931
V/C Ratio(X)	0.57	0.00	0.34	0.85	0.02	0.77	0.63	1.01	1.19	1.09	0.68	0.68
Avail Cap(c_a), veh/h	106	0	196	618	446	379	106	1537	687	159	888	931
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	0.0	30.1	26.6	20.2	24.3	32.4	18.9	18.9	30.4	12.6	12.6
Incr Delay (d2), s/veh	20.5	0.0	2.0	10.9	0.0	8.8	15.6	24.9	100.8	98.0	4.2	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.6	5.5	0.1	5.6	0.6	19.2	31.8	7.2	9.4	9.8
LnGrp Delay(d),s/veh	53.3	0.0	32.2	37.5	20.2	33.2	48.0	43.8	119.7	128.4	16.8	16.6
LnGrp LOS	D		C	D	C	C	D	F	F	F	B	B
Approach Vol, veh/h		46			799			2394			1412	
Approach Delay, s/veh		38.1			35.9			69.9			30.5	
Approach LOS		D			D			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	33.0	15.8	8.0	5.5	37.5	4.9	18.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	29.0	12.0	8.0	4.0	31.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	8.0	31.0	11.7	3.3	2.9	19.3	2.5	12.8
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.0	6.1	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	51.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	378	141	143	319	260	185	1353	144	195	870	173
Future Volume (veh/h)	250	378	141	143	319	260	185	1353	144	195	870	173
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	260	394	147	149	332	0	193	1409	150	203	906	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	383	318	156	397	338	227	1380	605	207	1340	600
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.13	0.39	0.39	0.12	0.38	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	260	394	147	149	332	0	193	1409	150	203	906	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.8	18.5	7.5	7.5	15.4	0.0	9.6	35.1	5.9	10.3	19.2	0.0
Cycle Q Clear(g_c), s	6.8	18.5	7.5	7.5	15.4	0.0	9.6	35.1	5.9	10.3	19.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	383	318	156	397	338	227	1380	605	207	1340	600
V/C Ratio(X)	0.94	1.03	0.46	0.96	0.84	0.00	0.85	1.02	0.25	0.98	0.68	0.00
Avail Cap(c_a), veh/h	275	383	318	156	397	338	240	1380	605	207	1340	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.2	35.8	31.4	40.9	33.9	0.0	38.4	27.4	18.5	39.6	23.4	0.0
Incr Delay (d2), s/veh	39.4	53.6	1.0	59.1	14.3	0.0	23.1	29.6	0.2	56.9	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	15.2	3.3	6.2	9.4	0.0	6.1	22.7	2.5	8.3	9.6	0.0
LnGrp Delay(d),s/veh	80.6	89.4	32.4	100.0	48.2	0.0	61.5	57.0	18.7	96.5	24.7	0.0
LnGrp LOS	F	F	C	F	D		E	F	B	F	C	
Approach Vol, veh/h		801			481			1752			1109	
Approach Delay, s/veh		76.1			64.2			54.3			37.9	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	39.6	12.4	23.0	16.0	38.6	11.7	23.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2
Max Q Clear Time (g_c+I1), s	12.3	37.1	9.5	20.5	11.6	21.2	8.8	17.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	55.2
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	900	160	98	413	4	101	2	181	5	0	1
Future Volume (veh/h)	0	900	160	98	413	4	101	2	181	5	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	918	163	100	421	4	103	2	185	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1020	181	125	1729	16	584	10	508	415	11	62
Arrive On Green	0.00	0.36	0.36	0.07	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	2864	508	1675	3393	32	1379	30	1524	900	32	186
Grp Volume(v), veh/h	0	540	541	100	207	218	105	0	185	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1686	1675	1671	1754	1409	0	1524	1118	0	0
Q Serve(g_s), s	0.0	17.4	17.4	3.4	4.0	4.0	0.0	0.0	5.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.4	17.4	3.4	4.0	4.0	2.5	0.0	5.3	2.5	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.02	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	601	600	125	852	893	594	0	508	488	0	0
V/C Ratio(X)	0.00	0.90	0.90	0.80	0.24	0.24	0.18	0.00	0.36	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	615	615	190	852	893	594	0	508	488	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	17.5	26.1	7.9	7.9	13.6	0.0	14.5	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	16.1	16.1	12.7	0.1	0.1	0.6	0.0	2.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.6	10.6	2.0	1.8	1.9	1.3	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	33.5	33.6	38.8	8.0	8.0	14.2	0.0	16.5	12.9	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		1081			525			290			6	
Approach Delay, s/veh		33.6			13.9			15.7			12.9	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.6	8.8	24.9		23.6	0.0	33.7
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4
Max Q Clear Time (g_c+I1), s		7.3	5.4	19.4		4.5	0.0	6.0
Green Ext Time (p_c), s		0.9	0.0	1.0		0.0	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	788	303	400	427	0	88	0	74	0	3	0
Future Volume (veh/h)	1	788	303	400	427	0	88	0	74	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	829	319	421	449	0	93	0	78	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	797	306	446	2035	0	404	0	355	0	454	0
Arrive On Green	0.00	0.33	0.33	0.26	0.59	0.00	0.24	0.00	0.24	0.00	0.24	0.00
Sat Flow, veh/h	1707	2406	924	1740	3563	0	1287	0	1455	0	1863	0
Grp Volume(v), veh/h	1	586	562	421	449	0	93	0	78	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1628	1740	1736	0	1287	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	19.0	4.9	0.0	4.7	0.0	3.4	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	19.0	4.9	0.0	4.8	0.0	3.4	0.0	0.1	0.0
Prop In Lane	1.00		0.57	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	564	539	446	2035	0	404	0	355	0	454	0
V/C Ratio(X)	0.43	1.04	1.04	0.94	0.22	0.00	0.23	0.00	0.22	0.00	0.01	0.00
Avail Cap(c_a), veh/h	107	564	539	446	2035	0	404	0	355	0	454	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.9	26.7	26.8	29.2	7.9	0.0	24.7	0.0	24.2	0.0	22.9	0.0
Incr Delay (d2), s/veh	91.1	48.4	50.2	29.0	0.1	0.0	1.3	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	20.0	19.3	12.7	2.3	0.0	1.8	0.0	1.5	0.0	0.1	0.0
LnGrp Delay(d),s/veh	131.1	75.1	76.9	58.2	7.9	0.0	26.1	0.0	25.6	0.0	22.9	0.0
LnGrp LOS	F	F	F	E	A		C		C		C	
Approach Vol, veh/h		1149			870			171			3	
Approach Delay, s/veh		76.1			32.2			25.8			22.9	
Approach LOS		E			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	25.0	31.0		24.0	4.6	51.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		6.8	21.0	28.5		2.1	2.0	6.9
Green Ext Time (p_c), s		0.5	0.0	0.0		0.0	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	54.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	691	12	86	745	295	37	317	165	248	287	564
Future Volume (veh/h)	520	691	12	86	745	295	37	317	165	248	287	564
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	542	720	12	90	776	0	39	330	172	258	299	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	1148	19	115	810	363	64	548	280	253	648	551
Arrive On Green	0.16	0.32	0.32	0.07	0.23	0.00	0.04	0.24	0.24	0.14	0.35	0.00
Sat Flow, veh/h	3442	3562	59	1757	3505	1568	1757	2247	1148	1757	1845	1568
Grp Volume(v), veh/h	542	358	374	90	776	0	39	256	246	258	299	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1852	1757	1752	1568	1757	1752	1642	1757	1845	1568
Q Serve(g_s), s	12.5	13.7	13.7	4.0	17.5	0.0	1.8	10.3	10.7	11.5	10.0	0.0
Cycle Q Clear(g_c), s	12.5	13.7	13.7	4.0	17.5	0.0	1.8	10.3	10.7	11.5	10.0	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	538	570	597	115	810	363	64	427	400	253	648	551
V/C Ratio(X)	1.01	0.63	0.63	0.78	0.96	0.00	0.61	0.60	0.61	1.02	0.46	0.00
Avail Cap(c_a), veh/h	538	570	597	143	810	363	112	427	400	253	648	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	23.0	23.0	36.8	30.4	0.0	38.0	26.8	26.9	34.3	20.1	0.0
Incr Delay (d2), s/veh	40.8	2.2	2.1	19.9	21.8	0.0	9.2	6.1	6.9	62.3	2.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	7.0	7.3	2.6	10.9	0.0	1.0	5.7	5.6	9.9	5.5	0.0
LnGrp Delay(d),s/veh	74.6	25.2	25.1	56.7	52.2	0.0	47.2	32.9	33.8	96.7	22.4	0.0
LnGrp LOS	F	C	C	E	D		D	C	C	F	C	
Approach Vol, veh/h		1274			866			541			557	
Approach Delay, s/veh		46.2			52.6			34.3			56.8	
Approach LOS		D			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	24.0	9.7	30.3	7.4	32.6	17.0	23.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	19.5	6.5	24.5	5.1	25.9	12.5	18.5
Max Q Clear Time (g_c+I1), s	13.5	12.7	6.0	15.7	3.8	12.0	14.5	19.5
Green Ext Time (p_c), s	0.0	1.7	0.0	3.0	0.0	1.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	237	66	238	237	257	118	1025	260	199	1182	240
Future Volume (veh/h)	214	237	66	238	237	257	118	1025	260	199	1182	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	223	247	69	248	247	268	123	1068	271	207	1231	250
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	722	315	291	406	341	156	1201	305	269	1468	447
Arrive On Green	0.15	0.20	0.20	0.16	0.22	0.22	0.09	0.30	0.30	0.08	0.29	0.29
Sat Flow, veh/h	1774	3539	1544	1774	1863	1562	1774	4028	1021	3442	5085	1550
Grp Volume(v), veh/h	223	247	69	248	247	268	123	899	440	207	1231	250
Grp Sat Flow(s),veh/h/ln	1774	1770	1544	1774	1863	1562	1774	1695	1659	1721	1695	1550
Q Serve(g_s), s	8.6	4.2	2.6	9.6	8.4	11.4	4.8	17.8	17.8	4.2	16.0	9.6
Cycle Q Clear(g_c), s	8.6	4.2	2.6	9.6	8.4	11.4	4.8	17.8	17.8	4.2	16.0	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.62	1.00		1.00
Lane Grp Cap(c), veh/h	266	722	315	291	406	341	156	1011	495	269	1468	447
V/C Ratio(X)	0.84	0.34	0.22	0.85	0.61	0.79	0.79	0.89	0.89	0.77	0.84	0.56
Avail Cap(c_a), veh/h	302	905	395	315	489	410	164	1011	495	269	1468	447
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	24.0	23.3	28.6	24.8	26.0	31.5	23.6	23.6	31.8	23.5	21.2
Incr Delay (d2), s/veh	16.8	0.3	0.3	18.6	1.5	8.2	21.7	11.6	20.7	12.8	5.9	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	2.1	1.1	6.2	4.5	5.7	3.3	9.9	11.0	2.5	8.2	4.7
LnGrp Delay(d),s/veh	45.9	24.3	23.7	47.2	26.3	34.2	53.2	35.2	44.3	44.6	29.4	26.2
LnGrp LOS	D	C	C	D	C	C	D	D	D	D	C	C
Approach Vol, veh/h		539			763			1462			1688	
Approach Delay, s/veh		33.1			35.9			39.5			30.8	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.5	16.1	18.9	10.7	24.8	15.1	19.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5
Max Q Clear Time (g_c+I1), s	6.2	19.8	11.6	6.2	6.8	18.0	10.6	13.4
Green Ext Time (p_c), s	0.0	0.9	0.1	1.3	0.0	1.6	0.1	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	34.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	239	674	89	176	545	185	152	968	202	327	919	224
Future Volume (veh/h)	239	674	89	176	545	185	152	968	202	327	919	224
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	244	688	91	180	556	189	155	988	206	334	938	229
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	816	108	193	583	198	230	1062	463	366	1379	335
Arrive On Green	0.14	0.26	0.26	0.11	0.22	0.22	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3137	415	1774	2592	878	3442	3539	1544	3442	4062	988
Grp Volume(v), veh/h	244	388	391	180	379	366	155	988	206	334	782	385
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1701	1721	1770	1544	1721	1695	1660
Q Serve(g_s), s	10.9	16.6	16.7	8.1	16.9	17.0	3.5	21.7	8.6	7.7	15.9	15.9
Cycle Q Clear(g_c), s	10.9	16.6	16.7	8.1	16.9	17.0	3.5	21.7	8.6	7.7	15.9	15.9
Prop In Lane	1.00		0.23	1.00		0.52	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	255	460	463	193	398	383	230	1062	463	366	1151	563
V/C Ratio(X)	0.96	0.84	0.84	0.93	0.95	0.96	0.67	0.93	0.44	0.91	0.68	0.68
Avail Cap(c_a), veh/h	255	460	463	193	398	383	237	1062	463	366	1151	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	28.1	28.1	35.4	30.6	30.6	36.5	27.2	22.6	35.4	22.7	22.7
Incr Delay (d2), s/veh	44.4	13.3	13.4	46.0	32.8	34.7	7.1	15.3	3.1	26.6	3.2	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	9.8	9.9	6.4	11.8	11.6	1.9	12.8	4.1	5.0	7.9	8.3
LnGrp Delay(d),s/veh	78.4	41.4	41.4	81.4	63.4	65.3	43.6	42.4	25.7	62.0	25.9	29.3
LnGrp LOS	E	D	D	F	E	E	D	D	C	E	C	C
Approach Vol, veh/h		1023			925			1349			1501	
Approach Delay, s/veh		50.2			67.7			40.0			34.8	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	28.5	13.2	25.3	9.8	31.7	16.0	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0
Max Q Clear Time (g_c+I1), s	9.7	23.7	10.1	18.7	5.5	17.9	12.9	19.0
Green Ext Time (p_c), s	0.0	0.2	0.0	1.0	0.0	5.1	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	45.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	312	10	930	485	323	25	308	890	196	310	32
Future Volume (veh/h)	32	312	10	930	485	323	25	308	890	196	310	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	34	335	11	1000	522	0	27	331	957	211	333	34
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	61	488	16	1162	1585	838	55	654	1453	277	755	77
Arrive On Green	0.04	0.15	0.16	0.34	0.46	0.00	0.03	0.19	0.19	0.08	0.24	0.25
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2718	3342	3151	320
Grp Volume(v), veh/h	34	169	177	1000	522	0	27	331	957	211	181	186
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	2.0	9.7	9.7	27.6	9.6	0.0	1.5	8.6	7.8	6.2	8.9	9.0
Cycle Q Clear(g_c), s	2.0	9.7	9.7	27.6	9.6	0.0	1.5	8.6	7.8	6.2	8.9	9.0
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	61	247	257	1162	1585	838	55	654	1453	277	412	420
V/C Ratio(X)	0.56	0.68	0.69	0.86	0.33	0.00	0.49	0.51	0.66	0.76	0.44	0.44
Avail Cap(c_a), veh/h	121	757	788	1249	2618	1300	104	1209	1887	301	650	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	40.3	40.3	30.5	17.3	0.0	47.6	36.4	4.8	44.9	32.3	32.2
Incr Delay (d2), s/veh	3.0	7.0	6.8	6.8	0.3	0.0	2.5	0.6	0.5	12.6	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	4.9	5.1	13.9	4.6	0.0	0.8	4.1	4.1	3.3	4.3	4.4
LnGrp Delay(d),s/veh	50.3	47.3	47.1	37.3	17.6	0.0	50.1	37.0	5.3	57.5	33.0	33.0
LnGrp LOS	D	D	D	D	B		D	D	A	E	C	C
Approach Vol, veh/h		380			1522			1315			578	
Approach Delay, s/veh		47.4			30.6			14.2			41.9	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	40.4	20.4	9.2	29.9	9.2	51.6	14.3	24.8
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8
Max Q Clear Time (g_c+I1), s	29.6	11.7	3.5	11.0	4.0	11.6	8.2	10.6
Green Ext Time (p_c), s	4.8	3.2	0.0	1.4	0.0	6.1	0.1	7.6

Intersection Summary	
HCM 2010 Ctrl Delay	28.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	31	341	66	10	100	180	1086	13	132	1048	21
Future Volume (veh/h)	37	31	341	66	10	100	180	1086	13	132	1048	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	36	38	367	71	11	108	194	1168	14	142	1127	23
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	381	400	339	149	23	152	187	1676	20	174	1128	503
Arrive On Green	0.22	0.22	0.22	0.11	0.10	0.10	0.11	0.33	0.33	0.10	0.32	0.32
Sat Flow, veh/h	1707	1792	1522	1531	237	1563	1757	5130	61	1774	3539	1577
Grp Volume(v), veh/h	36	38	367	82	0	108	194	764	418	142	1127	23
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1834	1774	1770	1577
Q Serve(g_s), s	1.6	1.6	21.0	4.1	0.0	6.3	10.0	18.7	18.7	7.4	30.0	0.9
Cycle Q Clear(g_c), s	1.6	1.6	21.0	4.1	0.0	6.3	10.0	18.7	18.7	7.4	30.0	0.9
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	381	400	339	172	0	152	187	1097	599	174	1128	503
V/C Ratio(X)	0.09	0.10	1.08	0.48	0.00	0.71	1.04	0.70	0.70	0.82	1.00	0.05
Avail Cap(c_a), veh/h	381	400	339	469	0	415	187	1097	599	207	1128	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	29.0	36.6	39.6	0.0	41.2	42.1	27.6	27.6	41.6	32.1	22.2
Incr Delay (d2), s/veh	0.1	0.1	72.4	2.0	0.0	6.0	76.7	1.9	3.5	19.0	26.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	15.6	2.1	0.0	3.0	8.8	8.9	10.0	4.5	18.7	0.4
LnGrp Delay(d),s/veh	29.1	29.1	109.0	41.6	0.0	47.2	118.9	29.6	31.2	60.7	58.7	22.2
LnGrp LOS	C	C	F	D		D	F	C	C	E	E	C
Approach Vol, veh/h		441			190			1376			1292	
Approach Delay, s/veh		95.6			44.8			42.7			58.3	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.0	16.0	36.0		15.2	15.2	36.8
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0
Max Q Clear Time (g_c+I1), s		23.0	12.0	32.0		8.3	9.4	20.7
Green Ext Time (p_c), s		0.0	0.0	0.0		0.6	0.1	3.6

Intersection Summary	
HCM 2010 Ctrl Delay	56.0
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	354	290	156	347	107	124	650	62	149	1260	246
Future Volume (veh/h)	154	354	290	156	347	107	124	650	62	149	1260	246
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	177	407	333	179	399	0	143	747	71	171	1448	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.12	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1570	1774	3539	1583
Grp Volume(v), veh/h	177	407	333	179	399	0	143	747	71	171	1448	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1570	1774	1770	1583
Q Serve(g_s), s	4.6	18.9	18.9	9.1	18.4	0.0	7.2	15.2	2.7	8.5	36.0	0.0
Cycle Q Clear(g_c), s	4.6	18.9	18.9	9.1	18.4	0.0	7.2	15.2	2.7	8.5	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
V/C Ratio(X)	0.89	1.04	1.02	0.97	0.84	0.00	0.95	0.57	0.12	0.82	1.02	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1301	577	304	1416	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.1	35.5	35.5	40.1	31.6	0.0	41.0	22.8	18.8	38.8	27.0	0.0
Incr Delay (d2), s/veh	35.4	56.4	54.7	55.8	12.6	0.0	59.8	0.6	0.1	11.3	29.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	15.8	13.1	7.3	11.0	0.0	6.0	7.5	1.2	4.8	23.4	0.0
LnGrp Delay(d),s/veh	77.5	92.0	90.3	95.9	44.2	0.0	100.8	23.4	18.9	50.1	56.9	0.0
LnGrp LOS	E	F	F	F	D		F	C	B	D	F	
Approach Vol, veh/h		917			578			961			1619	
Approach Delay, s/veh		88.6			60.2			34.6			56.2	
Approach LOS		F			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	37.6	14.0	23.4	12.1	40.5	9.7	27.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2
Max Q Clear Time (g_c+I1), s	10.5	17.2	11.1	20.9	9.2	38.0	6.6	20.4
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	58.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	609	108	180	381	3	109	1	117	1	1	0
Future Volume (veh/h)	1	609	108	180	381	3	109	1	117	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	700	124	207	438	3	125	1	134	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	840	149	251	1476	10	577	4	488	296	267	0
Arrive On Green	0.00	0.29	0.29	0.15	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	2920	517	1660	3372	23	1393	13	1509	622	824	0
Grp Volume(v), veh/h	1	412	412	207	215	226	126	0	134	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1718	1660	1656	1739	1405	0	1509	1446	0	0
Q Serve(g_s), s	0.0	12.8	12.8	6.9	4.8	4.8	0.0	0.0	3.7	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	12.8	12.8	6.9	4.8	4.8	3.1	0.0	3.7	3.1	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	495	494	251	725	761	581	0	488	563	0	0
V/C Ratio(X)	0.33	0.83	0.83	0.82	0.30	0.30	0.22	0.00	0.27	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	544	544	295	725	761	581	0	488	563	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.4	19.0	19.0	23.4	10.3	10.3	14.1	0.0	14.3	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.7	9.9	10.0	15.0	0.2	0.2	0.9	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.4	7.4	4.2	2.2	2.3	1.6	0.0	1.7	0.0	0.0	0.0
LnGrp Delay(d),s/veh	82.0	28.9	29.0	38.4	10.6	10.5	14.9	0.0	15.7	13.1	0.0	0.0
LnGrp LOS	F	C	C	D	B	B	B		B	B		
Approach Vol, veh/h		825			648			260			2	
Approach Delay, s/veh		29.0			19.4			15.3			13.1	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	13.1	20.9		22.9	4.6	29.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.7	8.9	14.8		5.1	2.0	6.8
Green Ext Time (p_c), s		0.9	0.1	1.6		0.0	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	23.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	360	8	798	383	580	13	547	1152	582	540	34
Future Volume (veh/h)	31	360	8	798	383	580	13	547	1152	582	540	34
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	32	375	8	831	399	0	14	570	1200	606	562	35
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	56	538	11	744	1204	802	33	880	1301	578	1347	84
Arrive On Green	0.03	0.16	0.17	0.22	0.35	0.00	0.02	0.25	0.25	0.17	0.40	0.41
Sat Flow, veh/h	1690	3375	72	3374	3470	1552	1756	3504	2759	3407	3350	208
Grp Volume(v), veh/h	32	187	196	831	399	0	14	570	1200	606	293	304
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.0	20.0	14.2	14.2
Cycle Q Clear(g_c), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.0	20.0	14.2	14.2
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	56	269	281	744	1204	802	33	880	1301	578	704	726
V/C Ratio(X)	0.57	0.70	0.70	1.12	0.33	0.00	0.43	0.65	0.92	1.05	0.42	0.42
Avail Cap(c_a), veh/h	100	665	695	744	1928	1126	89	1011	1404	578	713	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	46.8	46.8	45.9	28.4	0.0	57.2	39.5	9.5	48.9	25.3	25.3
Incr Delay (d2), s/veh	3.4	6.8	6.5	69.8	0.3	0.0	3.2	1.2	9.9	50.7	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	6.3	6.6	19.2	4.8	0.0	0.5	8.5	9.3	13.4	6.9	7.2
LnGrp Delay(d),s/veh	59.6	53.6	53.4	115.8	28.7	0.0	60.4	40.7	19.4	99.6	25.7	25.7
LnGrp LOS	E	D	D	F	C		E	D	B	F	C	C
Approach Vol, veh/h		415			1230			1784			1203	
Approach Delay, s/veh		54.0			87.5			26.5			62.9	
Approach LOS		D			F			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	24.3	8.2	53.4	9.4	46.9	26.0	35.6
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0
Max Q Clear Time (g_c+I1), s	28.0	14.4	2.9	16.2	4.2	12.0	22.0	22.0
Green Ext Time (p_c), s	0.0	3.5	0.0	2.4	0.0	4.4	0.0	7.3

Intersection Summary	
HCM 2010 Ctrl Delay	54.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	32	232	117	12	191	223	1421	18	231	1027	44
Future Volume (veh/h)	99	32	232	117	12	191	223	1421	18	231	1027	44
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	66	80	234	118	12	193	225	1435	18	233	1037	44
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	323	272	251	26	244	238	1493	19	238	1021	453
Arrive On Green	0.18	0.18	0.18	0.17	0.16	0.16	0.13	0.29	0.29	0.13	0.29	0.29
Sat Flow, veh/h	1757	1845	1555	1617	164	1571	1774	5176	65	1774	3539	1572
Grp Volume(v), veh/h	66	80	234	130	0	193	225	940	513	233	1037	44
Grp Sat Flow(s),veh/h/ln	1757	1845	1555	1782	0	1571	1774	1695	1851	1774	1770	1572
Q Serve(g_s), s	3.1	3.6	14.2	6.4	0.0	11.5	12.2	26.5	26.5	12.7	28.0	2.0
Cycle Q Clear(g_c), s	3.1	3.6	14.2	6.4	0.0	11.5	12.2	26.5	26.5	12.7	28.0	2.0
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	308	323	272	277	0	244	238	978	534	238	1021	453
V/C Ratio(X)	0.21	0.25	0.86	0.47	0.00	0.79	0.95	0.96	0.96	0.98	1.02	0.10
Avail Cap(c_a), veh/h	362	380	320	459	0	405	238	978	534	238	1021	453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	34.5	38.9	36.7	0.0	39.5	41.7	34.0	34.0	41.9	34.5	25.3
Incr Delay (d2), s/veh	0.3	0.4	18.1	1.2	0.0	5.7	43.8	20.0	29.3	52.8	32.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.9	7.5	3.2	0.0	5.4	8.9	15.1	17.9	9.7	18.2	0.9
LnGrp Delay(d),s/veh	34.7	34.9	57.0	37.9	0.0	45.2	85.6	54.0	63.3	94.8	66.8	25.4
LnGrp LOS	C	C	E	D		D	F	D	E	F	F	C
Approach Vol, veh/h		380			323			1678			1314	
Approach Delay, s/veh		48.5			42.3			61.1			70.4	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.0	19.0	34.0		21.1	19.0	34.0
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0
Max Q Clear Time (g_c+I1), s		16.2	14.2	30.0		13.5	14.7	28.5
Green Ext Time (p_c), s		0.6	0.0	0.0		1.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	61.4
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	375	139	143	315	260	183	1353	144	195	870	173
Future Volume (veh/h)	250	375	139	143	315	260	183	1353	144	195	870	173
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	260	391	145	149	328	0	191	1409	150	203	906	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	383	318	156	397	338	225	1380	605	207	1344	601
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.13	0.39	0.39	0.12	0.38	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	260	391	145	149	328	0	191	1409	150	203	906	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.8	18.5	7.4	7.5	15.1	0.0	9.5	35.1	5.9	10.3	19.2	0.0
Cycle Q Clear(g_c), s	6.8	18.5	7.4	7.5	15.1	0.0	9.5	35.1	5.9	10.3	19.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	383	318	156	397	338	225	1380	605	207	1344	601
V/C Ratio(X)	0.94	1.02	0.46	0.96	0.83	0.00	0.85	1.02	0.25	0.98	0.67	0.00
Avail Cap(c_a), veh/h	275	383	318	156	397	338	240	1380	605	207	1344	601
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.2	35.8	31.3	40.9	33.8	0.0	38.4	27.4	18.5	39.6	23.3	0.0
Incr Delay (d2), s/veh	39.4	51.5	1.0	59.1	13.3	0.0	22.7	29.6	0.2	56.9	1.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	14.9	3.3	6.2	9.2	0.0	6.0	22.7	2.5	8.3	9.6	0.0
LnGrp Delay(d),s/veh	80.6	87.2	32.4	100.0	47.1	0.0	61.2	57.0	18.7	96.5	24.6	0.0
LnGrp LOS	F	F	C	F	D		E	F	B	F	C	
Approach Vol, veh/h		796			477			1750			1109	
Approach Delay, s/veh		75.1			63.6			54.2			37.8	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	39.6	12.4	23.0	15.9	38.7	11.7	23.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2
Max Q Clear Time (g_c+I1), s	12.3	37.1	9.5	20.5	11.5	21.2	8.8	17.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	54.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	787	298	399	427	0	88	0	74	0	3	0
Future Volume (veh/h)	1	787	298	399	427	0	88	0	74	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	828	314	420	449	0	93	0	78	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	801	303	446	2035	0	404	0	355	0	454	0
Arrive On Green	0.00	0.33	0.33	0.26	0.59	0.00	0.24	0.00	0.24	0.00	0.24	0.00
Sat Flow, veh/h	1707	2417	915	1740	3563	0	1287	0	1455	0	1863	0
Grp Volume(v), veh/h	1	583	559	420	449	0	93	0	78	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1629	1740	1736	0	1287	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	18.9	4.9	0.0	4.7	0.0	3.4	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	18.9	4.9	0.0	4.8	0.0	3.4	0.0	0.1	0.0
Prop In Lane	1.00		0.56	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	564	540	446	2035	0	404	0	355	0	454	0
V/C Ratio(X)	0.43	1.03	1.04	0.94	0.22	0.00	0.23	0.00	0.22	0.00	0.01	0.00
Avail Cap(c_a), veh/h	107	564	540	446	2035	0	404	0	355	0	454	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.9	26.7	26.8	29.2	7.9	0.0	24.7	0.0	24.2	0.0	22.9	0.0
Incr Delay (d2), s/veh	91.1	46.7	48.4	28.5	0.1	0.0	1.3	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	19.7	19.1	12.6	2.3	0.0	1.8	0.0	1.5	0.0	0.1	0.0
LnGrp Delay(d),s/veh	131.1	73.5	75.1	57.7	7.9	0.0	26.1	0.0	25.6	0.0	22.9	0.0
LnGrp LOS	F	F	F	E	A		C		C		C	
Approach Vol, veh/h		1143			869			171			3	
Approach Delay, s/veh		74.3			32.0			25.8			22.9	
Approach LOS		E			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	25.0	31.0		24.0	4.6	51.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		6.8	20.9	28.5		2.1	2.0	6.9
Green Ext Time (p_c), s		0.5	0.0	0.0		0.0	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	53.6
HCM 2010 LOS	D

Appendix L

Level of Service

Calculations

Background Plus Project

Apartments

Conditions

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	234	892	1112	19	23	475
Future Volume (vph)	234	892	1112	19	23	475
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.12	1.00	1.00		0.95	1.00
Satd. Flow (perm)	223	3504	3477		1770	1583
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	257	980	1222	21	25	522
RTOR Reduction (vph)	0	0	0	0	0	158
Lane Group Flow (vph)	257	980	1243	0	25	364
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	47.4		20.6	20.6
Effective Green, g (s)	61.1	61.5	48.5		21.3	21.7
Actuated g/C Ratio	0.68	0.68	0.54		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	306	2399	1877		419	382
v/s Ratio Prot	c0.08	0.28	0.36		0.01	
v/s Ratio Perm	c0.48					c0.23
v/c Ratio	0.84	0.41	0.66		0.06	0.95
Uniform Delay, d1	16.0	6.2	14.8		26.5	33.5
Progression Factor	1.75	0.38	1.00		1.00	1.00
Incremental Delay, d2	16.7	0.1	1.0		0.0	33.5
Delay (s)	44.7	2.5	15.8		26.5	67.1
Level of Service	D	A	B		C	E
Approach Delay (s)		11.3	15.8		65.2	
Approach LOS		B	B		E	

Intersection Summary

HCM 2000 Control Delay	22.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	89.8	Sum of lost time (s)	11.6
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	965	0	0	1315	272	313	1	162	0	0	0
Future Volume (vph)	0	965	0	0	1315	272	313	1	162	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3396		1624	1629	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3396		1624	1629	1530			
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1060	0	0	1445	299	344	1	178	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	108	0	0	0
Lane Group Flow (vph)	0	1060	0	0	1744	0	172	173	70	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			47.4		20.6	20.6	20.6			
Effective Green, g (s)		61.5			48.5		21.3	21.3	21.3			
Actuated g/C Ratio		0.68			0.54		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2364			1834		385	386	362			
v/s Ratio Prot		c0.31			c0.51		0.11	c0.11				
v/s Ratio Perm									0.05			
v/c Ratio		0.45			0.95		0.45	0.45	0.19			
Uniform Delay, d1		6.4			19.5		29.2	29.2	27.4			
Progression Factor		1.00			0.68		1.00	1.00	1.00			
Incremental Delay, d2		0.2			8.2		0.8	0.8	0.3			
Delay (s)		6.6			21.6		30.1	30.1	27.7			
Level of Service		A			C		C	C	C			
Approach Delay (s)		6.6			21.6			29.2			0.0	
Approach LOS		A			C			C			A	

Intersection Summary

HCM 2000 Control Delay	18.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	89.8	Sum of lost time (s)	12.3
Intersection Capacity Utilization	60.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1062	1347	0	231	399
Future Volume (veh/h)	0	1062	1347	0	231	399
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800
Adj Flow Rate, veh/h	0	1167	1480	0	254	438
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	4	2	0	4	4
Cap, veh/h	0	1713	1747	0	1152	530
Arrive On Green	0.00	0.50	0.50	0.00	0.35	0.35
Sat Flow, veh/h	0	3599	3670	0	3325	1530
Grp Volume(v), veh/h	0	1167	1480	0	254	438
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530
Q Serve(g_s), s	0.0	13.1	18.6	0.0	2.7	13.2
Cycle Q Clear(g_c), s	0.0	13.1	18.6	0.0	2.7	13.2
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1713	1747	0	1152	530
V/C Ratio(X)	0.00	0.68	0.85	0.00	0.22	0.83
Avail Cap(c_a), veh/h	0	2091	2132	0	1408	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	9.5	10.9	0.0	11.7	15.1
Incr Delay (d2), s/veh	0.0	0.4	2.4	0.0	0.1	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.1	9.4	0.0	1.2	6.5
LnGrp Delay(d),s/veh	0.0	10.0	13.3	0.0	11.7	21.9
LnGrp LOS		A	B		B	C
Approach Vol, veh/h		1167	1480		692	
Approach Delay, s/veh		10.0	13.3		18.2	
Approach LOS		A	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		29.4		21.1		29.4		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		15.1		15.2		20.6		
Green Ext Time (p_c), s		3.4		1.3		3.7		

Intersection Summary	
HCM 2010 Ctrl Delay	13.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	312	10	938	485	323	25	312	918	196	311	32
Future Volume (veh/h)	32	312	10	938	485	323	25	312	918	196	311	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	34	335	11	1009	522	0	27	335	987	211	334	34
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	61	487	16	1162	1585	837	55	662	1460	276	762	77
Arrive On Green	0.04	0.15	0.16	0.34	0.46	0.00	0.03	0.19	0.19	0.08	0.24	0.25
Sat Flow, veh/h	1659	3270	107	3374	3470	1552	1739	3470	2718	3342	3151	319
Grp Volume(v), veh/h	34	169	177	1009	522	0	27	335	987	211	181	187
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1687	1735	1552	1739	1735	1359	1671	1718	1752
Q Serve(g_s), s	2.0	9.8	9.8	28.2	9.7	0.0	1.5	8.7	8.2	6.2	9.0	9.1
Cycle Q Clear(g_c), s	2.0	9.8	9.8	28.2	9.7	0.0	1.5	8.7	8.2	6.2	9.0	9.1
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	61	246	256	1162	1585	837	55	662	1460	276	416	424
V/C Ratio(X)	0.56	0.69	0.69	0.87	0.33	0.00	0.49	0.51	0.68	0.76	0.44	0.44
Avail Cap(c_a), veh/h	120	751	782	1239	2597	1290	104	1199	1880	299	645	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	40.6	40.6	30.9	17.5	0.0	48.0	36.5	4.9	45.2	32.4	32.3
Incr Delay (d2), s/veh	3.0	7.1	6.9	7.3	0.3	0.0	2.5	0.6	0.7	12.9	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	4.9	5.2	14.2	4.7	0.0	0.8	4.2	4.2	3.4	4.4	4.5
LnGrp Delay(d),s/veh	50.7	47.7	47.5	38.2	17.8	0.0	50.5	37.1	5.5	58.1	33.1	33.0
LnGrp LOS	D	D	D	D	B		D	D	A	E	C	C
Approach Vol, veh/h		380			1531			1349			579	
Approach Delay, s/veh		47.9			31.2			14.3			42.2	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	40.7	20.5	9.2	30.4	9.2	52.0	14.3	25.2
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8
Max Q Clear Time (g_c+I1), s	30.2	11.8	3.5	11.1	4.0	11.7	8.2	10.7
Green Ext Time (p_c), s	4.5	3.2	0.0	1.4	0.0	6.1	0.1	7.9

Intersection Summary	
HCM 2010 Ctrl Delay	28.6
HCM 2010 LOS	C

Intersection												
Int Delay, s/veh	38.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	256	180	185	274	43	122	24	19	66	43	0
Future Vol, veh/h	0	256	180	185	274	43	122	24	19	66	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	86	86	86	86	86	86	86	86	86	86	86	86
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	298	209	215	319	50	142	28	22	77	50	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	369	0	0	507	0	0	1097	1097	298	1177	1256	319
Stage 1	-	-	-	-	-	-	298	298	-	749	749	-
Stage 2	-	-	-	-	-	-	799	799	-	428	507	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1142	-	-	1048	-	-	189	211	737	168	171	722
Stage 1	-	-	-	-	-	-	706	663	-	404	419	-
Stage 2	-	-	-	-	-	-	376	395	-	605	539	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1142	-	-	1048	-	-	~ 115	168	737	120	136	722
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 115	168	-	120	136	-
Stage 1	-	-	-	-	-	-	706	663	-	404	333	-
Stage 2	-	-	-	-	-	-	254	314	-	562	539	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	176.5	148.6
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	115	255	1142	-	-	1048	-	-	126	-
HCM Lane V/C Ratio	1.234	0.196	-	-	-	0.205	-	-	1.006	-
HCM Control Delay (s)	230.8	22.5	0	-	-	9.3	-	-	148.6	0
HCM Lane LOS	F	C	A	-	-	A	-	-	F	A
HCM 95th %tile Q(veh)	9.2	0.7	0	-	-	0.8	-	-	6.9	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	31	341	67	10	100	180	1118	15	132	1057	21
Future Volume (veh/h)	37	31	341	67	10	100	180	1118	15	132	1057	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	36	38	367	72	11	108	194	1202	16	142	1137	23
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	381	400	339	149	23	152	187	1674	22	174	1128	503
Arrive On Green	0.22	0.22	0.22	0.11	0.10	0.10	0.11	0.33	0.33	0.10	0.32	0.32
Sat Flow, veh/h	1707	1792	1522	1534	234	1563	1757	5122	68	1774	3539	1577
Grp Volume(v), veh/h	36	38	367	83	0	108	194	788	430	142	1137	23
Grp Sat Flow(s),veh/h/ln	1707	1792	1522	1768	0	1563	1757	1679	1833	1774	1770	1577
Q Serve(g_s), s	1.6	1.6	21.0	4.2	0.0	6.3	10.0	19.4	19.4	7.4	30.0	0.9
Cycle Q Clear(g_c), s	1.6	1.6	21.0	4.2	0.0	6.3	10.0	19.4	19.4	7.4	30.0	0.9
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	381	400	339	172	0	152	187	1097	599	174	1128	503
V/C Ratio(X)	0.09	0.10	1.08	0.48	0.00	0.71	1.04	0.72	0.72	0.82	1.01	0.05
Avail Cap(c_a), veh/h	381	400	339	469	0	415	187	1097	599	207	1128	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	29.0	36.6	39.6	0.0	41.2	42.1	27.9	27.9	41.6	32.1	22.2
Incr Delay (d2), s/veh	0.1	0.1	72.4	2.1	0.0	6.0	76.8	2.3	4.1	19.0	28.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.8	15.6	2.1	0.0	3.0	8.8	9.3	10.5	4.5	19.1	0.4
LnGrp Delay(d),s/veh	29.1	29.1	109.0	41.7	0.0	47.2	118.9	30.2	32.0	60.7	61.0	22.2
LnGrp LOS	C	C	F	D		D	F	C	C	E	F	C
Approach Vol, veh/h		441			191			1412			1302	
Approach Delay, s/veh		95.6			44.8			42.9			60.2	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.0	16.0	36.0		15.2	15.2	36.8
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0
Max Q Clear Time (g_c+I1), s		23.0	12.0	32.0		8.3	9.4	21.4
Green Ext Time (p_c), s		0.0	0.0	0.0		0.6	0.1	3.5

Intersection Summary

HCM 2010 Ctrl Delay	56.7
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	1	25	655	3	143	8	1010	535	227	1276	10
Future Volume (veh/h)	34	1	25	655	3	143	8	1010	535	227	1276	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	36	1	27	697	3	152	9	1074	569	241	1357	11
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	51	3	85	769	466	396	16	1347	603	198	1725	14
Arrive On Green	0.03	0.06	0.06	0.23	0.25	0.25	0.01	0.38	0.38	0.11	0.48	0.48
Sat Flow, veh/h	1774	57	1535	3408	1845	1568	1774	3539	1583	1757	3563	29
Grp Volume(v), veh/h	36	0	28	697	3	152	9	1074	569	241	667	701
Grp Sat Flow(s),veh/h/ln	1774	0	1592	1704	1845	1568	1774	1770	1583	1757	1752	1840
Q Serve(g_s), s	1.4	0.0	1.2	14.1	0.1	5.7	0.4	19.1	24.7	8.0	22.5	22.5
Cycle Q Clear(g_c), s	1.4	0.0	1.2	14.1	0.1	5.7	0.4	19.1	24.7	8.0	22.5	22.5
Prop In Lane	1.00		0.96	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	51	0	89	769	466	396	16	1347	603	198	848	891
V/C Ratio(X)	0.71	0.00	0.32	0.91	0.01	0.38	0.55	0.80	0.94	1.22	0.79	0.79
Avail Cap(c_a), veh/h	100	0	90	769	466	396	100	1347	603	198	848	891
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	0.0	32.2	26.7	19.9	21.9	35.0	19.5	21.2	31.5	15.2	15.2
Incr Delay (d2), s/veh	16.5	0.0	2.0	14.5	0.0	0.6	26.2	5.0	25.2	134.4	7.3	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.6	8.1	0.0	2.5	0.3	10.2	15.0	11.3	12.5	13.0
LnGrp Delay(d),s/veh	50.7	0.0	34.2	41.2	19.9	22.6	61.2	24.5	46.5	165.9	22.5	22.2
LnGrp LOS	D		C	D	B	C	E	C	D	F	C	C
Approach Vol, veh/h		64			852			1652			1609	
Approach Delay, s/veh		43.5			37.8			32.3			43.9	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	31.0	20.0	7.9	4.7	38.3	6.0	21.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	27.0	16.0	4.0	4.0	31.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	10.0	26.7	16.1	3.2	2.4	24.5	3.4	7.7
Green Ext Time (p_c), s	0.0	0.3	0.0	0.0	0.0	4.3	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	38.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	361	294	156	349	107	125	650	62	149	1260	246
Future Volume (veh/h)	154	361	294	156	349	107	125	650	62	149	1260	246
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	177	415	338	179	401	0	144	747	71	171	1448	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.37	0.37	0.12	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1570	1774	3539	1583
Grp Volume(v), veh/h	177	415	338	179	401	0	144	747	71	171	1448	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1570	1774	1770	1583
Q Serve(g_s), s	4.6	18.9	18.9	9.1	18.6	0.0	7.3	15.2	2.7	8.5	36.0	0.0
Cycle Q Clear(g_c), s	4.6	18.9	18.9	9.1	18.6	0.0	7.3	15.2	2.7	8.5	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1301	577	207	1416	633
V/C Ratio(X)	0.89	1.06	1.03	0.97	0.84	0.00	0.96	0.57	0.12	0.82	1.02	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1301	577	304	1416	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.1	35.5	35.5	40.1	31.7	0.0	41.1	22.8	18.8	38.8	27.0	0.0
Incr Delay (d2), s/veh	35.4	62.5	58.9	55.8	13.0	0.0	61.7	0.6	0.1	11.3	29.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	16.5	13.4	7.3	11.2	0.0	6.1	7.5	1.2	4.8	23.4	0.0
LnGrp Delay(d),s/veh	77.5	98.1	94.5	95.9	44.7	0.0	102.7	23.4	18.9	50.1	56.9	0.0
LnGrp LOS	E	F	F	F	D		F	C	B	D	F	
Approach Vol, veh/h		930			580			962			1619	
Approach Delay, s/veh		92.9			60.5			35.0			56.2	
Approach LOS		F			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	37.6	14.0	23.4	12.1	40.5	9.7	27.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2
Max Q Clear Time (g_c+I1), s	10.5	17.2	11.1	20.9	9.3	38.0	6.6	20.6
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	60.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	498	156	108	378	3	176	0	192	7	2	0
Future Volume (veh/h)	0	498	156	108	378	3	176	0	192	7	2	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	607	190	132	461	4	215	0	234	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	754	236	166	1579	14	653	0	556	381	73	0
Arrive On Green	0.00	0.29	0.29	0.10	0.48	0.48	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2580	806	1630	3304	29	1465	0	1568	730	206	0
Grp Volume(v), veh/h	0	404	393	132	227	238	215	0	234	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1667	1630	1626	1707	1465	0	1568	936	0	0
Q Serve(g_s), s	0.0	11.7	11.7	4.2	4.5	4.5	0.0	0.0	6.1	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	11.7	11.7	4.2	4.5	4.5	5.2	0.0	6.1	5.2	0.0	0.0
Prop In Lane	1.00		0.48	1.00		0.02	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	502	487	166	777	815	653	0	556	454	0	0
V/C Ratio(X)	0.00	0.80	0.81	0.80	0.29	0.29	0.33	0.00	0.42	0.02	0.00	0.00
Avail Cap(c_a), veh/h	161	577	560	289	777	815	653	0	556	454	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.6	17.6	23.5	8.5	8.5	12.9	0.0	13.1	11.5	0.0	0.0
Incr Delay (d2), s/veh	0.0	7.2	7.5	8.4	0.2	0.2	1.3	0.0	2.3	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.5	6.4	2.3	2.1	2.2	2.6	0.0	2.9	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	24.8	25.1	32.0	8.7	8.7	14.2	0.0	15.5	11.6	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		797			597			449			11	
Approach Delay, s/veh		24.9			13.8			14.9			11.6	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.5	9.9	20.2		23.5	0.0	30.1
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5
Max Q Clear Time (g_c+I1), s		8.1	6.2	13.7		7.2	0.0	6.5
Green Ext Time (p_c), s		1.6	0.1	2.0		0.0	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	610	109	180	381	3	109	1	117	1	1	0
Future Volume (veh/h)	1	610	109	180	381	3	109	1	117	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	701	125	207	438	3	125	1	134	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	840	150	251	1477	10	576	4	488	296	266	0
Arrive On Green	0.00	0.29	0.29	0.15	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	2917	520	1660	3372	23	1393	13	1509	622	824	0
Grp Volume(v), veh/h	1	413	413	207	215	226	126	0	134	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1718	1660	1656	1739	1405	0	1509	1446	0	0
Q Serve(g_s), s	0.0	12.8	12.8	6.9	4.8	4.8	0.0	0.0	3.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	12.8	12.8	6.9	4.8	4.8	3.1	0.0	3.8	3.1	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	495	495	251	725	762	580	0	488	562	0	0
V/C Ratio(X)	0.33	0.83	0.83	0.82	0.30	0.30	0.22	0.00	0.27	0.00	0.00	0.00
Avail Cap(c_a), veh/h	151	544	543	295	725	762	580	0	488	562	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.4	19.0	19.0	23.4	10.3	10.3	14.1	0.0	14.3	13.1	0.0	0.0
Incr Delay (d2), s/veh	53.7	10.0	10.1	15.0	0.2	0.2	0.9	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.5	7.5	4.2	2.2	2.3	1.6	0.0	1.7	0.0	0.0	0.0
LnGrp Delay(d),s/veh	82.1	29.0	29.1	38.4	10.6	10.5	14.9	0.0	15.7	13.1	0.0	0.0
LnGrp LOS	F	C	C	D	B	B	B		B	B		
Approach Vol, veh/h		827			648			260			2	
Approach Delay, s/veh		29.1			19.5			15.3			13.1	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	13.1	20.9		22.9	4.6	29.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.8	8.9	14.8		5.1	2.0	6.8
Green Ext Time (p_c), s		0.9	0.1	1.6		0.0	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	23.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	553	712	32	142	608	262	44	285	77	198	399	644
Future Volume (veh/h)	553	712	32	142	608	262	44	285	77	198	399	644
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	570	734	33	146	627	0	45	294	79	204	411	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	635	1009	45	180	735	329	69	657	173	235	619	526
Arrive On Green	0.18	0.29	0.29	0.10	0.21	0.00	0.04	0.24	0.24	0.13	0.34	0.00
Sat Flow, veh/h	3442	3450	155	1740	3471	1553	1740	2718	718	1757	1845	1568
Grp Volume(v), veh/h	570	376	391	146	627	0	45	186	187	204	411	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1835	1740	1736	1553	1740	1736	1700	1757	1845	1568
Q Serve(g_s), s	12.7	15.0	15.0	6.5	13.7	0.0	2.0	7.2	7.4	9.0	15.0	0.0
Cycle Q Clear(g_c), s	12.7	15.0	15.0	6.5	13.7	0.0	2.0	7.2	7.4	9.0	15.0	0.0
Prop In Lane	1.00		0.08	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	635	518	537	180	735	329	69	419	411	235	619	526
V/C Ratio(X)	0.90	0.73	0.73	0.81	0.85	0.00	0.65	0.44	0.46	0.87	0.66	0.00
Avail Cap(c_a), veh/h	635	518	537	210	794	355	111	419	411	235	619	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.4	25.0	25.0	34.5	29.8	0.0	37.2	25.3	25.4	33.4	22.4	0.0
Incr Delay (d2), s/veh	15.7	5.1	4.9	18.3	8.5	0.0	9.8	3.4	3.6	27.7	5.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	8.1	8.3	4.0	7.4	0.0	1.2	3.8	3.8	6.2	8.6	0.0
LnGrp Delay(d),s/veh	47.0	30.1	29.9	52.8	38.3	0.0	47.0	28.7	29.0	61.1	27.9	0.0
LnGrp LOS	D	C	C	D	D		D	C	C	E	C	
Approach Vol, veh/h		1337			773			418			615	
Approach Delay, s/veh		37.3			41.0			30.8			38.9	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	23.5	12.6	27.5	7.6	30.9	19.0	21.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0
Max Q Clear Time (g_c+I1), s	11.0	9.4	8.5	17.0	4.0	17.0	14.7	15.7
Green Ext Time (p_c), s	0.0	1.5	0.0	2.4	0.0	1.5	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	422	107	319	322	283	35	449	383	230	593	91
Future Volume (veh/h)	120	422	107	319	322	283	35	449	383	230	593	91
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	138	485	123	367	370	325	40	516	440	264	682	105
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	173	755	288	394	629	530	66	817	377	327	1522	469
Arrive On Green	0.10	0.21	0.21	0.22	0.34	0.34	0.04	0.24	0.24	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1352	1774	1863	1569	1774	3390	1566	3442	5085	1567
Grp Volume(v), veh/h	138	485	123	367	370	325	40	516	440	264	682	105
Grp Sat Flow(s),veh/h/ln	1774	1770	1352	1774	1863	1569	1774	1695	1566	1721	1695	1567
Q Serve(g_s), s	6.0	9.8	6.2	16.0	12.9	13.6	1.8	10.7	19.0	5.9	8.6	4.0
Cycle Q Clear(g_c), s	6.0	9.8	6.2	16.0	12.9	13.6	1.8	10.7	19.0	5.9	8.6	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	755	288	394	629	530	66	817	377	327	1522	469
V/C Ratio(X)	0.80	0.64	0.43	0.93	0.59	0.61	0.61	0.63	1.17	0.81	0.45	0.22
Avail Cap(c_a), veh/h	248	808	309	394	629	530	133	817	377	327	1522	469
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	28.3	26.8	30.1	21.6	21.8	37.4	26.8	29.9	34.9	22.4	20.7
Incr Delay (d2), s/veh	11.1	1.6	1.0	28.8	1.4	2.1	8.8	3.7	99.7	13.7	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	4.9	2.4	11.0	6.8	6.2	1.0	5.4	18.5	3.4	4.1	1.8
LnGrp Delay(d),s/veh	45.9	29.8	27.8	58.8	23.0	23.9	46.2	30.5	129.6	48.7	23.3	21.8
LnGrp LOS	D	C	C	E	C	C	D	C	F	D	C	C
Approach Vol, veh/h		746			1062			996			1051	
Approach Delay, s/veh		32.5			35.7			74.9			29.5	
Approach LOS		C			D			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	23.5	22.0	21.3	7.4	28.1	12.2	31.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5
Max Q Clear Time (g_c+I1), s	7.9	21.0	18.0	11.8	3.8	10.6	8.0	15.6
Green Ext Time (p_c), s	0.0	0.0	0.0	1.9	0.0	3.6	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	43.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	197	432	105	145	603	97	78	537	123	211	810	176
Future Volume (veh/h)	197	432	105	145	603	97	78	537	123	211	810	176
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	221	485	118	163	678	109	88	603	138	237	910	198
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	776	188	202	769	124	200	958	424	272	1228	266
Arrive On Green	0.14	0.27	0.27	0.11	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	2822	682	1774	3051	490	3408	3505	1551	3442	4183	906
Grp Volume(v), veh/h	221	303	300	163	393	394	88	603	138	237	737	371
Grp Sat Flow(s),veh/h/ln	1774	1770	1735	1774	1770	1771	1704	1752	1551	1721	1695	1700
Q Serve(g_s), s	8.5	10.4	10.5	6.2	14.8	14.9	1.7	10.5	4.9	4.7	13.6	13.7
Cycle Q Clear(g_c), s	8.5	10.4	10.5	6.2	14.8	14.9	1.7	10.5	4.9	4.7	13.6	13.7
Prop In Lane	1.00		0.39	1.00		0.28	1.00		1.00	1.00		0.53
Lane Grp Cap(c), veh/h	242	487	477	202	446	447	200	958	424	272	995	499
V/C Ratio(X)	0.91	0.62	0.63	0.81	0.88	0.88	0.44	0.63	0.33	0.87	0.74	0.74
Avail Cap(c_a), veh/h	242	487	477	227	458	459	245	958	424	272	995	499
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.6	22.0	22.1	30.1	25.0	25.0	31.6	22.2	20.2	31.7	22.2	22.2
Incr Delay (d2), s/veh	35.1	2.5	2.6	17.4	17.5	17.7	1.5	3.1	2.0	24.8	4.9	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	5.4	5.3	4.0	9.4	9.4	0.9	5.4	2.3	3.2	7.0	7.7
LnGrp Delay(d),s/veh	64.7	24.5	24.7	47.5	42.5	42.7	33.1	25.3	22.2	56.5	27.1	31.9
LnGrp LOS	E	C	C	D	D	D	C	C	C	E	C	C
Approach Vol, veh/h		824			950			829			1345	
Approach Delay, s/veh		35.4			43.4			25.6			33.6	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	23.5	12.4	23.6	8.6	24.9	14.0	22.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0
Max Q Clear Time (g_c+I1), s	6.7	12.5	8.2	12.5	3.7	15.7	10.5	16.9
Green Ext Time (p_c), s	0.0	2.4	0.0	1.9	0.0	2.4	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	34.7
HCM 2010 LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	488	1482	974	33	41	343
Future Volume (vph)	488	1482	974	33	41	343
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3469		1770	1583
Flt Permitted	0.15	1.00	1.00		0.95	1.00
Satd. Flow (perm)	268	3504	3469		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	493	1497	984	33	41	346
RTOR Reduction (vph)	0	0	0	0	0	262
Lane Group Flow (vph)	493	1497	1017	0	41	84
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	39.4		20.8	20.8
Effective Green, g (s)	61.1	61.5	40.5		21.5	21.9
Actuated g/C Ratio	0.68	0.68	0.45		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	463	2394	1561		422	385
v/s Ratio Prot	c0.20	0.43	0.29		0.02	
v/s Ratio Perm	c0.52					c0.05
v/c Ratio	1.06	0.63	0.65		0.10	0.22
Uniform Delay, d1	22.7	7.9	19.3		26.7	27.2
Progression Factor	1.14	0.55	1.00		1.00	1.00
Incremental Delay, d2	51.8	0.4	1.1		0.1	0.2
Delay (s)	77.6	4.7	20.4		26.8	27.4
Level of Service	E	A	C		C	C
Approach Delay (s)		22.7	20.4		27.4	
Approach LOS		C	C		C	

Intersection Summary

HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1578	0	0	1065	252	467	3	393	0	0	0
Future Volume (vph)	0	1578	0	0	1065	252	467	3	393	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3367		1656	1661	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3367		1656	1661	1560			
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	1679	0	0	1133	268	497	3	418	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1679	0	0	1401	0	248	252	361	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			39.4		20.8	20.8	20.8			
Effective Green, g (s)		61.5			40.5		21.5	21.5	21.5			
Actuated g/C Ratio		0.68			0.45		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2382			1515		395	396	372			
v/s Ratio Prot		c0.48			c0.42		0.15	0.15				
v/s Ratio Perm									c0.23			
v/c Ratio		0.70			0.92		0.63	0.64	0.97			
Uniform Delay, d1		8.7			23.3		30.7	30.7	33.9			
Progression Factor		1.00			0.44		1.00	1.00	1.00			
Incremental Delay, d2		1.0			8.4		3.1	3.3	38.6			
Delay (s)		9.7			18.8		33.8	34.1	72.6			
Level of Service		A			B		C	C	E			
Approach Delay (s)		9.7			18.8			51.5			0.0	
Approach LOS		A			B			D			A	

Intersection Summary

HCM 2000 Control Delay	22.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.3
Intersection Capacity Utilization	74.6%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1585	1381	0	427	406
Future Volume (veh/h)	0	1585	1381	0	427	406
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835
Adj Flow Rate, veh/h	0	1651	1439	0	445	423
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1883	1883	0	1082	498
Arrive On Green	0.00	0.54	0.54	0.00	0.32	0.32
Sat Flow, veh/h	0	3670	3670	0	3390	1560
Grp Volume(v), veh/h	0	1651	1439	0	445	423
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560
Q Serve(g_s), s	0.0	22.6	17.7	0.0	5.6	13.9
Cycle Q Clear(g_c), s	0.0	22.6	17.7	0.0	5.6	13.9
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1883	1883	0	1082	498
V/C Ratio(X)	0.00	0.88	0.76	0.00	0.41	0.85
Avail Cap(c_a), veh/h	0	2159	2159	0	1140	524
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	11.0	9.9	0.0	14.6	17.4
Incr Delay (d2), s/veh	0.0	3.6	1.2	0.0	0.2	11.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.5	8.7	0.0	2.6	7.5
LnGrp Delay(d),s/veh	0.0	14.6	11.0	0.0	14.8	29.2
LnGrp LOS		B	B		B	C
Approach Vol, veh/h		1651	1439		868	
Approach Delay, s/veh		14.6	11.0		21.8	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		33.7		21.1		33.7		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		24.6		15.9		19.7		
Green Ext Time (p_c), s		3.9		0.6		4.3		

Intersection Summary	
HCM 2010 Ctrl Delay	14.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	360	8	824	383	580	13	549	1167	582	544	34
Future Volume (veh/h)	31	360	8	824	383	580	13	549	1167	582	544	34
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	32	375	8	858	399	0	14	572	1216	606	567	35
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	56	537	11	742	1201	800	33	886	1305	576	1352	83
Arrive On Green	0.03	0.16	0.17	0.22	0.35	0.00	0.02	0.25	0.25	0.17	0.40	0.41
Sat Flow, veh/h	1690	3375	72	3374	3470	1552	1756	3504	2759	3407	3352	207
Grp Volume(v), veh/h	32	187	196	858	399	0	14	572	1216	606	296	306
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1687	1735	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.5	20.0	14.3	14.4
Cycle Q Clear(g_c), s	2.2	12.4	12.4	26.0	10.0	0.0	0.9	17.2	20.5	20.0	14.3	14.4
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	56	268	280	742	1201	800	33	886	1305	576	707	729
V/C Ratio(X)	0.57	0.70	0.70	1.16	0.33	0.00	0.43	0.65	0.93	1.05	0.42	0.42
Avail Cap(c_a), veh/h	100	663	693	742	1922	1123	89	1008	1400	576	711	734
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	47.0	47.0	46.1	28.6	0.0	57.4	39.4	9.6	49.1	25.3	25.3
Incr Delay (d2), s/veh	3.4	6.8	6.6	85.2	0.3	0.0	3.2	1.2	11.0	51.7	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	6.3	6.6	20.8	4.9	0.0	0.5	8.5	9.6	13.5	7.0	7.2
LnGrp Delay(d),s/veh	59.8	53.8	53.6	131.3	28.9	0.0	60.6	40.6	20.6	100.8	25.7	25.7
LnGrp LOS	E	D	D	F	C		E	D	C	F	C	C
Approach Vol, veh/h		415			1257			1802			1208	
Approach Delay, s/veh		54.2			98.8			27.3			63.4	
Approach LOS		D			F			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	24.3	8.2	53.7	9.4	46.9	26.0	35.9
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0
Max Q Clear Time (g_c+I1), s	28.0	14.4	2.9	16.4	4.2	12.0	22.0	22.5
Green Ext Time (p_c), s	0.0	3.5	0.0	2.5	0.0	4.4	0.0	7.2

Intersection Summary	
HCM 2010 Ctrl Delay	58.2
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	9.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	256	94	130	193	78	110	54	46	57	32	1
Future Vol, veh/h	7	256	94	130	193	78	110	54	46	57	32	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	7	269	99	137	203	82	116	57	48	60	34	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	286	0	0	374	0	0	833	849	275	863	866	213
Stage 1	-	-	-	-	-	-	289	289	-	478	478	-
Stage 2	-	-	-	-	-	-	544	560	-	385	388	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1237	-	-	1158	-	-	286	296	759	275	291	827
Stage 1	-	-	-	-	-	-	714	669	-	568	556	-
Stage 2	-	-	-	-	-	-	520	507	-	638	609	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1236	-	-	1152	-	-	230	258	755	194	253	820
Mov Cap-2 Maneuver	-	-	-	-	-	-	230	258	-	194	253	-
Stage 1	-	-	-	-	-	-	706	662	-	565	489	-
Stage 2	-	-	-	-	-	-	423	446	-	543	602	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.8	27.5	34.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	230	370	1236	-	-	1152	-	-	212	820
HCM Lane V/C Ratio	0.503	0.284	0.006	-	-	0.119	-	-	0.442	0.001
HCM Control Delay (s)	35.5	18.6	7.9	-	-	8.5	-	-	34.8	9.4
HCM Lane LOS	E	C	A	-	-	A	-	-	D	A
HCM 95th %tile Q(veh)	2.6	1.2	0	-	-	0.4	-	-	2.1	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	32	232	119	12	191	223	1438	19	231	1057	44
Future Volume (veh/h)	99	32	232	119	12	191	223	1438	19	231	1057	44
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	66	80	234	120	12	193	225	1453	19	233	1068	44
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	308	323	272	252	25	244	238	1492	20	238	1021	453
Arrive On Green	0.18	0.18	0.18	0.17	0.16	0.16	0.13	0.29	0.29	0.13	0.29	0.29
Sat Flow, veh/h	1757	1845	1555	1620	162	1571	1774	5173	68	1774	3539	1572
Grp Volume(v), veh/h	66	80	234	132	0	193	225	952	520	233	1068	44
Grp Sat Flow(s),veh/h/ln	1757	1845	1555	1782	0	1571	1774	1695	1850	1774	1770	1572
Q Serve(g_s), s	3.1	3.6	14.2	6.5	0.0	11.5	12.2	27.0	27.0	12.7	28.0	2.0
Cycle Q Clear(g_c), s	3.1	3.6	14.2	6.5	0.0	11.5	12.2	27.0	27.0	12.7	28.0	2.0
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	308	323	272	277	0	244	238	978	534	238	1021	453
V/C Ratio(X)	0.21	0.25	0.86	0.48	0.00	0.79	0.95	0.97	0.97	0.98	1.05	0.10
Avail Cap(c_a), veh/h	362	380	320	459	0	404	238	978	534	238	1021	453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.3	34.5	38.9	36.8	0.0	39.5	41.7	34.2	34.2	41.9	34.6	25.3
Incr Delay (d2), s/veh	0.3	0.4	18.1	1.3	0.0	5.7	43.9	22.6	32.3	52.9	41.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.9	7.5	3.3	0.0	5.4	8.9	15.6	18.5	9.7	19.4	0.9
LnGrp Delay(d),s/veh	34.7	34.9	57.0	38.0	0.0	45.1	85.6	56.8	66.5	94.8	75.7	25.4
LnGrp LOS	C	C	E	D		D	F	E	E	F	F	C
Approach Vol, veh/h		380			325			1697			1345	
Approach Delay, s/veh		48.5			42.3			63.6			77.3	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.0	19.0	34.0		21.1	19.0	34.0
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0
Max Q Clear Time (g_c+I1), s		16.2	14.2	30.0		13.5	14.7	29.0
Green Ext Time (p_c), s		0.6	0.0	0.0		1.0	0.0	0.0

Intersection Summary

HCM 2010 Ctrl Delay	65.1
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	6	15	471	11	248	26	1410	746	158	1113	34
Future Volume (veh/h)	20	6	15	471	11	248	26	1410	746	158	1113	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	22	7	16	518	12	273	29	1549	820	174	1223	37
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	36	30	69	608	403	343	44	1537	687	159	1750	53
Arrive On Green	0.02	0.06	0.06	0.18	0.22	0.22	0.02	0.43	0.43	0.09	0.50	0.50
Sat Flow, veh/h	1774	505	1154	3442	1863	1583	1774	3539	1583	1774	3508	106
Grp Volume(v), veh/h	22	0	23	518	12	273	29	1549	820	174	617	643
Grp Sat Flow(s),veh/h/ln	1774	0	1659	1721	1863	1583	1774	1770	1583	1774	1770	1844
Q Serve(g_s), s	0.8	0.0	0.9	9.7	0.3	10.9	1.1	29.0	29.0	6.0	17.9	17.9
Cycle Q Clear(g_c), s	0.8	0.0	0.9	9.7	0.3	10.9	1.1	29.0	29.0	6.0	17.9	17.9
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	36	0	99	608	403	343	44	1537	687	159	883	920
V/C Ratio(X)	0.62	0.00	0.23	0.85	0.03	0.80	0.66	1.01	1.19	1.09	0.70	0.70
Avail Cap(c_a), veh/h	106	0	199	618	446	379	106	1537	687	159	883	920
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	29.9	26.6	20.6	24.8	32.3	18.9	18.9	30.4	12.9	12.9
Incr Delay (d2), s/veh	16.1	0.0	1.2	10.9	0.0	10.4	15.3	25.0	100.8	98.0	4.6	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.4	5.5	0.2	5.7	0.7	19.2	31.8	7.2	9.7	10.1
LnGrp Delay(d),s/veh	48.6	0.0	31.1	37.5	20.7	35.1	47.6	43.9	119.7	128.4	17.4	17.3
LnGrp LOS	D		C	D	C	D	D	F	F	F	B	B
Approach Vol, veh/h		45			803			2398			1434	
Approach Delay, s/veh		39.7			36.5			69.8			30.8	
Approach LOS		D			D			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	33.0	15.8	8.0	5.7	37.3	5.3	18.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	29.0	12.0	8.0	4.0	31.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	8.0	31.0	11.7	2.9	3.1	19.9	2.8	12.9
Green Ext Time (p_c), s	0.0	0.0	0.1	0.0	0.0	6.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	51.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	378	141	143	321	260	187	1353	144	195	870	173
Future Volume (veh/h)	250	378	141	143	321	260	187	1353	144	195	870	173
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	260	394	147	149	334	0	195	1409	150	203	906	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	383	318	156	397	338	229	1380	605	207	1336	598
Arrive On Green	0.08	0.21	0.21	0.09	0.21	0.00	0.13	0.39	0.39	0.12	0.38	0.00
Sat Flow, veh/h	3442	1863	1549	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	260	394	147	149	334	0	195	1409	150	203	906	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1549	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	6.8	18.5	7.5	7.5	15.5	0.0	9.7	35.1	5.9	10.3	19.3	0.0
Cycle Q Clear(g_c), s	6.8	18.5	7.5	7.5	15.5	0.0	9.7	35.1	5.9	10.3	19.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	383	318	156	397	338	229	1380	605	207	1336	598
V/C Ratio(X)	0.94	1.03	0.46	0.96	0.84	0.00	0.85	1.02	0.25	0.98	0.68	0.00
Avail Cap(c_a), veh/h	275	383	318	156	397	338	240	1380	605	207	1336	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.2	35.8	31.4	40.9	33.9	0.0	38.3	27.4	18.5	39.6	23.4	0.0
Incr Delay (d2), s/veh	39.4	53.6	1.0	59.1	14.8	0.0	23.5	29.6	0.2	56.9	1.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	15.2	3.3	6.2	9.6	0.0	6.2	22.7	2.5	8.3	9.7	0.0
LnGrp Delay(d),s/veh	80.6	89.4	32.4	100.0	48.8	0.0	61.8	57.0	18.7	96.5	24.8	0.0
LnGrp LOS	F	F	C	F	D		E	F	B	F	C	
Approach Vol, veh/h		801			483			1754			1109	
Approach Delay, s/veh		76.1			64.6			54.3			37.9	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	39.6	12.4	23.0	16.1	38.5	11.7	23.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2
Max Q Clear Time (g_c+I1), s	12.3	37.1	9.5	20.5	11.7	21.3	8.8	17.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	55.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	901	160	98	413	4	98	2	181	5	0	1
Future Volume (veh/h)	0	901	160	98	413	4	98	2	181	5	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	919	163	100	421	4	100	2	185	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1020	181	125	1729	16	583	10	508	417	11	62
Arrive On Green	0.00	0.36	0.36	0.07	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	2865	508	1675	3393	32	1377	31	1524	904	32	187
Grp Volume(v), veh/h	0	541	541	100	207	218	102	0	185	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1686	1675	1671	1754	1408	0	1524	1123	0	0
Q Serve(g_s), s	0.0	17.4	17.4	3.4	4.0	4.0	0.0	0.0	5.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	17.4	17.4	3.4	4.0	4.0	2.4	0.0	5.3	2.4	0.0	0.0
Prop In Lane	1.00		0.30	1.00		0.02	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	601	601	125	852	894	594	0	508	490	0	0
V/C Ratio(X)	0.00	0.90	0.90	0.80	0.24	0.24	0.17	0.00	0.36	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	615	615	190	852	894	594	0	508	490	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	17.5	26.1	7.9	7.9	13.5	0.0	14.5	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	16.1	16.2	12.7	0.1	0.1	0.6	0.0	2.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	10.7	10.7	2.0	1.8	1.9	1.2	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	33.6	33.7	38.8	8.0	8.0	14.2	0.0	16.5	12.9	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		1082			525			287			6	
Approach Delay, s/veh		33.7			13.9			15.7			12.9	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.6	8.8	24.9		23.6	0.0	33.7
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4
Max Q Clear Time (g_c+I1), s		7.3	5.4	19.4		4.4	0.0	6.0
Green Ext Time (p_c), s		0.9	0.0	1.0		0.0	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	788	304	400	427	0	88	0	74	0	3	0
Future Volume (veh/h)	1	788	304	400	427	0	88	0	74	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	829	320	421	449	0	93	0	78	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	796	307	446	2035	0	404	0	355	0	454	0
Arrive On Green	0.00	0.33	0.33	0.26	0.59	0.00	0.24	0.00	0.24	0.00	0.24	0.00
Sat Flow, veh/h	1707	2404	926	1740	3563	0	1287	0	1455	0	1863	0
Grp Volume(v), veh/h	1	587	562	421	449	0	93	0	78	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1627	1740	1736	0	1287	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	19.0	4.9	0.0	4.7	0.0	3.4	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	19.0	4.9	0.0	4.8	0.0	3.4	0.0	0.1	0.0
Prop In Lane	1.00		0.57	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	564	539	446	2035	0	404	0	355	0	454	0
V/C Ratio(X)	0.43	1.04	1.04	0.94	0.22	0.00	0.23	0.00	0.22	0.00	0.01	0.00
Avail Cap(c_a), veh/h	107	564	539	446	2035	0	404	0	355	0	454	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	39.9	26.7	26.8	29.2	7.9	0.0	24.7	0.0	24.2	0.0	22.9	0.0
Incr Delay (d2), s/veh	91.1	48.7	50.5	29.0	0.1	0.0	1.3	0.0	1.4	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	20.0	19.4	12.7	2.3	0.0	1.8	0.0	1.5	0.0	0.1	0.0
LnGrp Delay(d),s/veh	131.1	75.4	77.2	58.2	7.9	0.0	26.1	0.0	25.6	0.0	22.9	0.0
LnGrp LOS	F	F	F	E	A		C		C		C	
Approach Vol, veh/h		1150			870			171			3	
Approach Delay, s/veh		76.4			32.2			25.8			22.9	
Approach LOS		E			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	25.0	31.0		24.0	4.6	51.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		6.8	21.0	28.5		2.1	2.0	6.9
Green Ext Time (p_c), s		0.5	0.0	0.0		0.0	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	54.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	521	691	12	86	745	297	37	316	165	248	285	561
Future Volume (veh/h)	521	691	12	86	745	297	37	316	165	248	285	561
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	543	720	12	90	776	0	39	329	172	258	297	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	1148	19	115	810	363	64	547	280	253	648	551
Arrive On Green	0.16	0.32	0.32	0.07	0.23	0.00	0.04	0.24	0.24	0.14	0.35	0.00
Sat Flow, veh/h	3442	3562	59	1757	3505	1568	1757	2244	1150	1757	1845	1568
Grp Volume(v), veh/h	543	358	374	90	776	0	39	255	246	258	297	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1852	1757	1752	1568	1757	1752	1642	1757	1845	1568
Q Serve(g_s), s	12.5	13.7	13.7	4.0	17.5	0.0	1.8	10.3	10.6	11.5	10.0	0.0
Cycle Q Clear(g_c), s	12.5	13.7	13.7	4.0	17.5	0.0	1.8	10.3	10.6	11.5	10.0	0.0
Prop In Lane	1.00		0.03	1.00		1.00	1.00		0.70	1.00		1.00
Lane Grp Cap(c), veh/h	538	570	597	115	810	363	64	427	400	253	648	551
V/C Ratio(X)	1.01	0.63	0.63	0.78	0.96	0.00	0.61	0.60	0.61	1.02	0.46	0.00
Avail Cap(c_a), veh/h	538	570	597	143	810	363	112	427	400	253	648	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	23.0	23.0	36.8	30.4	0.0	38.0	26.8	26.9	34.3	20.1	0.0
Incr Delay (d2), s/veh	41.3	2.2	2.1	19.9	21.8	0.0	9.2	6.1	6.9	62.3	2.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	7.0	7.3	2.6	10.9	0.0	1.0	5.7	5.5	9.9	5.5	0.0
LnGrp Delay(d),s/veh	75.0	25.2	25.1	56.7	52.2	0.0	47.2	32.8	33.8	96.7	22.4	0.0
LnGrp LOS	F	C	C	E	D		D	C	C	F	C	
Approach Vol, veh/h		1275			866			540			555	
Approach Delay, s/veh		46.4			52.6			34.3			56.9	
Approach LOS		D			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	24.0	9.7	30.3	7.4	32.6	17.0	23.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	19.5	6.5	24.5	5.1	25.9	12.5	18.5
Max Q Clear Time (g_c+I1), s	13.5	12.6	6.0	15.7	3.8	12.0	14.5	19.5
Green Ext Time (p_c), s	0.0	1.7	0.0	3.0	0.0	1.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	47.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	214	238	66	239	238	257	118	1026	260	199	1183	241
Future Volume (veh/h)	214	238	66	239	238	257	118	1026	260	199	1183	241
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	223	248	69	249	248	268	123	1069	271	207	1232	251
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	721	314	292	406	341	156	1201	304	269	1468	447
Arrive On Green	0.15	0.20	0.20	0.16	0.22	0.22	0.09	0.30	0.30	0.08	0.29	0.29
Sat Flow, veh/h	1774	3539	1544	1774	1863	1562	1774	4029	1021	3442	5085	1550
Grp Volume(v), veh/h	223	248	69	249	248	268	123	899	441	207	1232	251
Grp Sat Flow(s),veh/h/ln	1774	1770	1544	1774	1863	1562	1774	1695	1659	1721	1695	1550
Q Serve(g_s), s	8.6	4.2	2.6	9.6	8.5	11.4	4.8	17.8	17.9	4.2	16.0	9.7
Cycle Q Clear(g_c), s	8.6	4.2	2.6	9.6	8.5	11.4	4.8	17.8	17.9	4.2	16.0	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.62	1.00		1.00
Lane Grp Cap(c), veh/h	266	721	314	292	406	341	156	1011	495	269	1468	447
V/C Ratio(X)	0.84	0.34	0.22	0.85	0.61	0.79	0.79	0.89	0.89	0.77	0.84	0.56
Avail Cap(c_a), veh/h	302	905	395	315	489	410	164	1011	495	269	1468	447
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	24.0	23.4	28.6	24.8	26.0	31.5	23.6	23.6	31.8	23.5	21.3
Incr Delay (d2), s/veh	16.8	0.3	0.3	18.7	1.6	8.2	21.7	11.6	20.8	12.8	5.9	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	2.1	1.1	6.2	4.5	5.7	3.3	10.0	11.1	2.5	8.2	4.7
LnGrp Delay(d),s/veh	45.9	24.3	23.7	47.3	26.4	34.2	53.2	35.3	44.4	44.6	29.4	26.3
LnGrp LOS	D	C	C	D	C	C	D	D	D	D	C	C
Approach Vol, veh/h		540			765			1463			1690	
Approach Delay, s/veh		33.1			35.9			39.5			30.8	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.5	16.1	18.8	10.7	24.8	15.1	19.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5
Max Q Clear Time (g_c+I1), s	6.2	19.9	11.6	6.2	6.8	18.0	10.6	13.4
Green Ext Time (p_c), s	0.0	0.9	0.1	1.3	0.0	1.5	0.1	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	34.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	674	89	176	547	185	152	968	202	327	919	226
Future Volume (veh/h)	241	674	89	176	547	185	152	968	202	327	919	226
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	246	688	91	180	558	189	155	988	206	334	938	231
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	816	108	193	584	197	230	1062	463	366	1376	338
Arrive On Green	0.14	0.26	0.26	0.11	0.22	0.22	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3137	415	1774	2595	876	3442	3539	1544	3442	4054	995
Grp Volume(v), veh/h	246	388	391	180	380	367	155	988	206	334	784	385
Grp Sat Flow(s),veh/h/ln	1774	1770	1782	1774	1770	1701	1721	1770	1544	1721	1695	1659
Q Serve(g_s), s	11.0	16.6	16.7	8.1	17.0	17.1	3.5	21.7	8.6	7.7	15.9	16.0
Cycle Q Clear(g_c), s	11.0	16.6	16.7	8.1	17.0	17.1	3.5	21.7	8.6	7.7	15.9	16.0
Prop In Lane	1.00		0.23	1.00		0.51	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	255	460	463	193	398	383	230	1062	463	366	1151	563
V/C Ratio(X)	0.96	0.84	0.84	0.93	0.95	0.96	0.67	0.93	0.44	0.91	0.68	0.68
Avail Cap(c_a), veh/h	255	460	463	193	398	383	237	1062	463	366	1151	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.0	28.1	28.1	35.4	30.6	30.6	36.5	27.2	22.6	35.4	22.7	22.7
Incr Delay (d2), s/veh	46.4	13.3	13.4	46.0	33.4	35.3	7.1	15.3	3.1	26.6	3.3	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	9.8	9.9	6.4	11.9	11.7	1.9	12.8	4.1	5.0	7.9	8.3
LnGrp Delay(d),s/veh	80.5	41.4	41.4	81.4	64.0	65.9	43.6	42.4	25.7	62.0	26.0	29.3
LnGrp LOS	F	D	D	F	E	E	D	D	C	E	C	C
Approach Vol, veh/h		1025			927			1349			1503	
Approach Delay, s/veh		50.8			68.1			40.0			34.8	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	28.5	13.2	25.3	9.8	31.7	16.0	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0
Max Q Clear Time (g_c+I1), s	9.7	23.7	10.1	18.7	5.5	18.0	13.0	19.1
Green Ext Time (p_c), s	0.0	0.2	0.0	1.0	0.0	5.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	46.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	312	10	938	485	323	25	312	918	196	311	32
Future Volume (veh/h)	32	312	10	938	485	323	25	312	918	196	311	32
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	34	335	11	1009	522	0	27	335	987	211	334	34
Adj No. of Lanes	1	2	0	3	1	1	1	2	2	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	64	512	17	1344	716	743	58	732	1322	291	835	84
Arrive On Green	0.04	0.16	0.17	0.27	0.39	0.00	0.03	0.21	0.21	0.09	0.26	0.28
Sat Flow, veh/h	1659	3270	107	4905	1826	1552	1739	3470	2719	3342	3152	319
Grp Volume(v), veh/h	34	169	177	1009	522	0	27	335	987	211	181	187
Grp Sat Flow(s),veh/h/ln	1659	1655	1723	1635	1826	1552	1739	1735	1360	1671	1718	1752
Q Serve(g_s), s	1.7	8.3	8.4	16.3	21.1	0.0	1.3	7.3	7.7	5.3	7.5	7.6
Cycle Q Clear(g_c), s	1.7	8.3	8.4	16.3	21.1	0.0	1.3	7.3	7.7	5.3	7.5	7.6
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	64	259	270	1344	716	743	58	732	1322	291	455	464
V/C Ratio(X)	0.53	0.65	0.66	0.75	0.73	0.00	0.47	0.46	0.75	0.73	0.40	0.40
Avail Cap(c_a), veh/h	140	873	909	1529	1379	1307	121	1395	1841	347	750	765
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.8	34.3	34.3	28.7	22.4	0.0	41.1	29.8	4.9	38.5	26.2	26.1
Incr Delay (d2), s/veh	2.5	5.8	5.7	2.5	3.1	0.0	2.2	0.4	1.1	8.9	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	4.2	4.4	7.6	11.2	0.0	0.7	3.5	4.0	2.8	3.6	3.8
LnGrp Delay(d),s/veh	43.3	40.1	39.9	31.2	25.5	0.0	43.3	30.3	6.0	47.4	26.7	26.7
LnGrp LOS	D	D	D	C	C		D	C	A	D	C	C
Approach Vol, veh/h		380			1531			1349			579	
Approach Delay, s/veh		40.3			29.3			12.8			34.2	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	29.7	19.1	8.9	28.9	8.9	39.9	13.5	24.3
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	27.0	45.7	6.0	37.8	7.3	65.4	9.0	34.8
Max Q Clear Time (g_c+I1), s	18.3	10.4	3.3	9.6	3.7	23.1	7.3	9.7
Green Ext Time (p_c), s	5.4	3.2	0.0	1.4	0.0	5.9	0.2	8.0

Intersection Summary	
HCM 2010 Ctrl Delay	25.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	31	341	67	10	100	180	1118	15	132	1057	21
Future Volume (veh/h)	37	31	341	67	10	100	180	1118	15	132	1057	21
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	40	33	367	72	11	108	194	1202	16	142	1137	23
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	349	492	418	327	43	430	233	1944	26	178	1230	548
Arrive On Green	0.27	0.27	0.27	0.29	0.27	0.27	0.13	0.38	0.38	0.10	0.35	0.35
Sat Flow, veh/h	1219	1792	1522	857	157	1566	1757	5122	68	1774	3539	1578
Grp Volume(v), veh/h	40	33	367	83	0	108	194	788	430	142	1137	23
Grp Sat Flow(s),veh/h/ln	1219	1792	1522	1014	0	1566	1757	1679	1833	1774	1770	1578
Q Serve(g_s), s	2.0	1.0	16.9	4.0	0.0	3.9	7.9	13.9	13.9	5.7	22.6	0.7
Cycle Q Clear(g_c), s	7.0	1.0	16.9	5.0	0.0	3.9	7.9	13.9	13.9	5.7	22.6	0.7
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	349	492	418	391	0	430	233	1274	696	178	1230	548
V/C Ratio(X)	0.11	0.07	0.88	0.21	0.00	0.25	0.83	0.62	0.62	0.80	0.92	0.04
Avail Cap(c_a), veh/h	447	636	540	474	0	556	240	1274	696	218	1255	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	19.7	25.4	20.7	0.0	20.7	31.0	18.4	18.4	32.2	23.0	15.8
Incr Delay (d2), s/veh	0.1	0.1	12.6	0.3	0.0	0.3	21.2	0.9	1.7	15.4	11.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.5	8.5	1.3	0.0	1.7	5.2	6.6	7.4	3.6	13.0	0.3
LnGrp Delay(d),s/veh	24.0	19.7	38.0	21.0	0.0	21.0	52.2	19.3	20.1	47.7	34.4	15.9
LnGrp LOS	C	B	D	C		C	D	B	C	D	C	B
Approach Vol, veh/h		440			191			1412			1302	
Approach Delay, s/veh		35.4			21.0			24.1			35.5	
Approach LOS		D			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		26.1	15.7	31.5		26.1	13.4	33.8
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		26.0	10.0	26.0		26.0	9.0	27.0
Max Q Clear Time (g_c+I1), s		18.9	9.9	24.6		7.0	7.7	15.9
Green Ext Time (p_c), s		1.2	0.0	0.8		0.8	0.1	4.4

Intersection Summary	
HCM 2010 Ctrl Delay	29.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	361	294	156	349	107	125	650	62	149	1260	246
Future Volume (veh/h)	154	361	294	156	349	107	125	650	62	149	1260	246
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	177	415	338	179	401	0	144	747	71	171	1448	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	249	449	376	209	531	451	171	1503	142	208	1724	0
Arrive On Green	0.07	0.24	0.24	0.12	0.29	0.00	0.10	0.32	0.32	0.12	0.34	0.00
Sat Flow, veh/h	3442	1863	1560	1757	1845	1568	1774	4723	446	1774	5253	0
Grp Volume(v), veh/h	177	415	338	179	401	0	144	535	283	171	1448	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1560	1757	1845	1568	1774	1695	1779	1774	1695	0
Q Serve(g_s), s	4.4	19.2	18.5	8.8	17.4	0.0	7.0	11.3	11.4	8.3	23.2	0.0
Cycle Q Clear(g_c), s	4.4	19.2	18.5	8.8	17.4	0.0	7.0	11.3	11.4	8.3	23.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.25	1.00		0.00
Lane Grp Cap(c), veh/h	249	449	376	209	531	451	171	1079	566	208	1724	0
V/C Ratio(X)	0.71	0.92	0.90	0.85	0.76	0.00	0.84	0.50	0.50	0.82	0.84	0.00
Avail Cap(c_a), veh/h	270	450	377	209	531	451	171	1079	566	320	1830	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.0	32.7	32.4	38.1	28.5	0.0	39.1	24.3	24.4	38.0	26.9	0.0
Incr Delay (d2), s/veh	7.8	24.9	23.6	27.5	6.1	0.0	29.6	0.4	0.7	9.6	3.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	12.9	10.4	5.9	9.7	0.0	4.8	5.3	5.7	4.6	11.4	0.0
LnGrp Delay(d),s/veh	47.7	57.5	56.0	65.6	34.7	0.0	68.7	24.7	25.0	47.5	30.4	0.0
LnGrp LOS	D	E	E	E	C		E	C	C	D	C	
Approach Vol, veh/h		930			580			962			1619	
Approach Delay, s/veh		55.1			44.2			31.4			32.2	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	32.5	15.0	25.7	13.0	34.4	10.9	29.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.9	24.3	10.5	21.3	8.5	31.7	6.9	24.9
Max Q Clear Time (g_c+I1), s	10.3	13.4	10.8	21.2	9.0	25.2	6.4	19.4
Green Ext Time (p_c), s	0.2	4.0	0.0	0.1	0.0	4.7	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay	38.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	610	109	180	381	3	109	1	117	1	1	0
Future Volume (veh/h)	1	610	109	180	381	3	109	1	117	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	701	125	207	438	3	125	1	134	1	1	0
Adj No. of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	925	414	252	1415	10	594	4	504	308	277	0
Arrive On Green	0.00	0.27	0.27	0.15	0.42	0.42	0.33	0.33	0.33	0.33	0.33	0.00
Sat Flow, veh/h	1723	3438	1538	1660	3372	23	1390	13	1509	628	830	0
Grp Volume(v), veh/h	1	701	125	207	215	226	126	0	134	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1538	1660	1656	1739	1403	0	1509	1458	0	0
Q Serve(g_s), s	0.0	10.3	3.6	6.7	4.8	4.8	0.0	0.0	3.6	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	10.3	3.6	6.7	4.8	4.8	3.0	0.0	3.6	3.0	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	925	414	252	695	730	599	0	504	585	0	0
V/C Ratio(X)	0.32	0.76	0.30	0.82	0.31	0.31	0.21	0.00	0.27	0.00	0.00	0.00
Avail Cap(c_a), veh/h	156	1123	502	304	695	730	599	0	504	585	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.5	18.5	16.0	22.6	10.7	10.7	13.2	0.0	13.4	12.2	0.0	0.0
Incr Delay (d2), s/veh	50.2	2.4	0.4	13.9	0.3	0.2	0.8	0.0	1.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	5.2	1.5	4.0	2.2	2.3	1.5	0.0	1.7	0.0	0.0	0.0
LnGrp Delay(d),s/veh	77.7	20.9	16.4	36.5	10.9	10.9	14.0	0.0	14.7	12.3	0.0	0.0
LnGrp LOS	E	C	B	D	B	B	B		B	B		
Approach Vol, veh/h		827			648			260			2	
Approach Delay, s/veh		20.3			19.1			14.4			12.3	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	12.9	19.3		22.9	4.6	27.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.6	8.7	12.3		5.0	2.0	6.8
Green Ext Time (p_c), s		0.9	0.1	2.5		0.0	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	19.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	360	8	824	383	580	13	549	1167	582	544	34
Future Volume (veh/h)	31	360	8	824	383	580	13	549	1167	582	544	34
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	32	375	8	858	399	0	14	572	1216	606	567	35
Adj No. of Lanes	1	2	0	3	1	1	1	2	2	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	56	538	11	913	571	785	33	920	1238	658	1465	90
Arrive On Green	0.03	0.16	0.17	0.19	0.31	0.00	0.02	0.26	0.26	0.19	0.44	0.45
Sat Flow, veh/h	1690	3375	72	4905	1826	1552	1756	3504	2759	3407	3352	207
Grp Volume(v), veh/h	32	187	196	858	399	0	14	572	1216	606	296	306
Grp Sat Flow(s),veh/h/ln	1690	1686	1762	1635	1826	1552	1756	1752	1379	1704	1752	1807
Q Serve(g_s), s	2.2	12.4	12.4	20.4	22.7	0.0	0.9	17.0	22.7	20.6	13.5	13.6
Cycle Q Clear(g_c), s	2.2	12.4	12.4	20.4	22.7	0.0	0.9	17.0	22.7	20.6	13.5	13.6
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	56	269	281	913	571	785	33	920	1238	658	765	790
V/C Ratio(X)	0.57	0.70	0.70	0.94	0.70	0.00	0.43	0.62	0.98	0.92	0.39	0.39
Avail Cap(c_a), veh/h	103	678	708	913	963	1118	89	1008	1307	663	765	790
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	47.0	47.0	47.4	35.7	0.0	57.4	38.4	10.8	46.8	22.5	22.5
Incr Delay (d2), s/veh	3.4	6.8	6.5	17.5	3.3	0.0	3.2	1.0	20.3	18.9	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	6.3	6.6	10.7	11.9	0.0	0.5	8.4	11.9	11.4	6.6	6.8
LnGrp Delay(d),s/veh	59.7	53.7	53.5	64.9	39.0	0.0	60.6	39.4	31.1	65.7	22.9	22.8
LnGrp LOS	E	D	D	E	D		E	D	C	E	C	C
Approach Vol, veh/h		415			1257			1802			1208	
Approach Delay, s/veh		54.1			56.7			34.0			44.3	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.0	24.3	8.2	57.6	9.4	42.9	28.8	37.0
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	22.0	47.5	6.0	51.0	7.2	62.3	23.0	34.0
Max Q Clear Time (g_c+I1), s	22.4	14.4	2.9	15.6	4.2	24.7	22.6	24.7
Green Ext Time (p_c), s	0.0	3.5	0.0	2.5	0.0	4.1	0.2	6.1

Intersection Summary	
HCM 2010 Ctrl Delay	44.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	32	232	119	12	191	223	1438	19	231	1057	44
Future Volume (veh/h)	99	32	232	119	12	191	223	1438	19	231	1057	44
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	100	32	234	120	12	193	225	1453	19	233	1068	44
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	262	444	375	339	29	379	268	1757	23	276	1217	541
Arrive On Green	0.24	0.24	0.24	0.26	0.24	0.24	0.15	0.34	0.34	0.16	0.34	0.34
Sat Flow, veh/h	1157	1845	1558	990	120	1575	1774	5173	68	1774	3539	1574
Grp Volume(v), veh/h	100	32	234	132	0	193	225	952	520	233	1068	44
Grp Sat Flow(s),veh/h/ln	1157	1845	1558	1109	0	1575	1774	1695	1850	1774	1770	1574
Q Serve(g_s), s	5.6	0.9	9.1	6.3	0.0	7.2	8.4	17.6	17.6	8.7	19.3	1.3
Cycle Q Clear(g_c), s	12.8	0.9	9.1	7.2	0.0	7.2	8.4	17.6	17.6	8.7	19.3	1.3
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	262	444	375	392	0	379	268	1151	628	276	1217	541
V/C Ratio(X)	0.38	0.07	0.62	0.34	0.00	0.51	0.84	0.83	0.83	0.84	0.88	0.08
Avail Cap(c_a), veh/h	425	704	595	554	0	601	287	1244	679	287	1299	578
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	20.0	23.1	22.0	0.0	22.4	28.1	20.7	20.7	28.0	21.0	15.1
Incr Delay (d2), s/veh	0.9	0.1	1.7	0.5	0.0	1.1	18.4	4.5	7.9	19.6	6.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.5	4.1	2.1	0.0	3.3	5.5	8.9	10.3	5.8	10.5	0.6
LnGrp Delay(d),s/veh	28.8	20.1	24.8	22.5	0.0	23.4	46.5	25.1	28.5	47.5	27.8	15.1
LnGrp LOS	C	C	C	C		C	D	C	C	D	C	B
Approach Vol, veh/h		366			325			1697			1345	
Approach Delay, s/veh		25.5			23.1			29.0			30.8	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.4	16.3	29.4		22.4	16.6	29.1
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		26.0	11.0	25.0		26.0	11.0	25.0
Max Q Clear Time (g_c+I1), s		14.8	10.4	21.3		9.2	10.7	19.6
Green Ext Time (p_c), s		1.3	0.1	1.9		1.4	0.0	3.2

Intersection Summary	
HCM 2010 Ctrl Delay	28.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	378	141	143	321	260	187	1353	144	195	870	173
Future Volume (veh/h)	250	378	141	143	321	260	187	1353	144	195	870	173
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	260	394	147	149	334	0	195	1409	150	203	906	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	427	356	177	448	381	231	1580	168	231	1725	0
Arrive On Green	0.09	0.23	0.23	0.10	0.24	0.00	0.13	0.34	0.34	0.13	0.34	0.00
Sat Flow, veh/h	3442	1863	1552	1774	1863	1583	1774	4656	496	1774	5253	0
Grp Volume(v), veh/h	260	394	147	149	334	0	195	1026	533	203	906	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1552	1774	1863	1583	1774	1695	1761	1774	1695	0
Q Serve(g_s), s	6.6	18.5	7.2	7.4	14.8	0.0	9.6	25.6	25.6	10.0	12.8	0.0
Cycle Q Clear(g_c), s	6.6	18.5	7.2	7.4	14.8	0.0	9.6	25.6	25.6	10.0	12.8	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.28	1.00		0.00
Lane Grp Cap(c), veh/h	305	427	356	177	448	381	231	1151	598	231	1725	0
V/C Ratio(X)	0.85	0.92	0.41	0.84	0.75	0.00	0.85	0.89	0.89	0.88	0.53	0.00
Avail Cap(c_a), veh/h	305	428	356	177	449	381	272	1177	612	231	1725	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.1	33.6	29.3	39.5	31.4	0.0	38.0	27.9	27.9	38.2	23.7	0.0
Incr Delay (d2), s/veh	20.3	25.4	0.8	29.0	6.7	0.0	18.7	8.7	15.1	30.0	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	12.4	3.2	5.0	8.4	0.0	5.9	13.4	15.0	6.8	6.0	0.0
LnGrp Delay(d),s/veh	60.4	59.0	30.0	68.5	38.0	0.0	56.6	36.7	43.1	68.2	24.0	0.0
LnGrp LOS	E	E	C	E	D		E	D	D	E	C	
Approach Vol, veh/h		801			483			1754			1109	
Approach Delay, s/veh		54.2			47.4			40.8			32.1	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	34.8	13.4	25.0	16.1	34.8	12.4	26.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.6	31.0	8.9	20.5	13.7	28.9	7.9	21.5
Max Q Clear Time (g_c+I1), s	12.0	27.6	9.4	20.5	11.6	14.8	8.6	16.8
Green Ext Time (p_c), s	0.0	2.7	0.0	0.0	0.1	5.4	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay	41.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	788	304	400	427	0	88	0	74	0	3	0
Future Volume (veh/h)	1	788	304	400	427	0	88	0	74	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	829	320	421	449	0	93	0	78	0	3	0
Adj No. of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	1031	461	458	1959	0	425	0	373	0	478	0
Arrive On Green	0.00	0.30	0.30	0.26	0.56	0.00	0.26	0.00	0.26	0.00	0.26	0.00
Sat Flow, veh/h	1707	3406	1521	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	829	320	421	449	0	93	0	78	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1521	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	17.0	14.1	17.9	4.9	0.0	4.4	0.0	3.2	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	17.0	14.1	17.9	4.9	0.0	4.5	0.0	3.2	0.0	0.1	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	1031	461	458	1959	0	425	0	373	0	478	0
V/C Ratio(X)	0.43	0.80	0.69	0.92	0.23	0.00	0.22	0.00	0.21	0.00	0.01	0.00
Avail Cap(c_a), veh/h	112	1188	530	469	1959	0	425	0	373	0	478	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	37.9	24.4	23.4	27.2	8.3	0.0	22.7	0.0	22.2	0.0	21.0	0.0
Incr Delay (d2), s/veh	91.0	3.6	3.3	23.1	0.1	0.0	1.2	0.0	1.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	8.5	6.3	11.5	2.3	0.0	1.7	0.0	1.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	129.0	28.0	26.7	50.4	8.3	0.0	23.9	0.0	23.5	0.0	21.1	0.0
LnGrp LOS	F	C	C	D	A		C		C		C	
Approach Vol, veh/h		1150			870			171			3	
Approach Delay, s/veh		27.7			28.7			23.7			21.1	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	24.5	27.5		24.0	4.6	47.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		6.5	19.9	19.0		2.1	2.0	6.9
Green Ext Time (p_c), s		0.5	0.1	4.0		0.0	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	27.8
HCM 2010 LOS	C

Appendix M

Level of Service

Calculations

Cumulative Without Project

Conditions

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	210	885	1138	20	30	600
Future Volume (vph)	210	885	1138	20	30	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.12	1.00	1.00		0.95	1.00
Satd. Flow (perm)	215	3504	3477		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	962	1237	22	33	652
RTOR Reduction (vph)	0	0	0	0	0	157
Lane Group Flow (vph)	228	962	1259	0	33	495
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	47.4		20.8	20.8
Effective Green, g (s)	61.1	61.5	48.5		21.5	21.9
Actuated g/C Ratio	0.68	0.68	0.54		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	301	2394	1873		422	385
v/s Ratio Prot	c0.08	0.27	0.36		0.02	
v/s Ratio Perm	c0.44					c0.31
v/c Ratio	0.76	0.40	0.67		0.08	1.29
Uniform Delay, d1	14.0	6.2	15.0		26.6	34.0
Progression Factor	1.82	0.33	1.00		1.00	1.00
Incremental Delay, d2	9.6	0.1	1.1		0.1	147.4
Delay (s)	35.0	2.2	16.1		26.6	181.4
Level of Service	D	A	B		C	F
Approach Delay (s)		8.5	16.1		174.0	
Approach LOS		A	B		F	

Intersection Summary

HCM 2000 Control Delay	47.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	968	0	0	1433	305	250	0	127	0	0	0
Future Volume (vph)	0	968	0	0	1433	305	250	0	127	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3394		1624	1624	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3394		1624	1624	1530			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1052	0	0	1558	332	272	0	138	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	105	0	0	0
Lane Group Flow (vph)	0	1052	0	0	1890	0	136	136	33	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			47.4		20.8	20.8	20.8			
Effective Green, g (s)		61.5			48.5		21.5	21.5	21.5			
Actuated g/C Ratio		0.68			0.54		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2358			1828		387	387	365			
v/s Ratio Prot		c0.30			c0.56		c0.08	0.08				
v/s Ratio Perm									0.02			
v/c Ratio		0.45			1.03		0.35	0.35	0.09			
Uniform Delay, d1		6.5			20.8		28.5	28.5	26.6			
Progression Factor		1.00			0.78		1.00	1.00	1.00			
Incremental Delay, d2		0.2			24.4		0.6	0.6	0.1			
Delay (s)		6.7			40.5		29.0	29.0	26.8			
Level of Service		A			D		C	C	C			
Approach Delay (s)		6.7			40.5			28.2			0.0	
Approach LOS		A			D			C			A	

Intersection Summary

HCM 2000 Control Delay	28.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.3
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1045	1355	0	263	440
Future Volume (veh/h)	0	1045	1355	0	263	440
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800
Adj Flow Rate, veh/h	0	1136	1473	0	286	478
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	2	0	4	4
Cap, veh/h	0	1683	1716	0	1208	556
Arrive On Green	0.00	0.49	0.49	0.00	0.36	0.36
Sat Flow, veh/h	0	3599	3670	0	3325	1530
Grp Volume(v), veh/h	0	1136	1473	0	286	478
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530
Q Serve(g_s), s	0.0	13.5	19.8	0.0	3.2	15.4
Cycle Q Clear(g_c), s	0.0	13.5	19.8	0.0	3.2	15.4
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1683	1716	0	1208	556
V/C Ratio(X)	0.00	0.68	0.86	0.00	0.24	0.86
Avail Cap(c_a), veh/h	0	1984	2023	0	1336	615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	10.3	11.9	0.0	11.8	15.7
Incr Delay (d2), s/veh	0.0	0.5	3.0	0.0	0.1	10.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.4	10.1	0.0	1.5	8.2
LnGrp Delay(d),s/veh	0.0	10.8	14.9	0.0	11.9	26.4
LnGrp LOS		B	B		B	C
Approach Vol, veh/h		1136	1473		764	
Approach Delay, s/veh		10.8	14.9		20.9	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		30.3		22.9		30.3		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		15.5		17.4		21.8		
Green Ext Time (p_c), s		3.3		0.9		3.4		

Intersection Summary	
HCM 2010 Ctrl Delay	14.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	220	20	1015	480	320	20	333	965	170	295	20
Future Volume (veh/h)	30	220	20	1015	480	320	20	333	965	170	295	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	32	234	21	1080	511	0	21	354	1027	181	314	21
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	361	32	1225	1544	807	46	703	1543	251	822	55
Arrive On Green	0.04	0.12	0.13	0.36	0.44	0.00	0.03	0.20	0.20	0.08	0.25	0.26
Sat Flow, veh/h	1659	3074	274	3374	3470	1552	1739	3470	2719	3342	3270	218
Grp Volume(v), veh/h	32	125	130	1080	511	0	21	354	1027	181	164	171
Grp Sat Flow(s),veh/h/ln	1659	1655	1693	1687	1735	1552	1739	1735	1359	1671	1718	1770
Q Serve(g_s), s	1.8	7.0	7.1	29.2	9.3	0.0	1.2	8.8	8.1	5.2	7.7	7.8
Cycle Q Clear(g_c), s	1.8	7.0	7.1	29.2	9.3	0.0	1.2	8.8	8.1	5.2	7.7	7.8
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	59	195	199	1225	1544	807	46	703	1543	251	432	445
V/C Ratio(X)	0.54	0.64	0.65	0.88	0.33	0.00	0.45	0.50	0.67	0.72	0.38	0.38
Avail Cap(c_a), veh/h	124	777	795	1283	2689	1320	107	1241	1964	309	668	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.1	41.0	40.9	29.0	17.6	0.0	46.6	34.4	3.8	44.0	30.2	30.1
Incr Delay (d2), s/veh	2.8	7.4	7.5	7.9	0.3	0.0	2.5	0.6	0.6	9.5	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.6	3.7	14.8	4.5	0.0	0.6	4.3	3.8	2.7	3.7	3.9
LnGrp Delay(d),s/veh	48.9	48.3	48.4	37.0	17.8	0.0	49.2	35.0	4.4	53.5	30.7	30.7
LnGrp LOS	D	D	D	D	B		D	C	A	D	C	C
Approach Vol, veh/h		287			1591			1402			516	
Approach Delay, s/veh		48.5			30.8			12.8			38.7	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	41.3	16.9	8.6	30.4	9.0	49.3	13.3	25.7
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8
Max Q Clear Time (g_c+I1), s	31.2	9.1	3.2	9.8	3.8	11.3	7.2	10.8
Green Ext Time (p_c), s	4.1	2.3	0.0	1.3	0.0	5.9	0.2	8.3

Intersection Summary	
HCM 2010 Ctrl Delay	26.6
HCM 2010 LOS	C

Intersection												
Int Delay, s/veh	10.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	144	73	190	227	43	65	24	20	66	43	0
Future Vol, veh/h	0	144	73	190	227	43	65	24	20	66	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	164	83	216	258	49	74	27	23	75	49	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	307	0	0	247	0	0	903	903	164	921	937	258
Stage 1	-	-	-	-	-	-	164	164	-	690	690	-
Stage 2	-	-	-	-	-	-	739	739	-	231	247	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1204	-	-	1307	-	-	256	275	875	251	265	781
Stage 1	-	-	-	-	-	-	833	759	-	435	446	-
Stage 2	-	-	-	-	-	-	406	421	-	772	702	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1204	-	-	1307	-	-	186	230	875	195	221	781
Mov Cap-2 Maneuver	-	-	-	-	-	-	186	230	-	195	221	-
Stage 1	-	-	-	-	-	-	833	759	-	435	372	-
Stage 2	-	-	-	-	-	-	294	352	-	725	702	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	28.8	46.7
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	186	346	1204	-	-	1307	-	-	204	-
HCM Lane V/C Ratio	0.397	0.145	-	-	-	0.165	-	-	0.607	-
HCM Control Delay (s)	36.6	17.2	0	-	-	8.3	-	-	46.7	0
HCM Lane LOS	E	C	A	-	-	A	-	-	E	A
HCM 95th %tile Q(veh)	1.8	0.5	0	-	-	0.6	-	-	3.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	31	174	66	10	100	242	839	13	132	1110	48
Future Volume (veh/h)	79	31	174	66	10	100	242	839	13	132	1110	48
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	69	185	70	11	106	257	893	14	140	1181	51
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	259	272	231	151	24	155	206	1888	30	174	1241	553
Arrive On Green	0.15	0.15	0.15	0.12	0.10	0.10	0.12	0.37	0.37	0.10	0.35	0.35
Sat Flow, veh/h	1707	1792	1521	1528	240	1563	1757	5108	80	1774	3539	1578
Grp Volume(v), veh/h	58	69	185	81	0	106	257	587	320	140	1181	51
Grp Sat Flow(s),veh/h/ln	1707	1792	1521	1768	0	1563	1757	1679	1830	1774	1770	1578
Q Serve(g_s), s	2.5	2.9	10.0	3.7	0.0	5.6	10.0	11.4	11.4	6.6	27.7	1.9
Cycle Q Clear(g_c), s	2.5	2.9	10.0	3.7	0.0	5.6	10.0	11.4	11.4	6.6	27.7	1.9
Prop In Lane	1.00		1.00	0.86		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	259	272	231	175	0	155	206	1241	677	174	1241	553
V/C Ratio(X)	0.22	0.25	0.80	0.46	0.00	0.69	1.25	0.47	0.47	0.80	0.95	0.09
Avail Cap(c_a), veh/h	420	441	374	518	0	458	206	1241	677	229	1244	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	31.9	34.9	35.7	0.0	37.2	37.7	20.5	20.5	37.7	27.0	18.6
Incr Delay (d2), s/veh	0.4	0.5	6.3	1.9	0.0	5.3	145.4	0.3	0.5	14.3	15.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.5	4.6	1.9	0.0	2.6	13.1	5.3	5.8	3.9	16.1	0.8
LnGrp Delay(d),s/veh	32.2	32.4	41.2	37.6	0.0	42.5	183.1	20.8	21.1	52.0	42.4	18.7
LnGrp LOS	C	C	D	D		D	F	C	C	D	D	B
Approach Vol, veh/h		312			187			1164			1372	
Approach Delay, s/veh		37.6			40.3			56.7			42.5	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		19.0	16.0	35.9		14.4	14.4	37.5
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0
Max Q Clear Time (g_c+I1), s		12.0	12.0	29.7		7.6	8.6	13.4
Green Ext Time (p_c), s		0.9	0.0	0.2		0.6	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	47.3
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	301	292	139	412	373	228	120	540	335	163	675	246
Future Volume (veh/h)	301	292	139	412	373	228	120	540	335	163	675	246
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	320	311	148	438	397	243	128	574	356	173	718	262
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	333	328	156	469	415	353	133	973	435	198	786	287
Arrive On Green	0.19	0.28	0.28	0.14	0.22	0.22	0.08	0.28	0.28	0.11	0.31	0.31
Sat Flow, veh/h	1774	1194	568	3408	1845	1568	1774	3539	1583	1757	2517	918
Grp Volume(v), veh/h	320	0	459	438	397	243	128	574	356	173	500	480
Grp Sat Flow(s),veh/h/ln	1774	0	1762	1704	1845	1568	1774	1770	1583	1757	1752	1683
Q Serve(g_s), s	14.3	0.0	20.4	10.2	17.0	11.4	5.8	11.2	16.8	7.8	22.0	22.0
Cycle Q Clear(g_c), s	14.3	0.0	20.4	10.2	17.0	11.4	5.8	11.2	16.8	7.8	22.0	22.0
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	333	0	485	469	415	353	133	973	435	198	548	526
V/C Ratio(X)	0.96	0.00	0.95	0.93	0.96	0.69	0.96	0.59	0.82	0.88	0.91	0.91
Avail Cap(c_a), veh/h	333	0	485	469	415	353	133	973	435	198	548	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	0.0	28.4	34.1	30.6	28.4	36.9	25.1	27.1	34.9	26.5	26.5
Incr Delay (d2), s/veh	39.2	0.0	28.0	26.1	33.1	5.6	66.2	2.6	15.6	32.6	22.1	22.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	0.0	13.7	6.5	12.4	5.5	5.3	5.9	9.2	5.5	13.9	13.5
LnGrp Delay(d),s/veh	71.4	0.0	56.4	60.3	63.7	34.0	103.0	27.7	42.7	67.5	48.5	49.2
LnGrp LOS	E		E	E	E	C	F	C	D	E	D	D
Approach Vol, veh/h		779			1078			1058			1153	
Approach Delay, s/veh		62.6			55.6			41.9			51.6	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	26.0	15.0	26.0	10.0	29.0	19.0	22.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	22.0	11.0	22.0	6.0	25.0	15.0	18.0
Max Q Clear Time (g_c+I1), s	9.8	18.8	12.2	22.4	7.8	24.0	16.3	19.0
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	0.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	378	236	136	391	111	161	715	73	126	1295	201
Future Volume (veh/h)	164	378	236	136	391	111	161	715	73	126	1295	201
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	189	434	271	156	449	0	185	822	84	145	1489	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.38	0.38	0.10	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	189	434	271	156	449	0	185	822	84	145	1489	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.9	18.9	15.0	7.8	21.5	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Cycle Q Clear(g_c), s	4.9	18.9	15.0	7.8	21.5	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
V/C Ratio(X)	0.95	1.11	0.83	0.84	0.94	0.00	1.23	0.61	0.14	0.81	1.05	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1356	602	304	1416	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.3	35.5	34.0	39.5	32.8	0.0	41.2	22.3	18.1	39.6	27.0	0.0
Incr Delay (d2), s/veh	49.6	78.5	16.2	27.8	27.8	0.0	150.2	0.8	0.1	8.2	38.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	18.2	7.9	5.2	14.5	0.0	10.0	8.4	1.4	4.0	25.1	0.0
LnGrp Delay(d),s/veh	91.9	114.1	50.2	67.3	60.5	0.0	191.4	23.1	18.2	47.8	65.8	0.0
LnGrp LOS	F	F	D	E	E		F	C	B	D	F	
Approach Vol, veh/h		894			605			1091			1634	
Approach Delay, s/veh		90.0			62.3			51.2			64.2	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	39.0	14.0	23.4	12.1	40.5	9.7	27.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2
Max Q Clear Time (g_c+I1), s	9.2	18.8	9.8	20.9	9.6	38.0	6.9	23.5
Green Ext Time (p_c), s	0.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	66.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	673	128	88	534	3	139	0	157	7	2	0
Future Volume (veh/h)	0	673	128	88	534	3	139	0	157	7	2	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	821	156	107	651	4	170	0	191	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	927	176	134	1611	10	644	0	547	410	80	0
Arrive On Green	0.00	0.32	0.32	0.08	0.49	0.49	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2884	548	1630	3314	20	1468	0	1568	832	228	0
Grp Volume(v), veh/h	0	489	488	107	319	336	170	0	191	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1713	1630	1626	1708	1468	0	1568	1060	0	0
Q Serve(g_s), s	0.0	14.7	14.7	3.5	6.8	6.8	0.0	0.0	4.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.7	14.7	3.5	6.8	6.8	3.8	0.0	4.9	3.8	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.01	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	552	550	134	791	830	644	0	547	490	0	0
V/C Ratio(X)	0.00	0.89	0.89	0.80	0.40	0.40	0.26	0.00	0.35	0.02	0.00	0.00
Avail Cap(c_a), veh/h	158	568	566	284	791	830	644	0	547	490	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	17.5	24.6	9.0	9.0	12.8	0.0	13.2	11.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.3	15.3	10.3	0.3	0.3	1.0	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.3	9.3	2.0	3.1	3.2	2.0	0.0	2.4	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	32.8	32.9	34.8	9.3	9.3	13.8	0.0	14.9	11.8	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		977			762			361			11	
Approach Delay, s/veh		32.9			12.9			14.4			11.8	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.5	9.0	22.0		23.5	0.0	31.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5
Max Q Clear Time (g_c+I1), s		6.9	5.5	16.7		5.8	0.0	8.8
Green Ext Time (p_c), s		1.3	0.1	0.8		0.0	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	22.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	752	84	148	536	3	89	1	95	1	1	0
Future Volume (veh/h)	1	752	84	148	536	3	89	1	95	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	864	97	170	616	3	102	1	109	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	968	109	211	1475	7	573	5	489	308	278	0
Arrive On Green	0.00	0.31	0.31	0.13	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	3117	350	1660	3380	16	1379	15	1509	656	858	0
Grp Volume(v), veh/h	1	477	484	170	302	317	103	0	109	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1748	1660	1656	1740	1394	0	1509	1513	0	0
Q Serve(g_s), s	0.0	15.0	15.0	5.6	7.1	7.1	0.0	0.0	3.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.0	15.0	5.6	7.1	7.1	2.5	0.0	3.0	2.5	0.0	0.0
Prop In Lane	1.00		0.20	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	534	543	211	723	759	578	0	489	586	0	0
V/C Ratio(X)	0.33	0.89	0.89	0.80	0.42	0.42	0.18	0.00	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	545	554	296	723	759	578	0	489	586	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.3	18.7	18.7	24.1	11.0	11.0	13.8	0.0	14.0	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.4	16.7	16.5	10.5	0.4	0.4	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	9.5	9.6	3.2	3.3	3.4	1.3	0.0	1.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	81.7	35.4	35.2	34.5	11.4	11.4	14.5	0.0	15.0	13.0	0.0	0.0
LnGrp LOS	F	D	D	C	B	B	B		B	B		
Approach Vol, veh/h		962			789			212			2	
Approach Delay, s/veh		35.3			16.4			14.7			13.0	
Approach LOS		D			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	11.7	22.1		22.9	4.6	29.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.0	7.6	17.0		4.5	2.0	9.1
Green Ext Time (p_c), s		0.7	0.1	0.6		0.0	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	589	620	340	290	640	250	590	279	250	210	410	760
Future Volume (veh/h)	589	620	340	290	640	250	590	279	250	210	410	760
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	607	639	351	299	660	0	608	288	258	216	423	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	624	634	348	207	781	349	109	418	364	231	565	480
Arrive On Green	0.18	0.29	0.29	0.12	0.22	0.00	0.06	0.24	0.24	0.13	0.31	0.00
Sat Flow, veh/h	3442	2206	1212	1740	3471	1553	1740	1760	1532	1757	1845	1568
Grp Volume(v), veh/h	607	512	478	299	660	0	608	284	262	216	423	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1649	1740	1736	1553	1740	1736	1557	1757	1845	1568
Q Serve(g_s), s	14.0	23.0	23.0	9.5	14.6	0.0	5.0	11.9	12.4	9.7	16.5	0.0
Cycle Q Clear(g_c), s	14.0	23.0	23.0	9.5	14.6	0.0	5.0	11.9	12.4	9.7	16.5	0.0
Prop In Lane	1.00		0.74	1.00		1.00	1.00		0.98	1.00		1.00
Lane Grp Cap(c), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
V/C Ratio(X)	0.97	1.01	1.01	1.45	0.85	0.00	5.59	0.69	0.71	0.94	0.75	0.00
Avail Cap(c_a), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.6	28.5	28.5	35.3	29.7	0.0	37.5	27.8	28.0	34.4	25.0	0.0
Incr Delay (d2), s/veh	29.3	41.7	43.2	226.3	8.5	0.0	2085.9	9.1	10.9	42.0	8.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	17.1	16.1	17.5	7.9	0.0	65.4	6.7	6.4	7.4	9.7	0.0
LnGrp Delay(d),s/veh	61.8	70.2	71.7	261.5	38.1	0.0	2123.4	36.9	38.9	76.5	33.8	0.0
LnGrp LOS	E	F	F	F	D		F	D	D	E	C	
Approach Vol, veh/h		1597			959			1154			639	
Approach Delay, s/veh		67.5			107.8			1136.7			48.2	
Approach LOS		E			F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	23.5	14.0	27.5	9.5	29.0	19.0	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0
Max Q Clear Time (g_c+I1), s	11.7	14.4	11.5	25.0	7.0	18.5	16.0	16.6
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	1.3	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	357.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	330	140	300	310	264	40	620	320	216	745	140
Future Volume (veh/h)	146	330	140	300	310	264	40	620	320	216	745	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	168	379	161	345	356	303	46	713	368	248	856	161
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	746	284	384	579	488	72	831	384	329	1526	471
Arrive On Green	0.12	0.21	0.21	0.22	0.31	0.31	0.04	0.25	0.25	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1349	1774	1863	1568	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	168	379	161	345	356	303	46	713	368	248	856	161
Grp Sat Flow(s),veh/h/ln	1774	1770	1349	1774	1863	1568	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	7.2	7.3	8.3	14.7	12.6	12.8	2.0	15.6	18.0	5.4	11.0	6.2
Cycle Q Clear(g_c), s	7.2	7.3	8.3	14.7	12.6	12.8	2.0	15.6	18.0	5.4	11.0	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	746	284	384	579	488	72	831	384	329	1526	471
V/C Ratio(X)	0.82	0.51	0.57	0.90	0.61	0.62	0.64	0.86	0.96	0.75	0.56	0.34
Avail Cap(c_a), veh/h	252	822	313	400	589	496	135	831	384	333	1526	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	27.0	27.4	29.6	22.7	22.8	36.6	28.0	28.9	34.2	22.8	21.2
Incr Delay (d2), s/veh	15.6	0.5	1.9	22.1	1.9	2.3	9.1	11.2	36.7	9.3	1.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	3.6	3.2	9.5	6.7	5.8	1.2	8.5	11.7	3.0	5.4	3.0
LnGrp Delay(d),s/veh	49.1	27.6	29.4	51.6	24.6	25.1	45.7	39.1	65.6	43.4	24.3	23.1
LnGrp LOS	D	C	C	D	C	C	D	D	E	D	C	C
Approach Vol, veh/h		708			1004			1127			1265	
Approach Delay, s/veh		33.1			34.0			48.0			27.9	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	23.5	21.3	20.8	7.6	27.8	13.5	28.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5
Max Q Clear Time (g_c+I1), s	7.4	20.0	16.7	10.3	4.0	13.0	9.2	14.8
Green Ext Time (p_c), s	0.0	0.0	0.1	1.9	0.0	3.8	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	35.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	518	90	160	609	100	80	688	140	180	962	143
Future Volume (veh/h)	222	518	90	160	609	100	80	688	140	180	962	143
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	249	582	101	180	684	112	90	773	157	202	1081	161
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	801	139	220	770	126	202	956	423	272	1308	195
Arrive On Green	0.14	0.27	0.27	0.12	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	3013	521	1774	3042	498	3408	3505	1551	3442	4468	665
Grp Volume(v), veh/h	249	341	342	180	398	398	90	773	157	202	820	422
Grp Sat Flow(s),veh/h/ln	1774	1770	1765	1774	1770	1770	1704	1752	1551	1721	1695	1743
Q Serve(g_s), s	9.5	12.2	12.3	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.7	15.7
Cycle Q Clear(g_c), s	9.5	12.2	12.3	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.7	15.7
Prop In Lane	1.00		0.30	1.00		0.28	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	242	471	469	220	448	448	202	956	423	272	992	510
V/C Ratio(X)	1.03	0.73	0.73	0.82	0.89	0.89	0.45	0.81	0.37	0.74	0.83	0.83
Avail Cap(c_a), veh/h	242	473	472	227	457	458	245	956	423	272	992	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	23.2	23.3	29.8	25.0	25.1	31.7	23.6	20.5	31.4	23.0	23.0
Incr Delay (d2), s/veh	65.5	5.4	5.6	20.2	18.4	18.7	1.5	7.3	2.5	10.5	7.8	14.3
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	6.7	6.7	4.6	9.6	9.6	0.9	7.8	2.7	2.3	8.4	9.5
LnGrp Delay(d),s/veh	95.6	28.7	28.9	50.0	43.5	43.7	33.2	30.9	23.0	41.9	30.8	37.3
LnGrp LOS	F	C	C	D	D	D	C	C	C	D	C	D
Approach Vol, veh/h		932			976			1020			1444	
Approach Delay, s/veh		46.6			44.8			29.9			34.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	23.5	13.1	23.0	8.6	24.9	14.0	22.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0
Max Q Clear Time (g_c+I1), s	6.0	16.3	8.9	14.3	3.8	17.7	11.5	17.1
Green Ext Time (p_c), s	0.0	1.5	0.0	1.7	0.0	1.3	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	38.2
HCM 2010 LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	480	1430	986	30	40	290
Future Volume (vph)	480	1430	986	30	40	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3471		1770	1583
Flt Permitted	0.14	1.00	1.00		0.95	1.00
Satd. Flow (perm)	261	3504	3471		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	485	1444	996	30	40	293
RTOR Reduction (vph)	0	0	0	0	0	223
Lane Group Flow (vph)	485	1444	1026	0	40	70
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	59.6	59.6	38.6		20.0	20.0
Effective Green, g (s)	60.3	60.7	39.7		20.7	21.1
Actuated g/C Ratio	0.68	0.69	0.45		0.23	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	466	2406	1558		414	377
v/s Ratio Prot	c0.20	0.41	0.30		0.02	
v/s Ratio Perm	c0.51					c0.04
v/c Ratio	1.04	0.60	0.66		0.10	0.19
Uniform Delay, d1	22.6	7.4	19.0		26.5	26.8
Progression Factor	1.11	0.54	1.00		1.00	1.00
Incremental Delay, d2	45.6	0.3	1.1		0.1	0.2
Delay (s)	70.7	4.3	20.2		26.6	27.0
Level of Service	E	A	C		C	C
Approach Delay (s)		21.0	20.2		26.9	
Approach LOS		C	C		C	

Intersection Summary

HCM 2000 Control Delay	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	88.4	Sum of lost time (s)	11.6
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1542	0	0	1012	264	570	0	369	0	0	0
Future Volume (vph)	0	1542	0	0	1012	264	570	0	369	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3358		1656	1656	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3358		1656	1656	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1623	0	0	1065	278	600	0	388	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1623	0	0	1343	0	300	300	331	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		59.6			38.6		20.0	20.0	20.0			
Effective Green, g (s)		60.7			39.7		20.7	20.7	20.7			
Actuated g/C Ratio		0.69			0.45		0.23	0.23	0.23			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2393			1508		387	387	365			
v/s Ratio Prot		c0.47			c0.40		0.18	0.18				
v/s Ratio Perm									c0.21			
v/c Ratio		0.68			0.89		0.78	0.78	0.91			
Uniform Delay, d1		8.1			22.4		31.7	31.7	32.9			
Progression Factor		1.00			0.40		1.00	1.00	1.00			
Incremental Delay, d2		0.8			6.0		9.4	9.4	25.0			
Delay (s)		9.0			14.9		41.0	41.0	57.9			
Level of Service		A			B		D	D	E			
Approach Delay (s)		9.0			14.9			47.7			0.0	
Approach LOS		A			B			D			A	

Intersection Summary

HCM 2000 Control Delay	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	88.4	Sum of lost time (s)	12.3
Intersection Capacity Utilization	72.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1596	1435	0	486	410
Future Volume (veh/h)	0	1596	1435	0	486	410
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835
Adj Flow Rate, veh/h	0	1645	1479	0	501	423
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1879	1879	0	1085	499
Arrive On Green	0.00	0.54	0.54	0.00	0.32	0.32
Sat Flow, veh/h	0	3670	3670	0	3390	1560
Grp Volume(v), veh/h	0	1645	1479	0	501	423
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560
Q Serve(g_s), s	0.0	22.5	18.6	0.0	6.4	13.8
Cycle Q Clear(g_c), s	0.0	22.5	18.6	0.0	6.4	13.8
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1879	1879	0	1085	499
V/C Ratio(X)	0.00	0.88	0.79	0.00	0.46	0.85
Avail Cap(c_a), veh/h	0	2163	2163	0	1142	525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	11.0	10.1	0.0	14.8	17.3
Incr Delay (d2), s/veh	0.0	3.5	1.5	0.0	0.2	11.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.4	9.2	0.0	3.0	7.5
LnGrp Delay(d),s/veh	0.0	14.5	11.5	0.0	15.1	28.9
LnGrp LOS		B	B		B	C
Approach Vol, veh/h		1645	1479		924	
Approach Delay, s/veh		14.5	11.5		21.4	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		33.6		21.1		33.6		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		24.5		15.8		20.6		
Green Ext Time (p_c), s		4.0		0.7		4.3		

Intersection Summary	
HCM 2010 Ctrl Delay	15.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	400	20	675	550	620	30	596	1016	660	533	40
Future Volume (veh/h)	50	400	20	675	550	620	30	596	1016	660	533	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	52	412	21	696	567	0	31	614	1047	680	549	41
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	70	576	29	736	1226	809	57	843	1265	572	1243	93
Arrive On Green	0.04	0.18	0.18	0.22	0.35	0.00	0.03	0.24	0.24	0.17	0.38	0.38
Sat Flow, veh/h	1690	3264	166	3374	3470	1552	1756	3504	2759	3407	3305	246
Grp Volume(v), veh/h	52	212	221	696	567	0	31	614	1047	680	290	300
Grp Sat Flow(s),veh/h/ln	1690	1686	1745	1687	1735	1552	1756	1752	1379	1704	1752	1800
Q Serve(g_s), s	3.6	14.1	14.2	24.2	15.1	0.0	2.1	19.2	15.9	20.0	14.8	14.8
Cycle Q Clear(g_c), s	3.6	14.1	14.2	24.2	15.1	0.0	2.1	19.2	15.9	20.0	14.8	14.8
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	70	297	308	736	1226	809	57	843	1265	572	659	677
V/C Ratio(X)	0.74	0.71	0.72	0.95	0.46	0.00	0.55	0.73	0.83	1.19	0.44	0.44
Avail Cap(c_a), veh/h	99	658	681	736	1907	1114	88	1000	1389	572	706	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	46.2	46.2	45.9	29.8	0.0	56.8	41.7	9.3	49.6	27.8	27.8
Incr Delay (d2), s/veh	8.7	6.6	6.5	21.4	0.6	0.0	3.0	2.2	4.0	101.7	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.2	7.4	13.5	7.3	0.0	1.1	9.6	6.7	17.4	7.2	7.5
LnGrp Delay(d),s/veh	65.2	52.9	52.8	67.2	30.4	0.0	59.8	43.9	13.3	151.3	28.3	28.2
LnGrp LOS	E	D	D	E	C		E	D	B	F	C	C
Approach Vol, veh/h		485			1263			1692			1270	
Approach Delay, s/veh		54.1			50.7			25.3			94.2	
Approach LOS		D			D			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	26.5	9.8	50.8	10.4	48.1	26.0	34.7
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0
Max Q Clear Time (g_c+I1), s	26.2	16.2	4.1	16.8	5.6	17.1	22.0	21.2
Green Ext Time (p_c), s	0.0	4.0	0.0	2.4	0.0	6.6	0.0	7.1

Intersection Summary	
HCM 2010 Ctrl Delay	53.6
HCM 2010 LOS	D

Intersection												
Int Delay, s/veh	11.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	323	48	140	362	78	64	54	50	57	32	1
Future Vol, veh/h	7	323	48	140	362	78	64	54	50	57	32	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	7	336	50	146	377	81	67	56	52	59	33	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	459	0	0	392	0	0	1091	1107	342	1099	1076	387
Stage 1	-	-	-	-	-	-	356	356	-	670	670	-
Stage 2	-	-	-	-	-	-	735	751	-	429	406	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1066	-	-	1140	-	-	191	208	696	190	219	661
Stage 1	-	-	-	-	-	-	657	625	-	446	455	-
Stage 2	-	-	-	-	-	-	408	415	-	604	598	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1065	-	-	1134	-	-	146	179	693	120	188	655
Mov Cap-2 Maneuver	-	-	-	-	-	-	146	179	-	120	188	-
Stage 1	-	-	-	-	-	-	649	618	-	443	396	-
Stage 2	-	-	-	-	-	-	323	361	-	504	591	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.1	34.7	72
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	146	278	1065	-	-	1134	-	-	138	655
HCM Lane V/C Ratio	0.457	0.39	0.007	-	-	0.129	-	-	0.672	0.002
HCM Control Delay (s)	48.9	26	8.4	-	-	8.6	-	-	72.7	10.5
HCM Lane LOS	E	D	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	2.1	1.8	0	-	-	0.4	-	-	3.7	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	32	123	117	12	191	134	1367	18	231	914	38
Future Volume (veh/h)	84	32	123	117	12	191	134	1367	18	231	914	38
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	69	124	118	12	193	135	1381	18	233	923	38
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	213	179	258	26	250	169	1566	20	263	1259	560
Arrive On Green	0.12	0.12	0.12	0.18	0.16	0.16	0.10	0.30	0.30	0.15	0.36	0.36
Sat Flow, veh/h	1757	1845	1548	1617	164	1571	1774	5173	67	1774	3539	1574
Grp Volume(v), veh/h	58	69	124	130	0	193	135	905	494	233	923	38
Grp Sat Flow(s),veh/h/ln	1757	1845	1548	1782	0	1571	1774	1695	1850	1774	1770	1574
Q Serve(g_s), s	2.6	3.0	6.7	5.7	0.0	10.3	6.5	22.2	22.2	11.3	19.9	1.4
Cycle Q Clear(g_c), s	2.6	3.0	6.7	5.7	0.0	10.3	6.5	22.2	22.2	11.3	19.9	1.4
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	203	213	179	284	0	250	169	1027	560	263	1259	560
V/C Ratio(X)	0.29	0.32	0.69	0.46	0.00	0.77	0.80	0.88	0.88	0.89	0.73	0.07
Avail Cap(c_a), veh/h	401	421	353	508	0	448	263	1083	591	263	1259	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	35.6	37.3	32.7	0.0	35.3	38.8	29.0	29.0	36.6	24.6	18.6
Incr Delay (d2), s/veh	0.8	0.9	4.8	1.2	0.0	5.0	9.0	8.4	14.0	28.0	2.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.6	3.1	2.9	0.0	4.8	3.6	11.5	13.4	7.5	10.1	0.6
LnGrp Delay(d),s/veh	36.2	36.5	42.0	33.9	0.0	40.3	47.8	37.4	43.1	64.6	26.8	18.7
LnGrp LOS	D	D	D	C		D	D	D	D	E	C	B
Approach Vol, veh/h		251			323			1534			1194	
Approach Delay, s/veh		39.2			37.7			40.2			33.9	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		16.1	14.4	37.2		20.0	19.0	32.5
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0
Max Q Clear Time (g_c+I1), s		8.7	8.5	21.9		12.3	13.3	24.2
Green Ext Time (p_c), s		0.7	0.2	2.5		1.1	0.0	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	37.6
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	453	109	197	419	113	211	209	790	651	116	644	377
Future Volume (veh/h)	453	109	197	419	113	211	209	790	651	116	644	377
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	498	120	216	460	124	232	230	868	715	127	708	414
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	159	286	523	271	230	226	1236	553	154	666	388
Arrive On Green	0.27	0.27	0.27	0.15	0.15	0.15	0.13	0.35	0.35	0.09	0.31	0.31
Sat Flow, veh/h	1774	597	1075	3442	1863	1583	1774	3539	1583	1774	2154	1257
Grp Volume(v), veh/h	498	0	336	460	124	232	230	868	715	127	581	541
Grp Sat Flow(s),veh/h/ln	1774	0	1673	1721	1863	1583	1774	1770	1583	1774	1770	1641
Q Serve(g_s), s	30.0	0.0	20.3	14.4	6.7	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Cycle Q Clear(g_c), s	30.0	0.0	20.3	14.4	6.7	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Prop In Lane	1.00		0.64	1.00		1.00	1.00		1.00	1.00		0.77
Lane Grp Cap(c), veh/h	484	0	445	523	271	230	226	1236	553	154	547	507
V/C Ratio(X)	1.03	0.00	0.75	0.88	0.46	1.01	1.02	0.70	1.29	0.82	1.06	1.07
Avail Cap(c_a), veh/h	484	0	445	563	271	230	226	1236	553	177	547	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	0.0	37.1	45.7	43.0	47.0	48.0	30.9	35.8	49.4	38.0	38.0
Incr Delay (d2), s/veh	48.6	0.0	7.2	14.2	1.2	61.2	64.8	3.3	144.8	23.2	56.3	58.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.2	0.0	10.2	7.9	3.5	10.9	10.9	11.9	38.9	4.8	25.1	23.6
LnGrp Delay(d),s/veh	88.6	0.0	44.2	59.9	44.2	108.2	112.9	34.2	180.6	72.6	94.3	96.7
LnGrp LOS	F		D	E	D	F	F	C	F	E	F	F
Approach Vol, veh/h		834			816			1813			1249	
Approach Delay, s/veh		70.7			71.2			101.9			93.1	
Approach LOS		E			E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	42.4	20.7	33.3	18.0	38.0	34.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	37.0	18.0	28.0	14.0	34.0	30.0	16.0
Max Q Clear Time (g_c+I1), s	9.7	40.4	16.4	22.3	16.0	36.0	32.0	18.0
Green Ext Time (p_c), s	0.0	0.0	0.3	1.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	88.8
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	423	156	113	372	285	252	1349	93	162	872	192
Future Volume (veh/h)	334	423	156	113	372	285	252	1349	93	162	872	192
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	348	441	162	118	388	0	262	1405	97	169	908	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
Arrive On Green	0.08	0.21	0.21	0.08	0.21	0.00	0.14	0.39	0.39	0.11	0.37	0.00
Sat Flow, veh/h	3442	1863	1550	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	348	441	162	118	388	0	262	1405	97	169	908	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1550	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	7.2	19.0	8.3	5.9	18.6	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Cycle Q Clear(g_c), s	7.2	19.0	8.3	5.9	18.6	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
V/C Ratio(X)	1.26	1.12	0.49	0.80	0.97	0.00	1.09	1.01	0.16	0.84	0.69	0.00
Avail Cap(c_a), veh/h	276	393	327	156	399	339	241	1385	607	208	1317	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.3	35.4	31.2	40.4	35.0	0.0	38.8	27.3	17.7	38.9	24.0	0.0
Incr Delay (d2), s/veh	142.9	82.4	1.2	24.0	38.0	0.0	82.8	27.9	0.1	24.2	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	18.6	3.7	3.9	13.7	0.0	11.4	22.3	1.6	5.4	9.7	0.0
LnGrp Delay(d),s/veh	184.1	117.8	32.3	64.4	73.0	0.0	121.6	55.2	17.9	63.2	25.6	0.0
LnGrp LOS	F	F	C	E	E		F	F	B	E	C	
Approach Vol, veh/h		951			506			1764			1077	
Approach Delay, s/veh		127.5			71.0			63.0			31.5	
Approach LOS		F			E			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	39.6	11.9	23.5	16.7	37.6	11.7	23.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2
Max Q Clear Time (g_c+I1), s	10.4	37.1	7.9	21.0	14.2	21.5	9.2	20.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	70.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1069	141	83	649	4	79	2	153	5	0	1
Future Volume (veh/h)	0	1069	141	83	649	4	79	2	153	5	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	1091	144	85	662	4	81	2	156	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1095	144	109	1733	10	579	13	509	433	11	66
Arrive On Green	0.00	0.37	0.37	0.06	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	2998	395	1675	3406	21	1362	38	1524	952	32	197
Grp Volume(v), veh/h	0	613	622	85	325	341	83	0	156	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1706	1675	1671	1756	1401	0	1524	1180	0	0
Q Serve(g_s), s	0.0	20.7	20.8	2.9	6.8	6.8	0.0	0.0	4.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.7	20.8	2.9	6.8	6.8	1.9	0.0	4.3	1.9	0.0	0.0
Prop In Lane	1.00		0.23	1.00		0.01	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	616	623	109	850	893	592	0	509	509	0	0
V/C Ratio(X)	0.00	0.99	1.00	0.78	0.38	0.38	0.14	0.00	0.31	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	616	623	190	850	893	592	0	509	509	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	18.1	18.1	26.4	8.6	8.6	13.3	0.0	14.1	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	34.9	35.4	11.6	0.3	0.3	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.5	15.8	1.7	3.1	3.3	1.0	0.0	2.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	53.0	53.6	37.9	8.8	8.8	13.8	0.0	15.7	12.8	0.0	0.0
LnGrp LOS		D	D	D	A	A	B		B	B		
Approach Vol, veh/h		1235			751			239			6	
Approach Delay, s/veh		53.3			12.1			15.0			12.8	
Approach LOS		D			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.6	8.2	25.4		23.6	0.0	33.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4
Max Q Clear Time (g_c+I1), s		6.3	4.9	22.8		3.9	0.0	8.8
Green Ext Time (p_c), s		0.7	0.0	0.0		0.0	0.0	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	35.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	976	251	338	662	0	74	0	62	0	3	0
Future Volume (veh/h)	1	976	251	338	662	0	74	0	62	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	1027	264	356	697	0	78	0	65	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	922	236	398	1982	0	419	0	368	0	471	0
Arrive On Green	0.00	0.34	0.34	0.23	0.57	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2686	687	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	649	642	356	697	0	78	0	65	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1670	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	15.3	8.3	0.0	3.7	0.0	2.7	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	15.3	8.3	0.0	3.8	0.0	2.7	0.0	0.1	0.0
Prop In Lane	1.00		0.41	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	585	573	398	1982	0	419	0	368	0	471	0
V/C Ratio(X)	0.43	1.11	1.12	0.89	0.35	0.00	0.19	0.00	0.18	0.00	0.01	0.00
Avail Cap(c_a), veh/h	111	585	573	462	1982	0	419	0	368	0	471	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.5	25.3	25.3	28.8	8.9	0.0	23.0	0.0	22.6	0.0	21.6	0.0
Incr Delay (d2), s/veh	91.1	71.3	74.6	17.7	0.1	0.0	1.0	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	23.9	24.0	9.3	4.0	0.0	1.4	0.0	1.2	0.0	0.1	0.0
LnGrp Delay(d),s/veh	129.6	96.7	100.0	46.5	9.0	0.0	24.0	0.0	23.6	0.0	21.6	0.0
LnGrp LOS	F	F	F	D	A		C		C		C	
Approach Vol, veh/h		1292			1053			143			3	
Approach Delay, s/veh		98.3			21.7			23.8			21.6	
Approach LOS		F			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	22.2	31.0		24.0	4.6	48.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		5.8	17.3	28.5		2.1	2.0	10.3
Green Ext Time (p_c), s		0.4	0.4	0.0		0.0	0.0	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	61.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	551	640	330	350	800	320	300	371	730	280	259	579
Future Volume (veh/h)	551	640	330	350	800	320	300	371	730	280	259	579
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	574	667	344	365	833	0	312	386	760	292	270	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	692	357	143	810	363	112	427	382	253	597	508
Arrive On Green	0.16	0.31	0.31	0.08	0.23	0.00	0.06	0.24	0.24	0.14	0.32	0.00
Sat Flow, veh/h	3442	2259	1165	1757	3505	1568	1757	1752	1568	1757	1845	1568
Grp Volume(v), veh/h	574	522	489	365	833	0	312	386	760	292	270	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1655	1757	1752	1568	1757	1752	1568	1757	1845	1568
Q Serve(g_s), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.1	19.5	11.5	9.3	0.0
Cycle Q Clear(g_c), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.1	19.5	11.5	9.3	0.0
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
V/C Ratio(X)	1.07	0.96	0.96	2.56	1.03	0.00	2.79	0.90	1.99	1.16	0.45	0.00
Avail Cap(c_a), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	27.3	27.3	36.8	30.8	0.0	37.5	29.3	30.3	34.3	21.4	0.0
Incr Delay (d2), s/veh	58.0	29.6	30.9	720.8	38.9	0.0	827.9	25.1	454.1	105.5	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	15.8	14.9	31.7	13.3	0.0	28.2	11.2	56.6	12.9	5.1	0.0
LnGrp Delay(d),s/veh	91.8	56.9	58.2	757.6	69.6	0.0	865.4	54.4	484.4	139.7	23.9	0.0
LnGrp LOS	F	E	E	F	F		F	D	F	F	C	
Approach Vol, veh/h		1585			1198			1458			562	
Approach Delay, s/veh		70.0			279.2			452.1			84.1	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	24.0	11.0	29.0	9.6	30.4	17.0	23.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	19.5	6.5	24.5	5.1	25.9	12.5	18.5
Max Q Clear Time (g_c+I1), s	13.5	21.5	8.5	25.3	7.1	11.3	14.5	20.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	239.8
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	234	210	60	220	190	248	120	1392	250	195	1425	236
Future Volume (veh/h)	234	210	60	220	190	248	120	1392	250	195	1425	236
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	244	219	62	229	198	258	125	1450	260	203	1484	246
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	776	339	272	394	330	158	1280	229	267	1447	441
Arrive On Green	0.16	0.22	0.22	0.15	0.21	0.21	0.09	0.30	0.30	0.08	0.28	0.28
Sat Flow, veh/h	1774	3539	1547	1774	1863	1561	1774	4325	774	3442	5085	1550
Grp Volume(v), veh/h	244	219	62	229	198	258	125	1136	574	203	1484	246
Grp Sat Flow(s),veh/h/ln	1774	1770	1547	1774	1863	1561	1774	1695	1708	1721	1695	1550
Q Serve(g_s), s	9.5	3.7	2.3	8.9	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.6
Cycle Q Clear(g_c), s	9.5	3.7	2.3	8.9	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	286	776	339	272	394	330	158	1003	506	267	1447	441
V/C Ratio(X)	0.85	0.28	0.18	0.84	0.50	0.78	0.79	1.13	1.14	0.76	1.03	0.56
Avail Cap(c_a), veh/h	300	898	392	313	486	407	163	1003	506	267	1447	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	23.0	22.5	29.2	24.7	26.4	31.7	25.0	25.0	32.1	25.4	21.6
Incr Delay (d2), s/veh	19.9	0.2	0.3	16.5	1.0	7.7	22.4	72.2	82.8	12.1	30.4	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.8	1.0	5.6	3.5	5.4	3.4	19.8	21.5	2.4	13.5	4.7
LnGrp Delay(d),s/veh	48.8	23.2	22.8	45.7	25.7	34.1	54.0	97.2	107.8	44.2	55.8	26.6
LnGrp LOS	D	C	C	D	C	C	D	F	F	D	F	C
Approach Vol, veh/h		525			685			1835			1933	
Approach Delay, s/veh		35.1			35.5			97.6			50.9	
Approach LOS		D			D			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.5	15.4	20.1	10.8	24.7	15.9	19.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5
Max Q Clear Time (g_c+I1), s	6.1	23.0	10.9	5.7	6.9	22.2	11.5	13.1
Green Ext Time (p_c), s	0.0	0.0	0.1	1.2	0.0	0.0	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	64.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	800	110	620	610	620	160	1078	940	480	825	82
Future Volume (veh/h)	124	800	110	620	610	620	160	1078	940	480	825	82
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	127	816	112	633	622	633	163	1100	959	490	842	84
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	161	811	111	193	492	438	237	1062	463	366	1583	157
Arrive On Green	0.09	0.26	0.26	0.11	0.28	0.28	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3121	428	1774	1770	1575	3442	3539	1544	3442	4692	466
Grp Volume(v), veh/h	127	463	465	633	622	633	163	1100	959	490	607	319
Grp Sat Flow(s),veh/h/ln	1774	1770	1779	1774	1770	1575	1721	1770	1544	1721	1695	1767
Q Serve(g_s), s	5.6	20.8	20.8	8.7	22.3	22.3	3.7	24.0	24.0	8.5	11.6	11.7
Cycle Q Clear(g_c), s	5.6	20.8	20.8	8.7	22.3	22.3	3.7	24.0	24.0	8.5	11.6	11.7
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	161	460	463	193	492	438	237	1062	463	366	1144	596
V/C Ratio(X)	0.79	1.01	1.01	3.28	1.26	1.45	0.69	1.04	2.07	1.34	0.53	0.53
Avail Cap(c_a), veh/h	255	460	463	193	492	438	237	1062	463	366	1144	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	29.6	29.6	35.7	28.9	28.9	36.4	28.0	28.0	35.8	21.4	21.4
Incr Delay (d2), s/veh	8.4	43.4	43.3	1039.7	134.2	212.9	8.2	37.4	489.2	170.4	1.8	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	15.6	15.7	60.0	29.1	35.5	2.0	17.2	73.1	12.7	5.7	6.2
LnGrp Delay(d),s/veh	44.0	73.0	72.9	1075.4	163.1	241.8	44.6	65.4	517.2	206.2	23.2	24.8
LnGrp LOS	D	F	F	F	F	F	D	F	F	F	C	C
Approach Vol, veh/h		1055			1888			2222			1416	
Approach Delay, s/veh		69.4			495.3			258.9			86.9	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	28.5	13.2	25.3	10.0	31.5	11.7	26.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0
Max Q Clear Time (g_c+I1), s	10.5	26.0	10.7	22.8	5.7	13.7	7.6	24.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.1	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	259.3
HCM 2010 LOS	F

Appendix N

Level of Service

Calculations

Cumulative Plus Project

Ag Housing

Conditions

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	210	885	1138	20	30	600
Future Volume (vph)	210	885	1138	20	30	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.12	1.00	1.00		0.95	1.00
Satd. Flow (perm)	215	3504	3477		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	228	962	1237	22	33	652
RTOR Reduction (vph)	0	0	0	0	0	157
Lane Group Flow (vph)	228	962	1259	0	33	495
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	47.4		20.8	20.8
Effective Green, g (s)	61.1	61.5	48.5		21.5	21.9
Actuated g/C Ratio	0.68	0.68	0.54		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	301	2394	1873		422	385
v/s Ratio Prot	c0.08	0.27	0.36		0.02	
v/s Ratio Perm	c0.44					c0.31
v/c Ratio	0.76	0.40	0.67		0.08	1.29
Uniform Delay, d1	14.0	6.2	15.0		26.6	34.0
Progression Factor	1.82	0.33	1.00		1.00	1.00
Incremental Delay, d2	9.6	0.1	1.1		0.1	147.4
Delay (s)	35.0	2.2	16.1		26.6	181.4
Level of Service	D	A	B		C	F
Approach Delay (s)		8.5	16.1		174.0	
Approach LOS		A	B		F	

Intersection Summary

HCM 2000 Control Delay	47.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	75.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	968	0	0	1433	305	250	0	127	0	0	0
Future Volume (vph)	0	968	0	0	1433	305	250	0	127	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3394		1624	1624	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3394		1624	1624	1530			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1052	0	0	1558	332	272	0	138	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	105	0	0	0
Lane Group Flow (vph)	0	1052	0	0	1890	0	136	136	33	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			47.4		20.8	20.8	20.8			
Effective Green, g (s)		61.5			48.5		21.5	21.5	21.5			
Actuated g/C Ratio		0.68			0.54		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2358			1828		387	387	365			
v/s Ratio Prot		c0.30			c0.56		c0.08	0.08				
v/s Ratio Perm									0.02			
v/c Ratio		0.45			1.03		0.35	0.35	0.09			
Uniform Delay, d1		6.5			20.8		28.5	28.5	26.6			
Progression Factor		1.00			0.78		1.00	1.00	1.00			
Incremental Delay, d2		0.2			24.4		0.6	0.6	0.1			
Delay (s)		6.7			40.5		29.0	29.0	26.8			
Level of Service		A			D		C	C	C			
Approach Delay (s)		6.7			40.5			28.2			0.0	
Approach LOS		A			D			C			A	

Intersection Summary

HCM 2000 Control Delay	28.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.3
Intersection Capacity Utilization	62.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1045	1355	0	263	441
Future Volume (veh/h)	0	1045	1355	0	263	441
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800
Adj Flow Rate, veh/h	0	1136	1473	0	286	479
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	2	0	4	4
Cap, veh/h	0	1682	1715	0	1209	556
Arrive On Green	0.00	0.49	0.49	0.00	0.36	0.36
Sat Flow, veh/h	0	3599	3670	0	3325	1530
Grp Volume(v), veh/h	0	1136	1473	0	286	479
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530
Q Serve(g_s), s	0.0	13.5	19.8	0.0	3.2	15.5
Cycle Q Clear(g_c), s	0.0	13.5	19.8	0.0	3.2	15.5
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1682	1715	0	1209	556
V/C Ratio(X)	0.00	0.68	0.86	0.00	0.24	0.86
Avail Cap(c_a), veh/h	0	1981	2020	0	1334	614
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	10.3	11.9	0.0	11.8	15.7
Incr Delay (d2), s/veh	0.0	0.5	3.1	0.0	0.1	10.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.4	10.1	0.0	1.5	8.2
LnGrp Delay(d),s/veh	0.0	10.8	15.0	0.0	11.9	26.5
LnGrp LOS		B	B		B	C
Approach Vol, veh/h		1136	1473		765	
Approach Delay, s/veh		10.8	15.0		21.0	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		30.3		23.0		30.3		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		15.5		17.5		21.8		
Green Ext Time (p_c), s		3.3		0.9		3.4		

Intersection Summary	
HCM 2010 Ctrl Delay	14.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	220	20	1016	480	320	20	333	965	170	295	20
Future Volume (veh/h)	30	220	20	1016	480	320	20	333	965	170	295	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	32	234	21	1081	511	0	21	354	1027	181	314	21
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	361	32	1225	1544	807	46	703	1543	251	821	55
Arrive On Green	0.04	0.12	0.13	0.36	0.44	0.00	0.03	0.20	0.20	0.08	0.25	0.26
Sat Flow, veh/h	1659	3074	274	3374	3470	1552	1739	3470	2719	3342	3270	218
Grp Volume(v), veh/h	32	125	130	1081	511	0	21	354	1027	181	164	171
Grp Sat Flow(s),veh/h/ln	1659	1655	1693	1687	1735	1552	1739	1735	1359	1671	1718	1770
Q Serve(g_s), s	1.8	7.0	7.1	29.2	9.3	0.0	1.2	8.8	8.1	5.2	7.7	7.8
Cycle Q Clear(g_c), s	1.8	7.0	7.1	29.2	9.3	0.0	1.2	8.8	8.1	5.2	7.7	7.8
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	59	195	199	1225	1544	807	46	703	1543	251	432	445
V/C Ratio(X)	0.54	0.64	0.65	0.88	0.33	0.00	0.45	0.50	0.67	0.72	0.38	0.38
Avail Cap(c_a), veh/h	124	777	795	1283	2689	1320	107	1241	1964	309	667	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.1	41.0	41.0	29.0	17.6	0.0	46.7	34.4	3.8	44.0	30.2	30.1
Incr Delay (d2), s/veh	2.8	7.4	7.5	8.0	0.3	0.0	2.5	0.6	0.6	9.5	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.6	3.7	14.9	4.5	0.0	0.6	4.3	3.8	2.7	3.7	3.9
LnGrp Delay(d),s/veh	49.0	48.3	48.5	37.0	17.8	0.0	49.2	35.0	4.4	53.5	30.7	30.7
LnGrp LOS	D	D	D	D	B		D	D	A	D	C	C
Approach Vol, veh/h		287			1592			1402			516	
Approach Delay, s/veh		48.5			30.9			12.8			38.7	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	41.3	16.9	8.6	30.4	9.0	49.3	13.3	25.7
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8
Max Q Clear Time (g_c+I1), s	31.2	9.1	3.2	9.8	3.8	11.3	7.2	10.8
Green Ext Time (p_c), s	4.1	2.3	0.0	1.3	0.0	5.9	0.2	8.3

Intersection Summary	
HCM 2010 Ctrl Delay	26.6
HCM 2010 LOS	C

Intersection												
Int Delay, s/veh	10.9											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	144	73	190	227	43	65	24	20	66	43	0
Future Vol, veh/h	0	144	73	190	227	43	65	24	20	66	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	164	83	216	258	49	74	27	23	75	49	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	307	0	0	247	0	0	903	903	164	921	937	258
Stage 1	-	-	-	-	-	-	164	164	-	690	690	-
Stage 2	-	-	-	-	-	-	739	739	-	231	247	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1204	-	-	1307	-	-	256	275	875	251	265	781
Stage 1	-	-	-	-	-	-	833	759	-	435	446	-
Stage 2	-	-	-	-	-	-	406	421	-	772	702	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1204	-	-	1307	-	-	186	230	875	195	221	781
Mov Cap-2 Maneuver	-	-	-	-	-	-	186	230	-	195	221	-
Stage 1	-	-	-	-	-	-	833	759	-	435	372	-
Stage 2	-	-	-	-	-	-	294	352	-	725	702	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	28.8	46.7
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	186	346	1204	-	-	1307	-	-	204	-
HCM Lane V/C Ratio	0.397	0.145	-	-	-	0.165	-	-	0.607	-
HCM Control Delay (s)	36.6	17.2	0	-	-	8.3	-	-	46.7	0
HCM Lane LOS	E	C	A	-	-	A	-	-	E	A
HCM 95th %tile Q(veh)	1.8	0.5	0	-	-	0.6	-	-	3.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	31	174	66	10	100	242	839	13	132	1111	48
Future Volume (veh/h)	79	31	174	66	10	100	242	839	13	132	1111	48
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	69	185	70	11	106	257	893	14	140	1182	51
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	259	272	231	151	24	155	206	1889	30	174	1241	553
Arrive On Green	0.15	0.15	0.15	0.12	0.10	0.10	0.12	0.37	0.37	0.10	0.35	0.35
Sat Flow, veh/h	1707	1792	1521	1528	240	1563	1757	5108	80	1774	3539	1578
Grp Volume(v), veh/h	58	69	185	81	0	106	257	587	320	140	1182	51
Grp Sat Flow(s),veh/h/ln	1707	1792	1521	1768	0	1563	1757	1679	1830	1774	1770	1578
Q Serve(g_s), s	2.5	2.9	10.0	3.7	0.0	5.6	10.0	11.4	11.4	6.6	27.8	1.9
Cycle Q Clear(g_c), s	2.5	2.9	10.0	3.7	0.0	5.6	10.0	11.4	11.4	6.6	27.8	1.9
Prop In Lane	1.00		1.00	0.86		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	259	272	231	175	0	155	206	1241	677	174	1241	553
V/C Ratio(X)	0.22	0.25	0.80	0.46	0.00	0.69	1.25	0.47	0.47	0.80	0.95	0.09
Avail Cap(c_a), veh/h	420	441	374	518	0	458	206	1241	677	229	1244	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	31.9	34.9	35.7	0.0	37.2	37.7	20.5	20.5	37.7	27.0	18.6
Incr Delay (d2), s/veh	0.4	0.5	6.3	1.9	0.0	5.3	145.5	0.3	0.5	14.3	15.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.5	4.6	1.9	0.0	2.6	13.1	5.3	5.8	3.9	16.1	0.8
LnGrp Delay(d),s/veh	32.2	32.4	41.2	37.6	0.0	42.5	183.2	20.8	21.1	52.0	42.5	18.7
LnGrp LOS	C	C	D	D		D	F	C	C	D	D	B
Approach Vol, veh/h		312			187			1164			1373	
Approach Delay, s/veh		37.6			40.4			56.7			42.6	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		19.0	16.0	35.9		14.4	14.4	37.6
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0
Max Q Clear Time (g_c+I1), s		12.0	12.0	29.8		7.6	8.6	13.4
Green Ext Time (p_c), s		0.9	0.0	0.1		0.6	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	47.4
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	301	292	141	412	374	228	124	540	335	163	675	247
Future Volume (veh/h)	301	292	141	412	374	228	124	540	335	163	675	247
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	320	311	150	438	398	243	132	574	356	173	718	263
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	333	327	158	469	415	353	133	973	435	198	786	288
Arrive On Green	0.19	0.28	0.28	0.14	0.22	0.22	0.08	0.28	0.28	0.11	0.31	0.31
Sat Flow, veh/h	1774	1188	573	3408	1845	1568	1774	3539	1583	1757	2514	921
Grp Volume(v), veh/h	320	0	461	438	398	243	132	574	356	173	501	480
Grp Sat Flow(s),veh/h/ln	1774	0	1762	1704	1845	1568	1774	1770	1583	1757	1752	1682
Q Serve(g_s), s	14.3	0.0	20.6	10.2	17.1	11.4	5.9	11.2	16.8	7.8	22.0	22.0
Cycle Q Clear(g_c), s	14.3	0.0	20.6	10.2	17.1	11.4	5.9	11.2	16.8	7.8	22.0	22.0
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	333	0	484	469	415	353	133	973	435	198	548	526
V/C Ratio(X)	0.96	0.00	0.95	0.93	0.96	0.69	0.99	0.59	0.82	0.88	0.91	0.91
Avail Cap(c_a), veh/h	333	0	484	469	415	353	133	973	435	198	548	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	0.0	28.5	34.1	30.6	28.4	37.0	25.1	27.1	34.9	26.5	26.5
Incr Delay (d2), s/veh	39.2	0.0	29.0	26.1	33.6	5.6	75.5	2.6	15.6	32.6	22.2	22.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	0.0	13.9	6.5	12.5	5.5	5.7	5.9	9.2	5.5	13.9	13.5
LnGrp Delay(d),s/veh	71.4	0.0	57.5	60.3	64.2	34.0	112.4	27.7	42.7	67.5	48.7	49.3
LnGrp LOS	E		E	E	E	C	F	C	D	E	D	D
Approach Vol, veh/h		781			1079			1062			1154	
Approach Delay, s/veh		63.2			55.8			43.3			51.8	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	26.0	15.0	26.0	10.0	29.0	19.0	22.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	22.0	11.0	22.0	6.0	25.0	15.0	18.0
Max Q Clear Time (g_c+I1), s	9.8	18.8	12.2	22.6	7.9	24.0	16.3	19.1
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	0.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	378	236	136	392	111	161	715	73	126	1295	201
Future Volume (veh/h)	164	378	236	136	392	111	161	715	73	126	1295	201
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	189	434	271	156	451	0	185	822	84	145	1489	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.38	0.38	0.10	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	189	434	271	156	451	0	185	822	84	145	1489	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.9	18.9	15.0	7.8	21.6	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Cycle Q Clear(g_c), s	4.9	18.9	15.0	7.8	21.6	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
V/C Ratio(X)	0.95	1.11	0.83	0.84	0.95	0.00	1.23	0.61	0.14	0.81	1.05	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1356	602	304	1416	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.3	35.5	34.0	39.5	32.8	0.0	41.2	22.3	18.1	39.6	27.0	0.0
Incr Delay (d2), s/veh	49.6	78.5	16.2	27.8	28.6	0.0	150.2	0.8	0.1	8.2	38.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	18.2	7.9	5.2	14.8	0.0	10.0	8.4	1.4	4.0	25.1	0.0
LnGrp Delay(d),s/veh	91.9	114.1	50.2	67.3	61.5	0.0	191.4	23.1	18.2	47.8	65.8	0.0
LnGrp LOS	F	F	D	E	E		F	C	B	D	F	
Approach Vol, veh/h		894			607			1091			1634	
Approach Delay, s/veh		90.0			63.0			51.2			64.2	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	39.0	14.0	23.4	12.1	40.5	9.7	27.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2
Max Q Clear Time (g_c+I1), s	9.2	18.8	9.8	20.9	9.6	38.0	6.9	23.6
Green Ext Time (p_c), s	0.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	66.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	674	128	88	534	3	140	0	157	7	2	0
Future Volume (veh/h)	0	674	128	88	534	3	140	0	157	7	2	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	822	156	107	651	4	171	0	191	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	927	176	134	1612	10	644	0	547	410	80	0
Arrive On Green	0.00	0.32	0.32	0.08	0.49	0.49	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2885	547	1630	3314	20	1469	0	1568	830	228	0
Grp Volume(v), veh/h	0	490	488	107	319	336	171	0	191	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1713	1630	1626	1708	1469	0	1568	1059	0	0
Q Serve(g_s), s	0.0	14.7	14.7	3.5	6.8	6.8	0.0	0.0	4.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.7	14.7	3.5	6.8	6.8	3.8	0.0	4.9	3.9	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.01	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	553	551	134	791	831	644	0	547	489	0	0
V/C Ratio(X)	0.00	0.89	0.89	0.80	0.40	0.40	0.27	0.00	0.35	0.02	0.00	0.00
Avail Cap(c_a), veh/h	158	568	566	284	791	831	644	0	547	489	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	17.5	24.6	8.9	9.0	12.8	0.0	13.2	11.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.4	15.4	10.3	0.3	0.3	1.0	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.3	9.3	2.0	3.1	3.2	2.0	0.0	2.4	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	32.9	33.0	34.8	9.3	9.3	13.8	0.0	14.9	11.8	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		978			762			362			11	
Approach Delay, s/veh		32.9			12.9			14.4			11.8	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.5	9.0	22.0		23.5	0.0	31.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5
Max Q Clear Time (g_c+I1), s		6.9	5.5	16.7		5.9	0.0	8.8
Green Ext Time (p_c), s		1.3	0.1	0.8		0.0	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	22.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	752	85	148	536	3	89	1	95	1	1	0
Future Volume (veh/h)	1	752	85	148	536	3	89	1	95	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	864	98	170	616	3	102	1	109	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	967	110	211	1475	7	573	5	489	308	278	0
Arrive On Green	0.00	0.31	0.31	0.13	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	3113	353	1660	3380	16	1379	15	1509	656	858	0
Grp Volume(v), veh/h	1	477	485	170	302	317	103	0	109	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1747	1660	1656	1740	1394	0	1509	1513	0	0
Q Serve(g_s), s	0.0	15.0	15.0	5.7	7.1	7.1	0.0	0.0	3.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.0	15.0	5.7	7.1	7.1	2.5	0.0	3.0	2.5	0.0	0.0
Prop In Lane	1.00		0.20	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	534	543	211	723	760	578	0	489	586	0	0
V/C Ratio(X)	0.33	0.89	0.89	0.80	0.42	0.42	0.18	0.00	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	545	554	295	723	760	578	0	489	586	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.3	18.7	18.7	24.1	11.0	11.0	13.8	0.0	14.0	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.4	16.8	16.6	10.5	0.4	0.4	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	9.5	9.6	3.2	3.3	3.4	1.3	0.0	1.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	81.7	35.5	35.3	34.6	11.4	11.4	14.5	0.0	15.0	13.0	0.0	0.0
LnGrp LOS	F	D	D	C	B	B	B		B	B		
Approach Vol, veh/h		963			789			212			2	
Approach Delay, s/veh		35.4			16.4			14.8			13.0	
Approach LOS		D			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	11.7	22.1		22.9	4.6	29.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.0	7.7	17.0		4.5	2.0	9.1
Green Ext Time (p_c), s		0.7	0.1	0.6		0.0	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	590	620	340	290	640	251	590	280	250	210	410	761
Future Volume (veh/h)	590	620	340	290	640	251	590	280	250	210	410	761
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	608	639	351	299	660	0	608	289	258	216	423	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	624	634	348	207	781	349	109	419	363	231	565	480
Arrive On Green	0.18	0.29	0.29	0.12	0.22	0.00	0.06	0.24	0.24	0.13	0.31	0.00
Sat Flow, veh/h	3442	2206	1212	1740	3471	1553	1740	1763	1530	1757	1845	1568
Grp Volume(v), veh/h	608	512	478	299	660	0	608	284	263	216	423	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1649	1740	1736	1553	1740	1736	1557	1757	1845	1568
Q Serve(g_s), s	14.1	23.0	23.0	9.5	14.6	0.0	5.0	12.0	12.4	9.7	16.5	0.0
Cycle Q Clear(g_c), s	14.1	23.0	23.0	9.5	14.6	0.0	5.0	12.0	12.4	9.7	16.5	0.0
Prop In Lane	1.00		0.74	1.00		1.00	1.00		0.98	1.00		1.00
Lane Grp Cap(c), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
V/C Ratio(X)	0.97	1.01	1.01	1.45	0.85	0.00	5.59	0.69	0.71	0.94	0.75	0.00
Avail Cap(c_a), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.6	28.5	28.5	35.3	29.7	0.0	37.5	27.8	28.0	34.4	25.0	0.0
Incr Delay (d2), s/veh	29.6	41.7	43.2	226.3	8.5	0.0	2085.9	9.1	11.0	42.0	8.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	17.1	16.1	17.5	7.9	0.0	65.4	6.7	6.5	7.4	9.7	0.0
LnGrp Delay(d),s/veh	62.2	70.2	71.7	261.5	38.1	0.0	2123.4	36.9	39.0	76.5	33.8	0.0
LnGrp LOS	E	F	F	F	D		F	D	D	E	C	
Approach Vol, veh/h		1598			959			1155			639	
Approach Delay, s/veh		67.6			107.8			1135.7			48.2	
Approach LOS		E			F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	23.5	14.0	27.5	9.5	29.0	19.0	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0
Max Q Clear Time (g_c+I1), s	11.7	14.4	11.5	25.0	7.0	18.5	16.1	16.6
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	1.3	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	357.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	330	140	300	310	264	40	620	320	216	745	140
Future Volume (veh/h)	146	330	140	300	310	264	40	620	320	216	745	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	168	379	161	345	356	303	46	713	368	248	856	161
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	746	284	384	579	488	72	831	384	329	1526	471
Arrive On Green	0.12	0.21	0.21	0.22	0.31	0.31	0.04	0.25	0.25	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1349	1774	1863	1568	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	168	379	161	345	356	303	46	713	368	248	856	161
Grp Sat Flow(s),veh/h/ln	1774	1770	1349	1774	1863	1568	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	7.2	7.3	8.3	14.7	12.6	12.8	2.0	15.6	18.0	5.4	11.0	6.2
Cycle Q Clear(g_c), s	7.2	7.3	8.3	14.7	12.6	12.8	2.0	15.6	18.0	5.4	11.0	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	746	284	384	579	488	72	831	384	329	1526	471
V/C Ratio(X)	0.82	0.51	0.57	0.90	0.61	0.62	0.64	0.86	0.96	0.75	0.56	0.34
Avail Cap(c_a), veh/h	252	822	313	400	589	496	135	831	384	333	1526	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	27.0	27.4	29.6	22.7	22.8	36.6	28.0	28.9	34.2	22.8	21.2
Incr Delay (d2), s/veh	15.6	0.5	1.9	22.1	1.9	2.3	9.1	11.2	36.7	9.3	1.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	3.6	3.2	9.5	6.7	5.8	1.2	8.5	11.7	3.0	5.4	3.0
LnGrp Delay(d),s/veh	49.1	27.6	29.4	51.6	24.6	25.1	45.7	39.1	65.6	43.4	24.3	23.1
LnGrp LOS	D	C	C	D	C	C	D	D	E	D	C	C
Approach Vol, veh/h		708			1004			1127			1265	
Approach Delay, s/veh		33.1			34.0			48.0			27.9	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	23.5	21.3	20.8	7.6	27.8	13.5	28.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5
Max Q Clear Time (g_c+I1), s	7.4	20.0	16.7	10.3	4.0	13.0	9.2	14.8
Green Ext Time (p_c), s	0.0	0.0	0.1	1.9	0.0	3.8	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	35.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	518	90	160	609	100	80	688	140	180	962	143
Future Volume (veh/h)	222	518	90	160	609	100	80	688	140	180	962	143
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	249	582	101	180	684	112	90	773	157	202	1081	161
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	801	139	220	770	126	202	956	423	272	1308	195
Arrive On Green	0.14	0.27	0.27	0.12	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	3013	521	1774	3042	498	3408	3505	1551	3442	4468	665
Grp Volume(v), veh/h	249	341	342	180	398	398	90	773	157	202	820	422
Grp Sat Flow(s),veh/h/ln	1774	1770	1765	1774	1770	1770	1704	1752	1551	1721	1695	1743
Q Serve(g_s), s	9.5	12.2	12.3	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.7	15.7
Cycle Q Clear(g_c), s	9.5	12.2	12.3	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.7	15.7
Prop In Lane	1.00		0.30	1.00		0.28	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	242	471	469	220	448	448	202	956	423	272	992	510
V/C Ratio(X)	1.03	0.73	0.73	0.82	0.89	0.89	0.45	0.81	0.37	0.74	0.83	0.83
Avail Cap(c_a), veh/h	242	473	472	227	457	458	245	956	423	272	992	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	23.2	23.3	29.8	25.0	25.1	31.7	23.6	20.5	31.4	23.0	23.0
Incr Delay (d2), s/veh	65.5	5.4	5.6	20.2	18.4	18.7	1.5	7.3	2.5	10.5	7.8	14.3
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	6.7	6.7	4.6	9.6	9.6	0.9	7.8	2.7	2.3	8.4	9.5
LnGrp Delay(d),s/veh	95.6	28.7	28.9	50.0	43.5	43.7	33.2	30.9	23.0	41.9	30.8	37.3
LnGrp LOS	F	C	C	D	D	D	C	C	C	D	C	D
Approach Vol, veh/h		932			976			1020			1444	
Approach Delay, s/veh		46.6			44.8			29.9			34.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	23.5	13.1	23.0	8.6	24.9	14.0	22.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0
Max Q Clear Time (g_c+I1), s	6.0	16.3	8.9	14.3	3.8	17.7	11.5	17.1
Green Ext Time (p_c), s	0.0	1.5	0.0	1.7	0.0	1.3	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	38.2
HCM 2010 LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	481	1433	990	30	40	291
Future Volume (vph)	481	1433	990	30	40	291
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3471		1770	1583
Flt Permitted	0.14	1.00	1.00		0.95	1.00
Satd. Flow (perm)	259	3504	3471		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	486	1447	1000	30	40	294
RTOR Reduction (vph)	0	0	0	0	0	224
Lane Group Flow (vph)	486	1447	1030	0	40	70
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	59.6	59.6	38.6		20.0	20.0
Effective Green, g (s)	60.3	60.7	39.7		20.7	21.1
Actuated g/C Ratio	0.68	0.69	0.45		0.23	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	465	2406	1558		414	377
v/s Ratio Prot	c0.20	0.41	0.30		0.02	
v/s Ratio Perm	c0.51					c0.04
v/c Ratio	1.05	0.60	0.66		0.10	0.19
Uniform Delay, d1	22.7	7.4	19.1		26.5	26.8
Progression Factor	1.11	0.54	1.00		1.00	1.00
Incremental Delay, d2	46.9	0.3	1.2		0.1	0.2
Delay (s)	72.1	4.3	20.3		26.6	27.0
Level of Service	E	A	C		C	C
Approach Delay (s)		21.4	20.3		26.9	
Approach LOS		C	C		C	

Intersection Summary

HCM 2000 Control Delay	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	88.4	Sum of lost time (s)	11.6
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1546	0	0	1017	264	572	0	369	0	0	0
Future Volume (vph)	0	1546	0	0	1017	264	572	0	369	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3358		1656	1656	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3358		1656	1656	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1627	0	0	1071	278	602	0	388	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1627	0	0	1349	0	301	301	331	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		59.6			38.6		20.0	20.0	20.0			
Effective Green, g (s)		60.7			39.7		20.7	20.7	20.7			
Actuated g/C Ratio		0.69			0.45		0.23	0.23	0.23			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2393			1508		387	387	365			
v/s Ratio Prot		c0.47			c0.40		0.18	0.18				
v/s Ratio Perm									c0.21			
v/c Ratio		0.68			0.89		0.78	0.78	0.91			
Uniform Delay, d1		8.1			22.4		31.7	31.7	32.9			
Progression Factor		1.00			0.40		1.00	1.00	1.00			
Incremental Delay, d2		0.9			6.2		9.5	9.5	25.0			
Delay (s)		9.0			15.1		41.2	41.2	57.9			
Level of Service		A			B		D	D	E			
Approach Delay (s)		9.0			15.1			47.7			0.0	
Approach LOS		A			B			D			A	

Intersection Summary

HCM 2000 Control Delay	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	88.4	Sum of lost time (s)	12.3
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1604	1442	0	486	415
Future Volume (veh/h)	0	1604	1442	0	486	415
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835
Adj Flow Rate, veh/h	0	1654	1487	0	501	428
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1881	1881	0	1087	500
Arrive On Green	0.00	0.54	0.54	0.00	0.32	0.32
Sat Flow, veh/h	0	3670	3670	0	3390	1560
Grp Volume(v), veh/h	0	1654	1487	0	501	428
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560
Q Serve(g_s), s	0.0	22.9	18.9	0.0	6.5	14.2
Cycle Q Clear(g_c), s	0.0	22.9	18.9	0.0	6.5	14.2
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1881	1881	0	1087	500
V/C Ratio(X)	0.00	0.88	0.79	0.00	0.46	0.86
Avail Cap(c_a), veh/h	0	2142	2142	0	1131	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	11.1	10.2	0.0	14.9	17.5
Incr Delay (d2), s/veh	0.0	3.8	1.6	0.0	0.2	12.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.8	9.3	0.0	3.0	7.8
LnGrp Delay(d),s/veh	0.0	14.9	11.7	0.0	15.2	30.1
LnGrp LOS		B	B		B	C
Approach Vol, veh/h		1654	1487		929	
Approach Delay, s/veh		14.9	11.7		22.0	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		33.9		21.3		33.9		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		24.9		16.2		20.9		
Green Ext Time (p_c), s		3.9		0.5		4.3		

Intersection Summary	
HCM 2010 Ctrl Delay	15.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	400	20	687	550	620	30	597	1026	660	534	40
Future Volume (veh/h)	50	400	20	687	550	620	30	597	1026	660	534	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	52	412	21	708	567	0	31	615	1058	680	551	41
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	70	576	29	736	1225	808	57	844	1266	571	1244	92
Arrive On Green	0.04	0.18	0.18	0.22	0.35	0.00	0.03	0.24	0.24	0.17	0.38	0.38
Sat Flow, veh/h	1690	3264	166	3374	3470	1552	1756	3504	2759	3407	3306	246
Grp Volume(v), veh/h	52	212	221	708	567	0	31	615	1058	680	291	301
Grp Sat Flow(s),veh/h/ln	1690	1686	1745	1687	1735	1552	1756	1752	1379	1704	1752	1800
Q Serve(g_s), s	3.6	14.1	14.2	24.8	15.1	0.0	2.1	19.3	16.2	20.0	14.8	14.9
Cycle Q Clear(g_c), s	3.6	14.1	14.2	24.8	15.1	0.0	2.1	19.3	16.2	20.0	14.8	14.9
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	70	297	308	736	1225	808	57	844	1266	571	659	677
V/C Ratio(X)	0.74	0.71	0.72	0.96	0.46	0.00	0.55	0.73	0.84	1.19	0.44	0.44
Avail Cap(c_a), veh/h	99	657	680	736	1906	1113	88	999	1388	571	705	724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	46.3	46.3	46.2	29.8	0.0	56.8	41.7	9.4	49.6	27.8	27.8
Incr Delay (d2), s/veh	8.7	6.6	6.5	24.6	0.6	0.0	3.0	2.2	4.3	102.1	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.2	7.4	14.0	7.3	0.0	1.1	9.6	6.9	17.5	7.3	7.5
LnGrp Delay(d),s/veh	65.3	52.9	52.8	70.7	30.4	0.0	59.9	43.9	13.7	151.7	28.3	28.2
LnGrp LOS	E	D	D	E	C		E	D	B	F	C	C
Approach Vol, veh/h		485			1275			1704			1272	
Approach Delay, s/veh		54.2			52.8			25.4			94.3	
Approach LOS		D			D			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	26.5	9.9	50.9	10.4	48.1	26.0	34.7
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0
Max Q Clear Time (g_c+I1), s	26.8	16.2	4.1	16.9	5.6	17.1	22.0	21.3
Green Ext Time (p_c), s	0.0	4.0	0.0	2.4	0.0	6.6	0.0	7.2

Intersection Summary	
HCM 2010 Ctrl Delay	54.2
HCM 2010 LOS	D

Intersection												
Int Delay, s/veh	11.2											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	323	48	140	362	78	64	54	50	57	32	1
Future Vol, veh/h	7	323	48	140	362	78	64	54	50	57	32	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	7	336	50	146	377	81	67	56	52	59	33	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	459	0	0	392	0	0	1091	1107	342	1099	1076	387
Stage 1	-	-	-	-	-	-	356	356	-	670	670	-
Stage 2	-	-	-	-	-	-	735	751	-	429	406	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1066	-	-	1140	-	-	191	208	696	190	219	661
Stage 1	-	-	-	-	-	-	657	625	-	446	455	-
Stage 2	-	-	-	-	-	-	408	415	-	604	598	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1065	-	-	1134	-	-	146	179	693	120	188	655
Mov Cap-2 Maneuver	-	-	-	-	-	-	146	179	-	120	188	-
Stage 1	-	-	-	-	-	-	649	618	-	443	396	-
Stage 2	-	-	-	-	-	-	323	361	-	504	591	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.1	34.7	72
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	146	278	1065	-	-	1134	-	-	138	655
HCM Lane V/C Ratio	0.457	0.39	0.007	-	-	0.129	-	-	0.672	0.002
HCM Control Delay (s)	48.9	26	8.4	-	-	8.6	-	-	72.7	10.5
HCM Lane LOS	E	D	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	2.1	1.8	0	-	-	0.4	-	-	3.7	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	32	123	118	12	191	134	1378	19	231	927	38
Future Volume (veh/h)	84	32	123	118	12	191	134	1378	19	231	927	38
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	69	124	119	12	193	135	1392	19	233	936	38
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	213	179	258	26	250	169	1571	21	263	1262	561
Arrive On Green	0.12	0.12	0.12	0.18	0.16	0.16	0.10	0.30	0.30	0.15	0.36	0.36
Sat Flow, veh/h	1757	1845	1548	1619	163	1571	1774	5170	71	1774	3539	1574
Grp Volume(v), veh/h	58	69	124	131	0	193	135	913	498	233	936	38
Grp Sat Flow(s),veh/h/ln	1757	1845	1548	1782	0	1571	1774	1695	1850	1774	1770	1574
Q Serve(g_s), s	2.7	3.0	6.8	5.8	0.0	10.3	6.5	22.5	22.5	11.3	20.3	1.4
Cycle Q Clear(g_c), s	2.7	3.0	6.8	5.8	0.0	10.3	6.5	22.5	22.5	11.3	20.3	1.4
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	203	213	179	284	0	250	169	1030	562	263	1262	561
V/C Ratio(X)	0.29	0.32	0.69	0.46	0.00	0.77	0.80	0.89	0.89	0.89	0.74	0.07
Avail Cap(c_a), veh/h	400	420	353	507	0	447	263	1081	590	263	1262	561
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.5	35.7	37.3	32.8	0.0	35.4	38.9	29.1	29.1	36.7	24.7	18.6
Incr Delay (d2), s/veh	0.8	0.9	4.8	1.2	0.0	5.0	9.1	8.8	14.7	28.4	2.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.6	3.1	2.9	0.0	4.8	3.6	11.8	13.8	7.6	10.3	0.6
LnGrp Delay(d),s/veh	36.3	36.6	42.1	34.0	0.0	40.3	48.0	37.9	43.8	65.1	27.1	18.7
LnGrp LOS	D	D	D	C		D	D	D	D	E	C	B
Approach Vol, veh/h		251			324			1546			1207	
Approach Delay, s/veh		39.2			37.8			40.7			34.2	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		16.1	14.4	37.3		20.0	19.0	32.7
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0
Max Q Clear Time (g_c+I1), s		8.8	8.5	22.3		12.3	13.3	24.5
Green Ext Time (p_c), s		0.7	0.2	2.4		1.1	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay	37.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	453	115	221	419	120	211	232	790	651	116	675	391
Future Volume (veh/h)	453	115	221	419	120	211	232	790	651	116	675	391
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	498	126	243	460	132	232	255	868	715	127	742	430
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	152	293	523	271	230	226	1236	553	154	669	386
Arrive On Green	0.27	0.27	0.27	0.15	0.15	0.15	0.13	0.35	0.35	0.09	0.31	0.31
Sat Flow, veh/h	1774	570	1099	3442	1863	1583	1774	3539	1583	1774	2163	1249
Grp Volume(v), veh/h	498	0	369	460	132	232	255	868	715	127	606	566
Grp Sat Flow(s),veh/h/ln	1774	0	1669	1721	1863	1583	1774	1770	1583	1774	1770	1642
Q Serve(g_s), s	30.0	0.0	22.9	14.4	7.2	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Cycle Q Clear(g_c), s	30.0	0.0	22.9	14.4	7.2	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Prop In Lane	1.00		0.66	1.00		1.00	1.00		1.00	1.00		0.76
Lane Grp Cap(c), veh/h	484	0	444	523	271	230	226	1236	553	154	547	508
V/C Ratio(X)	1.03	0.00	0.83	0.88	0.49	1.01	1.13	0.70	1.29	0.82	1.11	1.11
Avail Cap(c_a), veh/h	484	0	444	563	271	230	226	1236	553	177	547	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	0.0	38.0	45.7	43.2	47.0	48.0	30.9	35.8	49.4	38.0	38.0
Incr Delay (d2), s/veh	48.6	0.0	12.5	14.2	1.4	61.2	99.1	3.3	144.8	23.2	71.8	75.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.2	0.0	12.1	7.9	3.8	10.9	13.1	11.9	38.9	4.8	27.5	26.0
LnGrp Delay(d),s/veh	88.6	0.0	50.5	59.9	44.6	108.2	147.1	34.2	180.6	72.6	109.8	113.1
LnGrp LOS	F		D	E	D	F	F	C	F	E	F	F
Approach Vol, veh/h		867			824			1838			1299	
Approach Delay, s/veh		72.4			71.0			106.8			107.6	
Approach LOS		E			E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	42.4	20.7	33.3	18.0	38.0	34.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	37.0	18.0	28.0	14.0	34.0	30.0	16.0
Max Q Clear Time (g_c+I1), s	9.7	40.4	16.4	24.9	16.0	36.0	32.0	18.0
Green Ext Time (p_c), s	0.0	0.0	0.3	0.7	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	94.7
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	427	158	113	377	285	254	1349	93	162	872	192
Future Volume (veh/h)	334	427	158	113	377	285	254	1349	93	162	872	192
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	348	445	165	118	393	0	265	1405	97	169	908	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
Arrive On Green	0.08	0.21	0.21	0.08	0.21	0.00	0.14	0.39	0.39	0.11	0.37	0.00
Sat Flow, veh/h	3442	1863	1550	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	348	445	165	118	393	0	265	1405	97	169	908	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1550	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	7.2	19.0	8.4	5.9	18.9	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Cycle Q Clear(g_c), s	7.2	19.0	8.4	5.9	18.9	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
V/C Ratio(X)	1.26	1.13	0.50	0.80	0.99	0.00	1.10	1.01	0.16	0.84	0.69	0.00
Avail Cap(c_a), veh/h	276	393	327	156	399	339	241	1385	607	208	1317	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.3	35.4	31.2	40.4	35.1	0.0	38.8	27.3	17.7	38.9	24.0	0.0
Incr Delay (d2), s/veh	142.9	86.0	1.2	24.0	41.2	0.0	86.8	27.9	0.1	24.2	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	19.0	3.7	3.9	14.2	0.0	11.7	22.3	1.6	5.4	9.7	0.0
LnGrp Delay(d),s/veh	184.1	121.4	32.5	64.4	76.3	0.0	125.6	55.2	17.9	63.2	25.6	0.0
LnGrp LOS	F	F	C	E	E		F	F	B	E	C	
Approach Vol, veh/h		958			511			1767			1077	
Approach Delay, s/veh		128.9			73.6			63.7			31.5	
Approach LOS		F			E			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	39.6	11.9	23.5	16.7	37.6	11.7	23.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2
Max Q Clear Time (g_c+I1), s	10.4	37.1	7.9	21.0	14.2	21.5	9.2	20.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	71.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1075	141	83	649	4	86	2	154	5	0	1
Future Volume (veh/h)	0	1075	141	83	649	4	86	2	154	5	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	1097	144	85	662	4	88	2	157	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1096	144	109	1733	10	581	12	509	430	11	65
Arrive On Green	0.00	0.37	0.37	0.06	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	3000	393	1675	3406	21	1368	35	1524	942	32	195
Grp Volume(v), veh/h	0	616	625	85	325	341	90	0	157	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1706	1675	1671	1756	1403	0	1524	1168	0	0
Q Serve(g_s), s	0.0	20.9	20.9	2.9	6.8	6.8	0.0	0.0	4.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.9	20.9	2.9	6.8	6.8	2.1	0.0	4.4	2.1	0.0	0.0
Prop In Lane	1.00		0.23	1.00		0.01	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	616	623	109	850	893	593	0	509	505	0	0
V/C Ratio(X)	0.00	1.00	1.00	0.78	0.38	0.38	0.15	0.00	0.31	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	616	623	190	850	893	593	0	509	505	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	18.1	18.2	26.4	8.6	8.6	13.4	0.0	14.1	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	36.1	36.7	11.6	0.3	0.3	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.8	16.0	1.7	3.1	3.3	1.1	0.0	2.1	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	54.3	54.8	37.9	8.8	8.8	13.9	0.0	15.7	12.8	0.0	0.0
LnGrp LOS		D	F	D	A	A	B		B	B		
Approach Vol, veh/h		1241			751			247			6	
Approach Delay, s/veh		54.5			12.1			15.1			12.8	
Approach LOS		D			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.6	8.2	25.4		23.6	0.0	33.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4
Max Q Clear Time (g_c+I1), s		6.4	4.9	22.9		4.1	0.0	8.8
Green Ext Time (p_c), s		0.8	0.0	0.0		0.0	0.0	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	977	257	339	662	0	74	0	62	0	3	0
Future Volume (veh/h)	1	977	257	339	662	0	74	0	62	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	1028	271	357	697	0	78	0	65	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	916	240	399	1983	0	418	0	367	0	470	0
Arrive On Green	0.00	0.34	0.34	0.23	0.57	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2670	700	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	654	645	357	697	0	78	0	65	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1668	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	15.4	8.3	0.0	3.7	0.0	2.7	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	15.4	8.3	0.0	3.8	0.0	2.7	0.0	0.1	0.0
Prop In Lane	1.00		0.42	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	584	572	399	1983	0	418	0	367	0	470	0
V/C Ratio(X)	0.43	1.12	1.13	0.89	0.35	0.00	0.19	0.00	0.18	0.00	0.01	0.00
Avail Cap(c_a), veh/h	111	584	572	462	1983	0	418	0	367	0	470	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.5	25.4	25.4	28.8	8.9	0.0	23.0	0.0	22.6	0.0	21.6	0.0
Incr Delay (d2), s/veh	91.1	74.3	77.9	17.8	0.1	0.0	1.0	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	24.4	24.5	9.3	4.0	0.0	1.4	0.0	1.2	0.0	0.1	0.0
LnGrp Delay(d),s/veh	129.6	99.7	103.2	46.7	9.0	0.0	24.0	0.0	23.6	0.0	21.6	0.0
LnGrp LOS	F	F	F	D	A		C		C		C	
Approach Vol, veh/h		1300			1054			143			3	
Approach Delay, s/veh		101.5			21.7			23.8			21.6	
Approach LOS		F			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	22.2	31.0		24.0	4.6	48.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		5.8	17.4	28.5		2.1	2.0	10.3
Green Ext Time (p_c), s		0.4	0.4	0.0		0.0	0.0	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	63.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	557	640	330	350	800	325	300	376	730	284	263	586
Future Volume (veh/h)	557	640	330	350	800	325	300	376	730	284	263	586
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	580	667	344	365	833	0	312	392	760	296	274	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	692	357	143	810	363	112	427	382	253	597	508
Arrive On Green	0.16	0.31	0.31	0.08	0.23	0.00	0.06	0.24	0.24	0.14	0.32	0.00
Sat Flow, veh/h	3442	2259	1165	1757	3505	1568	1757	1752	1568	1757	1845	1568
Grp Volume(v), veh/h	580	522	489	365	833	0	312	392	760	296	274	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1655	1757	1752	1568	1757	1752	1568	1757	1845	1568
Q Serve(g_s), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.4	19.5	11.5	9.4	0.0
Cycle Q Clear(g_c), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.4	19.5	11.5	9.4	0.0
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
V/C Ratio(X)	1.08	0.96	0.96	2.56	1.03	0.00	2.79	0.92	1.99	1.17	0.46	0.00
Avail Cap(c_a), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	27.3	27.3	36.8	30.8	0.0	37.5	29.5	30.3	34.3	21.5	0.0
Incr Delay (d2), s/veh	61.7	29.6	30.9	720.8	38.9	0.0	827.9	27.1	454.1	111.2	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	15.8	14.9	31.7	13.3	0.0	28.2	11.6	56.6	13.3	5.2	0.0
LnGrp Delay(d),s/veh	95.4	56.9	58.2	757.6	69.6	0.0	865.4	56.6	484.4	145.5	24.0	0.0
LnGrp LOS	F	E	E	F	F		F	E	F	F	C	
Approach Vol, veh/h		1591			1198			1464			570	
Approach Delay, s/veh		71.4			279.2			451.0			87.1	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	24.0	11.0	29.0	9.6	30.4	17.0	23.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	19.5	6.5	24.5	5.1	25.9	12.5	18.5
Max Q Clear Time (g_c+I1), s	13.5	21.5	8.5	25.3	7.1	11.4	14.5	20.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	240.1
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	210	60	221	190	248	120	1393	251	195	1428	237
Future Volume (veh/h)	235	210	60	221	190	248	120	1393	251	195	1428	237
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	245	219	62	230	198	258	125	1451	261	203	1488	247
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	287	776	339	273	394	330	158	1278	229	267	1445	441
Arrive On Green	0.16	0.22	0.22	0.15	0.21	0.21	0.09	0.30	0.30	0.08	0.28	0.28
Sat Flow, veh/h	1774	3539	1547	1774	1863	1561	1774	4322	776	3442	5085	1550
Grp Volume(v), veh/h	245	219	62	230	198	258	125	1138	574	203	1488	247
Grp Sat Flow(s),veh/h/ln	1774	1770	1547	1774	1863	1561	1774	1695	1708	1721	1695	1550
Q Serve(g_s), s	9.5	3.7	2.3	8.9	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.6
Cycle Q Clear(g_c), s	9.5	3.7	2.3	8.9	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	287	776	339	273	394	330	158	1003	505	267	1445	441
V/C Ratio(X)	0.85	0.28	0.18	0.84	0.50	0.78	0.79	1.13	1.14	0.76	1.03	0.56
Avail Cap(c_a), veh/h	300	897	392	312	485	407	162	1003	505	267	1445	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	23.1	22.5	29.2	24.7	26.4	31.7	25.0	25.0	32.1	25.4	21.6
Incr Delay (d2), s/veh	20.1	0.2	0.3	16.7	1.0	7.7	22.4	73.1	83.6	12.1	31.6	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.8	1.0	5.6	3.5	5.4	3.4	19.9	21.6	2.4	13.6	4.7
LnGrp Delay(d),s/veh	49.0	23.3	22.8	45.9	25.7	34.1	54.1	98.1	108.6	44.2	57.0	26.7
LnGrp LOS	D	C	C	D	C	C	D	F	F	D	F	C
Approach Vol, veh/h		526			686			1837			1938	
Approach Delay, s/veh		35.2			35.6			98.4			51.8	
Approach LOS		D			D			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.5	15.4	20.1	10.8	24.7	16.0	19.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5
Max Q Clear Time (g_c+I1), s	6.1	23.0	10.9	5.7	6.9	22.2	11.5	13.1
Green Ext Time (p_c), s	0.0	0.0	0.1	1.2	0.0	0.0	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	65.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	802	110	620	612	620	160	1078	940	480	825	84
Future Volume (veh/h)	125	802	110	620	612	620	160	1078	940	480	825	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	128	818	112	633	624	633	163	1100	959	490	842	86
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	812	111	193	491	437	237	1062	463	366	1579	161
Arrive On Green	0.09	0.26	0.26	0.11	0.28	0.28	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3122	427	1774	1770	1575	3442	3539	1544	3442	4680	476
Grp Volume(v), veh/h	128	464	466	633	624	633	163	1100	959	490	609	319
Grp Sat Flow(s),veh/h/ln	1774	1770	1780	1774	1770	1575	1721	1770	1544	1721	1695	1765
Q Serve(g_s), s	5.7	20.8	20.8	8.7	22.2	22.2	3.7	24.0	24.0	8.5	11.6	11.7
Cycle Q Clear(g_c), s	5.7	20.8	20.8	8.7	22.2	22.2	3.7	24.0	24.0	8.5	11.6	11.7
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	162	460	463	193	491	437	237	1062	463	366	1144	596
V/C Ratio(X)	0.79	1.01	1.01	3.28	1.27	1.45	0.69	1.04	2.07	1.34	0.53	0.54
Avail Cap(c_a), veh/h	255	460	463	193	491	437	237	1062	463	366	1144	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	29.6	29.6	35.7	28.9	28.9	36.4	28.0	28.0	35.8	21.4	21.4
Incr Delay (d2), s/veh	8.4	43.9	43.8	1039.7	137.1	214.4	8.2	37.4	489.2	170.4	1.8	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	15.7	15.8	60.0	29.5	35.6	2.0	17.2	73.1	12.7	5.7	6.2
LnGrp Delay(d),s/veh	44.0	73.5	73.4	1075.4	166.0	243.3	44.6	65.4	517.2	206.2	23.2	24.9
LnGrp LOS	D	F	F	F	F	F	D	F	F	F	C	C
Approach Vol, veh/h		1058			1890			2222			1418	
Approach Delay, s/veh		69.9			496.5			258.9			86.8	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	28.5	13.2	25.3	10.0	31.5	11.8	26.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0
Max Q Clear Time (g_c+I1), s	10.5	26.0	10.7	22.8	5.7	13.7	7.7	24.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.1	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	259.6
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	301	292	140	412	373	228	120	540	335	163	675	246
Future Volume (veh/h)	301	292	140	412	373	228	120	540	335	163	675	246
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	320	311	149	438	397	243	128	574	356	173	718	262
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	333	328	157	469	415	353	133	973	435	198	786	287
Arrive On Green	0.19	0.28	0.28	0.14	0.22	0.22	0.08	0.28	0.28	0.11	0.31	0.31
Sat Flow, veh/h	1774	1191	571	3408	1845	1568	1774	3539	1583	1757	2517	918
Grp Volume(v), veh/h	320	0	460	438	397	243	128	574	356	173	500	480
Grp Sat Flow(s),veh/h/ln	1774	0	1762	1704	1845	1568	1774	1770	1583	1757	1752	1683
Q Serve(g_s), s	14.3	0.0	20.5	10.2	17.0	11.4	5.8	11.2	16.8	7.8	22.0	22.0
Cycle Q Clear(g_c), s	14.3	0.0	20.5	10.2	17.0	11.4	5.8	11.2	16.8	7.8	22.0	22.0
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	333	0	485	469	415	353	133	973	435	198	548	526
V/C Ratio(X)	0.96	0.00	0.95	0.93	0.96	0.69	0.96	0.59	0.82	0.88	0.91	0.91
Avail Cap(c_a), veh/h	333	0	485	469	415	353	133	973	435	198	548	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.2	0.0	28.5	34.1	30.6	28.4	36.9	25.1	27.1	34.9	26.5	26.5
Incr Delay (d2), s/veh	39.2	0.0	28.5	26.1	33.1	5.6	66.2	2.6	15.6	32.6	22.1	22.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	0.0	13.8	6.5	12.4	5.5	5.3	5.9	9.2	5.5	13.9	13.5
LnGrp Delay(d),s/veh	71.4	0.0	56.9	60.3	63.7	34.0	103.0	27.7	42.7	67.5	48.5	49.2
LnGrp LOS	E		E	E	E	C	F	C	D	E	D	D
Approach Vol, veh/h		780			1078			1058			1153	
Approach Delay, s/veh		62.9			55.6			41.9			51.6	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	26.0	15.0	26.0	10.0	29.0	19.0	22.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	22.0	11.0	22.0	6.0	25.0	15.0	18.0
Max Q Clear Time (g_c+I1), s	9.8	18.8	12.2	22.5	7.8	24.0	16.3	19.0
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	0.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	301	292	141	412	374	228	124	540	335	163	675	247
Future Volume (veh/h)	301	292	141	412	374	228	124	540	335	163	675	247
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1845	1845	1845
Adj Flow Rate, veh/h	320	311	150	438	398	243	132	574	356	173	718	263
Adj No. of Lanes	2	1	1	2	1	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	383	413	351	487	468	398	167	955	654	195	1005	450
Arrive On Green	0.11	0.22	0.22	0.14	0.25	0.25	0.09	0.27	0.27	0.11	0.29	0.29
Sat Flow, veh/h	3442	1863	1583	3408	1845	1568	1774	3539	1583	1757	3505	1568
Grp Volume(v), veh/h	320	311	150	438	398	243	132	574	356	173	718	263
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1704	1845	1568	1774	1770	1583	1757	1752	1568
Q Serve(g_s), s	5.7	9.8	5.1	8.0	12.9	8.6	4.6	8.9	10.7	6.1	11.6	9.1
Cycle Q Clear(g_c), s	5.7	9.8	5.1	8.0	12.9	8.6	4.6	8.9	10.7	6.1	11.6	9.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	383	413	351	487	468	398	167	955	654	195	1005	450
V/C Ratio(X)	0.84	0.75	0.43	0.90	0.85	0.61	0.79	0.60	0.54	0.89	0.71	0.58
Avail Cap(c_a), veh/h	383	473	402	487	527	448	197	955	654	195	1005	450
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.4	22.9	21.1	26.5	22.4	20.8	27.9	20.0	14.0	27.6	20.1	19.2
Incr Delay (d2), s/veh	14.9	5.8	0.8	19.4	11.5	2.0	16.5	2.8	3.2	34.9	4.3	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	5.7	2.3	5.0	8.0	3.9	3.0	4.7	5.2	4.9	6.2	4.5
LnGrp Delay(d),s/veh	42.3	28.7	21.9	46.0	33.9	22.7	44.4	22.8	17.2	62.5	24.5	24.7
LnGrp LOS	D	C	C	D	C	C	D	C	B	E	C	C
Approach Vol, veh/h		781			1079			1062			1154	
Approach Delay, s/veh		33.0			36.3			23.6			30.2	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	21.0	13.0	18.0	9.9	22.1	11.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	17.0	9.0	16.0	7.0	17.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	8.1	12.7	10.0	11.8	6.6	13.6	7.7	14.9
Green Ext Time (p_c), s	0.0	2.0	0.0	0.9	0.0	1.8	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	30.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	378	236	136	391	111	161	715	73	126	1295	201
Future Volume (veh/h)	164	378	236	136	391	111	161	715	73	126	1295	201
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	189	434	271	156	449	0	185	822	84	145	1489	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.38	0.38	0.10	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	189	434	271	156	449	0	185	822	84	145	1489	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.9	18.9	15.0	7.8	21.5	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Cycle Q Clear(g_c), s	4.9	18.9	15.0	7.8	21.5	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
V/C Ratio(X)	0.95	1.11	0.83	0.84	0.94	0.00	1.23	0.61	0.14	0.81	1.05	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1356	602	304	1416	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.3	35.5	34.0	39.5	32.8	0.0	41.2	22.3	18.1	39.6	27.0	0.0
Incr Delay (d2), s/veh	49.6	78.5	16.2	27.8	27.8	0.0	150.2	0.8	0.1	8.2	38.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	18.2	7.9	5.2	14.5	0.0	10.0	8.4	1.4	4.0	25.1	0.0
LnGrp Delay(d),s/veh	91.9	114.1	50.2	67.3	60.5	0.0	191.4	23.1	18.2	47.8	65.8	0.0
LnGrp LOS	F	F	D	E	E		F	C	B	D	F	
Approach Vol, veh/h		894			605			1091			1634	
Approach Delay, s/veh		90.0			62.3			51.2			64.2	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	39.0	14.0	23.4	12.1	40.5	9.7	27.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2
Max Q Clear Time (g_c+I1), s	9.2	18.8	9.8	20.9	9.6	38.0	6.9	23.5
Green Ext Time (p_c), s	0.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	66.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	674	128	88	534	3	139	0	157	7	2	0
Future Volume (veh/h)	0	674	128	88	534	3	139	0	157	7	2	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	822	156	107	651	4	170	0	191	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	927	176	134	1612	10	644	0	547	410	80	0
Arrive On Green	0.00	0.32	0.32	0.08	0.49	0.49	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2885	547	1630	3314	20	1468	0	1568	832	228	0
Grp Volume(v), veh/h	0	490	488	107	319	336	170	0	191	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1713	1630	1626	1708	1468	0	1568	1060	0	0
Q Serve(g_s), s	0.0	14.7	14.7	3.5	6.8	6.8	0.0	0.0	4.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.7	14.7	3.5	6.8	6.8	3.8	0.0	4.9	3.8	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.01	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	553	551	134	791	831	644	0	547	490	0	0
V/C Ratio(X)	0.00	0.89	0.89	0.80	0.40	0.40	0.26	0.00	0.35	0.02	0.00	0.00
Avail Cap(c_a), veh/h	158	568	566	284	791	831	644	0	547	490	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.5	17.5	24.6	8.9	9.0	12.8	0.0	13.2	11.7	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.4	15.4	10.3	0.3	0.3	1.0	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.3	9.3	2.0	3.1	3.2	2.0	0.0	2.4	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	32.9	33.0	34.8	9.3	9.3	13.8	0.0	14.9	11.8	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		978			762			361			11	
Approach Delay, s/veh		32.9			12.9			14.4			11.8	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.5	9.0	22.0		23.5	0.0	31.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5
Max Q Clear Time (g_c+I1), s		6.9	5.5	16.7		5.8	0.0	8.8
Green Ext Time (p_c), s		1.3	0.1	0.8		0.0	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	22.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	752	85	148	536	3	89	1	95	1	1	0
Future Volume (veh/h)	1	752	85	148	536	3	89	1	95	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	864	98	170	616	3	102	1	109	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	967	110	211	1475	7	573	5	489	308	278	0
Arrive On Green	0.00	0.31	0.31	0.13	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	3113	353	1660	3380	16	1379	15	1509	656	858	0
Grp Volume(v), veh/h	1	477	485	170	302	317	103	0	109	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1747	1660	1656	1740	1394	0	1509	1513	0	0
Q Serve(g_s), s	0.0	15.0	15.0	5.7	7.1	7.1	0.0	0.0	3.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.0	15.0	5.7	7.1	7.1	2.5	0.0	3.0	2.5	0.0	0.0
Prop In Lane	1.00		0.20	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	534	543	211	723	760	578	0	489	586	0	0
V/C Ratio(X)	0.33	0.89	0.89	0.80	0.42	0.42	0.18	0.00	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	545	554	295	723	760	578	0	489	586	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.3	18.7	18.7	24.1	11.0	11.0	13.8	0.0	14.0	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.4	16.8	16.6	10.5	0.4	0.4	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	9.5	9.6	3.2	3.3	3.4	1.3	0.0	1.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	81.7	35.5	35.3	34.6	11.4	11.4	14.5	0.0	15.0	13.0	0.0	0.0
LnGrp LOS	F	D	D	C	B	B	B		B	B		
Approach Vol, veh/h		963			789			212			2	
Approach Delay, s/veh		35.4			16.4			14.8			13.0	
Approach LOS		D			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	11.7	22.1		22.9	4.6	29.3
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.0	7.7	17.0		4.5	2.0	9.1
Green Ext Time (p_c), s		0.7	0.1	0.6		0.0	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	589	620	340	290	640	250	590	279	250	210	410	760
Future Volume (veh/h)	589	620	340	290	640	250	590	279	250	210	410	760
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	607	639	351	299	660	0	608	288	258	216	423	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	624	634	348	207	781	349	109	418	364	231	565	480
Arrive On Green	0.18	0.29	0.29	0.12	0.22	0.00	0.06	0.24	0.24	0.13	0.31	0.00
Sat Flow, veh/h	3442	2206	1212	1740	3471	1553	1740	1760	1532	1757	1845	1568
Grp Volume(v), veh/h	607	512	478	299	660	0	608	284	262	216	423	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1649	1740	1736	1553	1740	1736	1557	1757	1845	1568
Q Serve(g_s), s	14.0	23.0	23.0	9.5	14.6	0.0	5.0	11.9	12.4	9.7	16.5	0.0
Cycle Q Clear(g_c), s	14.0	23.0	23.0	9.5	14.6	0.0	5.0	11.9	12.4	9.7	16.5	0.0
Prop In Lane	1.00		0.74	1.00		1.00	1.00		0.98	1.00		1.00
Lane Grp Cap(c), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
V/C Ratio(X)	0.97	1.01	1.01	1.45	0.85	0.00	5.59	0.69	0.71	0.94	0.75	0.00
Avail Cap(c_a), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.6	28.5	28.5	35.3	29.7	0.0	37.5	27.8	28.0	34.4	25.0	0.0
Incr Delay (d2), s/veh	29.3	41.7	43.2	226.3	8.5	0.0	2085.9	9.1	10.9	42.0	8.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	17.1	16.1	17.5	7.9	0.0	65.4	6.7	6.4	7.4	9.7	0.0
LnGrp Delay(d),s/veh	61.8	70.2	71.7	261.5	38.1	0.0	2123.4	36.9	38.9	76.5	33.8	0.0
LnGrp LOS	E	F	F	F	D		F	D	D	E	C	
Approach Vol, veh/h		1597			959			1154			639	
Approach Delay, s/veh		67.5			107.8			1136.7			48.2	
Approach LOS		E			F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	23.5	14.0	27.5	9.5	29.0	19.0	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0
Max Q Clear Time (g_c+I1), s	11.7	14.4	11.5	25.0	7.0	18.5	16.0	16.6
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	1.3	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	357.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	330	140	300	310	264	40	620	320	216	745	140
Future Volume (veh/h)	146	330	140	300	310	264	40	620	320	216	745	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	168	379	161	345	356	303	46	713	368	248	856	161
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	746	284	384	579	488	72	831	384	329	1526	471
Arrive On Green	0.12	0.21	0.21	0.22	0.31	0.31	0.04	0.25	0.25	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1349	1774	1863	1568	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	168	379	161	345	356	303	46	713	368	248	856	161
Grp Sat Flow(s),veh/h/ln	1774	1770	1349	1774	1863	1568	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	7.2	7.3	8.3	14.7	12.6	12.8	2.0	15.6	18.0	5.4	11.0	6.2
Cycle Q Clear(g_c), s	7.2	7.3	8.3	14.7	12.6	12.8	2.0	15.6	18.0	5.4	11.0	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	746	284	384	579	488	72	831	384	329	1526	471
V/C Ratio(X)	0.82	0.51	0.57	0.90	0.61	0.62	0.64	0.86	0.96	0.75	0.56	0.34
Avail Cap(c_a), veh/h	252	822	313	400	589	496	135	831	384	333	1526	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	27.0	27.4	29.6	22.7	22.8	36.6	28.0	28.9	34.2	22.8	21.2
Incr Delay (d2), s/veh	15.6	0.5	1.9	22.1	1.9	2.3	9.1	11.2	36.7	9.3	1.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	3.6	3.2	9.5	6.7	5.9	1.2	8.5	11.7	3.0	5.4	2.9
LnGrp Delay(d),s/veh	49.1	27.6	29.4	51.6	24.6	25.1	45.7	39.1	65.6	43.4	24.3	23.1
LnGrp LOS	D	C	C	D	C	C	D	D	E	D	C	C
Approach Vol, veh/h		708			1004			1127			1265	
Approach Delay, s/veh		33.1			34.0			48.0			27.9	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	23.5	21.3	20.8	7.6	27.8	13.5	28.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5
Max Q Clear Time (g_c+I1), s	7.4	20.0	16.7	10.3	4.0	13.0	9.2	14.8
Green Ext Time (p_c), s	0.0	0.0	0.1	1.9	0.0	3.8	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	35.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	518	90	160	609	100	80	688	140	180	962	143
Future Volume (veh/h)	222	518	90	160	609	100	80	688	140	180	962	143
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	249	582	101	180	684	112	90	773	157	202	1081	161
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	801	139	220	770	126	202	956	423	272	1308	195
Arrive On Green	0.14	0.27	0.27	0.12	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	3013	521	1774	3042	498	3408	3505	1551	3442	4468	665
Grp Volume(v), veh/h	249	341	342	180	398	398	90	773	157	202	820	422
Grp Sat Flow(s),veh/h/ln	1774	1770	1765	1774	1770	1770	1704	1752	1551	1721	1695	1743
Q Serve(g_s), s	9.5	12.2	12.3	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.7	15.7
Cycle Q Clear(g_c), s	9.5	12.2	12.3	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.7	15.7
Prop In Lane	1.00		0.30	1.00		0.28	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	242	471	469	220	448	448	202	956	423	272	992	510
V/C Ratio(X)	1.03	0.73	0.73	0.82	0.89	0.89	0.45	0.81	0.37	0.74	0.83	0.83
Avail Cap(c_a), veh/h	242	473	472	227	457	458	245	956	423	272	992	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	23.2	23.3	29.8	25.0	25.1	31.7	23.6	20.5	31.4	23.0	23.0
Incr Delay (d2), s/veh	65.5	5.4	5.6	20.2	18.4	18.7	1.5	7.3	2.5	10.5	7.8	14.3
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	6.7	6.7	4.6	9.6	9.6	0.9	7.8	2.7	2.3	8.4	9.5
LnGrp Delay(d),s/veh	95.6	28.7	28.9	50.0	43.5	43.7	33.2	30.9	23.0	41.9	30.8	37.3
LnGrp LOS	F	C	C	D	D	D	C	C	C	D	C	D
Approach Vol, veh/h		932			976			1020			1444	
Approach Delay, s/veh		46.6			44.8			29.9			34.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	23.5	13.1	23.0	8.6	24.9	14.0	22.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0
Max Q Clear Time (g_c+I1), s	6.0	16.3	8.9	14.3	3.8	17.7	11.5	17.1
Green Ext Time (p_c), s	0.0	1.5	0.0	1.7	0.0	1.3	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	38.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	455	110	200	419	114	211	212	790	651	116	644	379
Future Volume (veh/h)	455	110	200	419	114	211	212	790	651	116	644	379
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	500	121	220	460	125	232	233	868	715	127	708	416
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	158	287	523	271	230	226	1236	553	154	664	390
Arrive On Green	0.27	0.27	0.27	0.15	0.15	0.15	0.13	0.35	0.35	0.09	0.31	0.31
Sat Flow, veh/h	1774	593	1079	3442	1863	1583	1774	3539	1583	1774	2150	1260
Grp Volume(v), veh/h	500	0	341	460	125	232	233	868	715	127	582	542
Grp Sat Flow(s),veh/h/ln	1774	0	1672	1721	1863	1583	1774	1770	1583	1774	1770	1640
Q Serve(g_s), s	30.0	0.0	20.7	14.4	6.8	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Cycle Q Clear(g_c), s	30.0	0.0	20.7	14.4	6.8	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Prop In Lane	1.00		0.65	1.00		1.00	1.00		1.00	1.00		0.77
Lane Grp Cap(c), veh/h	484	0	445	523	271	230	226	1236	553	154	547	507
V/C Ratio(X)	1.03	0.00	0.77	0.88	0.46	1.01	1.03	0.70	1.29	0.82	1.06	1.07
Avail Cap(c_a), veh/h	484	0	445	563	271	230	226	1236	553	177	547	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	0.0	37.2	45.7	43.1	47.0	48.0	30.9	35.8	49.4	38.0	38.0
Incr Delay (d2), s/veh	49.8	0.0	7.8	14.2	1.2	61.2	68.5	3.3	144.8	23.2	56.9	59.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.3	0.0	10.5	7.9	3.6	10.9	11.1	11.9	38.9	4.8	25.2	23.7
LnGrp Delay(d),s/veh	89.8	0.0	45.0	59.9	44.3	108.2	116.5	34.2	180.6	72.6	94.9	97.4
LnGrp LOS	F		D	E	D	F	F	C	F	E	F	F
Approach Vol, veh/h		841			817			1816			1251	
Approach Delay, s/veh		71.6			71.2			102.4			93.7	
Approach LOS		E			E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	42.4	20.7	33.3	18.0	38.0	34.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	37.0	18.0	28.0	14.0	34.0	30.0	16.0
Max Q Clear Time (g_c+I1), s	9.7	40.4	16.4	22.7	16.0	36.0	32.0	18.0
Green Ext Time (p_c), s	0.0	0.0	0.3	1.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	89.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	453	115	221	419	120	211	232	790	651	116	675	391
Future Volume (veh/h)	453	115	221	419	120	211	232	790	651	116	675	391
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	498	126	243	460	132	232	255	868	715	127	742	430
Adj No. of Lanes	2	1	1	2	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	577	345	293	549	330	281	296	1209	794	160	939	420
Arrive On Green	0.17	0.19	0.19	0.16	0.18	0.18	0.17	0.34	0.34	0.09	0.27	0.27
Sat Flow, veh/h	3442	1863	1583	3442	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	498	126	243	460	132	232	255	868	715	127	742	430
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1721	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	10.1	4.2	10.6	9.3	4.5	10.1	10.0	15.3	24.5	5.0	14.0	19.0
Cycle Q Clear(g_c), s	10.1	4.2	10.6	9.3	4.5	10.1	10.0	15.3	24.5	5.0	14.0	19.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	577	345	293	549	330	281	296	1209	794	160	939	420
V/C Ratio(X)	0.86	0.37	0.83	0.84	0.40	0.83	0.86	0.72	0.90	0.79	0.79	1.02
Avail Cap(c_a), veh/h	577	416	354	577	416	354	297	1209	794	173	939	420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	25.5	28.1	29.2	26.1	28.4	29.0	20.6	16.2	31.9	24.5	26.3
Incr Delay (d2), s/veh	12.9	0.6	13.0	10.1	0.8	12.2	21.9	3.7	15.3	20.5	6.8	50.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	2.2	5.7	5.2	2.4	5.3	6.7	8.1	16.0	3.4	7.7	14.1
LnGrp Delay(d),s/veh	41.9	26.2	41.1	39.3	26.9	40.6	50.9	24.2	31.6	52.5	31.2	76.5
LnGrp LOS	D	C	D	D	C	D	D	C	C	D	C	F
Approach Vol, veh/h		867			824			1838			1299	
Approach Delay, s/veh		39.4			37.7			30.8			48.3	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	28.5	15.4	17.3	15.9	23.0	16.0	16.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	24.0	12.0	16.0	12.0	19.0	12.0	16.0
Max Q Clear Time (g_c+I1), s	7.0	26.5	11.3	12.6	12.0	21.0	12.1	12.1
Green Ext Time (p_c), s	0.0	0.0	0.2	0.5	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	38.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	424	156	113	373	285	252	1349	93	162	872	192
Future Volume (veh/h)	334	424	156	113	373	285	252	1349	93	162	872	192
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	348	442	162	118	389	0	262	1405	97	169	908	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
Arrive On Green	0.08	0.21	0.21	0.08	0.21	0.00	0.14	0.39	0.39	0.11	0.37	0.00
Sat Flow, veh/h	3442	1863	1550	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	348	442	162	118	389	0	262	1405	97	169	908	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1550	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	7.2	19.0	8.3	5.9	18.6	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Cycle Q Clear(g_c), s	7.2	19.0	8.3	5.9	18.6	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
V/C Ratio(X)	1.26	1.12	0.49	0.80	0.98	0.00	1.09	1.01	0.16	0.84	0.69	0.00
Avail Cap(c_a), veh/h	276	393	327	156	399	339	241	1385	607	208	1317	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.3	35.4	31.2	40.4	35.0	0.0	38.8	27.3	17.7	38.9	24.0	0.0
Incr Delay (d2), s/veh	142.9	83.3	1.2	24.0	38.6	0.0	82.8	27.9	0.1	24.2	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	18.7	3.7	3.9	13.8	0.0	11.4	22.3	1.6	5.4	9.7	0.0
LnGrp Delay(d),s/veh	184.1	118.7	32.3	64.4	73.6	0.0	121.6	55.2	17.9	63.2	25.6	0.0
LnGrp LOS	F	F	C	E	E		F	F	B	E	C	
Approach Vol, veh/h		952			507			1764			1077	
Approach Delay, s/veh		127.9			71.5			63.0			31.5	
Approach LOS		F			E			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	39.6	11.9	23.5	16.7	37.6	11.7	23.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2
Max Q Clear Time (g_c+I1), s	10.4	37.1	7.9	21.0	14.2	21.5	9.2	20.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	70.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1070	141	83	649	4	80	2	153	5	0	1
Future Volume (veh/h)	0	1070	141	83	649	4	80	2	153	5	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	1092	144	85	662	4	82	2	156	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1095	144	109	1733	10	579	13	509	433	11	66
Arrive On Green	0.00	0.37	0.37	0.06	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	2998	395	1675	3406	21	1363	38	1524	951	32	196
Grp Volume(v), veh/h	0	614	622	85	325	341	84	0	156	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1706	1675	1671	1756	1401	0	1524	1179	0	0
Q Serve(g_s), s	0.0	20.8	20.9	2.9	6.8	6.8	0.0	0.0	4.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.8	20.9	2.9	6.8	6.8	2.0	0.0	4.3	2.0	0.0	0.0
Prop In Lane	1.00		0.23	1.00		0.01	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	616	623	109	850	893	592	0	509	509	0	0
V/C Ratio(X)	0.00	1.00	1.00	0.78	0.38	0.38	0.14	0.00	0.31	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	616	623	190	850	893	592	0	509	509	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	18.1	18.1	26.4	8.6	8.6	13.3	0.0	14.1	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	35.1	35.6	11.6	0.3	0.3	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.6	15.9	1.7	3.1	3.3	1.0	0.0	2.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	53.2	53.8	37.9	8.8	8.8	13.8	0.0	15.7	12.8	0.0	0.0
LnGrp LOS		D	D	D	A	A	B		B	B		
Approach Vol, veh/h		1236			751			240			6	
Approach Delay, s/veh		53.5			12.1			15.0			12.8	
Approach LOS		D			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.6	8.2	25.4		23.6	0.0	33.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4
Max Q Clear Time (g_c+I1), s		6.3	4.9	22.9		4.0	0.0	8.8
Green Ext Time (p_c), s		0.7	0.0	0.0		0.0	0.0	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	35.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	976	252	338	662	0	74	0	62	0	3	0
Future Volume (veh/h)	1	976	252	338	662	0	74	0	62	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	1027	265	356	697	0	78	0	65	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	921	237	398	1982	0	419	0	368	0	471	0
Arrive On Green	0.00	0.34	0.34	0.23	0.57	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2683	689	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	650	642	356	697	0	78	0	65	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1670	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	15.3	8.3	0.0	3.7	0.0	2.7	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	15.3	8.3	0.0	3.8	0.0	2.7	0.0	0.1	0.0
Prop In Lane	1.00		0.41	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	585	573	398	1982	0	419	0	368	0	471	0
V/C Ratio(X)	0.43	1.11	1.12	0.89	0.35	0.00	0.19	0.00	0.18	0.00	0.01	0.00
Avail Cap(c_a), veh/h	111	585	573	462	1982	0	419	0	368	0	471	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.5	25.3	25.3	28.8	8.9	0.0	23.0	0.0	22.6	0.0	21.6	0.0
Incr Delay (d2), s/veh	91.1	71.7	75.0	17.7	0.1	0.0	1.0	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	24.0	24.0	9.3	4.0	0.0	1.4	0.0	1.2	0.0	0.1	0.0
LnGrp Delay(d),s/veh	129.6	97.0	100.3	46.5	9.0	0.0	24.0	0.0	23.6	0.0	21.6	0.0
LnGrp LOS	F	F	F	D	A		C		C		C	
Approach Vol, veh/h		1293			1053			143			3	
Approach Delay, s/veh		98.7			21.7			23.8			21.6	
Approach LOS		F			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	22.2	31.0		24.0	4.6	48.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		5.8	17.3	28.5		2.1	2.0	10.3
Green Ext Time (p_c), s		0.4	0.4	0.0		0.0	0.0	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	61.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	552	640	330	350	800	320	300	372	730	280	260	580
Future Volume (veh/h)	552	640	330	350	800	320	300	372	730	280	260	580
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	575	667	344	365	833	0	312	388	760	292	271	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	692	357	143	810	363	112	427	382	253	597	508
Arrive On Green	0.16	0.31	0.31	0.08	0.23	0.00	0.06	0.24	0.24	0.14	0.32	0.00
Sat Flow, veh/h	3442	2259	1165	1757	3505	1568	1757	1752	1568	1757	1845	1568
Grp Volume(v), veh/h	575	522	489	365	833	0	312	388	760	292	271	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1655	1757	1752	1568	1757	1752	1568	1757	1845	1568
Q Serve(g_s), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.2	19.5	11.5	9.3	0.0
Cycle Q Clear(g_c), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.2	19.5	11.5	9.3	0.0
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
V/C Ratio(X)	1.07	0.96	0.96	2.56	1.03	0.00	2.79	0.91	1.99	1.16	0.45	0.00
Avail Cap(c_a), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	27.3	27.3	36.8	30.8	0.0	37.5	29.4	30.3	34.3	21.4	0.0
Incr Delay (d2), s/veh	58.6	29.6	30.9	720.8	38.9	0.0	827.9	25.7	454.1	105.5	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	15.8	14.9	31.7	13.3	0.0	28.2	11.4	56.6	12.9	5.2	0.0
LnGrp Delay(d),s/veh	92.4	56.9	58.2	757.6	69.6	0.0	865.4	55.1	484.4	139.7	23.9	0.0
LnGrp LOS	F	E	E	F	F		F	E	F	F	C	
Approach Vol, veh/h		1586			1198			1460			563	
Approach Delay, s/veh		70.2			279.2			451.7			84.0	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	24.0	11.0	29.0	9.6	30.4	17.0	23.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	19.5	6.5	24.5	5.1	25.9	12.5	18.5
Max Q Clear Time (g_c+I1), s	13.5	21.5	8.5	25.3	7.1	11.3	14.5	20.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	239.8
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	234	210	60	220	190	248	120	1392	250	195	1426	236
Future Volume (veh/h)	234	210	60	220	190	248	120	1392	250	195	1426	236
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	244	219	62	229	198	258	125	1450	260	203	1485	246
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	286	776	339	272	394	330	158	1280	229	267	1447	441
Arrive On Green	0.16	0.22	0.22	0.15	0.21	0.21	0.09	0.30	0.30	0.08	0.28	0.28
Sat Flow, veh/h	1774	3539	1547	1774	1863	1561	1774	4325	774	3442	5085	1550
Grp Volume(v), veh/h	244	219	62	229	198	258	125	1136	574	203	1485	246
Grp Sat Flow(s),veh/h/ln	1774	1770	1547	1774	1863	1561	1774	1695	1708	1721	1695	1550
Q Serve(g_s), s	9.5	3.7	2.3	8.9	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.6
Cycle Q Clear(g_c), s	9.5	3.7	2.3	8.9	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	286	776	339	272	394	330	158	1003	506	267	1447	441
V/C Ratio(X)	0.85	0.28	0.18	0.84	0.50	0.78	0.79	1.13	1.14	0.76	1.03	0.56
Avail Cap(c_a), veh/h	300	898	392	313	486	407	163	1003	506	267	1447	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	23.0	22.5	29.2	24.7	26.4	31.7	25.0	25.0	32.1	25.4	21.6
Incr Delay (d2), s/veh	19.9	0.2	0.3	16.5	1.0	7.7	22.4	72.2	82.8	12.1	30.6	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.8	1.0	5.6	3.5	5.4	3.4	19.8	21.5	2.4	13.5	4.7
LnGrp Delay(d),s/veh	48.8	23.2	22.8	45.7	25.7	34.1	54.0	97.2	107.8	44.2	56.0	26.6
LnGrp LOS	D	C	C	D	C	C	D	F	F	D	F	C
Approach Vol, veh/h		525			685			1835			1934	
Approach Delay, s/veh		35.1			35.5			97.6			51.0	
Approach LOS		D			D			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.5	15.4	20.1	10.8	24.7	15.9	19.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5
Max Q Clear Time (g_c+I1), s	6.1	23.0	10.9	5.7	6.9	22.2	11.5	13.1
Green Ext Time (p_c), s	0.0	0.0	0.1	1.2	0.0	0.0	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	64.4
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	800	110	620	610	620	160	1078	940	480	825	83
Future Volume (veh/h)	125	800	110	620	610	620	160	1078	940	480	825	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	128	816	112	633	622	633	163	1100	959	490	842	85
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	811	111	193	491	437	237	1062	463	366	1581	159
Arrive On Green	0.09	0.26	0.26	0.11	0.28	0.28	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3121	428	1774	1770	1575	3442	3539	1544	3442	4686	471
Grp Volume(v), veh/h	128	463	465	633	622	633	163	1100	959	490	608	319
Grp Sat Flow(s),veh/h/ln	1774	1770	1779	1774	1770	1575	1721	1770	1544	1721	1695	1766
Q Serve(g_s), s	5.7	20.8	20.8	8.7	22.2	22.2	3.7	24.0	24.0	8.5	11.6	11.7
Cycle Q Clear(g_c), s	5.7	20.8	20.8	8.7	22.2	22.2	3.7	24.0	24.0	8.5	11.6	11.7
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	162	460	463	193	491	437	237	1062	463	366	1144	596
V/C Ratio(X)	0.79	1.01	1.01	3.28	1.27	1.45	0.69	1.04	2.07	1.34	0.53	0.54
Avail Cap(c_a), veh/h	255	460	463	193	491	437	237	1062	463	366	1144	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	29.6	29.6	35.7	28.9	28.9	36.4	28.0	28.0	35.8	21.4	21.4
Incr Delay (d2), s/veh	8.4	43.4	43.3	1039.7	135.4	214.4	8.2	37.4	489.2	170.4	1.8	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	15.6	15.7	60.0	29.2	35.6	2.0	17.2	73.1	12.7	5.7	6.2
LnGrp Delay(d),s/veh	44.0	73.0	72.9	1075.4	164.3	243.3	44.6	65.4	517.2	206.2	23.2	24.8
LnGrp LOS	D	F	F	F	F	F	D	F	F	F	C	C
Approach Vol, veh/h		1056			1888			2222			1417	
Approach Delay, s/veh		69.4			496.3			258.9			86.8	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	28.5	13.2	25.3	10.0	31.5	11.8	26.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0
Max Q Clear Time (g_c+I1), s	10.5	26.0	10.7	22.8	5.7	13.7	7.7	24.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.1	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	259.5
HCM 2010 LOS	F

Appendix O

Level of Service

Calculations

Cumulative Plus Project

Apartments

Conditions

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	213	893	1141	20	30	600
Future Volume (vph)	213	893	1141	20	30	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3477		1770	1583
Flt Permitted	0.12	1.00	1.00		0.95	1.00
Satd. Flow (perm)	214	3504	3477		1770	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	232	971	1240	22	33	652
RTOR Reduction (vph)	0	0	0	0	0	157
Lane Group Flow (vph)	232	971	1262	0	33	495
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	60.4	60.4	47.4		20.8	20.8
Effective Green, g (s)	61.1	61.5	48.5		21.5	21.9
Actuated g/C Ratio	0.68	0.68	0.54		0.24	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	300	2394	1873		422	385
v/s Ratio Prot	c0.08	0.28	0.36		0.02	
v/s Ratio Perm	c0.45					c0.31
v/c Ratio	0.77	0.41	0.67		0.08	1.29
Uniform Delay, d1	14.6	6.2	15.0		26.6	34.0
Progression Factor	1.81	0.33	1.00		1.00	1.00
Incremental Delay, d2	10.8	0.1	1.1		0.1	147.4
Delay (s)	37.3	2.2	16.1		26.6	181.4
Level of Service	D	A	B		C	F
Approach Delay (s)		9.0	16.1		174.0	
Approach LOS		A	B		F	

Intersection Summary

HCM 2000 Control Delay	47.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.6
Intersection Capacity Utilization	76.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	979	0	0	1436	305	252	0	127	0	0	0
Future Volume (vph)	0	979	0	0	1436	305	252	0	127	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3452			3394		1624	1624	1530			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3452			3394		1624	1624	1530			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1064	0	0	1561	332	274	0	138	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	105	0	0	0
Lane Group Flow (vph)	0	1064	0	0	1893	0	137	137	33	0	0	0
Heavy Vehicles (%)	3%	3%	3%	2%	2%	2%	4%	4%	4%	2%	2%	2%
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		60.4			47.4		20.8	20.8	20.8			
Effective Green, g (s)		61.5			48.5		21.5	21.5	21.5			
Actuated g/C Ratio		0.68			0.54		0.24	0.24	0.24			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2358			1828		387	387	365			
v/s Ratio Prot		c0.31			c0.56		c0.08	0.08				
v/s Ratio Perm									0.02			
v/c Ratio		0.45			1.04		0.35	0.35	0.09			
Uniform Delay, d1		6.5			20.8		28.5	28.5	26.6			
Progression Factor		1.00			0.77		1.00	1.00	1.00			
Incremental Delay, d2		0.2			25.0		0.6	0.6	0.1			
Delay (s)		6.7			41.0		29.0	29.0	26.8			
Level of Service		A			D		C	C	C			
Approach Delay (s)		6.7			41.0			28.3			0.0	
Approach LOS		A			D			C			A	

Intersection Summary

HCM 2000 Control Delay	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	12.3
Intersection Capacity Utilization	63.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1066	1380	0	263	443
Future Volume (veh/h)	0	1066	1380	0	263	443
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1800	1835	0	1800	1800
Adj Flow Rate, veh/h	0	1159	1500	0	286	482
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	4	2	0	4	4
Cap, veh/h	0	1694	1727	0	1207	555
Arrive On Green	0.00	0.50	0.50	0.00	0.36	0.36
Sat Flow, veh/h	0	3599	3670	0	3325	1530
Grp Volume(v), veh/h	0	1159	1500	0	286	482
Grp Sat Flow(s),veh/h/ln	0	1710	1743	0	1662	1530
Q Serve(g_s), s	0.0	14.1	20.7	0.0	3.3	15.9
Cycle Q Clear(g_c), s	0.0	14.1	20.7	0.0	3.3	15.9
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1694	1727	0	1207	555
V/C Ratio(X)	0.00	0.68	0.87	0.00	0.24	0.87
Avail Cap(c_a), veh/h	0	1942	1980	0	1308	602
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	10.5	12.2	0.0	12.1	16.1
Incr Delay (d2), s/veh	0.0	0.6	3.6	0.0	0.1	11.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.7	10.7	0.0	1.5	8.5
LnGrp Delay(d),s/veh	0.0	11.1	15.7	0.0	12.2	28.0
LnGrp LOS		B	B		B	C
Approach Vol, veh/h		1159	1500		768	
Approach Delay, s/veh		11.1	15.7		22.1	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		31.1		23.3		31.1		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		29.9		20.4		29.9		
Max Q Clear Time (g_c+I1), s		16.1		17.9		22.7		
Green Ext Time (p_c), s		3.3		0.8		3.2		

Intersection Summary	
HCM 2010 Ctrl Delay	15.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	220	20	1023	480	320	20	337	993	170	296	20
Future Volume (veh/h)	30	220	20	1023	480	320	20	337	993	170	296	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	32	234	21	1088	511	0	21	359	1056	181	315	21
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	361	32	1223	1541	806	46	713	1549	251	830	55
Arrive On Green	0.04	0.12	0.13	0.36	0.44	0.00	0.03	0.21	0.21	0.08	0.25	0.26
Sat Flow, veh/h	1659	3074	274	3374	3470	1552	1739	3470	2719	3342	3271	217
Grp Volume(v), veh/h	32	125	130	1088	511	0	21	359	1056	181	165	171
Grp Sat Flow(s),veh/h/ln	1659	1655	1693	1687	1735	1552	1739	1735	1359	1671	1718	1770
Q Serve(g_s), s	1.9	7.1	7.2	29.7	9.4	0.0	1.2	9.0	8.5	5.2	7.8	7.8
Cycle Q Clear(g_c), s	1.9	7.1	7.2	29.7	9.4	0.0	1.2	9.0	8.5	5.2	7.8	7.8
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	59	194	199	1223	1541	806	46	713	1549	251	436	449
V/C Ratio(X)	0.54	0.64	0.65	0.89	0.33	0.00	0.45	0.50	0.68	0.72	0.38	0.38
Avail Cap(c_a), veh/h	124	772	790	1274	2669	1311	106	1232	1956	307	663	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	41.3	41.3	29.4	17.8	0.0	47.0	34.5	3.9	44.3	30.2	30.2
Incr Delay (d2), s/veh	2.9	7.4	7.6	8.5	0.3	0.0	2.6	0.6	0.7	9.7	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.6	3.8	15.2	4.5	0.0	0.6	4.3	4.0	2.7	3.7	3.9
LnGrp Delay(d),s/veh	49.3	48.7	48.8	37.9	18.0	0.0	49.5	35.1	4.6	54.0	30.7	30.7
LnGrp LOS	D	D	D	D	B		D	D	A	D	C	C
Approach Vol, veh/h		287			1599			1436			517	
Approach Delay, s/veh		48.9			31.6			12.9			38.9	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	41.5	17.0	8.6	30.9	9.0	49.5	13.4	26.1
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	37.0	45.7	6.0	37.8	7.3	75.4	9.0	34.8
Max Q Clear Time (g_c+I1), s	31.7	9.2	3.2	9.8	3.9	11.4	7.2	11.0
Green Ext Time (p_c), s	3.8	2.3	0.0	1.3	0.0	5.9	0.2	8.5

Intersection Summary	
HCM 2010 Ctrl Delay	26.8
HCM 2010 LOS	C

Intersection												
Int Delay, s/veh	10.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	144	73	190	227	43	65	24	20	66	43	0
Future Vol, veh/h	0	144	73	190	227	43	65	24	20	66	43	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	11	11	11	4	4	4	4	4	4	2	2	2
Mvmt Flow	0	164	83	216	258	49	74	27	23	75	49	0

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	307	0	0	247	0	0	903	903	164	921	937	258
Stage 1	-	-	-	-	-	-	164	164	-	690	690	-
Stage 2	-	-	-	-	-	-	739	739	-	231	247	-
Critical Hdwy	4.21	-	-	4.14	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.299	-	-	2.236	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1204	-	-	1307	-	-	256	275	875	251	265	781
Stage 1	-	-	-	-	-	-	833	759	-	435	446	-
Stage 2	-	-	-	-	-	-	406	421	-	772	702	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1204	-	-	1307	-	-	186	230	875	195	221	781
Mov Cap-2 Maneuver	-	-	-	-	-	-	186	230	-	195	221	-
Stage 1	-	-	-	-	-	-	833	759	-	435	372	-
Stage 2	-	-	-	-	-	-	294	352	-	725	702	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	3.4	28.8	46.7
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	186	346	1204	-	-	1307	-	-	204	-
HCM Lane V/C Ratio	0.397	0.145	-	-	-	0.165	-	-	0.607	-
HCM Control Delay (s)	36.6	17.2	0	-	-	8.3	-	-	46.7	0
HCM Lane LOS	E	C	A	-	-	A	-	-	E	A
HCM 95th %tile Q(veh)	1.8	0.5	0	-	-	0.6	-	-	3.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	31	174	67	10	100	242	871	15	132	1119	48
Future Volume (veh/h)	79	31	174	67	10	100	242	871	15	132	1119	48
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1900	1845	1845	1845	1845	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	69	185	71	11	106	257	927	16	140	1190	51
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	6	6	6	3	3	3	3	3	3	2	2	2
Cap, veh/h	259	272	231	151	23	155	206	1887	33	174	1243	554
Arrive On Green	0.15	0.15	0.15	0.12	0.10	0.10	0.12	0.37	0.37	0.10	0.35	0.35
Sat Flow, veh/h	1707	1792	1521	1531	237	1563	1757	5098	88	1774	3539	1578
Grp Volume(v), veh/h	58	69	185	82	0	106	257	610	333	140	1190	51
Grp Sat Flow(s),veh/h/ln	1707	1792	1521	1768	0	1563	1757	1679	1829	1774	1770	1578
Q Serve(g_s), s	2.5	2.9	10.0	3.7	0.0	5.6	10.0	12.0	12.0	6.6	28.1	1.9
Cycle Q Clear(g_c), s	2.5	2.9	10.0	3.7	0.0	5.6	10.0	12.0	12.0	6.6	28.1	1.9
Prop In Lane	1.00		1.00	0.87		1.00	1.00		0.05	1.00		1.00
Lane Grp Cap(c), veh/h	259	272	231	175	0	155	206	1243	677	174	1243	554
V/C Ratio(X)	0.22	0.25	0.80	0.47	0.00	0.69	1.25	0.49	0.49	0.80	0.96	0.09
Avail Cap(c_a), veh/h	420	441	374	517	0	457	206	1243	677	228	1243	554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	31.9	35.0	35.7	0.0	37.2	37.7	20.7	20.7	37.7	27.1	18.6
Incr Delay (d2), s/veh	0.4	0.5	6.3	1.9	0.0	5.3	146.1	0.3	0.6	14.4	16.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.5	4.6	1.9	0.0	2.6	13.1	5.6	6.1	3.9	16.5	0.8
LnGrp Delay(d),s/veh	32.2	32.4	41.3	37.7	0.0	42.5	183.8	21.0	21.3	52.1	43.5	18.7
LnGrp LOS	C	C	D	D		D	F	C	C	D	D	B
Approach Vol, veh/h		312			188			1200			1381	
Approach Delay, s/veh		37.6			40.4			55.9			43.4	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		19.0	16.0	36.0		14.4	14.4	37.6
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		21.0	10.0	30.0		25.0	11.0	29.0
Max Q Clear Time (g_c+I1), s		12.0	12.0	30.1		7.6	8.6	14.0
Green Ext Time (p_c), s		0.9	0.0	0.0		0.6	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	47.5
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	335	303	165	412	376	228	128	540	335	163	675	256
Future Volume (veh/h)	335	303	165	412	376	228	128	540	335	163	675	256
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1863	1863	1863	1845	1845	1900
Adj Flow Rate, veh/h	356	322	176	438	400	243	136	574	356	173	718	272
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	333	312	170	469	415	353	133	973	435	198	778	295
Arrive On Green	0.19	0.28	0.28	0.14	0.22	0.22	0.08	0.28	0.28	0.11	0.31	0.31
Sat Flow, veh/h	1774	1134	620	3408	1845	1568	1774	3539	1583	1757	2488	943
Grp Volume(v), veh/h	356	0	498	438	400	243	136	574	356	173	506	484
Grp Sat Flow(s),veh/h/ln	1774	0	1753	1704	1845	1568	1774	1770	1583	1757	1752	1678
Q Serve(g_s), s	15.0	0.0	22.0	10.2	17.2	11.4	6.0	11.2	16.8	7.8	22.3	22.3
Cycle Q Clear(g_c), s	15.0	0.0	22.0	10.2	17.2	11.4	6.0	11.2	16.8	7.8	22.3	22.3
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		0.56
Lane Grp Cap(c), veh/h	333	0	482	469	415	353	133	973	435	198	548	524
V/C Ratio(X)	1.07	0.00	1.03	0.93	0.96	0.69	1.02	0.59	0.82	0.88	0.92	0.92
Avail Cap(c_a), veh/h	333	0	482	469	415	353	133	973	435	198	548	524
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	0.0	29.0	34.1	30.7	28.4	37.0	25.1	27.1	34.9	26.6	26.6
Incr Delay (d2), s/veh	69.2	0.0	49.7	26.1	34.7	5.6	84.0	2.6	15.6	32.6	23.5	24.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	0.0	17.2	6.5	12.7	5.5	6.0	5.9	9.2	5.5	14.3	13.8
LnGrp Delay(d),s/veh	101.7	0.0	78.7	60.3	65.4	34.0	121.3	27.7	42.7	67.5	50.1	50.9
LnGrp LOS	F		F	E	E	C	F	C	D	E	D	D
Approach Vol, veh/h		854			1081			1066			1163	
Approach Delay, s/veh		88.3			56.3			44.7			53.0	
Approach LOS		F			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	26.0	15.0	26.0	10.0	29.0	19.0	22.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	22.0	11.0	22.0	6.0	25.0	15.0	18.0
Max Q Clear Time (g_c+I1), s	9.8	18.8	12.2	24.0	8.0	24.3	17.0	19.2
Green Ext Time (p_c), s	0.0	1.6	0.0	0.0	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	59.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	385	240	136	393	111	162	715	73	126	1295	201
Future Volume (veh/h)	164	385	240	136	393	111	162	715	73	126	1295	201
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	189	443	276	156	452	0	186	822	84	145	1489	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
Arrive On Green	0.06	0.21	0.21	0.11	0.26	0.00	0.08	0.38	0.38	0.10	0.40	0.00
Sat Flow, veh/h	3442	1863	1556	1757	1845	1568	1774	3539	1571	1774	3539	1583
Grp Volume(v), veh/h	189	443	276	156	452	0	186	822	84	145	1489	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1556	1757	1845	1568	1774	1770	1571	1774	1770	1583
Q Serve(g_s), s	4.9	18.9	15.3	7.8	21.7	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Cycle Q Clear(g_c), s	4.9	18.9	15.3	7.8	21.7	0.0	7.6	16.8	3.1	7.2	36.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	199	391	327	185	476	404	150	1356	602	180	1416	633
V/C Ratio(X)	0.95	1.13	0.84	0.84	0.95	0.00	1.24	0.61	0.14	0.81	1.05	0.00
Avail Cap(c_a), veh/h	199	391	327	185	476	404	150	1356	602	304	1416	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	42.3	35.5	34.1	39.5	32.8	0.0	41.2	22.3	18.1	39.6	27.0	0.0
Incr Delay (d2), s/veh	49.6	86.7	18.0	27.8	29.1	0.0	152.7	0.8	0.1	8.2	38.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	19.1	8.2	5.2	14.9	0.0	10.1	8.4	1.4	4.0	25.1	0.0
LnGrp Delay(d),s/veh	91.9	122.2	52.1	67.3	61.9	0.0	193.9	23.1	18.2	47.8	65.8	0.0
LnGrp LOS	F	F	D	E	E		F	C	B	D	F	
Approach Vol, veh/h		908			608			1092			1634	
Approach Delay, s/veh		94.6			63.3			51.8			64.2	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	39.0	14.0	23.4	12.1	40.5	9.7	27.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.4	28.2	9.5	18.9	7.6	36.0	5.2	23.2
Max Q Clear Time (g_c+I1), s	9.2	18.8	9.8	20.9	9.6	38.0	6.9	23.7
Green Ext Time (p_c), s	0.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	67.4
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	675	128	88	534	3	146	0	158	7	2	0
Future Volume (veh/h)	0	675	128	88	534	3	146	0	158	7	2	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	823	156	107	651	4	178	0	193	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	928	176	134	1612	10	645	0	546	406	79	0
Arrive On Green	0.00	0.32	0.32	0.08	0.49	0.49	0.35	0.00	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1723	2885	547	1630	3314	20	1472	0	1568	820	226	0
Grp Volume(v), veh/h	0	490	489	107	319	336	178	0	193	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1713	1630	1626	1708	1472	0	1568	1045	0	0
Q Serve(g_s), s	0.0	14.8	14.8	3.5	6.8	6.8	0.0	0.0	5.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.8	14.8	3.5	6.8	6.8	4.0	0.0	5.0	4.0	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.01	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	553	551	134	791	831	645	0	546	484	0	0
V/C Ratio(X)	0.00	0.89	0.89	0.80	0.40	0.40	0.28	0.00	0.35	0.02	0.00	0.00
Avail Cap(c_a), veh/h	158	568	566	284	791	831	645	0	546	484	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.6	17.6	24.6	8.9	8.9	12.9	0.0	13.2	11.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	15.4	15.5	10.3	0.3	0.3	1.1	0.0	1.8	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	9.3	9.3	2.0	3.1	3.2	2.1	0.0	2.4	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	33.0	33.0	34.8	9.3	9.3	13.9	0.0	15.0	11.8	0.0	0.0
LnGrp LOS		C	C	C	A	A	B		B	B		
Approach Vol, veh/h		979			762			371			11	
Approach Delay, s/veh		33.0			12.9			14.5			11.8	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.5	9.0	22.0		23.5	0.0	31.0
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.0	9.5	18.0		19.0	5.0	22.5
Max Q Clear Time (g_c+I1), s		7.0	5.5	16.8		6.0	0.0	8.8
Green Ext Time (p_c), s		1.3	0.1	0.8		0.0	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay	22.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	753	86	149	536	3	89	1	95	1	1	0
Future Volume (veh/h)	1	753	86	149	536	3	89	1	95	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	866	99	171	616	3	102	1	109	1	1	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	967	111	212	1478	7	573	5	489	307	278	0
Arrive On Green	0.00	0.31	0.31	0.13	0.44	0.44	0.32	0.32	0.32	0.32	0.32	0.00
Sat Flow, veh/h	1723	3110	356	1660	3380	16	1379	15	1509	655	858	0
Grp Volume(v), veh/h	1	479	486	171	302	317	103	0	109	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1747	1660	1656	1740	1394	0	1509	1513	0	0
Q Serve(g_s), s	0.0	15.1	15.1	5.7	7.1	7.1	0.0	0.0	3.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.1	15.1	5.7	7.1	7.1	2.5	0.0	3.0	2.5	0.0	0.0
Prop In Lane	1.00		0.20	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	534	543	212	724	761	578	0	489	585	0	0
V/C Ratio(X)	0.33	0.90	0.90	0.81	0.42	0.42	0.18	0.00	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	152	544	553	295	724	761	578	0	489	585	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.3	18.7	18.7	24.1	11.0	11.0	13.8	0.0	14.0	13.0	0.0	0.0
Incr Delay (d2), s/veh	53.6	17.2	17.0	10.6	0.4	0.4	0.7	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	9.6	9.7	3.2	3.3	3.4	1.3	0.0	1.4	0.0	0.0	0.0
LnGrp Delay(d),s/veh	81.9	35.9	35.7	34.7	11.4	11.4	14.5	0.0	15.1	13.0	0.0	0.0
LnGrp LOS	F	D	D	C	B	B	B		B	B		
Approach Vol, veh/h		966			790			212			2	
Approach Delay, s/veh		35.8			16.4			14.8			13.0	
Approach LOS		D			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	11.8	22.2		22.9	4.6	29.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		5.0	7.7	17.1		4.5	2.0	9.1
Green Ext Time (p_c), s		0.7	0.1	0.5		0.0	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	25.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	591	620	340	290	640	252	590	280	250	217	414	767
Future Volume (veh/h)	591	620	340	290	640	252	590	280	250	217	414	767
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1827	1827	1827	1827	1827	1900	1845	1845	1845
Adj Flow Rate, veh/h	609	639	351	299	660	0	608	289	258	224	427	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	624	634	348	207	781	349	109	419	363	231	565	480
Arrive On Green	0.18	0.29	0.29	0.12	0.22	0.00	0.06	0.24	0.24	0.13	0.31	0.00
Sat Flow, veh/h	3442	2206	1212	1740	3471	1553	1740	1763	1530	1757	1845	1568
Grp Volume(v), veh/h	609	512	478	299	660	0	608	284	263	224	427	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1649	1740	1736	1553	1740	1736	1557	1757	1845	1568
Q Serve(g_s), s	14.1	23.0	23.0	9.5	14.6	0.0	5.0	12.0	12.4	10.2	16.7	0.0
Cycle Q Clear(g_c), s	14.1	23.0	23.0	9.5	14.6	0.0	5.0	12.0	12.4	10.2	16.7	0.0
Prop In Lane	1.00		0.74	1.00		1.00	1.00		0.98	1.00		1.00
Lane Grp Cap(c), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
V/C Ratio(X)	0.98	1.01	1.01	1.45	0.85	0.00	5.59	0.69	0.71	0.97	0.76	0.00
Avail Cap(c_a), veh/h	624	509	474	207	781	349	109	412	370	231	565	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.6	28.5	28.5	35.3	29.7	0.0	37.5	27.8	28.0	34.6	25.1	0.0
Incr Delay (d2), s/veh	30.0	41.7	43.2	226.3	8.5	0.0	2085.9	9.1	11.0	51.0	9.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	17.1	16.1	17.5	7.9	0.0	65.4	6.7	6.5	8.2	9.9	0.0
LnGrp Delay(d),s/veh	62.6	70.2	71.7	261.5	38.1	0.0	2123.4	36.9	39.0	85.6	34.2	0.0
LnGrp LOS	E	F	F	F	D		F	D	D	F	C	
Approach Vol, veh/h		1599			959			1155			651	
Approach Delay, s/veh		67.8			107.8			1135.7			51.9	
Approach LOS		E			F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	23.5	14.0	27.5	9.5	29.0	19.0	22.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	19.0	9.5	23.0	5.0	24.5	14.5	18.0
Max Q Clear Time (g_c+I1), s	12.2	14.4	11.5	25.0	7.0	18.7	16.1	16.6
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	1.3	0.0	0.7

Intersection Summary	
HCM 2010 Ctrl Delay	356.8
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	331	140	301	310	264	40	622	322	216	746	140
Future Volume (veh/h)	148	331	140	301	310	264	40	622	322	216	746	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	170	380	161	346	356	303	46	715	370	248	857	161
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	746	284	384	578	486	72	830	383	329	1526	470
Arrive On Green	0.12	0.21	0.21	0.22	0.31	0.31	0.04	0.24	0.24	0.10	0.30	0.30
Sat Flow, veh/h	1774	3539	1349	1774	1863	1568	1774	3390	1566	3442	5085	1567
Grp Volume(v), veh/h	170	380	161	346	356	303	46	715	370	248	857	161
Grp Sat Flow(s),veh/h/ln	1774	1770	1349	1774	1863	1568	1774	1695	1566	1721	1695	1567
Q Serve(g_s), s	7.3	7.4	8.3	14.7	12.6	12.8	2.0	15.7	18.1	5.4	11.0	6.2
Cycle Q Clear(g_c), s	7.3	7.4	8.3	14.7	12.6	12.8	2.0	15.7	18.1	5.4	11.0	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	746	284	384	578	486	72	830	383	329	1526	470
V/C Ratio(X)	0.82	0.51	0.57	0.90	0.62	0.62	0.64	0.86	0.96	0.75	0.56	0.34
Avail Cap(c_a), veh/h	252	821	313	400	588	495	135	830	383	333	1526	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.4	27.1	27.4	29.6	22.8	22.9	36.7	28.0	29.0	34.2	22.9	21.2
Incr Delay (d2), s/veh	16.0	0.5	2.0	22.2	1.9	2.4	9.1	11.4	37.9	9.3	1.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	3.6	3.3	9.6	6.8	5.8	1.2	8.6	11.9	3.0	5.4	3.0
LnGrp Delay(d),s/veh	49.4	27.6	29.4	51.8	24.7	25.2	45.8	39.4	66.9	43.5	24.4	23.2
LnGrp LOS	D	C	C	D	C	C	D	D	E	D	C	C
Approach Vol, veh/h		711			1005			1131			1266	
Approach Delay, s/veh		33.2			34.2			48.7			28.0	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	23.5	21.3	20.8	7.6	27.8	13.6	28.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	7.5	19.0	17.5	18.0	5.9	20.6	11.0	24.5
Max Q Clear Time (g_c+I1), s	7.4	20.1	16.7	10.3	4.0	13.0	9.3	14.8
Green Ext Time (p_c), s	0.0	0.0	0.1	1.9	0.0	3.8	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	36.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	522	90	160	610	100	80	688	140	180	962	145
Future Volume (veh/h)	226	522	90	160	610	100	80	688	140	180	962	145
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	254	587	101	180	685	112	90	773	157	202	1081	163
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	242	803	138	220	771	126	202	956	423	272	1305	197
Arrive On Green	0.14	0.27	0.27	0.12	0.25	0.25	0.06	0.27	0.27	0.08	0.29	0.29
Sat Flow, veh/h	1774	3018	518	1774	3043	497	3408	3505	1551	3442	4460	672
Grp Volume(v), veh/h	254	344	344	180	398	399	90	773	157	202	821	423
Grp Sat Flow(s),veh/h/ln	1774	1770	1766	1774	1770	1770	1704	1752	1551	1721	1695	1742
Q Serve(g_s), s	9.5	12.3	12.4	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.8	15.8
Cycle Q Clear(g_c), s	9.5	12.3	12.4	6.9	15.1	15.1	1.8	14.3	5.7	4.0	15.8	15.8
Prop In Lane	1.00		0.29	1.00		0.28	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	242	471	470	220	448	448	202	956	423	272	992	510
V/C Ratio(X)	1.05	0.73	0.73	0.82	0.89	0.89	0.45	0.81	0.37	0.74	0.83	0.83
Avail Cap(c_a), veh/h	242	473	472	227	457	458	245	956	423	272	992	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	23.3	23.3	29.8	25.0	25.1	31.7	23.6	20.5	31.4	23.0	23.0
Incr Delay (d2), s/veh	71.5	5.7	5.8	20.2	18.6	18.8	1.5	7.3	2.5	10.5	7.9	14.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	6.8	6.8	4.6	9.6	9.6	0.9	7.8	2.7	2.3	8.4	9.6
LnGrp Delay(d),s/veh	101.5	28.9	29.1	50.0	43.6	43.8	33.2	30.9	23.0	41.9	30.9	37.4
LnGrp LOS	F	C	C	D	D	D	C	C	C	D	C	D
Approach Vol, veh/h		942			977			1020			1446	
Approach Delay, s/veh		48.6			44.9			29.9			34.4	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	23.5	13.1	23.0	8.6	24.9	14.0	22.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	19.0	8.9	18.6	5.0	19.5	9.5	18.0
Max Q Clear Time (g_c+I1), s	6.0	16.3	8.9	14.4	3.8	17.8	11.5	17.1
Green Ext Time (p_c), s	0.0	1.5	0.0	1.7	0.0	1.2	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	38.7
HCM 2010 LOS	D

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	482	1435	994	30	40	293
Future Volume (vph)	482	1435	994	30	40	293
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)		2%	3%		0%	
Total Lost time (s)	3.9	3.5	3.5		3.5	3.1
Lane Util. Factor	1.00	0.95	0.95		1.00	1.00
Frt	1.00	1.00	1.00		1.00	0.85
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1752	3504	3471		1770	1583
Flt Permitted	0.14	1.00	1.00		0.95	1.00
Satd. Flow (perm)	257	3504	3471		1770	1583
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	487	1449	1004	30	40	296
RTOR Reduction (vph)	0	0	0	0	0	225
Lane Group Flow (vph)	487	1449	1034	0	40	71
Turn Type	pm+pt	NA	NA		Prot	Perm
Protected Phases	5	2	6		8	
Permitted Phases	2					8
Actuated Green, G (s)	59.7	59.7	38.7		20.0	20.0
Effective Green, g (s)	60.4	60.8	39.8		20.7	21.1
Actuated g/C Ratio	0.68	0.69	0.45		0.23	0.24
Clearance Time (s)	4.6	4.6	4.6		4.2	4.2
Vehicle Extension (s)	3.0	4.0	4.0		2.5	2.5
Lane Grp Cap (vph)	464	2407	1560		414	377
v/s Ratio Prot	c0.20	0.41	0.30		0.02	
v/s Ratio Perm	c0.51					c0.04
v/c Ratio	1.05	0.60	0.66		0.10	0.19
Uniform Delay, d1	22.8	7.4	19.1		26.6	26.9
Progression Factor	1.11	0.54	1.00		1.00	1.00
Incremental Delay, d2	48.3	0.3	1.2		0.1	0.2
Delay (s)	73.6	4.3	20.3		26.6	27.0
Level of Service	E	A	C		C	C
Approach Delay (s)		21.7	20.3		27.0	
Approach LOS		C	C		C	

Intersection Summary

HCM 2000 Control Delay	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	88.5	Sum of lost time (s)	11.6
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1549	0	0	1023	264	577	0	369	0	0	0
Future Volume (vph)	0	1549	0	0	1023	264	577	0	369	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)		3%			3%			3%			3%	
Total Lost time (s)		3.5			3.5		3.5	3.5	3.5			
Lane Util. Factor		0.95			0.95		0.95	0.95	1.00			
Frpb, ped/bikes		1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes		1.00			1.00		1.00	1.00	1.00			
Frt		1.00			0.97		1.00	1.00	0.85			
Flt Protected		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)		3486			3359		1656	1656	1560			
Flt Permitted		1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)		3486			3359		1656	1656	1560			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1631	0	0	1077	278	607	0	388	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	57	0	0	0
Lane Group Flow (vph)	0	1631	0	0	1355	0	303	304	331	0	0	0
Confl. Peds. (#/hr)						3						
Turn Type		NA			NA		Split	NA	Perm			
Protected Phases		2			6		4	4				
Permitted Phases					6				4			
Actuated Green, G (s)		59.7			38.7		20.0	20.0	20.0			
Effective Green, g (s)		60.8			39.8		20.7	20.7	20.7			
Actuated g/C Ratio		0.69			0.45		0.23	0.23	0.23			
Clearance Time (s)		4.6			4.6		4.2	4.2	4.2			
Vehicle Extension (s)		4.0			4.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2394			1510		387	387	364			
v/s Ratio Prot		c0.47			c0.40		0.18	0.18				
v/s Ratio Perm									c0.21			
v/c Ratio		0.68			0.90		0.78	0.79	0.91			
Uniform Delay, d1		8.1			22.5		31.8	31.8	33.0			
Progression Factor		1.00			0.40		1.00	1.00	1.00			
Incremental Delay, d2		0.9			6.3		9.9	10.1	25.4			
Delay (s)		9.0			15.2		41.7	41.9	58.4			
Level of Service		A			B		D	D	E			
Approach Delay (s)		9.0			15.2			48.3			0.0	
Approach LOS		A			B			D			A	

Intersection Summary

HCM 2000 Control Delay	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	88.5	Sum of lost time (s)	12.3
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	1609	1453	0	486	420
Future Volume (veh/h)	0	1609	1453	0	486	420
Number	5	2	6	16	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1835	1835	0	1835	1835
Adj Flow Rate, veh/h	0	1659	1498	0	501	433
Adj No. of Lanes	0	2	2	0	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1881	1881	0	1091	502
Arrive On Green	0.00	0.54	0.54	0.00	0.32	0.32
Sat Flow, veh/h	0	3670	3670	0	3390	1560
Grp Volume(v), veh/h	0	1659	1498	0	501	433
Grp Sat Flow(s),veh/h/ln	0	1743	1743	0	1695	1560
Q Serve(g_s), s	0.0	23.2	19.3	0.0	6.5	14.5
Cycle Q Clear(g_c), s	0.0	23.2	19.3	0.0	6.5	14.5
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1881	1881	0	1091	502
V/C Ratio(X)	0.00	0.88	0.80	0.00	0.46	0.86
Avail Cap(c_a), veh/h	0	2126	2126	0	1122	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	11.2	10.3	0.0	15.0	17.7
Incr Delay (d2), s/veh	0.0	4.0	1.7	0.0	0.2	13.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	11.9	9.6	0.0	3.1	8.0
LnGrp Delay(d),s/veh	0.0	15.2	12.0	0.0	15.2	31.2
LnGrp LOS		B	B		B	C
Approach Vol, veh/h		1659	1498		934	
Approach Delay, s/veh		15.2	12.0		22.6	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		34.1		21.5		34.1		
Change Period (Y+Rc), s		5.1		4.6		5.1		
Max Green Setting (Gmax), s		32.9		17.4		32.9		
Max Q Clear Time (g_c+I1), s		25.2		16.5		21.3		
Green Ext Time (p_c), s		3.8		0.4		4.2		

Intersection Summary	
HCM 2010 Ctrl Delay	15.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	400	20	703	550	620	30	598	1033	660	537	40
Future Volume (veh/h)	50	400	20	703	550	620	30	598	1033	660	537	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	52	412	21	725	567	0	31	616	1065	680	554	41
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	70	576	29	735	1224	808	57	845	1267	571	1246	92
Arrive On Green	0.04	0.18	0.18	0.22	0.35	0.00	0.03	0.24	0.24	0.17	0.38	0.38
Sat Flow, veh/h	1690	3264	166	3374	3470	1552	1756	3504	2759	3407	3308	244
Grp Volume(v), veh/h	52	212	221	725	567	0	31	616	1065	680	293	302
Grp Sat Flow(s),veh/h/ln	1690	1686	1745	1687	1735	1552	1756	1752	1379	1704	1752	1800
Q Serve(g_s), s	3.6	14.2	14.2	25.5	15.1	0.0	2.1	19.3	16.3	20.0	14.9	15.0
Cycle Q Clear(g_c), s	3.6	14.2	14.2	25.5	15.1	0.0	2.1	19.3	16.3	20.0	14.9	15.0
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	70	297	308	735	1224	808	57	845	1267	571	660	678
V/C Ratio(X)	0.74	0.71	0.72	0.99	0.46	0.00	0.55	0.73	0.84	1.19	0.44	0.45
Avail Cap(c_a), veh/h	99	657	680	735	1905	1112	88	998	1387	571	705	724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	46.3	46.3	46.5	29.9	0.0	56.9	41.7	9.4	49.7	27.8	27.8
Incr Delay (d2), s/veh	8.8	6.6	6.5	29.8	0.6	0.0	3.0	2.2	4.5	102.4	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.2	7.4	14.9	7.3	0.0	1.1	9.6	7.0	17.5	7.3	7.5
LnGrp Delay(d),s/veh	65.3	53.0	52.8	76.2	30.4	0.0	59.9	43.9	13.9	152.0	28.3	28.3
LnGrp LOS	E	D	D	E	C		E	D	B	F	C	C
Approach Vol, veh/h		485			1292			1712			1275	
Approach Delay, s/veh		54.2			56.1			25.5			94.3	
Approach LOS		D			E			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	26.5	9.9	50.9	10.4	48.1	26.0	34.8
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	26.0	46.5	6.0	48.0	7.0	65.5	20.0	34.0
Max Q Clear Time (g_c+I1), s	27.5	16.2	4.1	17.0	5.6	17.1	22.0	21.3
Green Ext Time (p_c), s	0.0	4.0	0.0	2.4	0.0	6.6	0.0	7.2

Intersection Summary	
HCM 2010 Ctrl Delay	55.2
HCM 2010 LOS	E

Intersection												
Int Delay, s/veh	11.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	323	48	140	362	78	64	54	50	57	32	1
Future Vol, veh/h	7	323	48	140	362	78	64	54	50	57	32	1
Conflicting Peds, #/hr	1	0	6	6	0	1	9	0	0	0	0	9
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	70	-	85	175	-	0	0	-	-	-	-	110
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	2	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	9	9	9	7	7	7	4	4	4	2	2	2
Mvmt Flow	7	336	50	146	377	81	67	56	52	59	33	1

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	459	0	0	392	0	0	1091	1107	342	1099	1076	387
Stage 1	-	-	-	-	-	-	356	356	-	670	670	-
Stage 2	-	-	-	-	-	-	735	751	-	429	406	-
Critical Hdwy	4.19	-	-	4.17	-	-	7.14	6.54	6.24	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.14	5.54	-	6.12	5.52	-
Follow-up Hdwy	2.281	-	-	2.263	-	-	3.536	4.036	3.336	3.518	4.018	3.318
Pot Cap-1 Maneuver	1066	-	-	1140	-	-	191	208	696	190	219	661
Stage 1	-	-	-	-	-	-	657	625	-	446	455	-
Stage 2	-	-	-	-	-	-	408	415	-	604	598	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1065	-	-	1134	-	-	146	179	693	120	188	655
Mov Cap-2 Maneuver	-	-	-	-	-	-	146	179	-	120	188	-
Stage 1	-	-	-	-	-	-	649	618	-	443	396	-
Stage 2	-	-	-	-	-	-	323	361	-	504	591	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.2	2.1	34.7	72
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	146	278	1065	-	-	1134	-	-	138	655
HCM Lane V/C Ratio	0.457	0.39	0.007	-	-	0.129	-	-	0.672	0.002
HCM Control Delay (s)	48.9	26	8.4	-	-	8.6	-	-	72.7	10.5
HCM Lane LOS	E	D	A	-	-	A	-	-	F	B
HCM 95th %tile Q(veh)	2.1	1.8	0	-	-	0.4	-	-	3.7	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	32	123	119	12	191	134	1386	19	231	949	38
Future Volume (veh/h)	84	32	123	119	12	191	134	1386	19	231	949	38
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	58	69	124	120	12	193	135	1400	19	233	959	38
Adj No. of Lanes	1	1	1	0	1	1	1	3	0	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	203	213	179	258	26	250	169	1574	21	262	1264	562
Arrive On Green	0.12	0.12	0.12	0.18	0.16	0.16	0.10	0.30	0.30	0.15	0.36	0.36
Sat Flow, veh/h	1757	1845	1548	1620	162	1571	1774	5170	70	1774	3539	1574
Grp Volume(v), veh/h	58	69	124	132	0	193	135	918	501	233	959	38
Grp Sat Flow(s),veh/h/ln	1757	1845	1548	1782	0	1571	1774	1695	1850	1774	1770	1574
Q Serve(g_s), s	2.7	3.0	6.8	5.9	0.0	10.3	6.6	22.7	22.7	11.3	21.0	1.4
Cycle Q Clear(g_c), s	2.7	3.0	6.8	5.9	0.0	10.3	6.6	22.7	22.7	11.3	21.0	1.4
Prop In Lane	1.00		1.00	0.91		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	203	213	179	284	0	250	169	1032	563	262	1264	562
V/C Ratio(X)	0.29	0.32	0.69	0.46	0.00	0.77	0.80	0.89	0.89	0.89	0.76	0.07
Avail Cap(c_a), veh/h	400	420	352	507	0	447	262	1080	589	262	1264	562
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	35.7	37.4	32.9	0.0	35.4	38.9	29.2	29.2	36.7	24.9	18.6
Incr Delay (d2), s/veh	0.8	0.9	4.8	1.2	0.0	5.0	9.1	9.1	15.1	28.7	2.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	1.6	3.1	3.0	0.0	4.8	3.7	11.9	13.9	7.7	10.7	0.6
LnGrp Delay(d),s/veh	36.3	36.6	42.2	34.1	0.0	40.4	48.1	38.2	44.2	65.4	27.7	18.7
LnGrp LOS	D	D	D	C		D	D	D	D	E	C	B
Approach Vol, veh/h		251			325			1554			1230	
Approach Delay, s/veh		39.3			37.8			41.0			34.5	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		16.1	14.4	37.4		20.0	19.0	32.8
Change Period (Y+Rc), s		6.0	6.0	6.0		6.0	6.0	6.0
Max Green Setting (Gmax), s		20.0	13.0	28.0		25.0	13.0	28.0
Max Q Clear Time (g_c+I1), s		8.8	8.6	23.0		12.3	13.3	24.7
Green Ext Time (p_c), s		0.7	0.2	2.2		1.1	0.0	2.1

Intersection Summary	
HCM 2010 Ctrl Delay	38.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	473	115	212	419	124	211	235	790	651	116	644	411
Future Volume (veh/h)	473	115	212	419	124	211	235	790	651	116	644	411
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	520	126	233	460	136	232	258	868	715	127	708	452
Adj No. of Lanes	1	1	0	2	1	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	484	156	289	523	271	230	226	1236	553	154	642	408
Arrive On Green	0.27	0.27	0.27	0.15	0.15	0.15	0.13	0.35	0.35	0.09	0.31	0.31
Sat Flow, veh/h	1774	587	1085	3442	1863	1583	1774	3539	1583	1774	2078	1321
Grp Volume(v), veh/h	520	0	359	460	136	232	258	868	715	127	603	557
Grp Sat Flow(s),veh/h/ln	1774	0	1671	1721	1863	1583	1774	1770	1583	1774	1770	1630
Q Serve(g_s), s	30.0	0.0	22.1	14.4	7.4	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Cycle Q Clear(g_c), s	30.0	0.0	22.1	14.4	7.4	16.0	14.0	23.3	38.4	7.7	34.0	34.0
Prop In Lane	1.00		0.65	1.00		1.00	1.00		1.00	1.00		0.81
Lane Grp Cap(c), veh/h	484	0	445	523	271	230	226	1236	553	154	547	504
V/C Ratio(X)	1.07	0.00	0.81	0.88	0.50	1.01	1.14	0.70	1.29	0.82	1.10	1.11
Avail Cap(c_a), veh/h	484	0	445	563	271	230	226	1236	553	177	547	504
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	0.0	37.7	45.7	43.3	47.0	48.0	30.9	35.8	49.4	38.0	38.0
Incr Delay (d2), s/veh	62.5	0.0	10.5	14.2	1.5	61.2	103.7	3.3	144.8	23.2	69.3	72.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	23.0	0.0	11.5	7.9	3.9	10.9	13.3	11.9	38.9	4.8	27.1	25.4
LnGrp Delay(d),s/veh	102.5	0.0	48.2	59.9	44.8	108.2	151.7	34.2	180.6	72.6	107.3	110.6
LnGrp LOS	F		D	E	D	F	F	C	F	E	F	F
Approach Vol, veh/h		879			828			1841			1287	
Approach Delay, s/veh		80.3			70.9			107.5			105.3	
Approach LOS		F			E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	42.4	20.7	33.3	18.0	38.0	34.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	37.0	18.0	28.0	14.0	34.0	30.0	16.0
Max Q Clear Time (g_c+I1), s	9.7	40.4	16.4	24.1	16.0	36.0	32.0	18.0
Green Ext Time (p_c), s	0.0	0.0	0.3	0.8	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	95.7
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	427	158	113	379	285	256	1349	93	162	872	192
Future Volume (veh/h)	334	427	158	113	379	285	256	1349	93	162	872	192
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	348	445	165	118	395	0	267	1405	97	169	908	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
Arrive On Green	0.08	0.21	0.21	0.08	0.21	0.00	0.14	0.39	0.39	0.11	0.37	0.00
Sat Flow, veh/h	3442	1863	1550	1774	1863	1583	1774	3539	1551	1774	3539	1583
Grp Volume(v), veh/h	348	445	165	118	395	0	267	1405	97	169	908	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1550	1774	1863	1583	1774	1770	1551	1774	1770	1583
Q Serve(g_s), s	7.2	19.0	8.4	5.9	19.0	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Cycle Q Clear(g_c), s	7.2	19.0	8.4	5.9	19.0	0.0	12.2	35.1	3.6	8.4	19.5	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	393	327	147	399	339	241	1385	607	202	1307	585
V/C Ratio(X)	1.26	1.13	0.50	0.80	0.99	0.00	1.11	1.01	0.16	0.84	0.69	0.00
Avail Cap(c_a), veh/h	276	393	327	156	399	339	241	1385	607	208	1317	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.3	35.4	31.2	40.4	35.2	0.0	38.8	27.3	17.7	38.9	24.0	0.0
Incr Delay (d2), s/veh	142.9	86.0	1.2	24.0	42.6	0.0	89.6	27.9	0.1	24.2	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	19.0	3.7	3.9	14.4	0.0	11.9	22.3	1.6	5.4	9.7	0.0
LnGrp Delay(d),s/veh	184.1	121.4	32.5	64.4	77.7	0.0	128.3	55.2	17.9	63.2	25.6	0.0
LnGrp LOS	F	F	C	E	E		F	F	B	E	C	
Approach Vol, veh/h		958			513			1769			1077	
Approach Delay, s/veh		128.9			74.7			64.2			31.5	
Approach LOS		F			E			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	39.6	11.9	23.5	16.7	37.6	11.7	23.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	35.1	7.9	18.5	12.2	33.4	7.2	19.2
Max Q Clear Time (g_c+I1), s	10.4	37.1	7.9	21.0	14.2	21.5	9.2	21.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	71.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1076	141	83	649	4	86	2	154	5	0	1
Future Volume (veh/h)	0	1076	141	83	649	4	86	2	154	5	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	1098	144	85	662	4	88	2	157	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1096	144	109	1733	10	581	12	509	430	11	65
Arrive On Green	0.00	0.37	0.37	0.06	0.51	0.51	0.33	0.33	0.33	0.33	0.00	0.33
Sat Flow, veh/h	1691	3000	393	1675	3406	21	1368	35	1524	942	32	195
Grp Volume(v), veh/h	0	617	625	85	325	341	90	0	157	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1706	1675	1671	1756	1403	0	1524	1168	0	0
Q Serve(g_s), s	0.0	20.9	20.9	2.9	6.8	6.8	0.0	0.0	4.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	20.9	20.9	2.9	6.8	6.8	2.1	0.0	4.4	2.1	0.0	0.0
Prop In Lane	1.00		0.23	1.00		0.01	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	616	623	109	850	893	593	0	509	505	0	0
V/C Ratio(X)	0.00	1.00	1.00	0.78	0.38	0.38	0.15	0.00	0.31	0.01	0.00	0.00
Avail Cap(c_a), veh/h	148	616	623	190	850	893	593	0	509	505	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	18.2	18.2	26.4	8.6	8.6	13.4	0.0	14.1	12.8	0.0	0.0
Incr Delay (d2), s/veh	0.0	36.3	36.9	11.6	0.3	0.3	0.5	0.0	1.6	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	15.8	16.1	1.7	3.1	3.3	1.1	0.0	2.1	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	54.5	55.0	37.9	8.8	8.8	13.9	0.0	15.7	12.8	0.0	0.0
LnGrp LOS		F	F	D	A	A	B		B	B		
Approach Vol, veh/h		1242			751			247			6	
Approach Delay, s/veh		54.7			12.1			15.1			12.8	
Approach LOS		D			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.6	8.2	25.4		23.6	0.0	33.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.1	6.5	20.9		19.1	5.0	22.4
Max Q Clear Time (g_c+I1), s		6.4	4.9	22.9		4.1	0.0	8.8
Green Ext Time (p_c), s		0.8	0.0	0.0		0.0	0.0	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	36.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	977	258	339	662	0	74	0	62	0	3	0
Future Volume (veh/h)	1	977	258	339	662	0	74	0	62	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	1028	272	357	697	0	78	0	65	0	3	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	915	241	399	1983	0	418	0	367	0	470	0
Arrive On Green	0.00	0.34	0.34	0.23	0.57	0.00	0.25	0.00	0.25	0.00	0.25	0.00
Sat Flow, veh/h	1707	2668	702	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	654	646	357	697	0	78	0	65	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1667	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	26.5	26.5	15.4	8.3	0.0	3.7	0.0	2.7	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	26.5	26.5	15.4	8.3	0.0	3.8	0.0	2.7	0.0	0.1	0.0
Prop In Lane	1.00		0.42	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	584	572	399	1983	0	418	0	367	0	470	0
V/C Ratio(X)	0.43	1.12	1.13	0.89	0.35	0.00	0.19	0.00	0.18	0.00	0.01	0.00
Avail Cap(c_a), veh/h	111	584	572	462	1983	0	418	0	367	0	470	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.5	25.4	25.4	28.8	8.9	0.0	23.0	0.0	22.6	0.0	21.6	0.0
Incr Delay (d2), s/veh	91.1	74.6	78.3	17.8	0.1	0.0	1.0	0.0	1.1	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	24.5	24.5	9.3	4.0	0.0	1.4	0.0	1.2	0.0	0.1	0.0
LnGrp Delay(d),s/veh	129.6	100.0	103.6	46.7	9.0	0.0	24.0	0.0	23.6	0.0	21.6	0.0
LnGrp LOS	F	F	F	D	A		C		C		C	
Approach Vol, veh/h		1301			1054			143			3	
Approach Delay, s/veh		101.8			21.7			23.8			21.6	
Approach LOS		F			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	22.2	31.0		24.0	4.6	48.6
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		5.8	17.4	28.5		2.1	2.0	10.3
Green Ext Time (p_c), s		0.4	0.4	0.0		0.0	0.0	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	63.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	558	640	330	350	800	327	300	375	730	284	261	583
Future Volume (veh/h)	558	640	330	350	800	327	300	375	730	284	261	583
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	581	667	344	365	833	0	312	391	760	296	272	0
Adj No. of Lanes	2	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	538	692	357	143	810	363	112	427	382	253	597	508
Arrive On Green	0.16	0.31	0.31	0.08	0.23	0.00	0.06	0.24	0.24	0.14	0.32	0.00
Sat Flow, veh/h	3442	2259	1165	1757	3505	1568	1757	1752	1568	1757	1845	1568
Grp Volume(v), veh/h	581	522	489	365	833	0	312	391	760	296	272	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1655	1757	1752	1568	1757	1752	1568	1757	1845	1568
Q Serve(g_s), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.4	19.5	11.5	9.4	0.0
Cycle Q Clear(g_c), s	12.5	23.2	23.3	6.5	18.5	0.0	5.1	17.4	19.5	11.5	9.4	0.0
Prop In Lane	1.00		0.70	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
V/C Ratio(X)	1.08	0.96	0.96	2.56	1.03	0.00	2.79	0.92	1.99	1.17	0.46	0.00
Avail Cap(c_a), veh/h	538	542	507	143	810	363	112	427	382	253	597	508
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	27.3	27.3	36.8	30.8	0.0	37.5	29.4	30.3	34.3	21.5	0.0
Incr Delay (d2), s/veh	62.3	29.6	30.9	720.8	38.9	0.0	827.9	26.8	454.1	111.2	2.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	15.8	14.9	31.7	13.3	0.0	28.2	11.5	56.6	13.3	5.2	0.0
LnGrp Delay(d),s/veh	96.1	56.9	58.2	757.6	69.6	0.0	865.4	56.2	484.4	145.5	24.0	0.0
LnGrp LOS	F	E	E	F	F		F	E	F	F	C	
Approach Vol, veh/h		1592			1198			1463			568	
Approach Delay, s/veh		71.6			279.2			451.2			87.3	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	24.0	11.0	29.0	9.6	30.4	17.0	23.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	11.5	19.5	6.5	24.5	5.1	25.9	12.5	18.5
Max Q Clear Time (g_c+I1), s	13.5	21.5	8.5	25.3	7.1	11.4	14.5	20.5
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	240.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	211	60	222	191	248	120	1394	251	195	1427	238
Future Volume (veh/h)	235	211	60	222	191	248	120	1394	251	195	1427	238
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	245	220	62	231	199	258	125	1452	261	203	1486	248
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	287	774	338	274	394	330	158	1278	229	267	1445	441
Arrive On Green	0.16	0.22	0.22	0.15	0.21	0.21	0.09	0.30	0.30	0.08	0.28	0.28
Sat Flow, veh/h	1774	3539	1546	1774	1863	1561	1774	4323	775	3442	5085	1550
Grp Volume(v), veh/h	245	220	62	231	199	258	125	1138	575	203	1486	248
Grp Sat Flow(s),veh/h/ln	1774	1770	1546	1774	1863	1561	1774	1695	1708	1721	1695	1550
Q Serve(g_s), s	9.5	3.7	2.3	9.0	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.7
Cycle Q Clear(g_c), s	9.5	3.7	2.3	9.0	6.7	11.1	4.9	21.0	21.0	4.1	20.2	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	287	774	338	274	394	330	158	1003	505	267	1445	441
V/C Ratio(X)	0.85	0.28	0.18	0.84	0.50	0.78	0.79	1.14	1.14	0.76	1.03	0.56
Avail Cap(c_a), veh/h	300	897	392	312	485	407	162	1003	505	267	1445	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.9	23.1	22.6	29.2	24.7	26.4	31.7	25.0	25.0	32.1	25.4	21.7
Incr Delay (d2), s/veh	20.1	0.2	0.3	16.8	1.0	7.7	22.4	73.4	83.9	12.1	31.2	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.8	1.0	5.6	3.5	5.4	3.4	20.0	21.6	2.4	13.5	4.7
LnGrp Delay(d),s/veh	49.0	23.3	22.8	46.0	25.7	34.1	54.1	98.4	108.9	44.2	56.6	26.8
LnGrp LOS	D	C	C	D	C	C	D	F	F	D	F	C
Approach Vol, veh/h		527			688			1838			1937	
Approach Delay, s/veh		35.2			35.7			98.7			51.5	
Approach LOS		D			D			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	25.5	15.5	20.0	10.8	24.7	16.0	19.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.5	21.0	12.5	18.0	6.5	20.0	12.0	18.5
Max Q Clear Time (g_c+I1), s	6.1	23.0	11.0	5.7	6.9	22.2	11.5	13.1
Green Ext Time (p_c), s	0.0	0.0	0.1	1.2	0.0	0.0	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	65.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	802	110	620	614	620	160	1078	940	480	825	86
Future Volume (veh/h)	127	802	110	620	614	620	160	1078	940	480	825	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	130	818	112	633	627	633	163	1100	959	490	842	88
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	812	111	193	489	435	237	1062	463	366	1575	164
Arrive On Green	0.09	0.26	0.26	0.11	0.28	0.28	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	3122	427	1774	1770	1575	3442	3539	1544	3442	4668	485
Grp Volume(v), veh/h	130	464	466	633	627	633	163	1100	959	490	610	320
Grp Sat Flow(s),veh/h/ln	1774	1770	1780	1774	1770	1575	1721	1770	1544	1721	1695	1763
Q Serve(g_s), s	5.7	20.8	20.8	8.7	22.1	22.1	3.7	24.0	24.0	8.5	11.6	11.7
Cycle Q Clear(g_c), s	5.7	20.8	20.8	8.7	22.1	22.1	3.7	24.0	24.0	8.5	11.6	11.7
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	164	460	463	193	489	435	237	1062	463	366	1144	595
V/C Ratio(X)	0.79	1.01	1.01	3.28	1.28	1.46	0.69	1.04	2.07	1.34	0.53	0.54
Avail Cap(c_a), veh/h	255	460	463	193	489	435	237	1062	463	366	1144	595
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.5	29.6	29.6	35.7	29.0	29.0	36.4	28.0	28.0	35.8	21.4	21.4
Incr Delay (d2), s/veh	8.8	43.9	43.8	1039.7	142.2	217.4	8.2	37.4	489.2	170.4	1.8	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	15.7	15.8	60.0	30.0	35.8	2.0	17.2	73.1	12.7	5.7	6.3
LnGrp Delay(d),s/veh	44.4	73.5	73.4	1075.4	171.2	246.3	44.6	65.4	517.2	206.2	23.2	24.9
LnGrp LOS	D	F	F	F	F	F	D	F	F	F	C	C
Approach Vol, veh/h		1060			1893			2222			1420	
Approach Delay, s/veh		69.9			498.6			258.9			86.7	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	28.5	13.2	25.3	10.0	31.5	11.9	26.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	8.5	24.0	8.7	20.8	5.5	27.0	11.5	18.0
Max Q Clear Time (g_c+I1), s	10.5	26.0	10.7	22.8	5.7	13.7	7.7	24.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.1	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	260.3
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	220	20	1023	480	320	20	337	993	170	296	20
Future Volume (veh/h)	30	220	20	1023	480	320	20	337	993	170	296	20
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1742	1742	1881	1826	1826	1826	1826	1826	1826	1809	1809	1881
Adj Flow Rate, veh/h	32	234	21	1088	511	0	21	359	1056	181	315	21
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	3	3	3	3	3	3	4	4	4
Cap, veh/h	59	361	32	1224	1542	806	46	712	1548	251	829	55
Arrive On Green	0.04	0.12	0.13	0.36	0.44	0.00	0.03	0.21	0.21	0.08	0.25	0.26
Sat Flow, veh/h	1659	3074	274	3374	3470	1552	1739	3470	2719	3342	3271	217
Grp Volume(v), veh/h	32	125	130	1088	511	0	21	359	1056	181	165	171
Grp Sat Flow(s),veh/h/ln	1659	1655	1693	1687	1735	1552	1739	1735	1359	1671	1718	1770
Q Serve(g_s), s	1.9	7.1	7.2	29.7	9.4	0.0	1.2	9.0	8.5	5.2	7.8	7.8
Cycle Q Clear(g_c), s	1.9	7.1	7.2	29.7	9.4	0.0	1.2	9.0	8.5	5.2	7.8	7.8
Prop In Lane	1.00		0.16	1.00		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	59	194	199	1224	1542	806	46	712	1548	251	435	449
V/C Ratio(X)	0.54	0.64	0.65	0.89	0.33	0.00	0.45	0.50	0.68	0.72	0.38	0.38
Avail Cap(c_a), veh/h	124	777	795	1274	2681	1316	107	1222	1948	307	658	678
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	41.3	41.3	29.4	17.7	0.0	47.0	34.5	3.9	44.3	30.2	30.2
Incr Delay (d2), s/veh	2.9	7.4	7.6	8.5	0.3	0.0	2.6	0.6	0.7	9.7	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	3.6	3.8	15.2	4.5	0.0	0.6	4.3	4.0	2.7	3.7	3.9
LnGrp Delay(d),s/veh	49.3	48.7	48.8	37.9	18.0	0.0	49.5	35.1	4.6	54.0	30.7	30.7
LnGrp LOS	D	D	D	D	B		D	D	A	D	C	C
Approach Vol, veh/h		287			1599			1436			517	
Approach Delay, s/veh		48.8			31.5			12.9			38.9	
Approach LOS		D			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	41.5	17.0	8.6	30.8	9.0	49.5	13.4	26.1
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	37.0	46.0	6.0	37.5	7.3	75.7	9.0	34.5
Max Q Clear Time (g_c+I1), s	31.7	9.2	3.2	9.8	3.9	11.4	7.2	11.0
Green Ext Time (p_c), s	3.8	2.3	0.0	1.3	0.0	5.9	0.2	8.5

Intersection Summary	
HCM 2010 Ctrl Delay	26.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	335	303	165	412	376	228	128	540	335	163	675	256
Future Volume (veh/h)	335	303	165	412	376	228	128	540	335	163	675	256
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1863	1845	1845	1845
Adj Flow Rate, veh/h	356	322	176	438	400	243	136	574	356	173	718	272
Adj No. of Lanes	2	1	1	2	1	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	3	3	3
Cap, veh/h	382	415	352	487	469	399	172	955	653	195	995	445
Arrive On Green	0.11	0.22	0.22	0.14	0.25	0.25	0.10	0.27	0.27	0.11	0.28	0.28
Sat Flow, veh/h	3442	1863	1583	3408	1845	1568	1774	3539	1583	1757	3505	1568
Grp Volume(v), veh/h	356	322	176	438	400	243	136	574	356	173	718	272
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1704	1845	1568	1774	1770	1583	1757	1752	1568
Q Serve(g_s), s	6.5	10.2	6.1	8.0	13.0	8.6	4.7	8.9	10.7	6.1	11.6	9.5
Cycle Q Clear(g_c), s	6.5	10.2	6.1	8.0	13.0	8.6	4.7	8.9	10.7	6.1	11.6	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	382	415	352	487	469	399	172	955	653	195	995	445
V/C Ratio(X)	0.93	0.78	0.50	0.90	0.85	0.61	0.79	0.60	0.55	0.89	0.72	0.61
Avail Cap(c_a), veh/h	382	473	402	487	527	448	197	955	653	195	995	445
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	23.0	21.4	26.6	22.4	20.7	27.8	20.1	14.0	27.6	20.3	19.6
Incr Delay (d2), s/veh	29.3	7.0	1.1	19.6	11.7	2.0	17.2	2.8	3.3	35.2	4.5	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	6.1	2.8	5.0	8.1	3.9	3.1	4.7	5.2	4.9	6.2	4.9
LnGrp Delay(d),s/veh	57.1	30.1	22.5	46.1	34.1	22.7	45.0	22.9	17.3	62.8	24.9	25.7
LnGrp LOS	E	C	C	D	C	C	D	C	B	E	C	C
Approach Vol, veh/h		854			1081			1066			1163	
Approach Delay, s/veh		39.8			36.4			23.8			30.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	21.0	13.0	18.0	10.1	21.9	11.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	17.0	9.0	16.0	7.0	17.0	7.0	18.0
Max Q Clear Time (g_c+I1), s	8.1	12.7	10.0	12.2	6.7	13.6	8.5	15.0
Green Ext Time (p_c), s	0.0	2.0	0.0	0.9	0.0	1.8	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay	32.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	385	240	136	393	111	162	715	73	126	1295	201
Future Volume (veh/h)	164	385	240	136	393	111	162	715	73	126	1295	201
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	189	443	276	156	452	0	186	822	84	145	1489	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	237	453	380	172	503	428	206	1661	169	180	1727	0
Arrive On Green	0.07	0.24	0.24	0.10	0.27	0.00	0.12	0.35	0.35	0.10	0.34	0.00
Sat Flow, veh/h	3442	1863	1560	1757	1845	1568	1774	4687	477	1774	5253	0
Grp Volume(v), veh/h	189	443	276	156	452	0	186	593	313	145	1489	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1560	1757	1845	1568	1774	1695	1774	1774	1695	0
Q Serve(g_s), s	4.8	21.0	14.4	7.8	20.9	0.0	9.2	12.2	12.3	7.1	24.3	0.0
Cycle Q Clear(g_c), s	4.8	21.0	14.4	7.8	20.9	0.0	9.2	12.2	12.3	7.1	24.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.27	1.00		0.00
Lane Grp Cap(c), veh/h	237	453	380	172	503	428	206	1201	628	180	1727	0
V/C Ratio(X)	0.80	0.98	0.73	0.91	0.90	0.00	0.90	0.49	0.50	0.81	0.86	0.00
Avail Cap(c_a), veh/h	237	453	380	172	503	428	206	1201	628	294	1799	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.7	33.3	30.9	39.6	31.1	0.0	38.7	22.4	22.5	39.0	27.4	0.0
Incr Delay (d2), s/veh	17.4	36.2	6.8	42.7	18.9	0.0	37.3	0.3	0.6	8.2	4.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	15.3	6.9	5.8	13.3	0.0	6.6	5.7	6.1	3.9	12.0	0.0
LnGrp Delay(d),s/veh	58.1	69.5	37.7	82.3	49.9	0.0	76.0	22.7	23.1	47.2	31.8	0.0
LnGrp LOS	E	E	D	F	D		E	C	C	D	C	
Approach Vol, veh/h		908			608			1092			1634	
Approach Delay, s/veh		57.5			58.2			31.9			33.2	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	35.9	13.2	26.1	14.8	34.6	10.6	28.7
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	14.7	27.0	8.7	21.6	10.3	31.4	6.1	24.2
Max Q Clear Time (g_c+I1), s	9.1	14.3	9.8	23.0	11.2	26.3	6.8	22.9
Green Ext Time (p_c), s	0.2	4.9	0.0	0.0	0.0	3.9	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	41.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	675	128	88	534	3	146	0	158	7	2	0
Future Volume (veh/h)	0	675	128	88	534	3	146	0	158	7	2	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1712	1712	1900	1900	1845	1845	1900	1863	1900
Adj Flow Rate, veh/h	0	823	156	107	651	4	178	0	193	9	2	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82	0.82
Percent Heavy Veh, %	5	5	5	11	11	11	3	3	3	2	2	2
Cap, veh/h	3	978	185	133	1661	10	626	0	529	389	75	0
Arrive On Green	0.00	0.34	0.34	0.08	0.50	0.50	0.34	0.00	0.34	0.34	0.34	0.00
Sat Flow, veh/h	1723	2885	547	1630	3314	20	1474	0	1568	806	223	0
Grp Volume(v), veh/h	0	490	489	107	319	336	178	0	193	11	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1713	1630	1626	1708	1474	0	1568	1030	0	0
Q Serve(g_s), s	0.0	14.7	14.7	3.6	6.8	6.8	0.0	0.0	5.2	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.7	14.7	3.6	6.8	6.8	4.2	0.0	5.2	4.2	0.0	0.0
Prop In Lane	1.00		0.32	1.00		0.01	1.00		1.00	0.82		0.00
Lane Grp Cap(c), veh/h	3	583	581	133	815	856	626	0	529	465	0	0
V/C Ratio(X)	0.00	0.84	0.84	0.80	0.39	0.39	0.28	0.00	0.36	0.02	0.00	0.00
Avail Cap(c_a), veh/h	155	635	633	208	815	856	626	0	529	465	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.0	17.0	25.2	8.6	8.6	13.6	0.0	14.0	12.4	0.0	0.0
Incr Delay (d2), s/veh	0.0	9.3	9.4	11.7	0.3	0.3	1.1	0.0	1.9	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.5	8.4	2.0	3.1	3.2	2.2	0.0	2.5	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	26.4	26.4	36.9	8.9	8.9	14.8	0.0	15.9	12.5	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		979			762			371			11	
Approach Delay, s/veh		26.4			12.8			15.4			12.5	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.3	9.1	23.4		23.3	0.0	32.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.8	7.1	20.6		18.8	5.0	22.7
Max Q Clear Time (g_c+I1), s		7.2	5.6	16.7		6.2	0.0	8.8
Green Ext Time (p_c), s		1.3	0.0	2.2		0.0	0.0	3.5

Intersection Summary	
HCM 2010 Ctrl Delay	19.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	753	86	149	536	3	89	1	95	1	1	0
Future Volume (veh/h)	1	753	86	149	536	3	89	1	95	1	1	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1743	1743	1900	1900	1776	1776	1900	1863	1900
Adj Flow Rate, veh/h	1	866	99	171	616	3	102	1	109	1	1	0
Adj No. of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	5	5	5	9	9	9	7	7	7	2	2	2
Cap, veh/h	3	1034	463	213	1445	7	582	5	497	313	283	0
Arrive On Green	0.00	0.30	0.30	0.13	0.43	0.43	0.33	0.33	0.33	0.33	0.33	0.00
Sat Flow, veh/h	1723	3438	1538	1660	3380	16	1378	15	1509	658	860	0
Grp Volume(v), veh/h	1	866	99	171	302	317	103	0	109	2	0	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1538	1660	1656	1740	1393	0	1509	1518	0	0
Q Serve(g_s), s	0.0	13.2	2.7	5.6	7.1	7.1	0.0	0.0	2.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	13.2	2.7	5.6	7.1	7.1	2.4	0.0	2.9	2.4	0.0	0.0
Prop In Lane	1.00		1.00	1.00		0.01	0.99		1.00	0.50		0.00
Lane Grp Cap(c), veh/h	3	1034	463	213	708	744	587	0	497	597	0	0
V/C Ratio(X)	0.32	0.84	0.21	0.80	0.43	0.43	0.18	0.00	0.22	0.00	0.00	0.00
Avail Cap(c_a), veh/h	154	1108	496	300	708	744	587	0	497	597	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	27.9	18.3	14.6	23.7	11.2	11.2	13.4	0.0	13.5	12.6	0.0	0.0
Incr Delay (d2), s/veh	51.7	5.5	0.2	10.1	0.4	0.4	0.7	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	6.9	1.2	3.2	3.3	3.4	1.2	0.0	1.3	0.0	0.0	0.0
LnGrp Delay(d),s/veh	79.5	23.7	14.8	33.8	11.6	11.6	14.0	0.0	14.6	12.6	0.0	0.0
LnGrp LOS	E	C	B	C	B	B	B		B	B		
Approach Vol, veh/h		966			790			212			2	
Approach Delay, s/veh		22.9			16.4			14.3			12.6	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		22.9	11.7	21.3		22.9	4.6	28.4
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		18.4	10.1	18.0		18.4	5.0	23.1
Max Q Clear Time (g_c+I1), s		4.9	7.6	15.2		4.4	2.0	9.1
Green Ext Time (p_c), s		0.7	0.1	1.6		0.0	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay	19.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	591	620	340	290	640	252	590	280	250	217	414	767
Future Volume (veh/h)	591	620	340	290	640	252	590	280	250	217	414	767
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1827	1827	1827	1827	1827	1827	1845	1845	1845
Adj Flow Rate, veh/h	609	639	351	299	660	0	608	289	258	224	427	0
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	4	4	4	4	4	4	3	3	3
Cap, veh/h	585	869	389	350	622	278	579	1280	573	252	1194	534
Arrive On Green	0.17	0.25	0.25	0.10	0.18	0.00	0.17	0.37	0.37	0.14	0.34	0.00
Sat Flow, veh/h	3442	3539	1583	3375	3471	1553	3375	3471	1553	1757	3505	1568
Grp Volume(v), veh/h	609	639	351	299	660	0	608	289	258	224	427	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1583	1688	1736	1553	1688	1736	1553	1757	1752	1568
Q Serve(g_s), s	22.1	21.6	27.9	11.3	23.3	0.0	22.3	7.5	16.4	16.3	11.9	0.0
Cycle Q Clear(g_c), s	22.1	21.6	27.9	11.3	23.3	0.0	22.3	7.5	16.4	16.3	11.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	585	869	389	350	622	278	579	1280	573	252	1194	534
V/C Ratio(X)	1.04	0.74	0.90	0.85	1.06	0.00	1.05	0.23	0.45	0.89	0.36	0.00
Avail Cap(c_a), veh/h	585	869	389	382	622	278	579	1280	573	362	1194	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	54.0	45.2	47.5	57.3	53.4	0.0	53.8	28.3	31.1	54.6	32.2	0.0
Incr Delay (d2), s/veh	48.3	3.3	23.7	16.0	53.3	0.0	51.2	0.4	2.6	17.0	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.4	11.0	14.8	6.1	15.8	0.0	14.5	3.6	7.4	9.1	5.9	0.0
LnGrp Delay(d),s/veh	102.2	48.4	71.2	73.3	106.6	0.0	105.1	28.7	33.6	71.6	33.0	0.0
LnGrp LOS	F	D	E	E	F		F	C	C	E	C	
Approach Vol, veh/h		1599			959			1155			651	
Approach Delay, s/veh		73.9			96.2			70.0			46.3	
Approach LOS		E			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.2	52.4	18.0	36.4	26.8	48.8	26.6	27.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	26.8	39.8	14.7	30.7	22.3	44.3	22.1	23.3
Max Q Clear Time (g_c+I1), s	18.3	18.4	13.3	29.9	24.3	13.9	24.1	25.3
Green Ext Time (p_c), s	0.4	2.7	0.2	0.5	0.0	3.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	73.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	331	140	301	310	264	40	622	322	216	746	140
Future Volume (veh/h)	148	331	140	301	310	264	40	622	322	216	746	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	170	380	161	346	356	303	46	715	370	248	857	161
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	208	745	284	384	577	486	72	855	395	306	1529	471
Arrive On Green	0.12	0.21	0.21	0.22	0.31	0.31	0.04	0.25	0.25	0.09	0.30	0.30
Sat Flow, veh/h	1774	3539	1349	1774	1863	1568	1774	3390	1566	3442	5085	1568
Grp Volume(v), veh/h	170	380	161	346	356	303	46	715	370	248	857	161
Grp Sat Flow(s),veh/h/ln	1774	1770	1349	1774	1863	1568	1774	1695	1566	1721	1695	1568
Q Serve(g_s), s	7.3	7.4	8.3	14.7	12.7	12.8	2.0	15.5	18.0	5.5	11.0	6.2
Cycle Q Clear(g_c), s	7.3	7.4	8.3	14.7	12.7	12.8	2.0	15.5	18.0	5.5	11.0	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	745	284	384	577	486	72	855	395	306	1529	471
V/C Ratio(X)	0.82	0.51	0.57	0.90	0.62	0.62	0.64	0.84	0.94	0.81	0.56	0.34
Avail Cap(c_a), veh/h	253	820	312	400	585	492	114	855	395	306	1529	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	27.1	27.5	29.6	22.9	22.9	36.7	27.5	28.4	34.8	22.9	21.2
Incr Delay (d2), s/veh	15.7	0.5	2.0	22.3	1.9	2.4	9.1	9.5	31.8	15.1	1.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	3.6	3.3	9.6	6.8	5.8	1.2	8.4	11.2	3.3	5.4	3.0
LnGrp Delay(d),s/veh	49.2	27.7	29.5	51.9	24.8	25.3	45.8	37.0	60.2	49.9	24.3	23.1
LnGrp LOS	D	C	C	D	C	C	D	D	E	D	C	C
Approach Vol, veh/h		711			1005			1131			1266	
Approach Delay, s/veh		33.2			34.3			45.0			29.2	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	24.1	21.3	20.9	7.6	27.9	13.6	28.6
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.9	19.6	17.5	18.0	5.0	21.5	11.1	24.4
Max Q Clear Time (g_c+I1), s	7.5	20.0	16.7	10.3	4.0	13.0	9.3	14.8
Green Ext Time (p_c), s	0.0	0.0	0.1	1.9	0.0	4.1	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay	35.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	226	522	90	160	610	100	80	688	140	180	962	145
Future Volume (veh/h)	226	522	90	160	610	100	80	688	140	180	962	145
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1845	1845	1845	1863	1863	1900
Adj Flow Rate, veh/h	254	587	101	180	685	112	90	773	157	202	1081	163
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	3	3	3	2	2	2
Cap, veh/h	292	865	148	218	745	122	185	1022	452	251	1383	208
Arrive On Green	0.16	0.29	0.29	0.12	0.24	0.24	0.05	0.29	0.29	0.07	0.31	0.31
Sat Flow, veh/h	1774	3018	518	1774	3043	497	3408	3505	1552	3442	4460	672
Grp Volume(v), veh/h	254	344	344	180	398	399	90	773	157	202	821	423
Grp Sat Flow(s),veh/h/ln	1774	1770	1766	1774	1770	1770	1704	1752	1552	1721	1695	1742
Q Serve(g_s), s	11.1	13.7	13.8	7.9	17.4	17.5	2.0	16.0	6.3	4.6	17.6	17.6
Cycle Q Clear(g_c), s	11.1	13.7	13.8	7.9	17.4	17.5	2.0	16.0	6.3	4.6	17.6	17.6
Prop In Lane	1.00		0.29	1.00		0.28	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	292	507	506	218	433	433	185	1022	452	251	1051	540
V/C Ratio(X)	0.87	0.68	0.68	0.83	0.92	0.92	0.49	0.76	0.35	0.81	0.78	0.78
Avail Cap(c_a), veh/h	301	507	506	259	434	434	218	1022	452	251	1051	540
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	25.1	25.2	34.1	29.3	29.3	36.6	25.6	22.2	36.3	25.0	25.0
Incr Delay (d2), s/veh	22.5	3.6	3.7	16.9	24.5	24.8	2.0	5.2	2.1	17.2	5.8	10.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	7.2	7.2	4.9	11.5	11.5	1.0	8.5	3.0	2.8	9.1	10.1
LnGrp Delay(d),s/veh	54.9	28.7	28.8	51.0	53.8	54.0	38.5	30.9	24.3	53.6	30.8	35.8
LnGrp LOS	D	C	C	D	D	D	D	C	C	D	C	D
Approach Vol, veh/h		942			977			1020			1446	
Approach Delay, s/veh		35.8			53.4			30.5			35.4	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	27.7	14.3	27.3	8.8	29.2	17.6	24.0
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.8	23.2	11.6	21.4	5.1	23.9	13.5	19.5
Max Q Clear Time (g_c+I1), s	6.6	18.0	9.9	15.8	4.0	19.6	13.1	19.5
Green Ext Time (p_c), s	0.0	2.6	0.1	2.1	0.0	2.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	38.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	400	20	703	550	620	30	598	1033	660	537	40
Future Volume (veh/h)	50	400	20	703	550	620	30	598	1033	660	537	40
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1775	1775	1881	1826	1826	1826	1844	1844	1844	1844	1844	1881
Adj Flow Rate, veh/h	52	412	21	725	567	0	31	616	1065	680	554	41
Adj No. of Lanes	1	2	0	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	6	6	6	3	3	3	2	2	2	2	2	2
Cap, veh/h	70	576	29	679	1166	808	57	845	1220	628	1301	96
Arrive On Green	0.04	0.18	0.18	0.20	0.34	0.00	0.03	0.24	0.24	0.18	0.39	0.40
Sat Flow, veh/h	1690	3264	166	3374	3470	1552	1756	3504	2759	3407	3308	244
Grp Volume(v), veh/h	52	212	221	725	567	0	31	616	1065	680	293	302
Grp Sat Flow(s),veh/h/ln	1690	1686	1745	1687	1735	1552	1756	1752	1379	1704	1752	1800
Q Serve(g_s), s	3.6	14.2	14.2	24.0	15.5	0.0	2.1	19.3	17.6	22.0	14.5	14.6
Cycle Q Clear(g_c), s	3.6	14.2	14.2	24.0	15.5	0.0	2.1	19.3	17.6	22.0	14.5	14.6
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	70	297	308	679	1166	808	57	845	1220	628	689	708
V/C Ratio(X)	0.74	0.71	0.72	1.07	0.49	0.00	0.55	0.73	0.87	1.08	0.43	0.43
Avail Cap(c_a), veh/h	147	657	680	679	1748	1068	88	998	1341	628	734	754
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	46.3	46.3	47.7	31.4	0.0	56.9	41.7	10.2	48.7	26.4	26.3
Incr Delay (d2), s/veh	5.8	6.6	6.5	54.3	0.7	0.0	3.0	2.2	6.2	60.3	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	7.2	7.4	16.2	7.5	0.0	1.1	9.6	7.6	15.6	7.1	7.3
LnGrp Delay(d),s/veh	62.3	53.0	52.8	101.9	32.1	0.0	59.9	43.9	16.3	109.0	26.8	26.7
LnGrp LOS	E	D	D	F	C		E	D	B	F	C	C
Approach Vol, veh/h		485			1292			1712			1275	
Approach Delay, s/veh		53.9			71.3			27.0			70.6	
Approach LOS		D			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.0	26.5	9.9	52.9	10.4	46.1	28.0	34.8
Change Period (Y+Rc), s	6.0	5.5	6.0	6.0	5.5	6.0	6.0	6.0
Max Green Setting (Gmax), s	24.0	46.5	6.0	50.0	10.4	60.1	22.0	34.0
Max Q Clear Time (g_c+I1), s	26.0	16.2	4.1	16.6	5.6	17.5	24.0	21.3
Green Ext Time (p_c), s	0.0	4.0	0.0	2.4	0.0	6.5	0.0	7.2

Intersection Summary	
HCM 2010 Ctrl Delay	53.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	473	115	212	419	124	211	235	790	651	116	644	411
Future Volume (veh/h)	473	115	212	419	124	211	235	790	651	116	644	411
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	520	126	233	460	136	232	258	868	715	127	708	452
Adj No. of Lanes	2	1	1	2	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	576	345	293	549	330	281	297	1234	805	148	938	420
Arrive On Green	0.17	0.18	0.18	0.16	0.18	0.18	0.17	0.35	0.35	0.08	0.26	0.26
Sat Flow, veh/h	3442	1863	1583	3442	1863	1583	1774	3539	1583	1774	3539	1583
Grp Volume(v), veh/h	520	126	233	460	136	232	258	868	715	127	708	452
Grp Sat Flow(s),veh/h/ln	1721	1863	1583	1721	1863	1583	1774	1770	1583	1774	1770	1583
Q Serve(g_s), s	10.6	4.2	10.1	9.3	4.6	10.1	10.2	15.2	25.0	5.1	13.2	19.0
Cycle Q Clear(g_c), s	10.6	4.2	10.1	9.3	4.6	10.1	10.2	15.2	25.0	5.1	13.2	19.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	576	345	293	549	330	281	297	1234	805	148	938	420
V/C Ratio(X)	0.90	0.37	0.80	0.84	0.41	0.83	0.87	0.70	0.89	0.86	0.76	1.08
Avail Cap(c_a), veh/h	576	416	353	576	416	353	297	1234	805	148	938	420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	25.5	27.9	29.2	26.2	28.4	29.1	20.2	15.8	32.4	24.2	26.4
Incr Delay (d2), s/veh	17.6	0.6	10.0	10.1	0.8	12.2	23.0	3.4	14.0	35.8	5.6	66.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	2.2	5.2	5.2	2.5	5.3	6.8	7.9	15.7	3.9	7.1	16.0
LnGrp Delay(d),s/veh	46.9	26.2	38.0	39.4	27.0	40.7	52.1	23.5	29.8	68.3	29.8	92.6
LnGrp LOS	D	C	D	D	C	D	D	C	C	E	C	F
Approach Vol, veh/h		879			828			1841			1287	
Approach Delay, s/veh		41.5			37.7			30.0			55.7	
Approach LOS		D			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	29.0	15.4	17.3	16.0	23.0	16.0	16.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	25.0	12.0	16.0	12.0	19.0	12.0	16.0
Max Q Clear Time (g_c+I1), s	7.1	27.0	11.3	12.1	12.2	21.0	12.6	12.1
Green Ext Time (p_c), s	0.0	0.0	0.1	0.6	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay	40.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	334	427	158	113	379	285	256	1349	93	162	872	192
Future Volume (veh/h)	334	427	158	113	379	285	256	1349	93	162	872	192
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	348	445	165	118	395	0	267	1405	97	169	908	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	412	502	420	148	434	369	302	1588	110	203	1382	0
Arrive On Green	0.12	0.27	0.27	0.08	0.23	0.00	0.17	0.33	0.33	0.11	0.27	0.00
Sat Flow, veh/h	3442	1863	1557	1774	1863	1583	1774	4849	335	1774	5253	0
Grp Volume(v), veh/h	348	445	165	118	395	0	267	982	520	169	908	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1557	1774	1863	1583	1774	1695	1794	1774	1695	0
Q Serve(g_s), s	8.7	20.1	7.6	5.7	18.1	0.0	12.9	24.1	24.1	8.2	13.9	0.0
Cycle Q Clear(g_c), s	8.7	20.1	7.6	5.7	18.1	0.0	12.9	24.1	24.1	8.2	13.9	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		0.00
Lane Grp Cap(c), veh/h	412	502	420	148	434	369	302	1110	588	203	1382	0
V/C Ratio(X)	0.84	0.89	0.39	0.80	0.91	0.00	0.88	0.88	0.88	0.83	0.66	0.00
Avail Cap(c_a), veh/h	412	520	435	152	457	388	314	1140	603	212	1421	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.8	30.7	26.2	39.5	32.7	0.0	35.5	27.9	27.9	38.0	28.3	0.0
Incr Delay (d2), s/veh	14.8	16.3	0.6	24.9	21.5	0.0	23.9	8.4	14.4	23.0	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	12.5	3.3	3.8	11.9	0.0	8.3	12.5	14.2	5.3	6.6	0.0
LnGrp Delay(d),s/veh	52.6	47.0	26.8	64.4	54.2	0.0	59.5	36.3	42.3	61.1	29.4	0.0
LnGrp LOS	D	D	C	E	D		E	D	D	E	C	
Approach Vol, veh/h		958			513			1769			1077	
Approach Delay, s/veh		45.6			56.6			41.6			34.4	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	33.2	11.8	28.2	19.4	28.3	15.0	24.9
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	10.5	29.5	7.5	24.5	15.5	24.5	10.5	21.5
Max Q Clear Time (g_c+I1), s	10.2	26.1	7.7	22.1	14.9	15.9	10.7	20.1
Green Ext Time (p_c), s	0.0	2.7	0.0	0.8	0.1	4.0	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay	42.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1076	141	83	649	4	86	2	154	5	0	1
Future Volume (veh/h)	0	1076	141	83	649	4	86	2	154	5	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1900	1759	1759	1900	1900	1792	1792	1900	1863	1900
Adj Flow Rate, veh/h	0	1098	144	85	662	4	88	2	157	5	0	1
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	7	7	7	8	8	8	6	6	6	2	2	2
Cap, veh/h	3	1227	161	106	1854	11	542	11	475	395	10	60
Arrive On Green	0.00	0.41	0.41	0.06	0.54	0.54	0.31	0.31	0.31	0.31	0.00	0.31
Sat Flow, veh/h	1691	3000	393	1675	3406	21	1372	35	1524	929	31	192
Grp Volume(v), veh/h	0	617	625	85	325	341	90	0	157	6	0	0
Grp Sat Flow(s),veh/h/ln	1691	1687	1706	1675	1671	1756	1407	0	1524	1152	0	0
Q Serve(g_s), s	0.0	21.3	21.4	3.1	6.9	6.9	0.0	0.0	4.9	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	21.3	21.4	3.1	6.9	6.9	2.4	0.0	4.9	2.4	0.0	0.0
Prop In Lane	1.00		0.23	1.00		0.01	0.98		1.00	0.83		0.17
Lane Grp Cap(c), veh/h	3	690	698	106	909	955	553	0	475	465	0	0
V/C Ratio(X)	0.00	0.89	0.90	0.80	0.36	0.36	0.16	0.00	0.33	0.01	0.00	0.00
Avail Cap(c_a), veh/h	135	715	723	147	909	955	553	0	475	465	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	17.2	17.2	28.9	8.1	8.1	15.6	0.0	16.5	14.9	0.0	0.0
Incr Delay (d2), s/veh	0.0	13.5	13.6	18.9	0.2	0.2	0.6	0.0	1.9	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	12.3	12.5	2.0	3.2	3.4	1.2	0.0	2.3	0.1	0.0	0.0
LnGrp Delay(d),s/veh	0.0	30.7	30.9	47.8	8.3	8.3	16.3	0.0	18.4	14.9	0.0	0.0
LnGrp LOS		C	C	D	A	A	B		B	B		
Approach Vol, veh/h		1242			751			247			6	
Approach Delay, s/veh		30.8			12.8			17.6			14.9	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	8.5	30.1		24.0	0.0	38.5
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	5.5	26.5		19.5	5.0	27.0
Max Q Clear Time (g_c+I1), s		6.9	5.1	23.4		4.4	0.0	8.9
Green Ext Time (p_c), s		0.8	0.0	2.2		0.0	0.0	3.9

Intersection Summary	
HCM 2010 Ctrl Delay	23.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	977	258	339	662	0	74	0	62	0	3	0
Future Volume (veh/h)	1	977	258	339	662	0	74	0	62	0	3	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1827	1827	1900	1900	1712	1712	1900	1863	1900
Adj Flow Rate, veh/h	1	1028	272	357	697	0	78	0	65	0	3	0
Adj No. of Lanes	1	2	1	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	4	4	4	11	11	11	2	2	2
Cap, veh/h	2	1149	513	400	1964	0	424	0	372	0	476	0
Arrive On Green	0.00	0.34	0.34	0.23	0.57	0.00	0.26	0.00	0.26	0.00	0.26	0.00
Sat Flow, veh/h	1707	3406	1521	1740	3563	0	1288	0	1455	0	1863	0
Grp Volume(v), veh/h	1	1028	272	357	697	0	78	0	65	0	3	0
Grp Sat Flow(s),veh/h/ln	1707	1703	1521	1740	1736	0	1288	0	1455	0	1863	0
Q Serve(g_s), s	0.0	21.9	11.0	15.2	8.3	0.0	3.6	0.0	2.7	0.0	0.1	0.0
Cycle Q Clear(g_c), s	0.0	21.9	11.0	15.2	8.3	0.0	3.7	0.0	2.7	0.0	0.1	0.0
Prop In Lane	1.00		1.00	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	2	1149	513	400	1964	0	424	0	372	0	476	0
V/C Ratio(X)	0.43	0.90	0.53	0.89	0.35	0.00	0.18	0.00	0.17	0.00	0.01	0.00
Avail Cap(c_a), veh/h	112	1184	529	468	1964	0	424	0	372	0	476	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	0.00	1.00	0.00
Uniform Delay (d), s/veh	38.0	24.0	20.4	28.4	9.0	0.0	22.5	0.0	22.1	0.0	21.2	0.0
Incr Delay (d2), s/veh	91.0	8.9	0.9	17.2	0.1	0.0	1.0	0.0	1.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	11.7	4.7	9.2	4.0	0.0	1.4	0.0	1.2	0.0	0.0	0.0
LnGrp Delay(d),s/veh	129.1	32.9	21.3	45.7	9.1	0.0	23.5	0.0	23.1	0.0	21.2	0.0
LnGrp LOS	F	C	C	D	A		C		C		C	
Approach Vol, veh/h		1301			1054			143			3	
Approach Delay, s/veh		30.6			21.5			23.3			21.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	22.0	30.2		24.0	4.6	47.7
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5	4.5	4.5
Max Green Setting (Gmax), s		19.5	20.5	26.5		19.5	5.0	42.0
Max Q Clear Time (g_c+I1), s		5.7	17.2	23.9		2.1	2.0	10.3
Green Ext Time (p_c), s		0.4	0.4	1.9		0.0	0.0	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	26.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	558	640	330	350	800	327	300	375	730	284	261	583
Future Volume (veh/h)	558	640	330	350	800	327	300	375	730	284	261	583
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	581	667	344	365	833	0	312	391	760	296	272	0
Adj No. of Lanes	2	2	1	2	2	1	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	3	3	3	3	3	3	3	3	3
Cap, veh/h	560	925	413	426	784	351	373	1013	453	283	1194	534
Arrive On Green	0.16	0.26	0.26	0.12	0.22	0.00	0.11	0.29	0.29	0.16	0.34	0.00
Sat Flow, veh/h	3442	3539	1582	3408	3505	1568	3408	3505	1568	1757	3505	1568
Grp Volume(v), veh/h	581	667	344	365	833	0	312	391	760	296	272	0
Grp Sat Flow(s),veh/h/ln	1721	1770	1582	1704	1752	1568	1704	1752	1568	1757	1752	1568
Q Serve(g_s), s	17.9	18.9	22.6	11.5	24.6	0.0	9.9	9.8	31.8	17.7	6.1	0.0
Cycle Q Clear(g_c), s	17.9	18.9	22.6	11.5	24.6	0.0	9.9	9.8	31.8	17.7	6.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	560	925	413	426	784	351	373	1013	453	283	1194	534
V/C Ratio(X)	1.04	0.72	0.83	0.86	1.06	0.00	0.84	0.39	1.68	1.05	0.23	0.00
Avail Cap(c_a), veh/h	560	925	413	462	784	351	409	1013	453	283	1194	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	46.1	37.0	38.3	47.2	42.7	0.0	48.0	31.3	39.1	46.2	25.9	0.0
Incr Delay (d2), s/veh	48.1	2.8	13.5	14.0	50.1	0.0	13.2	1.1	314.0	66.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.2	9.5	11.4	6.3	17.3	0.0	5.3	4.9	53.3	13.8	3.0	0.0
LnGrp Delay(d),s/veh	94.1	39.7	51.8	61.1	92.8	0.0	61.2	32.4	353.1	112.5	26.4	0.0
LnGrp LOS	F	D	D	E	F		E	C	F	F	C	
Approach Vol, veh/h		1592			1198			1463			568	
Approach Delay, s/veh		62.2			83.2			205.2			71.3	
Approach LOS		E			F			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.2	36.3	18.2	33.3	16.5	42.0	22.4	29.1
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	17.7	31.8	14.9	27.6	13.2	36.3	17.9	24.6
Max Q Clear Time (g_c+I1), s	19.7	33.8	13.5	24.6	11.9	8.1	19.9	26.6
Green Ext Time (p_c), s	0.0	0.0	0.2	1.7	0.2	1.8	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	111.9
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	211	60	222	191	248	120	1394	251	195	1427	238
Future Volume (veh/h)	235	211	60	222	191	248	120	1394	251	195	1427	238
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	245	220	62	231	199	258	125	1452	261	203	1486	248
Adj No. of Lanes	1	2	1	1	1	1	1	3	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	709	309	265	358	299	150	1614	290	253	1840	563
Arrive On Green	0.16	0.20	0.20	0.15	0.19	0.19	0.08	0.37	0.37	0.07	0.36	0.36
Sat Flow, veh/h	1774	3539	1543	1774	1863	1559	1774	4326	776	3442	5085	1557
Grp Volume(v), veh/h	245	220	62	231	199	258	125	1137	576	203	1486	248
Grp Sat Flow(s),veh/h/ln	1774	1770	1543	1774	1863	1559	1774	1695	1712	1721	1695	1557
Q Serve(g_s), s	11.9	4.7	3.0	11.3	8.5	14.2	6.1	28.0	28.1	5.1	23.3	10.7
Cycle Q Clear(g_c), s	11.9	4.7	3.0	11.3	8.5	14.2	6.1	28.0	28.1	5.1	23.3	10.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	280	709	309	265	358	299	150	1265	639	253	1840	563
V/C Ratio(X)	0.88	0.31	0.20	0.87	0.56	0.86	0.83	0.90	0.90	0.80	0.81	0.44
Avail Cap(c_a), veh/h	291	760	331	271	379	317	150	1265	639	253	1840	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.4	30.2	29.5	36.8	32.3	34.6	39.8	26.1	26.2	40.3	25.4	21.4
Incr Delay (d2), s/veh	23.9	0.2	0.3	24.6	1.6	20.0	30.8	10.3	18.2	16.8	3.9	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	2.3	1.3	7.3	4.5	7.7	4.3	14.9	16.5	3.0	11.5	5.0
LnGrp Delay(d),s/veh	60.3	30.4	29.8	61.4	33.9	54.6	70.6	36.5	44.4	57.1	29.4	23.9
LnGrp LOS	E	C	C	E	C	D	E	D	D	E	C	C
Approach Vol, veh/h		527			688			1838			1937	
Approach Delay, s/veh		44.2			50.9			41.3			31.6	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	37.5	17.7	22.2	12.0	36.5	18.4	21.5
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	6.5	33.0	13.5	19.0	7.5	32.0	14.5	18.0
Max Q Clear Time (g_c+I1), s	7.1	30.1	13.3	6.7	8.1	25.3	13.9	16.2
Green Ext Time (p_c), s	0.0	2.4	0.0	1.2	0.0	5.2	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay	39.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	802	110	620	614	620	160	1078	940	480	825	86
Future Volume (veh/h)	127	802	110	620	614	620	160	1078	940	480	825	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	130	818	112	633	627	633	163	1100	959	490	842	88
Adj No. of Lanes	1	2	0	1	2	0	2	2	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	148	657	90	450	674	600	213	1049	457	381	1612	168
Arrive On Green	0.08	0.21	0.21	0.25	0.38	0.38	0.06	0.30	0.30	0.11	0.35	0.35
Sat Flow, veh/h	1774	3120	427	1774	1770	1577	3442	3539	1543	3442	4668	485
Grp Volume(v), veh/h	130	464	466	633	627	633	163	1100	959	490	610	320
Grp Sat Flow(s),veh/h/ln	1774	1770	1778	1774	1770	1577	1721	1770	1543	1721	1695	1763
Q Serve(g_s), s	10.1	29.5	29.5	35.5	47.6	53.3	6.5	41.5	41.5	15.5	20.1	20.3
Cycle Q Clear(g_c), s	10.1	29.5	29.5	35.5	47.6	53.3	6.5	41.5	41.5	15.5	20.1	20.3
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	148	373	375	450	674	600	213	1049	457	381	1171	609
V/C Ratio(X)	0.88	1.24	1.24	1.41	0.93	1.05	0.77	1.05	2.10	1.29	0.52	0.52
Avail Cap(c_a), veh/h	148	373	375	450	674	600	288	1049	457	381	1171	609
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.4	55.3	55.3	52.3	41.6	43.4	64.7	49.3	49.3	62.2	36.6	36.6
Incr Delay (d2), s/veh	40.4	130.5	130.5	196.1	19.6	51.8	8.2	41.4	500.8	147.2	1.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	27.9	28.0	41.9	26.8	31.8	3.3	26.3	81.4	15.1	9.7	10.4
LnGrp Delay(d),s/veh	103.8	185.8	185.7	248.4	61.2	95.2	72.9	90.6	550.0	209.5	38.3	39.9
LnGrp LOS	F	F	F	F	E	F	E	F	F	F	D	D
Approach Vol, veh/h		1060			1893			2222			1420	
Approach Delay, s/veh		175.7			135.2			287.6			97.7	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	46.0	40.0	34.0	13.2	52.8	16.2	57.8
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	15.5	41.5	35.5	29.5	11.7	45.3	11.7	53.3
Max Q Clear Time (g_c+I1), s	17.5	43.5	37.5	31.5	8.5	22.3	12.1	55.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.1	6.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	185.0
HCM 2010 LOS	F

Appendix P

Monterey County

Regional Trip Length

Calculation

Average Monterey County Home-Based Trip Lengths				
RESIDENTIAL: HOME-BASED TRIPS				
	Home to Work	Home to Shopping	Home to Other	Weighted Average
Trip Length (miles)	10.8	7.3	7.5	
Percent of Total Trips	44.0%	18.8%	37.2%	100.0%
Total	4.8	1.4	2.8	**8.9**

Source: *California Emissions Estimator Model (CalEEMOd), Appendix D - Default Data Tables,* pg D-85, for Monterey County, October 2017

Keith Higgins
Traffic Engineer

File #: ID#22-453, **Version:** 1

Front Street/Sherwood Drive Adaptive Traffic Control System, CIP 9431

Approve a Resolution approving the plans and specifications for the Front Street/Sherwood Drive Adaptive Traffic Control System Project, CIP 9431; awarding a contract to Bear Electrical Solutions, Inc. for in the amount of $585,870.00; and authorizing the direct purchase of traffic signal equipment in the amount of $219,572.22.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **SEPTEMBER 6, 2022**

DEPARTMENT: **PUBLIC WORKS**

FROM: **DAVID JACOBS P.E., L.S., PUBLIC WORKS DIRECTOR**

THRU: **ANDREW EASTERLING, TRAFFIC ENGINEER**

BY: **GERARDO RODRIGUEZ, ASSISTANT ENGINEER**

TITLE: **FRONT STREET/SHERWOOD DRIVE ADAPTIVE TRAFFIC CONTROL SYSTEM; CIP 9431**

RECOMMENDED MOTION:

A motion to approve a Resolution:

1) Approving the plans and specifications for the Front Street/Sherwood Drive Adaptive Traffic Control System Project, CIP 9431;

2) Awarding a contract to Bear Electrical Solutions, Inc. for the Front Street/Sherwood Drive Adaptive Traffic Control System Project; CIP 9431, in the amount of $585,870.00;

3) Authorizing a budget transfer of $80,000.00 funds from CIP 9253 – ADA Traffic Signal Upgrades and $130,000.00 funds from 9654 – Traffic Sign Installations, for a total increase of $210,000.00 to CIP 9431 – Traffic Signal Coordination; and,

4) Authorizing the direct purchase of traffic signal equipment in the amount of $219,572.22 for the Front Street/Sherwood Drive Adaptive Traffic Control System Project, CIP 9431.

RECOMMENDATION:

Staff recommends that the City Council approve a Resolution approving the plans and specifications for the Front Street/Sherwood Drive Adaptive Traffic Control System Project; awarding a contract to Bear Electrical Solutions, Inc. for the Front Street/Sherwood Drive Adaptive Traffic Control System Project, CIP 9431, in the amount of $585,870.00; authorizing a budget transfer of $80,000.00 funds from CIP 9253 – ADA Traffic Signal Upgrades and $130,000.00 funds from 9654 – Traffic Sign Installations, for a total increase of $210,000.00 to CIP 9431 – Traffic Signal Coordination; and authorizing the direct purchase of traffic signal equipment in the amount of $219,572.22 for the Front Street/Sherwood Drive Adaptive Traffic Control System Project, CIP 9431.

EXECUTIVE SUMMARY:

On February 2, 2021, City Council approved Resolution No. 22041 accepting grant funds from Monterey Bay Air Resources District (MBARD) for Front Street/Sherwood Drive Adaptive Traffic Control System and authorizing the Public Works Director to execute agreements related to the MBARD grant. The project will improve Front Street/Sherwood Drive corridor by improving travel times, reducing delay, reducing emissions, improving air quality, and reducing rear-end collisions. Project plans and specifications are complete, and the project was advertised on June 20, 2022. The City opened bids on July 26, 2022, and the low bidder was Bear Electrical Solutions, Inc. for the amount of $585,870.00. City staff is recommending a budget transfer of $210,000.00 to fully fund the estimated project costs.

BACKGROUND:

The City was awarded funding from the Air District's Emissions Reductions Program (AB2766) for the Front Street/Sherwood Drive Adaptive Traffic Control System Project. The City of Salinas experiences traffic congestion at signalized intersections that creates inefficient motor vehicle traffic resulting in considerable emissions of pollutants and particulate matter. The Front Street and Sherwood Drive corridor consists of five contiguous traffic signals. The congested portion of the corridor extends between the intersections of East San Luis Street and East Rossi Street. These five intersections are closely spaced, between 500 and 1,100 feet away from each other. This roadway segment can experience severe congestion during peak periods. The northbound queues have been observed to extend throughout the corridor from East Rossi Street to East San Luis Street. It is common for the northbound traffic to wait two to three cycles before being served by a green light.

Adaptive traffic control systems can monitor traffic conditions and can adjust signal controller timing to prioritize platoons of vehicles and provide a series of green lights for the busiest movements. Installing an adaptive system in traffic signals corridors can improve the performance of the signals and slightly improve the capacity of the corridor. The benefit to the community will be improved travel time reliability, reduced delay, reduced emissions, improved air quality, and reduced rear-end collisions. The City has previously installed adaptive traffic control systems on several congested roadway segments, specifically on North Main Street (Boronda Road to Bernal Drive), East Boronda Road (Independence Boulevard to North Main Street), and North Sanborn Road (Freedom Parkway to East Alisal Street). These past projects not only saved motorists considerable time and fuel consumption, but also reduced motor vehicle emissions and rear end collisions.

The City applied for a MBARD grant to improve the Front Street/Sherwood Drive corridor and reduce delays and emissions. The City was awarded a grant by the MBARD in the amount of $400,000 for the Front Street/Sherwood Drive Adaptive Traffic Control System Project. On February 2, 2021, City Council approved Resolution No. 22041 accepting grant funds and authorizing the Public Works Director to execute agreements related to the grant (Attachment 1).

The Front Street/Sherwood Drive Adaptive Traffic Control System Project consists of the installation of communication equipment, upgrading traffic signal controllers and peer-to-peer

adaptive controller timing. In the past the City has used third-party vendors for adaptive traffic signal systems to provide coordinated and responsive traffic signal timing. For this application the City is programing the adaptive timing plans without the use of a third-party vendor, which generally requires an on-going expensive subscription service and limits local control of the timing settings. The City plans to use peer-to-peer functions to allow controllers to communicate and place advance calls to adjacent traffic signal controllers. Staff anticipates the peer-to-peer function, along with coordinated time of day plans and dynamic max settings can provide similar performance as the third-party vendors. However, in the event that the peer-to-peer function is not as effective as staff anticipates, the project was also designed to be compatible with the SCOOT (Split Cycle and Offset Optimization Technique) software. The City must upgrade the signals' camera and controller cabinet equipment in order to be upward compatible with the SCOOT system.

Additionally, the project also includes the installation of approximately 3,300 feet of fiber optic communication which will connect the City's fiber optic backbone on East Alisal Street. The new fiber optic communication equipment will expand the City's existing fiber optic network. The additional fiber optic communication equipment benefits the City in other ways unrelated to the project and supports efforts to improve broadband infrastructure. Other City departments which require IoT (internet of things) communication equipment will also benefit from the fiber optic network expansion.

City staff developed and completed plans, specifications and estimate (PS&E) documents for the project. The project generally consists of traffic signal modifications, controller cabinet updates, video detection equipment, and fiber optic communication equipment at five signalized intersections: Front Street and East San Luis Street; Front Street and East Alisal Street; Front Street and East Market Street; Sherwood Drive and East Market Street; and Sherwood Drive and East Rossi Street/Calle Cebu. The modifications include safety improvements such as protected left turns phases and ADA upgrades including, accessible pedestrian push buttons.

The project was advertised on June 20, 2022, and the City opened bids on July 26, 2022. Four contractors submitted bid proposals for the project, and the results are as follows:

Contractor	**Total Bid**
Bear Electrical Solutions, Inc.	$585,870
PTM General Engineering Service	$646,046
Tennyson Electric, Inc.	$688,850
Monterey Peninsula Engineering	$869,500

Bear Electric Solutions, Inc. was the low bidder, and a full bid tab is included in the attachments (Attachment 2). All bid contract documents and bonds have been received. The City has verified Bear Electrical Solutions Inc. and their only subcontractor, SoCal Stormwater Runoff Solutions Services Inc., have active Department of Industrial Relations (DIR) registration. Bear Electrical Solutions Inc. has an active contractor's license, and a contractor's licenses is not required for the

subcontractor's work. Additionally, both Bear Electrical Solutions Inc., and SoCal Stormwater Runoff Solutions Services Inc. have active City of Salinas business licenses. Staff recommends that the City Council approve a Resolution awarding the contract to Bear Electrical Solutions, Inc. for the Front Street/Sherwood Drive Adaptive Traffic Control System Project; CIP 9431, in the amount of $585,870.00.

CEQA CONSIDERATION:

The City of Salinas has determined that the project is exempt from the California Environmental Quality Act (CEQA) Guidelines (Section 15301, Class 1(c)) because the actions consist of operation and minor alteration of an existing City street. A notice of exemption has been prepared and will be filed at the County Clerk's office.

STRATEGIC PLAN INITIATIVE:

This item supports the City Council's goals of Infrastructure and Environmental Sustainability and Public Safety.

DEPARTMENTAL COORDINATION:

The Public Works Department and Finance Department manage the project accounting. The Public Works Department oversees construction projects.

FISCAL AND SUSTAINABILITY IMPACT:

The estimated funding for this project comes from sources below:

CIP No.	Name	Funding Source	Appropriations	Available Balance*
9431	Front Street/Sherwood Drive Adaptive Traffic Control System Project	MBARD Grant / Local Match	$427,000.00	$390,800.00
9431	Front Street/Sherwood Drive Adaptive Traffic Control System Project	Measure X (2510 Funds)	$280,000.00	$271,328.00
9431	Front Street/Sherwood Drive Adaptive Traffic Control System Project	Gas Tax (2404 Funds)	$43,000.00	$39,927.33
		Total	**$750,000.00**	**$702,055.33**

*As of 8/8/2022

Construction Cost

Base Bid	$585,870.00
City Furnished Equipment	$219,572.22
Contingencies (10%)	$59,000.00
Construction Engineering (8%)	$47,000.00
Total Estimated Construction Costs	**$ 911,442.22**

Based on the bid results and the existing available balance there is an estimated budget shortfall of $209,386.89. A total appropriation of $210,000.00 of funds will cover the estimated budget shortfall. Staff recommends the transfer of $80,000 funds from CIP 9253 – ADA Traffic Signal Upgrades and $130,000 funds from 9654 – Traffic Sign Installations to CIP 9431 – Traffic Signal Coordination.

In an effort to reduce project costs, the project plans and specifications call for the City to furnish some of the traffic signal equipment. Typically, when a contractor supplies equipment for a construction project, a mark-up on the material is paid by the City. As part of this contract, the City proposes furnishing controller cabinet equipment and the detection cameras for this project. The City received a quote from Iteris for $113,403.90 to purchase the project's video detection cameras and a quote from Western Systems for $106,168.32 to purchase the project's controller cabinet equipment. Quotations for City-furnished equipment are included in the attached documents (Attachment 3). It is recommended City Council approve a Resolution authorizing the direct purchase of traffic signal equipment in the amount of $219,572.22 for the Front Street/Sherwood Drive Adaptive Traffic Control System Project; CIP 943.

ATTACHMENTS:
Resolution
Attachment 1: Resolution 22041
Attachment 2: Bid Tab
Attachment 3: Quotations for City-Furnished Equipment

RESOLUTION NO. _____ (N.C.S.)

A RESOLUTION APPROVING THE PLANS AND SPECIFICATIONS FOR THE FRONT STREET/SHERWOOD DRIVE ADAPTIVE TRAFFIC CONTROL SYSTEM PROJECT; AWARDING A CONTRACT TO BEAR ELECTRICAL SOLUTIONS, INC. FOR THE FRONT STREET/SHERWOOD DRIVE ADAPTIVE TRAFFIC CONTROL SYSTEM PROJECT, CIP 9431, IN THE AMOUNT OF $585,870.00; AUTHORIZING A BUDGET TRANSFER OF $80,000.00 FUNDS FROM CIP 9253 AND $130,000.00 FUNDS FROM CIP 9654, FOR A TOTAL INCREASE OF $210,000.00 TO CIP 9431; AND AUTHORIZING THE DIRECT PURCHASE OF TRAFFIC SIGNAL EQUIPMENT IN THE AMOUNT OF $219,572.22 FOR THE FRONT STREET/SHERWOOD DRIVE ADAPTIVE TRAFFIC CONTROL SYSTEM PROJECT, CIP 9431

WHEREAS, On February 2, 2021, City Council approved Resolution No. 22041 accepting grant funds from Monterey Bay Air Resources District for Front Street/Sherwood Drive Adaptive Traffic Control System and authorizing the Public Works Director to execute agreements related to the grant; and

WHEREAS, the project will improve Front Street/Sherwood Drive corridor by improving travel times, reducing delays, reducing emissions, improving air quality, and reducing rear-end collisions; and

WHEREAS, Project plans and specifications are complete, and the project was advertised on June 20, 2022; and

WHEREAS, The City opened bids on July 26, 2022, and the low bidder was Bear Electrical Solutions, Inc. for the amount of $585,870.00; and

WHEREAS, the City received quotes for traffic signal equipment totaling $219,572.22 for the Front Street/Sherwood Drive Adaptive Traffic Control System Project, CIP 9431; and

WHEREAS, City staff is recommending a budget transfer of $210,000.00 to fully fund the estimated project costs; and

WHEREAS, the City has determined that the project is exempt from the California Environmental Quality Act (CEQA) Guidelines (Section 15301, Class 1(c)) because the actions consists of operation and minor alteration of an existing City street.

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council approve the plans and specifications for the Front Street/Sherwood Drive Adaptive Traffic Control System Project, CIP 9431;

BE IT FURTHER RESOLVED that the Salinas City Council awards a contract to Bear Electrical Solutions, Inc. for the Front Street/Sherwood Drive Adaptive Traffic Control System Project; CIP 9431, in the amount of $585,870.00;

BE IT FURTHER RESOLVED that the Salinas City Council authorizes a budget transfer of $80,000.00 funds from CIP 9253 – ADA Traffic Signal Upgrades and $130,000.00 funds from CIP 9654 – Traffic Sign Installations, for a total increase of $210,000.00 to CIP 9431 – Traffic Signal Coordination; and,

BE IT FURTHER RESOLVED that the Salinas authorizes the direct purchase of traffic signal equipment in the amount of $219,572.22 for the Front Street/Sherwood Drive Adaptive Traffic Control System Project, CIP 9431.

PASSED AND APPROVED this 6th day of September 2022 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____

Kimbley Craig, Mayor

ATTEST:

_____

Patricia M. Barajas, City Clerk

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RESOLUTION NO. 22041 (N.C.S.)

A RESOLUTION ACCEPTING GRANT FUNDS FROM THE MONTEREY BAY AIR RESOURCES DISTRICT RECEIVED FOR THE FRONT STREET/SHERWOOD DRIVE ADAPTIVE TRAFFIC CONTROL SYSTEM; AND AUTHORIZING THE PUBLIC WORKS DIRECTOR TO EXECUTE GRANT AGREEMENTS AND GRANT DOCUMENTS RELATED TO THE MONTEREY BAY AIR RESOURCES DISTRICT.

WHEREAS, The Front Street/Sherwood Drive Adaptive Traffic Control System project benefits city travelers by reducing delay and traffic queues at each of the five traffic signals on this roadway segment of Front Street and Sherwood Drive; and

WHEREAS, adaptive traffic control systems have been proven to reduce delay at traffic signals and improve traffic safety by reducing rear end collisions, and

WHEREAS, the project is expected to reduce congestion, and significantly reduce vehicle emissions from idling vehicles; and

WHEREAS, the City was awarded a grant by the Monterey Bay Air Resources District in the amount of $400,000 for the Adaptive Traffic Control System project; and

WHEREAS the City's contribution is $100,000 in Measure X revenue funds to fully fund the project; and

WHEREAS, the City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act.

NOW, THEREFORE, BE IT RESOLVED that the City Council approve a Resolution accepting grant funds from the Monterey Bay Air Resources District received for the Front Street/Sherwood Drive Adaptive Traffic Control System; and authorizing the Public Works Director to execute grant agreements and grant documents related to the Monterey Bay Air Resources District.

PASSED AND APPROVED this 2nd day of February 2021, by the following vote:

AYES: Councilmembers: Barrera, Cromeenes, González, McShane, Osornio, Rocha and Mayor Craig

NOES: None

ABSENT: None

ABSTAIN: None

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APPROVED:

DocuSigned by:
Kimbley Craig
E554E94F4CE64C8...

Kimbley Craig, Mayor

ATTEST:

DocuSigned by:
5BE31EC636A6432...

Patricia M. Barajas, City Clerk

Bid awarded on _____by Salinas City Council by Resolution No. _____(NCS) to

_____For the sum of $_____ for item_____. All others bids were rejected and

bid bonds returned. Dated this _____ day of _____, 20____.

_____
CITY CLERK

Front Street/Sherwood Dr Adaptive Traffic Control System, Project No. 9431

Bid Opening: July 26, 2022

PROJECT MANAGER: Gerardo Rodriguez

Base Bid

Item #	Item Description	Quantity	Measure	Engineer's Estimate Unit Price	Engineer's Estimate Item Total	Bear Electrical Solutions, Inc. Estimate Unit Price	Bear Electrical Solutions, Inc. Estimate Item Total	PTM General Engineering Service Estimate Unit Price	PTM General Engineering Service Estimate Item Total	Tennyson Electric, Inc. Estimate Unit Price	Tennyson Electric, Inc. Estimate Item Total	Monterey Peninsula Engineering Estimate Unit Price	Monterey Peninsula Engineering Estimate Item Total
1	Mobilization	1	LS	$ 37,000.00	$ 37,000.00	$ 5,000.00	$ 5,000.00	$ 16,561.00	$ 16,561.00	$ 36,500.00	$ 36,500.00	$ 30,000.00	$ 30,000.00
2	Furnish and Install Traffic Control and all Temporary Construction Area Signs and Hardware (Including Removal at End of Project)	1	LS	$ 28,000.00	$ 28,000.00	$ 2,500.00	$ 2,500.00	$ 42,000.00	$ 42,000.00	$ 27,875.00	$ 27,875.00	$ 50,000.00	$ 50,000.00
3	Erosion & Sediment Control Plan	1	LS	$ 5,000.00	$ 5,000.00	$ 750.00	$ 750.00	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ 2,500.00	$ 10,000.00	$ 10,000.00
4	Remove Pull Box	14	EA	$950	$ 13,300.00	$315	$ 4,410.00	$400	$ 5,600.00	$450	$ 6,300.00	$1,000	$ 14,000.00
5	Furnish and Install 4" Schedule 80 HDPE Conduit (Directional Drill)	1,200	LF	$95.25	$ 114,300.00	$75	$ 90,000.00	$95	$ 114,000.00	$85	$ 102,000.00	$117	$ 140,400.00
6	Furnish and Install No. 6E Pull Box	15	EA	$3,188	$ 47,820.00	$2,470	$ 37,050.00	$3,200	$ 48,000.00	$2,650	$ 39,750.00	$1,400	$ 21,000.00
7	Furnish and Install N48 Pull Box	3	EA	$3,795	$ 11,385.00	$3,620	$ 10,860.00	$4,100	$ 12,300.00	$4,150	$ 12,450.00	$2,300	$ 6,900.00
8	Furnish and Install 12-Strand Fiber Optic Cable	3,900	FT	$7.55	$ 29,445.00	$5	$ 19,500.00	$5	$ 19,500.00	$10	$ 39,000.00	$12	$ 46,800.00
9	Furnish and Install Flexible Innerduct w/ Tracer Wire	3,300	LF	$9.15	$ 30,195.00	$12.00	$ 39,600.00	$12.06	$ 39,798.00	$12.00	$ 39,600.00	$13.00	$ 42,900.00
10	Furnish and Install Fiber Termination Panel (12 port)	6	EA	$750	$ 4,500.00	$1,700	$ 10,200.00	$1,020	$ 6,120.00	$3,650	$ 21,900.00	$2,000	$ 12,000.00
11	Furnish and Install Fiber Optic Edge Switch - include patch cables	5	EA	$4,770	$ 23,850.00	$7,200	$ 36,000.00	$5,000	$ 25,000.00	$9,265	$ 46,325.00	$6,300	$ 31,500.00
12	Make and Test Fiber Terminations	1	LS	$25,300	$ 25,300.00	$11,000	$ 11,000.00	$14,400	$ 14,400.00	$21,500	$ 21,500.00	$8,000	$ 8,000.00
13	System Testing	1	LS	$25,300	$ 25,300.00	$5,000	$ 5,000.00	$4,260	$ 4,260.00	$15,000	$ 15,000.00	$7,500	$ 7,500.00
14	Traffic Signal System Modifications - Front St and East San Luis St	1	LS	$75,463.75	$ 75,463.75	$95,000	$ 95,000.00	$75,000	$ 75,000.00	$85,000	$ 85,000.00	$112,000	$ 112,000.00
15	Traffic Signal System Modifications - Front St and East Market St	1	LS	$91,563	$ 91,563.00	$115,000	$ 115,000.00	$111,007	$ 111,007.00	$53,000	$ 53,000.00	$143,500	$ 143,500.00
16	Traffic Signal System Modifications - Sherwood Dr and East Market St/Market Way	1	LS	$71,282.75	$ 71,282.75	$47,000	$ 47,000.00	$60,000	$ 60,000.00	$81,500	$ 81,500.00	$93,000	$ 93,000.00
17	Traffic Signal System Modifications - Sherwood Dr and West Rossi St/Calle Cebu	1	LS	$64,135.50	$ 64,135.50	$57,000	$ 57,000.00	$50,000	$ 50,000.00	$58,650	$ 58,650.00	$100,000	$ 100,000.00
	Bid Total (Items 1-17) (For Comparison Only)				**$697,840**		**$585,870**		**$646,046**		**$688,850**		**$869,500**

WesternSystems
Innovative Transportation Solutions

Quotation

Quote #: Q-09033

Date: July 27, 2022
Sales: Jason Spencer

Project: City of Salinas, CA / Front Street Cabinets
Attention: Jose Saucedo
Terms: Net 30
Freight: FOB DstFrt PP&ADD

Bid Item # Front St Cabinet #1

QTY	Description
1	ENCLOSURE TYPE SP (UL) ROLLED STOCK HANDLE (UNFINISHED) MOBOTREX Part # **EL1008TWB**
1	CONTROLLER CABINET (TS2-1); SALINAS TYPE SP 32CH DLS (2020) WESTERN SYSTEMS Part # **SP/SALINAS 32**
1	CITY OF SALINAS SP (TS2-1) DLS SPECIFICATIONS (2021)
1	SUB-ASSEMBLY 768 PANEL SYSTEM INSTALLATION (NEMA CABINET) WESTERN SYSTEMS Part # **2100000000**
1	SMART MONITOR (MMU2-16LEIP) 16 CH ENHANCED MMU W/FYA SUPPORT & ETHERNET EBERLE DESIGN INC (EDI) Part # **MMU2-16LEIP**
1	POWER SUPPLY (PS250) SHELF MOUNT (TS2) 5A EBERLE DESIGN INC (EDI) Part # **PS250**
8	LOAD SWITCH I/O DUAL WESTERN SYSTEMS WESTERN SYSTEMS Part # **SSS-216**
1	FLASHER I/O DUAL WESTERN SYSTEMS WESTERN SYSTEMS Part # **SSF-216**
8	FLASHER TRANSFER RELAY MINI STRUTHERS-DUNN Part # **21XBXHL-120VAC**
3	BUS INTERFACE UNIT (BIU700H) (TS2) 1/2W EDI Part # **BIU700H**
1	FIBER ENCLOSURE WALL MOUNT (12PORT) CORNING WHITE CORNING Part # **WIC-012**
1	COUPLER PLATE 12 PACK SM (LC) DUPLEX BLUE (CCH-CP12-A9) CORNING Part # **CCH-CP12-A9**

1122 Industry Street, Bldg. B, Everett, WA 98203
Phone (425) 438-1133 | Fax (425)438-1585

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Quote #: Q-09033

1	CONTROLLER EPAC M62; ATC / ATC COMM HUB / LINUX CPU / SEPAC LATEST VERSION / 8133-0004-014 SIEMENS ITS Part # **8133-0004-014**
1	14 port Managed Fiber Ethernet switch, 4x100/1000Base-FX SFP + 10x 10/100/1000 Base-T, DIN Rail, ROHS-6 compliant, Fanless, 12-58V DC, Dual power input, Power supply and SFP should be ordered separately (Actelis PN 506R62011) See Description Part # **See Description**
1	DIN Rail 110-220VAC-24VDC PSU (<40W) for ML5114D -40+74C (Actelis PN 506R61181) See Description Part # **See Description**
2	SFP OPTICS 1000BASE-LX SM, 1310NM, 10KM, LC ACTELIS Part # **506R61187**

Lump Sum $24,294.81

Bid Item # Front St Cabinet #2

QTY	Description
1	ENCLOSURE TYPE SP (UL) ROLLED STOCK HANDLE (UNFINISHED) MOBOTREX Part # **EL1008TWB**
1	CONTROLLER CABINET (TS2-1); SALINAS TYPE SP 32CH DLS (2020) WESTERN SYSTEMS Part # **SP/SALINAS 32**
1	CITY OF SALINAS SP (TS2-1) DLS SPECIFICATIONS (2021)
1	SUB-ASSEMBLY 768 PANEL SYSTEM INSTALLATION (NEMA CABINET) WESTERN SYSTEMS Part # **2100000000**
1	SMART MONITOR (MMU2-16LEIP) 16 CH ENHANCED MMU W/FYA SUPPORT & ETHERNET EBERLE DESIGN INC (EDI) Part # **MMU2-16LEIP**
1	POWER SUPPLY (PS250) SHELF MOUNT (TS2) 5A EBERLE DESIGN INC (EDI) Part # **PS250**
8	LOAD SWITCH I/O DUAL WESTERN SYSTEMS WESTERN SYSTEMS Part # **SSS-216**
1	FLASHER I/O DUAL WESTERN SYSTEMS WESTERN SYSTEMS Part # **SSF-216**

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Quotation

Quote #: Q-09033

8	FLASHER TRANSFER RELAY MINI STRUTHERS-DUNN Part # **21XBXHL-120VAC**
3	BUS INTERFACE UNIT (BIU700H) (TS2) 1/2W EDI Part # **BIU700H**
1	FIBER ENCLOSURE WALL MOUNT (12PORT) CORNING WHITE CORNING Part # **WIC-012**
1	COUPLER PLATE 12 PACK SM (LC) DUPLEX BLUE (CCH-CP12-A9) CORNING Part # **CCH-CP12-A9**
1	CONTROLLER EPAC M62; ATC / ATC COMM HUB / LINUX CPU / SEPAC LATEST VERSION / 8133-0004-014 SIEMENS ITS Part # **8133-0004-014**
1	14 port Managed Fiber Ethernet switch, 4x100/1000Base-FX SFP + 10x 10/100/1000 Base-T, DIN Rail, ROHS-6 compliant, Fanless, 12-58V DC, Dual power input, Power supply and SFP should be ordered separately (Actelis PN 506R62011) See Description Part # **See Description**
1	DIN Rail 110-220VAC-24VDC PSU (<40W) for ML5114D -40+74C (Actelis PN 506R61181) See Description Part # **See Description**
2	SFP OPTICS 1000BASE-LX SM, 1310NM, 10KM, LC ACTELIS Part # **506R61187**

Lump Sum $24,294.81

Bid Item # Front St Cabinet #3

QTY	Description
1	ENCLOSURE TYPE SP (UL) ROLLED STOCK HANDLE (UNFINISHED) MOBOTREX Part # **EL1008TWB**
1	CONTROLLER CABINET (TS2-1); SALINAS TYPE SP 32CH DLS (2020) WESTERN SYSTEMS Part # **SP/SALINAS 32**
1	CITY OF SALINAS SP (TS2-1) DLS SPECIFICATIONS (2021)
1	SUB-ASSEMBLY 768 PANEL SYSTEM INSTALLATION (NEMA CABINET) WESTERN SYSTEMS Part # **2100000000**

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1	SMART MONITOR (MMU2-16LEIP) 16 CH ENHANCED MMU W/FYA SUPPORT & ETHERNET EBERLE DESIGN INC (EDI) Part # **MMU2-16LEIP**
1	POWER SUPPLY (PS250) SHELF MOUNT (TS2) 5A EBERLE DESIGN INC (EDI) Part # **PS250**
8	LOAD SWITCH I/O DUAL WESTERN SYSTEMS WESTERN SYSTEMS Part # **SSS-216**
1	FLASHER I/O DUAL WESTERN SYSTEMS WESTERN SYSTEMS Part # **SSF-216**
8	FLASHER TRANSFER RELAY MINI STRUTHERS-DUNN Part # **21XBXHL-120VAC**
3	BUS INTERFACE UNIT (BIU700H) (TS2) 1/2W EDI Part # **BIU700H**
1	FIBER ENCLOSURE WALL MOUNT (12PORT) CORNING WHITE CORNING Part # **WIC-012**
1	COUPLER PLATE 12 PACK SM (LC) DUPLEX BLUE (CCH-CP12-A9) CORNING Part # **CCH-CP12-A9**
1	CONTROLLER EPAC M62; ATC / ATC COMM HUB / LINUX CPU / SEPAC LATEST VERSION / 8133-0004-014 SIEMENS ITS Part # **8133-0004-014**
1	14 port Managed Fiber Ethernet switch, 4x100/1000Base-FX SFP + 10x 10/100/1000 Base-T, DIN Rail, ROHS-6 compliant, Fanless, 12-58V DC, Dual power input, Power supply and SFP should be ordered separately (Actelis PN 506R62011) See Description Part # **See Description**
1	DIN Rail 110-220VAC-24VDC PSU (<40W) for ML5114D -40+74C (Actelis PN 506R61181) See Description Part # **See Description**
2	SFP OPTICS 1000BASE-LX SM, 1310NM, 10KM, LC ACTELIS Part # **506R61187**

Lump Sum $24,294.81

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Quotation

Quote #: Q-09033

Bid Item # Front St Cabinet #4

QTY	Description
1	ENCLOSURE TYPE SP (UL) ROLLED STOCK HANDLE (UNFINISHED) MOBOTREX Part # **EL1008TWB**
1	CONTROLLER CABINET (TS2-1); SALINAS TYPE SP 32CH DLS (2020) WESTERN SYSTEMS Part # **SP/SALINAS 32**
1	CITY OF SALINAS SP (TS2-1) DLS SPECIFICATIONS (2021)
1	SUB-ASSEMBLY 768 PANEL SYSTEM INSTALLATION (NEMA CABINET) WESTERN SYSTEMS Part # **2100000000**
1	SMART MONITOR (MMU2-16LEIP) 16 CH ENHANCED MMU W/FYA SUPPORT & ETHERNET EBERLE DESIGN INC (EDI) Part # **MMU2-16LEIP**
1	POWER SUPPLY (PS250) SHELF MOUNT (TS2) 5A EBERLE DESIGN INC (EDI) Part # **PS250**
8	LOAD SWITCH I/O DUAL WESTERN SYSTEMS WESTERN SYSTEMS Part # **SSS-216**
1	FLASHER I/O DUAL WESTERN SYSTEMS WESTERN SYSTEMS Part # **SSF-216**
8	FLASHER TRANSFER RELAY MINI STRUTHERS-DUNN Part # **21XBXHL-120VAC**
3	BUS INTERFACE UNIT (BIU700H) (TS2) 1/2W EDI Part # **BIU700H**
1	FIBER ENCLOSURE WALL MOUNT (12PORT) CORNING WHITE CORNING Part # **WIC-012**
1	COUPLER PLATE 12 PACK SM (LC) DUPLEX BLUE (CCH-CP12-A9) CORNING Part # **CCH-CP12-A9**
1	CONTROLLER EPAC M62; ATC / ATC COMM HUB / LINUX CPU / SEPAC LATEST VERSION / 8133-0004-014 SIEMENS ITS Part # **8133-0004-014**

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1	14 port Managed Fiber Ethernet switch, 4x100/1000Base-FX SFP + 10x 10/100/1000 Base-T, DIN Rail, ROHS-6 compliant, Fanless, 12-58V DC, Dual power input, Power supply and SFP should be ordered separately (Actelis PN 506R62011) See Description Part # **See Description**
1	DIN Rail 110-220VAC-24VDC PSU (<40W) for ML5114D -40+74C (Actelis PN 506R61181) See Description Part # **See Description**
2	SFP OPTICS 1000BASE-LX SM, 1310NM, 10KM, LC ACTELIS Part # **506R61187**

Lump Sum $24,294.81

Sales Tax $8,989.08
Grand Total $106,168.32

GENERAL CONDITIONS OF SALE

All information contained within this quote is valid for 30 days from the date of the quotation. Thereafter, all prices and applicable charges are subject to change. The acceptance of this quotation implies the acceptance of the following terms and conditions which cannot be varied or waived except by express written authorization by a Western Systems representative. These terms govern the sale of goods and services supplied by Western Systems. Differing terms from Buyer in any purchase order or written communication shall not be binding on Western Systems."

TERMS AND CONDITIONS

Purchase Order: All purchases require a formal purchase order. Emails or verbal communication does not constitute an acceptable purchase order.

Delivery: Material lead time date is based after the release of the order. During the Covid-19 outbreak, Western Systems lead time dates will be estimates based on our best information available.

Clarification on Shipping During Covid-19; FOB Destination and FOB Destination, Prepay & Add terms as quoted imply that the customer will be available to receive material deliveries. Any repeated delivery attempts, trucking reroutes, en route cancellations or product factory returns which incur additional shipping costs shall be billed to the customer will be passed onto the purchaser.

Taxes/Fees: Unless current resale certificate is on file with Western Systems, purchaser shall be responsible for all tariffs, duties, sales or use taxes in addition to the quoted prices herein. Any taxes listed are estimated totals and should be verified against local requirements.

Payment Terms: Payment terms are based on approval of credit. If credit is approved, terms are Net 30 days. Western Systems imposes a surcharge of 2% on the transaction amounts when paying with a Visa or MasterCard. We are unable to accept other credit cards for payment options. All prices are quotes in USD funds.

Non-Payment Penalties: If payment has not been received within terms, the purchaser will be considered in default. Western Systems will be entitled, without prejudice to our other rights, without serving notice of default, to charge the purchaser for all costs incurred such as administration, storage, legal advice etc. The unpaid portion of any amount due to Western Systems will bear interest at the rate of 1.5% per month simple interest. Western Systems reserves the right to hold goods until customer balances their account.

Western Systems will not be subject to any project retainage of any kind. Material purchases are due and payable upon receipt. Unpaid balances will be subject to Non-Payment Penalties.

Collections: Upon Buyer default of these terms, Western Systems may, in addition to any other rights or remedies at contract or law, declare the entire balance of Buyer's account immediately due and payable. If unpaid balance is referred for collections, Buyer agrees to pay Western Systems, to the extent permitted by law, reasonable attorney fees in addition to all damages otherwise available, plus any court costs or expenses incurred by Western Systems, plus any finance charges accrued on any unpaid balance owed by Purchaser.

Deferment or Cancellation Policy: Order deferment or cancellation once materials have been released will be subject to cancellation and/or restocking fees.

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Documentation: Any operational documentation supplied as a part of this quotation remains the property of Western Systems and may not be copied, reproduced, transmitted, or communicated to 3rd parties without the express written consent of Western Systems.

On-Site Services: On-site services such as signal or video system turn-on support shall be scheduled three weeks in advance. If services need to be cancelled or postponed, any non-reimbursable travel expenses will be billed to purchaser. This quotation does not provide nor imply any on-site support services unless mentioned specifically herein. If on-site support services are required, and not included as part of this proposed scope of work, please contact Western Systems for a revised quotation.

Warranty: Standard one-year warranty on material goods manufactured or supplied by Western Systems from the date of manufacturers factory shipment, unless superseded by an additional manufacturer's warranty, provided such goods are maintained and operated in accordance with manufacturers standard method of operation. For additional information on Western Systems warranty, please send an email to info@westernsystems-inc.com.

Return and Restocking Policy: Western Systems will be the sole source in determining whether any item is eligible for return. To be eligible the item(s) must be standard product models, new and unused, in the original packaging, and invoiced within the last 90 days. Restocking fees are applied to all returns and can vary between 20-50% based on annual sales activity. In no case will Western Systems be obligated to take returns for materials, including items that are obsolete, custom orders, or past the 90-day invoice period.

Delivery Inspection: All materials deliveries must be inspected upon receipt from freight carrier. Any freight damages must be reported to the carrier at the time of receipt of goods. Any materials shortages or inaccuracies in shipment must be reported to Western Systems within ten days receipt of goods. Thereafter, any discrepancies will be considered incidental and the responsibility of the receiver.

Force Majeure: Western Systems, Inc. shall in no event be responsible for delays in performance due to actions beyond its reasonable control including without limitation acts of God, strikes, labor shortage or disturbance, fire, accident, war, civil disturbance, or carrier delays.

Western Systems, Inc. accepts no liability for errors or omissions or the accuracy or the completeness of this quotation. It has been prepared to the best of our knowledge per plans, specifications, documentation, and communications provided but we do not guarantee these to be accurate or of the latest revision. Determination of accuracy of this quotation and final quantities are the sole responsibility of recipient. Western Systems, Inc. shall in no event be liable for any special, consequential, incidental, or liquidated damages (including without limitation damages for loss of use of facilities or equipment, loss of revenue, loss of profits or loss of goodwill), regardless of whether seller (a) has been informed of the possibility of such damages or (b) is negligent.

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iteris®

Iteris, Inc.
1700 Carnegie Avenue
Suite 100
Santa Ana, CA 92705-5551

Brian Girardot
(408) 824-8324
brg@iteris.com

EQUIPMENT QUOTATION

Quote #00010912

July 27, 2022

Jose Saucedo 200 Lincoln Ave. Salinas, California 93901 josesau@ci.salinas.ca.us	**Agency:** Salinas, City of **Project Name:** ENGQUOTE27072022SALINASCOORIDOR2022-0100 **Contractor:** **Reference:** ENGQUOTE27072022SALINASCOORIDOR2022-0100	**Delivery Term:** FOB Destination **Payment Terms:** NET 30 Days

Fax or email Purchase Orders to: Marilyn Holden, 949-270-9615 or mdh@iteris.com. Please include Quote Number on your Purchase Order. Prices are valid for 30 days from the date of quote unless extended in writing. Prices on this quote include material only unless otherwise stated. For questions regarding this quotation, please contact the representative listed above.

Front at Market - 3 Camera System

Product Name	Product Description	Qty	Unit Price	Ext. Price
MON-10LCD-SL	10 in. Color LCD Monitor, Sunlight Viewable, 2 composite video inputs, 1 VGA input, 1 HDMI input (NTSC/PAL)	1		
MON-BRKT-SWVL	Monoprice Adjustable Tilting/Swiveling Wall Mount Bracket for LCD LED Plasma (Max 30Lbs, 10~24inch)	1		
NEXT-CCU-SM4-TS2-PAK	Vantage Next CCU, Shelf-Mount Unit, for TS2 applications. Supports up to 4 sensors, no separate rack-mount processors required. Includes CCU-SM-TS2-SHIPKIT (external din-rail power supply, 2.4GHz rubber duck antenna, USB optical mouse, 6 ft. HDMI cable, 5 ft. Cat5e patch cable, screwdriver)	1		
SPM-5YR	Iteris SPM hosted data service. Provides cloud-based collection, storage, analysis and presentation of high resolution SPM controller data from connected intersections. 5 intersections minimum. Does not include setup fee.	1		
TS2CABLE	TS2 SDLC cable, 8 ft., DB15 to DB15 connector with connector locks	1		
VECTOR-NEXT	Vantage Vector Sensor Unit for VantageNext Platform; NTSC/PAL 115/230AC,integrated sensor that includes a compact color wide dynamic range zoom camera and radar unit. Pole mount bracket also included.	3		
VLIVE-5YR	VantageLive! hosted data service. * Five year service duration Includes setup and configuration of Vantage Data Engine server and Cloud based storage services. 5 intersections minimum.	1		
				$23,742.30

Front at San Luis - 4 Camera System

Product Name	Product Description	Qty	Unit Price	Ext. Price
MON-10LCD-SL	10 in. Color LCD Monitor, Sunlight Viewable, 2 composite video inputs, 1 VGA input, 1 HDMI input (NTSC/PAL)	1		
MON-BRKT-SWVL	Monoprice Adjustable Tilting/Swiveling Wall Mount Bracket for LCD LED Plasma (Max 30Lbs, 10~24inch)	1		
SPM-5YR	Iteris SPM hosted data service. Provides cloud-based collection, storage, analysis and presentation of high resolution SPM controller data from connected intersections. 5 intersections minimum. Does not include setup fee.	1		
TS2CABLE	TS2 SDLC cable, 8 ft., DB15 to DB15 connector with connector locks	1		
VECTOR-NEXT	Vantage Vector Sensor Unit for VantageNext Platform; NTSC/PAL 115/230AC,integrated sensor that includes a compact color wide dynamic range zoom camera and radar unit. Pole mount bracket also included.	2		

Iteris, Inc.
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EQUIPMENT QUOTATION

Quote #00010912

July 27, 2022

Front at San Luis -	4 Camera System			
Product Name	**Product Description**	**Qty**	**Unit Price**	**Ext. Price**
VLIVE-5YR	VantageLive! hosted data service. * Five year service duration Includes setup and configuration of Vantage Data Engine server and Cloud based storage services. 5 intersections minimum.	1		
				$11,554.30

Front at San Luis - 4 Camera System				
Product Name	**Product Description**	**Qty**	**Unit Price**	**Ext. Price**
NEXT-CAM-PAK	Vantage Next WDR Camera. Includes NEXT-CAM-SHIPKIT (pedestal-mount bracket assembly, 2 shielded RJ45 connectors)	1		
				$1,265.00

Sherwood at Market -	3 Camera System			
Product Name	**Product Description**	**Qty**	**Unit Price**	**Ext. Price**
MON-10LCD-SL	10 in. Color LCD Monitor, Sunlight Viewable, 2 composite video inputs, 1 VGA input, 1 HDMI input (NTSC/PAL)	1		
MON-BRKT-SWVL	Monoprice Adjustable Tilting/Swiveling Wall Mount Bracket for LCD LED Plasma (Max 30Lbs, 10~24inch)	1		
NEXT-CCU-SM4-TS2-PAK	Vantage Next CCU, Shelf-Mount Unit, for TS2 applications. Supports up to 4 sensors, no separate rack-mount processors required. Includes CCU-SM-TS2-SHIPKIT (external din-rail power supply, 2.4GHz rubber duck antenna, USB optical mouse, 6 ft. HDMI cable, 5 ft. Cat5e patch cable, screwdriver)	1		
SPM-5YR	Iteris SPM hosted data service. Provides cloud-based collection, storage, analysis and presentation of high resolution SPM controller data from connected intersections. 5 intersections minimum. Does not include setup fee.	1		
TS2CABLE	TS2 SDLC cable, 8 ft., DB15 to DB15 connector with connector locks	1		
VECTOR-NEXT	Vantage Vector Sensor Unit for VantageNext Platform; NTSC/PAL 115/230AC,integrated sensor that includes a compact color wide dynamic range zoom camera and radar unit. Pole mount bracket also included.	3		
VLIVE-5YR	VantageLive! hosted data service. * Five year service duration Includes setup and configuration of Vantage Data Engine server and Cloud based storage services. 5 intersections minimum.	1		
				$23,742.30

Sherwood at Rossi -	4 Camera System			
Product Name	**Product Description**	**Qty**	**Unit Price**	**Ext. Price**

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EQUIPMENT QUOTATION

Quote #00010912

July 27, 2022

Sherwood at Rossi - 4 Camera System				
Product Name	**Product Description**	**Qty**	**Unit Price**	**Ext. Price**
MON-10LCD-SL	10 in. Color LCD Monitor, Sunlight Viewable, 2 composite video inputs, 1 VGA input, 1 HDMI input (NTSC/PAL)	1		
MON-BRKT-SWVL	Monoprice Adjustable Tilting/Swiveling Wall Mount Bracket for LCD LED Plasma (Max 30Lbs, 10~24inch)	1		
NEXT-CCU-SM4-TS2-PAK	Vantage Next CCU, Shelf-Mount Unit, for TS2 applications. Supports up to 4 sensors, no separate rack-mount processors required. Includes CCU-SM-TS2-SHIPKIT (external din-rail power supply, 2.4GHz rubber duck antenna, USB optical mouse, 6 ft. HDMI cable, 5 ft. Cat5e patch cable, screwdriver)	1		
SPM-5YR	Iteris SPM hosted data service. Provides cloud-based collection, storage, analysis and presentation of high resolution SPM controller data from connected intersections. 5 intersections minimum. Does not include setup fee.	1		
TS2CABLE	TS2 SDLC cable, 8 ft., DB15 to DB15 connector with connector locks	1		
VECTOR-NEXT	Vantage Vector Sensor Unit for VantageNext Platform; NTSC/PAL 115/230AC,integrated sensor that includes a compact color wide dynamic range zoom camera and radar unit. Pole mount bracket also included.	3		
VLIVE-5YR	VantageLive! hosted data service. * Five year service duration Includes setup and configuration of Vantage Data Engine server and Cloud based storage services. 5 intersections minimum.	1		
				$23,742.30

Sherwood at Rossi - 4 Camera System				
Product Name	**Product Description**	**Qty**	**Unit Price**	**Ext. Price**
NEXT-CAM-PAK	Vantage Next WDR Camera. Includes NEXT-CAM-SHIPKIT (pedestal-mount bracket assembly, 2 shielded RJ45 connectors)	1		
				$1,265.00

spare				
Product Name	**Product Description**	**Qty**	**Unit Price**	**Ext. Price**
NEXT-CAM-PAK	Vantage Next WDR Camera. Includes NEXT-CAM-SHIPKIT (pedestal-mount bracket assembly, 2 shielded RJ45 connectors)	2		
NEXT-CCU-SM4-TS2-PAK	Vantage Next CCU, Shelf-Mount Unit, for TS2 applications. Supports up to 4 sensors, no separate rack-mount processors required. Includes CCU-SM-TS2-SHIPKIT (external din-rail power supply, 2.4GHz rubber duck antenna, USB optical mouse, 6 ft. HDMI cable, 5 ft. Cat5e patch cable, screwdriver)	1		
VECTOR-NEXT	Vantage Vector Sensor Unit for VantageNext Platform; NTSC/PAL 115/230AC,integrated sensor that includes a compact color wide dynamic range zoom camera and radar unit. Pole mount bracket also included.	2		
				$18,491.00

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EQUIPMENT QUOTATION

Quote #00010912

July 27, 2022

Important Notes:

SUBTOTAL	$103,802.20
FREIGHT	
TAX	$9,601.70
TOTAL	$113,403.90

This quotation and any resulting order are subject to Iteris' Roadway Sensor Products Standard Terms and Conditions of Sale attached hereto or available at http://www.iteris.com/RS-Std-TC.pdf, which are incorporated herein by this reference.

Authorized Signature:

File #: ID#22-460, **Version:** 1

2022-2023 Prioritization of Restriping Projects

Approve a Resolution approving the 2022-2023 Prioritization of Restriping Projects.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **SEPTEMBER 6, 2022**

DEPARTMENT: **PUBLIC WORKS DEPARTMENT**

FROM: **DAVID JACOBS, PUBLIC WORKS DIRECTOR**

BY: **ANDREW EASTERLING, TRAFFIC ENGINEER**
JONATHAN HERNANDEZ, JUNIOR ENGINEER

TITLE: **2022-2023 PRIORITIZATION OF RESTRIPING PROJECTS**

RECOMMENDED MOTION:

A motion to approve a resolution approving the 2022-2023 Prioritization of Restriping Projects.

RECOMMENDATION:

Several requests to restripe roads have been received. The number of restriping requests exceed the City's budgeted resources, and there is therefore a need to prioritize restriping requests. City staff recommendations the approval of the 2022-2023 Prioritization of Restriping Projects.

BACKGROUND:

Most thermoplastic pavement markings have an upper limit life expectancy of six (6) to nine (9) years. Historically, the City replaced pavement markings whenever a road was resurfaced, which traditionally occurred at a similar frequency. However, the City has not been able to perform pavement maintenance on all of its streets within this timeframe and some streets now have faded pavement markings. Service requests have been reported to the City which exceed the City's budgeted resources. There is therefore a need to prioritize restriping requests.

The City's crews can perform minor restriping work, but for larger projects the City cannot restripe entire streets using its own forces and must contract the work out. On October 22, 2019 the City awarded an On-Call Services for Traffic Control Devices Contract to Chrisp Company through Resolution No. 21722 (Attachment 1). Unit prices for restriping work were competitively bid and using this contract the estimated cost to restripe a road can vary between roughly $6 to $28 per foot depending on the number of lanes and legends on any given roadway.

As of June 30, 2022, service requests for thirteen (13) road segments have been submitted to the City. Based on the On-Call Services Contract pricing, staff estimates the total costs to restripe all thirteen of these facilities is roughly $627,000. The City's available restriping budget (CIP 9081-66.4000) is $150,000. Staff estimates the City can restripe at least three (3) segments within the existing budget depending on the length and complexity of the individual restriping projects.

Additionally, staff recommends retaining at least $30,000 in the account, so that the City has resources to respond to smaller service requests, such as crosswalks, through the end of the fiscal year.

The City has no established prioritization policy for restriping projects and staff's recommendation for 2022-2023 Prioritization of Restriping Projects is based on staffs' opinion of needs and budgetary constraints. Additionally, the report includes pictures of the current conditions of these roads and their pavement markings (Attachment 1) for the Council to consider. Table 1 below lists staff's recommendation for 2022-2023 Prioritization of Restriping Projects. Table 2 also provides some relevant traffic data for the Commission to consider. Once the first three (3) projects are completed and final costs are known, and if remaining resources are available excluding the reserve balance, staff will work on the next highest scoring project until the budget is depleted. If the next highest priority project cannot be completed with remaining funds, but lower priority projects can be completed with the remaining funds then staff recommends treating the lower priority project to maximize the use of available funds.

Table 1: 2022-2023 Prioritization of Restriping Projects

Recommended Priority Ranking	Segment	Limits	Length (LF)	Total Estimate	Notes
1	Abbott Street	Harkins Road to Easterly City Limits	6731	$60,439	Four service requests on file
2	Hansen Street	Airport Boulevard to Harkins Road	1050	$45,582	
3	Natividad Road at E Laurel Drive	Northbound Approach	400	$9,176	Request is for northbound approach only
4	Boronda Road	N Main Street to San Juan Grade Road	1680	$34,071	Three service requests on file
5	W Rossi Street	N Davis Road to N Main Street	5900	$88,500	Three service requests on file
6	Harkins Road	Hansen Street to Southerly City Limits	5260	$78,900	
7	N Main Street	Boronda Road to Russell Road	4690	$140,700	
8	El Dorado Drive	Harden Parkway to E Alvin Drive	2050	$46,002	
9	Independence Boulevard	E Boronda Road to Nantucket Boulevard	1875	$56,250	
10	Terven Avenue	Sanborn Place to Airport Boulevard	2064	$23,282	
11	W Romie Lane	S Main Street to Padre Drive	1071	$16,065	
12	Rider Avenue	Mimbrera Way to Del Monte Avenue	1550	$23,250	Two service requests on file; Centerline not warranted per MUTCD
13	Towt Street	E Alisal Street to E Market Street	1609	$4,152	Centerline not warranted per MUTCD
Subtotal (1-3)				$115,197	
Estimated Remaining Balances (Reserves)				$34,803	
Subtotal (4-13)				$511,172	
Total Requests				**$626,369**	

Staff recommends retaining roughly $30,000 in the CIP account to be able to respond to smaller service requests, such as crosswalks, through the end of the fiscal year. Once the allotted budget has been depleted, the backlogged restriping service requests will be held until resources become available or until the next re-prioritization recommendation.

Table 2: Relevant Traffic Data

Segment	Limits	ADT	Fatal + Injury Collisions (2020-2021)	Collision Rate (Fatal + Injury per million vehicle miles)	Pavement Condition Index (2020)
Abbott Street	Harkins Rd to Easterly City Limits	13,040	3	0.49	48
Hansen Street	Airport Boulevard to Harkins Road	17,697	1	0.78	38
Natividad Road at Laurel Drive	Northbound Approach	13,246	12	21.84	76-80
Harkins Road	Hansen Street to Southerly City Limits	14,923	2	0.37	40-59
W Rossi Street	N Davis Road to N Main Street	17,009	10	1.44	40-50
N Main Street	Boronda Road to Russell Road	20,790*	18	2.67	74
Boronda Road	N Main Street to San Juan Grade Road	19,370*	5	2.22	46
El Dorado Drive	Harden Parkway to E Alvin Drive	5,620*	3	3.77	31
Independence Boulevard	E Boronda Road to Nantucket Boulevard	7,464	2	2.07	35-37
Terven Avenue	Sanborn Place to Airport Boulevard	7,589	0	0.00	53
W Romie Lane	S Main Street to Padre Drive	N/A	2	N/A	35
Rider Avenue	Mimbrera Way to Del Monte Avenue	3,871	0	0.00	25
Towt Street	E Alisal Street to E Market Street	4,040*	1	2.23	80

*ADT approximated from peak hour count, and K=0.10

TRAFFIC AND TRANSPORATION COMMISION:

The 2022-2023 Prioritization of Restriping Projects was presented to the Traffic and Transportation Commission at its August 11, 2022 meeting. The Commission voted 6-0 for to recommend the City restripe the top three (3) locations and to recommend to City Council to approve a resolution approving the 2022-2023 Prioritization of Restriping Projects.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378). In addition, CEQA Guidelines Section 15061 includes the general rule that CEQA applies only to activities which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. Because the proposed action and this matter have no potential to cause any effect on the environment, or because it falls within a category of activities excluded as projects pursuant to CEQA Guidelines section 15378, this matter is not a project. Because the matter does not cause a direct or foreseeable indirect physical change on or in the environment, this matter is not a project. Any subsequent discretionary projects resulting from this action will be assessed for CEQA applicability.

STRATEGIC PLAN INITIATIVE:

The 2022-2023 Prioritization of Restriping Projects supports the Council's goals of Infrastructure and Environmental Sustainability and Public Safety.

DEPARTMENTAL COORDINATION:

The City's Public Works Department is responsible for responding to restriping service requests.

FISCAL AND SUSTAINABILITY IMPACT:

There is no impact to the General Fund. The City's available restriping budget (CIP 9081-66.4000) is just less than $150,000, which is comprised of SB1 Maintenance and Rehab funds.

The 2022-2023 Prioritization of Restriping Projects establishes the priority ranking of projects only. Once the first projects are completed and final costs are known, and if remaining resources are available, staff will work on the next highest scoring project until the budget is depleted. If the next highest priority project cannot be completed with remaining funds, but lower priority projects can be completed within the remaining budget, staff recommends treating the lower priority project in order to maximize the use of available funds.

ATTACHMENTS:
Resolution
Attachment 1: Resolution No. 21722
Attachment 2: Current Conditions Photos
Attachment 3: 2020 Pavement Management System Update

RESOLUTION NO. _____ (N.C.S.)

A RESOLUTION OF THE SALINAS CITY COUNCIL APPROVING THE 2022-2023 PRIORITIZATION OF RESTRIPING PROJECTS

WHEREAS, the number of requests to restripe roads exceed the City's budged resources, and therefore there is a need to prioritize restriping projects; and

WHEREAS, Staff recommendation for 2022-2023 Prioritization of Restriping Projects is based on staffs' opinion of needs and budgetary constraints; and

WHEREAS, on August 11, 2022, the Traffic and Transportation Commission voted 6-0 for to recommend the City restripe the top three locations and to recommend to City Council to approve a resolution approving the 2022-2023 Prioritization of Restriping Projects.

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council hereby approves 2022-2023 Prioritization of Restriping Projects.

BE IT FURTHER RESOLVED that City staff is hereby authorized and directed to proceed with implementation to fully effectuate the intent of this Resolution.

PASSED AND APPROVED this 6th day of September 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____
Kimbley Craig, Mayor

ATTEST:

_____
Patricia M. Barajas, City Clerk

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RESOLUTION NO. 21722 (N.C.S.)

A RESOLUTION AWARDING THE ON-CALL SERVICES CONTRACT FOR TRAFFIC CONTROL DEVICES TO CHRISP COMPANY; AND AUTHORIZE THE PUBLIC WORKS DIRECTOR TO EXECUTE INDIVIDUAL JOB ORDER CONTRACTS; AND AUTHORIZE THE PUBLIC WORKS DIRECTOR TO EXECUTE AMENDMENTS TO CONTRACT

WHEREAS, on July 17, 2019, the Public Works Director, approved On-Call Services specifications for Traffic Control Devices and authorize issuance of invitation to public bid.; and

WHEREAS, representatives of the City Clerk of Salinas on August 30, 2019, at a public meeting held in the Rotunda at Salinas City Hall, Salinas, California, publicly opened, examined and declared the bids or proposals delivered to or filed with said City Clerk for the On-Call Services for Traffic Control Devices, Project No. 9081 and 9163, in accordance with the plans and specifications for such work filed in the office of said City Clerk on July 17, 2019, and now on file in said office; and

WHEREAS, City staff thereupon reported the results of the bidding to the City Council at its regular meeting on October 08, 2019, and the Council in open session at said meeting examined the report of staff; and

WHEREAS, City staff will use the current funding for CIP 9081 to implement the project listed on Exhibit "A". The remaining funds will be used to respond to maintenance requests at the direction of the Public Works Director.

NOW, THEREFORE, BE IT RESOLVED in reference to the On-Call Services for Traffic Control Devices, Project No. 9081 and 9163, that all of said bids or proposals are rejected except the bid from Chrisp Company, (hereinafter referred to as "Successful Bidder"), being the lowest and best bid, which is hereby accepted. The subject contract is hereby awarded to said Successful Bidder for the unit prices particularly set forth and contained in the Proposal for the On-Call Services for Traffic Control Devices, Project No. 9081 and 9163, of said successful bidders previously filed in the office of the City Clerk. Said sum shall be paid by the City of Salinas to said Successful Bidder in cash, lawful money of the United States of America, payable at the time and manner specified in the plans and specification and contract documents for the project filed in the office of the City Clerk, entitled "On-Call Services for Traffic Control Devices, Project No. 9081 and 9163."

BE IT FURTHER RESOLVED that said plans and specification are hereby referred to for all of the details and particulars thereof, and said plans and specification are by reference incorporated in and hereby made a part of this resolution.

BE IT FURTHER RESOLVED that the Public Works Director is authorized to execute individual Job Order contracts. Additionally, the Public Works Director is authorized to execute Amendments to the Contract.

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BE IT FURTHER RESOLVED that the Mayor of Salinas is hereby authorized and directed on behalf of the City of Salinas to execute a contract consistent with the Proposal of said Successful Bidder for said work.

PASSED AND APPROVED this 22nd day of October 2019 by the following vote:

AYES: Councilmembers: Barrera, Cromeenes, Davis, De La Rosa and Mayor Gunter

NOES: None

ABSENT: Councilmember McShane and Villegas

ABSTAIN: None

APPROVED:

DocuSigned by:

Joe Gunter

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Joe Gunter, Mayor

ATTEST:

DocuSigned by:

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Patricia M. Barajas, City Clerk

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On-Call Services (Job Order Contracts) for Traffic Control Devices, Project No. 9081 And 9163

Bid awarded on October 22, 2019 by Salinas City Council by Resolution No. 21722 (NCS) to Chrisp Company. For On-Call Srvices for Traffic Cntrol Devices for items 1-46.
All other bids were rejected and bid bonds returned.
Dated this 22nd day of October 2019.

DocuSigned by:
5BE31EC636A6432...
City Clerk

Bid Opening: 08/30/2019

Project Manager: Andrew Easterling, P.E.
Project Coordinator: Victor Gutierrez

Chrisp Company
PO Box 1368
Fremont, CA

Base Bid

Item #	*Item Description*	*Unit Price*	*Unit of Measure*
1	Traffic Striping Detail 2 (0-499ft)	$ 2.25	LF
2	Traffic Striping Detail 2 (500+ft)	$ 2.15	LF
3	Traffic Striping Detail 9 (0-499ft)	$ 2.25	LF
4	Traffic Striping Detail 9 (500+ft)	$ 2.15	LF
5	Traffic Striping Detail 12 (0-499ft)	$ 2.25	LF
6	Traffic Striping Detail 12 (500+ft)	$ 2.15	LF
7	Traffic Striping Detail 22 (0-499ft)	$ 5.20	LF
8	Traffic Striping Detail 22 (500+ft)	$ 4.90	LF
9	Traffic Striping Detail 24 (0-499ft)	$ 1.90	LF
10	Traffic Striping Detail 24 (500+ft)	$ 1.85	LF
11	Traffic Striping Detail 27B (0-499ft)	$ 1.90	LF
12	Traffic Striping Detail 27B (500+ft)	$ 1.85	LF
13	Traffic Striping Detail 32 (0-499ft)	$ 4.75	LF
14	Traffic Striping Detail 32 (500+ft)	$ 4.50	LF
15	Traffic Striping Detail 37B (0-499ft)	$ 4.90	LF
16	Traffic Striping Detail 37B (500+ft)	$ 4.70	LF
17	Traffic Striping Detail 38	$ 4.50	LF
18	Traffic Striping Detail 38A	$ 3.75	LF
19	Traffic Striping Detail 39 (0-499ft)	$ 2.85	LF
20	Traffic Striping Detail 39 (500+ft)	$ 2.80	LF
21	Traffic Striping Detail 39A (0-499ft)	$ 2.80	LF
22	Traffic Striping Detail 39A (500+ft)	$ 2.75	LF
23	Traffic Striping Detail 40	$ 2.00	LF
24	Traffic Striping Detail 41	$ 2.00	LF
25	Pavement Marking Area as shown in Caltrans Standard Plans A24A-A24F	$ 18.00	SF
26	Raised Pavement Marker (Reflective)	$ 8.00	EA
27	Raised Pavement Marker (Non-Reflective)	$ 6.50	EA
28	Curb Marking (0-499ft)	$ 8.00	LF
29	Curb Marking (500+ft)	$ 5.00	LF
30	Remove Pavement Markings	$ 18.00	SF
Traffic Striping, Curb And Pavement Markings Subtotal – Base Bid (For Comparison Only)		**$ 136.60**	
31	Furnish Single Sheet Aluminum Sign (0.080”-Unframed)	$ 195.00	EA
32	Install Roadside Sign – One Post	$ 650.00	EA
33	Install Sign (Strap and Saddle Bracket Method)	$ 425.00	EA
34	Install Roadside Sign Panel On Existing Post	$ 365.00	EA
35	Install In-Street Sign (R1-6 or equivalent)	$ 645.00	EA
36	Object Marker (Type K)	$ 245.00	EA
37	Object Marker (Type N)	$ 245.00	EA
38	Install Rectangular Rapid Flashing Beacon (Complete)	$ 10,400.00	EA
39	Install Radar Feedback Sign (Complete)	$ 10,640.00	EA
40	Remove Roadside Sign (Complete)	$ 225.00	EA
41	Remove Roadside Sign (Strap and Saddle Bracket Method)	$ 85.00	EA
42	Remove Sign Panel	$ 85.00	EA
43	Remove Sign Post	$ 125.00	EA
Signs and Markers Subtotal – Base Bid (For Comparison Only)		**$ 24,330.00**	
44	Sealing Cracks in Asphalt Paving	$ 25.00	LF
Sealing Cracks in Asphalt Paving – Base Bid (For Comparison Only)		**$ 25.00**	

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On-Call Services (Job Order Contracts) for Traffic Control Devices, Project No. 9081 And 9163

Bid Opening: 08/30/2019			
Project Manager: Andrew Easterling, P.E. **Project Coordinator:** Victor Gutierrez **Base Bid**		**Chrisp Company** **PO Box 1368** **Fremont, CA**	
Item #	***Item Description***	***Unit Price***	***Unit of Measure***
45	Install Speed Cushion (Complete)	$ 22,750.00	EA
46	Remove Speed Cushion (Complete)	$ 6,500.00	EA
Speed Cushions – Base Bid (For Comparison Only)		**$ 29,250.00**	
ADDENDUM NO. 1 SIGNED & DATED		YES	
PROPOSAL FORM COMPLETED, SIGNED & DATED		YES	
BIDDER'S BOND		YES	
BIDDER'S STATEMENT OF FINANCIAL RESPONSIBILITY		YES	
INSURANCE CERTIFICATION		YES	
BIDDER'S STATEMENT OF SUBCONTRACTORS - PT. 1		YES	
NON-COLLUSION DECLARATION OF CONTRACTOR AFFIDAVIT		YES	

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4	Traffic Striping Detail 9 (500+ft)	$ 2.15	LF
5	Traffic Striping Detail 12 (0-499ft)	$ 2.25	LF
6	Traffic Striping Detail 12 (500+ft)	$ 2.15	LF
7	Traffic Striping Detail 22 (0-499ft)	$ 5.20	LF
8	Traffic Striping Detail 22 (500+ft)	$ 4.90	LF
9	Traffic Striping Detail 24 (0-499ft)	$ 1.90	LF
10	Traffic Striping Detail 24 (500+ft)	$ 1.85	LF
11	Traffic Striping Detail 27B (0-499ft)	$ 1.90	LF
12	Traffic Striping Detail 27B (500+ft)	$ 1.85	LF
13	Traffic Striping Detail 32 (0-499ft)	$ 4.75	LF
14	Traffic Striping Detail 32 (500+ft)	$ 4.50	LF
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16	Traffic Striping Detail 37B (500+ft)	$ 4.70	LF
17	Traffic Striping Detail 38	$ 4.50	LF
18	Traffic Striping Detail 38A	$ 3.75	LF
19	Traffic Striping Detail 39 (0-499ft)	$ 2.85	LF
20	Traffic Striping Detail 39 (500+ft)	$ 2.80	LF
21	Traffic Striping Detail 39A (0-499ft)	$ 2.80	LF
22	Traffic Striping Detail 39A (500+ft)	$ 2.75	LF
23	Traffic Striping Detail 40	$ 2.00	LF
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27	Raised Pavement Marker (Non-Reflective)	$ 6.50	EA
28	Curb Marking (0-499ft)	$ 8.00	LF
29	Curb Marking (500+ft)	$ 5.00	LF
30	Remove Pavement Markings	$ 18.00	SF
Traffic Striping, Curb And Pavement Markings		**$ 136.60**	
31	Furnish Single Sheet Aluminum Sign (0.080”-Unframed)	$ 195.00	EA
32	Install Roadside Sign – One Post	$ 650.00	EA
33	Install Sign (Strap and Saddle Bracket Method)	$ 425.00	EA
34	Install Roadside Sign Panel On Existing Post	$ 365.00	EA
35	Install In-Street Sign (R1-6 or equivalent)	$ 645.00	EA
36	Object Marker (Type K)	$ 245.00	EA
37	Object Marker (Type N)	$ 245.00	EA
38	Install Rectangular Rapid Flashing Beacon (Complete)	$ 10,400.00	EA

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39	Install Radar Feedback Sign (Complete)	$ 10,640.00	EA
40	Remove Roadside Sign (Complete)	$ 225.00	EA
41	Remove Roadside Sign (Strap and Saddle Bracket Method)	$ 85.00	EA
42	Remove Sign Panel	$ 85.00	EA
43	Remove Sign Post	$ 125.00	EA
Signs and Markers Subtotal – Base Bid (For		**$ 24,330.00**	
44	Sealing Cracks in Asphalt Paving	$ 25.00	LF
Sealing Cracks in Asphalt Paving – Base Bid (For		**$ 25.00**	
45	Install Speed Cushion (Complete)	$ 22,750.00	EA
46	Remove Speed Cushion (Complete)	$ 6,500.00	EA
Speed Cushions – Base Bid (For Comparison Only)		**$ 29,250.00**	
ADDENDUM NO. 1 SIGNED & DATED		YES	
PROPOSAL FORM COMPLETED, SIGNED & DATED		YES	
BIDDER'S BOND		YES	
BIDDER'S STATEMENT OF FINANCIAL RESPONSIBILITY		YES	
INSURANCE CERTIFICATION		YES	
BIDDER'S STATEMENT OF SUBCONTRACTORS - PT. 1		YES	
NON-COLLUSION DECLARATION OF CONTRACTOR AFFIDA		YES	

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Exhibit A: Re-striping Priority List

Street Segment	Estimated Item Total
Boronda Rd Between (Natividad Rd - Independence Blvd)	$30,727
Crosswalks at Santa Teresa Way (West of Rosarita Dr)	$1,476
Crosswalks at the intersection of Buckhorn Dr and Falcon Dr	$5,256
Crosswalks at the intersection of Arcadia Way and Arcadia Ct	$2,250
Crosswalks at the intersection of Arcadia Way and El Dorado Dr	$1,620
Crosswalks at the intersection of Arcadia Way and Wimbledom Way	$2,790
Crosswalks at the intersection of Bardin Rd and E Alisal St	$4,032
Crosswalks at the intersection of Beacon Hill Dr and Great Island St	$1,980
Crosswalks at the intersection of Block Ave and Shires Way	$1,836
Crosswalks at the intersection of Burlington Dr and New Haven Dr	$3,690
Crosswalks at the intersection of Burlington Dr and New Salem Dr	$2,160
Crosswalks at the intersection of California St and Chestnut St	$6,264
Crosswalks at the intersection of Califronia St and Willow St	$5,832
Crosswalks at the intersection of Cambrian Dr and Los Coches Ave	$1,710
Crosswalks at the intersection of Cambrian Dr and Sausal Dr	$3,690
Crosswalks at the intersection of Capitol St and Central Ave	$4,770
Crosswalks at the intersection of Clay St and Homestead Ave	$3,420
Crosswalks at the intersection of Compton Way and Glendora Way	$1,800
Crosswalks at the intersection of E Bolivar St and Santa Rita St	$1,674
Crosswalks at the intersection of E Lamar St and Santa Rita St	$6,318
Crosswalks at the intersection of E Laurel Dr and 2nd Ave	$1,476
Crosswalks at the intersection of E Laurel Dr and Diablo Dr/Santa Teresa Way	$4,212
Crosswalks at the intersection of E Laurel Dr and Midway Ave	$1,764
Crosswalks at the intersection of Emerald Dr and Arcadia Way	$1,800
Crosswalks at the intersection of Emerald Dr and Emaral Way	$1,800
Crosswalks at the intersection of Eucalyptus Dr and E Alisal St	$1,818
Crosswalks at the intersection of Eucalyptus Dr and E Market St	$12,384
Crosswalks at the intersection of Harris Rd and Abbott St	$5,904
Crosswalks at the intersection of Independence Blvd and Danbury St	$12,222
Crosswalks at the intersection of Independence Blvd and Nantucket Blvd	$10,980
Crosswalks at the intersection of Iverson St and Geil St	$7,524
Crosswalks at the intersection of Iverson St and W Acacia St	$7,560
Crosswalks at the intersection of Kittery St and Crestview St	$5,022
Crosswalks at the intersection of Kittery St and Newington St	$1,890
Crosswalks at the intersection of Kittery St and Snug Harbor St	$1,980
Crosswalks at the intersection of Larkin St and Geary Circle	$1,584
Crosswalks at the intersection of Maple St and California St	$5,418
Crosswalks at the intersection of Maple St and Front St	$6,048
Crosswalks at the intersection of Maple St and Pajaro St	$1,926
Crosswalks at the intersection of Mckinoon St and Westminster Dr	$5,400
Crosswalks at the intersection of Modoc Ave and Glacier Ave	$2,970

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Crosswalks at the intersection of New Salem Dr and New Britain Cir	$1,980
Crosswalks at the intersection of Pajaro St and Pine St	$2,016
Crosswalks at the intersection of Paseo Grande and Towt St	$6,840
Crosswalks at the intersection of Provincetown Dr and Burlington Dr	$4,140
Crosswalks at the intersection of Rainer Dr and Modoc Ave	$2,574
Crosswalks at the intersection of Rider Ave and Amarillo Way	$1,692
Crosswalks at the intersection of Rider Ave and Antigua Ave	$1,890
Crosswalks at the intersection of Rider Ave and Del Monte Ave	$3,510
Crosswalks at the intersection of Rider Ave and Las Casitas Dr	$1,620
Crosswalks at the intersection of Rider Ave and Mazatlan Way	$5,040
Crosswalks at the intersection of Rider Ave and Minbrera Way	$4,770
Crosswalks at the intersection of Riker St and Central Ave	$1,458
Crosswalks at the intersection of Rochex Ave and Crescent Way	$1,476
Crosswalks at the intersection of Rochex Ave and N 4th St	$3,978
Crosswalks at the intersection of Rochex Ave and Tulane St	$1,566
Crosswalks at the intersection of Rochex Ave and Tyler St	$4,644
Crosswalks at the intersection of S Wood St and James St	$1,782
Crosswalks at the intersection of S Wood St and San Benito St	$1,656
Crosswalks at the intersection of S Wood St and Santa Maria St	$3,006
Crosswalks at the intersection of San Miguel Ave and Alameda Ave	$2,790
Crosswalks at the intersection of San Vicente Ave and Palma Dr	$3,240
Crosswalks at the intersection of Sanborn Rd and E Laurel Ave	$28,116
Crosswalks at the intersection of Sanborn Rd and E Market St	$30,096
Crosswalks at the intersection of Sanborn Rd and Elkington Ave	$3,924
Crosswalks at the intersection of Sanborn Rd and Paseo Grande	$1,890
Crosswalks at the intersection of Santa Rita St and Van Buren Ave	$3,204
Crosswalks at the intersection of Towt St and Del Monte Ave	$5,850
Crosswalks at the intersection of Towt St and E Alisal St	$2,970
Crosswalks at the intersection of Towt St and E Market st	$14,544
Crosswalks at the intersection of Towt St and Kentucky Ave	$2,898
Crosswalks at the intersection of Towt St and First Ave?	$4,680
Crosswalks at the intersection of University Ave and Ambrose Dr	$1,710
Crosswalks at the intersection of University Ave and Loyola Dr	$1,710
Crosswalks at the intersection of W Acacia St and Bruce Ave	$2,214
Crosswalks at the intersection of W Acacia St and Crespi Way	$2,034
Crosswalks at the intersection of W Acacia St and Marion Ave	$6,408
Crosswalks at the intersection of W Acacia St and Riker St	$4,104
Crosswalks at the intersection of W Acacia St and San Vicente Ave	$4,482
W Laurel Dr (Davis Rd to US 101 On-Ramp)	$7,500
Williams Rd (Bardin Rd to Del Monte Ave)	$43,678
Sub-Total	**$ 428,657**
Contingencies (18%)	**$ 77,158**
Total	**$ 505,815**

Attachment 1: Current Conditions Photos

Abbott Street between Harkins Road and Southerly City Limits

Abbott St at Harkins Rd

Abbott St between Harkins Rd and Harris Rd

Abbott St between Harkins Rd and Harris Rd

Abbott St between Harkins Rd and Harris Rd

Abbott St between Harkins Rd and Harris Rd

Abbott St between Harkins Rd and Harris Rd

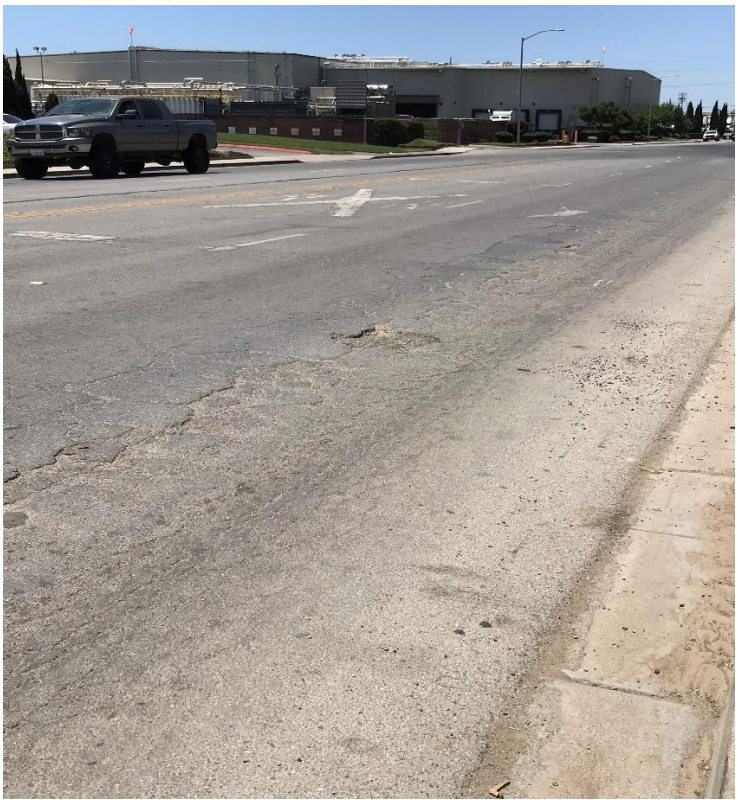
Hansen St between Airport Boulevard and Harkins Road

Hansen St at Airport Blvd

Hansen St between Airport Blvd and Harkins Rd (EB)

Hansen St between Harkins Rd and Airport Blvd (EB)

Hansen St at Harkins Rd



Hansen St between Harkins Rd and Airport Blvd (WB)

Hansen St between Harkins Rd and Airport Blvd (WB)

Hansen St at Airport Blvd

Natividad Road at East Laurel Drive Northbound Approach

Natividad Rd at E Laurel Dr

Natividad Rd at E Laurel Dr

Boronda Road between North Main Street and San Juan Grade Road

Boronda Rd at N Main St

Boronda Rd between N Main St and San Juan Grade Rd

Boronda Rd East of N Main St

Boronda Rd West of San Juan Grade Rd

West Rossi Street between Davis Road and North Main Street

West Rossi St at N Main St

W Rossi St between N Main St and Martella St

W Rossi St between Martella St and Sansome St

W Rossi St between Sansome St and Rico St

W Rossi St between Rico St and Powell St

W Rossi St between Powell St and Stockton St

W Rossi St between Stockton St and Victor St

W Rossi St between Victor St and Quail Run Cir

W Rossi St between Quail Run Cir and Rossi Cir

W Rossi St between Rossi Cir and Davis Rd

Harkins Road between Hansen Street and Southerly City Limits

Harkins Rd at Hansen St

Harkins Rd between Hansen St and Abbott St

Harkins Rd between Hansen St and Abbott St

Harkins Rd at Abbott St (Northbound)

Harkins Rd at Abbott St (Southbound)

Harkins Rd between Abbott St and Burton St

Harkins Rd at Growers St

Harkins Rd between Burton St and Growers St

Harkins Rd between Growers St and Dayton St

Harkins Rd at Dayton St

Harkins Rd at Nutting St

Harkins Rd between Nutting St and Southerly City Limits

North Main Street between Boronda Road and Russell Road

N Main St at Boronda Rd

N Main St between Boronda Rd and Castro St

N Main St between Castro St and E Lamar St

N Main St between E Lamar St and E Bolivar St

N Main St at Bolivar St

N Main St at Massa St

N Main St between Massa St and Russell Rd

N Main at Russell Rd

El Dorado Drive between Harden Parkway and East Alvin Drive

El Dorado Dr at Harden Parkway

El Dorado Dr between Harden Pkwy and Calaveras Dr

El Dorado Dr at Calaveras Dr

El Dorado Dr between Napa Wy and Mendocino Dr

El Dorado Dr between Napa Wy and Mendocino Dr

Independence Boulevard between East Boronda Road and Nantucket Boulevard

Independence Blvd at E Boronda Rd

Independence Blvd between E Boronda Rd and Danbury St (SB)

Independence Blvd between E Boronda Rd and Danbury St (SB)

Independence Blvd between E Boronda Rd and Danbury St (NB)

Independence Blvd between Nantucket Blvd and Danbury St (NB)

Independence Blvd between Danbury St and Nantucket Blvd (SB)

Rider Avenue between Mimbrera Way and Del Monte Avenue

Rider Ave at Del Monte Ave

Rider Ave between Del Monte Ave and Las Casitas Dr

Rider Ave between Las Casitas Dr and Bermuda Way

Rider Ave between Amarillo Way and Mimbrera Way

Terven Avenue between Sanborn Place and Airport Boulevard

Terven Ave between Airport Blvd and Vertin Ave (WB)

Terven Ave between Vertin Ave and Sanborn Pl (WB)

Terven Ave between Vertin Ave and Sanborn Pl (EB)

Terven Ave between Vertin Ave and Sanborn Pl (EB)

West Romie Lane between South Main Street and Padre Drive

W Romie Ln at S Main St

W Romie Ln

W Romie Ln

W Romie Lane at Mission Park

W Romie Ln at Padre Dr

Towt Street between East Alisal Street and East Market Street

Towt St at E Market St

Towt St at 2nd Ave

Towt St between 2nd Ave and 1st Ave

Towt St at 1st Ave

Towt St at E Alisal St

CITY OF SALINAS

2020 Pavement Management System Update

Final Report

March 4th, 2021

Pavement Engineering Inc.

You can ride on our reputation

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Section I

Executive Summary

EXECUTIVE SUMMARY

The City of Salinas currently maintains approximately 292 centerline miles of roads, or 61,553,843 square feet of pavement. The 292 miles of roads have an estimated replacement value of approximately $1.1 Billion, and a back log of deferred maintenance of $169 Million, as calculated by StreetSaver®.

Pavement Engineering Inc. (PEI) updated all the City's Arterial, Collector, and Residential Streets in the City's Pavement Management System, using the Metropolitan Transportation Commission's (MTC) StreetSaver® program. The purpose of a Pavement Management System is to track inventory, store work history and furnish budget estimates to optimize funding for improving the city's pavement system.

INTRODUCTION

A Pavement Management System has several distinctive uses:

- As a budgeting tool, a Pavement Management System uses treatment costs that are based on recently bid projects, by the participating agency, so that budgets reflect historical costs for the area.
- As an inventory tool, a Pavement Management System provides a quick and easy reference for pavement areas and use.
- As a pavement condition record, a Pavement Management System provides age, load-related, non-load related and climate-related pavement condition and deterioration information. The Pavement Management System uses pavement deterioration curves, based on nationwide research, which allow the program to predict a pavement's future condition.

A Pavement Management System is not capable of providing detailed engineering designs for a street. The Pavement Management System instead helps the user identify candidate streets for potential repair and maintenance. Project level pavement analysis and engineering is an essential feature of future pavement maintenance and rehabilitation projects. Additional investigation, or project level analysis, can optimize the City's pavement management dollars. Project level engineering examines the pavements in significantly more detail than the visual evaluation required for the Pavement Management System Update and optimizes designs for all of the peculiar constraints of a set of project streets.

WORK PERFORMED

Pavement Distress Survey and Database Update

For this update, PEI performed inspections on all 292 centerline miles of city-maintained roadways. 54.3 centerline miles of Arterial streets, 62.2 centerline miles of Collector streets, and 174.7 centerline miles of Residential streets. Additionally, PEI reviewed 1.15 centerline miles of gravel roads, these 9 gravel segments are currently part of the City's maintained road network, but pavement has not been installed. As part of our pavement management system review, the segmentation of each street was examined. This resulted in some segments being split, or combined, as well as the reassignment of segment data to be in one of the six (6) City Council Districts. The Functional Classification of each segment was also review and compared to The California Road System (CRS) data that Caltrans maintains.

PEI measured the following distress types as part of our review: Alligator cracking (fatigue), Block cracking, Distortions, Longitudinal & Transverse cracking, Patching & Utility cuts, Rutting/ Depressions, Raveling, and Weathering. All the collected data was entered into the City's StreetSaver® database. Field inspections were completed in November 2020.

As part of our field review, all the streets were measured to confirm lengths and widths. Lengths were measured using a vehicle-mounted electronic measuring device and widths were measured using a hand-held measuring wheel. Measurement discrepancies were tabulated and reviewed with the City to determine if corrections were needed.

PEI performed a quality control (QC) check on our work. PEI's QC check consists of performing a field review of any street segment where the PCI showed a decrease of 3 or more points per year, or an increase of 1 PCI without a documented M&R treatment, when compared to the last inspection for the same road segment in the StreetSaver® database. Each segment in the QC process was visually reviewed to determine if the StreetSaver® calculated PCI was representative of the observed overall pavement condition for that road segment. Variations found were re-inspected by a Senior Engineering Technician, or the Project Manager, and the segments' PCI was recalculated.

FINDINGS

The updated Pavement Management System showed that the City's overall average PCI is **55**.

The breakdown by functional classification is as follows:

Functional Classification	Centerline Miles	Lane Miles	Area (sq. ft.)	Percent of System	Average PCI
Arterial	**54.26**	**183.71**	**16,628,315**	**27.0%**	**60**
Collector	**62.16**	**138.24**	**13,397,482**	**21.8%**	**51**
Residential	**174.69**	**349.16**	**31,528,046**	**51.2%**	**54**
Totals	**291.1**	**671.1**	**61,553,843**	**100.00%**	**55**

Refer to Map #2 in Section IV for a City Map by Functional Classification

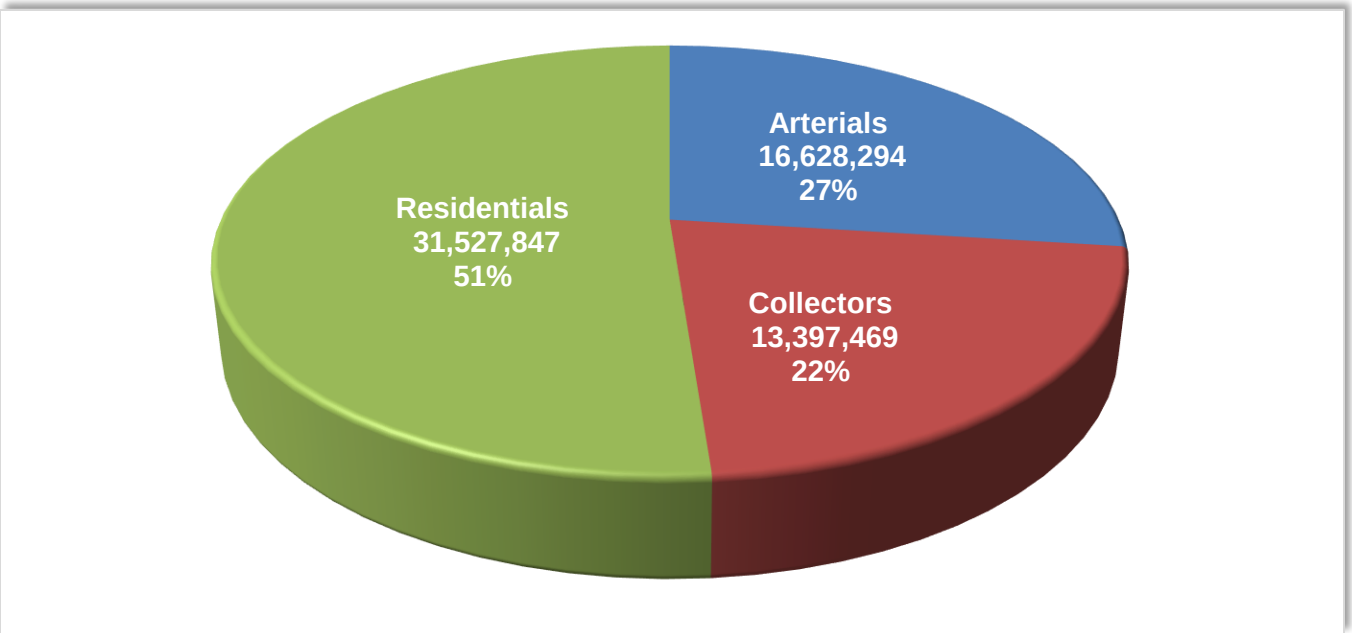
The breakdown by Condition Category and corresponding PCI range is shown below:

Condition Category Breakdown			
Condition	**PCI Range**	**Square Feet**	**% Of Total**
Excellent	91-100	860,481	1.6%
Good	71-90	15,565,738	25.9%
Fair	51-70	17,989,529	29.1%
Poor	31-50	20,830,900	33.8%
Failed	0-30	6,306,962	10.3%

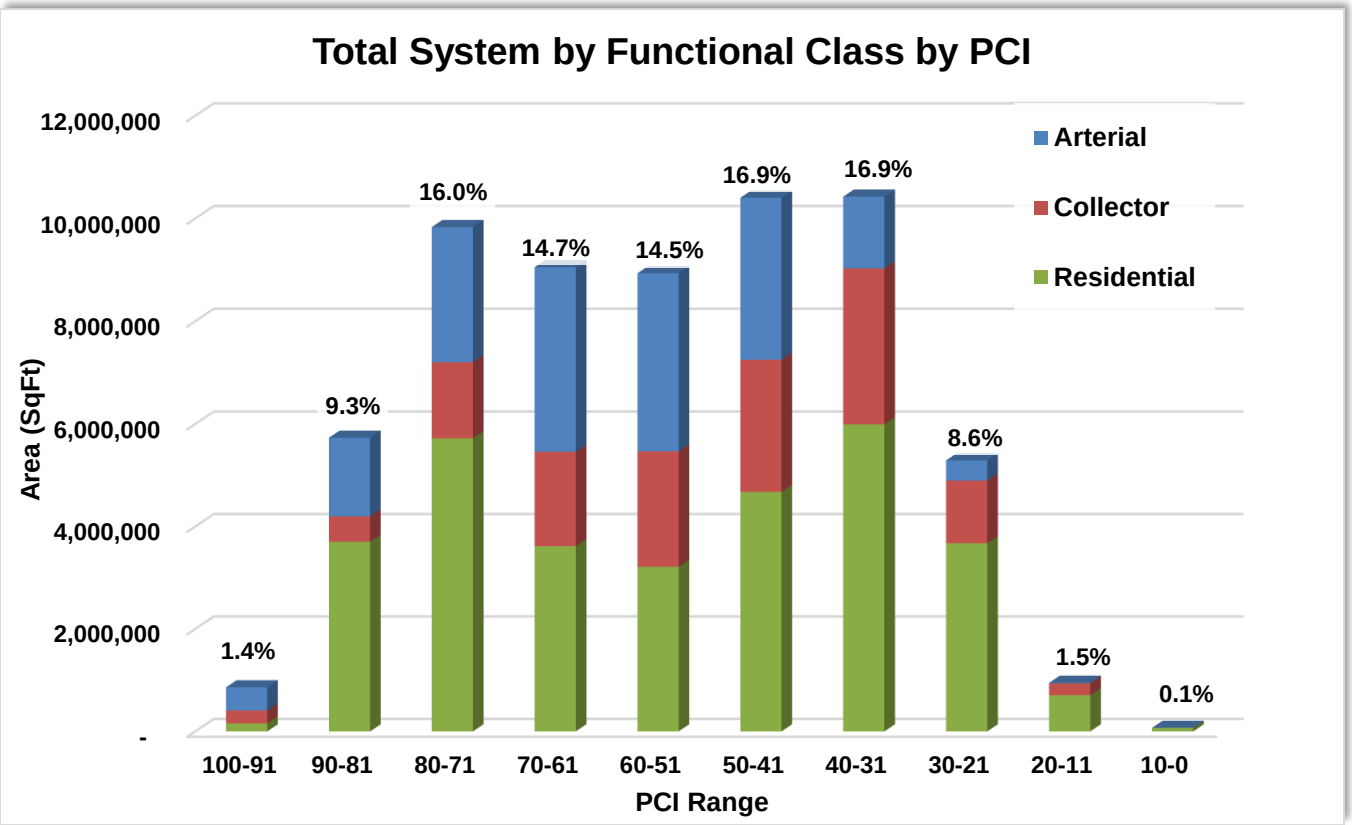
Refer to Map #1 in Section IV for a City Map by PCI Condition Category

The analysis shows that **54.5%** of the City's pavement are in **Good** to **Fair** condition. Details of each street segment are provided in ***Section IV: Reference Reports***.

The pie graph below shows the percentage of each functional classification, by area.



The bar graph below shows the City's street system broken down into 10-point PCI ranges.



BUDGET ANALYSIS

StreetSaver® uses a decision tree to model the decision-making process that agencies follow to select a maintenance or rehabilitation strategy. The decision tree contains "branches" for each functional classification, surface type and condition category. Jurisdictions can outline their maintenance and rehabilitation strategy by choosing a treatment for each branch.

StreetSaver® assigns a treatment action and estimated cost to each street segment based on the pavement's current PCI. The PCI range of 0 to 100 is broken down into five condition categories for budget calculation purposes. StreetSaver® default PCI breakpoints were used during the update of The City's Pavement Management System.

The breakpoints are as follows:

PCI BREAKPOINTS

	Arterial		Collector		Residential	
100	I		I		I	
90	LIGHT MAINTENANCE		LIGHT MAINTENANCE		LIGHT MAINTENANCE	
70	II (Non-Load)	III (Load)	II (Non-Load)	III (Load)	II (Non-Load)	III (Load)
	HEAVY MAINTENANCE	LIGHT REHABILITATION.	HEAVY MAINTENANCE	LIGHT REHABILITATION	HEAVY MAINTENANCE	LIGHT REHABILITATION
50	IV		IV		IV	
	HEAVY REHABILITATION.		HEAVY REHABILITATION		LIGHT REHABILITATION	
25	V		V		V	
0	RECONSTRUCT		RECONSTRUCT		RECONSTRUCT	

The treatments listed in the decision tree are generalized to provide a range of treatments. Typical treatments within each generalized treatment range are listed below. The exact treatment would need to be determined during the design phase of the project.

Treatment Category	Typical Treatment
Light Maintenance	• Slurry Seal or Micro-Surface • Fog Seal or Scrub Seal
Heavy Maintenance	• Chip Seal, Cape Seal • Slurry Seal or Micro-Surface with Digouts • Thin Maintenance Overlay (TMO)
Light Rehabilitation	• Overlay (2" and under) or Thin Mill and Fill
Heavy Rehabilitation	• Overlay (greater than 2") or Thick Mill and Fill • Cold-In-Place Recycling • Full Depth Reclamation • Pulverize and Resurfacing
Reconstruct	• Full Section Reconstruction

Decision Tree Unit Prices

As a minimum, recent bid tabulations should be used to determine the appropriate unit costs for each general treatment category. Furthermore, the unit costs should be whole or complete costs and include other costs that may be incurred during the process of a pavement maintenance, or rehabilitation project. This ensures that the budget projections in StreetSaver® are conservative. First, a 15% increase was applied to account for curb ramp upgrades that may be triggered by a treatment. Then, an increase of 15% was applied to the unit cost to account for "Soft costs", or items such as design, construction management, and materials testing. Additionally, an increase of 10% was applied to the unit costs as a general contingency. These all come together to form a more comprehensive unit cost for the selected treatments.

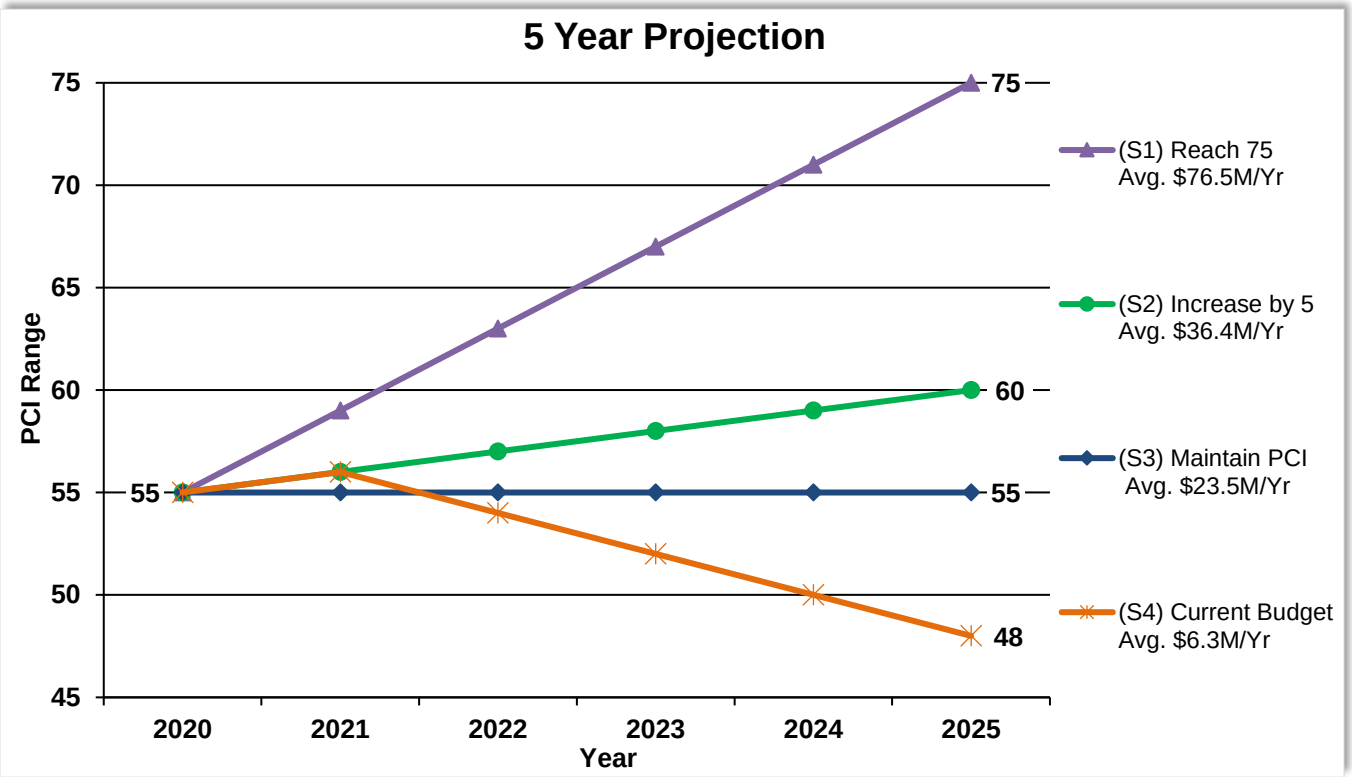
For the City of Salinas, the unit costs on the following table were used:

Treatment	Arterial	Collector	Residential
Cost/ Sq Yd			
Crack Seal **($$/LF)**	$1.56	$1.25	$1.25
Light Maintenance	$5.63	$5.06	$4.50
Heavy Maintenance	$13.86	$12.60	$12.60
Light Rehab	$50.40	$44.10	$44.10
Heavy Rehab	$104.71	$88.20	$75.60
Reconstruct	$176.40	$163.80	$151.20

For this update, PEI analyzed several scenarios, which are summarized below:

Budget Scenario Projections

PEI generated Five (5) scenario projections which are represented graphically below:



A summary of each of the scenario projections are as follows:

Scenario 1: Amount of funding estimated to reach a system wide PCI of 75 (Average $76.5 Million per Year)

Scenario 2: Amount of funding estimated to Increase the system PCI by 5 (Average of $36.4 Million per Year)

Scenario 3: Amount of funding estimated to Maintain an overall system PCI of 55 (Average of $23.5 Million per Year)

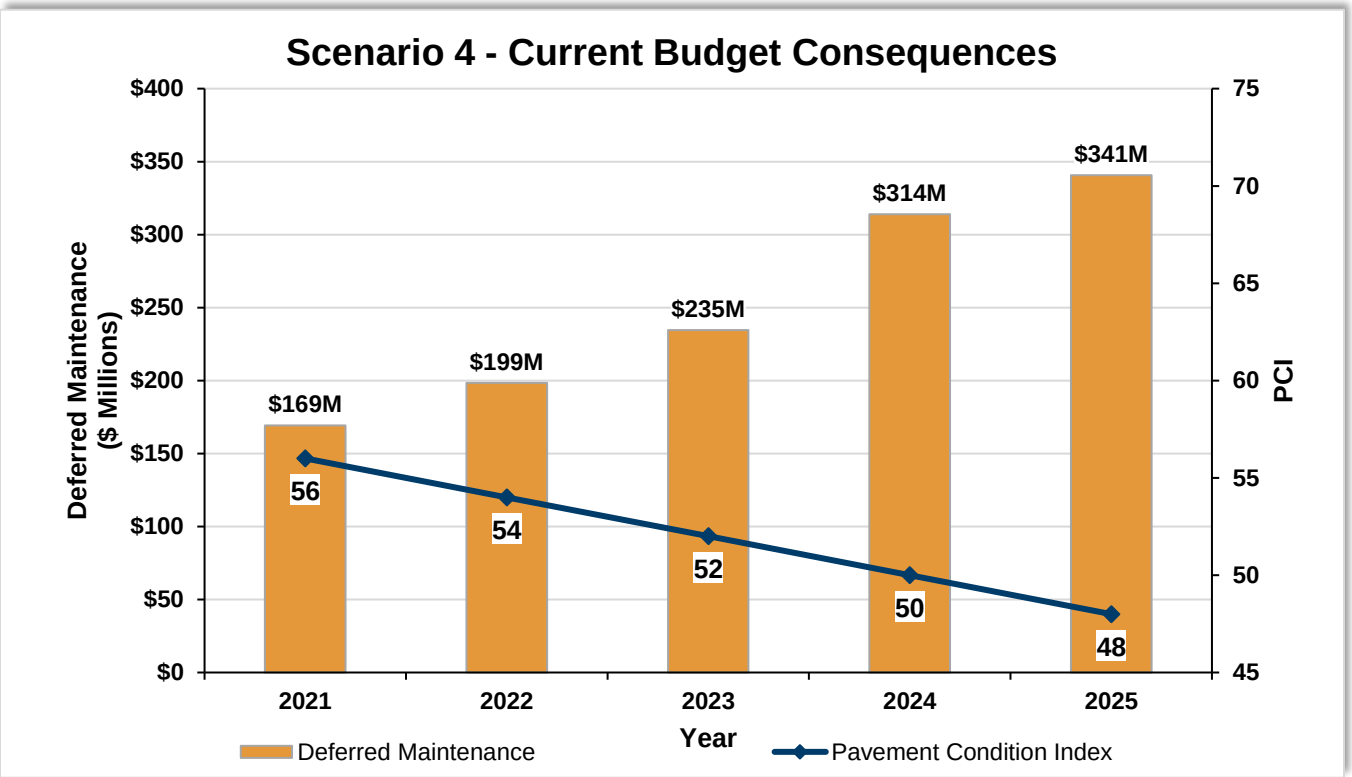
Scenario 4: Projected system PCI with Current Budget of $6.3 Million per Year, which includes all annual Measure X and SB1 funds. Results in a seven (7) point PCI drop to 48.

The full report for the various budget scenarios can be found in **Appendix B**.

Budget Consequences

The following graph illustrates the consequence to the City's overall weighted PCI and Deferred Maintenance Amount, based on the $6.3 Million per year Current Budget scenario projection:

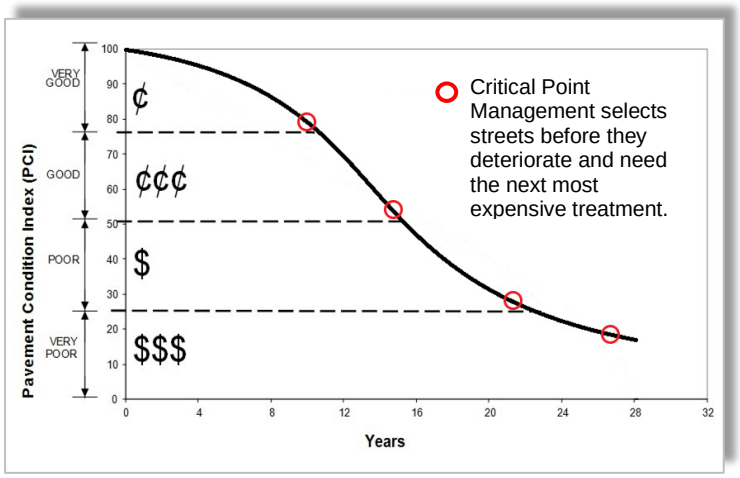
At the current funding level of $6.3 million annually, the PCI of the entire system will deteriorate from 55 to 48, a seven (7) PCI point drop over the next 5 years. In addition, the backlog of deferred maintenance grows from $169 million to $341 million, an increase of 101%.



CONCLUSIONS AND RECOMMENDATIONS

This Executive Summary provides a review of the 2020 Pavement Management System Update performed by PEI. PEI inspected all Arterial, Collector, and Residential road segments in the City of Salinas during the Fall of 2020. The average overall PCI for the City is **55**. **54.5%** of the City's pavement is in **Good to Fair** condition. To maintain the system at its current overall PCI of 55, the City will need to spend an estimated average of $23.5 Million annually over the next 5 years. Maintaining the current funding level of approximately $6.3 Million annually, will result in a PCI loss of seven (7) points in 5 years taking the average system wide PCI from 55 to 48.

Moving forward, PEI recommends the City carefully evaluate the condition and service level desired of their street system. Especially, when considering the overall annual budget, it wants to commit to pavement maintenance and rehabilitation projects.



We recommend the City set priorities for their pavements, based on a "Critical Point" pavement management strategy. Critical Point Management, focuses maintenance and rehabilitation on streets that are at a critical point on their deterioration curve, where if the correct treatment is applied it will keep the pavement from falling into a condition where the correct treatment is more costly (see Section III for more details on pavement management strategies). This will generally mean that the streets being selected to be treated should come from each of the condition categories; Good, Fair, Poor, and Failed.

It will be important for the City to address the 54% of the overall system that currently have a PCI in the Good to Fair Condition category (refer to Map 3, in Section IV of the report). That 54% breaks down into 25% in the Good Category (PCI 90-71), and 29% in the Fair Category (PCI 70-51). The city has already invested in improving these streets and they now need to be maintained.

To maintain a healthy pavement network, it is imperative to keep the pavements that are in the Good Category (PCI 90-71) in that condition. These pavements are in a position where Strategic Maintenance Treatments will keep these pavements from falling from the Good category to the Fair category, where the cost to apply the right treatment goes from approx. $0.60 Sq./Ft. (average Light Maintenance treatment costs) to $3.50 Sq./Ft. (average of Heavy Maintenance and Light Rehab treatment costs).

The pavements in the Fair Category (PCI 70-51) should be considered “At-Risk”. If these segments are left untreated, they will deteriorate and cause a large decrease of the overall Network condition. These Segments will require careful monitoring to ensure that maintenance treatments on these sections are performed before these sections fall into the next treatment category. This strategy would keep these pavements from falling into the Poor category, where the cost to apply the right treatment goes from approx. $3.50 Sq./Ft. (average between Heavy Maintenance and Light Rehab treatment costs) to $9.47 Sq./Ft. (average Heavy Rehab treatment cost).

To address the 34% of Street system that are in the Poor category will be key in the improvement of the overall network health and system PCI. This can be a financially daunting task, as the correct rehabilitation treatments for streets below 50 PCI are more costly than maintenance treatments, but when done right they will last much longer and be less expensive to maintain over time. In lieu of a significant increase in the pavement maintenance budget, it is recommended that the City attack the streets in the Poor category with aggressive Stop-Gap measures. This strategy will address the failed areas and keep those streets from joining the 10% of the system in the Failed Category, until suitable funding is secured to address the budget shortfall.

This Pavement Management System will assist the City in its efforts to monitor treatments and track their effectiveness, as well as, help the City in setting future priorities and treatment policies. As the City maintains and updates its Pavement Management System, the program will become a valuable tool in its efforts to maximize performance and minimize the spending for pavements.

Section II

Background

BACKGROUND

This section is intended to introduce important pavement design definitions and calculations as a background for understanding the Pavement Management System (PMS) assumptions.

PAVEMENT DESIGN BASICS

Pavements are a structural support system generally considered to act like a beam. But unlike beams in buildings, which generally have static loads, the pavement structure is flexed many times from traffic loading. Cars and light trucks have little impact on the pavement structure. Larger/Heavier trucks have very significant impacts on the pavement due to the high axle weights. The impact of trucks is measured in equivalent single 18,000-pound axle loads (EALs). The total EALs are converted into a design Traffic Index (TI). As an example, a design TI of 5 is equal to 7,160 EALs. A Design TI of 8 is equal to 372,000 EALs. Therefore, the design TI is the total number of EALs that the pavement will support before it begins to fail, regardless of the passage of time. Normally for a new pavement, the EALs over a 20-year period are used. For rehabilitation procedures such as overlays, 10 years is generally used.

The other element of pavement design is the support of the beam. The support is provided by the sub-grade soils. The support value is designated by the R-value test.

Using the design TI and R-value, the pavement designer chooses various materials to construct the structural section. The most common pavement section is a thin layer of asphalt concrete over aggregate base(s). Many options are available depending on specific project requirements and conditions.

The design methods used in California is based on a 50 percent reliability. This means that the average pavement life of all pavements constructed using the design procedure will last the design life. It also means that about half will not last that long and the other half will last longer. To express this concept, a design life is often expressed in a span of years, such as 17 to 23 years for 20-year design life.

PAVEMENT DETERIORATION

Pavement deteriorates from two processes. There are **fatigue** and **aging.** The processes occur simultaneously. In a well-designed and constructed pavement, the two processes result in the need to rehabilitate the pavement at approximately the same time. This is called the design life. The design life for most new pavements is 20 years. Each aging process has its own set of pavement defects, which are related to the process.

Fatigue

The first deterioration process is fatigue from heavy axle loads. As the pavement structure flexes or bends from heavy wheel loads, the asphalt concrete layer's ability to flex is consumed. With enough bending, the asphalt concrete layer begins to break at the bottom. These cracks progress upward until they reach the surface and appear as

alligator cracking. These areas are repaired by removal and replacement of the asphalt concrete in the affected areas. These repairs are commonly called digouts.

As the pavement structure, its supporting soils, and the precise loading from wheel loads vary, so does the time it takes for alligator cracking to appear. As alligator cracking appears, the pavement is repaired with digouts. Generally, when total cumulative quantity of digouts reaches approximately 10 percent, or more, of the total area, the pavement is considered to have reached its service life and requires major rehabilitation.

Aging

The major element of the pavement structure that ages is the asphalt concrete layer. To a minor extent, aggregate bases can age if contaminated by fine soil particles, which are transported from the subsoil into the aggregate base.

Asphalt concrete is composed of aggregates and asphalt cement. The aggregates used are generally of fair quality and do experience some breakdown over time. Aggregate aging problems need to be addressed in maintenance procedures. The asphalt concrete binder ages as well. As the asphalt binder ages, it loses volume through the loss of volatile components in the asphalt. As the volume decreases, the pavement will progressively crack from the resulting tensile strain in the layer. Normally, these cracks first show up as transverse cracks. They also show up in weak areas, such as paving joints. These cracks widen and increase over time until the pavement has a checkerboard appearance.

The aging process also causes the pavement to become more brittle. The increased stiffness results in additional cracking from loaded vehicles. This load induced cracking from the brittleness of the asphalt concrete is very similar to fatigue cracking in appearance.

The major agent for deterioration of the asphalt concrete binder is oxygen. The carrier of the oxygen is water. Water enters the pavement either from the surface or as water vapor from underneath.

TYPICAL PAVEMENT DEFECTS

StreetSaver® identifies eight different Asphalt Concrete distress types. These are:

1. Alligator Cracking (Fatigue)
2. Block Cracking
3. Distortions
4. Longitudinal and Transverse Cracking
5. Patching and Utility Cut Patching
6. Rutting and Depression
7. Raveling
8. Weathering

These defects are common to virtually the entire pavement as aging progresses.

Age cracking begins with longitudinal and transverse cracking and progresses to block shrinkage cracking.

For purposes of understanding the levels of these distresses, the condition level descriptions from the rating manual are included herein:

Alligator Cracking (Fatigue)

Description:

Alligator or fatigue cracking is a series of interconnecting cracks caused by fatigue failure of the asphalt concrete surface under repeated traffic loading. Cracking begins at the bottom of the asphalt surface (or stabilized base) where tensile stress and strain are highest under wheel load. The cracks propagate to the surface initially as a series of parallel longitudinal cracks. After repeated traffic loading, the cracks connect, forming many sided, sharp-angled pieces that develop a pattern resembling chicken wire or the skin of an alligator. The pieces are generally less than 0.6 m (2 ft) on the longest side. Alligator cracking occurs only in areas subjected to repeated traffic loading, such as wheel paths. Therefore, it would not occur over an entire area unless the entire area were subject to traffic loading (pattern-type cracking that occurs over an entire area not subjected to loading is called “block cracking,” which is not a load-associated distress).

Severity Levels:

- **L** Fine, longitudinal hairline cracks running parallel to each other with no, or only a few interconnecting cracks. The cracks are not spalled.
- **M** Further development of light alligator cracks into a pattern or network of cracks that may be lightly spalled.
- **H** Network or pattern cracking has progressed so that the pieces are well defined and spalled at the edges. Some of the pieces may rock under traffic.

Block Cracking

Description:

Block cracks are interconnected cracks that divide the pavement into approximately rectangular pieces. The blocks may range in size from approximately 0.3 by 0.3 m (1 by 1 ft) to 3 by 3 m (10 by 10 ft). Block cracking is caused mainly by shrinkage of the asphalt concrete and daily temperature cycling (which results in daily stress/strain cycling). It is not load-associated. Block cracking usually indicates that the asphalt has hardened significantly. Block cracking normally occurs over a large portion of the pavement area, but sometimes will occur only in non-traffic areas. This type of distress differs from alligator cracking in that alligator cracks form smaller, many-sided pieces with sharp angles. Also, unlike block cracks, alligator cracks are caused by repeated traffic loadings and therefore found only in traffic areas (i.e., wheel paths).

Severity Levels: (*See definitions of longitudinal transverse cracking.)

- **L** Blocks are defined by low-severity* cracks.
- **M** Blocks are defined by medium-severity* cracks.
- **H** Blocks are defined by high-severity* cracks.

Distortions

Description:

Distortions are usually caused by corrugations, bumps, sags and shoving. They are localized abrupt upward or downward displacements in the pavement surface, a series of closely spaced ridges and valley or localized longitudinal displacements of the pavement surface. Distortions affect ride quality.

Severity Levels:

L Distortion produces vehicle vibrations, which are noticeable, but no reduction in speed is necessary for comfort or safety and/or individual distortions cause the vehicle to bounce slightly but create little discomfort.

M Distortion produces vehicle vibrations, which are significant, and some reduction in speed is necessary for safety and comfort.

H Distortion produces vehicle vibrations, which are so excessive that speed must be reduced considerably for safety and comfort.

Longitudinal and Transverse Cracking (Non-PCC Slab Joint Reflective)

Description:

Longitudinal cracks are parallel to the pavement's centerline or laydown direction. They may be caused by:

1. A poorly constructed paving lane joint.
2. Shrinkage of the AC surface due to low temperature or hardening of the asphalt and/or daily temperature cycling.
3. A reflective crack caused by cracking beneath the surface course, including crack in PCC slabs.
4. Decreased support or thickness near the edge of the pavement.

Transverse cracks extend across the pavement at approximately right angles to the pavement centerline or direction of laydown. These may be caused by conditions (2) and (3) above. These types of cracks are not usually load-associated.

Severity Levels:

L One of the following conditions exists:
- (1) non-filling crack width is less than 10 mm (3/8 in.) or
- (2) filled crack of any width (filler in satisfactory condition).

M One of the following conditions exists:
- (1) non-filled crack width is greater than or equal to 10 mm and less than 75 mm (3/8 to 3 in.)
- (2) non-filled crack is less than or equal to 75 mm (3 in.) surrounded by light and random cracking, or
- (3) filled crack is of any width surrounded by light random cracking.

H One of the following conditions exists:

(1) any crack filled or non-filled surrounded by medium or high severity random cracking,

(2) non-filled crack greater than 75 mm (3 in.) or

(3) A crack of any width where approximately 100 mm (4 in.) of pavement around the crack is severely broken.

Patching and Utility Cut Patching

Description:

A patch is an area of pavement that has been replaced with new material to repair the existing pavement. A patch is considered a defect no matter how well it is performed (a patched area or adjacent area usually does not perform as well as an original pavement section). Generally, some roughness is associated with this distress.

Severity Levels:

L Patch is in good condition and satisfactory. Ride quality* is rated as low severity or better.

M Patch is moderately deteriorated and/or ride quality* is rated as medium severity.

H Patch is badly deteriorated and/or ride quality* is rated as high severity. Needs replacement soon.

*Ride quality is defined in the severity levels of distortions.

Rutting and Depressions

Description:

A rut is a surface depression in the wheel paths. Pavement uplift may occur along the sides of the rut, but in many instances, ruts are noticeable only after a rainfall when the paths are filled with water. Rutting stems from a permanent deformation in any of the pavement layers or sub-grades, usually caused by consolidated or lateral movement of the materials due to traffic load. Significant rutting can lead to major structural failure of the pavement.

Depressions are localized areas where the pavement structure is lower than the surrounding area, but the transition is not abrupt enough to be considered a distortion. They are often referred to as “bird baths”.

Severity Levels: (Average Rut or Depression Depth)

L 1/2" to less than 1” (13 to 25mm).

M 1” to less than 2” (25 to 50mm).

H equal to or greater than 2” (over 50mm).

Raveling

Description:

Raveling is the dislodging of coarse aggregate particles. Raveling may be caused by insufficient asphalt binder, poor mixture quality, insufficient compaction, segregation, or stripping.

Coarse aggregate refers to the predominant coarse aggregate size of the asphalt mix, and aggregate clusters refers to when more than one adjoining coarse aggregate piece is missing. If in doubt about a severity level, three representative areas of one square yard each (square meter) should be examined and the number of missing aggregate particles/clusters is counted.

Severity Levels:

M Considerable loss of coarse aggregate greater than 20 per square yard (square meter), and/ or clusters of missing coarse aggregate are present.

H Surface is rough and pitted, and it may be completely removed in places.

Weathering

Description:

Weathering is the wearing away of the asphalt binder and fine aggregate matrix.

Coarse aggregate refers to predominant coarse aggregate size of the asphalt mix. Loss or dislodging of coarse aggregate is covered under Raveling. Surface wear is normally caused by oxidation, inadequate compaction, insufficient asphalt content, excessive natural sand, surface water erosion, and traffic. Weathering occurs faster in areas with high solar radiation.

Severity Levels:

L Asphalt surface beginning to show signs of aging which may be accelerated by climatic conditions loss of fine aggregate mix is noticeable and may be accompanied by fading of the asphalt color. Edges of the aggregates are beginning to be exposed (less than 0.05 inches or 1 mm).

M Loss of the fine aggregate matrix is noticeable and the edges of the coarse aggregate have been exposed up to 1/4th of the width (of the longest side) of the coarse aggregate due to the loss of fine aggregate matrix.

H Edges of the coarse aggregate have been exposed greater than 1/4th of the width (of the longest side) of the coarse aggregate. There is considerable loss of fine aggregate matrix leading to potential or some loss of coarse aggregate.

PAVEMENT MAINTENANCE PROCEDURES

Pavement maintenance procedures are designed to slow the pavement aging process. Mainly, the procedures are designed to protect the pavement from the adverse effects of water and to some extent vehicle traffic.

Maintenance procedures, which protect the pavement from aging, are crack sealing, digouts, slurry seals, and cape seals. When pavements have extensive cracking and are beyond their design life, interim holding measures including skin patches and thin overlays are used as a stop gap prior to major rehabilitation.

The following outlines some of the more common types of maintenance procedures:

Crack Sealing

Crack sealing prevents surface water from getting beneath the asphalt concrete layer into the aggregate bases. Crack sealing is generally performed using hot rubberized crack sealing material. The procedure includes routing small cracks, cleaning and sealing.

Digouts

Digouts are small areas of deteriorated pavements, which are removed and replaced with new asphalt concrete. Pavement removal is accomplished by cold planning or saw cutting and excavation. New asphalt is installed in at least two lifts. The digout depth is determined depending on the street type and construction.

Slurry Seals

Slurry seals consist of a combination of fine aggregate and emulsified oil. A new type of slurry seal called Rubberized Asphalt Slurry (RAS) is in the development stage. Currently, the cost of RAS is 2 to 3 times as much as a conventional slurry seal, which makes the product economically unattractive. Slurry seals are used when the existing pavement surface is severely raveled.

Cape Seals

Cape seals consist of a chip seal over coated with a slurry seal. A chip seal is an application of small angular rock (chips) approximately 1/4" to 3/8” in a maximum size embedded into a thick application of asphalt emulsion. Most chip seals incorporate polymer modified binders.

Cape seals are used on residential and collector streets to maintain a pavement, which may need an overlay, but there are not sufficient funds available. Chip seals are placed over low to moderate alligator cracks and block shrinkage cracking. Due to the distress covered by the chip seal, small areas of disbanding or failure may occur and will require patching.

Cape sealed surfaces are fairly coarse compared to new paving. Due to this characteristic, they may not be acceptable to some segments of the public.

Interim Holding Measures (or “Stop Gap” in StreetSaver® Terms)

Interim holding measures or stop gap treatments are used to “hold” the pavement together until funds become available for major rehabilitation. The common holding measures used by City include skin patches and thin overlays.

Skin patches are thin lifts of fine asphalt concrete placed over deteriorated areas.

Thin maintenance overlays are placed to hold the surface together. The asphalt concrete layer is generally 1 to 1-1/2 inches thick. A 3/8 inch aggregate is used with a Terminally Blended Asphalt Rubber Binder.

PAVEMENT REHABILITATION PROCEDURES

Pavement rehabilitation consists of procedures used to restore the existing pavement quality or to add additional structural support to the pavement. Rehabilitation procedures include conventional overlays; pulverization and resurfacing; ARHM (asphalt rubber hot mix) overlays; AC removal and replacement (Mill and Fill); and reconstruction.

The following outlines some of the more common types of rehabilitation procedures:

Conventional Overlays

Conventional overlays generally consist of surface preparation, pavement fabric and varying thicknesses of asphalt concrete. Surface preparation can consist of crack filling, pavement repairs of base failures and leveling courses.

Pavement fabric is often used as a water inhibiting membrane and to retard reflective cracking. Care must be used with fabric to avoid intersections with heavy truck breaking, steep grades (generally over 8 percent), and areas where subsurface water might be trapped.

The overlay thickness is determined by the structural requirement of the deflection analysis and reflective cracking criteria. The reflective cracking criteria requires the thickness of the overlay to be a minimum 1/2 the thickness of the existing bonded layers. Pavement fabric can account for 0.10 ft of asphalt for reflective cracking criteria if the structural requirements from the deflection analysis are met.

Conventional overlays have an expected service life of 7 to 13 years if they are designed to meet structural and reflective cracking criteria and are well constructed.

Pulverization and Resurfacing

Pulverization and resurfacing is an alternative to conventional overlays for streets that are structurally adequate but exhibit sufficient cracking to warrant improvement to the asphalt surface.

Pulverization and resurfacing are an intermediate step between overlays and reconstruction. The existing asphalt concrete is recycled into aggregate base and the recycled base increases the total structural section. The surface is re-graded to conform to flush facilities similar to the way the pavement is keycut for overlays. The re-grading allows for some improvement to the cross section and profile. This method eliminates the stress history and cracking of the old asphalt concrete pavement, thus eliminating negative impacts on the new asphalt concrete surface.

Some instability can be encountered when the pulverization method is used. PEI typically recommends budgeting 5 to 10 percent of the pulverized sub-grade area for stabilization. Stabilization can be performed using 6-inch deep lift asphalt concrete.

Pulverization and resurfacing has a life expectancy of 13 to 18 years. The life expectancy is slightly less than full reconstruction because some residual deficiencies in thickness or quality of the unaffected layers may still exist. Additional testing is necessary to determine if pulverization is a viable alternative. This testing includes measuring the existing structural section and testing the native soil for bearing capacity (R-value).

RHMA Overlays

RHMA is the shortened reference for Rubberized Hot Mix Asphalt. This new material uses crumb rubber mixed with traditional asphalt binders to produce a more flexible paving material than conventional dense graded hot mix asphalt (HMA).

Caltrans has developed design criteria for use of this material based on accelerated performance testing using its dual wheel accelerated pavement testing equipment. The Caltrans criteria allows RHMA to be used in a one to two ratio to conventional hot mix asphalt. Thus 1 inch of RHMA is equal to two inches of conventional hot mix asphalt. This is true for both structural and reflective cracking criteria.

RHMA costs approximately 1-3/4 times as much as conventional asphalt and provides a similar service life to that of conventional hot mix asphalt, 7 to 13 years. RHMA is generally only feasible when vertical constraints such as curb and gutter restrict the thickness of the overlay. RHMA typically has more open surface than conventional hot mix asphalt and is more difficult to obtain a high quality finished product.

AC Removal and Replacement (Mill and Fill)

On some thick asphalt concrete pavements, the most economical approach to rehabilitating the pavement is to remove some of the existing asphalt concrete surface, which matches the existing profile. The replacement material can be either conventional hot mix asphalt (HMA) or RHMA, depending on the design criteria.

In other cases, due to drainage or other physical constraints, additional thickness cannot be placed. If the underlying base is sufficient to support anticipated loading, the asphalt layer can be removed and replaced. Depending on existing conditions, this method should have a life of 15 to 20 years.

Reconstruction

When the pavement has severe cross section deficiencies or requires significant structural strengthening, reconstruction may be the only alternative. Generally, existing pavement materials are recycled and incorporated into the new pavement structure. Structural section material alternatives include treated soils, full depth asphalt concrete, recycled materials and Portland cement concrete.

Section III

Pavement Management System Specifics

PAVEMENT MANAGEMENT SYSTEM SPECIFICS

This section discusses the characteristics of the Pavement Management System and its application for The City of Salinas.

BACKGROUND (STREETSAVER®)

During the early years of Pavement Management software development, many companies developed private software packages focused on management of municipal street systems. Though these programs were versatile and sophisticated, the user was also dependent upon the software vendor for training, program updates, and software servicing. Many of the vendors had difficulty maintaining their software, leaving agencies stranded after making a substantial investment.

In 1982, the Metropolitan Transportation Commission (MTC) completed a study of local road and street maintenance needs and revenue short falls in the San Francisco Bay Area. The results of the study indicated that local jurisdictions were spending only 60 percent of funds required to maintain roads in a condition considered adequate. This indicated a need to improve pavement maintenance and rehabilitation techniques and practices. A committee was formed to evaluate pavement management efforts. At approximately the same time, six public works directors reviewed a proposal to develop a prototype Pavement Management System (PMS); however, it was felt that the proposed system was too complex. This group strongly emphasized that simplicity was the most important objective to be developed in a PMS if it was to be adopted and used by cities and counties.

In 1983, a consultant was retained to assist MTC in determining PMS needs, PMS resources, and problems. In addition, they were to develop three basic elements of a standardized prototype PMS: a pavement condition index (PCI), effective maintenance treatments for the Bay Area, and a network level assignment procedure. The result was the first version of the MTC PMS. Since that time the program has evolved into StreetSaver®.

Today, the Metropolitan Transportation Commission (MTC) for California's San Francisco Bay Area uses StreetSaver® to help local cities and counties better allocate resources, predict the future condition of their pavements at different levels of funding, and demonstrate the effects of underfunded road programs. The Bay Area was one of the first regions in the country to implement a pavement management system that is used by nearly all of its localities. Using StreetSaver®, cities and counties can plan and manage road improvement projects, document budget needs and shortfalls, and use the collected data to build support for additional transportation funding.

StreetSaver® manages a collection of related data organized for easy storage and retrieval. The StreetSaver® program includes a database comprised of several sets of related data ("tables") that contain information about the street network in the jurisdiction. This information includes pavement condition, the available maintenance/rehabilitation treatments and their costs, and the history of the network. Based on this information, budget analyses are performed. A budget analysis allows the user to project network maintenance and rehabilitation needs, and costs to evaluate the consequences of various budget allocation alternatives. Alternatives can be evaluated in terms of maintenance and rehabilitation that can actually be performed, future pavement condition, and deferred costs. For some agencies, use of the StreetSaver® program is cyclical. For others, pavement management is integrated into an ongoing effort to manage their street networks.

Implementation

There are several steps involved in implementing an effective Pavement Management System. These tasks should be completed on a periodic basis. These tasks include:

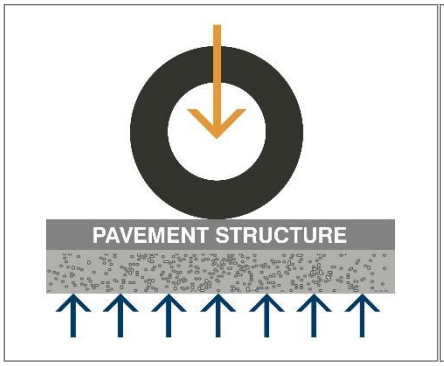
1. Collect pavement condition and maintenance/rehabilitation data.
2. Enter re-inspection data and/or applied maintenance and rehabilitation information.
3. Check/update maintenance treatment definitions and pavement category definitions.
4. Calculate Pavement Condition Index (PCI)
5. Evaluate system and current Maintenance/Rehabilitation strategies. Determine Budget needs and if necessary, develop alternate Budget Summaries.
6. Present analysis outputs to funding bodies.
7. Acquire funds and apply maintenance/rehabilitation treatments.

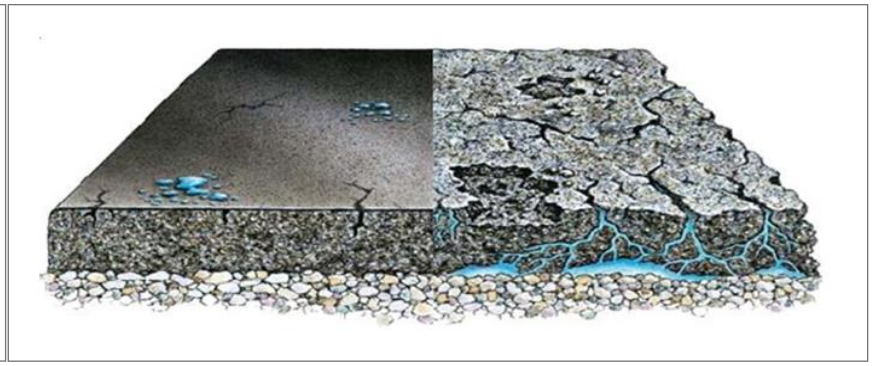
SYSTEM ASSUMPTIONS

The goal of the Pavement Management System is to furnish budgetary amounts in order to achieve system wide improvements in the overall pavement condition. The goal of project engineering is to obtain the maximum economical affect for a given subset of the system to be maintained. Using the Pavement Management System, management is able to realistically budget for economically maintaining The City's pavement system. Annually updating maintenance activity and costs keeps the system current.

PAVEMENT MANAGEMENT PRINCIPLES

The adage “timing is everything” applies to more than just life. It applies to pavement, too. As pavement deteriorates with time, the type and cost of maintenance treatments change, so understanding timing relative to treatment becomes fundamentally important in extending pavement service life.





Pavement deteriorates due to fatigue from heavy wheel loads and aging from the oxidizing effects of water and sunlight. Employing maintenance strategies is critically important to impede the deterioration process. Equally important is knowing when to apply those treatments.

There are three general approaches to managing pavements from a network level, each with different outcomes.

Worst-First Management

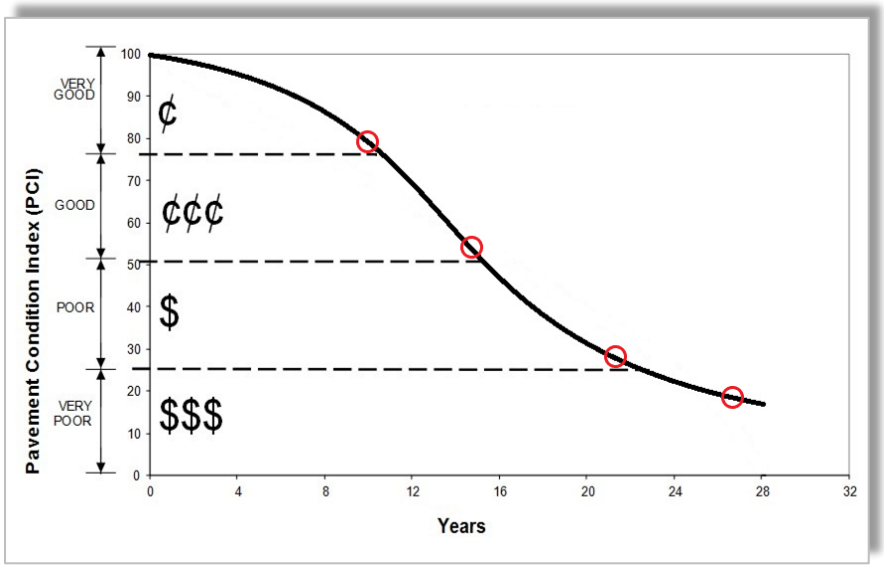
The first and most common is the “worst-first” or crisis-management approach, which focuses on the worst pavements while ignoring the rest. After all, it’s pavement in the worst condition that gets the most complaints, but while the worst-first approach eliminates some problems immediately, it creates more in the future. Good pavements that are ignored now become the worst pavements in the future and will require more costly treatments to rehabilitate. This approach works only with an unlimited budget that addresses all pavement needs. With tight budgets that many municipalities face today, this approach only adds to future costs.

Best-First Management

The second approach is “best- first,” which focuses all the effort and budget on maintaining pavements in the best condition while ignoring the rest. This approach is not sustainable. Over time, the “best” pavements will remain in good condition and the rest will continue to worsen.

Critical-Point Management

The third approach is “critical-point” management. Each pavement is unique and, as such, is somewhere on a deterioration curve. Eventually it intersects at a critical point where a specific treatment must be applied or the pavement risks falling into a condition where that treatment will no longer be effective and will require the next, more costly treatment to maintain or rehabilitate the pavement. Knowing where a pavement is on the curve and where that “critical-point” is determines the next needed treatment and the timing of the treatment. The critical- point approach is by far the most cost-effective pavement management plan.



Critical Point Management selects streets before they deteriorate and need the next most expensive treatment.

For example, a pavement may be nearing the point where it requires an overlay, but applying it too early is wasting money if it’s not yet needed. Conversely, if a pavement requires an overlay and it is seal-coated instead, that also wastes money because the applied treatment will not be effective.

The critical-point approach incorporates pavements from all parts of the deterioration curve, not just the best nor just the worst. This approach optimizes every budget dollar by seeking to apply the right treatment at the right time. Not too soon and not too late.

General Timing Rules

Although every pavement is unique, there are some general “right time” rules that apply to all new pavements.

A visual inspection should be performed at least every three years to assess each pavement’s condition and treatment needs and to update the current maintenance plan.

Cracks should be filled in immediately as a first-line defense against water intrusion, followed every three to five years with a surface treatment, depending on traffic. Assuming

the pavement was properly designed, a surface treatment can be applied two or three times before the pavement reaches a “critical-point” where it’s no longer effective. At that time, the pavement may be ready for a more aggressive treatment, such as an overlay.

Where budgets are tight, it may be necessary to “hold” a pavement together through localized repairs, skin patches or thin maintenance overlays. These stop gap measures won’t address the pavement’s structural needs but will hold it together until the correct treatment can be applied.

Applying the right treatment to the right pavement at the right time is an investment that will add years to pavement life. Knowing WHAT to do is half the battle. Knowing WHEN to do it and ensuring that the work is properly specified is the other half. That’s called a pavement management “plan.” Planning is the key.

PAVEMENT MAINTENANCE AND REHABILITATION (M&R) UNIT COSTS

The reliability and accuracy of any PMS is based on the information contained in its Decision Tree. The listed treatments in the Decision Tree are generalized to provide a range of treatments. The exact treatment would need to be determined during the design phase of a project.

Typical treatments within each generalized treatment range are listed below.

Treatment Category	Typical Treatment
Light Maintenance	• Slurry Seal or Micro-Surface • Fog Seal or Scrub Seal
Heavy Maintenance	• Chip Seal, Cape Seal • Slurry Seal or Micro-Surface with Digouts • Thin Maintenance Overlay (TMO)
Light Rehab.	• Overlay (2” and under) or Thin Mill and Fill
Heavy Rehab.	• Overlay (greater than 2”) or Thick Mill and Fill • Cold-In-Place Recycling • Full Depth Reclamation • Pulverize and Resurfacing
Reconstruct	• Full Section Reconstruction

Based on a street segment’s current PCI condition, StreetSaver® assigns a treatment action and estimated cost to perform the suggested treatment. This cost is not just what is paid to the contractor but should include all the “Soft Costs” incurred by The City.

Soft Costs can include the surface preparation, engineering cost, materials testing, and construction inspection. Even if these tasks are done “in-house”, the inclusion in combination with the construction costs will tend to show the “true picture” of the cost of a specific project.

The following costs were used to develop the indicated budget numbers for each street segment PEI reviewed. The costs include miscellaneous work such as transitions, striping, dig outs, etc.

The costs are averages. Small systems will have higher unit costs and large systems will have lower unit costs. The larger the annual project size, the better the economies of scale. Timing is also important. Bidding the work in early spring will result in significantly lower prices than bids solicited in the late summer or fall. If small packages are used, costs could be 25 to 50 percent higher.

The unit costs include a 15% increase to account for potential PCC repairs that may be triggered by applying a maintenance or rehabilitation treatment to a street section. The unit costs also include a 15% allowance to account for "Soft Costs" (engineering design, construction management, and inspection and material testing fees. As well as a 10% contingency. These prices are in today's dollars (2020) and do not account for inflation.

Treatment	Arterial	Collector	Residential
Cost/ Sq Yd			
Crack Seal ($$/LF)	$1.56	$1.25	$1.25
Light Maintenance	$5.63	$5.06	$4.50
Heavy Maintenance	$13.86	$12.60	$12.60
Light Rehab	$50.40	$44.10	$44.10
Heavy Rehab	$104.71	$88.20	$75.60
Reconstruct	$176.40	$163.80	$151.20

Decision Trees / Treatment Strategies

The Decision Trees are broken down into two main areas; Preventive Maintenance (PM) and Rehabilitation. StreetSaver® makes preventive maintenance a top priority. The longer a segment can be kept in good condition the lower the overall cost of its treatments. Preventive Maintenance addresses the sections that have a PCI of 71 and greater. This area is further broken down to specific treatments that could be better termed as Crack Sealing, Surface Treating and Restoration Treatments.

The Decision Tree allows the user to program these treatments on a cyclical basis. As part of this cyclical process, once a road has reached the point where it can no longer be maintained by a crack seal or a surface seal the program will shift to a Restoration Treatment. The program uses this treatment to restore the pavement in long term budgeting scenarios to the Very Good category.

The Decision Tree for Preventive Maintenance and Rehabilitation was reviewed with The City of Salinas and updated by PEI. The decision tree customizes the logic for how and what maintenance and rehabilitation treatments StreetSaver® selects.

Five general pavement treatment categories were used to account for the various treatments in the decision tree: Reconstruction, Heavy Rehabilitation, Light Rehabilitation, Heavy Maintenance, and Light Maintenance. Specifying a general treatment category allows the user to stay focused on a budget level analysis rather than moving to a project level analysis.

The PMS software assumes average construction and material quality. Pavement life is very sensitive to materials and workmanship quality. Poor quality new construction may result in up to a 50 percent loss in the pavement life. In other words, poor quality new construction may last 10 to 15 years, whereas excellent quality construction may last 20 to 30 years. Investing in quality, both in design and construction, provides significant returns in extended pavement life resulting in lowered annual maintenance costs.

The Decision Tree for The City of Salinas can be found in **Appendix A** of this report.

ANNUAL PAVEMENT MAINTENANCE / REHABILITATION PROGRAM

The PCI range of 0 to 100 is broken down into five condition categories for budget calculation purposes. StreetSaver® default PCI breakpoints were used during the update of The City of Salinas's Pavement Management System.

The breakpoints are as follows:

PCI BREAKPOINTS

	Arterial		Collector		Residential	
100	I		I		I	
90	LIGHT MAINTENANCE		LIGHT MAINTENANCE		LIGHT MAINTENANCE	
70	II (Non-Load)	III (Load)	II (Non-Load)	III (Load)	II (Non-Load)	III (Load)
	HEAVY MAINTENANCE	LIGHT REHABILITATION.	HEAVY MAINTENANCE	LIGHT REHABILITATION	HEAVY MAINTENANCE	LIGHT REHABILITATION
50	IV		IV		IV	
	HEAVY REHABILITATION.		HEAVY REHABILITATION		LIGHT REHABILITATION	
25	V		V		V	
0	RECONSTRUCT		RECONSTRUCT		RECONSTRUCT	

When a pavement section is identified for maintenance or rehabilitation, a user defined network-level cost category for a pavement of that functional class, type and condition is used to determine the needed funds for that section. For sections falling within the preventive maintenance category, or category one (1), a time sequence is used to identify the appropriate treatment and cost.

For those sections falling into a rehabilitation category, or categories two (2), three (3), four (4), or five (5), the PCI is used to determine the repair category for a pavement section.

The repair category is combined with functional classification (as a surrogate for traffic index) and surface type (as a surrogate for structural adequacy) to identify the appropriate treatment and cost. The treatment and cost identified for the section is a network-level budget planning treatment and is generally considered as a cost category for budgeting purposes rather than an actual treatment. Some sections will require more money than estimated, some will require less. A project-level analysis is used to determine the actual treatment to be used for a given section based on condition, structural capacity and other factors.

The funding needs are summed for all sections needing work for each year of the analysis period to determine the annual budget needs. The needs analysis provides a list of sections needing work over the selected analysis period and an estimate of the funds needed. In StreetSaver®, this analysis period is 5 years. It identifies maintenance and rehabilitation needs without considering funding constraints, i.e. the Needs Analysis is unconstrained by the available budget. StreetSaver® identifies candidate sections and funds needed to provide the level of service to meet agency-defined goals.

When an agency has a considerable backlog of maintenance and repair needs, the first-year needs will include the bulk of sections needing work. From a funding standpoint, this may appear unrealistic; however, the needs analysis is only the first step in planning and programming. The information from the needs analysis is generally best presented to management as the total 5 year needs or the average needs per year of the 5-year period. Few agencies will be able to meet the first year needs as developed by the program.

The StreetSaver® Needs Analysis provides information on the condition of the network over the analysis period with and without application of the treatments. Since the application of treatments assume no limit on funds, this can be considered the upper limit of condition that could be reached by the agency and the condition without treatment can be considered the lower limit.

StreetSaver® uses a ranking process based on cost-effectiveness concepts. Basically, the longer a pavement is in good condition, the more benefit the user gets from the pavement. This can be approximated by the area under the PCI vs Time curve.

The larger that area, the longer the pavement provides the desired level of service. That area is divided by annualized costs per unit area. This ratio is weighted for different usage so that arterial streets are selected for repair before collectors in the same condition, which are selected for repair before residential/locals in the same condition. Sections of pavements that provide the best service for the least money are then selected as those that should be repaired first. StreetSaver® provides a ranked listing based on this cost-effectiveness analysis. StreetSaver® also shows the condition with and without treatment, the estimated costs for each section, the calculations used to determine the ranking, and a listing of sections not recommended for treatment.

VISUAL EVALUATIONS

PEI's technical staff evaluated all of the pavements. The streets were rated based on the StreetSaver® system described in the Background. Once the data was entered into the program, PEI completed a quality assurance review of the system and verified the results in the field. The street inventory was based on visual evaluations.

SYSTEM UPDATES

The Pavement Management System is a dynamic program. It is expected that The City will continue to visually rate the street network and update the database at least every three years. In addition to the visual review, The City should update the database by adding new streets incorporated into The City as well as new maintenance and rehabilitation work performed to any particular street segment.

Section IV

Reference Reports

Street List Alphabetical

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 2	1STAVE	1ST AVE	15	TOWT ST	E LAUREL DR	A	R	2	2568	36	92,448	10/13/2020	63	Fair
Dist 2	1STAVE	1ST AVE	25	E LAUREL DR	GARNER AVE	A	R	2	2085	36	75,060	10/13/2020	33	Poor
Dist 2	2NDAVE	2ND AVE	010	GARNER AVE	BELLEHAVEN ST	A	R	2	910	36	32,760	10/13/2020	28	Failed
Dist 2	2NDAVE	2ND AVE	020	BELLEHAVEN ST	COOPER AVE	A	R	2	1470	36	52,920	10/13/2020	35	Poor
Dist 2	2NDAVE	2ND AVE	110	E MARKET ST	TOWT ST	A	R	2	1200	37	44,400	10/13/2020	83	Good
Dist 6	ABBEYWAY	ABBEY WAY	10	CROMWELL DR	GLADSTONE WAY	A	R	2	248	33	8,184	09/29/2020	73	Good
Dist 3	ABBOTTPL	ABBOTT PL	15	N END	S END	A	R	2	787	44	34,628	09/28/2020	20	Failed
Dist 3	ABBOTTST	ABBOTT ST	110	HARRIS RD	CITY LIMITS	A	A	3	1322	57	75,372	10/30/2020	64	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB010	HARRIS RD	1100' E(S)/O HARKINS RD	O	A	2	4294	28	120,232	10/30/2020	58	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB020	1100' E(S)/O HARKINS RD	GROWERS ST	C	A	2	2311	44	101,684	10/30/2020	44	Poor
Dist 3	ABBOTTST	ABBOTT ST	NB030	GROWERS ST	S SANBORN RD	O	A	2	1811	44	79,684	10/30/2020	31	Poor
Dist 3	ABBOTTST	ABBOTT ST	NB040	S SANBORN RD	E ROMIE LN	A	A	2	1076	36	38,743	10/30/2020	68	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB050	E ROMIE LN	JOHNSON AVE	A	A	2	262	36	9,460	10/30/2020	60	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB060	JOHNSON AVE	LOS PALOS DR	O	A	2	1269	36	45,684	10/30/2020	68	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB070	LOS PALOS DR	ALAMEDA AVE	O	A	2	1316	36	47,376	10/30/2020	67	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB080	ALAMEDA AVE	MAPLE ST	O	A	2	892	36	32,112	10/30/2020	66	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB090	MAPLE ST	JOHN ST	A	A	2	771	36	27,756	10/30/2020	61	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB100	JOHN ST	FRONT ST	A	A	2	901	36	32,455	10/30/2020	40	Poor
Dist 3	ABBOTTST	ABBOTT ST	SB010	FRONT ST	JOHN ST	A	A	2	901	36	32,455	11/02/2020	39	Poor
Dist 3	ABBOTTST	ABBOTT ST	SB020	JOHN ST	MAPLE ST	A	A	2	771	36	27,756	11/02/2020	59	Fair
Dist 3	ABBOTTST	ABBOTT ST	SB030	MAPLE ST	ALAMEDA AVE	O	A	2	892	36	32,112	11/02/2020	62	Fair
Dist 3	ABBOTTST	ABBOTT ST	SB040	ALAMEDA AVE	LOS PALOS DR	O	A	2	1316	36	47,376	11/02/2020	62	Fair
Dist 3	ABBOTTST	ABBOTT ST	SB050	LOS PALOS DR	JOHNSON AVE	O	A	2	1269	36	45,684	11/02/2020	62	Fair
Dist 3	ABBOTTST	ABBOTT ST	SB060	JOHNSON AVE	E ROMIE LN	A	A	2	262	36	9,460	11/02/2020	71	Good
Dist 3	ABBOTTST	ABBOTT ST	SB070	E ROMIE LN	S SANBORN RD	A	A	2	1076	36	38,743	11/02/2020	59	Fair
Dist 3	ABBOTTST	ABBOTT ST	SB080	S SANBORN RD	GROWERS ST	A	A	2	1811	44	79,684	11/02/2020	35	Poor
Dist 3	ABBOTTST	ABBOTT ST	SB090	GROWERS ST	1100' E(S)/O HARKINS RD	C	A	2	2311	44	101,684	11/02/2020	36	Poor
Dist 3	ABBOTTST	ABBOTT ST	SB100	1100' E(S)/O HARKINS RD	HARRIS RD	O	A	2	4294	28	120,232	11/02/2020	48	Poor
Dist 1	ABERFORDCI	ABERFORD CIR	10	DE CUNHA CT	END	A	R	2	260	31	8,060	09/10/2020	45	Poor
Dist 1	ACAPULCOWA	ACAPULCO WAY	10	MAZATLAN ST	DURANGO ST	A	R	2	510	37	18,870	09/28/2020	85	Good
Dist 1	ACAPULCOWA	ACAPULCO WAY	20	DURANGO	END	A	R	2	220	34	7,480	09/28/2020	85	Good
Dist 1	ACOSTAPLZ	ACOSTA PLZ	20	N SANBORN RD	END	A	R	2	270	42	11,340	09/29/2020	50	Poor
Dist 1	ACOSTAPLZ	ACOSTA PLZ	80	GARNER AVE	END	A	R	2	895	41	36,695	10/05/2020	77	Good
Dist 2	ACOSTAST	ACOSTA ST	10	N SANBORN RD	BEECH ST	A	R	2	1236	32	39,552	10/13/2020	59	Fair
Dist 2	ACOSTAST	ACOSTA ST	110	BEECH ST	TOWT ST	A	R	2	405	32	12,960	10/13/2020	54	Fair
Dist 2	ACOSTAST	ACOSTA ST	120	TOWT ST	2ND AVE	A	R	2	484	32	15,488	10/13/2020	23	Failed
Dist 5	ADAMSST	ADAMS ST	15	W LAUREL DR	NAVAJO DR	A	C	2	1609	32	51,515	10/20/2020	39	Poor
Dist 5	ADAMSST	ADAMS ST	45	MOHAWK AVE	NAVAJO DR	A	R	2	1669	32	53,417	10/20/2020	35	Poor
Dist 5	ADOBEDR	ADOBE DR	15	SLOAT DR	VICTOR ST	A	R	2	1021	40	40,845	10/21/2020	73	Good
Dist 2	AFTONRD	AFTON RD	010	SYCAMORE RD	BARDIN RD	A	R	2	1376	34	46,784	10/12/2020	25	Failed
Dist 2	AIRPORTBLV	AIRPORT BLVD	010	SKYWAY BLVD	MERCER WAY	A	C	4	1030	60	61,843	10/13/2020	37	Poor
Dist 2	AIRPORTBLV	AIRPORT BLVD	020	MERCER WAY	ROY DIAZ ST	A	C	4	2193	62	135,966	10/13/2020	75	Good
Dist 2	AIRPORTBLV	AIRPORT BLVD	030	ROY DIAZ ST	TERVEN AVE	A	A	4	890	50	44,500	10/13/2020	70	Fair
Dist 2	AIRPORTBLV	AIRPORT BLVD	040	TERVEN AVE	HANSEN ST	A	C	4	1268	59	74,812	10/13/2020	40	Poor
Dist 2	AIRPORTBLV	AIRPORT BLVD	050	HANSEN ST	SW END	A	C	2	385	48	18,480	10/13/2020	71	Good
Dist 2	AIRPORTBLV	AIRPORT BLVD	110	800' N/O HANSEN ST	AIRPORT BLVD	A	C	1	595	24	14,280	12/06/2020	63	Fair
Dist 3	ALAMEDAAVE	ALAMEDA AVE	015	ABBOTT ST	MAPLEWOOD DR	P	C	2	1598	32	51,136	10/28/2020	62	Fair
Dist 3	ALAMEDAAVE	ALAMEDA AVE	025	MAPLEWOOD DR	E ROMIE LN	A	C	2	943	32	30,176	09/30/2020	25	Failed

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	ALAMEDAAVE	ALAMEDA AVE	035	E ROMIE LN	SAN MIGUEL AVE	A	C	2	1377	32	44,064	09/30/2020	77	Good
Dist 3	ALAMEDAPL	ALAMEDA PL	10	ALAMEDA AVE (N)	ALAMEDA AVE (S)	A	R	2	633	32	20,256	09/30/2020	75	Good
Dist 1	ALAMOWAY	ALAMO WAY	10	LAS CASITAS DR	LA HONDA CT (N)	A	R	2	510	32	16,320	09/29/2020	55	Fair
Dist 1	ALAMOWAY	ALAMO WAY	20	LA HONDA CT (N)	GARNER AVE	A	R	2	1378	37	50,986	09/29/2020	65	Fair
Dist 1	ALDERCIR	ALDER CIR	10	NOGAL DR	END	A	R	2	339	33	11,212	09/28/2020	87	Good
Dist 3	ALEXANDERS	ALEXANDER ST	15	WEST ST	HOMESTEAD	P	R	2	639	34	21,726	10/26/2020	63	Fair
Dist 5	ALHAMBRAST	ALHAMBRA ST	10	SEPULVEDA DR	N 1ST ST	A	R	2	509	30	15,270	10/21/2020	25	Failed
Dist 2	ALISALRD	ALISAL RD	010	BARDIN RD	SCONBERG PKWY	A	A	4	230	56	12,880	10/12/2020	27	Failed
Dist 2	ALMAAVE	ALMA AVE	010	N. SANBORN ROAD	1ST AVE	A	R	2	2714	36	97,704	10/14/2020	40	Poor
Dist 2	ALMAAVE	ALMA AVE	020	1ST AVE	WILLIAMS RD	A	R	2	598	36	21,528	10/14/2020	38	Poor
Dist 6	ALMADENDR	ALMADEN DR	10	CUPERTINO WAY	LOS COCHES AVE	A	R	2	259	32	8,308	10/07/2020	31	Poor
Dist 6	ALTURASCIR	ALTURAS CIR	15	LOS COCHES AVE	END	A	R	2	375	32	12,027	10/07/2020	26	Failed
Dist 6	ALTURASWAY	ALTURAS WAY	10	ALTURAS CIR	TAHOE DR	A	R	2	394	32	12,631	10/07/2020	43	Poor
Dist 5	ALVARADOCT	ALVARADO CT	10	ALVARADO DR (N)	ALVARADO DR (S)	A	R	2	999	32	31,973	10/21/2020	50	Poor
Dist 5	ALVARADODR	ALVARADO DR	15	SHERMAN DR	END	A	R	2	1570	32	50,261	10/21/2020	72	Good
Dist 5	ALVINCIR	ALVIN CIR	10	W ALVIN DR	END	A	R	2	333	32	10,665	10/20/2020	24	Failed
Dist 4	AMADORCIR	AMADOR CIR	10	RAINIER DR	END	A	R	2	311	32	9,952	10/15/2020	58	Fair
Dist 1	AMARILLOWA	AMARILLO WAY	010	NOGAL DR	RIDER AVE	A	R	2	875	38	33,250	10/05/2020	58	Fair
Dist 1	AMARILLOWA	AMARILLO WAY	020	RIDER AVE	PACIFIC AVE	A	R	2	720	32	23,040	10/05/2020	80	Good
Dist 3	AMBROSEDR	AMBROSE DR	010	DAVIS RD	W ALISAL ST	A	C	2	2239	42	94,038	10/01/2020	47	Poor
Dist 3	AMBROSEDR	AMBROSE DR	020	W ALISAL ST	SAN VINCENTE AVE	A	C	2	1788	37	66,156	10/01/2020	38	Poor
Dist 3	AMHERSTDR	AMHERST DR	10	W ALISAL ST	COLLEGE DR	A	R	2	630	32	20,177	10/02/2020	30	Failed
Dist 2	ANDERSONAV	ANDERSON AVE	10	SKYWAY BLVD	MERCER WAY	A	R	2	1045	37	38,680	10/13/2020	15	Failed
Dist 2	ANDINACIR	ANDINA CIR	10	ANDINA DR	END	A	R	2	190	32	6,080	10/12/2020	43	Poor
Dist 2	ANDINADR	ANDINA DR	15	COUNTRYSIDE DR	ARGENTINE DR	A	R	2	821	37	30,377	10/12/2020	72	Good
Dist 1	ANDOVERCIR	ANDOVER CIR	10	NEWCASTLE DR	END	A	R	2	210	31	6,510	09/11/2020	74	Good
Dist 4	ANGELUSDR	ANGELUS DR	10	E LAUREL DR	ELWOOD ST	A	R	2	802	32	25,690	10/15/2020	38	Poor
Dist 3	ANNEST	ANNE ST	10	ALEXANDER ST	N. END	A	R	2	410	32	13,120	10/26/2020	30	Failed
Dist 1	ANTELOPEDR	ANTELOPE DR	15	BADGER WAY	COUGAR DR	A	R	2	765	37	28,305	09/09/2020	87	Good
Dist 1	ANTIGUAAVE	ANTIGUA AVE	15	RIDER AVE	N SANBORN RD	A	C	2	1537	37	56,886	10/05/2020	68	Fair
Dist 1	ANTIGUACIR	ANTIGUA CIR	10	ANTIGUA AVE	END	A	R	2	185	34	6,290	10/05/2020	76	Good
Dist 5	APACHECIR	APACHE CIR	10	CHEROKEE DR	END	A	R	2	225	32	7,200	10/20/2020	23	Failed
Dist 5	ARAGONCIR	ARAGON CIR	10	CHEROKEE DR	END	A	R	2	475	32	15,200	10/20/2020	27	Failed
Dist 6	ARCADIACIR	ARCADIA CIR	10	ARCADIA WAY	END	A	R	2	383	32	12,286	10/07/2020	53	Fair
Dist 6	ARCADIACT	ARCADIA CT	10	ARCADIA WAY	ARCADIA WAY	A	R	2	1292	32	41,361	10/07/2020	65	Fair
Dist 6	ARCADIAWAY	ARCADIA WAY	10	EL DORADO DR	ARCADIA CT	A	C	2	1850	42	77,700	10/07/2020	72	Good
Dist 6	ARCADIAWAY	ARCADIA WAY	20	ARCADIA CT	NATIVIDAD RD	A	C	2	975	44	42,900	10/07/2020	74	Good
Dist 6	ARCADIAWAY	ARCADIA WAY	30	NATIVIDAD RD	GLENDORA WAY	A	R	2	738	37	27,306	10/07/2020	45	Poor
Dist 3	ARCHERST	ARCHER ST	010	BELMONT DR	UNIVERSITY AVE	A	R	2	689	32	22,048	10/02/2020	28	Failed
Dist 3	ARCHERST	ARCHER ST	020	UNIVERSITY AVE	NACIONAL ST	A	R	2	1291	32	41,312	10/02/2020	32	Poor
Dist 3	ARCHERST	ARCHER ST	030	NACIONAL ST	VILLA ST	P	R	2	640	40	25,600	10/26/2020	61	Fair
Dist 3	ARCHERST	ARCHER ST	110	HOMESTEAD AVE	WEST ST	P	R	2	640	40	25,600	10/26/2020	66	Fair
Dist 3	ARCHERST	ARCHER ST	210	RIKER ST	CAPITOL ST	A	R	2	320	32	10,240	10/26/2020	74	Good
Dist 3	ARCHERST	ARCHER ST	220	CAPITOL ST	CASSIDY ST	C	R	2	214	38	8,132	10/26/2020	50	Poor
Dist 2	AREZZOCIR	AREZZO CIR	15	SIENA WAY	END	A	R	2	559	32	17,897	10/09/2020	82	Good
Dist 2	ARGENTINEC	ARGENTINE CIR	10	ARGENTINE DR	END	A	R	2	219	32	7,008	10/12/2020	64	Fair
Dist 2	ARGENTINED	ARGENTINE DR	010	BARDIN RD	END	A	R	2	1040	37	38,480	10/12/2020	60	Fair
Dist 2	ARGENTINEP	ARGENTINE PL	10	ARGENTINE DR	END	A	R	2	435	32	13,920	10/12/2020	67	Fair

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Dist 4	ARGUELLOCI	ARGUELLO CIR	10	ARGUELLO DR	END	A	R	2	180	32	5,760	10/14/2020	79	Good
Dist 4	ARGUELLODR	ARGUELLO DR	15	SANSOME ST	END	A	R	2	877	32	28,073	10/14/2020	78	Good
Dist 5	ARTHURCT	ARTHUR CT	10	CLEVELAND AVE	END	A	R	2	316	27	8,544	10/20/2020	37	Poor
Dist 5	ARTHURST	ARTHUR ST	15	CLEVERLAND AVE	END	A	R	2	2200	32	70,406	10/20/2020	47	Poor
Dist 5	ASHBURYWAY	ASHBURY WAY	10	ADOBE DR	VICTOR ST	A	R	2	1056	32	33,817	10/21/2020	28	Failed
Dist 3	ASPENPL	ASPEN PL	10	WOODSIDE DR	END	A	R	2	175	32	5,600	09/30/2020	37	Poor
Dist 6	ASTORCIR	ASTOR CIR	10	ASTOR WAY	END	A	R	2	226	31	7,006	09/29/2020	74	Good
Dist 6	ASTORWAY	ASTOR WAY	15	BROADWAY DR	HUDSON WAY	A	R	2	580	33	19,140	09/29/2020	75	Good
Dist 6	ATHERTONCI	ATHERTON CIR	10	ATHERTON WAY	END	A	R	2	349	32	11,186	10/07/2020	43	Poor
Dist 6	ATHERTONWA	ATHERTON WAY	10	MILLBRAE ST	CAMBRIAN DR	A	R	2	1257	37	46,509	10/07/2020	29	Failed
Dist 6	ATHERTONWA	ATHERTON WAY	20	CAMBRIAN DR	MILLBRAE ST	A	R	2	2573	37	95,201	10/07/2020	23	Failed
Dist 1	ATLANTICST	ATLANTIC ST	15	GARNER AVE	DEL MONTE AVE	A	R	2	1546	32	49,472	10/05/2020	49	Poor
Dist 6	ATTLEBURYC	ATTLEBURY CIR	10	CANTERBURY ST	END	A	R	2	292	32	9,350	10/08/2020	78	Good
Dist 3	AUBURNST	AUBURN ST	010	CHURCH ST	CAYUGA ST	A	R	2	321	39	12,519	10/27/2020	40	Poor
Dist 3	AUBURNST	AUBURN ST	020	CAYUGA ST	CAPITOL ST	A	R	2	310	30	9,300	10/27/2020	37	Poor
Dist 3	AUBURNST	AUBURN ST	030	CAPITOL ST	WEST ST	P	R	2	615	40	24,600	10/27/2020	30	Failed
Dist 3	AVELARST	AVELAR ST	10	PINE ST	END	C	R	2	280	32	8,960	10/03/2020	31	Poor
Dist 3	AVENUEA	AVENUE A	10	S MAIN ST	LINCOLN AVE	A	R	2	299	28	8,372	10/29/2020	29	Failed
Dist 3	AVENUEB	AVENUE B	10	LINCOLN AVE	S MAIN ST	A	R	2	298	37	11,026	10/29/2020	37	Poor
Dist 2	AVISCT	AVIS CT	10	MARGARET ST	SYCAMORE RD	A	R	2	563	36	20,268	10/12/2020	24	Failed
Dist 5	AZTECCIR	AZTEC CIR	10	CHEROKEE DR	END	A	R	2	185	32	5,920	10/20/2020	32	Poor
Dist 1	BADGERWAY	BADGER WAY	15	COUGAR DR	WILLIAMS RD	A	C	2	681	38	25,878	09/09/2020	87	Good
Dist 1	BAJACIR	BAJA CIR	10	DURANGO ST	END	A	R	2	155	33	5,115	09/28/2020	84	Good
Dist 5	BALDWINST	BALDWIN ST	10	W LAUREL DR	END	A	R	2	466	38	17,708	10/21/2020	34	Poor
Dist 2	BARBARAPL	BARBARA PL	010	BEVERLY DR	FAIRVIEW AVE	A	R	2	752	35	26,320	10/13/2020	33	Poor
Dist 5	BARCELONAC	BARCELONA CIR	10	CHEROKEE DR	END	A	R	2	475	32	15,200	10/20/2020	22	Failed
Dist 2	BARDINCIR	BARDIN CIR	10	BARDIN WAY (N)	BARDIN WAY (S)	A	R	2	1043	32	33,376	10/14/2020	22	Failed
Dist 2	BARDINRD	BARDIN RD	010	E ALISAL RD	TORO AVE	A	C	4	2347	66	154,902	10/14/2020	17	Failed
Dist 2	BARDINRD	BARDIN RD	020	TORO AVE	WILLIAMS RD	A	C	4	675	66	44,550	10/14/2020	33	Poor
Dist 2	BARDINWAY	BARDIN WAY	010	BARDIN CIR (N)	WILLIAMS RD	A	R	2	895	32	28,640	10/14/2020	23	Failed
Dist 5	BARKLEYDR	BARKLEY DR	10	EISENHOWER ST	LOHMAN ST	A	R	2	513	32	16,436	10/20/2020	34	Poor
Dist 3	BAUTISTADR	BAUTISTA DR	10	ORANGE DR	W ROMIE LN	A	R	2	563	32	18,016	10/27/2020	45	Poor
Dist 3	BAUTISTADR	BAUTISTA DR	20	W ROMIE LN	W ACACIA ST	A	R	2	872	32	27,904	10/27/2020	56	Fair
Dist 3	BAYWOODPL	BAYWOOD PL	10	WOODSIDE DR	END	A	R	2	393	32	12,599	09/30/2020	39	Poor
Dist 6	BEACONHILL	BEACON HILL CIR	10	BEACON HILL DR	SW END	A	R	2	180	32	5,791	10/08/2020	83	Good
Dist 6	BEACONHIL1	BEACON HILL DR	10	CONSTITUTION BLVD	ROCKPORT WAY	A	R	2	1033	42	43,386	10/08/2020	83	Good
Dist 6	BEACONHIL1	BEACON HILL DR	20	ROCKPORT WAY	BOSTON ST	A	R	2	1528	42	64,176	10/08/2020	83	Good
Dist 1	BEACONHIL	BEACON HILL DR	20	CONSTITUTION BLVD	END	A	R	2	570	42	23,940	09/29/2020	80	Good
Dist 6	BEACONHIL1	BEACON HILL DR	30	BOSTON ST	CONSTITUTION BLVD	A	R	2	1050	42	44,100	10/08/2020	83	Good
Dist 3	BEDFORDDR	BEDFORD DR	15	COLUMBIA AVE	CAMDEN AVE	A	R	2	1704	32	54,528	10/01/2020	44	Poor
Dist 2	BEECHST	BEECH ST	010	GARNER AVE	ACOSTA ST (SW END)	A	R	2	1810	52	94,120	10/14/2020	29	Failed
Dist 3	BELAIRWAY	BEL AIR WAY	10	W ACACIA ST	FAIRFAX DR	A	R	2	423	32	13,558	10/02/2020	26	Failed
Dist 2	BELLAGIOWA	BELLAGIO WAY	10	CAMPANIA WAY	PALERMO DR	A	R	2	641	32	20,512	10/14/2020	97	Excellent
Dist 3	BELLARMINE	BELLARMINE DR	10	W ALISAL ST	PALMA DR	A	R	2	978	32	31,320	10/01/2020	46	Poor
Dist 2	BELLEHAVEN	BELLEHAVEN ST	15	WILLIAMS RD	TOWT ST	A	R	2	1684	32	53,900	10/13/2020	20	Failed
Dist 3	BELMONTDR	BELMONT DR	15	MELROSE DR	ARCHER ST	A	R	2	1097	32	35,135	10/02/2020	42	Poor
Dist 6	BENNINGTON	BENNINGTON CT	15	BOSTON ST (N)	BOSTON ST (S)	A	R	2	856	34	29,104	10/08/2020	80	Good
Dist 6	BERKSHIREW	BERKSHIRE WAY	15	CAPE COD WAY	BOSTON ST	A	R	2	701	32	22,432	10/08/2020	83	Good

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Dist 1	BERMUDAWAY	BERMUDA WAY	10	RIDER AVE	PACIFIC AVE	A	R	2	720	32	23,055	10/05/2020	78	Good
Dist 1	BERNARDOAV	BERNARDO AVE	15	LA MANCHA WAY	FREEDOM PKWY	A	R	2	1500	37	55,500	10/05/2020	77	Good
Dist 1	BERNARDOCI	BERNARDO CIR	10	BERNARDO AVE	END	A	R	2	336	32	10,772	10/05/2020	80	Good
Dist 2	BEVERLYDR	BEVERLY DR	15	FAIRVIEW AVE	FLORENCE PL	A	R	2	1345	32	43,051	10/13/2020	47	Poor
Dist 1	BISONCIR	BISON CIR	10	BISON WAY	END	A	R	2	186	33	6,142	09/10/2020	87	Good
Dist 1	BISONWAY	BISON WAY	15	EAGLE DR	BUCKHORN DR	A	R	2	1113	33	36,729	09/10/2020	87	Good
Dist 3	BLANCOCIR	BLANCO CIR	10	E BLANCO RD	END	A	R	2	980	50	49,000	10/29/2020	34	Poor
Dist 4	BLOCKAVE	BLOCK AVE	15	KIP DR	PARSONS AVE	A	R	2	1234	38	46,892	10/15/2020	32	Poor
Dist 1	BOBCATWAY	BOBCAT WAY	10	ANTELOPE DR	COUGAR DR	A	R	2	762	34	25,908	09/10/2020	87	Good
Dist 6	BOCAWAY	BOCA WAY	10	EMERALD WAY	TAHOE DR	A	R	2	264	32	8,478	10/07/2020	40	Poor
Dist 5	BOEINGAVE	BOEING AVE	15	RODEO AVE	NAVAJO DR	A	R	2	1600	36	57,603	10/21/2020	36	Poor
Dist 4	BOLEROAVE	BOLERO AVE	15	E LAUREL DR	CHAPARRAL ST	A	R	2	1793	32	57,377	10/15/2020	45	Poor
Dist 2	BOLOGNACT	BOLOGNA CT	10	BOLOGNA WAY (W)	BOLOGNA WAY (E)	A	R	2	737	32	23,584	10/09/2020	77	Good
Dist 2	BOLOGNAWAY	BOLOGNA WAY	15	SIENA WAY	PIAZZA DR	A	R	2	782	32	25,054	10/09/2020	80	Good
Dist 5	BORONDARD	BORONDA RD	120	135' NW OF N DAVIS RD (CITY LIMIT)	N DAVIS RD	A	R	2	135	32	4,320	10/27/2020	71	Good
Dist 5	BORONDARD	BORONDA RD	010EB	N FREEWAY ON RAMP	N MAIN ST	A	A	2	546	32	17,502	10/27/2020	26	Failed
Dist 5	BORONDARD	BORONDA RD	010WB	N MAIN ST	N FREEWAY ON RAMP	A	A	2	546	32	17,502	10/27/2020	47	Poor
Dist 6	BOSTONCIR	BOSTON CIR	10	BENNINGTON CT	END	A	R	2	220	32	7,040	10/08/2020	75	Good
Dist 6	BOSTONST	BOSTON ST	15	BEACON HILL DR	BENNINGTON CT	A	R	2	2945	32	94,240	10/08/2020	83	Good
Dist 6	BOYLECT	BOYLE CT	15	CHRISTENSEN AVE (N)	CHRISTENSEN AVE (S)	A	R	2	1149	34	39,066	10/06/2020	64	Fair
Dist 6	BRADBURYST	BRADBURY ST	10	END	FITZGERALD ST	A	R	2	2003	37	74,111	10/08/2020	82	Good
Dist 3	BRIARWOODP	BRIARWOOD PL	15	END	END	A	R	2	720	32	23,040	09/30/2020	54	Fair
Dist 4	BRIDGEALY	BRIDGE ALY	10	MARKET WAY	E LAKE ST	P	R	2	561	18	10,111	10/19/2020	56	Fair
Dist 4	BRIDGEST	BRIDGE ST	10	N MAIN ST	E MENKE ST	A	R	2	680	24	16,320	10/19/2020	16	Failed
Dist 4	BRIDGEST	BRIDGE ST	20	E MENKE ST	E ROSSI ST	A	R	2	410	30	12,300	10/19/2020	26	Failed
Dist 4	BRIDGEST	BRIDGE ST	30	E ROSSI ST	S END (WALL)	P	R	2	240	24	5,760	10/26/2020	100	Excellent
Dist 4	BRIDGEST	BRIDGE ST	40	E LAKE ST	N END (WALL)	A	R	2	95	42	3,990	10/19/2020	23	Failed
Dist 4	BRIDGEST	BRIDGE ST	50	E LAKE ST	MARKET WAY	P	C	2	416	45	18,758	10/19/2020	60	Fair
Dist 4	BRIGHTONST	BRIGHTON ST	10	STEVENSON ST	FILBERT WAY	A	R	2	478	32	15,300	10/14/2020	50	Poor
Dist 4	BRIGHTONST	BRIGHTON ST	20	FILBERT WAY	MCALLISTER ST	A	R	2	436	32	13,968	10/14/2020	60	Fair
Dist 6	BRISTOLCIR	BRISTOL CIR	10	BEACON HILL DR	NE END	A	R	2	290	32	9,280	10/08/2020	83	Good
Dist 6	BROADWAYDR	BROADWAY DR	15	PENNSYLVANIA DR	HARDEN PKWY	A	R	2	1203	41	49,323	09/29/2020	75	Good
Dist 5	BROOKSRD	BROOKS RD	10	WESTRIDGE PKWY	BORONDA RD	A	C	2	884	32	28,290	10/27/2020	72	Good
Dist 3	BRUCEAVE	BRUCE AVE	10	TALBOT ST	COLLEGE DR	A	R	2	779	32	24,946	10/02/2020	34	Poor
Dist 3	BRUCEAVE	BRUCE AVE	20	W ACACIA ST	COLLEGE DR	A	R	2	836	32	26,762	10/02/2020	42	Poor
Dist 3	BRUNKENAVE	BRUNKEN AVE	10	SPICER ST	CHAMBERLAIN ST	A	C	2	567	42	23,814	09/29/2020	66	Fair
Dist 3	BRUNKENAVE	BRUNKEN AVE	20	CHAMBERLAIN ST	MALARIN ST	A	C	2	1012	42	42,504	09/29/2020	34	Poor
Dist 3	BRUNKENAVE	BRUNKEN AVE	30	MALARIN ST	END	A	R	2	855	42	35,910	09/29/2020	58	Fair
Dist 5	BRUTUSST	BRUTUS ST	15	END (N)	END (S)	A	R	2	1137	32	36,392	10/20/2020	33	Poor
Dist 4	BRYANTCIR	BRYANT CIR	10	VAN NESS CT	END	A	R	2	256	32	8,207	10/14/2020	62	Fair
Dist 5	BUCHANANWA	BUCHANAN WAY	10	KENNEDY ST (N)	KENNEDY ST (S)	A	R	2	670	32	21,444	10/20/2020	34	Poor
Dist 1	BUCKEYEWAY	BUCKEYE WAY	10	MADRONE DR	NOGAL DR	A	R	2	375	38	14,284	09/28/2020	87	Good
Dist 1	BUCKHORNDR	BUCKHORN DR	15	RIDER AVE	N SANBORN RD	A	C	2	1857	37	68,709	09/10/2020	82	Good
Dist 1	BUCKHORNDR	BUCKHORN DR	25	N SANBORN RD	FALCON RD	A	C	2	945	37	34,965	09/10/2020	87	Good
Dist 6	BUCKINGHAM	BUCKINGHAM CIR	10	BUCKINGHAM DR	END	A	R	2	168	32	5,384	10/07/2020	79	Good
Dist 6	BUCKINGHA1	BUCKINGHAM DR	10	CASCADE WAY	DORSET WAY	A	R	2	626	38	23,788	10/07/2020	79	Good
Dist 6	BUCKINGHA1	BUCKINGHAM DR	20	DORSET WAY	ARCADIA WAY	A	R	2	702	37	25,974	10/07/2020	79	Good
Dist 6	BUCKINGHA2	BUCKINGHAM WAY	10	EL DORADO DR	BUCKINGHAM DR	A	R	2	169	44	7,436	10/07/2020	77	Good

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	BUENAVISTA	BUENA VISTA ST	10	WILSON ST	PARK ST	P	R	2	637	40	25,488	10/26/2020	56	Fair
Dist 6	BUNKERHILL	BUNKER HILL WAY	15	CONSTITUTION BLVD	GEORGETOWN WAY	A	R	2	1245	37	46,065	10/08/2020	79	Good
Dist 6	BURGUNDYWA	BURGUNDY WAY	15	CABERNET WAY	CHARDONNAY DR	A	R	2	422	37	15,614	09/29/2020	69	Fair
Dist 1&2	BURKEST	BURKE ST	10	DEL MONTE AVE	END	A	R	2	708	25	17,700	10/22/2020	26	Failed
Dist 6	BURLINGTON	BURLINGTON CIR	10	BURLINGTON DR	END	A	R	2	193	31	5,983	10/08/2020	80	Good
Dist 6	BURLINGTO1	BURLINGTON DR	15	PROVINCETOWN DR	END	A	R	2	1015	37	37,555	10/08/2020	77	Good
Dist 3	BURTONAVE	BURTON AVE	10	HARKINS RD	END	A	R	2	1180	42	49,560	09/28/2020	13	Failed
Dist 5	BUSHST	BUSH ST	10	RICO ST	HYDE ST	A	R	2	1294	32	41,408	10/21/2020	71	Good
Dist 4	BUSHST	BUSH ST	20	HYDE ST	S END	A	R	2	185	32	5,920	10/14/2020	50	Poor
Dist 3	BYRONDR	BYRON DR	10	CHAUCER DR	STEPHANIE DR	A	R	2	857	32	27,433	10/01/2020	57	Fair
Dist 1	CST	C ST	010	MAE AVE	GALINDO ST	A	R	2	847	32	27,119	10/05/2020	49	Poor
Dist 4	CETENTR	C.E.T. ENTRANCE	010	NAVAJO DR	END	A	R	2	175	32	5,600	08/31/2017	19	Failed
Dist 6	CABERNETCI	CABERNET CIR	10	CABERNET WAY	END	A	R	2	190	31	5,890	09/29/2020	73	Good
Dist 6	CABERNETWA	CABERNET WAY	15	CHARDONNAY DR	BURGUNDY WAY	A	R	2	1103	33	36,399	09/29/2020	69	Fair
Dist 6	CABOTWAY	CABOT WAY	15	BEACON HILL DR	BERKSHIRE WAY	A	R	2	766	37	28,342	10/08/2020	83	Good
Dist 4	CABRILLOAV	CABRILLO AVE	10	TAMPICO AVE	LINWOOD DR	A	R	2	880	32	28,177	10/15/2020	47	Poor
Dist 5	CACERASCIR	CACERAS CIR	10	CHEROKEE DR	END	A	R	2	480	32	15,360	10/20/2020	25	Failed
Dist 1	CACHUMACT	CACHUMA CT	10	GAVIOTA DR (W)	GAVIOTA DR (E)	A	R	2	989	34	33,626	09/09/2020	80	Good
Dist 1	CACTUSCT	CACTUS CT	10	TUMBLEWEED DR (N)	TUMBLEWEED DR (S)	A	R	2	1254	32	40,128	10/05/2020	82	Good
Dist 5	CADIZCIR	CADIZ CIR	10	CHEROKEE DR	END	A	R	2	390	32	12,480	10/20/2020	33	Poor
Dist 6	CALAVERASD	CALAVERAS DR	15	END	END	A	R	2	3228	32	103,300	10/07/2020	46	Poor
Dist 3	CALIFORNIA	CALIFORNIA ALY	010	E GABILAN ST	E ALISAL ST	P	R	2	765	20	15,300	11/02/2020	70	Fair
Dist 3	CALIFORNIA	CALIFORNIA ALY	020	E ALISAL ST	E SAN LUIS ST	C	R	2	668	14	9,352	11/02/2020	67	Fair
Dist 3	CALIFORNIA	CALIFORNIA ALY	030	E SAN LUIS ST	END	A	R	2	420	18	7,560	11/02/2020	11	Failed
Dist 4	CALIFORNI1	CALIFORNIA ST	010	S. END	MARKET WAY	A	R	2	166	25	4,150	10/19/2020	51	Fair
Dist 4	CALIFORNI1	CALIFORNIA ST	020	MARKET WAY	E ROSSI ST	P	R	2	861	52	44,772	10/19/2020	41	Poor
Dist 3	CALIFORNI1	CALIFORNIA ST	045	E GABILAN ST	JOHN ST	C	C	2	2332	46	107,272	11/02/2020	43	Poor
Dist 3	CALIFORNI1	CALIFORNIA ST	145	E ACACIA ST	E ROMIE LN	A	C	2	611	48	29,328	11/02/2020	33	Poor
Dist 3	CALIFORNI1	CALIFORNIA ST	105A	JOHN ST	MAPLE ST	A	C	2	950	46	43,700	11/02/2020	33	Poor
Dist 3	CALIFORNI1	CALIFORNIA ST	105B	MAPLE ST	E ACACIA ST	P	C	2	1625	50	81,250	11/02/2020	60	Fair
Dist 4	CALLECEBU	CALLE CEBU	15	SHERWOOD DR	SUN WAY	A	R	2	1056	37	39,072	10/19/2020	79	Good
Dist 1	CAMARILLOC	CAMARILLO CT	10	MORENO DR (N)	MORENO DR (S)	A	R	2	1000	33	33,000	09/09/2020	80	Good
Dist 6	CAMBRIANDR	CAMBRIAN DR	10	ATHERTON WAY	CUPERTINO WAY	A	R	2	1320	37	48,840	10/07/2020	34	Poor
Dist 6	CAMBRIANDR	CAMBRIAN DR	30	CUPERTINO WAY	SAUSAL DR	A	R	2	1051	37	38,887	10/07/2020	25	Failed
Dist 6	CAMBRIDGEC	CAMBRIDGE CT	10	WESTMINSTER DR (N)	END	A	R	2	1389	32	44,464	10/06/2020	76	Good
Dist 3	CAMDENWAY	CAMDEN WAY	010	BEDFORD DR	W ACACIA ST	A	R	2	215	32	6,880	10/01/2020	46	Poor
Dist 3	CAMDENWAY	CAMDEN WAY	020	W ACACIA ST	CARMELITA DR	A	R	2	538	32	17,216	10/01/2020	49	Poor
Dist 1	CAMILLECT	CAMILLE CT	10	ATLANTIC ST	END	A	R	2	194	25	4,850	10/05/2020	65	Fair
Dist 2	CAMPANIACI	CAMPANIA CIR	10	PALERMO DR	EAST END	A	R	2	242	32	7,744	10/14/2020	89	Good
Dist 2	CAMPANIAWA	CAMPANIA WAY	15	PALERMO DR	WEST END	A	R	2	1151	34	39,134	10/12/2020	82	Good
Dist 3	CAMPUSAVE	CAMPUS AVE	010	HASTINGS AVE	LEMOS AVE	A	R	2	675	32	21,600	10/28/2020	15	Failed
Dist 3	CAMPUSAVE	CAMPUS AVE	020	LEMOS AVE	FAIRFAX DR	A	R	2	250	31	7,750	10/28/2020	29	Failed
Dist 1	CANCUNCIR	CANCUN CIR	10	BERNARDO AVE	END	A	R	2	145	33	4,785	10/05/2020	78	Good
Dist 2	CANELLICT	CANELLI CT	15	TUSCANY BLVD	CANELLI CT	A	R	2	1642	33	54,186	10/09/2020	81	Good
Dist 6	CANTERBURY	CANTERBURY ST	15	LEXINGTON DR	END	A	R	2	1215	32	38,883	10/08/2020	78	Good
Dist 1	CAOBAWAY	CAOBA WAY	10	AMARILLO WAY	NOGAL DR	A	R	2	875	32	28,000	09/28/2020	36	Poor
Dist 1	CAOBAWAY	CAOBA WAY	20	AMARILLO WAY	END	A	R	2	169	37	6,253	09/28/2020	11	Failed
Dist 6	CAPECODWAY	CAPE COD WAY	15	ROCKPORT WAY	CONSTITUTION BLVD	A	R	2	1142	32	36,554	10/08/2020	83	Good

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	CAPISTRANO	CAPISTRANO DR	15	ORANGE DR	W ACACIA ST	A	R	2	1559	32	49,910	10/27/2020	36	Poor
Dist 3	CAPITOLST	CAPITOL ST	010	W MARKET ST	CENTRAL ST	P	C	2	1170	40	46,800	10/27/2020	49	Poor
Dist 3	CAPITOLST	CAPITOL ST	020	CENTRAL AVE	CLAY ST	P	C	2	2260	40	90,400	10/27/2020	53	Fair
Dist 3	CAPITOLST	CAPITOL ST	030	CLAY ST	END	C	R	2	519	40	20,760	10/27/2020	31	Poor
Dist 3	CAPITOLST	CAPITOL ST	110	LANG ST	GEIL ST	A	R	2	325	38	12,350	10/27/2020	24	Failed
Dist 2	CAPRIWAY	CAPRI WAY	15	PIAZZA DR	END	A	R	2	810	32	25,933	10/09/2020	81	Good
Dist 1	CARDINAWAY	CARDINA WAY	10	BERNARDO AVE	PALMERA AVE	A	R	2	440	34	14,985	10/05/2020	77	Good
Dist 1	CARICT	CARI CT	10	ATLANTIC ST	END	A	R	2	194	25	4,850	10/05/2020	65	Fair
Dist 1	CARIBBEANA	CARIBBEAN AVE	010	HAWAII PL	TAHITI PL	A	R	2	241	32	7,712	10/05/2020	48	Poor
Dist 1	CARIBBEANA	CARIBBEAN AVE	020	TAHITI PL	PACIFIC AVE	A	R	2	239	32	7,659	10/05/2020	42	Poor
Dist 3	CARMELAVE	CARMEL AVE	010	MAPLE ST	EL PASO PL	P	C	2	1263	34	42,942	10/28/2020	64	Fair
Dist 3	CARMELAVE	CARMEL AVE	020	EL PASO PL	HAWTHORNE ST	C	C	2	694	37	25,678	10/03/2020	26	Failed
Dist 3	CARMELITAD	CARMELITA DR	010	AMBROSE DR	W ALISAL ST	A	R	2	1904	32	60,928	10/01/2020	27	Failed
Dist 3	CARMELITAD	CARMELITA DR	020	W ALISAL ST	PALMA DR	A	R	2	1050	37	38,850	10/01/2020	40	Poor
Dist 2	CAROLDR	CAROL DR	15	FLORENCE PL	END	A	R	2	1431	32	45,813	10/13/2020	46	Poor
Dist 4	CARRAVE	CARR AVE	15	E MARKET ST	END	A	R	2	748	38	28,438	10/19/2020	51	Fair
Dist 2	CARRIAGECT	CARRIAGE CT	10	CARRIAGE DR (N)	CARRIAGE DR (S)	A	R	2	786	32	25,152	10/12/2020	50	Poor
Dist 2	CARRIAGEDR	CARRIAGE DR	010	COUNTRYSIDE DR	CARRIAGE CT (N)	A	R	2	448	32	14,336	10/12/2020	51	Fair
Dist 6	CASCADECIR	CASCADE CIR	15	KLAMATH DR	END	A	R	2	491	32	15,739	10/07/2020	45	Poor
Dist 6	CASCADECT	CASCADE CT	15	KLAMATH DR	CASCADE CIR	A	R	2	958	37	35,446	10/07/2020	42	Poor
Dist 6	CASCADEWAY	CASCADE WAY	15	BUCKINGHAM DR	KLAMATH DR	A	R	2	877	37	32,449	10/07/2020	63	Fair
Dist 4&5	CASENTINIS	CASENTINI ST	10	RICO ST	N MAIN ST	A	C	2	2331	42	97,941	10/22/2020	65	Fair
Dist 3	CASSIDYST	CASSIDY ST	10	CENTRAL AVE	ARCHER ST	C	R	2	320	32	10,240	10/29/2020	32	Poor
Dist 2	CASSINOCIR	CASSINO CIR	10	CASSINO WAY	END	A	R	2	290	32	9,280	10/09/2020	80	Good
Dist 2	CASSINOWAY	CASSINO WAY	15	SPOLETO ST (N)	SPOLETO ST (S)	A	R	2	1041	37	38,517	10/09/2020	80	Good
Dist 6	CASTLETONS	CASTLETON ST	15	LITTLE RIVER DR	END	A	R	2	729	37	26,973	10/07/2020	80	Good
Dist 5	CASTROST	CASTRO ST	10	N MAIN ST	W LAMAR ST	A	R	2	680	32	21,769	10/20/2020	51	Fair
Dist 3	CATALINAAV	CATALINA AVE	10	WILSON ST	NACIONAL ST	A	R	2	668	37	24,716	10/26/2020	37	Poor
Dist 1	CAYUCOSCIR	CAYUCOS CIR	10	MORENO DR	END	A	R	2	234	33	7,722	09/09/2020	80	Good
Dist 3	CAYUGAST	CAYUGA ST	010	CENTRAL AVE	W GABILAN ST	C	R	2	473	38	17,974	10/27/2020	35	Poor
Dist 3	CAYUGAST	CAYUGA ST	110	W ALISAL ST	CLAY ST	C	R	2	1117	39	43,563	10/27/2020	31	Poor
Dist 3	CAYUGAST	CAYUGA ST	120	CLAY ST	S END	A	R	2	290	37	10,730	10/27/2020	35	Poor
Dist 4	CEDARST	CEDAR ST	10	PARKWAY RD	E MARKET ST	A	R	2	416	36	14,976	10/16/2020	36	Poor
Dist 4	CEDARST	CEDAR ST	25	N SANBORN RD	E MARKET ST	A	R	2	397	35	13,895	10/16/2020	31	Poor
Dist 3	CEDROSAVE	CEDROS AVE	10	NACIONAL ST	END	A	R	2	385	32	12,320	10/26/2020	23	Failed
Dist 4	CENTERST	CENTER ST	15	E MARKET ST	EAST ST	A	R	2	906	38	34,428	10/19/2020	50	Poor
Dist 3	CENTRALAVE	CENTRAL AVE	055	DAVIS RD	UNIVERSITY AVE	C	C	2	882	49	43,218	10/26/2020	54	Fair
Dist 3	CENTRALAVE	CENTRAL AVE	065	UNIVERSITY AVE	NACIONAL ST	C	C	2	1475	49	72,275	10/26/2020	40	Poor
Dist 3	CENTRALAVE	CENTRAL AVE	075	NACIONAL ST	HOMESTEAD AVE	C	C	2	1279	49	62,671	10/26/2020	44	Poor
Dist 3	CENTRALAVE	CENTRAL AVE	085	HOMESTEAD AVE	CAPITOL ST	C	C	2	1277	49	62,573	10/26/2020	54	Fair
Dist 3	CENTRALAVE	CENTRAL AVE	095	CAPITOL ST	SALINAS ST	C	C	2	1299	49	63,651	10/26/2020	40	Poor
Dist 3	CENTRALAVE	CENTRAL AVE	180	SALINAS ST	MAIN ST	A	C	2	260	40	10,429	10/26/2020	50	Poor
Dist 6	CHABLISCIR	CHABLIS CIR	10	MERLOT WAY	END	A	R	2	259	31	8,029	09/29/2020	71	Good
Dist 3	CHALONCIR	CHALON CIR	10	W ACACIA ST	END	A	R	2	256	32	8,199	10/02/2020	24	Failed
Dist 3	CHAMBERLAI	CHAMBERLAIN ST	10	BRUNKEN AVE	ABBOTT ST	A	R	2	671	41	27,511	09/29/2020	23	Failed
Dist 1	CHAMISECIR	CHAMISE CIR	10	CHAMISE CT	END	A	R	2	231	32	7,404	10/05/2020	82	Good
Dist 1	CHAMISEDR	CHAMISE DR	010	BUCKHORN DR	TAMARAK WAY	A	R	2	873	37	32,301	10/05/2020	83	Good
Dist 1	CHAMISEDR	CHAMISE DR	020	TAMARAK WAY	SAGE CT (S)	A	R	2	899	32	28,768	10/05/2020	83	Good

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Dist 4	CHAPARRALS	CHAPARRAL ST	015	N MAIN ST	LINWOOD DR	A	C	2	3143	42	132,006	10/15/2020	36	Poor
Dist 4	CHAPARRALS	CHAPARRAL ST	035	LINWOOD DR	NATIVIDAD RD	A	C	2	2486	38	94,468	10/15/2020	69	Fair
Dist 6	CHARDONNAY	CHARDONNAY CIR	10	CHARDONNAY DR	END	A	R	2	200	31	6,200	09/29/2020	73	Good
Dist 6	CHARDONNA1	CHARDONNAY DR	15	CROMWELL DR	MCKINNON ST	A	R	2	2365	41	96,965	09/29/2020	71	Good
Dist 6	CHARLESTOW	CHARLESTOWN WAY	15	BEACON HILL DR	BUNKER HILL WAY	A	R	2	552	37	20,424	10/08/2020	77	Good
Dist 1	CHARROWAY	CHARRO WAY	10	ALAMO WAY	RIDER AVE	A	R	2	302	38	11,476	09/29/2020	47	Poor
Dist 3	CHAUCERDR	CHAUCER DR	15	W END	E END	A	R	2	2011	38	76,418	10/01/2020	67	Fair
Dist 6	CHELSEACT	CHELSEA CT	10	WIMBLEDON AVE (W)	WIMBLEDON AVE (E)	A	R	2	1476	32	47,232	10/07/2020	66	Fair
Dist 5	CHEROKEECT	CHEROKEE CT	10	CHEROKEE DR (N)	CHEROKEE DR (S)	A	R	2	1646	32	52,686	10/20/2020	19	Failed
Dist 5	CHEROKEEDR	CHEROKEE DR	010	N MAIN ST	MADRID ST	A	C	2	2035	42	85,470	10/20/2020	68	Fair
Dist 5	CHEROKEEDR	CHEROKEE DR	020	MADRID ST	SEVILLE ST	A	C	2	599	42	25,158	10/20/2020	41	Poor
Dist 5	CHEROKEEDR	CHEROKEE DR	030	SEVILLE ST	DURAN ST	A	C	2	581	42	24,402	10/20/2020	59	Fair
Dist 5	CHEROKEEDR	CHEROKEE DR	040	DURAN ST	W ALVIN DR	A	C	2	1324	42	55,608	10/20/2020	49	Poor
Dist 5	CHEROKEEDR	CHEROKEE DR	050	W AVLIN DR	INCA WAY	A	C	2	883	38	33,554	10/20/2020	66	Fair
Dist 5	CHEROKEEDR	CHEROKEE DR	060	INCA WAY	TULANE ST	A	C	2	2170	38	82,460	10/20/2020	49	Poor
Dist 5	CHEROKEEDR	CHEROKEE DR	070	TULANE ST	S END	A	C	2	525	38	19,950	10/20/2020	28	Failed
Dist 4	CHERRYDR	CHERRY DR	10	SHERWOOD DR	PEACH DR	A	R	2	701	32	22,459	10/19/2020	17	Failed
Dist 6	CHESHIREWA	CHESHIRE WAY	10	BENNINGTON CT	BEACON HILL DR	A	R	2	249	37	9,213	10/08/2020	78	Good
Dist 3	CHESTNUTST	CHESTNUT ST	10	S MAIN ST	PAJARO ST	C	R	2	773	43	33,239	10/03/2020	32	Poor
Dist 3	CHESTNUTST	CHESTNUT ST	20	PAJARO ST	CALIFORNIA ST	C	R	2	691	45	31,095	10/03/2020	50	Poor
Dist 6	CHESWICKCI	CHESWICK CIR	10	WELLINGTON CT	END	A	R	2	390	32	12,503	10/08/2020	80	Good
Dist 6	CHICOWAY	CHICO WAY	10	SISKIYOU DR	CALAVERAS DR	A	R	2	695	32	22,265	10/06/2020	44	Poor
Dist 6	CHRISTENSE	CHRISTENSEN AVE	15	E ALVIN DR	JULIA AVE	A	R	2	1888	38	71,744	10/06/2020	68	Fair
Dist 3	CHURCHST	CHURCH ST	40	CLAY ST	W ALISAL ST	C	C	2	1117	38	42,446	10/27/2020	46	Poor
Dist 3	CHURCHST	CHURCH ST	50	W ALISAL ST	CENTRAL AVE	A	C	2	1142	38	43,396	10/27/2020	36	Poor
Dist 6	CHURCHILLC	CHURCHILL CIR	10	CHURCHILL WAY	END	A	R	2	244	33	8,052	09/29/2020	69	Fair
Dist 6	CHURCHILLW	CHURCHILL WAY	15	CROMWELL DR (W)	CROMWELL DR (N)	A	R	2	1057	33	34,881	09/29/2020	72	Good
Dist 4	CIRCLEDR	CIRCLE DR	010	N MADEIRA AVE	N SANBORN RD	A	R	2	2835	37	104,895	10/15/2020	65	Fair
Dist 4	CIRCLEDR	CIRCLE DR	015	N SANBORN RD	OREGON ST	A	C	2	1563	35	54,705	10/15/2020	36	Poor
Dist 4	CIRCLEPL	CIRCLE PL	10	CIRCLE DR	END	A	R	2	678	38	25,764	10/16/2020	42	Poor
Dist 5	CLAREMONTS	CLAREMONT ST	10	ROCHEX AVE	W LAUREL DR	A	R	2	457	32	14,633	10/21/2020	51	Fair
Dist 3	CLARKST	CLARK ST	15	NACIONAL CT (S)	W MARKET ST	A	C	2	1356	50	67,831	09/30/2020	53	Fair
Dist 3	CLAYALY	CLAY ALY	10	W SAN LUIS ST	CLAY ST	P	R	2	444	14	6,216	10/27/2020	54	Fair
Dist 3	CLAYST	CLAY ST	10	S MAIN ST	LINCOLN AVE	A	C	2	363	57	20,691	10/29/2020	36	Poor
Dist 3	CLAYST	CLAY ST	20	LINCOLN AVE	IVERSON ST	C	C	2	1962	36	70,632	10/29/2020	37	Poor
Dist 5	CLEVELANDA	CLEVELAND AVE	15	VAN BUREN AVE	LENNY ST	A	R	2	1212	38	46,056	10/20/2020	32	Poor
Dist 6	CLINTONCT	CLINTON CT	10	MANHATTAN DR	S END	A	R	2	347	33	11,451	09/29/2020	77	Good
Dist 6	CLINTONCT	CLINTON CT	20	MANHATTAN DR at HUDSON WAY	CLINTON CT	A	R	2	895	33	29,535	09/29/2020	77	Good
Dist 1	COBBLESTON	COBBLESTONE ST	010	BEACON HILL DR	START ONEWAY LOOP	A	R	2	1290	34	43,860	09/29/2020	82	Good
Dist 1	COBBLESTON	COBBLESTONE ST	020	START ONEWAY LOOP	END ONEWAY @ COBBLESTONE	A	R	1	545	26	14,170	09/29/2020	78	Good
Dist 4	COITWAY	COIT WAY	10	BRIGHTON ST	W ROSSI ST	A	R	2	156	37	5,772	10/14/2020	39	Poor
Dist 3	COLERIDGED	COLERIDGE DR	10	LOS OLIVOS ST	RIKER ST	A	R	2	1411	37	52,207	10/01/2020	71	Good
Dist 3	COLERIDGED	COLERIDGE DR	20	RIKER ST	SE END	A	R	2	425	32	13,600	10/01/2020	65	Fair
Dist 3	COLLEGEDR	COLLEGE DR	010	CAMPUS AVE	W ALISAL ST	A	C	2	1216	38	46,208	10/02/2020	43	Poor
Dist 3	COLLEGEDR	COLLEGE DR	020	W ALISAL ST	END	A	R	2	1481	38	56,278	10/02/2020	30	Failed
Dist 5	COLTONDR	COLTON DR	15	FLINT WAY	ESTRADA WAY	A	R	2	1311	32	41,958	10/21/2020	75	Good
Dist 3	COLUMBIAAV	COLUMBIA AVE	10	HASTINGS AVE	LEMOS AVE	A	R	2	682	32	21,824	10/01/2020	38	Poor
Dist 3	COLUMBIAAV	COLUMBIA AVE	20	LEMOS AVE	W ACACIA ST	A	R	2	865	32	27,680	10/01/2020	36	Poor

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Dist 5	COLUMBINED	COLUMBINE DR	10	HEATHER DR	LUPIN DR	A	R	2	755	32	24,176	10/21/2020	35	Poor
Dist 6	COLUSAPL	COLUSA PL	10	MENDOCINO DR (W)	MENDOCINO DR (E)	A	R	2	1470	32	47,040	09/29/2020	29	Failed
Dist 5	COMANCHEWA	COMANCHE WAY	10	SHAWNEE WAY	CHEROKEE DR	A	R	2	786	32	25,161	10/20/2020	29	Failed
Dist 4	COMMISSION	COMMISSION ST	15	GRIFFIN ST	END	A	R	2	1489	32	47,659	10/19/2020	32	Poor
Dist 6	COMPTONWAY	COMPTON WAY	15	PESCADERO DR	GLENDORA WAY	A	R	2	535	38	20,356	10/07/2020	34	Poor
Dist 4	CONNELYCT	CONNELY CT	10	CONNELY ST	CONNELY ST	A	R	2	593	32	18,996	10/13/2020	34	Poor
Dist 4	CONNELYST	CONNELY ST	15	N SANBORN RD	EUCALYPTUS DR	A	R	2	886	35	31,010	10/13/2020	25	Failed
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB10	E LAUREL DR	INDEPENDENCE BLVD	A	A	2	3904	32	124,944	10/22/2020	74	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB20	INDEPENDENCE BLVD	BEACON HILL DR	A	A	2	1728	32	55,314	10/22/2020	75	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB30	BEACON HILL DR	LAS CASITAS DR	A	A	2	1002	32	32,095	10/22/2020	81	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB40	LAS CASITAS DR	FREEDOM PKWY	A	A	2	1202	34	40,868	10/22/2020	69	Fair
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB50	FREEDOM PKWY	BEACON HILL DR (N)	A	A	2	840	34	28,560	10/22/2020	64	Fair
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB60	BEACON HILL DR (N)	RHODE ISLAND ST	A	A	2	877	34	29,818	10/22/2020	67	Fair
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB70	RHODE ISLAND ST	E BORONDA RD	A	A	2	640	34	21,760	10/06/2020	83	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB10	E BORONDA RD	NANTUCKET BLVD	A	A	2	640	34	21,760	10/06/2020	83	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB20	NANTUCKET BLVD	BEACON HILL DR (N)	A	A	2	886	34	30,124	10/22/2020	70	Fair
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB30	BEACON HILL DR (N)	LAS CASITAS DR	A	A	2	1003	32	32,096	10/22/2020	76	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB40	LAS CASITAS DR	FREEDOM PKWY	A	A	2	1189	34	40,426	10/22/2020	65	Fair
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB50	FREEDOM PKWY	BEACON HILL DR (S)	A	A	2	844	34	28,696	10/22/2020	64	Fair
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB60	BEACON HILL DR (S)	INDEPENDENCE BLVD	A	A	2	1729	32	55,328	10/22/2020	75	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB70	INDEPENDENCE BLVD	E LAUREL DR	A	A	2	3904	32	124,944	10/22/2020	70	Fair
Dist 5	COOLIDGEST	COOLIDGE ST	10	HOOVER ST	TAYLOR ST	A	R	2	494	32	15,816	10/20/2020	51	Fair
Dist 2	COOPERAVE	COOPER AVE	10	2ND AVE	TOWT ST	A	R	2	472	35	16,520	10/13/2020	29	Failed
Dist 3	CORNELLAVE	CORNELL AVE	10	HASTINGS AVE	LEMOS AVE	A	R	2	681	32	21,815	10/01/2020	40	Poor
Dist 3	CORONADOAV	CORONADO AVE	10	WILSON ST	SANTA BARBARA AVE	A	R	2	536	32	17,167	10/26/2020	51	Fair
Dist 2	CORTEZST	CORTEZ ST	15	NEW DEAL ST	END	A	R	2	1045	32	33,440	10/14/2020	27	Failed
Dist 1	CORTINAWAY	CORTINA WAY	10	BERNARDO AVE	PALMERA AVE	A	R	2	593	37	21,941	10/05/2020	76	Good
Dist 1	CTTNWDCT	COTTONWOOD CT	10	COTTONWOOD DR (W)	COTTONWOOD DR (E)	A	R	2	895	33	29,535	09/28/2020	75	Good
Dist 1	CTTNWDDR	COTTONWOOD DR	010	COTTONWOOD CT	END	A	R	2	1145	33	37,785	09/28/2020	65	Fair
Dist 1	CTTNWDWY	COTTONWOOD WAY	010	RIDER AVE	COTTONWOOD DR	A	R	2	429	37	15,873	09/28/2020	86	Good
Dist 1	COUGARDR	COUGAR DR	15	ANTELOPE DR	FREEDOM PKWY	A	R	2	2407	37	89,059	09/09/2020	87	Good
Dist 1	COUGARWAY	COUGAR WAY	10	EAGLE DR	COUGAR DR	A	R	2	244	38	9,272	09/09/2020	87	Good
Dist 2	COUNTRYSID	COUNTRYSIDE DR	15	BARDIN RD	EAST END	A	R	2	915	40	36,600	10/12/2020	48	Poor
Dist 6	COVENTRYST	COVENTRY ST	10	BARRICADE (S)	N END	A	R	2	2130	38	80,940	10/07/2020	74	Good
Dist 6	COVENTRYST	COVENTRY ST	15	GLENDORA WAY	BARICADE (N)	A	R	2	120	37	4,440	10/22/2020	50	Poor
Dist 6	CREEKBRIDG	CREEKBRIDGE CIR	10	PROVINCETOWN DR	END	A	R	2	316	32	10,119	10/08/2020	74	Good
Dist 5	CRESCENTWA	CRESCENT WAY	15	ADAMS ST	N 1ST ST	A	R	2	2692	32	86,170	10/21/2020	31	Poor
Dist 3	CRESPIWAY	CRESPI WAY	10	W ACACIA ST	PALMA DR	A	R	2	887	32	28,411	10/02/2020	33	Poor
Dist 6	CRESTVIEWS	CRESTVIEW ST	15	KITTERY ST	END	A	R	2	1208	33	39,864	10/08/2020	81	Good
Dist 6	CRESTVIEWW	CRESTVIEW WAY	10	SNUG HARBOR ST	CRESTVIEW ST	A	R	2	233	32	7,456	10/08/2020	80	Good
Dist 6	CROMWELLCI	CROMWELL CIR	10	CROMWELL DR	END	A	R	2	128	32	4,104	09/29/2020	73	Good
Dist 6	CROMWELLDR	CROMWELL DR	15	EL DORADO DR	VICTORIA AVE	A	R	2	1361	37	50,357	09/29/2020	72	Good
Dist 2	CROSSAVE	CROSS AVE	010	PALOMA AVE (E)	E MARKET ST	A	R	2	465	38	17,670	10/12/2020	69	Fair
Dist 2	CROSSAVE	CROSS AVE	020	E MARKET ST	MIAMI ST	A	R	2	1809	36	65,124	10/12/2020	41	Poor
Dist 2	CROSSAVE	CROSS AVE	030	MIAMI ST	BARDIN RD	A	R	2	1086	36	39,096	10/12/2020	57	Fair
Dist 2	CROSSAVE	CROSS AVE	110	CROSS AVE	PALOMA AVE	A	R	1	225	20	4,500	10/12/2020	64	Fair
Dist 5	CUEVASCIR	CUEVAS CIR	10	CHEROKEE DR	END	A	R	2	337	32	10,811	10/20/2020	64	Fair
Dist 6	CUPERTINOW	CUPERTINO WAY	15	MILLBRAE ST	CAMBRIAN DR	A	R	2	2262	32	72,397	10/07/2020	38	Poor

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	CYPRESSST	CYPRESS ST	10	CENTRAL AVE	END	A	R	2	238	37	8,806	10/26/2020	26	Failed
Dist 1	DST	D ST	15	MAE AVE	GALINDO ST	A	R	2	851	32	27,261	10/05/2020	43	Poor
Dist 2	DALLASAVE	DALLAS AVE	10	GARNER AVE	CORTEZ ST	A	R	2	775	36	27,900	10/14/2020	22	Failed
Dist 2	DALLASAVE	DALLAS AVE	20	CORTEZ ST	DEL MONTE AVE	A	R	2	770	36	27,720	10/14/2020	18	Failed
Dist 6	DANBURYST	DANBURY ST	15	HARTFORD ST	INDEPENDENCE BLVD	A	R	2	751	32	24,060	10/07/2020	78	Good
Dist 6	DARTMOUTHW	DARTMOUTH WAY	10	E BORONDA RD	S END (BARICADE)	A	R	2	364	41	14,924	09/29/2020	55	Fair
Dist 3	DAYTONST	DAYTON ST	10	HARKINS RD	END	A	R	2	1635	42	68,670	09/28/2020	10	Failed
Dist 1	DECUNHACT	DE CUNHA CT	15	DECLARATION ST (N)	DECLARATION ST (S)	A	R	2	2009	32	64,288	09/10/2020	77	Good
Dist 2	DELATORRE	DE LA TORRE ST	15	ROY DIAZ ST (N)	ROY DIAZ ST (S)	A	R	2	2121	40	84,851	10/13/2020	60	Fair
Dist 3	DELAVINAWA	DE LA VINA WAY	10	LOS OLIVOS DR	PASATIEMPO WAY	A	R	2	601	32	19,261	10/01/2020	74	Good
Dist 6	DECLARATIO	DECLARATION ST	10	BEACON HILL DR	NANTUCKET BLVD	A	R	2	1488	37	55,056	10/08/2020	83	Good
Dist 1	DECLARATIO	DECLARATION ST	100	NANTUCKET BLVD	DE CUNHA CT	A	R	2	690	37	25,530	09/10/2020	80	Good
Dist 4	DEERST	DEER ST	15	N MAIN ST	END	A	R	2	539	25	13,490	10/15/2020	61	Fair
Dist 3	DELMARDR	DEL MAR DR	15	END	NISSEN RD	A	R	2	1339	32	42,851	10/01/2020	34	Poor
Dist 1&2	DELMONTEAV	DEL MONTE AVE	010	RIDER AVE	N SANBORN RD	O	C	2	1404	42	58,968	10/05/2020	55	Fair
Dist 1&2	DELMONTEAV	DEL MONTE AVE	020	N SANBORN RD	MAE AVE	O	C	2	1325	42	55,650	10/09/2020	36	Poor
Dist 1&2	DELMONTEAV	DEL MONTE AVE	030	MAE AVE	BURKE ST	O	C	2	885	42	37,170	10/09/2020	45	Poor
Dist 2	DELMONTEAV	DEL MONTE AVE	040	BURKE ST	WILLIAMS RD	A	C	2	1130	44	49,720	10/09/2020	49	Poor
Dist 2	DELMONTEAV	DEL MONTE AVE	050	WILLIAMS RD	END	A	C	2	1084	42	45,528	10/09/2020	68	Fair
Dist 3	DELREYCIR	DEL REY CIR	10	PADRE DR	END	A	R	2	463	32	14,835	10/01/2020	61	Fair
Dist 6	DELANCEYDR	DELANCEY DR	15	BROADWAY DR	END	A	R	2	1675	37	61,975	09/29/2020	70	Fair
Dist 2	DENNISAVE	DENNIS AVE	15	TAMPA ST	BARDIN RD	A	R	2	2180	34	74,120	10/12/2020	58	Fair
Dist 6	DERBYWAY	DERBY WAY	10	WESTMINSTER DR	HAMPTON ST	A	R	2	258	37	9,546	10/06/2020	78	Good
Dist 6	DEVONSHIRE	DEVONSHIRE WAY	10	WESTMINSTER DR	ERCIA ST	A	R	2	1068	32	34,181	10/06/2020	78	Good
Dist 2	DEWEYAVE	DEWEY AVE	10	BEECH ST	TOWT ST	A	R	2	412	52	21,424	10/13/2020	18	Failed
Dist 4	DIABLODR	DIABLO DR	10	E LAUREL DR	ELWOOD ST	A	R	2	790	30	23,723	10/15/2020	41	Poor
Dist 3	DICKENSCIR	DICKENS CIR	10	DICKENS DR	END	A	R	2	183	32	5,866	10/01/2020	55	Fair
Dist 3	DICKENSDR	DICKENS DR	15	KIPLING ST	CHAUCER DR	A	R	2	1460	32	46,734	10/01/2020	64	Fair
Dist 4	DIVISIONST	DIVISION ST	15	SUMMIT DR	END	A	R	2	151	38	5,751	10/16/2020	59	Fair
Dist 4	DOLORESST	DOLORES ST	10	OREGON ST	KENTUCKY ST	A	R	2	556	35	19,486	10/15/2020	35	Poor
Dist 6	DONNERCIR	DONNER CIR	10	DONNER WAY	END	A	R	2	449	32	14,374	10/07/2020	26	Failed
Dist 6	DONNERWAY	DONNER WAY	15	HUMBOLDT DR	EMERALD DR	A	R	2	804	37	29,748	10/07/2020	50	Poor
Dist 4	DORORODR	DORORO DR	15	REATA ST	TAPADERO DR	A	R	2	1067	32	34,166	10/15/2020	54	Fair
Dist 6	DORSETWAY	DORSET WAY	10	BUCKINGHAM DR	LANCASHIRE DR	A	R	2	509	34	17,306	10/22/2020	74	Good
Dist 5	DOUGLASAVE	DOUGLAS AVE	10	CRESCENT WAY	N 1ST ST	A	R	2	839	36	30,204	10/21/2020	38	Poor
Dist 1	DOVERCIR	DOVER CIR	10	DE CUNHA CT	END	A	R	2	200	31	6,200	09/10/2020	55	Fair
Dist 6	DOWNINGCIR	DOWNING CIR	10	DECLARATION ST	END	A	R	2	379	32	12,153	10/08/2020	82	Good
Dist 3	DRIFTWOODP	DRIFTWOOD PL	15	N END	S END	A	R	2	680	32	21,760	09/30/2020	45	Poor
Dist 5	DURANCIR	DURAN CIR	10	CHEROKEE DR	END	A	R	2	471	32	15,072	10/20/2020	25	Failed
Dist 5	DURANST	DURAN ST	10	CHEROKEE DR	SEVILLE ST	A	R	2	1052	32	33,664	10/20/2020	20	Failed
Dist 1	DURANGOCIR	DURANGO CIR	10	DURANGO ST	END	A	R	2	150	33	4,950	09/28/2020	84	Good
Dist 1	DURANGOST	DURANGO ST	15	YUCATAN WAY	ACAPULCO WAY	A	R	2	695	38	26,410	09/28/2020	86	Good
Dist 3	EACACIAST	E ACACIA ST	010	S. MAIN ST	PAJARO ST	C	A	2	710	34	24,140	12/09/2020	45	Poor
Dist 3	EACACIAST	E ACACIA ST	020	PAJARO ST	CARMEL AVE	P	C	2	1479	34	50,286	10/28/2020	55	Fair
Dist 3	EACACIAST	E ACACIA ST	030	CARMEL AVE	ALAMEDA AVE	C	C	2	476	37	17,612	10/28/2020	27	Failed
Dist 2	EALISALST	E ALISAL ST	010	BARDIN/ALISAL RD	MARGARET ST	A	A	2	806	44	35,464	10/14/2020	55	Fair
Dist 2	EALISALST	E ALISAL ST	015	BARDIN RD	E ALISAL ST	A	A	2	252	38	9,576	10/14/2020	18	Failed
Dist 2	EALISALST	E ALISAL ST	020	MARGARET ST	FERN ST	A	A	2	911	53	48,283	10/14/2020	51	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 2	EALISALST	E ALISAL ST	030	FERN ST	TAMPA ST	A	A	2	1167	53	61,851	10/14/2020	47	Poor
Dist 2	EALISALST	E ALISAL ST	040	TAMPA ST	E MARKET ST	A	A	2	838	42	35,196	10/14/2020	42	Poor
Dist 2	EALISALST	E ALISAL ST	050	E MARKET ST	QUILLA ST	A	A	2	1205	42	50,610	10/14/2020	55	Fair
Dist 2	EALISALST	E ALISAL ST	055	QUILLA ST/ SKYWAY BLVD	WILLIAMS RD	A	A	4	617	80	49,360	10/14/2020	74	Good
Dist 2	EALISALST	E ALISAL ST	060	WILLIAMS RD	TOWT ST	A	A	4	987	67	66,129	10/14/2020	44	Poor
Dist 2&4	EALISALST	E ALISAL ST	070	TOWT ST	N SANBORN RD	A	A	4	1236	75	92,700	10/14/2020	40	Poor
Dist 2&4	EALISALST	E ALISAL ST	080	N SANBORN RD	N HEBBRON AVE	A	A	4	1423	75	106,725	10/14/2020	41	Poor
Dist 2&4	EALISALST	E ALISAL ST	090	N HEBBRON AVE	N WOOD ST	A	A	4	944	75	70,800	10/14/2020	58	Fair
Dist 2&4	EALISALST	E ALISAL ST	100	N WOOD ST	KERN ST	A	A	4	1427	75	107,025	10/14/2020	62	Fair
Dist 3	EALISALST	E ALISAL ST	140	FRONT ST	MAIN ST	A	A	4	1700	64	108,800	10/29/2020	85	Good
Dist 3&4	EALISALST	E ALISAL ST	110WB	KERN ST	START PCC W/O PRADER ST	A	A	2	1865	28	52,220	10/29/2020	67	Fair
Dist 3&4	EALISALST	E ALISAL ST	120WB	START PCC W/O PRADER	END PCC E/O FRONT ST	P	A	2	475	28	13,300	10/29/2020	87	Good
Dist 3	EALISALST	E ALISAL ST	130WB	END PCC E/O FRONT ST	FRONT ST	A	A	2	270	24	6,480	10/29/2020	87	Good
Dist 3	EALISALST	E ALISAL ST	150EB	FRONT ST	START PCC E/O FRONT	A	A	2	270	26	7,020	10/29/2020	87	Good
Dist 3&4	EALISALST	E ALISAL ST	160EB	START PCC E/O FRONT ST	END PCC	P	A	2	475	28	13,300	10/29/2020	82	Good
Dist 3&4	EALISALST	E ALISAL ST	170EB	END PCC	KERN ST	A	A	2	1865	28	52,220	10/29/2020	66	Fair
Dist 4&6	EALVINDR	E ALVIN DR	15	N MAIN ST	MCKINNON ST	O	A	4	2314	62	143,468	11/01/2020	100	Excellent
Dist 4&6	EALVINDR	E ALVIN DR	25	MCKINNON ST	LINWOOD DR	O	A	4	1678	64	107,392	11/01/2020	100	Excellent
Dist 6	EALVINDR	E ALVIN DR	35	LINWOOD DR	EL DORADO DR	O	A	4	790	62	48,980	11/01/2020	100	Excellent
Dist 6	EALVINDR	E ALVIN DR	45	EL DORADO DR	MARIN AVE	O	A	4	1515	62	93,930	11/01/2020	100	Excellent
Dist 6	EALVINDR	E ALVIN DR	55	MARIN AVE	NATIVIDAD RD	O	A	4	545	62	33,790	11/01/2020	100	Excellent
Dist 4	EBERNALDR	E BERNAL DR	10	SHERWOOD DR	ROSARITA DR	P	A	4	866	54	46,764	10/23/2020	81	Good
Dist 4	EBERNALDR	E BERNAL DR	20	ROSARITA DR	ALPINE DR	A	A	2	1609	53	85,277	10/23/2020	66	Fair
Dist 4	EBERNALDR	E BERNAL DR	30	ALPINE DR	MAIN ST	O	A	2	471	53	24,963	10/23/2020	65	Fair
Dist 4	EBERNALDR	E BERNAL DR	40	10 E BERNAL DR	S END	A	R	2	264	32	8,448	10/23/2020	66	Fair
Dist 3	EBLANCORD	E BLANCO RD	EB10	S MAIN ST	PAJARO ST	O	A	2	745	43	32,035	10/29/2020	61	Fair
Dist 3	EBLANCORD	E BLANCO RD	EB20	PAJARO ST	SAN JUAN DR	O	A	2	1680	36	60,480	10/29/2020	57	Fair
Dist 3	EBLANCORD	E BLANCO RD	EB30	SAN JUAN DR	LA MESA WAY	O	A	2	1600	36	57,600	10/29/2020	60	Fair
Dist 3	EBLANCORD	E BLANCO RD	EB40	LA MESA WAY	BLANCO CIR	O	A	2	3483	36	125,388	10/29/2020	56	Fair
Dist 3	EBLANCORD	E BLANCO RD	EB50	BLANCO CIR	ABBOTT ST	A	A	2	970	38	36,860	10/29/2020	58	Fair
Dist 3	EBLANCORD	E BLANCO RD	WB10	ABBOTT ST	BLANCO CIR	A	A	2	970	36	34,920	10/29/2020	39	Poor
Dist 3	EBLANCORD	E BLANCO RD	WB20	BLANCO CIR	LA MESA WAY	A	A	2	3462	34	117,708	10/29/2020	62	Fair
Dist 3	EBLANCORD	E BLANCO RD	WB30	LA MESA WAY	SAN JUAN DR	A	A	2	1600	38	60,800	10/29/2020	58	Fair
Dist 3	EBLANCORD	E BLANCO RD	WB40	SAN JUAN DR	PAJARO ST	A	A	2	1679	36	60,444	10/29/2020	58	Fair
Dist 3	EBLANCORD	E BLANCO RD	WB50	PAJARO ST	S MAIN ST	A	A	2	745	42	31,290	10/29/2020	52	Fair
Dist 5	EBOLIVARST	E BOLIVAR ST	15	N MAIN ST	VAN BUREN AVE	A	C	2	2014	32	64,469	10/20/2020	42	Poor
Dist 6	EBORONDARD	E BORONDA RD	030	DARTMOUTH WAY	MCKINNON ST	A	A	2	1534	48	73,632	10/22/2020	63	Fair
Dist 6	EBORONDARD	E BORONDA RD	040	MCKINNON ST	EL DORADO DR	A	A	2	3044	45	136,980	10/22/2020	49	Poor
Dist 6	EBORONDARD	E BORONDA RD	050	EL DORADO DR	NATIVIDAD RD	A	A	2	2926	45	131,670	10/22/2020	52	Fair
Dist 6	EBORONDARD	E BORONDA RD	060	NATIVIDAD DR	INDEPENDENCE BVD	A	A	2	2082	45	93,690	10/22/2020	37	Poor
Dist 1&6	EBORONDARD	E BORONDA RD	070	INDEPENDENCE BLVD	HEMINGWAY DR	A	A	2	2199	45	98,955	10/22/2020	48	Poor
Dist 1	EBORONDARD	E BORONDA RD	080	HEMINGWAY BLVD	CONSTITUTION BLVD	A	A	2	3738	44	164,472	10/06/2020	37	Poor
Dist 1	EBORONDARD	E BORONDA RD	090	CONSTITUTION BLVD	RIDER AVE	A	A	2	1763	45	79,335	10/06/2020	44	Poor
Dist 1	EBORONDARD	E BORONDA RD	100	RIDER AVE	MESQUITE DR	A	A	2	1326	45	59,670	11/01/2020	62	Fair
Dist 1	EBORONDARD	E BORONDA RD	110	MESQUITE DR	N SANBORN RD	A	A	2	973	45	43,785	11/01/2020	82	Good
Dist 1	EBORONDARD	E BORONDA RD	120	N SANBORN RD	WILLIAMS RD	A	A	2	2636	45	118,620	10/06/2020	54	Fair
Dist 5	EBORONDARD	E BORONDA RD	010EB	N MAIN ST	SAN JUAN GRADE RD	O	A	2	1684	40	67,360	10/22/2020	46	Poor
Dist 6	EBORONDARD	E BORONDA RD	020EB	SAN JUAN GRADE RD	DARTMOUTH WAY	A	A	2	977	40	39,080	10/22/2020	66	Fair

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Dist 6	EBORONDARD	E BORONDA RD	WB010	DARTMOUTH WAY	SAN JUAN GRADE RD	O	A	2	977	40	39,080	10/22/2020	67	Fair
Dist 5	EBORONDARD	E BORONDA RD	WB020	SAN JUAN GRADE RD	N MAIN ST	O	A	2	1684	40	67,360	10/22/2020	38	Poor
Dist 4	ECURTISST	E CURTIS ST	10	N MAIN ST	NOICE DR	A	R	2	341	28	9,551	10/15/2020	32	Poor
Dist 4	ECURTISST	E CURTIS ST	25	NOICE DR	REATA ST	A	R	2	710	38	26,980	10/15/2020	39	Poor
Dist 3	EGABILANST	E GABILAN ST	15	MAIN ST	PAJARO ST	A	C	2	676	32	21,639	03/26/2019	46	Poor
Dist 3	EGABILANST	E GABILAN ST	55	PAJARO ST	CALIFORNIA ST	A	C	2	673	49	32,977	10/29/2020	44	Poor
Dist 4	ELAKEST	E LAKE ST	15	N MAIN ST	CALIFORNIA ST	A	C	2	896	40	35,840	10/19/2020	60	Fair
Dist 5	ELAMARST	E LAMAR ST	15	N MAIN ST	SANTA RITA ST	A	R	2	783	40	31,320	10/20/2020	28	Failed
Dist 4	ELAURELDR	E LAUREL DR	005	N MAIN ST	MARYAL DR	A	A	4	1526	64	97,664	10/22/2020	57	Fair
Dist 4	ELAURELDR	E LAUREL DR	010	MARYAL DR	LINWOOD DR	A	A	4	852	64	54,528	10/22/2020	54	Fair
Dist 4	ELAURELDR	E LAUREL DR	015	LINWOOD DR	GRANADA AVE	A	A	4	1128	58	65,424	10/22/2020	46	Poor
Dist 4	ELAURELDR	E LAUREL DR	020	GRANADA AVE	NATIVIDAD RD	A	A	4	645	58	37,410	10/22/2020	63	Fair
Dist 2&4	ELAURELDR	E LAUREL DR	025	N SANBORN RD	TOWT ST	A	A	2	1658	42	69,636	10/14/2020	26	Failed
Dist 2	ELAURELDR	E LAUREL DR	035	TOWT ST	WILLIAMS RD	A	A	2	1686	42	70,812	10/14/2020	48	Poor
Dist 4	ELAURELDR	E LAUREL DR	120EB	NATIVIDAD RD	CONSTITUTION BLVD	A	A	2	1907	35	66,745	10/22/2020	76	Good
Dist 4	ELAURELDR	E LAUREL DR	120WB	CONSTITUTION BLVD	NATIVIDAD RD	A	A	2	1907	35	66,745	10/22/2020	71	Good
Dist 1&4	ELAURELDR	E LAUREL DR	130EB	CONSTITUTION BLVD	RANCH VIEW LN/COUNTY FACILITY	A	A	2	1698	30	50,940	10/22/2020	80	Good
Dist 1&4	ELAURELDR	E LAUREL DR	130WB	RANCH VIEW LN/COUNTY FACILITY	CONSTITUTION BLVD	A	A	2	1698	35	59,430	10/22/2020	79	Good
Dist 1&4	ELAURELDR	E LAUREL DR	140EB	RANCH VIEW LN/COUNTY FACILITY	ST EDWARDS AVE	A	A	2	2305	30	69,150	10/22/2020	79	Good
Dist 1&4	ELAURELDR	E LAUREL DR	140WB	ST EDWARDS AVE	RANCH VIEW LN/COUNTY FACILITY	A	A	2	2305	35	80,675	10/22/2020	80	Good
Dist 1&4	ELAURELDR	E LAUREL DR	150EB	ST EDWARDS AVE	N SANBORN RD	A	A	2	1390	35	48,650	10/22/2020	80	Good
Dist 1&4	ELAURELDR	E LAUREL DR	150WB	N SANBORN RD	ST EDWARDS AVE	A	A	2	1383	30	41,490	10/22/2020	80	Good
Dist 3	EMARKETST	E MARKET ST	010	MAIN ST	PAJARO ST	A	A	4	755	74	55,870	10/22/2020	42	Poor
Dist 2	EMARKETST	E MARKET ST	040	SHERWOOD DR/ MARKET WAY	SIMAS ST/ GRIFFIN ST	A	A	4	1550	56	86,800	10/23/2020	68	Fair
Dist 2	EMARKETST	E MARKET ST	050	SIMAS ST/ GRIFFIN ST	KERN ST	A	A	4	1540	62	95,480	10/23/2020	76	Good
Dist 4	EMARKETST	E MARKET ST	060	KERN ST	CARR AVE	A	A	4	1367	62	84,754	10/23/2020	80	Good
Dist 4	EMARKETST	E MARKET ST	070	CARR AVE	N SANBORN RD	A	A	4	2470	64	158,080	10/23/2020	75	Good
Dist 4	EMARKETST	E MARKET ST	080	N SANBORN RD	TOWT ST	A	A	4	1658	60	99,480	10/23/2020	67	Fair
Dist 2	EMARKETST	E MARKET ST	090	TOWT ST	KENNETH AVE	A	A	4	1732	44	76,208	10/13/2020	80	Good
Dist 2	EMARKETST	E MARKET ST	100	KENNETH AVE	E ALISAL ST	A	C	2	1321	64	84,544	10/13/2020	44	Poor
Dist 3	EMARKETST	E MARKET ST	020EB	PAJARO ST	START PCC (E/O GREENFIELD ALLEY)	A	A	2	480	30	14,400	10/22/2020	76	Good
Dist 3&4	EMARKETST	E MARKET ST	025EB	START PCC (E/O GREENFIELD ALLEY)	END PCC (S/O MARKET WAY)	P	A	3	650	38	24,700	11/03/2020	91	Excellent
Dist 4	EMARKETST	E MARKET ST	030EB	PCC END (S/O MARKET WAY)	MARKET WAY/ SHERWOOD DR	A	A	3	177	40	7,080	10/28/2020	62	Fair
Dist 4	EMARKETST	E MARKET ST	035EB	END PCC (S/O MARKET WAY)	E MARKET ST	A	A	2	360	28	10,080	10/28/2020	46	Poor
Dist 4	EMARKETST	E MARKET ST	110WB	MARKET WAY/ SHERWOOD DR	START PCC (S/O MARKET WAY)	A	A	4	177	50	8,850	10/28/2020	41	Poor
Dist 4	EMARKETST	E MARKET ST	120WB	BEGIN PCC (S/O MARKET WAY)	END PCC (E/O GREENFIELD ALLEY)	P	A	4	575	48	27,600	10/28/2020	68	Fair
Dist 4	EMARKETST	E MARKET ST	130WB	END PCC (E/O GREENFIELD ALLEY)	PAJARO ST	A	A	2	480	30	14,400	10/23/2020	80	Good
Dist 4	EMENKEST	E MENKE ST	10	N MAIN ST	BRIDGE ST	A	R	2	341	42	14,322	10/14/2020	70	Fair
Dist 3	EROMIELN	E ROMIE LN	010	S MAIN ST	ALAMEDA AVE	A	A	2	2809	44	123,596	09/29/2020	61	Fair
Dist 3	EROMIELN	E ROMIE LN	020	ALAMEDA AVE	LOS PALOS DR	A	A	4	1186	62	73,572	09/29/2020	46	Poor
Dist 3	EROMIELN	E ROMIE LN	030	LOS PALOS DR	ABBOTT ST	C	A	4	1766	62	109,492	10/03/2020	50	Poor
Dist 4	EROSSIST	E ROSSI ST	15	N MAIN ST	SHERWOOD DR	A	A	2	1137	58	65,946	10/23/2020	59	Fair
Dist 3	ESANJOAQUI	E SAN JOAQUIN ST	10	S MAIN ST	PAJARO ST	C	R	2	890	36	32,040	10/29/2020	70	Fair
Dist 3	ESANLUISST	E SAN LUIS ST	050	MAIN ST	FRONT ST	P	C	2	1699	34	57,766	10/29/2020	48	Poor
Dist 3	ESANLUISST	E SAN LUIS ST	090	FRONT ST	E END	A	C	2	560	32	17,920	10/29/2020	74	Good
Dist 1	EAGLECIR	EAGLE CIR	10	EAGLE DR	END	A	R	2	213	34	7,242	09/10/2020	87	Good
Dist 1	EAGLEDR	EAGLE DR	10	FALCON DR	COUGAR WAY	A	R	2	938	38	35,644	09/10/2020	86	Good
Dist 1	EAGLEDR	EAGLE DR	20	COUGAR WAY	EAGLE WAY	A	R	2	1571	38	59,698	09/10/2020	87	Good

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 1	EAGLEDR	EAGLE DR	30	EAGLE WAY	BISON WAY	A	R	2	1455	38	55,290	09/10/2020	87	Good
Dist 1	EAGLEWAY	EAGLE WAY	10	FREEDOM PKWY	EAGLE DR	A	R	2	170	39	6,630	09/10/2020	87	Good
Dist 4	EASTST	EAST ST	10	N HEBBRON AVE	N FILICE ST	A	R	2	564	41	23,124	10/19/2020	59	Fair
Dist 4	EASTST	EAST ST	20	N FILICE ST	N SANBORN RD	A	R	2	798	32	25,536	10/19/2020	35	Poor
Dist 1	EBANOPL	EBANO PL	10	RANCHERO DR	END	A	R	2	203	32	6,525	09/29/2020	51	Fair
Dist 5	EBROCIR	EBRO CIR	10	CHEROKEE DR	END	A	R	2	520	32	16,640	10/20/2020	25	Failed
Dist 3	EDENST	EDEN ST	10	SCHILLING PL	END	O	R	2	599	41	24,559	09/28/2020	56	Fair
Dist 5	EISENHOWER	EISENHOWER CIR	10	EISENHOWER ST	END	A	R	2	193	32	6,176	10/20/2020	40	Poor
Dist 5	EISENHOWE1	EISENHOWER ST	15	VAN BUREN AVE	RUSSELL RD	A	R	2	2875	37	106,406	10/20/2020	39	Poor
Dist 6	ELDORADODR	EL DORADO DR	10	E BORONDA RD	HARDEN PKWY	A	C	2	2067	41	84,747	09/29/2020	75	Good
Dist 6	ELDORADODR	EL DORADO DR	15	HARDEN PKWY	E ALVIN DR	A	C	2	2046	61	124,806	09/29/2020	31	Poor
Dist 3	ELPASOPL	EL PASO PL	15	CARMEL AVE	ALAMEDA AVE	P	R	2	608	32	19,456	10/28/2020	68	Fair
Dist 6	ELSURAVE	EL SUR AVE	10	PESCADERO DR	CAMBRIAN DR	A	R	2	813	32	26,017	10/07/2020	43	Poor
Dist 6	ELIOTCIR	ELIOT CIR	10	LEWIS ST	END	A	R	2	93	56	5,208	10/08/2020	82	Good
Dist 6	ELIZABETHC	ELIZABETH CIR	10	VICTORIA AVE	END	A	R	2	335	33	11,055	09/29/2020	75	Good
Dist 1	ELKCIR	ELK CIR	10	ELK DR	END	A	R	2	341	33	11,266	09/10/2020	87	Good
Dist 1	ELKDR	ELK DR	15	FALCON DR	COUGAR DR	A	C	2	825	38	31,384	09/10/2020	87	Good
Dist 1	ELKINGTONA	ELKINGTON AVE	10	KILBRETH AVE	DEL MONTE AVE	A	R	2	1758	38	66,832	10/05/2020	41	Poor
Dist 4	ELLISCIR	ELLIS CIR	10	FULTON WAY	END	A	R	2	214	32	6,865	10/14/2020	67	Fair
Dist 1	ELMDR	ELM DR	10	RIDER AVE	END	A	R	2	375	23	8,625	09/29/2020	37	Poor
Dist 6	ELMSFORDCI	ELMSFORD CIR	10	FAULKNER ST	END	A	R	2	352	32	11,288	10/08/2020	83	Good
Dist 6	ELMSFORDWA	ELMSFORD WAY	10	DECLARATION ST	FAULKNER ST	A	R	2	385	32	12,321	10/08/2020	83	Good
Dist 4	ELTONPL	ELTON PL	15	N HEBBRON AVE	END	A	R	2	834	29	24,203	10/19/2020	59	Fair
Dist 3	ELVEECIR	ELVEE CIR	10	WORK ST	S END	A	R	2	379	42	15,918	09/29/2020	74	Good
Dist 3	ELVEEDR	ELVEE DR	10	S SANBORN RD	PCC BRIDGE	A	C	2	2527	24	60,648	09/29/2020	91	Excellent
Dist 3	ELVEEDR	ELVEE DR	20	PCC BRIDGE	WORK ST	C	C	2	775	42	32,550	10/03/2020	91	Excellent
Dist 4	ELWOODST	ELWOOD ST	15	TAMPICO AVE	LOMA DR	A	R	2	2182	32	69,852	10/15/2020	37	Poor
Dist 6	EMERALDDR	EMERALD DR	15	ARCADIA WAY	EMERALD WAY	A	R	2	872	37	32,264	10/07/2020	78	Good
Dist 6	EMERALDDR	EMERALD DR	25	EMERALD WAY	DONNER WAY	A	R	2	808	37	29,896	10/07/2020	27	Failed
Dist 6	EMERALDWAY	EMERALD WAY	15	EMERALD DR	PESCADERO DR	A	R	2	673	42	28,266	10/07/2020	47	Poor
Dist 3	ENCINADADR	ENCINADA DR	10	LA MESA DR	SAN JUAN DR	A	R	2	1113	37	41,181	09/29/2020	63	Fair
Dist 6	ERCIAST	ERCIA ST	15	HARDEN PKWY	HAMPTON ST	A	R	2	760	41	31,160	09/29/2020	75	Good
Dist 6	ESSEXCIR	ESSEX CIR	10	WIMBLEDON AVE	END	A	R	2	221	32	7,088	10/07/2020	74	Good
Dist 6	ESSEXWAY	ESSEX WAY	10	ESSEX CIR	ARCADIA WAY	A	R	2	254	37	9,398	10/07/2020	76	Good
Dist 5	ESTRADACT	ESTRADA CT	10	ESTRADA WAY (N)	ESTRADA WAY (S)	A	R	2	1105	32	35,360	10/21/2020	61	Fair
Dist 5	ESTRADAWAY	ESTRADA WAY	15	SLOAT DR	END	A	R	2	1312	32	41,987	10/21/2020	74	Good
Dist 1	ESTRELLACT	ESTRELLA CT	10	ESTRELLA WAY	END	A	R	2	205	37	7,585	10/05/2020	79	Good
Dist 1	ESTRELLAWA	ESTRELLA WAY	15	FREEDOM PKWY	PASEO GRANDE	A	R	2	920	37	34,045	10/05/2020	82	Good
Dist 2	ETNACIR	ETNA CIR	10	PALERMO DR	END	A	R	2	290	32	9,280	10/13/2020	90	Good
Dist 4	EUCALYPTUS	EUCALYPTUS DR	15	N SANBORN RD	E ALISAL ST	A	C	2	2863	32	91,638	10/28/2020	29	Failed
Dist 3	FAIRFAXCIR	FAIRFAX CIR	10	W ALISAL ST	END	A	R	2	232	32	7,452	10/01/2020	20	Failed
Dist 3	FAIRFAXDR	FAIRFAX DR	15	W ALISAL ST	COLUMBIA AVE	A	R	2	2346	32	75,072	10/01/2020	31	Poor
Dist 2	FAIRHAVENS	FAIRHAVEN ST	15	WILLIAMS RD	TOWT ST	A	R	2	1687	32	54,012	10/13/2020	28	Failed
Dist 3	FAIRMONTCI	FAIRMONT CIR	10	FAIRMONT DR	END	A	R	2	139	32	4,448	09/29/2020	33	Poor
Dist 3	FAIRMONTDR	FAIRMONT DR	10	N END	LOS PALOS DR	C	R	2	220	32	7,040	10/03/2020	31	Poor
Dist 3	FAIRMONTDR	FAIRMONT DR	20	LOS PALOS DR	S END	C	R	2	704	32	22,528	10/03/2020	29	Failed
Dist 2	FAIRVIEWAV	FAIRVIEW AVE	15	S SANBORN RD	CAROL DR	A	R	2	2020	34	68,680	10/13/2020	40	Poor
Dist 1	FALCONDR	FALCON DR	010	E BORONDA RD	EAGLE DR	A	R	2	1254	41	51,414	09/10/2020	87	Good

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Dist 1	FALCONDR	FALCON DR	020	EAGLE DR	BISON WAY	A	R	2	440	33	14,520	09/10/2020	87	Good
Dist 6	FAULKNERCI	FAULKNER CIR	10	LEWIS ST	END	A	R	2	83	66	5,478	10/08/2020	82	Good
Dist 6	FAULKNERST	FAULKNER ST	15	FITZGERALD ST	LEWIS ST	A	R	2	800	36	28,800	10/08/2020	83	Good
Dist 4	FELLCIR	FELL CIR	10	FULTON WAY	END	A	R	2	305	32	9,760	10/14/2020	52	Fair
Dist 2	FERNST	FERN ST	10	E ALISAL ST	SYCAMORE RD	A	R	2	315	34	10,722	10/12/2020	44	Poor
Dist 4	FILBERTWAY	FILBERT WAY	15	BRIGHTON ST	END	A	R	2	453	32	14,500	10/14/2020	58	Fair
Dist 5	FILLMOREST	FILLMORE ST	10	VAN BUREN AVE	TRUMAN ST	A	R	2	516	37	19,092	10/20/2020	55	Fair
Dist 6	FITZGERALD	FITZGERALD ST	10	END	HEMINGWAY DR	A	R	2	666	37	24,642	10/08/2020	82	Good
Dist 6	FITZGERALD	FITZGERALD ST	20	HEMINGWAY DR	FAULKNER ST	A	R	2	831	37	30,747	10/08/2020	83	Good
Dist 5	FLINTCIR	FLINT CIR	10	LARKIN ST	END	A	R	2	125	32	4,000	10/21/2020	62	Fair
Dist 5	FLINTWAY	FLINT WAY	10	LARKIN ST	COLTON DR	A	R	2	259	32	8,308	10/21/2020	66	Fair
Dist 2	FLORENCEPL	FLORENCE PL	15	FAIRVIEW AVE	BEVERLY DR	A	R	2	906	32	29,002	10/13/2020	33	Poor
Dist 1	FOXGLENWAY	FOX GLEN WAY	15	COBBLESTONE ST (W)	COBBLESTONE ST (E)	A	R	2	870	34	29,580	09/29/2020	81	Good
Dist 1	FREEDOMPKW	FREEDOM PKWY	010	CONSTITUTION BLVD	BERNARDO AVE	A	C	4	3212	60	192,720	10/06/2020	80	Good
Dist 1	FREEDOMPKW	FREEDOM PKWY	020	BERNARDO AVE	ESTRELLA WAY	A	C	4	1433	60	85,980	10/06/2020	84	Good
Dist 1	FREEDOMPKW	FREEDOM PKWY	030	ESTRELLA WAY	TOWT ST	A	C	4	510	60	30,600	10/06/2020	84	Good
Dist 1	FREEDOMPKW	FREEDOM PKWY	040	TOWT STREET	WILLIAMS RD	A	C	4	1638	60	98,280	10/06/2020	74	Good
Dist 2	FREEDOMPKW	FREEDOM PKWY	050	WILLIAMS RD	TUSCANY BLVD	A	C	4	967	41	39,647	10/12/2020	79	Good
Dist 2	FREEDOMPKW	FREEDOM PKWY	060	TUSCANY BLVD	PADOVA DR	A	C	2	1167	30	35,010	10/12/2020	78	Good
Dist 4	FREMONTST	FREMONT ST	15	N MADEIRA AVE	N HEBBRON AVE	A	R	2	1837	32	58,805	10/19/2020	51	Fair
Dist 1	FRESAPL	FRESA PL	10	RANCHERO DR	END	A	R	2	157	32	5,034	09/29/2020	84	Good
Dist 3	FRONTST	FRONT ST	040	E MARKET ST (AC START)	E ALISAL ST	A	A	3	763	54	41,202	10/29/2020	50	Poor
Dist 3	FRONTST	FRONT ST	055	E ALISAL ST	JOHN ST	A	A	4	1839	82	150,798	10/29/2020	45	Poor
Dist 3	FRONTST	FRONT ST	075	JOHN ST	MAPLE ST	P	C	2	979	32	31,328	11/03/2020	66	Fair
Dist 3	FRONTST	FRONT ST	010EB	START PCC @ E MARKET ST	END PCC @ FRONT ST	P	A	2	404	20	8,080	09/29/2017	77	Good
Dist 3	FRONTST	FRONT ST	030NB	PCC START	E MARKET ST	P	A	2	422	26	10,972	11/03/2020	85	Good
Dist 3	FRONTST	FRONT ST	030SB	E MARKET ST	END OF PCC	P	A	2	367	30	11,010	11/03/2020	79	Good
Dist 3	FRONTST	FRONT ST	050WB	FORK 436 FT N/O E SALISAL ST	AC END	A	A	1	594	18	10,692	11/03/2020	43	Poor
Dist 3	FRONTST	FRONT ST	060WB	PCC START	PCC END	P	A	1	270	18	4,860	11/03/2020	80	Good
Dist 3	FRONTST	FRONT ST	070WB	PCC END	MERGE TO E MARKET ST	A	A	1	434	18	7,812	11/03/2020	27	Failed
Dist 4	FULTONWAY	FULTON WAY	15	POWELL ST	STOCKSTON ST	A	R	2	765	32	24,511	10/14/2020	77	Good
Dist 1	GALINDOST	GALINDO ST	15	DEL MONTE AVE	END	A	R	2	1151	32	36,838	10/05/2020	38	Poor
Dist 6	GAMAYWAY	GAMAY WAY	15	RIESLING WAY	END	A	R	2	1017	37	37,629	09/29/2020	72	Good
Dist 2	GARDENWAY	GARDEN WAY	15	S FILICE ST	MAGNOLIA DR	A	R	2	740	32	23,704	10/12/2020	59	Fair
Dist 5	GARDENIACI	GARDENIA CIR	10	GARDENIA DR	E END	A	R	2	246	31	7,626	10/21/2020	41	Poor
Dist 5	GARDENIADR	GARDENIA DR	15	W BERNAL DR	LUPIN DR	A	R	2	1884	32	60,300	10/21/2020	54	Fair
Dist 5	GARFIELDCI	GARFIELD CIR	10	SWANER AVE	END	A	R	2	155	26	4,030	10/20/2020	20	Failed
Dist 2	GARNERALY	GARNER ALY	10	ALMA AVE	GARNER AVE	A	R	2	250	21	5,250	10/14/2020	53	Fair
Dist 1	GARNERAVE	GARNER AVE	010	END	RIDER AVE	A	R	2	1096	37	40,552	09/29/2020	43	Poor
Dist 1	GARNERAVE	GARNER AVE	020	RIDER AVE	N SANBORN RD	A	C	2	1394	39	54,366	09/29/2020	75	Good
Dist 1	GARNERAVE	GARNER AVE	030	N SANBORN RD	BEECH ST	A	C	2	1224	42	51,408	10/06/2020	28	Failed
Dist 2	GARNERAVE	GARNER AVE	040	BEECH ST	1ST AVE	A	C	2	1494	41	61,254	10/14/2020	22	Failed
Dist 2	GARNERAVE	GARNER AVE	050	1ST AVE	WILLIAMS RD	A	C	2	600	41	24,600	10/14/2020	29	Failed
Dist 1	GARNERPVT	GARNER AVE	110PA	GARNER AVE (CULDESAC NORTH)	GEE STREET (CULDESAC)	A	R	2	1232	22	27,104	09/29/2020	77	Good
Dist 1	GARNERPVT	GARNER AVE	120PB	GARNER AVE PRIVATE A (EAST)	GARNER AVE PRIVATE A (WEST)	A	R	2	585	22	12,870	09/29/2020	71	Good
Dist 1	GAVIOTADR	GAVIOTA DR	010	CACHUMA CT (W)	TORONA WAY	A	R	2	834	38	31,692	09/09/2020	80	Good
Dist 1	GAVIOTADR	GAVIOTA DR	020	TORONA WAY	TECOPA WAY	A	R	2	515	34	17,510	09/09/2020	79	Good
Dist 5	GEARYCIR	GEARY CIR	10	LARKIN ST	END	A	R	2	420	32	13,440	10/21/2020	60	Fair

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Dist 1	GEEST	GEE ST	10	RIDER AVE	END	A	R	2	590	38	22,420	09/29/2020	42	Poor
Dist 3	GEILST	GEIL ST	10	IVERSON ST	RIKER ST	P	C	2	1038	40	41,520	10/27/2020	57	Fair
Dist 3	GEILST	GEIL ST	20	RIKER ST	S MAIN ST	P	C	2	1345	40	53,800	10/27/2020	66	Fair
Dist 4&5	GENEVAWAY	GENEVA WAY	10	POTRERO WAY	VICTOR ST	A	R	2	680	32	21,765	10/21/2020	82	Good
Dist 2	GENOACIR	GENOA CIR	10	GENOA WAY	END	A	R	2	248	32	7,954	10/09/2020	81	Good
Dist 2	GENOAWAY	GENOA WAY	15	AREZZO CIR	MONTE BELLA BLVD	A	R	2	513	32	16,429	10/09/2020	77	Good
Dist 6	GEORGETOWN	GEORGETOWN WAY	15	CHARLESTOWN WAY	HARRINGTON CIR	A	R	2	1638	32	52,417	10/08/2020	81	Good
Dist 6	GLACIERDR	GLACIER DR	10	PLUMAS WAY	MODOC AVE	A	R	2	1188	37	43,956	10/06/2020	37	Poor
Dist 6	GLADSTONEW	GLADSTONE WAY	15	CHARDONNAY DR	END	A	R	2	1203	33	39,699	09/29/2020	73	Good
Dist 6	GLENFALLSC	GLEN FALLS CIR	10	STONY BROOK DR	END	A	R	2	441	32	14,122	10/07/2020	82	Good
Dist 6	GLENDORAWA	GLENDORA WAY	10	COMPTON WAY	INGLEWOOD ST	A	R	2	1822	38	69,236	10/07/2020	36	Poor
Dist 2	GLENWOODCT	GLENWOOD CT	10	ALMA AVE	KIMMEL ST	A	R	2	447	32	14,315	10/13/2020	46	Poor
Dist 3	GONZALESAL	GONZALES ALY	10	E GABILAN ST	E ALISAL ST	P	R	2	672	14	9,408	11/02/2020	47	Poor
Dist 3	GONZALESAL	GONZALES ALY	20	E ALISAL ST	E SAN LUIS ST	P	R	2	625	15	9,375	11/02/2020	80	Good
Dist 4	GOUGHWAY	GOUGH WAY	10	POWELL ST	VICTOR ST	A	R	2	221	37	8,212	10/14/2020	80	Good
Dist 4	GRANADAAVE	GRANADA AVE	15	CHAPARRAL ST	E LAUREL DR	A	R	2	1794	32	57,422	10/15/2020	38	Poor
Dist 4	GRANADAAVE	GRANADA AVE	35	E LAUREL DR	ROSARITA DR	A	R	2	1748	32	55,948	10/15/2020	39	Poor
Dist 2	GRANDHAVEN	GRANDHAVEN ST	15	WILLIAMS RD	TOWT ST	A	R	2	1688	32	54,046	10/13/2020	31	Poor
Dist 6	GREATISLAN	GREAT ISLAND ST	15	BEACON HILL DR	CRESTVIEW ST	A	R	2	1186	32	37,979	10/08/2020	78	Good
Dist 2	GREENST	GREEN ST	15	DEL MONTE AVE	GARNER AVE	A	R	2	1546	32	49,484	10/14/2020	24	Failed
Dist 4	GREENBRIAR	GREENBRIAR WAY	15	SANSOME ST	END	A	R	2	1060	32	33,938	10/14/2020	76	Good
Dist 3	GREENFIELD	GREENFIELD ALY	010	E MARKET ST	E GABILAN ST	P	R	2	470	32	15,040	11/02/2020	78	Good
Dist 3	GREENFIELD	GREENFIELD ALY	020	E GABILAN ST	E ALISAL ST	P	R	2	671	32	21,472	11/02/2020	58	Fair
Dist 3	GREENFIELD	GREENFIELD ALY	030	E ALISAL ST	E SAN LUIS ST	P	R	2	670	16	10,720	11/02/2020	80	Good
Dist 4	GREENWICHW	GREENWICH WAY	15	ARGUELLO DR	SANSOME ST	A	R	2	598	34	20,332	10/14/2020	78	Good
Dist 3	GREENWOODP	GREENWOOD PL	010	WOODSIDE DR	SOUTH END	A	R	2	376	32	12,032	09/30/2020	35	Poor
Dist 3	GREENWOODP	GREENWOOD PL	020	WOODSIDE DR	NORTH END	A	R	2	401	32	12,851	09/30/2020	68	Fair
Dist 3	GRIFFINST	GRIFFIN ST	10	JOHN ST	E ALISAL ST	A	A	2	1170	37	43,290	09/29/2020	32	Poor
Dist 4	GRIFFINST	GRIFFIN ST	25	E MARKET ST	E ALISAL ST	A	A	2	2005	38	76,190	10/19/2020	70	Fair
Dist 3	GROVEST	GROVE ST	010	ALAMEDA AVE	START OF LOOP	P	R	2	360	34	12,240	10/28/2020	70	Fair
Dist 3	GROVEST	GROVE ST	020	START OF LOOP	END OF LOOP	A	R	2	675	32	21,600	09/30/2020	47	Poor
Dist 3	GROVEST	GROVE ST	110	ALAMEDA AVE	MANOR DR	A	R	2	1441	32	46,112	09/30/2020	53	Fair
Dist 6	HAMPTONST	HAMPTON ST	15	HARROD WAY	WESTMINSTER DR	A	R	2	1212	32	38,813	10/06/2020	78	Good
Dist 6	HANCOCKCIR	HANCOCK CIR	10	HANCOCK ST	END	A	R	2	305	31	9,455	10/08/2020	78	Good
Dist 6	HANCOCKST	HANCOCK ST	15	LEXINGTON DR N. SIDE	LEXINGTON DR S. SIDE	A	R	2	2612	35	91,420	10/08/2020	75	Good
Dist 3	HANSENST	HANSEN ST	15	AIRPORT BLVD	HARKINS RD	A	C	2	1051	62	65,162	10/28/2020	38	Poor
Dist 3	HAPPPL	HAPP PL	10	W MARKET ST	END	A	R	2	256	49	12,544	10/26/2020	65	Fair
Dist 6	HARDENPKWY	HARDEN PKWY	EB010	N MAIN ST	BROADWAY DR	A	C	2	2015	28	56,420	09/29/2020	41	Poor
Dist 6	HARDENPKWY	HARDEN PKWY	EB020	BROADWAY DR	MCKINNON ST	A	C	2	1161	28	32,508	09/29/2020	53	Fair
Dist 6	HARDENPKWY	HARDEN PKWY	EB030	MCKINNON ST	WINDSOR ST	A	C	2	938	28	26,264	09/29/2020	54	Fair
Dist 6	HARDENPKWY	HARDEN PKWY	EB040	WINDSOR ST	EL DORADO DR	A	C	2	1540	28	43,120	09/29/2020	39	Poor
Dist 6	HARDENPKWY	HARDEN PKWY	WB010	EL DORADO DR	WINDSOR ST	A	C	2	1540	28	43,120	09/29/2020	47	Poor
Dist 6	HARDENPKWY	HARDEN PKWY	WB020	WINDSOR ST	MCKINNON ST	A	C	2	937	28	26,236	09/29/2020	56	Fair
Dist 6	HARDENPKWY	HARDEN PKWY	WB030	MCKINNON ST	BROADWAY DR	A	C	2	1156	28	32,368	09/29/2020	58	Fair
Dist 6	HARDENPKWY	HARDEN PKWY	WB040	BROADWAY DR	N MAIN ST	A	C	2	2026	28	56,728	09/29/2020	42	Poor
Dist 5	HARDINGCIR	HARDING CIR	10	HARDING ST	END	A	R	2	215	26	5,590	10/21/2020	32	Poor
Dist 5	HARDINGST	HARDING ST	15	POLK ST	TYLER ST	A	R	2	1578	32	50,526	10/21/2020	37	Poor
Dist 3	HARKINSRD	HARKINS RD	010	SCHILLING PL	ABBOTT ST	A	C	4	1245	80	99,600	09/28/2020	40	Poor

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	HARKINSRD	HARKINS RD	020	ABBOTT ST	DAYTON ST	A	C	4	2372	80	189,760	09/28/2020	55	Fair
Dist 3	HARKINSRD	HARKINS RD	030	DAYTON ST	RR TRACKS	A	C	2	899	47	42,253	09/28/2020	59	Fair
Dist 3	HARKINSRD	HARKINS RD	040	RR TRACKS	CITY LIMIT	A	C	2	745	70	52,150	09/28/2020	55	Fair
Dist 3	HARMONYLN	HARMONY LN	10	E SAN LUIS ST	E ALISAL ST	P	R	2	679	15	10,185	11/02/2020	71	Good
Dist 6	HARRINGTON	HARRINGTON CIR	15	BEACON HILL DR	END	A	R	2	534	38	20,292	10/08/2020	81	Good
Dist 3	HARRISPL	HARRIS PL	10	HARRIS RD	END	A	R	2	999	42	41,958	09/28/2020	40	Poor
Dist 3	HARRISRD	HARRIS RD	10	ABBOTT ST	HARRIS PL	A	C	2	982	45	44,190	09/28/2020	54	Fair
Dist 3	HARRISRD	HARRIS RD	40	HARRIS PL	CITY LIMIT @ 1273' SW HARRIS PL;	A	C	2	1273	42	53,466	09/28/2020	53	Fair
Dist 6	HARRODCIR	HARROD CIR	10	HARROD WAY	END	A	R	2	331	33	10,923	09/29/2020	75	Good
Dist 6	HARRODWAY	HARROD WAY	15	HAMPTON ST	ERCIA ST	A	R	2	976	33	32,208	09/29/2020	74	Good
Dist 2	HARRYETTED	HARRYETTE DR	10	FAIRVIEW AVE	CAROL DR	A	R	2	487	32	15,597	10/13/2020	29	Failed
Dist 6	HARTFORDST	HARTFORD ST	15	INGLEWOOD ST	COVENTRY ST	A	R	2	1469	32	47,021	10/07/2020	78	Good
Dist 3	HARTNELLST	HARTNELL ST	10	CENTRAL AVE	COLLEGE DR	A	R	2	801	37	29,637	10/26/2020	33	Poor
Dist 6	HARVARDCT	HARVARD CT	10	PENNSYLVANIA DR (W)	PENNSYLVANIA DR (E)	A	R	2	844	33	27,852	09/29/2020	60	Fair
Dist 3	HARVESTALY	HARVEST ALY	10	WINHAM ST	HARVEST ST	P	R	2	275	15	4,125	10/29/2020	65	Fair
Dist 3	HARVESTST	HARVEST ST	15	S MAIN ST	E END	P	R	2	2414	46	111,044	10/29/2020	57	Fair
Dist 3	HASTINGSAV	HASTINGS AVE	25	COLUMBIA AVE	CAMPUS AVE	A	R	2	1207	32	38,651	10/01/2020	48	Poor
Dist 2	HAVENALY	HAVEN ALY	010	S. END	FAIRHAVEN ST	A	R	2	307	16	4,912	10/14/2020	14	Failed
Dist 2	HAVENALY	HAVEN ALY	020	FAIRHAVEN ST	GRANDHAVEN ST	A	R	2	298	16	4,768	10/14/2020	20	Failed
Dist 2	HAVENALY	HAVEN ALY	030	GRANDHAVEN ST	BELLEHAVEN ST	P	R	2	304	16	4,864	10/14/2020	55	Fair
Dist 2	HAVENALY	HAVEN ALY	040	BELLEHAVEN ST	N. END	P	R	2	85	21	1,785	10/14/2020	73	Good
Dist 1	HAWAIIPL	HAWAII PL	10	CARIBBEAN AVE	E END	A	R	2	398	25	9,957	10/05/2020	51	Fair
Dist 3	HAWTHORNES	HAWTHORNE ST	010	S MAIN ST	PAJARO ST	C	C	2	776	32	24,832	10/28/2020	31	Poor
Dist 3	HAWTHORNES	HAWTHORNE ST	020	PAJARO ST	CARMEL AVE	C	C	2	1482	32	47,424	10/28/2020	33	Poor
Dist 3	HAWTHORNES	HAWTHORNE ST	030	CARMEL AVE	ALAMEDA AVE	C	C	2	561	32	17,952	10/28/2020	38	Poor
Dist 5	HAYESST	HAYES ST	10	PARKSIDE ST	END	A	R	2	207	37	7,659	10/21/2020	39	Poor
Dist 5	HEATHERDR	HEATHER DR	15	IRIS DR	COLUMBINE DR	A	R	2	724	32	23,188	10/21/2020	33	Poor
Dist 2	HEBBRONALY	HEBBRON ALY	10	S HEBBRON AVE	S FILICE ST	P	R	2	515	20	10,300	10/12/2020	62	Fair
Dist 1&6	HEMINGWAYD	HEMINGWAY DR	010	E BORONDA RD	NANTUCKET BLVD	A	C	2	921	50	46,050	10/08/2020	75	Good
Dist 6	HEMINGWAYD	HEMINGWAY DR	20	NANTUCKET BLVD	FITZGERALD RD	A	R	2	1093	41	44,813	10/08/2020	83	Good
Dist 6	HIDDENCREE	HIDDEN CREEK CIR	10	PROVINCETOWN DR	END	A	R	2	188	32	6,036	10/08/2020	69	Fair
Dist 4	HILLCIR	HILL CIR	10	N MADEIRA AVE	END	A	R	2	174	37	6,438	10/16/2020	76	Good
Dist 4	HILLTOPDR	HILL TOP DR	15	N MADEIRA AVE	SUMMIT DR	A	R	2	1476	32	47,244	10/16/2020	26	Failed
Dist 4	HOLADAYAVE	HOLADAY AVE	10	E ALISAL ST	EAST ST	A	R	2	285	41	11,712	10/19/2020	55	Fair
Dist 1	HOLLYST	HOLLY ST	10	RIDER AVE	END	A	R	2	470	32	15,040	09/29/2020	39	Poor
Dist 6	HOLMESCIR	HOLMES CIR	10	HEMINGWAY DR	END	A	R	2	109	32	3,508	10/08/2020	83	Good
Dist 3	HOMESTEADA	HOMESTEAD AVE	010	N END	WILSON ST	A	R	2	285	38	10,830	10/26/2020	33	Poor
Dist 3	HOMESTEADA	HOMESTEAD AVE	020	WILSON ST	CENTRAL AVE	P	R	2	1230	38	46,740	10/26/2020	39	Poor
Dist 3	HOMESTEADA	HOMESTEAD AVE	030	CENTRAL AVE	W ALISAL ST	C	R	2	1147	38	43,586	10/26/2020	39	Poor
Dist 3	HOMESTEADA	HOMESTEAD AVE	040	W ALISAL ST	IVERSON ST	C	R	2	1255	37	46,435	10/26/2020	32	Poor
Dist 5	HOOVERST	HOOVER ST	15	EISENHOWER ST	SOUZA WAY	A	R	2	1394	32	44,623	10/20/2020	46	Poor
Dist 3	HOWARDST	HOWARD ST	010	CHURCH ST	LINCOLN AVE	C	R	2	270	23	6,210	11/02/2020	29	Failed
Dist 3	HOWARDST	HOWARD ST	020	LINCOLN AVE	SALINAS ST	C	R	2	225	32	7,200	11/02/2020	20	Failed
Dist 5	HOWECIR	HOWE CIR	10	HOWE DR	END	A	R	2	300	32	9,600	10/21/2020	75	Good
Dist 5	HOWEDR	HOWE DR	15	SHERMAN DR	END	A	R	2	739	32	23,660	10/21/2020	61	Fair
Dist 6	HUDSONWAY	HUDSON WAY	15	MANHATTAN DR	END	A	R	2	545	33	17,985	09/29/2020	74	Good
Dist 1	HUGHESWAY	HUGHES WAY	10	CONSTITUTION BLVD	FOX GLEN WAY	A	R	2	317	38	12,046	09/29/2020	79	Good
Dist 6	HUMBOLDTDR	HUMBOLDT DR	15	YREKA DR	TRUCKEE WAY	A	R	2	1548	37	57,276	10/07/2020	48	Poor

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Dist 5	HUNTINGTON	HUNTINGTON ST	10	ROCHEX AVE	W LAUREL DR	A	R	2	410	30	12,300	10/21/2020	31	Poor
Dist 6	HYANNISCIR	HYANNIS CIR	10	COVENTRY ST	END	A	R	2	176	32	5,639	10/07/2020	74	Good
Dist 4	HYDECIR	HYDE CIR	10	HYDE ST	END	A	R	2	177	36	6,372	10/14/2020	79	Good
Dist 4&5	HYDEST	HYDE ST	15	VAN NESS CT	RICO ST	A	R	2	1269	36	45,704	10/21/2020	51	Fair
Dist 6	IMPERIALWA	IMPERIAL WAY	10	NAPA WAY	SUTTER ST	A	R	2	617	32	19,766	10/06/2020	37	Poor
Dist 5	INCAWAY	INCA WAY	15	SHAWNEE WAY	ADAMS ST	A	R	2	981	32	31,398	10/20/2020	21	Failed
Dist 6	INDEPENDEN	INDEPENDENCE BLVD	NB010	CONSTITUTION BLVD	PROVINCETOWN DR	A	C	2	2796	19	53,124	10/22/2020	34	Poor
Dist 6	INDEPENDEN	INDEPENDENCE BLVD	NB020	PROVINCETOWN DR	E BORONDA RD	A	C	2	2952	28	82,656	10/22/2020	35	Poor
Dist 6	INDEPENDEN	INDEPENDENCE BLVD	SB010	E BORONDA RD	PROVINCETOWN DR	A	C	2	2952	32	94,464	10/08/2020	37	Poor
Dist 6	INDEPENDEN	INDEPENDENCE BLVD	SB020	PROVINCETOWN DR	CONSTITUTION BLVD	A	C	2	2796	18	50,328	10/08/2020	36	Poor
Dist 3	INDUSTRIAL	INDUSTRIAL ST	10	VERTIN AVE	SANBORN PL	A	C	2	1027	41	42,107	09/28/2020	24	Failed
Dist 6	INGLEWOODS	INGLEWOOD ST	10	PESCADERO DR	END	A	R	2	687	37	25,419	10/07/2020	34	Poor
Dist 6	INGLEWOODS	INGLEWOOD ST	110	COVENTRY ST	END	A	R	2	871	38	33,098	10/07/2020	77	Good
Dist 6	INYOCIR	INYO CIR	10	MENDOCINO DR	END	A	R	2	250	32	8,014	09/29/2020	44	Poor
Dist 5	IRISALY	IRIS ALY	10	W BERNAL DR	IRIS DR	A	R	2	1179	32	37,750	10/28/2020	31	Poor
Dist 5	IRISALY	IRIS ALY	20	IRIS DR	END	P	R	2	844	20	16,887	10/28/2020	59	Fair
Dist 5	IRISDR	IRIS DR	15	N MAIN ST	LUPIN DR	A	C	2	440	54	23,760	10/21/2020	29	Failed
Dist 5	IRISDR	IRIS DR	35	LUPIN DR	TYLER ST	A	C	2	1364	38	51,864	10/21/2020	63	Fair
Dist 3	IVERSONCIR	IVERSON CIR	10	IVERSON ST	END	A	R	2	285	32	9,144	09/30/2020	54	Fair
Dist 3	IVERSONST	IVERSON ST	35	CLAY ST	W ACACIA ST	A	C	2	1279	58	74,182	09/30/2020	40	Poor
Dist 3	IVERSONST	IVERSON ST	55	W ACACIA ST	W BLANCO RD	A	C	2	2417	44	106,348	09/30/2020	40	Poor
Dist 4	IVYST	IVY ST	10	E MARKET ST	GRIFFIN ST	A	R	2	342	32	10,949	10/19/2020	22	Failed
Dist 5	JACKSONCIR	JACKSON CIR	10	SWANER AVE	END	A	R	2	165	27	4,455	10/20/2020	51	Fair
Dist 5	JACKSONST	JACKSON ST	10	VAN BUREN AVE	SWANER AVE	A	R	2	1286	32	41,179	10/20/2020	65	Fair
Dist 2	JAMESST	JAMES ST	010	S WOOD ST	SMITH ST	A	R	2	385	41	15,785	10/12/2020	73	Good
Dist 2	JAMESST	JAMES ST	020	SMITH ST	S MADEIRA AVE	A	R	2	526	42	22,092	10/12/2020	74	Good
Dist 2	JEANAVE	JEAN AVE	10	CAROL DR	SHARON DR	A	R	2	900	32	28,826	10/13/2020	32	Poor
Dist 4	JEFFERSONS	JEFFERSON ST	10	N HEBBRON AVE	N FILICE ST	A	R	2	562	42	23,619	10/19/2020	52	Fair
Dist 2	JEFFERYAVE	JEFFERY AVE	10	SKYWAY BLVD	MERCER WAY	A	R	2	1043	36	37,564	10/13/2020	16	Failed
Dist 2	JOHNCIR	JOHN CIR	10	JOHN ST	END	A	R	2	273	32	8,761	10/13/2020	21	Failed
Dist 3	JOHNST	JOHN ST	100	SALINAS ST	S. MAIN ST	A	A	2	200	50	10,000	11/03/2020	39	Poor
Dist 2	JOHNST	JOHN ST	110	S WOOD ST	S FILICE ST	A	A	4	1481	58	85,898	10/13/2020	79	Good
Dist 2	JOHNST	JOHN ST	120	S FILICE ST	S SANBORN RD	A	A	4	981	58	56,898	10/13/2020	78	Good
Dist 2	JOHNST	JOHN ST	130	S SANBORN RD	MCGOWAN DR	A	A	4	1251	58	72,558	10/13/2020	78	Good
Dist 2	JOHNST	JOHN ST	140	MCGOWAN DR	E ALISAL ST	A	A	4	1433	62	88,846	10/13/2020	76	Good
Dist 3	JOHNSONAVE	JOHNSON AVE	15	ABBOTT ST	E END	A	R	2	1040	42	43,680	09/28/2020	33	Poor
Dist 1	JOSEPHINES	JOSEPHINE ST	15	C ST	END	A	R	2	632	32	20,250	10/05/2020	48	Poor
Dist 6	JULIAAVE	JULIA AVE	10	WHEELER DR	CHRISTENSEN AVE	A	R	2	661	32	21,164	10/06/2020	69	Fair
Dist 3	JUNIPEROWA	JUNIPERO WAY	10	W ACACIA ST	PALMA DR	A	R	2	887	32	28,406	10/02/2020	29	Failed
Dist 3	KATHERINEA	KATHERINE AVE	15	S MAIN ST	ALAMEDA AVE	A	C	2	2803	32	89,721	10/28/2020	40	Poor
Dist 5	KEARNYWAY	KEARNY WAY	10	ALVARADO DR	LARKIN ST	A	R	2	479	36	17,244	10/21/2020	54	Fair
Dist 5	KENNEDYCIR	KENNEDY CIR	10	KENNEDY ST	END	A	R	2	350	32	11,200	10/20/2020	47	Poor
Dist 5	KENNEDYST	KENNEDY ST	15	VAN BUREN AVE	BUCHANAN WAY	A	R	2	524	37	19,388	10/20/2020	51	Fair
Dist 5	KENNEDYST	KENNEDY ST	35	BUCHANAN WAY	END	A	R	2	1655	33	54,615	10/20/2020	50	Poor
Dist 2	KENNETHAVE	KENNETH AVE	010	FAIRHAVEN ST	E LAUREL DR	A	R	2	572	34	19,448	10/13/2020	26	Failed
Dist 2	KENNETHAVE	KENNETH AVE	020	E LAUREL DR	E MARKET ST	O	R	2	425	36	15,300	10/13/2020	72	Good
Dist 6	KENSINGTON	KENSINGTON WAY	15	BUNKER HILL WAY	END	A	R	2	478	37	17,686	10/08/2020	80	Good
Dist 6	KENTCIR	KENT CIR	10	KENT ST	END	A	R	2	155	34	5,270	10/07/2020	70	Fair

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Dist 6	KENTST	KENT ST	10	KLAMATH DR	KENT CIR	A	R	2	734	37	27,158	10/07/2020	70	Fair
Dist 6	KENTST	KENT ST	20	KENT CIR	ARCADIA WAY	A	R	2	367	38	13,946	10/07/2020	70	Fair
Dist 3	KENTFIELDD	KENTFIELD DR	25	LOYOLA DR	SAN JACINTO DR	A	R	2	2016	32	64,541	10/01/2020	76	Good
Dist 4	KENTUCKYST	KENTUCKY ST	15	LINDEN ST	TOWT ST	A	R	2	1267	36	45,646	10/15/2020	32	Poor
Dist 4	KERNST	KERN ST	10	E ALISAL ST	N FREEWAY OFF RAMP	A	A	2	1925	39	75,075	10/19/2020	37	Poor
Dist 4	KERNST	KERN ST	20	N FREEWAY OFF RAMP	END	A	A	2	1081	41	44,330	10/19/2020	62	Fair
Dist 2	KEYST	KEY ST	10	TORO AVE	PALOMA AVE	A	R	2	343	32	10,988	10/12/2020	26	Failed
Dist 1	KILBRETHAV	KILBRETH AVE	10	ELKINGTON AVE	DEL MONTE AVE	A	R	2	1666	31	51,646	10/05/2020	38	Poor
Dist 2	KIMMELST	KIMMEL ST	15	N SANBORN RD	BEECH ST	A	R	2	1224	32	39,189	10/13/2020	38	Poor
Dist 4	KINGSST	KINGS ST	15	E MARKET ST	E ALISAL ST	A	C	2	1155	42	48,537	10/19/2020	53	Fair
Dist 5	KIOWACIR	KIOWA CIR	10	CHEROKEE DR	END	A	R	2	184	32	5,888	10/20/2020	26	Failed
Dist 4	KIPDR	KIP DR	10	BLOCK AVE	E ALVIN DR	A	R	2	756	37	27,972	10/15/2020	20	Failed
Dist 3	KIPLINGST	KIPLING ST	55	RIKER ST	LOS OLIVOS DR	A	R	2	2803	32	89,708	10/01/2020	58	Fair
Dist 3	KIRKWOODAV	KIRKWOOD AVE	15	SAN CLEMENTE AVE	VILLA ST	A	R	2	1139	32	36,456	10/26/2020	29	Failed
Dist 6	KITTERYST	KITTERY ST	15	BEACON HILL DR	FITZGERALD ST	A	R	2	961	32	30,753	10/08/2020	80	Good
Dist 6	KLAMATHDR	KLAMATH DR	10	ARCADIA WAY	CALAVERAS DR	A	R	2	2205	37	81,585	10/07/2020	51	Fair
Dist 5	LABREAST	LA BREA ST	10	SEPULVEDA DR	N 1ST ST	A	R	2	443	32	14,203	10/21/2020	48	Poor
Dist 3	LACANADAWA	LA CANADA WAY	10	LOS OLIVOS DR	LA JOLLA WAY	A	R	2	682	32	21,824	10/01/2020	46	Poor
Dist 3	LACANADAWA	LA CANADA WAY	20	LA JOLLA WAY	NE END	A	R	2	430	32	13,760	10/01/2020	70	Fair
Dist 1	LACUESTACT	LA CUESTA CT	10	ANTIGUA AVE (N)	ANTIGUA AVE (S)	A	R	2	1375	34	46,750	10/05/2020	78	Good
Dist 2	LAGUARDIAS	LA GUARDIA ST	10	VANDENBERG ST	MOFFETT ST	A	R	2	1889	41	77,449	10/13/2020	68	Fair
Dist 1	LAHONDACIR	LA HONDA CIR	10	LA HONDA CT	END	A	R	2	205	32	6,560	09/29/2020	53	Fair
Dist 1	LAHONDACT	LA HONDA CT	010	ALAMO WAY (N)	RANCHERO DR	A	R	2	935	32	29,920	09/29/2020	70	Fair
Dist 1	LAHONDACT	LA HONDA CT	020	RANCHERO DR	ALAMO WAY (S)	A	R	2	590	38	22,420	09/29/2020	75	Good
Dist 3	LAJOLLACIR	LA JOLLA CIR	10	LA JOLLA WAY	END	A	R	2	337	32	10,784	10/01/2020	72	Good
Dist 3	LAJOLLAWAY	LA JOLLA WAY	10	LA CANADA WAY	LOS OLIVOS DR	A	R	2	927	32	29,664	10/01/2020	72	Good
Dist 1	LAMANCHACI	LA MANCHA CIR	10	LA MANCHA WAY	END	A	R	2	219	34	7,448	10/05/2020	77	Good
Dist 1	LAMANCHAWA	LA MANCHA WAY	15	BERNARDO AVE	PALMERA AVE	A	R	2	566	37	20,956	10/05/2020	78	Good
Dist 3	LAMESADR	LA MESA DR	050	W END	PAJARO ST	A	C	2	217	37	8,029	09/29/2020	47	Poor
Dist 3	LAMESADR	LA MESA DR	060	PAJARO ST	SAN JUAN DR	A	C	2	1677	37	62,049	09/29/2020	55	Fair
Dist 3	LAMESADR	LA MESA DR	070	SAN JUAN DR	LA MESA WAY	A	C	2	1597	37	59,089	09/29/2020	50	Poor
Dist 3	LAMESADR	LA MESA DR	080	LA MESA WAY	SAN ANGELO DR	A	C	2	1433	37	53,021	09/29/2020	45	Poor
Dist 3	LAMESAWAY	LA MESA WAY	10	LA MESA DR	E BLANCO RD	A	R	2	135	37	4,995	09/29/2020	22	Failed
Dist 3	LAMIRADACT	LA MIRADA CT	10	LA MIRADA DR (N)	LA MIRADA DR (N)	A	R	2	1124	32	35,968	09/29/2020	29	Failed
Dist 3	LAMIRADADR	LA MIRADA DR	15	SAN BRUNO WAY	LA MESA DR	A	R	2	1125	32	36,002	09/29/2020	28	Failed
Dist 4	LAPOSADADR	LA POSADA DR	15	END (N)	END (S)	A	R	2	473	25	11,842	10/15/2020	78	Good
Dist 4	LAPOSADAWA	LA POSADA WAY	10	SHERWOOD DR	LA POSADA DR	A	R	2	135	32	4,320	10/15/2020	22	Failed
Dist 3	LACEYLN	LACEY LN	10	E GABILAN ST	MONTEREY ST	P	R	2	265	15	3,975	10/22/2020	88	Good
Dist 6	LAFAYETTEC	LAFAYETTE CIR	10	LAFAYETTE WAY	END	A	R	2	191	31	5,921	09/29/2020	74	Good
Dist 6	LAFAYETTEW	LAFAYETTE WAY	15	DELANCEY DR	BROADWAY DR	A	R	2	677	37	25,049	09/29/2020	74	Good
Dist 4	LAKEALY	LAKE ALY	10	MARKET WAY	E LAKE ST	P	R	2	677	20	13,540	10/19/2020	74	Good
Dist 6	LANCASHIRE	LANCASHIRE CIR	10	LANCASHIRE DR	END	A	R	2	346	32	11,099	10/07/2020	63	Fair
Dist 6	LANCASHIR1	LANCASHIRE DR	10	BUCKINGHAM DR	DORSET WAY	A	R	2	821	32	26,280	10/07/2020	65	Fair
Dist 6	LANCASHIR1	LANCASHIRE DR	20	DORSET WAY	LANCASHIRE CIR	A	R	2	248	32	7,936	10/07/2020	64	Fair
Dist 6	LANCASHIR1	LANCASHIRE DR	30	LANCASHIRE CIR	CASCADE WAY	A	R	2	207	32	6,624	10/07/2020	65	Fair
Dist 3	LANGST	LANG ST	15	IVERSON ST	CAPITOL ST	P	R	2	1330	40	53,200	10/27/2020	60	Fair
Dist 5	LARKINCIR	LARKIN CIR	10	LARKIN ST	END	A	R	2	410	32	13,120	10/21/2020	41	Poor
Dist 5	LARKINST	LARKIN ST	015	W END	N DAVIS RD	A	C	2	344	37	12,728	10/21/2020	68	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 5	LARKINST	LARKIN ST	025	N DAVIS RD	KEARNY WAY	A	C	2	1268	43	54,524	10/21/2020	61	Fair
Dist 5	LARKINST	LARKIN ST	035	KEARNY WAY	VICTOR ST	A	C	2	1306	43	56,158	10/21/2020	69	Fair
Dist 5	LARKINST	LARKIN ST	045	VICTOR ST	RICO ST	A	C	2	756	43	32,508	10/21/2020	72	Good
Dist 5	LARKSPURDR	LARKSPUR DR	10	HEATHER DR	LUPIN DR	A	R	2	769	32	24,620	10/21/2020	31	Poor
Dist 1	LASCASITAS	LAS CASITAS DR	10	CONSTITUTION BLVD	RANCHERO DR	A	A	2	1552	38	58,980	09/29/2020	50	Poor
Dist 1	LASCASITAS	LAS CASITAS DR	20	RANCHERO DR	PINO WAY	A	A	2	447	37	16,539	09/29/2020	28	Failed
Dist 1	LASCASITAS	LAS CASITAS DR	30	PINO WAY	RIDER AVE	A	A	2	743	37	27,491	09/29/2020	31	Poor
Dist 3	LASCRUCESC	LAS CRUCES CT	10	LAS CRUCES WAY	END	A	R	2	417	38	15,846	10/01/2020	56	Fair
Dist 3	LASCRUCESW	LAS CRUCES WAY	15	SAN BLANCO DR	W END	A	R	2	396	32	12,697	10/01/2020	73	Good
Dist 6	LASSENAVE	LASSEN AVE	15	E ALVIN DR	RAINIER DR	A	R	2	1246	38	47,348	10/06/2020	46	Poor
Dist 5	LEESEDR	LEESE DR	10	SHERMAN DR	ALVARADO DR	A	R	2	1076	32	34,455	10/21/2020	65	Fair
Dist 5	LEGIONALY	LEGION ALY	10	ROCHEX AVE	W LAUREL DR	P	R	2	451	20	9,023	10/28/2020	68	Fair
Dist 3	LEMOSAVE	LEMOS AVE	010	DAVIS RD	COLLEGE DR	A	R	2	2532	37	93,684	10/01/2020	44	Poor
Dist 6	LENNOXWAY	LENNOX WAY	15	TUDOR WAY	VICTORIA AVE	A	R	2	1150	33	37,950	09/29/2020	73	Good
Dist 5	LENNYST	LENNY ST	15	HOOVER ST	LOUISE ST	A	R	2	1354	32	43,348	10/22/2020	46	Poor
Dist 6	LESLIEDR	LESLIE DR	15	NATIVIDAD RD	CALAVERAS DR	A	R	2	1363	32	43,622	10/06/2020	31	Poor
Dist 6	LEWISCIR	LEWIS CIR	10	LEWIS ST	END	A	R	2	184	32	5,902	10/08/2020	83	Good
Dist 6	LEWISST	LEWIS ST	15	HEMINGWAY DR	FAULKNER CIR	A	R	2	875	37	32,375	10/08/2020	83	Good
Dist 6	LEXINGTOND	LEXINGTON DR	15	PROVINCETOWN DR	INDEPENDENCE BLVD	A	R	2	1997	37	73,889	10/08/2020	76	Good
Dist 6	LEXINGTOND	LEXINGTON DR	90	INDEPENDENCE BLVD	LITTLE RIVER DR	A	R	2	210	33	6,930	10/08/2020	81	Good
Dist 3	LINCOLNAVE	LINCOLN AVE	010	W MARKET ST	CLAY ST	A	A	2	2827	43	121,561	11/03/2020	53	Fair
Dist 3	LINCOLNAVE	LINCOLN AVE	020	CLAY ST	AVENUE A	C	R	2	538	38	20,444	11/03/2020	46	Poor
Dist 3	LINCOLNAVE	LINCOLN AVE	030	AVENUE A	AVENUE B	A	R	2	439	40	17,560	11/03/2020	42	Poor
Dist 4	LINDENST	LINDEN ST	15	OREGON ST	EUCALYPTUS DR	A	R	2	996	42	41,839	10/15/2020	30	Failed
Dist 6	LINWOODDR	LINWOOD DR	010	E ALVIN DR	RAINIER DR	O	C	2	1253	44	55,132	11/01/2020	100	Excellent
Dist 4	LINWOODDR	LINWOOD DR	020SB	RAINIER DR	E LAUREL DR	O	C	2	1982	26	51,532	11/01/2020	100	Excellent
Dist 4	LINWOODDR	LINWOOD DR	030NB	E LAUREL DR	RAINIER DR	O	C	2	1982	26	51,532	11/01/2020	100	Excellent
Dist 6	LITTLERIVE	LITTLE RIVER DR	15	MANCHESTER DR	END	A	R	2	2604	38	98,952	10/07/2020	81	Good
Dist 3	LODGEALLY	LODGE ALLY	10	E MARKET ST	END	P	R	2	173	15	2,606	11/03/2020	62	Fair
Dist 3	LODGELN	LODGE LN	10	E MARKET ST	E GABILAN ST	P	R	2	605	14	8,470	11/03/2020	80	Good
Dist 3	LODGELN	LODGE LN	20	E GABILAN ST	E ALISAL ST	P	R	2	670	15	10,050	11/03/2020	79	Good
Dist 3	LODGELN	LODGE LN	30	E ALISAL ST	E SAN LUIS ST	P	R	2	605	15	9,075	11/03/2020	63	Fair
Dist 5	LOHMANST	LOHMAN ST	15	EISENHOWER ST	END	A	R	2	700	37	25,900	10/20/2020	69	Fair
Dist 4	LOMADR	LOMA DR	15	E LAUREL DR	DORORO DR	A	R	2	1054	32	33,736	10/15/2020	43	Poor
Dist 3	LOMAVISTAD	LOMA VISTA DR	10	W ALISAL ST	SIERRA MADRE DR	A	R	2	735	32	23,530	10/01/2020	38	Poor
Dist 4	LOMBARDCIR	LOMBARD CIR	10	LOMBARD ST	END	A	R	2	349	32	11,185	10/14/2020	71	Good
Dist 4	LOMBARDST	LOMBARD ST	15	VINCENT PL	HYDE ST	A	R	2	414	38	15,736	10/14/2020	40	Poor
Dist 6	LONDONWAY	LONDON WAY	10	FAULKNER ST	LEWIS ST	A	R	2	1026	32	32,839	10/08/2020	83	Good
Dist 6	LONDONDERR	LONDONDERRY WAY	15	COVENTRY ST	END	A	R	2	795	32	25,448	10/07/2020	76	Good
Dist 1	LNGFLWCIR	LONGFELLOW CIR	10	LONGFELLOW DR	END	A	R	2	393	31	12,183	09/11/2020	72	Good
Dist 1	LNGFLWDR	LONGFELLOW DR	010	HEMINGWAY DR	WHITMAN CIR	A	R	2	969	37	35,853	09/11/2020	69	Fair
Dist 6	LONGFELLO1	LONGFELLOW DR	10	BRADBURY ST	HEMINGWAY DR	A	R	2	322	22	7,084	10/08/2020	83	Good
Dist 3	LORIMERST	LORIMER ST	10	CENTRAL AVE	W ALISAL ST	C	R	2	1146	32	36,672	10/26/2020	50	Poor
Dist 3	LORIMERST	LORIMER ST	20	W ALISAL ST	HOMESTEAD AVE	C	R	2	1021	32	32,672	10/26/2020	32	Poor
Dist 6	LOSALTOSWA	LOS ALTOS WAY	15	ATHERTON WAY (N)	ATHERTON WAY (S)	A	R	2	1444	32	46,208	10/07/2020	32	Poor
Dist 6	LOSCOCHESA	LOS COCHES AVE	10	KLAMATH DR	HUMBOLDT DR	A	R	2	752	37	27,824	10/07/2020	60	Fair
Dist 6	LOSCOCHESA	LOS COCHES AVE	20	HUMBOLDT DR	CAMBRIAN DR	A	R	2	2098	37	77,626	10/07/2020	32	Poor
Dist 6	LOSCOCHESC	LOS COCHES CIR	10	LOS COCHES AVE	END	A	R	2	326	32	10,447	10/07/2020	47	Poor

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Dist 6	LOSGATOSWA	LOS GATOS WAY	10	SARATOGA DR (W)	SARATOGA DR (E)	A	R	2	1474	32	47,168	10/07/2020	42	Poor
Dist 3	LOSLAURELE	LOS LAURELES AVE	10	SANTA LUCIA AVE	EL PASO PL	P	R	2	794	34	26,996	10/28/2020	65	Fair
Dist 3	LOSOLIVOSD	LOS OLIVOS DR	55	SAN BLANCO DR	W BLANCO RD	A	C	2	1693	37	62,641	10/01/2020	70	Fair
Dist 3	LOSPALOSDR	LOS PALOS DR	25	ABBOTT ST	E ROMIE LN	C	C	2	1412	37	52,244	10/03/2020	51	Fair
Dist 3	LOSPALOSDR	LOS PALOS DR	30	E ROMIE LN	SAN JOSE ST	A	C	2	607	37	22,459	09/29/2020	51	Fair
Dist 3	LOSPALOSDR	LOS PALOS DR	45	SAN JOSE ST	SAN MIGUEL AVE	A	C	2	862	37	31,894	09/29/2020	46	Poor
Dist 5	LOUISECT	LOUISE CT	10	LOUISE ST	END	A	R	2	160	32	5,120	10/20/2020	36	Poor
Dist 5	LOUISEST	LOUISE ST	15	CLEVELAND AVE	LENNY ST	A	R	2	1151	32	36,856	10/20/2020	43	Poor
Dist 3	LOYOLADR	LOYOLA DR	25	UNIVERSITY AVE	ORINDA WAY	A	R	2	2667	37	98,679	10/01/2020	65	Fair
Dist 5	LUBERST	LUBER ST	10	HOOVER ST	CLEVELAND AVE	A	R	2	771	32	24,678	10/20/2020	41	Poor
Dist 4	LUNSFORDDR	LUNSFORD DR	10	NATIVIDAD RD	END	A	R	2	706	32	22,612	10/15/2020	32	Poor
Dist 5	LUPINDR	LUPIN DR	15	COLUMBINE DR	W BERNAL DR	A	R	2	1899	32	60,770	10/21/2020	32	Poor
Dist 3	LUTHERWAY	LUTHER WAY	10	PICO BLANCO	W BLANCO RD	A	R	2	420	23	9,660	10/01/2020	65	Fair
Dist 2	MACHADOWAY	MACHADO WAY	10	ALMA AVE	KIMMEL ST	A	R	2	467	32	14,944	10/13/2020	65	Fair
Dist 2	MACHADOWAY	MACHADO WAY	20	KIMMEL ST	ACOSTA ST	A	R	2	910	32	29,120	10/13/2020	31	Poor
Dist 4	MADEIRACIR	MADEIRA CIR	10	N MADEIRA AVE	END	A	R	2	480	32	15,360	10/15/2020	53	Fair
Dist 4	MADONNADR	MADONNA DR	10	ROSARITA DR	SANTA TERESA WAY	A	R	2	722	32	23,109	10/15/2020	33	Poor
Dist 5	MADRIDCIR	MADRID CIR	10	MADRID ST	END	A	R	2	495	32	15,840	10/20/2020	47	Poor
Dist 5	MADRIDST	MADRID ST	15	CHEROKEE DR	N MAIN ST	A	R	2	2077	51	105,927	10/20/2020	36	Poor
Dist 1	MADRONEDR	MADRONE DR	010	NOGAL DR	MADRONE WAY	A	R	2	660	33	21,780	09/28/2020	86	Good
Dist 1	MADRONEDR	MADRONE DR	020	MADRONE WAY	BUCKEYE WAY	A	R	2	700	37	25,900	09/28/2020	86	Good
Dist 1	MADRONEDR	MADRONE DR	030	BUCKEYE WAY	WEST END	A	R	2	425	33	14,025	09/28/2020	86	Good
Dist 1	MADRONEWAY	MADRONE WAY	10	MADRONE DR	RIDER AVE	A	C	2	155	37	5,735	09/28/2020	86	Good
Dist 1	MAEAVE	MAE AVE	010	TOWT ST	D ST	A	R	2	477	38	18,126	10/05/2020	72	Good
Dist 1	MAEAVE	MAE AVE	020	D ST	DEL MONTE AVE	A	R	2	823	32	26,345	10/05/2020	45	Poor
Dist 1	MAEAVE	MAE AVE	030	DEL MONTE AVE	GARNER AVE	A	R	2	1549	36	55,764	10/06/2020	26	Failed
Dist 2	MAGNOLIADR	MAGNOLIA DR	10	GARDEN WAY	MEADOW DR	A	R	2	1050	32	33,600	10/12/2020	46	Poor
Dist 3	MAINST	MAIN ST	25	E SAN LUIS ST	W GABILAN ST	A	C	2	1351	37	49,993	02/21/2019	50	Poor
Dist 3	MAINST	MAIN ST	30	JOHN ST	E SAN LUIS ST	A	C	4	341	60	20,507	11/03/2020	45	Poor
Dist 3	MAINST	MAIN ST	40	W GABILAN ST	CENTRAL AVE	A	C	2	430	36	15,485	11/03/2020	90	Good
Dist 3	MALARINST	MALARIN ST	10	ABBOTT ST	BRUNKEN AVE	A	C	2	674	42	28,308	09/29/2020	22	Failed
Dist 6	MANCHESTE1	MANCHESTER DR	10	CASTLETON ST	CONSTITUTION BLVD	A	R	2	813	42	34,146	10/07/2020	79	Good
Dist 6	MANHATTAND	MANHATTAN DR	10	BROADWAY DR	MCKINNON ST	A	R	2	877	37	32,449	09/29/2020	75	Good
Dist 3	MANORDR	MANOR DR	15	GROVE ST	LOS PALOS DR	A	R	2	554	32	17,741	09/30/2020	63	Fair
Dist 1	MANZANOCIR	MANZANO CIR	10	MIMBRERA WAY	END	A	R	2	482	31	14,954	09/28/2020	44	Poor
Dist 1	MANZANOWAY	MANZANO WAY	20	NOGAL DR	MANZANO CIR	A	R	2	407	31	12,631	09/28/2020	68	Fair
Dist 3	MAPLEST	MAPLE ST	010	S MAIN ST	PAJARO ST	C	C	2	774	42	32,508	10/03/2020	40	Poor
Dist 3	MAPLEST	MAPLE ST	020	PAJARO ST	CALIFORNIA ST	C	C	2	691	42	29,022	10/03/2020	42	Poor
Dist 3	MAPLEST	MAPLE ST	030	CALIFORNIA ST	ABBOTT ST	C	C	2	1706	40	68,240	10/03/2020	41	Poor
Dist 3	MAPLEWOODD	MAPLEWOOD DR	15	ALAMEDA AVE	GROVE ST	A	R	2	616	32	19,730	09/30/2020	42	Poor
Dist 3	MAPLEWOODD	MAPLEWOOD DR	30	GROVE ST	SIERRA DR	A	R	2	391	32	12,523	09/30/2020	48	Poor
Dist 2	MARGARETST	MARGARET ST	15	E ALISAL ST	PALOMA AVE	A	R	2	1305	35	45,701	10/12/2020	33	Poor
Dist 2	MARIGOLDWA	MARIGOLD WAY	15	GARDEN WAY	MEADOW DR	A	R	2	1114	32	35,678	10/13/2020	33	Poor
Dist 6	MARINAVE	MARIN AVE	15	RAINIER DR	LESLIE DR	A	R	2	2035	32	65,133	10/06/2020	35	Poor
Dist 3	MARIONAVE	MARION AVE	15	HOMESTEAD AVE	W ACACIA ST	A	R	2	1792	32	57,371	10/02/2020	37	Poor
Dist 6	MARIPOSACT	MARIPOSA CT	10	MARIPOSA ST	END	A	R	2	363	32	11,621	10/06/2020	28	Failed
Dist 6	MARIPOSAST	MARIPOSA ST	10	TRINITY WAY	MARIN AVE	A	R	2	873	32	27,945	10/06/2020	31	Poor
Dist 4	MARKETWAY	MARKET WAY	15	SHERWOOD DR	BRIDGE ST	A	C	2	1117	32	35,762	10/19/2020	52	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 2	MARSALACIR	MARSALA CIR	10	PALERMO DR	END	A	R	2	419	32	13,408	10/12/2020	96	Excellent
Dist 2	MARSALAWAY	MARSALA WAY	10	PALERMO DR	BELLAGIO WAY	A	R	2	682	34	23,188	10/12/2020	93	Excellent
Dist 6	MARSHFIELD	MARSHFIELD CIR	10	HANCOCK ST	END	A	R	2	332	32	10,641	10/08/2020	78	Good
Dist 6	MARSHFIEL1	MARSHFIELD CT	10	HANCOCK ST W. SIDE	HANCOCK ST E. SIDE	A	R	2	1307	33	43,131	10/08/2020	77	Good
Dist 4	MARTELLAST	MARTELLA ST	10	PRESTONE ST	W ROSSI ST	A	R	2	684	35	23,940	10/14/2020	44	Poor
Dist 3	MARTELLAST	MARTELLA ST	20	W ROSSI ST	S END	A	R	2	590	32	18,880	10/26/2020	34	Poor
Dist 4	MARYALDR	MARYAL DR	10	CHAPARRAL ST	END	A	R	2	154	30	4,641	10/15/2020	37	Poor
Dist 4	MARYALDR	MARYAL DR	20	CHAPARRAL ST	E LAUREL DR	A	R	2	1754	30	52,620	10/15/2020	30	Failed
Dist 4	MARYALDR	MARYAL DR	30	E LAUREL DR	E BERNAL DR	A	C	2	2714	37	100,418	10/15/2020	60	Fair
Dist 5	MASONWAY	MASON WAY	10	HOWE DR	LARKIN ST	A	R	2	249	32	7,973	10/21/2020	51	Fair
Dist 5	MASSAST	MASSA ST	15	N MAIN ST	END	A	R	2	479	32	15,348	10/20/2020	47	Poor
Dist 1	MSSCHUCIR	MASSACHUSETTS CIR	10	MASSACHUSETTS DR	END	A	R	2	235	33	7,755	09/10/2020	65	Fair
Dist 1	MSSCHUDR	MASSACHUSETTS DR	010	RHODE ISLAND ST	VERMONT CIR	A	R	2	925	37	34,225	09/10/2020	82	Good
Dist 1	MSSCHUDR	MASSACHUSETTS DR	020	VERMONT CIR	END	A	R	2	480	33	15,840	09/10/2020	85	Good
Dist 1	MSSCHUWAY	MASSACHUSETTS WAY	10	CONSTITUTION BLVD	MASSACHUSETTS DR	A	R	2	145	37	5,365	09/10/2020	80	Good
Dist 4	MASSOLOCIR	MASSOLO CIR	10	MASSOLO CT	END	A	R	2	200	32	6,400	10/14/2020	80	Good
Dist 4	MASSOLOCT	MASSOLO CT	15	VINCENT PL (W)	VINCENT PL (E)	A	R	2	1235	32	39,522	10/14/2020	72	Good
Dist 2	MAYFAIRDR	MAYFAIR DR	15	S SANBORN RD	MAYFAIR DR	A	R	2	2512	30	75,360	10/13/2020	81	Good
Dist 1	MAZATLANST	MAZATLAN ST	15	YUCATAN WAY	END	A	R	2	1085	38	41,230	09/28/2020	85	Good
Dist 1	MAZATLANWA	MAZATLAN WAY	10	MAZATLAN ST	RIDER AVE	A	R	2	158	38	6,004	09/28/2020	80	Good
Dist 4	MCALLISTER	MCALLISTER CIR	10	MCALLISTER ST	END	A	R	2	185	32	5,920	10/14/2020	61	Fair
Dist 4	MCALLISTE1	MCALLISTER ST	15	BRIGHTON ST	VICTOR ST	A	R	2	1649	32	52,780	10/14/2020	70	Fair
Dist 2	MCGOWANCIR	MCGOWAN CIR	10	MCGOWAN DR	END	A	R	2	272	39	10,608	10/13/2020	34	Poor
Dist 2	MCGOWANDR	MCGOWAN DR	15	S SANBORN RD	JOHN ST	A	R	2	1282	38	48,716	10/13/2020	43	Poor
Dist 6	MCKINNONST	MCKINNON ST	10	E ALVIN DR	WESTMINSTER DR	A	C	4	988	54	53,352	10/22/2020	45	Poor
Dist 6	MCKINNONST	MCKINNON ST	20	WESTMINSTER DR	HARDEN PKWY	A	C	2	866	42	36,372	10/22/2020	60	Fair
Dist 6	MCKINNONST	MCKINNON ST	30	HARDEN PKWY	CHARDONNAY DR	A	C	2	1029	42	43,218	10/22/2020	79	Good
Dist 6	MCKINNONST	MCKINNON ST	40	CHARDONNAY DR	E BORONDA RD	A	C	2	770	42	32,340	10/22/2020	71	Good
Dist 6	MCKINNONST	MCKINNON ST	50	E BORONDA RD	N END	A	C	2	1138	37	42,106	10/22/2020	71	Good
Dist 2	MEADOWDR	MEADOW DR	15	JOHN ST (N)	JOHN ST (S)	A	R	2	2200	32	70,400	10/12/2020	56	Fair
Dist 3	MELODYLN	MELODY LN	10	W GABILAN ST	W ALISAL ST	P	R	2	669	15	10,035	11/02/2020	68	Fair
Dist 3	MELODYLN	MELODY LN	20	W ALISAL ST	W SAN LUIS ST	P	R	2	630	15	9,450	11/02/2020	51	Fair
Dist 3	MELODYLN	MELODY LN	30	W GABILAN ST	END	P	R	2	172	15	2,593	11/02/2020	92	Excellent
Dist 3	MELROSEDR	MELROSE DR	10	BELMONT DR	PARK ST	A	R	2	736	32	23,578	10/02/2020	44	Poor
Dist 1	MELVILLEST	MELVILLE ST	10	LONGFELLOW DR	WHITMAN ST	A	R	2	1070	31	33,170	09/11/2020	72	Good
Dist 6	MENDOCINOD	MENDOCINO DR	15	PLACER WAY	YOLO CIR	A	R	2	884	38	33,592	09/29/2020	61	Fair
Dist 6	MENDOCINOD	MENDOCINO DR	45	YOLO CIR	EL DORADO DR	A	R	2	887	38	33,706	09/29/2020	30	Failed
Dist 6	MENLOWAY	MENLO WAY	10	ATHERTON WAY	LOS ALTOS WAY	A	R	2	644	32	20,625	10/07/2020	23	Failed
Dist 4	MERCEDST	MERCED ST	15	E MARKET ST	END	A	R	2	883	32	28,286	10/19/2020	27	Failed
Dist 2	MERCERWAY	MERCER WAY	10	AIRPORT BLVD	MORTENSEN AVE	A	R	2	692	35	24,220	10/13/2020	33	Poor
Dist 6	MEREDITHCI	MEREDITH CIR	10	BEACON HILL DR	END	A	R	2	235	32	7,520	10/08/2020	82	Good
Dist 6	MERLOTCIR	MERLOT CIR	10	MERLOT WAY	END	A	R	2	231	31	7,161	09/29/2020	71	Good
Dist 6	MERLOTWAY	MERLOT WAY	15	CHARDONNAY DR	WINDSOR ST	A	R	2	1214	33	40,062	09/29/2020	71	Good
Dist 1	MESCALCT	MESCAL CT	10	SAGUARO DR (N)	SAGUARO DR (S)	A	R	2	1380	32	44,160	10/05/2020	84	Good
Dist 1	MESQUITEDR	MESQUITE DR	15	E BORONDA RD	BUCKHORN DR	A	C	2	1085	37	40,152	10/05/2020	79	Good
Dist 4	MEYERSCT	MEYERS CT	10	N HEBBRON AVE (S)	N HEBBRON AVE (N)	P	R	2	1015	30	30,452	10/19/2020	68	Fair
Dist 2	MIAMIST	MIAMI ST	15	CROSS AVE	AFTON ROAD	A	R	2	1121	35	39,235	10/12/2020	58	Fair
Dist 2	MIDWAYAVE	MIDWAY AVE	10	FAIRHAVEN ST	E LAUREL DR	A	R	2	574	36	20,664	10/13/2020	34	Poor

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 2	MIDWAYAVE	MIDWAY AVE	20	E LAUREL DR	E MARKET ST	O	R	2	843	35	29,506	10/13/2020	60	Fair
Dist 4	MILLWAY	MILL WAY	10	SANSOME ST	GREENBRIAR WAY	A	R	2	321	32	10,273	10/14/2020	74	Good
Dist 6	MILLBRAEST	MILLBRAE ST	15	NATIVIDAD RD	ATHERTON WAY	A	R	2	453	41	18,573	10/07/2020	35	Poor
Dist 6	MILTONWAY	MILTON WAY	10	CABOT WAY	BOSTON ST	A	R	2	482	32	15,435	10/08/2020	83	Good
Dist 1	MIMBRERACI	MIMBRERA CIR	10	MIMBRERA WAY	END	A	R	2	330	31	10,230	09/28/2020	48	Poor
Dist 1	MIMBRERAWA	MIMBRERA WAY	010	RIDER AVE	NOGAL DR	A	R	2	859	38	32,642	09/28/2020	79	Good
Dist 2	MODENAST	MODENA ST	15	CAMPANIA WAY	END	A	R	2	1005	34	34,170	10/12/2020	80	Good
Dist 2	MODENAWAY	MODENA WAY	10	MODENA ST	PALERMO DR	A	R	2	272	33	8,976	10/12/2020	78	Good
Dist 6	MODOCAVE	MODOC AVE	10	RAINIER DR	E ALVIN DR	A	R	2	1244	35	43,540	10/06/2020	62	Fair
Dist 2	MOFFETTST	MOFFETT ST	010	AIRPORT BLVD	LA GUARDIA ST	A	C	2	3225	41	132,225	10/13/2020	70	Fair
Dist 2	MOFFETTST	MOFFETT ST	020	LA GUARDIA ST	VANDENBERG ST	A	C	2	1261	41	51,701	10/13/2020	70	Fair
Dist 2	MOHARST	MOHAR ST	15	N SANBORN RD	BEECH ST	A	R	2	1228	32	39,303	10/13/2020	35	Poor
Dist 5	MOHAWKAVE	MOHAWK AVE	15	ADAMS ST	NAVAJO DR	A	R	2	785	38	29,830	10/20/2020	33	Poor
Dist 5	MONROEST	MONROE ST	15	TULANE ST	POLK ST	A	R	2	1786	34	60,724	10/21/2020	34	Poor
Dist 2	MONTANAST	MONTANA ST	15	N SANBORN RD	BEECH ST	A	R	2	1227	32	39,277	10/13/2020	41	Poor
Dist 2	MONTEBELLA	MONTE BELLA BLVD	10	SCONBERG PKWY	SARDINA DR	A	R	2	1256	46	57,776	10/12/2020	82	Good
Dist 2	MONTEBELLA	MONTE BELLA BLVD	20	SARDINA DR	TUSCANY BLVD	A	R	2	1819	46	83,674	10/12/2020	82	Good
Dist 2	MONTEBELLA	MONTE BELLA BLVD	30	TUSCANY BLVD	WILLIAMS RD	A	R	2	894	41	36,654	10/12/2020	83	Good
Dist 3	MONTECITOC	MONTECITO CIR	10	MONTECITO WAY	END	A	R	2	367	32	11,769	10/01/2020	62	Fair
Dist 3	MONTECITOW	MONTECITO WAY	15	W ALISAL ST	SAN JACINTO DR	A	R	2	953	37	35,261	10/01/2020	48	Poor
Dist 3	MONTEREYST	MONTEREY ST	010	JOHN ST	E SAN LUIS ST	A	A	2	526	48	25,248	11/03/2020	62	Fair
Dist 3	MONTEREYST	MONTEREY ST	020	E SAN LUIS ST	E ALISAL ST	A	A	2	677	48	32,496	11/03/2020	52	Fair
Dist 3	MONTEREYST	MONTEREY ST	030	E ALISAL ST	E MARKET ST	A	A	2	1361	48	65,328	11/03/2020	54	Fair
Dist 5	MONTGOMERY	MONTGOMERY ST	10	BUSH ST	HYDE ST	A	R	2	797	32	25,506	10/21/2020	44	Poor
Dist 1	MORENOCIR	MORENO CIR	10	PASEO GRANDE	END	A	R	2	187	33	6,171	09/09/2020	83	Good
Dist 1	MORENODR	MORENO DR	010	PASEO GRANDE	CAMARILLO CT	A	C	2	975	38	37,050	09/09/2020	80	Good
Dist 1	MORENOWAY	MORENO WAY	10	TOWT ST	MORENO DR	A	C	2	145	38	5,510	09/09/2020	83	Good
Dist 2	MORTENSENA	MORTENSEN AVE	020	SKYWAY BLVD	MERCER WAY	A	R	2	1028	55	56,540	10/13/2020	22	Failed
Dist 3	MURPHYST	MURPHY ST	10	E ALISAL ST	END	A	R	2	586	32	18,752	09/29/2020	24	Failed
Dist 1	MUSTANGCT	MUSTANG CT	15	BADGER WAY (W)	BADGER WAY (E)	A	R	2	1258	33	41,514	09/09/2020	87	Good
Dist 4	MYRTLECT	MYRTLE CT	15	MYRTLE ST (N)	MYRTLE ST (S)	A	R	2	600	36	21,600	10/16/2020	59	Fair
Dist 4	MYRTLEST	MYRTLE ST	10	CIRCLE DR	TOWT ST	A	R	2	899	30	26,970	10/16/2020	44	Poor
Dist 5	N1STST	N 1ST ST	015	CHEROKEE DR	W ALVIN DR	A	R	2	1364	41	55,924	10/21/2020	30	Failed
Dist 5	N1STST	N 1ST ST	045	W ALVIN DR	W CURTIS ST	A	R	2	2226	38	84,588	10/21/2020	25	Failed
Dist 5	N2NDST	N 2ND ST	10	BOEING AVE	W CURTIS ST	A	R	2	635	36	22,860	10/21/2020	23	Failed
Dist 5	N3RDST	N 3RD ST	10	BOEING AVE	W CURTIS ST	A	R	2	653	36	23,508	10/21/2020	40	Poor
Dist 5	N3RDST	N 3RD ST	20	W CURTIS ST	ROCHEX AVE	A	R	2	412	32	13,184	10/21/2020	31	Poor
Dist 5	N4THST	N 4TH ST	10	CRESCENT WAY	W CURTIS ST	A	R	2	675	34	22,950	10/21/2020	34	Poor
Dist 5	N4THST	N 4TH ST	20	W CURTIS ST	ROCHEX AVE	A	R	2	406	22	8,932	10/21/2020	27	Failed
Dist 3	NACACIACIR	N ACACIA CIR	10	W ACACIA ST	END	A	R	2	156	32	4,993	10/27/2020	22	Failed
Dist 4	NDAVISRD	N DAVIS RD	150NB	W ROSSI ST	SLOAT DR	O	A	2	751	32	24,032	10/27/2020	47	Poor
Dist 4	NDAVISRD	N DAVIS RD	150SB	SLOAT DR	W ROSSI ST	O	A	2	751	32	24,032	10/26/2020	73	Good
Dist 5	NDAVISRD	N DAVIS RD	160NB	SLOAT DR	W LAUREL DR	A	A	2	3026	32	96,832	10/23/2020	45	Poor
Dist 5	NDAVISRD	N DAVIS RD	160SB	W LAUREL DR	SLOAT DR	A	A	2	3026	32	96,832	10/23/2020	59	Fair
Dist 5	NDAVISRD	N DAVIS RD	170NB	W LAUREL DR	WESTRIDGE PKWY	A	A	2	2232	32	71,424	10/27/2020	57	Fair
Dist 5	NDAVISRD	N DAVIS RD	170SB	WESTRIDGE PKWY	W LAUREL DR	A	A	2	2239	32	71,648	10/27/2020	55	Fair
Dist 5	NDAVISRD	N DAVIS RD	180NB	WESTRIDGE PKWY	AUTO CENTER CIR	A	A	2	4506	32	144,192	10/27/2020	51	Fair
Dist 5	NDAVISRD	N DAVIS RD	180SB	AUTO CENTER CIR	WESTRIDGE PKWY	A	A	2	4488	32	143,616	10/27/2020	52	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 5	NDAVISRD	N DAVIS RD	190NB	AUTO CENTER CIR	BORONDA CROSSING PL	A	A	2	2374	32	75,968	10/27/2020	60	Fair
Dist 5	NDAVISRD	N DAVIS RD	190SB	BORONDA CROSSING PL	AUTO CENTER CIR	A	A	2	2405	32	76,960	10/27/2020	62	Fair
Dist 5	NDAVISRD	N DAVIS RD	200NB	BORONDA CROSSING PL	S FREEWAY ON RAMP	A	A	2	1889	32	60,448	10/27/2020	64	Fair
Dist 5	NDAVISRD	N DAVIS RD	200SB	S FREEWAY OFF RAMP	BORONDA CROSSING PL	A	A	2	1916	32	61,312	10/27/2020	63	Fair
Dist 4	NFILICEST	N FILICE ST	10	E ALISAL ST	N END (BARRICADE)	A	C	2	105	44	4,620	10/23/2020	18	Failed
Dist 4	NFILICEST	N FILICE ST	15	ELTON PL	S END (BARRICADE)	A	C	2	1606	39	62,634	10/19/2020	51	Fair
Dist 4	NHEBBRONAV	N HEBBRON AVE	15	E ALISAL ST	E MARKET ST	A	C	2	1149	40	45,960	10/19/2020	47	Poor
Dist 4	NHEBBRONAV	N HEBBRON AVE	45	E MARKET ST	ELTON PL	A	R	2	566	38	21,539	10/19/2020	52	Fair
Dist 4	NMADEIRAAV	N MADEIRA AVE	010	W END (TREE BARRICADE)	ST EDWARDS AVE	A	R	2	2243	40	89,720	10/16/2020	61	Fair
Dist 4	NMADEIRAAV	N MADEIRA AVE	020	ST EDWARDS AVE	HILL CIR	A	R	2	1637	37	60,569	10/16/2020	49	Poor
Dist 4	NMADEIRAAV	N MADEIRA AVE	025	HILL CIR	N SANBORN RD	A	R	2	581	32	18,619	10/16/2020	23	Failed
Dist 4	NMADEIRAAV	N MADEIRA AVE	125	E ALISAL ST	E MARKET ST	A	R	2	1157	40	46,280	10/19/2020	54	Fair
Dist 4	NMADEIRAAV	N MADEIRA AVE	130	E MARKET ST	TERRACE ST	A	R	2	650	42	27,300	10/19/2020	32	Poor
Dist 4	NMADEIRAAV	N MADEIRA AVE	140	TERRACE ST	NE END (TREE BARRICADE)	A	R	2	1471	41	60,311	10/19/2020	51	Fair
Dist 4	NMAINDR	N MAIN DR	10	CHAPARRAL ST	END	O	R	2	514	32	16,477	10/15/2020	65	Fair
Dist 5	NMAINST	N MAIN ST	010	RUSSELL RD	COP 900' S/O RUSSELL RD	A	A	4	900	85	76,500	10/30/2020	66	Fair
Dist 5	NMAINST	N MAIN ST	020	COP 900' S/O RUSSEL RD	BORONDA RD	P	A	4	3798	78	296,244	10/30/2020	74	Good
Dist 5	NMAINST	N MAIN ST	025SB	E BORONDA RD	SAN JUAN GRADE RD	A	A	1	1749	13	22,737	10/28/2020	47	Poor
Dist 5&6	NMAINST	N MAIN ST	035SB	SAN JUAN GRADE RD	HARDEN PKWY	A	A	1	1280	13	16,640	10/28/2020	51	Fair
Dist 5&6	NMAINST	N MAIN ST	045SB	HARDEN PKWY	CHEROKEE DR	A	A	1	611	13	7,943	10/28/2020	54	Fair
Dist 5&6	NMAINST	N MAIN ST	055SB	CHEROKEE DR	W ALVIN DR	A	A	1	1392	13	18,096	10/28/2020	52	Fair
Dist 4&5	NMAINST	N MAIN ST	085SB	W ALVIN DR	NAVAJO DR	O	A	3	802	38	30,476	10/27/2020	53	Fair
Dist 4&5	NMAINST	N MAIN ST	095SB	NAVAJO DR	W CURTIS ST	O	A	3	1433	32	45,856	10/27/2020	66	Fair
Dist 4&5	NMAINST	N MAIN ST	115SB	W CURTIS ST	W LAUREL DR	O	A	3	918	38	34,884	10/27/2020	64	Fair
Dist 4&5	NMAINST	N MAIN ST	125SB	W LAUREL DR	IRIS DR	O	A	3	2231	38	84,778	10/27/2020	60	Fair
Dist 4&5	NMAINST	N MAIN ST	135SB	IRIS DR	W BERNAL DR	O	A	3	1180	38	44,840	10/27/2020	61	Fair
Dist 5	NMAINST	N MAIN ST	NB025	SAN JUAN GRADE RD	E BORONDA RD	A	A	1	1749	13	22,737	10/28/2020	46	Poor
Dist 5&6	NMAINST	N MAIN ST	NB035	HARDEN PKWY	SAN JUAN GRADE RD	A	A	1	1280	13	16,640	10/28/2020	54	Fair
Dist 5&6	NMAINST	N MAIN ST	NB045	CHEROKEE DR	HARDEN PKWY	A	A	1	611	13	7,943	10/28/2020	51	Fair
Dist 5&6	NMAINST	N MAIN ST	NB055	E ALVIN DR	CHEROKEE DR	A	A	1	1392	13	18,096	10/28/2020	52	Fair
Dist 4&5	NMAINST	N MAIN ST	NB085	NAVAJO DR	E ALVIN DR	A	A	3	802	38	30,476	10/27/2020	51	Fair
Dist 4&5	NMAINST	N MAIN ST	NB095	E CURTIS ST	NAVAJO DR	A	A	3	1433	38	54,454	10/27/2020	59	Fair
Dist 4&5	NMAINST	N MAIN ST	NB115	E LAUREL DR	E CURTIS ST	A	A	3	918	38	34,884	10/27/2020	56	Fair
Dist 4&5	NMAINST	N MAIN ST	NB125	IRIS DR	E LAUREL DR	A	A	3	2231	38	84,778	10/27/2020	61	Fair
Dist 4&5	NMAINST	N MAIN ST	NB135	E BERNAL DR	IRIS DR	A	A	3	1180	38	44,840	10/27/2020	62	Fair
Dist 4&5	NMAINST	N MAIN ST	NB200	SANTA CLARA AVE	W BERNAL DR	A	A	3	729	36	26,244	10/27/2020	70	Fair
Dist 5	NMAINST	N MAIN ST	PCC025	E BORONDA RD	SAN JUAN GRADE RD	P	A	4	1749	50	87,450	10/30/2020	64	Fair
Dist 5&6	NMAINST	N MAIN ST	PCC035	SAN JUAN GRADE RD	HARDEN PKWY	P	A	4	1280	50	64,000	10/30/2020	64	Fair
Dist 5&6	NMAINST	N MAIN ST	PCC045	HARDEN PKWY	CHEROKEE DR	P	A	4	611	50	30,550	10/30/2020	64	Fair
Dist 5&6	NMAINST	N MAIN ST	PCC055	CHEROKEE DR	E ALVIN DR	P	A	4	1392	50	69,600	10/30/2020	64	Fair
Dist 4	NPEARLST	N PEARL ST	15	E MARKET ST	E ALISAL ST	A	R	2	1146	36	41,256	10/19/2020	45	Poor
Dist 4	NSANBORNRD	N SANBORN RD	10	E BORONDA RD	FREEDOM PKWY	A	A	2	1937	64	123,980	10/23/2020	81	Good
Dist 4	NSANBORNRD	N SANBORN RD	20	FREEDOM PKWY	ANTIGUA AVE	A	A	2	1073	77	82,663	10/23/2020	84	Good
Dist 4	NSANBORNRD	N SANBORN RD	30	ANTIGUA AVE	DEL MONTE AVE	A	A	2	2098	63	132,201	10/23/2020	84	Good
Dist 1&2	NSANBORNRD	N SANBORN RD	40	DEL MONTE AVE	GARNER AVE	A	A	2	1545	64	98,880	10/22/2020	61	Fair
Dist 1&2	NSANBORNRD	N SANBORN RD	50	GARNER AVE	E LAUREL DR	A	A	2	2074	64	132,784	10/22/2020	76	Good
Dist 4	NSANBORNRD	N SANBORN RD	60	E LAUREL DR	OREGON ST	A	A	2	453	65	29,487	10/23/2020	38	Poor
Dist 4	NSANBORNRD	N SANBORN RD	70	OREGON ST	E MARKET ST	A	A	2	2580	32	82,589	10/23/2020	50	Poor

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Dist 4	NSANBORNRD	N SANBORN RD	80	E MARKET ST	E ALISAL ST	A	A	4	1308	65	85,020	10/23/2020	47	Poor
Dist 4	NWOODST	N WOOD ST	10	E. ALISAL ST	ROOSEVELT ST	A	A	2	577	32	18,471	10/19/2020	28	Failed
Dist 3	NACIONALCT	NACIONAL CT	10	CLARK ST (N)	CLARK ST (S)	A	R	2	1884	38	71,592	10/26/2020	78	Good
Dist 3	NACIONALST	NACIONAL ST	10	CLARK ST	CATALINA AVE	A	C	2	1642	38	62,396	10/26/2020	36	Poor
Dist 3	NACIONALST	NACIONAL ST	20	CATALINA AVE	CENTRAL AVE	P	C	2	813	40	32,520	10/26/2020	49	Poor
Dist 3	NACIONALST	NACIONAL ST	30	CENTRAL AVE	S END	A	C	2	236	37	8,732	10/26/2020	37	Poor
Dist 6	NANTUCKETB	NANTUCKET BLVD	10	INDEPENDENCE BLVD	HEMINGWAY DR	A	C	2	2292	38	87,096	10/08/2020	59	Fair
Dist 1&6	NANTUCKETB	NANTUCKET BLVD	20	HEMINGWAY DR	DECLARATION ST	A	C	2	1851	43	79,593	10/08/2020	68	Fair
Dist 1&6	NANTUCKETB	NANTUCKET BLVD	30	DECLARATION ST	CONSTITUTION BLVD	A	C	2	1122	44	49,368	10/08/2020	69	Fair
Dist 6	NAPAWAY	NAPA WAY	15	EL DORADO DR	IMPERIAL WAY	A	R	2	551	32	17,653	10/06/2020	43	Poor
Dist 2	NAPOLICIR	NAPOLI CIR	10	PALERMO DR	END	A	R	2	298	32	9,536	10/12/2020	97	Excellent
Dist 4	NATIVIDADR	NATIVIDAD RD	010	SHERWOOD DR	E LAUREL DR	P	A	2	2141	32	68,512	10/27/2020	76	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	080	E BORONDA RD	ROGGE RD	A	R	2	5275	38	200,450	09/30/2020	50	Poor
Dist 4	NATIVIDADR	NATIVIDAD RD	020NB	S LAUREL DR	RAINIER DR	P	A	3	2105	36	75,780	10/27/2020	80	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	030NB	RAINIER DR	E ALVIN DR	P	A	3	1109	36	39,924	09/30/2020	88	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	040NB	E ALVIN DR	LOS COCHES AVE	A	A	3	1803	36	64,908	09/30/2020	81	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	050NB	LOS COCHES AVE	EMERALD WAY	A	A	3	1753	36	63,108	09/30/2020	84	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	060NB	EMERALD WAY	ARCADIA WAY	A	A	3	849	36	30,564	09/30/2020	84	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	070NB	ARCADIA WAY	E BORONDA RD	A	A	3	776	36	27,936	09/30/2020	77	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	SB090	E BORONDA RD	ARCADIA WAY	O	A	3	775	60	46,500	09/30/2020	85	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	SB100	ARCADIA WAY	EMERALD WAY	O	A	3	849	36	30,564	09/30/2020	84	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	SB110	EMERALD WAY	LOS COCHES AVE	O	A	3	1745	36	62,820	09/30/2020	85	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	SB120	LOS COCHES AVE	E ALVIN DR	O	A	3	1803	36	64,908	09/30/2020	77	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	SB130	E ALVIN DR	RAINIER DR	P	A	3	1109	36	39,924	09/30/2020	88	Good
Dist 4	NATIVIDADR	NATIVIDAD RD	SB140	RAINIER DR	S LAUREL DR	P	A	3	2105	36	75,780	10/27/2020	77	Good
Dist 5	NAVAJODR	NAVAJO DR	15	ADAMS ST	W CURTIS ST	A	C	2	905	38	34,390	10/21/2020	26	Failed
Dist 5	NAVAJODR	NAVAJO DR	25	W CURTIS ST	MOHAWK AVE	A	C	2	808	37	29,896	10/21/2020	31	Poor
Dist 5	NAVAJODR	NAVAJO DR	35	MOHAWK AVE	N 1ST ST	A	C	2	946	37	35,002	10/21/2020	27	Failed
Dist 5	NAVAJODR	NAVAJO DR	45	N 1ST ST	N MAIN ST	A	C	2	750	41	30,750	10/21/2020	28	Failed
Dist 4	NAVAJODR	NAVAJO DR	70	NORTH MAIN ST	NOICE ST	A	C	2	331	41	13,571	10/15/2020	45	Poor
Dist 4	NEILST	NEIL ST	10	MERCED ST	GRIFFIN ST	A	R	2	277	38	10,551	10/19/2020	23	Failed
Dist 6	NEWBRITAIN	NEW BRITAIN CIR	10	NEW SALEM DR	END	A	R	2	251	32	8,052	10/08/2020	76	Good
Dist 2	NEWDEALST	NEW DEAL ST	15	DEL MONTE AVE	CORTEZ ST	A	R	2	769	26	19,994	10/14/2020	28	Failed
Dist 1	NWHMPSHCIR	NEW HAMPSHIRE CIR	10	NEW HAMPSHIRE CT	END	A	R	2	360	33	11,880	09/10/2020	51	Fair
Dist 1	NWHMPSHCT	NEW HAMPSHIRE CT	15	RHODE ISLAND ST	MASSACHUSETTS DR	A	R	2	1511	37	55,907	09/10/2020	79	Good
Dist 6	NEWHAVENWA	NEW HAVEN WAY	10	NEW SALEM DR	NANTUCKET BLVD	A	R	2	365	37	13,505	10/08/2020	79	Good
Dist 6	NEWSALEMDR	NEW SALEM DR	15	BURLINGTON DR	END	A	R	2	1248	35	43,680	10/08/2020	76	Good
Dist 3	NEWST	NEW ST	10	W MARKET ST	END	A	R	2	426	30	12,780	10/26/2020	14	Failed
Dist 1	NEWCASTLED	NEWCASTLE DR	15	NANTUCKET BLVD	ROCKHAVEN CT	A	R	2	762	31	23,626	09/11/2020	75	Good
Dist 6	NEWINGTONC	NEWINGTON CIR	10	NEWINGTON ST	END	A	R	2	145	61	8,845	10/08/2020	79	Good
Dist 6	NEWINGTONS	NEWINGTON ST	15	KITTERY ST	END	A	R	2	1036	33	34,188	10/08/2020	81	Good
Dist 6	NEWPORTCT	NEWPORT CT	10	LEXINGTON DR N. SIDE	LEXINGTON DR S. SIDE	A	R	2	1675	32	53,600	10/08/2020	47	Poor
Dist 6	NICHOLSAVE	NICHOLS AVE	10	LASSEN AVE	RAINIER DR	A	R	2	1224	32	39,172	10/06/2020	62	Fair
Dist 6	NICOLECIR	NICOLE CIR	10	BOYLE CT	END	A	R	2	119	32	3,819	10/06/2020	79	Good
Dist 3	NISSENRD	NISSEN RD	10	S MAIN ST	PADRE DR	A	C	2	617	43	26,531	10/01/2020	63	Fair
Dist 3	NISSENRD	NISSEN RD	25	PADRE DR	RIKER ST	A	C	2	950	43	40,850	10/01/2020	60	Fair
Dist 1	NOGALCIR	NOGAL CIR	10	NOGAL DR	END	A	R	2	260	31	8,060	09/28/2020	51	Fair
Dist 1	NOGALDR	NOGAL DR	010	MADRONE DR	FREEDOM PKWY	A	C	2	1197	37	44,289	09/28/2020	86	Good

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 1	NOGALDR	NOGAL DR	020	FREEDOM PKWY	MIMBRERA WAY	A	C	2	1638	38	62,244	09/28/2020	49	Poor
Dist 1	NOGALDR	NOGAL DR	030	MIMBRERA WAY	LAS CASITAS DR	A	C	2	1302	38	49,476	09/28/2020	37	Poor
Dist 4	NOICEDR	NOICE DR	10	NAVAJO DR	CHAPARRAL ST	A	R	2	600	41	24,617	10/15/2020	59	Fair
Dist 4	NOICEDR	NOICE DR	20	CHAPARRAL ST	E LAUREL DR	A	R	2	1876	32	60,039	10/15/2020	33	Poor
Dist 5	NORTHRIDGE	NORTHRIDGE DR	15	VAN BUREN AVE	SWANER AVE	A	R	2	2778	37	102,812	10/20/2020	44	Poor
Dist 5	NORTHRIDG2	NORTHRIDGE WAY	10	NORTHRIDGE DR	SAN JUAN GRADE RD	A	R	2	130	37	4,810	10/20/2020	56	Fair
Dist 3	OAKST	OAK ST	15	S MAIN ST	E END	P	R	2	2074	34	70,516	10/28/2020	48	Poor
Dist 4	OCONNORCIR	OCONNOR CIR	10	ST BRENDAN WAY	ROSARITA DR	A	R	2	871	32	27,890	10/15/2020	50	Poor
Dist 5	OFARRELLCT	OFARRELL CT	10	LARKIN ST (N)	LARKIN ST (S)	A	R	2	1021	32	32,672	10/21/2020	74	Good
Dist 1	OLDSTAGERD	OLD STAGE RD	060	CITY LIMITS	WILLIAMS RD	A	C	2	9382	26	243,932	10/06/2020	33	Poor
Dist 3	ORANGEDR	ORANGE DR	35	CAPISTRANO DR	S MAIN ST	A	C	2	1829	32	58,550	10/27/2020	37	Poor
Dist 1	ORCHARDAVE	ORCHARD AVE	10	DEL MONTE AVE	SIEBER ST	A	R	2	1146	25	28,650	10/05/2020	41	Poor
Dist 4	OREGONST	OREGON ST	10	N SANBORN RD	WASHINGTON DR	A	C	2	191	38	7,276	10/16/2020	22	Failed
Dist 4	OREGONST	OREGON ST	20	WASHINGTON DR	TOWT ST	A	C	2	1466	38	55,713	10/16/2020	18	Failed
Dist 3	ORINDAWAY	ORINDA WAY	10	KENTFIELD DR	LOYOLA DR	A	R	2	633	32	20,271	10/01/2020	83	Good
Dist 5	OSAGEDR	OSAGE DR	15	ADAMS ST	N 1ST ST	A	R	2	2222	32	71,112	10/20/2020	32	Poor
Dist 1	OSOCT	OSO CT	10	ESTRELLA WAY (N)	ESTRELLA WAY (S)	A	R	2	1292	32	41,344	10/05/2020	77	Good
Dist 6	OXFORDCT	OXFORD CT	10	WIMBLEDON AVE W. SIDE	WIMBLEDON AVE E. SIDE	A	R	2	1358	32	43,456	10/07/2020	79	Good
Dist 6	OYSTERBAYC	OYSTER BAY CIR	10	OYSTER BAY CT	END	A	R	2	135	35	4,725	10/07/2020	82	Good
Dist 6	OYSTERBAY1	OYSTER BAY CT	15	MANCHESTER DR (N)	MANCHESTER DR (S)	A	R	2	1266	38	48,108	10/07/2020	82	Good
Dist 1	PACANACIR	PACANA CIR	10	NOGAL DR	END	A	R	2	160	31	4,960	09/28/2020	79	Good
Dist 4	PACHECOST	PACHECO ST	15	TAMPICO AVE	NATIVIDAD RD	A	R	2	1140	32	36,502	10/15/2020	28	Failed
Dist 1	PACIFICAVE	PACIFIC AVE	010	AMARILLO WAY	DEL MONTE AVE	A	R	2	1154	38	43,852	10/05/2020	50	Poor
Dist 1	PACIFICAVE	PACIFIC AVE	020	DEL MONTE AVE	GARNER AVE	A	R	2	1544	23	35,512	10/05/2020	34	Poor
Dist 2	PADOVADR	PADOVA DR	10	PALERMO DR	FREEDOM PKWY	A	R	2	697	37	25,789	10/12/2020	80	Good
Dist 3	PADREDR	PADRE DR	010	W ACACIA ST	W ROMIE LN	A	C	2	738	32	23,616	10/01/2020	31	Poor
Dist 3	PADREDR	PADRE DR	020	W ROMIE LN	W SAN JOAQUIN ST	A	C	2	1226	32	39,232	10/01/2020	42	Poor
Dist 3	PADREDR	PADRE DR	030	W SAN JOAQUIN ST	NISSEN RD	A	C	2	457	42	19,194	10/01/2020	45	Poor
Dist 3	PADREDR	PADRE DR	040	NISSEN RD	W BLANCO RD	A	R	2	762	37	28,194	10/01/2020	27	Failed
Dist 3	PADREDR	PADRE DR	050	W BLANCO RD	END	A	R	2	293	38	11,134	10/01/2020	35	Poor
Dist 3	PAJAROCIR	PAJARO CIR	10	PAJARO ST	END	A	R	2	198	32	6,340	11/02/2020	62	Fair
Dist 3	PAJAROST	PAJARO ST	010	E MARKET ST	JOHN ST	A	A	2	2708	50	135,400	11/03/2020	67	Fair
Dist 3	PAJAROST	PAJARO ST	020	JOHN ST	MAPLE ST	C	A	2	974	50	48,700	11/03/2020	49	Poor
Dist 3	PAJAROST	PAJARO ST	030	MAPLE ST	PINE ST	C	A	2	969	50	48,450	11/03/2020	56	Fair
Dist 3	PAJAROST	PAJARO ST	040	PINE ST	E ROMIE LN	C	A	2	1256	50	62,800	11/03/2020	52	Fair
Dist 3	PAJAROST	PAJARO ST	050	E ROMIE LN	SAN MIGUEL AVE	C	A	2	1142	50	57,100	11/03/2020	31	Poor
Dist 3	PAJAROST	PAJARO ST	060	SAN MIGUEL AVE	SAN PEDRO ST	C	A	2	710	32	22,720	11/03/2020	34	Poor
Dist 3	PAJAROST	PAJARO ST	070	SAN PEDRO ST	E BLANCO RD	C	A	2	1166	32	37,312	10/03/2020	66	Fair
Dist 3	PAJAROWAY	PAJARO WAY	10	PAJARO ST	END	A	R	2	246	34	8,364	09/29/2020	75	Good
Dist 2	PALERMOCT	PALERMO CT	10	PALERMO DR	BELLAGIO WAY	A	R	2	939	32	30,048	10/12/2020	97	Excellent
Dist 2	PALERMODR	PALERMO DR	010	MONTE BELLA BLVD (S)	CAMPANIA WAY	A	R	2	1820	37	67,340	10/09/2020	88	Good
Dist 2	PALERMODR	PALERMO DR	020	CAMPANIA CIR	PADOVA DR	A	R	2	697	37	25,789	10/09/2020	82	Good
Dist 2	PALERMODR	PALERMO DR	030	PADOVA DR	MODENA WAY	A	R	2	546	37	20,202	10/09/2020	82	Good
Dist 2	PALERMODR	PALERMO DR	040	MODENA WAY	MONTE BELLA BLVD (N)	A	R	2	334	37	12,358	10/09/2020	86	Good
Dist 3	PALMADR	PALMA DR	010	UNIVERSITY AVE	W ALISAL ST	C	C	2	1620	38	61,560	10/27/2020	43	Poor
Dist 3	PALMADR	PALMA DR	020	W ALISAL ST	IVERSON ST	C	C	2	3060	38	116,280	10/27/2020	46	Poor
Dist 1	PALMERAAVE	PALMERA AVE	15	LA MANCHA WAY	CORTINA WAY	A	R	2	1345	37	49,765	10/05/2020	77	Good
Dist 3	PALMETTOST	PALMETTO ST	10	W MARKET ST	RAILROAD AVE	A	R	2	361	52	18,772	10/26/2020	50	Poor

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Dist 3	PALOALTOWA	PALO ALTO WAY	10	KENTFIELD DR	LOYOLA DR	A	R	2	634	32	20,291	10/01/2020	82	Good
Dist 2	PALOMAAVE	PALOMA AVE	10	QUILLA ST	E MARKET ST	A	R	2	1216	40	48,640	10/12/2020	59	Fair
Dist 2	PALOMAAVE	PALOMA AVE	20	E MARKET ST	TAMPA ST	A	R	2	840	40	33,600	10/12/2020	37	Poor
Dist 2	PALOMAAVE	PALOMA AVE	30	TAMPA ST	MIAMI ST	A	R	2	1142	34	38,828	10/12/2020	26	Failed
Dist 2	PALOMAAVE	PALOMA AVE	40	MIAMI ST	MARGARET ST	A	R	2	747	34	25,398	10/12/2020	73	Good
Dist 3	PARAISOCT	PARAISO CT	10	VIA PARAISO (N)	VIA PARAISO (S)	A	R	2	970	32	31,040	09/29/2020	22	Failed
Dist 3	PARKROW	PARK ROW	10	W ROMIE LN	W ACACIA ST	A	R	2	737	32	23,598	03/19/2019	71	Good
Dist 3	PARKROW	PARK ROW	20	W ACACIA ST	END	A	R	2	253	32	8,097	03/19/2019	83	Good
Dist 3	PARKST	PARK ST	010	CAPITOL ST	HOMESTEAD AVE	P	C	2	1281	40	51,240	10/26/2020	57	Fair
Dist 3	PARKST	PARK ST	020	HOMESTEAD AVE	NACIONAL ST	P	C	2	1278	40	51,120	10/26/2020	50	Poor
Dist 3	PARKST	PARK ST	030	NACIONAL ST	BELMONT DR	A	C	2	1524	32	48,768	10/02/2020	26	Failed
Dist 5	PARKSIDEST	PARKSIDE ST	10	ROCHEX AVE	W LAUREL DR	A	R	2	500	32	16,000	10/21/2020	29	Failed
Dist 5	PARKSIDEST	PARKSIDE ST	20	W LAUREL DR	S END	A	R	2	925	38	35,150	10/21/2020	38	Poor
Dist 4	PARKWAYRD	PARKWAY RD	15	N SANBORN RD	EUCALYPTUS DR	A	R	2	1027	32	32,887	10/28/2020	29	Failed
Dist 4	PARSONSAVE	PARSONS AVE	15	BLOCK AVE	RAINIER DR	A	R	2	954	32	30,529	10/15/2020	35	Poor
Dist 1	PARTRIDGES	PARTRIDGE ST	15	FALCON DR	END	A	R	2	831	32	26,592	09/10/2020	86	Good
Dist 1	PARTRIDGEW	PARTRIDGE WAY	10	FALCON DR	PARTRIDGE ST	A	R	2	210	37	7,770	09/10/2020	87	Good
Dist 3	PASATIEMPO	PASATIEMPO WAY	15	N. END	S. END	A	R	2	627	32	20,064	10/01/2020	73	Good
Dist 1	PASEOGRAND	PASEO GRANDE	15	N SANBORN RD	GAVIOTA DR	A	C	2	2083	38	79,182	09/09/2020	80	Good
Dist 2	PAVIACIR	PAVIA CIR	10	PALERMO DR	END	A	R	2	262	32	8,384	10/12/2020	97	Excellent
Dist 2	PAVIAWAY	PAVIA WAY	10	PALERMO DR	SCONBERG PKWY	A	R	2	470	37	17,390	10/12/2020	97	Excellent
Dist 6	PEACEFULCO	PEACEFUL COVE WAY	10	MANCHESTER DR	LITTLE RIVER DR	A	R	2	401	32	12,848	10/07/2020	83	Good
Dist 4	PEACHDR	PEACH DR	15	CALLE CEBU	COMMISSION ST	A	R	2	952	32	30,488	10/19/2020	25	Failed
Dist 2	PEARLALY	PEARL ALY	10	S PEARL ST	220' E/O S PEARL ST	A	R	2	220	20	4,400	10/12/2020	20	Failed
Dist 2	PEARLALY	PEARL ALY	20	220' E/O S PEARL ST	S HEBBRON AVE	P	R	2	170	20	3,400	10/12/2020	57	Fair
Dist 3	PELLETTAVE	PELLETT AVE	15	S SANBORN RD	VERTIN AVE	A	C	2	1062	41	43,542	09/28/2020	67	Fair
Dist 6	PENNSYLVAN	PENNSYLVANIA DR	15	MCKINNON ST	END	A	R	2	1601	41	65,641	09/29/2020	68	Fair
Dist 1	PENWICKCIR	PENWICK CIR	10	ROCKHAVEN CT	END	A	R	2	253	32	8,107	09/11/2020	75	Good
Dist 5	PEREZCIR	PEREZ CIR	10	PEREZ ST	END	A	R	2	245	37	9,065	10/20/2020	53	Fair
Dist 5	PEREZST	PEREZ ST	10	S END	E BOLIVAR ST	A	R	2	165	32	5,280	10/20/2020	37	Poor
Dist 5	PEREZST	PEREZ ST	20	E BOLIVAR ST	END	A	R	2	822	36	29,592	10/20/2020	55	Fair
Dist 6	PESCADEROD	PESCADERO DR	10	INGLEWOOD ST	ARCADIA WAY	A	R	2	608	32	19,456	10/07/2020	33	Poor
Dist 6	PESCADEROD	PESCADERO DR	20	ARCADIA WAY	LOS COCHES AVE	A	R	2	2636	37	97,532	10/07/2020	32	Poor
Dist 2	PIAZZACIR	PIAZZA CIR	10	PIAZZA DR	END	A	R	2	210	32	6,720	10/09/2020	77	Good
Dist 2	PIAZZADR	PIAZZA DR	15	MONTE BELLA BLVD	END	A	R	2	2696	37	99,752	10/09/2020	82	Good
Dist 1	PICKFORDWA	PICKFORD WAY	10	DECLARATION ST	ROCKHAVEN CT	A	R	2	258	32	8,261	09/11/2020	68	Fair
Dist 3	PICOBLANCO	PICO BLANCO ST	10	SAN BLANCO DR	LUTHER WAY	A	R	2	357	37	13,209	10/01/2020	81	Good
Dist 5	PIERCEST	PIERCE ST	10	NORTHRIDGE DR	SWANER AVE	A	R	2	464	32	14,848	10/20/2020	50	Poor
Dist 4	PIKEWAY	PIKE WAY	10	PARSONS AVE	LINWOOD DR	A	R	2	266	32	8,512	10/15/2020	31	Poor
Dist 6	PIKEWAY	PIKE WAY	20	LINWOOD DR	NICHOLS AVE	A	R	2	295	32	9,440	10/06/2020	30	Failed
Dist 5	PIMACIR	PIMA CIR	10	CHEROKEE DR	END	A	R	2	180	32	5,760	10/20/2020	19	Failed
Dist 3	PINEST	PINE ST	25	CARMEL AVE	S MAIN ST	P	R	2	2271	34	77,214	10/29/2020	55	Fair
Dist 1	PINOWAY	PINO WAY	10	LAS CASITAS DR	ALAMO WAY	A	R	2	832	32	26,638	09/29/2020	45	Poor
Dist 2	PISACIR	PISA CIR	10	PALERMO DR	END	A	R	2	181	32	5,792	10/12/2020	97	Excellent
Dist 6	PLACERWAY	PLACER WAY	10	WESTMINSTER DR	MENDOCINO DR	A	R	2	698	40	27,920	10/06/2020	73	Good
Dist 3	PLAZACIR	PLAZA CIR	10	S MAIN ST	END	A	R	2	448	38	17,024	10/01/2020	61	Fair
Dist 6	PLUMASWAY	PLUMAS WAY	10	GLACIER DR	MARIN AVE	A	R	2	889	32	28,475	10/06/2020	34	Poor
Dist 5	POLKCIR	POLK CIR	10	POLK ST	END	A	R	2	210	25	5,250	10/21/2020	26	Failed

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Dist 5	POLKST	POLK ST	10	TULANE ST	W LAUREL DR	A	R	2	946	30	28,380	10/21/2020	36	Poor
Dist 5	POLKST	POLK ST	20	W LAUREL DR	TYLER ST	A	R	2	2237	32	71,614	10/21/2020	47	Poor
Dist 4	POPLARST	POPLAR ST	10	PARKWAY RD	E MARKET ST	A	R	2	408	36	14,713	10/16/2020	27	Failed
Dist 6	PORTSMOUTH	PORTSMOUTH WAY	10	HARTFORD ST	COVENTRY ST	A	R	2	522	32	16,722	10/07/2020	77	Good
Dist 5	POSTDR	POST DR	10	N DAVIS RD	W LAUREL DR	O	A	4	1103	66	72,858	10/21/2020	48	Poor
Dist 4&5	POTREROWAY	POTRERO WAY	10	SLOAT DR	GENEVA WAY	A	R	2	201	32	6,432	10/21/2020	83	Good
Dist 5	POTREROWAY	POTRERO WAY	20	GENEVA WAY	VICTOR ST	A	R	2	655	32	20,960	10/21/2020	78	Good
Dist 4	POWELLST	POWELL ST	15	W ROSSI ST	END	A	R	2	2292	37	84,815	10/16/2020	48	Poor
Dist 4	PRADERST	PRADER ST	10	RIANDA ST	E ALISAL ST	A	R	2	313	37	11,581	10/19/2020	25	Failed
Dist 5	PRADOST	PRADO ST	10	W END	PEREZ ST	A	R	2	296	34	10,064	10/20/2020	44	Poor
Dist 5	PRADOST	PRADO ST	20	PEREZ ST	NE END	A	R	2	665	32	21,284	10/20/2020	67	Fair
Dist 4	PRESCOTTCI	PRESCOTT CIR	10	ARGUELLO DR	END	A	R	2	166	34	5,644	10/14/2020	79	Good
Dist 4	PRESTONST	PRESTON ST	10	MARTELLA ST	END	A	R	2	338	28	9,464	10/14/2020	32	Poor
Dist 3	PRIMAVERAS	PRIMAVERA ST	15	KIPLING ST	COLERIDGE DR	A	R	2	705	37	26,085	10/01/2020	67	Fair
Dist 3	PRIMAVERAW	PRIMAVERA WAY	10	PRIMAVERA ST	KIPLING ST	A	R	2	726	32	23,232	10/01/2020	55	Fair
Dist 5	PRIMROSEDR	PRIMROSE DR	10	HEATHER DR	LUPIN DR	A	R	2	768	32	24,595	10/21/2020	27	Failed
Dist 2	PRINCEPL	PRINCE PL	10	S HEBBRON AVE (N)	S HEBBRON AVE (S)	A	R	2	918	32	29,376	10/12/2020	42	Poor
Dist 6	PRINCETONC	PRINCETON CIR	10	PRINCETON CT	END	A	R	2	175	31	5,425	09/29/2020	75	Good
Dist 6	PRINCETON1	PRINCETON CT	15	PENNSYLVANIA DR (W)	PENNSYLVANIA DR (E)	A	R	2	1271	33	41,943	09/29/2020	75	Good
Dist 6	PROVINCETO	PROVINCETOWN CIR	10	PROVINCETOWN DR	END	A	R	2	310	32	9,920	10/08/2020	80	Good
Dist 6	PROVINCET1	PROVINCETOWN DR	10	LEXINGTON DR (S)	LEXINGTON DR (N)	A	R	2	1484	32	47,488	10/08/2020	79	Good
Dist 6	PROVINCET1	PROVINCETOWN DR	20	LEXINGTON DR	INDEPENDENCE BLVD	A	R	2	422	37	15,614	10/08/2020	82	Good
Dist 6	PROVINCET1	PROVINCETOWN DR	30	INDEPENDENCE BLVD	PROVINCETOWN WAY	A	R	2	907	32	29,024	10/08/2020	68	Fair
Dist 6	PROVINCET1	PROVINCETOWN DR	40	PROVINCETOWN WAY	SW END	A	R	2	404	34	13,736	10/08/2020	69	Fair
Dist 6	PROVINCET2	PROVINCETOWN WAY	10	HIDDEN CREEK CIR	INDEPENDENCE BLVD	A	R	2	144	37	5,328	10/08/2020	68	Fair
Dist 5	PUEBLODR	PUEBLO DR	15	ADAMS ST	N 1ST ST	A	R	2	2447	32	78,314	10/20/2020	22	Failed
Dist 3	QUAILRUNCI	QUAIL RUN CIR	10	W ROSSI ST	END	A	R	2	630	42	26,460	10/26/2020	77	Good
Dist 2	QUILLAST	QUILLA ST	15	E MARKET ST	WILLIAMS RD	A	R	2	1418	35	49,630	10/13/2020	74	Good
Dist 2	QUILLAST	QUILLA ST	25	WILLIAMS ROAD	E ALISAL ST	A	R	2	345	37	12,765	10/13/2020	25	Failed
Dist 5	QUINTEROCI	QUINTERO CIR	15	CHEROKEE DR	END	A	R	2	530	32	16,960	10/20/2020	66	Fair
Dist 4	RAGSDALECT	RAGSDALE CT	10	E MARKET ST	END	P	R	2	99	18	1,782	10/19/2020	69	Fair
Dist 4	RAGSDALECT	RAGSDALE CT	20	ROOSEVELT ST	RAGSDALE CT	P	R	2	332	30	9,960	10/19/2020	67	Fair
Dist 4	RAGSDALECT	RAGSDALE CT	30	RAGSDALE CT	RAGSDALE CT	P	R	2	203	34	6,902	10/19/2020	61	Fair
Dist 4	RAGSDALECT	RAGSDALE CT	40	RAGSDALE CT	ROOSEVELT ST	P	A	2	345	32	11,040	10/19/2020	61	Fair
Dist 4	RAINIERDR	RAINIER DR	015	SHIRES WAY	LINWOOD DR	A	R	2	892	32	28,568	10/15/2020	48	Poor
Dist 4&6	RAINIERDR	RAINIER DR	045	NATIVIDAD RD	LINWOOD DR	A	R	2	2600	32	83,215	10/06/2020	63	Fair
Dist 4	RAMONAAVE	RAMONA AVE	10	E LAUREL DR	RAINIER DR	A	R	2	2051	32	65,632	10/15/2020	59	Fair
Dist 6	RAMONAAVE	RAMONA AVE	20	RAINIER DR	GLACIER DR	A	R	2	997	32	31,904	10/06/2020	47	Poor
Dist 1	RANCHERODR	RANCHERO DR	15	LAS CASITAS DR	LA HONDA CT	A	R	2	1376	32	44,032	09/29/2020	37	Poor
Dist 1	RAVENCT	RAVEN CT	10	COUGAR DR (N)	COUGAR DR (S)	A	R	2	1212	33	39,996	09/09/2020	87	Good
Dist 4	REATAST	REATA ST	15	TAPADERO DR	LINWOOD DR	A	R	2	2281	32	73,022	10/15/2020	33	Poor
Dist 6	REDONDOWAY	REDONDO WAY	10	COMPTON WAY	GLENDORA WAY	A	R	2	1091	32	34,928	10/07/2020	45	Poor
Dist 3	REDWOODPL	REDWOOD PL	10	WOODSIDE DR	END	A	R	2	222	32	7,120	09/30/2020	39	Poor
Dist 6	REGENCYCIR	REGENCY CIR	10	HARDEN PKWY	END	A	R	2	658	42	27,636	10/06/2020	79	Good
Dist 6	REXCIR	REX CIR	10	WELLINGTON CT	END	A	R	2	135	37	4,995	10/08/2020	83	Good
Dist 6	RHINECIR	RHINE CIR	10	RIESLING WAY	END	A	R	2	240	33	7,920	09/29/2020	75	Good
Dist 6	RHINECT	RHINE CT	10	RIESLING WAY (W)	RIESLING WAY (E)	A	R	2	1089	33	35,955	09/29/2020	73	Good
Dist 1	RHDISLDCIR	RHODE ISLAND CIR	10	RHODE ISLAND ST	END	A	R	2	285	33	9,405	09/10/2020	47	Poor

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 1	RHDISLDST	RHODE ISLAND ST	010	CONSTITUTION BLVD	RHODE ISLAND CIR	A	R	2	576	37	21,312	09/10/2020	79	Good
Dist 1	RHDISLDST	RHODE ISLAND ST	020	RHODE ISLAND CIR	END	A	R	2	235	33	7,755	09/10/2020	85	Good
Dist 4	RIANDACIR	RIANDA CIR	20	PRADER ST	END	A	R	2	510	42	21,420	10/19/2020	24	Failed
Dist 4	RIANDAST	RIANDA ST	10	GRIFFIN ST	PRADER ST	A	R	2	918	37	33,990	10/19/2020	50	Poor
Dist 5	RICOCIR	RICO CIR	10	LARKIN ST	END	A	R	2	455	36	16,380	10/21/2020	71	Good
Dist 3	RICOST	RICO ST	010	W LAKE ST	W ROSSI ST	A	C	2	545	41	22,345	10/26/2020	70	Fair
Dist 4	RICOST	RICO ST	020	W ROSSI ST	HYDE ST	A	C	2	929	41	38,089	10/14/2020	63	Fair
Dist 4&5	RICOST	RICO ST	030	HYDE ST	CASENTINI ST	A	C	2	389	41	15,949	10/21/2020	55	Fair
Dist 5	RICOST	RICO ST	040	CASENTINI ST	LARKIN ST	A	C	2	836	42	35,112	10/21/2020	29	Failed
Dist 1	RIDERAVE	RIDER AVE	005	GEE ST	GARNER AVE	A	R	2	757	38	28,766	09/11/2020	28	Failed
Dist 1	RIDERAVE	RIDER AVE	010	GARNER AVE	LAS CASITAS DR	A	C	2	1864	38	70,832	09/11/2020	22	Failed
Dist 1	RIDERAVE	RIDER AVE	020	LAS CASITAS DR	MIMBRERA WAY	A	C	2	1222	38	46,436	09/11/2020	25	Failed
Dist 1	RIDERAVE	RIDER AVE	025	MIMBRERA WAY	ANTIGUA AVE	A	C	2	1165	38	44,270	09/11/2020	62	Fair
Dist 1	RIDERAVE	RIDER AVE	030	ANTIGUA AVE	FREEDOM PKWY	A	C	2	520	42	21,840	09/11/2020	76	Good
Dist 1	RIDERAVE	RIDER AVE	035	FREEDOM PKWY	E BORONDA RD	A	C	2	1975	41	80,975	09/11/2020	85	Good
Dist 6	RIESLINGWA	RIESLING WAY	15	RHINE CIR	BURGUNDY WAY	A	R	2	915	32	29,304	09/29/2020	74	Good
Dist 3	RIKERCIR	RIKER CIR	10	RIKER ST	END	A	R	2	126	32	4,035	10/01/2020	49	Poor
Dist 3	RIKERST	RIKER ST	010	W MARKET ST	320' S/O W MARKET ST	A	R	2	320	37	11,840	10/26/2020	18	Failed
Dist 3	RIKERST	RIKER ST	020	320' S/O W MARKET ST	CENTRAL AVE	P	R	2	1075	40	43,000	10/26/2020	62	Fair
Dist 3	RIKERST	RIKER ST	110	W ALISAL ST	CLAY ST	P	A	2	1116	40	44,640	10/27/2020	48	Poor
Dist 3	RIKERST	RIKER ST	120	CLAY ST	W ACACIA ST	A	A	2	1431	38	54,378	10/27/2020	34	Poor
Dist 3	RIKERST	RIKER ST	130	W ACACIA ST	W ROMIE LN	A	A	2	1000	38	38,000	10/27/2020	42	Poor
Dist 3	RIKERST	RIKER ST	140	W ROMIE LN	W BLANCO RD	A	A	2	1963	37	72,631	10/27/2020	32	Poor
Dist 3	RIKERST	RIKER ST	150	W BLANCO RD	KIPLING ST	A	C	2	1506	38	57,228	10/27/2020	42	Poor
Dist 3	RIKERTER	RIKER TER	10	W ALISAL ST	END	A	R	2	1072	32	34,310	10/26/2020	26	Failed
Dist 4	RINCONAVE	RINCON AVE	10	CENTER ST	EAST ST	A	R	2	700	32	22,413	10/19/2020	50	Poor
Dist 3	RIOVERDEDR	RIO VERDE DR	10	LA MESA DR	SAN JUAN DR	A	R	2	1633	32	52,265	09/29/2020	62	Fair
Dist 6	RIVERTONWA	RIVERTON WAY	10	HARTFORD ST	COVENTRY ST	A	R	2	636	32	20,382	10/07/2020	77	Good
Dist 5	ROCHEXAVE	ROCHEX AVE	15	N MAIN ST	CRESCENT WAY	A	R	2	2658	36	95,688	10/21/2020	26	Failed
Dist 1	ROCKHAVENC	ROCKHAVEN CT	15	NEWCASTLE DR (N)	NEWCASTLE DR (S)	A	R	2	2046	32	65,472	09/11/2020	75	Good
Dist 6	ROCKPORTWA	ROCKPORT WAY	15	BEACON HILL DR	BOSTON ST	A	R	2	856	37	31,672	10/08/2020	83	Good
Dist 1	ROCKROSEST	ROCKROSE ST	15	BUCKHORN DR	END	A	R	2	877	37	32,449	10/05/2020	78	Good
Dist 1	ROCKROSEWA	ROCKROSE WAY	10	BUCKHORN DR	ROCKROSE ST	A	R	2	200	37	7,400	10/05/2020	82	Good
Dist 5	RODEOAVE	RODEO AVE	15	N 1ST ST	W CURTIS ST	A	R	2	1286	34	43,724	10/21/2020	37	Poor
Dist 6	ROGGERD	ROGGE RD	010	NATIVIDAD RD	2725' W/O NATIVIDAD RD (COP)	A	R	2	2725	32	87,200	10/22/2020	33	Poor
Dist 6	ROGGERD	ROGGE RD	020	2725' W/O NATIVIDAD RD (COP)	CITY LIMITS	A	R	2	1680	36	60,480	10/22/2020	78	Good
Dist 4	ROOSEVELTS	ROOSEVELT ST	15	KERN ST	N PEARL ST	A	C	2	2049	41	84,009	10/19/2020	47	Poor
Dist 4	ROSARITADR	ROSARITA DR	15	SANTA TERESA WAY	E BERNAL DR	A	R	2	2102	32	67,269	10/15/2020	61	Fair
Dist 3	ROSEST	ROSE ST	10	WEST ST	END	C	R	2	230	32	7,383	10/26/2020	25	Failed
Dist 2	ROSSANOCT	ROSSANO CT	15	PALERMO DR (N)	PALERMO DR (S)	A	R	2	1321	33	43,593	10/12/2020	80	Good
Dist 4	ROSSIALY	ROSSI ALY	020	START PCC	E ROSSI ST	P	R	1	350	14	4,900	10/26/2020	70	Fair
Dist 3	ROSSICIR	ROSSI CIR	10	W ROSSI ST	END	A	R	2	463	42	19,446	10/26/2020	81	Good
Dist 2	ROYDIAZST	ROY DIAZ ST	010	END	AIRPORT BLVD	A	C	2	2082	32	66,624	10/13/2020	81	Good
Dist 5	RUSSELLRD	RUSSELL RD	60	PAUL AVE	SAN JUAN GRADE RD	A	A	2	331	32	10,615	10/22/2020	28	Failed
Dist 3	SACACIACIR	S ACACIA CIR	10	W ACACIA ST	END	A	R	2	147	32	4,732	10/27/2020	29	Failed
Dist 1	SELMDR	S ELM DR	10	RIDER AVE	END	A	R	2	325	32	10,400	10/05/2020	32	Poor
Dist 2	SFILICEST	S FILICE ST	15	E ALISAL ST	JOHN ST	A	C	2	1366	38	51,908	10/13/2020	33	Poor
Dist 2	SHEBBRONAV	S HEBBRON AVE	15	E ALISAL ST	JOHN ST	A	C	2	1290	36	46,440	10/13/2020	29	Failed

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 2	SMADEIRAAV	S MADEIRA AVE	15	JAMES ST	E ALISAL ST	A	C	2	872	42	36,624	10/12/2020	61	Fair
Dist 2	SPEARLST	S PEARL ST	15	E ALISAL ST	END	A	R	2	329	32	10,528	10/12/2020	42	Poor
Dist 3	SSANBORNRD	S SANBORN RD	010NB	ABBOTT ST	RAILROAD Ovepass (PCC START)	A	A	2	972	20	19,440	11/03/2020	46	Poor
Dist 3	SSANBORNRD	S SANBORN RD	020NB	RAILROAD Overpass (PCC START)	RAILROAD Overpass (PCC END)	P	A	2	850	20	17,000	11/03/2020	73	Good
Dist 3	SSANBORNRD	S SANBORN RD	030NB	RAILROAD Overpass (PCC END)	PELLETT AVE	A	A	2	225	20	4,500	11/03/2020	45	Poor
Dist 3	SSANBORNRD	S SANBORN RD	040NB	PELLETT AVE	ELVEE DR	A	A	2	1830	20	36,600	11/03/2020	52	Fair
Dist 2	SSANBORNRD	S SANBORN RD	050NB	ELVEE DR	FAIRWAY AVE	A	A	2	433	26	11,258	10/22/2020	58	Fair
Dist 2	SSANBORNRD	S SANBORN RD	060NB	FAIRVIEW AVE	JOHN ST	O	A	2	792	38	30,096	10/22/2020	39	Poor
Dist 2	SSANBORNRD	S SANBORN RD	070NB	JOHN ST	E ALISAL ST	O	A	2	1325	33	43,725	10/13/2020	59	Fair
Dist 2	SSANBORNRD	S SANBORN RD	SB010	E ALISAL ST	JOHN ST	A	A	2	1325	25	33,125	10/13/2020	60	Fair
Dist 2	SSANBORNRD	S SANBORN RD	SB020	JOHN ST	FAIRVIEW AVE	A	A	2	792	40	31,680	10/22/2020	50	Poor
Dist 2	SSANBORNRD	S SANBORN RD	SB030	FAIRWAY AVE	ELVEE DR	A	A	2	424	40	16,960	10/22/2020	59	Fair
Dist 3	SSANBORNRD	S SANBORN RD	SB040	ELVEE DR	PELLETT AVE	A	A	2	1830	20	36,600	11/03/2020	54	Fair
Dist 3	SSANBORNRD	S SANBORN RD	SB050	PELLETT AVE	RAILROAD Overpass (PCC START)	A	A	2	227	20	4,540	11/03/2020	50	Poor
Dist 3	SSANBORNRD	S SANBORN RD	SB060	RAILROAD Overpass (PCC START)	RAILROAD Overpass (PCC END)	P	A	2	850	20	17,000	11/03/2020	73	Good
Dist 3	SSANBORNRD	S SANBORN RD	SB070	RAILROAD Overpass (PCC END)	ABBOTT ST	A	A	2	980	20	19,600	11/03/2020	50	Poor
Dist 2	SWOODST	S WOOD ST	15	JOHN ST	E ALISAL ST	A	A	2	1228	41	50,348	10/13/2020	34	Poor
Dist 1	SAGECT	SAGE CT	15	CHAMISE CT (N)	CHAMISE CT (S)	A	R	2	1656	34	56,304	10/05/2020	83	Good
Dist 1	SAGEWAY	SAGE WAY	10	SAGE CT	BUCKHORN DR	A	R	2	150	37	5,550	10/05/2020	82	Good
Dist 1	SAGUAROCIR	SAGUARO CIR	10	TUMBLEWEED DR	NE END	A	R	2	411	32	13,152	10/05/2020	82	Good
Dist 1	SAGUARODR	SAGUARO DR	15	BUCKHORN DR	TUMBLEWEED DR	A	R	2	817	37	30,229	10/05/2020	82	Good
Dist 3	SALINASST	SALINAS ST	10	W MARKET ST	JOHN ST	C	A	2	2336	37	86,432	11/03/2020	56	Fair
Dist 3	SALINASST	SALINAS ST	20	JOHN ST	CLAY ST	A	A	2	336	38	12,768	11/03/2020	24	Failed
Dist 3	SANANDREAS	SAN ANDREAS WAY	10	SAN JUAN DR	END	A	R	2	171	32	5,476	09/29/2020	56	Fair
Dist 3	SANANGELOD	SAN ANGELO DR	15	SANTA CRUZ AVE	LA MESA DR	A	C	2	1918	37	70,966	09/29/2020	25	Failed
Dist 3	SANANTONIO	SAN ANTONIO CIR	10	ORANGE DR	END	A	R	2	159	32	5,114	10/27/2020	35	Poor
Dist 3	SANANTONI1	SAN ANTONIO DR	10	W ROMIE LN	W ACACIA ST	A	R	2	775	32	24,819	10/27/2020	20	Failed
Dist 2	SANBENITOS	SAN BENITO ST	010	S WOOD ST	S MADEIRA AVE	A	R	2	900	42	37,800	10/12/2020	70	Fair
Dist 2	SANBENITOS	SAN BENITO ST	020	S MADEIRA AVE	END	A	R	2	398	42	16,716	10/12/2020	21	Failed
Dist 3	SANBLANCOC	SAN BLANCO CT	10	SAN BLANCO DR	END	A	R	2	246	32	7,883	10/01/2020	56	Fair
Dist 3	SANBLANCOD	SAN BLANCO DR	25	PICO BLANCO	LAS CRUCES WAY	A	R	2	974	37	36,038	10/01/2020	71	Good
Dist 3	SANBRUNOWA	SAN BRUNO WAY	15	SAN MATEO DR	SAN ANGELO DR	A	R	2	748	37	27,676	09/29/2020	55	Fair
Dist 3	SANCARLOSD	SAN CARLOS DR	10	SAN PEDRO ST	SAN MIGUEL AVE	A	R	2	1259	32	40,307	09/29/2020	62	Fair
Dist 3	SANCLEMENT	SAN CLEMENTE AVE	15	KIRKWOOD AVE	NACIONAL ST	C	R	2	679	32	21,728	10/26/2020	24	Failed
Dist 3	SANDIEGODR	SAN DIEGO DR	15	SANTA CRUZ AVE	SAN BRUNO WAY	A	R	2	831	32	26,611	09/29/2020	72	Good
Dist 3	SANFELIPEC	SAN FELIPE CT	10	SAN FELIPE ST	END	A	R	2	365	32	11,711	10/01/2020	36	Poor
Dist 3	SANFELIPES	SAN FELIPE ST	010	SAN LEANDRO WAY	SIERRA MADRE DR	A	R	2	965	32	30,880	10/01/2020	55	Fair
Dist 3	SANFELIPES	SAN FELIPE ST	020	SIERRA MADRE DR	SAN VINCENTE AVE	A	R	2	1289	32	41,248	10/01/2020	31	Poor
Dist 3	SANFERNAND	SAN FERNANDO CIR	10	SAN FERNANDO DR	END	A	R	2	252	32	8,089	09/29/2020	68	Fair
Dist 3	SANFERNAN1	SAN FERNANDO DR	15	WILGART WAY	LA MESA DR	A	R	2	1617	32	51,752	09/29/2020	73	Good
Dist 3	SANGABRIEL	SAN GABRIEL DR	10	CENTRAL AVE	END	A	R	2	210	38	7,980	10/26/2020	79	Good
Dist 3	SANJACINTO	SAN JACINTO DR	10	KENTFIELD DR	MONTECITO WAY	A	R	2	1052	32	33,665	10/01/2020	69	Fair
Dist 3	SANJOSEST	SAN JOSE ST	010	LOS PALOS DR	WILGART WAY	C	A	2	810	37	29,970	10/03/2020	51	Fair
Dist 3	SANJOSEST	SAN JOSE ST	020	WILGART WAY	SAN JUAN DR	A	A	2	963	37	35,631	09/30/2020	43	Poor
Dist 3	SANJUANCIR	SAN JUAN CIR	10	SAN JUAN DR	END	A	R	2	202	25	5,050	09/29/2020	61	Fair
Dist 3	SANJUANDR	SAN JUAN DR	10	E BLANCO RD	SAN MIGUEL AVE	A	C	2	1257	37	46,509	09/30/2020	46	Poor
Dist 3	SANJUANDR	SAN JUAN DR	20	SAN MIGUEL AVE (E)	SAN MIGUEL DR (W)	A	C	2	2084	32	66,688	09/29/2020	67	Fair
Dist 5&6	SANJUANGRA	SAN JUAN GRADE RD	050	N MAIN ST	E BORONDA RD	A	A	2	1640	38	62,320	10/28/2020	57	Fair

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Dist 5&6	SANJUANGRA	SAN JUAN GRADE RD	060	E BORONDA RD	VAN BUREN AVE	A	A	2	2006	38	76,228	10/28/2020	46	Poor
Dist 5&6	SANJUANGRA	SAN JUAN GRADE RD	070	VAN BUREN AVE	RUSSEL RD	A	A	2	2807	38	106,666	10/28/2020	30	Failed
Dist 3	SANLEANDRO	SAN LEANDRO CIR	10	W ALISAL ST	END	A	R	2	221	32	7,079	10/01/2020	31	Poor
Dist 3	SANLEANDR1	SAN LEANDRO WAY	10	W ALISAL ST	SANTA FE WAY	A	R	2	292	38	11,096	10/01/2020	33	Poor
Dist 3	SANMARCOSC	SAN MARCOS CT	10	SAN MARCOS DR (N)	SAN MARCOS DR (S)	A	R	2	936	32	29,952	09/29/2020	38	Poor
Dist 3	SANMARCOSD	SAN MARCOS DR	15	SANTA CRUZ AVE	LA MESA DR	A	C	2	1956	37	72,372	09/29/2020	35	Poor
Dist 3	SANMARINOW	SAN MARINO WAY	10	E ROMIE LN	SANTA CRUZ AVE	A	C	2	473	41	19,393	09/29/2020	28	Failed
Dist 3	SANMATEODR	SAN MATEO DR	15	SAN MIGUEL AVE	SAN TOMAS WAY	A	R	2	729	37	26,973	09/29/2020	56	Fair
Dist 3	SANMATEOPL	SAN MATEO PL	10	SAN MATEO DR	END	A	R	2	201	32	6,432	09/29/2020	66	Fair
Dist 3	SANMIGUELA	SAN MIGUEL AVE	010	S MAIN ST	PAJARO ST	O	C	2	843	56	47,208	11/02/2020	46	Poor
Dist 3	SANMIGUELA	SAN MIGUEL AVE	020	PAJARO ST	ALAMEDA AVE	A	C	2	1924	32	61,568	11/02/2020	45	Poor
Dist 3	SANMIGUELA	SAN MIGUEL AVE	030	ALAMEDA AVE	SAN FERNANDO DR	A	C	2	739	35	25,865	11/02/2020	70	Fair
Dist 3	SANMIGUELA	SAN MIGUEL AVE	040	SAN FERNANDO DR	SAN MATEO DR	A	C	2	1137	38	43,206	11/02/2020	68	Fair
Dist 3	SANMIGUELC	SAN MIGUEL CIR	10	SAN MIGUEL AVE	END	A	R	2	188	26	4,888	09/29/2020	66	Fair
Dist 3	SANPEDROST	SAN PEDRO ST	10	PAJARO ST	SAN CARLOS DR	A	C	2	1208	26	31,408	09/29/2020	67	Fair
Dist 3	SANRAMONCI	SAN RAMON CIR	10	PAJARO ST	END	C	R	2	197	32	6,329	10/03/2020	65	Fair
Dist 3	SANSIMEOND	SAN SIMEON DR	15	CAMDEN WAY	AMBROSE DR	A	R	2	1792	32	57,360	10/01/2020	43	Poor
Dist 3	SANTOMASWA	SAN TOMAS WAY	15	SAN MARCOS DR	SAN DIEGO DR	A	R	2	623	32	19,966	09/29/2020	48	Poor
Dist 3	SANVINCENT	SAN VINCENTE AVE	010	W ALISAL ST	SANTA PAULA DR	A	C	2	1145	32	36,640	10/02/2020	30	Failed
Dist 3	SANVINCENT	SAN VINCENTE AVE	020	SANTA PAULA DR	W ACACIA ST	A	C	2	567	32	18,144	10/02/2020	20	Failed
Dist 3	SANVINCENT	SAN VINCENTE AVE	030	W ACACIA ST	PALMA DR	A	C	2	924	32	29,568	10/02/2020	60	Fair
Dist 3	SANVINCENT	SAN VINCENTE AVE	040	PALMA DR	W BLANCO RD	A	C	2	1311	32	41,952	10/02/2020	59	Fair
Dist 3	SANVINCEN1	SAN VINCENTE CIR	10	SAN VINCENTE AVE	END	A	R	2	324	37	11,988	10/02/2020	28	Failed
Dist 3	SANYSIDROW	SAN YSIDRO WAY	10	AMBROSE DR	MONTECITO WAY	A	R	2	629	41	25,789	10/01/2020	53	Fair
Dist 3	SANBORNPL	SANBORN PL	25	N END	INDUSTRIAL ST	A	C	2	2355	34	80,070	10/28/2020	39	Poor
Dist 4	SANSOMEST	SANSOME ST	15	RICO ST	W ROSSI ST	A	R	2	1678	35	58,745	10/14/2020	60	Fair
Dist 3	SANTAANADR	SANTA ANA DR	10	GROVE ST (N)	GROVE ST (S)	A	R	2	895	32	28,640	09/30/2020	52	Fair
Dist 3	SANTABARBA	SANTA BARBARA AVE	15	WILSON ST	NATIONAL ST	A	R	2	668	32	21,376	10/26/2020	29	Failed
Dist 4	SANTACLARA	SANTA CLARA AVE	10	N FREEWAY OFF RAMP	END	O	R	2	369	24	8,856	10/15/2020	78	Good
Dist 3	SANTACRUZA	SANTA CRUZ AVE	15	SAN ANGELO DR	SAN MARCOS DR	A	C	2	875	37	32,375	09/29/2020	38	Poor
Dist 3	SANTAFEWAY	SANTA FE WAY	15	SANTA MONICA WAY	SAN FELIPE ST	A	R	2	644	38	24,472	10/01/2020	64	Fair
Dist 3	SANTALUCIA	SANTA LUCIA AVE	15	ALAMEDA AVE	CARMEL AVE	P	R	2	917	34	31,178	10/28/2020	64	Fair
Dist 2	SANTAMARIA	SANTA MARIA ST	15	S WOOD ST	S MADEIRA AVE	A	R	2	899	42	37,758	10/12/2020	68	Fair
Dist 3	SANTAMONIC	SANTA MONICA CT	10	SANTA MONICA WAY	END	A	R	2	363	35	12,705	10/01/2020	20	Failed
Dist 3	SANTAMONI1	SANTA MONICA WAY	15	SIERRA MADRE DR	SANTA MONICA CT	A	R	2	816	37	30,192	10/01/2020	26	Failed
Dist 3	SANTAPAULA	SANTA PAULA DR	15	SIERRA MADRE DR	SAN VINCENTE AVE	A	R	2	879	32	28,148	10/01/2020	23	Failed
Dist 5	SANTARITAS	SANTA RITA ST	15	W BOLIVAR ST	SWANER AVE	A	R	2	819	36	29,484	10/20/2020	40	Poor
Dist 3	SANTAROSAA	SANTA ROSA AVE	10	NACIONAL ST	PARK ST	A	R	2	466	32	14,921	10/02/2020	25	Failed
Dist 4	SANTATERES	SANTA TERESA CIR	10	GRANADA AVE	END	A	R	2	180	32	5,760	10/15/2020	32	Poor
Dist 4	SANTATERE1	SANTA TERESA WAY	15	E LAUREL DR	GRANADA AVE	A	R	2	1619	37	59,903	10/15/2020	69	Fair
Dist 6	SARATOGACI	SARATOGA CIR	10	SARATOGA DR	END	A	R	2	232	32	7,432	10/07/2020	49	Poor
Dist 6	SARATOGADR	SARATOGA DR	15	NATIVIDAD RD	END	A	R	2	1455	41	59,655	10/07/2020	25	Failed
Dist 2	SARDINADR	SARDINA DR	15	CAPRI WAY	BELLAGIO WAY	A	R	2	907	32	29,024	10/09/2020	81	Good
Dist 6	SAUCITOAVE	SAUCITO AVE	10	PESCADERO DR	CAMBRIAN DR	A	R	2	878	32	28,108	10/07/2020	63	Fair
Dist 6	SAUSALDR	SAUSAL DR	10	PESCADERO DR	CAMBRIAN DR	A	R	2	719	32	23,018	10/07/2020	27	Failed
Dist 3	SCHILLINGP	SCHILLING PL	15	HANSEN ST	END	A	R	2	2543	32	81,407	09/28/2020	58	Fair
Dist 2	SCONBERGPK	SCONBERG PKWY	10	ALISAL RD	MONTE BELLA BLVD	A	A	2	875	32	28,000	10/12/2020	69	Fair
Dist 5	SEGOVIACIR	SEGOVIA CIR	10	MADRID ST	END	A	R	2	287	32	9,210	10/20/2020	52	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 5	SEMINOLEWA	SEMINOLE WAY	10	SHAWNEE WAY	CHEROKEE DR	A	R	2	926	32	29,656	10/20/2020	22	Failed
Dist 5	SENECAPL	SENECA PL	10	CHEROKEE DR	END	A	R	2	367	32	11,744	10/20/2020	19	Failed
Dist 5	SEPULVEDAC	SEPULVEDA CIR	10	SEPULVEDA DR	END	A	R	2	325	32	10,400	10/21/2020	48	Poor
Dist 5	SEPULVEDAD	SEPULVEDA DR	15	N 1ST ST	W ALVIN DR	A	R	2	1518	32	48,595	10/21/2020	35	Poor
Dist 4	SEQUOIAST	SEQUOIA ST	10	LINWOOD DR	MARYAL DR	A	R	2	1093	32	34,999	10/15/2020	39	Poor
Dist 5	SEVILLEST	SEVILLE ST	15	DURAN ST	CHEROKEE DR	A	R	2	1255	32	40,160	10/20/2020	41	Poor
Dist 5	SEVILLEWAY	SEVILLE WAY	10	CHEROKEE DR	SEVILLE ST	A	R	2	177	32	5,664	10/20/2020	33	Poor
Dist 2	SHARONDR	SHARON DR	15	END	BARBARA PL	A	R	2	1271	32	40,685	10/13/2020	33	Poor
Dist 2	SHASTAWAY	SHASTA WAY	10	GARDEN WAY	JOHN ST	A	R	2	792	32	25,351	10/13/2020	41	Poor
Dist 5	SHAWNEEWAY	SHAWNEE WAY	15	SEMINOLE WAY	INCA WAY	A	R	2	516	32	16,540	10/20/2020	24	Failed
Dist 3	SHELLEYWAY	SHELLEY WAY	10	KIPLING ST	KIPLING ST	A	R	2	863	32	27,628	10/01/2020	64	Fair
Dist 5	SHERMANCIR	SHERMAN CIR	10	SHERMAN DR	END	A	R	2	260	32	8,320	10/21/2020	65	Fair
Dist 5	SHERMANDR	SHERMAN DR	15	LARKIN ST	END	A	R	2	1727	37	63,899	10/21/2020	69	Fair
Dist 4	SHERWOODDR	SHERWOOD DR	025	E ROSSI ST	E MARKET ST	A	A	4	704	64	45,068	10/28/2020	61	Fair
Dist 4	SHERWOODDR	SHERWOOD DR	030	E ROSSI ST	101 Overpass (PCC START)	A	A	4	1649	64	105,536	10/28/2020	57	Fair
Dist 4	SHERWOODDR	SHERWOOD DR	040	101 Overpass (PCC END)	185 Ft S/O SHERWOOD PL	A	A	4	850	50	42,500	10/28/2020	70	Fair
Dist 4	SHERWOODDR	SHERWOOD DR	050	E BERNAL DR EB	185 Ft S/O SHERWOOD PL (PCC END)	P	A	4	1814	50	90,700	10/28/2020	78	Good
Dist 4	SHERWOODDR	SHERWOOD DR	060	NATIVIDAD RD	E BERNAL DR	P	A	4	278	64	17,828	10/28/2020	76	Good
Dist 4	SHERWOODPL	SHERWOOD PL	10	SHERWOOD DR	END	A	R	2	766	38	29,145	10/15/2020	29	Failed
Dist 4	SHIRESWAY	SHIRES WAY	10	BLOCK AVE	RAINIER DR	A	R	2	475	37	17,609	10/15/2020	26	Failed
Dist 4	SHORTST	SHORT ST	10	E MARKET ST	N FILICE ST	A	R	2	436	32	13,978	10/19/2020	58	Fair
Dist 1	SIEBERST	SIEBER ST	15	PACIFIC AVE	GARNER AVE	A	R	2	814	22	17,908	10/05/2020	50	Poor
Dist 2	SIENAWAY	SIENA WAY	15	PIAZZA DR	END	A	R	2	812	37	30,044	10/09/2020	82	Good
Dist 3	SIERRADR	SIERRA DR	15	GROVE ST	MANOR DR	A	R	2	1561	32	49,977	09/30/2020	42	Poor
Dist 3	SIERRAMADR	SIERRA MADRE DR	15	SANTA MONICA WAY	SANTA PAULA DR	A	R	2	2719	32	87,028	10/27/2020	27	Failed
Dist 2	SILVERADOC	SILVERADO CIR	10	DEL MONTE AVE	END	A	R	2	185	32	5,950	10/09/2020	61	Fair
Dist 2	SILVERWOOD	SILVERWOOD PL	10	DEL MONTE AVE	END	A	R	2	410	32	13,123	10/09/2020	63	Fair
Dist 4	SIMASST	SIMAS ST	15	E MARKET ST	END	A	R	2	732	38	27,834	10/19/2020	47	Poor
Dist 6	SISKIYOUDR	SISKIYOU DR	10	CALAVERAS DR	KLAMATH DR	A	R	2	1394	32	44,608	10/06/2020	48	Poor
Dist 6	SISKIYOUDR	SISKIYOU DR	20	KLAMATH DR	LOS COCHES AVE	A	R	2	739	32	23,651	10/06/2020	80	Good
Dist 2	SKYPL	SKY PL	10	ALMA AVE	END	A	R	2	245	32	7,855	10/13/2020	20	Failed
Dist 2	SKYWAYBLVD	SKYWAY BLVD	010	E ALISAL ST	AIRPORT BLVD	A	C	4	2339	62	145,018	10/13/2020	34	Poor
Dist 2	SKYWAYBLVD	SKYWAY BLVD	020	AIRPORT BLVD	MORTENSEN AVE	A	R	2	623	36	22,428	10/13/2020	31	Poor
Dist 5	SLOATCIR	SLOAT CIR	10	SLOAT DR	END	A	R	2	350	32	11,200	10/21/2020	74	Good
Dist 4&5	SLOATDR	SLOAT DR	10	N DAVIS RD	POTRERO WAY	A	R	2	810	38	30,780	10/21/2020	72	Good
Dist 5	SLOATDR	SLOAT DR	20	POTRERO WAY	COLTON DR	A	R	2	826	38	31,388	10/21/2020	71	Good
Dist 2	SMITHST	SMITH ST	15	JAMES ST	E ALISAL ST	A	R	2	911	24	21,864	10/12/2020	69	Fair
Dist 6	SNUGHARBOR	SNUG HARBOR ST	15	KITTERY ST	END	A	R	2	1469	32	47,024	10/08/2020	64	Fair
Dist 6	SOLANOWAY	SOLANO WAY	10	E ALVIN DR	MENDOCINO DR	A	R	2	245	37	9,065	09/29/2020	68	Fair
Dist 6	SOLANOWAY	SOLANO WAY	20	MENDOCINO DR	END	A	R	2	285	32	9,120	09/29/2020	29	Failed
Dist 3	SOLEDADST	SOLEDAD ST	010	JOHN ST	W GABILAN ST	A	R	2	2140	32	68,480	11/02/2020	34	Poor
Dist 4	SOLEDADST	SOLEDAD ST	10	E LAKE ST	MARKET WAY	A	R	2	678	32	21,719	11/02/2020	41	Poor
Dist 3	SOLEDADST	SOLEDAD ST	020	W GABILAN ST	N END	P	R	2	270	34	9,180	11/02/2020	36	Poor
Dist 6	SOMERSWORT	SOMERSWORTH CIR	10	SOMERSWORTH WAY	END	A	R	2	368	32	11,791	10/08/2020	83	Good
Dist 6	SOMERSWOR1	SOMERSWORTH WAY	10	CABOT WAY	BOSTON ST	A	R	2	758	32	24,281	10/08/2020	83	Good
Dist 4	SONORAWAY	SONORA WAY	10	CHAPARRAL ST	TAMPICO AVE	A	R	2	1078	32	34,509	10/22/2020	46	Poor
Dist 4	SORRENTINI	SORRENTINI DR	15	GRANADA AVE	NATIVIDAD RD	A	R	2	541	32	17,330	10/15/2020	39	Poor
Dist 5	SOTOPL	SOTO PL	15	E BOLIVAR ST	S END	A	R	2	145	32	4,640	10/20/2020	51	Fair

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Dist 5	SOUZAWAY	SOUZA WAY	10	HOOVER ST	LENNY ST	A	R	2	738	32	23,638	10/20/2020	39	Poor
Dist 3	SPICERST	SPICER ST	10	BRUNKEN AVE	ABBOTT ST	A	C	2	667	42	28,014	09/29/2020	55	Fair
Dist 2	SPOLETOCIR	SPOLETO CIR	10	SPOLETO WAY	END	A	R	2	378	32	12,126	10/09/2020	81	Good
Dist 2	SPOLETOST	SPOLETO ST	15	CASSINO WAY	END	A	R	2	1254	33	41,382	10/09/2020	79	Good
Dist 2	SPOLETOWAY	SPOLETO WAY	10	CANELLI CT	SPOLETO CIR	A	R	2	234	33	7,722	10/09/2020	82	Good
Dist 3	SPRINGST	SPRING ST	15	JOHN ST	SUMMER ST	C	R	2	500	30	15,000	11/03/2020	40	Poor
Dist 4	STALBANSCI	ST ALBANS CIR	10	ST ALBANS WAY	END	A	R	2	130	39	5,070	10/16/2020	43	Poor
Dist 4	STALBANSCT	ST ALBANS CT	15	ST EDWARDS AVE	CIRCLE DR	A	R	2	855	37	31,660	10/16/2020	65	Fair
Dist 4	STALBANSWA	ST ALBANS WAY	10	CIRCLE DR	ST ALBANS CT	A	R	2	576	32	18,463	10/16/2020	69	Fair
Dist 3	STANDREWCT	ST ANDREW CT	10	PALMA DR (W)	PALMA DR (E)	A	R	2	925	32	29,600	10/02/2020	33	Poor
Dist 3	STANNDR	ST ANN DR	10	BELMONT DR	ARCHER ST	A	R	2	1256	32	40,214	10/02/2020	30	Failed
Dist 4	STAUGUSTIN	ST AUGUSTINE DR	10	ST REGIS WAY	ST CHARLES WAY	A	R	2	1632	32	52,247	10/16/2020	65	Fair
Dist 4	STBRENDANW	ST BRENDAN WAY	10	ST FRANCIS WAY	ROSARITA DR	A	R	2	1374	32	43,996	10/15/2020	27	Failed
Dist 4	STCHARLESP	ST CHARLES PL	10	ST CHARLES WAY	END	A	R	2	187	32	5,984	10/16/2020	67	Fair
Dist 4	STCHARLESW	ST CHARLES WAY	10	N MADEIRA AVE	ST CHARLES PL	A	R	2	730	32	23,390	10/16/2020	63	Fair
Dist 4	STCHARLESW	ST CHARLES WAY	25	ST CHARLES PL	ST EDWARDS AVE	A	R	2	518	32	16,581	10/16/2020	37	Poor
Dist 4	STEDWARDSA	ST EDWARDS AVE	15	E LAUREL DR	CIRCLE DR	A	C	2	2688	32	86,042	10/16/2020	65	Fair
Dist 4	STFRANCISW	ST FRANCIS WAY	15	SORRENTINI DR	ROSARITA DR	A	R	2	1714	32	54,859	10/15/2020	50	Poor
Dist 4	STGEORGECI	ST GEORGE CIR	10	ST GEORGE DR	END	A	R	2	200	32	6,400	10/16/2020	53	Fair
Dist 4	STGEORGEDR	ST GEORGE DR	15	N MADEIRA AVE	ST REGIS WAY	A	R	2	1342	32	42,944	10/16/2020	59	Fair
Dist 4	STHELENWAY	ST HELEN WAY	10	CIRCLE DR	N MADEIRA AVE	A	R	2	1619	34	55,046	10/16/2020	36	Poor
Dist 2	STJOSEPHCI	ST JOSEPH CIR	10	1ST AVE	END	A	R	2	280	32	8,960	10/13/2020	54	Fair
Dist 4	STMICHAELP	ST MICHAEL PL	10	ST MICHAEL WAY	END	A	R	2	176	32	5,651	10/15/2020	57	Fair
Dist 4	STMICHAELW	ST MICHAEL WAY	10	CIRCLE DR	N MADEIRA AVE	A	R	2	1046	32	33,482	10/15/2020	61	Fair
Dist 4	STREGISCIR	ST REGIS CIR	10	ST REGIS WAY	END	A	R	2	161	32	5,152	10/16/2020	55	Fair
Dist 4	STREGISWAY	ST REGIS WAY	15	ST GEORGE DR	N END	A	R	2	810	32	25,920	10/16/2020	55	Fair
Dist 4	STTHOMASWA	ST THOMAS WAY	10	ST GEORGE DR	ST EDWARDS AVE	A	R	2	297	32	9,518	10/16/2020	55	Fair
Dist 3	STANFORDAV	STANFORD AVE	10	HASTINGS AVE	LEMOS AVE	A	R	2	678	32	21,708	10/01/2020	24	Failed
Dist 4	STANYANST	STANYAN ST	10	GREENWICH WAY	SANSOME ST	A	R	2	691	32	22,138	10/14/2020	77	Good
Dist 3	STATIONPL	STATION PL	10	W MARKET ST	RAILROAD AVE	C	R	2	361	56	20,216	10/26/2020	98	Excellent
Dist 3	STEPHANIED	STEPHANIE DR	10	S MAIN ST	STEPHANIE DR	A	R	2	860	41	35,260	10/01/2020	36	Poor
Dist 3	STEPHANIED	STEPHANIE DR	20	STEPHANIE DR	BYRON DR	A	R	2	633	35	22,155	10/01/2020	48	Poor
Dist 4	STEVENSONS	STEVENSON ST	10	MCALLISTER ST	BRIGHTON ST	A	R	2	542	36	19,512	10/14/2020	27	Failed
Dist 4	STOCKTONST	STOCKTON ST	15	POWELL ST	W ROSSI ST	A	R	2	1245	35	43,575	10/14/2020	67	Fair
Dist 5	STOKESWAY	STOKES WAY	10	LARKIN ST	COLTON DR	A	R	2	291	37	10,767	10/21/2020	41	Poor
Dist 3	STONEST	STONE ST	10	W MARKET ST	CENTRAL AVE	C	R	2	788	32	25,216	10/27/2020	41	Poor
Dist 6	STONYBROOK	STONY BROOK CIR	10	STONY BROOK DR	END	A	R	2	316	32	10,114	10/07/2020	82	Good
Dist 6	STONYBROO1	STONY BROOK DR	10	LITTLE RIVER DR	STONY BROOK CIR	A	R	2	905	38	34,390	10/07/2020	82	Good
Dist 6	STONYBROO1	STONY BROOK DR	20	STONY BROOK CIR	CASTLETON ST	A	R	2	779	38	29,602	10/07/2020	79	Good
Dist 6	STRATFORDC	STRATFORD CT	10	EMERALD DR N. SIDE	EMERALD DR S. SIDE	A	R	2	1037	32	33,184	10/07/2020	78	Good
Dist 5	SUCRECT	SUCRE CT	15	E LAMAR ST (W)	E LAMAR ST (E)	A	R	2	675	34	22,950	10/20/2020	30	Failed
Dist 6	SUFFIELDCI	SUFFIELD CIR	10	HANCOCK ST	END	A	R	2	294	31	9,114	10/08/2020	74	Good
Dist 1	SUMACWAY	SUMAC WAY	10	SAGE CT	CHAMISE DR	A	R	2	483	37	17,871	10/05/2020	85	Good
Dist 3	SUMMERST	SUMMER ST	25	FRONT ST	END	A	R	2	751	37	27,787	09/29/2020	34	Poor
Dist 4	SUMMITDR	SUMMIT DR	15	HILL TOP DR (W)	HILL TOP DR (E)	A	R	2	1187	36	42,732	10/16/2020	30	Failed
Dist 4	SUNST	SUN ST	10	END	CALLE CEBU	A	R	2	590	39	23,010	10/19/2020	36	Poor
Dist 4	SUNST	SUN ST	20	CALLE CEBU	E MARKET ST	A	R	2	683	32	21,856	10/19/2020	20	Failed
Dist 4	SUNST	SUN ST	30	E MARKET ST	COMMISSION ST	A	R	2	271	32	8,696	10/19/2020	24	Failed

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Dist 4	SUNST	SUN ST	40	COMMISSION ST	END	A	R	2	454	41	18,625	10/19/2020	26	Failed
Dist 2	SUNRISEST	SUNRISE ST	10	GARNER AVE	DEL MONTE AVE	A	R	2	1547	32	49,514	10/14/2020	54	Fair
Dist 2	SURREYWAY	SURREY WAY	10	COUNTRYSIDE DR	ANDINA DR	A	R	2	963	32	30,825	10/12/2020	72	Good
Dist 4	SUTROCIR	SUTRO CIR	10	SLOAT DR	END	A	R	2	245	32	7,846	10/14/2020	80	Good
Dist 6	SUTTERST	SUTTER ST	10	MARIN AVE	VENTURA WAY	A	R	2	1306	37	48,322	10/06/2020	23	Failed
Dist 6	SUTTONCIR	SUTTON CIR	10	SUTTON WAY	END	A	R	2	190	31	5,890	09/29/2020	71	Good
Dist 6	SUTTONWAY	SUTTON WAY	15	DELANCEY DR (W)	DELANCEY DR (N)	A	R	2	916	33	30,228	09/29/2020	73	Good
Dist 5	SWANERAVE	SWANER AVE	15	SANTA RITA ST	VAN BUREN AVE	A	R	2	2126	38	80,788	10/20/2020	47	Poor
Dist 5	SWANERCIR	SWANER CIR	10	SWANER AVE	END	A	R	2	195	28	5,460	10/20/2020	50	Poor
Dist 2	SYCAMORERD	SYCAMORE RD	15	PALOMA AVE	BARDIN RD	A	R	2	2184	34	74,256	10/12/2020	58	Fair
Dist 5	TAFTCIR	TAFT CIR	10	VAN BUREN AVE	END	A	R	2	240	27	6,480	10/20/2020	25	Failed
Dist 1	TAHITIPL	TAHITI PL	10	CARIBBEAN AVE	END	A	R	2	407	25	10,175	10/05/2020	45	Poor
Dist 6	TAHOECIR	TAHOE CIR	10	TAHOE DR	END	A	R	2	151	32	4,855	10/07/2020	33	Poor
Dist 6	TAHOEDR	TAHOE DR	15	LOS COCHES AVE	END	A	R	2	1498	35	52,430	10/07/2020	49	Poor
Dist 3	TALBOTST	TALBOT ST	15	HOMESTEAD AVE	SAN VINCENTE AVE	A	R	2	949	32	30,368	10/02/2020	35	Poor
Dist 1	TAMARAKWAY	TAMARAK WAY	10	CHAMISE DR	BUCKHORN DR	A	R	2	494	32	15,828	10/05/2020	83	Good
Dist 2	TAMPAST	TAMPA ST	15	TORO AVE	E ALISAL ST	A	R	2	767	35	26,845	10/12/2020	29	Failed
Dist 4	TAMPICOAVE	TAMPICO AVE	80	VALLEJO ST	ELWOOD ST	A	R	2	489	32	15,648	10/15/2020	67	Fair
Dist 4	TAMPICOAVE	TAMPICO AVE	90	ELWOOD ST	RAINIER DR	A	R	2	1261	32	40,352	10/15/2020	44	Poor
Dist 6	TAMPICOAVE	TAMPICO AVE	100	RAINIER DR	END	A	R	2	461	32	14,776	10/06/2020	82	Good
Dist 4	TAPADERODR	TAPADERO DR	15	E LAUREL DR	CHAPARRAL ST	A	R	2	1835	32	58,730	10/15/2020	36	Poor
Dist 4	TARPCIR	TARP CIR	10	SIMAS ST	END	A	R	2	339	37	12,543	10/19/2020	23	Failed
Dist 5	TAYLORST	TAYLOR ST	10	VAN BUREN AVE	COOLIDGE ST	A	R	2	502	32	16,071	10/20/2020	57	Fair
Dist 3	TEAKWOODPL	TEAKWOOD PL	10	WOODSIDE DR	END	A	R	2	408	32	13,072	09/30/2020	36	Poor
Dist 1	TECOPAWAY	TECOPA WAY	10	GAVIOTA DR	TORONA WAY	A	R	2	748	33	24,684	09/09/2020	80	Good
Dist 6	TEHAMACIR	TEHAMA CIR	10	RAINIER DR	END	A	R	2	414	32	13,251	10/06/2020	75	Good
Dist 4	TERRADR	TERRA DR	10	E LAUREL DR	DORORO DR	A	R	2	751	32	24,034	10/15/2020	32	Poor
Dist 4	TERRACEST	TERRACE ST	15	N MADEIRA AVE	FREMONT ST	A	R	2	1625	32	52,000	10/19/2020	50	Poor
Dist 3	TERVENAVE	TERVEN AVE	15	S SANBORN RD	AIRPORT BLVD	A	C	2	2298	42	96,516	09/28/2020	53	Fair
Dist 6	TETONAVE	TETON AVE	10	RAINIER DR	GLACIER DR	A	R	2	995	32	31,859	10/06/2020	55	Fair
Dist 4	TIPPL	TIP PL	10	TOP PL	END	A	R	2	202	32	6,466	10/16/2020	25	Failed
Dist 6	TOKAYCIR	TOKAY CIR	10	CABERNET WAY	END	A	R	2	130	31	4,030	09/29/2020	73	Good
Dist 4	TOPPL	TOP PL	15	CEDAR ST	END	A	R	2	422	26	10,972	10/16/2020	20	Failed
Dist 2	TOROAVE	TORO AVE	15	BARDIN RD	E MARKET ST	A	R	2	2903	35	101,605	10/12/2020	56	Fair
Dist 1	TORONAWAY	TORONA WAY	15	GAVIOTA DR	FREEDOM PKWY	A	C	2	400	38	15,200	09/09/2020	80	Good
Dist 1	TOWTST	TOWT ST	010	FREEDOM PARKWAY	MAE AVE	A	C	2	1798	41	73,718	10/05/2020	58	Fair
Dist 1	TOWTST	TOWT ST	020	MAE AVE	DEL MONTE AVE	A	C	2	1000	32	32,000	10/05/2020	22	Failed
Dist 2	TOWTST	TOWT ST	030	DEL MONTE AVE	CORTEZ ST	A	C	2	768	36	27,648	10/14/2020	22	Failed
Dist 2	TOWTST	TOWT ST	040	CORTEZ ST	GARNER AVE	A	C	2	787	36	28,332	10/14/2020	39	Poor
Dist 2	TOWTST	TOWT ST	050	GARNER AVE	E LAUREL DR	A	C	2	2085	52	108,420	10/14/2020	74	Good
Dist 2	TOWTST	TOWT ST	060	E LAUREL DR	E MARKET ST	A	C	2	1497	42	62,874	10/14/2020	29	Failed
Dist 2&4	TOWTST	TOWT ST	070	E MARKET ST	E ALISAL ST	A	C	2	1608	38	61,104	10/14/2020	80	Good
Dist 4	TOYONAVE	TOYON AVE	10	REATA ST	TAPADERO DR	A	R	2	725	38	27,564	10/15/2020	45	Poor
Dist 4	TRAZADOAVE	TRAZADO AVE	15	TAMPICO AVE	CHAPARRAL ST	A	R	2	1354	32	43,342	10/15/2020	25	Failed
Dist 6	TRINITYWAY	TRINITY WAY	15	E ALVIN DR	END	A	R	2	895	32	28,668	10/06/2020	29	Failed
Dist 2	TRIVOLIWAY	TRIVOLI WAY	10	CAMPANIA WAY	MONTE BELLA BLVD	A	R	2	752	33	24,816	10/12/2020	80	Good
Dist 6	TRUCKEEWAY	TRUCKEE WAY	10	DONNER WAY	HUMBOLDT DR	A	R	2	1180	32	37,774	10/07/2020	39	Poor
Dist 5	TRUMANST	TRUMAN ST	15	EISENHOWER ST	ARTHUR ST	A	R	2	546	38	20,748	10/20/2020	51	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 6	TUDORWAY	TUDOR WAY	10	VICTORIA AVE	S END	A	R	2	420	33	13,860	09/29/2020	75	Good
Dist 6	TUDORWAY	TUDOR WAY	20	LENNOX WAY	TUDOR WAY	A	R	2	860	33	28,380	09/29/2020	73	Good
Dist 5	TULANEST	TULANE ST	15	ROCHEX AVE	CHEROKEE DR	A	R	2	1404	34	47,736	10/21/2020	31	Poor
Dist 2	TULIPCIR	TULIP CIR	10	JOHN ST	END	A	R	2	387	32	12,393	10/12/2020	32	Poor
Dist 1	TUMBLEWEED	TUMBLEWEED DR	15	RIDER AVE	MESQUITE DR	A	R	2	1284	37	47,508	10/05/2020	83	Good
Dist 2	TUSCANYBLV	TUSCANY BLVD	15	MONTE BELLA BLVD	FREEDOM PKWY	A	R	2	1428	42	59,976	10/09/2020	81	Good
Dist 2	TUSCANYCIR	TUSCANY CIR	10	TUSCANY WAY	END	A	R	2	200	32	6,400	10/09/2020	80	Good
Dist 2	TUSCANYWAY	TUSCANY WAY	15	CASSINO WAY	TUSCANY BLVD	A	R	2	316	34	10,744	10/09/2020	76	Good
Dist 1	TWAINCIR	TWAIN CIR	10	LONGFELLOW DR	END	A	R	2	264	32	8,478	09/11/2020	57	Fair
Dist 1	TWNCRKCIR	TWIN CREEKS CIR	10	TWIN CREEKS DR	END	A	R	2	420	34	14,280	09/29/2020	85	Good
Dist 1	TWNCRKDR	TWIN CREEKS DR	15	NE END	COP @ SHOPPING CENTER	A	R	2	680	34	23,120	09/29/2020	83	Good
Dist 1	TWNCRKWY	TWIN CREEKS WAY	10	TWIN CREEKS DR	BEACON HILL DR	A	R	2	177	33	5,841	09/29/2020	84	Good
Dist 5	TYLERPL	TYLER PL	10	TYLER ST	END	A	R	2	137	32	4,407	10/21/2020	41	Poor
Dist 5	TYLERST	TYLER ST	15	N 4TH ST	W LAUREL DR	A	R	2	1429	31	44,299	10/21/2020	24	Failed
Dist 5	TYLERST	TYLER ST	25	W LAUREL DR	IRIS DR	A	C	2	1806	32	57,792	10/21/2020	30	Failed
Dist 5	TYLERST	TYLER ST	35	IRIS DR	S END	A	R	2	417	32	13,344	10/21/2020	22	Failed
Dist 6	TYNANWAY	TYNAN WAY	10	WESTMINSTER DR	PLACER WAY	A	R	2	770	32	24,668	10/06/2020	80	Good
Dist 6	UKIAHWAY	UKIAH WAY	10	SISKIYOU DR	CALAVERAS DR	A	R	2	666	32	21,315	10/06/2020	40	Poor
Dist 3	UNIVERSITY	UNIVERSITY AVE	10	AMBROSE DR	W ACACIA ST	A	R	2	1555	37	57,535	10/01/2020	73	Good
Dist 3	UNIVERSITY	UNIVERSITY AVE	20	W ACACIA ST	CENTRAL AVE	A	R	2	1751	37	64,787	10/01/2020	69	Fair
Dist 3	UNIVERSITY	UNIVERSITY AVE	30	CENTRAL AVE	ARCHER ST	A	R	2	263	40	10,520	10/01/2020	63	Fair
Dist 5	VALDEZCIR	VALDEZ CIR	10	QUINTERO CIR	END	A	R	2	387	32	12,384	10/20/2020	37	Poor
Dist 3	VALEST	VALE ST	10	W MARKET ST	END	A	R	2	234	47	10,998	10/26/2020	16	Failed
Dist 4	VALENCIAST	VALENCIA ST	10	OREGON ST	KENTUCKY ST	A	R	2	610	36	21,960	10/15/2020	33	Poor
Dist 4	VALLEJOST	VALLEJO ST	10	TAMPICO AVE	LINWOOD DR	A	R	2	1003	32	32,096	10/15/2020	64	Fair
Dist 4	VALLEJOST	VALLEJO ST	20	TAMPICO AVE	GRANADA AVE	A	R	2	177	32	5,679	10/15/2020	73	Good
Dist 5	VANBURENAV	VAN BUREN AVE	010	SAN JUAN GRADE RD	E BOLIVAR ST	A	C	2	1491	37	55,167	10/20/2020	62	Fair
Dist 5	VANBURENAV	VAN BUREN AVE	020	E BOLIVAR ST	EISENHOWER ST	A	C	2	1023	38	38,874	10/20/2020	54	Fair
Dist 5	VANBURENAV	VAN BUREN AVE	030	EISENHOWER ST	RUSSEL RD	A	C	2	1255	42	52,710	10/20/2020	71	Good
Dist 5	VANNESSCIR	VAN NESS CIR	10	VAN NESS CT	END	A	R	2	180	32	5,760	10/21/2020	80	Good
Dist 4&5	VANNESSCT	VAN NESS CT	10	VICTOR ST (W)	HYDE ST	A	R	2	717	37	26,529	10/21/2020	46	Poor
Dist 5	VANNESSCT	VAN NESS CT	20	VICTOR ST (E)	HYDE ST	A	R	2	705	38	26,790	10/21/2020	80	Good
Dist 2	VANDENBERG	VANDENBERG ST	10	LA GUARDIA ST	MOFFETT ST	A	R	2	699	41	28,659	10/13/2020	83	Good
Dist 3	VASSARAVE	VASSAR AVE	10	HASTINGS AVE	LEMOS AVE	A	R	2	680	32	21,783	10/01/2020	46	Poor
Dist 6	VENTURAWAY	VENTURA WAY	10	NAPA WAY	SUTTER ST	A	R	2	602	32	19,266	10/06/2020	46	Poor
Dist 1	VERACRUZCI	VERA CRUZ CIR	10	ANTIGUA AVE	END	A	R	2	183	34	6,222	10/05/2020	78	Good
Dist 1	VERMONTCIR	VERMONT CIR	10	MASSACHUSETTS DR	END	A	R	2	390	33	12,870	09/10/2020	83	Good
Dist 2	VERONACT	VERONA CT	15	VERONA WAY	PIAZZA DR	A	R	2	1978	35	69,230	10/09/2020	80	Good
Dist 2	VERONAWAY	VERONA WAY	15	MONTE BELLA BLVD	VERONA CT (W)	A	R	2	387	38	14,706	10/09/2020	79	Good
Dist 3	VERTINAVE	VERTIN AVE	010	INDUSTRIAL ST	TERVEN AVE	A	C	2	1636	42	68,712	09/28/2020	50	Poor
Dist 3	VERTINAVE	VERTIN AVE	020	TERVEN AVE	END	A	R	2	510	42	21,420	09/28/2020	34	Poor
Dist 3	VIAMARIA	VIA MARIA	15	END	ARCHER ST	A	R	2	1531	32	49,015	10/02/2020	56	Fair
Dist 3	VIAPARAISO	VIA PARAISO	25	LOS PALOS DR	LA MESA DR	A	R	2	1626	32	52,052	09/29/2020	19	Failed
Dist 5	VICTORCIR	VICTOR CIR	10	VICTOR ST	END	A	R	2	330	32	10,560	10/21/2020	52	Fair
Dist 3	VICTORST	VICTOR ST	010	VICTOR WY	W ROSSI ST	A	R	2	713	41	29,233	10/26/2020	23	Failed
Dist 5	VICTORST	VICTOR ST	10	LARKIN ST	VAN NESS CT (E)	A	R	2	365	42	15,362	10/21/2020	34	Poor
Dist 5	VICTORST	VICTOR ST	20	VAN NESS CT (E)	VAN NESS CT (W)	A	R	2	1013	42	42,546	10/21/2020	56	Fair
Dist 4&5	VICTORST	VICTOR ST	30	VAN NESS CT (W)	MCALLISTER ST	A	R	2	524	41	21,484	10/21/2020	39	Poor

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 4	VICTORST	VICTOR ST	160	W ROSSI ST	MCALLISTER ST	A	R	2	674	43	28,982	10/14/2020	83	Good
Dist 3	VICTORWAY	VICTOR WAY	15	WEST END	EAST END	A	R	2	605	42	25,410	10/26/2020	66	Fair
Dist 6	VICTORIAAV	VICTORIA AVE	15	WINDSOR ST	EL DORADO DR	A	R	2	1643	37	60,791	09/29/2020	71	Good
Dist 6	VICTORIACI	VICTORIA CIR	10	VICTORIA AVE	END	A	R	2	273	33	9,009	09/29/2020	74	Good
Dist 3	VILLAST	VILLA ST	10	CENTRAL AVE	WILSON ST	C	C	2	1285	38	48,830	10/26/2020	42	Poor
Dist 3	VILLAST	VILLA ST	20	WILSON ST	W MARKET ST	A	C	2	1105	38	41,990	10/26/2020	65	Fair
Dist 4	VINCENTPL	VINCENT PL	15	MASSOLO CT (W)	RICO ST	A	R	2	579	34	19,698	10/14/2020	66	Fair
Dist 3	WACACIAST	W ACACIA ST	010	S MAIN ST	RIKER ST	A	C	2	1471	35	51,485	10/28/2020	45	Poor
Dist 3	WACACIAST	W ACACIA ST	020	RIKER ST	JUNIPERO WAY	A	C	2	1356	37	50,172	10/28/2020	52	Fair
Dist 3	WACACIAST	W ACACIA ST	030	JUNIPERO WAY	W ALISAL ST	A	C	2	2299	37	85,063	10/28/2020	48	Poor
Dist 3	WACACIAST	W ACACIA ST	040	W ALISAL ST	DAVIS RD	A	C	2	2483	38	94,354	10/28/2020	39	Poor
Dist 3	WALISALST	W ALISAL ST	010	MAIN ST	LINCOLN AVE	A	A	4	610	60	36,620	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	020	LINCOLN AVE	CHURCH ST	A	A	4	317	60	19,020	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	030	CHURCH ST	RIKER ST	A	A	4	958	60	57,494	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	040	RIKER ST	HOMESTEAD AVE	A	A	4	958	60	57,480	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	050	HOMESTEAD AVE	COLLEGE DR	A	A	4	1898	60	113,880	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	060	COLLEGE DR	W ACACIA ST	A	A	4	885	60	53,100	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	070	W ACACIA ST	PALMA DR	A	A	4	1141	60	68,460	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	080	PALMA DR	W BLANCO RD	A	A	4	1394	60	83,640	10/29/2020	90	Good
Dist 5	WALVINDR	W ALVIN DR	15	N MAIN ST	CHEROKEE DR	A	C	2	1997	67	133,799	10/20/2020	46	Poor
Dist 5	WBERNALDR	W BERNAL DR	15	N MAIN ST	LUPIN DR	A	R	2	420	54	22,680	10/21/2020	32	Poor
Dist 3	WBLANCORD	W BLANCO RD	EB010	LUTHER WAY	LOS OLIVOS DR	O	A	2	1383	30	41,490	10/29/2020	65	Fair
Dist 3	WBLANCORD	W BLANCO RD	EB020	LOS OLIVOS DR	RIKER ST	O	A	2	1431	30	42,930	10/29/2020	65	Fair
Dist 3	WBLANCORD	W BLANCO RD	EB030	RIKER ST	PADRE DR	O	A	2	1250	30	37,500	10/29/2020	68	Fair
Dist 3	WBLANCORD	W BLANCO RD	EB040	PADRE DR	S MAIN ST	O	A	2	649	32	20,780	10/29/2020	68	Fair
Dist 3	WBLANCORD	W BLANCO RD	WB010	S MAIN ST	PADRE DR	O	A	2	649	32	20,780	10/29/2020	76	Good
Dist 3	WBLANCORD	W BLANCO RD	WB020	PADRE DR	RIKER ST	A	A	2	1233	30	36,990	10/29/2020	64	Fair
Dist 3	WBLANCORD	W BLANCO RD	WB030	RIKER ST	LOS OLIVOS DR	A	A	2	1443	30	43,290	10/29/2020	57	Fair
Dist 3	WBLANCORD	W BLANCO RD	WB040	LOS OLIVOS DR	LUTHER WAY	A	A	2	1388	30	41,640	10/29/2020	57	Fair
Dist 5	WBOLIVARST	W BOLIVAR ST	15	N MAIN ST	END	A	R	2	490	42	20,580	10/20/2020	50	Poor
Dist 5	WCURTISST	W CURTIS ST	015	N MAIN ST	PUEBLO DR	A	C	2	2881	32	92,216	10/21/2020	38	Poor
Dist 3	WGABILANST	W GABILAN ST	25	MAIN ST	LINCOLN AVE	A	C	2	608	32	19,464	10/29/2020	59	Fair
Dist 3	WGABILANST	W GABILAN ST	40	LINCOLN AVE	CHURCH ST	C	C	2	317	32	10,144	10/29/2020	32	Poor
Dist 3	WGABILANST	W GABILAN ST	50	CHURCH ST	CAPITOL ST	A	C	2	640	32	20,480	10/29/2020	38	Poor
Dist 3	WLAKEST	W LAKE ST	15	N MAIN ST	RICO ST	A	C	2	2387	32	76,389	10/26/2020	62	Fair
Dist 5	WLAMARST	W LAMAR ST	10	CASTRO ST	N MAIN ST	A	R	2	200	32	6,400	10/20/2020	42	Poor
Dist 5	WLAURELDR	W LAUREL DR	015	NMAIN ST	PARK SIDE ST	A	A	4	1144	68	77,792	10/28/2020	63	Fair
Dist 5	WLAURELDR	W LAUREL DR	025	PARK SIDE ST	TYLER ST	A	A	4	1095	68	74,460	10/28/2020	66	Fair
Dist 5	WLAURELDR	W LAUREL DR	035	TYLER ST	101 N ON/OFF RAMP	A	A	4	1104	68	75,072	10/28/2020	69	Fair
Dist 5	WLAURELDR	W LAUREL DR	140	N DAVIS RD	S FREEWAY ON RAMP	A	A	4	459	100	45,918	10/28/2020	33	Poor
Dist 5	WLAURELDR	W LAUREL DR	150	N DAVIS RD	EL RANCHO WAY	A	A	4	283	70	19,845	10/28/2020	42	Poor
Dist 4	WMENKEST	W MENKE ST	10	MARTELLA ST	N MAIN ST	A	R	2	305	48	14,669	10/14/2020	52	Fair
Dist 3	WROMIELN	W ROMIE LN	010	S MAIN ST	W ROMIE LN (MISSION PARK)	A	A	2	667	32	21,344	10/27/2020	35	Poor
Dist 3	WROMIELN	W ROMIE LN	020	W ROMIE LN (N MISSION PARK)	BAUTISTA DR	A	A	2	669	32	21,408	10/27/2020	58	Fair
Dist 3	WROMIELN	W ROMIE LN	030	BAUTISTA DR	END	A	C	2	800	32	25,600	10/27/2020	53	Fair
Dist 3	WROMIELN	W ROMIE LN	110	BAUTISTA DR	W ROMIE LN (S MISSION PARK)	A	A	2	677	32	21,664	10/27/2020	58	Fair
Dist 3&4	WROSSIST	W ROSSI ST	015	N MAIN ST	SANSOME ST	A	A	2	1429	54	77,191	11/03/2020	40	Poor
Dist 3&4	WROSSIST	W ROSSI ST	035	SANSOME ST	RICO ST	A	A	2	1029	54	55,566	11/03/2020	41	Poor

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3&4	WROSSIST	W ROSSI ST	045	RICO ST	VICTOR ST	A	A	2	2088	54	112,752	11/03/2020	41	Poor
Dist 3&4	WROSSIST	W ROSSI ST	055	VICTOR ST	N DAVIS RD	A	A	2	1346	54	72,684	11/03/2020	50	Poor
Dist 3	WSANJOAQUI	W SAN JOAQUIN ST	10	E SAN JOAQUIN ST	PADRE DR	A	R	2	765	32	24,507	10/01/2020	44	Poor
Dist 3	WSANLUISST	W SAN LUIS ST	15	SALINAS ST	MAIN ST	P	A	2	353	32	11,310	10/29/2020	68	Fair
Dist 3	WSANLUISST	W SAN LUIS ST	55	CAPITOL ST	SALINAS ST	P	C	2	1210	34	41,143	10/29/2020	56	Fair
Dist 3	WSANLUISST	W SAN LUIS ST	85	CAPITOL ST	WEST ST	P	C	2	638	34	21,722	10/29/2020	63	Fair
Dist 4	WASHINGTON	WASHINGTON DR	10	LINDEN ST	OREGON ST	A	R	2	793	25	19,837	10/15/2020	32	Poor
Dist 6	WATERBURYW	WATERBURY WAY	10	CANTERBURY ST	LEXINGTON DR	A	R	2	262	32	8,393	10/08/2020	73	Good
Dist 6	WATERFORDC	WATERFORD CIR	10	INGLEWOOD ST	END	A	R	2	237	32	7,587	10/07/2020	77	Good
Dist 6	WELLINGTON	WELLINGTON CT	15	DECLARATION ST (W)	DECLARATION ST (E)	A	R	2	1819	32	58,237	10/08/2020	83	Good
Dist 6	WENTWORTHC	WENTWORTH CIR	10	LONDONDERRY WAY	END	A	R	2	154	32	4,928	10/07/2020	77	Good
Dist 3	WESTST	WEST ST	035	W MARKET ST	CENTRAL AVE	P	R	2	1630	32	52,160	10/26/2020	57	Fair
Dist 3	WESTST	WEST ST	075	W ALISAL ST	CLAY ST	A	R	2	1114	32	35,667	10/26/2020	40	Poor
Dist 3	WESTST	WEST ST	090	LANG ST	GEIL ST	A	R	2	323	32	10,344	10/27/2020	47	Poor
Dist 3	WESTST	WEST ST	100	LANG ST	END	A	R	2	274	32	8,771	10/27/2020	31	Poor
Dist 6	WESTFIELDC	WESTFIELD CIR	10	HANCOCK ST	END	A	R	2	329	31	10,199	10/08/2020	77	Good
Dist 6	WESTMINSTE	WESTMINSTER DR	10	MCKINNON ST	CAMBRIDGE CT	A	R	2	1642	38	62,396	10/06/2020	74	Good
Dist 6	WESTPORTCI	WESTPORT CIR	10	INGLEWOOD ST	END	A	R	2	104	66	6,873	10/07/2020	74	Good
Dist 5	WESTRIDGEP	WESTRIDGE PKWY	10	N DAVIS RD	BROOKS RD	A	A	4	1261	78	98,358	10/23/2020	55	Fair
Dist 6	WHEELERDR	WHEELER DR	15	E ALVIN DR	END	A	R	2	846	41	34,686	10/06/2020	58	Fair
Dist 6	WHITERIVER	WHITE RIVER CIR	10	STONY BROOK DR	END	A	R	2	489	32	15,657	10/07/2020	80	Good
Dist 1	WHITMANCIR	WHITMAN CIR	10	LONGFELLOW DR	END	A	R	2	420	32	13,440	09/11/2020	48	Poor
Dist 1	WHITMANST	WHITMAN ST	15	NANTUCKET BLVD	LONGFELLOW DR	A	R	2	480	37	17,760	09/11/2020	71	Good
Dist 3	WILGARTWAY	WILGART WAY	25	MAPLEWOOD DR	E ROMIE LN	A	R	2	754	32	24,128	09/30/2020	36	Poor
Dist 3	WILGARTWAY	WILGART WAY	35	E ROMIE LN	SAN MIGUEL AVE	C	R	2	1442	32	46,144	10/03/2020	66	Fair
Dist 2	WILLIAMSRD	WILLIAMS RD	010	E ALISAL ST	E MARKET ST	A	A	4	1769	64	113,216	10/14/2020	46	Poor
Dist 2	WILLIAMSRD	WILLIAMS RD	020	E MARKET ST	BELLEHAVEN ST	A	A	4	1412	64	90,368	10/14/2020	44	Poor
Dist 2	WILLIAMSRD	WILLIAMS RD	030	BELLEHAVEN ST	BARDIN WAY	A	A	4	1481	64	94,784	10/14/2020	43	Poor
Dist 1&2	WILLIAMSRD	WILLIAMS RD	050	DEL MONTE AVE	FREEDOM PKWY	A	A	4	2751	80	220,080	10/06/2020	58	Fair
Dist 2	WILLIAMSRD	WILLIAMS RD	055	BARDIN RD	DEL MONTE AVE	A	A	4	971	76	73,815	10/14/2020	50	Poor
Dist 1	WILLIAMSRD	WILLIAMS RD	060	FREEDOM PKWY	E BORONDA RD	A	C	3	2133	57	121,581	10/06/2020	54	Fair
Dist 1	WILLIAMSRD	WILLIAMS RD	070	E BORONDA RD	OLD STAGE RD	A	C	2	5963	24	143,112	10/06/2020	29	Failed
Dist 3	WILLOWST	WILLOW ST	15	S MAIN ST	CALIFORNIA ST	P	R	2	1463	32	46,816	10/29/2020	47	Poor
Dist 3	WILSONST	WILSON ST	15	HOMESTEAD AVE	VILLA ST	C	R	2	635	33	20,979	10/26/2020	27	Failed
Dist 3	WILSONST	WILSON ST	45	VILLA ST	SAN CLEMENTE AVE	C	R	2	1194	33	39,429	10/26/2020	33	Poor
Dist 6	WIMBLEDONA	WIMBLEDON AVE	10	OXFORD CT	ESSEX WAY	A	R	2	243	38	9,234	10/07/2020	81	Good
Dist 6	WIMBLEDONA	WIMBLEDON AVE	20	ESSEX WAY	COP 375' E/O ESSEX WAY	A	R	2	375	30	11,250	10/07/2020	78	Good
Dist 6	WIMBLEDONA	WIMBLEDON AVE	30	COP 375' E/O ESSEX WAY	WIMBLEDON WAY	A	R	2	480	38	18,240	10/07/2020	66	Fair
Dist 6	WIMBLEDONA	WIMBLEDON AVE	40	WIMBLEDON WAY	CHELSEA CT	A	R	2	237	37	8,769	10/07/2020	68	Fair
Dist 6	WIMBLEDONC	WIMBLEDON CIR	20	WIMBLEDON AVE	END	A	R	2	273	37	10,101	10/07/2020	68	Fair
Dist 6	WIMBLEDONW	WIMBLEDON WAY	10	WIMBLEDON AVE	ARCADIA WAY	A	R	2	247	38	9,386	10/07/2020	68	Fair
Dist 6	WINDSORST	WINDSOR ST	15	CHARDONNAY DR	HARDEN PKWY	A	R	2	1049	37	38,849	09/29/2020	75	Good
Dist 3	WINHAMST	WINHAM ST	35	S MAIN ST	END	P	A	2	2361	42	99,169	10/29/2020	50	Poor
Dist 2	WIRENST	WIREN ST	10	WILLIAMS RD	N. END	A	R	2	1000	32	32,000	10/14/2020	18	Failed
Dist 1	WOLFCT	WOLF CT	10	EAGLE DR (W)	EAGLE DR (E)	A	R	2	1079	34	36,686	09/10/2020	87	Good
Dist 6	WOODBURYCI	WOODBURY CIR	10	CANTERBURY ST	END	A	R	2	155	32	4,960	10/08/2020	78	Good
Dist 3	WOODSIDECI	WOODSIDE CIR	10	WOODSIDE DR	END	A	R	2	172	32	5,525	09/30/2020	53	Fair
Dist 3	WOODSIDEDR	WOODSIDE DR	010	RIKER ST	IVERSON ST	A	R	2	1209	32	38,688	09/30/2020	41	Poor

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	WOODSIDEDR	WOODSIDE DR	020	IVERSON ST	SAN VINCENTE AVE	A	R	2	1113	32	35,616	09/30/2020	43	Poor
Dist 3	WORKCIR	WORK CIR	10	WORK ST	END	A	R	2	402	32	12,877	09/29/2020	48	Poor
Dist 3	WORKST	WORK ST	10	JOHN ST	E ALISAL ST	A	A	2	1481	38	56,294	09/29/2020	29	Failed
Dist 3	WORKST	WORK ST	20	JOHN ST	WORK CIR	A	A	4	1036	62	64,279	09/29/2020	25	Failed
Dist 3	WORKST	WORK ST	30	WORK CIR	ELVEE DR	A	A	4	1922	62	119,164	09/29/2020	74	Good
Dist 3	WORKST	WORK ST	50	S SANBORN RD	ELVEE DR	A	A	4	1902	62	117,940	09/29/2020	41	Poor
Dist 6	YALECIR	YALE CIR	10	PENNSYLVANIA DR	END	A	R	2	200	31	6,200	09/29/2020	58	Fair
Dist 6	YOLOCIR	YOLO CIR	10	MENDOCINO DR	END	A	R	2	247	38	9,386	09/29/2020	28	Failed
Dist 6	YOSEMITECI	YOSEMITE CIR	10	YOSEMITE WAY	END	A	R	2	423	32	13,543	10/07/2020	36	Poor
Dist 6	YOSEMITEWA	YOSEMITE WAY	15	CASCADE CT	HUBOLDT DR	A	R	2	503	32	16,124	10/07/2020	29	Failed
Dist 3	YOUNGDR	YOUNG DR	10	KIRKWOOD AVE	KIRKWOOD AVE	A	R	2	1040	32	33,285	10/26/2020	41	Poor
Dist 6	YREKADR	YREKA DR	15	CALAVERAS DR	KLAMATH DR	A	R	2	1398	32	44,736	10/07/2020	34	Poor
Dist 1	YUCATANWAY	YUCATAN WAY	15	MAZATLAN ST	NOGAL DR	A	R	2	695	38	26,410	09/28/2020	85	Good
Dist 6	ZINFANDELW	ZINFANDEL WAY	10	CHARDONNAY DR	WINDSOR ST	A	R	2	835	33	27,555	09/29/2020	72	Good

Street List PCI High to Low

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 4	BRIDGEST	BRIDGE ST	30	E ROSSI ST	S END (WALL)	P	R	2	240	24	5,760	10/26/2020	100	Excellent
Dist 4&6	EALVINDR	E ALVIN DR	15	N MAIN ST	MCKINNON ST	O	A	4	2314	62	143,468	11/01/2020	100	Excellent
Dist 4&6	EALVINDR	E ALVIN DR	25	MCKINNON ST	LINWOOD DR	O	A	4	1678	64	107,392	11/01/2020	100	Excellent
Dist 6	EALVINDR	E ALVIN DR	35	LINWOOD DR	EL DORADO DR	O	A	4	790	62	48,980	11/01/2020	100	Excellent
Dist 6	EALVINDR	E ALVIN DR	45	EL DORADO DR	MARIN AVE	O	A	4	1515	62	93,930	11/01/2020	100	Excellent
Dist 6	EALVINDR	E ALVIN DR	55	MARIN AVE	NATIVIDAD RD	O	A	4	545	62	33,790	11/01/2020	100	Excellent
Dist 6	LINWOODDR	LINWOOD DR	010	E ALVIN DR	RAINIER DR	O	C	2	1253	44	55,132	11/01/2020	100	Excellent
Dist 4	LINWOODDR	LINWOOD DR	020SB	RAINIER DR	E LAUREL DR	O	C	2	1982	26	51,532	11/01/2020	100	Excellent
Dist 4	LINWOODDR	LINWOOD DR	030NB	E LAUREL DR	RAINIER DR	O	C	2	1982	26	51,532	11/01/2020	100	Excellent
Dist 3	STATIONPL	STATION PL	10	W MARKET ST	RAILROAD AVE	C	R	2	361	56	20,216	10/26/2020	98	Excellent
Dist 2	BELLAGIOWA	BELLAGIO WAY	10	CAMPANIA WAY	PALERMO DR	A	R	2	641	32	20,512	10/14/2020	97	Excellent
Dist 2	NAPOLICIR	NAPOLI CIR	10	PALERMO DR	END	A	R	2	298	32	9,536	10/12/2020	97	Excellent
Dist 2	PALERMOCT	PALERMO CT	10	PALERMO DR	BELLAGIO WAY	A	R	2	939	32	30,048	10/12/2020	97	Excellent
Dist 2	PAVIACIR	PAVIA CIR	10	PALERMO DR	END	A	R	2	262	32	8,384	10/12/2020	97	Excellent
Dist 2	PAVIAWAY	PAVIA WAY	10	PALERMO DR	SCONBERG PKWY	A	R	2	470	37	17,390	10/12/2020	97	Excellent
Dist 2	PISACIR	PISA CIR	10	PALERMO DR	END	A	R	2	181	32	5,792	10/12/2020	97	Excellent
Dist 2	MARSALACIR	MARSALA CIR	10	PALERMO DR	END	A	R	2	419	32	13,408	10/12/2020	96	Excellent
Dist 2	MARSALAWAY	MARSALA WAY	10	PALERMO DR	BELLAGIO WAY	A	R	2	682	34	23,188	10/12/2020	93	Excellent
Dist 3	MELODYLN	MELODY LN	30	W GABILAN ST	END	P	R	2	172	15	2,593	11/02/2020	92	Excellent
Dist 3&4	EMARKETST	E MARKET ST	025EB	START PCC (E/O GREENFIELD ALLEY)	END PCC (S/O MARKET WAY)	P	A	3	650	38	24,700	11/03/2020	91	Excellent
Dist 3	ELVEEDR	ELVEE DR	10	S SANBORN RD	PCC BRIDGE	A	C	2	2527	24	60,648	09/29/2020	91	Excellent
Dist 3	ELVEEDR	ELVEE DR	20	PCC BRIDGE	WORK ST	C	C	2	775	42	32,550	10/03/2020	91	Excellent
Dist 2	ETNACIR	ETNA CIR	10	PALERMO DR	END	A	R	2	290	32	9,280	10/13/2020	90	Good
Dist 3	MAINST	MAIN ST	40	W GABILAN ST	CENTRAL AVE	A	C	2	430	36	15,485	11/03/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	010	MAIN ST	LINCOLN AVE	A	A	4	610	60	36,620	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	020	LINCOLN AVE	CHURCH ST	A	A	4	317	60	19,020	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	030	CHURCH ST	RIKER ST	A	A	4	958	60	57,494	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	040	RIKER ST	HOMESTEAD AVE	A	A	4	958	60	57,480	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	050	HOMESTEAD AVE	COLLEGE DR	A	A	4	1898	60	113,880	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	060	COLLEGE DR	W ACACIA ST	A	A	4	885	60	53,100	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	070	W ACACIA ST	PALMA DR	A	A	4	1141	60	68,460	10/29/2020	90	Good
Dist 3	WALISALST	W ALISAL ST	080	PALMA DR	W BLANCO RD	A	A	4	1394	60	83,640	10/29/2020	90	Good
Dist 2	CAMPANIACI	CAMPANIA CIR	10	PALERMO DR	EAST END	A	R	2	242	32	7,744	10/14/2020	89	Good
Dist 3	LACEYLN	LACEY LN	10	E GABILAN ST	MONTEREY ST	P	R	2	265	15	3,975	10/22/2020	88	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	030NB	RAINIER DR	E ALVIN DR	P	A	3	1109	36	39,924	09/30/2020	88	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	SB130	E ALVIN DR	RAINIER DR	P	A	3	1109	36	39,924	09/30/2020	88	Good
Dist 2	PALERMODR	PALERMO DR	010	MONTE BELLA BLVD (S)	CAMPANIA WAY	A	R	2	1820	37	67,340	10/09/2020	88	Good
Dist 1	ALDERCIR	ALDER CIR	10	NOGAL DR	END	A	R	2	339	33	11,212	09/28/2020	87	Good
Dist 1	ANTELOPEDR	ANTELOPE DR	15	BADGER WAY	COUGAR DR	A	R	2	765	37	28,305	09/09/2020	87	Good
Dist 1	BADGERWAY	BADGER WAY	15	COUGAR DR	WILLIAMS RD	A	C	2	681	38	25,878	09/09/2020	87	Good
Dist 1	BISONCIR	BISON CIR	10	BISON WAY	END	A	R	2	186	33	6,142	09/10/2020	87	Good
Dist 1	BISONWAY	BISON WAY	15	EAGLE DR	BUCKHORN DR	A	R	2	1113	33	36,729	09/10/2020	87	Good
Dist 1	BOBCATWAY	BOBCAT WAY	10	ANTELOPE DR	COUGAR DR	A	R	2	762	34	25,908	09/10/2020	87	Good
Dist 1	BUCKEYEWAY	BUCKEYE WAY	10	MADRONE DR	NOGAL DR	A	R	2	375	38	14,284	09/28/2020	87	Good
Dist 1	BUCKHORNDR	BUCKHORN DR	25	N SANBORN RD	FALCON RD	A	C	2	945	37	34,965	09/10/2020	87	Good
Dist 1	COUGARDR	COUGAR DR	15	ANTELOPE DR	FREEDOM PKWY	A	R	2	2407	37	89,059	09/09/2020	87	Good
Dist 1	COUGARWAY	COUGAR WAY	10	EAGLE DR	COUGAR DR	A	R	2	244	38	9,272	09/09/2020	87	Good
Dist 3&4	EALISALST	E ALISAL ST	120WB	START PCC W/O PRADER	END PCC E/O FRONT ST	P	A	2	475	28	13,300	10/29/2020	87	Good

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	EALISALST	E ALISAL ST	130WB	END PCC E/O FRONT ST	FRONT ST	A	A	2	270	24	6,480	10/29/2020	87	Good
Dist 3	EALISALST	E ALISAL ST	150EB	FRONT ST	START PCC E/O FRONT	A	A	2	270	26	7,020	10/29/2020	87	Good
Dist 1	EAGLECIR	EAGLE CIR	10	EAGLE DR	END	A	R	2	213	34	7,242	09/10/2020	87	Good
Dist 1	EAGLEDR	EAGLE DR	20	COUGAR WAY	EAGLE WAY	A	R	2	1571	38	59,698	09/10/2020	87	Good
Dist 1	EAGLEDR	EAGLE DR	30	EAGLE WAY	BISON WAY	A	R	2	1455	38	55,290	09/10/2020	87	Good
Dist 1	EAGLEWAY	EAGLE WAY	10	FREEDOM PKWY	EAGLE DR	A	R	2	170	39	6,630	09/10/2020	87	Good
Dist 1	ELKCIR	ELK CIR	10	ELK DR	END	A	R	2	341	33	11,266	09/10/2020	87	Good
Dist 1	ELKDR	ELK DR	15	FALCON DR	COUGAR DR	A	C	2	825	38	31,384	09/10/2020	87	Good
Dist 1	FALCONDR	FALCON DR	010	E BORONDA RD	EAGLE DR	A	R	2	1254	41	51,414	09/10/2020	87	Good
Dist 1	FALCONDR	FALCON DR	020	EAGLE DR	BISON WAY	A	R	2	440	33	14,520	09/10/2020	87	Good
Dist 1	MUSTANGCT	MUSTANG CT	15	BADGER WAY (W)	BADGER WAY (E)	A	R	2	1258	33	41,514	09/09/2020	87	Good
Dist 1	PARTRIDGEW	PARTRIDGE WAY	10	FALCON DR	PARTRIDGE ST	A	R	2	210	37	7,770	09/10/2020	87	Good
Dist 1	RAVENCT	RAVEN CT	10	COUGAR DR (N)	COUGAR DR (S)	A	R	2	1212	33	39,996	09/09/2020	87	Good
Dist 1	WOLFCT	WOLF CT	10	EAGLE DR (W)	EAGLE DR (E)	A	R	2	1079	34	36,686	09/10/2020	87	Good
Dist 1	CTTNWDWY	COTTONWOOD WAY	010	RIDER AVE	COTTONWOOD DR	A	R	2	429	37	15,873	09/28/2020	86	Good
Dist 1	DURANGOST	DURANGO ST	15	YUCATAN WAY	ACAPULCO WAY	A	R	2	695	38	26,410	09/28/2020	86	Good
Dist 1	EAGLEDR	EAGLE DR	10	FALCON DR	COUGAR WAY	A	R	2	938	38	35,644	09/10/2020	86	Good
Dist 1	MADRONEDR	MADRONE DR	010	NOGAL DR	MADRONE WAY	A	R	2	660	33	21,780	09/28/2020	86	Good
Dist 1	MADRONEDR	MADRONE DR	020	MADRONE WAY	BUCKEYE WAY	A	R	2	700	37	25,900	09/28/2020	86	Good
Dist 1	MADRONEDR	MADRONE DR	030	BUCKEYE WAY	WEST END	A	R	2	425	33	14,025	09/28/2020	86	Good
Dist 1	MADRONEWAY	MADRONE WAY	10	MADRONE DR	RIDER AVE	A	C	2	155	37	5,735	09/28/2020	86	Good
Dist 1	NOGALDR	NOGAL DR	010	MADRONE DR	FREEDOM PKWY	A	C	2	1197	37	44,289	09/28/2020	86	Good
Dist 2	PALERMODR	PALERMO DR	040	MODENA WAY	MONTE BELLA BLVD (N)	A	R	2	334	37	12,358	10/09/2020	86	Good
Dist 1	PARTRIDGES	PARTRIDGE ST	15	FALCON DR	END	A	R	2	831	32	26,592	09/10/2020	86	Good
Dist 1	ACAPULCOWA	ACAPULCO WAY	10	MAZATLAN ST	DURANGO ST	A	R	2	510	37	18,870	09/28/2020	85	Good
Dist 1	ACAPULCOWA	ACAPULCO WAY	20	DURANGO	END	A	R	2	220	34	7,480	09/28/2020	85	Good
Dist 3	EALISALST	E ALISAL ST	140	FRONT ST	MAIN ST	A	A	4	1700	64	108,800	10/29/2020	85	Good
Dist 3	FRONTST	FRONT ST	030NB	PCC START	E MARKET ST	P	A	2	422	26	10,972	11/03/2020	85	Good
Dist 1	MSSCHUDR	MASSACHUSETTS DR	020	VERMONT CIR	END	A	R	2	480	33	15,840	09/10/2020	85	Good
Dist 1	MAZATLANST	MAZATLAN ST	15	YUCATAN WAY	END	A	R	2	1085	38	41,230	09/28/2020	85	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	SB090	E BORONDA RD	ARCADIA WAY	O	A	3	775	60	46,500	09/30/2020	85	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	SB110	EMERALD WAY	LOS COCHES AVE	O	A	3	1745	36	62,820	09/30/2020	85	Good
Dist 1	RHDISLDST	RHODE ISLAND ST	020	RHODE ISLAND CIR	END	A	R	2	235	33	7,755	09/10/2020	85	Good
Dist 1	RIDERAVE	RIDER AVE	035	FREEDOM PKWY	E BORONDA RD	A	C	2	1975	41	80,975	09/11/2020	85	Good
Dist 1	SUMACWAY	SUMAC WAY	10	SAGE CT	CHAMISE DR	A	R	2	483	37	17,871	10/05/2020	85	Good
Dist 1	TWNCRKCIR	TWIN CREEKS CIR	10	TWIN CREEKS DR	END	A	R	2	420	34	14,280	09/29/2020	85	Good
Dist 1	YUCATANWAY	YUCATAN WAY	15	MAZATLAN ST	NOGAL DR	A	R	2	695	38	26,410	09/28/2020	85	Good
Dist 1	BAJACIR	BAJA CIR	10	DURANGO ST	END	A	R	2	155	33	5,115	09/28/2020	84	Good
Dist 1	DURANGOCIR	DURANGO CIR	10	DURANGO ST	END	A	R	2	150	33	4,950	09/28/2020	84	Good
Dist 1	FREEDOMPKW	FREEDOM PKWY	020	BERNARDO AVE	ESTRELLA WAY	A	C	4	1433	60	85,980	10/06/2020	84	Good
Dist 1	FREEDOMPKW	FREEDOM PKWY	030	ESTRELLA WAY	TOWT ST	A	C	4	510	60	30,600	10/06/2020	84	Good
Dist 1	FRESAPL	FRESA PL	10	RANCHERO DR	END	A	R	2	157	32	5,034	09/29/2020	84	Good
Dist 1	MESCALCT	MESCAL CT	10	SAGUARO DR (N)	SAGUARO DR (S)	A	R	2	1380	32	44,160	10/05/2020	84	Good
Dist 4	NSANBORNRD	N SANBORN RD	20	FREEDOM PKWY	ANTIGUA AVE	A	A	2	1073	77	82,663	10/23/2020	84	Good
Dist 4	NSANBORNRD	N SANBORN RD	30	ANTIGUA AVE	DEL MONTE AVE	A	A	2	2098	63	132,201	10/23/2020	84	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	050NB	LOS COCHES AVE	EMERALD WAY	A	A	3	1753	36	63,108	09/30/2020	84	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	060NB	EMERALD WAY	ARCADIA WAY	A	A	3	849	36	30,564	09/30/2020	84	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	SB100	ARCADIA WAY	EMERALD WAY	O	A	3	849	36	30,564	09/30/2020	84	Good

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Dist 1	TWNCRKWY	TWIN CREEKS WAY	10	TWIN CREEKS DR	BEACON HILL DR	A	R	2	177	33	5,841	09/29/2020	84	Good
Dist 2	2NDAVE	2ND AVE	110	E MARKET ST	TOWT ST	A	R	2	1200	37	44,400	10/13/2020	83	Good
Dist 6	BEACONHILL	BEACON HILL CIR	10	BEACON HILL DR	SW END	A	R	2	180	32	5,791	10/08/2020	83	Good
Dist 6	BEACONHIL1	BEACON HILL DR	10	CONSTITUTION BLVD	ROCKPORT WAY	A	R	2	1033	42	43,386	10/08/2020	83	Good
Dist 6	BEACONHIL1	BEACON HILL DR	20	ROCKPORT WAY	BOSTON ST	A	R	2	1528	42	64,176	10/08/2020	83	Good
Dist 6	BEACONHIL1	BEACON HILL DR	30	BOSTON ST	CONSTITUTION BLVD	A	R	2	1050	42	44,100	10/08/2020	83	Good
Dist 6	BERKSHIREW	BERKSHIRE WAY	15	CAPE COD WAY	BOSTON ST	A	R	2	701	32	22,432	10/08/2020	83	Good
Dist 6	BOSTONST	BOSTON ST	15	BEACON HILL DR	BENNINGTON CT	A	R	2	2945	32	94,240	10/08/2020	83	Good
Dist 6	BRISTOLCIR	BRISTOL CIR	10	BEACON HILL DR	NE END	A	R	2	290	32	9,280	10/08/2020	83	Good
Dist 6	CABOTWAY	CABOT WAY	15	BEACON HILL DR	BERKSHIRE WAY	A	R	2	766	37	28,342	10/08/2020	83	Good
Dist 6	CAPECODWAY	CAPE COD WAY	15	ROCKPORT WAY	CONSTITUTION BLVD	A	R	2	1142	32	36,554	10/08/2020	83	Good
Dist 1	CHAMISEDR	CHAMISE DR	010	BUCKHORN DR	TAMARAK WAY	A	R	2	873	37	32,301	10/05/2020	83	Good
Dist 1	CHAMISEDR	CHAMISE DR	020	TAMARAK WAY	SAGE CT (S)	A	R	2	899	32	28,768	10/05/2020	83	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB70	RHODE ISLAND ST	E BORONDA RD	A	A	2	640	34	21,760	10/06/2020	83	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB10	E BORONDA RD	NANTUCKET BLVD	A	A	2	640	34	21,760	10/06/2020	83	Good
Dist 6	DECLARATIO	DECLARATION ST	10	BEACON HILL DR	NANTUCKET BLVD	A	R	2	1488	37	55,056	10/08/2020	83	Good
Dist 6	ELMSFORDCI	ELMSFORD CIR	10	FAULKNER ST	END	A	R	2	352	32	11,288	10/08/2020	83	Good
Dist 6	ELMSFORDWA	ELMSFORD WAY	10	DECLARATION ST	FAULKNER ST	A	R	2	385	32	12,321	10/08/2020	83	Good
Dist 6	FAULKNERST	FAULKNER ST	15	FITZGERALD ST	LEWIS ST	A	R	2	800	36	28,800	10/08/2020	83	Good
Dist 6	FITZGERALD	FITZGERALD ST	20	HEMINGWAY DR	FAULKNER ST	A	R	2	831	37	30,747	10/08/2020	83	Good
Dist 6	HEMINGWAYD	HEMINGWAY DR	20	NANTUCKET BLVD	FITZGERALD RD	A	R	2	1093	41	44,813	10/08/2020	83	Good
Dist 6	HOLMESCIR	HOLMES CIR	10	HEMINGWAY DR	END	A	R	2	109	32	3,508	10/08/2020	83	Good
Dist 6	LEWISCIR	LEWIS CIR	10	LEWIS ST	END	A	R	2	184	32	5,902	10/08/2020	83	Good
Dist 6	LEWISST	LEWIS ST	15	HEMINGWAY DR	FAULKNER CIR	A	R	2	875	37	32,375	10/08/2020	83	Good
Dist 6	LONDONWAY	LONDON WAY	10	FAULKNER ST	LEWIS ST	A	R	2	1026	32	32,839	10/08/2020	83	Good
Dist 6	LONGFELLO1	LONGFELLOW DR	10	BRADBURY ST	HEMINGWAY DR	A	R	2	322	22	7,084	10/08/2020	83	Good
Dist 6	MILTONWAY	MILTON WAY	10	CABOT WAY	BOSTON ST	A	R	2	482	32	15,435	10/08/2020	83	Good
Dist 2	MONTEBELLA	MONTE BELLA BLVD	30	TUSCANY BLVD	WILLIAMS RD	A	R	2	894	41	36,654	10/12/2020	83	Good
Dist 1	MORENOCIR	MORENO CIR	10	PASEO GRANDE	END	A	R	2	187	33	6,171	09/09/2020	83	Good
Dist 1	MORENOWAY	MORENO WAY	10	TOWT ST	MORENO DR	A	C	2	145	38	5,510	09/09/2020	83	Good
Dist 3	ORINDAWAY	ORINDA WAY	10	KENTFIELD DR	LOYOLA DR	A	R	2	633	32	20,271	10/01/2020	83	Good
Dist 3	PARKROW	PARK ROW	20	W ACACIA ST	END	A	R	2	253	32	8,097	03/19/2019	83	Good
Dist 6	PEACEFULCO	PEACEFUL COVE WAY	10	MANCHESTER DR	LITTLE RIVER DR	A	R	2	401	32	12,848	10/07/2020	83	Good
Dist 4&5	POTREROWAY	POTRERO WAY	10	SLOAT DR	GENEVA WAY	A	R	2	201	32	6,432	10/21/2020	83	Good
Dist 6	REXCIR	REX CIR	10	WELLINGTON CT	END	A	R	2	135	37	4,995	10/08/2020	83	Good
Dist 6	ROCKPORTWA	ROCKPORT WAY	15	BEACON HILL DR	BOSTON ST	A	R	2	856	37	31,672	10/08/2020	83	Good
Dist 1	SAGECT	SAGE CT	15	CHAMISE CT (N)	CHAMISE CT (S)	A	R	2	1656	34	56,304	10/05/2020	83	Good
Dist 6	SOMERSWORT	SOMERSWORTH CIR	10	SOMERSWORTH WAY	END	A	R	2	368	32	11,791	10/08/2020	83	Good
Dist 6	SOMERSWOR1	SOMERSWORTH WAY	10	CABOT WAY	BOSTON ST	A	R	2	758	32	24,281	10/08/2020	83	Good
Dist 1	TAMARAKWAY	TAMARAK WAY	10	CHAMISE DR	BUCKHORN DR	A	R	2	494	32	15,828	10/05/2020	83	Good
Dist 1	TUMBLEWEED	TUMBLEWEED DR	15	RIDER AVE	MESQUITE DR	A	R	2	1284	37	47,508	10/05/2020	83	Good
Dist 1	TWNCRKDR	TWIN CREEKS DR	15	NE END	COP @ SHOPPING CENTER	A	R	2	680	34	23,120	09/29/2020	83	Good
Dist 2	VANDENBERG	VANDENBERG ST	10	LA GUARDIA ST	MOFFETT ST	A	R	2	699	41	28,659	10/13/2020	83	Good
Dist 1	VERMONTCIR	VERMONT CIR	10	MASSACHUSETTS DR	END	A	R	2	390	33	12,870	09/10/2020	83	Good
Dist 4	VICTORST	VICTOR ST	160	W ROSSI ST	MCALLISTER ST	A	R	2	674	43	28,982	10/14/2020	83	Good
Dist 6	WELLINGTON	WELLINGTON CT	15	DECLARATION ST (W)	DECLARATION ST (E)	A	R	2	1819	32	58,237	10/08/2020	83	Good
Dist 2	AREZZOCIR	AREZZO CIR	15	SIENA WAY	END	A	R	2	559	32	17,897	10/09/2020	82	Good
Dist 6	BRADBURYST	BRADBURY ST	10	END	FITZGERALD ST	A	R	2	2003	37	74,111	10/08/2020	82	Good

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 1	BUCKHORNDR	BUCKHORN DR	15	RIDER AVE	N SANBORN RD	A	C	2	1857	37	68,709	09/10/2020	82	Good
Dist 1	CACTUSCT	CACTUS CT	10	TUMBLEWEED DR (N)	TUMBLEWEED DR (S)	A	R	2	1254	32	40,128	10/05/2020	82	Good
Dist 2	CAMPANIAWA	CAMPANIA WAY	15	PALERMO DR	WEST END	A	R	2	1151	34	39,134	10/12/2020	82	Good
Dist 1	CHAMISECIR	CHAMISE CIR	10	CHAMISE CT	END	A	R	2	231	32	7,404	10/05/2020	82	Good
Dist 1	COBBLESTON	COBBLESTONE ST	010	BEACON HILL DR	START ONEWAY LOOP	A	R	2	1290	34	43,860	09/29/2020	82	Good
Dist 6	DOWNINGCIR	DOWNING CIR	10	DECLARATION ST	END	A	R	2	379	32	12,153	10/08/2020	82	Good
Dist 3&4	EALISALST	E ALISAL ST	160EB	START PCC E/O FRONT ST	END PCC	P	A	2	475	28	13,300	10/29/2020	82	Good
Dist 1	EBORONDARD	E BORONDA RD	110	MESQUITE DR	N SANBORN RD	A	A	2	973	45	43,785	11/01/2020	82	Good
Dist 6	ELIOTCIR	ELIOT CIR	10	LEWIS ST	END	A	R	2	93	56	5,208	10/08/2020	82	Good
Dist 1	ESTRELLAWA	ESTRELLA WAY	15	FREEDOM PKWY	PASEO GRANDE	A	R	2	920	37	34,045	10/05/2020	82	Good
Dist 6	FAULKNERCI	FAULKNER CIR	10	LEWIS ST	END	A	R	2	83	66	5,478	10/08/2020	82	Good
Dist 6	FITZGERALD	FITZGERALD ST	10	END	HEMINGWAY DR	A	R	2	666	37	24,642	10/08/2020	82	Good
Dist 4&5	GENEVAWAY	GENEVA WAY	10	POTRERO WAY	VICTOR ST	A	R	2	680	32	21,765	10/21/2020	82	Good
Dist 6	GLENFALLSC	GLEN FALLS CIR	10	STONY BROOK DR	END	A	R	2	441	32	14,122	10/07/2020	82	Good
Dist 1	MSSCHUDR	MASSACHUSETTS DR	010	RHODE ISLAND ST	VERMONT CIR	A	R	2	925	37	34,225	09/10/2020	82	Good
Dist 6	MEREDITHCI	MEREDITH CIR	10	BEACON HILL DR	END	A	R	2	235	32	7,520	10/08/2020	82	Good
Dist 2	MONTEBELLA	MONTE BELLA BLVD	10	SCONBERG PKWY	SARDINA DR	A	R	2	1256	46	57,776	10/12/2020	82	Good
Dist 2	MONTEBELLA	MONTE BELLA BLVD	20	SARDINA DR	TUSCANY BLVD	A	R	2	1819	46	83,674	10/12/2020	82	Good
Dist 6	OYSTERBAYC	OYSTER BAY CIR	10	OYSTER BAY CT	END	A	R	2	135	35	4,725	10/07/2020	82	Good
Dist 6	OYSTERBAY1	OYSTER BAY CT	15	MANCHESTER DR (N)	MANCHESTER DR (S)	A	R	2	1266	38	48,108	10/07/2020	82	Good
Dist 2	PALERMODR	PALERMO DR	020	CAMPANIA CIR	PADOVA DR	A	R	2	697	37	25,789	10/09/2020	82	Good
Dist 2	PALERMODR	PALERMO DR	030	PADOVA DR	MODENA WAY	A	R	2	546	37	20,202	10/09/2020	82	Good
Dist 3	PALOALTOWA	PALO ALTO WAY	10	KENTFIELD DR	LOYOLA DR	A	R	2	634	32	20,291	10/01/2020	82	Good
Dist 2	PIAZZADR	PIAZZA DR	15	MONTE BELLA BLVD	END	A	R	2	2696	37	99,752	10/09/2020	82	Good
Dist 6	PROVINCET1	PROVINCETOWN DR	20	LEXINGTON DR	INDEPENDENCE BLVD	A	R	2	422	37	15,614	10/08/2020	82	Good
Dist 1	ROCKROSEWA	ROCKROSE WAY	10	BUCKHORN DR	ROCKROSE ST	A	R	2	200	37	7,400	10/05/2020	82	Good
Dist 1	SAGEWAY	SAGE WAY	10	SAGE CT	BUCKHORN DR	A	R	2	150	37	5,550	10/05/2020	82	Good
Dist 1	SAGUAROCIR	SAGUARO CIR	10	TUMBLEWEED DR	NE END	A	R	2	411	32	13,152	10/05/2020	82	Good
Dist 1	SAGUARODR	SAGUARO DR	15	BUCKHORN DR	TUMBLEWEED DR	A	R	2	817	37	30,229	10/05/2020	82	Good
Dist 2	SIENAWAY	SIENA WAY	15	PIAZZA DR	END	A	R	2	812	37	30,044	10/09/2020	82	Good
Dist 2	SPOLETOWAY	SPOLETO WAY	10	CANELLI CT	SPOLETO CIR	A	R	2	234	33	7,722	10/09/2020	82	Good
Dist 6	STONYBROOK	STONY BROOK CIR	10	STONY BROOK DR	END	A	R	2	316	32	10,114	10/07/2020	82	Good
Dist 6	STONYBROO1	STONY BROOK DR	10	LITTLE RIVER DR	STONY BROOK CIR	A	R	2	905	38	34,390	10/07/2020	82	Good
Dist 6	TAMPICOAVE	TAMPICO AVE	100	RAINIER DR	END	A	R	2	461	32	14,776	10/06/2020	82	Good
Dist 2	CANELLICT	CANELLI CT	15	TUSCANY BLVD	CANELLI CT	A	R	2	1642	33	54,186	10/09/2020	81	Good
Dist 2	CAPRIWAY	CAPRI WAY	15	PIAZZA DR	END	A	R	2	810	32	25,933	10/09/2020	81	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB30	BEACON HILL DR	LAS CASITAS DR	A	A	2	1002	32	32,095	10/22/2020	81	Good
Dist 6	CRESTVIEWS	CRESTVIEW ST	15	KITTERY ST	END	A	R	2	1208	33	39,864	10/08/2020	81	Good
Dist 4	EBERNALDR	E BERNAL DR	10	SHERWOOD DR	ROSARITA DR	P	A	4	866	54	46,764	10/23/2020	81	Good
Dist 1	FOXGLENWAY	FOX GLEN WAY	15	COBBLESTONE ST (W)	COBBLESTONE ST (E)	A	R	2	870	34	29,580	09/29/2020	81	Good
Dist 2	GENOACIR	GENOA CIR	10	GENOA WAY	END	A	R	2	248	32	7,954	10/09/2020	81	Good
Dist 6	GEORGETOWN	GEORGETOWN WAY	15	CHARLESTOWN WAY	HARRINGTON CIR	A	R	2	1638	32	52,417	10/08/2020	81	Good
Dist 6	HARRINGTON	HARRINGTON CIR	15	BEACON HILL DR	END	A	R	2	534	38	20,292	10/08/2020	81	Good
Dist 6	LEXINGTOND	LEXINGTON DR	90	INDEPENDENCE BLVD	LITTLE RIVER DR	A	R	2	210	33	6,930	10/08/2020	81	Good
Dist 6	LITTLERIVE	LITTLE RIVER DR	15	MANCHESTER DR	END	A	R	2	2604	38	98,952	10/07/2020	81	Good
Dist 2	MAYFAIRDR	MAYFAIR DR	15	S SANBORN RD	MAYFAIR DR	A	R	2	2512	30	75,360	10/13/2020	81	Good
Dist 4	NSANBORNRD	N SANBORN RD	10	E BORONDA RD	FREEDOM PKWY	A	A	2	1937	64	123,980	10/23/2020	81	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	040NB	E ALVIN DR	LOS COCHES AVE	A	A	3	1803	36	64,908	09/30/2020	81	Good

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Dist 6	NEWINGTONS	NEWINGTON ST	15	KITTERY ST	END	A	R	2	1036	33	34,188	10/08/2020	81	Good
Dist 3	PICOBLANCO	PICO BLANCO ST	10	SAN BLANCO DR	LUTHER WAY	A	R	2	357	37	13,209	10/01/2020	81	Good
Dist 3	ROSSICIR	ROSSI CIR	10	W ROSSI ST	END	A	R	2	463	42	19,446	10/26/2020	81	Good
Dist 2	ROYDIAZST	ROY DIAZ ST	010	END	AIRPORT BLVD	A	C	2	2082	32	66,624	10/13/2020	81	Good
Dist 2	SARDINADR	SARDINA DR	15	CAPRI WAY	BELLAGIO WAY	A	R	2	907	32	29,024	10/09/2020	81	Good
Dist 2	SPOLETOCIR	SPOLETO CIR	10	SPOLETO WAY	END	A	R	2	378	32	12,126	10/09/2020	81	Good
Dist 2	TUSCANYBLV	TUSCANY BLVD	15	MONTE BELLA BLVD	FREEDOM PKWY	A	R	2	1428	42	59,976	10/09/2020	81	Good
Dist 6	WIMBLEDONA	WIMBLEDON AVE	10	OXFORD CT	ESSEX WAY	A	R	2	243	38	9,234	10/07/2020	81	Good
Dist 1	AMARILLOWA	AMARILLO WAY	020	RIDER AVE	PACIFIC AVE	A	R	2	720	32	23,040	10/05/2020	80	Good
Dist 1	BEACONHIL	BEACON HILL DR	20	CONSTITUTION BLVD	END	A	R	2	570	42	23,940	09/29/2020	80	Good
Dist 6	BENNINGTON	BENNINGTON CT	15	BOSTON ST (N)	BOSTON ST (S)	A	R	2	856	34	29,104	10/08/2020	80	Good
Dist 1	BERNARDOCI	BERNARDO CIR	10	BERNARDO AVE	END	A	R	2	336	32	10,772	10/05/2020	80	Good
Dist 2	BOLOGNAWAY	BOLOGNA WAY	15	SIENA WAY	PIAZZA DR	A	R	2	782	32	25,054	10/09/2020	80	Good
Dist 6	BURLINGTON	BURLINGTON CIR	10	BURLINGTON DR	END	A	R	2	193	31	5,983	10/08/2020	80	Good
Dist 1	CACHUMACT	CACHUMA CT	10	GAVIOTA DR (W)	GAVIOTA DR (E)	A	R	2	989	34	33,626	09/09/2020	80	Good
Dist 1	CAMARILLOC	CAMARILLO CT	10	MORENO DR (N)	MORENO DR (S)	A	R	2	1000	33	33,000	09/09/2020	80	Good
Dist 2	CASSINOCIR	CASSINO CIR	10	CASSINO WAY	END	A	R	2	290	32	9,280	10/09/2020	80	Good
Dist 2	CASSINOWAY	CASSINO WAY	15	SPOLETO ST (N)	SPOLETO ST (S)	A	R	2	1041	37	38,517	10/09/2020	80	Good
Dist 6	CASTLETONS	CASTLETON ST	15	LITTLE RIVER DR	END	A	R	2	729	37	26,973	10/07/2020	80	Good
Dist 1	CAYUCOSCIR	CAYUCOS CIR	10	MORENO DR	END	A	R	2	234	33	7,722	09/09/2020	80	Good
Dist 6	CHESWICKCI	CHESWICK CIR	10	WELLINGTON CT	END	A	R	2	390	32	12,503	10/08/2020	80	Good
Dist 6	CRESTVIEWW	CRESTVIEW WAY	10	SNUG HARBOR ST	CRESTVIEW ST	A	R	2	233	32	7,456	10/08/2020	80	Good
Dist 1	DECLARATIO	DECLARATION ST	100	NANTUCKET BLVD	DE CUNHA CT	A	R	2	690	37	25,530	09/10/2020	80	Good
Dist 1&4	ELAURELDR	E LAUREL DR	130EB	CONSTITUTION BLVD	RANCH VIEW LN/COUNTY FACILITY	A	A	2	1698	30	50,940	10/22/2020	80	Good
Dist 1&4	ELAURELDR	E LAUREL DR	140WB	ST EDWARDS AVE	RANCH VIEW LN/COUNTY FACILITY	A	A	2	2305	35	80,675	10/22/2020	80	Good
Dist 1&4	ELAURELDR	E LAUREL DR	150EB	ST EDWARDS AVE	N SANBORN RD	A	A	2	1390	35	48,650	10/22/2020	80	Good
Dist 1&4	ELAURELDR	E LAUREL DR	150WB	N SANBORN RD	ST EDWARDS AVE	A	A	2	1383	30	41,490	10/22/2020	80	Good
Dist 4	EMARKETST	E MARKET ST	060	KERN ST	CARR AVE	A	A	4	1367	62	84,754	10/23/2020	80	Good
Dist 2	EMARKETST	E MARKET ST	090	TOWT ST	KENNETH AVE	A	A	4	1732	44	76,208	10/13/2020	80	Good
Dist 4	EMARKETST	E MARKET ST	130WB	END PCC (E/O GREENFIELD ALLEY)	PAJARO ST	A	A	2	480	30	14,400	10/23/2020	80	Good
Dist 1	FREEDOMPKW	FREEDOM PKWY	010	CONSTITUTION BLVD	BERNARDO AVE	A	C	4	3212	60	192,720	10/06/2020	80	Good
Dist 3	FRONTST	FRONT ST	060WB	PCC START	PCC END	P	A	1	270	18	4,860	11/03/2020	80	Good
Dist 1	GAVIOTADR	GAVIOTA DR	010	CACHUMA CT (W)	TORONA WAY	A	R	2	834	38	31,692	09/09/2020	80	Good
Dist 3	GONZALESAL	GONZALES ALY	20	E ALISAL ST	E SAN LUIS ST	P	R	2	625	15	9,375	11/02/2020	80	Good
Dist 4	GOUGHWAY	GOUGH WAY	10	POWELL ST	VICTOR ST	A	R	2	221	37	8,212	10/14/2020	80	Good
Dist 3	GREENFIELD	GREENFIELD ALY	030	E ALISAL ST	E SAN LUIS ST	P	R	2	670	16	10,720	11/02/2020	80	Good
Dist 6	KENSINGTON	KENSINGTON WAY	15	BUNKER HILL WAY	END	A	R	2	478	37	17,686	10/08/2020	80	Good
Dist 6	KITTERYST	KITTERY ST	15	BEACON HILL DR	FITZGERALD ST	A	R	2	961	32	30,753	10/08/2020	80	Good
Dist 3	LODGELN	LODGE LN	10	E MARKET ST	E GABILAN ST	P	R	2	605	14	8,470	11/03/2020	80	Good
Dist 1	MSSCHUWAY	MASSACHUSETTS WAY	10	CONSTITUTION BLVD	MASSACHUSETTS DR	A	R	2	145	37	5,365	09/10/2020	80	Good
Dist 4	MASSOLOCIR	MASSOLO CIR	10	MASSOLO CT	END	A	R	2	200	32	6,400	10/14/2020	80	Good
Dist 1	MAZATLANWA	MAZATLAN WAY	10	MAZATLAN ST	RIDER AVE	A	R	2	158	38	6,004	09/28/2020	80	Good
Dist 2	MODENAST	MODENA ST	15	CAMPANIA WAY	END	A	R	2	1005	34	34,170	10/12/2020	80	Good
Dist 1	MORENODR	MORENO DR	010	PASEO GRANDE	CAMARILLO CT	A	C	2	975	38	37,050	09/09/2020	80	Good
Dist 4	NATIVIDADR	NATIVIDAD RD	020NB	S LAUREL DR	RAINIER DR	P	A	3	2105	36	75,780	10/27/2020	80	Good
Dist 2	PADOVADR	PADOVA DR	10	PALERMO DR	FREEDOM PKWY	A	R	2	697	37	25,789	10/12/2020	80	Good
Dist 1	PASEOGRAND	PASEO GRANDE	15	N SANBORN RD	GAVIOTA DR	A	C	2	2083	38	79,182	09/09/2020	80	Good
Dist 6	PROVINCETO	PROVINCETOWN CIR	10	PROVINCETOWN DR	END	A	R	2	310	32	9,920	10/08/2020	80	Good

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Dist 2	ROSSANOCT	ROSSANO CT	15	PALERMO DR (N)	PALERMO DR (S)	A	R	2	1321	33	43,593	10/12/2020	80	Good
Dist 6	SISKIYOUDR	SISKIYOU DR	20	KLAMATH DR	LOS COCHES AVE	A	R	2	739	32	23,651	10/06/2020	80	Good
Dist 4	SUTROCIR	SUTRO CIR	10	SLOAT DR	END	A	R	2	245	32	7,846	10/14/2020	80	Good
Dist 1	TECOPAWAY	TECOPA WAY	10	GAVIOTA DR	TORONA WAY	A	R	2	748	33	24,684	09/09/2020	80	Good
Dist 1	TORONAWAY	TORONA WAY	15	GAVIOTA DR	FREEDOM PKWY	A	C	2	400	38	15,200	09/09/2020	80	Good
Dist 2&4	TOWTST	TOWT ST	070	E MARKET ST	E ALISAL ST	A	C	2	1608	38	61,104	10/14/2020	80	Good
Dist 2	TRIVOLIWAY	TRIVOLI WAY	10	CAMPANIA WAY	MONTE BELLA BLVD	A	R	2	752	33	24,816	10/12/2020	80	Good
Dist 2	TUSCANYCIR	TUSCANY CIR	10	TUSCANY WAY	END	A	R	2	200	32	6,400	10/09/2020	80	Good
Dist 6	TYNANWAY	TYNAN WAY	10	WESTMINSTER DR	PLACER WAY	A	R	2	770	32	24,668	10/06/2020	80	Good
Dist 5	VANNESSCIR	VAN NESS CIR	10	VAN NESS CT	END	A	R	2	180	32	5,760	10/21/2020	80	Good
Dist 5	VANNESSCT	VAN NESS CT	20	VICTOR ST (E)	HYDE ST	A	R	2	705	38	26,790	10/21/2020	80	Good
Dist 2	VERONACT	VERONA CT	15	VERONA WAY	PIAZZA DR	A	R	2	1978	35	69,230	10/09/2020	80	Good
Dist 6	WHITERIVER	WHITE RIVER CIR	10	STONY BROOK DR	END	A	R	2	489	32	15,657	10/07/2020	80	Good
Dist 4	ARGUELLOCI	ARGUELLO CIR	10	ARGUELLO DR	END	A	R	2	180	32	5,760	10/14/2020	79	Good
Dist 6	BUCKINGHAM	BUCKINGHAM CIR	10	BUCKINGHAM DR	END	A	R	2	168	32	5,384	10/07/2020	79	Good
Dist 6	BUCKINGHA1	BUCKINGHAM DR	10	CASCADE WAY	DORSET WAY	A	R	2	626	38	23,788	10/07/2020	79	Good
Dist 6	BUCKINGHA1	BUCKINGHAM DR	20	DORSET WAY	ARCADIA WAY	A	R	2	702	37	25,974	10/07/2020	79	Good
Dist 6	BUNKERHILL	BUNKER HILL WAY	15	CONSTITUTION BLVD	GEORGETOWN WAY	A	R	2	1245	37	46,065	10/08/2020	79	Good
Dist 4	CALLECEBU	CALLE CEBU	15	SHERWOOD DR	SUN WAY	A	R	2	1056	37	39,072	10/19/2020	79	Good
Dist 1&4	ELAURELDR	E LAUREL DR	130WB	RANCH VIEW LN/COUNTY FACILITY	CONSTITUTION BLVD	A	A	2	1698	35	59,430	10/22/2020	79	Good
Dist 1&4	ELAURELDR	E LAUREL DR	140EB	RANCH VIEW LN/COUNTY FACILITY	ST EDWARDS AVE	A	A	2	2305	30	69,150	10/22/2020	79	Good
Dist 1	ESTRELLACT	ESTRELLA CT	10	ESTRELLA WAY	END	A	R	2	205	37	7,585	10/05/2020	79	Good
Dist 2	FREEDOMPKW	FREEDOM PKWY	050	WILLIAMS RD	TUSCANY BLVD	A	C	4	967	41	39,647	10/12/2020	79	Good
Dist 3	FRONTST	FRONT ST	030SB	E MARKET ST	END OF PCC	P	A	2	367	30	11,010	11/03/2020	79	Good
Dist 1	GAVIOTADR	GAVIOTA DR	020	TORONA WAY	TECOPA WAY	A	R	2	515	34	17,510	09/09/2020	79	Good
Dist 1	HUGHESWAY	HUGHES WAY	10	CONSTITUTION BLVD	FOX GLEN WAY	A	R	2	317	38	12,046	09/29/2020	79	Good
Dist 4	HYDECIR	HYDE CIR	10	HYDE ST	END	A	R	2	177	36	6,372	10/14/2020	79	Good
Dist 2	JOHNST	JOHN ST	110	S WOOD ST	S FILICE ST	A	A	4	1481	58	85,898	10/13/2020	79	Good
Dist 3	LODGELN	LODGE LN	20	E GABILAN ST	E ALISAL ST	P	R	2	670	15	10,050	11/03/2020	79	Good
Dist 6	MANCHESTE1	MANCHESTER DR	10	CASTLETON ST	CONSTITUTION BLVD	A	R	2	813	42	34,146	10/07/2020	79	Good
Dist 6	MCKINNONST	MCKINNON ST	30	HARDEN PKWY	CHARDONNAY DR	A	C	2	1029	42	43,218	10/22/2020	79	Good
Dist 1	MESQUITEDR	MESQUITE DR	15	E BORONDA RD	BUCKHORN DR	A	C	2	1085	37	40,152	10/05/2020	79	Good
Dist 1	MIMBRERAWA	MIMBRERA WAY	010	RIDER AVE	NOGAL DR	A	R	2	859	38	32,642	09/28/2020	79	Good
Dist 1	NWHMPSHCT	NEW HAMPSHIRE CT	15	RHODE ISLAND ST	MASSACHUSETTS DR	A	R	2	1511	37	55,907	09/10/2020	79	Good
Dist 6	NEWHAVENWA	NEW HAVEN WAY	10	NEW SALEM DR	NANTUCKET BLVD	A	R	2	365	37	13,505	10/08/2020	79	Good
Dist 6	NEWINGTONC	NEWINGTON CIR	10	NEWINGTON ST	END	A	R	2	145	61	8,845	10/08/2020	79	Good
Dist 6	NICOLECIR	NICOLE CIR	10	BOYLE CT	END	A	R	2	119	32	3,819	10/06/2020	79	Good
Dist 6	OXFORDCT	OXFORD CT	10	WIMBLEDON AVE W. SIDE	WIMBLEDON AVE E. SIDE	A	R	2	1358	32	43,456	10/07/2020	79	Good
Dist 1	PACANACIR	PACANA CIR	10	NOGAL DR	END	A	R	2	160	31	4,960	09/28/2020	79	Good
Dist 4	PRESCOTTCI	PRESCOTT CIR	10	ARGUELLO DR	END	A	R	2	166	34	5,644	10/14/2020	79	Good
Dist 6	PROVINCET1	PROVINCETOWN DR	10	LEXINGTON DR (S)	LEXINGTON DR (N)	A	R	2	1484	32	47,488	10/08/2020	79	Good
Dist 6	REGENCYCIR	REGENCY CIR	10	HARDEN PKWY	END	A	R	2	658	42	27,636	10/06/2020	79	Good
Dist 1	RHDISLDST	RHODE ISLAND ST	010	CONSTITUTION BLVD	RHODE ISLAND CIR	A	R	2	576	37	21,312	09/10/2020	79	Good
Dist 3	SANGABRIEL	SAN GABRIEL DR	10	CENTRAL AVE	END	A	R	2	210	38	7,980	10/26/2020	79	Good
Dist 2	SPOLETOST	SPOLETO ST	15	CASSINO WAY	END	A	R	2	1254	33	41,382	10/09/2020	79	Good
Dist 6	STONYBROO1	STONY BROOK DR	20	STONY BROOK CIR	CASTLETON ST	A	R	2	779	38	29,602	10/07/2020	79	Good
Dist 2	VERONAWAY	VERONA WAY	15	MONTE BELLA BLVD	VERONA CT (W)	A	R	2	387	38	14,706	10/09/2020	79	Good
Dist 4	ARGUELLODR	ARGUELLO DR	15	SANSOME ST	END	A	R	2	877	32	28,073	10/14/2020	78	Good

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 6	ATTLEBURYC	ATTLEBURY CIR	10	CANTERBURY ST	END	A	R	2	292	32	9,350	10/08/2020	78	Good
Dist 1	BERMUDAWAY	BERMUDA WAY	10	RIDER AVE	PACIFIC AVE	A	R	2	720	32	23,055	10/05/2020	78	Good
Dist 1	CANCUNCIR	CANCUN CIR	10	BERNARDO AVE	END	A	R	2	145	33	4,785	10/05/2020	78	Good
Dist 6	CANTERBURY	CANTERBURY ST	15	LEXINGTON DR	END	A	R	2	1215	32	38,883	10/08/2020	78	Good
Dist 6	CHESHIREWA	CHESHIRE WAY	10	BENNINGTON CT	BEACON HILL DR	A	R	2	249	37	9,213	10/08/2020	78	Good
Dist 1	COBBLESTON	COBBLESTONE ST	020	START ONEWAY LOOP	END ONEWAY @ COBBLESTONE	A	R	1	545	26	14,170	09/29/2020	78	Good
Dist 6	DANBURYST	DANBURY ST	15	HARTFORD ST	INDEPENDENCE BLVD	A	R	2	751	32	24,060	10/07/2020	78	Good
Dist 6	DERBYWAY	DERBY WAY	10	WESTMINSTER DR	HAMPTON ST	A	R	2	258	37	9,546	10/06/2020	78	Good
Dist 6	DEVONSHIRE	DEVONSHIRE WAY	10	WESTMINSTER DR	ERCIA ST	A	R	2	1068	32	34,181	10/06/2020	78	Good
Dist 6	EMERALDDR	EMERALD DR	15	ARCADIA WAY	EMERALD WAY	A	R	2	872	37	32,264	10/07/2020	78	Good
Dist 2	FREEDOMPKW	FREEDOM PKWY	060	TUSCANY BLVD	PADOVA DR	A	C	2	1167	30	35,010	10/12/2020	78	Good
Dist 6	GREATISLAN	GREAT ISLAND ST	15	BEACON HILL DR	CRESTVIEW ST	A	R	2	1186	32	37,979	10/08/2020	78	Good
Dist 3	GREENFIELD	GREENFIELD ALY	010	E MARKET ST	E GABILAN ST	P	R	2	470	32	15,040	11/02/2020	78	Good
Dist 4	GREENWICHW	GREENWICH WAY	15	ARGUELLO DR	SANSOME ST	A	R	2	598	34	20,332	10/14/2020	78	Good
Dist 6	HAMPTONST	HAMPTON ST	15	HARROD WAY	WESTMINSTER DR	A	R	2	1212	32	38,813	10/06/2020	78	Good
Dist 6	HANCOCKCIR	HANCOCK CIR	10	HANCOCK ST	END	A	R	2	305	31	9,455	10/08/2020	78	Good
Dist 6	HARTFORDST	HARTFORD ST	15	INGLEWOOD ST	COVENTRY ST	A	R	2	1469	32	47,021	10/07/2020	78	Good
Dist 2	JOHNST	JOHN ST	120	S FILICE ST	S SANBORN RD	A	A	4	981	58	56,898	10/13/2020	78	Good
Dist 2	JOHNST	JOHN ST	130	S SANBORN RD	MCGOWAN DR	A	A	4	1251	58	72,558	10/13/2020	78	Good
Dist 1	LACUESTACT	LA CUESTA CT	10	ANTIGUA AVE (N)	ANTIGUA AVE (S)	A	R	2	1375	34	46,750	10/05/2020	78	Good
Dist 1	LAMANCHAWA	LA MANCHA WAY	15	BERNARDO AVE	PALMERA AVE	A	R	2	566	37	20,956	10/05/2020	78	Good
Dist 4	LAPOSADADR	LA POSADA DR	15	END (N)	END (S)	A	R	2	473	25	11,842	10/15/2020	78	Good
Dist 6	MARSHFIELD	MARSHFIELD CIR	10	HANCOCK ST	END	A	R	2	332	32	10,641	10/08/2020	78	Good
Dist 2	MODENAWAY	MODENA WAY	10	MODENA ST	PALERMO DR	A	R	2	272	33	8,976	10/12/2020	78	Good
Dist 3	NACIONALCT	NACIONAL CT	10	CLARK ST (N)	CLARK ST (S)	A	R	2	1884	38	71,592	10/26/2020	78	Good
Dist 5	POTREROWAY	POTRERO WAY	20	GENEVA WAY	VICTOR ST	A	R	2	655	32	20,960	10/21/2020	78	Good
Dist 1	ROCKROSEST	ROCKROSE ST	15	BUCKHORN DR	END	A	R	2	877	37	32,449	10/05/2020	78	Good
Dist 6	ROGGERD	ROGGE RD	020	2725' W/O NATIVIDAD RD (COP)	CITY LIMITS	A	R	2	1680	36	60,480	10/22/2020	78	Good
Dist 4	SANTACLARA	SANTA CLARA AVE	10	N FREEWAY OFF RAMP	END	O	R	2	369	24	8,856	10/15/2020	78	Good
Dist 4	SHERWOODDR	SHERWOOD DR	050	E BERNAL DR EB	185 Ft S/O SHERWOOD PL (PCC END)	P	A	4	1814	50	90,700	10/28/2020	78	Good
Dist 6	STRATFORDC	STRATFORD CT	10	EMERALD DR N. SIDE	EMERALD DR S. SIDE	A	R	2	1037	32	33,184	10/07/2020	78	Good
Dist 1	VERACRUZCI	VERA CRUZ CIR	10	ANTIGUA AVE	END	A	R	2	183	34	6,222	10/05/2020	78	Good
Dist 6	WIMBLEDONA	WIMBLEDON AVE	20	ESSEX WAY	COP 375' E/O ESSEX WAY	A	R	2	375	30	11,250	10/07/2020	78	Good
Dist 6	WOODBURYCI	WOODBURY CIR	10	CANTERBURY ST	END	A	R	2	155	32	4,960	10/08/2020	78	Good
Dist 1	ACOSTAPLZ	ACOSTA PLZ	80	GARNER AVE	END	A	R	2	895	41	36,695	10/05/2020	77	Good
Dist 3	ALAMEDAAVE	ALAMEDA AVE	035	E ROMIE LN	SAN MIGUEL AVE	A	C	2	1377	32	44,064	09/30/2020	77	Good
Dist 1	BERNARDOAV	BERNARDO AVE	15	LA MANCHA WAY	FREEDOM PKWY	A	R	2	1500	37	55,500	10/05/2020	77	Good
Dist 2	BOLOGNACT	BOLOGNA CT	10	BOLOGNA WAY (W)	BOLOGNA WAY (E)	A	R	2	737	32	23,584	10/09/2020	77	Good
Dist 6	BUCKINGHA2	BUCKINGHAM WAY	10	EL DORADO DR	BUCKINGHAM DR	A	R	2	169	44	7,436	10/07/2020	77	Good
Dist 6	BURLINGTO1	BURLINGTON DR	15	PROVINCETOWN DR	END	A	R	2	1015	37	37,555	10/08/2020	77	Good
Dist 1	CARDINAWAY	CARDINA WAY	10	BERNARDO AVE	PALMERA AVE	A	R	2	440	34	14,985	10/05/2020	77	Good
Dist 6	CHARLESTOW	CHARLESTOWN WAY	15	BEACON HILL DR	BUNKER HILL WAY	A	R	2	552	37	20,424	10/08/2020	77	Good
Dist 6	CLINTONCT	CLINTON CT	10	MANHATTAN DR	S END	A	R	2	347	33	11,451	09/29/2020	77	Good
Dist 6	CLINTONCT	CLINTON CT	20	MANHATTAN DR at HUDSON WAY	CLINTON CT	A	R	2	895	33	29,535	09/29/2020	77	Good
Dist 1	DECUNHACT	DE CUNHA CT	15	DECLARATION ST (N)	DECLARATION ST (S)	A	R	2	2009	32	64,288	09/10/2020	77	Good
Dist 3	FRONTST	FRONT ST	010EB	START PCC @ E MARKET ST	END PCC @ FRONT ST	P	A	2	404	20	8,080	09/29/2017	77	Good
Dist 4	FULTONWAY	FULTON WAY	15	POWELL ST	STOCKSTON ST	A	R	2	765	32	24,511	10/14/2020	77	Good
Dist 1	GARNERPVT	GARNER AVE	110PA	GARNER AVE (CULDESAC NORTH)	GEE STREET (CULDESAC)	A	R	2	1232	22	27,104	09/29/2020	77	Good

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Dist 2	GENOAWAY	GENOA WAY	15	AREZZO CIR	MONTE BELLA BLVD	A	R	2	513	32	16,429	10/09/2020	77	Good
Dist 6	INGLEWOODS	INGLEWOOD ST	110	COVENTRY ST	END	A	R	2	871	38	33,098	10/07/2020	77	Good
Dist 1	LAMANCHACI	LA MANCHA CIR	10	LA MANCHA WAY	END	A	R	2	219	34	7,448	10/05/2020	77	Good
Dist 6	MARSHFIEL1	MARSHFIELD CT	10	HANCOCK ST W. SIDE	HANCOCK ST E. SIDE	A	R	2	1307	33	43,131	10/08/2020	77	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	070NB	ARCADIA WAY	E BORONDA RD	A	A	3	776	36	27,936	09/30/2020	77	Good
Dist 6	NATIVIDADR	NATIVIDAD RD	SB120	LOS COCHES AVE	E ALVIN DR	O	A	3	1803	36	64,908	09/30/2020	77	Good
Dist 4	NATIVIDADR	NATIVIDAD RD	SB140	RAINIER DR	S LAUREL DR	P	A	3	2105	36	75,780	10/27/2020	77	Good
Dist 1	OSOCT	OSO CT	10	ESTRELLA WAY (N)	ESTRELLA WAY (S)	A	R	2	1292	32	41,344	10/05/2020	77	Good
Dist 1	PALMERAAVE	PALMERA AVE	15	LA MANCHA WAY	CORTINA WAY	A	R	2	1345	37	49,765	10/05/2020	77	Good
Dist 2	PIAZZACIR	PIAZZA CIR	10	PIAZZA DR	END	A	R	2	210	32	6,720	10/09/2020	77	Good
Dist 6	PORTSMOUTH	PORTSMOUTH WAY	10	HARTFORD ST	COVENTRY ST	A	R	2	522	32	16,722	10/07/2020	77	Good
Dist 3	QUAILRUNCI	QUAIL RUN CIR	10	W ROSSI ST	END	A	R	2	630	42	26,460	10/26/2020	77	Good
Dist 6	RIVERTONWA	RIVERTON WAY	10	HARTFORD ST	COVENTRY ST	A	R	2	636	32	20,382	10/07/2020	77	Good
Dist 4	STANYANST	STANYAN ST	10	GREENWICH WAY	SANSOME ST	A	R	2	691	32	22,138	10/14/2020	77	Good
Dist 6	WATERFORDC	WATERFORD CIR	10	INGLEWOOD ST	END	A	R	2	237	32	7,587	10/07/2020	77	Good
Dist 6	WENTWORTHC	WENTWORTH CIR	10	LONDONDERRY WAY	END	A	R	2	154	32	4,928	10/07/2020	77	Good
Dist 6	WESTFIELDC	WESTFIELD CIR	10	HANCOCK ST	END	A	R	2	329	31	10,199	10/08/2020	77	Good
Dist 1	ANTIGUACIR	ANTIGUA CIR	10	ANTIGUA AVE	END	A	R	2	185	34	6,290	10/05/2020	76	Good
Dist 6	CAMBRIDGEC	CAMBRIDGE CT	10	WESTMINSTER DR (N)	END	A	R	2	1389	32	44,464	10/06/2020	76	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB30	BEACON HILL DR (N)	LAS CASITAS DR	A	A	2	1003	32	32,096	10/22/2020	76	Good
Dist 1	CORTINAWAY	CORTINA WAY	10	BERNARDO AVE	PALMERA AVE	A	R	2	593	37	21,941	10/05/2020	76	Good
Dist 4	ELAURELDR	E LAUREL DR	120EB	NATIVIDAD RD	CONSTITUTION BLVD	A	A	2	1907	35	66,745	10/22/2020	76	Good
Dist 2	EMARKETST	E MARKET ST	050	SIMAS ST/ GRIFFIN ST	KERN ST	A	A	4	1540	62	95,480	10/23/2020	76	Good
Dist 3	EMARKETST	E MARKET ST	020EB	PAJARO ST	START PCC (E/O GREENFIELD ALLEY)	A	A	2	480	30	14,400	10/22/2020	76	Good
Dist 6	ESSEXWAY	ESSEX WAY	10	ESSEX CIR	ARCADIA WAY	A	R	2	254	37	9,398	10/07/2020	76	Good
Dist 4	GREENBRIAR	GREENBRIAR WAY	15	SANSOME ST	END	A	R	2	1060	32	33,938	10/14/2020	76	Good
Dist 4	HILLCIR	HILL CIR	10	N MADEIRA AVE	END	A	R	2	174	37	6,438	10/16/2020	76	Good
Dist 2	JOHNST	JOHN ST	140	MCGOWAN DR	E ALISAL ST	A	A	4	1433	62	88,846	10/13/2020	76	Good
Dist 3	KENTFIELDD	KENTFIELD DR	25	LOYOLA DR	SAN JACINTO DR	A	R	2	2016	32	64,541	10/01/2020	76	Good
Dist 6	LEXINGTOND	LEXINGTON DR	15	PROVINCETOWN DR	INDEPENDENCE BLVD	A	R	2	1997	37	73,889	10/08/2020	76	Good
Dist 6	LONDONDERR	LONDONDERRY WAY	15	COVENTRY ST	END	A	R	2	795	32	25,448	10/07/2020	76	Good
Dist 1&2	NSANBORNRD	N SANBORN RD	50	GARNER AVE	E LAUREL DR	A	A	2	2074	64	132,784	10/22/2020	76	Good
Dist 4	NATIVIDADR	NATIVIDAD RD	010	SHERWOOD DR	E LAUREL DR	P	A	2	2141	32	68,512	10/27/2020	76	Good
Dist 6	NEWBRITAIN	NEW BRITAIN CIR	10	NEW SALEM DR	END	A	R	2	251	32	8,052	10/08/2020	76	Good
Dist 6	NEWSALEMDR	NEW SALEM DR	15	BURLINGTON DR	END	A	R	2	1248	35	43,680	10/08/2020	76	Good
Dist 1	RIDERAVE	RIDER AVE	030	ANTIGUA AVE	FREEDOM PKWY	A	C	2	520	42	21,840	09/11/2020	76	Good
Dist 4	SHERWOODDR	SHERWOOD DR	060	NATIVIDAD RD	E BERNAL DR	P	A	4	278	64	17,828	10/28/2020	76	Good
Dist 2	TUSCANYWAY	TUSCANY WAY	15	CASSINO WAY	TUSCANY BLVD	A	R	2	316	34	10,744	10/09/2020	76	Good
Dist 3	WBLANCORD	W BLANCO RD	WB010	S MAIN ST	PADRE DR	O	A	2	649	32	20,780	10/29/2020	76	Good
Dist 2	AIRPORTBLV	AIRPORT BLVD	020	MERCER WAY	ROY DIAZ ST	A	C	4	2193	62	135,966	10/13/2020	75	Good
Dist 3	ALAMEDAPL	ALAMEDA PL	10	ALAMEDA AVE (N)	ALAMEDA AVE (S)	A	R	2	633	32	20,256	09/30/2020	75	Good
Dist 6	ASTORWAY	ASTOR WAY	15	BROADWAY DR	HUDSON WAY	A	R	2	580	33	19,140	09/29/2020	75	Good
Dist 6	BOSTONCIR	BOSTON CIR	10	BENNINGTON CT	END	A	R	2	220	32	7,040	10/08/2020	75	Good
Dist 6	BROADWAYDR	BROADWAY DR	15	PENNSYLVANIA DR	HARDEN PKWY	A	R	2	1203	41	49,323	09/29/2020	75	Good
Dist 5	COLTONDR	COLTON DR	15	FLINT WAY	ESTRADA WAY	A	R	2	1311	32	41,958	10/21/2020	75	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB20	INDEPENDENCE BLVD	BEACON HILL DR	A	A	2	1728	32	55,314	10/22/2020	75	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB60	BEACON HILL DR (S)	INDEPENDENCE BLVD	A	A	2	1729	32	55,328	10/22/2020	75	Good
Dist 1	CTTNWDCT	COTTONWOOD CT	10	COTTONWOOD DR (W)	COTTONWOOD DR (E)	A	R	2	895	33	29,535	09/28/2020	75	Good

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Dist 4	EMARKETST	E MARKET ST	070	CARR AVE	N SANBORN RD	A	A	4	2470	64	158,080	10/23/2020	75	Good
Dist 6	ELDORADODR	EL DORADO DR	10	E BORONDA RD	HARDEN PKWY	A	C	2	2067	41	84,747	09/29/2020	75	Good
Dist 6	ELIZABETHC	ELIZABETH CIR	10	VICTORIA AVE	END	A	R	2	335	33	11,055	09/29/2020	75	Good
Dist 6	ERCIAST	ERCIA ST	15	HARDEN PKWY	HAMPTON ST	A	R	2	760	41	31,160	09/29/2020	75	Good
Dist 1	GARNERAVE	GARNER AVE	020	RIDER AVE	N SANBORN RD	A	C	2	1394	39	54,366	09/29/2020	75	Good
Dist 6	HANCOCKST	HANCOCK ST	15	LEXINGTON DR N. SIDE	LEXINGTON DR S. SIDE	A	R	2	2612	35	91,420	10/08/2020	75	Good
Dist 6	HARRODCIR	HARROD CIR	10	HARROD WAY	END	A	R	2	331	33	10,923	09/29/2020	75	Good
Dist 1&6	HEMINGWAYD	HEMINGWAY DR	010	E BORONDA RD	NANTUCKET BLVD	A	C	2	921	50	46,050	10/08/2020	75	Good
Dist 5	HOWECIR	HOWE CIR	10	HOWE DR	END	A	R	2	300	32	9,600	10/21/2020	75	Good
Dist 1	LAHONDACT	LA HONDA CT	020	RANCHERO DR	ALAMO WAY (S)	A	R	2	590	38	22,420	09/29/2020	75	Good
Dist 6	MANHATTAND	MANHATTAN DR	10	BROADWAY DR	MCKINNON ST	A	R	2	877	37	32,449	09/29/2020	75	Good
Dist 1	NEWCASTLED	NEWCASTLE DR	15	NANTUCKET BLVD	ROCKHAVEN CT	A	R	2	762	31	23,626	09/11/2020	75	Good
Dist 3	PAJAROWAY	PAJARO WAY	10	PAJARO ST	END	A	R	2	246	34	8,364	09/29/2020	75	Good
Dist 1	PENWICKCIR	PENWICK CIR	10	ROCKHAVEN CT	END	A	R	2	253	32	8,107	09/11/2020	75	Good
Dist 6	PRINCETONC	PRINCETON CIR	10	PRINCETON CT	END	A	R	2	175	31	5,425	09/29/2020	75	Good
Dist 6	PRINCETON1	PRINCETON CT	15	PENNSYLVANIA DR (W)	PENNSYLVANIA DR (E)	A	R	2	1271	33	41,943	09/29/2020	75	Good
Dist 6	RHINECIR	RHINE CIR	10	RIESLING WAY	END	A	R	2	240	33	7,920	09/29/2020	75	Good
Dist 1	ROCKHAVENC	ROCKHAVEN CT	15	NEWCASTLE DR (N)	NEWCASTLE DR (S)	A	R	2	2046	32	65,472	09/11/2020	75	Good
Dist 6	TEHAMACIR	TEHAMA CIR	10	RAINIER DR	END	A	R	2	414	32	13,251	10/06/2020	75	Good
Dist 6	TUDORWAY	TUDOR WAY	10	VICTORIA AVE	S END	A	R	2	420	33	13,860	09/29/2020	75	Good
Dist 6	WINDSORST	WINDSOR ST	15	CHARDONNAY DR	HARDEN PKWY	A	R	2	1049	37	38,849	09/29/2020	75	Good
Dist 1	ANDOVERCIR	ANDOVER CIR	10	NEWCASTLE DR	END	A	R	2	210	31	6,510	09/11/2020	74	Good
Dist 6	ARCADIAWAY	ARCADIA WAY	20	ARCADIA CT	NATIVIDAD RD	A	C	2	975	44	42,900	10/07/2020	74	Good
Dist 3	ARCHERST	ARCHER ST	210	RIKER ST	CAPITOL ST	A	R	2	320	32	10,240	10/26/2020	74	Good
Dist 6	ASTORCIR	ASTOR CIR	10	ASTOR WAY	END	A	R	2	226	31	7,006	09/29/2020	74	Good
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB10	E LAUREL DR	INDEPENDENCE BLVD	A	A	2	3904	32	124,944	10/22/2020	74	Good
Dist 6	COVENTRYST	COVENTRY ST	10	BARRICADE (S)	N END	A	R	2	2130	38	80,940	10/07/2020	74	Good
Dist 6	CREEKBRIDG	CREEKBRIDGE CIR	10	PROVINCETOWN DR	END	A	R	2	316	32	10,119	10/08/2020	74	Good
Dist 3	DELAVINAWA	DE LA VINA WAY	10	LOS OLIVOS DR	PASATIEMPO WAY	A	R	2	601	32	19,261	10/01/2020	74	Good
Dist 6	DORSETWAY	DORSET WAY	10	BUCKINGHAM DR	LANCASHIRE DR	A	R	2	509	34	17,306	10/22/2020	74	Good
Dist 2	EALISALST	E ALISAL ST	055	QUILLA ST/ SKYWAY BLVD	WILLIAMS RD	A	A	4	617	80	49,360	10/14/2020	74	Good
Dist 3	ESANLUISST	E SAN LUIS ST	090	FRONT ST	E END	A	C	2	560	32	17,920	10/29/2020	74	Good
Dist 3	ELVEECIR	ELVEE CIR	10	WORK ST	S END	A	R	2	379	42	15,918	09/29/2020	74	Good
Dist 6	ESSEXCIR	ESSEX CIR	10	WIMBLEDON AVE	END	A	R	2	221	32	7,088	10/07/2020	74	Good
Dist 5	ESTRADAWAY	ESTRADA WAY	15	SLOAT DR	END	A	R	2	1312	32	41,987	10/21/2020	74	Good
Dist 1	FREEDOMPKW	FREEDOM PKWY	040	TOWT STREET	WILLIAMS RD	A	C	4	1638	60	98,280	10/06/2020	74	Good
Dist 6	HARRODWAY	HARROD WAY	15	HAMPTON ST	ERCIA ST	A	R	2	976	33	32,208	09/29/2020	74	Good
Dist 6	HUDSONWAY	HUDSON WAY	15	MANHATTAN DR	END	A	R	2	545	33	17,985	09/29/2020	74	Good
Dist 6	HYANNISCIR	HYANNIS CIR	10	COVENTRY ST	END	A	R	2	176	32	5,639	10/07/2020	74	Good
Dist 2	JAMESST	JAMES ST	020	SMITH ST	S MADEIRA AVE	A	R	2	526	42	22,092	10/12/2020	74	Good
Dist 6	LAFAYETTEC	LAFAYETTE CIR	10	LAFAYETTE WAY	END	A	R	2	191	31	5,921	09/29/2020	74	Good
Dist 6	LAFAYETTEW	LAFAYETTE WAY	15	DELANCEY DR	BROADWAY DR	A	R	2	677	37	25,049	09/29/2020	74	Good
Dist 4	LAKEALY	LAKE ALY	10	MARKET WAY	E LAKE ST	P	R	2	677	20	13,540	10/19/2020	74	Good
Dist 4	MILLWAY	MILL WAY	10	SANSOME ST	GREENBRIAR WAY	A	R	2	321	32	10,273	10/14/2020	74	Good
Dist 5	NMAINST	N MAIN ST	020	COP 900' S/O RUSSEL RD	BORONDA RD	P	A	4	3798	78	296,244	10/30/2020	74	Good
Dist 5	OFARRELLCT	OFARRELL CT	10	LARKIN ST (N)	LARKIN ST (S)	A	R	2	1021	32	32,672	10/21/2020	74	Good
Dist 2	QUILLAST	QUILLA ST	15	E MARKET ST	WILLIAMS RD	A	R	2	1418	35	49,630	10/13/2020	74	Good
Dist 6	RIESLINGWA	RIESLING WAY	15	RHINE CIR	BURGUNDY WAY	A	R	2	915	32	29,304	09/29/2020	74	Good

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 5	SLOATCIR	SLOAT CIR	10	SLOAT DR	END	A	R	2	350	32	11,200	10/21/2020	74	Good
Dist 6	SUFFIELDCI	SUFFIELD CIR	10	HANCOCK ST	END	A	R	2	294	31	9,114	10/08/2020	74	Good
Dist 2	TOWTST	TOWT ST	050	GARNER AVE	E LAUREL DR	A	C	2	2085	52	108,420	10/14/2020	74	Good
Dist 6	VICTORIACI	VICTORIA CIR	10	VICTORIA AVE	END	A	R	2	273	33	9,009	09/29/2020	74	Good
Dist 6	WESTMINSTE	WESTMINSTER DR	10	MCKINNON ST	CAMBRIDGE CT	A	R	2	1642	38	62,396	10/06/2020	74	Good
Dist 6	WESTPORTCI	WESTPORT CIR	10	INGLEWOOD ST	END	A	R	2	104	66	6,873	10/07/2020	74	Good
Dist 3	WORKST	WORK ST	30	WORK CIR	ELVEE DR	A	A	4	1922	62	119,164	09/29/2020	74	Good
Dist 6	ABBEYWAY	ABBEY WAY	10	CROMWELL DR	GLADSTONE WAY	A	R	2	248	33	8,184	09/29/2020	73	Good
Dist 5	ADOBEDR	ADOBE DR	15	SLOAT DR	VICTOR ST	A	R	2	1021	40	40,845	10/21/2020	73	Good
Dist 6	CABERNETCI	CABERNET CIR	10	CABERNET WAY	END	A	R	2	190	31	5,890	09/29/2020	73	Good
Dist 6	CHARDONNAY	CHARDONNAY CIR	10	CHARDONNAY DR	END	A	R	2	200	31	6,200	09/29/2020	73	Good
Dist 6	CROMWELLCI	CROMWELL CIR	10	CROMWELL DR	END	A	R	2	128	32	4,104	09/29/2020	73	Good
Dist 6	GLADSTONEW	GLADSTONE WAY	15	CHARDONNAY DR	END	A	R	2	1203	33	39,699	09/29/2020	73	Good
Dist 2	HAVENALY	HAVEN ALY	040	BELLEHAVEN ST	N. END	P	R	2	85	21	1,785	10/14/2020	73	Good
Dist 2	JAMESST	JAMES ST	010	S WOOD ST	SMITH ST	A	R	2	385	41	15,785	10/12/2020	73	Good
Dist 3	LASCRUCESW	LAS CRUCES WAY	15	SAN BLANCO DR	W END	A	R	2	396	32	12,697	10/01/2020	73	Good
Dist 6	LENNOXWAY	LENNOX WAY	15	TUDOR WAY	VICTORIA AVE	A	R	2	1150	33	37,950	09/29/2020	73	Good
Dist 4	NDAVISRD	N DAVIS RD	150SB	SLOAT DR	W ROSSI ST	O	A	2	751	32	24,032	10/26/2020	73	Good
Dist 2	PALOMAAVE	PALOMA AVE	40	MIAMI ST	MARGARET ST	A	R	2	747	34	25,398	10/12/2020	73	Good
Dist 3	PASATIEMPO	PASATIEMPO WAY	15	N. END	S. END	A	R	2	627	32	20,064	10/01/2020	73	Good
Dist 6	PLACERWAY	PLACER WAY	10	WESTMINSTER DR	MENDOCINO DR	A	R	2	698	40	27,920	10/06/2020	73	Good
Dist 6	RHINECT	RHINE CT	10	RIESLING WAY (W)	RIESLING WAY (E)	A	R	2	1089	33	35,955	09/29/2020	73	Good
Dist 3	SSANBORNRD	S SANBORN RD	020NB	RAILROAD Overpass (PCC START)	RAILROAD Overpass (PCC END)	P	A	2	850	20	17,000	11/03/2020	73	Good
Dist 3	SSANBORNRD	S SANBORN RD	SB060	RAILROAD Overpass (PCC START)	RAILROAD Overpass (PCC END)	P	A	2	850	20	17,000	11/03/2020	73	Good
Dist 3	SANFERNAN1	SAN FERNANDO DR	15	WILGART WAY	LA MESA DR	A	R	2	1617	32	51,752	09/29/2020	73	Good
Dist 6	SUTTONWAY	SUTTON WAY	15	DELANCEY DR (W)	DELANCEY DR (N)	A	R	2	916	33	30,228	09/29/2020	73	Good
Dist 6	TOKAYCIR	TOKAY CIR	10	CABERNET WAY	END	A	R	2	130	31	4,030	09/29/2020	73	Good
Dist 6	TUDORWAY	TUDOR WAY	20	LENNOX WAY	TUDOR WAY	A	R	2	860	33	28,380	09/29/2020	73	Good
Dist 3	UNIVERSITY	UNIVERSITY AVE	10	AMBROSE DR	W ACACIA ST	A	R	2	1555	37	57,535	10/01/2020	73	Good
Dist 4	VALLEJOST	VALLEJO ST	20	TAMPICO AVE	GRANADA AVE	A	R	2	177	32	5,679	10/15/2020	73	Good
Dist 6	WATERBURYW	WATERBURY WAY	10	CANTERBURY ST	LEXINGTON DR	A	R	2	262	32	8,393	10/08/2020	73	Good
Dist 5	ALVARADODR	ALVARADO DR	15	SHERMAN DR	END	A	R	2	1570	32	50,261	10/21/2020	72	Good
Dist 2	ANDINADR	ANDINA DR	15	COUNTRYSIDE DR	ARGENTINE DR	A	R	2	821	37	30,377	10/12/2020	72	Good
Dist 6	ARCADIAWAY	ARCADIA WAY	10	EL DORADO DR	ARCADIA CT	A	C	2	1850	42	77,700	10/07/2020	72	Good
Dist 5	BROOKSRD	BROOKS RD	10	WESTRIDGE PKWY	BORONDA RD	A	C	2	884	32	28,290	10/27/2020	72	Good
Dist 6	CHURCHILLW	CHURCHILL WAY	15	CROMWELL DR (W)	CROMWELL DR (N)	A	R	2	1057	33	34,881	09/29/2020	72	Good
Dist 6	CROMWELLDR	CROMWELL DR	15	EL DORADO DR	VICTORIA AVE	A	R	2	1361	37	50,357	09/29/2020	72	Good
Dist 6	GAMAYWAY	GAMAY WAY	15	RIESLING WAY	END	A	R	2	1017	37	37,629	09/29/2020	72	Good
Dist 2	KENNETHAVE	KENNETH AVE	020	E LAUREL DR	E MARKET ST	O	R	2	425	36	15,300	10/13/2020	72	Good
Dist 3	LAJOLLACIR	LA JOLLA CIR	10	LA JOLLA WAY	END	A	R	2	337	32	10,784	10/01/2020	72	Good
Dist 3	LAJOLLAWAY	LA JOLLA WAY	10	LA CANADA WAY	LOS OLIVOS DR	A	R	2	927	32	29,664	10/01/2020	72	Good
Dist 5	LARKINST	LARKIN ST	045	VICTOR ST	RICO ST	A	C	2	756	43	32,508	10/21/2020	72	Good
Dist 1	LNGFLWCIR	LONGFELLOW CIR	10	LONGFELLOW DR	END	A	R	2	393	31	12,183	09/11/2020	72	Good
Dist 1	MAEAVE	MAE AVE	010	TOWT ST	D ST	A	R	2	477	38	18,126	10/05/2020	72	Good
Dist 4	MASSOLOCT	MASSOLO CT	15	VINCENT PL (W)	VINCENT PL (E)	A	R	2	1235	32	39,522	10/14/2020	72	Good
Dist 1	MELVILLEST	MELVILLE ST	10	LONGFELLOW DR	WHITMAN ST	A	R	2	1070	31	33,170	09/11/2020	72	Good
Dist 3	SANDIEGODR	SAN DIEGO DR	15	SANTA CRUZ AVE	SAN BRUNO WAY	A	R	2	831	32	26,611	09/29/2020	72	Good
Dist 4&5	SLOATDR	SLOAT DR	10	N DAVIS RD	POTRERO WAY	A	R	2	810	38	30,780	10/21/2020	72	Good

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Dist 2	SURREYWAY	SURREY WAY	10	COUNTRYSIDE DR	ANDINA DR	A	R	2	963	32	30,825	10/12/2020	72	Good
Dist 6	ZINFANDELW	ZINFANDEL WAY	10	CHARDONNAY DR	WINDSOR ST	A	R	2	835	33	27,555	09/29/2020	72	Good
Dist 3	ABBOTTST	ABBOTT ST	SB060	JOHNSON AVE	E ROMIE LN	A	A	2	262	36	9,460	11/02/2020	71	Good
Dist 2	AIRPORTBLV	AIRPORT BLVD	050	HANSEN ST	SW END	A	C	2	385	48	18,480	10/13/2020	71	Good
Dist 5	BORONDARD	BORONDA RD	120	135' NW OF N DAVIS RD (CITY LIMIT)	N DAVIS RD	A	R	2	135	32	4,320	10/27/2020	71	Good
Dist 5	BUSHST	BUSH ST	10	RICO ST	HYDE ST	A	R	2	1294	32	41,408	10/21/2020	71	Good
Dist 6	CHABLISCIR	CHABLIS CIR	10	MERLOT WAY	END	A	R	2	259	31	8,029	09/29/2020	71	Good
Dist 6	CHARDONNA1	CHARDONNAY DR	15	CROMWELL DR	MCKINNON ST	A	R	2	2365	41	96,965	09/29/2020	71	Good
Dist 3	COLERIDGED	COLERIDGE DR	10	LOS OLIVOS ST	RIKER ST	A	R	2	1411	37	52,207	10/01/2020	71	Good
Dist 4	ELAURELDR	E LAUREL DR	120WB	CONSTITUTION BLVD	NATIVIDAD RD	A	A	2	1907	35	66,745	10/22/2020	71	Good
Dist 1	GARNERPVT	GARNER AVE	120PB	GARNER AVE PRIVATE A (EAST)	GARNER AVE PRIVATE A (WEST)	A	R	2	585	22	12,870	09/29/2020	71	Good
Dist 3	HARMONYLN	HARMONY LN	10	E SAN LUIS ST	E ALISAL ST	P	R	2	679	15	10,185	11/02/2020	71	Good
Dist 4	LOMBARDCIR	LOMBARD CIR	10	LOMBARD ST	END	A	R	2	349	32	11,185	10/14/2020	71	Good
Dist 6	MCKINNONST	MCKINNON ST	40	CHARDONNAY DR	E BORONDA RD	A	C	2	770	42	32,340	10/22/2020	71	Good
Dist 6	MCKINNONST	MCKINNON ST	50	E BORONDA RD	N END	A	C	2	1138	37	42,106	10/22/2020	71	Good
Dist 6	MERLOTCIR	MERLOT CIR	10	MERLOT WAY	END	A	R	2	231	31	7,161	09/29/2020	71	Good
Dist 6	MERLOTWAY	MERLOT WAY	15	CHARDONNAY DR	WINDSOR ST	A	R	2	1214	33	40,062	09/29/2020	71	Good
Dist 3	PARKROW	PARK ROW	10	W ROMIE LN	W ACACIA ST	A	R	2	737	32	23,598	03/19/2019	71	Good
Dist 5	RICOCIR	RICO CIR	10	LARKIN ST	END	A	R	2	455	36	16,380	10/21/2020	71	Good
Dist 3	SANBLANCOD	SAN BLANCO DR	25	PICO BLANCO	LAS CRUCES WAY	A	R	2	974	37	36,038	10/01/2020	71	Good
Dist 5	SLOATDR	SLOAT DR	20	POTRERO WAY	COLTON DR	A	R	2	826	38	31,388	10/21/2020	71	Good
Dist 6	SUTTONCIR	SUTTON CIR	10	SUTTON WAY	END	A	R	2	190	31	5,890	09/29/2020	71	Good
Dist 5	VANBURENAV	VAN BUREN AVE	030	EISENHOWER ST	RUSSEL RD	A	C	2	1255	42	52,710	10/20/2020	71	Good
Dist 6	VICTORIAAV	VICTORIA AVE	15	WINDSOR ST	EL DORADO DR	A	R	2	1643	37	60,791	09/29/2020	71	Good
Dist 1	WHITMANST	WHITMAN ST	15	NANTUCKET BLVD	LONGFELLOW DR	A	R	2	480	37	17,760	09/11/2020	71	Good
Dist 2	AIRPORTBLV	AIRPORT BLVD	030	ROY DIAZ ST	TERVEN AVE	A	A	4	890	50	44,500	10/13/2020	70	Fair
Dist 3	CALIFORNIA	CALIFORNIA ALY	010	E GABILAN ST	E ALISAL ST	P	R	2	765	20	15,300	11/02/2020	70	Fair
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB20	NANTUCKET BLVD	BEACON HILL DR (N)	A	A	2	886	34	30,124	10/22/2020	70	Fair
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB70	INDEPENDENCE BLVD	E LAUREL DR	A	A	2	3904	32	124,944	10/22/2020	70	Fair
Dist 6	DELANCEYDR	DELANCEY DR	15	BROADWAY DR	END	A	R	2	1675	37	61,975	09/29/2020	70	Fair
Dist 4	EMENKEST	E MENKE ST	10	N MAIN ST	BRIDGE ST	A	R	2	341	42	14,322	10/14/2020	70	Fair
Dist 3	ESANJOAQUI	E SAN JOAQUIN ST	10	S MAIN ST	PAJARO ST	C	R	2	890	36	32,040	10/29/2020	70	Fair
Dist 4	GRIFFINST	GRIFFIN ST	25	E MARKET ST	E ALISAL ST	A	A	2	2005	38	76,190	10/19/2020	70	Fair
Dist 3	GROVEST	GROVE ST	010	ALAMEDA AVE	START OF LOOP	P	R	2	360	34	12,240	10/28/2020	70	Fair
Dist 6	KENTCIR	KENT CIR	10	KENT ST	END	A	R	2	155	34	5,270	10/07/2020	70	Fair
Dist 6	KENTST	KENT ST	10	KLAMATH DR	KENT CIR	A	R	2	734	37	27,158	10/07/2020	70	Fair
Dist 6	KENTST	KENT ST	20	KENT CIR	ARCADIA WAY	A	R	2	367	38	13,946	10/07/2020	70	Fair
Dist 3	LACANADAWA	LA CANADA WAY	20	LA JOLLA WAY	NE END	A	R	2	430	32	13,760	10/01/2020	70	Fair
Dist 1	LAHONDACT	LA HONDA CT	010	ALAMO WAY (N)	RANCHERO DR	A	R	2	935	32	29,920	09/29/2020	70	Fair
Dist 3	LOSOLIVOSD	LOS OLIVOS DR	55	SAN BLANCO DR	W BLANCO RD	A	C	2	1693	37	62,641	10/01/2020	70	Fair
Dist 4	MCALLISTE1	MCALLISTER ST	15	BRIGHTON ST	VICTOR ST	A	R	2	1649	32	52,780	10/14/2020	70	Fair
Dist 2	MOFFETTST	MOFFETT ST	010	AIRPORT BLVD	LA GUARDIA ST	A	C	2	3225	41	132,225	10/13/2020	70	Fair
Dist 2	MOFFETTST	MOFFETT ST	020	LA GUARDIA ST	VANDENBERG ST	A	C	2	1261	41	51,701	10/13/2020	70	Fair
Dist 4&5	NMAINST	N MAIN ST	NB200	SANTA CLARA AVE	W BERNAL DR	A	A	3	729	36	26,244	10/27/2020	70	Fair
Dist 3	RICOST	RICO ST	010	W LAKE ST	W ROSSI ST	A	C	2	545	41	22,345	10/26/2020	70	Fair
Dist 4	ROSSIALY	ROSSI ALY	020	START PCC	E ROSSI ST	P	R	1	350	14	4,900	10/26/2020	70	Fair
Dist 2	SANBENITOS	SAN BENITO ST	010	S WOOD ST	S MADEIRA AVE	A	R	2	900	42	37,800	10/12/2020	70	Fair
Dist 3	SANMIGUELA	SAN MIGUEL AVE	030	ALAMEDA AVE	SAN FERNANDO DR	A	C	2	739	35	25,865	11/02/2020	70	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 4	SHERWOODDR	SHERWOOD DR	040	101 Overpass (PCC END)	185 Ft S/O SHERWOOD PL	A	A	4	850	50	42,500	10/28/2020	70	Fair
Dist 6	BURGUNDYWA	BURGUNDY WAY	15	CABERNET WAY	CHARDONNAY DR	A	R	2	422	37	15,614	09/29/2020	69	Fair
Dist 6	CABERNETWA	CABERNET WAY	15	CHARDONNAY DR	BURGUNDY WAY	A	R	2	1103	33	36,399	09/29/2020	69	Fair
Dist 4	CHAPARRALS	CHAPARRAL ST	035	LINWOOD DR	NATIVIDAD RD	A	C	2	2486	38	94,468	10/15/2020	69	Fair
Dist 6	CHURCHILLC	CHURCHILL CIR	10	CHURCHILL WAY	END	A	R	2	244	33	8,052	09/29/2020	69	Fair
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB40	LAS CASITAS DR	FREEDOM PKWY	A	A	2	1202	34	40,868	10/22/2020	69	Fair
Dist 2	CROSSAVE	CROSS AVE	010	PALOMA AVE (E)	E MARKET ST	A	R	2	465	38	17,670	10/12/2020	69	Fair
Dist 6	HIDDENCREE	HIDDEN CREEK CIR	10	PROVINCETOWN DR	END	A	R	2	188	32	6,036	10/08/2020	69	Fair
Dist 6	JULIAAVE	JULIA AVE	10	WHEELER DR	CHRISTENSEN AVE	A	R	2	661	32	21,164	10/06/2020	69	Fair
Dist 5	LARKINST	LARKIN ST	035	KEARNY WAY	VICTOR ST	A	C	2	1306	43	56,158	10/21/2020	69	Fair
Dist 5	LOHMANST	LOHMAN ST	15	EISENHOWER ST	END	A	R	2	700	37	25,900	10/20/2020	69	Fair
Dist 1	LNGFLWDR	LONGFELLOW DR	010	HEMINGWAY DR	WHITMAN CIR	A	R	2	969	37	35,853	09/11/2020	69	Fair
Dist 1&6	NANTUCKETB	NANTUCKET BLVD	30	DECLARATION ST	CONSTITUTION BLVD	A	C	2	1122	44	49,368	10/08/2020	69	Fair
Dist 6	PROVINCET1	PROVINCETOWN DR	40	PROVINCETOWN WAY	SW END	A	R	2	404	34	13,736	10/08/2020	69	Fair
Dist 4	RAGSDALECT	RAGSDALE CT	10	E MARKET ST	END	P	R	2	99	18	1,782	10/19/2020	69	Fair
Dist 3	SANJACINTO	SAN JACINTO DR	10	KENTFIELD DR	MONTECITO WAY	A	R	2	1052	32	33,665	10/01/2020	69	Fair
Dist 4	SANTATERE1	SANTA TERESA WAY	15	E LAUREL DR	GRANADA AVE	A	R	2	1619	37	59,903	10/15/2020	69	Fair
Dist 2	SCONBERGPK	SCONBERG PKWY	10	ALISAL RD	MONTE BELLA BLVD	A	A	2	875	32	28,000	10/12/2020	69	Fair
Dist 5	SHERMANDR	SHERMAN DR	15	LARKIN ST	END	A	R	2	1727	37	63,899	10/21/2020	69	Fair
Dist 2	SMITHST	SMITH ST	15	JAMES ST	E ALISAL ST	A	R	2	911	24	21,864	10/12/2020	69	Fair
Dist 4	STALBANSWA	ST ALBANS WAY	10	CIRCLE DR	ST ALBANS CT	A	R	2	576	32	18,463	10/16/2020	69	Fair
Dist 3	UNIVERSITY	UNIVERSITY AVE	20	W ACACIA ST	CENTRAL AVE	A	R	2	1751	37	64,787	10/01/2020	69	Fair
Dist 5	WLAURELDR	W LAUREL DR	035	TYLER ST	101 N ON/OFF RAMP	A	A	4	1104	68	75,072	10/28/2020	69	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB040	S SANBORN RD	E ROMIE LN	A	A	2	1076	36	38,743	10/30/2020	68	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB060	JOHNSON AVE	LOS PALOS DR	O	A	2	1269	36	45,684	10/30/2020	68	Fair
Dist 1	ANTIGUAAVE	ANTIGUA AVE	15	RIDER AVE	N SANBORN RD	A	C	2	1537	37	56,886	10/05/2020	68	Fair
Dist 5	CHEROKEEDR	CHEROKEE DR	010	N MAIN ST	MADRID ST	A	C	2	2035	42	85,470	10/20/2020	68	Fair
Dist 6	CHRISTENSE	CHRISTENSEN AVE	15	E ALVIN DR	JULIA AVE	A	R	2	1888	38	71,744	10/06/2020	68	Fair
Dist 2	DELMONTEAV	DEL MONTE AVE	050	WILLIAMS RD	END	A	C	2	1084	42	45,528	10/09/2020	68	Fair
Dist 2	EMARKETST	E MARKET ST	040	SHERWOOD DR/ MARKET WAY	SIMAS ST/ GRIFFIN ST	A	A	4	1550	56	86,800	10/23/2020	68	Fair
Dist 4	EMARKETST	E MARKET ST	120WB	BEGIN PCC (S/O MARKET WAY)	END PCC (E/O GREENFIELD ALLEY)	P	A	4	575	48	27,600	10/28/2020	68	Fair
Dist 3	ELPASOPL	EL PASO PL	15	CARMEL AVE	ALAMEDA AVE	P	R	2	608	32	19,456	10/28/2020	68	Fair
Dist 3	GREENWOODP	GREENWOOD PL	020	WOODSIDE DR	NORTH END	A	R	2	401	32	12,851	09/30/2020	68	Fair
Dist 2	LAGUARDIAS	LA GUARDIA ST	10	VANDENBERG ST	MOFFETT ST	A	R	2	1889	41	77,449	10/13/2020	68	Fair
Dist 5	LARKINST	LARKIN ST	015	W END	N DAVIS RD	A	C	2	344	37	12,728	10/21/2020	68	Fair
Dist 5	LEGIONALY	LEGION ALY	10	ROCHEX AVE	W LAUREL DR	P	R	2	451	20	9,023	10/28/2020	68	Fair
Dist 1	MANZANOWAY	MANZANO WAY	20	NOGAL DR	MANZANO CIR	A	R	2	407	31	12,631	09/28/2020	68	Fair
Dist 3	MELODYLN	MELODY LN	10	W GABILAN ST	W ALISAL ST	P	R	2	669	15	10,035	11/02/2020	68	Fair
Dist 4	MEYERSCT	MEYERS CT	10	N HEBBRON AVE (S)	N HEBBRON AVE (N)	P	R	2	1015	30	30,452	10/19/2020	68	Fair
Dist 1&6	NANTUCKETB	NANTUCKET BLVD	20	HEMINGWAY DR	DECLARATION ST	A	C	2	1851	43	79,593	10/08/2020	68	Fair
Dist 6	PENNSYLVAN	PENNSYLVANIA DR	15	MCKINNON ST	END	A	R	2	1601	41	65,641	09/29/2020	68	Fair
Dist 1	PICKFORDWA	PICKFORD WAY	10	DECLARATION ST	ROCKHAVEN CT	A	R	2	258	32	8,261	09/11/2020	68	Fair
Dist 6	PROVINCET1	PROVINCETOWN DR	30	INDEPENDENCE BLVD	PROVINCETOWN WAY	A	R	2	907	32	29,024	10/08/2020	68	Fair
Dist 6	PROVINCET2	PROVINCETOWN WAY	10	HIDDEN CREEK CIR	INDEPENDENCE BLVD	A	R	2	144	37	5,328	10/08/2020	68	Fair
Dist 3	SANFERNAND	SAN FERNANDO CIR	10	SAN FERNANDO DR	END	A	R	2	252	32	8,089	09/29/2020	68	Fair
Dist 3	SANMIGUELA	SAN MIGUEL AVE	040	SAN FERNANDO DR	SAN MATEO DR	A	C	2	1137	38	43,206	11/02/2020	68	Fair
Dist 2	SANTAMARIA	SANTA MARIA ST	15	S WOOD ST	S MADEIRA AVE	A	R	2	899	42	37,758	10/12/2020	68	Fair
Dist 6	SOLANOWAY	SOLANO WAY	10	E ALVIN DR	MENDOCINO DR	A	R	2	245	37	9,065	09/29/2020	68	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	WBLANCORD	W BLANCO RD	EB030	RIKER ST	PADRE DR	O	A	2	1250	30	37,500	10/29/2020	68	Fair
Dist 3	WBLANCORD	W BLANCO RD	EB040	PADRE DR	S MAIN ST	O	A	2	649	32	20,780	10/29/2020	68	Fair
Dist 3	WSANLUISST	W SAN LUIS ST	15	SALINAS ST	MAIN ST	P	A	2	353	32	11,310	10/29/2020	68	Fair
Dist 6	WIMBLEDONA	WIMBLEDON AVE	40	WIMBLEDON WAY	CHELSEA CT	A	R	2	237	37	8,769	10/07/2020	68	Fair
Dist 6	WIMBLEDONC	WIMBLEDON CIR	20	WIMBLEDON AVE	END	A	R	2	273	37	10,101	10/07/2020	68	Fair
Dist 6	WIMBLEDONW	WIMBLEDON WAY	10	WIMBLEDON AVE	ARCADIA WAY	A	R	2	247	38	9,386	10/07/2020	68	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB070	LOS PALOS DR	ALAMEDA AVE	O	A	2	1316	36	47,376	10/30/2020	67	Fair
Dist 2	ARGENTINEP	ARGENTINE PL	10	ARGENTINE DR	END	A	R	2	435	32	13,920	10/12/2020	67	Fair
Dist 3	CALIFORNIA	CALIFORNIA ALY	020	E ALISAL ST	E SAN LUIS ST	C	R	2	668	14	9,352	11/02/2020	67	Fair
Dist 3	CHAUCERDR	CHAUCER DR	15	W END	E END	A	R	2	2011	38	76,418	10/01/2020	67	Fair
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB60	BEACON HILL DR (N)	RHODE ISLAND ST	A	A	2	877	34	29,818	10/22/2020	67	Fair
Dist 3&4	EALISALST	E ALISAL ST	110WB	KERN ST	START PCC W/O PRADER ST	A	A	2	1865	28	52,220	10/29/2020	67	Fair
Dist 6	EBORONDARD	E BORONDA RD	WB010	DARTMOUTH WAY	SAN JUAN GRADE RD	O	A	2	977	40	39,080	10/22/2020	67	Fair
Dist 4	EMARKETST	E MARKET ST	080	N SANBORN RD	TOWT ST	A	A	4	1658	60	99,480	10/23/2020	67	Fair
Dist 4	ELLISCIR	ELLIS CIR	10	FULTON WAY	END	A	R	2	214	32	6,865	10/14/2020	67	Fair
Dist 3	PAJAROST	PAJARO ST	010	E MARKET ST	JOHN ST	A	A	2	2708	50	135,400	11/03/2020	67	Fair
Dist 3	PELLETTAVE	PELLETT AVE	15	S SANBORN RD	VERTIN AVE	A	C	2	1062	41	43,542	09/28/2020	67	Fair
Dist 5	PRADOST	PRADO ST	20	PEREZ ST	NE END	A	R	2	665	32	21,284	10/20/2020	67	Fair
Dist 3	PRIMAVERAS	PRIMAVERA ST	15	KIPLING ST	COLERIDGE DR	A	R	2	705	37	26,085	10/01/2020	67	Fair
Dist 4	RAGSDALECT	RAGSDALE CT	20	ROOSEVELT ST	RAGSDALE CT	P	R	2	332	30	9,960	10/19/2020	67	Fair
Dist 3	SANJUANDR	SAN JUAN DR	20	SAN MIGUEL AVE (E)	SAN MIGUEL DR (W)	A	C	2	2084	32	66,688	09/29/2020	67	Fair
Dist 3	SANPEDROST	SAN PEDRO ST	10	PAJARO ST	SAN CARLOS DR	A	C	2	1208	26	31,408	09/29/2020	67	Fair
Dist 4	STCHARLESP	ST CHARLES PL	10	ST CHARLES WAY	END	A	R	2	187	32	5,984	10/16/2020	67	Fair
Dist 4	STOCKTONST	STOCKTON ST	15	POWELL ST	W ROSSI ST	A	R	2	1245	35	43,575	10/14/2020	67	Fair
Dist 4	TAMPICOAVE	TAMPICO AVE	80	VALLEJO ST	ELWOOD ST	A	R	2	489	32	15,648	10/15/2020	67	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB080	ALAMEDA AVE	MAPLE ST	O	A	2	892	36	32,112	10/30/2020	66	Fair
Dist 3	ARCHERST	ARCHER ST	110	HOMESTEAD AVE	WEST ST	P	R	2	640	40	25,600	10/26/2020	66	Fair
Dist 3	BRUNKENAVE	BRUNKEN AVE	10	SPICER ST	CHAMBERLAIN ST	A	C	2	567	42	23,814	09/29/2020	66	Fair
Dist 6	CHELSEACT	CHELSEA CT	10	WIMBLEDON AVE (W)	WIMBLEDON AVE (E)	A	R	2	1476	32	47,232	10/07/2020	66	Fair
Dist 5	CHEROKEEDR	CHEROKEE DR	050	W AVLIN DR	INCA WAY	A	C	2	883	38	33,554	10/20/2020	66	Fair
Dist 3&4	EALISALST	E ALISAL ST	170EB	END PCC	KERN ST	A	A	2	1865	28	52,220	10/29/2020	66	Fair
Dist 4	EBERNALDR	E BERNAL DR	20	ROSARITA DR	ALPINE DR	A	A	2	1609	53	85,277	10/23/2020	66	Fair
Dist 4	EBERNALDR	E BERNAL DR	40	10 E BERNAL DR	S END	A	R	2	264	32	8,448	10/23/2020	66	Fair
Dist 6	EBORONDARD	E BORONDA RD	020EB	SAN JUAN GRADE RD	DARTMOUTH WAY	A	A	2	977	40	39,080	10/22/2020	66	Fair
Dist 5	FLINTWAY	FLINT WAY	10	LARKIN ST	COLTON DR	A	R	2	259	32	8,308	10/21/2020	66	Fair
Dist 3	FRONTST	FRONT ST	075	JOHN ST	MAPLE ST	P	C	2	979	32	31,328	11/03/2020	66	Fair
Dist 3	GEILST	GEIL ST	20	RIKER ST	S MAIN ST	P	C	2	1345	40	53,800	10/27/2020	66	Fair
Dist 5	NMAINST	N MAIN ST	010	RUSSELL RD	COP 900' S/O RUSSELL RD	A	A	4	900	85	76,500	10/30/2020	66	Fair
Dist 4&5	NMAINST	N MAIN ST	095SB	NAVAJO DR	W CURTIS ST	O	A	3	1433	32	45,856	10/27/2020	66	Fair
Dist 3	PAJAROST	PAJARO ST	070	SAN PEDRO ST	E BLANCO RD	C	A	2	1166	32	37,312	10/03/2020	66	Fair
Dist 5	QUINTEROCI	QUINTERO CIR	15	CHEROKEE DR	END	A	R	2	530	32	16,960	10/20/2020	66	Fair
Dist 3	SANMATEOPL	SAN MATEO PL	10	SAN MATEO DR	END	A	R	2	201	32	6,432	09/29/2020	66	Fair
Dist 3	SANMIGUELC	SAN MIGUEL CIR	10	SAN MIGUEL AVE	END	A	R	2	188	26	4,888	09/29/2020	66	Fair
Dist 3	VICTORWAY	VICTOR WAY	15	WEST END	EAST END	A	R	2	605	42	25,410	10/26/2020	66	Fair
Dist 4	VINCENTPL	VINCENT PL	15	MASSOLO CT (W)	RICO ST	A	R	2	579	34	19,698	10/14/2020	66	Fair
Dist 5	WLAURELDR	W LAUREL DR	025	PARK SIDE ST	TYLER ST	A	A	4	1095	68	74,460	10/28/2020	66	Fair
Dist 3	WILGARTWAY	WILGART WAY	35	E ROMIE LN	SAN MIGUEL AVE	C	R	2	1442	32	46,144	10/03/2020	66	Fair
Dist 6	WIMBLEDONA	WIMBLEDON AVE	30	COP 375' E/O ESSEX WAY	WIMBLEDON WAY	A	R	2	480	38	18,240	10/07/2020	66	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 1	ALAMOWAY	ALAMO WAY	20	LA HONDA CT (N)	GARNER AVE	A	R	2	1378	37	50,986	09/29/2020	65	Fair
Dist 6	ARCADIACT	ARCADIA CT	10	ARCADIA WAY	ARCADIA WAY	A	R	2	1292	32	41,361	10/07/2020	65	Fair
Dist 1	CAMILLECT	CAMILLE CT	10	ATLANTIC ST	END	A	R	2	194	25	4,850	10/05/2020	65	Fair
Dist 1	CARICT	CARI CT	10	ATLANTIC ST	END	A	R	2	194	25	4,850	10/05/2020	65	Fair
Dist 4&5	CASENTINIS	CASENTINI ST	10	RICO ST	N MAIN ST	A	C	2	2331	42	97,941	10/22/2020	65	Fair
Dist 4	CIRCLEDR	CIRCLE DR	010	N MADEIRA AVE	N SANBORN RD	A	R	2	2835	37	104,895	10/15/2020	65	Fair
Dist 3	COLERIDGED	COLERIDGE DR	20	RIKER ST	SE END	A	R	2	425	32	13,600	10/01/2020	65	Fair
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB40	LAS CASITAS DR	FREEDOM PKWY	A	A	2	1189	34	40,426	10/22/2020	65	Fair
Dist 1	CTTNWDDR	COTTONWOOD DR	010	COTTONWOOD CT	END	A	R	2	1145	33	37,785	09/28/2020	65	Fair
Dist 4	EBERNALDR	E BERNAL DR	30	ALPINE DR	MAIN ST	O	A	2	471	53	24,963	10/23/2020	65	Fair
Dist 3	HAPPPL	HAPP PL	10	W MARKET ST	END	A	R	2	256	49	12,544	10/26/2020	65	Fair
Dist 3	HARVESTALY	HARVEST ALY	10	WINHAM ST	HARVEST ST	P	R	2	275	15	4,125	10/29/2020	65	Fair
Dist 5	JACKSONST	JACKSON ST	10	VAN BUREN AVE	SWANER AVE	A	R	2	1286	32	41,179	10/20/2020	65	Fair
Dist 6	LANCASHIR1	LANCASHIRE DR	10	BUCKINGHAM DR	DORSET WAY	A	R	2	821	32	26,280	10/07/2020	65	Fair
Dist 6	LANCASHIR1	LANCASHIRE DR	30	LANCASHIRE CIR	CASCADE WAY	A	R	2	207	32	6,624	10/07/2020	65	Fair
Dist 5	LEESEDR	LEESE DR	10	SHERMAN DR	ALVARADO DR	A	R	2	1076	32	34,455	10/21/2020	65	Fair
Dist 3	LOSLAURELE	LOS LAURELES AVE	10	SANTA LUCIA AVE	EL PASO PL	P	R	2	794	34	26,996	10/28/2020	65	Fair
Dist 3	LOYOLADR	LOYOLA DR	25	UNIVERSITY AVE	ORINDA WAY	A	R	2	2667	37	98,679	10/01/2020	65	Fair
Dist 3	LUTHERWAY	LUTHER WAY	10	PICO BLANCO	W BLANCO RD	A	R	2	420	23	9,660	10/01/2020	65	Fair
Dist 2	MACHADOWAY	MACHADO WAY	10	ALMA AVE	KIMMEL ST	A	R	2	467	32	14,944	10/13/2020	65	Fair
Dist 1	MSSCHUCIR	MASSACHUSETTS CIR	10	MASSACHUSETTS DR	END	A	R	2	235	33	7,755	09/10/2020	65	Fair
Dist 4	NMAINDR	N MAIN DR	10	CHAPARRAL ST	END	O	R	2	514	32	16,477	10/15/2020	65	Fair
Dist 3	SANRAMONCI	SAN RAMON CIR	10	PAJARO ST	END	C	R	2	197	32	6,329	10/03/2020	65	Fair
Dist 5	SHERMANCIR	SHERMAN CIR	10	SHERMAN DR	END	A	R	2	260	32	8,320	10/21/2020	65	Fair
Dist 4	STALBANSCT	ST ALBANS CT	15	ST EDWARDS AVE	CIRCLE DR	A	R	2	855	37	31,660	10/16/2020	65	Fair
Dist 4	STAUGUSTIN	ST AUGUSTINE DR	10	ST REGIS WAY	ST CHARLES WAY	A	R	2	1632	32	52,247	10/16/2020	65	Fair
Dist 4	STEDWARDSA	ST EDWARDS AVE	15	E LAUREL DR	CIRCLE DR	A	C	2	2688	32	86,042	10/16/2020	65	Fair
Dist 3	VILLAST	VILLA ST	20	WILSON ST	W MARKET ST	A	C	2	1105	38	41,990	10/26/2020	65	Fair
Dist 3	WBLANCORD	W BLANCO RD	EB010	LUTHER WAY	LOS OLIVOS DR	O	A	2	1383	30	41,490	10/29/2020	65	Fair
Dist 3	WBLANCORD	W BLANCO RD	EB020	LOS OLIVOS DR	RIKER ST	O	A	2	1431	30	42,930	10/29/2020	65	Fair
Dist 3	ABBOTTST	ABBOTT ST	110	HARRIS RD	CITY LIMITS	A	A	3	1322	57	75,372	10/30/2020	64	Fair
Dist 2	ARGENTINEC	ARGENTINE CIR	10	ARGENTINE DR	END	A	R	2	219	32	7,008	10/12/2020	64	Fair
Dist 6	BOYLECT	BOYLE CT	15	CHRISTENSEN AVE (N)	CHRISTENSEN AVE (S)	A	R	2	1149	34	39,066	10/06/2020	64	Fair
Dist 3	CARMELAVE	CARMEL AVE	010	MAPLE ST	EL PASO PL	P	C	2	1263	34	42,942	10/28/2020	64	Fair
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	NB50	FREEDOM PKWY	BEACON HILL DR (N)	A	A	2	840	34	28,560	10/22/2020	64	Fair
Dist 1&6	CONSTITUTI	CONSTITUTION BLVD	SB50	FREEDOM PKWY	BEACON HILL DR (S)	A	A	2	844	34	28,696	10/22/2020	64	Fair
Dist 2	CROSSAVE	CROSS AVE	110	CROSS AVE	PALOMA AVE	A	R	1	225	20	4,500	10/12/2020	64	Fair
Dist 5	CUEVASCIR	CUEVAS CIR	10	CHEROKEE DR	END	A	R	2	337	32	10,811	10/20/2020	64	Fair
Dist 3	DICKENSDR	DICKENS DR	15	KIPLING ST	CHAUCER DR	A	R	2	1460	32	46,734	10/01/2020	64	Fair
Dist 6	LANCASHIR1	LANCASHIRE DR	20	DORSET WAY	LANCASHIRE CIR	A	R	2	248	32	7,936	10/07/2020	64	Fair
Dist 5	NDAVISRD	N DAVIS RD	200NB	BORONDA CROSSING PL	S FREEWAY ON RAMP	A	A	2	1889	32	60,448	10/27/2020	64	Fair
Dist 4&5	NMAINST	N MAIN ST	115SB	W CURTIS ST	W LAUREL DR	O	A	3	918	38	34,884	10/27/2020	64	Fair
Dist 5	NMAINST	N MAIN ST	PCC025	E BORONDA RD	SAN JUAN GRADE RD	P	A	4	1749	50	87,450	10/30/2020	64	Fair
Dist 5&6	NMAINST	N MAIN ST	PCC035	SAN JUAN GRADE RD	HARDEN PKWY	P	A	4	1280	50	64,000	10/30/2020	64	Fair
Dist 5&6	NMAINST	N MAIN ST	PCC045	HARDEN PKWY	CHEROKEE DR	P	A	4	611	50	30,550	10/30/2020	64	Fair
Dist 5&6	NMAINST	N MAIN ST	PCC055	CHEROKEE DR	E ALVIN DR	P	A	4	1392	50	69,600	10/30/2020	64	Fair
Dist 3	SANTAFEWAY	SANTA FE WAY	15	SANTA MONICA WAY	SAN FELIPE ST	A	R	2	644	38	24,472	10/01/2020	64	Fair
Dist 3	SANTALUCIA	SANTA LUCIA AVE	15	ALAMEDA AVE	CARMEL AVE	P	R	2	917	34	31,178	10/28/2020	64	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	SHELLEYWAY	SHELLEY WAY	10	KIPLING ST	KIPLING ST	A	R	2	863	32	27,628	10/01/2020	64	Fair
Dist 6	SNUGHARBOR	SNUG HARBOR ST	15	KITTERY ST	END	A	R	2	1469	32	47,024	10/08/2020	64	Fair
Dist 4	VALLEJOST	VALLEJO ST	10	TAMPICO AVE	LINWOOD DR	A	R	2	1003	32	32,096	10/15/2020	64	Fair
Dist 3	WBLANCORD	W BLANCO RD	WB020	PADRE DR	RIKER ST	A	A	2	1233	30	36,990	10/29/2020	64	Fair
Dist 2	1STAVE	1ST AVE	15	TOWT ST	E LAUREL DR	A	R	2	2568	36	92,448	10/13/2020	63	Fair
Dist 2	AIRPORTBLV	AIRPORT BLVD	110	800' N/O HANSEN ST	AIRPORT BLVD	A	C	1	595	24	14,280	12/06/2020	63	Fair
Dist 3	ALEXANDERS	ALEXANDER ST	15	WEST ST	HOMESTEAD	P	R	2	639	34	21,726	10/26/2020	63	Fair
Dist 6	CASCADEWAY	CASCADE WAY	15	BUCKINGHAM DR	KLAMATH DR	A	R	2	877	37	32,449	10/07/2020	63	Fair
Dist 6	EBORONDARD	E BORONDA RD	030	DARTMOUTH WAY	MCKINNON ST	A	A	2	1534	48	73,632	10/22/2020	63	Fair
Dist 4	ELAURELDR	E LAUREL DR	020	GRANADA AVE	NATIVIDAD RD	A	A	4	645	58	37,410	10/22/2020	63	Fair
Dist 3	ENCINADADR	ENCINADA DR	10	LA MESA DR	SAN JUAN DR	A	R	2	1113	37	41,181	09/29/2020	63	Fair
Dist 5	IRISDR	IRIS DR	35	LUPIN DR	TYLER ST	A	C	2	1364	38	51,864	10/21/2020	63	Fair
Dist 6	LANCASHIRE	LANCASHIRE CIR	10	LANCASHIRE DR	END	A	R	2	346	32	11,099	10/07/2020	63	Fair
Dist 3	LODGELN	LODGE LN	30	E ALISAL ST	E SAN LUIS ST	P	R	2	605	15	9,075	11/03/2020	63	Fair
Dist 3	MANORDR	MANOR DR	15	GROVE ST	LOS PALOS DR	A	R	2	554	32	17,741	09/30/2020	63	Fair
Dist 5	NDAVISRD	N DAVIS RD	200SB	S FREEWAY OFF RAMP	BORONDA CROSSING PL	A	A	2	1916	32	61,312	10/27/2020	63	Fair
Dist 3	NISSENRD	NISSEN RD	10	S MAIN ST	PADRE DR	A	C	2	617	43	26,531	10/01/2020	63	Fair
Dist 4&6	RAINIERDR	RAINIER DR	045	NATIVIDAD RD	LINWOOD DR	A	R	2	2600	32	83,215	10/06/2020	63	Fair
Dist 4	RICOST	RICO ST	020	W ROSSI ST	HYDE ST	A	C	2	929	41	38,089	10/14/2020	63	Fair
Dist 6	SAUCITOAVE	SAUCITO AVE	10	PESCADERO DR	CAMBRIAN DR	A	R	2	878	32	28,108	10/07/2020	63	Fair
Dist 2	SILVERWOOD	SILVERWOOD PL	10	DEL MONTE AVE	END	A	R	2	410	32	13,123	10/09/2020	63	Fair
Dist 4	STCHARLESW	ST CHARLES WAY	10	N MADEIRA AVE	ST CHARLES PL	A	R	2	730	32	23,390	10/16/2020	63	Fair
Dist 3	UNIVERSITY	UNIVERSITY AVE	30	CENTRAL AVE	ARCHER ST	A	R	2	263	40	10,520	10/01/2020	63	Fair
Dist 5	WLAURELDR	W LAUREL DR	015	NMAIN ST	PARK SIDE ST	A	A	4	1144	68	77,792	10/28/2020	63	Fair
Dist 3	WSANLUISST	W SAN LUIS ST	85	CAPITOL ST	WEST ST	P	C	2	638	34	21,722	10/29/2020	63	Fair
Dist 3	ABBOTTST	ABBOTT ST	SB030	MAPLE ST	ALAMEDA AVE	O	A	2	892	36	32,112	11/02/2020	62	Fair
Dist 3	ABBOTTST	ABBOTT ST	SB040	ALAMEDA AVE	LOS PALOS DR	O	A	2	1316	36	47,376	11/02/2020	62	Fair
Dist 3	ABBOTTST	ABBOTT ST	SB050	LOS PALOS DR	JOHNSON AVE	O	A	2	1269	36	45,684	11/02/2020	62	Fair
Dist 3	ALAMEDAAVE	ALAMEDA AVE	015	ABBOTT ST	MAPLEWOOD DR	P	C	2	1598	32	51,136	10/28/2020	62	Fair
Dist 4	BRYANTCIR	BRYANT CIR	10	VAN NESS CT	END	A	R	2	256	32	8,207	10/14/2020	62	Fair
Dist 2&4	EALISALST	E ALISAL ST	100	N WOOD ST	KERN ST	A	A	4	1427	75	107,025	10/14/2020	62	Fair
Dist 3	EBLANCORD	E BLANCO RD	WB20	BLANCO CIR	LA MESA WAY	A	A	2	3462	34	117,708	10/29/2020	62	Fair
Dist 1	EBORONDARD	E BORONDA RD	100	RIDER AVE	MESQUITE DR	A	A	2	1326	45	59,670	11/01/2020	62	Fair
Dist 4	EMARKETST	E MARKET ST	030EB	PCC END (S/O MARKET WAY)	MARKET WAY/ SHERWOOD DR	A	A	3	177	40	7,080	10/28/2020	62	Fair
Dist 5	FLINTCIR	FLINT CIR	10	LARKIN ST	END	A	R	2	125	32	4,000	10/21/2020	62	Fair
Dist 2	HEBBRONALY	HEBBRON ALY	10	S HEBBRON AVE	S FILICE ST	P	R	2	515	20	10,300	10/12/2020	62	Fair
Dist 4	KERNST	KERN ST	20	N FREEWAY OFF RAMP	END	A	A	2	1081	41	44,330	10/19/2020	62	Fair
Dist 3	LODGEALLY	LODGE ALLY	10	E MARKET ST	END	P	R	2	173	15	2,606	11/03/2020	62	Fair
Dist 6	MODOCAVE	MODOC AVE	10	RAINIER DR	E ALVIN DR	A	R	2	1244	35	43,540	10/06/2020	62	Fair
Dist 3	MONTECITOC	MONTECITO CIR	10	MONTECITO WAY	END	A	R	2	367	32	11,769	10/01/2020	62	Fair
Dist 3	MONTEREYST	MONTEREY ST	010	JOHN ST	E SAN LUIS ST	A	A	2	526	48	25,248	11/03/2020	62	Fair
Dist 5	NDAVISRD	N DAVIS RD	190SB	BORONDA CROSSING PL	AUTO CENTER CIR	A	A	2	2405	32	76,960	10/27/2020	62	Fair
Dist 4&5	NMAINST	N MAIN ST	NB135	E BERNAL DR	IRIS DR	A	A	3	1180	38	44,840	10/27/2020	62	Fair
Dist 6	NICHOLSAVE	NICHOLS AVE	10	LASSEN AVE	RAINIER DR	A	R	2	1224	32	39,172	10/06/2020	62	Fair
Dist 3	PAJAROCIR	PAJARO CIR	10	PAJARO ST	END	A	R	2	198	32	6,340	11/02/2020	62	Fair
Dist 1	RIDERAVE	RIDER AVE	025	MIMBRERA WAY	ANTIGUA AVE	A	C	2	1165	38	44,270	09/11/2020	62	Fair
Dist 3	RIKERST	RIKER ST	020	320' S/O W MARKET ST	CENTRAL AVE	P	R	2	1075	40	43,000	10/26/2020	62	Fair
Dist 3	RIOVERDEDR	RIO VERDE DR	10	LA MESA DR	SAN JUAN DR	A	R	2	1633	32	52,265	09/29/2020	62	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	SANCARLOSD	SAN CARLOS DR	10	SAN PEDRO ST	SAN MIGUEL AVE	A	R	2	1259	32	40,307	09/29/2020	62	Fair
Dist 5	VANBURENAV	VAN BUREN AVE	010	SAN JUAN GRADE RD	E BOLIVAR ST	A	C	2	1491	37	55,167	10/20/2020	62	Fair
Dist 3	WLAKEST	W LAKE ST	15	N MAIN ST	RICO ST	A	C	2	2387	32	76,389	10/26/2020	62	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB090	MAPLE ST	JOHN ST	A	A	2	771	36	27,756	10/30/2020	61	Fair
Dist 3	ARCHERST	ARCHER ST	030	NACIONAL ST	VILLA ST	P	R	2	640	40	25,600	10/26/2020	61	Fair
Dist 4	DEERST	DEER ST	15	N MAIN ST	END	A	R	2	539	25	13,490	10/15/2020	61	Fair
Dist 3	DELREYCIR	DEL REY CIR	10	PADRE DR	END	A	R	2	463	32	14,835	10/01/2020	61	Fair
Dist 3	EBLANCORD	E BLANCO RD	EB10	S MAIN ST	PAJARO ST	O	A	2	745	43	32,035	10/29/2020	61	Fair
Dist 3	EROMIELN	E ROMIE LN	010	S MAIN ST	ALAMEDA AVE	A	A	2	2809	44	123,596	09/29/2020	61	Fair
Dist 5	ESTRADACT	ESTRADA CT	10	ESTRADA WAY (N)	ESTRADA WAY (S)	A	R	2	1105	32	35,360	10/21/2020	61	Fair
Dist 5	HOWEDR	HOWE DR	15	SHERMAN DR	END	A	R	2	739	32	23,660	10/21/2020	61	Fair
Dist 5	LARKINST	LARKIN ST	025	N DAVIS RD	KEARNY WAY	A	C	2	1268	43	54,524	10/21/2020	61	Fair
Dist 4	MCALLISTER	MCALLISTER CIR	10	MCALLISTER ST	END	A	R	2	185	32	5,920	10/14/2020	61	Fair
Dist 6	MENDOCINOD	MENDOCINO DR	15	PLACER WAY	YOLO CIR	A	R	2	884	38	33,592	09/29/2020	61	Fair
Dist 4	NMADEIRAAV	N MADEIRA AVE	010	W END (TREE BARRICADE)	ST EDWARDS AVE	A	R	2	2243	40	89,720	10/16/2020	61	Fair
Dist 4&5	NMAINST	N MAIN ST	135SB	IRIS DR	W BERNAL DR	O	A	3	1180	38	44,840	10/27/2020	61	Fair
Dist 4&5	NMAINST	N MAIN ST	NB125	IRIS DR	E LAUREL DR	A	A	3	2231	38	84,778	10/27/2020	61	Fair
Dist 1&2	NSANBORNRD	N SANBORN RD	40	DEL MONTE AVE	GARNER AVE	A	A	2	1545	64	98,880	10/22/2020	61	Fair
Dist 3	PLAZACIR	PLAZA CIR	10	S MAIN ST	END	A	R	2	448	38	17,024	10/01/2020	61	Fair
Dist 4	RAGSDALECT	RAGSDALE CT	30	RAGSDALE CT	RAGSDALE CT	P	R	2	203	34	6,902	10/19/2020	61	Fair
Dist 4	RAGSDALECT	RAGSDALE CT	40	RAGSDALE CT	ROOSEVELT ST	P	A	2	345	32	11,040	10/19/2020	61	Fair
Dist 4	ROSARITADR	ROSARITA DR	15	SANTA TERESA WAY	E BERNAL DR	A	R	2	2102	32	67,269	10/15/2020	61	Fair
Dist 2	SMADEIRAAV	S MADEIRA AVE	15	JAMES ST	E ALISAL ST	A	C	2	872	42	36,624	10/12/2020	61	Fair
Dist 3	SANJUANCIR	SAN JUAN CIR	10	SAN JUAN DR	END	A	R	2	202	25	5,050	09/29/2020	61	Fair
Dist 4	SHERWOODDR	SHERWOOD DR	025	E ROSSI ST	E MARKET ST	A	A	4	704	64	45,068	10/28/2020	61	Fair
Dist 2	SILVERADOC	SILVERADO CIR	10	DEL MONTE AVE	END	A	R	2	185	32	5,950	10/09/2020	61	Fair
Dist 4	STMICHAELW	ST MICHAEL WAY	10	CIRCLE DR	N MADEIRA AVE	A	R	2	1046	32	33,482	10/15/2020	61	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB050	E ROMIE LN	JOHNSON AVE	A	A	2	262	36	9,460	10/30/2020	60	Fair
Dist 2	ARGENTINED	ARGENTINE DR	010	BARDIN RD	END	A	R	2	1040	37	38,480	10/12/2020	60	Fair
Dist 4	BRIDGEST	BRIDGE ST	50	E LAKE ST	MARKET WAY	P	C	2	416	45	18,758	10/19/2020	60	Fair
Dist 4	BRIGHTONST	BRIGHTON ST	20	FILBERT WAY	MCALLISTER ST	A	R	2	436	32	13,968	10/14/2020	60	Fair
Dist 3	CALIFORNI1	CALIFORNIA ST	105B	MAPLE ST	E ACACIA ST	P	C	2	1625	50	81,250	11/02/2020	60	Fair
Dist 2	DELATORRE	DE LA TORRE ST	15	ROY DIAZ ST (N)	ROY DIAZ ST (S)	A	R	2	2121	40	84,851	10/13/2020	60	Fair
Dist 3	EBLANCORD	E BLANCO RD	EB30	SAN JUAN DR	LA MESA WAY	O	A	2	1600	36	57,600	10/29/2020	60	Fair
Dist 4	ELAKEST	E LAKE ST	15	N MAIN ST	CALIFORNIA ST	A	C	2	896	40	35,840	10/19/2020	60	Fair
Dist 5	GEARYCIR	GEARY CIR	10	LARKIN ST	END	A	R	2	420	32	13,440	10/21/2020	60	Fair
Dist 6	HARVARDCT	HARVARD CT	10	PENNSYLVANIA DR (W)	PENNSYLVANIA DR (E)	A	R	2	844	33	27,852	09/29/2020	60	Fair
Dist 3	LANGST	LANG ST	15	IVERSON ST	CAPITOL ST	P	R	2	1330	40	53,200	10/27/2020	60	Fair
Dist 6	LOSCOCHESA	LOS COCHES AVE	10	KLAMATH DR	HUMBOLDT DR	A	R	2	752	37	27,824	10/07/2020	60	Fair
Dist 4	MARYALDR	MARYAL DR	30	E LAUREL DR	E BERNAL DR	A	C	2	2714	37	100,418	10/15/2020	60	Fair
Dist 6	MCKINNONST	MCKINNON ST	20	WESTMINSTER DR	HARDEN PKWY	A	C	2	866	42	36,372	10/22/2020	60	Fair
Dist 2	MIDWAYAVE	MIDWAY AVE	20	E LAUREL DR	E MARKET ST	O	R	2	843	35	29,506	10/13/2020	60	Fair
Dist 5	NDAVISRD	N DAVIS RD	190NB	AUTO CENTER CIR	BORONDA CROSSING PL	A	A	2	2374	32	75,968	10/27/2020	60	Fair
Dist 4&5	NMAINST	N MAIN ST	125SB	W LAUREL DR	IRIS DR	O	A	3	2231	38	84,778	10/27/2020	60	Fair
Dist 3	NISSENRD	NISSEN RD	25	PADRE DR	RIKER ST	A	C	2	950	43	40,850	10/01/2020	60	Fair
Dist 2	SSANBORNRD	S SANBORN RD	SB010	E ALISAL ST	JOHN ST	A	A	2	1325	25	33,125	10/13/2020	60	Fair
Dist 3	SANVINCENT	SAN VINCENTE AVE	030	W ACACIA ST	PALMA DR	A	C	2	924	32	29,568	10/02/2020	60	Fair
Dist 4	SANSOMEST	SANSOME ST	15	RICO ST	W ROSSI ST	A	R	2	1678	35	58,745	10/14/2020	60	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	ABBOTTST	ABBOTT ST	SB020	JOHN ST	MAPLE ST	A	A	2	771	36	27,756	11/02/2020	59	Fair
Dist 3	ABBOTTST	ABBOTT ST	SB070	E ROMIE LN	S SANBORN RD	A	A	2	1076	36	38,743	11/02/2020	59	Fair
Dist 2	ACOSTAST	ACOSTA ST	10	N SANBORN RD	BEECH ST	A	R	2	1236	32	39,552	10/13/2020	59	Fair
Dist 5	CHEROKEEDR	CHEROKEE DR	030	SEVILLE ST	DURAN ST	A	C	2	581	42	24,402	10/20/2020	59	Fair
Dist 4	DIVISIONST	DIVISION ST	15	SUMMIT DR	END	A	R	2	151	38	5,751	10/16/2020	59	Fair
Dist 4	EROSSIST	E ROSSI ST	15	N MAIN ST	SHERWOOD DR	A	A	2	1137	58	65,946	10/23/2020	59	Fair
Dist 4	EASTST	EAST ST	10	N HEBBRON AVE	N FILICE ST	A	R	2	564	41	23,124	10/19/2020	59	Fair
Dist 4	ELTONPL	ELTON PL	15	N HEBBRON AVE	END	A	R	2	834	29	24,203	10/19/2020	59	Fair
Dist 2	GARDENWAY	GARDEN WAY	15	S FILICE ST	MAGNOLIA DR	A	R	2	740	32	23,704	10/12/2020	59	Fair
Dist 3	HARKINSRD	HARKINS RD	030	DAYTON ST	RR TRACKS	A	C	2	899	47	42,253	09/28/2020	59	Fair
Dist 5	IRISALY	IRIS ALY	20	IRIS DR	END	P	R	2	844	20	16,887	10/28/2020	59	Fair
Dist 4	MYRTLECT	MYRTLE CT	15	MYRTLE ST (N)	MYRTLE ST (S)	A	R	2	600	36	21,600	10/16/2020	59	Fair
Dist 5	NDAVISRD	N DAVIS RD	160SB	W LAUREL DR	SLOAT DR	A	A	2	3026	32	96,832	10/23/2020	59	Fair
Dist 4&5	NMAINST	N MAIN ST	NB095	E CURTIS ST	NAVAJO DR	A	A	3	1433	38	54,454	10/27/2020	59	Fair
Dist 6	NANTUCKETB	NANTUCKET BLVD	10	INDEPENDENCE BLVD	HEMINGWAY DR	A	C	2	2292	38	87,096	10/08/2020	59	Fair
Dist 4	NOICEDR	NOICE DR	10	NAVAJO DR	CHAPARRAL ST	A	R	2	600	41	24,617	10/15/2020	59	Fair
Dist 2	PALOMAAVE	PALOMA AVE	10	QUILLA ST	E MARKET ST	A	R	2	1216	40	48,640	10/12/2020	59	Fair
Dist 4	RAMONAAVE	RAMONA AVE	10	E LAUREL DR	RAINIER DR	A	R	2	2051	32	65,632	10/15/2020	59	Fair
Dist 2	SSANBORNRD	S SANBORN RD	070NB	JOHN ST	E ALISAL ST	O	A	2	1325	33	43,725	10/13/2020	59	Fair
Dist 2	SSANBORNRD	S SANBORN RD	SB030	FAIRWAY AVE	ELVEE DR	A	A	2	424	40	16,960	10/22/2020	59	Fair
Dist 3	SANVINCENT	SAN VINCENTE AVE	040	PALMA DR	W BLANCO RD	A	C	2	1311	32	41,952	10/02/2020	59	Fair
Dist 4	STGEORGEDR	ST GEORGE DR	15	N MADEIRA AVE	ST REGIS WAY	A	R	2	1342	32	42,944	10/16/2020	59	Fair
Dist 3	WGABILANST	W GABILAN ST	25	MAIN ST	LINCOLN AVE	A	C	2	608	32	19,464	10/29/2020	59	Fair
Dist 3	ABBOTTST	ABBOTT ST	NB010	HARRIS RD	1100' E(S)/O HARKINS RD	O	A	2	4294	28	120,232	10/30/2020	58	Fair
Dist 4	AMADORCIR	AMADOR CIR	10	RAINIER DR	END	A	R	2	311	32	9,952	10/15/2020	58	Fair
Dist 1	AMARILLOWA	AMARILLO WAY	010	NOGAL DR	RIDER AVE	A	R	2	875	38	33,250	10/05/2020	58	Fair
Dist 3	BRUNKENAVE	BRUNKEN AVE	30	MALARIN ST	END	A	R	2	855	42	35,910	09/29/2020	58	Fair
Dist 2	DENNISAVE	DENNIS AVE	15	TAMPA ST	BARDIN RD	A	R	2	2180	34	74,120	10/12/2020	58	Fair
Dist 2&4	EALISALST	E ALISAL ST	090	N HEBBRON AVE	N WOOD ST	A	A	4	944	75	70,800	10/14/2020	58	Fair
Dist 3	EBLANCORD	E BLANCO RD	EB50	BLANCO CIR	ABBOTT ST	A	A	2	970	38	36,860	10/29/2020	58	Fair
Dist 3	EBLANCORD	E BLANCO RD	WB30	LA MESA WAY	SAN JUAN DR	A	A	2	1600	38	60,800	10/29/2020	58	Fair
Dist 3	EBLANCORD	E BLANCO RD	WB40	SAN JUAN DR	PAJARO ST	A	A	2	1679	36	60,444	10/29/2020	58	Fair
Dist 4	FILBERTWAY	FILBERT WAY	15	BRIGHTON ST	END	A	R	2	453	32	14,500	10/14/2020	58	Fair
Dist 3	GREENFIELD	GREENFIELD ALY	020	E GABILAN ST	E ALISAL ST	P	R	2	671	32	21,472	11/02/2020	58	Fair
Dist 6	HARDENPKWY	HARDEN PKWY	WB030	MCKINNON ST	BROADWAY DR	A	C	2	1156	28	32,368	09/29/2020	58	Fair
Dist 3	KIPLINGST	KIPLING ST	55	RIKER ST	LOS OLIVOS DR	A	R	2	2803	32	89,708	10/01/2020	58	Fair
Dist 2	MIAMIST	MIAMI ST	15	CROSS AVE	AFTON ROAD	A	R	2	1121	35	39,235	10/12/2020	58	Fair
Dist 2	SSANBORNRD	S SANBORN RD	050NB	ELVEE DR	FAIRWAY AVE	A	A	2	433	26	11,258	10/22/2020	58	Fair
Dist 3	SCHILLINGP	SCHILLING PL	15	HANSEN ST	END	A	R	2	2543	32	81,407	09/28/2020	58	Fair
Dist 4	SHORTST	SHORT ST	10	E MARKET ST	N FILICE ST	A	R	2	436	32	13,978	10/19/2020	58	Fair
Dist 2	SYCAMORERD	SYCAMORE RD	15	PALOMA AVE	BARDIN RD	A	R	2	2184	34	74,256	10/12/2020	58	Fair
Dist 1	TOWTST	TOWT ST	010	FREEDOM PARKWAY	MAE AVE	A	C	2	1798	41	73,718	10/05/2020	58	Fair
Dist 3	WROMIELN	W ROMIE LN	020	W ROMIE LN (N MISSION PARK)	BAUTISTA DR	A	A	2	669	32	21,408	10/27/2020	58	Fair
Dist 3	WROMIELN	W ROMIE LN	110	BAUTISTA DR	W ROMIE LN (S MISSION PARK)	A	A	2	677	32	21,664	10/27/2020	58	Fair
Dist 6	WHEELERDR	WHEELER DR	15	E ALVIN DR	END	A	R	2	846	41	34,686	10/06/2020	58	Fair
Dist 1&2	WILLIAMSRD	WILLIAMS RD	050	DEL MONTE AVE	FREEDOM PKWY	A	A	4	2751	80	220,080	10/06/2020	58	Fair
Dist 6	YALECIR	YALE CIR	10	PENNSYLVANIA DR	END	A	R	2	200	31	6,200	09/29/2020	58	Fair
Dist 3	BYRONDR	BYRON DR	10	CHAUCER DR	STEPHANIE DR	A	R	2	857	32	27,433	10/01/2020	57	Fair

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Dist 2	CROSSAVE	CROSS AVE	030	MIAMI ST	BARDIN RD	A	R	2	1086	36	39,096	10/12/2020	57	Fair
Dist 3	EBLANCORD	E BLANCO RD	EB20	PAJARO ST	SAN JUAN DR	O	A	2	1680	36	60,480	10/29/2020	57	Fair
Dist 4	ELAURELDR	E LAUREL DR	005	N MAIN ST	MARYAL DR	A	A	4	1526	64	97,664	10/22/2020	57	Fair
Dist 3	GEILST	GEIL ST	10	IVERSON ST	RIKER ST	P	C	2	1038	40	41,520	10/27/2020	57	Fair
Dist 3	HARVESTST	HARVEST ST	15	S MAIN ST	E END	P	R	2	2414	46	111,044	10/29/2020	57	Fair
Dist 5	NDAVISRD	N DAVIS RD	170NB	W LAUREL DR	WESTRIDGE PKWY	A	A	2	2232	32	71,424	10/27/2020	57	Fair
Dist 3	PARKST	PARK ST	010	CAPITOL ST	HOMESTEAD AVE	P	C	2	1281	40	51,240	10/26/2020	57	Fair
Dist 2	PEARLALY	PEARL ALY	20	220' E/O S PEARL ST	S HEBBRON AVE	P	R	2	170	20	3,400	10/12/2020	57	Fair
Dist 5&6	SANJUANGRA	SAN JUAN GRADE RD	050	N MAIN ST	E BORONDA RD	A	A	2	1640	38	62,320	10/28/2020	57	Fair
Dist 4	SHERWOODDR	SHERWOOD DR	030	E ROSSI ST	101 Overpass (PCC START)	A	A	4	1649	64	105,536	10/28/2020	57	Fair
Dist 4	STMICHAELP	ST MICHAEL PL	10	ST MICHAEL WAY	END	A	R	2	176	32	5,651	10/15/2020	57	Fair
Dist 5	TAYLORST	TAYLOR ST	10	VAN BUREN AVE	COOLIDGE ST	A	R	2	502	32	16,071	10/20/2020	57	Fair
Dist 1	TWAINCIR	TWAIN CIR	10	LONGFELLOW DR	END	A	R	2	264	32	8,478	09/11/2020	57	Fair
Dist 3	WBLANCORD	W BLANCO RD	WB030	RIKER ST	LOS OLIVOS DR	A	A	2	1443	30	43,290	10/29/2020	57	Fair
Dist 3	WBLANCORD	W BLANCO RD	WB040	LOS OLIVOS DR	LUTHER WAY	A	A	2	1388	30	41,640	10/29/2020	57	Fair
Dist 3	WESTST	WEST ST	035	W MARKET ST	CENTRAL AVE	P	R	2	1630	32	52,160	10/26/2020	57	Fair
Dist 3	BAUTISTADR	BAUTISTA DR	20	W ROMIE LN	W ACACIA ST	A	R	2	872	32	27,904	10/27/2020	56	Fair
Dist 4	BRIDGEALY	BRIDGE ALY	10	MARKET WAY	E LAKE ST	P	R	2	561	18	10,111	10/19/2020	56	Fair
Dist 3	BUENAVISTA	BUENA VISTA ST	10	WILSON ST	PARK ST	P	R	2	637	40	25,488	10/26/2020	56	Fair
Dist 3	EBLANCORD	E BLANCO RD	EB40	LA MESA WAY	BLANCO CIR	O	A	2	3483	36	125,388	10/29/2020	56	Fair
Dist 3	EDENST	EDEN ST	10	SCHILLING PL	END	O	R	2	599	41	24,559	09/28/2020	56	Fair
Dist 6	HARDENPKWY	HARDEN PKWY	WB020	WINDSOR ST	MCKINNON ST	A	C	2	937	28	26,236	09/29/2020	56	Fair
Dist 3	LASCRUCESC	LAS CRUCES CT	10	LAS CRUCES WAY	END	A	R	2	417	38	15,846	10/01/2020	56	Fair
Dist 2	MEADOWDR	MEADOW DR	15	JOHN ST (N)	JOHN ST (S)	A	R	2	2200	32	70,400	10/12/2020	56	Fair
Dist 4&5	NMAINST	N MAIN ST	NB115	E LAUREL DR	E CURTIS ST	A	A	3	918	38	34,884	10/27/2020	56	Fair
Dist 5	NORTHRIDG2	NORTHRIDGE WAY	10	NORTHRIDGE DR	SAN JUAN GRADE RD	A	R	2	130	37	4,810	10/20/2020	56	Fair
Dist 3	PAJAROST	PAJARO ST	030	MAPLE ST	PINE ST	C	A	2	969	50	48,450	11/03/2020	56	Fair
Dist 3	SALINASST	SALINAS ST	10	W MARKET ST	JOHN ST	C	A	2	2336	37	86,432	11/03/2020	56	Fair
Dist 3	SANANDREAS	SAN ANDREAS WAY	10	SAN JUAN DR	END	A	R	2	171	32	5,476	09/29/2020	56	Fair
Dist 3	SANBLANCOC	SAN BLANCO CT	10	SAN BLANCO DR	END	A	R	2	246	32	7,883	10/01/2020	56	Fair
Dist 3	SANMATEODR	SAN MATEO DR	15	SAN MIGUEL AVE	SAN TOMAS WAY	A	R	2	729	37	26,973	09/29/2020	56	Fair
Dist 2	TOROAVE	TORO AVE	15	BARDIN RD	E MARKET ST	A	R	2	2903	35	101,605	10/12/2020	56	Fair
Dist 3	VIAMARIA	VIA MARIA	15	END	ARCHER ST	A	R	2	1531	32	49,015	10/02/2020	56	Fair
Dist 5	VICTORST	VICTOR ST	20	VAN NESS CT (E)	VAN NESS CT (W)	A	R	2	1013	42	42,546	10/21/2020	56	Fair
Dist 3	WSANLUISST	W SAN LUIS ST	55	CAPITOL ST	SALINAS ST	P	C	2	1210	34	41,143	10/29/2020	56	Fair
Dist 1	ALAMOWAY	ALAMO WAY	10	LAS CASITAS DR	LA HONDA CT (N)	A	R	2	510	32	16,320	09/29/2020	55	Fair
Dist 6	DARTMOUTHW	DARTMOUTH WAY	10	E BORONDA RD	S END (BARICADE)	A	R	2	364	41	14,924	09/29/2020	55	Fair
Dist 1&2	DELMONTEAV	DEL MONTE AVE	010	RIDER AVE	N SANBORN RD	O	C	2	1404	42	58,968	10/05/2020	55	Fair
Dist 3	DICKENSCIR	DICKENS CIR	10	DICKENS DR	END	A	R	2	183	32	5,866	10/01/2020	55	Fair
Dist 1	DOVERCIR	DOVER CIR	10	DE CUNHA CT	END	A	R	2	200	31	6,200	09/10/2020	55	Fair
Dist 3	EACACIAST	E ACACIA ST	020	PAJARO ST	CARMEL AVE	P	C	2	1479	34	50,286	10/28/2020	55	Fair
Dist 2	EALISALST	E ALISAL ST	010	BARDIN/ALISAL RD	MARGARET ST	A	A	2	806	44	35,464	10/14/2020	55	Fair
Dist 2	EALISALST	E ALISAL ST	050	E MARKET ST	QUILLA ST	A	A	2	1205	42	50,610	10/14/2020	55	Fair
Dist 5	FILLMOREST	FILLMORE ST	10	VAN BUREN AVE	TRUMAN ST	A	R	2	516	37	19,092	10/20/2020	55	Fair
Dist 3	HARKINSRD	HARKINS RD	020	ABBOTT ST	DAYTON ST	A	C	4	2372	80	189,760	09/28/2020	55	Fair
Dist 3	HARKINSRD	HARKINS RD	040	RR TRACKS	CITY LIMIT	A	C	2	745	70	52,150	09/28/2020	55	Fair
Dist 2	HAVENALY	HAVEN ALY	030	GRANDHAVEN ST	BELLEHAVEN ST	P	R	2	304	16	4,864	10/14/2020	55	Fair
Dist 4	HOLADAYAVE	HOLADAY AVE	10	E ALISAL ST	EAST ST	A	R	2	285	41	11,712	10/19/2020	55	Fair

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Dist 3	LAMESADR	LA MESA DR	060	PAJARO ST	SAN JUAN DR	A	C	2	1677	37	62,049	09/29/2020	55	Fair
Dist 5	NDAVISRD	N DAVIS RD	170SB	WESTRIDGE PKWY	W LAUREL DR	A	A	2	2239	32	71,648	10/27/2020	55	Fair
Dist 5	PEREZST	PEREZ ST	20	E BOLIVAR ST	END	A	R	2	822	36	29,592	10/20/2020	55	Fair
Dist 3	PINEST	PINE ST	25	CARMEL AVE	S MAIN ST	P	R	2	2271	34	77,214	10/29/2020	55	Fair
Dist 3	PRIMAVERAW	PRIMAVERA WAY	10	PRIMAVERA ST	KIPLING ST	A	R	2	726	32	23,232	10/01/2020	55	Fair
Dist 4&5	RICOST	RICO ST	030	HYDE ST	CASENTINI ST	A	C	2	389	41	15,949	10/21/2020	55	Fair
Dist 3	SANBRUNOWA	SAN BRUNO WAY	15	SAN MATEO DR	SAN ANGELO DR	A	R	2	748	37	27,676	09/29/2020	55	Fair
Dist 3	SANFELIPES	SAN FELIPE ST	010	SAN LEANDRO WAY	SIERRA MADRE DR	A	R	2	965	32	30,880	10/01/2020	55	Fair
Dist 3	SPICERST	SPICER ST	10	BRUNKEN AVE	ABBOTT ST	A	C	2	667	42	28,014	09/29/2020	55	Fair
Dist 4	STREGISCIR	ST REGIS CIR	10	ST REGIS WAY	END	A	R	2	161	32	5,152	10/16/2020	55	Fair
Dist 4	STREGISWAY	ST REGIS WAY	15	ST GEORGE DR	N END	A	R	2	810	32	25,920	10/16/2020	55	Fair
Dist 4	STTHOMASWA	ST THOMAS WAY	10	ST GEORGE DR	ST EDWARDS AVE	A	R	2	297	32	9,518	10/16/2020	55	Fair
Dist 6	TETONAVE	TETON AVE	10	RAINIER DR	GLACIER DR	A	R	2	995	32	31,859	10/06/2020	55	Fair
Dist 5	WESTRIDGEP	WESTRIDGE PKWY	10	N DAVIS RD	BROOKS RD	A	A	4	1261	78	98,358	10/23/2020	55	Fair
Dist 2	ACOSTAST	ACOSTA ST	110	BEECH ST	TOWT ST	A	R	2	405	32	12,960	10/13/2020	54	Fair
Dist 3	BRIARWOODP	BRIARWOOD PL	15	END	END	A	R	2	720	32	23,040	09/30/2020	54	Fair
Dist 3	CENTRALAVE	CENTRAL AVE	055	DAVIS RD	UNIVERSITY AVE	C	C	2	882	49	43,218	10/26/2020	54	Fair
Dist 3	CENTRALAVE	CENTRAL AVE	085	HOMESTEAD AVE	CAPITOL ST	C	C	2	1277	49	62,573	10/26/2020	54	Fair
Dist 3	CLAYALY	CLAY ALY	10	W SAN LUIS ST	CLAY ST	P	R	2	444	14	6,216	10/27/2020	54	Fair
Dist 4	DORORODR	DORORO DR	15	REATA ST	TAPADERO DR	A	R	2	1067	32	34,166	10/15/2020	54	Fair
Dist 1	EBORONDARD	E BORONDA RD	120	N SANBORN RD	WILLIAMS RD	A	A	2	2636	45	118,620	10/06/2020	54	Fair
Dist 4	ELAURELDR	E LAUREL DR	010	MARYAL DR	LINWOOD DR	A	A	4	852	64	54,528	10/22/2020	54	Fair
Dist 5	GARDENIADR	GARDENIA DR	15	W BERNAL DR	LUPIN DR	A	R	2	1884	32	60,300	10/21/2020	54	Fair
Dist 6	HARDENPKWY	HARDEN PKWY	EB030	MCKINNON ST	WINDSOR ST	A	C	2	938	28	26,264	09/29/2020	54	Fair
Dist 3	HARRISRD	HARRIS RD	10	ABBOTT ST	HARRIS PL	A	C	2	982	45	44,190	09/28/2020	54	Fair
Dist 3	IVERSONCIR	IVERSON CIR	10	IVERSON ST	END	A	R	2	285	32	9,144	09/30/2020	54	Fair
Dist 5	KEARNYWAY	KEARNY WAY	10	ALVARADO DR	LARKIN ST	A	R	2	479	36	17,244	10/21/2020	54	Fair
Dist 3	MONTEREYST	MONTEREY ST	030	E ALISAL ST	E MARKET ST	A	A	2	1361	48	65,328	11/03/2020	54	Fair
Dist 4	NMADEIRAAV	N MADEIRA AVE	125	E ALISAL ST	E MARKET ST	A	R	2	1157	40	46,280	10/19/2020	54	Fair
Dist 5&6	NMAINST	N MAIN ST	045SB	HARDEN PKWY	CHEROKEE DR	A	A	1	611	13	7,943	10/28/2020	54	Fair
Dist 5&6	NMAINST	N MAIN ST	NB035	HARDEN PKWY	SAN JUAN GRADE RD	A	A	1	1280	13	16,640	10/28/2020	54	Fair
Dist 3	SSANBORNRD	S SANBORN RD	SB040	ELVEE DR	PELLETT AVE	A	A	2	1830	20	36,600	11/03/2020	54	Fair
Dist 2	STJOSEPHCI	ST JOSEPH CIR	10	1ST AVE	END	A	R	2	280	32	8,960	10/13/2020	54	Fair
Dist 2	SUNRISEST	SUNRISE ST	10	GARNER AVE	DEL MONTE AVE	A	R	2	1547	32	49,514	10/14/2020	54	Fair
Dist 5	VANBURENAV	VAN BUREN AVE	020	E BOLIVAR ST	EISENHOWER ST	A	C	2	1023	38	38,874	10/20/2020	54	Fair
Dist 1	WILLIAMSRD	WILLIAMS RD	060	FREEDOM PKWY	E BORONDA RD	A	C	3	2133	57	121,581	10/06/2020	54	Fair
Dist 6	ARCADIACIR	ARCADIA CIR	10	ARCADIA WAY	END	A	R	2	383	32	12,286	10/07/2020	53	Fair
Dist 3	CAPITOLST	CAPITOL ST	020	CENTRAL AVE	CLAY ST	P	C	2	2260	40	90,400	10/27/2020	53	Fair
Dist 3	CLARKST	CLARK ST	15	NACIONAL CT (S)	W MARKET ST	A	C	2	1356	50	67,831	09/30/2020	53	Fair
Dist 2	GARNERALY	GARNER ALY	10	ALMA AVE	GARNER AVE	A	R	2	250	21	5,250	10/14/2020	53	Fair
Dist 3	GROVEST	GROVE ST	110	ALAMEDA AVE	MANOR DR	A	R	2	1441	32	46,112	09/30/2020	53	Fair
Dist 6	HARDENPKWY	HARDEN PKWY	EB020	BROADWAY DR	MCKINNON ST	A	C	2	1161	28	32,508	09/29/2020	53	Fair
Dist 3	HARRISRD	HARRIS RD	40	HARRIS PL	CITY LIMIT @ 1273' SW HARRIS PL;	A	C	2	1273	42	53,466	09/28/2020	53	Fair
Dist 4	KINGSST	KINGS ST	15	E MARKET ST	E ALISAL ST	A	C	2	1155	42	48,537	10/19/2020	53	Fair
Dist 1	LAHONDACIR	LA HONDA CIR	10	LA HONDA CT	END	A	R	2	205	32	6,560	09/29/2020	53	Fair
Dist 3	LINCOLNAVE	LINCOLN AVE	010	W MARKET ST	CLAY ST	A	A	2	2827	43	121,561	11/03/2020	53	Fair
Dist 4	MADEIRACIR	MADEIRA CIR	10	N MADEIRA AVE	END	A	R	2	480	32	15,360	10/15/2020	53	Fair
Dist 4&5	NMAINST	N MAIN ST	085SB	W ALVIN DR	NAVAJO DR	O	A	3	802	38	30,476	10/27/2020	53	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 5	PEREZCIR	PEREZ CIR	10	PEREZ ST	END	A	R	2	245	37	9,065	10/20/2020	53	Fair
Dist 3	SANYSIDROW	SAN YSIDRO WAY	10	AMBROSE DR	MONTECITO WAY	A	R	2	629	41	25,789	10/01/2020	53	Fair
Dist 4	STGEORGECI	ST GEORGE CIR	10	ST GEORGE DR	END	A	R	2	200	32	6,400	10/16/2020	53	Fair
Dist 3	TERVENAVE	TERVEN AVE	15	S SANBORN RD	AIRPORT BLVD	A	C	2	2298	42	96,516	09/28/2020	53	Fair
Dist 3	WROMIELN	W ROMIE LN	030	BAUTISTA DR	END	A	C	2	800	32	25,600	10/27/2020	53	Fair
Dist 3	WOODSIDECI	WOODSIDE CIR	10	WOODSIDE DR	END	A	R	2	172	32	5,525	09/30/2020	53	Fair
Dist 3	EBLANCORD	E BLANCO RD	WB50	PAJARO ST	S MAIN ST	A	A	2	745	42	31,290	10/29/2020	52	Fair
Dist 6	EBORONDARD	E BORONDA RD	050	EL DORADO DR	NATIVIDAD RD	A	A	2	2926	45	131,670	10/22/2020	52	Fair
Dist 4	FELLCIR	FELL CIR	10	FULTON WAY	END	A	R	2	305	32	9,760	10/14/2020	52	Fair
Dist 4	JEFFERSONS	JEFFERSON ST	10	N HEBBRON AVE	N FILICE ST	A	R	2	562	42	23,619	10/19/2020	52	Fair
Dist 4	MARKETWAY	MARKET WAY	15	SHERWOOD DR	BRIDGE ST	A	C	2	1117	32	35,762	10/19/2020	52	Fair
Dist 3	MONTEREYST	MONTEREY ST	020	E SAN LUIS ST	E ALISAL ST	A	A	2	677	48	32,496	11/03/2020	52	Fair
Dist 5	NDAVISRD	N DAVIS RD	180SB	AUTO CENTER CIR	WESTRIDGE PKWY	A	A	2	4488	32	143,616	10/27/2020	52	Fair
Dist 4	NHEBBRONAV	N HEBBRON AVE	45	E MARKET ST	ELTON PL	A	R	2	566	38	21,539	10/19/2020	52	Fair
Dist 5&6	NMAINST	N MAIN ST	055SB	CHEROKEE DR	W ALVIN DR	A	A	1	1392	13	18,096	10/28/2020	52	Fair
Dist 5&6	NMAINST	N MAIN ST	NB055	E ALVIN DR	CHEROKEE DR	A	A	1	1392	13	18,096	10/28/2020	52	Fair
Dist 3	PAJAROST	PAJARO ST	040	PINE ST	E ROMIE LN	C	A	2	1256	50	62,800	11/03/2020	52	Fair
Dist 3	SSANBORNRD	S SANBORN RD	040NB	PELLETT AVE	ELVEE DR	A	A	2	1830	20	36,600	11/03/2020	52	Fair
Dist 3	SANTAANADR	SANTA ANA DR	10	GROVE ST (N)	GROVE ST (S)	A	R	2	895	32	28,640	09/30/2020	52	Fair
Dist 5	SEGOVIACIR	SEGOVIA CIR	10	MADRID ST	END	A	R	2	287	32	9,210	10/20/2020	52	Fair
Dist 5	VICTORCIR	VICTOR CIR	10	VICTOR ST	END	A	R	2	330	32	10,560	10/21/2020	52	Fair
Dist 3	WACACIAST	W ACACIA ST	020	RIKER ST	JUNIPERO WAY	A	C	2	1356	37	50,172	10/28/2020	52	Fair
Dist 4	WMENKEST	W MENKE ST	10	MARTELLA ST	N MAIN ST	A	R	2	305	48	14,669	10/14/2020	52	Fair
Dist 4	CALIFORNI1	CALIFORNIA ST	010	S. END	MARKET WAY	A	R	2	166	25	4,150	10/19/2020	51	Fair
Dist 4	CARRAVE	CARR AVE	15	E MARKET ST	END	A	R	2	748	38	28,438	10/19/2020	51	Fair
Dist 2	CARRIAGEDR	CARRIAGE DR	010	COUNTRYSIDE DR	CARRIAGE CT (N)	A	R	2	448	32	14,336	10/12/2020	51	Fair
Dist 5	CASTROST	CASTRO ST	10	N MAIN ST	W LAMAR ST	A	R	2	680	32	21,769	10/20/2020	51	Fair
Dist 5	CLAREMONTS	CLAREMONT ST	10	ROCHEX AVE	W LAUREL DR	A	R	2	457	32	14,633	10/21/2020	51	Fair
Dist 5	COOLIDGEST	COOLIDGE ST	10	HOOVER ST	TAYLOR ST	A	R	2	494	32	15,816	10/20/2020	51	Fair
Dist 3	CORONADOAV	CORONADO AVE	10	WILSON ST	SANTA BARBARA AVE	A	R	2	536	32	17,167	10/26/2020	51	Fair
Dist 2	EALISALST	E ALISAL ST	020	MARGARET ST	FERN ST	A	A	2	911	53	48,283	10/14/2020	51	Fair
Dist 1	EBANOPL	EBANO PL	10	RANCHERO DR	END	A	R	2	203	32	6,525	09/29/2020	51	Fair
Dist 4	FREMONTST	FREMONT ST	15	N MADEIRA AVE	N HEBBRON AVE	A	R	2	1837	32	58,805	10/19/2020	51	Fair
Dist 1	HAWAIIPL	HAWAII PL	10	CARIBBEAN AVE	E END	A	R	2	398	25	9,957	10/05/2020	51	Fair
Dist 4&5	HYDEST	HYDE ST	15	VAN NESS CT	RICO ST	A	R	2	1269	36	45,704	10/21/2020	51	Fair
Dist 5	JACKSONCIR	JACKSON CIR	10	SWANER AVE	END	A	R	2	165	27	4,455	10/20/2020	51	Fair
Dist 5	KENNEDYST	KENNEDY ST	15	VAN BUREN AVE	BUCHANAN WAY	A	R	2	524	37	19,388	10/20/2020	51	Fair
Dist 6	KLAMATHDR	KLAMATH DR	10	ARCADIA WAY	CALAVERAS DR	A	R	2	2205	37	81,585	10/07/2020	51	Fair
Dist 3	LOSPALOSDR	LOS PALOS DR	25	ABBOTT ST	E ROMIE LN	C	C	2	1412	37	52,244	10/03/2020	51	Fair
Dist 3	LOSPALOSDR	LOS PALOS DR	30	E ROMIE LN	SAN JOSE ST	A	C	2	607	37	22,459	09/29/2020	51	Fair
Dist 5	MASONWAY	MASON WAY	10	HOWE DR	LARKIN ST	A	R	2	249	32	7,973	10/21/2020	51	Fair
Dist 3	MELODYLN	MELODY LN	20	W ALISAL ST	W SAN LUIS ST	P	R	2	630	15	9,450	11/02/2020	51	Fair
Dist 5	NDAVISRD	N DAVIS RD	180NB	WESTRIDGE PKWY	AUTO CENTER CIR	A	A	2	4506	32	144,192	10/27/2020	51	Fair
Dist 4	NFILICEST	N FILICE ST	15	ELTON PL	S END (BARRICADE)	A	C	2	1606	39	62,634	10/19/2020	51	Fair
Dist 4	NMADEIRAAV	N MADEIRA AVE	140	TERRACE ST	NE END (TREE BARRICADE)	A	R	2	1471	41	60,311	10/19/2020	51	Fair
Dist 5&6	NMAINST	N MAIN ST	035SB	SAN JUAN GRADE RD	HARDEN PKWY	A	A	1	1280	13	16,640	10/28/2020	51	Fair
Dist 5&6	NMAINST	N MAIN ST	NB045	CHEROKEE DR	HARDEN PKWY	A	A	1	611	13	7,943	10/28/2020	51	Fair
Dist 4&5	NMAINST	N MAIN ST	NB085	NAVAJO DR	E ALVIN DR	A	A	3	802	38	30,476	10/27/2020	51	Fair

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 1	NWHMPSHCIR	NEW HAMPSHIRE CIR	10	NEW HAMPSHIRE CT	END	A	R	2	360	33	11,880	09/10/2020	51	Fair
Dist 1	NOGALCIR	NOGAL CIR	10	NOGAL DR	END	A	R	2	260	31	8,060	09/28/2020	51	Fair
Dist 3	SANJOSEST	SAN JOSE ST	010	LOS PALOS DR	WILGART WAY	C	A	2	810	37	29,970	10/03/2020	51	Fair
Dist 5	SOTOPL	SOTO PL	15	E BOLIVAR ST	S END	A	R	2	145	32	4,640	10/20/2020	51	Fair
Dist 5	TRUMANST	TRUMAN ST	15	EISENHOWER ST	ARTHUR ST	A	R	2	546	38	20,748	10/20/2020	51	Fair
Dist 1	ACOSTAPLZ	ACOSTA PLZ	20	N SANBORN RD	END	A	R	2	270	42	11,340	09/29/2020	50	Poor
Dist 5	ALVARADOCT	ALVARADO CT	10	ALVARADO DR (N)	ALVARADO DR (S)	A	R	2	999	32	31,973	10/21/2020	50	Poor
Dist 3	ARCHERST	ARCHER ST	220	CAPITOL ST	CASSIDY ST	C	R	2	214	38	8,132	10/26/2020	50	Poor
Dist 4	BRIGHTONST	BRIGHTON ST	10	STEVENSON ST	FILBERT WAY	A	R	2	478	32	15,300	10/14/2020	50	Poor
Dist 4	BUSHST	BUSH ST	20	HYDE ST	S END	A	R	2	185	32	5,920	10/14/2020	50	Poor
Dist 2	CARRIAGECT	CARRIAGE CT	10	CARRIAGE DR (N)	CARRIAGE DR (S)	A	R	2	786	32	25,152	10/12/2020	50	Poor
Dist 4	CENTERST	CENTER ST	15	E MARKET ST	EAST ST	A	R	2	906	38	34,428	10/19/2020	50	Poor
Dist 3	CENTRALAVE	CENTRAL AVE	180	SALINAS ST	MAIN ST	A	C	2	260	40	10,429	10/26/2020	50	Poor
Dist 3	CHESTNUTST	CHESTNUT ST	20	PAJARO ST	CALIFORNIA ST	C	R	2	691	45	31,095	10/03/2020	50	Poor
Dist 6	COVENTRYST	COVENTRY ST	15	GLENDORA WAY	BARICADE (N)	A	R	2	120	37	4,440	10/22/2020	50	Poor
Dist 6	DONNERWAY	DONNER WAY	15	HUMBOLDT DR	EMERALD DR	A	R	2	804	37	29,748	10/07/2020	50	Poor
Dist 3	EROMIELN	E ROMIE LN	030	LOS PALOS DR	ABBOTT ST	C	A	4	1766	62	109,492	10/03/2020	50	Poor
Dist 3	FRONTST	FRONT ST	040	E MARKET ST (AC START)	E ALISAL ST	A	A	3	763	54	41,202	10/29/2020	50	Poor
Dist 5	KENNEDYST	KENNEDY ST	35	BUCHANAN WAY	END	A	R	2	1655	33	54,615	10/20/2020	50	Poor
Dist 3	LAMESADR	LA MESA DR	070	SAN JUAN DR	LA MESA WAY	A	C	2	1597	37	59,089	09/29/2020	50	Poor
Dist 1	LASCASITAS	LAS CASITAS DR	10	CONSTITUTION BLVD	RANCHERO DR	A	A	2	1552	38	58,980	09/29/2020	50	Poor
Dist 3	LORIMERST	LORIMER ST	10	CENTRAL AVE	W ALISAL ST	C	R	2	1146	32	36,672	10/26/2020	50	Poor
Dist 3	MAINST	MAIN ST	25	E SAN LUIS ST	W GABILAN ST	A	C	2	1351	37	49,993	02/21/2019	50	Poor
Dist 4	NSANBORNRD	N SANBORN RD	70	OREGON ST	E MARKET ST	A	A	2	2580	32	82,589	10/23/2020	50	Poor
Dist 6	NATIVIDADR	NATIVIDAD RD	080	E BORONDA RD	ROGGE RD	A	R	2	5275	38	200,450	09/30/2020	50	Poor
Dist 4	OCONNORCIR	OCONNOR CIR	10	ST BRENDAN WAY	ROSARITA DR	A	R	2	871	32	27,890	10/15/2020	50	Poor
Dist 1	PACIFICAVE	PACIFIC AVE	010	AMARILLO WAY	DEL MONTE AVE	A	R	2	1154	38	43,852	10/05/2020	50	Poor
Dist 3	PALMETTOST	PALMETTO ST	10	W MARKET ST	RAILROAD AVE	A	R	2	361	52	18,772	10/26/2020	50	Poor
Dist 3	PARKST	PARK ST	020	HOMESTEAD AVE	NACIONAL ST	P	C	2	1278	40	51,120	10/26/2020	50	Poor
Dist 5	PIERCEST	PIERCE ST	10	NORTHRIDGE DR	SWANER AVE	A	R	2	464	32	14,848	10/20/2020	50	Poor
Dist 4	RIANDAST	RIANDA ST	10	GRIFFIN ST	PRADER ST	A	R	2	918	37	33,990	10/19/2020	50	Poor
Dist 4	RINCONAVE	RINCON AVE	10	CENTER ST	EAST ST	A	R	2	700	32	22,413	10/19/2020	50	Poor
Dist 2	SSANBORNRD	S SANBORN RD	SB020	JOHN ST	FAIRVIEW AVE	A	A	2	792	40	31,680	10/22/2020	50	Poor
Dist 3	SSANBORNRD	S SANBORN RD	SB050	PELLETT AVE	RAILROAD Overpass (PCC START)	A	A	2	227	20	4,540	11/03/2020	50	Poor
Dist 3	SSANBORNRD	S SANBORN RD	SB070	RAILROAD Overpass (PCC END)	ABBOTT ST	A	A	2	980	20	19,600	11/03/2020	50	Poor
Dist 1	SIEBERST	SIEBER ST	15	PACIFIC AVE	GARNER AVE	A	R	2	814	22	17,908	10/05/2020	50	Poor
Dist 4	STFRANCISW	ST FRANCIS WAY	15	SORRENTINI DR	ROSARITA DR	A	R	2	1714	32	54,859	10/15/2020	50	Poor
Dist 5	SWANERCIR	SWANER CIR	10	SWANER AVE	END	A	R	2	195	28	5,460	10/20/2020	50	Poor
Dist 4	TERRACEST	TERRACE ST	15	N MADEIRA AVE	FREMONT ST	A	R	2	1625	32	52,000	10/19/2020	50	Poor
Dist 3	VERTINAVE	VERTIN AVE	010	INDUSTRIAL ST	TERVEN AVE	A	C	2	1636	42	68,712	09/28/2020	50	Poor
Dist 5	WBOLIVARST	W BOLIVAR ST	15	N MAIN ST	END	A	R	2	490	42	20,580	10/20/2020	50	Poor
Dist 3&4	WROSSIST	W ROSSI ST	055	VICTOR ST	N DAVIS RD	A	A	2	1346	54	72,684	11/03/2020	50	Poor
Dist 2	WILLIAMSRD	WILLIAMS RD	055	BARDIN RD	DEL MONTE AVE	A	A	4	971	76	73,815	10/14/2020	50	Poor
Dist 3	WINHAMST	WINHAM ST	35	S MAIN ST	END	P	A	2	2361	42	99,169	10/29/2020	50	Poor
Dist 1	ATLANTICST	ATLANTIC ST	15	GARNER AVE	DEL MONTE AVE	A	R	2	1546	32	49,472	10/05/2020	49	Poor
Dist 1	CST	C ST	010	MAE AVE	GALINDO ST	A	R	2	847	32	27,119	10/05/2020	49	Poor
Dist 3	CAMDENWAY	CAMDEN WAY	020	W ACACIA ST	CARMELITA DR	A	R	2	538	32	17,216	10/01/2020	49	Poor
Dist 3	CAPITOLST	CAPITOL ST	010	W MARKET ST	CENTRAL ST	P	C	2	1170	40	46,800	10/27/2020	49	Poor

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 5	CHEROKEEDR	CHEROKEE DR	040	DURAN ST	W ALVIN DR	A	C	2	1324	42	55,608	10/20/2020	49	Poor
Dist 5	CHEROKEEDR	CHEROKEE DR	060	INCA WAY	TULANE ST	A	C	2	2170	38	82,460	10/20/2020	49	Poor
Dist 2	DELMONTEAV	DEL MONTE AVE	040	BURKE ST	WILLIAMS RD	A	C	2	1130	44	49,720	10/09/2020	49	Poor
Dist 6	EBORONDARD	E BORONDA RD	040	MCKINNON ST	EL DORADO DR	A	A	2	3044	45	136,980	10/22/2020	49	Poor
Dist 4	NMADEIRAAV	N MADEIRA AVE	020	ST EDWARDS AVE	HILL CIR	A	R	2	1637	37	60,569	10/16/2020	49	Poor
Dist 3	NACIONALST	NACIONAL ST	20	CATALINA AVE	CENTRAL AVE	P	C	2	813	40	32,520	10/26/2020	49	Poor
Dist 1	NOGALDR	NOGAL DR	020	FREEDOM PKWY	MIMBRERA WAY	A	C	2	1638	38	62,244	09/28/2020	49	Poor
Dist 3	PAJAROST	PAJARO ST	020	JOHN ST	MAPLE ST	C	A	2	974	50	48,700	11/03/2020	49	Poor
Dist 3	RIKERCIR	RIKER CIR	10	RIKER ST	END	A	R	2	126	32	4,035	10/01/2020	49	Poor
Dist 6	SARATOGACI	SARATOGA CIR	10	SARATOGA DR	END	A	R	2	232	32	7,432	10/07/2020	49	Poor
Dist 6	TAHOEDR	TAHOE DR	15	LOS COCHES AVE	END	A	R	2	1498	35	52,430	10/07/2020	49	Poor
Dist 3	ABBOTTST	ABBOTT ST	SB100	1100' E(S)/O HARKINS RD	HARRIS RD	O	A	2	4294	28	120,232	11/02/2020	48	Poor
Dist 1	CARIBBEANA	CARIBBEAN AVE	010	HAWAII PL	TAHITI PL	A	R	2	241	32	7,712	10/05/2020	48	Poor
Dist 2	COUNTRYSID	COUNTRYSIDE DR	15	BARDIN RD	EAST END	A	R	2	915	40	36,600	10/12/2020	48	Poor
Dist 1&6	EBORONDARD	E BORONDA RD	070	INDEPENDENCE BLVD	HEMINGWAY DR	A	A	2	2199	45	98,955	10/22/2020	48	Poor
Dist 2	ELAURELDR	E LAUREL DR	035	TOWT ST	WILLIAMS RD	A	A	2	1686	42	70,812	10/14/2020	48	Poor
Dist 3	ESANLUISST	E SAN LUIS ST	050	MAIN ST	FRONT ST	P	C	2	1699	34	57,766	10/29/2020	48	Poor
Dist 3	HASTINGSAV	HASTINGS AVE	25	COLUMBIA AVE	CAMPUS AVE	A	R	2	1207	32	38,651	10/01/2020	48	Poor
Dist 6	HUMBOLDTDR	HUMBOLDT DR	15	YREKA DR	TRUCKEE WAY	A	R	2	1548	37	57,276	10/07/2020	48	Poor
Dist 1	JOSEPHINES	JOSEPHINE ST	15	C ST	END	A	R	2	632	32	20,250	10/05/2020	48	Poor
Dist 5	LABREAST	LA BREA ST	10	SEPULVEDA DR	N 1ST ST	A	R	2	443	32	14,203	10/21/2020	48	Poor
Dist 3	MAPLEWOODD	MAPLEWOOD DR	30	GROVE ST	SIERRA DR	A	R	2	391	32	12,523	09/30/2020	48	Poor
Dist 1	MIMBRERACI	MIMBRERA CIR	10	MIMBRERA WAY	END	A	R	2	330	31	10,230	09/28/2020	48	Poor
Dist 3	MONTECITOW	MONTECITO WAY	15	W ALISAL ST	SAN JACINTO DR	A	R	2	953	37	35,261	10/01/2020	48	Poor
Dist 3	OAKST	OAK ST	15	S MAIN ST	E END	P	R	2	2074	34	70,516	10/28/2020	48	Poor
Dist 5	POSTDR	POST DR	10	N DAVIS RD	W LAUREL DR	O	A	4	1103	66	72,858	10/21/2020	48	Poor
Dist 4	POWELLST	POWELL ST	15	W ROSSI ST	END	A	R	2	2292	37	84,815	10/16/2020	48	Poor
Dist 4	RAINIERDR	RAINIER DR	015	SHIRES WAY	LINWOOD DR	A	R	2	892	32	28,568	10/15/2020	48	Poor
Dist 3	RIKERST	RIKER ST	110	W ALISAL ST	CLAY ST	P	A	2	1116	40	44,640	10/27/2020	48	Poor
Dist 3	SANTOMASWA	SAN TOMAS WAY	15	SAN MARCOS DR	SAN DIEGO DR	A	R	2	623	32	19,966	09/29/2020	48	Poor
Dist 5	SEPULVEDAC	SEPULVEDA CIR	10	SEPULVEDA DR	END	A	R	2	325	32	10,400	10/21/2020	48	Poor
Dist 6	SISKIYOUDR	SISKIYOU DR	10	CALAVERAS DR	KLAMATH DR	A	R	2	1394	32	44,608	10/06/2020	48	Poor
Dist 3	STEPHANIED	STEPHANIE DR	20	STEPHANIE DR	BYRON DR	A	R	2	633	35	22,155	10/01/2020	48	Poor
Dist 3	WACACIAST	W ACACIA ST	030	JUNIPERO WAY	W ALISAL ST	A	C	2	2299	37	85,063	10/28/2020	48	Poor
Dist 1	WHITMANCIR	WHITMAN CIR	10	LONGFELLOW DR	END	A	R	2	420	32	13,440	09/11/2020	48	Poor
Dist 3	WORKCIR	WORK CIR	10	WORK ST	END	A	R	2	402	32	12,877	09/29/2020	48	Poor
Dist 3	AMBROSEDR	AMBROSE DR	010	DAVIS RD	W ALISAL ST	A	C	2	2239	42	94,038	10/01/2020	47	Poor
Dist 5	ARTHURST	ARTHUR ST	15	CLEVERLAND AVE	END	A	R	2	2200	32	70,406	10/20/2020	47	Poor
Dist 2	BEVERLYDR	BEVERLY DR	15	FAIRVIEW AVE	FLORENCE PL	A	R	2	1345	32	43,051	10/13/2020	47	Poor
Dist 5	BORONDARD	BORONDA RD	010WB	N MAIN ST	N FREEWAY ON RAMP	A	A	2	546	32	17,502	10/27/2020	47	Poor
Dist 4	CABRILLOAV	CABRILLO AVE	10	TAMPICO AVE	LINWOOD DR	A	R	2	880	32	28,177	10/15/2020	47	Poor
Dist 1	CHARROWAY	CHARRO WAY	10	ALAMO WAY	RIDER AVE	A	R	2	302	38	11,476	09/29/2020	47	Poor
Dist 2	EALISALST	E ALISAL ST	030	FERN ST	TAMPA ST	A	A	2	1167	53	61,851	10/14/2020	47	Poor
Dist 6	EMERALDWAY	EMERALD WAY	15	EMERALD DR	PESCADERO DR	A	R	2	673	42	28,266	10/07/2020	47	Poor
Dist 3	GONZALESAL	GONZALES ALY	10	E GABILAN ST	E ALISAL ST	P	R	2	672	14	9,408	11/02/2020	47	Poor
Dist 3	GROVEST	GROVE ST	020	START OF LOOP	END OF LOOP	A	R	2	675	32	21,600	09/30/2020	47	Poor
Dist 6	HARDENPKWY	HARDEN PKWY	WB010	EL DORADO DR	WINDSOR ST	A	C	2	1540	28	43,120	09/29/2020	47	Poor
Dist 5	KENNEDYCIR	KENNEDY CIR	10	KENNEDY ST	END	A	R	2	350	32	11,200	10/20/2020	47	Poor

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	LAMESADR	LA MESA DR	050	W END	PAJARO ST	A	C	2	217	37	8,029	09/29/2020	47	Poor
Dist 6	LOSCOCHESC	LOS COCHES CIR	10	LOS COCHES AVE	END	A	R	2	326	32	10,447	10/07/2020	47	Poor
Dist 5	MADRIDCIR	MADRID CIR	10	MADRID ST	END	A	R	2	495	32	15,840	10/20/2020	47	Poor
Dist 5	MASSAST	MASSA ST	15	N MAIN ST	END	A	R	2	479	32	15,348	10/20/2020	47	Poor
Dist 4	NDAVISRD	N DAVIS RD	150NB	W ROSSI ST	SLOAT DR	O	A	2	751	32	24,032	10/27/2020	47	Poor
Dist 4	NHEBBRONAV	N HEBBRON AVE	15	E ALISAL ST	E MARKET ST	A	C	2	1149	40	45,960	10/19/2020	47	Poor
Dist 5	NMAINST	N MAIN ST	025SB	E BORONDA RD	SAN JUAN GRADE RD	A	A	1	1749	13	22,737	10/28/2020	47	Poor
Dist 4	NSANBORNRD	N SANBORN RD	80	E MARKET ST	E ALISAL ST	A	A	4	1308	65	85,020	10/23/2020	47	Poor
Dist 6	NEWPORTCT	NEWPORT CT	10	LEXINGTON DR N. SIDE	LEXINGTON DR S. SIDE	A	R	2	1675	32	53,600	10/08/2020	47	Poor
Dist 5	POLKST	POLK ST	20	W LAUREL DR	TYLER ST	A	R	2	2237	32	71,614	10/21/2020	47	Poor
Dist 6	RAMONAAVE	RAMONA AVE	20	RAINIER DR	GLACIER DR	A	R	2	997	32	31,904	10/06/2020	47	Poor
Dist 1	RHDISLDCIR	RHODE ISLAND CIR	10	RHODE ISLAND ST	END	A	R	2	285	33	9,405	09/10/2020	47	Poor
Dist 4	ROOSEVELTS	ROOSEVELT ST	15	KERN ST	N PEARL ST	A	C	2	2049	41	84,009	10/19/2020	47	Poor
Dist 4	SIMASST	SIMAS ST	15	E MARKET ST	END	A	R	2	732	38	27,834	10/19/2020	47	Poor
Dist 5	SWANERAVE	SWANER AVE	15	SANTA RITA ST	VAN BUREN AVE	A	R	2	2126	38	80,788	10/20/2020	47	Poor
Dist 3	WESTST	WEST ST	090	LANG ST	GEIL ST	A	R	2	323	32	10,344	10/27/2020	47	Poor
Dist 3	WILLOWST	WILLOW ST	15	S MAIN ST	CALIFORNIA ST	P	R	2	1463	32	46,816	10/29/2020	47	Poor
Dist 3	BELLARMINE	BELLARMINE DR	10	W ALISAL ST	PALMA DR	A	R	2	978	32	31,320	10/01/2020	46	Poor
Dist 6	CALAVERASD	CALAVERAS DR	15	END	END	A	R	2	3228	32	103,300	10/07/2020	46	Poor
Dist 3	CAMDENWAY	CAMDEN WAY	010	BEDFORD DR	W ACACIA ST	A	R	2	215	32	6,880	10/01/2020	46	Poor
Dist 2	CAROLDR	CAROL DR	15	FLORENCE PL	END	A	R	2	1431	32	45,813	10/13/2020	46	Poor
Dist 3	CHURCHST	CHURCH ST	40	CLAY ST	W ALISAL ST	C	C	2	1117	38	42,446	10/27/2020	46	Poor
Dist 5	EBORONDARD	E BORONDA RD	010EB	N MAIN ST	SAN JUAN GRADE RD	O	A	2	1684	40	67,360	10/22/2020	46	Poor
Dist 3	EGABILANST	E GABILAN ST	15	MAIN ST	PAJARO ST	A	C	2	676	32	21,639	03/26/2019	46	Poor
Dist 4	ELAURELDR	E LAUREL DR	015	LINWOOD DR	GRANADA AVE	A	A	4	1128	58	65,424	10/22/2020	46	Poor
Dist 4	EMARKETST	E MARKET ST	035EB	END PCC (S/O MARKET WAY)	E MARKET ST	A	A	2	360	28	10,080	10/28/2020	46	Poor
Dist 3	EROMIELN	E ROMIE LN	020	ALAMEDA AVE	LOS PALOS DR	A	A	4	1186	62	73,572	09/29/2020	46	Poor
Dist 2	GLENWOODCT	GLENWOOD CT	10	ALMA AVE	KIMMEL ST	A	R	2	447	32	14,315	10/13/2020	46	Poor
Dist 5	HOOVERST	HOOVER ST	15	EISENHOWER ST	SOUZA WAY	A	R	2	1394	32	44,623	10/20/2020	46	Poor
Dist 3	LACANADAWA	LA CANADA WAY	10	LOS OLIVOS DR	LA JOLLA WAY	A	R	2	682	32	21,824	10/01/2020	46	Poor
Dist 6	LASSENAVE	LASSEN AVE	15	E ALVIN DR	RAINIER DR	A	R	2	1246	38	47,348	10/06/2020	46	Poor
Dist 5	LENNYST	LENNY ST	15	HOOVER ST	LOUISE ST	A	R	2	1354	32	43,348	10/22/2020	46	Poor
Dist 3	LINCOLNAVE	LINCOLN AVE	020	CLAY ST	AVENUE A	C	R	2	538	38	20,444	11/03/2020	46	Poor
Dist 3	LOSPALOSDR	LOS PALOS DR	45	SAN JOSE ST	SAN MIGUEL AVE	A	C	2	862	37	31,894	09/29/2020	46	Poor
Dist 2	MAGNOLIADR	MAGNOLIA DR	10	GARDEN WAY	MEADOW DR	A	R	2	1050	32	33,600	10/12/2020	46	Poor
Dist 5	NMAINST	N MAIN ST	NB025	SAN JUAN GRADE RD	E BORONDA RD	A	A	1	1749	13	22,737	10/28/2020	46	Poor
Dist 3	PALMADR	PALMA DR	020	W ALISAL ST	IVERSON ST	C	C	2	3060	38	116,280	10/27/2020	46	Poor
Dist 3	SSANBORNRD	S SANBORN RD	010NB	ABBOTT ST	RAILROAD Ovepass (PCC START)	A	A	2	972	20	19,440	11/03/2020	46	Poor
Dist 3	SANJUANDR	SAN JUAN DR	10	E BLANCO RD	SAN MIGUEL AVE	A	C	2	1257	37	46,509	09/30/2020	46	Poor
Dist 5&6	SANJUANGRA	SAN JUAN GRADE RD	060	E BORONDA RD	VAN BUREN AVE	A	A	2	2006	38	76,228	10/28/2020	46	Poor
Dist 3	SANMIGUELA	SAN MIGUEL AVE	010	S MAIN ST	PAJARO ST	O	C	2	843	56	47,208	11/02/2020	46	Poor
Dist 4	SONORAWAY	SONORA WAY	10	CHAPARRAL ST	TAMPICO AVE	A	R	2	1078	32	34,509	10/22/2020	46	Poor
Dist 4&5	VANNESSCT	VAN NESS CT	10	VICTOR ST (W)	HYDE ST	A	R	2	717	37	26,529	10/21/2020	46	Poor
Dist 3	VASSARAVE	VASSAR AVE	10	HASTINGS AVE	LEMOS AVE	A	R	2	680	32	21,783	10/01/2020	46	Poor
Dist 6	VENTURAWAY	VENTURA WAY	10	NAPA WAY	SUTTER ST	A	R	2	602	32	19,266	10/06/2020	46	Poor
Dist 5	WALVINDR	W ALVIN DR	15	N MAIN ST	CHEROKEE DR	A	C	2	1997	67	133,799	10/20/2020	46	Poor
Dist 2	WILLIAMSRD	WILLIAMS RD	010	E ALISAL ST	E MARKET ST	A	A	4	1769	64	113,216	10/14/2020	46	Poor
Dist 1	ABERFORDCI	ABERFORD CIR	10	DE CUNHA CT	END	A	R	2	260	31	8,060	09/10/2020	45	Poor

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Dist 6	ARCADIAWAY	ARCADIA WAY	30	NATIVIDAD RD	GLENDORA WAY	A	R	2	738	37	27,306	10/07/2020	45	Poor
Dist 3	BAUTISTADR	BAUTISTA DR	10	ORANGE DR	W ROMIE LN	A	R	2	563	32	18,016	10/27/2020	45	Poor
Dist 4	BOLEROAVE	BOLERO AVE	15	E LAUREL DR	CHAPARRAL ST	A	R	2	1793	32	57,377	10/15/2020	45	Poor
Dist 6	CASCADECIR	CASCADE CIR	15	KLAMATH DR	END	A	R	2	491	32	15,739	10/07/2020	45	Poor
Dist 1&2	DELMONTEAV	DEL MONTE AVE	030	MAE AVE	BURKE ST	O	C	2	885	42	37,170	10/09/2020	45	Poor
Dist 3	DRIFTWOODP	DRIFTWOOD PL	15	N END	S END	A	R	2	680	32	21,760	09/30/2020	45	Poor
Dist 3	EACACIAST	E ACACIA ST	010	S. MAIN ST	PAJARO ST	C	A	2	710	34	24,140	12/09/2020	45	Poor
Dist 3	FRONTST	FRONT ST	055	E ALISAL ST	JOHN ST	A	A	4	1839	82	150,798	10/29/2020	45	Poor
Dist 3	LAMESADR	LA MESA DR	080	LA MESA WAY	SAN ANGELO DR	A	C	2	1433	37	53,021	09/29/2020	45	Poor
Dist 1	MAEAVE	MAE AVE	020	D ST	DEL MONTE AVE	A	R	2	823	32	26,345	10/05/2020	45	Poor
Dist 3	MAINST	MAIN ST	30	JOHN ST	E SAN LUIS ST	A	C	4	341	60	20,507	11/03/2020	45	Poor
Dist 6	MCKINNONST	MCKINNON ST	10	E ALVIN DR	WESTMINSTER DR	A	C	4	988	54	53,352	10/22/2020	45	Poor
Dist 5	NDAVISRD	N DAVIS RD	160NB	SLOAT DR	W LAUREL DR	A	A	2	3026	32	96,832	10/23/2020	45	Poor
Dist 4	NPEARLST	N PEARL ST	15	E MARKET ST	E ALISAL ST	A	R	2	1146	36	41,256	10/19/2020	45	Poor
Dist 4	NAVAJODR	NAVAJO DR	70	NORTH MAIN ST	NOICE ST	A	C	2	331	41	13,571	10/15/2020	45	Poor
Dist 3	PADREDR	PADRE DR	030	W SAN JOAQUIN ST	NISSEN RD	A	C	2	457	42	19,194	10/01/2020	45	Poor
Dist 1	PINOWAY	PINO WAY	10	LAS CASITAS DR	ALAMO WAY	A	R	2	832	32	26,638	09/29/2020	45	Poor
Dist 6	REDONDOWAY	REDONDO WAY	10	COMPTON WAY	GLENDORA WAY	A	R	2	1091	32	34,928	10/07/2020	45	Poor
Dist 3	SSANBORNRD	S SANBORN RD	030NB	RAILROAD Overpass (PCC END)	PELLETT AVE	A	A	2	225	20	4,500	11/03/2020	45	Poor
Dist 3	SANMIGUELA	SAN MIGUEL AVE	020	PAJARO ST	ALAMEDA AVE	A	C	2	1924	32	61,568	11/02/2020	45	Poor
Dist 1	TAHITIPL	TAHITI PL	10	CARIBBEAN AVE	END	A	R	2	407	25	10,175	10/05/2020	45	Poor
Dist 4	TOYONAVE	TOYON AVE	10	REATA ST	TAPADERO DR	A	R	2	725	38	27,564	10/15/2020	45	Poor
Dist 3	WACACIAST	W ACACIA ST	010	S MAIN ST	RIKER ST	A	C	2	1471	35	51,485	10/28/2020	45	Poor
Dist 3	ABBOTTST	ABBOTT ST	NB020	1100' E(S)/O HARKINS RD	GROWERS ST	C	A	2	2311	44	101,684	10/30/2020	44	Poor
Dist 3	BEDFORDDR	BEDFORD DR	15	COLUMBIA AVE	CAMDEN AVE	A	R	2	1704	32	54,528	10/01/2020	44	Poor
Dist 3	CENTRALAVE	CENTRAL AVE	075	NACIONAL ST	HOMESTEAD AVE	C	C	2	1279	49	62,671	10/26/2020	44	Poor
Dist 6	CHICOWAY	CHICO WAY	10	SISKIYOU DR	CALAVERAS DR	A	R	2	695	32	22,265	10/06/2020	44	Poor
Dist 2	EALISALST	E ALISAL ST	060	WILLIAMS RD	TOWT ST	A	A	4	987	67	66,129	10/14/2020	44	Poor
Dist 1	EBORONDARD	E BORONDA RD	090	CONSTITUTION BLVD	RIDER AVE	A	A	2	1763	45	79,335	10/06/2020	44	Poor
Dist 3	EGABILANST	E GABILAN ST	55	PAJARO ST	CALIFORNIA ST	A	C	2	673	49	32,977	10/29/2020	44	Poor
Dist 2	EMARKETST	E MARKET ST	100	KENNETH AVE	E ALISAL ST	A	C	2	1321	64	84,544	10/13/2020	44	Poor
Dist 2	FERNST	FERN ST	10	E ALISAL ST	SYCAMORE RD	A	R	2	315	34	10,722	10/12/2020	44	Poor
Dist 6	INYOCIR	INYO CIR	10	MENDOCINO DR	END	A	R	2	250	32	8,014	09/29/2020	44	Poor
Dist 3	LEMOSAVE	LEMOS AVE	010	DAVIS RD	COLLEGE DR	A	R	2	2532	37	93,684	10/01/2020	44	Poor
Dist 1	MANZANOCIR	MANZANO CIR	10	MIMBRERA WAY	END	A	R	2	482	31	14,954	09/28/2020	44	Poor
Dist 4	MARTELLAST	MARTELLA ST	10	PRESTONE ST	W ROSSI ST	A	R	2	684	35	23,940	10/14/2020	44	Poor
Dist 3	MELROSEDR	MELROSE DR	10	BELMONT DR	PARK ST	A	R	2	736	32	23,578	10/02/2020	44	Poor
Dist 5	MONTGOMERY	MONTGOMERY ST	10	BUSH ST	HYDE ST	A	R	2	797	32	25,506	10/21/2020	44	Poor
Dist 4	MYRTLEST	MYRTLE ST	10	CIRCLE DR	TOWT ST	A	R	2	899	30	26,970	10/16/2020	44	Poor
Dist 5	NORTHRIDGE	NORTHRIDGE DR	15	VAN BUREN AVE	SWANER AVE	A	R	2	2778	37	102,812	10/20/2020	44	Poor
Dist 5	PRADOST	PRADO ST	10	W END	PEREZ ST	A	R	2	296	34	10,064	10/20/2020	44	Poor
Dist 4	TAMPICOAVE	TAMPICO AVE	90	ELWOOD ST	RAINIER DR	A	R	2	1261	32	40,352	10/15/2020	44	Poor
Dist 3	WSANJOAQUI	W SAN JOAQUIN ST	10	E SAN JOAQUIN ST	PADRE DR	A	R	2	765	32	24,507	10/01/2020	44	Poor
Dist 2	WILLIAMSRD	WILLIAMS RD	020	E MARKET ST	BELLEHAVEN ST	A	A	4	1412	64	90,368	10/14/2020	44	Poor
Dist 6	ALTURASWAY	ALTURAS WAY	10	ALTURAS CIR	TAHOE DR	A	R	2	394	32	12,631	10/07/2020	43	Poor
Dist 2	ANDINACIR	ANDINA CIR	10	ANDINA DR	END	A	R	2	190	32	6,080	10/12/2020	43	Poor
Dist 6	ATHERTONCI	ATHERTON CIR	10	ATHERTON WAY	END	A	R	2	349	32	11,186	10/07/2020	43	Poor
Dist 3	CALIFORNI1	CALIFORNIA ST	045	E GABILAN ST	JOHN ST	C	C	2	2332	46	107,272	11/02/2020	43	Poor

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Dist 3	COLLEGEDR	COLLEGE DR	010	CAMPUS AVE	W ALISAL ST	A	C	2	1216	38	46,208	10/02/2020	43	Poor
Dist 1	DST	D ST	15	MAE AVE	GALINDO ST	A	R	2	851	32	27,261	10/05/2020	43	Poor
Dist 6	ELSURAVE	EL SUR AVE	10	PESCADERO DR	CAMBRIAN DR	A	R	2	813	32	26,017	10/07/2020	43	Poor
Dist 3	FRONTST	FRONT ST	050WB	FORK 436 FT N/O E SALISAL ST	AC END	A	A	1	594	18	10,692	11/03/2020	43	Poor
Dist 1	GARNERAVE	GARNER AVE	010	END	RIDER AVE	A	R	2	1096	37	40,552	09/29/2020	43	Poor
Dist 4	LOMADR	LOMA DR	15	E LAUREL DR	DORORO DR	A	R	2	1054	32	33,736	10/15/2020	43	Poor
Dist 5	LOUISEST	LOUISE ST	15	CLEVELAND AVE	LENNY ST	A	R	2	1151	32	36,856	10/20/2020	43	Poor
Dist 2	MCGOWANDR	MCGOWAN DR	15	S SANBORN RD	JOHN ST	A	R	2	1282	38	48,716	10/13/2020	43	Poor
Dist 6	NAPAWAY	NAPA WAY	15	EL DORADO DR	IMPERIAL WAY	A	R	2	551	32	17,653	10/06/2020	43	Poor
Dist 3	PALMADR	PALMA DR	010	UNIVERSITY AVE	W ALISAL ST	C	C	2	1620	38	61,560	10/27/2020	43	Poor
Dist 3	SANJOSEST	SAN JOSE ST	020	WILGART WAY	SAN JUAN DR	A	A	2	963	37	35,631	09/30/2020	43	Poor
Dist 3	SANSIMEOND	SAN SIMEON DR	15	CAMDEN WAY	AMBROSE DR	A	R	2	1792	32	57,360	10/01/2020	43	Poor
Dist 4	STALBANSCI	ST ALBANS CIR	10	ST ALBANS WAY	END	A	R	2	130	39	5,070	10/16/2020	43	Poor
Dist 2	WILLIAMSRD	WILLIAMS RD	030	BELLEHAVEN ST	BARDIN WAY	A	A	4	1481	64	94,784	10/14/2020	43	Poor
Dist 3	WOODSIDEDR	WOODSIDE DR	020	IVERSON ST	SAN VINCENTE AVE	A	R	2	1113	32	35,616	09/30/2020	43	Poor
Dist 3	BELMONTDR	BELMONT DR	15	MELROSE DR	ARCHER ST	A	R	2	1097	32	35,135	10/02/2020	42	Poor
Dist 3	BRUCEAVE	BRUCE AVE	20	W ACACIA ST	COLLEGE DR	A	R	2	836	32	26,762	10/02/2020	42	Poor
Dist 1	CARIBBEANA	CARIBBEAN AVE	020	TAHITI PL	PACIFIC AVE	A	R	2	239	32	7,659	10/05/2020	42	Poor
Dist 6	CASCADECT	CASCADE CT	15	KLAMATH DR	CASCADE CIR	A	R	2	958	37	35,446	10/07/2020	42	Poor
Dist 4	CIRCLEPL	CIRCLE PL	10	CIRCLE DR	END	A	R	2	678	38	25,764	10/16/2020	42	Poor
Dist 2	EALISALST	E ALISAL ST	040	TAMPA ST	E MARKET ST	A	A	2	838	42	35,196	10/14/2020	42	Poor
Dist 5	EBOLIVARST	E BOLIVAR ST	15	N MAIN ST	VAN BUREN AVE	A	C	2	2014	32	64,469	10/20/2020	42	Poor
Dist 3	EMARKETST	E MARKET ST	010	MAIN ST	PAJARO ST	A	A	4	755	74	55,870	10/22/2020	42	Poor
Dist 1	GEEST	GEE ST	10	RIDER AVE	END	A	R	2	590	38	22,420	09/29/2020	42	Poor
Dist 6	HARDENPKWY	HARDEN PKWY	WB040	BROADWAY DR	N MAIN ST	A	C	2	2026	28	56,728	09/29/2020	42	Poor
Dist 3	LINCOLNAVE	LINCOLN AVE	030	AVENUE A	AVENUE B	A	R	2	439	40	17,560	11/03/2020	42	Poor
Dist 6	LOSGATOSWA	LOS GATOS WAY	10	SARATOGA DR (W)	SARATOGA DR (E)	A	R	2	1474	32	47,168	10/07/2020	42	Poor
Dist 3	MAPLEST	MAPLE ST	020	PAJARO ST	CALIFORNIA ST	C	C	2	691	42	29,022	10/03/2020	42	Poor
Dist 3	MAPLEWOODD	MAPLEWOOD DR	15	ALAMEDA AVE	GROVE ST	A	R	2	616	32	19,730	09/30/2020	42	Poor
Dist 3	PADREDR	PADRE DR	020	W ROMIE LN	W SAN JOAQUIN ST	A	C	2	1226	32	39,232	10/01/2020	42	Poor
Dist 2	PRINCEPL	PRINCE PL	10	S HEBBRON AVE (N)	S HEBBRON AVE (S)	A	R	2	918	32	29,376	10/12/2020	42	Poor
Dist 3	RIKERST	RIKER ST	130	W ACACIA ST	W ROMIE LN	A	A	2	1000	38	38,000	10/27/2020	42	Poor
Dist 3	RIKERST	RIKER ST	150	W BLANCO RD	KIPLING ST	A	C	2	1506	38	57,228	10/27/2020	42	Poor
Dist 2	SPEARLST	S PEARL ST	15	E ALISAL ST	END	A	R	2	329	32	10,528	10/12/2020	42	Poor
Dist 3	SIERRADR	SIERRA DR	15	GROVE ST	MANOR DR	A	R	2	1561	32	49,977	09/30/2020	42	Poor
Dist 3	VILLAST	VILLA ST	10	CENTRAL AVE	WILSON ST	C	C	2	1285	38	48,830	10/26/2020	42	Poor
Dist 5	WLAMARST	W LAMAR ST	10	CASTRO ST	N MAIN ST	A	R	2	200	32	6,400	10/20/2020	42	Poor
Dist 5	WLAURELDR	W LAUREL DR	150	N DAVIS RD	EL RANCHO WAY	A	A	4	283	70	19,845	10/28/2020	42	Poor
Dist 4	CALIFORNI1	CALIFORNIA ST	020	MARKET WAY	E ROSSI ST	P	R	2	861	52	44,772	10/19/2020	41	Poor
Dist 5	CHEROKEEDR	CHEROKEE DR	020	MADRID ST	SEVILLE ST	A	C	2	599	42	25,158	10/20/2020	41	Poor
Dist 2	CROSSAVE	CROSS AVE	020	E MARKET ST	MIAMI ST	A	R	2	1809	36	65,124	10/12/2020	41	Poor
Dist 4	DIABLODR	DIABLO DR	10	E LAUREL DR	ELWOOD ST	A	R	2	790	30	23,723	10/15/2020	41	Poor
Dist 2&4	EALISALST	E ALISAL ST	080	N SANBORN RD	N HEBBRON AVE	A	A	4	1423	75	106,725	10/14/2020	41	Poor
Dist 4	EMARKETST	E MARKET ST	110WB	MARKET WAY/ SHERWOOD DR	START PCC (S/O MARKET WAY)	A	A	4	177	50	8,850	10/28/2020	41	Poor
Dist 1	ELKINGTONA	ELKINGTON AVE	10	KILBRETH AVE	DEL MONTE AVE	A	R	2	1758	38	66,832	10/05/2020	41	Poor
Dist 5	GARDENIACI	GARDENIA CIR	10	GARDENIA DR	E END	A	R	2	246	31	7,626	10/21/2020	41	Poor
Dist 6	HARDENPKWY	HARDEN PKWY	EB010	N MAIN ST	BROADWAY DR	A	C	2	2015	28	56,420	09/29/2020	41	Poor
Dist 5	LARKINCIR	LARKIN CIR	10	LARKIN ST	END	A	R	2	410	32	13,120	10/21/2020	41	Poor

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 5	LUBERST	LUBER ST	10	HOOVER ST	CLEVELAND AVE	A	R	2	771	32	24,678	10/20/2020	41	Poor
Dist 3	MAPLEST	MAPLE ST	030	CALIFORNIA ST	ABBOTT ST	C	C	2	1706	40	68,240	10/03/2020	41	Poor
Dist 2	MONTANAST	MONTANA ST	15	N SANBORN RD	BEECH ST	A	R	2	1227	32	39,277	10/13/2020	41	Poor
Dist 1	ORCHARDAVE	ORCHARD AVE	10	DEL MONTE AVE	SIEBER ST	A	R	2	1146	25	28,650	10/05/2020	41	Poor
Dist 5	SEVILLEST	SEVILLE ST	15	DURAN ST	CHEROKEE DR	A	R	2	1255	32	40,160	10/20/2020	41	Poor
Dist 2	SHASTAWAY	SHASTA WAY	10	GARDEN WAY	JOHN ST	A	R	2	792	32	25,351	10/13/2020	41	Poor
Dist 4	SOLEDADST	SOLEDAD ST	10	E LAKE ST	MARKET WAY	A	R	2	678	32	21,719	11/02/2020	41	Poor
Dist 5	STOKESWAY	STOKES WAY	10	LARKIN ST	COLTON DR	A	R	2	291	37	10,767	10/21/2020	41	Poor
Dist 3	STONEST	STONE ST	10	W MARKET ST	CENTRAL AVE	C	R	2	788	32	25,216	10/27/2020	41	Poor
Dist 5	TYLERPL	TYLER PL	10	TYLER ST	END	A	R	2	137	32	4,407	10/21/2020	41	Poor
Dist 3&4	WROSSIST	W ROSSI ST	035	SANSOME ST	RICO ST	A	A	2	1029	54	55,566	11/03/2020	41	Poor
Dist 3&4	WROSSIST	W ROSSI ST	045	RICO ST	VICTOR ST	A	A	2	2088	54	112,752	11/03/2020	41	Poor
Dist 3	WOODSIDEDR	WOODSIDE DR	010	RIKER ST	IVERSON ST	A	R	2	1209	32	38,688	09/30/2020	41	Poor
Dist 3	WORKST	WORK ST	50	S SANBORN RD	ELVEE DR	A	A	4	1902	62	117,940	09/29/2020	41	Poor
Dist 3	YOUNGDR	YOUNG DR	10	KIRKWOOD AVE	KIRKWOOD AVE	A	R	2	1040	32	33,285	10/26/2020	41	Poor
Dist 3	ABBOTTST	ABBOTT ST	NB100	JOHN ST	FRONT ST	A	A	2	901	36	32,455	10/30/2020	40	Poor
Dist 2	AIRPORTBLV	AIRPORT BLVD	040	TERVEN AVE	HANSEN ST	A	C	4	1268	59	74,812	10/13/2020	40	Poor
Dist 2	ALMAAVE	ALMA AVE	010	N. SANBORN ROAD	1ST AVE	A	R	2	2714	36	97,704	10/14/2020	40	Poor
Dist 3	AUBURNST	AUBURN ST	010	CHURCH ST	CAYUGA ST	A	R	2	321	39	12,519	10/27/2020	40	Poor
Dist 6	BOCAWAY	BOCA WAY	10	EMERALD WAY	TAHOE DR	A	R	2	264	32	8,478	10/07/2020	40	Poor
Dist 3	CARMELITAD	CARMELITA DR	020	W ALISAL ST	PALMA DR	A	R	2	1050	37	38,850	10/01/2020	40	Poor
Dist 3	CENTRALAVE	CENTRAL AVE	065	UNIVERSITY AVE	NACIONAL ST	C	C	2	1475	49	72,275	10/26/2020	40	Poor
Dist 3	CENTRALAVE	CENTRAL AVE	095	CAPITOL ST	SALINAS ST	C	C	2	1299	49	63,651	10/26/2020	40	Poor
Dist 3	CORNELLAVE	CORNELL AVE	10	HASTINGS AVE	LEMOS AVE	A	R	2	681	32	21,815	10/01/2020	40	Poor
Dist 2&4	EALISALST	E ALISAL ST	070	TOWT ST	N SANBORN RD	A	A	4	1236	75	92,700	10/14/2020	40	Poor
Dist 5	EISENHOWER	EISENHOWER CIR	10	EISENHOWER ST	END	A	R	2	193	32	6,176	10/20/2020	40	Poor
Dist 2	FAIRVIEWAV	FAIRVIEW AVE	15	S SANBORN RD	CAROL DR	A	R	2	2020	34	68,680	10/13/2020	40	Poor
Dist 3	HARKINSRD	HARKINS RD	010	SCHILLING PL	ABBOTT ST	A	C	4	1245	80	99,600	09/28/2020	40	Poor
Dist 3	HARRISPL	HARRIS PL	10	HARRIS RD	END	A	R	2	999	42	41,958	09/28/2020	40	Poor
Dist 3	IVERSONST	IVERSON ST	35	CLAY ST	W ACACIA ST	A	C	2	1279	58	74,182	09/30/2020	40	Poor
Dist 3	IVERSONST	IVERSON ST	55	W ACACIA ST	W BLANCO RD	A	C	2	2417	44	106,348	09/30/2020	40	Poor
Dist 3	KATHERINEA	KATHERINE AVE	15	S MAIN ST	ALAMEDA AVE	A	C	2	2803	32	89,721	10/28/2020	40	Poor
Dist 4	LOMBARDST	LOMBARD ST	15	VINCENT PL	HYDE ST	A	R	2	414	38	15,736	10/14/2020	40	Poor
Dist 3	MAPLEST	MAPLE ST	010	S MAIN ST	PAJARO ST	C	C	2	774	42	32,508	10/03/2020	40	Poor
Dist 5	N3RDST	N 3RD ST	10	BOEING AVE	W CURTIS ST	A	R	2	653	36	23,508	10/21/2020	40	Poor
Dist 5	SANTARITAS	SANTA RITA ST	15	W BOLIVAR ST	SWANER AVE	A	R	2	819	36	29,484	10/20/2020	40	Poor
Dist 3	SPRINGST	SPRING ST	15	JOHN ST	SUMMER ST	C	R	2	500	30	15,000	11/03/2020	40	Poor
Dist 6	UKIAHWAY	UKIAH WAY	10	SISKIYOU DR	CALAVERAS DR	A	R	2	666	32	21,315	10/06/2020	40	Poor
Dist 3&4	WROSSIST	W ROSSI ST	015	N MAIN ST	SANSOME ST	A	A	2	1429	54	77,191	11/03/2020	40	Poor
Dist 3	WESTST	WEST ST	075	W ALISAL ST	CLAY ST	A	R	2	1114	32	35,667	10/26/2020	40	Poor
Dist 3	ABBOTTST	ABBOTT ST	SB010	FRONT ST	JOHN ST	A	A	2	901	36	32,455	11/02/2020	39	Poor
Dist 5	ADAMSST	ADAMS ST	15	W LAUREL DR	NAVAJO DR	A	C	2	1609	32	51,515	10/20/2020	39	Poor
Dist 3	BAYWOODPL	BAYWOOD PL	10	WOODSIDE DR	END	A	R	2	393	32	12,599	09/30/2020	39	Poor
Dist 4	COITWAY	COIT WAY	10	BRIGHTON ST	W ROSSI ST	A	R	2	156	37	5,772	10/14/2020	39	Poor
Dist 3	EBLANCORD	E BLANCO RD	WB10	ABBOTT ST	BLANCO CIR	A	A	2	970	36	34,920	10/29/2020	39	Poor
Dist 4	ECURTISST	E CURTIS ST	25	NOICE DR	REATA ST	A	R	2	710	38	26,980	10/15/2020	39	Poor
Dist 5	EISENHOWE1	EISENHOWER ST	15	VAN BUREN AVE	RUSSELL RD	A	R	2	2875	37	106,406	10/20/2020	39	Poor
Dist 4	GRANADAAVE	GRANADA AVE	35	E LAUREL DR	ROSARITA DR	A	R	2	1748	32	55,948	10/15/2020	39	Poor

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 6	HARDENPKWY	HARDEN PKWY	EB040	WINDSOR ST	EL DORADO DR	A	C	2	1540	28	43,120	09/29/2020	39	Poor
Dist 5	HAYESST	HAYES ST	10	PARKSIDE ST	END	A	R	2	207	37	7,659	10/21/2020	39	Poor
Dist 1	HOLLYST	HOLLY ST	10	RIDER AVE	END	A	R	2	470	32	15,040	09/29/2020	39	Poor
Dist 3	HOMESTEADA	HOMESTEAD AVE	020	WILSON ST	CENTRAL AVE	P	R	2	1230	38	46,740	10/26/2020	39	Poor
Dist 3	HOMESTEADA	HOMESTEAD AVE	030	CENTRAL AVE	W ALISAL ST	C	R	2	1147	38	43,586	10/26/2020	39	Poor
Dist 3	JOHNST	JOHN ST	100	SALINAS ST	S. MAIN ST	A	A	2	200	50	10,000	11/03/2020	39	Poor
Dist 3	REDWOODPL	REDWOOD PL	10	WOODSIDE DR	END	A	R	2	222	32	7,120	09/30/2020	39	Poor
Dist 2	SSANBORNRD	S SANBORN RD	060NB	FAIRVIEW AVE	JOHN ST	O	A	2	792	38	30,096	10/22/2020	39	Poor
Dist 3	SANBORNPL	SANBORN PL	25	N END	INDUSTRIAL ST	A	C	2	2355	34	80,070	10/28/2020	39	Poor
Dist 4	SEQUOIAST	SEQUOIA ST	10	LINWOOD DR	MARYAL DR	A	R	2	1093	32	34,999	10/15/2020	39	Poor
Dist 4	SORRENTINI	SORRENTINI DR	15	GRANADA AVE	NATIVIDAD RD	A	R	2	541	32	17,330	10/15/2020	39	Poor
Dist 5	SOUZAWAY	SOUZA WAY	10	HOOVER ST	LENNY ST	A	R	2	738	32	23,638	10/20/2020	39	Poor
Dist 2	TOWTST	TOWT ST	040	CORTEZ ST	GARNER AVE	A	C	2	787	36	28,332	10/14/2020	39	Poor
Dist 6	TRUCKEEWAY	TRUCKEE WAY	10	DONNER WAY	HUMBOLDT DR	A	R	2	1180	32	37,774	10/07/2020	39	Poor
Dist 4&5	VICTORST	VICTOR ST	30	VAN NESS CT (W)	MCALLISTER ST	A	R	2	524	41	21,484	10/21/2020	39	Poor
Dist 3	WACACIAST	W ACACIA ST	040	W ALISAL ST	DAVIS RD	A	C	2	2483	38	94,354	10/28/2020	39	Poor
Dist 2	ALMAAVE	ALMA AVE	020	1ST AVE	WILLIAMS RD	A	R	2	598	36	21,528	10/14/2020	38	Poor
Dist 3	AMBROSEDR	AMBROSE DR	020	W ALISAL ST	SAN VINCENTE AVE	A	C	2	1788	37	66,156	10/01/2020	38	Poor
Dist 4	ANGELUSDR	ANGELUS DR	10	E LAUREL DR	ELWOOD ST	A	R	2	802	32	25,690	10/15/2020	38	Poor
Dist 3	COLUMBIAAV	COLUMBIA AVE	10	HASTINGS AVE	LEMOS AVE	A	R	2	682	32	21,824	10/01/2020	38	Poor
Dist 6	CUPERTINOW	CUPERTINO WAY	15	MILLBRAE ST	CAMBRIAN DR	A	R	2	2262	32	72,397	10/07/2020	38	Poor
Dist 5	DOUGLASAVE	DOUGLAS AVE	10	CRESCENT WAY	N 1ST ST	A	R	2	839	36	30,204	10/21/2020	38	Poor
Dist 5	EBORONDARD	E BORONDA RD	WB020	SAN JUAN GRADE RD	N MAIN ST	O	A	2	1684	40	67,360	10/22/2020	38	Poor
Dist 1	GALINDOST	GALINDO ST	15	DEL MONTE AVE	END	A	R	2	1151	32	36,838	10/05/2020	38	Poor
Dist 4	GRANADAAVE	GRANADA AVE	15	CHAPARRAL ST	E LAUREL DR	A	R	2	1794	32	57,422	10/15/2020	38	Poor
Dist 3	HANSENST	HANSEN ST	15	AIRPORT BLVD	HARKINS RD	A	C	2	1051	62	65,162	10/28/2020	38	Poor
Dist 3	HAWTHORNES	HAWTHORNE ST	030	CARMEL AVE	ALAMEDA AVE	C	C	2	561	32	17,952	10/28/2020	38	Poor
Dist 1	KILBRETHAV	KILBRETH AVE	10	ELKINGTON AVE	DEL MONTE AVE	A	R	2	1666	31	51,646	10/05/2020	38	Poor
Dist 2	KIMMELST	KIMMEL ST	15	N SANBORN RD	BEECH ST	A	R	2	1224	32	39,189	10/13/2020	38	Poor
Dist 3	LOMAVISTAD	LOMA VISTA DR	10	W ALISAL ST	SIERRA MADRE DR	A	R	2	735	32	23,530	10/01/2020	38	Poor
Dist 4	NSANBORNRD	N SANBORN RD	60	E LAUREL DR	OREGON ST	A	A	2	453	65	29,487	10/23/2020	38	Poor
Dist 5	PARKSIDEST	PARKSIDE ST	20	W LAUREL DR	S END	A	R	2	925	38	35,150	10/21/2020	38	Poor
Dist 3	SANMARCOSC	SAN MARCOS CT	10	SAN MARCOS DR (N)	SAN MARCOS DR (S)	A	R	2	936	32	29,952	09/29/2020	38	Poor
Dist 3	SANTACRUZA	SANTA CRUZ AVE	15	SAN ANGELO DR	SAN MARCOS DR	A	C	2	875	37	32,375	09/29/2020	38	Poor
Dist 5	WCURTISST	W CURTIS ST	015	N MAIN ST	PUEBLO DR	A	C	2	2881	32	92,216	10/21/2020	38	Poor
Dist 3	WGABILANST	W GABILAN ST	50	CHURCH ST	CAPITOL ST	A	C	2	640	32	20,480	10/29/2020	38	Poor
Dist 2	AIRPORTBLV	AIRPORT BLVD	010	SKYWAY BLVD	MERCER WAY	A	C	4	1030	60	61,843	10/13/2020	37	Poor
Dist 5	ARTHURCT	ARTHUR CT	10	CLEVELAND AVE	END	A	R	2	316	27	8,544	10/20/2020	37	Poor
Dist 3	ASPENPL	ASPEN PL	10	WOODSIDE DR	END	A	R	2	175	32	5,600	09/30/2020	37	Poor
Dist 3	AUBURNST	AUBURN ST	020	CAYUGA ST	CAPITOL ST	A	R	2	310	30	9,300	10/27/2020	37	Poor
Dist 3	AVENUEB	AVENUE B	10	LINCOLN AVE	S MAIN ST	A	R	2	298	37	11,026	10/29/2020	37	Poor
Dist 3	CATALINAAV	CATALINA AVE	10	WILSON ST	NACIONAL ST	A	R	2	668	37	24,716	10/26/2020	37	Poor
Dist 3	CLAYST	CLAY ST	20	LINCOLN AVE	IVERSON ST	C	C	2	1962	36	70,632	10/29/2020	37	Poor
Dist 6	EBORONDARD	E BORONDA RD	060	NATIVIDAD DR	INDEPENDENCE BVD	A	A	2	2082	45	93,690	10/22/2020	37	Poor
Dist 1	EBORONDARD	E BORONDA RD	080	HEMINGWAY BLVD	CONSTITUTION BLVD	A	A	2	3738	44	164,472	10/06/2020	37	Poor
Dist 1	ELMDR	ELM DR	10	RIDER AVE	END	A	R	2	375	23	8,625	09/29/2020	37	Poor
Dist 4	ELWOODST	ELWOOD ST	15	TAMPICO AVE	LOMA DR	A	R	2	2182	32	69,852	10/15/2020	37	Poor
Dist 6	GLACIERDR	GLACIER DR	10	PLUMAS WAY	MODOC AVE	A	R	2	1188	37	43,956	10/06/2020	37	Poor

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Dist 5	HARDINGST	HARDING ST	15	POLK ST	TYLER ST	A	R	2	1578	32	50,526	10/21/2020	37	Poor
Dist 6	IMPERIALWA	IMPERIAL WAY	10	NAPA WAY	SUTTER ST	A	R	2	617	32	19,766	10/06/2020	37	Poor
Dist 6	INDEPENDEN	INDEPENDENCE BLVD	SB010	E BORONDA RD	PROVINCETOWN DR	A	C	2	2952	32	94,464	10/08/2020	37	Poor
Dist 4	KERNST	KERN ST	10	E ALISAL ST	N FREEWAY OFF RAMP	A	A	2	1925	39	75,075	10/19/2020	37	Poor
Dist 3	MARIONAVE	MARION AVE	15	HOMESTEAD AVE	W ACACIA ST	A	R	2	1792	32	57,371	10/02/2020	37	Poor
Dist 4	MARYALDR	MARYAL DR	10	CHAPARRAL ST	END	A	R	2	154	30	4,641	10/15/2020	37	Poor
Dist 3	NACIONALST	NACIONAL ST	30	CENTRAL AVE	S END	A	C	2	236	37	8,732	10/26/2020	37	Poor
Dist 1	NOGALDR	NOGAL DR	030	MIMBRERA WAY	LAS CASITAS DR	A	C	2	1302	38	49,476	09/28/2020	37	Poor
Dist 3	ORANGEDR	ORANGE DR	35	CAPISTRANO DR	S MAIN ST	A	C	2	1829	32	58,550	10/27/2020	37	Poor
Dist 2	PALOMAAVE	PALOMA AVE	20	E MARKET ST	TAMPA ST	A	R	2	840	40	33,600	10/12/2020	37	Poor
Dist 5	PEREZST	PEREZ ST	10	S END	E BOLIVAR ST	A	R	2	165	32	5,280	10/20/2020	37	Poor
Dist 1	RANCHERODR	RANCHERO DR	15	LAS CASITAS DR	LA HONDA CT	A	R	2	1376	32	44,032	09/29/2020	37	Poor
Dist 5	RODEOAVE	RODEO AVE	15	N 1ST ST	W CURTIS ST	A	R	2	1286	34	43,724	10/21/2020	37	Poor
Dist 4	STCHARLESW	ST CHARLES WAY	25	ST CHARLES PL	ST EDWARDS AVE	A	R	2	518	32	16,581	10/16/2020	37	Poor
Dist 5	VALDEZCIR	VALDEZ CIR	10	QUINTERO CIR	END	A	R	2	387	32	12,384	10/20/2020	37	Poor
Dist 3	ABBOTTST	ABBOTT ST	SB090	GROWERS ST	1100' E(S)/O HARKINS RD	C	A	2	2311	44	101,684	11/02/2020	36	Poor
Dist 5	BOEINGAVE	BOEING AVE	15	RODEO AVE	NAVAJO DR	A	R	2	1600	36	57,603	10/21/2020	36	Poor
Dist 1	CAOBAWAY	CAOBA WAY	10	AMARILLO WAY	NOGAL DR	A	R	2	875	32	28,000	09/28/2020	36	Poor
Dist 3	CAPISTRANO	CAPISTRANO DR	15	ORANGE DR	W ACACIA ST	A	R	2	1559	32	49,910	10/27/2020	36	Poor
Dist 4	CEDARST	CEDAR ST	10	PARKWAY RD	E MARKET ST	A	R	2	416	36	14,976	10/16/2020	36	Poor
Dist 4	CHAPARRALS	CHAPARRAL ST	015	N MAIN ST	LINWOOD DR	A	C	2	3143	42	132,006	10/15/2020	36	Poor
Dist 3	CHURCHST	CHURCH ST	50	W ALISAL ST	CENTRAL AVE	A	C	2	1142	38	43,396	10/27/2020	36	Poor
Dist 4	CIRCLEDR	CIRCLE DR	015	N SANBORN RD	OREGON ST	A	C	2	1563	35	54,705	10/15/2020	36	Poor
Dist 3	CLAYST	CLAY ST	10	S MAIN ST	LINCOLN AVE	A	C	2	363	57	20,691	10/29/2020	36	Poor
Dist 3	COLUMBIAAV	COLUMBIA AVE	20	LEMOS AVE	W ACACIA ST	A	R	2	865	32	27,680	10/01/2020	36	Poor
Dist 1&2	DELMONTEAV	DEL MONTE AVE	020	N SANBORN RD	MAE AVE	O	C	2	1325	42	55,650	10/09/2020	36	Poor
Dist 6	GLENDORAWA	GLENDORA WAY	10	COMPTON WAY	INGLEWOOD ST	A	R	2	1822	38	69,236	10/07/2020	36	Poor
Dist 6	INDEPENDEN	INDEPENDENCE BLVD	SB020	PROVINCETOWN DR	CONSTITUTION BLVD	A	C	2	2796	18	50,328	10/08/2020	36	Poor
Dist 5	LOUISECT	LOUISE CT	10	LOUISE ST	END	A	R	2	160	32	5,120	10/20/2020	36	Poor
Dist 5	MADRIDST	MADRID ST	15	CHEROKEE DR	N MAIN ST	A	R	2	2077	51	105,927	10/20/2020	36	Poor
Dist 3	NACIONALST	NACIONAL ST	10	CLARK ST	CATALINA AVE	A	C	2	1642	38	62,396	10/26/2020	36	Poor
Dist 5	POLKST	POLK ST	10	TULANE ST	W LAUREL DR	A	R	2	946	30	28,380	10/21/2020	36	Poor
Dist 3	SANFELIPEC	SAN FELIPE CT	10	SAN FELIPE ST	END	A	R	2	365	32	11,711	10/01/2020	36	Poor
Dist 3	SOLEDADST	SOLEDAD ST	020	W GABILAN ST	N END	P	R	2	270	34	9,180	11/02/2020	36	Poor
Dist 4	STHELENWAY	ST HELEN WAY	10	CIRCLE DR	N MADEIRA AVE	A	R	2	1619	34	55,046	10/16/2020	36	Poor
Dist 3	STEPHANIED	STEPHANIE DR	10	S MAIN ST	STEPHANIE DR	A	R	2	860	41	35,260	10/01/2020	36	Poor
Dist 4	SUNST	SUN ST	10	END	CALLE CEBU	A	R	2	590	39	23,010	10/19/2020	36	Poor
Dist 4	TAPADERODR	TAPADERO DR	15	E LAUREL DR	CHAPARRAL ST	A	R	2	1835	32	58,730	10/15/2020	36	Poor
Dist 3	TEAKWOODPL	TEAKWOOD PL	10	WOODSIDE DR	END	A	R	2	408	32	13,072	09/30/2020	36	Poor
Dist 3	WILGARTWAY	WILGART WAY	25	MAPLEWOOD DR	E ROMIE LN	A	R	2	754	32	24,128	09/30/2020	36	Poor
Dist 6	YOSEMITECI	YOSEMITE CIR	10	YOSEMITE WAY	END	A	R	2	423	32	13,543	10/07/2020	36	Poor
Dist 2	2NDAVE	2ND AVE	020	BELLEHAVEN ST	COOPER AVE	A	R	2	1470	36	52,920	10/13/2020	35	Poor
Dist 3	ABBOTTST	ABBOTT ST	SB080	S SANBORN RD	GROWERS ST	A	A	2	1811	44	79,684	11/02/2020	35	Poor
Dist 5	ADAMSST	ADAMS ST	45	MOHAWK AVE	NAVAJO DR	A	R	2	1669	32	53,417	10/20/2020	35	Poor
Dist 3	CAYUGAST	CAYUGA ST	010	CENTRAL AVE	W GABILAN ST	C	R	2	473	38	17,974	10/27/2020	35	Poor
Dist 3	CAYUGAST	CAYUGA ST	120	CLAY ST	S END	A	R	2	290	37	10,730	10/27/2020	35	Poor
Dist 5	COLUMBINED	COLUMBINE DR	10	HEATHER DR	LUPIN DR	A	R	2	755	32	24,176	10/21/2020	35	Poor
Dist 4	DOLORESST	DOLORES ST	10	OREGON ST	KENTUCKY ST	A	R	2	556	35	19,486	10/15/2020	35	Poor

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 4	EASTST	EAST ST	20	N FILICE ST	N SANBORN RD	A	R	2	798	32	25,536	10/19/2020	35	Poor
Dist 3	GREENWOODP	GREENWOOD PL	010	WOODSIDE DR	SOUTH END	A	R	2	376	32	12,032	09/30/2020	35	Poor
Dist 6	INDEPENDEN	INDEPENDENCE BLVD	NB020	PROVINCETOWN DR	E BORONDA RD	A	C	2	2952	28	82,656	10/22/2020	35	Poor
Dist 6	MARINAVE	MARIN AVE	15	RAINIER DR	LESLIE DR	A	R	2	2035	32	65,133	10/06/2020	35	Poor
Dist 6	MILLBRAEST	MILLBRAE ST	15	NATIVIDAD RD	ATHERTON WAY	A	R	2	453	41	18,573	10/07/2020	35	Poor
Dist 2	MOHARST	MOHAR ST	15	N SANBORN RD	BEECH ST	A	R	2	1228	32	39,303	10/13/2020	35	Poor
Dist 3	PADREDR	PADRE DR	050	W BLANCO RD	END	A	R	2	293	38	11,134	10/01/2020	35	Poor
Dist 4	PARSONSAVE	PARSONS AVE	15	BLOCK AVE	RAINIER DR	A	R	2	954	32	30,529	10/15/2020	35	Poor
Dist 3	SANANTONIO	SAN ANTONIO CIR	10	ORANGE DR	END	A	R	2	159	32	5,114	10/27/2020	35	Poor
Dist 3	SANMARCOSD	SAN MARCOS DR	15	SANTA CRUZ AVE	LA MESA DR	A	C	2	1956	37	72,372	09/29/2020	35	Poor
Dist 5	SEPULVEDAD	SEPULVEDA DR	15	N 1ST ST	W ALVIN DR	A	R	2	1518	32	48,595	10/21/2020	35	Poor
Dist 3	TALBOTST	TALBOT ST	15	HOMESTEAD AVE	SAN VINCENTE AVE	A	R	2	949	32	30,368	10/02/2020	35	Poor
Dist 3	WROMIELN	W ROMIE LN	010	S MAIN ST	W ROMIE LN (MISSION PARK)	A	A	2	667	32	21,344	10/27/2020	35	Poor
Dist 5	BALDWINST	BALDWIN ST	10	W LAUREL DR	END	A	R	2	466	38	17,708	10/21/2020	34	Poor
Dist 5	BARKLEYDR	BARKLEY DR	10	EISENHOWER ST	LOHMAN ST	A	R	2	513	32	16,436	10/20/2020	34	Poor
Dist 3	BLANCOCIR	BLANCO CIR	10	E BLANCO RD	END	A	R	2	980	50	49,000	10/29/2020	34	Poor
Dist 3	BRUCEAVE	BRUCE AVE	10	TALBOT ST	COLLEGE DR	A	R	2	779	32	24,946	10/02/2020	34	Poor
Dist 3	BRUNKENAVE	BRUNKEN AVE	20	CHAMBERLAIN ST	MALARIN ST	A	C	2	1012	42	42,504	09/29/2020	34	Poor
Dist 5	BUCHANANWA	BUCHANAN WAY	10	KENNEDY ST (N)	KENNEDY ST (S)	A	R	2	670	32	21,444	10/20/2020	34	Poor
Dist 6	CAMBRIANDR	CAMBRIAN DR	10	ATHERTON WAY	CUPERTINO WAY	A	R	2	1320	37	48,840	10/07/2020	34	Poor
Dist 6	COMPTONWAY	COMPTON WAY	15	PESCADERO DR	GLENDORA WAY	A	R	2	535	38	20,356	10/07/2020	34	Poor
Dist 4	CONNELYCT	CONNELY CT	10	CONNELY ST	CONNELY ST	A	R	2	593	32	18,996	10/13/2020	34	Poor
Dist 3	DELMARDR	DEL MAR DR	15	END	NISSEN RD	A	R	2	1339	32	42,851	10/01/2020	34	Poor
Dist 6	INDEPENDEN	INDEPENDENCE BLVD	NB010	CONSTITUTION BLVD	PROVINCETOWN DR	A	C	2	2796	19	53,124	10/22/2020	34	Poor
Dist 6	INGLEWOODS	INGLEWOOD ST	10	PESCADERO DR	END	A	R	2	687	37	25,419	10/07/2020	34	Poor
Dist 3	MARTELLAST	MARTELLA ST	20	W ROSSI ST	S END	A	R	2	590	32	18,880	10/26/2020	34	Poor
Dist 2	MCGOWANCIR	MCGOWAN CIR	10	MCGOWAN DR	END	A	R	2	272	39	10,608	10/13/2020	34	Poor
Dist 2	MIDWAYAVE	MIDWAY AVE	10	FAIRHAVEN ST	E LAUREL DR	A	R	2	574	36	20,664	10/13/2020	34	Poor
Dist 5	MONROEST	MONROE ST	15	TULANE ST	POLK ST	A	R	2	1786	34	60,724	10/21/2020	34	Poor
Dist 5	N4THST	N 4TH ST	10	CRESCENT WAY	W CURTIS ST	A	R	2	675	34	22,950	10/21/2020	34	Poor
Dist 1	PACIFICAVE	PACIFIC AVE	020	DEL MONTE AVE	GARNER AVE	A	R	2	1544	23	35,512	10/05/2020	34	Poor
Dist 3	PAJAROST	PAJARO ST	060	SAN MIGUEL AVE	SAN PEDRO ST	C	A	2	710	32	22,720	11/03/2020	34	Poor
Dist 6	PLUMASWAY	PLUMAS WAY	10	GLACIER DR	MARIN AVE	A	R	2	889	32	28,475	10/06/2020	34	Poor
Dist 3	RIKERST	RIKER ST	120	CLAY ST	W ACACIA ST	A	A	2	1431	38	54,378	10/27/2020	34	Poor
Dist 2	SWOODST	S WOOD ST	15	JOHN ST	E ALISAL ST	A	A	2	1228	41	50,348	10/13/2020	34	Poor
Dist 2	SKYWAYBLVD	SKYWAY BLVD	010	E ALISAL ST	AIRPORT BLVD	A	C	4	2339	62	145,018	10/13/2020	34	Poor
Dist 3	SOLEDADST	SOLEDAD ST	010	JOHN ST	W GABILAN ST	A	R	2	2140	32	68,480	11/02/2020	34	Poor
Dist 3	SUMMERST	SUMMER ST	25	FRONT ST	END	A	R	2	751	37	27,787	09/29/2020	34	Poor
Dist 3	VERTINAVE	VERTIN AVE	020	TERVEN AVE	END	A	R	2	510	42	21,420	09/28/2020	34	Poor
Dist 5	VICTORST	VICTOR ST	10	LARKIN ST	VAN NESS CT (E)	A	R	2	365	42	15,362	10/21/2020	34	Poor
Dist 6	YREKADR	YREKA DR	15	CALAVERAS DR	KLAMATH DR	A	R	2	1398	32	44,736	10/07/2020	34	Poor
Dist 2	1STAVE	1ST AVE	25	E LAUREL DR	GARNER AVE	A	R	2	2085	36	75,060	10/13/2020	33	Poor
Dist 2	BARBARAPL	BARBARA PL	010	BEVERLY DR	FAIRVIEW AVE	A	R	2	752	35	26,320	10/13/2020	33	Poor
Dist 2	BARDINRD	BARDIN RD	020	TORO AVE	WILLIAMS RD	A	C	4	675	66	44,550	10/14/2020	33	Poor
Dist 5	BRUTUSST	BRUTUS ST	15	END (N)	END (S)	A	R	2	1137	32	36,392	10/20/2020	33	Poor
Dist 5	CADIZCIR	CADIZ CIR	10	CHEROKEE DR	END	A	R	2	390	32	12,480	10/20/2020	33	Poor
Dist 3	CALIFORNI1	CALIFORNIA ST	145	E ACACIA ST	E ROMIE LN	A	C	2	611	48	29,328	11/02/2020	33	Poor
Dist 3	CALIFORNI1	CALIFORNIA ST	105A	JOHN ST	MAPLE ST	A	C	2	950	46	43,700	11/02/2020	33	Poor

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Dist 3	CRESPIWAY	CRESPI WAY	10	W ACACIA ST	PALMA DR	A	R	2	887	32	28,411	10/02/2020	33	Poor
Dist 3	FAIRMONTCI	FAIRMONT CIR	10	FAIRMONT DR	END	A	R	2	139	32	4,448	09/29/2020	33	Poor
Dist 2	FLORENCEPL	FLORENCE PL	15	FAIRVIEW AVE	BEVERLY DR	A	R	2	906	32	29,002	10/13/2020	33	Poor
Dist 3	HARTNELLST	HARTNELL ST	10	CENTRAL AVE	COLLEGE DR	A	R	2	801	37	29,637	10/26/2020	33	Poor
Dist 3	HAWTHORNES	HAWTHORNE ST	020	PAJARO ST	CARMEL AVE	C	C	2	1482	32	47,424	10/28/2020	33	Poor
Dist 5	HEATHERDR	HEATHER DR	15	IRIS DR	COLUMBINE DR	A	R	2	724	32	23,188	10/21/2020	33	Poor
Dist 3	HOMESTEADA	HOMESTEAD AVE	010	N END	WILSON ST	A	R	2	285	38	10,830	10/26/2020	33	Poor
Dist 3	JOHNSONAVE	JOHNSON AVE	15	ABBOTT ST	E END	A	R	2	1040	42	43,680	09/28/2020	33	Poor
Dist 4	MADONNADR	MADONNA DR	10	ROSARITA DR	SANTA TERESA WAY	A	R	2	722	32	23,109	10/15/2020	33	Poor
Dist 2	MARGARETST	MARGARET ST	15	E ALISAL ST	PALOMA AVE	A	R	2	1305	35	45,701	10/12/2020	33	Poor
Dist 2	MARIGOLDWA	MARIGOLD WAY	15	GARDEN WAY	MEADOW DR	A	R	2	1114	32	35,678	10/13/2020	33	Poor
Dist 2	MERCERWAY	MERCER WAY	10	AIRPORT BLVD	MORTENSEN AVE	A	R	2	692	35	24,220	10/13/2020	33	Poor
Dist 5	MOHAWKAVE	MOHAWK AVE	15	ADAMS ST	NAVAJO DR	A	R	2	785	38	29,830	10/20/2020	33	Poor
Dist 4	NOICEDR	NOICE DR	20	CHAPARRAL ST	E LAUREL DR	A	R	2	1876	32	60,039	10/15/2020	33	Poor
Dist 1	OLDSTAGERD	OLD STAGE RD	060	CITY LIMITS	WILLIAMS RD	A	C	2	9382	26	243,932	10/06/2020	33	Poor
Dist 6	PESCADEROD	PESCADERO DR	10	INGLEWOOD ST	ARCADIA WAY	A	R	2	608	32	19,456	10/07/2020	33	Poor
Dist 4	REATAST	REATA ST	15	TAPADERO DR	LINWOOD DR	A	R	2	2281	32	73,022	10/15/2020	33	Poor
Dist 6	ROGGERD	ROGGE RD	010	NATIVIDAD RD	2725' W/O NATIVIDAD RD (COP)	A	R	2	2725	32	87,200	10/22/2020	33	Poor
Dist 2	SFILICEST	S FILICE ST	15	E ALISAL ST	JOHN ST	A	C	2	1366	38	51,908	10/13/2020	33	Poor
Dist 3	SANLEANDR1	SAN LEANDRO WAY	10	W ALISAL ST	SANTA FE WAY	A	R	2	292	38	11,096	10/01/2020	33	Poor
Dist 5	SEVILLEWAY	SEVILLE WAY	10	CHEROKEE DR	SEVILLE ST	A	R	2	177	32	5,664	10/20/2020	33	Poor
Dist 2	SHARONDR	SHARON DR	15	END	BARBARA PL	A	R	2	1271	32	40,685	10/13/2020	33	Poor
Dist 3	STANDREWCT	ST ANDREW CT	10	PALMA DR (W)	PALMA DR (E)	A	R	2	925	32	29,600	10/02/2020	33	Poor
Dist 6	TAHOECIR	TAHOE CIR	10	TAHOE DR	END	A	R	2	151	32	4,855	10/07/2020	33	Poor
Dist 4	VALENCIAST	VALENCIA ST	10	OREGON ST	KENTUCKY ST	A	R	2	610	36	21,960	10/15/2020	33	Poor
Dist 5	WLAURELDR	W LAUREL DR	140	N DAVIS RD	S FREEWAY ON RAMP	A	A	4	459	100	45,918	10/28/2020	33	Poor
Dist 3	WILSONST	WILSON ST	45	VILLA ST	SAN CLEMENTE AVE	C	R	2	1194	33	39,429	10/26/2020	33	Poor
Dist 3	ARCHERST	ARCHER ST	020	UNIVERSITY AVE	NACIONAL ST	A	R	2	1291	32	41,312	10/02/2020	32	Poor
Dist 5	AZTECCIR	AZTEC CIR	10	CHEROKEE DR	END	A	R	2	185	32	5,920	10/20/2020	32	Poor
Dist 4	BLOCKAVE	BLOCK AVE	15	KIP DR	PARSONS AVE	A	R	2	1234	38	46,892	10/15/2020	32	Poor
Dist 3	CASSIDYST	CASSIDY ST	10	CENTRAL AVE	ARCHER ST	C	R	2	320	32	10,240	10/29/2020	32	Poor
Dist 3	CHESTNUTST	CHESTNUT ST	10	S MAIN ST	PAJARO ST	C	R	2	773	43	33,239	10/03/2020	32	Poor
Dist 5	CLEVELANDA	CLEVELAND AVE	15	VAN BUREN AVE	LENNY ST	A	R	2	1212	38	46,056	10/20/2020	32	Poor
Dist 4	COMMISSION	COMMISSION ST	15	GRIFFIN ST	END	A	R	2	1489	32	47,659	10/19/2020	32	Poor
Dist 4	ECURTISST	E CURTIS ST	10	N MAIN ST	NOICE DR	A	R	2	341	28	9,551	10/15/2020	32	Poor
Dist 3	GRIFFINST	GRIFFIN ST	10	JOHN ST	E ALISAL ST	A	A	2	1170	37	43,290	09/29/2020	32	Poor
Dist 5	HARDINGCIR	HARDING CIR	10	HARDING ST	END	A	R	2	215	26	5,590	10/21/2020	32	Poor
Dist 3	HOMESTEADA	HOMESTEAD AVE	040	W ALISAL ST	IVERSON ST	C	R	2	1255	37	46,435	10/26/2020	32	Poor
Dist 2	JEANAVE	JEAN AVE	10	CAROL DR	SHARON DR	A	R	2	900	32	28,826	10/13/2020	32	Poor
Dist 4	KENTUCKYST	KENTUCKY ST	15	LINDEN ST	TOWT ST	A	R	2	1267	36	45,646	10/15/2020	32	Poor
Dist 3	LORIMERST	LORIMER ST	20	W ALISAL ST	HOMESTEAD AVE	C	R	2	1021	32	32,672	10/26/2020	32	Poor
Dist 6	LOSALTOSWA	LOS ALTOS WAY	15	ATHERTON WAY (N)	ATHERTON WAY (S)	A	R	2	1444	32	46,208	10/07/2020	32	Poor
Dist 6	LOSCOCHESA	LOS COCHES AVE	20	HUMBOLDT DR	CAMBRIAN DR	A	R	2	2098	37	77,626	10/07/2020	32	Poor
Dist 4	LUNSFORDDR	LUNSFORD DR	10	NATIVIDAD RD	END	A	R	2	706	32	22,612	10/15/2020	32	Poor
Dist 5	LUPINDR	LUPIN DR	15	COLUMBINE DR	W BERNAL DR	A	R	2	1899	32	60,770	10/21/2020	32	Poor
Dist 4	NMADEIRAAV	N MADEIRA AVE	130	E MARKET ST	TERRACE ST	A	R	2	650	42	27,300	10/19/2020	32	Poor
Dist 5	OSAGEDR	OSAGE DR	15	ADAMS ST	N 1ST ST	A	R	2	2222	32	71,112	10/20/2020	32	Poor
Dist 6	PESCADEROD	PESCADERO DR	20	ARCADIA WAY	LOS COCHES AVE	A	R	2	2636	37	97,532	10/07/2020	32	Poor

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 4	PRESTONST	PRESTON ST	10	MARTELLA ST	END	A	R	2	338	28	9,464	10/14/2020	32	Poor
Dist 3	RIKERST	RIKER ST	140	W ROMIE LN	W BLANCO RD	A	A	2	1963	37	72,631	10/27/2020	32	Poor
Dist 1	SELMDR	S ELM DR	10	RIDER AVE	END	A	R	2	325	32	10,400	10/05/2020	32	Poor
Dist 4	SANTATERES	SANTA TERESA CIR	10	GRANADA AVE	END	A	R	2	180	32	5,760	10/15/2020	32	Poor
Dist 4	TERRADR	TERRA DR	10	E LAUREL DR	DORORO DR	A	R	2	751	32	24,034	10/15/2020	32	Poor
Dist 2	TULIPCIR	TULIP CIR	10	JOHN ST	END	A	R	2	387	32	12,393	10/12/2020	32	Poor
Dist 5	WBERNALDR	W BERNAL DR	15	N MAIN ST	LUPIN DR	A	R	2	420	54	22,680	10/21/2020	32	Poor
Dist 3	WGABILANST	W GABILAN ST	40	LINCOLN AVE	CHURCH ST	C	C	2	317	32	10,144	10/29/2020	32	Poor
Dist 4	WASHINGTON	WASHINGTON DR	10	LINDEN ST	OREGON ST	A	R	2	793	25	19,837	10/15/2020	32	Poor
Dist 3	ABBOTTST	ABBOTT ST	NB030	GROWERS ST	S SANBORN RD	O	A	2	1811	44	79,684	10/30/2020	31	Poor
Dist 6	ALMADENDR	ALMADEN DR	10	CUPERTINO WAY	LOS COCHES AVE	A	R	2	259	32	8,308	10/07/2020	31	Poor
Dist 3	AVELARST	AVELAR ST	10	PINE ST	END	C	R	2	280	32	8,960	10/03/2020	31	Poor
Dist 3	CAPITOLST	CAPITOL ST	030	CLAY ST	END	C	R	2	519	40	20,760	10/27/2020	31	Poor
Dist 3	CAYUGAST	CAYUGA ST	110	W ALISAL ST	CLAY ST	C	R	2	1117	39	43,563	10/27/2020	31	Poor
Dist 4	CEDARST	CEDAR ST	25	N SANBORN RD	E MARKET ST	A	R	2	397	35	13,895	10/16/2020	31	Poor
Dist 5	CRESCENTWA	CRESCENT WAY	15	ADAMS ST	N 1ST ST	A	R	2	2692	32	86,170	10/21/2020	31	Poor
Dist 6	ELDORADODR	EL DORADO DR	15	HARDEN PKWY	E ALVIN DR	A	C	2	2046	61	124,806	09/29/2020	31	Poor
Dist 3	FAIRFAXDR	FAIRFAX DR	15	W ALISAL ST	COLUMBIA AVE	A	R	2	2346	32	75,072	10/01/2020	31	Poor
Dist 3	FAIRMONTDR	FAIRMONT DR	10	N END	LOS PALOS DR	C	R	2	220	32	7,040	10/03/2020	31	Poor
Dist 2	GRANDHAVEN	GRANDHAVEN ST	15	WILLIAMS RD	TOWT ST	A	R	2	1688	32	54,046	10/13/2020	31	Poor
Dist 3	HAWTHORNES	HAWTHORNE ST	010	S MAIN ST	PAJARO ST	C	C	2	776	32	24,832	10/28/2020	31	Poor
Dist 5	HUNTINGTON	HUNTINGTON ST	10	ROCHEX AVE	W LAUREL DR	A	R	2	410	30	12,300	10/21/2020	31	Poor
Dist 5	IRISALY	IRIS ALY	10	W BERNAL DR	IRIS DR	A	R	2	1179	32	37,750	10/28/2020	31	Poor
Dist 5	LARKSPURDR	LARKSPUR DR	10	HEATHER DR	LUPIN DR	A	R	2	769	32	24,620	10/21/2020	31	Poor
Dist 1	LASCASITAS	LAS CASITAS DR	30	PINO WAY	RIDER AVE	A	A	2	743	37	27,491	09/29/2020	31	Poor
Dist 6	LESLIEDR	LESLIE DR	15	NATIVIDAD RD	CALAVERAS DR	A	R	2	1363	32	43,622	10/06/2020	31	Poor
Dist 2	MACHADOWAY	MACHADO WAY	20	KIMMEL ST	ACOSTA ST	A	R	2	910	32	29,120	10/13/2020	31	Poor
Dist 6	MARIPOSAST	MARIPOSA ST	10	TRINITY WAY	MARIN AVE	A	R	2	873	32	27,945	10/06/2020	31	Poor
Dist 5	N3RDST	N 3RD ST	20	W CURTIS ST	ROCHEX AVE	A	R	2	412	32	13,184	10/21/2020	31	Poor
Dist 5	NAVAJODR	NAVAJO DR	25	W CURTIS ST	MOHAWK AVE	A	C	2	808	37	29,896	10/21/2020	31	Poor
Dist 3	PADREDR	PADRE DR	010	W ACACIA ST	W ROMIE LN	A	C	2	738	32	23,616	10/01/2020	31	Poor
Dist 3	PAJAROST	PAJARO ST	050	E ROMIE LN	SAN MIGUEL AVE	C	A	2	1142	50	57,100	11/03/2020	31	Poor
Dist 4	PIKEWAY	PIKE WAY	10	PARSONS AVE	LINWOOD DR	A	R	2	266	32	8,512	10/15/2020	31	Poor
Dist 3	SANFELIPES	SAN FELIPE ST	020	SIERRA MADRE DR	SAN VINCENTE AVE	A	R	2	1289	32	41,248	10/01/2020	31	Poor
Dist 3	SANLEANDRO	SAN LEANDRO CIR	10	W ALISAL ST	END	A	R	2	221	32	7,079	10/01/2020	31	Poor
Dist 2	SKYWAYBLVD	SKYWAY BLVD	020	AIRPORT BLVD	MORTENSEN AVE	A	R	2	623	36	22,428	10/13/2020	31	Poor
Dist 5	TULANEST	TULANE ST	15	ROCHEX AVE	CHEROKEE DR	A	R	2	1404	34	47,736	10/21/2020	31	Poor
Dist 3	WESTST	WEST ST	100	LANG ST	END	A	R	2	274	32	8,771	10/27/2020	31	Poor
Dist 3	AMHERSTDR	AMHERST DR	10	W ALISAL ST	COLLEGE DR	A	R	2	630	32	20,177	10/02/2020	30	Failed
Dist 3	ANNEST	ANNE ST	10	ALEXANDER ST	N. END	A	R	2	410	32	13,120	10/26/2020	30	Failed
Dist 3	AUBURNST	AUBURN ST	030	CAPITOL ST	WEST ST	P	R	2	615	40	24,600	10/27/2020	30	Failed
Dist 3	COLLEGEDR	COLLEGE DR	020	W ALISAL ST	END	A	R	2	1481	38	56,278	10/02/2020	30	Failed
Dist 4	LINDENST	LINDEN ST	15	OREGON ST	EUCALYPTUS DR	A	R	2	996	42	41,839	10/15/2020	30	Failed
Dist 4	MARYALDR	MARYAL DR	20	CHAPARRAL ST	E LAUREL DR	A	R	2	1754	30	52,620	10/15/2020	30	Failed
Dist 6	MENDOCINOD	MENDOCINO DR	45	YOLO CIR	EL DORADO DR	A	R	2	887	38	33,706	09/29/2020	30	Failed
Dist 5	N1STST	N 1ST ST	015	CHEROKEE DR	W ALVIN DR	A	R	2	1364	41	55,924	10/21/2020	30	Failed
Dist 6	PIKEWAY	PIKE WAY	20	LINWOOD DR	NICHOLS AVE	A	R	2	295	32	9,440	10/06/2020	30	Failed
Dist 5&6	SANJUANGRA	SAN JUAN GRADE RD	070	VAN BUREN AVE	RUSSEL RD	A	A	2	2807	38	106,666	10/28/2020	30	Failed

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	SANVINCENT	SAN VINCENTE AVE	010	W ALISAL ST	SANTA PAULA DR	A	C	2	1145	32	36,640	10/02/2020	30	Failed
Dist 3	STANNDR	ST ANN DR	10	BELMONT DR	ARCHER ST	A	R	2	1256	32	40,214	10/02/2020	30	Failed
Dist 5	SUCRECT	SUCRE CT	15	E LAMAR ST (W)	E LAMAR ST (E)	A	R	2	675	34	22,950	10/20/2020	30	Failed
Dist 4	SUMMITDR	SUMMIT DR	15	HILL TOP DR (W)	HILL TOP DR (E)	A	R	2	1187	36	42,732	10/16/2020	30	Failed
Dist 5	TYLERST	TYLER ST	25	W LAUREL DR	IRIS DR	A	C	2	1806	32	57,792	10/21/2020	30	Failed
Dist 6	ATHERTONWA	ATHERTON WAY	10	MILLBRAE ST	CAMBRIAN DR	A	R	2	1257	37	46,509	10/07/2020	29	Failed
Dist 3	AVENUEA	AVENUE A	10	S MAIN ST	LINCOLN AVE	A	R	2	299	28	8,372	10/29/2020	29	Failed
Dist 2	BEECHST	BEECH ST	010	GARNER AVE	ACOSTA ST (SW END)	A	R	2	1810	52	94,120	10/14/2020	29	Failed
Dist 3	CAMPUSAVE	CAMPUS AVE	020	LEMOS AVE	FAIRFAX DR	A	R	2	250	31	7,750	10/28/2020	29	Failed
Dist 6	COLUSAPL	COLUSA PL	10	MENDOCINO DR (W)	MENDOCINO DR (E)	A	R	2	1470	32	47,040	09/29/2020	29	Failed
Dist 5	COMANCHEWA	COMANCHE WAY	10	SHAWNEE WAY	CHEROKEE DR	A	R	2	786	32	25,161	10/20/2020	29	Failed
Dist 2	COOPERAVE	COOPER AVE	10	2ND AVE	TOWT ST	A	R	2	472	35	16,520	10/13/2020	29	Failed
Dist 4	EUCALYPTUS	EUCALYPTUS DR	15	N SANBORN RD	E ALISAL ST	A	C	2	2863	32	91,638	10/28/2020	29	Failed
Dist 3	FAIRMONTDR	FAIRMONT DR	20	LOS PALOS DR	S END	C	R	2	704	32	22,528	10/03/2020	29	Failed
Dist 2	GARNERAVE	GARNER AVE	050	1ST AVE	WILLIAMS RD	A	C	2	600	41	24,600	10/14/2020	29	Failed
Dist 2	HARRYETTED	HARRYETTE DR	10	FAIRVIEW AVE	CAROL DR	A	R	2	487	32	15,597	10/13/2020	29	Failed
Dist 3	HOWARDST	HOWARD ST	010	CHURCH ST	LINCOLN AVE	C	R	2	270	23	6,210	11/02/2020	29	Failed
Dist 5	IRISDR	IRIS DR	15	N MAIN ST	LUPIN DR	A	C	2	440	54	23,760	10/21/2020	29	Failed
Dist 3	JUNIPEROWA	JUNIPERO WAY	10	W ACACIA ST	PALMA DR	A	R	2	887	32	28,406	10/02/2020	29	Failed
Dist 3	KIRKWOODAV	KIRKWOOD AVE	15	SAN CLEMENTE AVE	VILLA ST	A	R	2	1139	32	36,456	10/26/2020	29	Failed
Dist 3	LAMIRADACT	LA MIRADA CT	10	LA MIRADA DR (N)	LA MIRADA DR (N)	A	R	2	1124	32	35,968	09/29/2020	29	Failed
Dist 5	PARKSIDEST	PARKSIDE ST	10	ROCHEX AVE	W LAUREL DR	A	R	2	500	32	16,000	10/21/2020	29	Failed
Dist 4	PARKWAYRD	PARKWAY RD	15	N SANBORN RD	EUCALYPTUS DR	A	R	2	1027	32	32,887	10/28/2020	29	Failed
Dist 5	RICOST	RICO ST	040	CASENTINI ST	LARKIN ST	A	C	2	836	42	35,112	10/21/2020	29	Failed
Dist 3	SACACIACIR	S ACACIA CIR	10	W ACACIA ST	END	A	R	2	147	32	4,732	10/27/2020	29	Failed
Dist 2	SHEBBRONAV	S HEBBRON AVE	15	E ALISAL ST	JOHN ST	A	C	2	1290	36	46,440	10/13/2020	29	Failed
Dist 3	SANTABARBA	SANTA BARBARA AVE	15	WILSON ST	NATIONAL ST	A	R	2	668	32	21,376	10/26/2020	29	Failed
Dist 4	SHERWOODPL	SHERWOOD PL	10	SHERWOOD DR	END	A	R	2	766	38	29,145	10/15/2020	29	Failed
Dist 6	SOLANOWAY	SOLANO WAY	20	MENDOCINO DR	END	A	R	2	285	32	9,120	09/29/2020	29	Failed
Dist 2	TAMPAST	TAMPA ST	15	TORO AVE	E ALISAL ST	A	R	2	767	35	26,845	10/12/2020	29	Failed
Dist 2	TOWTST	TOWT ST	060	E LAUREL DR	E MARKET ST	A	C	2	1497	42	62,874	10/14/2020	29	Failed
Dist 6	TRINITYWAY	TRINITY WAY	15	E ALVIN DR	END	A	R	2	895	32	28,668	10/06/2020	29	Failed
Dist 1	WILLIAMSRD	WILLIAMS RD	070	E BORONDA RD	OLD STAGE RD	A	C	2	5963	24	143,112	10/06/2020	29	Failed
Dist 3	WORKST	WORK ST	10	JOHN ST	E ALISAL ST	A	A	2	1481	38	56,294	09/29/2020	29	Failed
Dist 6	YOSEMITEWA	YOSEMITE WAY	15	CASCADE CT	HUBOLDT DR	A	R	2	503	32	16,124	10/07/2020	29	Failed
Dist 2	2NDAVE	2ND AVE	010	GARNER AVE	BELLEHAVEN ST	A	R	2	910	36	32,760	10/13/2020	28	Failed
Dist 3	ARCHERST	ARCHER ST	010	BELMONT DR	UNIVERSITY AVE	A	R	2	689	32	22,048	10/02/2020	28	Failed
Dist 5	ASHBURYWAY	ASHBURY WAY	10	ADOBE DR	VICTOR ST	A	R	2	1056	32	33,817	10/21/2020	28	Failed
Dist 5	CHEROKEEDR	CHEROKEE DR	070	TULANE ST	S END	A	C	2	525	38	19,950	10/20/2020	28	Failed
Dist 5	ELAMARST	E LAMAR ST	15	N MAIN ST	SANTA RITA ST	A	R	2	783	40	31,320	10/20/2020	28	Failed
Dist 2	FAIRHAVENS	FAIRHAVEN ST	15	WILLIAMS RD	TOWT ST	A	R	2	1687	32	54,012	10/13/2020	28	Failed
Dist 1	GARNERAVE	GARNER AVE	030	N SANBORN RD	BEECH ST	A	C	2	1224	42	51,408	10/06/2020	28	Failed
Dist 3	LAMIRADADR	LA MIRADA DR	15	SAN BRUNO WAY	LA MESA DR	A	R	2	1125	32	36,002	09/29/2020	28	Failed
Dist 1	LASCASITAS	LAS CASITAS DR	20	RANCHERO DR	PINO WAY	A	A	2	447	37	16,539	09/29/2020	28	Failed
Dist 6	MARIPOSACT	MARIPOSA CT	10	MARIPOSA ST	END	A	R	2	363	32	11,621	10/06/2020	28	Failed
Dist 4	NWOODST	N WOOD ST	10	E. ALISAL ST	ROOSEVELT ST	A	A	2	577	32	18,471	10/19/2020	28	Failed
Dist 5	NAVAJODR	NAVAJO DR	45	N 1ST ST	N MAIN ST	A	C	2	750	41	30,750	10/21/2020	28	Failed
Dist 2	NEWDEALST	NEW DEAL ST	15	DEL MONTE AVE	CORTEZ ST	A	R	2	769	26	19,994	10/14/2020	28	Failed

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 4	PACHECOST	PACHECO ST	15	TAMPICO AVE	NATIVIDAD RD	A	R	2	1140	32	36,502	10/15/2020	28	Failed
Dist 1	RIDERAVE	RIDER AVE	005	GEE ST	GARNER AVE	A	R	2	757	38	28,766	09/11/2020	28	Failed
Dist 5	RUSSELLRD	RUSSELL RD	60	PAUL AVE	SAN JUAN GRADE RD	A	A	2	331	32	10,615	10/22/2020	28	Failed
Dist 3	SANMARINOW	SAN MARINO WAY	10	E ROMIE LN	SANTA CRUZ AVE	A	C	2	473	41	19,393	09/29/2020	28	Failed
Dist 3	SANVINCEN1	SAN VINCENTE CIR	10	SAN VINCENTE AVE	END	A	R	2	324	37	11,988	10/02/2020	28	Failed
Dist 6	YOLOCIR	YOLO CIR	10	MENDOCINO DR	END	A	R	2	247	38	9,386	09/29/2020	28	Failed
Dist 2	ALISALRD	ALISAL RD	010	BARDIN RD	SCONBERG PKWY	A	A	4	230	56	12,880	10/12/2020	27	Failed
Dist 5	ARAGONCIR	ARAGON CIR	10	CHEROKEE DR	END	A	R	2	475	32	15,200	10/20/2020	27	Failed
Dist 3	CARMELITAD	CARMELITA DR	010	AMBROSE DR	W ALISAL ST	A	R	2	1904	32	60,928	10/01/2020	27	Failed
Dist 2	CORTEZST	CORTEZ ST	15	NEW DEAL ST	END	A	R	2	1045	32	33,440	10/14/2020	27	Failed
Dist 3	EACACIAST	E ACACIA ST	030	CARMEL AVE	ALAMEDA AVE	C	C	2	476	37	17,612	10/28/2020	27	Failed
Dist 6	EMERALDDR	EMERALD DR	25	EMERALD WAY	DONNER WAY	A	R	2	808	37	29,896	10/07/2020	27	Failed
Dist 3	FRONTST	FRONT ST	070WB	PCC END	MERGE TO E MARKET ST	A	A	1	434	18	7,812	11/03/2020	27	Failed
Dist 4	MERCEDST	MERCED ST	15	E MARKET ST	END	A	R	2	883	32	28,286	10/19/2020	27	Failed
Dist 5	N4THST	N 4TH ST	20	W CURTIS ST	ROCHEX AVE	A	R	2	406	22	8,932	10/21/2020	27	Failed
Dist 5	NAVAJODR	NAVAJO DR	35	MOHAWK AVE	N 1ST ST	A	C	2	946	37	35,002	10/21/2020	27	Failed
Dist 3	PADREDR	PADRE DR	040	NISSEN RD	W BLANCO RD	A	R	2	762	37	28,194	10/01/2020	27	Failed
Dist 4	POPLARST	POPLAR ST	10	PARKWAY RD	E MARKET ST	A	R	2	408	36	14,713	10/16/2020	27	Failed
Dist 5	PRIMROSEDR	PRIMROSE DR	10	HEATHER DR	LUPIN DR	A	R	2	768	32	24,595	10/21/2020	27	Failed
Dist 6	SAUSALDR	SAUSAL DR	10	PESCADERO DR	CAMBRIAN DR	A	R	2	719	32	23,018	10/07/2020	27	Failed
Dist 3	SIERRAMADR	SIERRA MADRE DR	15	SANTA MONICA WAY	SANTA PAULA DR	A	R	2	2719	32	87,028	10/27/2020	27	Failed
Dist 4	STBRENDANW	ST BRENDAN WAY	10	ST FRANCIS WAY	ROSARITA DR	A	R	2	1374	32	43,996	10/15/2020	27	Failed
Dist 4	STEVENSONS	STEVENSON ST	10	MCALLISTER ST	BRIGHTON ST	A	R	2	542	36	19,512	10/14/2020	27	Failed
Dist 3	WILSONST	WILSON ST	15	HOMESTEAD AVE	VILLA ST	C	R	2	635	33	20,979	10/26/2020	27	Failed
Dist 6	ALTURASCIR	ALTURAS CIR	15	LOS COCHES AVE	END	A	R	2	375	32	12,027	10/07/2020	26	Failed
Dist 3	BELAIRWAY	BEL AIR WAY	10	W ACACIA ST	FAIRFAX DR	A	R	2	423	32	13,558	10/02/2020	26	Failed
Dist 5	BORONDARD	BORONDA RD	010EB	N FREEWAY ON RAMP	N MAIN ST	A	A	2	546	32	17,502	10/27/2020	26	Failed
Dist 4	BRIDGEST	BRIDGE ST	20	E MENKE ST	E ROSSI ST	A	R	2	410	30	12,300	10/19/2020	26	Failed
Dist 1&2	BURKEST	BURKE ST	10	DEL MONTE AVE	END	A	R	2	708	25	17,700	10/22/2020	26	Failed
Dist 3	CARMELAVE	CARMEL AVE	020	EL PASO PL	HAWTHORNE ST	C	C	2	694	37	25,678	10/03/2020	26	Failed
Dist 3	CYPRESSST	CYPRESS ST	10	CENTRAL AVE	END	A	R	2	238	37	8,806	10/26/2020	26	Failed
Dist 6	DONNERCIR	DONNER CIR	10	DONNER WAY	END	A	R	2	449	32	14,374	10/07/2020	26	Failed
Dist 2&4	ELAURELDR	E LAUREL DR	025	N SANBORN RD	TOWT ST	A	A	2	1658	42	69,636	10/14/2020	26	Failed
Dist 4	HILLTOPDR	HILL TOP DR	15	N MADEIRA AVE	SUMMIT DR	A	R	2	1476	32	47,244	10/16/2020	26	Failed
Dist 2	KENNETHAVE	KENNETH AVE	010	FAIRHAVEN ST	E LAUREL DR	A	R	2	572	34	19,448	10/13/2020	26	Failed
Dist 2	KEYST	KEY ST	10	TORO AVE	PALOMA AVE	A	R	2	343	32	10,988	10/12/2020	26	Failed
Dist 5	KIOWACIR	KIOWA CIR	10	CHEROKEE DR	END	A	R	2	184	32	5,888	10/20/2020	26	Failed
Dist 1	MAEAVE	MAE AVE	030	DEL MONTE AVE	GARNER AVE	A	R	2	1549	36	55,764	10/06/2020	26	Failed
Dist 5	NAVAJODR	NAVAJO DR	15	ADAMS ST	W CURTIS ST	A	C	2	905	38	34,390	10/21/2020	26	Failed
Dist 2	PALOMAAVE	PALOMA AVE	30	TAMPA ST	MIAMI ST	A	R	2	1142	34	38,828	10/12/2020	26	Failed
Dist 3	PARKST	PARK ST	030	NACIONAL ST	BELMONT DR	A	C	2	1524	32	48,768	10/02/2020	26	Failed
Dist 5	POLKCIR	POLK CIR	10	POLK ST	END	A	R	2	210	25	5,250	10/21/2020	26	Failed
Dist 3	RIKERTER	RIKER TER	10	W ALISAL ST	END	A	R	2	1072	32	34,310	10/26/2020	26	Failed
Dist 5	ROCHEXAVE	ROCHEX AVE	15	N MAIN ST	CRESCENT WAY	A	R	2	2658	36	95,688	10/21/2020	26	Failed
Dist 3	SANTAMONI1	SANTA MONICA WAY	15	SIERRA MADRE DR	SANTA MONICA CT	A	R	2	816	37	30,192	10/01/2020	26	Failed
Dist 4	SHIRESWAY	SHIRES WAY	10	BLOCK AVE	RAINIER DR	A	R	2	475	37	17,609	10/15/2020	26	Failed
Dist 4	SUNST	SUN ST	40	COMMISSION ST	END	A	R	2	454	41	18,625	10/19/2020	26	Failed
Dist 2	AFTONRD	AFTON RD	010	SYCAMORE RD	BARDIN RD	A	R	2	1376	34	46,784	10/12/2020	25	Failed

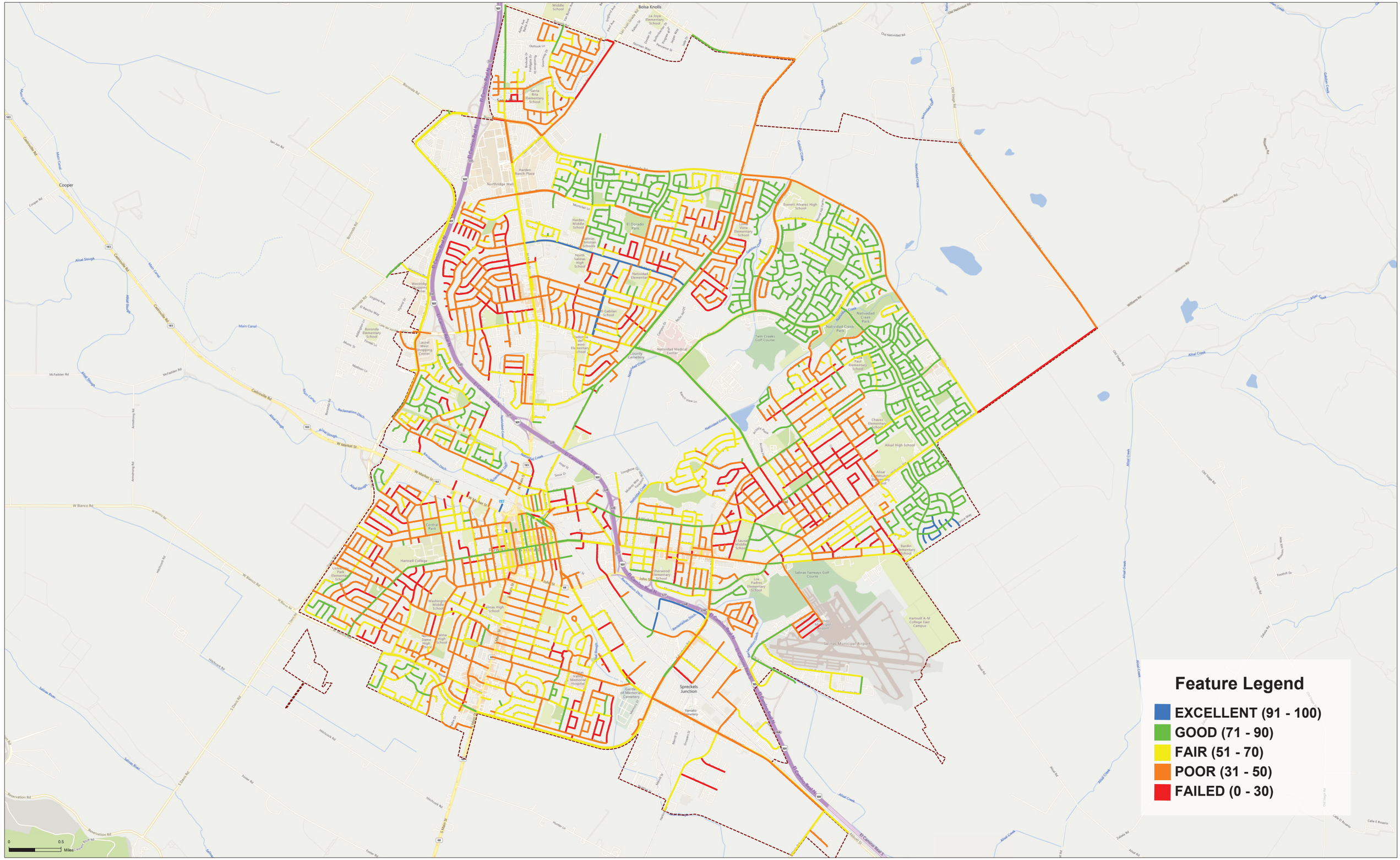
District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	ALAMEDAAVE	ALAMEDA AVE	025	MAPLEWOOD DR	E ROMIE LN	A	C	2	943	32	30,176	09/30/2020	25	Failed
Dist 5	ALHAMBRAST	ALHAMBRA ST	10	SEPULVEDA DR	N 1ST ST	A	R	2	509	30	15,270	10/21/2020	25	Failed
Dist 5	CACERASCIR	CACERAS CIR	10	CHEROKEE DR	END	A	R	2	480	32	15,360	10/20/2020	25	Failed
Dist 6	CAMBRIANDR	CAMBRIAN DR	30	CUPERTINO WAY	SAUSAL DR	A	R	2	1051	37	38,887	10/07/2020	25	Failed
Dist 4	CONNELYST	CONNELY ST	15	N SANBORN RD	EUCALYPTUS DR	A	R	2	886	35	31,010	10/13/2020	25	Failed
Dist 5	DURANCIR	DURAN CIR	10	CHEROKEE DR	END	A	R	2	471	32	15,072	10/20/2020	25	Failed
Dist 5	EBROCIR	EBRO CIR	10	CHEROKEE DR	END	A	R	2	520	32	16,640	10/20/2020	25	Failed
Dist 5	N1STST	N 1ST ST	045	W ALVIN DR	W CURTIS ST	A	R	2	2226	38	84,588	10/21/2020	25	Failed
Dist 4	PEACHDR	PEACH DR	15	CALLE CEBU	COMMISSION ST	A	R	2	952	32	30,488	10/19/2020	25	Failed
Dist 4	PRADERST	PRADER ST	10	RIANDA ST	E ALISAL ST	A	R	2	313	37	11,581	10/19/2020	25	Failed
Dist 2	QUILLAST	QUILLA ST	25	WILLIAMS ROAD	E ALISAL ST	A	R	2	345	37	12,765	10/13/2020	25	Failed
Dist 1	RIDERAVE	RIDER AVE	020	LAS CASITAS DR	MIMBRERA WAY	A	C	2	1222	38	46,436	09/11/2020	25	Failed
Dist 3	ROSEST	ROSE ST	10	WEST ST	END	C	R	2	230	32	7,383	10/26/2020	25	Failed
Dist 3	SANANGELOD	SAN ANGELO DR	15	SANTA CRUZ AVE	LA MESA DR	A	C	2	1918	37	70,966	09/29/2020	25	Failed
Dist 3	SANTAROSAA	SANTA ROSA AVE	10	NACIONAL ST	PARK ST	A	R	2	466	32	14,921	10/02/2020	25	Failed
Dist 6	SARATOGADR	SARATOGA DR	15	NATIVIDAD RD	END	A	R	2	1455	41	59,655	10/07/2020	25	Failed
Dist 5	TAFTCIR	TAFT CIR	10	VAN BUREN AVE	END	A	R	2	240	27	6,480	10/20/2020	25	Failed
Dist 4	TIPPL	TIP PL	10	TOP PL	END	A	R	2	202	32	6,466	10/16/2020	25	Failed
Dist 4	TRAZADOAVE	TRAZADO AVE	15	TAMPICO AVE	CHAPARRAL ST	A	R	2	1354	32	43,342	10/15/2020	25	Failed
Dist 3	WORKST	WORK ST	20	JOHN ST	WORK CIR	A	A	4	1036	62	64,279	09/29/2020	25	Failed
Dist 5	ALVINCIR	ALVIN CIR	10	W ALVIN DR	END	A	R	2	333	32	10,665	10/20/2020	24	Failed
Dist 2	AVISCT	AVIS CT	10	MARGARET ST	SYCAMORE RD	A	R	2	563	36	20,268	10/12/2020	24	Failed
Dist 3	CAPITOLST	CAPITOL ST	110	LANG ST	GEIL ST	A	R	2	325	38	12,350	10/27/2020	24	Failed
Dist 3	CHALONCIR	CHALON CIR	10	W ACACIA ST	END	A	R	2	256	32	8,199	10/02/2020	24	Failed
Dist 2	GREENST	GREEN ST	15	DEL MONTE AVE	GARNER AVE	A	R	2	1546	32	49,484	10/14/2020	24	Failed
Dist 3	INDUSTRIAL	INDUSTRIAL ST	10	VERTIN AVE	SANBORN PL	A	C	2	1027	41	42,107	09/28/2020	24	Failed
Dist 3	MURPHYST	MURPHY ST	10	E ALISAL ST	END	A	R	2	586	32	18,752	09/29/2020	24	Failed
Dist 4	RIANDACIR	RIANDA CIR	20	PRADER ST	END	A	R	2	510	42	21,420	10/19/2020	24	Failed
Dist 3	SALINASST	SALINAS ST	20	JOHN ST	CLAY ST	A	A	2	336	38	12,768	11/03/2020	24	Failed
Dist 3	SANCLEMENT	SAN CLEMENTE AVE	15	KIRKWOOD AVE	NACIONAL ST	C	R	2	679	32	21,728	10/26/2020	24	Failed
Dist 5	SHAWNEEWAY	SHAWNEE WAY	15	SEMINOLE WAY	INCA WAY	A	R	2	516	32	16,540	10/20/2020	24	Failed
Dist 3	STANFORDAV	STANFORD AVE	10	HASTINGS AVE	LEMOS AVE	A	R	2	678	32	21,708	10/01/2020	24	Failed
Dist 4	SUNST	SUN ST	30	E MARKET ST	COMMISSION ST	A	R	2	271	32	8,696	10/19/2020	24	Failed
Dist 5	TYLERST	TYLER ST	15	N 4TH ST	W LAUREL DR	A	R	2	1429	31	44,299	10/21/2020	24	Failed
Dist 2	ACOSTAST	ACOSTA ST	120	TOWT ST	2ND AVE	A	R	2	484	32	15,488	10/13/2020	23	Failed
Dist 5	APACHECIR	APACHE CIR	10	CHEROKEE DR	END	A	R	2	225	32	7,200	10/20/2020	23	Failed
Dist 6	ATHERTONWA	ATHERTON WAY	20	CAMBRIAN DR	MILLBRAE ST	A	R	2	2573	37	95,201	10/07/2020	23	Failed
Dist 2	BARDINWAY	BARDIN WAY	010	BARDIN CIR (N)	WILLIAMS RD	A	R	2	895	32	28,640	10/14/2020	23	Failed
Dist 4	BRIDGEST	BRIDGE ST	40	E LAKE ST	N END (WALL)	A	R	2	95	42	3,990	10/19/2020	23	Failed
Dist 3	CEDROSAVE	CEDROS AVE	10	NACIONAL ST	END	A	R	2	385	32	12,320	10/26/2020	23	Failed
Dist 3	CHAMBERLAI	CHAMBERLAIN ST	10	BRUNKEN AVE	ABBOTT ST	A	R	2	671	41	27,511	09/29/2020	23	Failed
Dist 6	MENLOWAY	MENLO WAY	10	ATHERTON WAY	LOS ALTOS WAY	A	R	2	644	32	20,625	10/07/2020	23	Failed
Dist 5	N2NDST	N 2ND ST	10	BOEING AVE	W CURTIS ST	A	R	2	635	36	22,860	10/21/2020	23	Failed
Dist 4	NMADEIRAAV	N MADEIRA AVE	025	HILL CIR	N SANBORN RD	A	R	2	581	32	18,619	10/16/2020	23	Failed
Dist 4	NEILST	NEIL ST	10	MERCED ST	GRIFFIN ST	A	R	2	277	38	10,551	10/19/2020	23	Failed
Dist 3	SANTAPAULA	SANTA PAULA DR	15	SIERRA MADRE DR	SAN VINCENTE AVE	A	R	2	879	32	28,148	10/01/2020	23	Failed
Dist 6	SUTTERST	SUTTER ST	10	MARIN AVE	VENTURA WAY	A	R	2	1306	37	48,322	10/06/2020	23	Failed
Dist 4	TARPCIR	TARP CIR	10	SIMAS ST	END	A	R	2	339	37	12,543	10/19/2020	23	Failed

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 3	VICTORST	VICTOR ST	010	VICTOR WY	W ROSSI ST	A	R	2	713	41	29,233	10/26/2020	23	Failed
Dist 5	BARCELONAC	BARCELONA CIR	10	CHEROKEE DR	END	A	R	2	475	32	15,200	10/20/2020	22	Failed
Dist 2	BARDINCIR	BARDIN CIR	10	BARDIN WAY (N)	BARDIN WAY (S)	A	R	2	1043	32	33,376	10/14/2020	22	Failed
Dist 2	DALLASAVE	DALLAS AVE	10	GARNER AVE	CORTEZ ST	A	R	2	775	36	27,900	10/14/2020	22	Failed
Dist 2	GARNERAVE	GARNER AVE	040	BEECH ST	1ST AVE	A	C	2	1494	41	61,254	10/14/2020	22	Failed
Dist 4	IVYST	IVY ST	10	E MARKET ST	GRIFFIN ST	A	R	2	342	32	10,949	10/19/2020	22	Failed
Dist 3	LAMESAWAY	LA MESA WAY	10	LA MESA DR	E BLANCO RD	A	R	2	135	37	4,995	09/29/2020	22	Failed
Dist 4	LAPOSADAWA	LA POSADA WAY	10	SHERWOOD DR	LA POSADA DR	A	R	2	135	32	4,320	10/15/2020	22	Failed
Dist 3	MALARINST	MALARIN ST	10	ABBOTT ST	BRUNKEN AVE	A	C	2	674	42	28,308	09/29/2020	22	Failed
Dist 2	MORTENSENA	MORTENSEN AVE	020	SKYWAY BLVD	MERCER WAY	A	R	2	1028	55	56,540	10/13/2020	22	Failed
Dist 3	NACACIACIR	N ACACIA CIR	10	W ACACIA ST	END	A	R	2	156	32	4,993	10/27/2020	22	Failed
Dist 4	OREGONST	OREGON ST	10	N SANBORN RD	WASHINGTON DR	A	C	2	191	38	7,276	10/16/2020	22	Failed
Dist 3	PARAISOCT	PARAISO CT	10	VIA PARAISO (N)	VIA PARAISO (S)	A	R	2	970	32	31,040	09/29/2020	22	Failed
Dist 5	PUEBLODR	PUEBLO DR	15	ADAMS ST	N 1ST ST	A	R	2	2447	32	78,314	10/20/2020	22	Failed
Dist 1	RIDERAVE	RIDER AVE	010	GARNER AVE	LAS CASITAS DR	A	C	2	1864	38	70,832	09/11/2020	22	Failed
Dist 5	SEMINOLEWA	SEMINOLE WAY	10	SHAWNEE WAY	CHEROKEE DR	A	R	2	926	32	29,656	10/20/2020	22	Failed
Dist 1	TOWTST	TOWT ST	020	MAE AVE	DEL MONTE AVE	A	C	2	1000	32	32,000	10/05/2020	22	Failed
Dist 2	TOWTST	TOWT ST	030	DEL MONTE AVE	CORTEZ ST	A	C	2	768	36	27,648	10/14/2020	22	Failed
Dist 5	TYLERST	TYLER ST	35	IRIS DR	S END	A	R	2	417	32	13,344	10/21/2020	22	Failed
Dist 5	INCAWAY	INCA WAY	15	SHAWNEE WAY	ADAMS ST	A	R	2	981	32	31,398	10/20/2020	21	Failed
Dist 2	JOHNCIR	JOHN CIR	10	JOHN ST	END	A	R	2	273	32	8,761	10/13/2020	21	Failed
Dist 2	SANBENITOS	SAN BENITO ST	020	S MADEIRA AVE	END	A	R	2	398	42	16,716	10/12/2020	21	Failed
Dist 3	ABBOTTPL	ABBOTT PL	15	N END	S END	A	R	2	787	44	34,628	09/28/2020	20	Failed
Dist 2	BELLEHAVEN	BELLEHAVEN ST	15	WILLIAMS RD	TOWT ST	A	R	2	1684	32	53,900	10/13/2020	20	Failed
Dist 5	DURANST	DURAN ST	10	CHEROKEE DR	SEVILLE ST	A	R	2	1052	32	33,664	10/20/2020	20	Failed
Dist 3	FAIRFAXCIR	FAIRFAX CIR	10	W ALISAL ST	END	A	R	2	232	32	7,452	10/01/2020	20	Failed
Dist 5	GARFIELDCI	GARFIELD CIR	10	SWANER AVE	END	A	R	2	155	26	4,030	10/20/2020	20	Failed
Dist 2	HAVENALY	HAVEN ALY	020	FAIRHAVEN ST	GRANDHAVEN ST	A	R	2	298	16	4,768	10/14/2020	20	Failed
Dist 3	HOWARDST	HOWARD ST	020	LINCOLN AVE	SALINAS ST	C	R	2	225	32	7,200	11/02/2020	20	Failed
Dist 4	KIPDR	KIP DR	10	BLOCK AVE	E ALVIN DR	A	R	2	756	37	27,972	10/15/2020	20	Failed
Dist 2	PEARLALY	PEARL ALY	10	S PEARL ST	220' E/O S PEARL ST	A	R	2	220	20	4,400	10/12/2020	20	Failed
Dist 3	SANANTONI1	SAN ANTONIO DR	10	W ROMIE LN	W ACACIA ST	A	R	2	775	32	24,819	10/27/2020	20	Failed
Dist 3	SANVINCENT	SAN VINCENTE AVE	020	SANTA PAULA DR	W ACACIA ST	A	C	2	567	32	18,144	10/02/2020	20	Failed
Dist 3	SANTAMONIC	SANTA MONICA CT	10	SANTA MONICA WAY	END	A	R	2	363	35	12,705	10/01/2020	20	Failed
Dist 2	SKYPL	SKY PL	10	ALMA AVE	END	A	R	2	245	32	7,855	10/13/2020	20	Failed
Dist 4	SUNST	SUN ST	20	CALLE CEBU	E MARKET ST	A	R	2	683	32	21,856	10/19/2020	20	Failed
Dist 4	TOPPL	TOP PL	15	CEDAR ST	END	A	R	2	422	26	10,972	10/16/2020	20	Failed
Dist 4	CETENTR	C.E.T. ENTRANCE	010	NAVAJO DR	END	A	R	2	175	32	5,600	08/31/2017	19	Failed
Dist 5	CHEROKEECT	CHEROKEE CT	10	CHEROKEE DR (N)	CHEROKEE DR (S)	A	R	2	1646	32	52,686	10/20/2020	19	Failed
Dist 5	PIMACIR	PIMA CIR	10	CHEROKEE DR	END	A	R	2	180	32	5,760	10/20/2020	19	Failed
Dist 5	SENECAPL	SENECA PL	10	CHEROKEE DR	END	A	R	2	367	32	11,744	10/20/2020	19	Failed
Dist 3	VIAPARAISO	VIA PARAISO	25	LOS PALOS DR	LA MESA DR	A	R	2	1626	32	52,052	09/29/2020	19	Failed
Dist 2	DALLASAVE	DALLAS AVE	20	CORTEZ ST	DEL MONTE AVE	A	R	2	770	36	27,720	10/14/2020	18	Failed
Dist 2	DEWEYAVE	DEWEY AVE	10	BEECH ST	TOWT ST	A	R	2	412	52	21,424	10/13/2020	18	Failed
Dist 2	EALISALST	E ALISAL ST	015	BARDIN RD	E ALISAL ST	A	A	2	252	38	9,576	10/14/2020	18	Failed
Dist 4	NFILICEST	N FILICE ST	10	E ALISAL ST	N END (BARRICADE)	A	C	2	105	44	4,620	10/23/2020	18	Failed
Dist 4	OREGONST	OREGON ST	20	WASHINGTON DR	TOWT ST	A	C	2	1466	38	55,713	10/16/2020	18	Failed
Dist 3	RIKERST	RIKER ST	010	W MARKET ST	320' S/O W MARKET ST	A	R	2	320	37	11,840	10/26/2020	18	Failed

District	Street ID	Road Name	Section ID	Begin Location	End Location	Surface Type	Functional Class	Lanes	Length (ft)	Width (ft)	Area (SqFt)	PCI Date	PCI	Condition Category
Dist 2	WIRENST	WIREN ST	10	WILLIAMS RD	N. END	A	R	2	1000	32	32,000	10/14/2020	18	Failed
Dist 2	BARDINRD	BARDIN RD	010	E ALISAL RD	TORO AVE	A	C	4	2347	66	154,902	10/14/2020	17	Failed
Dist 4	CHERRYDR	CHERRY DR	10	SHERWOOD DR	PEACH DR	A	R	2	701	32	22,459	10/19/2020	17	Failed
Dist 4	BRIDGEST	BRIDGE ST	10	N MAIN ST	E MENKE ST	A	R	2	680	24	16,320	10/19/2020	16	Failed
Dist 2	JEFFERYAVE	JEFFERY AVE	10	SKYWAY BLVD	MERCER WAY	A	R	2	1043	36	37,564	10/13/2020	16	Failed
Dist 3	VALEST	VALE ST	10	W MARKET ST	END	A	R	2	234	47	10,998	10/26/2020	16	Failed
Dist 2	ANDERSONAV	ANDERSON AVE	10	SKYWAY BLVD	MERCER WAY	A	R	2	1045	37	38,680	10/13/2020	15	Failed
Dist 3	CAMPUSAVE	CAMPUS AVE	010	HASTINGS AVE	LEMOS AVE	A	R	2	675	32	21,600	10/28/2020	15	Failed
Dist 2	HAVENALY	HAVEN ALY	010	S. END	FAIRHAVEN ST	A	R	2	307	16	4,912	10/14/2020	14	Failed
Dist 3	NEWST	NEW ST	10	W MARKET ST	END	A	R	2	426	30	12,780	10/26/2020	14	Failed
Dist 3	BURTONAVE	BURTON AVE	10	HARKINS RD	END	A	R	2	1180	42	49,560	09/28/2020	13	Failed
Dist 3	CALIFORNIA	CALIFORNIA ALY	030	E SAN LUIS ST	END	A	R	2	420	18	7,560	11/02/2020	11	Failed
Dist 1	CAOBAWAY	CAOBA WAY	20	AMARILLO WAY	END	A	R	2	169	37	6,253	09/28/2020	11	Failed
Dist 3	DAYTONST	DAYTON ST	10	HARKINS RD	END	A	R	2	1635	42	68,670	09/28/2020	10	Failed

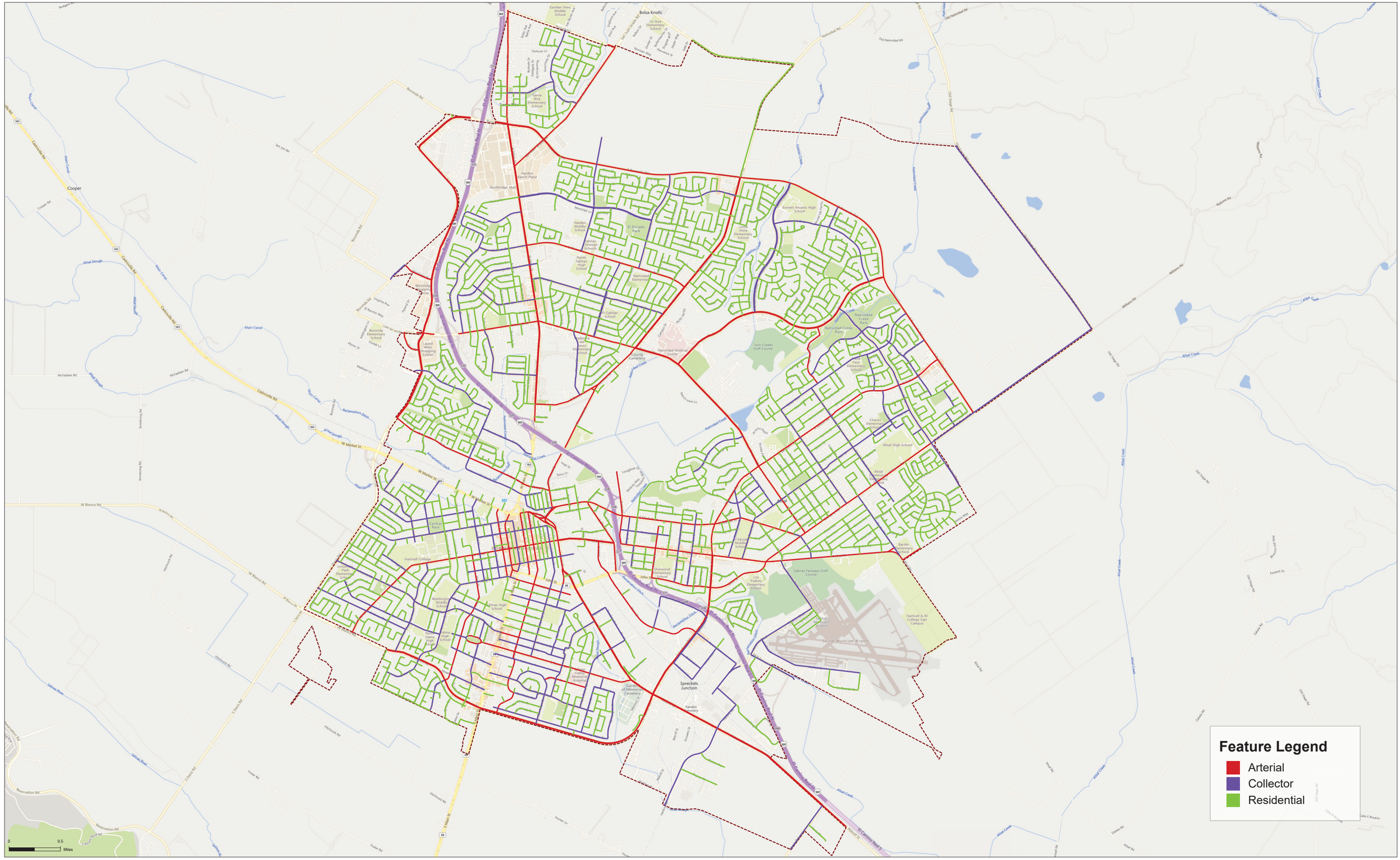
City of Salinas

MAP #1: CURRENT PAVEMENT CONDITION



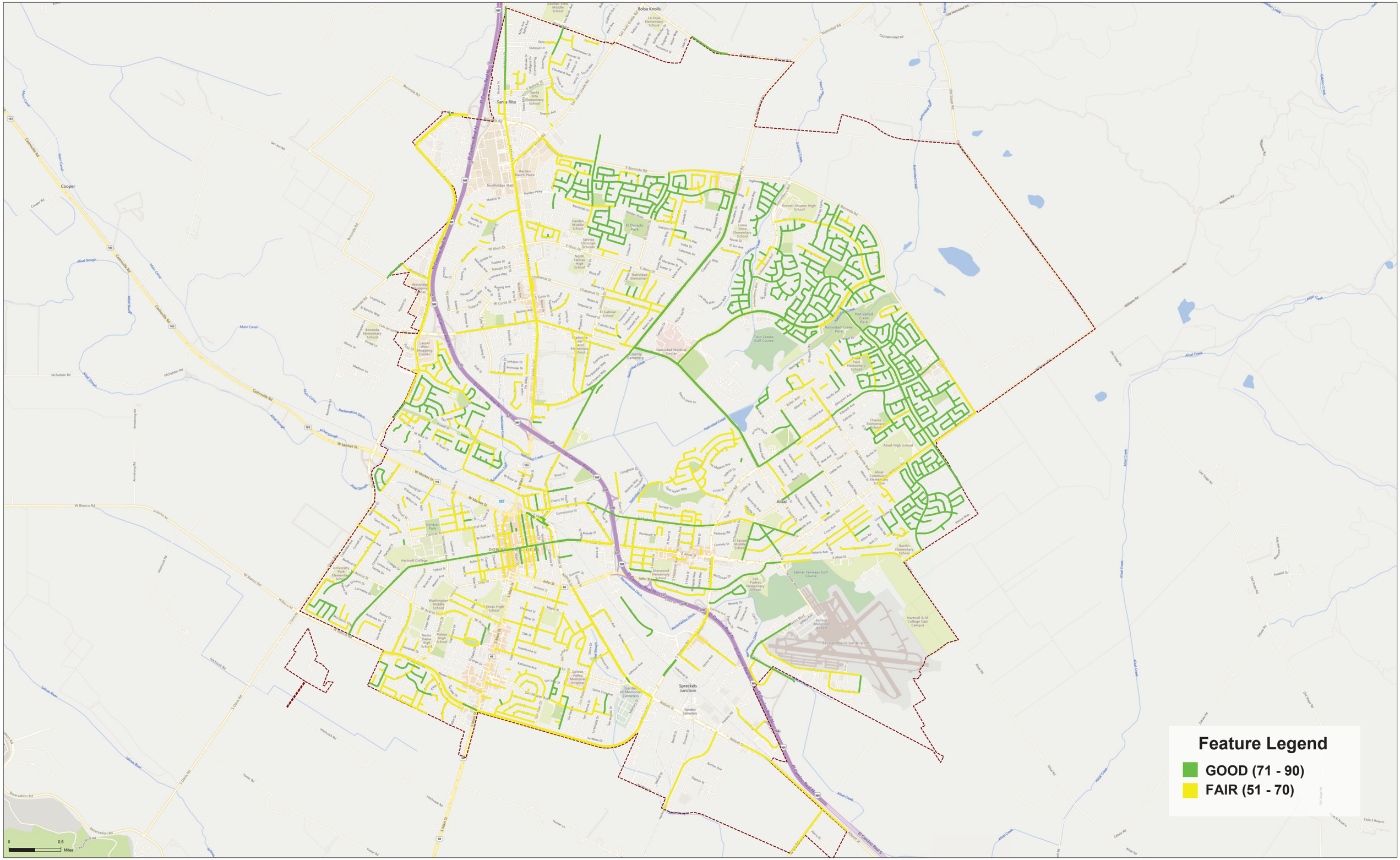
City of Salinas

MAP #2: Functional Class



City of Salinas

MAP # 3: CURRENT PAVEMENT CONDITION (GOOD & FAIR ONLY)



Appendix A

Summarized System Information

City of Salinas

Network Summary Statistics

Printed: 12/31/2020

	Total Sections	Total Center Miles	Total Lane Miles	Total Area (sq. ft.)	PCI
Arterial	288	54.26	183.71	16,628,314.54	60
Collector	250	62.16	138.24	13,397,482.37	51
Residential/Local	1,156	174.69	349.16	31,528,046.39	54
Total	1,694	291.11	671.11	61,553,843.3	
				Overall Network PCI as of 12/31/2020:	55
**Combined	9	1.15	2.24	188,374.17	N/A
Gravel	9	1.15	2.24	188,374.17	N/A

** Combined Sections are excluded from totals. These Sections do not have a PCI Date - they have not been inspected or had a Treatment applied.

City of Salinas

Network Replacement Cost

Printed: 01/28/2021

Functional Class	Surface Type	Lane Miles	Unit Cost/ Square Foot	Pavement Area/ Square Feet	Cost To Replace (in thousands)
Arterial	AC	132.2	$19.60	12,304,623	$241,171
	AC/AC	27.3	$19.60	2,276,168	$44,613
	AC/PCC	6.9	$19.60	730,484	$14,317
	PCC	17.3	$19.60	1,317,039	$25,814
Collector	AC	116.6	$18.20	11,166,944	$203,238
	AC/AC	3.7	$18.20	357,192	$6,501
	AC/PCC	10.3	$18.20	1,109,614	$20,195
	PCC	7.6	$18.20	763,732	$13,900
Proposed; Private; Non-County	AC	6.6	$16.80	566,050	$9,510
	PCC	2.3	$0.00	244,845	$0
Residential/Local	AC	327.8	$16.80	29,737,489	$499,590
	AC/AC	1.0	$16.80	94,699	$1,591
	AC/PCC	7.0	$16.80	640,569	$10,762
	PCC	13.3	$16.80	1,055,290	$17,729
	Grand Total:	680.0		62,364,737	$1,108,930

City of Salinas

Decision Tree

Printed: 01/28/2021

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Arterial	AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.56	4		
			Surface Treatment	LIGHT MAINTENANCE	$5.63		8	
			Restoration Treatment	LIGHT REHAB	$50.40			2
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$13.86		8	
		III - Good, Load Related		LIGHT REHAB	$50.40			
		IV - Poor		HEAVY REHAB	$104.71			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$176.40			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.56	4		
			Surface Treatment	LIGHT MAINTENANCE	$5.63		8	
			Restoration Treatment	LIGHT REHAB	$50.40			2
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$13.86		8	
		III - Good, Load Related		LIGHT REHAB	$50.40			
		IV - Poor		HEAVY REHAB	$104.71			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$176.40			
	AC/PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.56	4		
			Surface Treatment	LIGHT MAINTENANCE	$5.63		8	
			Restoration Treatment	LIGHT REHAB	$50.40			2
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$13.86		8	
		III - Good, Load Related		LIGHT REHAB	$50.40			
		IV - Poor		HEAVY REHAB	$104.71			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$176.40			
	PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.56	4		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			99
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		HEAVY REHAB	$104.71			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$176.40			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Salinas

Decision Tree

Printed: 01/28/2021

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Arterial	ST	I - Very Good	Crack Treatment	DO NOTHING	$0.00	9		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		DO NOTHING	$0.00			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Salinas

Decision Tree

Printed: 01/28/2021

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Collector	AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.25	4		
			Surface Treatment	LIGHT MAINTENANCE	$5.06		8	
			Restoration Treatment	LIGHT REHAB	$44.10			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$12.60		8	
		III - Good, Load Related		LIGHT REHAB	$44.10			
		IV - Poor		HEAVY REHAB	$91.35			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$163.80			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.25	4		
			Surface Treatment	LIGHT MAINTENANCE	$5.06		8	
			Restoration Treatment	LIGHT REHAB	$44.10			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$12.60		8	
		III - Good, Load Related		LIGHT REHAB	$44.10			
		IV - Poor		HEAVY REHAB	$91.35			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$163.80			
	AC/PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.25	4		
			Surface Treatment	LIGHT MAINTENANCE	$5.06		8	
			Restoration Treatment	LIGHT REHAB	$44.10			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$12.60		8	
		III - Good, Load Related		LIGHT REHAB	$44.10			
		IV - Poor		HEAVY REHAB	$91.35			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$163.80			
	PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.25	4		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		HEAVY REHAB	$91.35			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$163.80			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Salinas

Decision Tree

Printed: 01/28/2021

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Collector	ST	I - Very Good	Crack Treatment	DO NOTHING	$0.00	9		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		DO NOTHING	$20.00			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Salinas

Decision Tree

Printed: 01/28/2021

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Residential/Local	AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.25	5		
			Surface Treatment	LIGHT MAINTENANCE	$4.50		10	
			Restoration Treatment	LIGHT REHAB	$44.10			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$12.60		10	
		III - Good, Load Related		LIGHT REHAB	$44.10			
		IV - Poor		HEAVY REHAB	$75.60			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$151.20			
	AC/AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.25	5		
			Surface Treatment	LIGHT MAINTENANCE	$4.50		10	
			Restoration Treatment	LIGHT REHAB	$44.10			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$12.60		10	
		III - Good, Load Related		LIGHT REHAB	$44.10			
		IV - Poor		HEAVY REHAB	$75.60			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$151.20			
	AC/PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.25	5		
			Surface Treatment	LIGHT MAINTENANCE	$4.50		10	
			Restoration Treatment	LIGHT REHAB	$44.10			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$12.60		10	
		III - Good, Load Related		LIGHT REHAB	$44.10			
		IV - Poor		HEAVY REHAB	$75.60			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$151.20			
	PCC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.25	5		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		HEAVY REHAB	$75.60			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$151.20			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Salinas

Decision Tree

Printed: 01/28/2021

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Residential/Local	ST	I - Very Good	Crack Treatment	DO NOTHING	$0.00	9		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		DO NOTHING	$0.00			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Salinas

Decision Tree

Printed: 01/28/2021

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Other	AC	I - Very Good	Crack Treatment	SEAL CRACKS	$1.25	5		
			Surface Treatment	LIGHT MAINTENANCE	$4.50		10	
			Restoration Treatment	LIGHT REHAB	$44.10			3
		II - Good, Non-Load Related		HEAVY MAINTENANCE	$12.60		10	
		III - Good, Load Related		LIGHT REHAB	$44.10			
		IV - Poor		HEAVY REHAB	$75.60			
		V - Very Poor		RECONSTRUCT STRUCTURE (AC)	$151.20			
	AC/AC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	9		
			Surface Treatment	DO NOTHING	$0.00		10	
			Restoration Treatment	DO NOTHING	$0.00			3
		II - Good, Non-Load Related		DO NOTHING	$16.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		DO NOTHING	$0.00			
	AC/PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	5		
			Surface Treatment	DO NOTHING	$0.00		10	
			Restoration Treatment	DO NOTHING	$0.00			3
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		DO NOTHING	$0.00			
	PCC	I - Very Good	Crack Treatment	DO NOTHING	$0.00	5		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		DO NOTHING	$0.00			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

City of Salinas

Decision Tree

Printed: 01/28/2021

Functional Class	Surface	Condition Category	Treatment Type	Treatment	Cost/Sq Yd, except Seal Cracks in LF:	Yrs Between Crack Seals	Yrs Between Surface Seals	# of Surface Seals before Overlay
Other	ST	I - Very Good	Crack Treatment	DO NOTHING	$0.00	9		
			Surface Treatment	DO NOTHING	$0.00		99	
			Restoration Treatment	DO NOTHING	$0.00			100
		II - Good, Non-Load Related		DO NOTHING	$0.00			
		III - Good, Load Related		DO NOTHING	$0.00			
		IV - Poor		DO NOTHING	$0.00			
		V - Very Poor		DO NOTHING	$0.00			

Functional Class and Surface combination not used

Selected Treatment is not a Surface Seal

Appendix B

Budget Scenarios

Reach 75 PCI

($382.4 Million over 5 Years)

- Pavement Network Condition Lane Miles
- Network Condition Summary
- Cost Summary

Scenario: Reach 75

Objective: Minimum Network Average PCI Target: By Year

Year	Value	Year	Value	Year	Value	Year	Value
Year 1	59	Year 2	63	Year 3	67	Year 4	71
Year 5	75						

Annual budget needs to meet target objectives

Year	Arterial	Collector	Res/Loc	Other	Preventative Maintenance	Total
2021	$7,352,758	$1,860,340	$24,350,923	$0	$3,289,545	$33,564,021
2022	$27,446,040	$16,260,776	$31,331,734	$0	$52,595	$75,038,550
2023	$16,138,555	$16,713,110	$57,404,358	$0	$9,128	$90,256,023
2024	$16,590,203	$5,576,253	$69,336,112	$0	$94,166	$91,502,568
2025	$42,533,717	$21,032,878	$28,469,526	$0	$12,132	$92,036,121

Average Yearly Total: $76,479,457

Grand Total: $382,397,283

Pavement Network prior to treatments in lane miles.

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	60	7.5%	8.0%	13
Collector	51	3.6%	11.5%	7
Residential	54	15.5%	24.6%	13

Pavement Network after schedulable treatments applied in lane miles.

2021

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	63	12.2%	8.0%	15
Collector	52	4.2%	11.5%	8
Residential	60	22.5%	21.9%	17

2022

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	68	14.9%	5.7%	17
Collector	55	7.8%	10.4%	10
Residential	64	27.8%	17.0%	20

Pavement Network after schedulable treatments applied in lane miles.

2023

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	69	16.2%	4.4%	18
Collector	57	10.2%	9.1%	12
Residential	70	33.3%	11.9%	23

2024

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	71	17.0%	4.4%	19
Collector	55	10.5%	9.1%	13
Residential	78	39.7%	5.7%	26

2025

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	79	19.7%	1.5%	22
Collector	59	11.7%	7.5%	14
Residential	80	42.3%	3.0%	27

Scenario: Reach 75

Objective: Minimum Network Average PCI Target: By Year

Year	Value	Year	Value	Year	Value	Year	Value
Year 1	59	Year 2	63	Year 3	67	Year 4	71
Year 5	75						

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment
2021	55	59
2022	52	63
2023	49	67
2024	47	71
2025	44	75

Percent Network Area by Functional Classification and Condition Class

Condition in base year 2021, prior to applying treatments.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	7.5%	3.6%	15.5%	0.0%	26.6%
II / III	11.5%	6.7%	11.1%	0.0%	29.3%
IV	7.9%	10.3%	20.9%	0.0%	39.1%
V	0.1%	1.2%	3.6%	0.0%	5.0%
Total	27.0%	21.8%	51.2%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	12.2%	4.2%	22.5%	0.0%	38.9%
II / III	6.7%	6.1%	6.7%	0.0%	19.6%
IV	7.9%	10.3%	18.3%	0.0%	36.5%
V	0.1%	1.2%	3.6%	0.0%	5.0%
Total	27.0%	21.8%	51.2%	0.0%	100.0%

Condition in year 2025 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	19.7%	11.7%	42.3%	0.0%	73.7%
II / III	5.8%	2.6%	5.9%	0.0%	14.3%
IV	1.5%	1.0%	3.0%	0.0%	5.5%
V	0.0%	6.5%	0.0%	0.0%	6.5%
Total	27.0%	21.8%	51.2%	0.0%	100.0%

City of Salinas

Target-Driven Scenarios - Cost Summary

Interest: 0% Inflation: 0% Printed: 01/28/2021

Scenario: Reach 75

Objective: Minimum Network Average PCI Target: By Year

Year	Value	Year	Value	Year	Value	Year	Value
Year 1	59	Year 2	63	Year 3	67	Year 4	71
Year 5	75						

Year		Rehabilitation	Preventive Maintenance		Total Cost	Deferred
2021	II	$5,596,063	Non-Project	$3,289,545	$33,564,021	$141,990,287
	III	$11,089,817	Project	$0		
	IV	$13,588,596				
	V	$0				
	Total	$30,274,476				
	Project	$0				
2022	II	$2,333,501	Non-Project	$52,595	$75,038,550	$110,898,579
	III	$415,032	Project	$0		
	IV	$72,237,422				
	V	$0				
	Total	$74,985,955				
	Project	$0				
2023	II	$1,474,248	Non-Project	$9,128	$90,256,023	$96,442,058
	III	$763,494	Project	$0		
	IV	$34,687,201				
	V	$53,321,952				
	Total	$90,246,895				
	Project	$0				
2024	II	$22,932	Non-Project	$94,166	$91,502,568	$115,159,866
	III	$40,984	Project	$0		
	IV	$27,496,701				
	V	$63,847,785				
	Total	$91,408,402				
	Project	$0				
2025	II	$0	Non-Project	$12,132	$92,036,121	$72,395,578
	III	$387,240	Project	$0		
	IV	$10,197,372				
	V	$81,439,377				
	Total	$92,023,989				
	Project	$0				

Summary

Functional Class	Rehabilitation	Prev. Maint.
Arterial	$109,628,515	$432,758
Collector	$61,158,737	$284,620
Residential/Local	$208,152,465	$2,740,188
Total:	$378,939,717	$3,457,566

Grand Total: $382,397,283

Increase PCI by 5

($181.8 Million over 5 Years)

- Pavement Network Condition Lane Miles
- Network Condition Summary
- Cost Summary

Scenario: INCREASE BY 5

Objective: Minimum Network Average PCI Target: By Year

Year	Value	Year	Value	Year	Value	Year	Value
Year 1	56	Year 2	57	Year 3	58	Year 4	59
Year 5	60						

Annual budget needs to meet target objectives

Year	Arterial	Collector	Res/Loc	Other	Preventative Maintenance	Total
2021	$1,219,543	$787,431	$4,212,164	$0	$3,289,545	$6,219,138
2022	$4,337,926	$1,284,598	$27,435,595	$0	$52,595	$33,058,119
2023	$17,478,763	$4,316,584	$20,942,233	$0	$9,128	$42,737,580
2024	$29,740,553	$14,658,359	$5,488,327	$0	$94,166	$49,887,239
2025	$12,843,452	$5,888,682	$31,154,302	$0	$10,304	$49,886,436

Average Yearly Total: $36,357,702
Grand Total: $181,788,512

Pavement Network prior to treatments in lane miles.

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	60	7.5%	8.0%	13
Collector	51	3.6%	11.5%	7
Residential	54	15.5%	24.6%	13

Pavement Network after schedulable treatments applied in lane miles.

2021

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	61	7.9%	8.0%	14
Collector	51	3.8%	11.5%	8
Residential	55	16.1%	24.6%	14

2022

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	60	10.5%	9.5%	13
Collector	48	3.8%	12.8%	7
Residential	59	23.1%	21.6%	17

Pavement Network after schedulable treatments applied in lane miles.

2023

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	62	12.4%	8.1%	15
Collector	46	5.1%	13.6%	7
Residential	61	26.8%	18.3%	18

2024

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	67	15.1%	6.2%	17
Collector	48	7.5%	12.1%	9
Residential	59	27.0%	18.3%	18

2025

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	68	15.8%	6.1%	18
Collector	46	7.6%	11.6%	10
Residential	62	29.8%	15.4%	20

Scenario: INCREASE BY 5

Objective: Minimum Network Average PCI Target: By Year

Year	Value	Year	Value	Year	Value	Year	Value
Year 1	56	Year 2	57	Year 3	58	Year 4	59
Year 5	60						

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment
2021	55	56
2022	52	57
2023	49	58
2024	47	59
2025	44	60

Percent Network Area by Functional Classification and Condition Class

Condition in base year 2021, prior to applying treatments.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	7.5%	3.6%	15.5%	0.0%	26.6%
II / III	11.5%	6.7%	11.1%	0.0%	29.3%
IV	7.9%	10.3%	20.9%	0.0%	39.1%
V	0.1%	1.2%	3.6%	0.0%	5.0%
Total	27.0%	21.8%	51.2%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	7.9%	3.8%	16.1%	0.0%	27.8%
II / III	11.1%	6.5%	10.6%	0.0%	28.1%
IV	7.9%	10.3%	20.9%	0.0%	39.1%
V	0.1%	1.2%	3.6%	0.0%	5.0%
Total	27.0%	21.8%	51.2%	0.0%	100.0%

Condition in year 2025 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	15.8%	7.6%	29.8%	0.0%	53.2%
II / III	5.1%	2.6%	6.0%	0.0%	13.8%
IV	3.2%	3.5%	4.3%	0.0%	11.0%
V	2.9%	8.1%	11.1%	0.0%	22.1%
Total	27.0%	21.8%	51.2%	0.0%	100.0%

City of Salinas

Target-Driven Scenarios - Cost Summary

Interest: 0% Inflation: 0% Printed: 01/28/2021

Scenario: INCREASE BY 5

Objective: Minimum Network Average PCI Target: By Year

Year	Value	Year	Value	Year	Value	Year	Value
Year 1	56	Year 2	57	Year 3	58	Year 4	59
Year 5	60						

Year		Rehabilitation	Preventive Maintenance		Total Cost	Deferred
2021	II	$231,150	Non-Project	$3,289,545	$6,219,138	$169,335,090
	III	$2,698,443	Project	$0		
	IV	$0				
	V	$0				
	Total	$2,929,593				
	Project	$0				
2022	II	$4,603,670	Non-Project	$52,595	$33,058,119	$171,238,901
	III	$8,199,091	Project	$0		
	IV	$20,202,763				
	V	$0				
	Total	$33,005,524				
	Project	$0				
2023	II	$2,352,890	Non-Project	$9,128	$42,737,580	$181,028,824
	III	$763,494	Project	$0		
	IV	$39,612,068				
	V	$0				
	Total	$42,728,452				
	Project	$0				
2024	II	$22,932	Non-Project	$94,166	$49,887,239	$236,909,674
	III	$40,984	Project	$0		
	IV	$49,729,157				
	V	$0				
	Total	$49,793,073				
	Project	$0				
2025	II	$0	Non-Project	$10,304	$49,886,436	$240,715,251
	III	$387,240	Project	$0		
	IV	$19,199,537				
	V	$30,289,355				
	Total	$49,876,132				
	Project	$0				

Summary

Functional Class	Rehabilitation	Prev. Maint.
Arterial	$65,188,858	$431,379
Collector	$26,651,483	$284,171
Residential/Local	$86,492,433	$2,740,188
Total:	$178,332,774	$3,455,738

Grand Total: $181,788,512

Maintain 55 PCI

($117.7 Million over 5 Years)

- Pavement Network Condition Lane Miles
- Network Condition Summary
- Cost Summary

Scenario: MAINTAIN 55

Objective: Minimum Network Average PCI Target: Overall 55

Annual budget needs to meet target objectives

Year	Arterial	Collector	Res/Loc	Other	Preventative Maintenance	Total
2021	$116,669	$0	$527,706	$0	$644,375	$644,375
2022	$4,801,812	$1,511,083	$14,075,984	$0	$2,697,765	$20,388,879
2023	$302,509	$484,691	$25,210,007	$0	$9,128	$25,997,207
2024	$15,283,420	$5,894,074	$11,714,525	$0	$94,166	$32,892,019
2025	$25,578,246	$11,292,082	$864,947	$0	$5,580	$37,735,275

Average Yearly Total: $23,531,551
Grand Total: $117,657,755

Pavement Network prior to treatments in lane miles.

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	60	7.5%	8.0%	13
Collector	51	3.6%	11.5%	7
Residential	54	15.5%	24.6%	13

Pavement Network after schedulable treatments applied in lane miles.

2021

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	60	7.5%	8.0%	13
Collector	51	3.6%	11.5%	7
Residential	54	15.5%	24.6%	13

2022

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	60	10.3%	9.5%	13
Collector	48	3.6%	12.8%	7
Residential	56	19.6%	24.6%	15

Pavement Network after schedulable treatments applied in lane miles.

2023

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	57	9.8%	10.5%	12
Collector	44	2.8%	13.9%	6
Residential	59	24.1%	20.5%	17

2024

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	59	10.5%	10.7%	13
Collector	43	4.6%	14.0%	7
Residential	58	25.5%	19.3%	17

2025

Functional Class	PCI	Percentage of the Network in Very Good Condition	Percentage of the Network in Poor or Very Poor Condition	Remaining Life
Arterial	63	13.0%	8.7%	16
Collector	43	6.4%	12.8%	8
Residential	56	25.4%	19.3%	17

Scenario: MAINTAIN 55

Objective: Minimum Network Average PCI Target: Overall 55

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment
2021	55	55
2022	52	55
2023	49	55
2024	47	55
2025	44	55

Percent Network Area by Functional Classification and Condition Class

Condition in base year 2021, prior to applying treatments.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	7.5%	3.6%	15.5%	0.0%	26.6%
II / III	11.5%	6.7%	11.1%	0.0%	29.3%
IV	7.9%	10.3%	20.9%	0.0%	39.1%
V	0.1%	1.2%	3.6%	0.0%	5.0%
Total	27.0%	21.8%	51.2%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	7.5%	3.6%	15.5%	0.0%	26.6%
II / III	11.5%	6.7%	11.1%	0.0%	29.3%
IV	7.9%	10.3%	20.9%	0.0%	39.1%
V	0.1%	1.2%	3.6%	0.0%	5.0%
Total	27.0%	21.8%	51.2%	0.0%	100.0%

Condition in year 2025 after schedulable treatments applied.

Condition Class	Arterial	Collector	Res/Loc	Other	Total
I	13.0%	6.4%	25.4%	0.0%	44.7%
II / III	5.3%	2.6%	6.5%	0.0%	14.4%
IV	5.8%	4.7%	5.3%	0.0%	15.8%
V	2.9%	8.1%	14.0%	0.0%	25.0%
Total	27.0%	21.8%	51.2%	0.0%	100.0%

City of Salinas

Target-Driven Scenarios - Cost Summary

Interest: 0% Inflation: 0% Printed: 01/28/2021

Scenario: MAINTAIN 55

Objective: Minimum Network Average PCI Target: Overall 55

Year		Rehabilitation		Preventive Maintenance	Total Cost	Deferred
2021	II	$0	Non-Project	$644,375	$644,375	$174,909,803
	III	$0	Project	$0		
	IV	$0				
	V	$0				
	Total	$0				
	Project	$0				
2022	II	$4,834,820	Non-Project	$2,697,765	$20,388,879	$186,784,432
	III	$8,199,091	Project	$0		
	IV	$4,657,203				
	V	$0				
	Total	$17,691,114				
	Project	$0				
2023	II	$787,730	Non-Project	$9,128	$25,997,207	$208,263,140
	III	$763,494	Project	$0		
	IV	$24,436,855				
	V	$0				
	Total	$25,988,079				
	Project	$0				
2024	II	$857,838	Non-Project	$94,166	$32,892,019	$267,529,251
	III	$40,984	Project	$0		
	IV	$31,899,031				
	V	$0				
	Total	$32,797,853				
	Project	$0				
2025	II	$0	Non-Project	$5,580	$37,735,275	$282,241,717
	III	$387,240	Project	$0		
	IV	$37,342,455				
	V	$0				
	Total	$37,729,695				
	Project	$0				

Summary

Functional Class	Rehabilitation	Prev. Maint.
Arterial	$45,654,045	$428,611
Collector	$18,899,715	$282,215
Residential/Local	$49,652,981	$2,740,188
Total:	$114,206,741	$3,451,014

Grand Total: $117,657,755

Current Funding

($31.5 Million over 5 Years)

- Network Condition Summary
- Cost Summary
- Sections Selected for Treatment
- GIS Maps of Treatments by year

City of Salinas

Scenarios - Network Condition Summary

Interest: 0% Inflation: 0% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2021	$6,300,000	10%	2023	$6,300,000	10%	2025	$6,300,000	10%
2022	$6,300,000	10%	2024	$6,300,000	10%			

Projected Network Average PCI by year

Year	Never Treated	With Selected Treatment	Treated Centerline Miles	Treated Lane Miles
2021	55	56	18.75	42.73
2022	52	54	13.57	27.63
2023	49	52	30.26	68.26
2024	47	50	25.72	58.22
2025	44	48	12.28	30.55

Percent Network Area by Functional Class and Condition Category

Condition in base year 2021, prior to applying treatments.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	7.5%	3.6%	15.5%	0.0%	26.6%
II / III	11.5%	6.7%	11.1%	0.0%	29.3%
IV	7.9%	10.3%	20.9%	0.0%	39.1%
V	0.1%	1.2%	3.6%	0.0%	5.0%
Total	27.0%	21.8%	51.2%	0.0%	100.0%

Condition in year 2021 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	8.2%	4.0%	16.6%	0.0%	28.8%
II / III	10.8%	6.3%	10.0%	0.0%	27.1%
IV	7.9%	10.3%	20.9%	0.0%	39.1%
V	0.1%	1.2%	3.6%	0.0%	5.0%
Total	27.0%	21.8%	51.2%	0.0%	100.0%

Condition in year 2025 after schedulable treatments applied.

Condition	Arterial	Collector	Res/Loc	Other	Total
I	7.6%	2.4%	19.9%	0.0%	30.0%
II / III	5.0%	4.1%	5.9%	0.0%	15.0%
IV	11.4%	7.1%	11.4%	0.0%	30.0%
V	2.9%	8.1%	14.0%	0.0%	25.0%
Total	27.0%	21.8%	51.2%	0.0%	100.0%

City of Salinas

Scenarios - Cost Summary

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year	PM	Budget		Rehabilitation		Preventative Maintenance	Surplus PM	Deferred		Stop Gap
2021	10%	$6,300,000	II	$456,121	Non-Project	$635,969	$0	$169,254,196	Funded	$0
			III	$5,207,905					Unmet	$578,057
			IV	$0	Project	$0				
			V	$0						
			Total	$5,664,026						
			Project	$0						
2022	10%	$6,300,000	II	$180,820	Non-Project	$629,410	$590	$198,524,085	Funded	$0
			III	$5,489,053					Unmet	$265,005
			IV	$0	Project	$0				
			V	$0						
			Total	$5,669,873						
			Project	$0						
2023	10%	$6,300,000	II	$4,039,276	Non-Project	$631,516	$0	$234,600,920	Funded	$0
			III	$1,571,385					Unmet	$319,754
			IV	$57,792	Project	$0				
			V	$0						
			Total	$5,668,453						
			Project	$0						
2024	10%	$6,300,000	II	$1,494,739	Non-Project	$640,922	$0	$313,911,805	Funded	$0
			III	$39,725					Unmet	$464,359
			IV	$4,122,651	Project	$0				
			V	$0						
			Total	$5,657,115						
			Project	$0						
2025	10%	$6,300,000	II	$0	Non-Project	$570,249	$59,751	$340,661,827	Funded	$0
			III	$0					Unmet	$155,703
			IV	$5,669,214	Project	$0				
			V	$0						
			Total	$5,669,214						
			Project	$0						

Summary

Functional Class	Rehabilitation	Prev. Maint.	Funded Stop Gap	Unmet Stop Gap
Arterial	$5,416,687	$494,950	$0	$339,771
Collector	$2,274,717	$105,473	$0	$516,677
Residential/Local	$20,637,277	$2,507,643	$0	$926,431
Grand Total:	$28,328,681	$3,108,066	$0	$1,782,879

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year	Budget	PM	Year	Budget	PM	Year	Budget	PM
2021	$6,300,000	10%	2023	$6,300,000	10%	2025	$6,300,000	10%
2022	$6,300,000	10%	2024	$6,300,000	10%			

Year: 2021

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
1ST AVE	TOWT ST	E LAUREL DR	1STAVE	15	2,568	36	92,448	R	AC	Dist 2 - District 2	62	62	100	$452,996	18,097	LIGHT REHAB
BRYANT CIR	VAN NESS CT	END	BRYANTCIR	10	256	32	8,207	R	AC	Dist 4 - District 4	61	61	100	$40,217	18,411	LIGHT REHAB
CHEROKEE DR	W AVLIN DR	INCA WAY	CHEROKEE DR	050	883	38	33,554	C	AC	Dist 5 - District 5	65	65	100	$164,415	18,059	LIGHT REHAB
DEL REY CIR	PADRE DR	END	DELREYCIR	10	464	32	14,836	R	AC	Dist 3 - District 3	60	60	100	$72,696	18,732	LIGHT REHAB
E ALISAL ST	N WOOD ST	KERN ST	EALISALST	100	1,427	75	107,025	A	AC	Dist 2&4 - District 2&4	61	61	100	$599,340	18,515	LIGHT REHAB
E BORONDA RD	RIDER AVE	MESQUITE DR	EBORONDA RD	100	1,326	45	59,670	A	AC	Dist 1 - District 1	61	61	100	$334,152	18,411	LIGHT REHAB
E MARKET ST	PCC END (S/O MARKET WAY)	MARKET WAY/ SHERWOOD DR	EMARKETST	030EB	177	40	7,080	A	AC	Dist 4 - District 4	61	61	100	$39,648	18,486	LIGHT REHAB
ENCINADA DR	LA MESA DR	SAN JUAN DR	ENCINADADR	10	1,113	37	41,181	R	AC	Dist 3 - District 3	62	62	100	$201,787	18,119	LIGHT REHAB
FLINT CIR	LARKIN ST	END	FLINTCIR	10	125	32	4,000	R	AC	Dist 5 - District 5	61	61	100	$19,600	18,400	LIGHT REHAB
HOWE DR	SHERMAN DR	END	HOWEDR	15	739	32	23,660	R	AC	Dist 5 - District 5	60	60	100	$115,935	18,702	LIGHT REHAB
MCALLISTER CIR	MCALLISTER ST	END	MCALLISTER	10	185	32	5,920	R	AC	Dist 4 - District 4	60	60	100	$29,008	18,712	LIGHT REHAB
MENDOCINO DR	PLACER WAY	YOLO CIR	MENDOCINOD	15	884	38	33,592	R	AC	Dist 6 - District 6	60	60	100	$164,601	18,735	LIGHT REHAB
MODOC AVE	RAINIER DR	E ALVIN DR	MODOCAVE	10	1,244	35	43,540	R	AC	Dist 6 - District 6	61	61	100	$213,346	18,424	LIGHT REHAB
MONTECITO CIR	MONTECITO WAY	END	MONTECITOC	10	368	32	11,770	R	AC	Dist 3 - District 3	61	61	100	$57,672	18,432	LIGHT REHAB
NICHOLS AVE	LASSEN AVE	RAINIER DR	NICHOLSAVE	10	1,224	32	39,173	R	AC	Dist 6 - District 6	61	61	100	$191,946	18,424	LIGHT REHAB
PLAZA CIR	S MAIN ST	END	PLAZACIR	10	448	38	17,024	R	AC	Dist 3 - District 3	60	60	100	$83,418	18,732	LIGHT REHAB
RAINIER DR	NATIVIDAD RD	LINWOOD DR	RAINIERDR	045	2,600	32	83,216	R	AC	Dist 4&6 - District 4&6	62	62	100	$407,757	18,108	LIGHT REHAB
RICO ST	W ROSSI ST	HYDE ST	RICOST	020	929	41	38,089	C	AC	Dist 4 - District 4	62	62	100	$186,637	18,818	LIGHT REHAB
RIO VERDE DR	LA MESA DR	SAN JUAN DR	RIOVERDEDR	10	1,633	32	52,266	R	AC	Dist 3 - District 3	61	61	100	$256,102	18,435	LIGHT REHAB
ROSARITA DR	SANTA TERESA WAY	E BERNAL DR	ROSARITADR	15	2,102	32	67,270	R	AC	Dist 4 - District 4	60	60	100	$329,623	18,711	LIGHT REHAB
SAN CARLOS DR	SAN PEDRO ST	SAN MIGUEL AVE	SANCARLOSD	10	1,260	32	40,308	R	AC	Dist 3 - District 3	61	61	100	$197,508	18,435	LIGHT REHAB

** - Treatment from Project Selection

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2021

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
SAUCITO AVE	PESCADERO DR	CAMBRIAN DR	SAUCITOAVE	10	878	32	28,108	R	AC	Dist 6 - District 6	62	62	100	$137,731	18,106	LIGHT REHAB
SILVERWOOD PL	DEL MONTE AVE	END	SILVERWOOD	10	410	32	13,123	R	AC	Dist 2 - District 2	62	62	100	$64,304	18,103	LIGHT REHAB
ST EDWARDS AVE	E LAUREL DR	CIRCLE DR	STEDWARDSA	15	2,689	32	86,043	C	AC	Dist 4 - District 4	64	64	100	$421,609	18,316	LIGHT REHAB
UNIVERSITY AVE	CENTRAL AVE	ARCHER ST	UNIVERSITY	30	263	40	10,520	R	AC	Dist 3 - District 3	62	62	100	$51,548	18,116	LIGHT REHAB
W LAKE ST	N MAIN ST	RICO ST	WLAKEST	15	2,387	32	76,390	C	AC	Dist 3 - District 3	61	61	100	$374,309	19,013	LIGHT REHAB
											Treatment Total			$5,207,905		
ABBOTT ST	JOHNSON AVE	LOS PALOS DR	ABBOTTST	NB060	1,269	36	45,684	A	AC/AC	Dist 3 - District 3	67	67	77	$70,354	18,889	HEAVY MAINTENANCE
ABBOTT ST	LOS PALOS DR	ALAMEDA AVE	ABBOTTST	NB070	1,316	36	47,376	A	AC/AC	Dist 3 - District 3	66	66	76	$72,960	18,164	HEAVY MAINTENANCE
ABBOTT ST	ALAMEDA AVE	MAPLE ST	ABBOTTST	NB080	892	36	32,112	A	AC/AC	Dist 3 - District 3	65	65	75	$49,453	17,606	HEAVY MAINTENANCE
CALIFORNIA ALY	E ALISAL ST	E SAN LUIS ST	CALIFORNIA	020	668	14	9,353	R	AC/PCC	Dist 3 - District 3	66	66	76	$13,095	16,502	HEAVY MAINTENANCE
E BERNAL DR	ALPINE DR	MAIN ST	EBERNALDR	30	471	53	24,963	A	AC/AC	Dist 4 - District 4	64	64	74	$38,444	18,937	HEAVY MAINTENANCE
PAJARO ST	SAN PEDRO ST	E BLANCO RD	PAJAROST	070	1,166	32	37,312	A	AC/PCC	Dist 3 - District 3	65	65	75	$57,461	17,715	HEAVY MAINTENANCE
W BLANCO RD	RIKER ST	PADRE DR	WBLANCORD	EB030	1,250	30	37,500	A	AC/AC	Dist 3 - District 3	67	67	77	$57,750	20,262	HEAVY MAINTENANCE
W BLANCO RD	PADRE DR	S MAIN ST	WBLANCORD	EB040	649	32	20,780	A	AC/AC	Dist 3 - District 3	67	67	77	$32,002	18,305	HEAVY MAINTENANCE
WILGART WAY	E ROMIE LN	SAN MIGUEL AVE	WILGARTWAY	35	1,442	32	46,144	R	AC/PCC	Dist 3 - District 3	65	65	75	$64,602	22,505	HEAVY MAINTENANCE
											Treatment Total			$456,121		
ACOSTA PLZ	GARNER AVE	END	ACOSTAPLZ	80	895	41	36,695	R	AC	Dist 1 - District 1	76	76	84	$18,348	45,010	LIGHT MAINTENANCE
ANTIGUA CIR	ANTIGUA AVE	END	ANTIGUACIR	10	185	34	6,290	R	AC	Dist 1 - District 1	75	75	83	$3,145	45,041	LIGHT MAINTENANCE
ASTOR WAY	BROADWAY DR	HUDSON WAY	ASTORWAY	15	580	33	19,140	R	AC	Dist 6 - District 6	74	74	83	$9,570	44,921	LIGHT MAINTENANCE
BERNARDO AVE	LA MANCHA WAY	FREEDOM PKWY	BERNARDOAV	15	1,500	37	55,500	R	AC	Dist 1 - District 1	76	76	84	$27,750	45,010	LIGHT MAINTENANCE
BOLOGNA CT	BOLOGNA WAY (W)	BOLOGNA WAY (E)	BOLOGNACT	10	737	32	23,584	R	AC	Dist 2 - District 2	76	76	84	$11,792	45,011	LIGHT MAINTENANCE
BUCKINGHAM WAY	EL DORADO DR	BUCKINGHAM DR	BUCKINGHA2	10	169	44	7,436	R	AC	Dist 6 - District 6	76	76	84	$3,718	45,010	LIGHT MAINTENANCE
BURLINGTON DR	PROVINCETOWN DR	END	BURLINGTO1	15	1,015	37	37,555	R	AC	Dist 6 - District 6	76	76	84	$18,778	45,011	LIGHT MAINTENANCE
CAMBRIDGE CT	WESTMINSTER DR (N)	END	CAMBRIDGEC	10	1,390	32	44,464	R	AC	Dist 6 - District 6	75	75	83	$22,233	45,041	LIGHT MAINTENANCE

** - Treatment from Project Selection

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2021

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
CARDINA WAY	BERNARDO AVE	PALMERA AVE	CARDINAWAY	10	441	34	14,986	R	AC	Dist 1 - District 1	76	76	84	$7,493	45,010	LIGHT MAINTENANCE
CHARLESTOWN WAY	BEACON HILL DR	BUNKER HILL WAY	CHARLESTOW	15	552	37	20,424	R	AC	Dist 6 - District 6	76	76	84	$10,212	45,011	LIGHT MAINTENANCE
CLINTON CT	MANHATTAN DR	S END	CLINTONCT	10	347	33	11,451	R	AC	Dist 6 - District 6	76	76	84	$5,726	45,007	LIGHT MAINTENANCE
CLINTON CT	MANHATTAN DR at HUDSON WAY	CLINTON CT	CLINTONCT	20	895	33	29,535	R	AC	Dist 6 - District 6	76	76	84	$14,768	45,007	LIGHT MAINTENANCE
CORTINA WAY	BERNARDO AVE	PALMERA AVE	CORTINAWAY	10	593	37	21,941	R	AC	Dist 1 - District 1	75	75	83	$10,971	45,041	LIGHT MAINTENANCE
DE CUNHA CT	DECLARATION ST (N)	DECLARATION ST (S)	DECUNHACT	15	2,009	32	64,288	R	AC	Dist 1 - District 1	76	76	84	$32,144	45,000	LIGHT MAINTENANCE
ELIZABETH CIR	VICTORIA AVE	END	ELIZABETHC	10	335	33	11,055	R	AC	Dist 6 - District 6	74	74	83	$5,528	44,921	LIGHT MAINTENANCE
E MARKET ST	CARR AVE	N SANBORN RD	EMARKETST	070	2,470	64	158,080	A	AC	Dist 4 - District 4	74	74	83	$98,888	50,253	LIGHT MAINTENANCE
ERCIA ST	HARDEN PKWY	HAMPTON ST	ERCIAST	15	760	41	31,160	R	AC	Dist 6 - District 6	74	74	83	$15,580	44,921	LIGHT MAINTENANCE
ESSEX WAY	ESSEX CIR	ARCADIA WAY	ESSEXWAY	10	254	37	9,398	R	AC	Dist 6 - District 6	75	75	83	$4,699	45,040	LIGHT MAINTENANCE
FULTON WAY	POWELL ST	STOCKSTON ST	FULTONWAY	15	766	32	24,512	R	AC	Dist 4 - District 4	76	76	84	$12,256	45,009	LIGHT MAINTENANCE
GARNER AVE	GARNER AVE (CULDESAC NORTH)	GEE STREET (CULDESAC)	GARNERPVT	110PA	1,232	22	27,104	R	AC	Dist 1 - District 1	76	76	84	$13,552	45,007	LIGHT MAINTENANCE
GENOA WAY	AREZZO CIR	MONTE BELLA BLVD	GENOAWAY	15	513	32	16,430	R	AC	Dist 2 - District 2	76	76	84	$8,215	45,011	LIGHT MAINTENANCE
GREENBRIAR WAY	SANSOME ST	END	GREENBRIAR	15	1,061	32	33,938	R	AC	Dist 4 - District 4	75	75	83	$16,970	45,038	LIGHT MAINTENANCE
INGLEWOOD ST	COVENTRY ST	END	INGLEWOODS	110	871	38	33,098	R	AC	Dist 6 - District 6	76	76	84	$16,549	45,010	LIGHT MAINTENANCE
KENTFIELD DR	LOYOLA DR	SAN JACINTO DR	KENTFIELDD	25	2,017	32	64,541	R	AC	Dist 3 - District 3	75	75	83	$32,271	45,042	LIGHT MAINTENANCE
LA MANCHA CIR	LA MANCHA WAY	END	LAMANCHACI	10	219	34	7,448	R	AC	Dist 1 - District 1	76	76	84	$3,725	45,010	LIGHT MAINTENANCE
LEXINGTON DR	PROVINCETOWN DR	INDEPENDENCE BLVD	LEXINGTOND	15	1,997	37	73,889	R	AC	Dist 6 - District 6	75	75	83	$36,945	45,040	LIGHT MAINTENANCE
LONDONDERRY WAY	COVENTRY ST	END	LONDONDERR	15	795	32	25,449	R	AC	Dist 6 - District 6	75	75	83	$12,725	45,040	LIGHT MAINTENANCE
MARSHFIELD CT	HANCOCK ST W. SIDE	HANCOCK ST E. SIDE	MARSHFIEL1	10	1,307	33	43,131	R	AC	Dist 6 - District 6	76	76	84	$21,566	45,011	LIGHT MAINTENANCE
NEW BRITAIN CIR	NEW SALEM DR	END	NEWBRITAIN	10	252	32	8,053	R	AC	Dist 6 - District 6	75	75	83	$4,027	45,040	LIGHT MAINTENANCE
NEW SALEM DR	BURLINGTON DR	END	NEWSALEMDR	15	1,248	35	43,680	R	AC	Dist 6 - District 6	75	75	83	$21,840	45,040	LIGHT MAINTENANCE
OSO CT	ESTRELLA WAY (N)	ESTRELLA WAY (S)	OSOCT	10	1,292	32	41,344	R	AC	Dist 1 - District 1	76	76	84	$20,672	45,010	LIGHT MAINTENANCE

** - Treatment from Project Selection

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2021

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
PALMERA AVE	LA MANCHA WAY	CORTINA WAY	PALMERAAVE	15	1,345	37	49,765	R	AC	Dist 1 - District 1	76	76	84	$24,883	45,010	LIGHT MAINTENANCE
PIAZZA CIR	PIAZZA DR	END	PIAZZACIR	10	210	32	6,720	R	AC	Dist 2 - District 2	76	76	84	$3,360	45,011	LIGHT MAINTENANCE
PORTSMOUTH WAY	HARTFORD ST	COVENTRY ST	PORTSMOUTH	10	523	32	16,722	R	AC	Dist 6 - District 6	76	76	84	$8,362	45,010	LIGHT MAINTENANCE
RIVERTON WAY	HARTFORD ST	COVENTRY ST	RIVERTONWA	10	637	32	20,382	R	AC	Dist 6 - District 6	76	76	84	$10,192	45,010	LIGHT MAINTENANCE
SANTA CLARA AVE	N FREEWAY OFF RAMP	END	SANTACLARA	10	369	24	8,856	R	AC/AC	Dist 4 - District 4	77	77	85	$4,428	57,384	LIGHT MAINTENANCE
TEHAMA CIR	RAINIER DR	END	TEHAMACIR	10	414	32	13,251	R	AC	Dist 6 - District 6	74	74	83	$6,626	44,931	LIGHT MAINTENANCE
TUSCANY WAY	CASSINO WAY	TUSCANY BLVD	TUSCANYWAY	15	316	34	10,744	R	AC	Dist 2 - District 2	75	75	83	$5,372	45,040	LIGHT MAINTENANCE
WATERFORD CIR	INGLEWOOD ST	END	WATERFORDC	10	237	32	7,587	R	AC	Dist 6 - District 6	76	76	84	$3,794	45,010	LIGHT MAINTENANCE
W BLANCO RD	S MAIN ST	PADRE DR	WBLANCORD	WB010	649	32	20,780	A	AC/AC	Dist 3 - District 3	75	75	84	$13,000	62,171	LIGHT MAINTENANCE
WENTWORTH CIR	LONDONDERRY WAY	END	WENTWORTHC	10	154	32	4,928	R	AC	Dist 6 - District 6	76	76	84	$2,464	45,010	LIGHT MAINTENANCE
WESTFIELD CIR	HANCOCK ST	END	WESTFIELDC	10	329	31	10,199	R	AC	Dist 6 - District 6	76	76	84	$5,100	45,011	LIGHT MAINTENANCE
											Treatment Total			$630,237		
E ALISAL ST	START PCC W/O PRADER	END PCC E/O FRONT ST	EALISALST	120WB	475	28	13,300	A	PCC	Dist 3&4 - District 3&4	86	86	91	$40	28,104,489	SEAL CRACKS
E ALISAL ST	START PCC E/O FRONT ST	END PCC	EALISALST	160EB	475	28	13,300	A	PCC	Dist 3&4 - District 3&4	81	81	86	$59	11,317,049	SEAL CRACKS
E BERNAL DR	SHERWOOD DR	ROSARITA DR	EBERNALDR	10	866	54	46,764	A	PCC	Dist 4 - District 4	80	80	85	$219	9,579,618	SEAL CRACKS
FRONT ST	START PCC @ E MARKET ST	END PCC @ FRONT ST	FRONTST	010EB	404	20	8,080	A	PCC	Dist 3 - District 3	74	74	77	$54	3,695,217	SEAL CRACKS
FRONT ST	PCC START	E MARKET ST	FRONTST	030NB	422	26	10,972	A	PCC	Dist 3 - District 3	84	84	89	$39	19,209,682	SEAL CRACKS
FRONT ST	E MARKET ST	END OF PCC	FRONTST	030SB	367	30	11,010	A	PCC	Dist 3 - District 3	78	78	82	$58	7,021,648	SEAL CRACKS
FRONT ST	PCC START	PCC END	FRONTST	060WB	270	18	4,860	A	PCC	Dist 3 - District 3	79	79	84	$25	8,198,026	SEAL CRACKS
GONZALES ALY	E ALISAL ST	E SAN LUIS ST	GONZALESAL	20	625	15	9,375	R	PCC	Dist 3 - District 3	79	79	84	$38	8,195,466	SEAL CRACKS
GREENFIELD ALY	E MARKET ST	E GABILAN ST	GREENFIELD	010	470	32	15,040	R	PCC	Dist 3 - District 3	77	77	81	$67	6,064,264	SEAL CRACKS
GREENFIELD ALY	E ALISAL ST	E SAN LUIS ST	GREENFIELD	030	670	16	10,720	R	PCC	Dist 3 - District 3	79	79	84	$43	8,195,466	SEAL CRACKS
HAVEN ALY	BELLEHAVEN ST	N. END	HAVENALY	040	85	21	1,785	R	PCC	Dist 2 - District 2	72	72	76	$10	3,144,267	SEAL CRACKS

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2021

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
HUGHES WAY	CONSTITUTION BLVD	FOX GLEN WAY	HUGHESWAY	10	317	38	12,046	R	AC	Dist 1 - District 1	78	78	80	$52	1,214,901	SEAL CRACKS
LACEY LN	E GABILAN ST	MONTEREY ST	LACEYLN	10	265	15	3,975	R	PCC	Dist 3 - District 3	87	87	92	$9	33,887,595	SEAL CRACKS
LAKE ALY	MARKET WAY	E LAKE ST	LAKEALY	10	677	20	13,540	R	PCC	Dist 4 - District 4	73	73	77	$73	3,543,021	SEAL CRACKS
LODGE LN	E MARKET ST	E GABILAN ST	LODGELN	10	605	14	8,470	R	PCC	Dist 3 - District 3	79	79	84	$34	8,197,527	SEAL CRACKS
LODGE LN	E GABILAN ST	E ALISAL ST	LODGELN	20	670	15	10,050	R	PCC	Dist 3 - District 3	78	78	82	$43	7,032,072	SEAL CRACKS
NACIONAL CT	CLARK ST (N)	CLARK ST (S)	NACIONALCT	10	1,884	38	71,592	R	AC	Dist 3 - District 3	77	77	79	$322	1,187,763	SEAL CRACKS
NATIVIDAD RD	SHERWOOD DR	E LAUREL DR	NATIVIDADR	010	2,141	32	68,512	A	PCC	Dist 4 - District 4	75	75	79	$421	4,562,493	SEAL CRACKS
NATIVIDAD RD	S LAUREL DR	RAINIER DR	NATIVIDADR	020NB	2,105	36	75,780	A	PCC	Dist 4 - District 4	79	79	84	$377	8,181,142	SEAL CRACKS
NATIVIDAD RD	RAINIER DR	E ALVIN DR	NATIVIDADR	030NB	1,109	36	39,924	A	PCC	Dist 6 - District 6	87	87	92	$108	21,989,118	SEAL CRACKS
NATIVIDAD RD	E ALVIN DR	RAINIER DR	NATIVIDADR	SB130	1,109	36	39,924	A	PCC	Dist 6 - District 6	87	87	92	$108	21,989,118	SEAL CRACKS
NATIVIDAD RD	RAINIER DR	S LAUREL DR	NATIVIDADR	SB140	2,105	36	75,780	A	PCC	Dist 4 - District 4	76	76	80	$444	5,236,338	SEAL CRACKS
N MAIN ST	COP 900' S/O RUSSEL RD	BORONDA RD	NMAINST	020	3,798	78	296,244	A	PCC	Dist 5 - District 5	73	73	77	$1,978	3,535,616	SEAL CRACKS
QUAIL RUN CIR	W ROSSI ST	END	QUAILRUNCI	10	630	42	26,460	R	AC	Dist 3 - District 3	76	76	78	$125	1,171,893	SEAL CRACKS
ROSSI CIR	W ROSSI ST	END	ROSSICIR	10	463	42	19,446	R	AC	Dist 3 - District 3	80	80	82	$74	1,250,298	SEAL CRACKS
SHERWOOD DR	E BERNAL DR EB	185 Ft S/O SHERWOOD PL (PCC END)	SHERWOOD DR	050	1,814	50	90,700	A	PCC	Dist 4 - District 4	77	77	81	$505	6,038,192	SEAL CRACKS
SHERWOOD DR	NATIVIDAD RD	E BERNAL DR	SHERWOOD DR	060	279	64	17,828	A	PCC	Dist 4 - District 4	75	75	79	$110	4,563,922	SEAL CRACKS
S SANBORN RD	RAILROAD Overpass (PCC START)	RAILROAD Overpass (PCC END)	SSANBORN RD	020NB	850	20	17,000	A	PCC	Dist 3 - District 3	72	72	76	$118	3,148,239	SEAL CRACKS
S SANBORN RD	RAILROAD Overpass (PCC START)	RAILROAD Overpass (PCC END)	SSANBORN RD	SB060	850	20	17,000	A	PCC	Dist 3 - District 3	72	72	76	$118	3,148,239	SEAL CRACKS
TWIN CREEKS CIR	TWIN CREEKS DR	END	TWNCRKCIR	10	420	34	14,280	R	AC	Dist 1 - District 1	84	84	85	$42	1,253,718	SEAL CRACKS
TWIN CREEKS WAY	TWIN CREEKS DR	BEACON HILL DR	TWNCRKWY	10	177	33	5,841	R	AC	Dist 1 - District 1	83	83	84	$19	1,260,133	SEAL CRACKS
											Treatment Total			$5,732		
					Year 2021 Area Total				3,624,367		Year 2021 Total			$6,299,995		

** - Treatment from Project Selection

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
BOYLE CT	CHRISTENSEN AVE (N)	CHRISTENSEN AVE (S)	BOYLECT	15	1,149	34	39,066	R	AC	Dist 6 - District 6	63	61	100	$191,424	18,377	LIGHT REHAB
CAMILLE CT	ATLANTIC ST	END	CAMILLECT	10	194	25	4,850	R	AC	Dist 1 - District 1	64	62	100	$23,765	18,055	LIGHT REHAB
COLERIDGE DR	RIKER ST	SE END	COLERIDGED	20	425	32	13,600	R	AC	Dist 3 - District 3	64	62	100	$66,640	18,061	LIGHT REHAB
CONSTITUTION BLVD	NANTUCKET BLVD	BEACON HILL DR (N)	CONSTITUTI	SB20	886	34	30,124	A	AC	Dist 1&6 - District 1&6	69	67	100	$168,695	16,694	LIGHT REHAB
CONSTITUTION BLVD	FREEDOM PKWY	BEACON HILL DR (S)	CONSTITUTI	SB50	844	34	28,696	A	AC	Dist 1&6 - District 1&6	63	60	100	$160,698	18,652	LIGHT REHAB
CONSTITUTION BLVD	INDEPENDENCE BLVD	E LAUREL DR	CONSTITUTI	SB70	3,905	32	124,945	A	AC	Dist 1&6 - District 1&6	69	67	100	$699,690	16,694	LIGHT REHAB
COTTONWOOD DR	COTTONWOOD CT	END	CTTNWDDR	010	1,145	33	37,785	R	AC	Dist 1 - District 1	64	62	100	$185,147	18,066	LIGHT REHAB
ELLIS CIR	FULTON WAY	END	ELLISCIR	10	215	32	6,866	R	AC	Dist 4 - District 4	66	64	100	$33,643	17,350	LIGHT REHAB
E MARKET ST	SHERWOOD DR/ MARKET WAY	SIMAS ST/ GRIFFIN ST	EMARKETST	040	1,550	56	86,800	A	AC	Dist 2 - District 2	67	65	100	$486,080	17,395	LIGHT REHAB
GRIFFIN ST	E MARKET ST	E ALISAL ST	GRIFFINST	25	2,005	38	76,190	A	AC	Dist 4 - District 4	69	67	100	$426,664	16,702	LIGHT REHAB
LA GUARDIA ST	VANDENBERG ST	MOFFETT ST	LAGUARDIAS	10	1,889	41	77,449	R	AC	Dist 2 - District 2	67	65	100	$379,501	16,979	LIGHT REHAB
LARKIN ST	KEARNY WAY	VICTOR ST	LARKINST	035	1,306	43	56,158	C	AC	Dist 5 - District 5	68	65	100	$275,175	18,008	LIGHT REHAB
LARKIN ST	VICTOR ST	RICO ST	LARKINST	045	756	43	32,508	C	AC	Dist 5 - District 5	71	68	100	$159,290	17,089	LIGHT REHAB
LOYOLA DR	UNIVERSITY AVE	ORINDA WAY	LOYOLADR	25	2,667	37	98,679	R	AC	Dist 3 - District 3	64	62	100	$483,528	18,061	LIGHT REHAB
MASSACHUSETTS CIR	MASSACHUSETTS DR	END	MSSCHUCIR	10	235	33	7,755	R	AC	Dist 1 - District 1	64	62	100	$38,000	18,094	LIGHT REHAB
SAN FERNANDO CIR	SAN FERNANDO DR	END	SANFERNAND	10	253	32	8,089	R	AC	Dist 3 - District 3	67	65	100	$39,638	17,005	LIGHT REHAB
SAN MIGUEL AVE	SAN FERNANDO DR	SAN MATEO DR	SANMIGUELA	040	1,137	38	43,206	C	AC	Dist 3 - District 3	67	64	100	$211,710	18,253	LIGHT REHAB
SAN RAMON CIR	PAJARO ST	END	SANRAMONCI	10	198	32	6,330	R	AC/PCC	Dist 3 - District 3	64	63	100	$31,016	16,183	LIGHT REHAB
SHERMAN CIR	SHERMAN DR	END	SHERMANCIR	10	260	32	8,320	R	AC	Dist 5 - District 5	64	62	100	$40,768	18,029	LIGHT REHAB
SNUG HARBOR ST	KITTERY ST	END	SNUGHARBOR	15	1,470	32	47,025	R	AC	Dist 6 - District 6	63	61	100	$230,423	18,374	LIGHT REHAB
ST CHARLES PL	ST CHARLES WAY	END	STCHARLESP	10	187	32	5,984	R	AC	Dist 4 - District 4	66	64	100	$29,322	17,347	LIGHT REHAB
STOCKTON ST	POWELL ST	W ROSSI ST	STOCKTONST	15	1,245	35	43,575	R	AC	Dist 4 - District 4	66	64	100	$213,518	17,350	LIGHT REHAB
UNIVERSITY AVE	W ACACIA ST	CENTRAL AVE	UNIVERSITY	20	1,751	37	64,787	R	AC	Dist 3 - District 3	68	66	100	$317,457	16,625	LIGHT REHAB

** - Treatment from Project Selection

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
VICTOR WAY	WEST END	EAST END	VICTORWAY	15	605	42	25,410	R	AC	Dist 3 - District 3	65	63	100	$124,509	17,678	LIGHT REHAB
W BLANCO RD	LUTHER WAY	LOS OLIVOS DR	WBLANCORD	EB010	1,383	30	41,490	A	AC/AC	Dist 3 - District 3	64	62	100	$232,344	17,638	LIGHT REHAB
W BLANCO RD	LOS OLIVOS DR	RIKER ST	WBLANCORD	EB020	1,431	30	42,930	A	AC/AC	Dist 3 - District 3	64	62	100	$240,408	17,638	LIGHT REHAB
											Treatment Total			$5,489,053		
ALVARADO DR	SHERMAN DR	END	ALVARADODR	15	1,571	32	50,262	R	AC	Dist 5 - District 5	71	69	79	$70,367	15,485	HEAVY MAINTENANCE
ANDINA DR	COUNTRYSIDE DR	ARGENTINE DR	ANDINADR	15	821	37	30,377	R	AC	Dist 2 - District 2	71	69	79	$42,528	15,476	HEAVY MAINTENANCE
E SAN JOAQUIN ST	S MAIN ST	PAJARO ST	ESANJOAQUI	10	890	36	32,040	R	AC/PCC	Dist 3 - District 3	69	68	77	$44,856	16,820	HEAVY MAINTENANCE
N MAIN DR	CHAPARRAL ST	END	NMAINDR	10	515	32	16,478	R	AC/AC	Dist 4 - District 4	64	63	73	$23,069	15,705	HEAVY MAINTENANCE
											Treatment Total			$180,820		
ARGUELLO DR	SANSOME ST	END	ARGUELLODR	15	877	32	28,073	R	AC	Dist 4 - District 4	77	76	84	$14,037	45,001	LIGHT MAINTENANCE
ATTLEBURY CIR	CANTERBURY ST	END	ATTLEBURYC	10	292	32	9,350	R	AC	Dist 6 - District 6	77	76	84	$4,676	45,003	LIGHT MAINTENANCE
BERMUDA WAY	RIDER AVE	PACIFIC AVE	BERMUDAWAY	10	720	32	23,055	R	AC	Dist 1 - District 1	77	76	84	$11,528	45,005	LIGHT MAINTENANCE
BUCKINGHAM DR	CASCADE WAY	DORSET WAY	BUCKINGHA1	10	626	38	23,788	R	AC	Dist 6 - District 6	78	77	85	$11,894	44,912	LIGHT MAINTENANCE
BUCKINGHAM DR	DORSET WAY	ARCADIA WAY	BUCKINGHA1	20	702	37	25,974	R	AC	Dist 6 - District 6	78	77	85	$12,987	44,912	LIGHT MAINTENANCE
BUCKINGHAM CIR	BUCKINGHAM DR	END	BUCKINGHAM	10	168	32	5,384	R	AC	Dist 6 - District 6	78	77	85	$2,693	44,912	LIGHT MAINTENANCE
BUNKER HILL WAY	CONSTITUTION BLVD	GEORGETOWN WAY	BUNKERHILL	15	1,245	37	46,065	R	AC	Dist 6 - District 6	78	77	85	$23,033	44,910	LIGHT MAINTENANCE
CACHUMA CT	GAVIOTA DR (W)	GAVIOTA DR (E)	CACHUMACT	10	989	34	33,626	R	AC	Dist 1 - District 1	79	77	85	$16,813	44,625	LIGHT MAINTENANCE
CALLE CEBU	SHERWOOD DR	SUN WAY	CALLECEBU	15	1,056	37	39,072	R	AC	Dist 4 - District 4	78	77	85	$19,536	44,897	LIGHT MAINTENANCE
CAMARILLO CT	MORENO DR (N)	MORENO DR (S)	CAMARILLOC	10	1,000	33	33,000	R	AC	Dist 1 - District 1	79	77	85	$16,500	44,625	LIGHT MAINTENANCE
CANCUN CIR	BERNARDO AVE	END	CANCUNCIR	10	145	33	4,785	R	AC	Dist 1 - District 1	77	76	84	$2,393	45,005	LIGHT MAINTENANCE
CANTERBURY ST	LEXINGTON DR	END	CANTERBURY	15	1,215	32	38,884	R	AC	Dist 6 - District 6	77	76	84	$19,442	45,003	LIGHT MAINTENANCE
CHESHIRE WAY	BENNINGTON CT	BEACON HILL DR	CHESHIREWA	10	249	37	9,213	R	AC	Dist 6 - District 6	77	76	84	$4,607	45,003	LIGHT MAINTENANCE
COBBLESTONE ST	START ONEWAY LOOP	END ONEWAY @ COBBLESTONE	COBBLESTON	020	545	26	14,170	R	AC	Dist 1 - District 1	77	76	84	$7,085	45,008	LIGHT MAINTENANCE
DANBURY ST	HARTFORD ST	INDEPENDENCE BLVD	DANBURYST	15	752	32	24,061	R	AC	Dist 6 - District 6	77	76	84	$12,031	45,004	LIGHT MAINTENANCE

** - Treatment from Project Selection

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
DERBY WAY	WESTMINSTER DR	HAMPTON ST	DERBYWAY	10	258	37	9,546	R	AC	Dist 6 - District 6	77	76	84	$4,773	45,004	LIGHT MAINTENANCE
DEVONSHIRE WAY	WESTMINSTER DR	ERCIA ST	DEVONSHIRE	10	1,068	32	34,182	R	AC	Dist 6 - District 6	77	76	84	$17,091	45,004	LIGHT MAINTENANCE
EMERALD DR	ARCADIA WAY	EMERALD WAY	EMERALDDR	15	872	37	32,264	R	AC	Dist 6 - District 6	77	76	84	$16,132	45,004	LIGHT MAINTENANCE
ESTRELLA CT	ESTRELLA WAY	END	ESTRELLACT	10	205	37	7,585	R	AC	Dist 1 - District 1	78	77	85	$3,793	44,914	LIGHT MAINTENANCE
GAVIOTA DR	CACHUMA CT (W)	TORONA WAY	GAVIOTADR	010	834	38	31,692	R	AC	Dist 1 - District 1	79	77	85	$15,846	44,625	LIGHT MAINTENANCE
GAVIOTA DR	TORONA WAY	TECOPA WAY	GAVIOTADR	020	515	34	17,510	R	AC	Dist 1 - District 1	78	76	85	$8,755	44,943	LIGHT MAINTENANCE
GREAT ISLAND ST	BEACON HILL DR	CRESTVIEW ST	GREATISLAN	15	1,187	32	37,980	R	AC	Dist 6 - District 6	77	76	84	$18,990	45,003	LIGHT MAINTENANCE
GREENWICH WAY	ARGUELLO DR	SANSOME ST	GREENWICHW	15	598	34	20,332	R	AC	Dist 4 - District 4	77	76	84	$10,166	45,001	LIGHT MAINTENANCE
HAMPTON ST	HARROD WAY	WESTMINSTER DR	HAMPTONST	15	1,213	32	38,814	R	AC	Dist 6 - District 6	77	76	84	$19,407	45,004	LIGHT MAINTENANCE
HANCOCK CIR	HANCOCK ST	END	HANCOCKCIR	10	305	31	9,455	R	AC	Dist 6 - District 6	77	76	84	$4,728	45,003	LIGHT MAINTENANCE
HARTFORD ST	INGLEWOOD ST	COVENTRY ST	HARTFORDST	15	1,469	32	47,022	R	AC	Dist 6 - District 6	77	76	84	$23,511	45,004	LIGHT MAINTENANCE
LA CUESTA CT	ANTIGUA AVE (N)	ANTIGUA AVE (S)	LACUESTACT	10	1,375	34	46,750	R	AC	Dist 1 - District 1	77	76	84	$23,375	45,005	LIGHT MAINTENANCE
LA MANCHA WAY	BERNARDO AVE	PALMERA AVE	LAMANCHAWA	15	566	37	20,956	R	AC	Dist 1 - District 1	77	76	84	$10,479	45,005	LIGHT MAINTENANCE
LA POSADA DR	END (N)	END (S)	LAPOSADADR	15	474	25	11,843	R	AC	Dist 4 - District 4	77	76	84	$5,922	45,000	LIGHT MAINTENANCE
MANCHESTER DR	CASTLETON ST	CONSTITUTION BLVD	MANCHESTE1	10	813	42	34,146	R	AC	Dist 6 - District 6	78	77	85	$17,073	44,912	LIGHT MAINTENANCE
MARSHFIELD CIR	HANCOCK ST	END	MARSHFIELD	10	333	32	10,642	R	AC	Dist 6 - District 6	77	76	84	$5,321	45,003	LIGHT MAINTENANCE
MIMBRERA WAY	RIDER AVE	NOGAL DR	MIMBRERAWA	010	859	38	32,642	R	AC	Dist 1 - District 1	78	77	85	$16,321	44,922	LIGHT MAINTENANCE
MODENA WAY	MODENA ST	PALERMO DR	MODENAWAY	10	272	33	8,976	R	AC	Dist 2 - District 2	77	76	84	$4,488	45,001	LIGHT MAINTENANCE
NEW HAVEN WAY	NEW SALEM DR	NANTUCKET BLVD	NEWHAVENWA	10	365	37	13,505	R	AC	Dist 6 - District 6	78	77	85	$6,753	44,910	LIGHT MAINTENANCE
NICOLE CIR	BOYLE CT	END	NICOLECIR	10	119	32	3,819	R	AC	Dist 6 - District 6	78	77	85	$1,910	44,913	LIGHT MAINTENANCE
NEW HAMPSHIRE CT	RHODE ISLAND ST	MASSACHUSETTS DR	NWHMPSHCT	15	1,511	37	55,907	R	AC	Dist 1 - District 1	78	76	85	$27,954	44,942	LIGHT MAINTENANCE
OXFORD CT	WIMBLEDON AVE W. SIDE	WIMBLEDON AVE E. SIDE	OXFORDCT	10	1,358	32	43,456	R	AC	Dist 6 - District 6	78	77	85	$21,728	44,912	LIGHT MAINTENANCE
PROVINCETOWN DR	LEXINGTON DR (S)	LEXINGTON DR (N)	PROVINCET1	10	1,484	32	47,488	R	AC	Dist 6 - District 6	78	77	85	$23,744	44,910	LIGHT MAINTENANCE

** - Treatment from Project Selection

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2022

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
REGENCY CIR	HARDEN PKWY	END	REGENCYCIR	10	658	42	27,636	R	AC	Dist 6 - District 6	78	77	85	$13,818	44,913	LIGHT MAINTENANCE
RHODE ISLAND ST	CONSTITUTION BLVD	RHODE ISLAND CIR	RHDISLDST	010	576	37	21,312	R	AC	Dist 1 - District 1	78	76	85	$10,656	44,942	LIGHT MAINTENANCE
ROGGE RD	2725' W/O NATIVIDAD RD (COP)	CITY LIMITS	ROGGERD	020	1,680	36	60,480	R	AC	Dist 6 - District 6	77	76	84	$30,240	44,997	LIGHT MAINTENANCE
SAN GABRIEL DR	CENTRAL AVE	END	SANGABRIEL	10	210	38	7,980	R	AC	Dist 3 - District 3	78	77	85	$3,990	44,889	LIGHT MAINTENANCE
SPOLETO ST	CASSINO WAY	END	SPOLETOST	15	1,254	33	41,382	R	AC	Dist 2 - District 2	78	77	85	$20,691	44,909	LIGHT MAINTENANCE
STONY BROOK DR	STONY BROOK CIR	CASTLETON ST	STONYBROO1	20	779	38	29,602	R	AC	Dist 6 - District 6	78	77	85	$14,801	44,912	LIGHT MAINTENANCE
STRATFORD CT	EMERALD DR N. SIDE	EMERALD DR S. SIDE	STRATFORDC	10	1,037	32	33,184	R	AC	Dist 6 - District 6	77	76	84	$16,592	45,004	LIGHT MAINTENANCE
TECOPA WAY	GAVIOTA DR	TORONA WAY	TECOPAWAY	10	748	33	24,684	R	AC	Dist 1 - District 1	79	77	85	$12,342	44,625	LIGHT MAINTENANCE
VERA CRUZ CIR	ANTIGUA AVE	END	VERACRUZCI	10	183	34	6,222	R	AC	Dist 1 - District 1	77	76	84	$3,111	45,005	LIGHT MAINTENANCE
VERONA WAY	MONTE BELLA BLVD	VERONA CT (W)	VERONAWAY	15	387	38	14,706	R	AC	Dist 2 - District 2	78	77	85	$7,353	44,909	LIGHT MAINTENANCE
WIMBLEDON AVE	ESSEX WAY	COP 375' E/O ESSEX WAY	WIMBLEDONA	20	375	30	11,250	R	AC	Dist 6 - District 6	77	76	84	$5,625	45,004	LIGHT MAINTENANCE
WOODBURY CIR	CANTERBURY ST	END	WOODBURYCI	10	155	32	4,960	R	AC	Dist 6 - District 6	77	76	84	$2,480	45,003	LIGHT MAINTENANCE
											Treatment Total			$629,214		
ETNA CIR	PALERMO DR	END	ETNACIR	10	290	32	9,280	R	AC	Dist 2 - District 2	89	88	89	$20	3,540,950	SEAL CRACKS
PALERMO DR	MONTE BELLA BLVD (S)	CAMPANIA WAY	PALERMODR	010	1,820	37	67,340	R	AC	Dist 2 - District 2	87	85	86	$176	2,846,235	SEAL CRACKS
											Treatment Total			$196		
					Year 2022 Area Total				2,522,801		Year 2022 Total			$6,299,283		

Year: 2023

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
CAMDEN WAY	BEDFORD DR	W ACACIA ST	CAMDENWAY	010	215	32	6,880	R	AC	Dist 3 - District 3	45	40	100	$57,792	13,083	HEAVY REHAB
											Treatment Total			$57,792		
BUSH ST	RICO ST	HYDE ST	BUSHST	10	1,294	32	41,408	R	AC	Dist 5 - District 5	70	67	100	$202,900	16,462	LIGHT REHAB
FREEDOM PKWY	TOWT STREET	WILLIAMS RD	FREEDOMPKW	040	1,638	60	98,280	C	AC	Dist 1 - District 1	73	68	100	$481,572	17,306	LIGHT REHAB

City of Salinas

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Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
LA JOLLA CIR	LA JOLLA WAY	END	LAJOLLACIR	10	337	32	10,784	R	AC	Dist 3 - District 3	71	68	100	$52,842	16,094	LIGHT REHAB
MCALLISTER ST	BRIGHTON ST	VICTOR ST	MCALLISTE1	15	1,649	32	52,780	R	AC	Dist 4 - District 4	69	66	100	$258,624	16,869	LIGHT REHAB
SANTA TERESA WAY	E LAUREL DR	GRANADA AVE	SANTATERE 1	15	1,619	37	59,903	R	AC	Dist 4 - District 4	68	65	100	$293,525	17,249	LIGHT REHAB
UNIVERSITY AVE	AMBROSE DR	W ACACIA ST	UNIVERSITY	10	1,555	37	57,535	R	AC	Dist 3 - District 3	72	69	100	$281,922	15,668	LIGHT REHAB
											Treatment Total			$1,571,385		
ABBEY WAY	CROMWELL DR	GLADSTONE WAY	ABBEYWAY	10	248	33	8,184	R	AC	Dist 6 - District 6	72	69	78	$11,458	15,316	HEAVY MAINTENANCE
ABBOTT ST	S SANBORN RD	E ROMIE LN	ABBOTTST	NB040	1,076	36	38,744	A	AC	Dist 3 - District 3	67	62	72	$59,666	13,339	HEAVY MAINTENANCE
ABBOTT ST	JOHNSON AVE	E ROMIE LN	ABBOTTST	SB060	263	36	9,461	A	AC	Dist 3 - District 3	70	65	75	$14,570	14,007	HEAVY MAINTENANCE
AIRPORT BLVD	ROY DIAZ ST	TERVEN AVE	AIRPORTBLV	030	890	50	44,500	A	AC	Dist 2 - District 2	69	64	74	$68,530	13,734	HEAVY MAINTENANCE
ALAMO WAY	LA HONDA CT (N)	GARNER AVE	ALAMOWAY	20	1,378	37	50,986	R	AC	Dist 1 - District 1	64	60	71	$71,381	13,625	HEAVY MAINTENANCE
ARCADIA CT	ARCADIA WAY	ARCADIA WAY	ARCADIACT	10	1,293	32	41,362	R	AC	Dist 6 - District 6	64	60	71	$57,907	13,633	HEAVY MAINTENANCE
BORONDA RD	135' NW OF N DAVIS RD (CITY LIMIT)	N DAVIS RD	BORONDAR D	120	135	32	4,320	R	AC	Dist 5 - District 5	70	67	76	$6,048	14,925	HEAVY MAINTENANCE
BURGUNDY WAY	CABERNET WAY	CHARDONNAY DR	BURGUNDY WA	15	422	37	15,614	R	AC	Dist 6 - District 6	68	65	74	$21,860	14,480	HEAVY MAINTENANCE
CABERNET CIR	CABERNET WAY	END	CABERNETC I	10	190	31	5,890	R	AC	Dist 6 - District 6	72	69	78	$8,246	15,316	HEAVY MAINTENANCE
CABERNET WAY	CHARDONNAY DR	BURGUNDY WAY	CABERNET WA	15	1,103	33	36,399	R	AC	Dist 6 - District 6	68	65	74	$50,959	14,480	HEAVY MAINTENANCE
CHABLIS CIR	MERLOT WAY	END	CHABLISCIR	10	259	31	8,029	R	AC	Dist 6 - District 6	70	67	76	$11,241	14,898	HEAVY MAINTENANCE
CHARDONNAY DR	CROMWELL DR	MCKINNON ST	CHARDONN A1	15	2,365	41	96,965	R	AC	Dist 6 - District 6	70	67	76	$135,751	14,898	HEAVY MAINTENANCE
CHARDONNAY CIR	CHARDONNAY DR	END	CHARDONN AY	10	200	31	6,200	R	AC	Dist 6 - District 6	72	69	78	$8,680	15,316	HEAVY MAINTENANCE
CHELSEA CT	WIMBLEDON AVE (W)	WIMBLEDON AVE (E)	CHELSEACT	10	1,476	32	47,232	R	AC	Dist 6 - District 6	65	61	72	$66,125	13,834	HEAVY MAINTENANCE
CHRISTENSEN AVE	E ALVIN DR	JULIA AVE	CHRISTENS E	15	1,888	38	71,744	R	AC	Dist 6 - District 6	67	64	73	$100,442	14,262	HEAVY MAINTENANCE
CHURCHILL CIR	CHURCHILL WAY	END	CHURCHILL C	10	244	33	8,052	R	AC	Dist 6 - District 6	68	65	74	$11,273	14,480	HEAVY MAINTENANCE
CHURCHILL WAY	CROMWELL DR (W)	CROMWELL DR (N)	CHURCHILL W	15	1,057	33	34,881	R	AC	Dist 6 - District 6	71	68	77	$48,834	15,136	HEAVY MAINTENANCE
CROMWELL CIR	CROMWELL DR	END	CROMWELL CI	10	128	32	4,104	R	AC	Dist 6 - District 6	72	69	78	$5,747	15,316	HEAVY MAINTENANCE

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2023

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
CROMWELL DR	EL DORADO DR	VICTORIA AVE	CROMWELL DR	15	1,361	37	50,357	R	AC	Dist 6 - District 6	71	68	77	$70,500	15,136	HEAVY MAINTENANCE
CROSS AVE	PALOMA AVE (E)	E MARKET ST	CROSSAVE	010	465	38	17,670	R	AC	Dist 2 - District 2	68	65	74	$24,738	14,488	HEAVY MAINTENANCE
DELANCEY DR	BROADWAY DR	END	DELANCEYDR	15	1,675	37	61,975	R	AC	Dist 6 - District 6	69	66	75	$86,765	14,698	HEAVY MAINTENANCE
E ALISAL ST	QUILLA ST/ SKYWAY BLVD	WILLIAMS RD	EALISALST	055	617	80	49,360	A	AC	Dist 2 - District 2	73	68	78	$76,015	14,575	HEAVY MAINTENANCE
E ALISAL ST	KERN ST	START PCC W/O PRADER ST	EALISALST	110WB	1,865	28	52,220	A	AC	Dist 3&4 - District 3&4	66	61	72	$80,419	13,157	HEAVY MAINTENANCE
E BERNAL DR	10 E BERNAL DR	S END	EBERNALDR	40	264	32	8,448	R	AC	Dist 4 - District 4	65	61	72	$11,828	13,851	HEAVY MAINTENANCE
E BORONDA RD	DARTMOUTH WAY	SAN JUAN GRADE RD	EBORONDA RD	WB010	977	40	39,080	A	AC/AC	Dist 6 - District 6	66	62	72	$60,184	14,687	HEAVY MAINTENANCE
E MARKET ST	N SANBORN RD	TOWT ST	EMARKETST	080	1,658	60	99,480	A	AC	Dist 4 - District 4	66	61	71	$153,200	13,151	HEAVY MAINTENANCE
E MENKE ST	N MAIN ST	BRIDGE ST	EMENKEST	10	341	42	14,322	R	AC	Dist 4 - District 4	69	66	75	$20,051	14,714	HEAVY MAINTENANCE
GAMAY WAY	RIESLING WAY	END	GAMAYWAY	15	1,017	37	37,629	R	AC	Dist 6 - District 6	71	68	77	$52,681	15,136	HEAVY MAINTENANCE
GARNER AVE	GARNER AVE PRIVATE A (EAST)	GARNER AVE PRIVATE A (WEST)	GARNERPVT	120PB	585	22	12,870	R	AC	Dist 1 - District 1	70	67	76	$18,018	14,898	HEAVY MAINTENANCE
GLADSTONE WAY	CHARDONNAY DR	END	GLADSTONEW	15	1,203	33	39,699	R	AC	Dist 6 - District 6	72	69	78	$55,579	15,316	HEAVY MAINTENANCE
HAPP PL	W MARKET ST	END	HAPPPL	10	256	49	12,544	R	AC	Dist 3 - District 3	64	60	71	$17,562	13,653	HEAVY MAINTENANCE
HIDDEN CREEK CIR	PROVINCETOWN DR	END	HIDDENCREE	10	189	32	6,036	R	AC	Dist 6 - District 6	68	65	74	$8,451	14,486	HEAVY MAINTENANCE
JAMES ST	S WOOD ST	SMITH ST	JAMESST	010	385	41	15,785	R	AC	Dist 2 - District 2	72	69	78	$22,099	15,330	HEAVY MAINTENANCE
KENNETH AVE	E LAUREL DR	E MARKET ST	KENNETHAVE	020	425	36	15,300	R	AC/AC	Dist 2 - District 2	71	69	78	$21,420	20,241	HEAVY MAINTENANCE
KENT CIR	KENT ST	END	KENTCIR	10	155	34	5,270	R	AC	Dist 6 - District 6	69	66	75	$7,378	14,707	HEAVY MAINTENANCE
KENT ST	KLAMATH DR	KENT CIR	KENTST	10	734	37	27,158	R	AC	Dist 6 - District 6	69	66	75	$38,022	14,707	HEAVY MAINTENANCE
KENT ST	KENT CIR	ARCADIA WAY	KENTST	20	367	38	13,946	R	AC	Dist 6 - District 6	69	66	75	$19,525	14,707	HEAVY MAINTENANCE
LA HONDA CT	ALAMO WAY (N)	RANCHERO DR	LAHONDACT	010	935	32	29,920	R	AC	Dist 1 - District 1	69	66	75	$41,888	14,698	HEAVY MAINTENANCE
LANCASHIRE DR	BUCKINGHAM DR	DORSET WAY	LANCASHIR1	10	821	32	26,280	R	AC	Dist 6 - District 6	64	60	71	$36,793	13,633	HEAVY MAINTENANCE
LANCASHIRE DR	LANCASHIRE CIR	CASCADE WAY	LANCASHIR1	30	207	32	6,624	R	AC	Dist 6 - District 6	64	60	71	$9,274	13,633	HEAVY MAINTENANCE
LENNOX WAY	TUDOR WAY	VICTORIA AVE	LENNOXWAY	15	1,150	33	37,950	R	AC	Dist 6 - District 6	72	69	78	$53,130	15,316	HEAVY MAINTENANCE

** - Treatment from Project Selection

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City of Salinas

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LONGFELLOW CIR	LONGFELLOW DR	END	LNGFLWCIR	10	393	31	12,183	R	AC	Dist 1 - District 1	71	68	77	$17,057	15,117	HEAVY MAINTENANCE
LONGFELLOW DR	HEMINGWAY DR	WHITMAN CIR	LNGFLWDR	010	969	37	35,853	R	AC	Dist 1 - District 1	68	64	74	$50,195	14,468	HEAVY MAINTENANCE
LOHMAN ST	EISENHOWER ST	END	LOHMANST	15	700	37	25,900	R	AC	Dist 5 - District 5	68	65	74	$36,260	14,494	HEAVY MAINTENANCE
MACHADO WAY	ALMA AVE	KIMMEL ST	MACHADOWAY	10	467	32	14,944	R	AC	Dist 2 - District 2	64	60	71	$20,922	13,639	HEAVY MAINTENANCE
MAE AVE	TOWT ST	D ST	MAEAVE	010	477	38	18,126	R	AC	Dist 1 - District 1	71	68	77	$25,377	15,143	HEAVY MAINTENANCE
MANZANO WAY	NOGAL DR	MANZANO CIR	MANZANOWAY	20	407	31	12,632	R	AC	Dist 1 - District 1	67	63	73	$17,685	14,254	HEAVY MAINTENANCE
MASSOLO CT	VINCENT PL (W)	VINCENT PL (E)	MASSOLOCT	15	1,235	32	39,522	R	AC	Dist 4 - District 4	71	68	77	$55,331	15,153	HEAVY MAINTENANCE
MELVILLE ST	LONGFELLOW DR	WHITMAN ST	MELVILLEST	10	1,070	31	33,170	R	AC	Dist 1 - District 1	71	68	77	$46,438	15,117	HEAVY MAINTENANCE
MERLOT CIR	MERLOT WAY	END	MERLOTCIR	10	231	31	7,161	R	AC	Dist 6 - District 6	70	67	76	$10,026	14,898	HEAVY MAINTENANCE
MERLOT WAY	CHARDONNAY DR	WINDSOR ST	MERLOTWAY	15	1,214	33	40,062	R	AC	Dist 6 - District 6	70	67	76	$56,087	14,898	HEAVY MAINTENANCE
N DAVIS RD	SLOAT DR	W ROSSI ST	NDAVISRD	150SB	751	32	24,032	A	AC/AC	Dist 4 - District 4	72	69	78	$37,010	18,952	HEAVY MAINTENANCE
N MAIN ST	NAVAJO DR	W CURTIS ST	NMAINST	095SB	1,433	32	45,856	A	AC/AC	Dist 4&5 - District 4&5	65	61	71	$70,619	14,244	HEAVY MAINTENANCE
N MAIN ST	SANTA CLARA AVE	W BERNAL DR	NMAINST	NB200	729	36	26,244	A	AC	Dist 4&5 - District 4&5	69	64	74	$40,416	13,749	HEAVY MAINTENANCE
PAJARO ST	E MARKET ST	JOHN ST	PAJAROST	010	2,708	50	135,400	A	AC	Dist 3 - District 3	66	61	72	$208,516	13,162	HEAVY MAINTENANCE
PALOMA AVE	MIAMI ST	MARGARET ST	PALOMAAVE	40	747	34	25,398	R	AC	Dist 2 - District 2	72	69	78	$35,558	15,330	HEAVY MAINTENANCE
PARK ROW	W ROMIE LN	W ACACIA ST	PARKROW	10	737	32	23,598	R	AC	Dist 3 - District 3	68	65	74	$33,038	14,486	HEAVY MAINTENANCE
PENNSYLVANIA DR	MCKINNON ST	END	PENNSYLVAN	15	1,601	41	65,641	R	AC	Dist 6 - District 6	67	63	73	$91,898	14,255	HEAVY MAINTENANCE
PICKFORD WAY	DECLARATION ST	ROCKHAVEN CT	PICKFORDWA	10	258	32	8,262	R	AC	Dist 1 - District 1	67	63	73	$11,567	14,235	HEAVY MAINTENANCE
PLACER WAY	WESTMINSTER DR	MENDOCINO DR	PLACERWAY	10	698	40	27,920	R	AC	Dist 6 - District 6	72	69	78	$39,088	15,324	HEAVY MAINTENANCE
PRADO ST	PEREZ ST	NE END	PRADOST	20	665	32	21,285	R	AC	Dist 5 - District 5	66	63	73	$29,799	14,073	HEAVY MAINTENANCE
PROVINCETOWN DR	INDEPENDENCE BLVD	PROVINCETOWN WAY	PROVINCET1	30	907	32	29,024	R	AC	Dist 6 - District 6	67	64	73	$40,634	14,265	HEAVY MAINTENANCE
PROVINCETOWN DR	PROVINCETOWN WAY	SW END	PROVINCET1	40	404	34	13,736	R	AC	Dist 6 - District 6	68	65	74	$19,231	14,486	HEAVY MAINTENANCE
PROVINCETOWN WAY	HIDDEN CREEK CIR	INDEPENDENCE BLVD	PROVINCET2	10	144	37	5,328	R	AC	Dist 6 - District 6	67	64	73	$7,460	14,265	HEAVY MAINTENANCE

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City of Salinas

Scenarios - Sections Selected for Treatment

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QUINTERO CIR	CHEROKEE DR	END	QUINTEROCI	15	530	32	16,960	R	AC	Dist 5 - District 5	65	61	72	$23,744	13,848	HEAVY MAINTENANCE
RHINE CT	RIESLING WAY (W)	RIESLING WAY (E)	RHINECT	10	1,090	33	35,955	R	AC	Dist 6 - District 6	72	69	78	$50,338	15,316	HEAVY MAINTENANCE
SAN BENITO ST	S WOOD ST	S MADEIRA AVE	SANBENITOS	010	900	42	37,800	R	AC	Dist 2 - District 2	69	66	75	$52,920	14,712	HEAVY MAINTENANCE
SAN DIEGO DR	SANTA CRUZ AVE	SAN BRUNO WAY	SANDIEGODR	15	832	32	26,612	R	AC	Dist 3 - District 3	71	68	77	$37,257	15,136	HEAVY MAINTENANCE
SAN FERNANDO DR	WILGART WAY	LA MESA DR	SANFERNAN1	15	1,617	32	51,752	R	AC	Dist 3 - District 3	72	69	78	$72,453	15,316	HEAVY MAINTENANCE
SAN MATEO PL	SAN MATEO DR	END	SANMATEOPL	10	201	32	6,432	R	AC	Dist 3 - District 3	65	61	72	$9,005	13,826	HEAVY MAINTENANCE
SAN MIGUEL CIR	SAN MIGUEL AVE	END	SANMIGUELC	10	188	26	4,888	R	AC	Dist 3 - District 3	65	61	72	$6,844	13,826	HEAVY MAINTENANCE
SANTA MARIA ST	S WOOD ST	S MADEIRA AVE	SANTAMARIA	15	899	42	37,758	R	AC	Dist 2 - District 2	67	64	74	$52,862	14,269	HEAVY MAINTENANCE
SCONBERG PKWY	ALISAL RD	MONTE BELLA BLVD	SCONBERGPK	10	875	32	28,000	A	AC	Dist 2 - District 2	68	63	73	$43,120	13,559	HEAVY MAINTENANCE
SHERMAN DR	LARKIN ST	END	SHERMANDR	15	1,727	37	63,899	R	AC	Dist 5 - District 5	68	65	74	$89,459	14,494	HEAVY MAINTENANCE
SHERWOOD DR	101 Overpass (PCC END)	185 Ft S/O SHERWOOD PL	SHERWOODDR	040	850	50	42,500	A	AC	Dist 4 - District 4	69	64	74	$65,450	13,751	HEAVY MAINTENANCE
SMITH ST	JAMES ST	E ALISAL ST	SMITHST	15	911	24	21,864	R	AC	Dist 2 - District 2	68	65	74	$30,610	14,488	HEAVY MAINTENANCE
SOLANO WAY	E ALVIN DR	MENDOCINO DR	SOLANOWAY	10	245	37	9,065	R	AC	Dist 6 - District 6	67	63	73	$12,691	14,255	HEAVY MAINTENANCE
ST ALBANS CT	ST EDWARDS AVE	CIRCLE DR	STALBANSCT	15	856	37	31,661	R	AC	Dist 4 - District 4	64	60	71	$44,326	13,642	HEAVY MAINTENANCE
ST ALBANS WAY	CIRCLE DR	ST ALBANS CT	STALBANSWA	10	577	32	18,463	R	AC	Dist 4 - District 4	68	65	74	$25,849	14,491	HEAVY MAINTENANCE
SUTTON CIR	SUTTON WAY	END	SUTTONCIR	10	190	31	5,890	R	AC	Dist 6 - District 6	70	67	76	$8,246	14,898	HEAVY MAINTENANCE
SUTTON WAY	DELANCEY DR (W)	DELANCEY DR (N)	SUTTONWAY	15	916	33	30,228	R	AC	Dist 6 - District 6	72	69	78	$42,320	15,316	HEAVY MAINTENANCE
TAMPICO AVE	VALLEJO ST	ELWOOD ST	TAMPICOAVE	80	489	32	15,648	R	AC	Dist 4 - District 4	66	63	73	$21,908	14,067	HEAVY MAINTENANCE
TOKAY CIR	CABERNET WAY	END	TOKAYCIR	10	130	31	4,030	R	AC	Dist 6 - District 6	72	69	78	$5,642	15,316	HEAVY MAINTENANCE
TUDOR WAY	LENNOX WAY	TUDOR WAY	TUDORWAY	20	860	33	28,380	R	AC	Dist 6 - District 6	72	69	78	$39,732	15,316	HEAVY MAINTENANCE
VALLEJO ST	TAMPICO AVE	GRANADA AVE	VALLEJOST	20	177	32	5,679	R	AC	Dist 4 - District 4	72	69	78	$7,951	15,333	HEAVY MAINTENANCE
VICTORIA AVE	WINDSOR ST	EL DORADO DR	VICTORIAAV	15	1,643	37	60,791	R	AC	Dist 6 - District 6	70	67	76	$85,108	14,898	HEAVY MAINTENANCE
VINCENT PL	MASSOLO CT (W)	RICO ST	VINCENTPL	15	579	34	19,699	R	AC	Dist 4 - District 4	65	61	72	$27,579	13,842	HEAVY MAINTENANCE

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WATERBURY WAY	CANTERBURY ST	LEXINGTON DR	WATERBURYW	10	262	32	8,393	R	AC	Dist 6 - District 6	72	69	78	$11,751	15,325	HEAVY MAINTENANCE
WHITMAN ST	NANTUCKET BLVD	LONGFELLOW DR	WHITMANST	15	480	37	17,760	R	AC	Dist 1 - District 1	70	67	76	$24,864	14,886	HEAVY MAINTENANCE
WIMBLEDON AVE	COP 375' E/O ESSEX WAY	WIMBLEDON WAY	WIMBLEDONA	30	480	38	18,240	R	AC	Dist 6 - District 6	65	61	72	$25,536	13,834	HEAVY MAINTENANCE
WIMBLEDON AVE	WIMBLEDON WAY	CHELSEA CT	WIMBLEDONA	40	237	37	8,769	R	AC	Dist 6 - District 6	67	64	73	$12,277	14,264	HEAVY MAINTENANCE
WIMBLEDON CIR	WIMBLEDON AVE	END	WIMBLEDONC	20	273	37	10,101	R	AC	Dist 6 - District 6	67	64	73	$14,142	14,264	HEAVY MAINTENANCE
WIMBLEDON WAY	WIMBLEDON AVE	ARCADIA WAY	WIMBLEDONW	10	247	38	9,386	R	AC	Dist 6 - District 6	67	64	73	$13,141	14,264	HEAVY MAINTENANCE
W LAUREL DR	TYLER ST	101 N ON/OFF RAMP	WLAURELDR	035	1,104	68	75,072	A	AC	Dist 5 - District 5	68	63	73	$115,611	13,576	HEAVY MAINTENANCE
WORK ST	WORK CIR	ELVEE DR	WORKST	30	1,922	62	119,164	A	AC	Dist 3 - District 3	73	68	78	$183,513	14,559	HEAVY MAINTENANCE
ZINFANDEL WAY	CHARDONNAY DR	WINDSOR ST	ZINFANDELW	10	835	33	27,555	R	AC	Dist 6 - District 6	71	68	77	$38,577	15,136	HEAVY MAINTENANCE
											Treatment Total			$4,039,276		
AMARILLO WAY	RIDER AVE	PACIFIC AVE	AMARILLOWA	020	720	32	23,040	R	AC	Dist 1 - District 1	79	76	84	$11,520	44,997	LIGHT MAINTENANCE
BENNINGTON CT	BOSTON ST (N)	BOSTON ST (S)	BENNINGTON	15	856	34	29,104	R	AC	Dist 6 - District 6	79	76	84	$14,552	44,998	LIGHT MAINTENANCE
BERNARDO CIR	BERNARDO AVE	END	BERNARDOCI	10	337	32	10,772	R	AC	Dist 1 - District 1	79	76	84	$5,387	44,997	LIGHT MAINTENANCE
BOLOGNA WAY	SIENA WAY	PIAZZA DR	BOLOGNAWAY	15	783	32	25,054	R	AC	Dist 2 - District 2	79	76	84	$12,528	44,998	LIGHT MAINTENANCE
BURLINGTON CIR	BURLINGTON DR	END	BURLINGTON	10	193	31	5,983	R	AC	Dist 6 - District 6	79	76	84	$2,992	44,998	LIGHT MAINTENANCE
CANELLI CT	TUSCANY BLVD	CANELLI CT	CANELLICT	15	1,642	33	54,186	R	AC	Dist 2 - District 2	80	77	85	$27,093	44,779	LIGHT MAINTENANCE
CAPRI WAY	PIAZZA DR	END	CAPRIWAY	15	810	32	25,934	R	AC	Dist 2 - District 2	80	77	85	$12,967	44,779	LIGHT MAINTENANCE
CASSINO CIR	CASSINO WAY	END	CASSINOCIR	10	290	32	9,280	R	AC	Dist 2 - District 2	79	76	84	$4,640	44,998	LIGHT MAINTENANCE
CASSINO WAY	SPOLETO ST (N)	SPOLETO ST (S)	CASSINOWAY	15	1,041	37	38,517	R	AC	Dist 2 - District 2	79	76	84	$19,259	44,998	LIGHT MAINTENANCE
CASTLETON ST	LITTLE RIVER DR	END	CASTLETONS	15	729	37	26,973	R	AC	Dist 6 - District 6	79	76	84	$13,487	44,997	LIGHT MAINTENANCE
COBBLESTONE ST	BEACON HILL DR	START ONEWAY LOOP	COBBLESTON	010	1,290	34	43,860	R	AC	Dist 1 - District 1	81	78	86	$21,930	44,395	LIGHT MAINTENANCE
CRESTVIEW ST	KITTERY ST	END	CRESTVIEWS	15	1,208	33	39,864	R	AC	Dist 6 - District 6	80	77	85	$19,932	44,780	LIGHT MAINTENANCE
DECLARATION ST	NANTUCKET BLVD	DE CUNHA CT	DECLARATIO	100	690	37	25,530	R	AC	Dist 1 - District 1	79	76	84	$12,765	44,985	LIGHT MAINTENANCE

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2023

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
ESTRELLA WAY	FREEDOM PKWY	PASEO GRANDE	ESTRELLAWA	15	920	37	34,045	R	AC	Dist 1 - District 1	81	78	86	$17,023	44,382	LIGHT MAINTENANCE
FOX GLEN WAY	COBBLESTONE ST (W)	COBBLESTONE ST (E)	FOXGLENWAY	15	870	34	29,580	R	AC	Dist 1 - District 1	80	77	85	$14,790	44,793	LIGHT MAINTENANCE
FRESA PL	RANCHERO DR	END	FRESAPL	10	157	32	5,035	R	AC	Dist 1 - District 1	83	80	88	$2,518	42,904	LIGHT MAINTENANCE
GENOA CIR	GENOA WAY	END	GENOACIR	10	249	32	7,955	R	AC	Dist 2 - District 2	80	77	85	$3,978	44,779	LIGHT MAINTENANCE
GEORGETOWN WAY	CHARLESTOWN WAY	HARRINGTON CIR	GEORGETOWN	15	1,638	32	52,417	R	AC	Dist 6 - District 6	80	77	85	$26,209	44,780	LIGHT MAINTENANCE
HARRINGTON CIR	BEACON HILL DR	END	HARRINGTON	15	534	38	20,292	R	AC	Dist 6 - District 6	80	77	85	$10,146	44,780	LIGHT MAINTENANCE
KENSINGTON WAY	BUNKER HILL WAY	END	KENSINGTON	15	478	37	17,686	R	AC	Dist 6 - District 6	79	76	84	$8,843	44,998	LIGHT MAINTENANCE
KITTERY ST	BEACON HILL DR	FITZGERALD ST	KITTERYST	15	961	32	30,754	R	AC	Dist 6 - District 6	79	76	84	$15,377	44,998	LIGHT MAINTENANCE
LEXINGTON DR	INDEPENDENCE BLVD	LITTLE RIVER DR	LEXINGTOND	90	210	33	6,930	R	AC	Dist 6 - District 6	80	77	85	$3,465	44,780	LIGHT MAINTENANCE
LITTLE RIVER DR	MANCHESTER DR	END	LITTLERIVE	15	2,604	38	98,952	R	AC	Dist 6 - District 6	80	77	85	$49,476	44,782	LIGHT MAINTENANCE
MAYFAIR DR	S SANBORN RD	MAYFAIR DR	MAYFAIRDR	15	2,512	30	75,360	R	AC	Dist 2 - District 2	80	77	85	$37,680	44,773	LIGHT MAINTENANCE
MAZATLAN WAY	MAZATLAN ST	RIDER AVE	MAZATLANWA	10	158	38	6,004	R	AC	Dist 1 - District 1	79	76	84	$3,002	44,993	LIGHT MAINTENANCE
MODENA ST	CAMPANIA WAY	END	MODENAST	15	1,005	34	34,170	R	AC	Dist 2 - District 2	79	76	84	$17,085	45,000	LIGHT MAINTENANCE
MASSACHUSETTS DR	RHODE ISLAND ST	VERMONT CIR	MSSCHUDR	010	925	37	34,225	R	AC	Dist 1 - District 1	81	78	86	$17,113	44,437	LIGHT MAINTENANCE
MASSACHUSETTS WAY	CONSTITUTION BLVD	MASSACHUSETTS DR	MSSCHUWAY	10	145	37	5,365	R	AC	Dist 1 - District 1	79	76	84	$2,683	44,985	LIGHT MAINTENANCE
NEWINGTON ST	KITTERY ST	END	NEWINGTONS	15	1,036	33	34,188	R	AC	Dist 6 - District 6	80	77	85	$17,094	44,780	LIGHT MAINTENANCE
OYSTER BAY CIR	OYSTER BAY CT	END	OYSTERBAYC	10	135	35	4,725	R	AC	Dist 6 - District 6	81	78	86	$2,363	44,377	LIGHT MAINTENANCE
PADOVA DR	PALERMO DR	FREEDOM PKWY	PADOVADR	10	697	37	25,789	R	AC	Dist 2 - District 2	79	76	84	$12,895	45,000	LIGHT MAINTENANCE
PARK ROW	W ACACIA ST	END	PARKROW	20	253	32	8,097	R	AC	Dist 3 - District 3	80	77	85	$4,049	44,896	LIGHT MAINTENANCE
PROVINCETOWN CIR	PROVINCETOWN DR	END	PROVINCETO	10	310	32	9,920	R	AC	Dist 6 - District 6	79	76	84	$4,960	44,998	LIGHT MAINTENANCE
ROSSANO CT	PALERMO DR (N)	PALERMO DR (S)	ROSSANOCT	15	1,321	33	43,593	R	AC	Dist 2 - District 2	79	76	84	$21,797	45,000	LIGHT MAINTENANCE
SARDINA DR	CAPRI WAY	BELLAGIO WAY	SARDINADR	15	907	32	29,025	R	AC	Dist 2 - District 2	80	77	85	$14,513	44,779	LIGHT MAINTENANCE
SISKIYOU DR	KLAMATH DR	LOS COCHES AVE	SISKIYOUDR	20	739	32	23,651	R	AC	Dist 6 - District 6	79	76	84	$11,826	44,997	LIGHT MAINTENANCE

** - Treatment from Project Selection

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City of Salinas

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Scenario: 2020 Current Budget

Year: 2023

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SPOLETO CIR	SPOLETO WAY	END	SPOLETOCIR	10	379	32	12,126	R	AC	Dist 2 - District 2	80	77	85	$6,064	44,779	LIGHT MAINTENANCE
TRIVOLI WAY	CAMPANIA WAY	MONTE BELLA BLVD	TRIVOLIWAY	10	752	33	24,816	R	AC	Dist 2 - District 2	79	76	84	$12,408	45,000	LIGHT MAINTENANCE
TUSCANY BLVD	MONTE BELLA BLVD	FREEDOM PKWY	TUSCANYBLV	15	1,428	42	59,976	R	AC	Dist 2 - District 2	80	77	85	$29,988	44,779	LIGHT MAINTENANCE
TUSCANY CIR	TUSCANY WAY	END	TUSCANYCIR	10	200	32	6,400	R	AC	Dist 2 - District 2	79	76	84	$3,200	44,998	LIGHT MAINTENANCE
TYNAN WAY	WESTMINSTER DR	PLACER WAY	TYNANWAY	10	771	32	24,668	R	AC	Dist 6 - District 6	79	76	84	$12,335	44,997	LIGHT MAINTENANCE
VAN NESS CT	VICTOR ST (E)	HYDE ST	VANNESSCT	20	705	38	26,790	R	AC	Dist 5 - District 5	79	76	84	$13,395	45,003	LIGHT MAINTENANCE
VERONA CT	VERONA WAY	PIAZZA DR	VERONACT	15	1,978	35	69,230	R	AC	Dist 2 - District 2	79	76	84	$34,615	44,998	LIGHT MAINTENANCE
WHITE RIVER CIR	STONY BROOK DR	END	WHITERIVER	10	489	32	15,658	R	AC	Dist 6 - District 6	79	76	84	$7,829	44,997	LIGHT MAINTENANCE
WIMBLEDON AVE	OXFORD CT	ESSEX WAY	WIMBLEDONA	10	243	38	9,234	R	AC	Dist 6 - District 6	80	77	85	$4,617	44,782	LIGHT MAINTENANCE
											Treatment Total			$622,388		
BADGER WAY	COUGAR DR	WILLIAMS RD	BADGERWAY	15	681	38	25,878	C	AC	Dist 1 - District 1	86	82	83	$88	1,186,055	SEAL CRACKS
BELLAGIO WAY	CAMPANIA WAY	PALERMO DR	BELLAGIOWA	10	641	32	20,512	R	AC	Dist 2 - District 2	94	89	90	$38	3,498,900	SEAL CRACKS
BUCKHORN DR	RIDER AVE	N SANBORN RD	BUCKHORNDR	15	1,857	37	68,709	C	AC	Dist 1 - District 1	81	76	78	$322	973,677	SEAL CRACKS
BUCKHORN DR	N SANBORN RD	FALCON RD	BUCKHORNDR	25	945	37	34,965	C	AC	Dist 1 - District 1	86	82	83	$119	1,186,399	SEAL CRACKS
CONSTITUTION BLVD	E BORONDA RD	NANTUCKET BLVD	CONSTITUTI	SB10	640	34	21,760	A	AC	Dist 1&6 - District 1&6	82	78	80	$119	1,013,919	SEAL CRACKS
CONSTITUTION BLVD	BEACON HILL DR (N)	LAS CASITAS DR	CONSTITUTI	SB30	1,003	32	32,096	A	AC	Dist 1&6 - District 1&6	75	71	73	$237	842,224	SEAL CRACKS
CONSTITUTION BLVD	BEACON HILL DR (S)	INDEPENDENCE BLVD	CONSTITUTI	SB60	1,729	32	55,328	A	AC	Dist 1&6 - District 1&6	74	70	72	$421	809,101	SEAL CRACKS
E LAUREL DR	RANCH VIEW LN/COUNTY FACILITY	CONSTITUTION BLVD	ELAURELDR	130WB	1,698	35	59,430	A	AC	Dist 1&4 - District 1&4	78	74	76	$391	920,789	SEAL CRACKS
E LAUREL DR	ST EDWARDS AVE	RANCH VIEW LN/COUNTY FACILITY	ELAURELDR	140WB	2,305	35	80,675	A	AC	Dist 1&4 - District 1&4	79	75	77	$508	948,665	SEAL CRACKS
E LAUREL DR	N SANBORN RD	ST EDWARDS AVE	ELAURELDR	150WB	1,383	30	41,490	A	AC	Dist 1&4 - District 1&4	79	75	77	$261	948,665	SEAL CRACKS
ELK DR	FALCON DR	COUGAR DR	ELKDR	15	826	38	31,384	C	AC	Dist 1 - District 1	86	82	83	$107	1,186,399	SEAL CRACKS
E MARKET ST	START PCC (E/O GREENFIELD ALLEY)	END PCC (S/O MARKET WAY)	EMARKETST	025EB	650	38	24,700	A	PCC	Dist 3&4 - District 3&4	90	89	94	$56	27,904,259	SEAL CRACKS

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City of Salinas

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FREEDOM PKWY	CONSTITUTION BLVD	BERNARDO AVE	FREEDOMPKW	010	3,212	60	192,720	C	AC	Dist 1 - District 1	79	74	77	$991	901,258	SEAL CRACKS
FREEDOM PKWY	BERNARDO AVE	ESTRELLA WAY	FREEDOMPKW	020	1,433	60	85,980	C	AC	Dist 1 - District 1	83	79	81	$356	1,060,432	SEAL CRACKS
FREEDOM PKWY	ESTRELLA WAY	TOWT ST	FREEDOMPKW	030	510	60	30,600	C	AC	Dist 1 - District 1	83	79	81	$127	1,060,432	SEAL CRACKS
MESQUITE DR	E BORONDA RD	BUCKHORN DR	MESQUITEDR	15	1,085	37	40,152	C	AC	Dist 1 - District 1	78	73	76	$217	861,599	SEAL CRACKS
NATIVIDAD RD	E ALVIN DR	LOS COCHES AVE	NATIVIDADR	040NB	1,803	36	64,908	A	AC	Dist 6 - District 6	80	76	78	$392	969,045	SEAL CRACKS
NATIVIDAD RD	LOS COCHES AVE	EMERALD WAY	NATIVIDADR	050NB	1,753	36	63,108	A	AC	Dist 6 - District 6	83	79	81	$327	1,036,629	SEAL CRACKS
NATIVIDAD RD	EMERALD WAY	ARCADIA WAY	NATIVIDADR	060NB	849	36	30,564	A	AC	Dist 6 - District 6	83	79	81	$159	1,036,629	SEAL CRACKS
NATIVIDAD RD	ARCADIA WAY	E BORONDA RD	NATIVIDADR	070NB	776	36	27,936	A	AC	Dist 6 - District 6	76	72	74	$200	862,313	SEAL CRACKS
NATIVIDAD RD	E BORONDA RD	ARCADIA WAY	NATIVIDADR	SB090	775	60	46,500	A	AC/AC	Dist 6 - District 6	84	81	82	$200	1,492,489	SEAL CRACKS
NATIVIDAD RD	ARCADIA WAY	EMERALD WAY	NATIVIDADR	SB100	849	36	30,564	A	AC/AC	Dist 6 - District 6	83	80	82	$144	1,436,463	SEAL CRACKS
NATIVIDAD RD	EMERALD WAY	LOS COCHES AVE	NATIVIDADR	SB110	1,745	36	62,820	A	AC/AC	Dist 6 - District 6	84	81	82	$271	1,492,489	SEAL CRACKS
NATIVIDAD RD	LOS COCHES AVE	E ALVIN DR	NATIVIDADR	SB120	1,803	36	64,908	A	AC/AC	Dist 6 - District 6	76	73	75	$437	1,188,682	SEAL CRACKS
NOGAL DR	MADRONE DR	FREEDOM PKWY	NOGALDR	010	1,197	37	44,289	C	AC	Dist 1 - District 1	85	81	82	$161	1,135,420	SEAL CRACKS
N SANBORN RD	E BORONDA RD	FREEDOM PKWY	NSANBORNRD	10	1,937	64	123,980	A	AC	Dist 4 - District 4	80	76	78	$744	972,255	SEAL CRACKS
N SANBORN RD	FREEDOM PKWY	ANTIGUA AVE	NSANBORNRD	20	1,074	77	82,663	A	AC	Dist 4 - District 4	83	79	81	$425	1,037,869	SEAL CRACKS
N SANBORN RD	ANTIGUA AVE	DEL MONTE AVE	NSANBORNRD	30	2,098	63	132,201	A	AC	Dist 4 - District 4	83	79	81	$679	1,037,869	SEAL CRACKS
RIDER AVE	FREEDOM PKWY	E BORONDA RD	RIDERAVE	035	1,975	41	80,975	C	AC	Dist 1 - District 1	84	80	81	$317	1,105,151	SEAL CRACKS
TOWT ST	E MARKET ST	E ALISAL ST	TOWTST	070	1,608	38	61,104	C	AC	Dist 2&4 - District 2&4	79	74	77	$314	903,147	SEAL CRACKS

Treatment Total $9,128

Year 2023 Area Total 6,137,485 Year 2023 Total $6,299,969

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
CAMDEN WAY	W ACACIA ST	CARMELITA DR	CAMDENWAY	020	538	32	17,216	R	AC	Dist 3 - District 3	48	41	100	$144,615	13,020	HEAVY REHAB

City of Salinas

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CARIBBEAN AVE	HAWAII PL	TAHITI PL	CARIBBEAN A	010	241	32	7,712	R	AC	Dist 1 - District 1	47	40	100	$64,781	13,091	HEAVY REHAB
COUNTRYSIDE DR	BARDIN RD	EAST END	COUNTRYSID	15	915	40	36,600	R	AC	Dist 2 - District 2	47	40	100	$307,440	13,088	HEAVY REHAB
HASTINGS AVE	COLUMBIA AVE	CAMPUS AVE	HASTINGSAV	25	1,208	32	38,652	R	AC	Dist 3 - District 3	47	40	100	$324,675	13,092	HEAVY REHAB
HUMBOLDT DR	YREKA DR	TRUCKEE WAY	HUMBOLDTDR	15	1,548	37	57,276	R	AC	Dist 6 - District 6	47	40	100	$481,119	13,090	HEAVY REHAB
JOSEPHINE ST	C ST	END	JOSEPHINES	15	633	32	20,251	R	AC	Dist 1 - District 1	47	40	100	$170,106	13,091	HEAVY REHAB
LA BREA ST	SEPULVEDA DR	N 1ST ST	LABREAST	10	444	32	14,203	R	AC	Dist 5 - District 5	47	40	100	$119,307	13,084	HEAVY REHAB
MAPLEWOOD DR	GROVE ST	SIERRA DR	MAPLEWOODD	30	391	32	12,523	R	AC	Dist 3 - District 3	47	40	100	$105,196	13,092	HEAVY REHAB
MIMBRERA CIR	MIMBRERA WAY	END	MIMBRERACI	10	330	31	10,230	R	AC	Dist 1 - District 1	47	40	100	$85,932	13,093	HEAVY REHAB
MONTECITO WAY	W ALISAL ST	SAN JACINTO DR	MONTECITOW	15	953	37	35,261	R	AC	Dist 3 - District 3	47	40	100	$296,193	13,092	HEAVY REHAB
POWELL ST	W ROSSI ST	END	POWELLST	15	2,292	37	84,816	R	AC	Dist 4 - District 4	47	40	100	$712,454	13,086	HEAVY REHAB
RAINIER DR	SHIRES WAY	LINWOOD DR	RAINIERDR	015	893	32	28,568	R	AC	Dist 4 - District 4	47	40	100	$239,974	13,087	HEAVY REHAB
RIKER CIR	RIKER ST	END	RIKERCIR	10	126	32	4,036	R	AC	Dist 3 - District 3	48	41	100	$33,901	13,020	HEAVY REHAB
SAN TOMAS WAY	SAN MARCOS DR	SAN DIEGO DR	SANTOMASWA	15	624	32	19,966	R	AC	Dist 3 - District 3	47	40	100	$167,717	13,093	HEAVY REHAB
SEPULVEDA CIR	SEPULVEDA DR	END	SEPULVEDAC	10	325	32	10,400	R	AC	Dist 5 - District 5	47	40	100	$87,360	13,084	HEAVY REHAB
SISKIYOU DR	CALAVERAS DR	KLAMATH DR	SISKIYOUDR	10	1,394	32	44,608	R	AC	Dist 6 - District 6	47	40	100	$374,708	13,090	HEAVY REHAB
STEPHANIE DR	STEPHANIE DR	BYRON DR	STEPHANIED	20	633	35	22,155	R	AC	Dist 3 - District 3	47	40	100	$186,102	13,092	HEAVY REHAB
WHITMAN CIR	LONGFELLOW DR	END	WHITMANCIR	10	420	32	13,440	R	AC	Dist 1 - District 1	47	40	100	$112,896	13,100	HEAVY REHAB
WORK CIR	WORK ST	END	WORKCIR	10	402	32	12,878	R	AC	Dist 3 - District 3	47	40	100	$108,175	13,093	HEAVY REHAB
											Treatment Total			$4,122,651		
PENWICK CIR	ROCKHAVEN CT	END	PENWICKCIR	10	253	32	8,107	R	AC	Dist 1 - District 1	74	69	100	$39,725	15,541	LIGHT REHAB
											Treatment Total			$39,725		
ANDOVER CIR	NEWCASTLE DR	END	ANDOVERCIR	10	210	31	6,510	R	AC	Dist 1 - District 1	73	68	77	$9,114	15,199	HEAVY MAINTENANCE
ARCHER ST	RIKER ST	CAPITOL ST	ARCHERST	210	320	32	10,240	R	AC	Dist 3 - District 3	73	68	77	$14,336	15,227	HEAVY MAINTENANCE
ASTOR CIR	ASTOR WAY	END	ASTORCIR	10	226	31	7,006	R	AC	Dist 6 - District 6	73	68	77	$9,809	15,210	HEAVY MAINTENANCE

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BROADWAY DR	PENNSYLVANIA DR	HARDEN PKWY	BROADWAY DR	15	1,203	41	49,323	R	AC	Dist 6 - District 6	74	69	78	$69,053	15,405	HEAVY MAINTENANCE
COVENTRY ST	BARRICADE (S)	N END	COVENTRYST	10	2,130	38	80,940	R	AC	Dist 6 - District 6	73	68	77	$113,316	15,215	HEAVY MAINTENANCE
CREEKBRIDGE CIR	PROVINCETOWN DR	END	CREEKBRIDG	10	316	32	10,120	R	AC	Dist 6 - District 6	73	68	77	$14,168	15,215	HEAVY MAINTENANCE
DORSET WAY	BUCKINGHAM DR	LANCASHIRE DR	DORSETWAY	10	509	34	17,306	R	AC	Dist 6 - District 6	73	68	77	$24,229	15,224	HEAVY MAINTENANCE
ELVEE CIR	WORK ST	S END	ELVEECIR	10	379	42	15,918	R	AC	Dist 3 - District 3	73	68	77	$22,286	15,210	HEAVY MAINTENANCE
E MARKET ST	PAJARO ST	START PCC (E/O GREENFIELD ALLEY)	EMARKETST	020EB	480	30	14,400	A	AC	Dist 3 - District 3	75	68	78	$22,176	14,551	HEAVY MAINTENANCE
E MARKET ST	SIMAS ST/ GRIFFIN ST	KERN ST	EMARKETST	050	1,540	62	95,480	A	AC	Dist 2 - District 2	75	68	78	$147,040	14,552	HEAVY MAINTENANCE
ESSEX CIR	WIMBLEDON AVE	END	ESSEXCIR	10	222	32	7,088	R	AC	Dist 6 - District 6	73	68	77	$9,924	15,215	HEAVY MAINTENANCE
HANCOCK ST	LEXINGTON DR N. SIDE	LEXINGTON DR S. SIDE	HANCOCKST	15	2,612	35	91,420	R	AC	Dist 6 - District 6	74	69	78	$127,988	15,414	HEAVY MAINTENANCE
HARROD CIR	HARROD WAY	END	HARRODCIR	10	331	33	10,923	R	AC	Dist 6 - District 6	74	69	78	$15,293	15,405	HEAVY MAINTENANCE
HARROD WAY	HAMPTON ST	ERCIA ST	HARRODWAY	15	976	33	32,208	R	AC	Dist 6 - District 6	73	68	77	$45,092	15,210	HEAVY MAINTENANCE
HUDSON WAY	MANHATTAN DR	END	HUDSONWAY	15	545	33	17,985	R	AC	Dist 6 - District 6	73	68	77	$25,179	15,210	HEAVY MAINTENANCE
HYANNIS CIR	COVENTRY ST	END	HYANNISCIR	10	176	32	5,640	R	AC	Dist 6 - District 6	73	68	77	$7,896	15,215	HEAVY MAINTENANCE
JAMES ST	SMITH ST	S MADEIRA AVE	JAMESST	020	526	42	22,092	R	AC	Dist 2 - District 2	73	68	77	$30,929	15,218	HEAVY MAINTENANCE
LAFAYETTE CIR	LAFAYETTE WAY	END	LAFAYETTEC	10	191	31	5,921	R	AC	Dist 6 - District 6	73	68	77	$8,290	15,210	HEAVY MAINTENANCE
LAFAYETTE WAY	DELANCEY DR	BROADWAY DR	LAFAYETTEW	15	677	37	25,049	R	AC	Dist 6 - District 6	73	68	77	$35,069	15,210	HEAVY MAINTENANCE
LA HONDA CT	RANCHERO DR	ALAMO WAY (S)	LAHONDACT	020	590	38	22,420	R	AC	Dist 1 - District 1	74	69	78	$31,388	15,405	HEAVY MAINTENANCE
MANHATTAN DR	BROADWAY DR	MCKINNON ST	MANHATTAND	10	877	37	32,449	R	AC	Dist 6 - District 6	74	69	78	$45,429	15,405	HEAVY MAINTENANCE
NEWCASTLE DR	NANTUCKET BLVD	ROCKHAVEN CT	NEWCASTLED	15	762	31	23,626	R	AC	Dist 1 - District 1	74	69	78	$33,077	15,387	HEAVY MAINTENANCE
N SANBORN RD	GARNER AVE	E LAUREL DR	NSANBORNRD	50	2,075	64	132,785	A	AC	Dist 1&2 - District 1&2	75	68	78	$204,489	14,551	HEAVY MAINTENANCE
PRINCETON CT	PENNSYLVANIA DR (W)	PENNSYLVANIA DR (E)	PRINCETON1	15	1,271	33	41,943	R	AC	Dist 6 - District 6	74	69	78	$58,721	15,405	HEAVY MAINTENANCE
PRINCETON CIR	PRINCETON CT	END	PRINCETONC	10	175	31	5,425	R	AC	Dist 6 - District 6	74	69	78	$7,595	15,405	HEAVY MAINTENANCE
RHINE CIR	RIESLING WAY	END	RHINECIR	10	240	33	7,920	R	AC	Dist 6 - District 6	74	69	78	$11,088	15,405	HEAVY MAINTENANCE

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
RICO CIR	LARKIN ST	END	RICOCIR	10	455	36	16,380	R	AC	Dist 5 - District 5	70	65	75	$22,932	14,556	HEAVY MAINTENANCE
RIESLING WAY	RHINE CIR	BURGUNDY WAY	RIESLINGWA	15	916	32	29,304	R	AC	Dist 6 - District 6	73	68	77	$41,026	15,210	HEAVY MAINTENANCE
ROCKHAVEN CT	NEWCASTLE DR (N)	NEWCASTLE DR (S)	ROCKHAVEN C	15	2,046	32	65,472	R	AC	Dist 1 - District 1	74	69	78	$91,661	15,387	HEAVY MAINTENANCE
SUFFIELD CIR	HANCOCK ST	END	SUFFIELDCI	10	294	31	9,114	R	AC	Dist 6 - District 6	73	68	77	$12,760	15,215	HEAVY MAINTENANCE
TUDOR WAY	VICTORIA AVE	S END	TUDORWAY	10	420	33	13,860	R	AC	Dist 6 - District 6	74	69	78	$19,404	15,405	HEAVY MAINTENANCE
VICTORIA CIR	VICTORIA AVE	END	VICTORIACI	10	273	33	9,009	R	AC	Dist 6 - District 6	73	68	77	$12,613	15,210	HEAVY MAINTENANCE
WESTMINSTER DR	MCKINNON ST	CAMBRIDGE CT	WESTMINST E	10	1,642	38	62,396	R	AC	Dist 6 - District 6	73	68	77	$87,355	15,214	HEAVY MAINTENANCE
WESTPORT CIR	INGLEWOOD ST	END	WESTPORT CI	10	104	66	6,874	R	AC	Dist 6 - District 6	73	68	77	$9,624	15,215	HEAVY MAINTENANCE
WINDSOR ST	CHARDONNAY DR	HARDEN PKWY	WINDSORST	15	1,050	37	38,850	R	AC	Dist 6 - District 6	74	69	78	$54,390	15,405	HEAVY MAINTENANCE
											Treatment Total			$1,494,739		
ACAPULCO WAY	MAZATLAN ST	DURANGO ST	ACAPULCO WA	10	510	37	18,870	R	AC	Dist 1 - District 1	84	79	87	$9,435	43,515	LIGHT MAINTENANCE
ACAPULCO WAY	DURANGO	END	ACAPULCO WA	20	220	34	7,480	R	AC	Dist 1 - District 1	84	79	87	$3,740	43,515	LIGHT MAINTENANCE
AREZZO CIR	SIENA WAY	END	AREZZOCIR	15	559	32	17,897	R	AC	Dist 2 - District 2	81	76	85	$8,949	44,943	LIGHT MAINTENANCE
BRADBURY ST	END	FITZGERALD ST	BRADBURYS T	10	2,003	37	74,111	R	AC	Dist 6 - District 6	81	76	85	$37,056	44,944	LIGHT MAINTENANCE
CAMPANIA CIR	PALERMO DR	EAST END	CAMPANIACI	10	242	32	7,744	R	AC	Dist 2 - District 2	88	83	90	$3,872	38,393	LIGHT MAINTENANCE
CAMPANIA WAY	PALERMO DR	WEST END	CAMPANIAW A	15	1,151	34	39,134	R	AC	Dist 2 - District 2	81	76	85	$19,567	44,940	LIGHT MAINTENANCE
DURANGO ST	YUCATAN WAY	ACAPULCO WAY	DURANGOS T	15	695	38	26,410	R	AC	Dist 1 - District 1	85	80	88	$13,205	42,564	LIGHT MAINTENANCE
E ALISAL ST	END PCC E/O FRONT ST	FRONT ST	EALISALST	130WB	270	24	6,480	A	AC	Dist 3 - District 3	86	80	87	$4,054	36,543	LIGHT MAINTENANCE
E ALISAL ST	FRONT ST	START PCC E/O FRONT	EALISALST	150EB	270	26	7,020	A	AC	Dist 3 - District 3	86	80	87	$4,392	36,543	LIGHT MAINTENANCE
E BORONDA RD	MESQUITE DR	N SANBORN RD	EBORONDA RD	110	973	45	43,785	A	AC	Dist 1 - District 1	81	75	83	$27,390	37,836	LIGHT MAINTENANCE
ELVEE DR	PCC BRIDGE	WORK ST	ELVEEDR	20	775	42	32,550	C	AC/PCC	Dist 3 - District 3	90	84	91	$18,301	35,019	LIGHT MAINTENANCE
E MARKET ST	END PCC (E/O GREENFIELD ALLEY)	PAJARO ST	EMARKETST	130WB	480	30	14,400	A	AC	Dist 4 - District 4	79	73	81	$9,008	37,436	LIGHT MAINTENANCE
FALCON DR	EAGLE DR	BISON WAY	FALCONDR	020	440	33	14,520	R	AC	Dist 1 - District 1	86	81	89	$7,260	41,559	LIGHT MAINTENANCE

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
FITZGERALD ST	END	HEMINGWAY DR	FITZGERALD	10	666	37	24,642	R	AC	Dist 6 - District 6	81	76	85	$12,321	44,944	LIGHT MAINTENANCE
GLEN FALLS CIR	STONY BROOK DR	END	GLENFALLSC	10	441	32	14,122	R	AC	Dist 6 - District 6	81	76	85	$7,062	44,945	LIGHT MAINTENANCE
HUGHES WAY	CONSTITUTION BLVD	FOX GLEN WAY	HUGHESWAY	10	317	38	12,046	R	AC	Dist 1 - District 1	78	75	84	$6,023	45,028	LIGHT MAINTENANCE
LONGFELLOW DR	BRADBURY ST	HEMINGWAY DR	LONGFELLO1	10	322	22	7,084	R	AC	Dist 6 - District 6	82	77	85	$3,542	44,629	LIGHT MAINTENANCE
MADRONE DR	MADRONE WAY	BUCKEYE WAY	MADRONEDR	020	700	37	25,900	R	AC	Dist 1 - District 1	85	80	88	$12,950	42,564	LIGHT MAINTENANCE
MADRONE DR	BUCKEYE WAY	WEST END	MADRONEDR	030	425	33	14,025	R	AC	Dist 1 - District 1	85	80	88	$7,013	42,564	LIGHT MAINTENANCE
MAIN ST	W GABILAN ST	CENTRAL AVE	MAINST	40	430	36	15,485	C	AC	Dist 3 - District 3	89	83	90	$8,707	37,307	LIGHT MAINTENANCE
MAZATLAN ST	YUCATAN WAY	END	MAZATLANST	15	1,085	38	41,230	R	AC	Dist 1 - District 1	84	79	87	$20,615	43,515	LIGHT MAINTENANCE
MONTE BELLA BLVD	SCONBERG PKWY	SARDINA DR	MONTEBELLA	10	1,256	46	57,776	R	AC	Dist 2 - District 2	81	76	85	$28,888	44,940	LIGHT MAINTENANCE
MONTE BELLA BLVD	SARDINA DR	TUSCANY BLVD	MONTEBELLA	20	1,819	46	83,674	R	AC	Dist 2 - District 2	81	76	85	$41,837	44,940	LIGHT MAINTENANCE
MONTE BELLA BLVD	TUSCANY BLVD	WILLIAMS RD	MONTEBELLA	30	894	41	36,654	R	AC	Dist 2 - District 2	82	77	85	$18,327	44,623	LIGHT MAINTENANCE
MORENO CIR	PASEO GRANDE	END	MORENOCIR	10	187	33	6,171	R	AC	Dist 1 - District 1	82	77	85	$3,086	44,676	LIGHT MAINTENANCE
MORENO WAY	TOWT ST	MORENO DR	MORENOWAY	10	145	38	5,510	C	AC	Dist 1 - District 1	82	75	83	$3,098	34,841	LIGHT MAINTENANCE
MASSACHUSETTS DR	VERMONT CIR	END	MSSCHUDR	020	480	33	15,840	R	AC	Dist 1 - District 1	84	79	87	$7,920	43,589	LIGHT MAINTENANCE
NACIONAL CT	CLARK ST (N)	CLARK ST (S)	NACIONALCT	10	1,884	38	71,592	R	AC	Dist 3 - District 3	77	74	83	$35,796	45,043	LIGHT MAINTENANCE
OYSTER BAY CT	MANCHESTER DR (N)	MANCHESTER DR (S)	OYSTERBAY1	15	1,266	38	48,108	R	AC	Dist 6 - District 6	81	76	85	$24,054	44,945	LIGHT MAINTENANCE
PALERMO DR	CAMPANIA CIR	PADOVA DR	PALERMODR	020	697	37	25,789	R	AC	Dist 2 - District 2	81	76	85	$12,895	44,943	LIGHT MAINTENANCE
PALERMO DR	PADOVA DR	MODENA WAY	PALERMODR	030	546	37	20,202	R	AC	Dist 2 - District 2	81	76	85	$10,101	44,943	LIGHT MAINTENANCE
PALERMO DR	MODENA WAY	MONTE BELLA BLVD (N)	PALERMODR	040	334	37	12,358	R	AC	Dist 2 - District 2	85	80	88	$6,179	42,518	LIGHT MAINTENANCE
PEACEFUL COVE WAY	MANCHESTER DR	LITTLE RIVER DR	PEACEFULCO	10	402	32	12,849	R	AC	Dist 6 - District 6	82	77	85	$6,425	44,631	LIGHT MAINTENANCE
PIAZZA DR	MONTE BELLA BLVD	END	PIAZZADR	15	2,696	37	99,752	R	AC	Dist 2 - District 2	81	76	85	$49,876	44,943	LIGHT MAINTENANCE
PROVINCETOWN DR	LEXINGTON DR	INDEPENDENCE BLVD	PROVINCET1	20	422	37	15,614	R	AC	Dist 6 - District 6	81	76	85	$7,807	44,944	LIGHT MAINTENANCE
QUAIL RUN CIR	W ROSSI ST	END	QUAILRUNCI	10	630	42	26,460	R	AC	Dist 3 - District 3	76	74	82	$13,230	44,840	LIGHT MAINTENANCE

** - Treatment from Project Selection

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
RHODE ISLAND ST	RHODE ISLAND CIR	END	RHDISLDST	020	235	33	7,755	R	AC	Dist 1 - District 1	84	79	87	$3,878	43,589	LIGHT MAINTENANCE
ROSSI CIR	W ROSSI ST	END	ROSSICIR	10	463	42	19,446	R	AC	Dist 3 - District 3	80	77	85	$9,723	44,714	LIGHT MAINTENANCE
SIENA WAY	PIAZZA DR	END	SIENAWAY	15	812	37	30,044	R	AC	Dist 2 - District 2	81	76	85	$15,022	44,943	LIGHT MAINTENANCE
SPOLETO WAY	CANELLI CT	SPOLETO CIR	SPOLETOWAY	10	234	33	7,722	R	AC	Dist 2 - District 2	81	76	85	$3,861	44,943	LIGHT MAINTENANCE
STONY BROOK DR	LITTLE RIVER DR	STONY BROOK CIR	STONYBROO1	10	905	38	34,390	R	AC	Dist 6 - District 6	81	76	85	$17,195	44,945	LIGHT MAINTENANCE
STONY BROOK CIR	STONY BROOK DR	END	STONYBROOK	10	316	32	10,114	R	AC	Dist 6 - District 6	81	76	85	$5,058	44,945	LIGHT MAINTENANCE
TAMPICO AVE	RAINIER DR	END	TAMPICOAVE	100	462	32	14,776	R	AC	Dist 6 - District 6	81	76	85	$7,388	44,946	LIGHT MAINTENANCE
TWIN CREEKS CIR	TWIN CREEKS DR	END	TWNCRKCIR	10	420	34	14,280	R	AC	Dist 1 - District 1	84	81	88	$7,140	42,306	LIGHT MAINTENANCE
TWIN CREEKS DR	NE END	COP @ SHOPPING CENTER	TWNCRKDR	15	680	34	23,120	R	AC	Dist 1 - District 1	82	77	85	$11,560	44,644	LIGHT MAINTENANCE
TWIN CREEKS WAY	TWIN CREEKS DR	BEACON HILL DR	TWNCRKWY	10	177	33	5,841	R	AC	Dist 1 - District 1	83	80	87	$2,921	43,123	LIGHT MAINTENANCE
VANDENBERG ST	LA GUARDIA ST	MOFFETT ST	VANDENBERG	10	699	41	28,659	R	AC	Dist 2 - District 2	82	77	85	$14,330	44,621	LIGHT MAINTENANCE
VERMONT CIR	MASSACHUSETTS DR	END	VERMONTCIR	10	390	33	12,870	R	AC	Dist 1 - District 1	82	77	85	$6,435	44,674	LIGHT MAINTENANCE
YUCATAN WAY	MAZATLAN ST	NOGAL DR	YUCATANWAY	15	695	38	26,410	R	AC	Dist 1 - District 1	84	79	87	$13,205	43,515	LIGHT MAINTENANCE
											Treatment Total			$631,697		
2ND AVE	E MARKET ST	TOWT ST	2NDAVE	110	1,200	37	44,400	R	AC	Dist 2 - District 2	82	77	79	$197	1,196,952	SEAL CRACKS
ANTELOPE DR	BADGER WAY	COUGAR DR	ANTELOPEDR	15	765	37	28,305	R	AC	Dist 1 - District 1	86	81	83	$101	1,260,939	SEAL CRACKS
BEACON HILL DR	CONSTITUTION BLVD	END	BEACONHIL	20	570	42	23,940	R	AC	Dist 1 - District 1	79	74	77	$123	1,117,392	SEAL CRACKS
BERKSHIRE WAY	CAPE COD WAY	BOSTON ST	BERKSHIREW	15	701	32	22,433	R	AC	Dist 6 - District 6	82	77	79	$100	1,195,982	SEAL CRACKS
BISON WAY	EAGLE DR	BUCKHORN DR	BISONWAY	15	1,113	33	36,729	R	AC	Dist 1 - District 1	86	81	83	$131	1,260,967	SEAL CRACKS
BOBCAT WAY	ANTELOPE DR	COUGAR DR	BOBCATWAY	10	762	34	25,908	R	AC	Dist 1 - District 1	86	81	83	$93	1,260,967	SEAL CRACKS
BOSTON ST	BEACON HILL DR	BENNINGTON CT	BOSTONST	15	2,945	32	94,240	R	AC	Dist 6 - District 6	82	77	79	$419	1,195,982	SEAL CRACKS
CABOT WAY	BEACON HILL DR	BERKSHIRE WAY	CABOTWAY	15	766	37	28,342	R	AC	Dist 6 - District 6	82	77	79	$126	1,195,982	SEAL CRACKS
CACTUS CT	TUMBLEWEED DR (N)	TUMBLEWEED DR (S)	CACTUSCT	10	1,254	32	40,128	R	AC	Dist 1 - District 1	81	76	79	$188	1,175,160	SEAL CRACKS

** - Treatment from Project Selection

Scenarios Criteria:

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
CAPE COD WAY	ROCKPORT WAY	CONSTITUTION BLVD	CAPECODWAY	15	1,142	32	36,554	R	AC	Dist 6 - District 6	82	77	79	$163	1,195,982	SEAL CRACKS
CHAMISE CIR	CHAMISE CT	END	CHAMISECIR	10	231	32	7,405	R	AC	Dist 1 - District 1	81	76	79	$35	1,175,160	SEAL CRACKS
CHAMISE DR	BUCKHORN DR	TAMARAK WAY	CHAMISEDR	010	873	37	32,301	R	AC	Dist 1 - District 1	82	77	79	$144	1,195,308	SEAL CRACKS
CHAMISE DR	TAMARAK WAY	SAGE CT (S)	CHAMISEDR	020	899	32	28,768	R	AC	Dist 1 - District 1	82	77	79	$128	1,195,308	SEAL CRACKS
COUGAR DR	ANTELOPE DR	FREEDOM PKWY	COUGARDR	15	2,407	37	89,059	R	AC	Dist 1 - District 1	86	81	83	$318	1,260,939	SEAL CRACKS
COTTONWOOD WAY	RIDER AVE	COTTONWOOD DR	CTTNWDWY	010	429	37	15,873	R	AC	Dist 1 - District 1	85	80	82	$60	1,251,247	SEAL CRACKS
EAGLE DR	FALCON DR	COUGAR WAY	EAGLEDR	10	938	38	35,644	R	AC	Dist 1 - District 1	85	80	82	$135	1,250,402	SEAL CRACKS
EAGLE DR	COUGAR WAY	EAGLE WAY	EAGLEDR	20	1,571	38	59,698	R	AC	Dist 1 - District 1	86	81	83	$213	1,260,967	SEAL CRACKS
EAGLE DR	EAGLE WAY	BISON WAY	EAGLEDR	30	1,455	38	55,290	R	AC	Dist 1 - District 1	86	81	83	$198	1,260,967	SEAL CRACKS
E ALISAL ST	FRONT ST	MAIN ST	EALISALST	140	1,700	64	108,800	A	AC	Dist 3 - District 3	84	78	80	$594	1,013,334	SEAL CRACKS
E ALVIN DR	N MAIN ST	MCKINNON ST	EALVINDR	15	2,314	62	143,468	A	AC/AC	Dist 4&6 - District 4&6	93	86	87	$234	6,012,297	SEAL CRACKS
E ALVIN DR	MCKINNON ST	LINWOOD DR	EALVINDR	25	1,678	64	107,392	A	AC/AC	Dist 4&6 - District 4&6	93	86	87	$176	6,012,297	SEAL CRACKS
E ALVIN DR	LINWOOD DR	EL DORADO DR	EALVINDR	35	790	62	48,980	A	AC/AC	Dist 6 - District 6	93	86	87	$80	6,012,297	SEAL CRACKS
E ALVIN DR	EL DORADO DR	MARIN AVE	EALVINDR	45	1,515	62	93,930	A	AC/AC	Dist 6 - District 6	93	86	87	$154	6,012,297	SEAL CRACKS
E ALVIN DR	MARIN AVE	NATIVIDAD RD	EALVINDR	55	545	62	33,790	A	AC/AC	Dist 6 - District 6	93	86	87	$56	6,012,297	SEAL CRACKS
ELK CIR	ELK DR	END	ELKCIR	10	341	33	11,266	R	AC	Dist 1 - District 1	86	81	83	$41	1,260,967	SEAL CRACKS
FALCON DR	E BORONDA RD	EAGLE DR	FALCONDR	010	1,254	41	51,414	R	AC	Dist 1 - District 1	86	81	83	$184	1,260,967	SEAL CRACKS
FAULKNER ST	FITZGERALD ST	LEWIS ST	FAULKNERST	15	800	36	28,800	R	AC	Dist 6 - District 6	82	77	79	$128	1,195,982	SEAL CRACKS
FITZGERALD ST	HEMINGWAY DR	FAULKNER ST	FITZGERALD	20	831	37	30,747	R	AC	Dist 6 - District 6	82	77	79	$137	1,195,982	SEAL CRACKS
LEWIS ST	HEMINGWAY DR	FAULKNER CIR	LEWISST	15	875	37	32,375	R	AC	Dist 6 - District 6	82	77	79	$144	1,195,982	SEAL CRACKS
LINWOOD DR	E ALVIN DR	RAINIER DR	LINWOODDR	010	1,253	44	55,132	C	AC/AC	Dist 6 - District 6	93	86	87	$74	6,180,461	SEAL CRACKS
LINWOOD DR	RAINIER DR	E LAUREL DR	LINWOODDR	020SB	1,982	26	51,532	C	AC/AC	Dist 4 - District 4	93	86	87	$69	6,180,461	SEAL CRACKS
LINWOOD DR	E LAUREL DR	RAINIER DR	LINWOODDR	030NB	1,982	26	51,532	C	AC/AC	Dist 4 - District 4	93	86	87	$69	6,180,461	SEAL CRACKS

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
MADRONE DR	NOGAL DR	MADRONE WAY	MADRONEDR	010	660	33	21,780	R	AC	Dist 1 - District 1	85	80	82	$83	1,251,247	SEAL CRACKS
MARSALA WAY	PALERMO DR	BELLAGIO WAY	MARSALAWAY	10	682	34	23,188	R	AC	Dist 2 - District 2	92	89	90	$42	4,599,442	SEAL CRACKS
MEREDITH CIR	BEACON HILL DR	END	MEREDITHCI	10	235	32	7,520	R	AC	Dist 6 - District 6	81	76	79	$36	1,175,355	SEAL CRACKS
MILTON WAY	CABOT WAY	BOSTON ST	MILTONWAY	10	482	32	15,436	R	AC	Dist 6 - District 6	82	77	79	$69	1,195,982	SEAL CRACKS
MUSTANG CT	BADGER WAY (W)	BADGER WAY (E)	MUSTANGCT	15	1,258	33	41,514	R	AC	Dist 1 - District 1	86	81	83	$149	1,260,939	SEAL CRACKS
PARTRIDGE ST	FALCON DR	END	PARTRIDGES	15	831	32	26,592	R	AC	Dist 1 - District 1	85	80	82	$101	1,250,402	SEAL CRACKS
PARTRIDGE WAY	FALCON DR	PARTRIDGE ST	PARTRIDGEW	10	210	37	7,770	R	AC	Dist 1 - District 1	86	81	83	$28	1,260,967	SEAL CRACKS
POTRERO WAY	SLOAT DR	GENEVA WAY	POTREROWAY	10	201	32	6,432	R	AC	Dist 4&5 - District 4&5	82	77	79	$29	1,198,598	SEAL CRACKS
POTRERO WAY	GENEVA WAY	VICTOR ST	POTREROWAY	20	655	32	20,960	R	AC	Dist 5 - District 5	77	72	75	$117	1,053,694	SEAL CRACKS
RAVEN CT	COUGAR DR (N)	COUGAR DR (S)	RAVENCT	10	1,212	33	39,996	R	AC	Dist 1 - District 1	86	81	83	$143	1,260,939	SEAL CRACKS
REX CIR	WELLINGTON CT	END	REXCIR	10	135	37	4,995	R	AC	Dist 6 - District 6	82	77	79	$23	1,195,982	SEAL CRACKS
ROCKPORT WAY	BEACON HILL DR	BOSTON ST	ROCKPORTWA	15	856	37	31,672	R	AC	Dist 6 - District 6	82	77	79	$141	1,195,982	SEAL CRACKS
ROCKROSE ST	BUCKHORN DR	END	ROCKROSEST	15	877	37	32,449	R	AC	Dist 1 - District 1	77	72	75	$181	1,050,694	SEAL CRACKS
ROCKROSE WAY	BUCKHORN DR	ROCKROSE ST	ROCKROSEWA	10	200	37	7,400	R	AC	Dist 1 - District 1	81	76	79	$35	1,175,160	SEAL CRACKS
SAGE CT	CHAMISE CT (N)	CHAMISE CT (S)	SAGECT	15	1,656	34	56,304	R	AC	Dist 1 - District 1	82	77	79	$251	1,195,308	SEAL CRACKS
SAGUARO CIR	TUMBLEWEED DR	NE END	SAGUAROCIR	10	411	32	13,152	R	AC	Dist 1 - District 1	81	76	79	$62	1,175,160	SEAL CRACKS
SAGUARO DR	BUCKHORN DR	TUMBLEWEED DR	SAGUARODR	15	817	37	30,229	R	AC	Dist 1 - District 1	81	76	79	$142	1,175,160	SEAL CRACKS
SOMERSWORTH WAY	CABOT WAY	BOSTON ST	SOMERSWOR1	10	759	32	24,281	R	AC	Dist 6 - District 6	82	77	79	$108	1,195,982	SEAL CRACKS
SOMERSWORTH CIR	SOMERSWORTH WAY	END	SOMERSWORT	10	368	32	11,791	R	AC	Dist 6 - District 6	82	77	79	$53	1,195,982	SEAL CRACKS
TUMBLEWEED DR	RIDER AVE	MESQUITE DR	TUMBLEWEED	15	1,284	37	47,508	R	AC	Dist 1 - District 1	82	77	79	$212	1,195,308	SEAL CRACKS
W ALISAL ST	MAIN ST	LINCOLN AVE	WALISALST	010	610	60	36,620	A	AC	Dist 3 - District 3	89	82	84	$152	1,069,194	SEAL CRACKS
W ALISAL ST	CHURCH ST	RIKER ST	WALISALST	030	958	60	57,494	A	AC	Dist 3 - District 3	89	82	84	$238	1,069,194	SEAL CRACKS
W ALISAL ST	RIKER ST	HOMESTEAD AVE	WALISALST	040	958	60	57,480	A	AC	Dist 3 - District 3	89	82	84	$238	1,069,194	SEAL CRACKS

** - Treatment from Project Selection

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2024

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
W ALISAL ST	HOMESTEAD AVE	COLLEGE DR	WALISALST	050	1,898	60	113,880	A	AC	Dist 3 - District 3	89	82	84	$471	1,069,194	SEAL CRACKS
W ALISAL ST	COLLEGE DR	W ACACIA ST	WALISALST	060	885	60	53,100	A	AC	Dist 3 - District 3	89	82	84	$220	1,069,194	SEAL CRACKS
W ALISAL ST	W ACACIA ST	PALMA DR	WALISALST	070	1,141	60	68,460	A	AC	Dist 3 - District 3	89	82	84	$284	1,069,194	SEAL CRACKS
W ALISAL ST	PALMA DR	W BLANCO RD	WALISALST	080	1,394	60	83,640	A	AC	Dist 3 - District 3	89	82	84	$346	1,069,194	SEAL CRACKS
WELLINGTON CT	DECLARATION ST (W)	DECLARATION ST (E)	WELLINGTON	15	1,820	32	58,238	R	AC	Dist 6 - District 6	82	77	79	$259	1,195,982	SEAL CRACKS
											Treatment Total			$9,225		
					Year 2024 Area Total				5,335,063		Year 2024 Total			$6,298,037		

Year: 2025

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
ACOSTA PLZ	N SANBORN RD	END	ACOSTAPLZ	20	270	42	11,340	R	AC	Dist 1 - District 1	49	40	100	$95,256	13,097	HEAVY REHAB
BRIGHTON ST	STEVENSON ST	FILBERT WAY	BRIGHTONST	10	478	32	15,300	R	AC	Dist 4 - District 4	49	40	100	$128,521	13,092	HEAVY REHAB
BUSH ST	HYDE ST	S END	BUSHST	20	185	32	5,920	R	AC	Dist 4 - District 4	49	40	100	$49,728	13,092	HEAVY REHAB
CALIFORNIA ST	S. END	MARKET WAY	CALIFORNI1	010	166	25	4,150	R	AC	Dist 4 - District 4	50	41	100	$34,860	13,014	HEAVY REHAB
CARRIAGE CT	CARRIAGE DR (N)	CARRIAGE DR (S)	CARRIAGECT	10	786	32	25,152	R	AC	Dist 2 - District 2	49	40	100	$211,277	13,092	HEAVY REHAB
CENTER ST	E MARKET ST	EAST ST	CENTERST	15	906	38	34,428	R	AC	Dist 4 - District 4	49	40	100	$289,196	13,090	HEAVY REHAB
DONNER WAY	HUMBOLDT DR	EMERALD DR	DONNERWAY	15	804	37	29,748	R	AC	Dist 6 - District 6	49	40	100	$249,884	13,094	HEAVY REHAB
KENNEDY ST	BUCHANAN WAY	END	KENNEDYST	35	1,655	33	54,615	R	AC	Dist 5 - District 5	49	40	100	$458,766	13,089	HEAVY REHAB
NATIVIDAD RD	E BORONDA RD	ROGGE RD	NATIVIDADR	080	5,275	38	200,450	R	AC	Dist 6 - District 6	49	40	100	$1,683,780	13,097	HEAVY REHAB
OCONNOR CIR	ST BRENDAN WAY	ROSARITA DR	OCONNORCIR	10	872	32	27,891	R	AC	Dist 4 - District 4	49	40	100	$234,284	13,091	HEAVY REHAB
PACIFIC AVE	AMARILLO WAY	DEL MONTE AVE	PACIFICAVE	010	1,154	38	43,852	R	AC	Dist 1 - District 1	49	40	100	$368,357	13,095	HEAVY REHAB
PIERCE ST	NORTHRIDGE DR	SWANER AVE	PIERCEST	10	464	32	14,849	R	AC	Dist 5 - District 5	49	40	100	$124,730	13,089	HEAVY REHAB
RIANDA ST	GRIFFIN ST	PRADER ST	RIANDAST	10	919	37	33,990	R	AC	Dist 4 - District 4	49	40	100	$285,517	13,090	HEAVY REHAB
RINCON AVE	CENTER ST	EAST ST	RINCONAVE	10	700	32	22,414	R	AC	Dist 4 - District 4	49	40	100	$188,277	13,090	HEAVY REHAB

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2025

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
SIEBER ST	PACIFIC AVE	GARNER AVE	SIEBERST	15	814	22	17,908	R	AC	Dist 1 - District 1	49	40	100	$150,428	13,095	HEAVY REHAB
ST FRANCIS WAY	SORRENTINI DR	ROSARITA DR	STFRANCIS W	15	1,714	32	54,859	R	AC	Dist 4 - District 4	49	40	100	$460,817	13,091	HEAVY REHAB
SWANER CIR	SWANER AVE	END	SWANERCIR	10	195	28	5,460	R	AC	Dist 5 - District 5	49	40	100	$45,864	13,089	HEAVY REHAB
TERRACE ST	N MADEIRA AVE	FREMONT ST	TERRACEST	15	1,625	32	52,000	R	AC	Dist 4 - District 4	49	40	100	$436,800	13,090	HEAVY REHAB
W BOLIVAR ST	N MAIN ST	END	WBOLIVARS T	15	490	42	20,580	R	AC	Dist 5 - District 5	49	40	100	$172,872	13,089	HEAVY REHAB
											Treatment Total			$5,669,214		
ABBOTT ST	S SANBORN RD	E ROMIE LN	ABBOTTST	NB040	1,076	36	38,744	A	AC	Dist 3 - District 3	67	68	100	$216,964	16,296	LIGHT REHAB
HILL CIR	N MADEIRA AVE	END	HILLCIR	10	174	37	6,438	R	AC	Dist 4 - District 4	75	69	100	$31,547	15,736	LIGHT REHAB
SAN MATEO PL	SAN MATEO DR	END	SANMATEOP L	10	201	32	6,432	R	AC	Dist 3 - District 3	65	68	100	$31,517	15,820	LIGHT REHAB
SAN MIGUEL CIR	SAN MIGUEL AVE	END	SANMIGUEL C	10	188	26	4,888	R	AC	Dist 3 - District 3	65	68	100	$23,952	15,820	LIGHT REHAB
TAMPICO AVE	VALLEJO ST	ELWOOD ST	TAMPICOAV E	80	489	32	15,648	R	AC	Dist 4 - District 4	66	69	100	$76,676	15,423	LIGHT REHAB
											Treatment Total			$380,656		
ELVEE DR	S SANBORN RD	PCC BRIDGE	ELVEEDR	10	2,527	24	60,648	C	AC	Dist 3 - District 3	90	82	89	$34,098	37,688	LIGHT MAINTENANCE
E MARKET ST	KERN ST	CARR AVE	EMARKETST	060	1,367	62	84,754	A	AC	Dist 4 - District 4	79	70	79	$53,019	36,689	LIGHT MAINTENANCE
E MARKET ST	TOWT ST	KENNETH AVE	EMARKETST	090	1,732	44	76,208	A	AC	Dist 2 - District 2	79	70	79	$47,673	36,666	LIGHT MAINTENANCE
ROY DIAZ ST	END	AIRPORT BLVD	ROYDIAZST	010	2,082	32	66,624	C	AC	Dist 2 - District 2	80	70	79	$37,458	31,574	LIGHT MAINTENANCE
STATION PL	W MARKET ST	RAILROAD AVE	STATIONPL	10	361	56	20,216	R	AC/PCC	Dist 3 - District 3	95	86	93	$10,108	33,339	LIGHT MAINTENANCE
											Treatment Total			$182,356		
ABBOTT ST	JOHNSON AVE	LOS PALOS DR	ABBOTTST	NB060	1,269	36	45,684	A	AC/AC	Dist 3 - District 3	67	70	73	$327	1,130,398	SEAL CRACKS
CHEROKEE DR	W AVLIN DR	INCA WAY	CHEROKEE DR	050	883	38	33,554	C	AC	Dist 5 - District 5	65	84	86	$69	1,955,627	SEAL CRACKS
E ALISAL ST	N WOOD ST	KERN ST	EALISALST	100	1,427	75	107,025	A	AC	Dist 2&4 - District 2&4	61	84	86	$267	1,903,308	SEAL CRACKS
E ALISAL ST	START PCC E/O FRONT ST	END PCC	EALISALST	160EB	475	28	13,300	A	PCC	Dist 3&4 - District 3&4	81	84	88	$50	15,463,810	SEAL CRACKS
E BERNAL DR	SHERWOOD DR	ROSARITA DR	EBERNALDR	10	866	54	46,764	A	PCC	Dist 4 - District 4	80	82	87	$193	12,534,612	SEAL CRACKS
E BORONDA RD	RIDER AVE	MESQUITE DR	EBORONDA RD	100	1,326	45	59,670	A	AC	Dist 1 - District 1	61	84	86	$149	1,903,308	SEAL CRACKS

** - Treatment from Project Selection

Scenarios Criteria:

City of Salinas

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2025

Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
E MARKET ST	PCC END (S/O MARKET WAY)	MARKET WAY/ SHERWOOD DR	EMARKETST	030EB	177	40	7,080	A	AC	Dist 4 - District 4	61	84	86	$18	1,903,308	SEAL CRACKS
E MARKET ST	CARR AVE	N SANBORN RD	EMARKETST	070	2,470	64	158,080	A	AC	Dist 4 - District 4	74	76	79	$920	1,879,818	SEAL CRACKS
FRONT ST	START PCC @ E MARKET ST	END PCC @ FRONT ST	FRONTST	010EB	404	20	8,080	A	PCC	Dist 3 - District 3	74	74	78	$53	3,795,066	SEAL CRACKS
FRONT ST	PCC START	E MARKET ST	FRONTST	030NB	422	26	10,972	A	PCC	Dist 3 - District 3	84	87	92	$31	29,795,420	SEAL CRACKS
FRONT ST	E MARKET ST	END OF PCC	FRONTST	030SB	367	30	11,010	A	PCC	Dist 3 - District 3	78	80	84	$54	8,461,096	SEAL CRACKS
FRONT ST	PCC START	PCC END	FRONTST	060WB	270	18	4,860	A	PCC	Dist 3 - District 3	79	81	85	$22	10,283,377	SEAL CRACKS
MELODY LN	W GABILAN ST	END	MELODYLN	30	173	15	2,593	R	PCC	Dist 3 - District 3	91	89	94	$5	25,420,874	SEAL CRACKS
NAPOLI CIR	PALERMO DR	END	NAPOLICIR	10	298	32	9,536	R	AC	Dist 2 - District 2	94	85	87	$25	1,217,931	SEAL CRACKS
NATIVIDAD RD	SHERWOOD DR	E LAUREL DR	NATIVIDADR	010	2,141	32	68,512	A	PCC	Dist 4 - District 4	75	76	80	$408	4,922,210	SEAL CRACKS
NATIVIDAD RD	S LAUREL DR	RAINIER DR	NATIVIDADR	020NB	2,105	36	75,780	A	PCC	Dist 4 - District 4	79	81	85	$341	10,256,406	SEAL CRACKS
NATIVIDAD RD	RAINIER DR	S LAUREL DR	NATIVIDADR	SB140	2,105	36	75,780	A	PCC	Dist 4 - District 4	76	77	81	$425	5,844,211	SEAL CRACKS
N MAIN ST	COP 900' S/O RUSSEL RD	BORONDA RD	NMAINST	020	3,798	78	296,244	A	PCC	Dist 5 - District 5	73	74	77	$1,964	3,603,590	SEAL CRACKS
PALERMO CT	PALERMO DR	BELLAGIO WAY	PALERMOCT	10	939	32	30,048	R	AC	Dist 2 - District 2	94	85	87	$78	1,217,931	SEAL CRACKS
PAVIA CIR	PALERMO DR	END	PAVIACIR	10	262	32	8,384	R	AC	Dist 2 - District 2	94	85	87	$22	1,217,931	SEAL CRACKS
PAVIA WAY	PALERMO DR	SCONBERG PKWY	PAVIAWAY	10	470	37	17,390	R	AC	Dist 2 - District 2	94	85	87	$45	1,217,931	SEAL CRACKS
PISA CIR	PALERMO DR	END	PISACIR	10	181	32	5,792	R	AC	Dist 2 - District 2	94	85	87	$15	1,217,931	SEAL CRACKS
RICO ST	W ROSSI ST	HYDE ST	RICOST	020	929	41	38,089	C	AC	Dist 4 - District 4	62	84	86	$78	1,955,627	SEAL CRACKS
SHERWOOD DR	E BERNAL DR EB	185 Ft S/O SHERWOOD PL (PCC END)	SHERWOOD DR	050	1,814	50	90,700	A	PCC	Dist 4 - District 4	77	78	83	$475	6,993,183	SEAL CRACKS
SHERWOOD DR	NATIVIDAD RD	E BERNAL DR	SHERWOOD DR	060	279	64	17,828	A	PCC	Dist 4 - District 4	75	76	80	$107	4,924,099	SEAL CRACKS
S SANBORN RD	RAILROAD Overpass (PCC START)	RAILROAD Overpass (PCC END)	SSANBORN RD	020NB	850	20	17,000	A	PCC	Dist 3 - District 3	72	72	76	$119	3,135,785	SEAL CRACKS
S SANBORN RD	RAILROAD Overpass (PCC START)	RAILROAD Overpass (PCC END)	SSANBORN RD	SB060	850	20	17,000	A	PCC	Dist 3 - District 3	72	72	76	$119	3,135,785	SEAL CRACKS
ST EDWARDS AVE	E LAUREL DR	CIRCLE DR	STEDWARD SA	15	2,689	32	86,043	C	AC	Dist 4 - District 4	64	84	86	$176	1,955,627	SEAL CRACKS

Scenarios Criteria:

Scenarios - Sections Selected for Treatment

Interest: .00% Inflation: .00% Printed: 01/28/2021

Scenario: 2020 Current Budget

Year: 2025

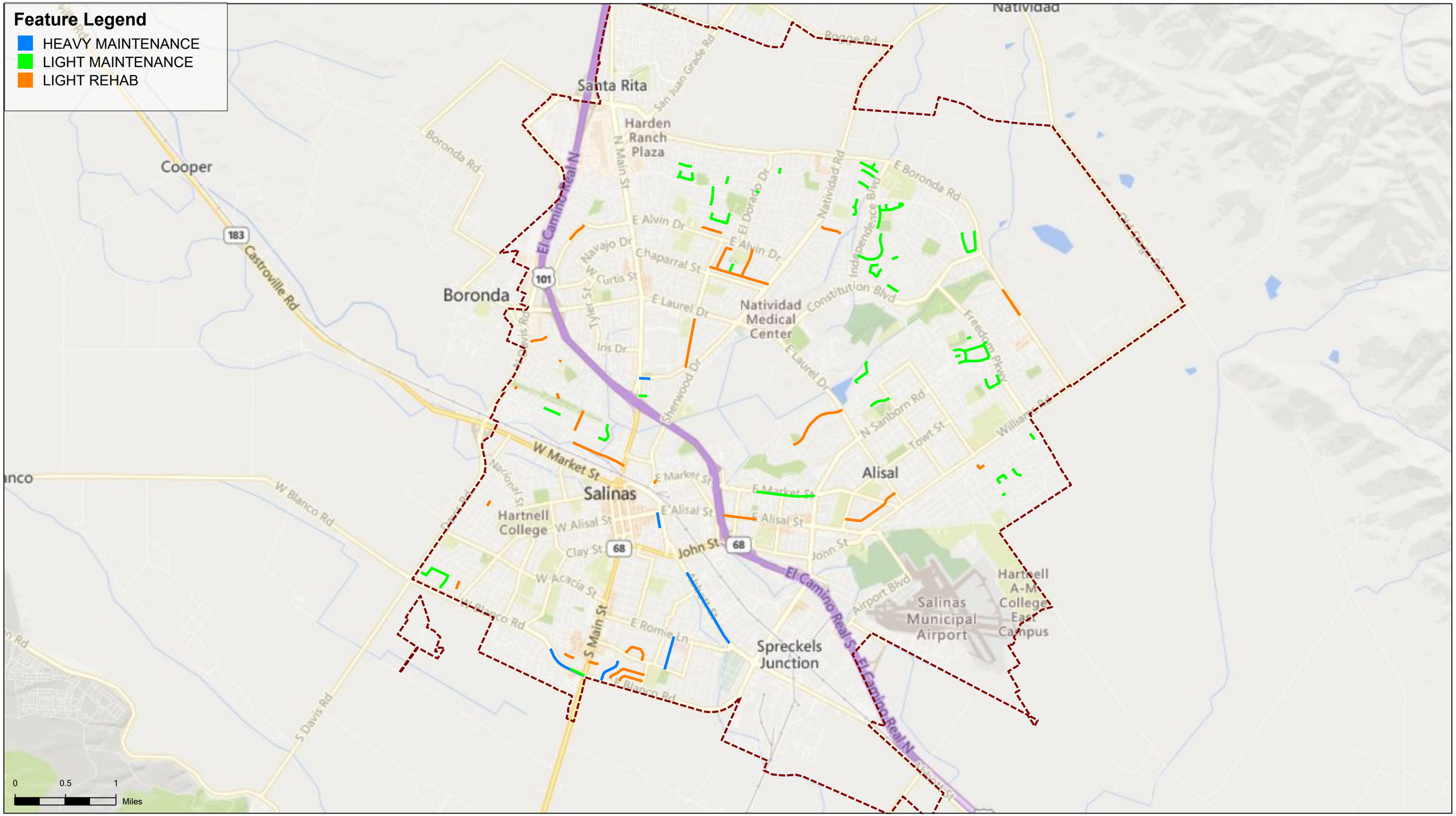
Street Name	Begin Location	End Location	Street ID	Section ID	Length	Width	Area	FC	Surf Type	Area ID	Current PCI	Treatment PCI Before	Treatment PCI After	Cost	Rating	Treatment
W BLANCO RD	RIKER ST	PADRE DR	WBLANCOR D	EB030	1,250	30	37,500	A	AC/AC	Dist 3 - District 3	67	70	73	$266	1,233,080	SEAL CRACKS
W BLANCO RD	PADRE DR	S MAIN ST	WBLANCOR D	EB040	649	32	20,780	A	AC/AC	Dist 3 - District 3	67	70	72	$150	1,088,088	SEAL CRACKS
W BLANCO RD	S MAIN ST	PADRE DR	WBLANCOR D	WB010	649	32	20,780	A	AC/AC	Dist 3 - District 3	75	78	80	$109	1,686,357	SEAL CRACKS
W LAKE ST	N MAIN ST	RICO ST	WLAKEST	15	2,387	32	76,390	C	AC	Dist 3 - District 3	61	84	86	$157	1,955,627	SEAL CRACKS

		Treatment Total	$7,237
Year 2025 Area Total	2,573,753	Year 2025 Total	$6,239,463
Total Section Area:	20,193,470	Grand Total	$31,436,747

City of Salinas

Scenario Treatments

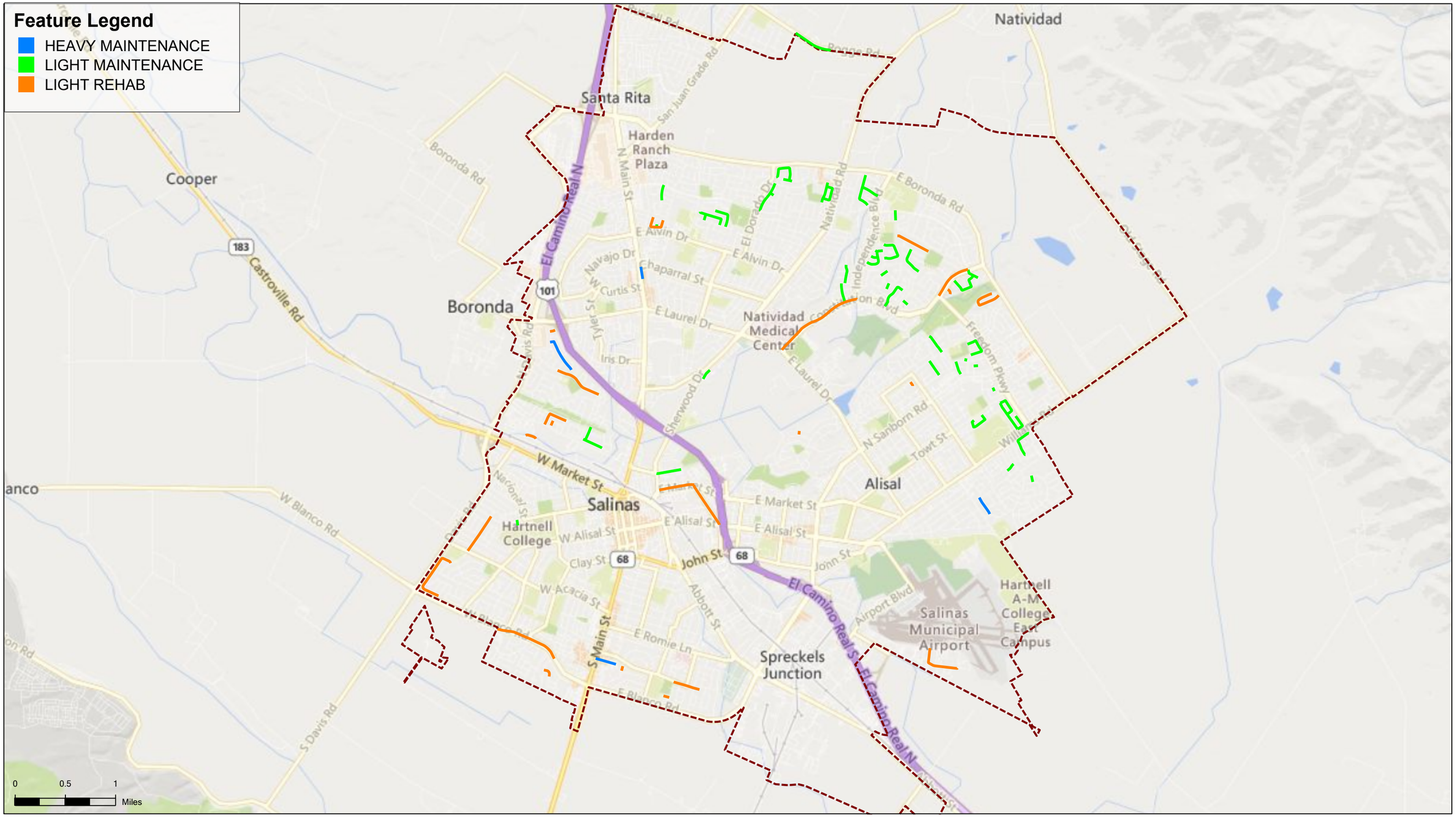
2021 Project Period - Printed: 1/28/2021



City of Salinas

Scenario Treatments

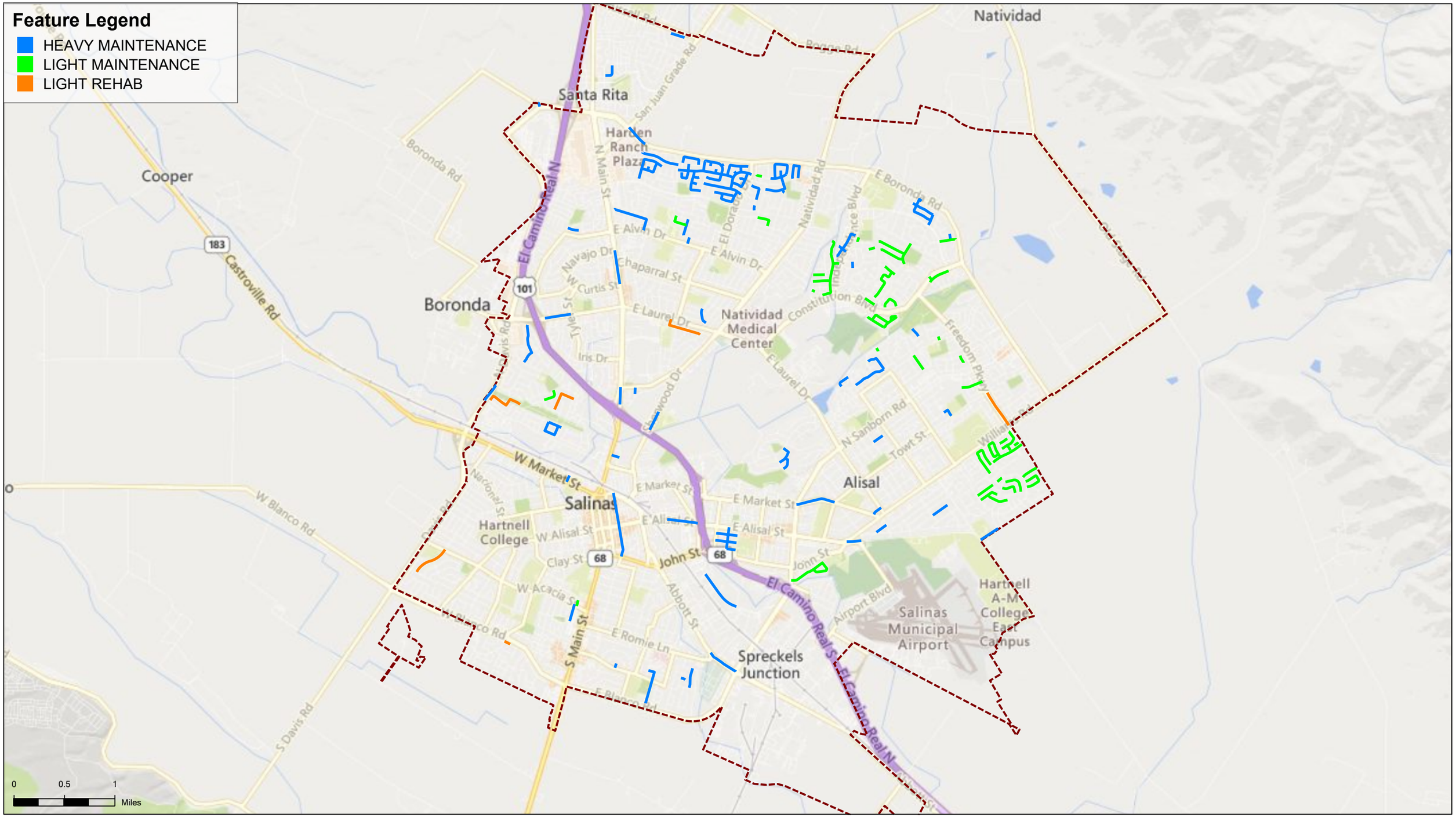
2022 Project Period - Printed: 1/28/2021



City of Salinas

Scenario Treatments

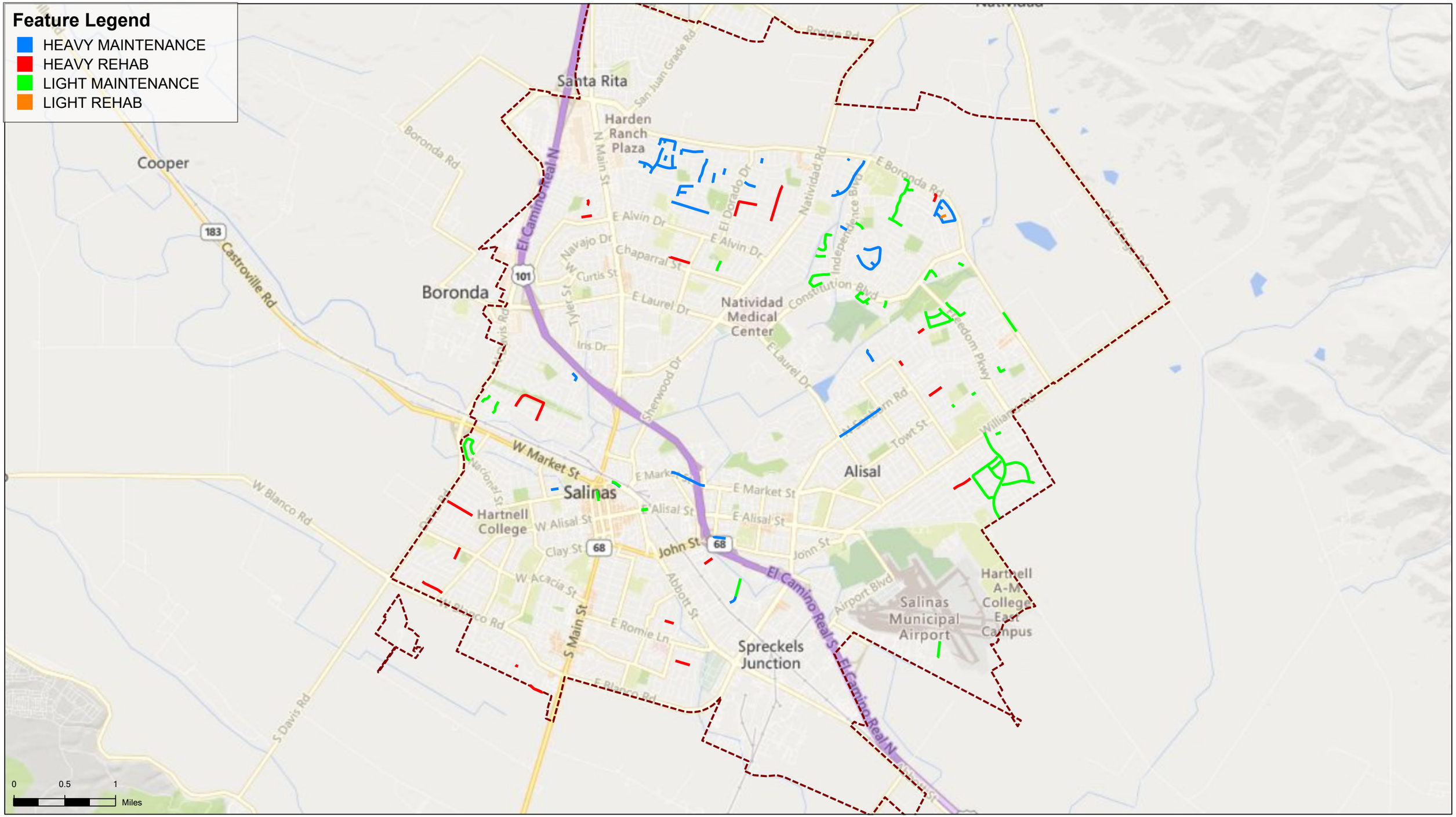
2023 Project Period - Printed: 1/28/2021



City of Salinas

Scenario Treatments

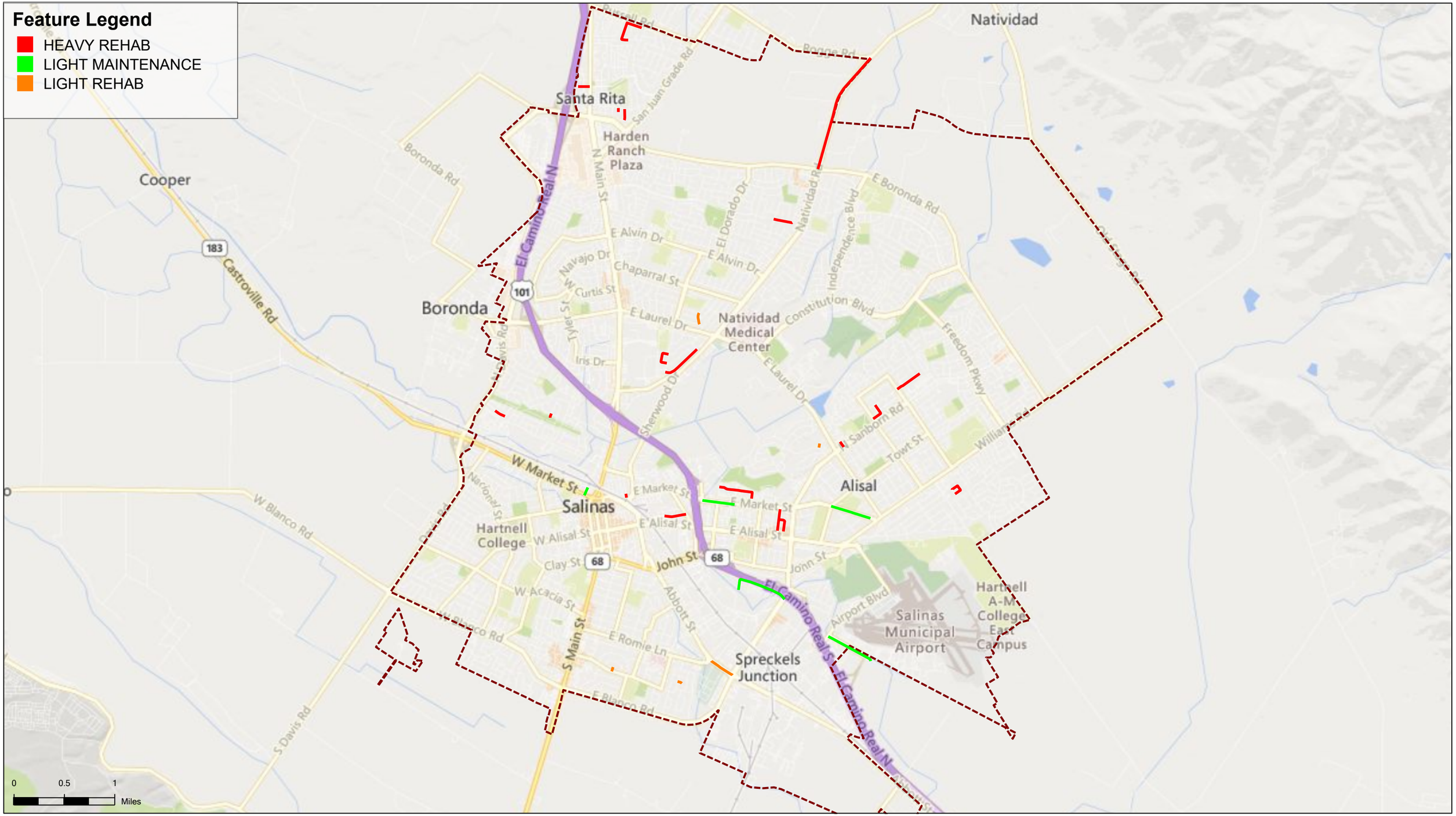
2024 Project Period - Printed: 1/28/2021



City of Salinas

Scenario Treatments

2025 Project Period - Printed: 1/28/2021



Appendix C
Definitions

DEFINITIONS

This section is intended to define important pavement design acronyms and terms used when discussing a Pavement Management System (PMS).

GENERAL TERMS

PMS - Pavement Management System - A program to aid in tracking the condition of roads and a means to help quantify the cost of maintaining the roads in a given area.

TI - Traffic Index - Cars and light trucks have little impact on the pavement structure. Larger/Heavier trucks have very significant impacts on the pavement due to the high axle weights. The total EALs is converted into a design Traffic Index (TI). The design TI is the total number of EALs that the pavement will support before it begins to fail, regardless of the passage of time. Normally for a new pavement, the EALs over a 20_year period are used. For rehabilitation procedures such as overlays, 10 years is generally used.

PCI - Pavement Condition Index - A rating scale for the condition of a road segment. 100 represents no defects and recent major rehabilitation.

CRITICAL PCI - The PCI value at which the rate of loss increases with time, or the cost of applying a maintenance treatment increases significantly.

CLS / FC - Functional Classification is the process by which streets and highways are grouped into classes, or systems, according to the character of traffic service that they are intended to provide. There are three highway functional classifications: arterial, collector, and local roads. All streets and highways are grouped into one of these classes, depending on the character of the traffic.

Arterials - provide the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control.

Collectors - provide a less highly developed level of service at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials.

Residential/Local - consists of all roads not defined as arterials or collectors and primarily provides access to land with little or no through movement.

- (*Excerpted from the U.S. Department of Transportation, Federal Highway Administration web site on "Functional Classification".)*

EMULSION - A chemical added to water and asphalt that keeps the asphalt in a stable suspension in the water.

AC - Asphaltic Concrete - A plant mixed asphalt binder (asphalt cement that is classified according to the Standard Specification for Performance Graded Asphalt Binder) and aggregate (rocks) thoroughly mixed and compacted into a mass.

PCC - Portland Cement Concrete

OVERLAY - The placement of asphaltic concrete mix over an existing asphaltic concrete or portland cement concrete surface.

Light Overlay - would include any overlay of less than 2 inches of asphalt.

Heavy Overlay - is a thicker layer of asphalt and might include such items/operations as, but not limited to fabric, milling/grinding and reconstruction.

PREVENTIVE MAINTENANCE - Provides budget dollars for localized pavement repairs such as digouts and crack filling.

SLURRY SEAL - Includes a graded aggregate along with emulsion and water. Generally squeegeed and generally consists of two layers.

REFLECTIVE CRACKING - Cracks that occur in new "thin" overlays that are identical to the cracks that were present in the existing pavement.

ALLIGATOR CRACKING - Alligator or fatigue cracking is a series of interconnecting cracks caused by fatigue failure of the asphalt concrete surface under repeated traffic loading. Cracking begins at the bottom of the asphalt surface (or stabilized base) where the stress and strain are highest under a wheel load. The cracks propagate to the surface initially as a series of parallel longitudinal cracks. After repeated traffic loading, the cracks connect, forming many sided, sharp-angled pieces that develop a pattern resembling chicken wire or the skin of an alligator. Alligator cracking occurs only in areas subjected to repeated traffic loading, such as wheel paths. (Pattern-type cracking that occurs over an entire area not subjected to loading is called "block cracking," which is not a load-associated distress.)

BLOCK CRACKING - Block cracks are interconnected cracks that divide the pavement into approximately rectangular pieces. Block cracking is caused mainly by shrinkage of the asphalt concrete and daily temperature cycling (which results in daily stress/strain cycling). It is not load-associated. Block cracking usually indicates that the asphalt has hardened significantly. Block cracking normally occurs over a large portion of the pavement area, but sometimes will occur only in non-traffic areas. This type of distress differs from alligator cracking in that alligator cracks form smaller, many-sided pieces with sharp angles. Also, unlike block, alligator cracks are caused by repeated traffic loadings, and are therefore found only in traffic areas (i.e., wheel paths).

LONGITUDINAL / TRANSVERSE CRACKING - Longitudinal cracks are parallel to the pavement's centerline or laydown direction. Transverse cracks extend across the pavement at approximately right angles to the pavement centerline or direction of laydown. These types of cracks are not usually load-associated.

WEATHERING & RAVELING - Weathering and raveling is the wearing away of the pavement surface due to a loss of asphalt or tar and dislodged aggregate particles. These distresses indicate that either the asphalt binder has hardened appreciably or that a poor quality mixture is present. In addition, raveling may be caused by certain types of traffic, i.e., tracked vehicles. Softening of the surface and dislodging of the aggregates due to oil spillage are also included under raveling.

BUMPS & SAGS - Bumps are small, localized, upward displacements of the pavement surface. They are different from shoves in that shoves are caused by unstable pavement. Sags are small, abrupt, downward displacements of the pavement surface. If bumps appear in pattern perpendicular to traffic flow and are spaced at less than 3 m (10 ft), the distress is called corrugation. Distortion and displacement that occur over large areas of the pavement surface causing large and/or long dips in the pavement should be recorded at "swelling."

RUTTING / SHOVING - A rut is a surface depression in the wheel paths. Pavement uplift may occur along the sides of the rut, but, in many instances, ruts are noticeable only after a rainfall when the paths are filled with water. Rutting stems from a permanent deformation in any of the pavement layers or subgrades, usually caused by consolidated or lateral movement of the materials due to traffic load.

Shoving is a permanent, longitudinal displacement of a localized area of the pavement surface caused by traffic loading. When traffic pushes against the pavement, it produces a short, abrupt wave in the pavement surface. This distress normally occurs only in unstable liquid asphalt mix (cutback or emulsion) pavements.

PATCHING & UTILITY CUTS - A patch is an area of pavement that has been replaced with new material to repair the existing pavement. A patch is considered a defect no matter how well it is performing (a patched area or adjacent area usually does not perform as well as an original pavement section). Generally, some roughness is associated with this distress.

POTHOLES - Most often are structurally related distresses and should not be confused with raveling and weathering.

PAVEMENT PRESERVATION - Applying the Right Treatment to the Right Pavement at the Right Time using the Right Materials.

R-VALUE - A test to evaluate the base, subbase and subgrades of an area to be used in pavement designing for thickness of asphalt.

ESAL - The impact of trucks is measured in equivalent single
18,000 pound axle loads (EALs).

STREETSAVER DEFINITIONS

MANAGEMENT SECTION - This is used to maintain an inventory of all the roads and road sections in your jurisdiction.

EVENTS – This provides for viewing and maintaining of Events or changes that have been made on a management section. The Events that are included are:

- Management Section Creation.
- Results from Maintenance and Rehabilitation treatments that have been applied to the Management Section.
- Results from Visual Inspections of Management Sections.
- Listing of changes/edits of information on a Management Section.

DETERIORATION CURVE - This provides a graphical representation of the current pavement condition index and the historical PCIs for each section of road in your jurisdiction.

MAINTENANCE/REHABILITATION - This is used to review the proposed maintenance, new maintenance, and rehabilitation for any road section in your jurisdiction.

BRANCH - Generally a road name or a road name with a direction of travel.

SECTION - Usually a branch or road is large and needs to be divided into smaller pieces to maintain. These smaller pieces are labeled as “sections” and designated with a number and a beginning and ending location.

DISTRESSES - Defects found in asphalt concrete pavements or portland cement concrete. These defects degrade the condition of the road.

RATING - The rating is the weight cost - effectiveness ratio of the recommended treatment.

% OF ENVIRONMENT - The percentage of the pavement distress in a management section that is an environment related distress.

% LOAD RELATED - The percentage of the pavement distress in a management section that is load related distress (caused by excessive weight on the pavement surface).
% OTHER - Is the percentage of the pavement section that is not a load related or environment related distress.

ACTIVE - Indicates whether or not the current record is active.

AREA - Contains the area of a section in square feet. This is automatically calculated using the values that are entered in the Length and Width fields. However, if the section is irregularly shaped the area can be entered by the user.

AREA ID - Is an optional, jurisdiction defined field to identify the area in which the section is located. For example, each neighborhood or subdivision, or each geographic type (mountain, valley, coast, etc.) in the jurisdiction may be assigned a letter of the alphabet.

BASE BUDGET - Provides an area for you to enter the dollar amount of your base budget.

BASE BUDGET INCREASE FACTOR - Stores the percent that the base budget will increase each year.

BASE PM SPLIT - Percent of the base budget that has been set aside for preventive maintenance.

BEGINNING LOCATION - Identifies the point that defines the beginning of the section. This is generally the name of a cross road or other landmark.

CONDITION - Column lists the condition levels (2-5) that require stop-gap treatments.

COST/ SQ YD - Indicates the cost per square yard of road for the suggested treatment.

CURRENT PCI - Calculated from either a visual inspection or a maintenance treatment.

DESCRIPTION - Displays a description of the item named in the previous column in a grid.

DISTRESS - Contains the type of distress present on a section of a road.

END LOCATION - Identifies the point that defines the end of the section. This is generally the name of a cross road or other landmark.

EVENT ACTIVE - Indicates whether an Event is currently part of the active history for the current Section.

EVENT PCI - The PCI after the selected Event occurred.

EVENT TRANSACTION TYPE - Includes: Creation, Inspection, Treatment, Split, Combine, Attribute Change and Core Data Change.

EVENT VALID - Indicates if an Event can be activated and made part of the valid events for the current section.

FUNDING SOURCE - Is an optional, jurisdiction defined field to identify the funding source for the section; an example might be G for general fund.

GENERAL CODE - Is an optional, jurisdiction defined field used to identify sections of pavement sharing common characteristics, i.e., drainage type.

INFLATION RATE - Is the inflation used throughout your jurisdiction. You may wish to consult your financial department with this value.

INSPECTION AREA - Is the total area of the inspection unit.

INTEREST RATE - Contains the interest rate used throughout your jurisdiction.

LIFE EXTENSION - Is the number of years that a maintenance treatment extends the life of a pavement surface.

MAINTENANCE DATE - Displays the date the maintenance was completed.

MANAGEMENT UNIT - Relates a project to a management unit.

MILEPOSTS - Display the beginning and ending points of a management section.

NEW PCI - Stores the PCI value that was calculated after a treatment was applied.

NUMBER OF SURFACE SEALS BEFORE OVERLAY - Displays the recommended number of surface seals before the application of an overlay.

OLD PCI - Displays the pavement condition index before a treatment was applied.

OTHER - Displays the weighting factor applied to management sections with functional classes other than arterial, collector, and residential.

OVERLAY - Displays the overlay code that corresponds to an overlay procedure.

OVERLAY CODE - Is an identifier for the treatment type; use one of the six codes from the pop-up list that appears when this is activated.

PCI CAP - Stores the maximum PCI value that will be included in needs and scenario calculations. If a PCI value is larger than the PCI Cap value, it will not be included.

PCI EFFECTIVENESS CUT-OFF - Contains the minimum PCI value used in calculating the area under the projected performance curve. That area is used in ranking sections needing work, and the area below the PCI Cut-Off value is not included in that area. It should generally be the lowest PCI value that defines the minimum acceptable condition for all of the pavement types and functional classification groupings.

PCI HIGH - LOW > 25 - Is marked if the difference between the high and low PCI values is greater than 25.

PCI HIGH VALUE - Is the maximum PCI value for an inspection unit used in the last PCI calculation for a management unit.

PCI LOW VALUE - Is the minimum PCI value for an inspection unit used in the last PCI calculation for a management unit.

PM% - Scenarios based on a yearly budget, this column stores the percent that has been set aside for preventive maintenance.

REPLACEMENT COST - Is the cost per square yard to install a new pavement surface.

RESIDENTIAL $ - Indicates the cost of a stop-gap treatment per square yard when applied to a road with a residential functional class and a given condition.

ROAD ID - Contains a two-character identifier that was assigned to the road. The combination of Road Number, Road Name, and Road ID must be unique for each road section.

ROAD NAME - Displays the name of the road that corresponds to the road number and road ID. The combination of Road Number, Road Name, and Road ID must be unique for each road section.

ROAD NUMBER - Contains the number that was assigned to a road. The combination of Road Number, Road Name, and Road ID must be unique for each road section.

SECTION ID - Is an identifier that is unique for each section of a given street. Note that the Street ID and the Section ID combined describe the individual section. Therefore, that combination must be unique. The same Section ID can be reused as long as it is used in conjunction with a different Street ID each time.

SEGMENT LENGTH - Is the length in feet of the management section.

SELECT MANAGEMENT SECTIONS - Allows you to calculate PCI values based on selected management sections. If this button is marked, the management sections that have had records updated since the last calculations are displayed in a grid. Select the management sections you want included in the calculations from this grid.

SPECIAL - Check box is marked if the displayed inspection unit is non-representative of a section as a whole.

SPECIAL UNIT - The information will either be Y or blank. Y is an indication that this inspection unit is in some way non-representative of the section as a whole, and would receive a different maintenance/rehabilitation treatment from the rest of the section.

STANDARD INSPECTION UNITS - Is the typical number of inspection units that would be used for a particular management section.

STOP-GAP APPLICATION INTERVAL - Indicates the number of years between the applications of stop-gap treatments.

STREET ID - Is an identifier that is unique for each street. The Street ID usually bears some similarity to the actual street name.

STREET NAME - Is the full name of the street including “Street”, “Way”, “Court” etc.

SURFACE - Describes the type of surface for a specific section of road. The options for this field are:

- **A - AC** for asphalt concrete,
- **C - AC/PCC** for asphalt concrete over Portland cement concrete,
- **O - AC/AC** for overlays of asphalt concrete over asphalt concrete,
- **P - PCC** for Portland cement concrete,
- **S - ST** for surface treatment (This Surface Type is not used very often, as it refers to roads that have neither AC or PCC, but have a surface treatment over dirt or gravel.)

TREATMENT - Contains the type of treatment the road received or will receive.

TREATMENT COST - Is an optional field giving the cost in dollars and cents of the treatment.

UNIT OF MEASURE - Displays the units of measure used to measure an item.

UNIT PRICE - Displays the price paid for an inventory item.

VISUAL PCI - Used to identify PCI calculations that have been determined based upon a visual inspection. If this check box is blank, then the PCI was extrapolated based upon the maintenance treatment that has been applied to a management section.

WEIGHTING FACTORS - Section displays the weighting factors established by your jurisdiction for the functional classes.

YEAR OF MAINTENANCE - Stores the proposed year of a treatment.

YEARS BETWEEN CRACK SEALS - Displays the number of years between the application of crack seals for the functional class with a specific severity.

YEARS BETWEEN SURFACE SEALS - Displays the recommended number of years that should come between surface seal application for the functional class with the indicated severity.

YEARS TO CALCULATE - Stores the number of years you want to include in the Budget Needs calculation. The number of years cannot be less than 5 or more than 20.

REPORT DEFINITIONS

ZONES - Geographical areas of the city defined by city staff to aid in the development of a maintenance plan for residential roads.

CL - Centerline Mile - a measuring of the length of a road regardless of the width of the road.

LM - Lane Mile - a measurement of the length of all the lanes for a given FC or area.

ACTION / TREATMENT - A proposed type of rehabilitation work that should be used on a given road segment, based on PCI, FC and engineering evaluation.

ANNUAL BUDGET - The amount of money that is available each year to be used for pavement maintenance. These funds can come from various sources and can vary from year to year, although it is generally a fixed figure.

File #: ID#22-462, **Version:** 1

All Way Stop at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza

Approve a Resolution approving the plan for an all way stop application at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **SEPTEMBER 6, 2022**

DEPARTMENT: **PUBLIC WORKS, TRANSPORTATION & TRAFFIC DIVISION**

FROM: **DAVID JACOBS, PUBLIC WORKS DIRECTOR**

BY: **ANDREW EASTERLING, TRAFFIC ENGINEER**

TITLE: **ALL WAY STOP AT THE INTERSECTION OF GARNER AVENUE AT PACIFIC AVENUE/ACOSTA PLAZA**

RECOMMENDED MOTION:

A motion to approve a Resolution approving the plan for an all way stop application at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza.

RECOMMENDATION:

It is recommended City Council approve a Resolution approving the plan for an all way stop application at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza.

EXECUTIVE SUMMARY:

Staff received a request to evaluate the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza. Staff conducted a traffic analysis and determined that there is sufficient crossing demand to warrant the installation of a marked crosswalk. Staff developed a conceptual design to improve the intersection including considerations of ADA curb ramps, bus stops, and intersection control. However, the ultimate design requires time and funding to perform a survey and develop engineering plans. An interim plan was developed to install an all way stop at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza to make incremental improvements before the ultimate design is complete. Staff recommends the approval of an all way stop application at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza.

BACKGROUND:

Staff received a request from the superintendent of the Alisal Union School District Jim Koenig to evaluate the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza for the potential of a crosswalk. Staff conducted an analysis of the intersection and determined that in accordance with the City's Crosswalk Policy (Attachment 1) a marked crosswalk could be installed. However, a new crosswalk would require additional enhancements and must be connected to ADA compliant pedestrian ramps, as required by Title II regulations.

Staff developed a conceptual design (Attachment 2) for the new crosswalk, applying the design guidelines from the City's Crosswalk Policy and considering ADA requirements. The new ramps will require the relocation of a drainage inlet, which will require surveying and engineering design. Additionally, two Monterey-Salinas Transit (MST) stops are located at the intersection and must be considered as part of the design. Staff coordinated with partners at MST and the Alisal Union School District to develop a conceptual design that worked for each stakeholder. The opinion of probable costs to construct the improvements including survey, design, curb extensions and the installation of new storm drain inlets is over $250K. The ultimate design will require additional funds that are not currently programed for these improvements. The City plans to seek grant funding in the future as part of a larger Safe Routes to School Project to finance the ultimate improvements. In the meantime, staff worked with the school district to develop a more immediate solution and recommends an all way stop plan (Attachment 3).

The City's standard for traffic control devices is the California Manual of Uniform Traffic Control Devices (CA-MUTCD). The manual establishes the criteria for which stop sign applications should be installed. The CA-MUTCD states that in order for an all way stop condition to be warranted, the intersection should either have five or more reported correctable collisions in a 12-month period or have an average of at least 300 vehicles per hour from the major approach and 200 vehicles, pedestrians and bicyclists per hour from the minor street approaches for an 8-hour period of the day. The manual also allows for reductions to these thresholds if the approach speed on the major street exceeds 40mph. Staff conducted a stop warrant analysis and concluded that neither the traffic volume nor the collision history at the intersection meet the conventional CA-MUTCD all way stop warrants (Attachment 4).

When CA-MUTCD warrants are not met, the guidelines also allow for engineering judgement to consider some additional criteria when evaluating potential all way stop applications. The need to control vehicle and pedestrian conflicts near locations that generate high pedestrian volumes may also be considered in an engineering study for multi-way stop applications. The intersection of Garner Avenue at Pacific Avenue/Acosta Plaza provides direct access to Dr. Martin Luther King Academy School and based on 108 survey responses collected during the Safe Routes to School Plan development approximately 74% of the students walk or bike to school. With that information, staff conducted a pedestrian count on February 2, 2022. The single day count found that there were 191 pedestrian crossings Garner Avenue at the intersection during the peak periods from 7:00AM-9:00AM and 4:00PM-6:00PM. The application of an all way stop at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza would control the direction of vehicle traffic that conflicts with pedestrian crossing route serving Dr. Martin Luther King Academy School and Jesse G. Sanchez Elementary School. Pedestrian crossing conditions would benefit from controlling the conflicting movement, however vehicles traveling along Garner Avenue would experience some additional delays. Because of the crossing benefits to pedestrians and the high pedestrian volumes, staff recommends the approval of an all way stop application at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza.

TRAFFIC AND TRANSPORATION COMMISION:

The all way stop at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza was presented to the Traffic and Transportation Commission at its August 11, 2022 meeting. The

Commission voted 6-0 to recommend City Council approve a Resolution approving the plan for an all way stop application at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza.

CEQA CONSIDERATION:

The City of Salinas has determined that the project is exempt from the California Environmental Quality Act (CEQA) Guidelines (Section 15301, Class 1(c)) because the actions consist of operation and minor alteration of an existing City street.

STRATEGIC PLAN INITIATIVE:

The proposed all way stop at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza improves walking conditions and safe routes to school. This action supports the Council of Public Safety and Infrastructure and Environmental Sustainability.

DEPARTMENTAL COORDINATION:

Street signs are installed and maintained by Public Works staff. Traffic enforcement is coordinated with the Police Department.

FISCAL AND SUSTAINABILITY IMPACT:

The estimated labor and material cost to install the multi-way stop at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza is estimated to be $4,000 using the existing job order contract for traffic control devices. Alternatively, the City's maintenance staff may be able to perform this work depending on their availability and it will cost much less if the City performs the work. Sufficient funding is available in the current streets maintenance budget to fund the proposed all way stop.

ATTACHMENTS:
Resolution
Attachment 1: City of Salinas Crosswalk Policy
Attachment 2: Garner Avenue and Pacific Avenue/Acosta Plaza Improvements Conceptual Design
Attachment 3: Garner Avenue and Pacific Avenue/Acosta Plaza All Way Stop Plan
Attachment 4: Garner Avenue and Pacific Avenue/Acosta Plaza Stop Warrant Analysis

RESOLUTION NO. _____ (N.C.S.)

A RESOLUTION OF THE SALINAS CITY COUNCIL APPROVING THE PLAN FOR AN ALL WAY STOP APPLICATION AT THE INTERSECTION OF GARNER AVENUE AT PACIFIC AVENUE/ACOSTA PLAZA

WHEREAS, the City received a request to evaluate the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza; and

WHEREAS, staff conducted a traffic analysis and determined that there is sufficient crossing demand to warrant the installation of a marked crosswalk; and

WHEREAS, staff developed a conceptual design to improve the intersection including considerations of ADA curb ramps, bus stops, and intersection control. However, the ultimate design requires time and funding to perform survey and develop engineering plans; and

WHEREAS, an interim plan was developed to install an all way stop application at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza is proposed to make incremental improvements before the ultimate design is complete; and

WHEREAS, staff recommends the approval of an all way stop application at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza; and

WHEREAS, on August 11, 2022, the Traffic and Transportation Commission voted unanimously (6-0) to recommend City Council approve a Resolution approving the plan for an all way stop application at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza; and

WHEREAS, the City of Salinas has determined that the implementing the parking restrictions is exempt from the California Environmental Quality Act (CEQA) Guidelines (Section 15301, Class 1). The project consists of the operation, repair, or minor alteration of public streets involving no expansion of use. There would be no significant effect on the environment.

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council hereby approve a Resolution approving the plan for an all way stop application at the intersection of Garner Avenue at Pacific Avenue/Acosta Plaza.

PASSED AND APPROVED this 6th day of September 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____
Kimbley Craig, Mayor

ATTEST:

_____
Patricia M. Barajas, City Clerk

Crosswalk Policy Guidelines

Prepared for:
City of Salinas

June 2014

SJ11_1252

FEHR PEERS

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1. INTRODUCTION

The City of Salinas initiated development of these Crosswalk Policy Guidelines to prescribe a formal and transparent process for marked crosswalk implementation. The City regularly receives requests to install marked crosswalks from residents, businesses, and institutions. However, designing a safe roadway crossing for pedestrians is a complex process; the installation of crosswalk striping alone does not necessarily constitute a safe pedestrian crossing.

The Crosswalk Policy Guidelines are aimed at improving pedestrian safety and enhancing pedestrian mobility. A comprehensive pedestrian safety strategy contains a three-pronged approach of engineering, enforcement, and education programs. This document focuses on engineering elements, such as pedestrian crossing treatments and intersection design.

This document describes the function of crosswalks and their legal context in the California Vehicle Code. It discusses the advantages and disadvantages of marked crosswalks and summarizes research in the United States focused on pedestrian safety and crosswalks. It provides a summary of best practices related to numerous pedestrian treatments, including geometric, signage and striping, and signal hardware or operational measure treatments.

The purpose of this document is to enable the City to respond to crosswalk requests in a manner that improves pedestrian accessibility and maintains public safety. It provides information to be used when making decisions about where standard crosswalks (two, parallel white stripes) can be marked; where crosswalks with special treatments, such as high-visibility crosswalks, flashing beacons and other special features, should be employed; and where crosswalks will not be marked due to safety concerns resulting from volume, speed, or sight distance issues.

This report was produced in cooperation with the City of Salinas. The suggestions presented in this report are based on local knowledge, data analysis, and discussions with the City of Salinas. These suggestions, which reflect general knowledge of best practices in pedestrian design and safety, are intended to guide City staff in making decisions for future safety improvement projects in the City, and they may not incorporate all factors that may be relevant to the pedestrian safety issues in the City. Final implementation of these guidelines will at all times involve engineering judgment.

2. BACKGROUND AND CONTEXT

The City of Salinas has several planning-level documents that provide the primary policy context for this *Crosswalk Policy*. These documents provide policy support for pedestrian-friendly land uses, built environment characteristics, and design standards in Salinas. This chapter provides a summary of the City's relevant plans and polices that address pedestrian safety, including the *General Plan* and *Pedestrian Plan*.

POLICY CONTEXT

GENERAL PLAN

The City's current *General Plan* (September 2002) includes several elements that address the pedestrian environment and safety, including the housing element, conservation/open space element, community design element, and circulation element. The *General Plan* used new urbanism principles to guide the future transportation and land use development in the City. The following goals and policies provide support for pedestrian-friendly design within Salinas:

- Community Design Element, Goal 3: Create a community that promotes a pedestrian-friendly, livable environment.
    - Policy CD-3.1: Create and preserve the distinct, identifiable neighborhoods that have traditional neighborhood development (TND) characteristics. Specifically, each neighborhood should have the following characteristics:
        - An approximately 5-minute walk from perimeter to center;
        - Housing densities should increase from perimeter to center (i.e., neighborhoods should be more densely populated at the center);
        - The neighborhood center should be the location of retail space, office space, and upper story residential above commercial and office space;
        - A civic or public space such as a plaza or park should be at the neighborhood center;
        - Small parks should be distributed throughout the neighborhood;
        - Schools should lie within the neighborhood and be easily accessible and within walking distance;
        - When not adjacent to agricultural operations, which may require a variety of buffering techniques, the neighborhood edge should be bordered by either a natural corridor or the edge of an adjacent neighborhood across a pedestrian-friendly boulevard; and

        - Front yard setbacks should decrease from the neighborhood edge to neighborhood center.
    - Policy CD-3.6: Provide and maintain a pedestrian-friendly atmosphere by encouraging "pedestrian zones" with increased landscaping, use of traffic-calming techniques on local streets, adequate separation of automobile traffic, and the inclusion of amenities such as lighted crosswalks and increased lighting along sidewalks.
    - Policy CD-3.8: Promote the use of alternative modes of transportation, including bus, rail, bicycling, and walking.
- Circulation Element, Goal C-5: Provide safe routes to school, work, shopping, and recreation for pedestrians.
    - Policy C-5.1: Increase availability of safe and well-maintained sidewalks in all areas of the City.
    - Policy C-5.2: Encourage all new bus stops and changes in existing bus stops to take pedestrian access into consideration.
    - Policy C-5.3: Ensure that all pedestrian route improvements meet with ADA standards for accessibility.
    - Policy C-5.4: Encourage parking lot designs that promote pedestrian access and safety.
    - Policy C-5.5: Improve the walking environment by providing safe and attractive sidewalks, cut-throughs, and walkways, for both recreational and commuting purposes.
- Housing
    - Policy H-1.10: Promote the development of neighborhoods, or sub-communities, designed to encourage pedestrian and mass transit by offering employment or services for the daily needs of residents, while reducing the need for autos.
- Conservation/Open Space
    - Policy COS-6.4: Support alternative modes of transportation, such as walking, biking, and public transit, and develop bike- and pedestrian-friendly neighborhoods to reduce emissions associated with automobile use.
    - Policy COS-7.12: Link activity centers, recreational opportunities, transit nodes, and other services to the integrated trails network.

PEDESTRIAN PLAN

The City of Salinas' *Pedestrian Plan* was adopted in May 2004 to support the principles and policies of the City's *General Plan*. The *Pedestrian Plan* includes goals and strategies to increase walking in the City in

support of health, transportation, quality of life/social, economic, and environmental benefits. The plan specifically outlines these goals:

1. Promote the development and design of pedestrian facilities that are convenient, safe, attractive, comfortable, interesting, and interconnected to provide continuity of travel
2. Reduce the number of pedestrian-related accidents in Salinas
3. Condition New Development to install appropriate streets, sidewalks, pedestrian access ramps, traffic calming measures, lighting, and related facilities to encourage walking
4. Develop a Traffic Calming Policy to address vehicular speeds in residential and commercial areas
5. Develop a Suggested Routes to School Program for all elementary schools in Salinas
6. Educate the general public to increase the number of overall walking trips within Salinas
7. Identify needs of walking districts or areas to increase walking trips

The *Pedestrian Plan* includes strong policy support, as well as a project list for infrastructure upgrades and ongoing programs to encourage walking in the City. Appendix A of the Plan also includes a Pedestrian Facilities Toolbox, with design guidance for some pedestrian facilities and treatments, such as sidewalks/walkways, curb ramps, crosswalks, transit stops, driveways, curb radii, and roadway lighting.

The Plan's guidance for marked crosswalks has a three-pronged approach as follows:

- Accessibility – The crosswalk be located for convenient pedestrian access, preferably at controlled intersections (signals, all-way stops, etc.).
- Design – The design, use, and installation of crosswalks shall conform to the Caltrans Traffic Manual and Federal Manual of Uniform Traffic Control Devices (MUTCD), most recent edition.1
- Safety – Crosswalk markings must be placed to include a ramp so that a wheelchair does not have to leave the crosswalk to access the ramp.

EXISTING MARKED CROSSWALK INVENTORY

An up-to-date inventory of existing pedestrian facilities is an important and efficient approach to identify gaps and deficiencies in the existing pedestrian network. The City maintains this inventory in a computer aided drafting (CAD) database, and applies it to citywide Suggested Routes to Schools maps for distribution

[1] As of April 2013, the most recent editions include the California Manual of Uniform Traffic Control Devices (2012), based on the Federal Highways Administration (FHWA) Manual of Uniform Traffic Control Devices (2009).

to local schools in the City. This section summarizes the existing marked crosswalk inventory within Salinas, current as of April 2013. **Figure 1** presents a map of the City of Salinas.

Appendix A presents a Citywide map showing existing marked crosswalks in the City, with a note if they are located at a stop-sign or traffic signal, in a school zone, or have been upgraded with other enhancements. Twenty-eight (28) enhanced crosswalks are currently marked in Salinas, generally at uncontrolled locations near schools, such as El Gablan Elementary, on Linwood Drive at Sequoia Street as shown in the photo below. These crossings are enhanced with high visibility, continental style markings with alternating white and fluorescent yellow-green blocks, which is an application unique to Salinas, and "LOOK" stencils at each corner encouraging pedestrians to look both ways before crossing.

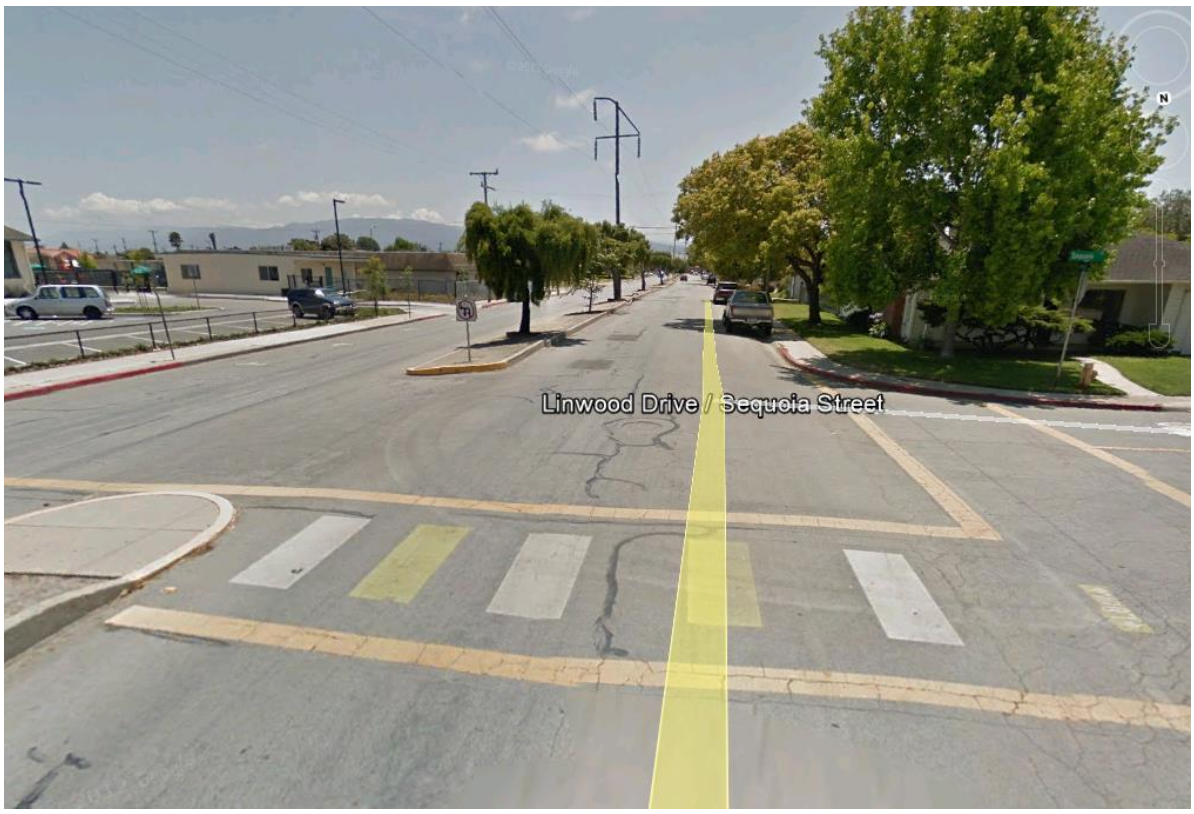


Figure 1: City of Salinas Map

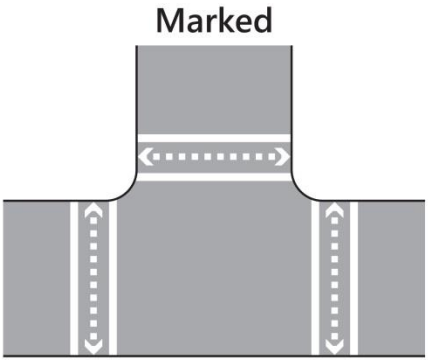
3. CROSSWALK FUNDAMENTALS

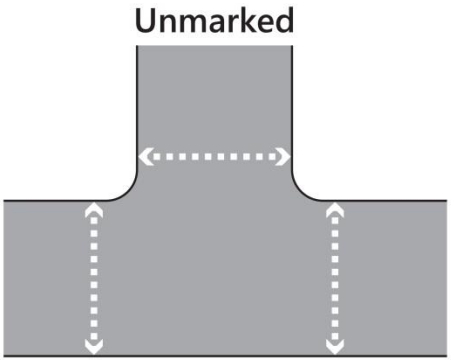
Pedestrian crossing and right-of-way laws vary state to state, and are often a source of driver or pedestrian uncertainty and confusion for when crossing is legal. This section outlines the types of crosswalks, where crossing the street is legal in California, and the steps the City should take in identifying locations for marked crosswalks.

TYPES OF CROSSWALKS

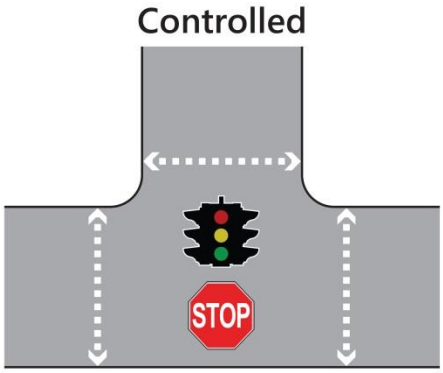
Crosswalks are primarily classified by three characteristics:

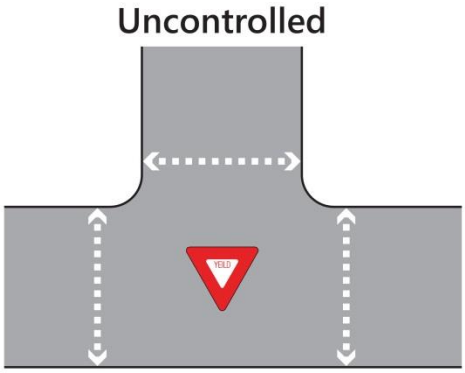
1) Whether they are marked (demarcated with striping on the street) or unmarked (no striping)



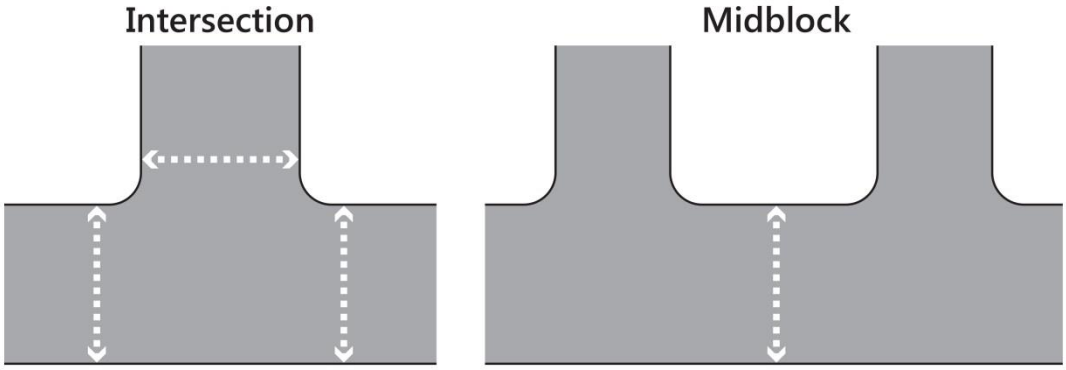


2) Whether they are controlled (by a traffic signal or stop-sign) or uncontrolled (with no intersection control)





3) Whether they are located at an intersection (where two streets meet) or mid-block (between intersections)



The following section outlines where crossing the street is legal in California. Based on pedestrian safety and crosswalk marking research, some types of crosswalks are safer than others (e.g., generally marked, controlled crosswalks at an intersection have lower risk of pedestrian collisions than a mid-block, uncontrolled crosswalk). A summary of relevant pedestrian safety research is provided in **Chapter 4**. **Chapters 4** and **5** in this document provide guidance on why, where, and how to treat crosswalks at uncontrolled and controlled locations, respectively, based on this research.

WHERE IS CROSSING THE STREET LEGAL?

In California, a legal crosswalk exists where a sidewalk meets a street, regardless of whether the crosswalk is marked (i.e., with or without striping to denote the crosswalk). Pedestrians may legally cross any street, except at unmarked locations between immediately adjacent signalized crossings, or where crossing is expressly prohibited. Marked crosswalks reinforce the location and legitimacy of a pedestrian crossing.

These legal statues are contained in the California Vehicle Code (CVC) as follows:

- Section 275 defines a legal crosswalk as:
    - That portion of a roadway included within the prolongation or connection of the boundary lines of sidewalks at intersections where the intersecting roadways meet at approximately right angles, except the prolongation of such lines from an alley across a street.
    - Any portion of a roadway distinctly indicated for pedestrian crossing by lines or other markings on the surface (such as a marked midblock crossing).
- Section 21950 describes right-of-way at a crosswalk:

  - The driver of a marked vehicle shall yield the right-of-way to a pedestrian crossing the roadway within any marked crosswalk or within any unmarked crosswalk at an intersection.
- Section 21955 describes where pedestrians may *not* cross a street:
  - Between adjacent intersections controlled by traffic control signal devices or by police officers, pedestrians shall not cross the roadway at any place except in a crosswalk.

WHY DO CITIES MARK CROSSWALKS?

Sidewalks and crosswalks are essential links within a pedestrian network. Whether commuting, running an errand, exercising, or wandering, pedestrians will need safe and convenient crossing opportunities to reach their destinations. A marked crosswalk has three (3) primary functions:

1) To create reasonable expectations where pedestrians may cross a roadway
2) To improve predictability of pedestrian actions and movement
3) To channel pedestrians to designated crossing locations (often selected for their optimal sight distance)

Advantages of Marked Crosswalks

Marked crosswalks offer the following advantages:

- They help pedestrians find their way across complex intersections
- They can designate the shortest path
- They can direct pedestrians to locations of best sight distance
- They assure pedestrians of their legal right to cross a roadway at an intersection or mid-block crossing

This last bullet point is important. The *California Vehicle Code* gives the right-of-way to pedestrians at any marked or unmarked crosswalk (as noted above), although the law is not always obeyed by road users, including both drivers and pedestrians. Drivers often fail to yield the right-of-way without the visual cue of a marked crosswalk. Pedestrians also do not always know the right-of-way law, and will either wait for a gap in traffic, or assert their right-of-way by stepping in to the roadway. Strategies for this challenge are discussed in the Education and Enforcement section of this document, **Chapter 6**.

STEPS TO IDENTIFY CANDIDATE LOCATIONS FOR MARKED CROSSWALKS

Identifying candidate locations for marked crosswalks involves two steps.

The first step is to locate the places people would like to cross the street. These locations are called *pedestrian desire lines*, which represent the most desirable, and typically most direct, places that people want to cross a street. Pedestrian desire lines are influenced by elements of the roadway network, such as transit stops, and nearby land uses (homes, schools, parks, trails, commercial centers, etc.). This information provides a basis for identifying pedestrian crossing improvement areas and prioritizing such improvements, thereby creating a convenient, connected, and continuous walking environment.

The second step in identifying candidate locations for marked crosswalks is to identify where people can cross safely. The primary consideration in this step is adequate stopping sight distance. Of all road users, pedestrians have the highest risk of injury in a collision because they are the least protected. The crosswalk safety treatment toolboxes in **Chapters 4** and **5** provide numerous options for enhancing pedestrian safety at uncontrolled and controlled crossings, respectively, with treatment selection based on the overall context of the crosswalk – including surrounding land uses, roadway characteristics, and user characteristics.

WHEN TO INSTALL MARKED CROSSWALKS

Once candidate locations are identified, an engineering evaluation should be conducted to determine if a marked crosswalk should be installed at an uncontrolled or mid-block location, and if so, what visibility enhancements should be included in the design. Crossings should be marked where all of the following occur:

- Sufficient demand exists to justify the installation of a crosswalk
- Sufficient sight distance as measured by stopping sight distance calculations exists and/or sight distance will be improved prior to crosswalk marking
- Safety considerations do not preclude a crosswalk

Figures 2 and **3** describe the overall procedures from the moment City staff receives a request for a new marked crosswalk (or considers removing an existing marked crosswalk) to the installation of the treatment. As described, the first steps to determine the appropriate location and treatment for the crosswalk include a staff field visit.

Figure 2: Marked Crosswalk Placement Flowchart

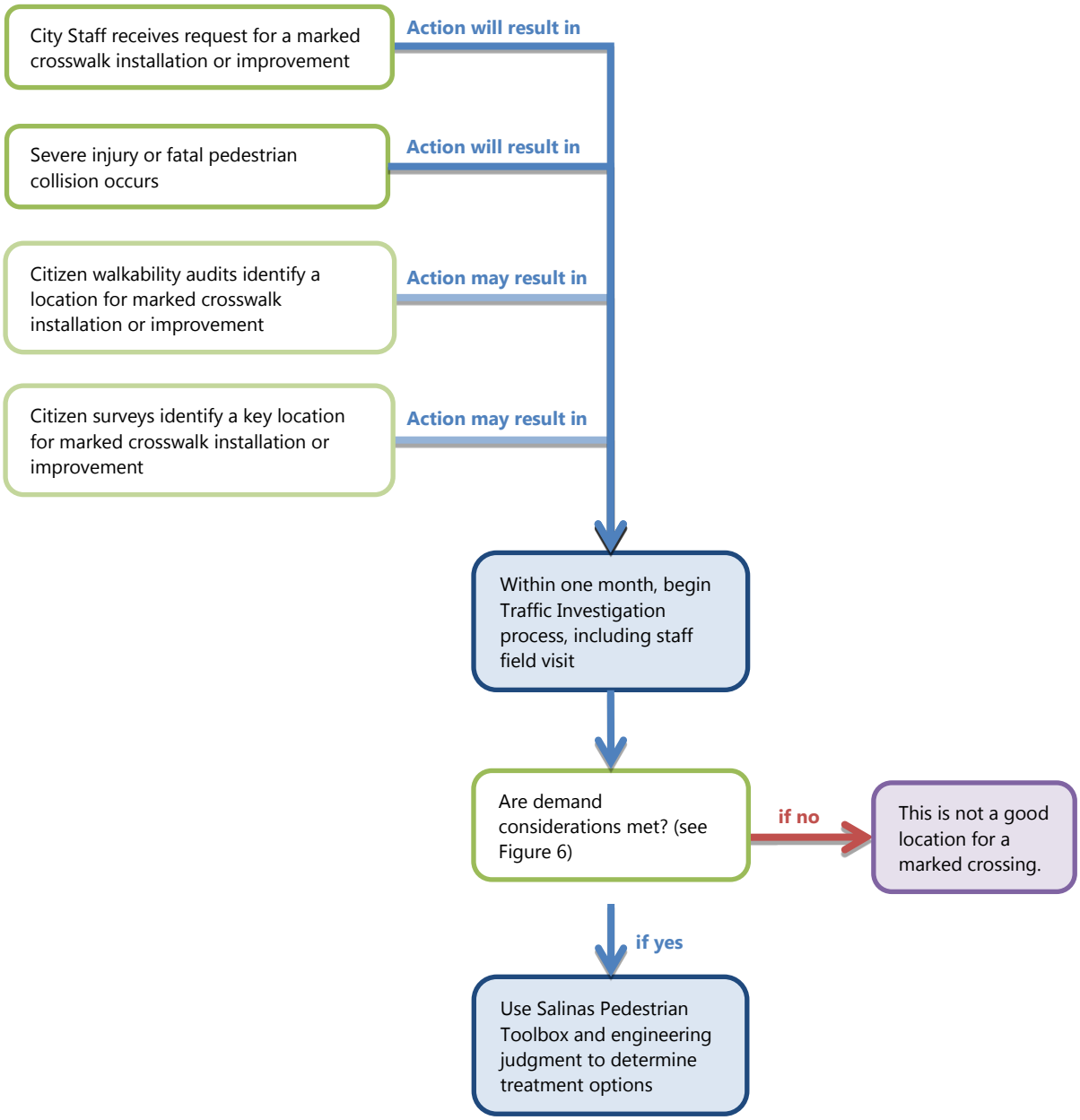
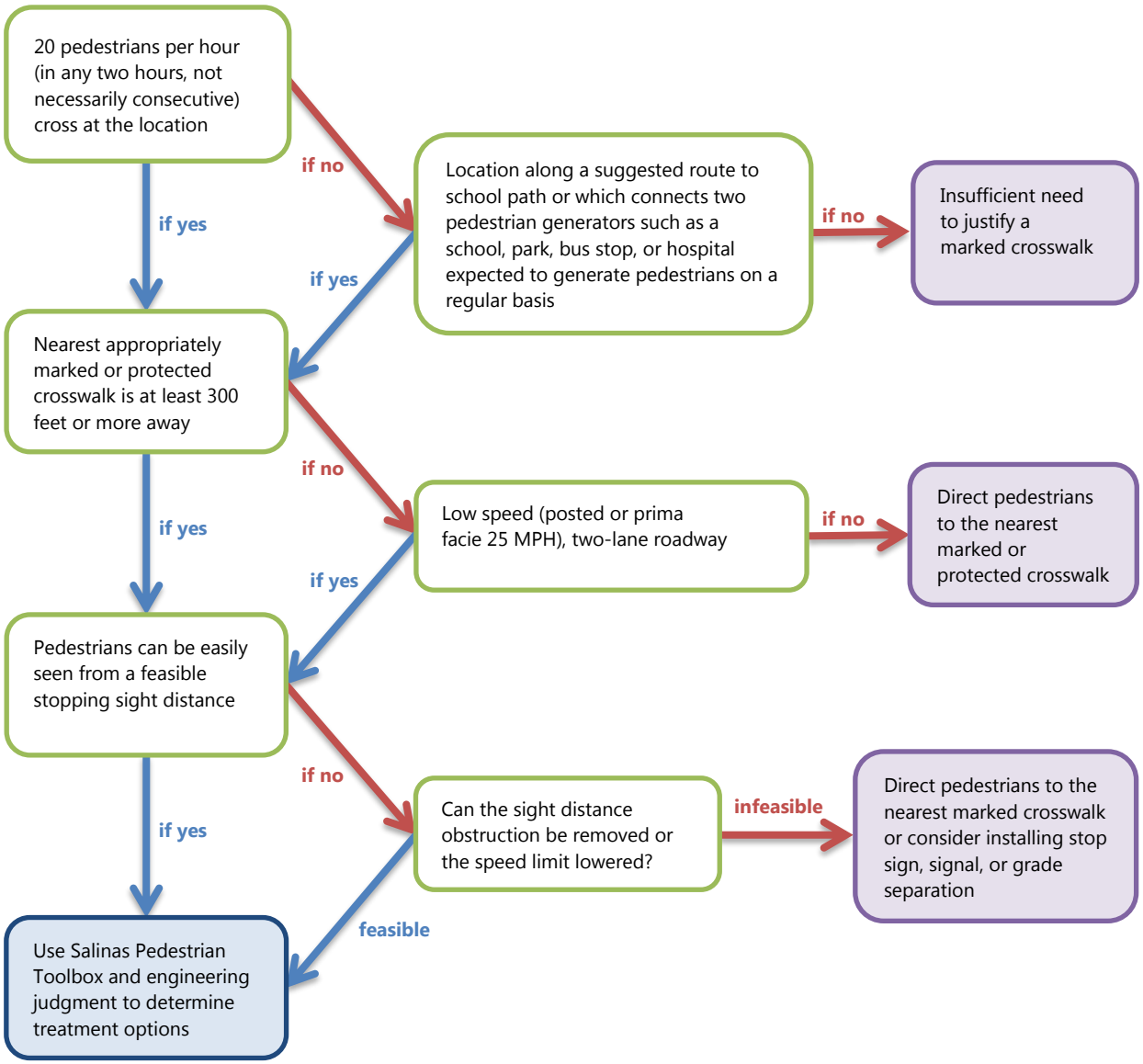


Figure 6: Feasibility Analysis for Treatments at Uncontrolled Locations



Note: Where no engineering action is recommended in Chart 2, consider applicable education and enforcement efforts.

4. UNCONTROLLED CROSSING ENHANCEMENT TOOLBOX

This section presents best practices for the installation of marked crosswalks at uncontrolled intersections and mid-block locations. Uncontrolled crossings require additional consideration during planning and design since traffic signals and stop signs are not provided to require motorists to stop – they must recognize the pedestrian and yield accordingly. Thus, providing appropriate enhancements to improve the visibility and safety of pedestrians crossing the street at an uncontrolled location is critical.

CROSSWALK SAFETY RESEARCH

Several studies of pedestrian safety at uncontrolled crossings have been completed, from which conflicting research had emerged in the past. Studies conducted in San Diego in the 1970s showed that pedestrian collision risk at marked, uncontrolled crosswalks was greater than at unmarked crossings. This led many cities to remove marked crosswalks, as they were suspected of providing a false sense of security that drivers would yield to pedestrians in the crosswalk. However, a more recent study[2] by the Federal Highway Administration (FHWA) comprehensively reviewed crossing safety at 1,000 marked and 1,000 matching unmarked crosswalks in 30 U.S. cities, controlling for site context factors. The study concluded that site factors related to pedestrian-involved collisions included pedestrian average daily traffic (ADT), vehicle ADT, number of lanes, median type, and the region of the U.S. At uncontrolled locations on two-lane roads and multi-lane roads with ADT below 12,000 vehicles, FHWA found that the presence of a marked crosswalk alone, compared with an unmarked crosswalk, made no statistically significant difference in the pedestrian crash rate. However, on multi-lane roads with an ADT of greater than 12,000 vehicles (without a raised median) and 15,000 vehicles (with a raised median) the presence of a marked

Mid-Block Crossings

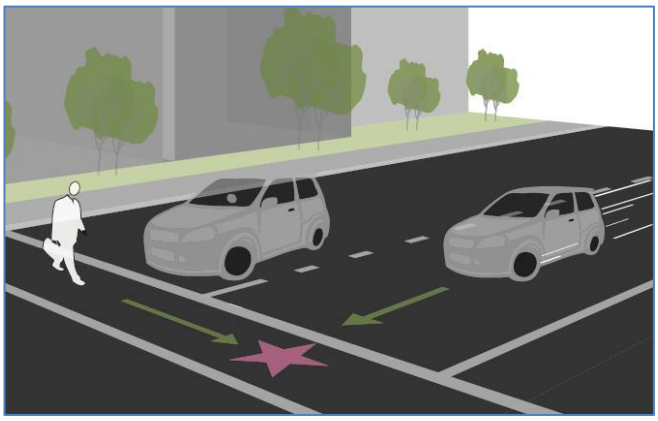
Crosswalks can be marked at intersections and mid-block points. Mid-block crossings play an important role for pedestrian access; without mid-block crossing locations, pedestrians may face the undesirable choice to detour to a controlled crossing location, detour to an intersection where crossing is legal even if not controlled, or cross illegally (if the midblock crossing is between two signalized intersections). Where signals are spaced far apart (generally more than 600-800 feet), pedestrians may have to detour several minutes to a controlled crossing location. Pedestrians are more likely to wait for a gap in traffic and cross at an unmarked location, rather than travel a distance out of their way to find a marked crosswalk. Mid-block crossings also offer an important safety consideration: fewer potential conflict points between pedestrians and motorists.

[2] Zeeger, C., J. Stewart, and H. Huang. *Safety Effects of Marked Versus Unmarked Crosswalks at Uncontrolled Locations*. Publication FHWA-RD-01-142, FHWA, U.S. Department of Transportation, 2001.

crosswalk without other improvements was associated with a statistically significant higher rate of pedestrian collisions compared to sites with an unmarked crosswalk.

The results of the study should not encourage city officials to simply remove (or fail to install) marked crosswalks. Rather, the report suggested adding crosswalk enhancements to the marked crosswalks to balance mobility needs with safety needs. These improvements include providing raised medians on multi-lane roads, installing traffic and pedestrian signals where warranted, adding curb extensions, providing adequate lighting, and designing intersections with tighter turn radii.

In the FHWA study, about 70 percent of the pedestrian crashes occurred at marked crosswalks on multi-lane roads. Of the pedestrian crashes at marked crosswalks, 17.6 percent were classified as multiple-threat collisions. Multiple-threat collisions occur as one car slows down to allow pedestrians to cross, but a second car approaching from behind in the adjacent lane may not see the pedestrian, as illustrated in the image to the right. The slowing vehicle blocks the sight line of both the pedestrian and the second motorist, leading to the pedestrian-vehicle collision. Multi-lane roadways are therefore not well-served by unmarked or marked crosswalks alone. At these sites, the study concluded, engineers should consider countermeasures that provide additional safety to pedestrians and alert motorists to upcoming crosswalks. These countermeasures include advanced yield lines with corresponding signs informing motorists where to yield. Other more substantial measures may also be considered, such as signalization, illumination, or raised medians. The summary in **Table 1** below shows when marking a crosswalk only should not be considered.



Multiple threat conflicts on multi-lane roadways occur where a vehicle yielding to a pedestrian inhibits sight lines to another oncoming vehicle.

Table 1. Recommendations for installing marked crosswalks and other needed pedestrian improvements at uncontrolled locations.*

Roadway Type (Number of Travel Lanes and Median Type)	Vehicle ADT ≤ 9,000			Vehicle ADT >9000 to 12,000			Vehicle ADT >12,000 - 15,000			Vehicle ADT > 15,000		
	Speed Limit**											
	≤ 30 mi/h	35 mi/h	40 mi/h	≤ 30 mi/h	35 mi/h	40 mi/h	≤ 30 mi/h	35 mi/h	40 mi/h	≤ 30 mi/h	35 mi/h	40 mi/h
2 Lanes	C	C	P	C	C	P	C	C	N	C	P	N
3 Lanes	C	C	P	C	P	P	P	P	N	P	N	N
Multi-Lane (4 or More Lanes) With Raised Median***	C	C	P	C	P	N	P	P	N	N	N	N
Multi-Lane (4 or More Lanes) Without Raised Median	C	P	N	P	P	N	N	N	N	N	N	N

* These guidelines include intersection and midblock locations with no traffic signals or stop signs on the approach to the crossing. They do not apply to school crossings. A two-way center turn lane is not considered a median. Crosswalks should not be installed at locations that could present an increased safety risk to pedestrians, such as where there is poor sight distance, complex or confusing designs, a substantial volume of heavy trucks, or other dangers, without first providing adequate design features and/or traffic control devices. Adding crosswalks alone **will not** make crossings safer, nor will they necessarily result in more vehicles stopping for pedestrians. Whether or not marked crosswalks are installed, it is important to consider other pedestrian facility enhancements (e.g., raised median, traffic signal, roadway narrowing, enhanced overhead lighting, traffic-calming measures, curb extensions), as needed, to improve the safety of the crossing. **These are general recommendations; good engineering judgment should be used in individual cases for deciding where to install crosswalks.**

** Where the speed limit exceeds 40 mi/h (64.4 km/h) marked crosswalks alone should not be used at unsignalized locations.

C = **Candidate sites for marked crosswalks**. Marked crosswalks must be installed carefully and selectively. Before installing new marked crosswalks, an engineering study is needed to determine whether the location is suitable for a marked crosswalk. For an engineering study, a site review may be sufficient at some locations, while a more in-depth study of pedestrian volume, vehicle speed, sight distance, vehicle mix, etc. may be needed at other sites. It is recommended that a minimum of 20 pedestrian crossings per peak hour (or 15 or more elderly and/or child pedestrians) exist at a location before placing a high priority on the installation of a marked crosswalk alone.

P = **Possible increase in pedestrian crash risk may occur if crosswalks are added without other pedestrian facility enhancements.** These locations should be closely monitored and enhanced with other pedestrian crossing improvements, if necessary, before adding a marked crosswalk.

N = **Marked crosswalks alone are insufficient, since pedestrian crash risk may be increased due to providing marked crosswalks alone. Consider using other treatments, such as traffic-calming treatments, traffic signals with pedestrian signals where warranted, or other substantial crossing improvement to improve crossing safety for pedestrians.**

*** The raised median or crossing island must be at least 4 ft (1.2 m) wide and 6 ft (1.8 m) long to adequately serve as a refuge area for pedestrians in accordance with MUTCD and American Association of State Highway and Transportation Officials (AASHTO) guidelines.

With these studies as a backdrop, the remainder of this chapter outlines a decision making process to identify appropriate treatments and presents a variety of treatment options to mitigate safety, visibility, or operational concerns at specific locations.

TREATMENT SELECTION

At uncontrolled locations, a marked crosswalk with striping only may not provide adequate visibility to the pedestrian crossing, especially at high volume, high speed, or multi-lane crossings. Enhancements should

be considered for installation to supplement crosswalk striping. Appropriate treatments should be identified based on:

- Site characteristics: presence of pedestrian desire lines, available sight distance and visibility, lighting
- Geometric configuration of the roadway: number of vehicle travel lanes and presence of curb extensions or median refuge islands
- Travel data: 85th percentile speeds, posted speed limits, and average daily traffic (ADT) volumes.

Marked crosswalks alone <u>should not</u> be installed on multi-lane streets (two or more lanes per direction; three or more lanes total) under the following conditions[3]:

- Speeds of greater than 40 miles per hour
- Average daily traffic volumes (ADT) greater than 12,000 without a raised median or pedestrian refuge island
- Average daily traffic volumes (ADT) greater than 15,000 with a raised median or pedestrian refuge island

Locations with speeds and ADT volumes below these thresholds may also warrant enhancements. The Uncontrolled Treatment Toolbox outlines considerations for the use of enhancements in various contexts as summarized in **Table 2**. This Toolbox may be used to identify potential treatments at a candidate uncontrolled crosswalk location based on the results of **Figures 2** and **3** in Chapter 3.

A calculation of Pedestrian Level of Service forms the basis for the treatment identification. Pedestrian Level of Service is the average delay experienced by pedestrians as they are waiting to cross the street. Expected motorist compliance is another other key variable for treatment identification. Compliance is based on field observations and engineering judgment. It is meant to reflect typical motorist responses to pedestrians attempting to cross the street. If drivers are likely to stop for a pedestrian, the compliance is rated "high." If drivers rarely stop for pedestrians, compliance is "low." The compliance rate should be assumed to be low for all locations where the speed limit is greater than 30 MPH. **Table 2** summarizes the appropriate treatments based on level of enhancement needed (with the most significant enhancement required with the worst LOS and compliance rates).

[3] California MUTCD, Section 3B. 18.

TABLE 2:
APPLICATION OF ENHANCED TREATMENTS FOR UNCONTROLLED LOCATIONS

	Expected Motorist Compliance		
	Low (or Speed >30 mph)	**Moderate**	**High**
LOS A-D (average delay up to 30 seconds)	***LEVEL 3*** 2 lane road: In-pavement flashers, overhead flashing beacons Multi-lane road: RRFB *Plus LEVELS 1 and 2*	***LEVEL 2*** Curb Extensions, Bus Bulb, Reduced Curb Radii, Staggered Pedestrian Refuge *Plus LEVEL 1*	***LEVEL 1*** High Visibility Crosswalk Markings, Advanced Yield Lines, Advance Signage
LOS E-F (average delay greater than 30 seconds)	***LEVEL 4*** Pedestrian Hybrid Beacon, RRFB, or Direct Pedestrians to Nearest Safe Crossing *Plus LEVELS 1 and 2*	***LEVEL 3*** 2 lane road: In-pavement flashers, overhead flashing beacons Multi-lane road: RRFB *Plus LEVELS 1 and 2*	***LEVEL 2*** Curb Extensions, Reduced Curb Radii, Staggered Pedestrian Refuge *Plus LEVEL 1*

Notes: A pedestrian refuge island (median) is recommended for consideration in all scenarios with more than 2 lanes of traffic.

Level 1 represents a minor intervention, appropriate for situations with lower speeds and traffic volumes and high driver yielding rates. Higher levels represent more significant interventions, as may be needed on higher speed or volume roadways, wider roadways, and roadways where motorists are less likely to yield to pedestrians. Treatments may be combined with higher level treatments added to lower level treatments (i.e., flashing beacons with curb extensions). Additional funding sources should be identified as needed for these enhancements. Failing to provide an enhanced crosswalk and/or removing a marked crosswalk should be an option of last resort.

Application of **Table 2** is operationalized by the **XWalk+ Tool** that accompanies this policy. The Tool is embedded in an Excel platform and was developed to guide the user through application of the methods and processes summarized in this document. It should not replace understanding of local context or application of engineering judgment, but may be used to supplement this document.

TREATMENT OPTIONS

The following tables described preferred pedestrian safety treatments for uncontrolled locations with different roadway characteristics:

- Table 3: Geometric Treatments

- Table 4: Striping and Signage
- Table 5: Signal Hardware and Operational Measures

Within each table, devices are categorized in three levels based on the level of safety concern they are meant to address: Level 1 (all cases), Level 2 (enhancements), and Level 3 (advanced enhancements). Categories of improvements are cumulative; for example, a Level 2 device should also include appropriate Level 1 devices.

TABLE 3:
UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Estimated Cost
6-1. Fewer Travel Lanes ("Road Diet") *Image Source: Fehr & Peers*	Fewer travel lanes decrease roadway width and crosswalk length, reduce speeds, reduce left-turn and rear-end collisions, and often eliminate the multiple-threat collision. It takes an average pedestrian almost four seconds to cross each additional travel lane. Therefore, reducing the number of travel lanes minimizes the amount of time that pedestrians are in the crosswalk. More travel lanes than necessary can also increase vehicle travel speeds; research has shown that the severity of pedestrian collisions increases with vehicle travel speed. Where fewer travel lanes are not possible, travel lanes can be narrowed to as little as nine feet, especially left- and right-turn pockets.	**Level 1**	$20/LF[4]

[4] Cost includes removal of existing pavement markings and repainting. Assumes existing curbs are to remain as is.

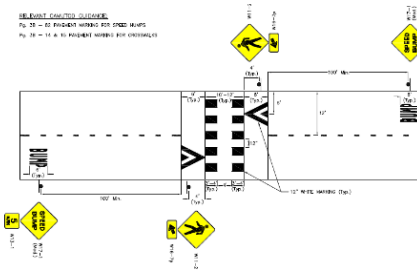
TABLE 3:
UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Estimated Cost
6-2. Removal of Sight-Distance Obstructions *Image Source: Fehr & Peers*	If objects impede sight-distance, this may result in an unsafe condition where motorists and pedestrians are unable to see each other. Items such as parked cards, signage, landscaping, fencing, and street furniture should be placed in a location that will not obstruct sight distance.	**Level 1**	$150/EA[5]
6-3. Pedestrian Refuge Island *Image Source: Fehr & Peers*	Raised islands are placed in the center of the roadway separating opposing lanes of traffic with cutouts or ramps for accessibility along the pedestrian path. Median refuge islands are recommended where right-of-way allows and conditions warrant. Studies show medians are one of the most important safety enhancements available for crosswalks. They simplify complicated multi-lane crossings by breaking the crossings/conflicts into two stages.	**Level 1**	$130/LF[6]

[5] Item removed is anticipated to be no larger than a sign and post.

[6] Cost includes new curb and concrete barrier. Assumes a 6 foot median.

TABLE 3:
UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Estimated Cost
6-4. Curb Extensions *Image Source: Fehr & Peers*	Curb extensions extend the curb and sidewalks further into the roadway, shortening the length of the crosswalk. They act as a traffic calming device by narrowing the effective width of the roadway and slowing turning speeds. Because they extend into the roadway, often past parallel-parked vehicles, they improve visibility for pedestrians. The also provide space for street furniture, landscaping, bicycle parking, and signs and signal poles. Curb extensions can be constructed with reduced curb radii and to accommodate ADA improvements, such as directional curb ramps.	**Level 1**	$140/LF[7]
6-5. Split Pedestrian Crossover (SPXO) *Image Source: Fehr & Peers*	This measure is similar to traditional median refuge islands; the difference is that the crosswalks in the roadway are staggered such that a pedestrian crosses half of the street and then walks toward traffic to reach the second half of the crosswalk. This measure must be designed for accessibility by including rails and truncated domes to direct sight-impaired pedestrians along the path of travel.	**Level 1** Note: see Table 11 for a Pedestrian Signal	$130/LF[8]
6-6. Raised Crosswalk  *Image Source: Fehr & Peers*	Raised crosswalks are speed tables (flat-topped speed humps) outfitted with crosswalk markings and signage, providing pedestrians with a level street crossing. By raising the level of the crossing, vehicles drive more slowly through the crosswalk and pedestrians are more visible to approaching motorists.	**Level 2**	$4,000/EA

[7] Cost includes removal of existing curb, new curb, new sidewalk, and new bollards. Cost does not include curb ramps.

[8] Same materials as 6-3

TABLE 3:
UNCONTROLLED CROSSINGS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Estimated Cost
6-7. Pedestrian Overpass/Underpass *Image Source: Fehr & Peers*	This measure consists of a pedestrian or pedestrian/bicycle overpass or underpass of a roadway. It provides complete separation from motor vehicle traffic, normally where no other pedestrian facility is available, and connects off-road trails and paths across major barriers. Overpasses and underpasses should be used as a measure of last resort because of their cost and barriers to their effective/efficient use, with topographical and desire line considerations influencing their design. Personal security concerns must also be addressed in the design of these facilities.	**Level 3**	$150/SF

Source: Fehr & Peers, 2013.

TABLE 4:
UNCONTROLLED CROSSINGS: STRIPING AND SIGNAGE

Treatment	Description	Level	Estimated Cost
7-1. High Visibility Markings *Image Source: Fehr & Peers*	All uncontrolled marked crosswalks should feature high-visibility markings. Various striping patterns are available. The City of Salinas has recently installed white and fluorescent yellow green continental style markings. Triple four striping, as shown in the photo to the left, is recommended for use in future installations.	**Level 1**	$6/Ft

TABLE 4:
UNCONTROLLED CROSSINGS: STRIPING AND SIGNAGE

Treatment	Description	Level	Estimated Cost
7-2. Advanced Yield Line *Image Source: Fehr & Peers*	Advanced yield lines, often referred to as "sharks teeth", should be striped at all marked, uncontrolled crosswalks on multi-lane roadways. They should be placed 20-30 feet in front of the crosswalk. Their intention is to identify where vehicles should stop when yielding to a pedestrian to maintain adequate sight lines.	**Level 1**	$100/EA
7-3. Advanced Warning Signs *Image Source: Fehr & Peers*	High-visibility yellow or fluorescent-yellow-green (FYG) signs are posted at crossings to increase the visibility of a pedestrian crossing.	**Level 1**	$1,000/EA
7-4. In-Street Pedestrian Crossing Sign *Image Source: FHWA*	This measure involves posting regulatory pedestrian signage on lane edge lines and/or road centerlines. The in-street pedestrian crossing sign may be used to remind road users of laws regarding right-of-way at an uncontrolled pedestrian crossing. They can be installed on medians and may also be temporary signs, placed by school crossing guards during school hours.	**Level 1**	$400/EA

Source: Fehr & Peers, 2013.

TABLE 5:
UNCONTROLLED CROSSINGS: BEACON, LIGHTING, AND SIGNAL TREATMENTS

Treatment	Description	Level	Estimated Cost
8-1. Pedestrian-Scale Lighting *Image source: www.ci.mil.wi.us*	Pedestrian-scale lighting improves visibility along a pedestrian's path and across driveways. It also improves visibility at pedestrian/vehicle conflict points in crosswalks.	**Level 1**	$10,000/EA[9]
8-2. Flashing Beacon *Image Source: Fehr & Peers*	Flashing amber lights are installed on overhead or post-mounted signs, in advance of the crosswalk or at the crosswalk's entrance. Full-time flashing beacons are not recommended; flashing beacons are most effective when they are activated by the crosswalk user (they should rest on dark). By resting on dark, they can also be solar powered.	**Level 2**	$50,000/EA

[9] Cost assumes light every 100 feet

TABLE 5:
UNCONTROLLED CROSSINGS: BEACON, LIGHTING, AND SIGNAL TREATMENTS

Treatment	Description	Level	Estimated Cost
8-3. Rectangular Rapid Flashing Beacon (RRFB) *Image Source: Fehr & Peers*	The RRFB is an enhancement of the flashing beacon that replaced the traditional slow flashing incandescent lamps with rapid flashing LED lamps. The RRFB may be push-button activated or activated with passive detection. This treatment was approved for use in California via Interim Approval IA-11-83 in 2011. Any installations should be reported to Caltrans for documentation, but do not require pre-approval for experimentation.	**Level 2** 40mph or less	$25,000/EA
8-4. Pedestrian Hybrid Beacon (PHB) *Image Source: FHWA*	The PHB is a pedestrian-activated beacon that is a combination of a beacon flasher and a traffic control signal. When actuated, the PHB displays a yellow (warning) indication followed by a solid red indication. During the pedestrian clearance interval, the driver sees a flashing red "wig-wag" pattern until the clearance interval has ended and the beacon goes dark. The device is included in the 2012 California MUTCD for use at midblock locations.[10]	**Level 3**	$50,000/EA
8-5. Pedestrian Signal *Image Source: Fehr & Peers*	A pedestrian signal is a conventional traffic control device with warrants for use based on the MUTCD. The pedestrian warrants were revised with the 2009 Federal and 2012 California MUTCD.	**Level 4**	$100,000/EA

Source: Fehr & Peers, 2013.

[10] Use of the device at side-street stop control locations currently requires separate permission from the CTCDC (though this is under review).

5. CONTROLLED CROSSWALK TREATMENT TOOLBOX

Controlled crosswalks are located at stop-controlled or signalized intersections. Generally, these crossings do not need enhancements beyond standard crosswalk markings (two parallel lines), as the traffic signal or stop-sign controls allocation of right-of-way. However, in some cases, such as in the Downtown, at skewed intersections, or near schools, the City may consider providing enhanced crossings to create a sense of place or improved aesthetics, or to improve visibility. This chapter presents preferred and enhanced measures for pedestrian treatments at controlled locations to:

- Improve the visibility of pedestrians to motorists and vice-versa
- Communicate to motorists and pedestrians who has the right-of-way
- Accommodate vulnerable populations such as the disabled, children, and the elderly
- Reduce conflicts between pedestrians and vehicles
- Reduce vehicular speeds at locations with potential pedestrian conflicts

All treatments identified in this chapter are required or allowed by the standards and specifications in the *California Manual on Uniform Traffic Control Devices* (CA MUTCD).

PREFERRED CROSSING TREATMENTS

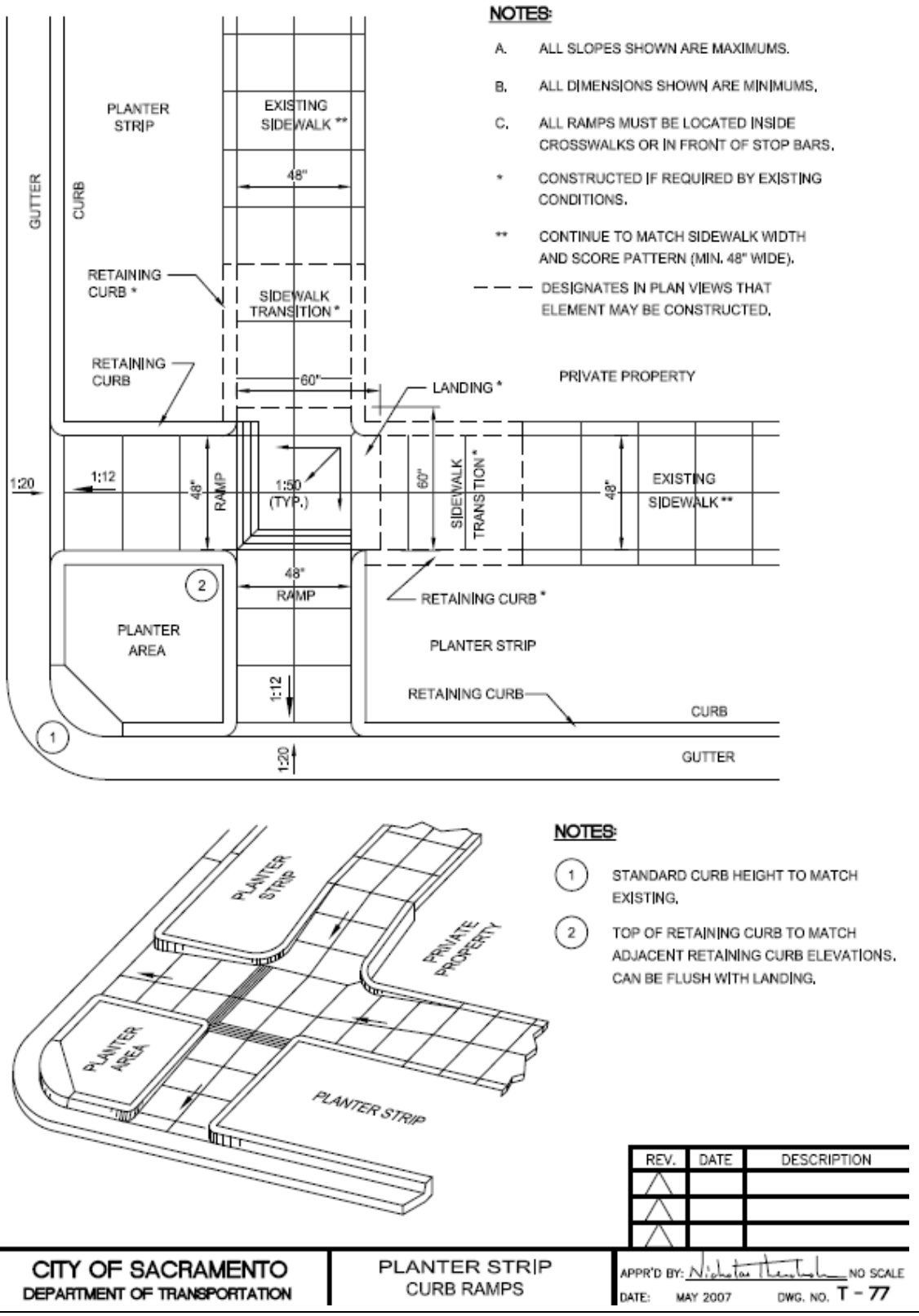
Preferred crossing treatments are identified as the basic pedestrian crossing improvements to be provided at all stop-controlled and signalized intersections. New controlled intersections should be designed with these treatments included; existing controlled intersections that require retrofits may be prioritized and upgraded as City funds become available. These treatments are based on recommended best practices in pedestrian safety:[11]

- Mark crosswalks on all legs of the intersection that serve a key desire line
- Provide advanced stop bars in advance of each crosswalk
- Minimize the number of vehicle traffic lanes pedestrians must cross
- Provide median refuge islands and thumbnails, as width and path of turn maneuvers allow
- Remove sight-distance obstructions
- Provide directional curb ramps for each crosswalk (e.g., two per corner) The Standard Drawings for the City of Sacramento include best practices for directional curb ramp design (see drawing T-

[11] See America Walks *Signalized Intersection Enhancements that Benefit Pedestrians* http://americawalks.org/wp-content/upload/America-Walks-Signalized-Intersection-Enhancement-Report-Updated-8.16.2012.pdf (2012).

77 in Transportation document at: http://portal.cityofsacramento.org/Utilities/Resources/Specs-and-Drawings)

- Eliminate free right-turn slip lanes, where feasible, and mitigate for pedestrian safety where they remain
- Locate bus stops on the far-side of the intersection (or in front of mid-block crossings)
- Minimize cycle lengths
- Reduce prevalence or eliminate permitted signal phasing where pedestrian crossings exist
- Provide pedestrian signal heads for all crossings at signalized intersections
- Provide adequate pedestrian clearance intervals (crossing time) at signalized intersections



Source: Standard drawings for the City of Sacramento Department of Transportation, 2007 (http://portal.cityofsacramento.org/Utilities/Resources/Specs-and-Drawings)

ENHANCED CROSSING TREATMENTS

At high volume pedestrian crossing locations or other areas designated by the City as pedestrian zones, the City may provide additional crosswalk enhancements at controlled intersections. These treatments provide improve drivers' awareness of pedestrians by slowing traffic through geometric changes, providing signal timing or phasing modifications, or enhancing striping or signing to improve visibility.

The following tables describe the preferred and optional enhanced pedestrian safety treatments that may be used at the City's discretion for controlled locations:

- Table 6: Geometric Treatments
- Table 7: Striping and Signage
- Table 8: Signal Hardware and Operational Measures

TABLE 6:
CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Cost
9-1. Fewer Travel Lanes ("Road Diet") *Image Source: Fehr & Peers*	Fewer travel lanes decrease roadway width and crosswalk length, reduce speeds, reduce left-turn and rear-end collisions, and often eliminate the multiple-threat collision. An average pedestrian takes almost four seconds to cross each additional travel lane. Therefore, reducing the number of travel lanes minimizes the amount of time that pedestrians are in the crosswalk. More travel lanes than necessary can also increase vehicle travel speeds; research has shown that the severity of pedestrian collisions increases with vehicle travel speed. Where fewer travel lanes are not possible, travel lanes can be narrowed to as little as nine feet, especially left- and right-turn pockets.	Preferred	$20/LF[12]
9-2. Pedestrian Refuge Island with "Thumbnail" *Image Source: Fehr & Peers*	Median pedestrian islands provide a refuge for pedestrians to stand if they do not have sufficient time to cross a street. They can be enhanced with median pedestrian push buttons at signalized crossings. Median islands can be installed throughout a corridor or only at specific crosswalks.	Preferred	$130/LF[13]

[12] Cost includes removal of existing pavement markings and repainting. Assumes existing curbs are to remain as is.

[13] Cost assumes 6 foot median and includes new curb and concrete barrier.

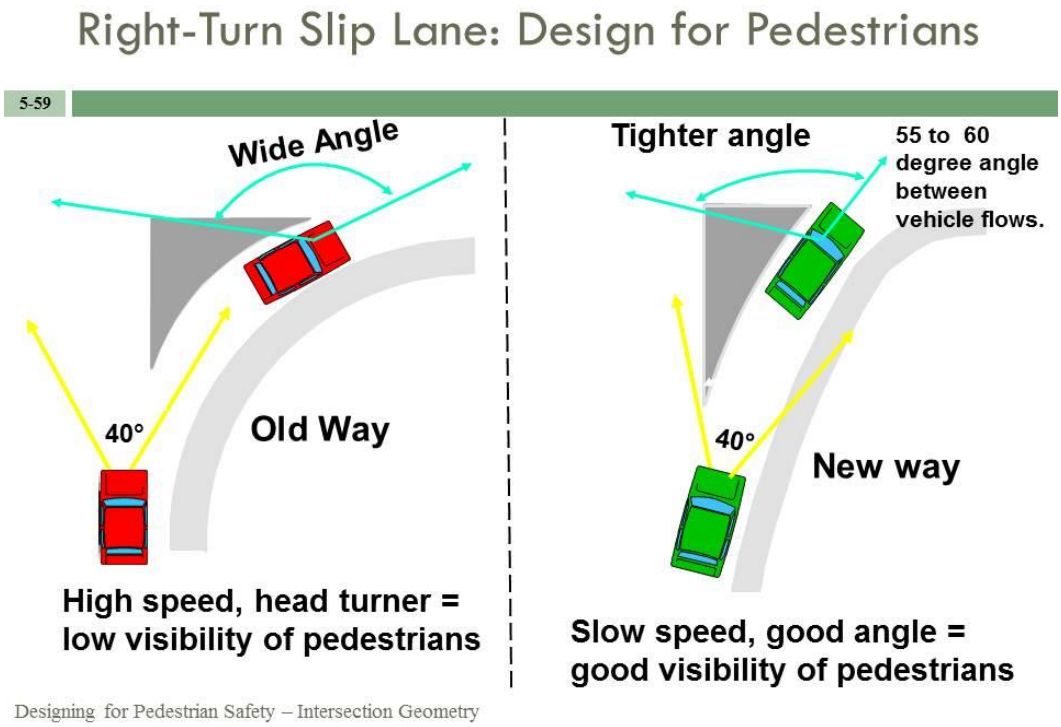
TABLE 6:
CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Cost
9-3. Removal of Sight-Distance Obstructions *Image Source: Fehr & Peers*	If objects impede sight-distance, an unsafe condition may arise where motorists and pedestrians are unable to see each other. Items such as parked cards, signage, landscaping, fencing, and street furniture should be placed in a location that will not obstruct sight-distance.	Preferred	$150/EA[14]
9-4. Directional Curb Ramps with Truncated Domes *Image Source: Fehr & Peers*	Curb ramps offer wheelchair access to/from the sidewalk and crosswalk. Truncated domes, or tactile strips, warn blind pedestrians that they are about to enter a crosswalk. The best practice for curb ramps is to install two per corner so that each ramp points directly into the crosswalk and to the curb ramp at the other side of the street. Corner bulbouts can be used to increase the amount of space available for directional curb ramps.	Preferred	$4,000/ea

[14] Item removed is anticipated to be no larger than a sign and post

TABLE 6:
CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Cost
9-5. Right-Turn Lane Design *Image Source: Fehr & Peers*	Free right-turns allow vehicles to turn right at high speeds. Since the vehicles are not typically controlled by the traffic signal in this circumstance, crosswalks across the turn lanes are usually uncontrolled crosswalks. Controlled right-turn movements are preferable for pedestrians because they require a vehicle to stop on red before turning right. Where "pork-chop" islands that channelize right-turns are necessary to provide acceptable turning radii, raised crosswalks are a pedestrian enhancement. Other options include signalizing the crossing (especially if it is multi-lane) and designing the "pork-chop" for slower speeds and better visibility of pedestrians.	Preferred	$25,000/EA[15]



Source: FHWA

[15] Cost to remove assuming no electrical costs

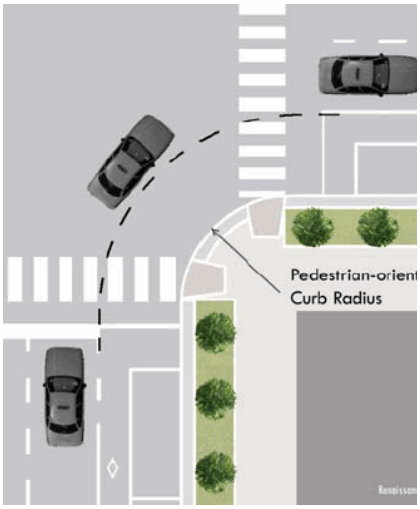
TABLE 6:
CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Cost
9-6. Far-Side Bus Stops *Image Source: Fehr & Peers*	Far-side bus stops allow pedestrians to cross behind the bus, improving pedestrian visibility. Far side bus stops also enhance transit operations by providing a guaranteed merging opportunity for buses. Exceptions for far-side bus stops include considerations for bus routing, sufficient sidewalk area, and conflicts with parking, land uses, or driveways.	Preferred	$1,000/EA[16]
9-7. Curb Extensions *Image Source: Fehr & Peers*	Curb extensions extend the curb and sidewalks farther into the roadway, shortening the length of the crosswalk. They act as a traffic calming device by narrowing the effective width of the roadway and slowing turning speeds. Because they extend into the roadway, often past parallel-parked vehicles, they improve visibility for pedestrians. The also provide space for street furniture, landscaping, bicycle parking, and signs and signal poles. Curb extensions can be constructed to accommodate ADA improvements, such as directional curb ramps.	Enhanced	$140/LF[17]

[16] Cost assumes no sidewalk or paving work

[17] Cost includes removal of existing curb, new bollards, curb, and sidewalk. Cost does not include curb ramps.

TABLE 6:
CONTROLLED INTERSECTIONS: GEOMETRIC TREATMENTS

Treatment	Description	Level	Cost
9-8. Reduced Turn Radius  *Image Source: AARP*	Vehicles travel faster through turns with a large radius. Reducing the radius of a corner is an effective way of reducing vehicle speeds. In suburban environments, turn radii generally do not need to exceed 30 feet. In urban environments turn radii can be 10 feet or less, especially where the meeting of one-way streets prohibits turning movements. Where on-street parking is permitted and/or bicycle lanes are present on one or both streets, consideration for further reductions of radii should occur acknowledging that the effective radius is increased with on-street parking. Corner curb radii on multi-lane streets should acknowledge that trucks turning right can turn into two lanes.	Enhanced	$175/LF[18]

Source: Fehr & Peers, 2013

[18] Cost includes removal of existing curb, new bollards, curb, and sidewalk. Cost does not include curb ramps.

TABLE 7:
CONTROLLED INTERSECTIONS: STRIPING AND SIGNAGE

Treatment	Description	Level	Cost
10-1. Marked Crosswalks *Image Source: Google Maps*	Marking a crosswalk across all approaches of an intersection improves pedestrian accessibility. At a four-way intersection, a closed crosswalk forces pedestrians to cross via three crosswalks instead of one. Crosswalks on all approaches can often be accommodated without a significant impact to traffic signal operations.	Preferred	$15/LF[19]
10-2. Advanced Stop Bar *Image Source: Fehr & Peers*	Advanced stop bars are placed five to seven feet in front of crosswalks. They keep vehicles from encroaching into the crosswalk when stopped at a red signal or stop sign.	Preferred	$7.50/LF

[19] Cost includes both lines of crossing.

TABLE 7:
CONTROLLED INTERSECTIONS: STRIPING AND SIGNAGE

Treatment	Description	Level	Cost
10-3. High Visibility Markings *Image Source: Fehr & Peers*	High-visibility crosswalks at controlled locations are appropriate in areas with high pedestrian volumes, at crosswalks with skewed geometries, or near sensitive land uses (such as schools).	Enhanced	$6/Ft
10-4. Textured Pavement or Colored Crosswalks *Image Source: Fehr & Peers*	Textured pavement can be used in crosswalks or in intersections as an aesthetic enhancement. Because of its texture, it may also calm traffic by slowing vehicles before they cross an intersection. It can also make crosswalks more visible. Textured pavement can be made of brick or, alternatively, both concrete and asphalt can be stamped to look like brick or stone. At controlled locations, standard crosswalk striping should be provided in addition to the textured pavement. A smooth, non-slip surface is preferable.	Enhanced	$15/SF

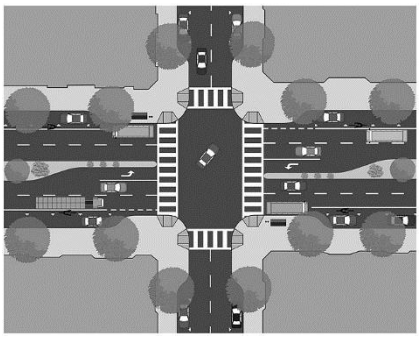
Source: Fehr & Peers, 2013

TABLE 8:
CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES

Treatment	Description	Level	Cost
11-1. Adequate Crossing Times *Image Source: Fehr & Peers*	The 2012 California MUTCD requires a walking speed of 3.5 feet per second be assumed to determine crossing times as a default minimum (4.0 feet per second was previously the guidance). A speed slower than 3.5 feet per second can be used where slower pedestrians routinely use the crosswalk, such as locations near schools, hospitals, or senior centers.	Preferred	N/A[20]
11-2. Pedestrian Countdown Signal *Image Source: Fehr & Peers*	Pedestrian countdown signals give pedestrians "Walk" and "Don't Walk" signals with a second-by-second countdown for each phase. Research suggests that pedestrians are more likely to obey the "Don't Walk" signal when delivered using a countdown signal. The device has been shown to enhance safety for all road users. The 2012 California MUTCD requires that all new pedestrian signals be countdown signals.	Preferred	$500/EA

[20] No construction costs associated with measure. Only preparation and implementation costs

TABLE 8:
CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES

Treatment	Description	Level	Cost
11-3. Pedestrian Signals and Push Buttons *Image Source: Fehr & Peers*	Mounting push buttons for different crosswalks on one pole can be confusing for blind pedestrians. Push buttons should be separated by ten feet and placed within five feet of each curb ramp, one per crosswalk. At long crosswalks (≥60 feet) with a median refuge island, push buttons can be placed in the median for pedestrians who may not be able to cross the entire crosswalk in one cycle length. In areas with high pedestrian volumes, eliminating pedestrian push buttons and providing a pedestrian phase in every cycle, can enhance walkability (and signal compliance).	Preferred	$1,000/EA[21]
11-4. Short Cycle Lengths  *Image Source: Institute of Transportation Engineers*	Long cycle lengths at signalized intersections result in long pedestrian wait times to cross a street. By shortening an intersection's cycle length, pedestrians do not have to wait as long to cross after pushing the button to request a "Walk" signal.	Preferred	N/A[22]

[21] Cost includes pole

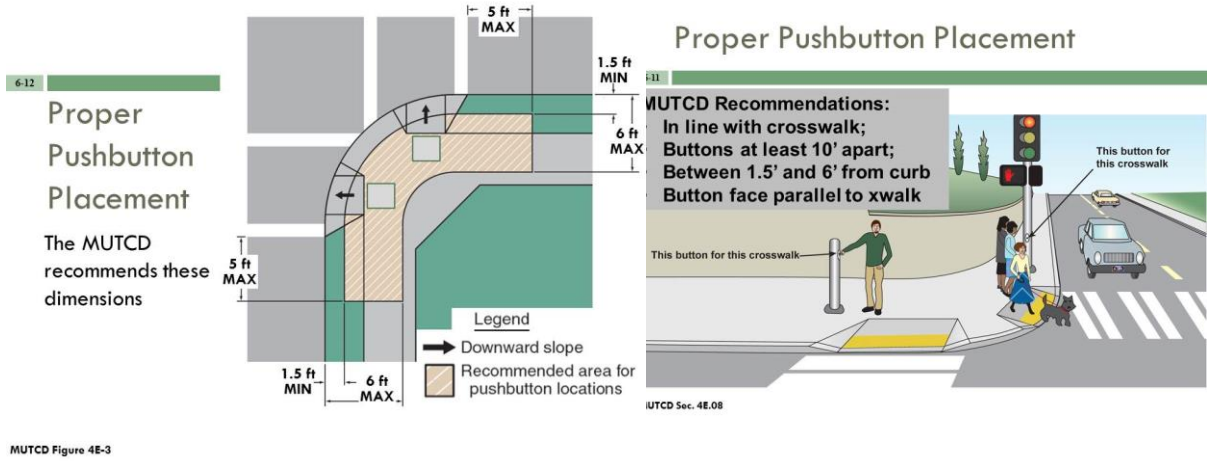
[22] No construction costs associated with measure. Only preparation and implementation costs

TABLE 8:
CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES

Treatment	Description	Level	Cost
11-5. Protected Left-Turns *Image Source: Fehr & Peers*	Where permitted left-turns are allowed, denoted by a "Left Turn Yield on Green" sign, left-turning vehicles can conflict with pedestrians in the crosswalk. By making the left-turn protected, so that it is allowed only with a green arrow, the "Walk" signal at a crosswalk occurs at the same time that through- and right-turning vehicles in the same direction receive a green light. This reduces the risk of left-turning vehicle conflicts with the opposing crosswalk; since left-turns typically occur at a higher speed than right-turns, collisions of increased severity can be avoided by protecting left-turns.	Preferred	$20,000-50,000/EA[23]
11-6. Accessible Pedestrian Signals *Image Source: Fehr & Peers*	Accessible pedestrian signals (APS) and detectors provide information, such as "Walk" indications and direction of crossing, in non-visual formats to improve accessibility for blind pedestrians. Audible options for accessible pedestrian signals include audible tones and speech messages. Vibrotactile push-buttons are effective options that alleviate the impacts of noise created by audible pedestrian signals. They are also accessible to deaf pedestrians. APS should always be provided when two push buttons are located on one pole and where persons with disabilities are expected frequently at a crossing. At other locations, APS is currently a best practice, but is expected to become a requirement when the proposed rulemaking of the *Public Rights of Way Accessibility Guidelines* (PROWAG) is finalized.	Enhanced	$2,500/EA

[23] Assumes left turn lane is existing, so no roadway work is necessary. Only signal work.

TABLE 8:
CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES

Treatment	Description	Level	Cost
 Source: FHWA			
11-7. Pedestrian Recall *Image Source: Fehr & Peers*	Pedestrian recall gives pedestrians a "Walk" signal at every cycle. No push-button or detection is necessary since a "Walk" signal will always be given. Pedestrian recalls are useful in areas with high levels of pedestrian activity. They demonstrate that an intersection is meant to serve both vehicles and pedestrians. In general, pedestrian recall should be used if pedestrians actuate a "Walk" signal 75 percent of the time during three or more hours per day. Recall can be used 24-hours a day or during peak hours for pedestrians (in which case push buttons should continue to be provided).	Enhanced	N/A[24]

[24] No construction costs associated with measure. Only preparation and implementation costs

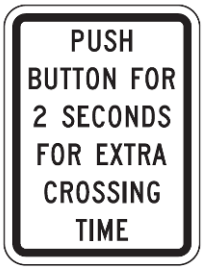
TABLE 8:
CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES

Treatment	Description	Level	Cost
11-8. No Right Turn on Red *Image Source: FHWA*	When attempting to turn right on red, motorists must look left to see if the road is clear; motorists often do not look right before turning and may not see pedestrians to their right. Restricting right turns on red can reduce conflicts between vehicles and pedestrians. "Blank out" turn restriction signs (see 11-9 below) are more effective than conventional "No Right Turn on Red" signs. "No Right Turn on Red" signs that specify time-of-day restrictions or "When Pedestrians are Present" are confusing to motorists and are often disregarded.	Enhanced	$1,500/EA[25]
11-9. Blank-Out Turn Restriction LED Sign *Image Source: Fehr & Peers*	The ubiquity of conventional turn restriction signs, usually for no right turn on red, contributes to their disregard by motorists. Blank out turn restriction signs activate only when the specified movement is prohibited. The LED sign is also very visible.	Enhanced	$2,000[26]

[25] Cost includes 2 signs: one on mast arm and other on pole nearby

[26] Cost includes installation

TABLE 8:
CONTROLLED INTERSECTIONS: SIGNAL HARDWARE AND OPERATIONAL MEASURES

Treatment	Description	Level	Cost
11-10. Animated Eyes *Image Source: Fehr & Peers*	Animated eyes pedestrian signals feature eyes that move from side to side when a "Walk" signal is given. The signals remind pedestrians to look for turning vehicles before proceeding into the crosswalk. Research has indicated that animated eyes pedestrian signals reduce conflicts between vehicles and pedestrians. Source: http://www.cers-safety.com/pedestriansignals.pdf	Enhanced	$2,000[27]
11-11. Leading Pedestrian Interval (LPI) *Image Source: Fehr & Peers*	A leading pedestrian interval (LPI) advances the "Walk" signal for a few seconds while through-vehicles continue to receive a red indication. By allowing pedestrians to get a head start into the crosswalk, it can reduce conflicts between pedestrians and turning vehicles. The 2012 California MUTCD recommends that LPIs be at least three seconds in duration. Right-turn on red restrictions may be needed with LPIs are installed in locations with lower pedestrian volumes.	Enhanced	No construction costs only preparation and implementation costs
11-12. Push Button for Extended Crossing Time  *Image Source: FHWA*	Some pedestrians may need extra time to safely cross a street. Traffic signals can be retrofitted to provide pedestrians with increased crossing time by extending the duration of a pushbutton press.	Enhanced	$1,000/EA[28]

Source: Fehr & Peers, 2013.

[27] Cost includes installation

[28] Cost includes pole

6. CREATIVE CROSSWALK GUIDELINES

Creative crosswalks are a means to promote vibrant place making which can improve active pedestrian lifestyles in downtown districts and neighborhoods. If designed properly, creative crosswalks can also increase the attention of motorists and improve safety where pedestrians cross the street. These guidelines are intended to guide City staff to determine if a creative crosswalk is appropriate at a particular location and to provide guidance in regards to artwork placement, color, composition, and material.

These guidelines were developed to address where and under what conditions creative crosswalk treatments could be installed. When a specific location is being considered for a creative crosswalk- due to public request, a new development, or staff recommendation- this chapter serves as a guide to consistently and transparently determine the appropriate application. This chapter contains a background of relevant state and federal regulations and feedback of the creative crosswalk best practices. The best practices were chosen to cover common guidance principals, sighting, project styles and applied design requirements which were used to develop this Creative Crosswalk policy.

Creative Crosswalks Definition

Creative crosswalks are decorative paving treatments which include: colored and/or textured concrete, asphalt or pavers, Street Print, Duratherm, or other similar treatments. Creative crosswalks are a means to facilitate vibrant place making and to promote improved pedestrian facilities in downtown districts and neighborhoods. If designed correctly, creative crosswalks can also increase the attention of motorists in order to improve traffic calming where pedestrians will be crossing the street. Many cities have begun installing creative crosswalks, but because there are no specific standards established, each city has been creating their own guidelines and process for installation.

Creative crosswalk treatments should not be considered a safety or traffic control measure and are not a substitute for, and should not detract from, transverse, triple four or continental crosswalk markings. Furthermore, creative crosswalk treatments are not a substitute for continental crosswalk or triple four markings.

Creative crosswalks consistency with The CA-MUTCD

One concern with creative crosswalks is whether they are compliant with the state and national traffic control standards as provided in the California Manual on Uniform Traffic Control Devices (CA-MUTCD). The CA-MUTCD states in Section 3.G.01, paragraph 6:

- Crosswalks should not be marked at intersections unless they are intended to channelize pedestrians.
- Crosswalk markings should be located so that the curb ramps are within the extension of the crosswalk markings.
- Crosswalk markings provide guidance for pedestrians who are crossing roadway segments by defining and delineating paths on approaches to and within signalized intersections and on approaches to other intersections where traffic stops.
- Crosswalk lines should not be used indiscriminately.
- Colored pavement located between crosswalk lines should not use colors or patterns that degrade the contrast of white crosswalk lines or that might be mistaken by road users as a traffic control application.

These guidelines suggest that crosswalks must have white lines and the space in between those lines should not be filled with a distracting color or pattern.

FHWA Interpretation Letter 3(09)-24(I) – Application of Colored Pavement Treatment in Crosswalks was written by the Federal Highway Administration in response to multiple requests from municipal traffic departments across the country requesting an official interpretation of the MUTCD regarding proposed colored crosswalk designs. The FHWA letter states:

> *The FHWA's position has always been, and continues to be that subdued-colored aesthetic treatments between the legally marked transverse crosswalk lines are permissible provided that they are devoid of retroreflective properties and that they do not diminish the effectiveness of the legally required white transverse pavement markings used to establish the crosswalk. Examples of acceptable treatments include brick lattice patterns, paving bricks, paving stones, setts, cobbles, or other resources designed to simulate such paving. Acceptable colors for these materials would be red, rust, brown, burgundy, clay, tan or similar earth tone equivalents. All elements of pattern and color for these treatments are to be uniform, consistent, repetitive, and expected so as not to be a source of distraction. No element of the aesthetic interior treatment is to be random or unsystematic. No element of the aesthetic interior treatment can implement pictographs, symbols, multiple color arrangements, etc., or can otherwise attempt to communicate with any roadway user.*
>
> *Patterns or colors that degrade the contrast of the white transverse pavement markings establishing the crosswalk are to be avoided. Attempts to intensify this contrast by increasing or thickening the width of the transverse pavement markings have been observed in the field. These attempts to increase contrast are perceived to be efforts to circumvent the contrast prerequisite*

so that an intentional noncompliant alternative of an aesthetic interior pattern or color can be used. Further techniques to install an empty buffer space between an aesthetic treatment and the interior edge of the white transverse crosswalk markings have also been observed in the field. This strategy is also perceived to be an attempt to circumvent FHWA's prior position on contrast. However, an empty buffer space between a subdued-colored, uniform-patterned aesthetic treatment can be implemented to enhance contrast between the aesthetic treatment and the white transverse pavement markings. When used properly, buffer spaces can be an effective tool to disseminate a necessary contrast in order to visually enhance an otherwise difficult to discern white transverse crosswalk marking, provided that the aesthetic treatment conforms to the conditions in the preceding paragraph.

In order to recognize the safety reasons for the MUTCD statement and the FHWA Interpretation Letter, but to not completely exclude creative crosswalks, it is recommended that only white paint be used for the transverse crosswalk lines. The application of white paint is recommended so that the transverse crosswalk markings remain clearly visible. Due to the narrow spacing between stripes of continental crosswalks and triple four crosswalks, it is recommended to avoid creative crosswalk treatments at all continental crosswalks and triple four crosswalks.

GUIDELINES FOR THE IMPLEMENTATION OF CREATIVE CROSSWALKS

This section presents the guidelines for the design and implementation of creative crosswalks in the City of Salinas. These guidelines are based in part on the requirements of the CA-MUTCD as documented above and on the research and case studies referenced at the end of this memo. These guidelines document the desired practice and are subject to the engineering judgement of the City Traffic Engineer.

Location Requirements:

- Must be at a location where traffic is required to stop because of a stop sign or traffic signal.
- Approved on local or collector streets where speeds do not exceed 35 mph. Arterial streets will be considered at the discretion of the City Traffic Engineer.
- If the intersection pavement is in poor condition, materials will not bond; pavement must be in satisfactory condition in order to receive approval.
- The approval of the creative crosswalk will be at the discretion of the City Traffic Engineer

Design Guidelines:

- Creative crosswalk treatments may be installed (1) within the transverse line crosswalks or (2) within the central portion of the intersection as indicated on **Exhibit 1**.

- Crosswalks shall contain two white transverse lines with reflectivity to be compliant with minimum crosswalk standards. All creative crosswalk treatments must be contained within the two transverse (horizontal) lines or within the interior portion of the intersection and should not overlap with or distract from visibility of the transverse crosswalk lines.
- Transverse crosswalk lines shall be limited to white paint only, with the exception of school zones which require yellow transverse crosswalk lines.
- Creative crosswalk treatments located within the central portion of the intersection can be varied in color but bold yellow, red, blue, and green paint should be avoided as these colors may detract from visibility of the transverse or continental crosswalk markings.
- All creative crosswalk treatments must contrast with the visibility of the crosswalk markings and must be devoid of reflective properties.
- Painting between the solid white vertical lines in a continental crosswalk is not allowed per federal guidelines. If installing at a location where a continental or triple four crosswalk already exists; striping must first be removed and converted to a transverse crosswalk.
- No logos, text, or advertising shall be utilized in the creative crosswalk design.
- The creative crosswalk treatments shall not contain octagons, triangles, other shapes, text, or logos that could be confused with a standard traffic control devices or legends.

Materials / Paint Type:

- A street-grade paint must be used and provide a non-slip surface for pedestrians, bicyclists, or those who use wheelchairs and other assistive mobility devices.
- All artwork must utilize a non-reflective paint.
- Materials must be reviewed and approved by the City Traffic Engineer

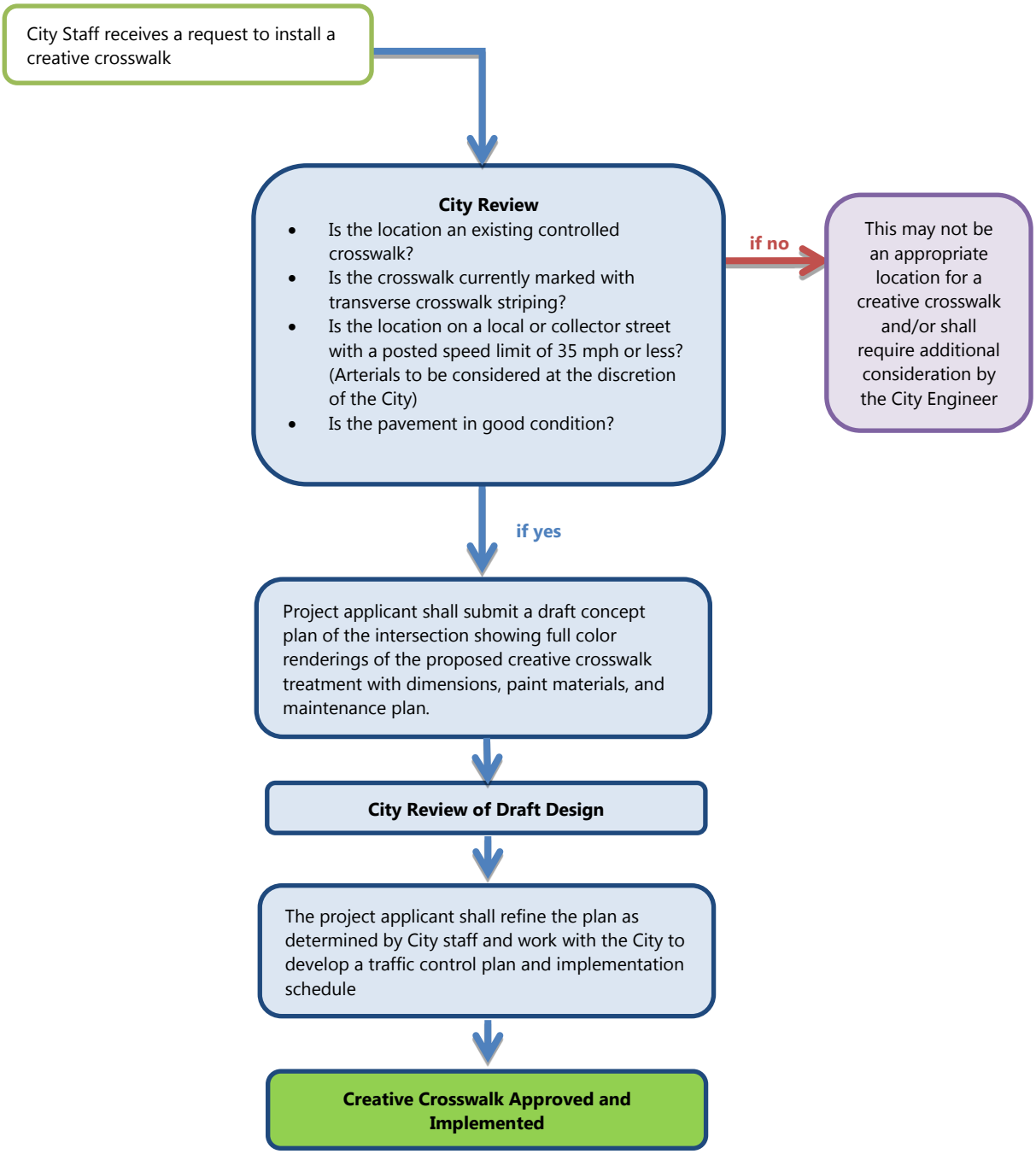
Maintenance and Implementation:

- Depending on materials used and the location, creative crosswalks typically last from three to six months when using street grade paint or three to five years when using thermo-plastic paint.
- The City of Salinas will maintain crosswalk markings and other traffic control devices but assumes no responsibility for maintaining the artwork portions of the creative crosswalks.

- A maintenance plan that details the continued maintenance of the creative crosswalk markings including periodic paint touch-ups and/or removal if the crosswalks are temporary a temporary. Touch up of the creative crosswalks markings should occur at least every six months.
- A traffic control plan and street occupancy permit must be obtained prior to implementation and each time the creative crosswalk requires maintenance.

Figure 1 describes the overall procedures from the moment City staff receives a request for a new creative crosswalk to the installation of the treatment. As described, the first steps to determine the appropriate location and treatment for the creative crosswalk shall be evaluated according to the creative crosswalk guidelines provided above.

INSERT EXHIBIT 1 HERE


City Staff receives a request to install a creative crosswalk
City Review
Is the location an existing controlled crosswalk?
Is the crosswalk currently marked with transverse crosswalk striping?
Is the location on a local or collector street with a posted speed limit of 35 mph or less? (Arterials to be considered at the discretion of the City)
Is the pavement in good condition?
if no
This may not be an appropriate location for a creative crosswalk and/or shall require additional consideration by the City Engineer
if yes
Project applicant shall submit a draft concept plan of the intersection showing full color renderings of the proposed creative crosswalk treatment with dimensions, paint materials, and maintenance plan.
City Review of Draft Design
The project applicant shall refine the plan as determined by City staff and work with the City to develop a traffic control plan and implementation schedule
Creative Crosswalk Approved and Implemented

7. EDUCATION, ENFORCEMENT, AND ENCOURAGEMENT PROGRAMS

The prior chapters in this policy describe engineering treatments to improve pedestrian safety and enhance walkability. Engineering, however, is only one aspect of a comprehensive pedestrian safety strategy. Education, enforcement, and encouragement, are also crucial, as outlined in the City's *Pedestrian Master Plan*. This section presents best practices for education, encouragement, and enforcement components of pedestrian safety programs that may be considered to supplement the *Crosswalk Policy Guidelines*.

EDUCATION

The following is a list of pedestrian safety practices for educating pedestrians and motorists about safe and lawful behavior:

- Website – provide informational materials relating to pedestrian safety
- Videos – post information such as public service announcements to the City's website
- Community outreach events – provide opportunities for pedestrian education such as Mayor's night out events
- Pamphlets – make informational materials available through the City
- Student group involvement – promote pedestrian safety by involving and educating student groups
- Street/Bus Stop/School Banners – place advertisements in high activity pedestrian areas
- Yard Signs – communicate roadway conditions to motorists and pedestrians
- Strategic partnerships – partner with groups such as American Association of Retired Persons (AARP) to promote pedestrian safety
- Local media campaigns – involve local media in pedestrian safety campaigns
- Classroom curricula – collaborate with local school districts to develop pedestrian safety curricula for schools
- Structured skills practice – develop a program that trains pedestrians in safe behavior
- Games, coloring books, etc. – develop or provide fun and educational materials for children

ENFORCEMENT

The following is a list of pedestrian safety practices for enforcing pedestrian and vehicular right-of-way laws:

- Officer training courses – provides law enforcement with full understanding of pedestrian laws and safety practices
- Traffic complaint hotline – provides a method for citizens to alert the City when a public facility is of concern, such as inoperable traffic signal
- Community enforcement – provides a mechanism for community members to help enforce traffic laws, such as a radar gun checkout program
- Adult school crossing guards – provides a trained adult to help pedestrians cross the street
- Pedestrian decoys – target enforcement activities with a staged pedestrian or motorist, targeting motorists or pedestrians who do not comply with traffic laws
- Partnership with media, stakeholders, and City departments – involve various stakeholders in pedestrian education campaigns and efforts

ENCOURAGEMENT

The following is a list of pedestrian safety practices that encourage pedestrians and motorists to engage in safe and lawful behavior:

- Wayfinding – install signage directing pedestrians to designated routes and destinations
- Walking school buses/Walking Wednesdays –organize activities by schools and/or parents that have students walk to school in groups on selected days
- Community walking audits – lead or support community members on walk around an area noting positive practices and areas for improvement
- Silver sneaker awards – distribute awards encouraging physical activity among seniors
- Incentives/contests – reward those who walk or demonstrate safe walking habits
- Peer-to-peer education – develop program to educate pedestrians through interaction with peers trained in pedestrian safety

APPENDIX A:
CITYWIDE CROSSWALK INVENTORY

APPENDIX B:
PEDESTRIAN LEVEL OF SERVICE CALCULATIONS

The pedestrian delay calculations included in the Crosswalk Tool rely on the methodology recommended in NCRHP Report 562 (http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_562.pdf). A full discussion of this methodology is found in Appendix A of the NCHRP report. The key equations in the tool include:

TABLE 9:
PEDESTRIAN LOS CALCULATIONS

Road Characteristics	Description
Speed on the major street (mph)	Use the major road posted or statutory speed limit for the facilities or, if available, the 85th percentile speed.
Pedestrian **crossing distance** (ft)	Pedestrian crossing distance represents the distance that a pedestrian would need to cross before reaching either the far curb or a median refuge island. The distance would be between the near and far curbs if a painted or raised median refuge island is not present, or to the median refuge island if the island is present. Note if a parking stall is present, its width should be included in the crossing distance measurement. Crossing distance rather than number of lanes was selected for the procedure so that the extra time needed by a pedestrian to cross bike lanes, two-way left-turn lanes, wide lanes, etc. could be considered.
Counts	**Description**
Peak-hour **pedestrian volume** crossing major roadway (ped/h)	Pedestrian volume is the number of pedestrians crossing the major roadway in a peak hour. The count includes all pedestrian crossings of the major roadway at the location.
Major road peak hour **vehicle volume** (veh/h)	Vehicle volume represents the number of vehicles and bicycles on both approaches of the major road during a peak hour. If a painted or raised median refuge island is present of sufficient size to store pedestrians (minimum of 6 ft [1.8 m] wide), then consider the volume on each approach individually. In the signal warrant calculations, use the volume on both approaches (Vmaj-s). For the delay calculations, the volume (Vmaj-d) would reflect either both approaches if a refuge island is not present or each approach individually if a refuge island is present.
Local Parameters	**Description**
Motorist **compliance** for region (high or low)	Compliance reflects the typical behavior of motorists for the site. If motorists tend to stop for a pedestrian attempting to cross at an uncontrolled location, then compliance is "high." If motorists rarely stop for a crossing pedestrian, then compliance is "low."
Pedestrian **walking speed** (ft/s)	Walking speed represents the speed of the crossing pedestrians. Recent research has suggested walking speeds of 3.5 ft/s (1.1 m/s) for the general population and 3.0 ft/s (0.9 m/s) for the older population. If calculating for a site, determine the 15th percentile value of those using the crossing.
Pedestrian **start-up** time and end clearance time (s)	Start-up time is used in the calculation of the critical gap. A value of 3 s is suggested in the Highway Capacity Manual.

TABLE 9:
PEDESTRIAN LOS CALCULATIONS

Calculations	Description
Signal warrant check (ped/hr)	Regression equations were determined for the plots shown in the 2012 CA MUTCD Figures 4C-7 and 4C-8. These equations can calculate the minimum number of pedestrians crossing the major road needed to meet the signal warrant based on the major road volume. The recommendation made in 2006 to the National Committee on Uniform Traffic Control Devices is that the vehicles signal warrants values for crossing two lanes be used as the pedestrian signal warrant values. Both the peak vehicle hour and the peak pedestrian hour may need to be checked.
HAWK warrant check	Regression equations were determined for the plots shown in the 2012 CA MUTCD Figures 4F-1 and 4F-2. These equations can calculate the minimum number of pedestrians crossing the major road needed to meet the HAWK signal warrant based on the major road volume.
Critical gap (s), tc	Critical gap is the time in seconds below which a pedestrian will not attempt to begin crossing the street. For a single pedestrian, critical gap (tc) can be computed using Equation 18-17 of the 2000 Highway Capacity Manual. The equation includes consideration of the pedestrian walking speed (Sp), crossing distance (L), and start-up and end clearance times (ts). tc = (L/Sp) + ts
Major road flow rate (veh/s), v	Flow rate is a measure of the number of vehicles per second (v). For high-speed conditions, the number of vehicles is adjusted by dividing by 0.7. Flow rate is determined by: Low speed: v = Vmaj-p/3600 high speed: v = (Vmaj-p/0.7)/3600 It is based on the major road volume (Vmaj-d), which is the total of both approaches (or the approach being crossed if median refuge island is present) during the peak hour (veh/h).
Average pedestrian delay (s/person), dp	The 2000 Highway Capacity Manual includes Equation 18-21 that can be used to determine the average delay per pedestrian at an unsignalized intersection crossing (s/person). dp = (1/v)*(EXP(v*tc)-(v*tc-1)). It depends upon critical gap (tc), the vehicular flow rate of the crossing (v), and the mean vehicle headway.
Total pedestrian delay (ped-h)	Total pedestrian delay (Dp) uses the average pedestrian delay (dp) and multiplies that value by the number of pedestrians (Vp) to determine the total pedestrian delay for the approach. Dp = (dp × Vp)/3,600

Source: NCHRP Report 562, http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_562.pdf

APPENDIX C:
PEDESTRIAN COLLISION ANALYSIS

PEDESTRIAN COLLISION ANALYSIS

Vehicle-pedestrian collision data is one source of information to identify pedestrian safety "hotspots". Collision data was obtained from the California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) for the City of Salinas between January 2005 and December 2010, the five (5) most recent years of available data at the time this report was authored.

The locations of pedestrian collisions were mapped to illustrate the pedestrian-vehicle collisions throughout Salinas. A total of 363 vehicle-pedestrian collisions occurred in Salinas between 2005 and 2010. **Figure 4** shows the number and location of collisions at intersections throughout Salinas from 2005-2010. **Table 10** lists the locations with the highest number of vehicle-pedestrian collisions Citywide. As shown, the intersection of N. Sanborn Road and Garner Avenue has the most frequent pedestrian collisions, with 14 occurring between 2005 and 2010.[29]

TABLE 10:
TOP PEDESTRIAN-VEHICLE COLLISION LOCATIONS, SALINAS, 2005-2010

Intersection	Number of Collisions	Intersection	Number of Collisions
N. Sanborn Road and Garner Avenue	14	Lincoln Avenue and Central Avenue	4
Salinas Street and W. Alisal Street	7	Geil Street and S. Main Street	4
N. Main Street and E. Laurel Drive	6	N. Main Street and Lamar Street	4
Williams Road and Bardin Road	5	Alisal Street and Wood Street	4
Harden Parkway and N. Main Street	5	E. Alisal Street and N. Madeira Avenue	4
E. Alisal Street and Sanborn Street	5	E. Market Street and Carr Avenue	4
E. Bernal Drive and N. Main Street	4	N. Sanborn Road and Freedom Parkway	4

Source: SWITRS, 2005-2010.Fehr & Peers, 2013.
Notes: This list is based on number of collisions and does not adjust for vehicle or pedestrian volumes (exposure). Collisions occurring 25 feet or closer to an intersection were assigned to the nearest intersection.

[29] The City recently received a Highway Safety Improvement Program (HSIP) grant to provide intersection safety improvements along the Sanborn Road Corridor that includes pedestrian benefits. (countdown signals/eliminates permitted left turns).

Figure 4: Salinas Pedestrian-Vehicle Collisions, 2005-2010

Figure 5 shows the higher severity pedestrian-vehicle collisions, including those with pedestrian injuries and fatalities, and **Table 11** lists the locations with the highest number of fatalities and injuries. Similar to Table 1, N. Sanborn Road and Garner Avenue has the highest frequency of pedestrian-vehicle collisions, with 14 injuries and two fatalities occurring between 2005 and 2010.

TABLE 11:
TOP PEDESTRIAN-VEHICLE COLLISIONS LOCATIONS, INJURY OR FATALITY, 2005-2010

Intersection	Number of Injuries (Fatalities)	Intersection	Number of Injuries (Fatalities)
N. Sanborn Road and Garner Avenue	14 (2)	E. Alisal Street and N. Pearl Street	4 (0)
N. Main Street and E. Laurel Drive	7 (0)	Freedom Parkway and N. Sanborn Road	4 (0)
Salinas Street and W. Alisal Street	7 (0)	E. Laurel Drive and Towt Street	4 (0)
E. Alisal Street and N. Sanborn Road	6 (0)	W. Alisal Street and Lincoln Avenue	4 (0)
Williams Road and Bardin Road	6 (0)	S. Main Street and Geil Street	4 (0)
Harden Parkway and N. Main Street	5 (0)	N. Main Street and Lamar Street	4 (0)
Alisal Street and Wood Street	4 (0)	N. Main Street and Bernal Drive	4 (1)
E. Alisal Street and N. Madeira Avenue	4 (0)	E. Alvin Drive and McKinnon Street	4 (0)

Source: SWITRS, 2005-2010.Fehr & Peers, 2013.
Notes: This list is based on number of collisions and does not adjust for vehicle or pedestrian volumes (exposure). Collisions occurring 25 feet or closer to an intersection were assigned to the nearest intersection.

Figure 5: Salinas Pedestrian-Vehicle Collisions Resulting in Injuries and/or Fatalities, 2005-2010

Primary Collision Factor

Table 12 lists the most common primary collisions factors (PCFs) for pedestrian-vehicle collisions in Salinas. The top three PCFs were pedestrian right-of-way violation (wherein the motorist is at fault), pedestrian violation (wherein the pedestrian is at fault), and unsafe speed (wherein the vehicle's speed is the primary cause of the collision). In total, motorists are at fault for over 50 percent of pedestrian collisions. Pedestrian violations account for approximately one-third of collision factors.

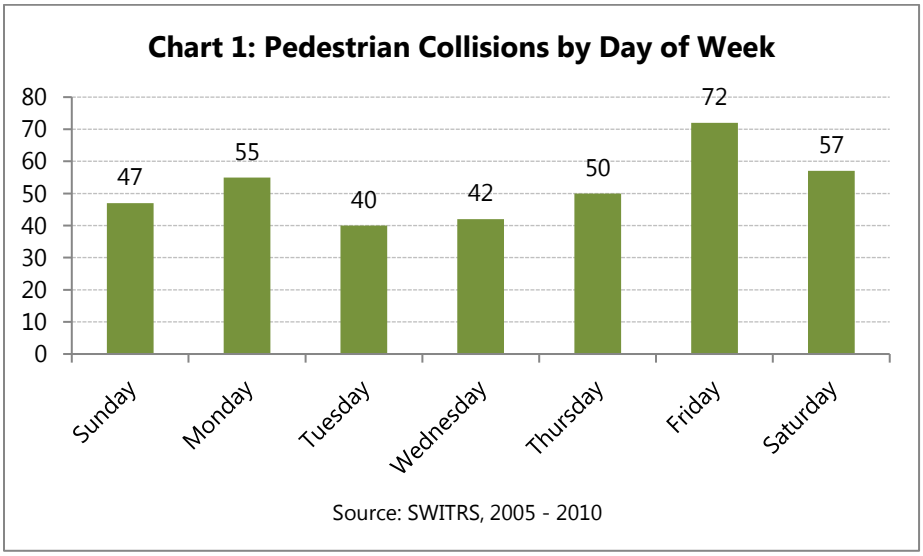
TABLE 12:
PRIMARY COLLISION FACTORS (PCFS) FOR PEDESTRIAN-VEHICLE COLLISIONS IN SALINAS, 2005-2010

Primary Collision Factor	% of Total
Pedestrian Right-of-Way	36.4%
Pedestrian Violation	34.4%
Not Stated	5.2%
Unsafe Speed	4.4%
Unsafe Starting or Backing	3.0%
Traffic Signals and Signs	2.8%
Unknown	2.8%
Improper Turning	2.5%
Driving or Bicycling Under the Influence of Alcohol or Drug	2.2%
Automobile Right-of-Way	1.7%
Improper Passing	1.1%
Other Improper Driving	1.1%
Wrong Side of Road	0.8%
Other Hazardous Violation	0.8%
Unsafe Lane Change	0.6%

Source: SWITRS 2005-2010, Fehr & Peers, 2013

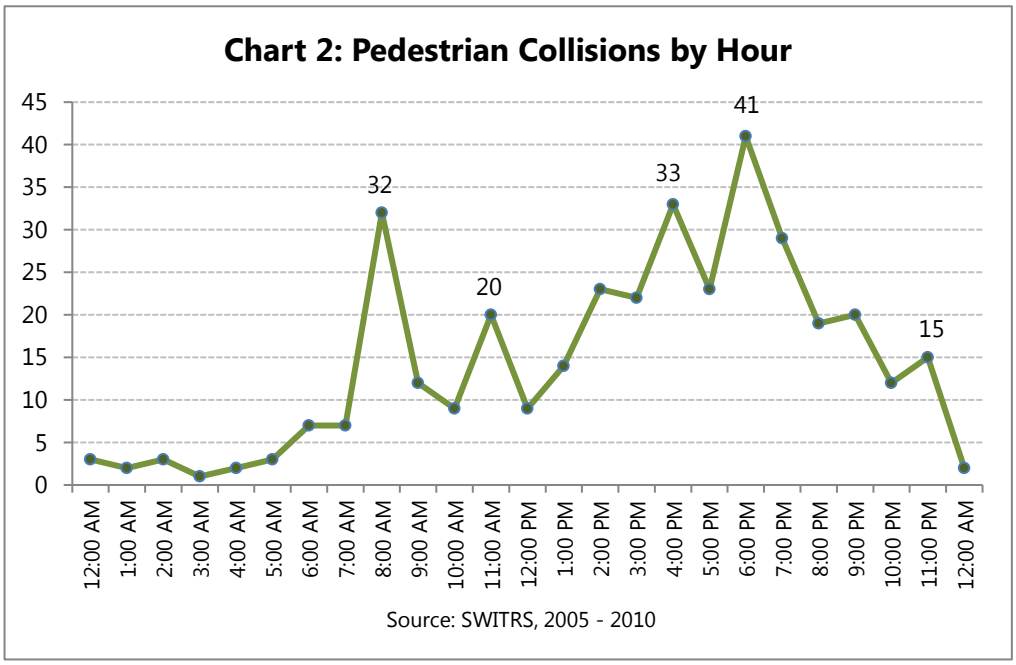
Day of the Week

The following statistics and charts show the number of pedestrian collisions that occur by day of the week and hour of the day. Between 2005 and 2010, collisions occurred most frequently on Fridays and Saturdays, with 72 and 57 collisions, respectively. Monday had the third highest number of pedestrian collisions (55).



Pedestrian collisions occur in a pattern similar to typical morning and evening commute peak hours: between 2005 and 2010, 32 pedestrian collisions occurred in the 8:00 am hour, and 41 collisions in the 6:00 pm hour.

Weather



Conditions

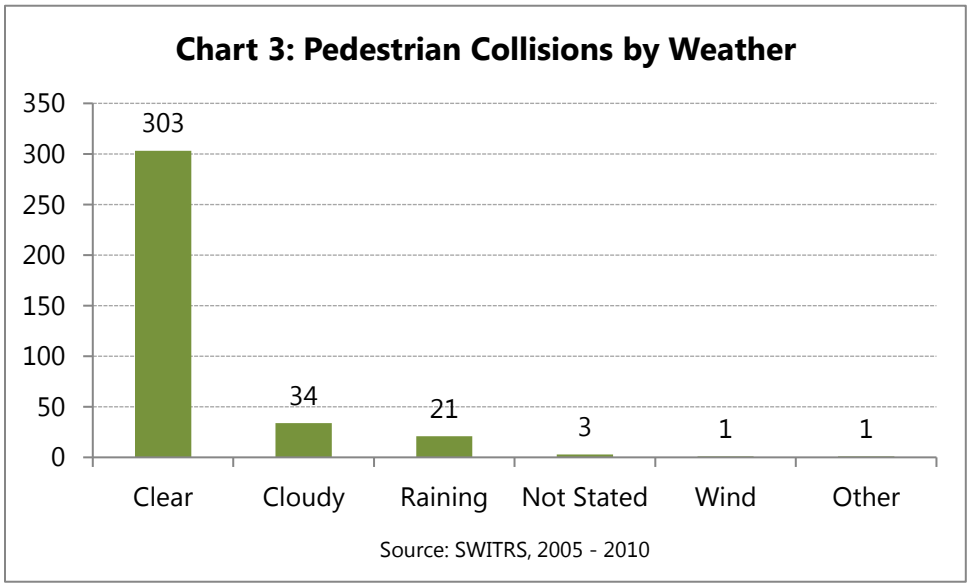


Chart 3 displays the weather conditions during pedestrian collisions in Salinas. The majority of pedestrian collisions took place when the weather was clear, which indicates that in 80% of collisions, weather was likely not a factor in condition of the roadway; however, sun glare may have contributed to some of these collisions. The weather was cloudy in 34 of the collisions and raining in 21. Wind was noted in one (1) collision, "Other" in one (1) collision, and in three (3) reports weather was not reported.

Age Statistics

TABLE 13:
AGE RANGES FOR PEDESTRIAN-VEHICLE COLLISIONS IN SALINAS, 2005-2010

Age Range	% of Total
0-15	28%
16-30	29%
31-45	18%
46-60	17%
61+	9%

Source: SWITRS 2005-2010, Fehr & Peers, 2013

Table 13 provides a summary of pedestrian age data for collisions in Salinas. The ages are grouped in five categories: ages 0-15, ages 15-30, ages 31-45, ages 46-60, and ages 61 and above. The greatest proportion of collisions involved the age group 16-30, which accounted for 29 percent of the collisions, followed closely by the age group 0-15, which accounted for 28 percent of pedestrian collisions. Together, pedestrians under 30 years of age account for over half of the pedestrians involved in collisions.

Near Schools

The frequency of pedestrian-vehicle collisions was also reviewed for school-age children (five years old through 18 years old) within ¼-mile of schools. **Figure 6** shows the locations of these pedestrian-vehicle collisions. In total, 33 collisions occurred that meet these criteria, or approximately 10 percent of the total pedestrian-vehicle collisions occurring Citywide.

SUMMARY

While walking accounts for only a small percentage of trips,[30] according to the National Highway Traffic Safety Administration (NHTSA), pedestrian fatalities represented 13 percent of total fatalities in traffic crashes in 2010 ("Traffic Safety Facts: 2010 Data," 2012). This implies that pedestrians are over represented in collisions compared to the number of trips made by walking. Pedestrian collisions are also known to be

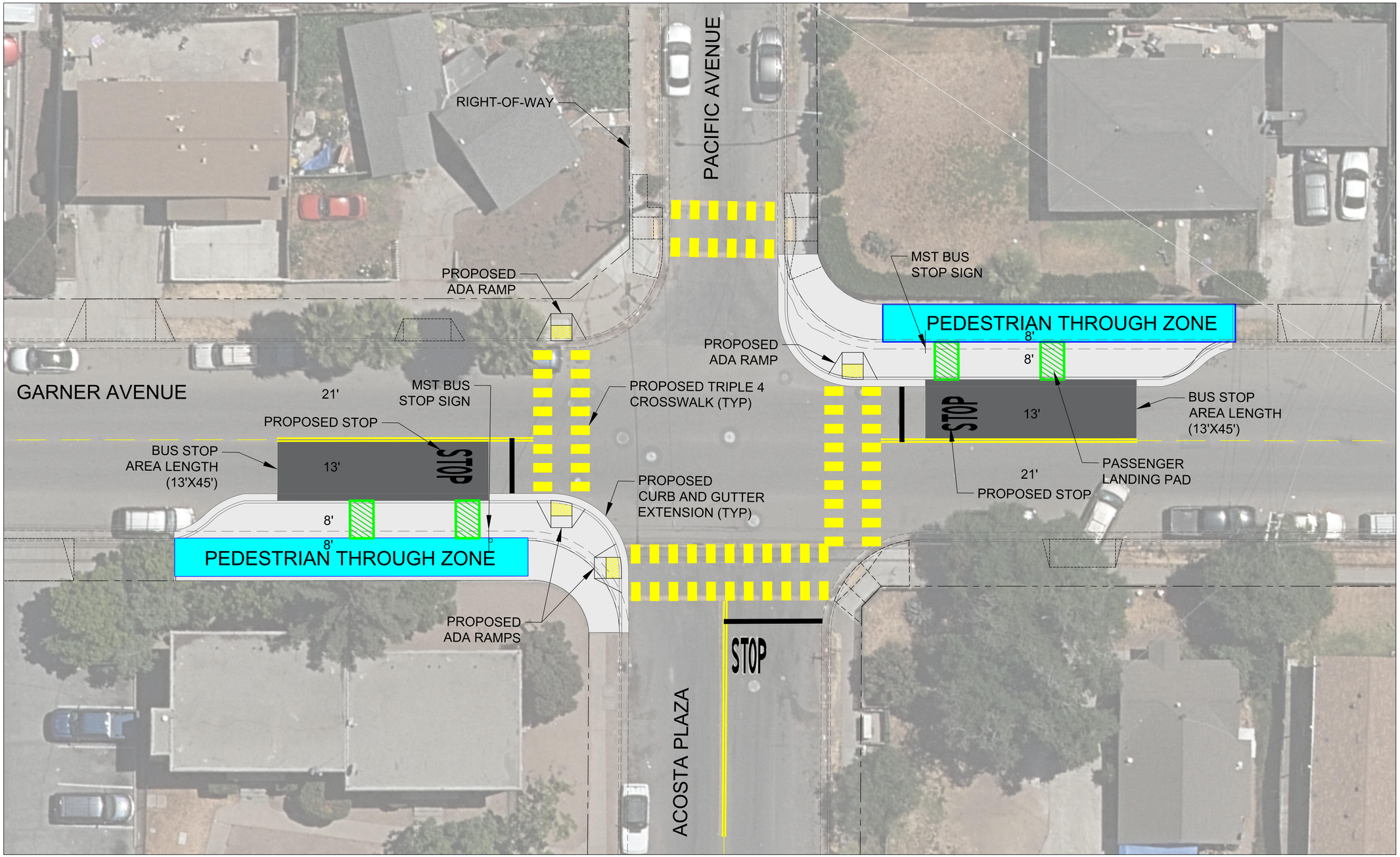
[30] According to the 2010 American Community Survey 3-Year Estimates, the walking mode for work trips in the United States is 2.8 percent.

underreported, since those collisions with no injury or fatality often go without a police report and are, thus, not added to the City or SWITRS databases for analysis.

Collision data for the City of Salinas was obtained from the California Highway Patrol Statewide Integrated Traffic Records System (SWITRS) between January 2005 and December 2010, the five (5) most recent years of available data at the time this report was authored. Based on this data, 363 vehicle-pedestrian collisions occurred in Salinas between 2005 and 2010. The most common primary collision factors included pedestrian right-of-way violation (wherein the vehicle is at fault), pedestrian violation (wherein the pedestrian is at fault), and unsafe speed (wherein the vehicle's speed is the primary cause of the collision). Weekends (Fridays through Sundays) had higher collision frequency, on average, than weekdays; however, collision frequency tended to follow peak vehicle commute times – 8:00 am, 4:00 pm, and 6:00 pm have the highest number of pedestrian collisions.

Age is also an important variable in understanding collision frequency, as 57 percent of pedestrian collisions involved pedestrians under the age of 30. This indicates that safe routes to school education, enforcement, and engineering efforts should be a priority for the City.

Figure 6: Pedestrian-Vehicle Collisions for School-Age Children Occurring within ¼-Mile of Schools



CONCEPTUAL DESIGN
NOT FOR CONSTRUCTION

0 20' 40'
SCALE: 1"=20'

CITY OF SALINAS PUBLIC WORKS DEPARTMENT	DESIGNED BY: GERARDO RODRIGUEZ CAD BY: GERARDO RODRIGUEZ CONSTRUCTION INSPECTION SUPERVISOR: TBD PROJECT ENGINEER / MANAGER: TBD	APPROVED FOR CONSTRUCTION: DATE	REGISTERED PROFESSIONAL ENGINEER TBD NO. ##### CIVIL STATE OF CALIFORNIA	REVIEWED BY: DATE	REGISTERED PROFESSIONAL ENGINEER TBD NO. #### TRAFFIC STATE OF CALIFORNIA	DATE	REVISION	APP.	GARNER AVE AT PACIFIC AVE INTERSECTION IMPROVEMENTS CONCEPTUAL DRAWING	PROJ. NO(S) #### / FILE NO. ####	SHEET NO. ### / OF ###

File Path: I:\PWTra\Construction Projects\Garner Ave at Pacific Ave-Acosta Plaza\Intersection Modifications Concept Exhibit.dwg
Plot By: ANDREW EASTERLING
Plot Date: 8/3/2022 4:59 PM

SHEET NOTES

1. ALL LINES AND MARKINGS SHALL CONFORM TO THE CALTRANS STANDARD SPECIFICATIONS DESIGN STANDARDS AND STANDARD PLANS (2018 EDITION).
2. REMOVAL OF ALL CONFLICTING LINES AND MARKINGS SHALL BE BY GRINDING OR PRE-APPROVED EQUAL.
3. LANE WIDTHS ARE MEASURED BETWEEN THE CENTERLINES OF EACH ADJACENT SINGLE OR DOUBLE STRIPE OR THE TOP OF CURB AS APPROPRIATE.
4. ALL PAVEMENT DELINEATION IS THERMOPLASTIC UNLESS OTHERWISE STATED.
5. ALL CROSSWALKS AND LIMIT LINES SHALL BE 12" WHITE LINES UNLESS OTHERWISE NOTED.
6. ALL REFLECTIVE MARKERS SHALL BE RAISED.
7. ALL LANE STRIPING AT INTERSECTIONS WITHOUT CROSSWALKS SHALL END 10' FROM THE EXTENSION OF THE INTERSECTION CURB LINE.

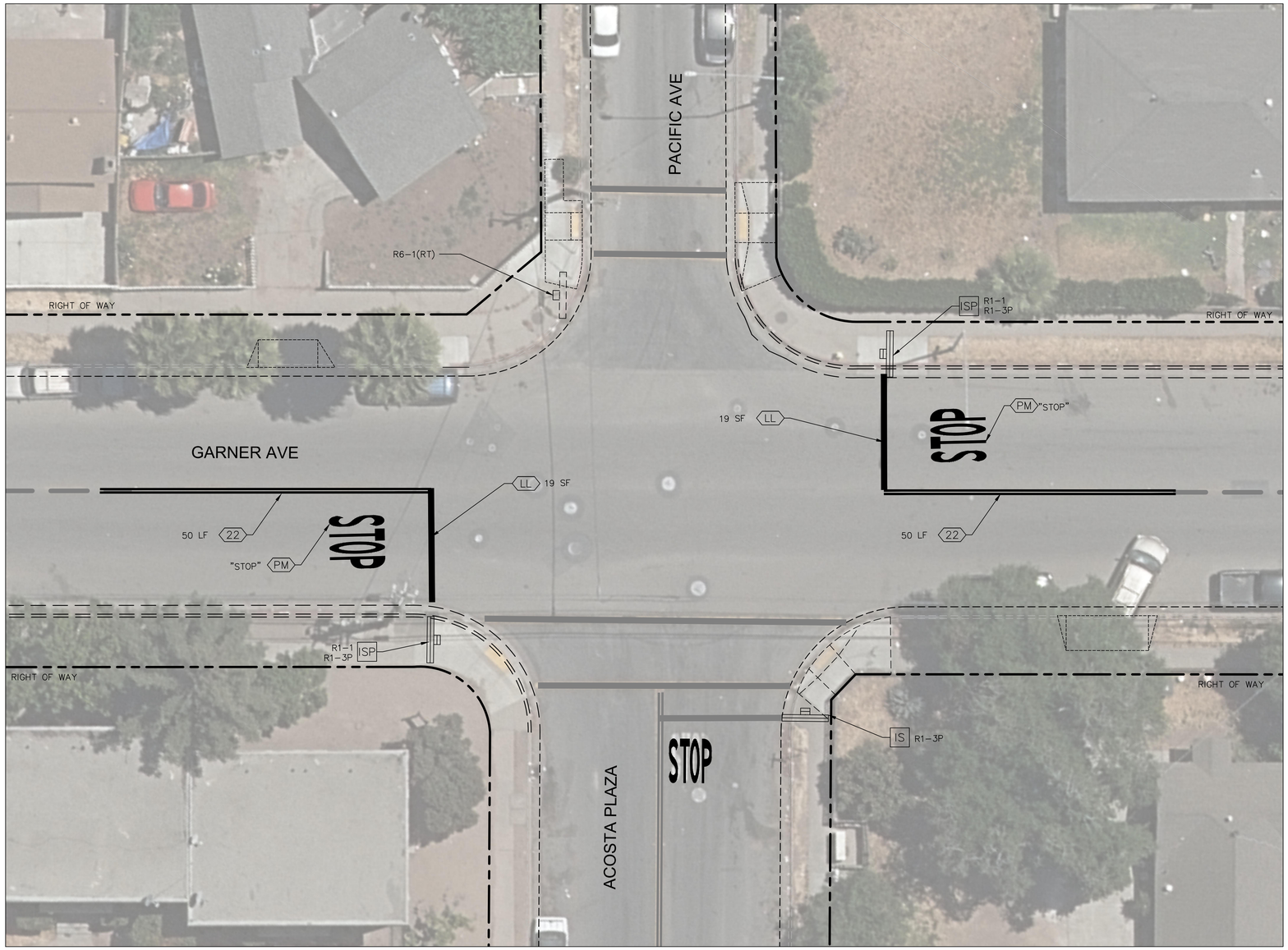
LEGEND

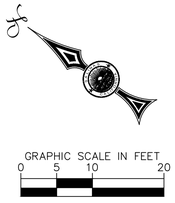
- LL — 12" LIMIT LINE
- PM — PAVEMENT MARKINGS PER CALTRANS STD PLANS A24A TO A24F
- ISP — INSTALL SIGN AND POST
- IS — INSTALL SIGN ON EXISTING POST
- NEW SIGN
- EXISTING SIGN TO REMAIN IN PLACE

SIGN CHART

SHEET TOTAL

ITEM DESCRIPTION	QTY	UNIT OF MEASURE
LIMIT LINE (12")	38	SF
PAVEMENT MARKINGS	44	SF
DETAIL 22	100	LF
INSTALL SIGN AND POST	2	EA
INSTALL SIGN ON EXISTING POST	1	EA





CITY OF SALINAS PUBLIC WORKS DEPARTMENT	DESIGNED BY: ANDREW EASTERLING CAD BY: JONATHAN HERNANDEZ CONSTRUCTION INSPECTION SUPERVISOR: TBD PROJECT ENGINEER / MANAGER: ANDREW EASTERLING	APPROVED FOR CONSTRUCTION: DATE _____ ADRIANA ROBLES, P.E. CITY ENGINEER	REGISTERED PROFESSIONAL ENGINEER ADRIANA ROBLES NO. 69142 CIVIL STATE OF CALIFORNIA	REVIEWED BY: DATE _____ ANDREW EASTERLING, P.E., T.E. TRAFFIC ENGINEER	REGISTERED PROFESSIONAL ENGINEER ANDREW EASTERLING NO. 2824 TRAFFIC STATE OF CALIFORNIA	DATE	REVISION	APP.

RESTRIPING - JOC 6

GARNER AVE AT PACIFIC AVE/ACOSTA PLZ

PROJ. NO(S) #### | SHEET NO. #

FILE NO. | OF #

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Plot By: ANDREW EASTERLING
Plot Date: 8/3/2022 4:44 PM

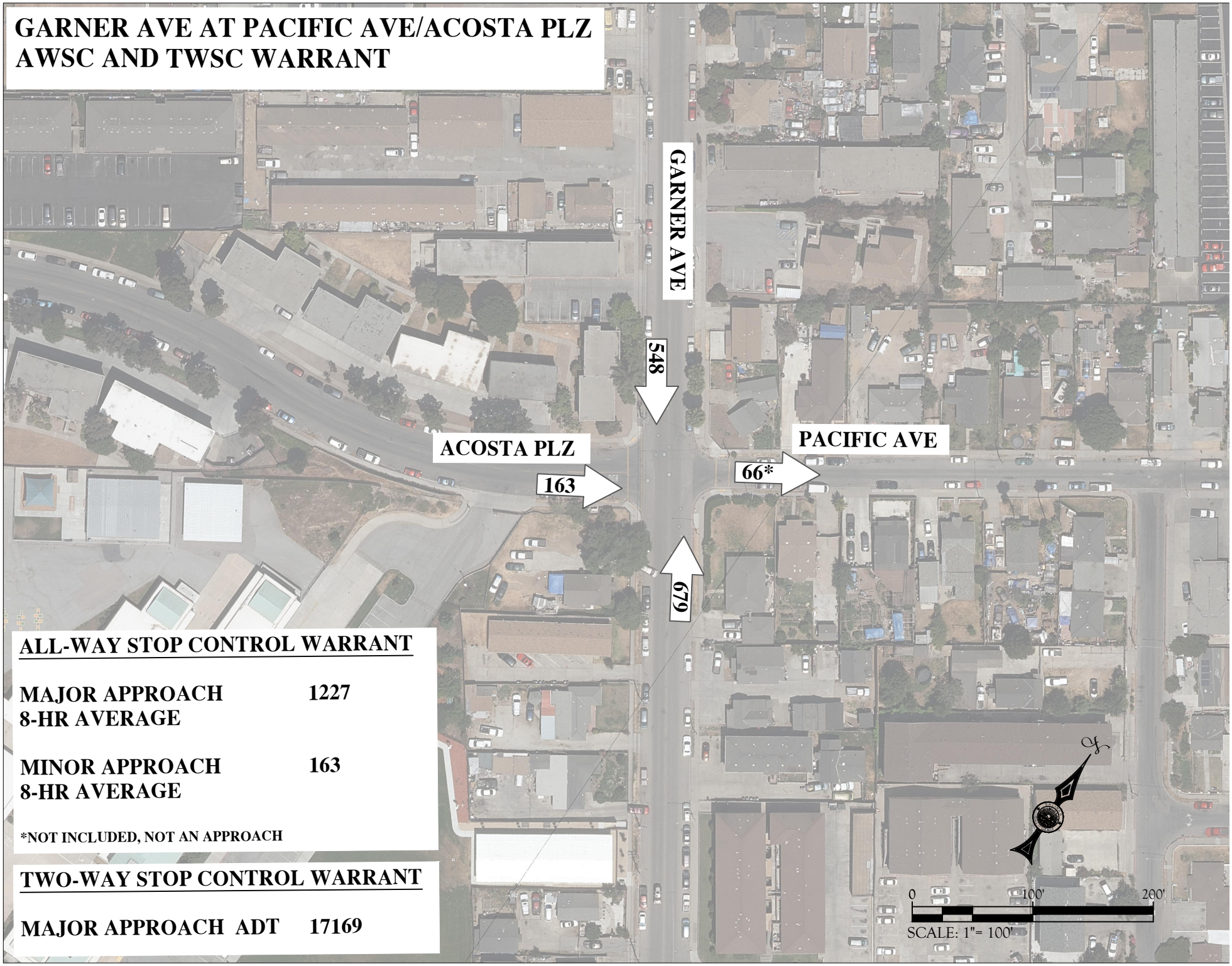
Stop Warrant Analysis: Garner Ave and Pacific Ave
Date: 7/26/22
Performed by: Gerardo Rodriquez
Checked by: Andrew Easterling

City of Salinas

AWSC	Major Approach 8-hour average	Major Approach (<40 mph) 8-hour average AWSC Warrant	Minor Approach 8-hour average	Minor Approach (<40 mph) 8-hour average AWSC Warrant	Condition Met?		Reported correctable crashes in a 12-month period	Reported correctable crashes in a 12-month period AWSC Warrant	Condition Met?			80% Condition Met?
Garner Ave and Pacific Ave	1227	300	163	200	No		0	5	No			No

TWSC	Major Approach ADT	Major Approach ADT AWSC Warrant	Condition Met?	Reported correctable crashes in a 12-month period	Reported correctable crashes in a 12-month period AWSC Warrant	Condition Met?	Reported correctable crashes in a 24-month period	Reported correctable crashes in a 24-month period AWSC Warrant	Condition Met?	Section 2B.06 02B: A restricted view	Section 2B.06 02B: A restricted view	Condition Met?
Garner Ave and Pacific Ave	17169	6000	Yes	0	3	No	1	5	No	TWSC exists		

GARNER AVE AT PACIFIC AVE/ACOSTA PLZ
AWSC AND TWSC WARRANT



ALL-WAY STOP CONTROL WARRANT

MAJOR APPROACH 8-HR AVERAGE	1227
MINOR APPROACH 8-HR AVERAGE	163

*NOT INCLUDED, NOT AN APPROACH

TWO-WAY STOP CONTROL WARRANT

MAJOR APPROACH ADT	17169

City of Salinas
Police Department

From 1/1/2020 to 12/31/2021

Total Collisions: 3

Injury Collisions: 1

Fatal Collisions: 0

Collision Summary Report

6/20/22

GARNER AVE & PACIFIC AVE

9122312	**6/8/2020**	**15:15**	Monday	PACIFIC AVE - GARNER AVE			80'	Direction: North	Daylight	Clear	Pty at Fault:1
	Rear-End		Parked Motor Vehicle	Unsafe Speed			22350	Hit & Run: No	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	North	Parking Maneuver		Male	Age: 24	2008 -		Passenger Car, Station Wagon, Jeep	No Injury	
Veh Type: Passenger Car			Sobriety: HNBD		Assoc Factor: Not Stated		Not Stated		Not Stated		
Party 2	Parked Vehicle	North	Parked		Not Sta	Age:	2005 -		Passenger Car, Station Wagon, Jeep	No Injury	
Veh Type: Passenger Car			Sobriety: Not Applicable		Assoc Factor: Not Stated		Not Stated		Not Stated		
9348577	**9/22/2020**	**11:58**	Tuesday	GARNER AVE - ACOSTA			0'	Direction: Not Stated	Daylight	Clear	Pty at Fault:1
	Vehicle - Pedestrian		Pedestrian	Pedestrian Violation			21954A	Hit & Run: No	Other Visible Injury	# Inj: 1	# Killed: 0
Party 1	Pedestrian	North	Proceeding Straight		Male	Age: 63	0 -		Pedestrian	No Injury	
Veh Type: Pedestrian			Sobriety: HNBD		Assoc Factor: Not Stated		Not Stated		Not Stated		
Party 2	Driver	East	Proceeding Straight		Female	Age: 42	2008 -		Passenger Car, Station Wagon, Jeep	No Injury	
Veh Type: Passenger Car			Sobriety: HNBD		Assoc Factor: Not Stated		Lap/Shoulder Harness Used		Not Stated		
9256768	**6/3/2021**	**19:45**	Thursday	ACOSTA - GARNER AVE			40'	Direction: West	Daylight	Clear	Pty at Fault:1
	Head-On		Other Motor Vehicle	Unsafe Starting or Backing			22106	Hit & Run: Misde	Property Damage Only	# Inj: 0	# Killed: 0
Party 1	Driver	East	Backing		Male	Age:	2007 -			No Injury	
Veh Type: Not Stated			Sobriety: Impairment Not Kno		Assoc Factor: Not Stated		Unknown		Not Stated		
Party 2	Driver	West	Proceeding Straight		Male	Age: 31	2018 -			No Injury	
Veh Type: Not Stated			Sobriety: HNBD		Assoc Factor: Not Stated		Air Bag Deployed		Not Stated		

Settings for Query:

Street: GARNER AVE
Cross Street: PACIFIC AVE
Within Distance of: 100
Sorted By: Date and Time

CITY OF SALINAS
TURNING MOVEMENT PROGRAM

Garner Ave @ Pacific Ave
Counted By: Eva Hernandez
Weather: Sunny
Hours: 7:00am to 6:00pm

File Name : Garner & Pacific
Site Code :
Start Date : 2/9/2022
Page No : 1

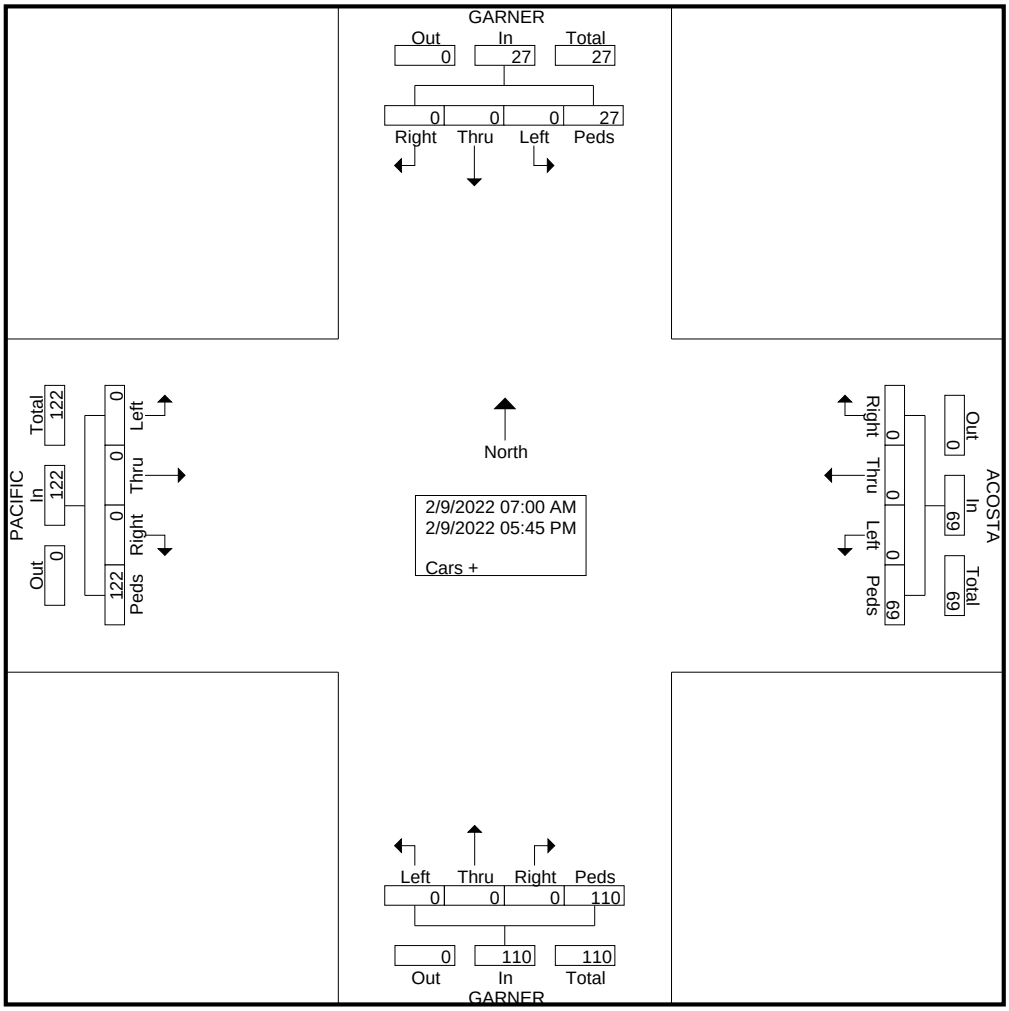
Groups Printed- Cars +

	GARNER From North					ACOSTA From East					GARNER From South					PACIFIC From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	3	3	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	5
07:15 AM	0	0	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	0	1	1	0	0	0	0	0	0	0	0	3	3	0	0	0	7	7	11
07:45 AM	0	0	0	0	0	0	0	0	7	7	0	0	0	23	23	0	0	0	12	12	42
Total	0	0	0	4	4	0	0	0	10	10	0	0	0	26	26	0	0	0	20	20	60
08:00 AM	0	0	0	3	3	0	0	0	11	11	0	0	0	46	46	0	0	0	28	28	88
08:15 AM	0	0	0	3	3	0	0	0	12	12	0	0	0	11	11	0	0	0	6	6	32
08:30 AM	0	0	0	0	0	0	0	0	7	7	0	0	0	7	7	0	0	0	6	6	20
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	4	4	6
Total	0	0	0	6	6	0	0	0	30	30	0	0	0	66	66	0	0	0	44	44	146
BREAK																					
04:00 PM	0	0	0	4	4	0	0	0	8	8	0	0	0	5	5	0	0	0	7	7	24
04:15 PM	0	0	0	4	4	0	0	0	5	5	0	0	0	1	1	0	0	0	12	12	22
04:30 PM	0	0	0	2	2	0	0	0	2	2	0	0	0	1	1	0	0	0	7	7	12
04:45 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	7	8
Total	0	0	0	11	11	0	0	0	15	15	0	0	0	7	7	0	0	0	33	33	66
05:00 PM	0	0	0	1	1	0	0	0	4	4	0	0	0	6	6	0	0	0	5	5	16
05:15 PM	0	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	10	10	12
05:30 PM	0	0	0	0	0	0	0	0	5	5	0	0	0	4	4	0	0	0	5	5	14
05:45 PM	0	0	0	4	4	0	0	0	5	5	0	0	0	0	0	0	0	0	5	5	14
Total	0	0	0	6	6	0	0	0	14	14	0	0	0	11	11	0	0	0	25	25	56
Grand Total	0	0	0	27	27	0	0	0	69	69	0	0	0	110	110	0	0	0	122	122	328
Apprch %	0	0	0	100		0	0	0	100		0	0	0	100		0	0	0	100		
Total %	0	0	0	8.2	8.2	0	0	0	21	21	0	0	0	33.5	33.5	0	0	0	37.2	37.2	

CITY OF SALINAS
TURNING MOVEMENT PROGRAM

Garner Ave @ Pacific Ave
Counted By: Eva Hernandez
Weather: Sunny
Hours: 7:00am to 6:00pm

File Name : Garner & Pacific
Site Code :
Start Date : 2/9/2022
Page No : 2

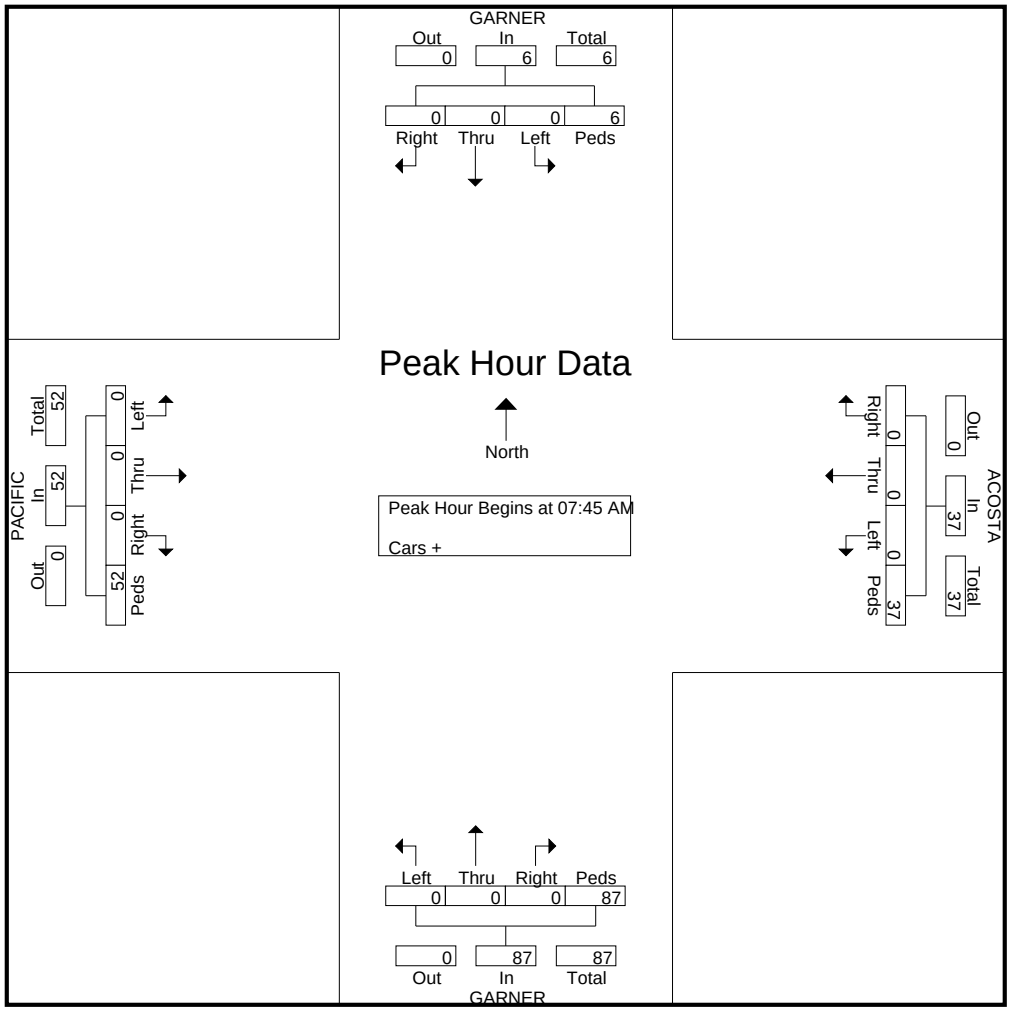


CITY OF SALINAS
TURNING MOVEMENT PROGRAM

Garner Ave @ Pacific Ave
Counted By: Eva Hernandez
Weather: Sunny
Hours: 7:00am to 6:00pm

File Name : Garner & Pacific
Site Code :
Start Date : 2/9/2022
Page No : 3

	GARNER From North					ACOSTA From East					GARNER From South					PACIFIC From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	0	0	0	0	0	0	7	7	0	0	0	23	23	0	0	0	12	12	42
08:00 AM	0	0	0	**3**	**3**	0	0	0	11	11	0	0	0	**46**	**46**	0	0	0	**28**	**28**	**88**
08:15 AM	0	0	0	3	3	0	0	0	**12**	**12**	0	0	0	11	11	0	0	0	6	6	32
08:30 AM	0	0	0	0	0	0	0	0	7	7	0	0	0	7	7	0	0	0	6	6	20
Total Volume	0	0	0	6	6	0	0	0	37	37	0	0	0	87	87	0	0	0	52	52	182
% App. Total	0	0	0	100		0	0	0	100		0	0	0	100		0	0	0	100		
PHF	.000	.000	.000	.500	.500	.000	.000	.000	.771	.771	.000	.000	.000	.473	.473	.000	.000	.000	.464	.464	.517



Option:

14 A portable or part-time (folding) STOP sign that is electrically or mechanically operated such that it only displays the STOP message during a power outage and ceases to display the STOP message upon restoration of power may be used during a power outage to control a signalized approach.

Support:

15 Section 9B.03 contains provisions regarding the assignment of priority at a shared-use path/ roadway intersection.

Section 2B.05 STOP Sign (R1-1) and ALL WAY Plaque (R1-3P)

Standard:

01 **When it is determined that a full stop is always required on an approach to an intersection, a STOP (R1-1) sign (see Figure 2B-1) shall be used.**

02 **The STOP sign shall be an octagon with a white legend and border on a red background.**

03 **Secondary legends shall not be used on STOP sign faces.**

04 **At intersections where all approaches are controlled by STOP signs (see Section 2B.07), an ALL WAY supplemental plaque (R1-3P) shall be mounted below each STOP sign. The ALL WAY plaque (see Figure 2B-1) shall have a white legend and border on a red background.**

05 **The ALL WAY plaque shall only be used if all intersection approaches are controlled by STOP signs.**

06 **Supplemental plaques with legends such as 2-WAY, 3-WAY, 4-WAY, or other numbers of ways shall not be used with STOP signs.**

Support:

07 The use of the CROSS TRAFFIC DOES NOT STOP (W4-4P) plaque (and other plaques with variations of this word message) is described in Section 2C.59.

Guidance:

08 *Plaques with the appropriate alternative messages of TRAFFIC FROM LEFT (RIGHT) DOES NOT STOP (W4-4aP) or ONCOMING TRAFFIC DOES NOT STOP (W4-4bP) should be used at intersections where STOP signs control all but one approach to the intersection, unless the only non-stopped approach is from a one-way street.*

Option:

09 An EXCEPT RIGHT TURN (R1-10P) plaque (see Figure 2B-1) may be mounted below the STOP sign if an engineering study determines that a special combination of geometry and traffic volumes is present that makes it possible for right-turning traffic on the approach to be permitted to enter the intersection without stopping.

Support:

10 The design and application of Stop Beacons are described in Section 4L.05.

11 A STOP (R1-1) sign is not a "cure-all" and is not a substitute for other traffic control devices. Often, the need for a STOP (R1-1) sign can be eliminated if the sight distance is increased by removing obstructions.

Through Highways

Option:

12 STOP (R1-1) signs may be installed either at or near the entrance to a State highway, except at signalized intersections, or at any location so as to control traffic within an intersection. Refer to CVC 21352 and 21355. See Section 1A.11 for information regarding this publication.

Support:

13 When STOP (R1-1) signs or traffic control signals have been erected at all entrances, a highway constitutes a through highway. Refer to CVC 600.

14 Authority to place STOP (R1-1) signs facing State highway traffic is delegated to the Caltrans District Directors.

Option:

15 Local authorities may designate any highway under their jurisdiction as a through highway and install STOP (R1-1) signs in a like manner. Refer to CVC 21354.

Standard:

16 **No local authority shall erect or maintain any STOP (R1-1) sign or other traffic control device requiring a stop, on any State highway, except by permission of Caltrans. Refer to CVC 21353.**

Support:

17 Caltrans will grant such permission only when an investigation indicates that the STOP (R1-1) sign will benefit traffic.

Section 2B.06 STOP Sign Applications

Guidance:

01 *At intersections where a full stop is not necessary at all times, consideration should first be given to using less restrictive measures such as YIELD signs (see Sections 2B.08 and 2B.09).*

02 *The use of STOP signs on the minor-street approaches should be considered if engineering judgment indicates that a stop is always required because of one or more of the following conditions:*

A. The vehicular traffic volumes on the through street or highway exceed 6,000 vehicles per day;

B. A restricted view exists that requires road users to stop in order to adequately observe conflicting traffic on the through street or highway; and/or

C. Crash records indicate that three or more crashes that are susceptible to correction by the installation of a STOP sign have been reported within a 12-month period, or that five or more such crashes have been reported within a 2-year period. Such crashes include right-angle collisions involving road users on the minor-street approach failing to yield the right-of-way to traffic on the through street or highway.

Support:

03 The use of STOP signs at grade crossings is described in Sections 8B.04 and 8B.05.

Section 2B.07 Multi-Way Stop Applications

Support:

01 Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.

02 The restrictions on the use of STOP signs described in Section 2B.04 also apply to multi-way stop applications.

Guidance:

03 *The decision to install multi-way stop control should be based on an engineering study.*

04 *The following criteria should be considered in the engineering study for a multi-way STOP sign installation:*

A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.

B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.

C. Minimum volumes:

1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and

2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but

3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.

D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

Option:

05 Other criteria that may be considered in an engineering study include:

A. The need to control left-turn conflicts;

B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes;

C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and

File #: ID#22-463, **Version:** 1

North Main Street Improvement Project, CIP 9278

Approve a Resolution accepting the North Main Street Improvement Project, CIP 9278 for maintenance and responsibility.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **SEPTEMBER 6, 2022**

DEPARTMENT: **PUBLIC WORKS DEPARTMENT**

FROM: **DAVID JACOBS, PUBLIC WORKS DIRECTOR**

BY: **ANDREW EASTERLING, TRAFFIC ENGINEER**

TITLE: **THE NORTH MAIN STREET IMPROVEMENT PROJECT (CIP 9278) ACCEPTANCE**

RECOMMENDED MOTION:

A motion accepting the North Main Street Improvement Project (CIP No. 9278) for maintenance and responsibility.

RECOMMENDATION:

It is recommended that the City Council approve a Resolution accepting the North Main Street Improvement Project (CIP No. 9278) for maintenance and responsibility.

BACKGROUND:

The City has had an adaptive traffic signal system on North Main Street from Bernal Drive to Alvin Drive to optimize throughput progression on North Main Street. The adaptive traffic signal system on North Main Street is called InSync and it is provided by Rhythm. The system uses proprietary algorithms to adjust signal timing, to better adapt to traffic conditions. The system communicates to traffic signals on North Main Street to create green tunnels and reduce travel delays.

The Northridge Mall Expansion project was responsible for mitigating traffic impacts on North Main Street. The project was responsible for extending the adaptive signal system along North Main Street to the traffic signals along the mall's frontage, so that the entire system ran from Bernal Drive to Boronda Rd. The City collected fair share traffic mitigation fees from the Northridge Mall Expansion Project to extend the InSync adaptive signal system coverage along North Main Street.

Bear Electrical Solutions, Inc, was awarded the contract for Traffic Signal Maintenance in December 2018, through Council Resolution No. 21536 (Attachment 1). The contract includes providing preventative and routine traffic signal maintenance, responsive maintenance, emergency repair, inspection support, and supervision for the maintenance of traffic signals within the City of Salinas. Because of the company's in-depth understanding of the City’s signal system and InSync

adaptive traffic signal technology, the City's maintenance Contractor was approved to perform the signal modifications needed for the North Main Street Improvement Project. The agreement with Bear Electrical Solutions, Inc for the North Main Street Improvement Project was for $37,102.50 (Attachment 2).

The project began on April 1, 2021, and work was substantially complete on August 20, 2021. There were no contract change orders on this project. The City monitored construction work to ensure prevailing wage requirements and contract obligations relate to labor compliance were met. On August 12, 2022, all labor compliance discrepancies were resolved for this contract. Now that all contract requirements have been met, staff recommends that the North Main Street Improvement Project be accepted for maintenance and responsibility.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378). In addition, CEQA Guidelines Section 15061 includes the general rule that CEQA applies only to activities which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. Because the proposed action and this matter have no potential to cause any effect on the environment, or because it falls within a category of activities excluded as projects pursuant to CEQA Guidelines section 15378, this matter is not a project. Because the matter does not cause a direct or foreseeable indirect physical change on or in the environment, this matter is not a project. Any subsequent discretionary projects resulting from this action will be assessed for CEQA applicability.

STRATEGIC PLAN INITIATIVE:

This action does not support a specific City Council Goal.

FISCAL AND SUSTAINABILITY IMPACT:

There was no impact to the general fund. The signal modifications along North Main Street are part of the Northridge Mall Expansion traffic mitigation program and were funded by development fees.

ATTACHMENTS:
Resolution
Attachment 1: Resolution No. 21536
Attachment 2: Agreement with Bear Electrical Solutions, Inc

RESOLUTION NO. _____ (N.C.S.)

A RESOLUTION OF THE SALINAS CITY COUNCIL ACCEPTING THE NORTH MAIN STREET IMPROVEMENT PROJECT (CIP 9278) FOR MAINTENANCE AND RESPONSIBILITY

WHEREAS, the Northridge Mall Expansion project was responsible for mitigating traffic impacts on North Main Street; and

WHEREAS, the City collected fair share traffic mitigation fees from the Northridge Mall Expansion Project to extend the InSync adaptive signal system coverage along North Main Street; and

WHEREAS, the City entered into an agreement with Bear Electrical Solutions, Inc to install the adaptive signal system along the mall's frontage as part of the North Main Street Improvement Project; and

WHEREAS, the project began on April 1, 2021, and work was substantially complete on August 20, 2021. There were no contract change orders on this project; and

WHEREAS, the City entered into an agreement with Bear Electrical Solutions, Inc to install the adaptive signal system along the mall's frontage as part of the North Main Street Improvement Project; and

WHEREAS, on August 12, 2022, all labor compliance discrepancies were resolved for this contract.

WHEREAS, now that all contract requirements have been met, staff recommends that the North Main Street Improvement project be accepted for maintenance and responsibility.

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council hereby accepts the North Main Street Improvement Project (CIP 9278) for maintenance and responsibility.

PASSED AND APPROVED this 6th day of September 2022, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____
Kimbley Craig, Mayor

ATTEST:

_____
Patricia M. Barajas, City Clerk

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RESOLUTION NO. 22071 (N.C.S.)

A RESOLUTION APPROVING EXCEPTION TO LOW BID COMPETITION AND APPROVING AN AGREEMENT WITH BEAR ELECTRICAL SOLUTIONS, INC TO PERFORM TRAFFIC SIGNAL MODIFICATIONS FOR THE NORTH MAIN STREET IMPROVEMENT PROJECT

WHEREAS, traffic staff initiated a Request for Qualifications (RFQ) for Traffic Signal Preventive Maintenance services on October 5th, 2018. Based on qualifications submitted, Staff recommended awarding contract for Traffic Signal Preventive Maintenance and Emergency Repair Service to Bear Electrical Solutions, Inc; and

WHEREAS, the North Main Street Improvement Project require traffic signal modifications to optimize traffic flow along North Main Street along the Northridge Mall frontage; and

WHEREAS, Northridge Mall paid traffic impact mitigation fees associated with the mall expansion to help fund improvements along the corridor; and

WHEREAS, Bear Electrical Solutions, Inc. technicians have been maintaining and servicing the City's traffic signal system since 2015, and understand the City's advanced traffic signal adaptive system; and

WHEREAS, because of this expertise with the adaptive traffic signal system, Bear Electrical Solutions, Inc. is poised to deliver the desired traffic signal modifications effectively at a lower cost to the City and that a low bid based competition will not yield the best value to the City.

NOW, THEREFORE, BE IT RESOLVED by the Salinas City Council that in order to expedite project timelines and reduce overall cost to City, the said signal modifications shall be done by Bear Electrical Solutions, Inc., excepted from competitive bid in accordance with Section 12-27 of the Salinas Municipal Code.

BE IT FURTHER RESOLVED THAT the Council authorizes said agreement with Bear Electrical Solutions, Inc. for the traffic signal modifications for the North Main Street Improvement Project (CIP # 9278) in the amount of $37,102.50.

PASSED AND APPROVED this 30th day of March 2021, by the following votes:

AYES: Councilmembers: Barrera, Cromeenes, González, McShane, Osornio, Rocha and Mayor Craig

NOES: None

ABSENT: None

ABSTAIN: None

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APPROVED:

DocuSigned by:
Kimbley Craig
E554E94F4CE64C8...

Kimbley Craig, Mayor

ATTEST:

DocuSigned by:
5BE31EC636A6432...

Patricia M. Barajas, City Clerk

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AGREEMENT FOR SERVICES BETWEEN THE CITY OF SALINAS AND BEAR ELECTRICAL SOLUTIONS, INC.

Traffic Signal Modifications for the North Main Street Improvement Project (CIP 9278)

THIS AGREEMENT is executed this 30th day of March, 2021, ("Agreement" or "Contract") between the City of Salinas, a California Charter city and municipal corporation (hereinafter "City") and Bear Electrical Solutions, Inc., a **California corporation**. (Hereinafter "Contractor").

IT IS HEREBY MUTUALLY AGREED AS FOLLOWS:

1. **Scope.** Contractor hereby agrees to provide to the City, as the scope of services under this Agreement, the following services: Traffic Signal Modifications. Scope of work is further discussed in Contractor's Proposal dated 03/05/2021, Attachment B.

2. **Timeliness.** Contractor shall perform all tasks in a timely fashion, as set forth more specifically in Section 3 below. Failure to so perform is hereby deemed a material breach of this Agreement, and City may terminate this Agreement with no further liability hereunder, or the city may agree in writing with Contractor to an extension of time.

3. **Term.** The work under this Agreement shall commence 4/01/2021 and shall be completed by 6/31/2021 unless City grants a written extension of time as set forth in Section 2 above.

4. **Payment.** City agrees to pay, and Contractor agrees to accept as full and fair consideration for the performance of this Agreement, Thirty-seven Thousand one hundred two Dollars and fifty cents ($37,102.50). Contractor has no right of reimbursement for expenses under this Agreement. Compensation shall become due and payable 30 days after City's approval of Contractor's submission of monthly written invoices to the City. The payment of any compensation shall be contingent upon performance of the terms and conditions of this Agreement to the satisfaction of the City. If City determines that the work set forth in the written invoice has not been performed in accordance with the terms of this Agreement, City shall not be responsible for payment until such time as the work has been satisfactorily performed.

5. **Meet & Confer.** Contractor agrees to meet and confer with City or its agents or employees with regard to services as set forth herein as may be required by City to insure timely and adequate performance of this Agreement.

6. **Insurance.** Contractor shall procure and maintain for the duration of this Agreement insurance meeting the requirements specified in Attachment A hereto.

7. **Indemnification.** Contractor shall hold harmless, defend at its own expense, and indemnify City and its officers, officials, employees, agents, and volunteers from and against all liability, claims, damages, losses, and/or expenses including reasonable City attorney fees arising from all acts or omissions of Contractor or its officers, agents, or employees arising

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out of the performance of the work under this Contract, caused in whole or in part by any negligent act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, except where caused by the active negligence, sole negligence or willful misconduct of the City.

8. **Licensing.** Contractor warrants that it is properly licensed to perform the work specified under this Agreement, including but not limited to possession of a current City business license.

9. **Termination.** City may terminate this Agreement upon ten days' written notice. The amount of damages, if any, as a result of such termination may be decided by negotiations between the parties or before a court of competent jurisdiction.

10. **Agency.** In performing the services specified under this Agreement, Contractor is hereby deemed to be an independent contractor and not an agent or employee of City.

11. **Non-Assignability.** The rights and obligations of Contractor hereunder are not assignable and cannot be delegated without written consent of City.

12. **Entire Agreement.** This Agreement constitutes the entire Agreement between the parties hereto and supersedes any and all prior agreements, whether oral or written, relating to the subject matter thereof. Any modification of the Agreement will be effective only if it is in writing signed by both parties hereto.

13. **Validity.** If any provision in this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will continue in full force without being impaired or invalidated in any way.

14. **Counterparts.** This Agreement may be executed in multiple originals, each of which is deemed to be an original, and may be signed in counterparts.

15. **Laws.** Contractor agrees that in the performance of this Agreement it will comply with all applicable State, Federal and local laws and regulations including those outlined in Attachment C. This Agreement shall be governed by and construed in accordance with the laws of the State of California, County of Monterey, and City of Salinas.

IN WITNESS WHEREOF, this Agreement is entered into by the parties hereto on the day and year first written above.

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CITY OF SALINAS

DocuSigned by:
Steve Carrigan
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Steven S. Carrigan
City Manager

APPROVED AS TO FORM:

DocuSigned by:
Christopher A. Callihan
1895479BC5A349F...

Christopher A. Callihan, City Attorney, or
Rhonda Combs, Assistant City Attorney

CONTRACTOR

DocuSigned by:
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By (Printed Name): Brent Paulson

Its (Title): Project Manager

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Attachment A

Insurance Requirements

Contractor shall procure and maintain for the duration of the contract, and for three years thereafter, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his/her/its officers, agents, representatives, employees, and/or subcontractors.

MINIMUM SCOPE AND LIMIT OF INSURANCE
Coverage shall be at least as broad as:
1. **Commercial General Liability** ("CGL"): Insurance Services Office ("ISO") Form CG 00 01 covering CGL on an occurrence basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **$2,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO Form CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability**: ISO Form CA 0001 covering Code 1 (any auto), with limits no less than **$1,000,000** per accident for bodily injury and property damage.
3. **Workers' Compensation**: as required by the State of California, with Statutory Limits, and Employers' Liability insurance with a limit of no less than $1,000,000 per accident for bodily injury or disease.
4. **Contractors' Pollution Legal Liability and/or Asbestos Legal Liability and/or Errors and Omissions** (if project involves environmental hazards): with limits no less than $1,000,000 per occurrence or claim, and $2,000,000 policy aggregate, on an annual basis.

If the Contractor maintains broader coverage and/or higher limits than the minimums shown above, the Contractor requires and shall be entitled to the broader coverage and/or higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

Self-Insured Retentions
Self-insured retentions must be declared to and approved by the City. At the option of the City, either: the Contractor shall cause the insurer shall to reduce or eliminate such self-insured retentions as respects the City, its officers, officials, employees, and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration, and defense expenses. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or City.

Other Insurance Provisions
The insurance policies are to contain, or be endorsed to contain, the following provisions:
1. **The City, its officers, officials, employees, and volunteers are to be covered as additional insureds** on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by

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or on behalf of the Contractor. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10, CG 11 85 or **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; **and** CG 20 37 forms if later revisions used).

2. For any claims related to this project, the **Contractor's insurance coverage shall be primary** insurance coverage at least as broad as ISO CG 20 01 04 13 as respects the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.

3. Each insurance policy required by this clause shall provide that coverage shall not be canceled, except with notice to the City.

4. A copy of the claims reporting requirements must be submitted by Contractor to the City.

5. If the services involve lead-based paint or asbestos identification/remediation, the Contractor's Pollution Liability policy shall not contain lead-based paint or asbestos exclusions. If the services involve mold identification/remediation, the Contractor's Pollution Liability policy shall not contain a mold exclusion, and the definition of Pollution shall include microbial matter, including mold.

Acceptability of Insurers

Insurance is to be placed with insurers authorized to conduct business in the state with a current A.M. Best rating of no less than A: VII, unless otherwise acceptable to the City.

Waiver of Subrogation

Contractor hereby agrees to waive rights of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Contractor, its employees, agents and subcontractors.

Verification of Coverage

Contractor shall furnish the City with original Certificates of Insurance including an additional insured endorsement and all required amendatory endorsements (or copies of the applicable policy language effecting coverage required by this clause) and a copy of the Declarations and Endorsement Page of the CGL policy listing all policy endorsements to City before work begins. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time.

Subcontractors

Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that City is an additional insured on insurance required from subcontractors. For CGL coverage subcontractors shall provide coverage with a form at least as broad as CG 20 38 04 13.

Maintenance of Insurance

Maintenance of insurance by Contractor as specified shall in no way be interpreted as relieving

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Contractor of its indemnification obligations or any responsibility whatsoever and the Contractor may carry, at its own expense, such additional insurance as it deems necessary.

Special Risks or Circumstances
City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Surety Bonds
Contractor shall provide the following Surety Bonds:
1. Payment bond
2. Performance bond
3. Maintenance bond

The Payment Bond and the Performance Bond shall be in a sum equal to the contract price. If the Performance Bond provides for a one-year warranty, a separate Maintenance Bond is not necessary. If the warranty period specified in the contract is for longer than one year a Maintenance Bond equal to 10% of the contract price is required. Bonds shall be duly executed by a responsible corporate surety, authorized to issue such bonds in the State of California and secured through an authorized agent with an office in California.

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Attachment B

BEAR ELECTRICAL SOLUTIONS

Contractors License No. 982079
A – General Engineering
C-10 High Voltage Electrical
LBE# CMD121616779/ SBE# 1752478

1341 Archer Street, PO Box 924, Alviso, CA 95002-0924
Tel: 408-449-5178 Fax 408-449-5147

PROPOSAL

DATE:	March 5, 2021	TO:	Jose Saucedo
FROM:	Brent Paulson	COMPANY:	City of Salinas
PHONE:	(408) 449-5178	PHONE:	(831) 758-7197
FAX:	(408) 449-5147	EMAIL:	Josesau@ci.salinas.ca.us

BID/ PROJECT: N. Main Corridor Rhythm Adaptive Tie-in

BES received a request for pricing to provide electrical labor and equipment for the following scope of work:

N.Main/Boronda-

1. Install, connect and configure Actelis unit to establish network to N.Main/BofA over existing signal interconnect cabling.

Communication Network Establishment: $875.00

N.Main/ B of A-

1. Install, connect and configure Actelis unit to establish network to N.Main/Boronda and N.Main/Northridge Entrance over existing signal interconnect cabling.
2. Remove existing Autoscope camera system and install new Rhythm camera system. New conductors will need to be installed for Rhythm camera system.
3. Install all necessary Rhythm equipment into existing traffic signal cabinet.
4. Align cameras and work with Rhythm support for turn-on of new InSync system.
5. Reprogram existing traffic signal controllers with correct parameters to operate Rhythm System.

Video Detection Removal and Installation: $8,000.00

Communication Network Establishment: $875.00

N.Main/Northridge Entrance-

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BEAR ELECTRICAL SOLUTIONS

Contractors License No. 982079
A – General Engineering
C-10 High Voltage Electrical
LBE# CMD121616779/ SBE# 1752478

1341 Archer Street, PO Box 924, Alviso, CA 95002-0924
Tel: 408-449-5178 Fax 408-449-5147

1. Install, connect and configure Actelis unit to establish network to N.Main/B of A and N.Main/San Juan Grade over existing signal interconnect cabling.
2. Remove existing Autoscope camera system and install new Rhythm camera system. New conductors will need to be installed for Rhythm camera system.
3. Install all necessary Rhythm equipment into existing traffic signal cabinet.
4. Align cameras and work with Rhythm support for turn-on of new InSync system.
5. Reprogram existing traffic signal controllers with correct parameters to operate Rhythm System.

Video Detection Removal and Installation:	**$8,000.00**
Communication Network Establishment:	**$875.00**

N.Main/San Juan Grade

1. Install, connect and configure Actelis unit to establish network to N.Main/Northridge Ent and N.Main/Madrid over existing signal interconnect cabling.
2. Remove existing Autoscope camera system and Wavetronics RADAR units. Install new Rhythm camera system. New conductors will need to be installed for Rhythm camera system.
3. Install all necessary Rhythm equipment into existing traffic signal cabinet.
4. Align cameras and work with Rhythm support for turn-on of new InSync system.
5. Reprogram existing traffic signal controllers with correct parameters to operate Rhythm System.

Video Detection Removal and Installation:	**$8,000.00**
Communication Network Establishment:	**$875.00**

N.Main/Madrid-

1. Install, connect and configure Actelis unit to establish network to N.Main/San Juan Grade over existing signal interconnect cabling.

DocuSign Envelope ID: 7A55863A-5494-47DD-82CA-61523AAC4F9F

BEAR ELECTRICAL SOLUTIONS

Contractors License No. 982079
A – General Engineering
C-10 High Voltage Electrical
LBE# CMD121616779/ SBE# 1752478

1341 Archer Street, PO Box 924, Alviso, CA 95002-0924
Tel: 408-449-5178 Fax 408-449-5147

2. Remove existing Autoscope camera system and Wavetronics RADAR units. Install new Rhythm camera system. New conductors will need to be installed for Rhythm camera system.
3. Install all necessary Rhythm equipment into existing traffic signal cabinet.
4. Align cameras and work with Rhythm support for turn-on of new InSync system.
5. Reprogram existing traffic signal controllers with correct parameters to operate Rhythm System.

Video Detection Removal and Installation:	**$8,000.00**
Communication Network Establishment:	**$875.00**

QUOTE:

1. Provide and install all labor and equipment to complete the electrical scope of work referenced above.

N. Main Corridor Rhythm Adaptive Tie-in:	
VIDS removal and installations:	**$32,000.00**
Communication Network Establishment:	**$4,375.00**
Project Bonds:	**$727.50**
Total Project Cost:	**$37,102.50**

Additional out of scope work to be completed on T&M basis utilizing the following contract rates. Out of scope or additional work to be billed against contingency funds or agreed upon Contract Change Order:

• **Signal Electrician Supervisor**	**$110.00/Hr**
• **Signal Electrician**	**$95.00/Hr**
• **Signal Apprentice Electrician**	**$75.00/Hr**
• **Service Bucket Truck**	**$30.00/Hr**

EXCLUSIONS:

-Material Furnishing
-Warranty of City furnished material
-Licenses
-Permits
-Engineering Services

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Attachment C

DEPARTMENT OF INDUSTRIAL RELATIONS' STATE LABOR CODE

Labor Law Requirements

(CCR Title 8, Section 16421)

This public works project is subject to compliance monitoring and enforcement by the California Department of Industrial Relations ("DIR"). All work shall be in accordance with wage scales and applicable determinations made by the Director of the DIR, as provided by Article 2, Chapter 1, Division 2, Part 7 of the Labor Code of the State of California, commencing with §1771.

Penalties for violations may be applied by the DIR pursuant to the Labor Code §1813 and §1815. The Contractor shall indemnify, hold harmless, and defend the City (with counsel reasonably approved by the City) against any claim for damages, compensation, fines, penalties, or other amounts arising out of the failure or alleged failure of any person or entity (including Contractor and its subcontractors) to pay prevailing wages as determined pursuant to Labor Code §1720, and hereby agrees to, §§1771-1774; to employ apprentices pursuant to Labor Code §1777.5 et seq., and/or to comply with the other applicable provisions of Labor Code §1720 et seq., §§1771-1774, §1777.5 et seq., and the implementing regulations of the DIR in connection with the scope of work. This indemnification section shall survive the expiration of the Term.

The Federal and State Labor Law requirements applicable to the Agreement are composed of, but not limited, to the following items:

1. **Payment of Prevailing Wage Rates**: All contractors, including subcontractors, shall pay no less than the prevailing rate of wages (Labor Code §1775), including the rates for holidays and overtime work (Labor Code §§1813 and 1815), to all workers employed in the execution of the contract (Labor Code §1774), pursuant to Labor Code §§1720-1784. The prevailing rates are those issued as wage determinations by the DIR, for each craft, classification and type of work. The current wage rate information can be found at the DIR's website at: https://www.dir.ca.gov/oprl/DPreWageDetermination.htm.

   Copies of the prevailing rate of per diem wages are on file at City's Public Works Department (principal place of office). Contractor shall post a copy of the determination of the Director of DIR of the prevailing rate of per diem wages at each job site.
2. **Apprentices**: Contractor and subcontractors shall employ registered apprentices on this public works Agreement pursuant to Labor Code §1777.5. All contractors on this project (prime and subcontractors) are required to submit the Division of Apprenticeship Standards' ("DAS") Public Works Contract Award Information (DAS 140) form to all applicable apprenticeship committees no later than 10 days before commencing work. Additionally, all contractors are required to request registered apprentices (DAS 142 form).

   Penalties for failure to pay prevailing wages (for non-exempt projects) and failure to employ apprentices include forfeitures and debarment under Labor Code §§1775 and 1777.7.
3. **Certified Payroll Records**: All contractors, including subcontractors, must maintain and file certified payroll records ("CPRs") pursuant to Labor Code §1776. Additionally, all contractors and subcontractors must furnish **certified payroll records into the DIR's**

Electronic Certified Payroll Reporting ("eCPRs") database (https://efiling.dir.ca.gov/eCPR/pages/eCPROnlineForm.jsp). Penalties apply to Contractor and any Subcontractors for failure to do so under Labor Code §1777.

4. **Subcontracting**: Contractors are required to list all subcontractors hired to perform work on this public works agreement when that work is in an excess of one-half of 1 percent of the prime contractor's total bid or ten thousand dollars ($10,000), whichever is greater.

   See **Public Contracts Code §4104**.

5. **Proper Licensing/Registration**: All contractors and subcontractors are required to be properly licensed, in accordance with the Provisions of Chapter 9 of Division 3 of the Business and Professions Code and subject to the requirements of §4104 of the Public Contract Code. In addition, all contractors including subcontractors must submit proof of current registration to perform public work, pursuant to Labor Code §1771.1. Contractors are required to be properly licensed and to require all subcontractors to be properly licensed. Penalties for employing workers while unlicensed under Labor Code §1021 and under the California Contractors License Law, found at Business and Professions Code §7000 et. seq.
6. **Job Site Notices**: Contractors are required to post all required notices (posters) on the job site in an area accessible to all workers, including subcontractors. Posters must be readable and placed in visible areas allowing workers to access the posters before, during, and after work shifts. Jobsites with multiple locations must include a portable poster board to ensure continued access to the information. Posters placed in foreman, supervisor, or employee vehicles, in an offsite job trailer, or inside a temporary restroom do not meet the posting requirement. Posters may be printed from the DIR's website at: http://www.dir.ca.gov/wpnodb.html.
7. **Nondiscrimination in Employment – Equal Employment Opportunity ("EEO")**: Employment discrimination is prohibited, pursuant to Labor Code §1777.6, the Government Code, and Title VII of the Civil Rights Act of 1964.
8. **Kickbacks Prohibited**: Contractors and subcontractors are prohibited from recapturing wages illegally by accepting or extracting "kickbacks" from employee wages pursuant to Labor Code §1778.
9. **Acceptance of Fees Prohibited**: Contractors and subcontractors are prohibited from accepting fees for registering any person for public work or for filling work orders on public works contracts, pursuant to Labor Code §§1779 and 1780.
10. **Unfair Competition Prohibited**: Contractors and subcontractors are prohibited from engaging in unfair competition as specified under Business and Professions Code §§17200 - 17208.
11. **Workers' Compensation:** Contractors and subcontractors must be properly insured for Workers' Compensation under Labor Code §1861. Contractor hereby represents that Contractor is aware of the provisions of Section 3700 of the Labor Code, which require every employee to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and Contractor will comply with such provisions before commencing the performance of the work of this agreement.
12. **OSHA:** Contractors and subcontractors must abide by the Occupational, Safety, and Health Laws and regulations that apply.

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File #: ID#22-473, **Version:** 1

65 W. Alisal Gutter Replacement

Approve a Resolution authorizing an Agreement for Services with Scudder Roofing the replacement of the gutters on the building at 65 W. Alisal at a total cost of $30,560, with a 10% contingency for any price increase.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **SEPTEMBER 6, 2022**

DEPARTMENT: **PUBLIC WORKS, FACILITIES MAINTENANCE DIVISION**

FROM: **DAVID JACOBS, PUBLIC WORKS DIRECTOR**

BY: **RONALD PATTERSON, FLEET MAINTENANCE MANANGER**

TITLE: **REPLACEMENT OF GUTTERS AT 65 W. ALISAL**

RECOMMENDED MOTION:

It is recommended that City Council approve a resolution authorizing the replacement of the gutters on the building at 65 W. Alisal at a total cost of $30,560, with a 10% contingency for any price increase due to market volatility or unforeseen issues.

RECOMMENDATION:

It is recommended that City Council approve a resolution authorizing the replacement of the metal gutters at 65 W. Alisal at a total cost of $30,560. It is further recommended that a contingency of 10% be allowed for any price increase due to market volatility or unforeseen issues.

BACKGROUND:

Facilities Maintenance requested quotes to replace the gutter system at 65 W. Alisal. The gutters leak during heavy rain and cause interior damage to the building. We had several contractors out to look for the cause of the leak and it was deemed that the gutter system has started to fail. The gutter system at the building is enclosed by architectural detail. They are not the more traditional gutters seen on many buildings. It was difficult to find someone willing to get us quotes. We reached out to Mid-Cal Heating and Sheet Metal, Geo. H Wilson and Scudder Roofing for quotes. Only Geo Wilson and Scudder provided quotes. We chose Scudder Roofing to perform the required work.

We are asking for a 10% contingency in case there are any pricing increases due to materials or labor force change.

The city can utilize cooperative purchases with other government agencies. Local businesses are given the opportunity to compete against these contracts. The quote from Scudder Roofing satisfies the purpose and requirements of Article III-A, Local Purchasing Preference of the Salinas Municipal Code.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

The requested Council action directly relates to Council's Strategic Plans or Goals of providing "Well Planned City and Excellent Infrastructure". The replacement of the failed gutters will provide a healthy as safe work environment.

FISCAL AND SUSTAINABILITY IMPACT:

Funds are appropriated and available in the Facilities Reserve account (1000.80.8003-63.6010).

ATTACHMENTS:

Resolution
Agreement for Services

RESOLUTION NO._____(N.C.S.)

A RESOLUTION AUTHORIZING THE GUTTER SYSTEM TO BE REPAIRED AT 65. W ALISAL

WHEREAS, Funds are available in 1000.80.8003-63.6010; and

WHEREAS, the gutter system at 65 W. Alisal has started to leak into the building due to failing; and

WHEREAS, Scudder Roofing provided a quote for the gutters system at a cost of $30,560; and

WHEARAS, a contingency of ten percent be allowed for any price increase due to market volatility; and

NOW, THEREFORE, BE IT RESOLVED that the Salinas City Council authorizes the City Manager to execute an agreement with Scudder Roofing for the replacement of the gutters system at 65 W. Alisal at a cost of $30,560 with a 10% contingency for market volatility for a total approved cost of $33,616.

PASSED AND APPROVED this September 6th, 2022 by the following votes:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:

_____

Kimbley Craig, Mayor

ATTEST:

_____

Patricia M. Barajas, City Clerk

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AGREEMENT FOR SERVICES BETWEEN THE CITY OF SALINAS AND SCUDDER ROOFING AND SCUDDER SUN ENERGY

65 W. GUTTER REPAIRS

THIS AGREEMENT is executed this 18th day of July 2022, Agreement between the City of Salinas, a California Charter city and municipal corporation (hereinafter "City") and Scudder Roofing and Scudder Sun Energy, a California corporation (Hereinafter "Contractor").

IT IS HEREBY MUTUALLY AGREED AS FOLLOWS:

1. **Scope.** Contractor hereby agrees to provide to the City, as the scope of services under this Agreement, the following services: Reline architectural gutters. Scope of work is further discussed in Solicitation, Attachment B and Contractor's Proposal dated 04/11/22, Attachment C further states Department of Industrial Relations requirements.

2. **Timeliness.** Contractor shall perform all tasks in a timely fashion, as set forth more specifically in Section 3 below. Failure to so perform is hereby deemed a material breach of this Agreement, and City may terminate this Agreement with no further liability hereunder, or the city may agree in writing with Contractor to an extension of time.

3. **Term.** The work under this Agreement shall commence upon agreement approval and shall be completed by 6/30/23 unless City grants a written extension of time as set forth in Section 2 above.

4. **Payment.** City agrees to pay and Contractor agrees to accept as full and fair consideration for the performance of this Agreement, Thirty Thousand Five Hundered and Sixty Dollars ($30,560) Which includes the 2% bond charge. Contractor has no right of reimbursement for expenses under this Agreement. Compensation shall become due and payable 30 days after City's approval of Contractor's submission of monthly written invoices to the City. The payment of any compensation shall be contingent upon performance of the terms and conditions of this Agreement to the satisfaction of the City. If City determines that the work set forth in the written invoice has not been performed in accordance with the terms of this Agreement, City shall not be responsible for payment until such time as the work has been satisfactorily performed.

5. **Meet & Confer.** Contractor agrees to meet and confer with City or its agents or employees with regard to services as set forth herein as may be required by City to insure timely and adequate performance of this Agreement.

6. **Insurance.** Contractor shall procure and maintain for the duration of this Agreement insurance meeting the requirements specified in Attachment A hereto.

7. **Indemnification.** Contractor shall hold harmless, defend at its own expense, and

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indemnify City and its officers, officials, employees, agents, and volunteers from and against all liability, claims, damages, losses, and/or expenses including reasonable City attorney fees arising from all acts or omissions of Contractor or its officers, agents, or employees arising

out of the performance of the work under this Contract, caused in whole or in part by any negligent act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, except where caused by the sole negligence or willful misconduct of the City.

8. **Licensing.** Contractor warrants that it is properly licensed to perform the work specified under this Agreement, including but not limited to possession of a current City business license.

9. **Termination.** City may terminate this Agreement upon ten days' written notice. The amount of damages, if any, as a result of such termination may be decided by negotiations between the parties or before a court of competent jurisdiction.

10. **Agency.** In performing the services specified under this Agreement, Contractor is hereby deemed to be an independent contractor and not an agent or employee of City.

11. **Non-Assignability.** The rights and obligations of Contractor hereunder are not assignable and cannot be delegated without written consent of City.

12. **Entire Agreement.** This Agreement constitutes the entire Agreement between the parties hereto and supersedes any and all prior agreements, whether oral or written, relating to the subject matter thereof. Any modification of the Agreement will be effective only if it is in writing signed by both parties hereto.

13. **Validity.** If any provision in this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will continue in full force without being impaired or invalidated in any way.

14. **Counterparts.** This Agreement may be executed in multiple originals, each of which is deemed to be an original, and may be signed in counterparts.

15. **Laws.** Contractor agrees that in the performance of this Agreement it will comply with all applicable State, Federal and local laws and regulations. This Agreement shall be governed by and construed in accordance with the laws of the State of California, County of Monterey, and City of Salinas.

IN WITNESS WHEREOF, this Agreement is entered into by the parties hereto on the day and year first written above.

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CITY OF SALINAS

_____
David Jacobs
Public Works Director

APPROVED AS TO FORM:

_____
Christopher A. Callihan, City Attorney, or
Rhonda Combs, Assistant City Attorney

CONTRACTOR

DocuSigned by:
Peter H Scudder
0C1E0B46BE564BF...

By (Printed Name): Peter H Scudder

Its (Title): President

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Attachment A

Insurance Requirements

Contractor shall procure and maintain for the duration of the contract, and for three years thereafter, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his/her/its officers, agents, representatives, employees, and/or subcontractors.

MINIMUM SCOPE AND LIMIT OF INSURANCE
Coverage shall be at least as broad as:
1. **Commercial General Liability** ("CGL"): Insurance Services Office ("ISO") Form CG 00 01 covering CGL on an occurrence basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **$2,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO Form CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability**: ISO Form CA 0001 covering Code 1 (any auto), with limits no less than **$1,000,000** per accident for bodily injury and property damage.
3. **Workers' Compensation**: as required by the State of California, with Statutory Limits, and Employers' Liability insurance with a limit of no less than $1,000,000 per accident for bodily injury or disease.
4. **Contractors' Pollution Legal Liability and/or Asbestos Legal Liability and/or Errors and Omissions** (if project involves environmental hazards): with limits no less than $1,000,000 per occurrence or claim, and $2,000,000 policy aggregate, on an annual basis.

If the Contractor maintains broader coverage and/or higher limits than the minimums shown above, the Contractor requires and shall be entitled to the broader coverage and/or higher limits maintained by the Contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City.

Self-Insured Retentions
Self-insured retentions must be declared to and approved by the City. At the option of the City, either: the Contractor shall cause the insurer shall to reduce or eliminate such self-insured retentions as respects the City, its officers, officials, employees, and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the City guaranteeing payment of losses and related investigations, claim administration, and defense expenses. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or City.

Other Insurance Provisions
The insurance policies are to contain, or be endorsed to contain, the following provisions:
1. **The City, its officers, officials, employees, and volunteers are to be covered as additional insureds** on the CGL policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by

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or on behalf of the Contractor. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10, CG 11 85 or **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; **and** CG 20 37 forms if later revisions used).

2. For any claims related to this project, the **Contractor's insurance coverage shall be primary** insurance coverage at least as broad as ISO CG 20 01 04 13 as respects the City, its officers, officials, employees, and volunteers. Any insurance or self-insurance maintained by the City, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.

3. Each insurance policy required by this clause shall provide that coverage shall not be canceled, except with notice to the City.

4. A copy of the claims reporting requirements must be submitted by Contractor to the City.

5. If the services involve lead-based paint or asbestos identification/remediation, the Contractor's Pollution Liability policy shall not contain lead-based paint or asbestos exclusions. If the services involve mold identification/remediation, the Contractor's Pollution Liability policy shall not contain a mold exclusion, and the definition of Pollution shall include microbial matter, including mold.

Acceptability of Insurers

Insurance is to be placed with insurers authorized to conduct business in the state with a current A.M. Best rating of no less than A: VII, unless otherwise acceptable to the City.

Waiver of Subrogation

Contractor hereby agrees to waive rights of subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the City for all work performed by the Contractor, its employees, agents and subcontractors.

Verification of Coverage

Contractor shall furnish the City with original Certificates of Insurance including an additional insured endorsement and all required amendatory endorsements (or copies of the applicable policy language effecting coverage required by this clause) and a copy of the Declarations and Endorsement Page of the CGL policy listing all policy endorsements to City before work begins. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. The City reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time.

Subcontractors

Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that City is an additional insured on insurance required from subcontractors. For CGL coverage subcontractors shall provide coverage with a form at least as broad as CG 20 38 04 13.

Maintenance of Insurance

Maintenance of insurance by Contractor as specified shall in no way be interpreted as relieving

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Contractor of its indemnification obligations or any responsibility whatsoever and the Contractor may carry, at its own expense, such additional insurance as it deems necessary.

Special Risks or Circumstances
City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other special circumstances.

Surety Bonds
Contractor shall provide the following Surety Bonds:
1. Payment bond
2. Performance bond
3. Maintenance bond

The Payment Bond and the Performance Bond shall be in a sum equal to the contract price. If the Performance Bond provides for a one-year warranty, a separate Maintenance Bond is not necessary. If the warranty period specified in the contract is for longer than one year a Maintenance Bond equal to 10% of the contract price is required. Bonds shall be duly executed by a responsible corporate surety, authorized to issue such bonds in the State of California and secured through an authorized agent with an office in California.

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Attachment B

Scudder Roofing Company

California Contractor's Lic. #445118 DIR#100010044
P.O. Box 2596 Monterey, CA 93942
Telephone: (831) 373-7212 Fax: (831) 883-2453
Visit our website at: www.scudderroofing.com

Proposal/Contract

Date:	April 11th 2022
Attention:	Sean Schmidt seans@ci.salinas.ca.us
Roofing Proposal For:	65 West Alisal Street. Salinas Ca
From:	Javier Heredia Javier@scudderroofing.com Cell: (831) 901-3150 / Fax: (831) 883-2453
Bid Date:	4-11-2022

Scope of Work

Scudder Roofing will furnish all required materials, guaranteed to be as specified, and will perform all the labor required for the completion of gutter work as follows:

- Scudder Roofing will coordinate and facilitate a pre-construction meeting at the job site prior to the commencement of work. The pre-construction meeting will be attended by Javier Heredia (project consultant), Rafael Heredia (safety superintendent), the project foreman, and the owner/agent. The purpose of the meeting is to introduce the owner/agent to the project foreman and discuss the project details and assure all expectations are met.

- The work area will be cleaned on a daily basis. Upon completion of the work described below, a final clean-up will be performed and all job-related debris will be removed.

- All work performed by Scudder Roofing will be in accordance to local building codes, manufacturer recommendations and guidelines set by the (NRCA) National Roofing Contractors Association.

- All roof installation procedures and other related work installed by Scudder Roofing will be performed in accordance with current Cal-OSHA safety recommendations and requirements.

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Base bid 1: 50-mil Duro Last gutter system

- Carefully remove two rows of composition roof shingles at all perimeter gutter details.
- Leave in place the existing metal internal gutter system and prepare for installation of a new Duro-Last liner.
- Install new Duro-Last 50mil liner gutter system fully adhered to the existing metal gutter.
- Install new membrane corners and new membrane drain flashings.
- Supply and install new composition shingles over one layer of synthetic roof underlayment to match as close as possible.
- Supply and install all new aluminum gutter screens with stainless steel mesh.
- The color of the single-ply roof membrane is to be Gray.

DURO-LAST
THE WORLD'S BEST ROOF®

Note: **Price is based on work being done during regular business hours (8:00-5:00 Monday-Friday). If determined, work must be commenced outside these hours, a change order will result.

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Note: **If any additional work not mentioned in this proposal is required, a change order will result.

Note: **No bid bond is included in this price. If a Performance bond is required, a 2% bond fee will need to be added.

Note: **This bid was prepared based on the current state prevailing wage rate schedule.

Exclusions
Carpentry work
Permits
Lead abatement
Asbestos abatement

Guarantee
Ten (10)-year guarantee on workmanship provided by Scudder Roofing Company. The manufacturer of the single-ply roof product "Duro-Last" will provide a material warranty.

Safety note
Work includes set up of worker and pedestrian safety systems including but not limited to toe boards and harnesses at roof level and scaffolding and/or other safety systems at ground level. All roof installation procedures and other related work installed by Scudder Roofing will be performed in accordance with current Cal-OSHA safety recommendations and requirements.

Safety note
The job scope detailed in this proposal includes the set-up, as necessary, of worker and pedestrian safety systems which may include but are not limited to toe boards at roof level and personal safety harness systems and other fall protection systems to be worn or secured by Scudder workman while on the roof. All roof installation procedures and other related work installed by Scudder Roofing will be performed in accordance with current Fed-OSHA safety recommendations and requirements.

Asbestos note
If demolition encounters asbestos for removal, disturbance, or disposal, owner of building will be responsible for any disposal and roof price will increase accordingly for any special abatement procedures.

Price note
Prices are based on having good access the roof areas for loading purposes and working continuously without interruption for the duration of the project. If direct access is not available and it becomes necessary to pack the materials and/or if delays develop which are out of our control and may affect the profitability of the work provided by the Scudder Roofing Company a change order may be issued to cover the cost of additional set up time for each delay.

Prices include all materials, labor, clean up, licenses, and insurance (PL, PD, and Workman's Compensation) required to complete the job. Any alterations or improvements which must be performed by Scudder Roofing will be charged at an additional rate of $135.00 per hour and materials will be charged at cost plus 38% gross margin. Please note that any alterations or improvements performed will be done solely for purposes of roof installation. Bid subject to change if not accepted within fifteen (15) days.

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Payment terms
We propose to perform the above work in accordance with the drawings and specifications submitted and completed in a workmanlike manner according to standard practices with payments made as outlined in "terms and conditions" on the following page. Any alteration or deviation from the above specifications involving extra costs will be made and will become an extra charge over and above the work. Our workers are fully covered by Workman's Compensation and Public Liability Insurance. Overdue accounts will be charged interest at the rate of 1.5% per month (minimum $2.00 per month charge). In the event it becomes necessary to enforce this agreement by litigation, the prevailing party shall be entitled to court costs, attorney and collection fees. We may withdraw this proposal at any time before acceptance.

Acceptance of Proposal *Initial Options Elected*

Base bid 1: 50-mil Duro Last gutter system
.....Total $29,961.00 (_____)

Terms and conditions
Deposit of 10% up to $1,000.00 due upon signing of proposal with payments made per progress billing cycle based upon the percentage of job completed at the end of each regular work week with final payment due at the completion of the project OR 6 months same as cash. For 12 month no money down terms and no payment for 364 days add 3% of bid price to project total. All additional pre-approved "change order" or "project improvement" work above the contract price will be billed on an individual basis with payment to be made in full upon completion of the agreed upon improvement work.

Acceptance of proposal
The above prices, specifications and conditions are satisfactory and are hereby accepted. You are authorized to do the work as specified. Payment will be made as outlined above. It is understood and agreed that this is work not provided for in any other agreement and no contractual rights arise until this proposal is accepted in writing. This contract is only valid when signed by an officer of Scudder Roofing. Scudder Roofing has the right of refusal on this project prior to officer's signature.

Accepted: _____ Date_____
(Sign and print name)

DocuSigned by:
Peter H Scudder
Authorized Signature: _____ Date 8/18/2022
Peter H. Scudder, President

We would like to thank you in advance for this opportunity to review and propose a bid for your project. We are striving for 100% customer satisfaction and have worked very diligently to make sure this proposal is suited to meet your needs for now, and in the future. Please call me if you have any questions. We look forward to working with you.

Sincerely,

Javier Heredia

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MEDIATION. The parties agree to mediate any dispute or claim arising between them out of this agreement, or any resulting transaction, before resorting to arbitration or court action, through a mutually agreed upon mediator, who shall be a professional mediator, retired judge or attorney, or through the judicial Arbitration and Mediation service. (JAMS), or any other mediation provider or service mutually agreed to by the parties. Mediation fees, if any, shall be divided equally among the Parties. If, for any dispute or claim to which this paragraph applies, any part (i) commences an action without first attempting to resolve the matter through mediation, or (ii) before an action or arbitration is commenced, refuses to mediate after a request has been made, then that Party shall not be entitled to recover attorneys' fees, even if they would otherwise be available to that Party in any such action or arbitration.

ARBITRATION OF DISPUTES. The Parties agree that any dispute or claim arising out of this agreement, or any resulting transaction, which is not settled through mediation, shall be decided by neutral binding arbitration. The arbitration shall be a retired judge or justice, or an attorney with at least 10 years of experience in construction litigation. The Parties shall have the right to discovery in accordance with Code of Civil Procedure 1283.05. in all other respects, the arbitration shall be conducted in accordance with Tittle 9 of Part 3 of the Code of Civil Procedure. Enforcement of this agreement shall be governed by the Federal Arbitration Act. Judgment upon the award of the arbitrator may be entered in any court having jurisdiction.

"NOTICE: By INITIALING IN THE SPACE BELOW, YOU ARE AGREEING TO HAVE ANY DISPUTE ARISING OUT OF THE MATTERS INCLUDED IN THE 'ARBITRATION OF DISPUTES' PROVISION DECED BY NEUTRAL ARBITRATION AS PROVIDE BY CALIFORNIA LAW AND YOU ARE GIVING UP ANY RIGHTS YOU MIGHT POSSESS TO HAVE THE DISPUTE LITIGATEDIN A COURT OR JURY TRIAL, BY INTIALING IN THE SPACE BELOW YOU ARE GIVING UP YOUR JUDICIAL RIGHTS TO DISCOVERY AND APPEAL, UNLESS THOSE RIGHTS ARE SPECIFICALLY INCLUDED IN THE 'ARBITRATION OF DISPUTES' PROVISION. IF YOU REFUSE TO SUBMIT TO ARBITRATION AFTER AGREEING TO THIS PROVISION, YOUI MAY BE COMPELLED TO ARBITRATION UNDER THE AUTHORITY OF THE CALIFORNIA CODE OF CIVIL PROCEDURE. YOUR AGREEMENT TO THIS ARBITRATION PROVISION IS VOLUNTARY." WE HAVE READ AND UNDERSTAND THE FOREGOING AND AGREE TO SUBMIT DISPUTES ARISING OUT OF THE MATTER INCLUDED IN THE 'ARBITRATION OF DISPUTES' PROVISION TO NEUTRAL ARBITRATION."

Customer ☐ **Scudder** DS PHS

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Fencing / Facilities / Pedestrian Safety
There is no work are wire- cyclone fencing or a staging area or entry-way Pedestrian safety-scaffold included in this proposal. If this or Project fencing is required a change order will result.
Standard Orange Cones and Caution tape will be used to delineate the work areas.

Plants
Scudder Roofing assumes no responsibility for damage to plants and shrubs, however all due care will be taken to prevent damage.

Change Orders
If you direct any modification or addition to the work covered by this contract, the charge for that extra work shall be determined in advance and the estimated cost shall be added to the contract price, either by estimated amount or previously agreed upon time and materials basis. You shall make payments for all extras as that work progresses, concurrently with the regularly scheduled payments. Contractor shall do no extra work without prior written authorization from you. Any extra work may also increase the estimated time for completion of this project. If

owner cannot be reached to approve additional required work, Scudder Roofing will assume owner agrees to the charges and Scudder Roofing will move forward to complete the project on a timely basis.

Job duration note
Prices are based on working continuously without interruption for the duration of the project. If delays are develop which are out of our control and may affect the profitability of the work provided by the Scudder Roofing Company a change order may be issued to cover the cost of additional set up time for each delay.

Lead note
California law requires all structures built prior to 1978, where a painted area in the amount of 20 square feet or more may be disturbed during the roofing or reconstruction process to be either tested for lead in the paint or to assume the existence of lead in the paint. Any removal of paint or stucco in the amount of 20 square feet or more is subject to this provision. As such any testing or abatement procedures required to perform this work will result in a change order over and above the project amount listed in this proposal.

Ceiling
Scudder Roofing assumes no responsibility for damage to ceilings, resulting from roof vibration during re-roofing procedures; however, all due care is taken to prevent any damage. Although great care is administered Scudder Roofing cannot be responsible for non-detectable house wiring that may run directly underneath existing roof system. This wiring may be disturbed or may need to be upgraded to meet certain code upgrades, if this is discovered a change order price will be produced.

Note: Scudder Roofing assumes no responsibility for damage to skylight(s) resulting from roofing procedures. However, all due care is taken to prevent any damage.

Note: Due to the nature of a roofing project, Scudder Roofing must use the driveway access provided. Scudder roofing will assume no liability for damage, which may be caused to the driveway/sidewalk by Scudder, its employees and/or agents. Such damage may include, but is not limited to, subsidence, cracks, crumbling or displacement of the surface due to placing laden or UN-laden vehicles, trucks and/or equipment on the driveway surface.

Note: Scudder Roofing assumes no responsibility for damage to dry wall ceilings, resulting from roof vibration during roofing procedures. However, all due care is taken to prevent any damage.

Note: During roofing of your home or business it is possible the heat duct and water heat duct can be disturbed or jarred loose. Often times it is undetectable from the roof line that any disturbance has occurred. It is strongly recommended and suggested that after the roof is complete and if Scudder Roofing cannot access interior of the house that the owner inspect the duct systems on both the water heater and furnace. If anything looks out of the ordinary and appears to be loose or disturbed, please contact us at your earliest convenience so we can perform a further investigation. It is crucial because an improper connection of the ducting can result in serious injury or death due to carbon monoxide poisoning.

Time for Performance
It is anticipated that work on this contract will begin approximately ___days after return of the signed agreement, and will be completed in approximately ___ days after commencement, weather permitting. If contractor fails to commence work within twenty (20) days of the date specified for commencement, this may constitute a violation of the Contractor's State Licensing Law.

Mechanics Lien Notice to Owner
To protect yourself under the Mechanics Lien Law, you have the right to require all materials suppliers and laborers to have signed a "Waiver and Release" form. If a Mechanics Lien has been filed against your property, it can only be voluntarily released by a voluntary "Release of Mechanics Lien" signed by the person or entity that filed the Mechanics Lien against your property unless a lawsuit to enforce the lien was not timely filed. You have the right to withhold any final payment until any and all such liens are removed. You are encouraged to consult with an attorney if a lien is filed against your property.

Acceptance/Rejection
The company reserves the right to reject or cancel all or part of this agreement due to unacceptable payment performance or credit rating of the Owner/Customer. The Company may accept late payments of partial payments, checks; back drafts or money orders marked "Paid in Full" without waving any of its rights related to this agreement.

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Approval
Until approved this proposal is subject to change without notice and is automatically with drawn on the (15th) fifteenth day at issue.

Alternate Bids
The Owner/Customer has the option to obtain alter-alternate bids for the above additional work, provided that obtaining the bids does not unduly hold up completion of the project. The Company will be held harmless for damage to the property during this bidding period. In emergency situations if the Owner/Customer is absent from the work site, the Company is authorized to proceed without formal notification to the Owner/Customer. However, the Company shall be responsible to document the performance of this additional work.

Company Responsibility
The Company shall provide necessary labor, materials and sales tax on materials to complete the object as specified. The Company may in its discretion substitute materials to be used in the work; provided all substituted materials are that of equal kind and quality All surplus or salvageable materials remain the property of the Company.

Company Insurance
The Company shall provide Workers Compensation, Public Liability, Property Damage and Complete Operations insurance for the project unless such insurance in whole or in part is supplied by a general contractor, sub-contractor or owner. Damage to the building or its contents, during or after construction or during the warranty period shall be covered by this insurance. The Company's maximum liability is limited to the coverage provided.

Mutual Cancellation
The Owner/Customer and Company have the option to renegotiate or cancel this agreement at any time for any reason up to three days after signing the agreement without penalty and with the assurance any deposits paid will be immediately returned. If the contract is breached thereafter without consent of the Company liquidated damages of 20% of the cash PRICE of the project, plus a pro-proportionate share of all work already performed will be due the Company.

Ownership
Title to material and/or work furnished under this agreement shall remain the property of the Company or its assignees until all payments have been made. It is also agreed the Company will have a security interest in any real property of the Owner, and the Owner will not dispose of the property until the work has been paid in full.

Owner/Customer Responsibility
The owner is responsible for individual finance charges, bank fees, or local building permit fees required for the project. The Owner/Customer will make themselves available during construction for clarification of specifications and approval of additional work as may be required The Owner/Customer will assure adequate access to the property and incidental electric and water as required. Special changes or additions to this agreement, as required by regulatory agencies will be at additional cost unless such changes or additions are cited in this agreement normal maintenance and care of work installed is the Owner's responsibility. The owner/customer will confirm in writing to the Company headquarters any warranty claims within ten days of discovering any detect or failure of the work to properly perform. Certified Mail is considered proof of notice.

Project Sequencing
The Company is responsible for establishing scheduling and sequencing of the work to be performed. The Company shall not he held responsible for delay, non-delivery, discontinuance, default in shipment by a supplier in whole or in part loss in transit, strikes, lockouts or other conditions beyond the control of the Company. The Owner/Customer agrees to pay for completed work, if portions are delayed, due to these reasons. In the event of significant delay, change and price increase involving labor, material or equipment through no fault of the Company the contract amount, time of completion and/or other contract requirements shall be adjusted equitably by Additional Work Order.

Substantial Completion
Payment is due upon substantial completion of the work. If certain minor items OF WORK are incomplete, the cost of those items may be withheld from the substantial completion pay-PAYMENT at the Owner/Customer option until such items are complete.

Understanding
This agreement constitutes the entire understanding between the Owner/Customer and the Company. It is agreed that no representation or warranty is binding unless cited in this agreement.

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Scudder Roofing Company
P.O. Box 2596, Monterey, CA 93942
Phone (831) 373-7212, Fax (831) 883-2453
www.scudderroofing.com

PARTICULARS

Pitched roof type _____ color _____

Flat roof type _____ color _____

Gutter type _____ color _____ downspout color _____

Bathroom facilities provided by owner? ☐ Yes ☐ No

Portable toilet? ☐ Yes ☐ No

Location of toilet: _____

Electrical service provided by owner? ☐ Yes ☐ No

Location of Electrical service: _____

Existing property damage:

Other Notes:

Initial_____

Attachment C

DEPARTMENT OF INDUSTRIAL RELATIONS' STATE LABOR CODE

Labor Law Requirements

(CCR Title 8, Section 16421)

This public works project is subject to compliance monitoring and enforcement by the California Department of Industrial Relations ("DIR"). All work shall be in accordance with wage scales and applicable determinations made by the Director of the DIR, as provided by Article 2, Chapter 1, Division 2, Part 7 of the Labor Code of the State of California, commencing with §1771.

Penalties for violations may be applied by the DIR pursuant to the Labor Code §1813 and §1815. The Contractor shall indemnify, hold harmless, and defend the City (with counsel reasonably approved by the City) against any claim for damages, compensation, fines, penalties, or other amounts arising out of the failure or alleged failure of any person or entity (including Contractor and its subcontractors) to pay prevailing wages as determined pursuant to Labor Code §1720, and hereby agrees to, §§1771-1774; to employ apprentices pursuant to Labor Code §1777.5 et seq., and/or to comply with the other applicable provisions of Labor Code §1720 et seq., §§1771-1774, §1777.5 et seq., and the implementing regulations of the DIR in connection with the scope of work. This indemnification section shall survive the expiration of the Term.

The Federal and State Labor Law requirements applicable to the Agreement are composed of, but not limited, to the following items:

1. **Payment of Prevailing Wage Rates**: All contractors, including subcontractors, shall pay no less than the prevailing rate of wages (Labor Code §1775), including the rates for holidays and overtime work (Labor Code §§1813 and 1815), to all workers employed in the execution of the contract (Labor Code §1774), pursuant to Labor Code §§1720-1784. The prevailing rates are those issued as wage determinations by the DIR, for each craft, classification and type of work. The current wage rate information can be found at the DIR's website at: https://www.dir.ca.gov/oprl/DPreWageDetermination.htm.

   Copies of the prevailing rate of per diem wages are on file at City's Public Works Department (principal place of office). Contractor shall post a copy of the determination of the Director of DIR of the prevailing rate of per diem wages at each job site.
2. **Apprentices**: Contractor and subcontractors shall employ registered apprentices on this public works Agreement pursuant to Labor Code §1777.5. All contractors on this project (prime and subcontractors) are required to submit the Division of Apprenticeship Standards' ("DAS") Public Works Contract Award Information (DAS 140) form to all applicable apprenticeship committees no later than 10 days before commencing work. Additionally, all contractors are required to request registered apprentices (DAS 142 form).

   Penalties for failure to pay prevailing wages (for non-exempt projects) and failure to employ apprentices include forfeitures and debarment under Labor Code §§1775 and 1777.7.
3. **Certified Payroll Records**: All contractors, including subcontractors, must maintain and file certified payroll records ("CPRs") pursuant to Labor Code §1776. Additionally, all contractors and subcontractors must furnish **certified payroll records into the DIR's Electronic Certified Payroll Reporting ("eCPRs") database**

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(https://efiling.dir.ca.gov/eCPR/pages/eCPROnlineForm.jsp). Penalties apply to Contractor and any Subcontractors for failure to do so under Labor Code §1777.

4. **Subcontracting**: Contractors are required to list all subcontractors hired to perform work on this public works agreement.
5. **Proper Licensing/Registration**: All contractors and subcontractors are required to be properly licensed, in accordance with the Provisions of Chapter 9 of Division 3 of the Business and Professions Code and subject to the requirements of §4104 of the Public Contract Code. In addition, all contractors including subcontractors must submit proof of current registration to perform public work, pursuant to Labor Code §1771.1. Contractors are required to be properly licensed and to require all subcontractors to be properly licensed. Penalties for employing workers while unlicensed under Labor Code §1021 and under the California Contractors License Law, found at Business and Professions Code §7000 et. seq.
6. **Job Site Notices**: Contractors are required to post all required notices (posters) on the job site in an area accessible to all workers, including subcontractors. Posters must be readable and placed in visible areas allowing workers to access the posters before, during, and after work shifts. Jobsites with multiple locations must include a portable poster board to ensure continued access to the information. Posters placed in foreman, supervisor, or employee vehicles, in an offsite job trailer, or inside a temporary restroom do not meet the posting requirement. Posters may be printed from the DIR's website at: http://www.dir.ca.gov/wpnodb.html.
7. **Nondiscrimination in Employment – Equal Employment Opportunity ("EEO")**: Employment discrimination is prohibited, pursuant to Labor Code §1777.6, the Government Code, and Title VII of the Civil Rights Act of 1964.
8. **Kickbacks Prohibited**: Contractors and subcontractors are prohibited from recapturing wages illegally by accepting or extracting "kickbacks" from employee wages pursuant to Labor Code §1778.
9. **Acceptance of Fees Prohibited**: Contractors and subcontractors are prohibited from accepting fees for registering any person for public work or for filling work orders on public works contracts, pursuant to Labor Code §§1779 and 1780.
10. **Unfair Competition Prohibited**: Contractors and subcontractors are prohibited from engaging in unfair competition as specified under Business and Professions Code §§17200 - 17208.
11. **Workers' Compensation:** Contractors and subcontractors must be properly insured for Workers' Compensation under Labor Code §1861. Contractor hereby represents that Contractor is aware of the provisions of Section 3700 of the Labor Code, which require every employee to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that Code, and Contractor will comply with such provisions before commencing the performance of the work of this agreement.
12. **OSHA:** Contractors and subcontractors must abide by the Occupational, Safety, and Health Laws and regulations that apply.

ACORD

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 1/7/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
(PT) Heffernan Insurance Brokers
101 2nd Street, Suite 120
Petaluma CA 94952

License#: 0564249

CONTACT NAME:
PHONE (A/C, No, Ext): 707-781-3400
FAX (A/C, No): 707-781-0800
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A: United Specialty Insurance Company	12537
INSURER B: Redwood Fire & Casualty Insurance Company	11673
INSURER C: United States Fire Insurance Company	21113
INSURER D:	
INSURER E:	
INSURER F:	

INSURED
Scudder Roofing Co.
P.O. Box 2596
Monterey CA 93942

SCUDROO-02

COVERAGES CERTIFICATE NUMBER: 723008608 REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY			ATN2251204	1/1/2022	1/1/2023	EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 50,000
							MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	POLICY X PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	OTHER:							$
C	AUTOMOBILE LIABILITY			5069035107	1/1/2022	1/1/2023	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
A	UMBRELLA LIAB X OCCUR			BTN2248351	1/1/2022	1/1/2023	EACH OCCURRENCE	$ 5,000,000
	X EXCESS LIAB CLAIMS-MADE						AGGREGATE	$ 5,000,000
	DED X RETENTION $ 10,000							$
B	WORKERS COMPENSATION AND EMPLOYER'S' LIABILITY			SCWC250208	12/31/2021	12/31/2022	X PER STATUTE / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH)	N / A					E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
General Liability policy contains the attached Wrap Up exclusion endorsement.
Sample of coverages at time of binding. Does not provide any proof of coverage unless holder name and address is completed.

CERTIFICATE HOLDER

Name
Address
City, State Zip

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

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ATN2251204

Rectangular Snip

United Specialty Insurance Company

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

VEN 069 02 (04/18)

WRAP- UP EXCLUSION
(Limited off-site exception)

This Exclusion modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

The following exclusion is added to **SECTION 1 - COVERAGE A BODILY INJURY AND PROPERTY DAMAGE**, Paragraph **2. Exclusions** and **SECTION 1 – COVERAGE B PERSONAL AND ADVERTISING INJURY LIABILITY**, Paragraph **2. Exclusions** of the **COMMERCIAL GENERAL LIABILITY COVERAGE FORM**;

This insurance does not apply to "bodily Injury", "property damage", or "personal and advertising injury" arising out of any project which is insured, in whole or in part, under a Consolidated Insurance Program commonly known as an Owner Controlled Insurance Program, a Contractor Controlled Insurance Program, a Wrap-Up Insurance Program or any other type of insurance program designed to provide liability coverage for parties involved in the development, design, construction, erection, supervision or management of a specific project or projects.

This exclusion applies whether or not the Consolidated Insurance Program:

1. Provides coverage identical to that provided by this policy:
2. Has limits adequate to cover all claims;
3. Remains in effect.

However, this exclusion does not apply to work performed by you or on your behalf for a project that is insured under a Consolidated Insurance Program if the work is performed away from the premises insured under the Consolidated Insurance Program and that no coverage for this work is found in the Consolidated Insurance Program. This exception to the exclusion does not apply to "bodily injury" or "property damage" which is included in the "products-completed operations hazard". Nothing in this endorsement shall be construed as to grant any products-completed operations coverage.

All other terms, conditions and exclusions under the policy are applicable to this Endorsement and remain unchanged.

VEN 069 02 (04/18) Page 1 of 1

File #: ID#22-483, **Version:** 1

Cal Cities Voting Delegates

Approve appointment of Mayor Kimbley Craig as the voting delegate and Councilmember Anthony Rocha as the alternate voting delegate for the annual Cal Cities' business meeting.

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **SEPTEMBER 6, 2022**

DEPARTMENT: **ADMINISTRATION**

FROM: **PATRICIA M. BARAJAS, CITY CLERK**

TITLE: **CAL CITIES' VOTING DELEGATES**

RECOMMENDED MOTION:

Motion to approve appointment of Mayor Kimbley Craig as the voting delegate and Councilmember Anthony Rocha as the alternate voting delegate for the annual Cal Cities' business meeting on policy resolutions and further authorize the City's delegate to vote in support/opposition of the Cal Cities' proposed Policy Resolutions.

RECOMMENDATION:

It is recommended that the City Council approve appointment of Mayor Kimbley Craig as the voting delegate and Councilmember Anthony Rocha as the alternate voting delegate for the annual Cal Cities' business meeting on policy resolutions and authorize the City's delegate to vote on policy resolutions accordingly.

EXECUTIVE SUMMARY:

The Cal Cities 2022 Annual Conference and Expo is scheduled for September 7 - 9 in Long Beach, California. An important part of the Annual Conference is the annual business meeting where the membership considers and takes action on resolutions that establish policy. In order to vote on the proposed policy resolution at the annual business meeting, voting delegates and alternates must be appointed by the City Council.

BACKGROUND:

At its annual business meeting, the Cal Cities adopts policy resolutions on issues of statewide importance that have direct bearing on municipal affairs and are of broad municipal interests. This year's general assembly and business meeting will be held during the League's annual conference on Friday, September 9, 2022, at the Long Beach Convention Center. Each city must appoint a voting delegate and may appoint up to two alternates to vote on the policy resolutions. Action by the City Council is required consistent with Cal Cities bylaws. Mayor Kimbley Craig wishes to serve as the city's voting delegate and recommends Councilmember Anthony Rocha serve as the alternate delegate.

Cal Cities primary means for developing policy is through their standing policy committees and Board of Directors. Additionally, any city, elected or appointed city official, or Cal Cities Division, Department, or Policy Committee may submit a resolution sixty days before the business meeting. Resolutions signed by at least 47 delegates may be introduced during the annual conference for issues that developed after the submittal deadline.

This year, the Cal Cities did not receive resolutions to be considered at the Annual Conference, however there will be an amendment to Cal Cities bylaws to be considered and voted on during the business meeting. The proposed bylaws amendment packet is attached hereto.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

Identifying voting delegates of the City Council to participate in Cal Cities Annual Business meeting supports the City Council's goal of effective and culturally responsive government and encourages participation in Cal Cities events and activities that help build strong strategic partnerships.

DEPARTMENTAL COORDINATION:

The City Clerk's Office in collaboration with the City Manager and Mayor is responsible for the appointment of the voting delegates consistent with Cal Cities bylaws.

FISCAL AND SUSTAINABILITY IMPACT:

No fiscal and sustainability impact.

ATTACHMENTS:
Letter from Cal Cities reg. Voting Delegates
2022 Proposed Bylaws Amendment Packet

LEAGUE OF CALIFORNIA CITIES

Council Action Advised by August 31, 2022

DATE: June 1, 2022

TO: City Managers and City Clerks

RE: DESIGNATION OF VOTING DELEGATES AND ALTERNATES
League of California Cities Annual Conference & Expo – September 7-9, 2022

Cal Cities 2022 Annual Conference & Expo is scheduled for September 7-9, 2022 in Long Beach. An important part of the Annual Conference is the Annual Business Meeting (during General Assembly) on Friday, September 9. At this meeting, Cal Cities membership considers and acts on resolutions that establish Cal Cities policy.

In order to vote at the Annual Business Meeting, your city council must designate a voting delegate. Your city may also appoint up to two alternate voting delegates, one of whom may vote if the designated voting delegate is unable to serve in that capacity.

Please complete the attached Voting Delegate form and return it to Cal Cities office no later than Friday, September 2. This will allow us time to establish voting delegate/alternate records prior to the conference.

Please view Cal Cities' event and meeting policy in advance of the conference.

- **Action by Council Required.** Consistent with Cal Cities bylaws, a city's voting delegate and up to two alternates must be designated by the city council. When completing the attached Voting Delegate form, please attach either a copy of the council resolution that reflects the council action taken, or have your city clerk or mayor sign the form affirming that the names provided are those selected by the city council. Please note that designating the voting delegate and alternates **must** be done by city council action and cannot be accomplished by individual action of the mayor or city manager alone.

- **Conference Registration Required.** The voting delegate and alternates must be registered to attend the conference. They need not register for the entire conference; they may register for Friday only. Conference registration will open by June 1 on the Cal Cities website. In order to cast a vote, at least one voter must be present at the Business Meeting and in possession of the voting delegate card. Voting delegates and alternates need to pick up their conference badges before signing in and picking up the voting delegate card at the Voting Delegate Desk. This will enable them to receive the special sticker on their name badges that will admit them into the voting area during the Business Meeting.

- **Transferring Voting Card to Non-Designated Individuals Not Allowed.** The voting delegate card may be transferred freely between the voting delegate and alternates, but *only* between the voting delegate and alternates. If the voting delegate and alternates find themselves unable to attend the Business Meeting, they may *not* transfer the voting card to another city official.

- **Seating Protocol during General Assembly.** At the Business Meeting, individuals with the voting card will sit in a separate area. Admission to this area will be limited to those individuals with a special sticker on their name badge identifying them as a voting delegate or alternate. If the voting delegate and alternates wish to sit together, they must sign in at the Voting Delegate Desk and obtain the special sticker on their badges.

The Voting Delegate Desk, located in the conference registration area of the Long Beach Convention Center, will be open at the following times: Wednesday, September 7, 8:00 a.m. – 6:00 p.m.; Thursday, September 8, 7:00 a.m. – 4:00 p.m.; and Friday, September 9, 7:30 a.m.–12:30 p.m. The Voting Delegate Desk will also be open at the Business Meeting on Friday, but will be closed during roll calls and voting.

The voting procedures that will be used at the conference are attached to this memo. Please share these procedures and this memo with your council and especially with the individuals that your council designates as your city's voting delegate and alternates.

Once again, thank you for completing the voting delegate and alternate form and returning it to Cal Cities office by Friday, September 2. If you have questions, please call Darla Yacub at (916) 658-8254.

Attachments:
- Annual Conference Voting Procedures
- Voting Delegate/Alternate Form

LEAGUE OF CALIFORNIA CITIES

Annual Conference Voting Procedures

1. **One City One Vote.** Each member city has a right to cast one vote on matters pertaining to Cal Cities policy.

2. **Designating a City Voting Representative.** Prior to the Annual Conference, each city council may designate a voting delegate and up to two alternates; these individuals are identified on the Voting Delegate Form provided to the Cal Cities Credentials Committee.

3. **Registering with the Credentials Committee.** The voting delegate, or alternates, may pick up the city's voting card at the Voting Delegate Desk in the conference registration area. Voting delegates and alternates must sign in at the Voting Delegate Desk. Here they will receive a special sticker on their name badge and thus be admitted to the voting area at the Business Meeting.

4. **Signing Initiated Resolution Petitions**. Only those individuals who are voting delegates (or alternates), and who have picked up their city's voting card by providing a signature to the Credentials Committee at the Voting Delegate Desk, may sign petitions to initiate a resolution.

5. **Voting.** To cast the city's vote, a city official must have in their possession the city's voting card and be registered with the Credentials Committee. The voting card may be transferred freely between the voting delegate and alternates, but may not be transferred to another city official who is neither a voting delegate or alternate.

6. **Voting Area at Business Meeting.** At the Business Meeting, individuals with a voting card will sit in a designated area. Admission will be limited to those individuals with a special sticker on their name badge identifying them as a voting delegate or alternate.

7. **Resolving Disputes**. In case of dispute, the Credentials Committee will determine the validity of signatures on petitioned resolutions and the right of a city official to vote at the Business Meeting.

LEAGUE OF CALIFORNIA CITIES

CITY:_____

2022 ANNUAL CONFERENCE
VOTING DELEGATE/ALTERNATE FORM

Please complete this form and return it to Cal Cities office by Friday, September 2, 2022. Forms not sent by this deadline may be submitted to the Voting Delegate Desk located in the Annual Conference Registration Area. Your city council may designate one voting delegate and up to two alternates.

To vote at the Annual Business Meeting (General Assembly), voting delegates and alternates must be designated by your city council. Please attach the council resolution as proof of designation. As an alternative, the Mayor or City Clerk may sign this form, affirming that the designation reflects the action taken by the council.

Please note: Voting delegates and alternates will be seated in a separate area at the Annual Business Meeting. Admission to this designated area will be limited to individuals (voting delegates and alternates) who are identified with a special sticker on their conference badge. This sticker can be obtained only at the Voting Delegate Desk.

1. VOTING DELEGATE

Name: _____

Title: _____

2. VOTING DELEGATE - ALTERNATE

Name:_____

Title:_____

3. VOTING DELEGATE - ALTERNATE

Name: _____

Title: _____

ATTACH COUNCIL RESOLUTION DESIGNATING VOTING DELEGATE AND ALTERNATES OR

ATTEST: I affirm that the information provided reflects action by the city council to designate the voting delegate and alternate(s).

Name: _____ Email_____

Mayor or City Clerk_____ Date_____ Phone_____
(circle one) (signature)

Please complete and return by Friday, September 2, 2022 to:
Darla Yacub, Assistant to the Administrative Services Director
E-mail: dyacub@calcities.org; Phone: (916) 658-8254

2022 Annual Conference and Expo

PROPOSED BYLAWS AMENDMENTS

General Assembly
September 9, 2022

If you have any questions regarding these materials, please contact Norman Coppinger at ncoppinger@calcities.org or by phone at 916.658.8277.

LEAGUE OF CALIFORNIA CITIES

2021-2022
CAL CITIES OFFICERS

President
Cindy Silva
Mayor Pro Tem, Walnut Creek

First Vice President
Ali Taj
Council Member, Artesia

Second Vice President
Daniel Parra
Council Member, Fowler

Immediate Past President
Cheryl Viegas Walker
Council Member, El Centro

Executive Director and CEO
Carolyn M. Coleman

August 2022

To: Cal Cities General Assembly
From: Cindy Silva, President
Carolyn Coleman, Executive Director and CEO
Re: Proposed Cal Cities Bylaws Amendments

On July 15, 2022, the League of California Cities (Cal Cities) Board of Directors (Board) voted to present proposed bylaws amendments to the General Assembly at the 2022 Cal Cities Annual Conference and Expo. This memorandum outlines the history of the proposed amendments, summarizes the amendments, and provides an explanation of the process for adopting amendments to the bylaws.

Background

Beginning in 2017, the Board directed Cal Cities to undertake a strategic planning process that resulted in the adoption of the "Powering Up for California Cities Strategic Grown Plan 2018-2021" (Strategic Growth Plan). The Strategic Growth Plan set forth goals to enhance Cal Cities' governance to: (a) achieve even higher levels of engagement and effectiveness; (b) ensure optimal engagement by members and effectiveness in supporting fulfillment of the Cal Cities' mission; and (c) ensure the pathway to leadership is transparent and inclusive.

In furtherance of its governance goals, the Board engaged an association governance consultant (Consultant) to evaluate the Cal Cities governance system and make recommendations for enhancing Cal Cities' governance. The Consultant gathered and considered input from more than 350 Cal Cities members through advisory groups, roundtable discussions, interviews, and surveys. On July 8, 2021, the Consultant produced a report (Governance Report) detailing 49 recommendations to the Board to deepen the engagement of Cal Cities Member Cities and ensure Cal Cities' governance is operating at peak performance.

The Governance Report included findings indicating that Cal Cities is a strong organization, with a high level of member engagement, but also highlighted opportunities for Cal Cities to enhance its governance. The opportunities for enhancement included: (a) improving the clarity, ease, and consistency in how the governance system works; (b) clarifying the guidelines for position qualifications and performance expectations; (c) identifying ways to deepen member engagement and enhance the quality of the experience of involvement; and (d) ensuring Cal Cities has an intentional, consistent organizational culture at all levels of the governance system.

The findings and recommendations from the Governance Report were presented to the Board during the July 2021 Board meeting. Following a robust exchange of ideas and input, the Board decided to move forward with many of the recommendations, referred other recommendations to a "to be established" board subcommittee for further study, and deferred consideration of the remaining recommendations.

Following Board approval, in September 2021 during the Cal Cities Annual Conference and Expo, the General Assembly voted to approve the following bylaws amendments:

1. Adjust the composition of the Board to achieve a higher impact and be more representative by adding Director seats to the Board for each of the five Diversity Caucuses, and transitioning members of the National League of Cities Board from Cal Cities Directors to one non-voting advisor to the Cal Cities Board.

2. Recognize the Cal Cities Diversity Caucuses in the Cal Cities bylaws to reflect the full contribution the caucuses make to Cal Cities' mission and vision.

Those amendments became effective on Nov. 24, 2021.

Among the recommendations the Board decided was a priority to move forward was the establishment of a standing Governance Committee to assist the Board in fulfilling its governance function.

At its February 2022 meeting, the Board voted to approve Board policy establishing the Governance Committee with the task of regularly reviewing the governance structures, policies, and practices of Cal Cities and reporting its findings and recommendations to the Board. The Board also approved a one-year work plan for the Governance Committee that established priority governance issues to focus on in its first year.

Following the Board meeting, President Cindy Silva appointed the following Board members to serve on the Governance Committee:

- Cheryl Viegas Walker, Immediate Past President and Council Member, El Centro, Chair
- Walt Allen, Council Member, Covina
- Jan Arbuckle, Vice Mayor, Grass Valley
- LaTanya Bellow, Deputy City Manager, Berkeley
- Pippin Dew, Council Member, Vallejo
- Lynne Kennedy, Mayor Pro Tem, Rancho Cucamonga
- Karen Goh, Mayor, Bakersfield
- Jim Lewis, City Manager, Pismo Beach
- Lisa Middleton, Mayor, Palm Springs
- John Minto, Mayor, Santee
- David Pollock, Council Member, Moorpark

The Governance Committee met in April 2022, and following engaging and productive discussions, brought forward to the Board at its May 2022 meeting several recommendations to further enhance Cal Cities' governance. Among the recommendations approved by the Board during that meeting are two that require bylaws amendments:

1. Formalize oversight of the **Resolutions Committee** by establishing the Second Vice President as the chair of the committee, while retaining the President's authority to appoint the vice chair of the committee.

2. To ensure a more inclusive **Nominating Committee**, add one committee member appointed from among the Caucus Directors and one additional committee member appointed from among the At-Large Directors for a total of 13 committee members.[1]

In addition to those recommendations identified by the Governance Committee and approved by the Board, Cal Cities staff identified various non-substantive revisions to the Cal Cities bylaws:

1. Clarify that, unless the Board establishes otherwise, the **Cal Cities President appoints the chair of Board-established committees**.

2. To avoid confusion and clarify organizational responsibilities, remove "Treasurer" from the **title of the Second Vice President**.[2]

3. To promote consistency, replace the term "Board member(s)" with "**Director(s)**."[3]

On July 15, 2022, the Board voted to present these proposed bylaws amendments to the General Assembly at the 2022 Cal Cities Annual Conference and Expo.

While the work to enhance Cal Cities' governance is a process being implemented in phases over several years, the Board believes these proposed amendments constitute important next steps toward ensuring Cal Cities' governance is operating at peak performance.

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[1] Under the current bylaws, the Nominating Committee is comprised of 11 Directors. Two committee members are appointed from among At-Large Directors and one from a Department. Divisions participate on a rotation, with Directors residing within eight of the Divisions appointed in even-numbered years and Directors from the other eight appointed in odd-numbered years.

[2] Under the current bylaws, the Second Vice President is referred to as "Second Vice President/Treasurer." However, in practice the Second Vice President does not serve as treasurer of Cal Cities. Rather, that function is performed by the Chief Financial Officer designated in Article VIII, section 5, subdivision b(2), of the Cal Cities bylaws.

[3] The current bylaws primarily refer to members of the Cal Cities Board of Directors as "Directors." However, there are instances in which they are referred to as "Board members."

Procedure for Amending the Cal Cities Bylaws

Amendments to the Cal Cities bylaws may be proposed by the Cal Cities Board and may be adopted: (a) by vote of the Cal Cities General Assembly, or (b) by mail ballot to Member Cities.[4] In this case, the amendments will be considered by the General Assembly. Bylaws amendments need to be approved by 2/3 of those voting,[5] and the number that constitutes 2/3 of those voting (a) cannot be less than a majority of the voting delegates present if there is a quorum at the time the vote is taken;[6] or (b) cannot be less than a majority of a quorum if the meeting started with a quorum but a quorum is not present when the vote is taken.[7]

If approved by the General Assembly, the amendments to the bylaws will go into effect after the expiration of a 60-day protest period.[8] If, within 60 days after the adoption of the amendments, one-third or more of Member Cities submit a written protest against such amendments, the amendments are automatically suspended until the next Annual Conference and Expo, when they may be taken up again for reconsideration and vote.[9] If the amendments are approved by the General Assembly and no protest is lodged, the effective date of the bylaws amendments will be Nov. 9, 2022.

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[4] Article XVII, Section 1.
[5] Article XVII, Section 2.
[6] Cal. Corp. Code 7512, subd. (a).
[7] Cal. Corp. Code 7512, subd. (d).
[8] Article XVII, section 6.
[9] Article XVII, section 7.

RESOLUTION RELATING TO AMENDMENTS TO THE CAL CITIES BYLAWS
(2/3 vote at General Assembly required to approve)

Source: *League of California Cities Board of Directors*

WHEREAS, the League of California Cities (Cal Cities) is a nonprofit mutual benefit corporation under California law and, as such, is governed by corporate bylaws; and

WHEREAS, the Cal Cities Board of Directors (Board) periodically reviews the Cal Cities bylaws for issues of clarity, practicality, compliance with current laws, and responsiveness to membership needs and interests; and

WHEREAS, beginning in 2017, the Board directed Cal Cities to undertake a strategic planning process that resulted in the adoption of the "Powering Up for California Cities Strategic Growth Plan 2018-2021" (Strategic Growth Plan); and

WHEREAS, the Strategic Growth Plan set forth goals to enhance Cal Cities' governance to: (a) achieve even higher levels of engagement and effectiveness; (b) ensure optimal engagement by members and effectiveness in supporting fulfillment of the Cal Cities' mission; and (c) ensure the pathway to leadership is transparent and inclusive; and

WHEREAS, in furtherance of its governance goals, the Board engaged an expert in association governance who gathered and considered input from more than 350 Cal Cities members through advisory groups, roundtable discussions, interviews, and surveys to evaluate the Cal Cities governance system and make recommendations for enhancing Cal Cities' governance; and

WHEREAS, in July 2021 the Board decided to move forward with certain recommendations made as a result of that governance evaluation, including a recommendation to establish a standing Governance Committee of the Board to assist the Board in fulfilling its governance function; and

WHEREAS, in February 2022 the Board approved Board policy establishing the Governance Committee and charging it with regularly reviewing the governance structures, policies, and practices of Cal Cities, and reporting its findings and making recommendations to the Board; and

WHEREAS, in 2022 the Governance Committee recommended, and the Board, approved certain changes to the bylaws that: (1) formalize the oversight of the Resolutions Committee; (2) ensure a more inclusive Nominating Committee by adding one committee member appointed from among Caucus Directors and one additional committee member appointed from among At-Large Directors; (3) clarify that, unless the board establishes otherwise, the Cal Cities President appoints the chair of board-established committees; and (4) make various non-substantive revisions; and

WHEREAS, the Cal Cities Board offers the following proposed amendments and additions to the bylaws, as set forth in the attached redlined version of the bylaws specified below, which is hereby incorporated by reference:

1. Amend Article VI, section 3(c) to designate the Second Vice-President as the Resolutions Committee chair, while retaining the President's authority to appoint the vice chair of the Resolutions Committee;
2. Amend Article VII, section 5(b) to adjust the composition of the Nominating Committee by adding one At-Large Director and one Caucus Director for a total of 13 Nominating Committee members;
3. Amend Article VII, Section 10(d) to provide that, *unless the Board establishes otherwise*, the Cal Cities President appoints the chair of board-established committees;
4. Replace the title "Second Vice-President/Treasurer" with "Second Vice President" in Article VII, sections 2(a), 5(e), and 10(b); and Article VIII, sections 1, 2(c), and 4;
5. Replace the term "board member(s)" with "Director(s)" in Article VII, sections 5(b), 5(e), and 8; Article XII, section 5(c); and Article XV, section 4; and

now therefore, be it

RESOLVED, by the General Assembly of the League of California Cities assembled during the Annual Conference in Long Beach on September 9, 2022, that the proposed bylaws amendments are hereby approved and Cal Cities shall make the specified amendments to the Cal Cities bylaws set forth in the attached redlined version of the bylaws.

See ATTACHMENT 1 for redline of proposed changes to the bylaws.

ATTACHMENT 1
Redline of Proposed Changes to Bylaws

Bylaws for the
League of California Cities

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Article VI. Resolutions

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Section 3: Resolutions Committee for Annual Conference Resolutions.

(a) Resolutions Committee Composition. The Cal Cities President establishes a Resolutions Committee sixty days prior to each Annual Conference, which committee shall consist of:

(i) One elected official from each regional division, appointed by the regional division;

(ii) One elected official from each policy committee, appointed by the policy committee;

(iii) One member from each functional department, appointed by the department;

(iv) One elected official from each caucus, appointed by the caucus; and

(v) Up to ten additional members (at least five of whom are elected officials) as the Cal Cities President deems necessary to achieve geographic and population balance, as well as recognize the multiplicity of city functions not represented by the other appointments, including, but not limited to, the perspectives of board and commission members as well as professional staff.

(b) Presidential Appointments. In the event a regional division, policy committee, functional department, or caucus does not make its appointment to the Resolutions Committee, the Cal Cities President may make the appointment on the regional division's, policy committee's, functional department's, or caucus's behalf.

(c) Chair. The Cal Cities ~~President shall also appoint to the Resolutions Committee a committee chair and vice chair~~Second Vice-President shall serve as committee chair. The Cal Cities President shall also appoint to the Resolutions Committee a vice chair.

(d) Minimum Committee Size and Composition. In the event the full committee is not in attendance at the Annual Conference, the Cal Cities President shall appoint a sufficient number of city officials in attendance to achieve a total of thirty. No less than two-thirds of the members of the Resolutions Committee shall be elected officials.

(e) Committee Consideration of Proposed Resolutions. Except for resolutions of courtesy, commendation, appreciation or condolence, no resolution expressing the opinion or policy of Cal Cities on any question may be considered or discussed by Cal Cities' General Assembly, unless it has been first submitted to, and reported on, by the Resolutions Committee.

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Article VII: Board of Directors

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Section 2: Composition.

The Cal Cities Board is composed of the following:

(a) A President, First Vice-President and Second Vice-President~~/Treasurer~~, who each serve a term of one year;

(b) The Immediate Past President who serves for a term of one year, immediately succeeding his or her term as President;

(c) Twelve Directors-at-Large,

(i) Who serve staggered two-year terms, and

(ii) At least one of whom is a representative of a small city with a population of 10,000 or less;

(d) One Director to be elected from each of the regional divisions, functional departments, and caucuses of Cal Cities, each of whom serves for a term of two years; and

(e) Ten Directors that may be designated by the mayors of each of the ten largest cities in California to serve two-year terms.

(f) For purposes of this section, the population of each city is the most current population as determined by the California Department of Finance, Demographic Research Unit, or its successor agency or unit. If no successor agency or unit is named, the most current population used to determine these dues shall be used to determine future dues until such time as these bylaws are amended to designate a new source for determining city population.

(g) Directors hold office until their successors are elected and qualified.

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Section 5: Nomination Process.

(a) Timing. The Cal Cities President, with the concurrence of the Cal Cities Board, shall establish a nominating committee at the first Board meeting of the calendar year in which the election is to occur.

(b) Composition. The nominating committee shall be comprised of ~~eleven~~ thirteen ~~Board members~~Directors. Three~~Two~~ nominating committee members shall be At-Large Directors, ~~and~~ one shall represent a functional department, and one shall represent a caucus. Regional divisions shall be represented on the nominating committee on the following rotating basis:

(i) Even-Numbered Years: In even-numbered years, the Central Valley, Imperial County, Monterey Bay, North Bay, Orange County, Redwood Empire, Sacramento Valley and San Diego County Regional Divisions shall be represented on the nominating committee.

(ii) Odd-Numbered Years: In odd-numbered years, the Channel Counties, Inland Empire, Desert-Mountain, East Bay, Los Angeles County, Peninsula, Riverside County, and South San Joaquin Regional Divisions shall be represented on the nominating committee.

(c) Nominating Committee Chair. The Cal Cities President shall appoint the chair of the nominating committee.

(d) Candidates for Positions Ineligible. Candidates for officer and at-large positions on the Cal Cities Board are not eligible to serve on the nominating committee. In the event a regional division representative on the nominating committee wishes to be a candidate for an officer or at-large position, the Cal Cities President will appoint a substitute nominating committee member from the same regional division, if available. If one is not available, the President shall appoint a substitute from a nearby regional division.

(e) Duties. The duties of the nominating committee are to:

(i) Member Outreach. Publicize the qualifications for the offices of Second ~~Vice~~ Vice-President~~/Treasurer~~ and the at-large members of the Cal Cities Board to Cal Cities' Member Cities;

(ii) At-Large and Second Vice-President Recommendations. Make recommendations to the Cal Cities Board on the following year's Cal Cities officers and at-large ~~board members~~Directors; and

(iii) President and First Vice President Recommendation. Recommend whether the previous year's First Vice President

becomes President and the previous year's Second Vice-President~~/Treasurer~~ becomes First Vice President.

(f) Notice to Members. An explanation of the nomination process and relevant deadlines for submitting nominations to the nominating committee shall be publicized in Cal Cities publications and communications throughout the year, along with the identity of nominating committee members once such members are appointed. In addition, the nominating committee shall inform the membership of the opening of the nominations for the following year when it makes its report to the general membership as provided in Article VI, Section 5(g) below.

(g) Decision and Report. The nominating committee's recommendations shall be communicated to the Cal Cities Board not later than 30 days prior to the date of Cal Cities' Annual Conference and again at the Annual Conference. In addition, the nominating committee shall make its report to the membership at the opening general session of the Annual Conference.

(h) Election. The election of Cal Cities Board officers and Directors-at-Large shall occur at a Cal Cities Board meeting at the Annual Conference as provided in Article VII, Section 4(c) and Article VII, section 3.

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Section 8: Meetings and Meeting Notice.

(a) Regularly Scheduled Board Meetings. The Cal Cities Board shall meet no fewer than four times a year. Notice of regularly scheduled Board meetings shall be mailed to each Director at least 14 days before any such meeting.

(b) Emergency Board Meetings. A good faith effort shall be made to provide notice of any emergency board meetings (for example, by first-class mail, personal or telephone notification, including a voice messaging system or other system or technology designed to record and communicate messages, telegraph, facsimile, electronic mail, or other electronic means).

(c) Telephonic or Electronic Participation. Members of the Cal Cities Board may participate in any meeting through the use of conference telephone or similar communications equipment, so long as all members participating in such meeting can hear one another. Participation in a meeting by this means constitutes presence in person at such meeting.

(d) Notice Content. All meeting notices shall include the meeting date, place, time, and, as applicable, the means by which a Cal Cities ~~Board member~~Director may participate electronically.

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Section 10: Committees.

(a) General. The Cal Cities Board may establish committees to study city problems, advise on Cal Cities educational efforts, make recommendations with respect to Cal Cities advocacy efforts, or to engage in other appropriate Cal Cities service.

(b) Executive Committee.

(i) Composition. The Executive Committee of the Cal Cities Board consists of the following: the Cal Cities President, First Vice-President, Second Vice-President~~/Treasurer~~, Immediate Past President and Executive Director.

(ii) Authority. The Executive Committee has authority to act for the Cal Cities Board between Board meetings, provided that no action of the Executive Committee is binding on the Cal Cities Board unless authorized or approved by the Board.

(c) Standing Policy Committees.

(i) Charge. Cal Cities shall have a series of standing policy committees, whose charge shall be to make recommendations to the Cal Cities Board on matters within the committees' jurisdiction, as well as fulfill other duties specified in these bylaws (see, for example, Article VI, section 4(b)).

(ii) Membership. Each Cal Cities Policy Committee shall be comprised of the following:

- Two members appointed by each regional division president;
- One member appointed by each functional department president;
- One member appointed by each caucus president;
- No more than 16 members appointed by the Cal Cities President, to provide population and geographic balance, as well as expertise; and
- Such representatives of affiliate organizations in the capacity authorized by the Cal Cities Board.

(iii) Feedback. Policy committees shall receive information on actions taken on committee recommendations and the reasons for those actions.

(d) Committee Chairs and Vice Chairs. Unless the Cal Cities Board establishes otherwise, ~~T~~the Cal Cities President appoints the chair of all Cal-Cities-wide committees. The term of such appointments coincides with the Cal Cities President's term. The Cal Cities President may appoint vice chairs for such committees, as the Cal Cities President deems necessary.

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Article VIII: Officers

Section 1: Identity.

The officers of Cal Cities are a President, a First Vice-President, a Second Vice-President~~/Treasurer~~, an Immediate Past President, and an Executive Director.

Section 2: Duties of Cal Cities Officers.

(a) President. The President presides at all Cal Cities Board meetings and all General Assemblies. The President has such other powers and duties as may be prescribed by these bylaws or the Cal Cities Board.

(b) First Vice-President. The First Vice-President carries on the duties of the President in the President's temporary absence or incapacity. The First Vice-President has such other powers and duties as may be prescribed by these bylaws or the Cal Cities Board.

(c) Second Vice-President~~/Treasurer~~. The Second Vice-President~~/Treasurer~~ carries on the duties of the President in the President's and First Vice-President's temporary absence or incapacity. The Second Vice-President~~/Treasurer~~ has such other powers and duties as may be prescribed by these bylaws or the Cal Cities Board.

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Section 4: Vacancies.

A vacancy in the office of President is filled by the Immediate Past President who shall serve for the unexpired term of office and, upon election of a new President at the next Annual Conference, shall subsequently serve a full term as Immediate Past President. In the event the Immediate Past President is not available to fill the vacancy in the office of the President, or declines in writing, it shall be filled by the succession of the First Vice-President to that office. A vacancy in the office of First Vice-President, or Second Vice-President~~/Treasurer~~, is filled for the un-expired term by appointment by the Cal Cities Board of a member of the Cal Cities Board. A vacancy in the office of the Immediate Past President is filled for the un-expired term by the last Past President continuing to hold a city office.

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Article XII: Voting

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Section 5: Mail Balloting.

In addition to voting at Cal Cities meetings, Cal Cities may solicit member input by mail ballot.

(a) Mailing.[10] The question(s) to be voted upon, along with explanatory materials and a ballot, shall be mailed by first class mail to each Member City for consideration and action.

(b) Time Frame for Action. Member Cities shall have at least 45 days to cast their vote. Ballots shall be cast by returning the Member City's ballot to Cal Cities' principal office in Sacramento.

(c) Ballot Tabulation and Results Announcement. The Cal Cities President will appoint a counting committee of three ~~board members~~Directors to count the votes cast by mail ballot. The counting committee will submit its count to the Cal Cities Board, which shall canvass the vote and announce the results.

(d) Functional Departments, Regional Divisions, and Caucuses. Departments, divisions, and caucuses may also use mail balloting under procedures specified in their respective bylaws.

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Article XV: Prohibited Transactions

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Section 4: Ethical Considerations.

These restrictions, of course, represent the floor, not the ceiling, for ethical conduct as a Cal Cities ~~board member~~Director or policy committee member. If a ~~board member~~Director or policy committee member believes that there are circumstances under which Cal Cities' members might reasonably question the ~~board member's~~Director's or policy committee member's ability to act solely in the best interests of Cal Cities and its member cities, the prudent course is to abstain. As an example, typically Cal Cities ~~board members~~Directors have abstained from participating in decisions on legislation that would affect organizations for which they work. Another example is legislation that would uniquely benefit a ~~board member's~~Director's city. Policy committee members should also consider abstaining in similar circumstances.

[10] The Administrative Services Committee recommends Cal Cities also include notice of the upcoming ballot in a variety of Cal Cities communications to alert Member Cities to make inquiry in the event a city's ballot is lost in the mail.

File #: ID#22-492, **Version:** 1

2nd reading, Ordinance Amendment to Article XVI of Chapter 20 (Vendor Ordinance)

Adopt an Ordinance Amendment amending Article XVI of Chapter 20 of the Salinas Municipal Code updating the regulations governing food trucks, ice cream trucks, nonmotorized pushcarts and street vendors (Vendor Ordinance).

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **SEPTEMBER 6, 2022**

DEPARTMENT: **PUBLIC WORKS AND COMMUNITY DEVELOPMENT**

FROM: **DAVID JACOBS, PE, PLS, PW DIRECTOR**

BY: **ADRIANA ROBLES, PE, CFM, CITY ENGINEER**
FERNANDO RIZO-GONZALEZ, ASSISTANT ENGINEER
CYSTAL CASILLAS, BUSINESS NAVIGATOR
LORENZO SANCHEZ, CODE ENFORECEMENT MANAGER

TITLE: **AN ORDINANCE AMENDMENT TO ARTICLE XVI OF CHAPTER 20**

RECOMMENDED MOTION:

A motion to adopt an Ordinance Amendment amending Article XVI of Chapter 20 of the Salinas Municipal Code updating the regulations governing food trucks, ice cream trucks, nonmotorized pushcarts and street vendors (Vendor Ordinance).

RECOMMENDATION:

It is recommended that the City Council adopt Ordinance Amendment amending Article XVI of Chapter 20 of the Salinas Municipal Code updating the regulations governing food trucks, ice cream trucks, nonmotorized pushcarts and street vendors (Vendor Ordinance).

EXECUTIVE SUMMARY:

This staff report is a supplement to the report provided for the August 23rd meeting. Both reports should be reviewed together for a complete overview, analysis and findings of the proposed Vendor Ordinance Amendments.

The staff reports propose amendments to Ordinance No. 2650 which was adopted by City Council on September 21, 2021. The Vendor Ordinance Amendments presented aim to address vendor concerns. The proposed amendments to the food truck vendor ordinance provisions were vetted with a majority of concurrence from current food vendors. The proposed Vendor Ordinance Amendments provide vendors a more comprehensive program tailored for the vendor business needs while ensuring community health and safety.

BACKGROUND:

This Second Reading of proposed Ordinance Amendments was continued from the August 23rd meeting. The continuation of the Second Reading of the proposed Ordinance Amendments has allowed staff time to respond to City Council and community stakeholder questions and concerns. Additional outreach, research and analysis, and refinement of recommended amendments is outlined below in combination with the August 23rd staff report. Both reports should be reviewed together for a complete overview, analysis and findings of proposed Vendor Ordinance Amendments.

DISCUSSION:

Supplemental Information

Site Analysis and Findings

Based on the findings of the Food Truck survey, staff found sixteen (16) of the 47 vendors who participated in the survey were not satisfied with their vending location. Outside of the survey, staff identified a total of twenty (20) locations which required further analysis based on vendor complaints. The complete list of site-specific findings is attached hereto. The table below summarizes staff findings.

Table 1: Site Analysis of Unsatisfied Food Truck Vendors

No. of Locations Analyzed	Locations with Parking Issues	Locations with Sidewalk Issues	Locations with Lighting Issues	Business Operations Issues
20	6	1	5	15

The site analysis coincides with the findings of the survey. Based on this, the primary issue faced by vendors is related to business operations and business viability. Many of sites located near parks have little foot or vehicular traffic during their hours of operation. As indicated at the August 23rd Council meeting, staff will be working with each of the vendors individually to rectify or relocate them to more suitable locations. Table 2, below, identifies the proposed changes.

Table 2: Proposed Corrections of Problem Sites

No. of Locations Analyzed	No Change to Vendor or Location	Relocate Vendor/No Change to Location	Change Designated Location
20	2	12	6

Site analysis and observation of the use of designated locations has led staff to recommend requiring vendors to occupy their designated locations on a regular basis. At a number of locations, specifically parks, vendors were not observed operating on most occasions that staff visited the sites. As noted on the field visit log, some of the locations saw little foot traffic and greatly limited a vendor's ability to conduct their business. Staff recommends updating the ordinance to allow roaming vendors to park adjacent to parks during park hours, while abiding to all other provisions and setbacks required by the ordinance. Doing this will allow staff to explore new locations for

designated vendors.

In response to the above-mentioned problems with Designated Locations and following suggestions from Council at the August 23rd meeting, staff has revised the priorities and goals set for the food truck vendor program. As previously indicated, midterm goals may be achieved by reviewing and revising program policies and with coordination with the Traffic and Transportation Commission. Long term goals may require additional funding allocations and council action.

Table 3: Food Truck Vendor Program Priorities & Goals *(Revised)*

Priority Designation	Current Ordinance
Short-term Goals *(0-3 months)*	1. Amend Vendor Ordinance to extend Roaming food truck permit hours from 8AM to 8PM to 6AM to 10PM. 2. Amend Vendor Ordinance to allow Roaming food truck vendors to vend 6 hours at a single location. 3. Amend Vendor Ordinance to require Designated food truck locations to be occupied *at least once a week for six consecutive hours.* 4. Host seminars for business practices and procedures. *5. Amend Vendor Ordinance to allow relocation of some park locations to accommodate vendors.*
Midterm Goals *(6-12 months)*	1. Relocate unsatisfied Designated vendors on a case by case based on site analysis conducted by staff and in coordination with vendors. 2. Create temporary Roaming vendor permits for Designated vendors to roam.
Long-term Goals *(+12 months)*	1. Explore the creation of monthly vending hubs in City streets or on City owned properties. 2. Conduct a fee schedule analysis for vendor permits.

Pushcart/Street Vendor Setback

Following the August 23rd Council meeting, staff reached out to the Alisal Union School District to address concerns raised by Council members. The Superintendent was surprised that such concerns were raised and will be discussing further with the board. The Superintendent, as several principals whom staff had previously spoken to, is concerned with student safety when sidewalks are blocked by pushcarts and street vendors in the immediate vicinity of schools and supports the 200-foot setback recommended by staff.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378). In addition, CEQA Guidelines Section 15061 includes the general rule that CEQA applies only to activities which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. Because the proposed action and this matter have no potential to cause any effect on the environment, or because it falls within a category of activities excluded as projects pursuant to CEQA Guidelines section 15378,

this matter is not a project. Because the matter does not cause a direct or foreseeable indirect physical change on or in the environment, this matter is not a project. Any subsequent discretionary projects resulting from this action will be assessed for CEQA applicability.

STRATEGIC PLAN INITIATIVE:

This staff report and recommendations align with the City Council strategic plan initiatives of Economic Development, Public Safety and Effective and Culturally Responsive Government.

DEPARTMENTAL COORDINATION

Staff from the Public Works Department (Development Engineering Division) and the Community Development Department (Code Enforcement, Project Implementation and Economic Development Division) comprise the Vendor Program Task Force. The task force meets regularly and works continuously to address vendor issues.

FISCAL AND SUSTAINABILITY IMPACT:

No additional funding is requested for the proposed ordinance amendments. The proposed changes are programmatic. Staff time is budgeted in each divisions home accounts.

ATTACHMENTS

Ordinance Amendment with Errata Sheet
Attachment 1: Problem Sites Field Visit Log
Attachment 2: Vendor Ordinance Amendment Staff Report (First Reading)
Attachment 3: Article XVI, Chapter 20 Ordinance Amendment (First Reading)
Attachment 4: Vendor Questionnaire
Attachment 5: Vendor Questionnaire Follow Up Meeting Presentation

ERRATA SHEET

Article XVI Vendor Ordinance Amendment – Second Reading

The following additional modifications are proposed to the Article XVI Vendor Ordinance Amendment (revised) (~~strikethrough~~ indicates text to be deleted and underline indicates text to be added):

Sec. 20-16.110. Nonmotorized pushcarts and vendors—Operating restrictions.

(g) No nonmotorized pushcart or street vendor shall use or have any moveable or permanent table, chair, canopy, or any equipment within their vending area, except that they may have one stool for their own use and ~~one~~ two stand-alone umbrellas which shall each be no more than six feet in diameter and anchored by an umbrella stand.

Sec. 20-16.130. Food trucks—Operating restrictions.

(h) No owner or operator of a food truck may park or operate any food truck or sell, display or permit or authorize the sale, display or dispersal of any food, beverage or other product from any food truck within any public park or other recreation facility, ~~except in designated locations and~~ except in compliance with all other applicable provisions of this article and except as other specifically set forth in this subsection as follows:

(1) An owner or operator of a food that sells, offer for sale, displays, disperses, or permits, any food, food item or beverage from any food truck ~~from a designated location~~ adjacent to a public park may do so only between the hours of sunrise and sunset. Except as otherwise provided in this section, it shall be unlawful for any other person to operate any food truck in any such manner at any other time.

(2) No owner or operator of a food truck selling ~~in a designated location~~ adjacent a public park shall use or operate a diesel- or gas-powered generator exceeding fifty-five decibels measured at a distance of five feet from the unit.

(aa) Designated food truck locations shall be occupied. The owner of a food truck shall notify the City Engineer if a designated location will be left vacant for an extended period. Failure of a permittee to ~~not~~ occupy a designated location ~~within a thirty (30) day period~~ at least one time within a calendar week period (Saturday through Sunday) for at least six consecutive hours without prior notification to the City Engineer shall result in the revocation of the designated location and vendor permit.

ORDINANCE NO._____ (N.C.S.)

AN ORDINANCE AMENDING ARTICLE XVI OF CHAPTER 20 OF THE SALINAS MUNICIPAL CODE UPDATING THE REGULATIONS GOVERING FOOD TRUCKS, ICE CREAM TRUCKS, NONMOTORIZED PUSHCARTS AND STREET VENDORS

City Attorney's Impartial Analysis

This Ordinance amends a section of Chapter 20 of the Salinas Municipal Code to expand the program in response to concerns presented to City Council by food truck vendors.

WHEREAS, the primary purpose of the public right-of-way is for use by vehicle and pedestrian traffic;

WHEREAS, in 2021, the City Council enacted Ordinance No. 2650 to amend article XVI of Chapter 20 of the Salinas Municipal Code updating the regulations governing food trucks, ice cream trucks, nonmotorized pushcarts and street vendors;

WHEREAS, Resolution No. 22198 approved by the Council established fifty-two (52) designated food truck locations on September 21, 2021;

WHEREAS, conducting business on city streets from a food truck may have negative land use, public safety, and traffic impacts which the city desires to regulate;

WHEREAS, nonmotorized pushcart or ice cream truck vendor operating and conducting business on the sidewalks or street shoulder in the vicinity of elementary, middle or high schools, or other K-12 schools or educational facilities may limit pedestrian access to safe walking paths and may also obstruct the views of approaching vehicles. Restricting nonmotorized pushcarts and ice cream truck vendors from operating within a two-hundred-foot distance will reduce the potential for such safety hazards;

WHEREAS, on June 23, 2022, the vendor task force conducted a follow-up meeting to provide a summarize findings from the vendor survey conducted in May 2022. This meeting provided the task force guidance in recommending improvements to the program;

WHEREAS, it is recognized that operating a roaming food truck involves mobilization and de-mobilization at a chosen location which significantly reduces the hours of operation for a roaming vendor;

WHEREAS, the vendor ordinance does not regulate the use of designated locations; potentially allowing vendors to leave designated locations unutilized for extended periods which the city would like to prevent;

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF SALINAS AS FOLLOWS:

SECTION 1. Recitals. The above recitals are true and correct and are by this reference incorporated herein in their entirety.

SECTION 2. Article XVI of Chapter 20 of the Salinas Municipal Code is hereby amended as follows (Revisions are shown in underline/strikethrough text):

Sec. 20-16.110. - Nonmotorized pushcarts and vendors—Operating restrictions.

(i) No nonmotorized pushcart or street vendor shall operate withing two hundred feet of any elementary, middle or high school, or other K-12 school or educational facility, whether public or private. The two-hundred-foot distance shall be measured from the property line of the school closest to the pushcart.

Sec. 20-16-120. – Ice cream trucks – Operating restrictions.

(l) Ice cream truck owner or operator shall operate withing two hundred feet of any elementary, middle or high school, or other K-12 school or educational facility, whether public or private.

Sec. 20-16.130. Food trucks—Operating restrictions.

(d) An owner or operator of a food truck that sells, offer for sale, displays, disperses, or permits, any food, food item or beverage from any food truck not from a designated location may do so only between the hours of ~~8:00 a.m. and 8:00 p.m.~~ 6:00 a.m. to 10:00 p.m. for a period not to exceed ~~four~~ six hours at a single location and not within five hundred feet of the same address or location or on the same street. Except as otherwise provided in this section, it shall be unlawful for any person to operate any food truck in any such manner at any other time.

(aa) Designated food truck locations shall be occupied. The owner of a food truck shall notify the City Engineer if a designated location will be left vacant for an extended period. Failure to not occupy a designated location within a thirty (30) day period without notification shall result in the revocation of the designated location and vendor permit.

SECTION 3. CEQA CONSIDERATIONS. The amendment is "Not a Project" under CEQA Guidelines Section 15061(b)(3). This exemption is allowed when the activity, in this case adoption of the ordinance, does not have the potential for causing a significant effect on the environment. The proposed Ordinance Amendment includes refinements to vendor operation restrictions in the public right-of-way.

SECTION 4. SEVERABILITY. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of any competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The Salinas City Council hereby declares that it would have passed this ordinance, and each and every section, subsection, clause and phrase thereof not declared invalid or unconstitutional without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE. This ordinance shall take effect and be in force thirty days from and after its adoption.

PASSED AND ADOPTED this 23th day of August 2022, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

APPROVED:

_____
Kimbley Craig, Mayor

ATTEST:

_____
Patricia M. Barajas, City Clerk

APPROVED AS TO FORM:

_____
Christopher A. Callihan, City Attorney

CITY OF SALINAS
COUNCIL STAFF REPORT

DATE: **AUGUST 23, 2022**

DEPARTMENT: **PUBLIC WORKS AND COMMUNITY DEVELOPMENT**

FROM: **DAVID JACOBS, PE, PLS, DIRECTOR**
MEGAN HUNTER, DIRECTOR

THROUGH: **ADRIANA ROBLES, PE, CFM, CITY ENGINEER**
LISA BRINTON, ASSISTANT DIRECTOR

BY: **FERNANDO RIZO-GONZALEZ, ASSISTANT ENGINEER**
OSCAR RESENDIZ, ASSOCIATE PLANNER
CYSTAL CASILLAS, BUSINESS NAVIGATOR
LORENZO SANCHEZ, CODE ENFORECEMENT MANAGER
ALEXIS MEJIA, ASSISTANT CITY CLERK

TITLE: **ORDINANCE AMENDMENT TO ARTICLE XVI OF CHAPTER 20**

RECOMMENDED MOTION:

A motion to adopt an Ordinance amending Article XVI of Chapter 20 of the Salinas Municipal Code to update the regulations governing food trucks, ice cream trucks, nonmotorized pushcarts and street vendors (Vendor Ordinance).

RECOMMENDATION:

It is recommended that the City Council adopt an Ordinance amending Article XVI of Chapter 20 of the Salinas Municipal Code to update the regulations governing food trucks, ice cream trucks, nonmotorized pushcarts and street vendors (Vendor Ordinance).

EXECUTIVE SUMMARY:

On September 21, 2021 the City Council adopted Ordinance No. 2650 amending the Vendor Ordinance which became effective on October 21, 2021. The proposed ordinance presented in this Report includes amendments to address vendor concerns brought forward to City Council during the vendor program update on April 12, 2022. Proposed changes have been vetted with a majority of current food vendors. The proposed Vendor Ordinance Amendments provide vendors a more comprehensive program tailored for vendor business needs while ensuring community health and safety.

Amendments include:

1) expanding the hours of operation for roaming food trucks from four (4) to six (6) hours to allow them additional time for set up and break down so that they can maximize their business operation,

2) restricting nonmotorized pushcarts and ice cream truck vendors from operating within a two-hundred-foot distance from schools to reduce the potential for pedestrian safety hazards, and

3) establishing the frequency of occupation for designated food truck locations and the revocation process if a designated space is not occupied according to regulations.

BACKGROUND:

During the April 12, 2022 City Council meeting vendor program update, staff was instructed to revisit the program to alleviate some of issues vendors had expressed regarding the program. To support this effort, staff conducted additional outreach with community stakeholders and vendors. Following an additional survey of vendors, a meeting was conducted on June 23, 2022 at the PAL building where all Designated and Roaming food truck vendors were invited and were presented with staff's recommended ordinance amendments. Vendors were given the opportunity to pose questions and concerns on the recommended amendments and to vote on their preferred amendments. In conjunction, staff presented the recommended ordinance amendments to the Small Business Economic and Recovery Taskforce at their quarterly meeting held on August 04, 2022. Based on this outreach, refinement of recommended amendments has been completed and are outlined in this report.

DISCUSSION:

Additional Survey and Findings

In response to City Council direction, staff conducted a survey open to both Designated and Roaming food truck vendors. The survey was conducted in both Spanish and English by the Vendor Program Task Force comprised of City staff from Development Engineering, Code Enforcement, Project Implementation and Economic Development Division. In addition, City staff actively performed site visits at food truck vending locations and conducted phone calls to collect and increase the number of survey responses. A total of 47 vendors were surveyed including seven (7) Roaming and 40 Designated food truck vendors. The survey was composed of five (5) open ended questions with common vendor responses/findings summarized in Table 1 below. Survey questions and responses are also provided as an attachment to this report.

Table 1: Food Truck Vendor Survey Results

Question	Common Responses/Findings
1. What would you change about the Vendor Ordinance to best suit your business needs?	• 16 - vendors were not satisfied with their assigned vending locations. • 18 - vendors were satisfied with the ordinance and would not recommend any changes. • 5 - vendors requested more frequent vendor enforcement.

2. What hours of operation work best for your business and why?	• 35 - designated vendors responded that current vending hours worked for their business. • 5 – designated vendors would like to extend hours of operation, specifically designated vendors adjacent a city park. • 6 - roaming vendors requested expansion of hours of operation • 1 - roaming vendor was satisfied with current hours of operation
3. What are your thoughts on your current vending location(s)? Do you have suggestions on how to improve the benefits of that location?	• 16 - designated vendors were not satisfied with their vending locations and would like to be relocated. Spots were described as "secluded", "not visible", and complained about having very low foot traffic. • 24 - designated vendors were satisfied with their assigned vending locations. • 9 - designated vendors complained about the conditions of sidewalk. • 5 - designated vendors had problems with the homeless population affecting their business. • 6 - designated vendors complained about limited parking for costumers.
4. What additional improvement recommendations do you have on the Vendor Program?	• 5 - vendors would like to see more frequent vendor enforcement and homeless outreach services. • 4 - vendors would like the CUP process to be more lenient and more affordable
5. Do you have any additional concerns you would like to inform us of?	• 5 - vendors requested additional resources for business growth including social media promotion, creation of google business profile and possible creation of a vending hub similar to farmers markets. • 6 - vendors expressed concerns over the vendor program enforcement and would more frequent vendor enforcement during the night.

Program Goals Prioritization and Additional Outreach

Following review of the survey findings, the Vendor Program task force developed short-term, midterm and long-term goals based on the vendor responses summarized above. Table 2 below shows the goals identified and their prioritization. These goals and prioritization were presented to both Roaming and Designated vendors at a food truck vendor meeting hosted by City staff at the PAL building on June 23, 2022. At this meeting vendors were giving the opportunity to vote on staff recommended food truck vendor program policy changes and proposed ordinance amendments. Table 2 shows staff recommended program policy changes and ordinance amendments that were accepted by most of the vendors present at the meeting. A total of twenty (20) food truck vendors

attended the meeting and the average acceptance to the City staff recommendations was eighty percent (80%).

Table 2: Food Truck Vendor Program Priorities & Goals

Priority Designation	Current Ordinance
Short-term Goals	1. Amend Vendor Ordinance to extend Roaming food truck permit hours from 8AM to 8PM to 6AM to 10PM. 2. Amend Vendor Ordinance to allow Roaming food truck vendors to vend 6 hours at a single location. 3. Amend Vendor Ordinance to require Designated food truck locations to be occupied at least once within 30 days. 4. Host seminars for business practices and procedures.
Midterm Goals	1. Relocate unsatisfied Designated vendors on a case by case based on site analysis conducted by staff and in coordination with vendors. 2. Create temporary Roaming vendor permits for Designated vendors to roam.
Long-term Goals	1. Explore the creation of monthly vending hubs in City streets or on City owned properties. 2. Conduct a fee schedule analysis for vendor permits.

Short-term goals are being addressed with this report and proposed ordinance amendments. The Vendor Program task force has developed a time frame for possible completion on action items not addressed in this report and identified in Table 2. (Midterm and Long-term goals). Midterm goals have been given a time frame of completion of 6-12 months, while Long-term goals have been given one (1) year or more. Furthermore, goals identified as Midterm goals do not require further City Council approval or additional program funding allocation. Midterm goals can be achieved via changes in vendor permitting policies and if necessary, coordination with the City's Traffic and Transportation Commission. Long-term goals may require City Council approval and additional funding allocation.

Following the April 12, 2022 City Council meeting staff received calls from several school principals concerned about the safety of their students. Vending in these areas has created hazardous conditions for students while crossing streets and congregating near high traffic intersections. Code Enforcement has begun working with schools on possible solutions to their concerns. In an effort to reduce the traffic conflicts at schools, staff is also recommending a two hundred (200) foot setback for nonmotorized pushcarts, street vendors and ice cream trucks near schools.

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (CEQA Guidelines Section 15378). Any subsequent discretionary projects resulting from this action will be assessed for CEQA applicability.

STRATEGIC PLAN INITIATIVE:

This staff report and recommended ordinance amendments align with the City Council strategic plan initiatives of Economic Development, Public Safety and Effective and Culturally Responsive Government. Expanding the hours of operation for Roaming food trucks allows them to maximize their business operation. Restricting nonmotorized pushcarts and street vendors and ice cream trucks from operating within a two-hundred-foot distance will reduce the potential for pedestrian safety hazards with block sidewalks and limited visibility at street crossings. The proposed amendments and mid- and long-term goals were developed with vendor input obtained through surveys and in person meetings.

DEPARTMENTAL COORDINATION

Staff from the Public Works Department (Development Engineering Division) and the Community Development Department (Code Enforcement, Project Implementation and Economic Development Division) comprise the Vendor Program task force. The task force meets regularly and continues to work on addressing vendor issues.

FISCAL AND SUSTAINABILITY IMPACT:

No additional funding is requested for the proposed ordinance amendments. The proposed changes are programmatic. Staff time is budgeted in each divisions home accounts.

ATTACHMENTS

1. Ordinance Amendment
2. Vendor Questionnaire
3. Vendor Questionnaire Follow Up Meeting Presentation

ORDINANCE NO._____ (N.C.S.)

AN ORDINANCE AMENDING ARTICLE XVI OF CHAPTER 20 OF THE SALINAS MUNICIPAL CODE UPDATING THE REGULATIONS GOVERING FOOD TRUCKS, ICE CREAM TRUCKS, NONMOTORIZED PUSHCARTS AND STREET VENDORS

City Attorney's Impartial Analysis

This Ordinance amends a section of Chapter 20 of the Salinas Municipal Code to expand the program in response to concerns presented to City Council by food truck vendors.

WHEREAS, the primary purpose of the public right-of-way is for use by vehicle and pedestrian traffic;

WHEREAS, in 2021, the City Council enacted Ordinance No. 2650 to amend article XVI of Chapter 20 of the Salinas Municipal Code updating the regulations governing food trucks, ice cream trucks, nonmotorized pushcarts and street vendors;

WHEREAS, Resolution No. 22198 approved by the Council established fifty-two (52) designated food truck locations on September 21, 2021;

WHEREAS, conducting business on city streets from a food truck may have negative land use, public safety, and traffic impacts which the city desires to regulate;

WHEREAS, nonmotorized pushcart or ice cream truck vendor operating and conducting business on the sidewalks or street shoulder in the vicinity of elementary, middle or high schools, or other K-12 schools or educational facilities may limit pedestrian access to safe walking paths and may also obstruct the views of approaching vehicles. Restricting nonmotorized pushcarts and ice cream truck vendors from operating within a two-hundred-foot distance will reduce the potential for such safety hazards;

WHEREAS, on June 23, 2022, the vendor task force conducted a follow-up meeting to provide a summarize findings from the vendor survey conducted in May 2022. This meeting provided the task force guidance in recommending improvements to the program;

WHEREAS, it is recognized that operating a roaming food truck involves mobilization and de-mobilization at a chosen location which significantly reduces the hours of operation for a roaming vendor;

WHEREAS, the vendor ordinance does not regulate the use of designated locations; potentially allowing vendors to leave designated locations unutilized for extended periods which the city would like to prevent;

NOW, THEREFORE, BE IT ORDAINED BY THE COUNCIL OF SALINAS AS FOLLOWS:

SECTION 1. Recitals. The above recitals are true and correct and are by this reference incorporated herein in their entirety.

SECTION 2. Article XVI of Chapter 20 of the Salinas Municipal Code is hereby amended as follows (Revisions are shown in underline/strikethrough text):

Sec. 20-16.110. - Nonmotorized pushcarts and vendors—Operating restrictions.

(i) No nonmotorized pushcart or street vendor shall operate withing two hundred feet of any elementary, middle or high school, or other K-12 school or educational facility, whether public or private. The two-hundred-foot distance shall be measured from the property line of the school closest to the pushcart.

Sec. 20-16-120. – Ice cream trucks – Operating restrictions.

(l) Ice cream truck owner or operator shall operate withing two hundred feet of any elementary, middle or high school, or other K-12 school or educational facility, whether public or private.

Sec. 20-16.130. Food trucks—Operating restrictions.

(d) An owner or operator of a food truck that sells, offer for sale, displays, disperses, or permits, any food, food item or beverage from any food truck not from a designated location may do so only between the hours of ~~8:00 a.m. and 8:00 p.m.~~ 6:00 a.m. to 10:00 p.m. for a period not to exceed ~~four~~ six hours at a single location and not within five hundred feet of the same address or location or on the same street. Except as otherwise provided in this section, it shall be unlawful for any person to operate any food truck in any such manner at any other time.

(aa) Designated food truck locations shall be occupied. The owner of a food truck shall notify the City Engineer if a designated location will be left vacant for an extended period. Failure to not occupy a designated location within a thirty (30) day period without notification shall result in the revocation of the designated location and vendor permit.

SECTION 3. CEQA CONSIDERATIONS. The amendment is "Not a Project" under CEQA Guidelines Section 15061(b)(3). This exemption is allowed when the activity, in this case adoption of the ordinance, does not have the potential for causing a significant effect on the environment. The proposed Ordinance Amendment includes refinements to vendor operation restrictions in the public right-of-way.

SECTION 4. SEVERABILITY. If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be invalid or unconstitutional by a decision of any court of any competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance. The Salinas City Council hereby declares that it would have passed this ordinance, and each and every section, subsection, clause and phrase thereof not declared invalid or unconstitutional without regard to whether any portion of the ordinance would be subsequently declared invalid or unconstitutional.

SECTION 5. EFFECTIVE DATE. This ordinance shall take effect and be in force thirty days from and after its adoption.

PASSED AND ADOPTED this 23th day of August 2022, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

APPROVED:

_____
Kimbley Craig, Mayor

ATTEST:

_____
Patricia M. Barajas, City Clerk

APPROVED AS TO FORM:

_____
Christopher A. Callihan, City Attorney

Vendor Questionnaire

1. What would you change with the Vendor Ordinance to best suit your business needs? / ¿Qué cambiaría de la Ordenanza de Vendores Ambulantes para adaptarse mejor a las necesidades de su negocio?

2. What hours of operation work best for your business and why? / ¿Qué horario funcionaria mejor para su negocio y porqué?

3. What are your thoughts on your current vending location(s)? Do you have suggestions on how to improve the benefits of that location? / ¿Qué opina sobre su ubicacion de venta actual? ¿Tiene alguna sugerencia en cómo mejorar los beneficios de su ubicacion?

4. What additional improvement recommendations do you have on the Vendor Program? / ¿Qué recomendaciones adicionales tiene para mejorar el Programa de Vendedores Ambulates?

5. Do you have any additional concerns you would like to inform us of? / ¿Tiene algún comentario adicional del cual le gustaría informarnos?

Vendor Questionnaire Follow Up Meeting /Reunión de seguimiento del cuestionario de vendedores

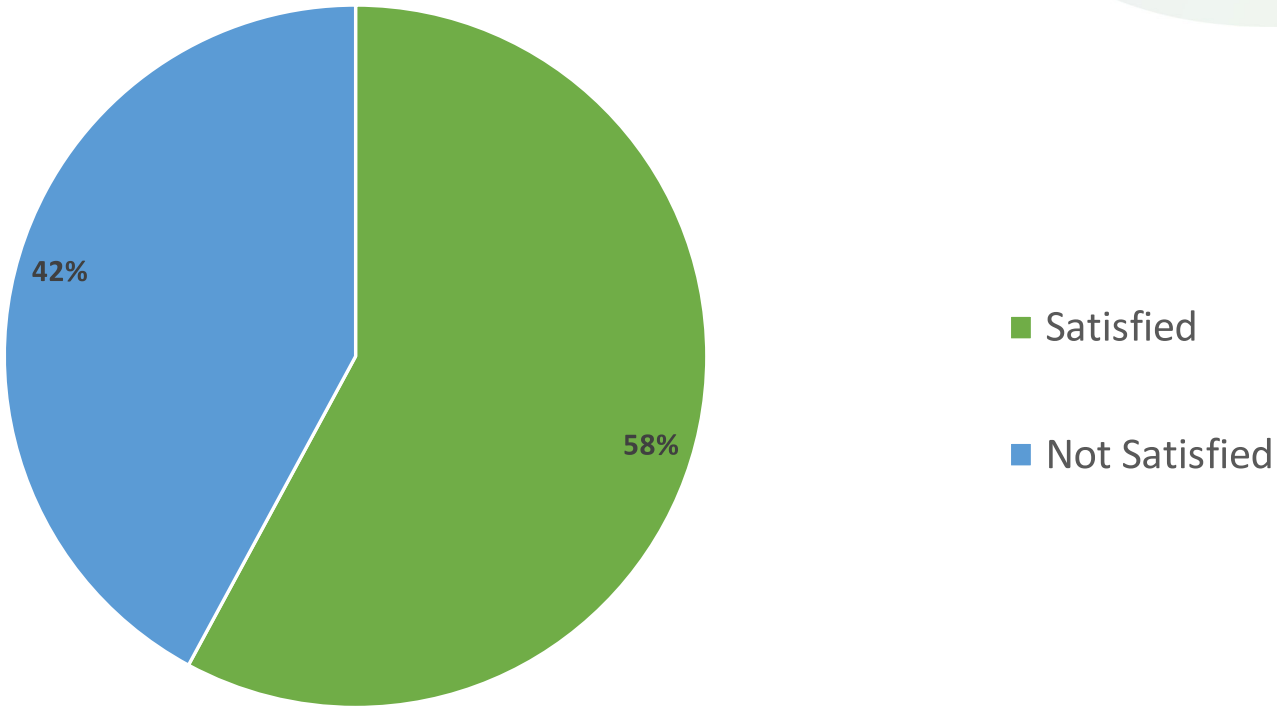
June 23, 2022

Questionnaire Recap / Repaso del Cuestionario

- Five questions asked on how to improve program
- Target group: Designated/roaming food trucks
- Received responses from 40 of the 45 vendors
- Great ideas and recommendations shared
- Taskforce reviewed/analyzed all responses
- Goals created for changes to be made
- Se hicieron cinco preguntas sobre cómo podríamos mejorar el programa
- Grupo objetivo: camiones de comida designados/móvil
- Recibimos repuestas de 39 de los 45 vendedores
- Buenas ideas y recomendaciones fueron compartidas
- Nuestro grupo repaso y analizo todas las repuestas
- Un sistema de metas fue establecido para implementar cambios

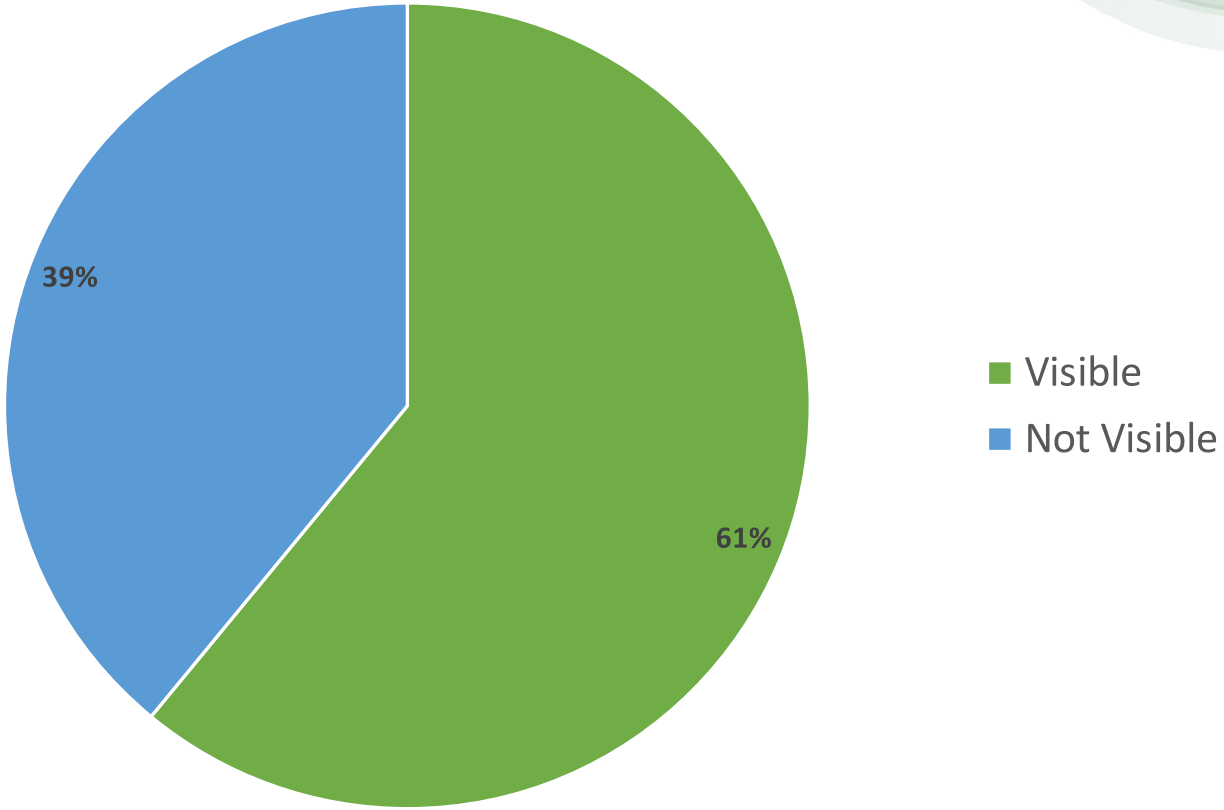
Summary of Responses / Resumen del Cuestionario

How many vendors are satisfied with the vendor program? / ¿Cuántos vendedores están satisfechos con el programa de vendedores?

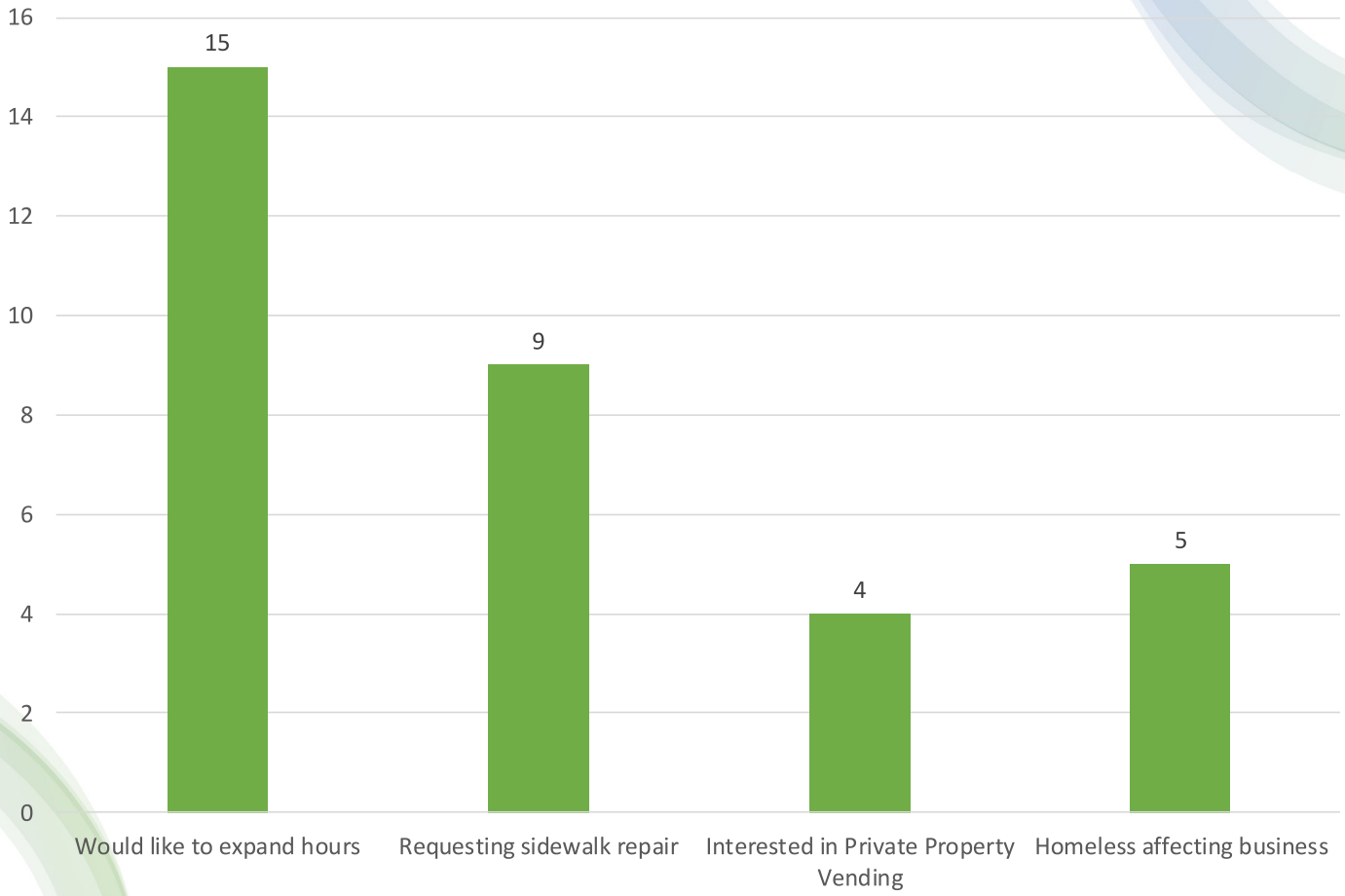


Summary of Responses / Resumen del Cuestionario

How many vendors are satisfied with the visibility/location of designated area? /
¿Cuántos vendedores están satisfechos con la visibilidad/ubicación del área designada?



Summary of Responses / Resumen del Cuestionario



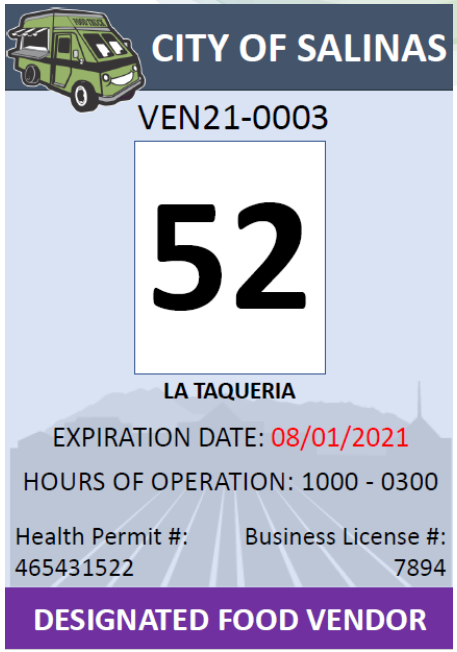
Short-term Goals / Metas a corto plazo

- Update roaming hours:
  - An owner or operator of a food truck that sells, offer for sale, displays, disperses, or permits, any food, food item or beverage from any food truck not from a designated location may do so only between the hours of ~~8:00 a.m. and 8:00 p.m~~ 6:00 a.m. to 10:00 p.m. for a period not to exceed ~~four~~ six (6) hours at a single location and not within five hundred feet of the same address or location or on the same street.
- Change the distance requirement between food trucks from ~~200 feet~~ to 50 feet
- Review/ analyze all designated locations
- Require food truck locations to be occupied within the last 30 days
- Seminars for business practices and procedures

- Actualizar el horario de operación:
  - Cambiar las horas de ~~8:00 a.m. a 8:00 p.m~~ a las nuevas horas de 6:00 a.m. a 10:00 p.m.
  - Extender la cantidad de horas en un solo lugar de ~~cuatro horas~~ a 6 horas
- Cambiar el requerimiento de distancia entre camiones de comida de ~~200 pies~~ a 50 pies
- Revisar y analizar todos los lugares designados
- Requerir que Camiones de comida con lugar designados estén ocupado en los últimos 30 días
- Seminarios de prácticas y procedimientos para negocios

Mid-term Goals / Metas a medio plazo

- Vendor Focus Group
- Revision of designated locations based on analysis
- Temporary roaming permit for designated vendors
- Grupo objective de vendedores
- Revisar los lugares designados basado en el analisis
- Permisos temporales moviles para vendedores designados



Long-term Goals / Metas a largo plazo

- Food Truck Vending Hub
- Permit fee schedule analysis
- Centro de venta
- Analisis del costo de permisos

Vendor Enforcement / Cumplimiento de Codigo

- See an unpermitted vendor? Call the Vendor Enforcement Hotline: 831-758-7156
- Salinas Outreach & Response Team (SORT) assist with homeless outreach/services: 831-758-4269

- Si mira algún vendedor sin permiso: llama la línea directa de Cumplimiento de Código: 831-758-7156
- Si necesita ayuda con algún persona sin hogar llama a difusión comunitaria de Salinas: 831-758-42

Small Business Support / Asistencia para Negocios Pequeños

- Small Business Hotline 831-758-7367
- Bizsupport@ci.salinas.ca.us
- línea directa para negocios pequeños: 831-758-7367

First Seminar: Renewing Vendor Permits / Renovar Permiso de Vendedores

September 20

11 am – 1 pm

PAL Building

Q & A Session

Municipal Code Amendments

AN ORDINANCE AMENDMENT

TO ARTICLE XVI OF CHAPTER 20

AUGUST 23, 2022

ADRIANA ROBLES, CITY ENGINEER
FERNANDO RIZO-GONZALEZ, ASSISTANT ENGINEER
OSCAR RESENDIZ, ASSOCIATE PLANNER
CRYSTAL CASILLAS, BUSINESS NAVIGATOR
LORENZO SANCHEZ, CODE ENFORCEMENT MANAGER

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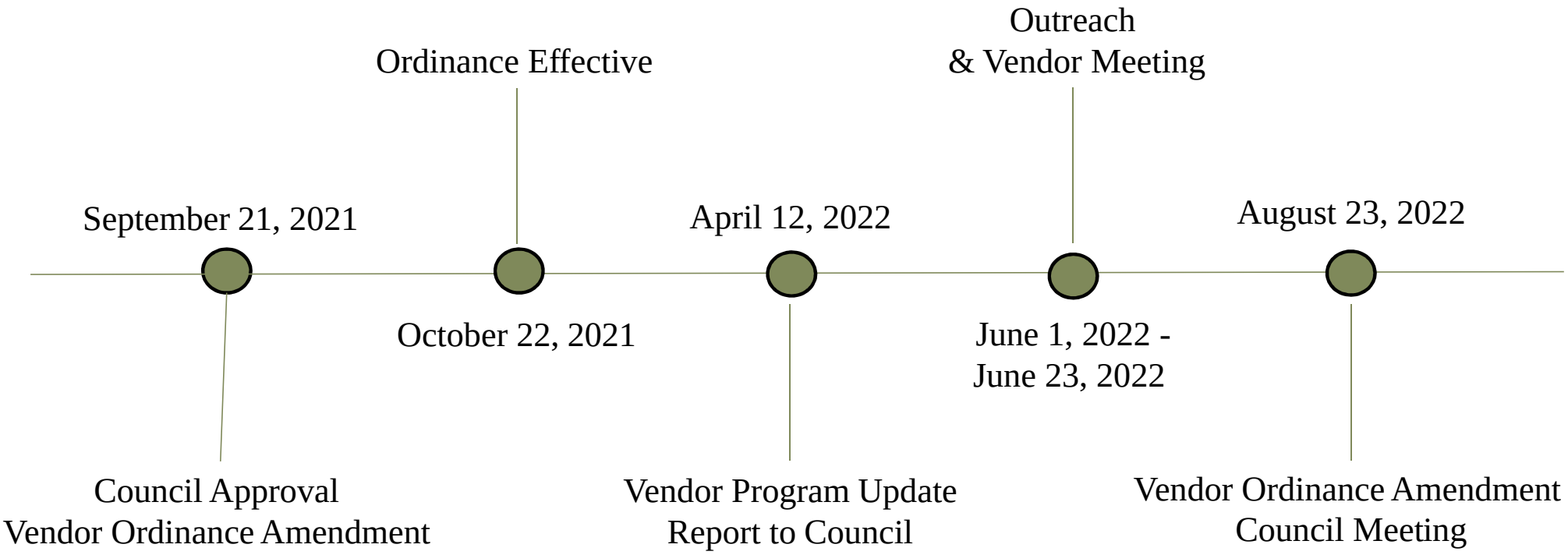
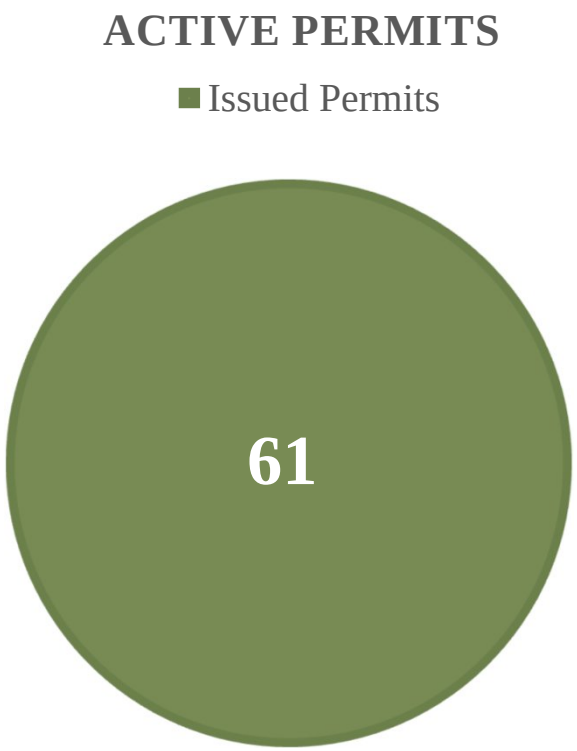
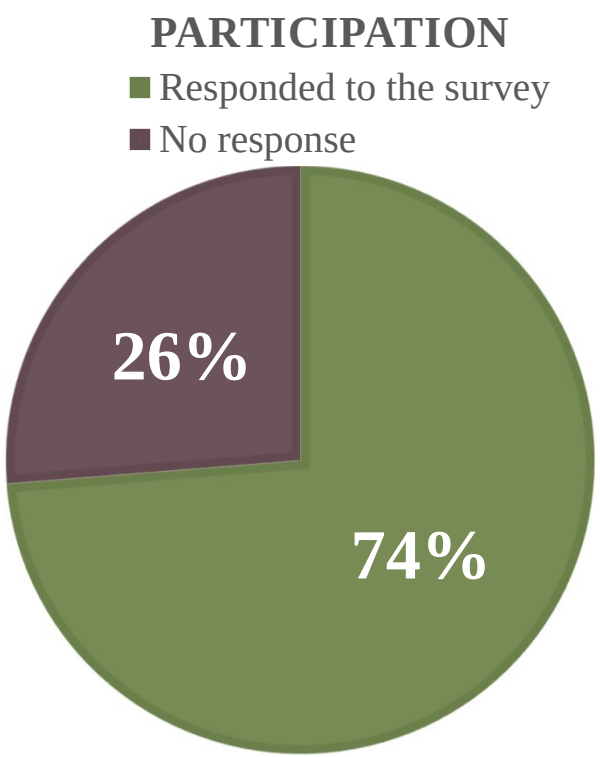
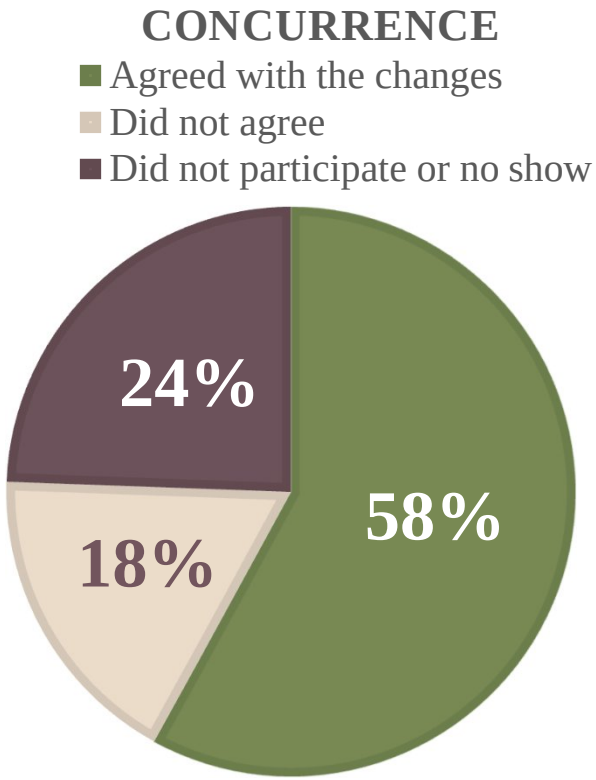
Vendor Program Timeline



Outreach and Vendor Meeting Findings







Ordinance Update

Short-term Goals (0-3 Months)

- Amend Vendor Ordinance
  - Extend Roaming food truck permit hours from 8AM to 8PM to **6AM to 10PM**.
  - Allow Roaming food truck vendors to vend from 4 hours to **6 hours** at a single location.
  - Require Designated food truck locations to be **occupied weekly**.
  - Add a **200-foot setback** requirement for nonmotorized pushcarts and street vendors near schools.
- Host seminars for business practices and procedures.

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Next Steps

Mid-term Goals (6-12 Months)

- Relocate Designated food truck vendors on a case by case based on site analysis conducted by staff and in coordination with vendors.
- Create temporary Roaming vendor permits for Designated vendors to roam.

Long-term Goals (+12 Months)

- Explore the creation of vending hubs on City streets or on City-owned properties.
- Conduct a fee schedule analysis for vendor permits.

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Recommendation

It is recommended that the City Council adopt Ordinance Amendment amending Article XVI of Chapter 20 of the Salinas Municipal Code updating the regulations governing food trucks, ice cream trucks, nonmotorized pushcarts and street vendors (Vendor Ordinance).

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File #: ID#22-493, **Version:** 1

FY 22-23 Workforce Allocation Adjustment and Modification to the Classification - Salary Schedule

Approve a Resolution adjusting the workforce allocation for the Community Development Department and authorize a modification to the Classification - Salary Schedule.

CITY OF SALINAS

COUNCIL STAFF REPORT

DATE: **September 6, 2022**

Department: **HUMAN RESOURCES**

FROM: **Marina Horta-Gallegos, Human Resources Director**

SUBJECT: **FY 22-23 WORKFORCE ALLOCATION ADJUSTMENT AND MODIFICATION TO THE CLASSIFICATION – SALARY SCHEDULE**

RECOMMENDED MOTION:

It is recommended that the City Council adopt a Resolution adjusting the workforce allocation for the Community Development Department and authorize a modification to the Classification – Salary Schedule.

RECOMMENDATION:

Staff recommends that the City Council adopt a Resolution adjusting the workforce for the Community Development Department and authorize a modification to the Classification – Salary Schedule.

BACKGROUND:

The Community Development Department requests an adjustment to the FY 22-23 workforce to include three additional positions for the Housing Division. Two Community Outreach Assistants and one Community Development Analyst will be grant funded (limited term) and support the Housing Division in addressing encampments and family homelessness. Additionally, the Community Development Department is requesting authorization to replace the vacant Administrative Aide position with an Administrative Analyst and to replace the vacant Senior Economic Development Manager with a Planning Manager.

The Public Works Department was approved for one Stormwater Technician during the FY 21-22 mid-year budget process. Staff recommend retitling the classification to Stormwater Analyst and adding the classification to the Classification – Salary Schedule.

Benefit Group	Grade	Position			Step 1 Hourly	Step 1 Monthly	Step 2 Hourly	Step 2 Monthly	Step 3 Hourly	Step 3 Monthly	Step 4 Hourly	Step 4 Monthly	Step 5 Hourly	Step 5 Monthly	Step 6 Hourly	Step 6 Monthly
26		Stormwater Analyst			29.6059	5,132	31.0856	5,388	32.6426	5,658	34.2710	5,940	35.9897	6,238	37.7926	6,551

CEQA CONSIDERATION:

Not a Project. The City of Salinas has determined that the proposed action is not a project as defined by the California Environmental Quality Act (CEQA) (SEQA Guidelines Section 15378).

STRATEGIC PLAN INITIATIVE:

The proposed action meets the Effective and Culturally Responsive Government Council goal.

DEPARTMENTAL COORDINATION:

The Human Resources Department coordinated this effort with the Community Development and Public Works Departments.

FISCAL AND SUSTAINABILITY IMPACT:

Grant funding will be used to fund the three limited term positions in the Community Development Department. The difference in salary between the Administrative Aide and Administrative Analyst is approximately $10,416 in base salary and will be covered through salary savings and the Community Development enterprise fund. Replacing the Senior Economic Development Manager with a Planning Manager will provide for salary savings of approximately $7,000.

There is no fiscal impact associated with the retitling of the Public Works Stormwater Technician to Stormwater Analyst.

ATTACHMENTS:

Resolution

RESOLUTION NO. _____ (N.C.S.)

RESOLUTION APPROVING FY 22-23 WORKFORCE ALLOCATION ADJUSTMENT

BE IT RESOLVED BY THE CITY COUNCIL OF SALINAS that the workforce for the Community Development reflect the addition of the following positions: two Community Outreach Assistants (limited term); one Community Development Analyst (limited term). An Administrative Analyst will replace the vacant Administrative Aide and a Planning Manager will replace the vacant Senior Economic Development Manager. The Stormwater Technician will be retitled Stormwater Analyst.

PASSED AND APPROVED this 6th day of September 2022, by the following vote:

AYES:
NOES:
ABSENT:
ABSTAIN:

APPROVED:

_____
Kimbley Craig, Mayor

ATTEST:

_____
Patricia Barajas, City Clerk

File #: ID#22-495, **Version:** 1

a. **Pending Litigation** - California Government Code Section 54956.9(d)(1), conference with legal counsel regarding, Santa Rita Union High School District, et al. v. City of Salinas et al., Monterey County Superior Court Case No. 20CV000242.

b. **Pending Litigation** - California Government Code Section 54956.9(d)(1), conference with legal counsel regarding, Alisal Union School District, et al. v. City of Salinas, et al., Monterey County Superior Court Case No. 20CV00340.

c. **Real Property Negotiations** - California Government Code Section 54956.8, conference with real property negotiators City Manager Steven S. Carrigan, City Attorney Christopher A. Callihan, Community Development Director Megan Hunter, Assistant Community Development Director Lisa Brinton, and Dan Massolo (Massolo Brothers Company) to discuss the terms and sale of real property located at 1 Preston Street, Salinas, California, 93901, APN 003161008000.