Rodeo Property Traffic Impact Analysis

June 12, 2019

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1 Report Summary

The project is a General Plan amendment and Rezone change that would allow development of industrial and commercial uses on a 6.8-acre site located on Sun Street adjacent to US 101. The proposed land use designation would allow site to be developed at a floor area ratio 0.4, which would allow for up to 118,600 square feet of industrial floor space. For purposes of this traffic study, 4 percent of the floor space (4,700 square feet) was assumed to be occupied by support office space and this space was modeled as general office space. The remaining floor area (113,900 square feet) was modeled as light industrial space.

The site is designated in the General Plan as Open Space. Access to the site is provided via Sun Street and its connection to Calle Cebu and E. Market Street.

This report summarizes the potential traffic circulation impacts associated with the proposed Rodeo Property General Plan Amendment (GPA) and Rezoning in Salinas, California. Vehicular, pedestrian and bicycle circulation issues were evaluated at the project site and the surrounding street network in Salinas. The project site is located on Sun Street between US 101 and East Market Street. Access to the site is provided via Sun Street and its connection to Calle Cebu and E. Market Street.

This report concludes that the identified traffic impacts can be mitigated and that there are no significant and unavoidable traffic impacts with the Implementation of the proposed mitigation measures. The Applicants payment of TFO fees or the funding of required mitigation measures as described in this report shall occur after the Applicants future submittal of a project specific plan and the City Staff evaluation of the actual impacts. This report utilized the maximum allowable FAR of .40 as consistent with the proposed zoning and general plan changes, it is anticipated that the future project specific application may include a lower FAR.

Study Network

The AM and PM peak periods were analyzed at the following intersections:

1. Natividad Road / East Laurel Drive;
2. Sherwood Drive - Natividad Road / East Bernal Drive – La Posada Way;
3. North Main Street / Bernal Drive;
4. Sherwood Drive / Sherwood Place;
5. North Main Street (State Route 183) / Rossi Street;
6. Sherwood Drive / East Rossi Street – Calle Cebu;
7. Kern Street / US 101 Northbound Ramps – Mobray Way;
8. East Market Street – Front Street / East Market Street;
9. East Market Street – Sherwood Drive / Market Place – East Market Street;
10. Sun Street / East Market Street;
11. Griffin Street – Simas Street / East Market Street;
12. US 101 Southbound Offramp – Merced Street / East Market Street;
13. US 101 Southbound Onramp / East Market Street;
14. Kern Street / East Market Street;
15. Front Street / East Alisal Street; and

Traffic operations for the Existing, Existing Plus Project, Background, Background Plus Project, Cumulative (General Plan Buildout) Without Project and Cumulative (General Plan Buildout) Plus Project development scenarios were analyzed.

1.1 Existing Conditions

The intersection turning movement counts were collected during the AM (7:00 – 9:00 AM) and PM (4:00 – 6:00) peak hours on Friday, June 2 and Monday, June 5, 2017. As the intersection traffic volumes were collected on atypical days of the week and when Salinas area schools were not in session, the collected intersection traffic volumes were adjusted to be consistent with available historical volumes when schools were in session.

Although most of the study intersections currently operate at or better than their respective level of service standards under Existing conditions, the following five intersections currently operate below their standards:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N Main Street (SR 183) / Rossi Street: LOS D (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM)

A review of the traffic counts found that there is a low to moderate level of pedestrian activity near the project site. Pedestrian activity is highest near the residential and commercial areas on Sherwood Drive and E Market Street, especially during the PM peak hour (compared to the AM peak hour).

A review of the traffic counts found that there is relatively little bicycle activity in the study network, including near the project site.

1.2 Existing Plus Project Conditions

The project is a General Plan amendment and Rezone change that would allow development of industrial and commercial uses on a 6.8-acre site located on Sun Street adjacent to US 101. The proposed land use designation would allow site to be developed at a floor area ratio 0.4, which would allow for up to 118,600 square feet of industrial floor space. For purposes of this traffic study, 4 percent of the floor space (4,700 square feet) was assumed to be occupied by support office space and this space was modeled as general office space. The remaining floor area (113,900 square feet) was modeled as light industrial space. A specific development project is not proposed for the site at this time.

The site is designated in the General Plan as Open Space. Access to the site is provided via Sun Street and its connection to Calle Cebu and E. Market Street.

Project Trip Generation

The estimate was derived using trip rates from the Institute of Transportation Engineers (ITE) publication *Trip Generation Manual,* 10th Edition, 2017. Note that trip generation estimates for the industrial and office components of the project have been separately calculated.

In total, the project is estimated to generate 611 daily trips, with 85 trips (74 in, 11 out) during the AM peak hour and 77 trips (10 in, 67 out) during the PM peak hour.

Vehicle Circulation

Although most of the study intersections would continue operate at or better than their respective level of service (LOS) standards, the following five intersections that currently operate below acceptable LOS would be significantly impacted by the proposed project based upon the significance criteria utilized for this study:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N Main Street (SR 183) / Rossi Street: LOS D (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM).

Figure ES-1 shows the levels of service with and without the project at each of the significantly impacted intersections for the Existing Plus Project Condition. **Figure ES-1** also shows the contribution of the project to the intersection deficiency and project's percentage of total overall intersection delay.

See **Figure ES-4** for the recommended improvements at these intersections for the Existing Condition. Implementation of these improvements would reduce the project's impact contribution at these intersections to less-than-significant. The impact and the recommended mitigation measure at each intersection is described below.

- **Intersection #1 – Natividad Road / E Laurel Drive:**
  This intersection would operate at a deficient LOS E during the AM and PM peak hours, unchanged from Existing Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Add a third northbound and third southbound lane to Natividad Road through this intersection. Intersection operations would improve during the AM and PM peak hour to LOS D.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 61).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #2 – Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way:**
  This intersection would operate at a deficient LOS E (AM) and F (PM), unchanged from Existing Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Convert the signal phasing on the east and west intersection approaches from concurrent phasing to split phasing. Intersection operations would improve during the AM and PM peak hour to LOS D.

Project Responsibility: To ensure that the intersection of Sherwood Drive – Natividad Road / E. Bernal Drive-La Posada Way will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include the signal modifications at this intersection as one of the improvements that is funded by the TFO, or (2) if the signal modifications at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for modifying the signal phasing and ensure that the signal modification is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and modify the signal phasing ensuring that the signal modification is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #5 – N Main Street (SR 183) / Rossi Street:**
  This intersection, which is under Caltrans jurisdiction, would operate at a deficient LOS D during the PM peak hour, unchanged from Existing Conditions. The project would add 6 trips to this intersection during the PM peak hour and increase the PM peak hour delay by 0.1 seconds.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the PM peak hour by at least 0.1 seconds.

  Mitigation: Add a third northbound and third southbound lane on N. Main Street through this intersection. Intersection operations would improve during the PM peak hour to LOS C.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 31).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #10 – Sun Street / E Market Street:**
  Side-street operations at this intersection (the southbound Sun Street approach) would operate at a deficient LOS F during the PM peak hour, unchanged from Existing Conditions. The project would add 31 trips to this approach during the PM peak hour.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection whose southbound approach operates at LOS F without the Project.

  Mitigation: Signalize the intersection. The intersection would operate at LOS A during the AM and PM peak hours with signalization.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits for, and installation of, a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #12 – US 101 Southbound Offramp – Merced Street / E Market Street:** This intersection would operate at a deficient LOS F during the PM peak hour, while side-street operations (the southbound US 101 Southbound Offramp approach) would operate at a deficient LOS F during the AM and PM peak hours, unchanged from Existing Conditions. The project would add 30 AM peak hour and 27 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the AM and PM peak hours by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: To ensure that the intersection of U.S. 101 Southbound Offramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or (2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

Pedestrian Circulation

Pedestrian traffic that is generated by development of the project site would likely be traveling from areas easily reached on foot from the project site, such as adjacent neighborhoods and bus stops. It is anticipated that the complete sidewalk and crosswalk network in the greater study area would facilitate pedestrian access from these areas. However, potential pedestrian impacts should be assessed at the time the project site is proposed to be developed by a specific project.

Bicycle Circulation

Development on the project site is anticipated to generate little bicycle traffic. As with the pedestrian traffic, the bicycle traffic that would be generated by the project would be traveling to areas easily reached on bike from the project site, such as residential areas that are more than a 10-minute bike ride from the project site. Although there are few bike facilities in the study area nearest the project site, the small level of bicycle traffic will be low enough to minimize any effects on existing vehicle traffic. Potential bicycle traffic impacts should be assessed at the time the project site is proposed to be developed by a specific project.

Transit Circulation

Development on the project site is anticipated to generate little transit usage. The transit usage that would be generated by the project would likely be walking to and from the bust stops within a 10-minute walk from the project site (as enumerated in Section 2.4). The small level of transit usage generated by the project would be low enough to minimize any effects on existing transit demand for bus routes in the area. Potential transit traffic impacts should be assessed at the time the project site is proposed to be developed by a specific project.

Impact Fees

The future development project constructed on the project site would be responsible for payment of the City of Salinas TFO and the Transportation Agency for Monterey County (TAMC) Regional Development Impact fees.

1.3 Background Conditions

Traffic volumes under Background conditions were derived by applying growth factors to the existing volumes on the study corridors in this analysis. More specifically, the corridors and their associated growth factors are the following:

1. E Laurel Drive – 2% (AM), 3% (PM)
2. Natividad Road – 2% (AM), 3% (PM)
3. Sherwood Drive – 2% (AM), 3% (PM)
4. E Rossi Street and W Rossi Street – 2% (AM), 3% (PM)
5. N Main Street:
   a. North of US 101 – 2% (AM), 3% (PM)
   b. South of US 101 – 10% (AM), 15% (PM)
6. E Market Street – 2% (AM), 3% (PM)
7. Front Street – 2% (AM), 3% (PM)
8. E Alisal Street – 2% (AM), 3% (PM)
9. Kern Street – 2% (AM), 3% (PM)
10. US 101 Onramps and Offramps – 2% (AM), 3% (PM)

The growth factors were primarily applied to the mainline traffic on each corridor. The lower of the two growth factors on intersecting streets was applied to the turning movements between those streets. The growth factors used are consistent with the net increase in traffic on these corridors attributable to approved projects in past traffic analyses in the study area.

Vehicle Circulation

Although most of the study intersections would continue to operate at or better than their respective level of service standards under Background conditions, the following six intersections would operate below their standards:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N. Main Street (SR 183) / Rossi Street: LOS D (AM and PM)
7. Kern Street / US 101 Northbound Ramps – Mobray Way: Side Street approach LOS F (PM)

10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM)

1.4 Background Plus Project Conditions

Vehicle Circulation

The same five intersections significantly impacted under Existing Conditions would be significantly impacted by the project under Background Conditions:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N. Main Street (SR 183) / Rossi Street: LOS D (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM).

Figure ES-2 shows the levels of service with and without the project at each of the significantly impacted intersections for the Background Plus Project Condition. **Figure ES-2** also shows the contribution of the project to the intersection deficiency and project's percentage of total overall intersection delay.

See **Figure ES-4** for the recommended improvements at these intersections under Background Conditions. Implementation of these improvements would reduce the project's impact at these intersections to less-than-significant. The impact and the recommended mitigation measure at each intersection is described below.

- **Intersection #1 – Natividad Road / E Laurel Drive:**
  This intersection would operate at a deficient LOS E during the AM and PM peak hours, unchanged from Background Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Add a third northbound and third southbound lane to Natividad Road through this intersection. Intersection operations would improve during the AM and PM peak hour to LOS D.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 61).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #2 – Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way:**
  This intersection would operate at a deficient LOS E (AM) and F (PM), unchanged from Background Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

Mitigation: Convert the signal phasing on the east and west intersection approaches from concurrent phasing to split phasing. Intersection operations would improve during the AM and PM peak hour to LOS D.

Project Responsibility: To ensure that the intersection of Sherwood Drive – Natividad Road / E. Bernal Drive-La Posada Way will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include the signal modifications at this intersection as one of the improvements that is funded by the TFO, or (2) if the signal modifications at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for modifying the signal phasing and ensure that the signal modification is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and modify the signal phasing ensuring that the signal modification is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #5 – N Main Street (SR 183) / Rossi Street:**
  This intersection, which is under Caltrans jurisdiction, would operate at a deficient LOS D during the AM and PM peak hours, unchanged from Background Conditions. The project would add 17 trips to this intersection during the AM peak hour and 15 trips to this intersection during the PM peak hour. The trips added by the Project would not increase the average vehicle delay during the AM peak hour, but would increase the PM peak hour vehicle delay by 0.1 seconds.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the PM peak hour by at least 0.1 seconds.

  Mitigation: Add a third northbound and third southbound lane on N. Main Street through this intersection. Intersection operations would improve during the PM peak hour to LOS C.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 31).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #10 – Sun Street / E Market Street:**
  Side-street operations at this intersection (the southbound Sun Street approach) would operate at a deficient LOS F during the PM peak hour, unchanged from Background Conditions. The project would add 31 trips to this approach during the PM peak hour.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection whose southbound approach operates at LOS F without the Project.

  Mitigation: Signalize the intersection. The intersection would operate at LOS A during the AM and PM peak hours with signalization.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

Project Responsibility: To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits for and installation of a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #12 – US 101 Southbound Offramp – Merced Street / E Market Street:** This intersection would operate at a deficient LOS F during the PM peak hour, while side-street operations (the southbound US 101 Southbound Offramp approach) would operate at a deficient LOS F during the AM and PM peak hours, unchanged from Background Conditions. The project would add 30 AM peak hour and 27 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay on the southbound off-ramp approach during the AM and PM peak hours by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: To ensure that the intersection of U.S. 101 Southbound Offramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or (2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

1.5 Cumulative Without Project Conditions

The Cumulative Without Project condition traffic volumes are primarily on traffic forecasts documented in the City of Salinas General Plan Circulation Study prepared by Higgins Associates in 2002. Traffic forecasts documented in the following reports were also referenced:

1. Monterey County Jail Housing Addition Traffic Impact Analysis, Hatch Mott MacDonald, April 29, 2014.
2. Haciendas Phase III/IV Traffic Impact Analysis, Hatch Mott MacDonald, April 8, 2014.

3. Sun Street Solid Waste Transfer Station Access Plan Traffic Impact Analysis, Higgins Associates, August 27, 2007.
4. Tynan Village Mixed Use Development Traffic Impact Study Report, Higgins Associates, November 22, 2004.
5. Salinas Sphere of Influence Amendment and Annexation Supplemental TIA, Fehr & Peers, November 14, 2007.

The Cumulative Condition traffic volume forecasts reflect new road links and the level of service calculations for the Cumulative Condition include intersection improvements that are included in the City of Salinas Traffic Fee Ordinance and are planned for implementation in conjunction with buildout of the city's General Plan. These improvements include the following:

1. TFO Project No. 30: Rossi Street Widening – widen to four lanes between Main Street and Sherwood Drive.
2. TFO Project No. 31: Main Street Widening – widen from a four to six-lane arterial between Casentini Street and Market Street.
3. TFO Project No. 33A: Bernal Drive Extension – extend as a four-lane arterial from Sherwood Drive/Natividad Road intersection to Kern Street.
4. TFO Project No. 33B: Bernal Drive Widening – widen, construct sidewalk and retaining wall on north side between Main Street and Rosarita Drive.
5. TFO Project No. 34: Constitution Boulevard Extension – extend from Laurel Drive to Bernal Drive Extension.
6. TFO Project No. 45: Laurel Drive Widening – widen to six lanes between Natividad and Constitution. Add left turn channelization east of Constitution.
7. TFO Project No. 46: Main Street Widening – widen to six lanes between Market Street and Bernal by eliminating on-street parking and widening UP Structure north of Market Street.
8. TFO Project No. 61: Natividad Road/Laurel Drive Intersection – widen the Natividad Road north and south intersection legs to provide the following lane configuration on the intersection approaches:
    a. Northbound approach – 1 left turn lane, 3 through lanes, 1 right turn lane
    b. Southbound approach – 2 left turn lanes, 2 through lanes, 1 through/right turn lane.
    c. Eastbound approach – 1 left turn lane, 2 through lanes, 1 right turn lane.
    d. Westbound approach – 2 left turn lanes, 2 through lanes, 1 right turn lane.

Vehicle Circulation

Although some of the study intersections would operate at or better than their respective level of service standards under Cumulative Without Project conditions, the following intersections would operate below their standards:

#5: N Main Street (SR 183) / Rossi Street: LOS D (PM)

#7: Kern Street / US 101 Northbound Ramps – Mobray Way: Overall LOS F, Side Street approach LOS F (PM)

#10: Sun Street / E Market Street: Side-street approach LOS F (PM)

#12: US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS E (AM) and LOS F (PM), Side-street approach LOS F (AM and PM)

#14: Kern Street / E Market Street: LOS F (PM)

1.6 Cumulative Plus Project Conditions

Vehicle Circulation

Although some of the study intersections would operate at or better than their respective level of service standards under Cumulative Plus Project conditions, the following intersections would operate below their standards and the project would contribute to the cumulative impact:

#5: N Main Street (SR 183) / Rossi Street: LOS D (PM)

#7: Kern Street / US 101 Northbound Ramps – Mobray Way: Overall LOS F, Side Street approach LOS F (PM)

#10: Sun Street / E Market Street: Side-street approach LOS F (PM)

#12: US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS E (AM) and LOS F (PM), Side-street approach LOS F (AM and PM)

#14: Kern Street / E Market Street: LOS F (PM)

Figure ES-3 shows the levels of service with and without the project at each of the significantly impacted intersections for the Cumulative Plus Project Condition. **Figure ES-3** also shows the contribution of the project to the intersection deficiency and project's percentage of total overall intersection delay.

See **Figure ES-4** for the recommended improvements at these intersections under Cumulative Conditions. Implementation of these improvements would reduce the project's impact at these intersections to less-than-significant. The impact and the recommended mitigation measure at each intersection is described below.

- **Intersection #5 – N Main Street (SR 183) / Rossi Street:**
  This intersection, which is under Caltrans jurisdiction, would operate at LOS C during the AM peak hour and a deficient LOS D during the PM peak hour unchanged from Cumulative Conditions. The project would add 17 trips to this intersection during the AM peak hour and 15 trips to this intersection during the PM peak hour. The trips added by the Project would not increase the average vehicle delay during the PM peak hour vehicle delay by 0.1 seconds.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the PM peak hour by at least 0.1 seconds. The Project's impact to this intersection is significant under Existing and Background Conditions.

  Mitigation:
  1) Add a third northbound through lane and third southbound through lane to N. Main Street at this intersection. The improvement would be achieved by converting the existing right turn lanes on northbound and southbound N. Main Street to through/right turn lanes.
  2) Add a second left turn lane on the westbound Rossi Street approach. TFO Project 30 would widen Rossi Street to a four-lane divided arterial within a right of way of 106 feet.

  With the second left turn lane included in the mitigation, the PM peak hour delay would be 41.8 seconds, which would be lower than the Cumulative Condition without project PM peak hour delay of 42.5 seconds. Therefore, the Project's cumulative impact would be mitigated.

  Salinas TFO Project: Projects 30 and 31. The City would need to modify Project 30 to include the second left turn lane on the westbound Rossi Street approach to N. Main Street.

Salinas TFO Project: Salinas TFO Project 30 and Project 31.

Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **<u>Intersection #7 – Kern Street / US 101 Northbound Ramps – Mobray Way:</u>**
This intersection would operate at an overall LOS F with side-street operations (the eastbound US 101 Northbound Ramps approach) of LOS F during the PM peak hour, unchanged from Cumulative Without Project Conditions. The project would add 2 trips to the eastbound off-ramp approach during the PM peak hour. The project by itself would not significantly impact the intersection, but the project would contribute to the cumulative operating deficiency at the intersection. Traffic diversions associated with the Bernal Avenue Extension and the Constitution Boulevard Extension will contribute to the deficient operations at this intersection under Cumulative Conditions.

Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay on the eastbound off-ramp approach during the PM peak hour by at least 0.1 seconds.

Mitigation: Signalize the intersection. Intersection operations would improve during the AM peak hour to LOS B and to LOS C during the PM peak hour.

Salinas TFO Project: This improvement is not included in the City of Salinas TFO. It is recommended that this improvement be added to Salinas TFO Project 33A (Bernal Avenue Extension) and 34 (Constitution Boulevard Extension). Traffic diversions associated with the extensions of Bernal Avenue and Constitution Boulevard will create new turning movement patterns at the Kern Avenue/Northbound US 101 ramps intersection and these new turning patterns will necessitate modification of the existing intersection traffic control. For this reason, the costs for the new intersection traffic control should be included in the TFO.

Project Responsibility: This improvement is not currently included in the City's Capital Improvement Program nor the TFO. To mitigate the Project's cumulative impact, a mechanism would need to be in place that ensures the ultimate full funding and completion of the improvement. This could be accomplished by adding the improvement to the City TFO or Capital Improvement Program. The Project's cumulative impact would be mitigated by the following:

Alternative 1: Add the improvement to the TFO and pay the TFO fee.

Alternative 2: Include the improvement in the Capital Improvement Program and pay a pro-rata contribution toward implementation of the project that would be combined with future development impact fees to fully fund implementation of the improvement. The pro-rata contribution would be based upon the project's share of cumulative traffic growth, where cumulative traffic growth equals Cumulative With Project volumes minus Existing volumes. The equitable share contribution calculation is based on the average of AM and PM peak hour volumes. The project's equitable share of cumulative traffic growth is 1 percent (1%).

- **<u>Intersection #10 – Sun Street / E Market Street:</u>**
Side-street operations at this intersection (the southbound Sun Street approach) would operate at a deficient LOS F during the PM peak hour, unchanged from Cumulative Conditions. The project would add 31 trips to this approach during the PM peak hour. The Project's impact to this intersection is significant under Existing and Background Conditions.

Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection whose southbound approach operates at LOS F without the Project.

Mitigation: Signalize the intersection. The intersection would operate at LOS A during the AM and PM peak hours with signalization.

Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

Project Responsibility: The Project's impact to this intersection was identified as significant under Existing and Background Conditions. The mitigation required for Cumulative Conditions (signalization) is the same as the mitigation recommended for Existing and Background Conditions. Therefore, the Project's responsibility to mitigate cumulative impacts is the same as the responsibility identified for the Existing and Background Conditions, which is as follows: To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits for installation of a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #12 – US 101 Southbound Off-ramp – Merced Street / E Market Street:** This intersection would operate at a deficient LOS E during the AM peak hour and LOS F during the PM peak hour, while side-street operations (the southbound US 101 Southbound Off-ramp approach) would operate at a deficient LOS F during the AM and PM peak hours, unchanged from Cumulative Conditions. The project would add 30 AM peak hour and 27 PM peak hour trips to this intersection. The Project's impact to this intersection is significant under Existing and Background Conditions.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay on the southbound off-ramp approach during the AM and PM peak hours by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: The Project's impact to this intersection was identified as significant under Existing and Background Conditions. The mitigation required for Cumulative Conditions (signalization) is the same as the mitigation recommended for Existing and Background Conditions. Therefore, the Project's responsibility to mitigate cumulative impacts is the same as the responsibility identified for the Existing and Background Conditions, which is as follows: To ensure that the intersection of U.S. 101 Southbound Off-ramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or (2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **<u>Intersection #14 – Kern Street / E Market Street:</u>**
  This intersection would operate at a deficient LOS F during the PM peak hour, unchanged from Cumulative without Project Conditions. The project would add 17 PM peak hour trips to this intersection. The project by itself would not significantly impact the intersection, but the project would contribute to the cumulative operating deficiency at the intersection. Traffic diversions associated with the Bernal Avenue Extension and the Constitution Boulevard Extension will contribute to the deficient operations at this intersection under Cumulative Conditions.

  Impact: The impact of the Project to the intersection is significant because the Project will add trips to the intersection that operates at a deficient level without the project.

  Mitigation: Restripe the westbound E. Market Street approach as one exclusive left turn lane, one through lane and one exclusive right turn lane. With this improvement, the intersection would operate at LOS C during the AM peak hour and LOS D during the PM peak hour.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO. It is recommended that this improvement be added to Salinas TFO Project 33A (Bernal Avenue Extension) and 34 (Constitution Boulevard Extension). Traffic diversions associated with the extensions of Bernal Avenue and Constitution Boulevard will create new turning movement patterns at the Kern Avenue/E. Market Street intersection and these new turning patterns, including an increase in the volume of traffic turning right from westbound E. Market Street to northbound Kern Avenue, will necessitate modification of the existing intersection lane configuration. For this reason, the costs for the new intersection configuration should be included in the TFO.

  Project Responsibility: This improvement is not currently included in the City's Capital Improvement Program nor the TFO. To mitigate the Project's cumulative impact, a mechanism would need to be in place that ensures the ultimate full funding and completion of the improvement. This could be accomplished by adding the improvement to the City TFO or Capital Improvement Program. The Project's cumulative impact would be mitigated by the following:

  Alternative 1: If the improvement is added to the TFO, pay the TFO fee.

  Alternative 2: Include the improvement in the Capital Improvement Program and pay a pro-rata contribution toward implementation of the project that would be combined with future development impact fees to fully fund implementation of the improvement. The pro-rata contribution would be based upon the project's share of cumulative traffic growth, where cumulative traffic growth equals Cumulative With Project volumes minus Existing volumes. The equitable share contribution calculation is based on the average of the AM and PM peak hour volumes. The project's share of cumulative traffic growth is three percent (3%).

Table ES-1: Existing Plus Project Condition Intersection Levels of Service With Project's Percentage Share of Deficiency at Significantly Impacted Intersections

						Existing Conditions		Existing Plus Project Conditions		Intersection - Average of All Movements					Unsignalized Intersection Side Street Approach					Project Contribution to Total Intersection Volume	
	N-S Street	**E-W Street**	**Existing Intersection Control**	**LOS Stnd.**	**Peak Hour**	Delay (sec)	LOS	Delay (sec)	LOS	Maximum Satisfactory Delay (sec)	Amount of Ex + Proj Delay Over Maximum Limit (sec)	Increment Attributable to Project (sec)	Percentage of Deficiency Attributable to Project	Project Percentage of Total Delay	Maximum Satisfactory Delay (sec)	Amount of Ex + Proj Delay Over Maximum Limit (sec)	Increment Attributable to Project (sec)	Percentage of Deficiency Attributable to Project	Project Percentage of Total Delay	Total Existing Plus Project Intersection Volume	Project Vehicle Trips Added to Intersection
1	Natividad Road	East Laurel Drive	Signal	D	AM	61.1	E	62.1	**E**	55.0	7.1	1.0	14.08%	1.61%	-	-	-	-	-	4,008	17
					PM	62.5	E	62.7	**E**	55.0	7.7	0.2	2.60%	0.32%	-	-	-	-	-	5,273	16
			With Improvement		*AM*			*48.2*	*D*												
					PM			*52.9*	*D*												
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	D	AM	57.8	E	**58.7**	**E**	55.0	3.7	0.9	24.32%	1.53%	-	-	-	-	-	2,961	17
					PM	92.1	F	**93.2**	**F**	55.0	38.2	1.1	2.88%	1.18%	-	-	-	-	-	3,262	16
			With Improvement		*AM*			*34.2*	*C*												
					PM			*44.0*	*D*												
5	North Main Street (SR 183)	Rossi Street	Signal	C/D (Caltrans)	AM	30.5	C	30.5	C	-	-	-	-		-	-	-	-	-	-	-
					PM	39.9	D	**40.0**	**D**	35.0	5.0	0.1	2.00%	0.25%	-	-	-	-	-	3,876	15
			With Improvement		*AM*			*26.5*	*C*												
					PM			*32.7*	*C*												
10	Sun Street	East Market Street	Two-Way Stop	D (E/E)	AM	1.7 (24.7/32.2)	A (C/D)	1.9 (25.8/34.7)	A (D/D)	-	-	-	-	-	-	-	-	-	-	-	-
					PM	3.9 (33.0/79.8)	A (D/F)	**8.4 (33.4/142.2)**	**A (D/F)**	-	-	-	-	-	50.0	92.2	62.4	0.68	0.44	1,866	36
			With Improvement		*AM*			*7.0*	*A*												
					PM			*7.0*	*A*												
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	C/D (E/E) (Caltrans)	AM	19.5 (18.4/78.9)	C (C/F)	**21.9 (19.2/90.8)**	**C (C/F)**	-	-	-	-	-	50.0	40.8	11.9	0.29	0.13	1,447	30
					PM	69.3 (20.9/ *)	F (C/F)	**72.5 (22.2/ *)**	**F (C/F)**	25.0	47.5	3.2	6.70%	4.41%	50.0	-	-	-	-	2,109	27
			With Improvement		*AM*			*10.3*	*B*												
					PM			*12.8*	*B*												

Notes:

1. LOS Stnd. = Level of Service Standard.
2. XX (YY) = Overall (Side Street).
3. Analysis performed using 2010 Highway Capacity Manual methodologies.
4. Overall level of service standard for the City of Salinas is LOS D.
   Maximum delay for LOS D at a signalized intersection = 55.0 sec per vehicle
   Maximum delay for LOS D at an unsignalized intersection = 35.0 sec per vehicle
5. Overall level of service standard for the Caltrans is the transition between LOS C and LOS D (LOS C/D).
   Maximum delay for LOS C at a signalized intersection = 35.0 sec per vehicle
   Maximum delay for LOS C at an unsignalized intersection = 25.0 sec per vehicle
6. Worst approach level of service standard is generally LOS E. Level of service "F" is the level of service at which improvements would normally be required.
   Maximum delay for LOS E at an unsignalized intersection approach = 50.0 sec per vehicle
7. * : Delay exceeds 300 seconds per vehicle. Percentage of delay deficiency calculation not shown for conditions when the delay is greater than 300 seconds per vehicle due to the problematic nature of the delay calculation at high levels of saturation.

Table ES-2: Background Plus Project Condition Intersection Levels of Service With Project's Percentage Share of Deficiency at Significantly Impacted Intersections

										Intersection - Average of All Movements					Unsignalized Intersection Side Street Approach					Project Contribution to Total Intersection Volume	
						Background Conditions		**Background Plus Project Conditions**													
	N-S Street	**E-W Street**	**Existing Intersection Control**	**LOS Stnd.**	**Peak Hour**	Delay (sec)	LOS	Delay (sec)	LOS	Maximum Satisfactory Delay (sec)	Amount of Back + Proj Delay Over Maximum Limit (sec)	Increment Attributable to Project (sec)	Percentage of Deficiency Attributable to Project	Project Percentage of Total Delay	Maximum Satisfactory Delay (sec)	Amount of Back + Proj Delay Over Maximum Limit (sec)	Increment Attributable to Project (sec)	Percentage of Deficiency Attributable to Project	Project Percentage of Total Delay	Total Background Plus Project Intersection Volume	Project Vehicle Trips Added to Intersection
1	Natividad Road	East Laurel Drive	Signal	D	AM	63.9	E	**65.1**	**E**	55.0	10.1	1.2	11.88%	1.84%	-	-	-	-	-	4,087	17
					PM	66.7	E	**66.9**	**E**	55.0	11.9	0.2	1.68%	0.30%	-	-	-	-	-	5,429	16
			With Improvement		*AM*			*50.0*	*D*												
					PM			*54.5*	*D*												
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	D	AM	61.3	E	**62.5**	**E**	55.0	7.5	1.2	16.00%	1.92%	-	-	-	-	-	3,019	17
					PM	98.5	F	**99.8**	**F**	55.0	44.8	1.3	2.90%	1.30%	-	-	-	-	-	3,358	16
			With Improvement		*AM*			*36.4*	*D*												
					PM			*54.5*	*D*												
5	North Main Street (SR 183)	Rossi Street	Signal	C/D (Caltrans)	AM	35.8	D	35.8	D	-	-	-	-		-	-	-	-	-	-	-
					PM	47.1	D	**47.3**	**D**	35.0	12.3	0.2	1.63%	0.42%	-	-	-	-	-	4,239	15
			With Improvement		*AM*			*29.1*	*C*												
					PM			*34.8*	*C*												
10	Sun Street	East Market Street	Two-Way Stop	D (E/E)	AM	1.7 (25.2/33.5)	A (D/D)	2.1 (26.8/39.0)	A (D/E)	-	-	-	-	-	-	-	-	-	-	-	-
					PM	4.4 (35.0/92.0)	A (E/F)	**9.5 (36.1/166.0)**	**A (E/F)**	-	-	-	-	-	50.0	116.0	74.0	63.80%	44.58%	1,915	36
			With Improvement		*AM*			*4.9*	*A*												
					PM			*6.2*	*A*												
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	C/D (E/E) (Caltrans)	AM	22.1 (19.1/89.8)	C (C/F)	**24.6 (19.9/102.2)**	**C (C/F)**	-	-	-	-	-	50.0	52.2	12.4	23.80%	12.13%	1,473	30
					PM	81.8 (23.0/ *)	F (C/F)	**84.7 (24.4/ *)**	**F (C/F)**	25.0	59.7	2.9	4.90%	3.42%	50.0	-	-	-	-	2,166	27
			With Improvement		*AM*			*10.4*	*B*												
					PM			*13.2*	*B*												

Notes:

1. LOS Stnd. = Level of Service Standard.
2. XX (YY) = Overall (Side Street).
3. Analysis performed using 2010 Highway Capacity Manual methodologies.
4. Overall level of service standard for the City of Salinas is LOS D.
   Maximum delay for LOS D at a signalized intersection = 55.0 sec per vehicle
   Maximum delay for LOS D at an unsignalized intersection = 35.0 sec per vehicle
5. Overall level of service standard for the Caltrans is the transition between LOS C and LOS D (LOS C/D).
   Maximum delay for LOS C at a signalized intersection = 35.0 sec per vehicle
   Maximum delay for LOS C at an unsignalized intersection = 25.0 sec per vehicle
6. Worst approach level of service standard is generally LOS E. Level of service "F" is the level of service at which improvements would normally be required.
   Maximum delay for LOS E at an unsignalized intersection approach = 50.0 sec per vehicle
7. * : Delay exceeds 300 seconds per vehicle. Percentage of delay deficiency calculation not shown for conditions when the delay is greater than 300 seconds per vehicle due to the problematic nature of the delay calculation at high levels of saturation.

Table ES-3: Cumulative Plus Project Condition Intersection Levels of Service With Project's Percentage Share of Deficiency at Significantly Impacted Intersections

						Cumulative Conditions		Cumulative Plus Project Conditions		Intersection - Average of All Movements					Unsignalized Intersection Side Street Approach					Project Contribution to Total Intersection Volume	
	N-S Street	**E-W Street**	**Existing Intersection Control**	**LOS Stnd.**	**Peak Hour**	Delay (sec)	LOS	Delay (sec)	LOS	Maximum Satisfactory Delay (sec)	Amount of C + Proj Delay Over Maximum Limit (sec)	Increment Attributable to Project (sec)	Percentage of Deficiency Attributable to Project	Project Percentage of Total Delay	Maximum Satisfactory Delay (sec)	Amount of C + Proj Delay Over Maximum Limit (sec)	Increment Attributable to Project (sec)	Percentage of Deficiency Attributable to Project	Project Percentage of Total Delay	Total Cumulative Plus Project Intersection Volume	Project Vehicle Trips Added to Intersection
5	North Main Street (SR 183)	Rossi Street	Signal	C/D (Caltrans)	AM	34.6	C	34.8	C	-	-	-	-	-	-	-	-	-	-	-	-
					PM	42.5	D	**42.6**	**D**	35.0	7.6	0.1	1.32%	0.23%	-	-	-	-	-	4,603	15
			With Improvement		*AM*			*34.7*	*C*												
					PM			*41.8*	*D*												
7	Kern Street	US 101 Northbound Ramps - Mobray Way	One-Way Stop	C/D (E) (Caltrans)	AM	8.1 (21.3)	A (C)	8.2 (21.3)	A (C)	-	-	-	-	-	-	-	-	-	-	-	-
					PM	* (*)	F (F)	*** (*)**	F (F)	-	-	-	-	-	-	-	-	-	-	2,105	2
			With Improvement		*AM*			*12.3*	*B*												
					PM			*26.4*	*C*												
10	Sun Street	East Market Street	Two-Way Stop	D (E/E)	AM	1.7 (27.9/35.5)	A (D/E)	2.1 (29.3/41.8)	A (D/E)	-	-	-	-	-	-	-	-	-	-	-	-
					PM	8.4 (48.8/180.2)	A (E/F)	**18.2 (49.8/ *)**	**C (E/F)**	-	-	-	-	-	50.0	-	-	-	-	2,107	36
			With Improvement		*AM*			*3.8*	*A*												
					PM			*4.9*	*A*												
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	C/D (E/E)	AM	44.1 (23.2/164.0)	E (C/F)	**48.7 (24.2/184.3)**	**E (C/F)**	25.0	23.7	4.6	19.40%	9.45%	50.0	134.3	20.3	15.10%	11.01%	1,761	30
					PM	228.0 (-/ *)	F (F/F)	**236.6 (-/ *)**	**F (F/F)**	25.0	211.6	8.6	4.10%	3.63%	50.0	-	-	-	-	2,530	27
			With Improvement		*AM*			*10.1*	*B*												
					PM			*14.9*	*B*												
14	Kern Street	East Market Street	Signal	D	AM	25.2	C	25.8	C	-	-	-	-		-	-	-	-	-	2,116	28
					PM	82.0	F	**81.9**	**F**				0.00%	0.00%	-	-	-	-	-	3,478	17
			With Improvement		*AM*			*23.3*	*C*												
					PM			*48.1*	*D*												

Notes:

1. LOS Stnd. = Level of Service Standard.
2. XX (YY) = Overall (Side Street).
3. Analysis performed using 2010 Highway Capacity Manual methodologies.
4. Overall level of service standard for the City of Salinas is LOS D.
   Maximum delay for LOS D at a signalized intersection = 55.0 sec per vehicle
   Maximum delay for LOS D at an unsignalized intersection = 35.0 sec per vehicle
5. Overall level of service standard for the Caltrans is the transition between LOS C and LOS D (LOS C/D).
   Maximum delay for LOS C at a signalized intersection = 35.0 sec per vehicle
   Maximum delay for LOS C at an unsignalized intersection = 25.0 sec per vehicle
6. Worst approach level of service standard is generally LOS E. Level of service "F" is the level of service at which improvements would normally be required.
   Maximum delay for LOS E at an unsignalized intersection approach = 50.0 sec per vehicle
7. * : Delay exceeds 300 seconds per vehicle. Percentage of delay deficiency calculation not shown for conditions when the delay is greater than 300 seconds per vehicle due to the problematic nature of the delay calculation at high levels of saturation.

Figure ES-4: Recommended Intersection Improvements

	N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project Mitigation	Background Plus Project Mitigation	Cumulative Plus Project Mitigation
1	Natividad Road	East Laurel Drive	Signal	Add 3rd NB T, 3rd SB T (TFO Project No. 61)	Same as Existing Plus Project.	-
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	Change E Bernal - La Posada Signal Phasing to Split Phasing. (Not currently included in the Salinas TFO.)	Same as Existing Plus Project.	-
5	North Main Street (SR 183)	Rossi Street	Signal	Add 3rd NB T, 3rd SB T. (TFO Project 31)	Same as Existing Plus Project.	1. Add 3rd NB T & 3rd SB T: TFO Project 31 2. Provide a second left turn lane on the westbound Rossi Street approach to N. Main. (TFO Project 30, modified by the City to include a second westbound left turn lane on Rossi within the 106 foot right of way planned by TFO Project 30.)
7	Kern Street	US 101 Northbound Ramps - Mobray Way	One-Way Stop	-	-	Signalize intersection.
10	Sun Street	East Market Street	Two-Way Stop	Signalize intersection.	Same as Existing Plus Project.	Same as Existing Plus Project.
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	Signalize Intersection	Same as Existing Plus Project.	Same as Existing Plus Project.
14	Kern Street	East Market Street	Signal	-	-	Restripe westbound E. Market approach to provide left turn lane, 1 through lane and 1 right turn lane.

Notes:
1. LOS Stnd. = Level of Service Standard
2. L, T, R, EB, WB, NB, SB, RTO = Left, Through, Right, Eastbound, Westbound, Southbound, Northbound, Right Turn Overlap signal phase.

Source: Mott MacDonald.

2 Introduction

This report summarizes the potential traffic circulation issues associated with the proposed Rodeo Property General Plan Amendment (GPA) and Rezoning in Salinas, California Vehicular, pedestrian and bicycle circulation issues were evaluated at the project site and the surrounding street network in Salinas, along with site access and internal circulation. The project site is located on Sun Street between US 101 and East Market Street. The location of the project site with respect to the area road network is indicated on **Figure 1**. **Figure 2** shows the project parcel. Access to the site is provided via Sun Street and its connection to Calle Cebu and E. Market Street.

2.1 Scope of Work

A specific development to be constructed on the project is not proposed at this time. Developed at a 0.4 Floor Area Ratio, the GPA Amendment and Rezoning would allow for the development of up to 118,600 square feet of floor space on the project site. For this study, the transportation impacts associated with the development of 118,600 square feet of floor space were analyzed. For purposes of this traffic study, 4 percent of the floor space (4,700 square feet) was assumed to be occupied by support office space and this space was modeled as general office space. The remaining floor area (113,900 square feet) was modeled as light industrial space.

This report addresses the following:

- Existing vehicular, pedestrian, bicycle and transit circulation at the project site and the surrounding street network.
- Assessment of potential direct impacts to vehicular, pedestrian, bicycle and transit circulation due to the GPA, and recommendations to minimize or alleviate those impacts.
- Assessment of potential cumulative traffic impacts.
- Potential site access issues.

2.2 Study Network

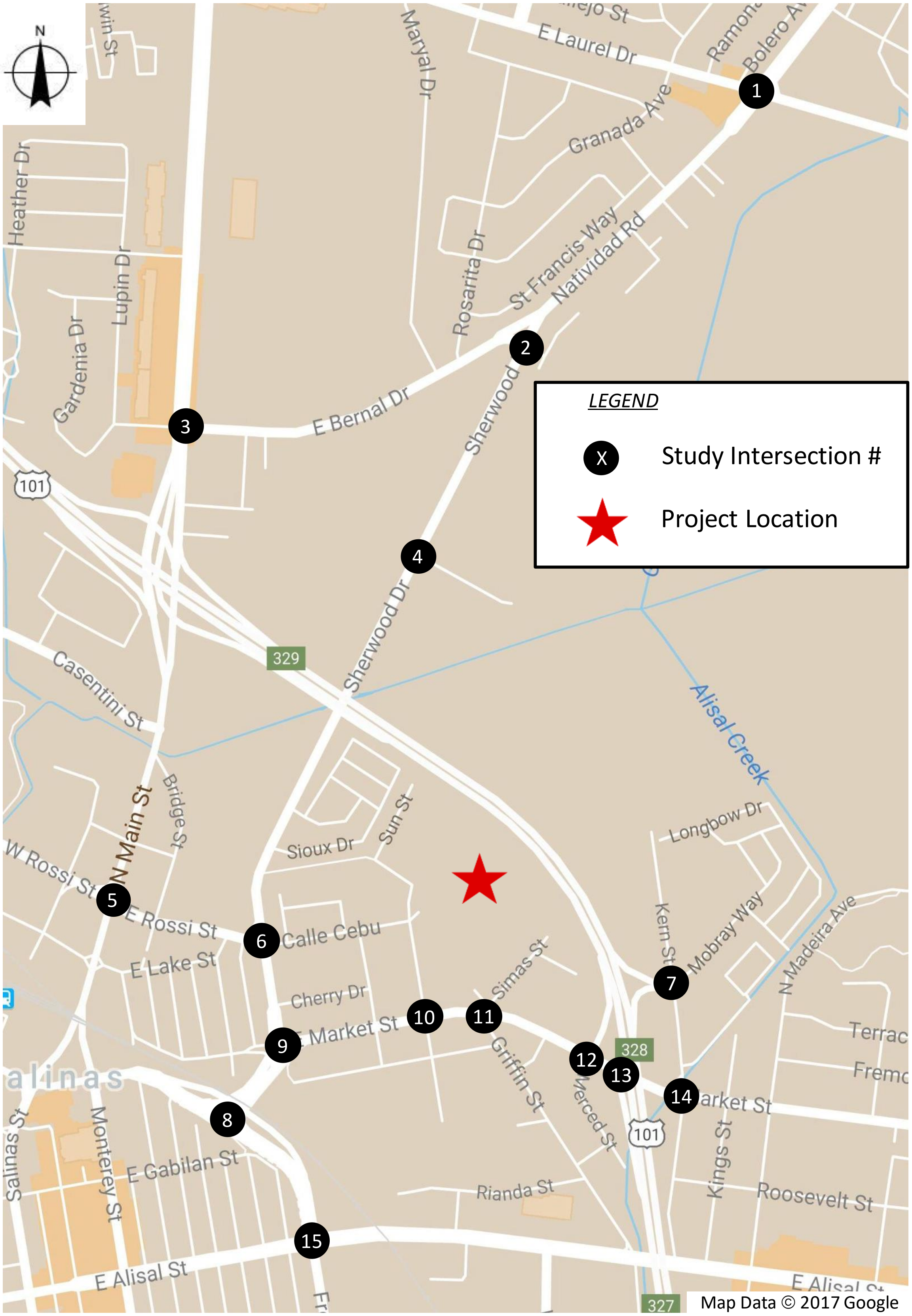
The AM and PM peak periods were analyzed at the following intersections:

1. Natividad Road / East Laurel Drive;
2. Sherwood Drive - Natividad Road / East Bernal Drive – La Posada Way;
3. North Main Street / Bernal Drive;
4. Sherwood Drive / Sherwood Place;
5. North Main Street (State Route 183) / Rossi Street;
6. Sherwood Drive / East Rossi Street – Calle Cebu;
7. Kern Street / US 101 Northbound Ramps – Mobray Way;
8. East Market Street – Front Street / East Market Street;
9. East Market Street – Sherwood Drive / Market Place – East Market Street;
10. Sun Street / East Market Street;
11. Griffin Street – Simas Street / East Market Street;
12. US 101 Southbound Offramp – Merced Street / East Market Street;
13. US 101 Southbound Onramp / East Market Street;
14. Kern Street / East Market Street; and
15. Front Street / East Alisal Street.

Figure 3 shows the existing traffic controls and lane configurations at the study intersections.

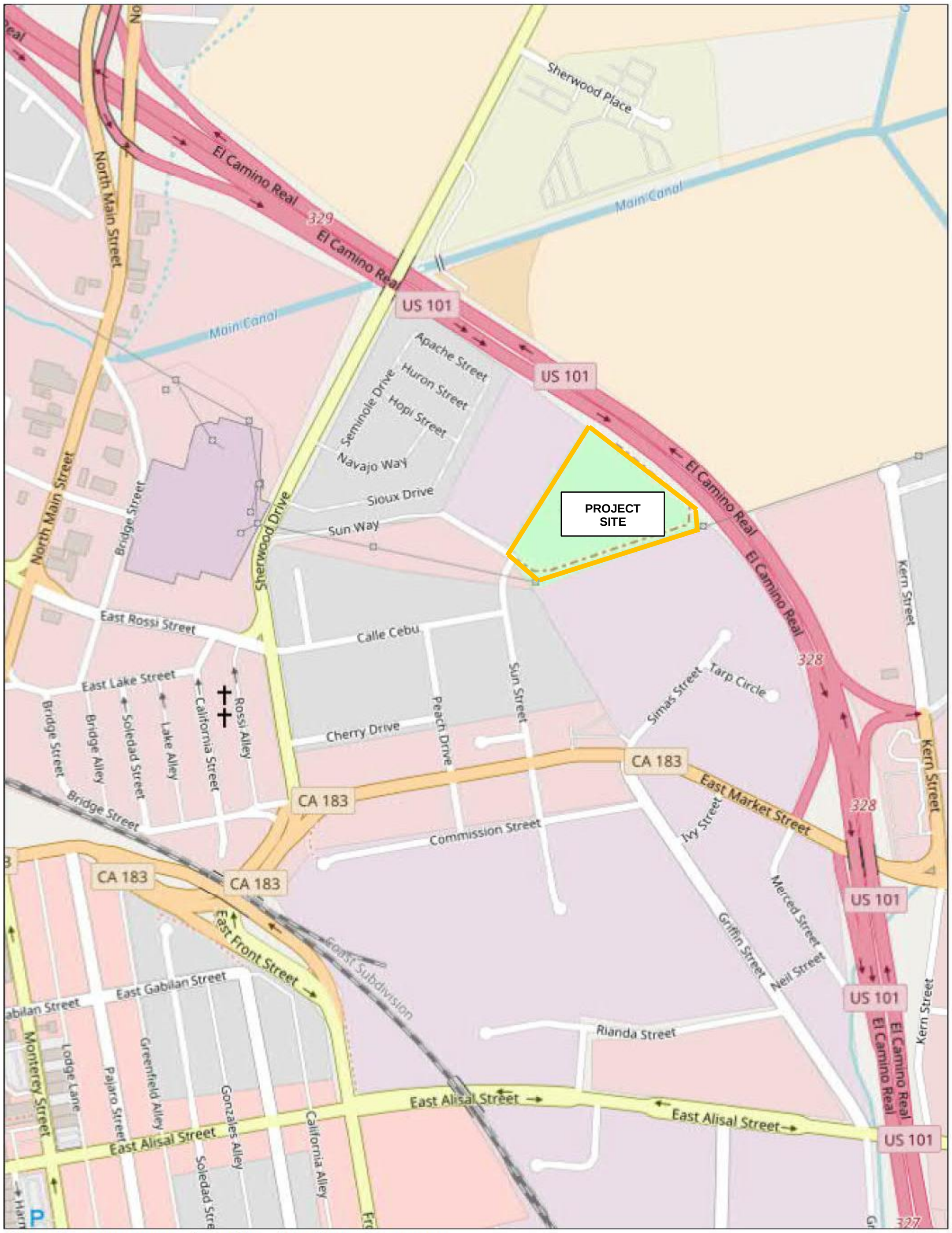
Traffic operations for the Existing, Existing Plus Project, Background, Background Plus Project, Cumulative Without Project and Cumulative Plus Project development scenarios were analyzed. Improvements recommended to address project and cumulative impacts are recommended where warranted.

Figure 1: Project Location Map



Base map Source: Google Maps, 2017.

Figure 2: Project Parcel



https://openstreetmap.org/copyright https://openstreetmap.org

Figure 3: Study Intersection Traffic Controls and Lane Configurations

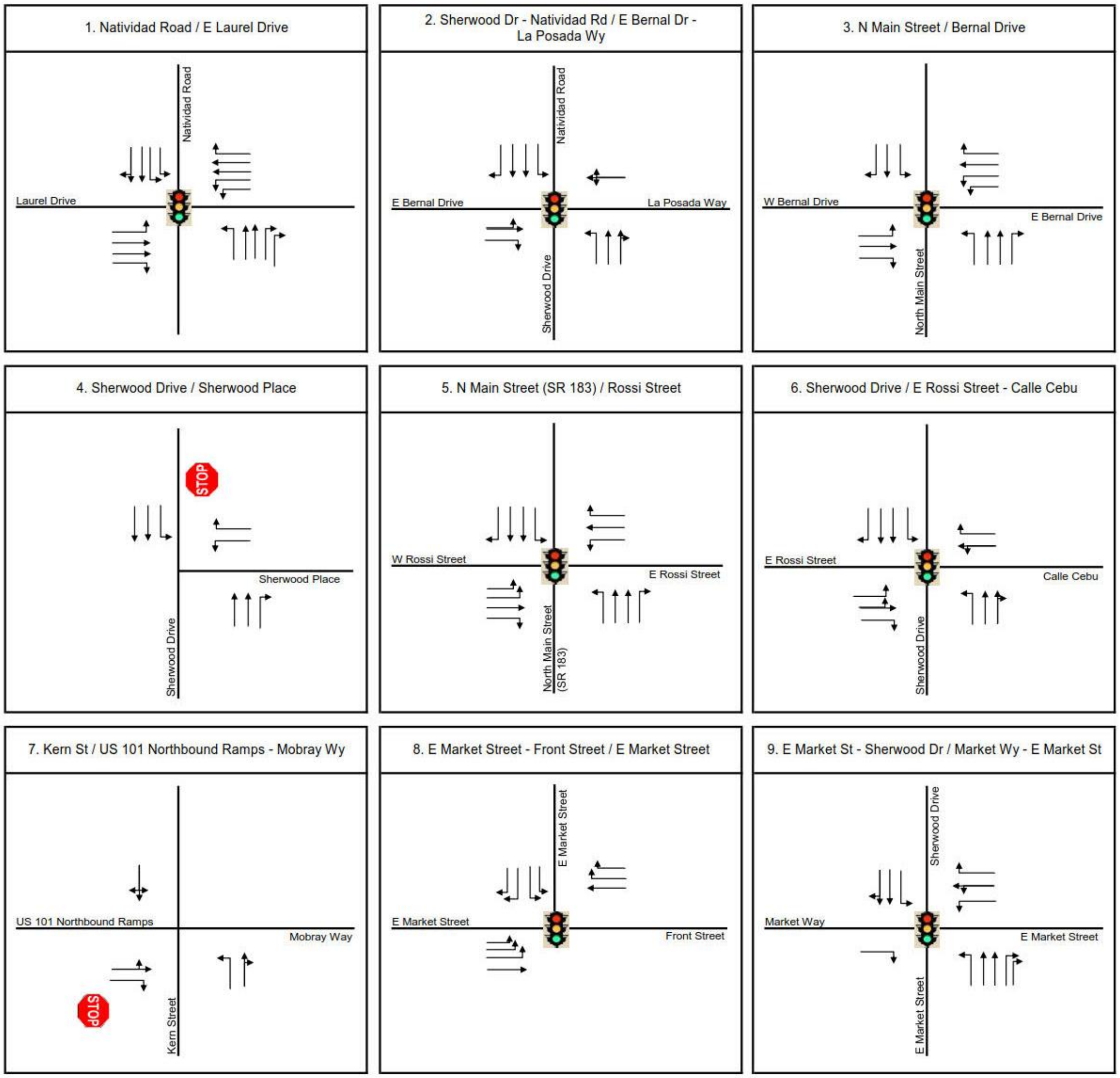
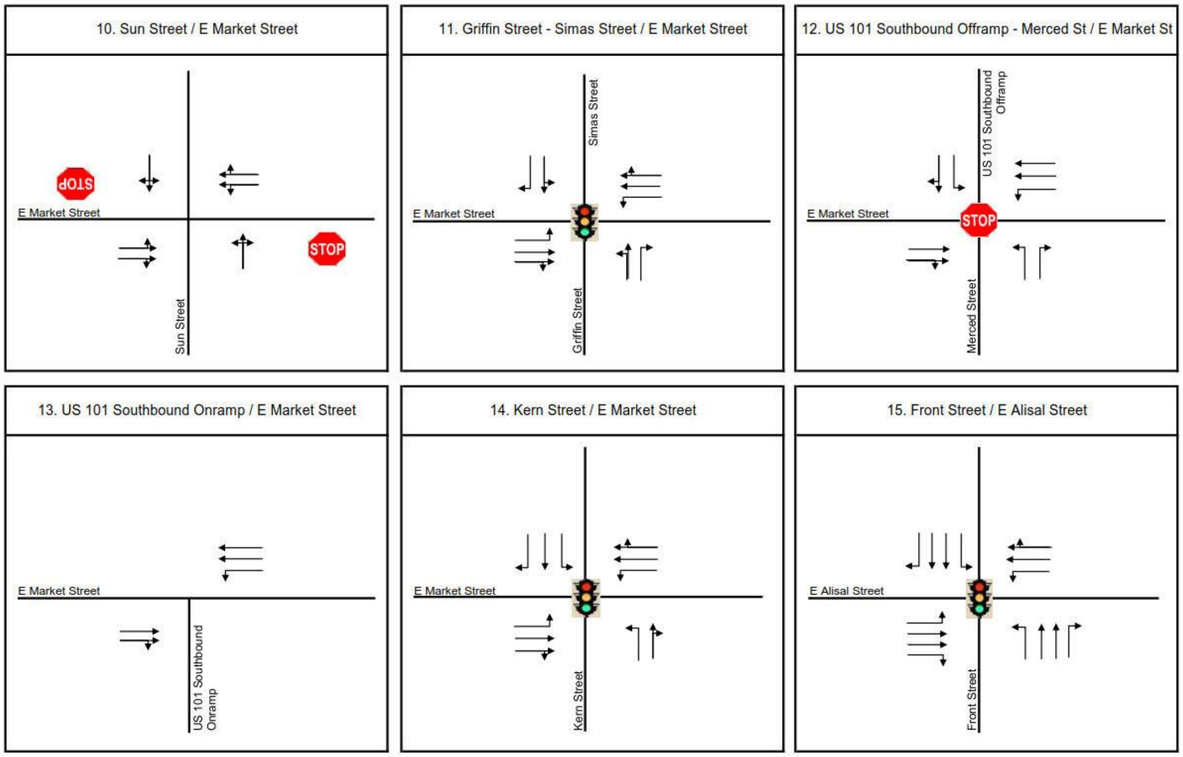
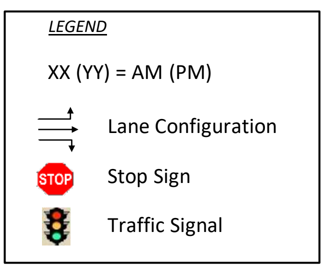


Figure 3: Study Intersection Traffic Controls and Lane Configurations (Continued)



Source: Mott MacDonald



2.3 Level of Service Standard

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. The analysis was performed using both the *2000* and *2010 Highway Capacity Manual* methodologies. A LOS description is included as **Appendix A**.

The study area includes intersections under the jurisdictions of the City of Salinas and Caltrans. The City of Salinas has an overall level of service (LOS) standard of LOS D, which applies to Intersections #1-4, 6, 8-11, and 14-15. The Caltrans' overall level of service standard is generally the transition from LOS C to LOS D (abbreviated as LOS C/D in this document), which applies to Intersections #5, 7, 12 and 13. According to the *Caltrans Guide for the Preparation of Traffic Impact Studies,* the existing measure of effectiveness should be maintained when an existing State highway facility is operating at less than the appropriate target level of service.

2.4 Analysis Methodology

The Synchro 9 software was used for analysis of intersection delays and associated levels of service.

Note: The traffic signal at Intersection #3 – N Main Street / Bernal Drive – is controlled by the InSync adaptive traffic control system, which optimizes traffic throughput through this intersection and to other corridor intersections to the north N Main Street. There is currently no analysis methodology that fully models the exact operations of an InSync system. For that reason, the analysis results for this intersection should be considered conservative.

2.5 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 has been used within this study, based upon the jurisdiction of each study intersection:

2.5.1 City of Salinas

The City of Salinas impact criteria for transportation-related impacts is used in this study. It is as follows:

Signalized Intersection (Intersections #1-3, 6, 8-9, 11, and 14-15)

A significant impact at a **signalized study intersection** is defined to occur under either of the following two conditions:

- The addition of project traffic causes operations to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or LOS F); or
- The addition of project traffic adds one vehicle trip to intersections already operating at LOS E or LOS F.

One- or Two-Way Stop-Controlled Intersection (Intersections #4 and 10)

A significant impact at a **one- or two-way stop-controlled study intersection** is defined to occur under either of the following two conditions:

- The addition of project traffic causes overall operations to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or LOS F); or

- The addition of project traffic adds one vehicle trip to intersections whose side-street operations are already operating at LOS F.

2.5.2 Caltrans

The following significance criteria have been used within this study at intersections under the jurisdiction of Caltrans:

Signalized Intersection (LOS C/D Standard) (Intersection #5)

A significant impact at a **signalized study intersection** is defined to occur under either of the following two conditions:

- A significant impact would occur if an intersection operating at LOS A, B or C degrades to D, E or F; or
- For intersections already operating at unacceptable levels D, E or F, a significant impact would occur if the project would cause overall delay to increase by at least 0.1 seconds.

A significant impact is satisfactorily mitigated when mitigation measures are implemented that would restore the intersection level of service to the pre-project condition or better.

One- or Two-Way Stop-Controlled Intersection (Intersections #7, 12, 13)

A significant impact at a **one- or two-way stop-controlled study intersection** is defined to occur under either of the following two conditions:

- A significant impact would occur if any traffic movement operating at LOS A, B, C, D or E degrades to F; or
- For traffic movements already operating at unacceptable level F, a significant impact would occur if the project would cause delay for the movement operating at LOS F to increase by at least 0.1 seconds.

A significant impact is satisfactorily mitigated when mitigation measures are implemented that would restore the intersection level of service to the pre-project condition or better.

2.6 Funding for Transportation Improvements

2.6.1 City of Salinas Traffic Impact Fee

The City of Salinas adopted the first Salinas Traffic Fee Ordinance (TFO) program in August 1987. The fee program links increases in traffic generated by new development to the cost of transportation improvements that would be required to mitigate the traffic impacts caused by the new development. Projects such as schools are exempt from payment of this fee.

The City of Salinas Traffic Improvement Program, Wood Rodgers, March 2010, identifies the roadway improvements currently funded by the TFO. These improvements are cited as potential improvement methods to offset project and cumulative impacts. New development constructed on the project site would be subject to payment of traffic impact fees according to the requirements of the TFO.

2.6.2 TAMC Regional Development Impact Fee

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 improvements throughout Monterey County. This impact fee, which went into effect on August 27, 2008, is applied to all new development within Monterey County. As with the Salinas TFO, projects such as schools are exempt from payment of the TAMC fee.

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 again in June 2013 by Wood Rodgers. New development constructed on the project site would be subject to payment of the TAMC fee.

3 Existing Conditions

This chapter of the report evaluates Existing traffic conditions and includes a description of the project setting.

3.1 Existing Road Network

The project site is located off Sun Street in the central portion of Salinas, northeast of the downtown central business district (i.e., Downtown). The site is surrounded by US 101 to the north and industrial and commercial uses to the east, south and west.

The site would be directly accessible via Sun Street and indirectly accessible from Calle Cebu (via Sun Street); see Chapter 3, Existing Plus Project Conditions, for more information about the project access points. Sun Street connects to East Market Street, while Calle Cebu connects to Sherwood Drive. Regional access to the project site is provided by US 101, East Market Street, Sherwood Drive, Natividad Road, North Main Street and Front Street. Other streets in the area include East Laurel Drive, Bernal Drive, La Posada Way, Sherwood Place, Rossi Street, Kern Street, Mobray Way, Market Way, Griffin Street, Merced Street and East Alisal Street. Each street is discussed below, in alphabetical order.

East Alisal Street is a four-lane major arterial running in an east-west direction though central Salinas. The speed limit on Alisal Street is 35 miles per hour (mph) east of Front Street and 25 mph west of Front Street.

East Bernal Drive is a three-lane (one lane eastbound and two lanes westbound) major arterial that runs between North Main Street and Sherwood Drive. The roadway continues as a two-lane roadway (West Bernal Drive) west of North Main Street. The speed limit on East Bernal Drive is 35 mph, while the speed limit on West Bernal Drive is 25 mph.

Calle Cebu is a two-lane east-west local street that runs between Sherwood Drive and Sun Street, east of Sherwood Drive. On-street parking is allowed on both sides of the street. Calle Cebu becomes Rossi Street west of Sherwood Drive. The speed limit on Calle Cebu is 25 mph.

Front Street is a four-lane north-south major arterial that runs between East Market Street and John Street. It provides access to commercial and residential land uses. Front Street has a posted speed limit of 25 mph north of East Alisal Street and 35 mph south of East Alisal Street.

Griffin Street is a minor arterial in central Salinas providing access to the commercial and industrial areas between Downtown and US 101. The speed limit on Griffin Street is 25 mph.

Kern Street is a minor arterial in eastern Salinas that connects the northbound US 101 ramps to E. Market Street. It provides access to commercial and residential uses directly east of US 101. There are no speed limit signs on Kern Street; thus, the speed limit is presumed to be 30 mph.

La Posada Way is a local street in northern Salinas that provides access to a residential neighborhood. The speed limit on La Posada Way is 25 mph.

East Laurel Drive is an east/west four-lane major arterial that extends between North Davis Road on the west and Williams Road on east, where it terminates. East Laurel Drive has a posted speed limit of 35 mph west of Natividad Road and 45 mph east of Natividad Road.

North Main Street is a four- to six-lane north-south major arterial in central and northern Salinas. It provides primary access to the Downtown from the north, as well as to northbound and southbound US 101 approximately one-half mile north of Rossi Street. Commercial and residential land uses line North Main Street. South of US 101, North Main Street is also State Route 183, which continues south then west towards Castroville. The speed limit on North Main Street is 40 miles per hour in the vicinity of the project site.

East Market Street is a four-lane east-west major arterial in the vicinity of the project site, connecting the Downtown with eastern Salinas. It provides access primarily to commercial land uses along its frontage. It also provides direct access to and from southbound US 101 and access to and from northbound US 101 via Kern Street. The speed limit on East Market Street is 25 mph west of Sherwood Drive and 35 mph east of Sherwood Drive.

Market Way is two-lane collector street providing access to the Chinatown neighborhood north of Downtown. The speed limit on Market Way is 25 mph.

Merced Street is a two-lane local street just west of US 101, providing access to commercial and residential land uses south of East Market Street. The speed limit on Merced Street is 25 mph.

Mobray Way is a private road that provides access to the Sherwood Lake Mobile Home Park.

Natividad Road begins as a continuation of Sherwood Drive. Between East Bernal Drive and East Laurel Drive, Natividad Road is a four-lane major arterial. Natividad Road is a six-lane divided major arterial between East Laurel Drive and Boronda Road. Natividad Road is a two-lane rural roadway north of Boronda Road to Old Stage Road. Natividad Road has a posted speed limit of 45 mph.

Rossi Street is a two-lane east-west minor arterial west of Sherwood Drive. It provides access to residential and commercial land uses. The posted speed limit on Rossi Street is 40 mph west of North Main Street and 25 mph east of North Main Street.

Sherwood Drive is a four-lane north-south major arterial that runs from East Market Street to East Bernal Drive, where its name changes to Natividad Road. It provides access to commercial and residential land uses. The posted speed limit on Sherwood Drive is 45 mph between East Bernal Drive and Sherwood Place and 35 mph between Sherwood Place and East Market Street.

Sherwood Place is a two-lane local street off of Sherwood Drive, providing access to the Salinas Education Center, a collection of schools and offices operate by the Salinas Unified High School District (SUHSD). The speed limit on Sherwood Place is 25 mph.

Simas Street is a two-lane local street north of East Market Street. It provides access to both commercial and industrial land uses. The speed limit on Simas Street is 25 mph.

Sun Street is a two-lane local street in central Salinas, east of Downtown. It provides access to commercial, industrial, and residential areas. The speed limit on Sun Street is 25 mph.

US 101 is a four-lane freeway in Salinas, extending south to San Luis Obispo and Los Angeles and north to San Jose and San Francisco. The speed limit on US 101 is 65 mph.

3.2 Existing Pedestrian Network

Sidewalks are present along both sides of Sun Street and Calle Cebu, extending to the study project site at the north end of Sun Street. These sidewalks are continuous onto intersecting streets, such as East Market Street, Sherwood Drive, North Market Street and Front Street. Although the sidewalks also continue onto Natividad Road, there is a gap in the sidewalk network along southbound Natividad Road between Sorrentini Drive and East Bernal Drive.

3.3 Existing Bicycle Network

The City of Salinas has adopted a Master Bikeway Plan that designates routes along roadways that can be used by bicycling commuters and recreational riders for safe access to major employers, shopping centers and schools. Consistent with State and Federal designations, there are three basic types of bicycle facilities in Salinas. Each bike facility type is described below:

- Bike path (Class I) - A separate right-of-way designed for the exclusive use of cyclists and pedestrians, with minimal crossings for motorists.
- Bike lane (Class II) - A lane on a regular roadway, separated from the motorized vehicle right-of-way by paint striping, designated for the exclusive or semi-exclusive use of bicycles. Bike lanes allow one-way bike travel. Through travel by motor vehicles or pedestrians is prohibited, but crossing by pedestrians and motorists is permitted.
- Bike route (Class III) - Provides shared use of the roadway with motorists, designated by signs or permanent markings.

There are no dedicated bicycle facilities (Class I bicycle paths) near the project site.

Class II bike lanes are currently provided on Rossi Street and Sherwood Drive near the project site.

There are no designated bike routes (Class III) in the project vicinity.

Appendix B illustrates the City of Salinas bicycle facilities.

3.4 Existing Transit Network

Public transit service in the County of Monterey and City of Salinas is provided by Monterey-Salinas Transit (MST). MST focuses on improving operational conditions through established bus routes and schedules that efficiently meet travel demands, reduce travel times, improve service reliability, and encourage bike-and-ride initiatives. All MST buses are wheelchair accessible and equipped with bike racks. The following MST routes serve the immediate project area:

- Route 45 – Northridge – Salinas
- Route 46 – Salinas - Natividad

Appendix C illustrates the existing transit routes in the vicinity of the project site.

The nearest bus stops to the project site are located at the following locations:

- Eastbound East Market Street, east of Peach Street (Line 45);
- Eastbound East Market Street, east of Griffin Street (Line 45);
- Westbound East Market Street, west of Simas Street (Line 45);
- Northbound Sherwood Drive, north of Calle Cebu (Line 46);
- Westbound East Rossi Street, west of Sherwood Drive (Line 46).

These bus stops are located within a 10-minute walk from the project site.

Note: Although Lines 82 and 86 also travel along East Market Street, neither line stops at any of the bus stops on East Market Street near the project site.

3.5 Existing Condition Traffic Circulation

3.5.1 Vehicle Circulation

The intersection turning movement counts were collected during the AM (7:00 – 9:00 AM) and PM (4:00 – 6:00) peak hours on Friday, June 2 and Monday, June 5, 2017. Traffic data was collected for cars, trucks, buses, bicyclists, and pedestrians. From these counts, the AM and PM peak hour volumes were derived. The intersection traffic volumes were collected on atypical days of the week and when Salinas area schools were not in session. Therefore, the collected intersection traffic volumes were adjusted to be consistent with available historical volumes when schools were in session.

Appendix D contains the traffic count data at the study intersections, including a table summarizing when each intersection volume was collected. **Appendix L** provides a comparison of the traffic volumes utilized for this study and traffic counts collected for previous traffic studies and traffic counts collected by the City at selected intersections. The tables contained in Appendix L show the adjustments that were made for each study intersection. The tables in Appendix L also include existing AM and PM peak hour traffic volumes that were utilized in previously prepared traffic studies. These studies are as follows:

1. Haciendas Phase III/IV Traffic Impact Analysis, Hatch Mott MacDonald, April 8, 2014.
2. Sun Street Solid Waste Transfer Station, Hatch Mott MacDonald memorandum to Jose Gamboa, August 17, 2011.
3. Proposed New City of Salinas Police Station Traffic Impact Report, Crane Associates, September 6, 2017. Traffic counts collected July 2017.

Traffic counts collected by the City of Salinas within the last two-year period that are available on the city's website are also included in the tables for comparison.

Because Sherwood Place provides access to a school, peak hour turning movement volumes from the Haciendas Phase III/IV traffic impact study at the Sherwood Drive/Sherwood Place intersection were used for this study. The Haciendas Phase III/IV traffic volumes were collected when Salinas schools were in session.

Figure 4 depicts the peak turning movement volumes for the study intersections under Existing Conditions.

The intersection levels of service for the Exiting Condition are summarized in **Table 2**. Although most of the study intersections currently operate at or better than their respective level of service standards under Existing conditions, the following five intersections currently operate below their standards:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N Main Street (SR 183) / Rossi Street: LOS D (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM)

See **Appendix E** for the level of service calculations under Existing Conditions.

Figure 4: Existing Conditions – AM and PM Peak Hour Volumes

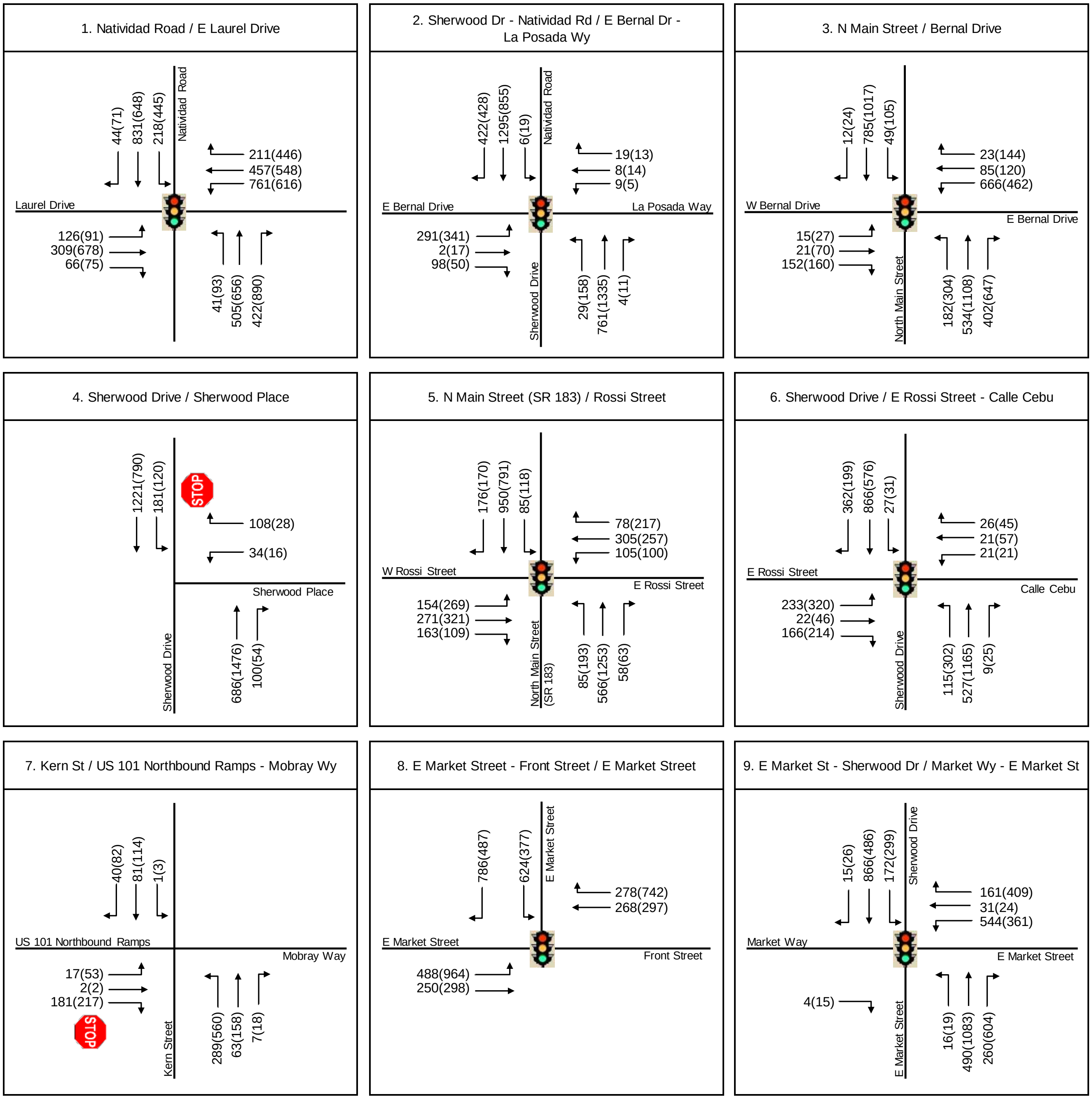
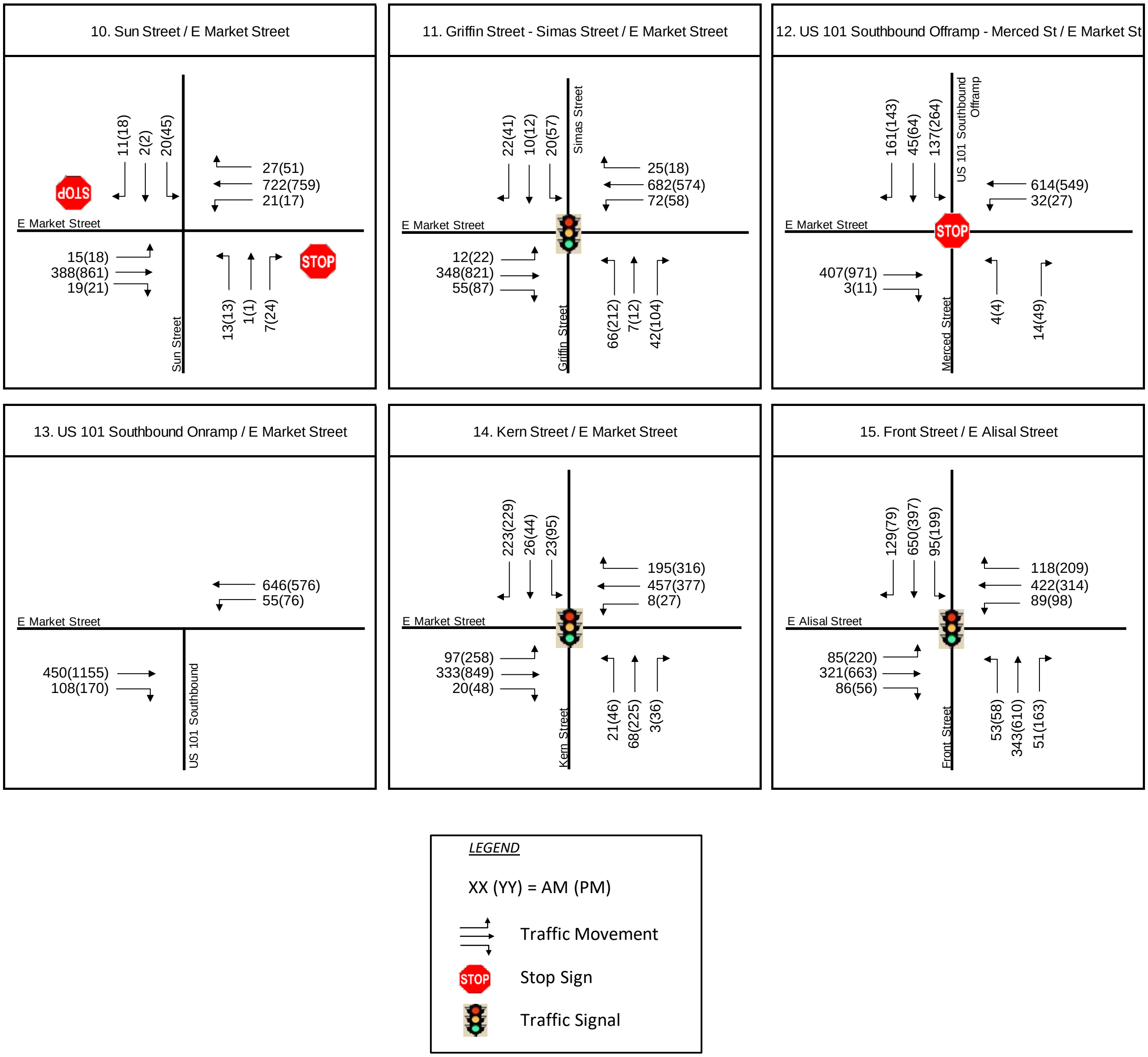


Figure 4: Existing Conditions – AM and PM Peak Hour Volumes (Continued)



Source: Mott MacDonald

3.5.2 Pedestrian Circulation

A review of the traffic counts found that there is a low to moderate level of pedestrian activity near the project site. Pedestrian activity is highest near the residential and commercial areas on Sherwood Drive and E Market Street, especially during the PM peak hour (compared to the AM peak hour).

3.5.3 Bicycle Circulation

A review of the traffic counts found that there is relatively little bicycle activity in the study network, including near the project site.

4 Existing Plus Project Conditions

This chapter describes the analysis of the transportation impacts under Existing Plus Project traffic conditions.

4.1 Project Description

The project is a General Plan amendment and Rezone change that would allow development of industrial and commercial uses on a 6.8-acre site located on Sun Street adjacent to US 101. The proposed land use designation would allow site to be developed at a floor area ratio 0.4, which would allow for up to 118,600 square feet of industrial floor space. For purposes of this traffic study, 4 percent of the floor space (4,700 square feet) was assumed to be occupied by support office space and this space was modeled as general office space. The remaining floor area (113,900 square feet) was modeled as light industrial space.

The site is designated in the General Plan as Open Space. Access to the site is provided via Sun Street and its connection to Calle Cebu and E. Market Street.

4.2 Project Trip Generation

Table 1 contains the trip generation estimate for the project. The estimate was derived using trip rates from the Institute of Transportation Engineers (ITE) publication *Trip Generation Manual,* 10th Edition, 2017. Note that trip generation estimates for the industrial and office components of the project have been separately calculated.

In total, the project is estimated to generate 611 daily trips, with 85 trips (74 in, 11 out) during the AM peak hour and 77 trips (10 in, 67 out) during the PM peak hour.

Table 1: Project Trip Generation

			AM PEAK HOUR				PM PEAK HOUR			
TRIP GENERATION RATES	ITE LAND USE CODE	DAILY TRIP RATE	PEAK HOUR RATE	% OF ADT	% IN	% OUT	PEAK HOUR RATE	% OF ADT	% IN	% OUT
General Light Industrial (per 1,000 sq. ft.)	110	4.96	0.70	14%	88%	12%	0.63	13%	13%	87%
General Office	710	9.74	1.16	12%	86%	14%	1.15	12%	16%	84%

			AM PEAK HOUR				AM PEAK HOUR			
GENERATED TRIPS	PROJECT SITE	DAILY TRIPS	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT	PEAK HOUR TRIPS	% OF ADT	TRIPS IN	TRIPS OUT
Industrial	113,900 sq. ft.	565	80	14%	70	10	72	13%	9	63
Office	4,700 sq. ft.	46	5	11%	4	1	5	11%	1	4
Total:	118,600 sq. ft.	611	85		74	11	77		10	67

Notes:
1. Trip generation rates from Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017, unless otherwise noted.
2. "sq. ft." = square feet.

Source: Mott MacDonald

4.3 Project Trip Distribution and Assignment

Figure 5 depicts the trip distribution for the project. This distribution was derived based upon adjacent complementary uses in the greater Salinas area. Note that this distribution was previously included in *Rodeo Property Preliminary Traffic Assessment, Salinas California,* Mott MacDonald, December 15, 2016. The trip distribution was combined with the trip generation to derive the project trip assignment depicted on **Figure 6**. The trip assignment was added to the existing traffic volumes to create the Existing Plus Project volumes depicted in **Figure 7**.

4.4 Existing Plus Project Condition Traffic Circulation

4.4.1 Vehicle Circulation

Table 2 summarizes the levels of service at the study intersections under Existing and Existing Plus Project conditions. Although most of the study intersections would operate at or better than their respective level of service standards, the following five intersections that currently operate below acceptable LOS would be significantly impacted by the project based upon the significance criteria utilized for this study:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N Main Street (SR 183) / Rossi Street: LOS D (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM)

See **Appendix F** for the level of service calculations under Existing Plus Project Conditions.

Below is a discussion of deficient operations and recommended improvements at the study intersections under Existing Plus Project conditions. Recommended improvements are summarized in **Table 3**.

- **Intersection #1 – Natividad Road / E Laurel Drive:**
  This intersection would operate at a deficient LOS E during the AM and PM peak hours, unchanged from Existing Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Add a third northbound and third southbound lane to Natividad Road through this intersection. Intersection operations would improve during the AM and PM peak hour to LOS D.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 61).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #2 – Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way:**
  This intersection would operate at a deficient LOS E (AM) and F (PM), unchanged from Existing Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Convert the signal phasing on the east and west intersection approaches from concurrent phasing to split phasing. Intersection operations would improve during the AM and PM peak hour to LOS D.

  Project Responsibility: To ensure that the intersection of Sherwood Drive – Natividad Road / E. Bernal Drive-La Posada Way will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include the signal modifications at this intersection as one of the improvements that is funded by the TFO, or (2) if the signal modifications at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for modifying the signal phasing and ensure that the signal modification is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and modify the signal phasing ensuring that the signal modification is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #5 – N Main Street (SR 183) / Rossi Street:**
  This intersection, which is under Caltrans jurisdiction, would operate at a deficient LOS D during the PM peak hour, unchanged from Existing Conditions. The project would add 6 trips to this intersection during the PM peak hour and increase the PM peak hour delay by 0.1 seconds.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the PM peak hour by at least 0.1 seconds.

  Mitigation: Add a third northbound and third southbound lane on N. Main Street through this intersection. Intersection operations would improve during the PM peak hour to LOS C.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 31).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #10 – Sun Street / E Market Street:**
  Side-street operations at this intersection (the southbound Sun Street approach) would operate at a deficient LOS F during the PM peak hour, unchanged from Existing Conditions. The project would add 31 trips to this approach during the PM peak hour.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection whose southbound approach operates at LOS F without the Project.

Mitigation: Signalize the intersection. The intersection would operate at LOS A during the AM and PM peak hours with signalization.

Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

Project Responsibility: To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits for installation of a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #12 – US 101 Southbound Offramp – Merced Street / E Market Street:** This intersection would operate at a deficient LOS F during the PM peak hour, while side-street operations (the southbound US 101 Southbound Offramp approach) would operate at a deficient LOS F during the AM and PM peak hours, unchanged from Existing Conditions. The project would add 30 AM peak hour and 27 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the AM and PM peak hours by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: To ensure that the intersection of U.S. 101 Southbound Offramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or (2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

4.4.2 Pedestrian Circulation

Pedestrian traffic that is generated by development of the project site would likely be traveling from areas easily reached on foot from the project site, such as adjacent neighborhoods and bus stops. It is anticipated that the complete sidewalk and crosswalk network in the greater study area would facilitate pedestrian access from these areas. However, potential pedestrian impacts should be assessed at the time the project site is proposed to be developed by a specific project.

4.4.3 Bicycle Circulation

Development on the project site is anticipated to generate little bicycle traffic. As with the pedestrian traffic, the bicycle traffic that would be generated by the project would be traveling to areas easily reached on bike from the project site, such as residential areas that are more than a 10-minute bike ride from the project site. Although there are few bike facilities in the study area nearest the project site, the small level of bicycle traffic will be low enough to minimize any effects on existing vehicle traffic. Potential bicycle traffic impacts should be assessed at the time the project site is proposed to be developed by a specific project.

4.4.4 Transit Circulation

Development on the project site is anticipated to generate little transit usage. The transit usage that would be generated by the project would likely be walking to and from the bust stops within a 10-minute walk from the project site (as enumerated in Section 2.4). The small level of transit usage generated by the project would be low enough to minimize any effects on existing transit demand for bus routes in the area. Potential transit traffic impacts should be assessed at the time the project site is proposed to be developed by a specific project.

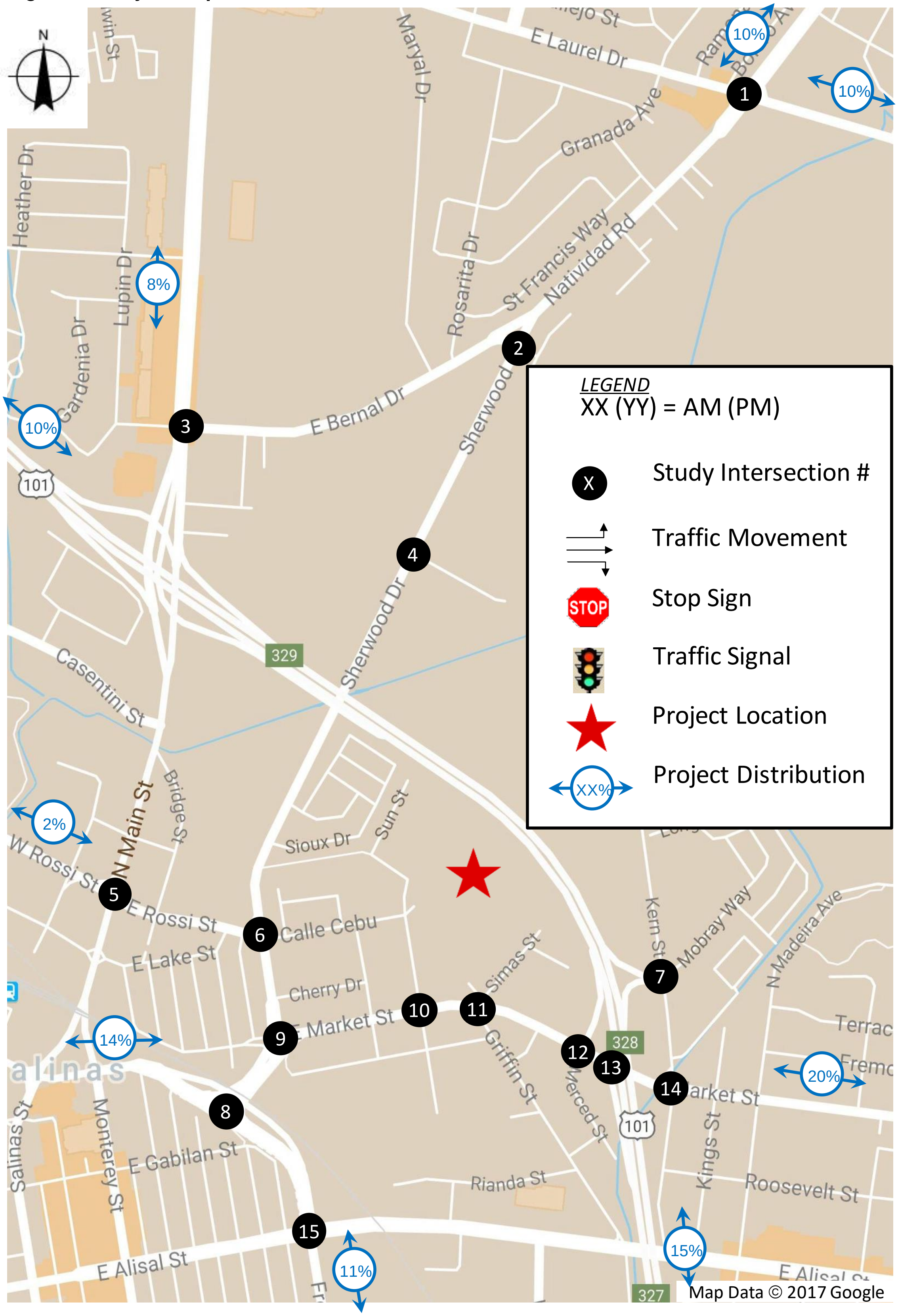
4.5 City of Salinas Traffic Fee Ordinance

A development project constructed on the project site would be responsible for payment of the City of Salinas Traffic Fee Ordinance (TFO) traffic impact fee, which would represent the development’s contribution towards citywide roadway improvements funded by the fee program.

4.6 TAMC Regional Development Impact Fee

A development project constructed on the project site would be responsible for payment of the TAMC Regional Development Impact Fee, which would represent the project’s contribution towards countywide roadway improvements funded by the fee program.

Figure 5: Project Trip Distribution



Base map Source: Google Maps, 2017.

Figure 6: Project Trip Assignment – AM and PM Peak Hour Volumes

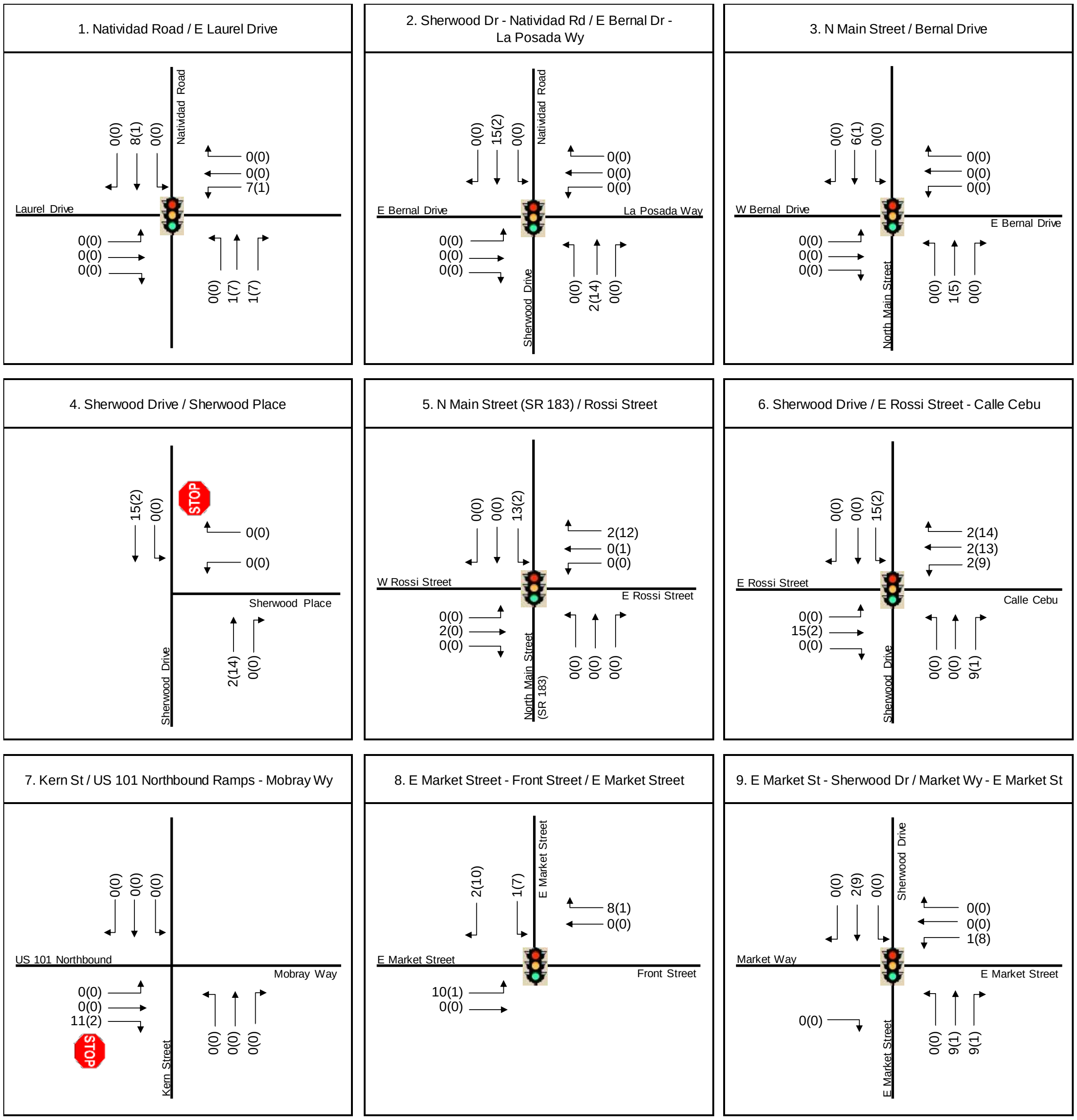
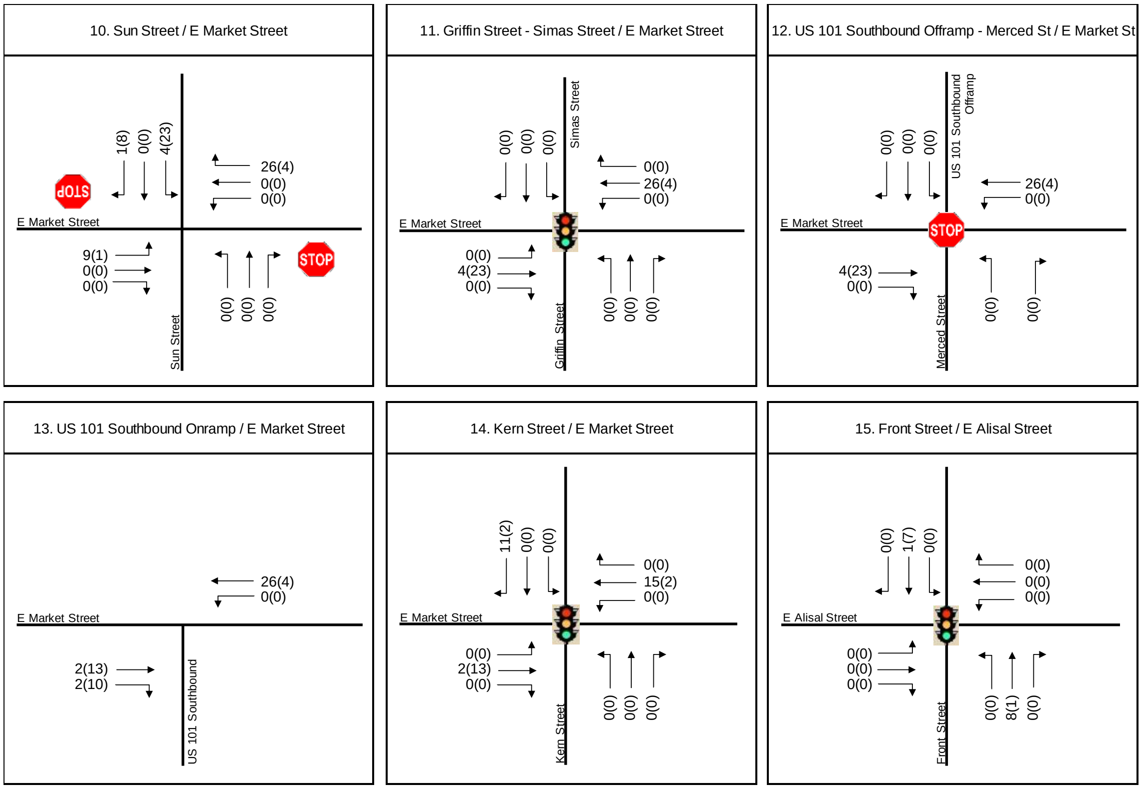


Figure 6: Project Trip Assignment – AM and PM Peak Hour Volumes (Continued)



Source: Mott MacDonald

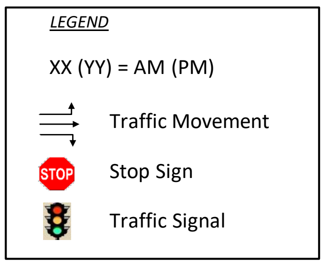


Figure 7: Existing Plus Project Conditions – AM and PM Peak Hour Volumes

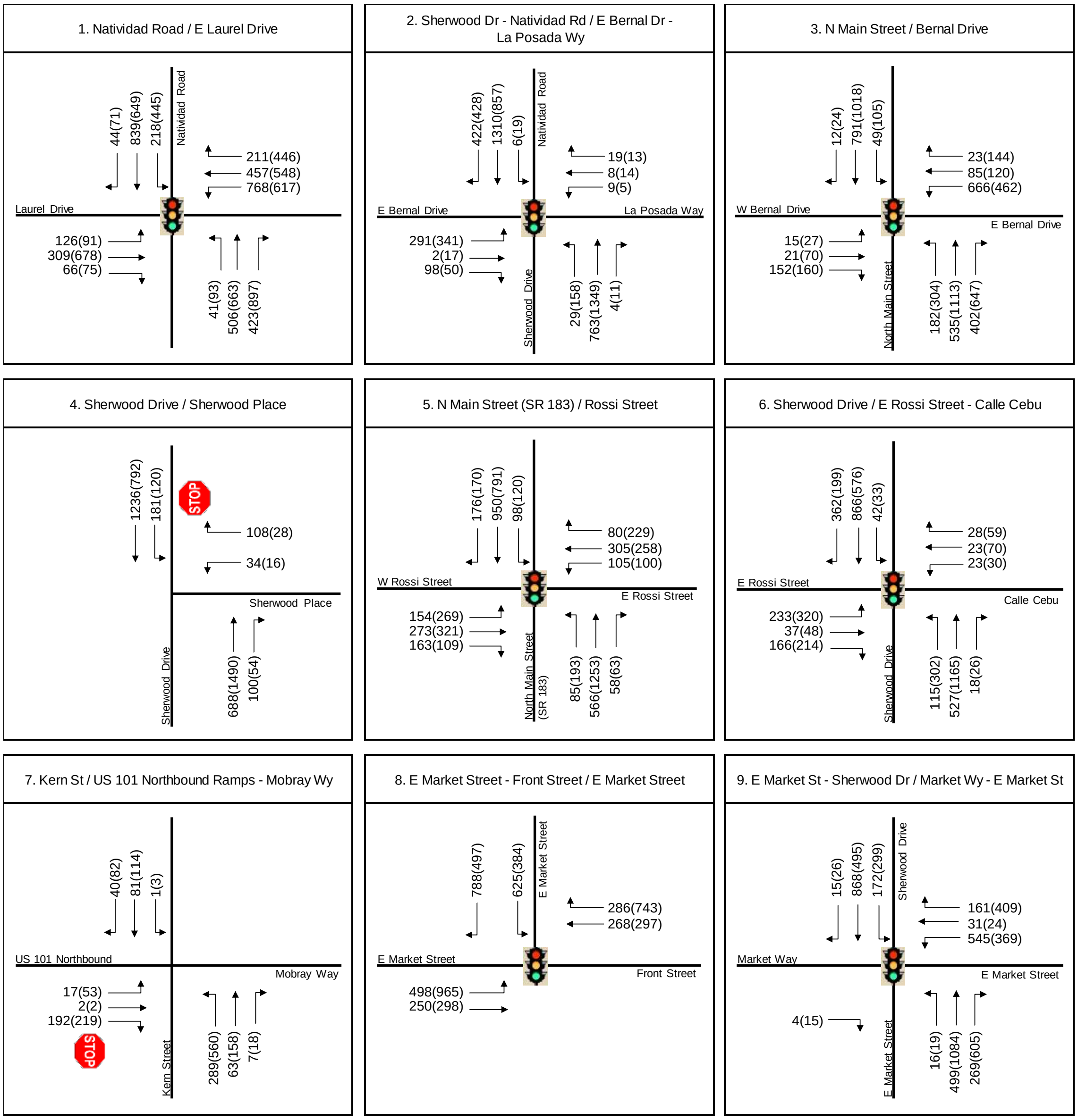
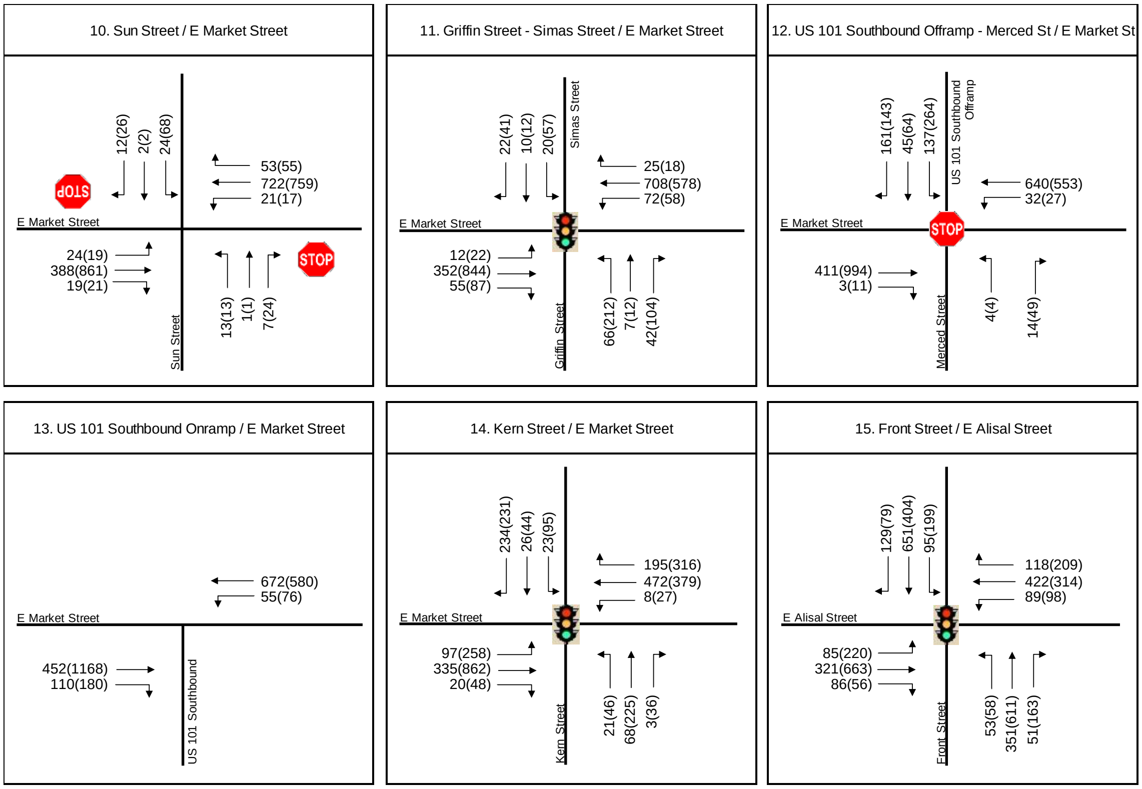


Figure 7: Existing Plus Project Conditions – AM and PM Peak Hour Volumes (Continued)



Source: Mott MacDonald

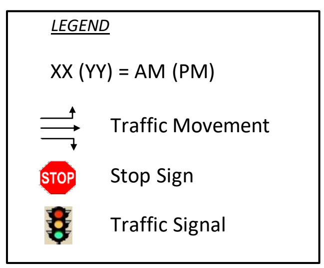


Table 2: Intersection Levels of Service – Existing and Existing Plus Project Conditions

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Existing Conditions Delay (sec)	Existing Conditions LOS	Existing Plus Project Conditions Delay (sec)	Existing Plus Project Conditions LOS
1	Natividad Road	East Laurel Drive	Signal	D	AM	61.1	E	**62.1**	**E**
					PM	62.5	E	**62.7**	**E**
			With Improvement		*AM*			*48.2*	*D*
					PM			*52.9*	*D*
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	D	AM	57.8	E	**58.7**	**E**
					PM	92.1	F	**93.2**	**F**
			With Improvement		*AM*			*34.2*	*C*
					PM			*44.0*	*D*
3	North Main Street	Bernal Drive	Signal	D	AM	41.6	D	41.6	D
					PM	52.5	D	52.5	D
4	Sherwood Drive	Sherwood Place	One-Way Stop	D (E)	AM	2.0 (19.5)	A (C)	2.0 (19.6)	A (C)
					PM	1.3 (25.4)	A (D)	1.3 (25.8)	A (D)
5	North Main Street (SR 183)	Rossi Street	Signal	C/D (Caltrans)	AM	30.5	C	30.5	C
					PM	39.9	D	**40.0**	**D**
			With Improvement		*AM*			*26.5*	*C*
					PM			*32.7*	*C*
6	Sherwood Drive	East Rossi Street - Calle Cebu	Signal	D	AM	23.1	C	24.3	C
					PM	32.5	C	34.2	C
7	Kern Street	US 101 Northbound Ramps - Mobray Way	One-Way Stop	C/D (E)	AM	6.7 (10.8)	B (B)	6.7 (10.8)	B (B)
					PM	15.0 (46.3)	B (E)	14.9 (46.0)	B (E)
8	East Market Street - Front Street	East Market Street	Signal	D	AM	5.5	A	5.6	A
					PM	8.8	A	8.8	A
9	East Market Street - Sherwood Drive	Market Way - East Market Street	Signal	D	AM	18.7	B	18.8	B
					PM	23.6	C	23.6	C

Table 2: Intersection Levels of Service – Existing and Existing Plus Project Conditions (Continued)

#	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Existing Conditions Delay (sec)	Existing Conditions LOS	Existing Plus Project Conditions Delay (sec)	Existing Plus Project Conditions LOS
10	Sun Street	East Market Street	Two-Way Stop	D (E/E)	AM	1.7 (24.7/32.2)	A (C/D)	1.9 (25.8/34.7)	A (D/D)
					PM	3.9 (33.0/79.8)	A (D/F)	**8.4 (33.4/142.2)**	**B (D/F)**
			With Improvement		*AM*			*7.0*	*A*
					PM			*7.0*	*A*
11	Griffin Street - Simas Street	East Market Street	Signal	D	AM	6.7	A	6.7	A
					PM	10.9	A	11.1	B
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	C/D (E/E) (Caltrans)	AM	19.5 (18.4/78.9)	C (C/F)	**21.9 (19.2/90.8)**	**C (C/F)**
					PM	69.3 (20.9/*)	F (C/F)	**72.5 (22.2/*)**	**F (C/F)**
			With Improvement		*AM*			*10.3*	*B*
					PM			*12.8*	*B*
13	US 101 Southbound Onramp	East Market Street	Uncontrolled	D (E)	AM	0.4 (0.0)	A (A)	0.4 (0.0)	A (A)
					PM	0.5 (0.0)	A (A)	0.5 (0.0)	A (A)
14	Kern Street	East Market Street	Signal	D	AM	11.8	B	11.9	B
					PM	22.8	C	22.9	C
15	Front Street	East Alisal Street	Signal	D	AM	31.3	C	31.3	C
					PM	47.4	D	47.4	D

Notes:
1. LOS Stnd. = Level of Service Standard
2. XX (YY) = Overall (Side Street).
3. Analysis performed using *2000* and *2010 Highway Capacity Manual* methodologies.
4. Overall level of service standard for the City of Salinas is LOS D. Overall level of service standard for Caltrans is the transition between LOS C and LOS D (LOS C/D).
5. Worst approach level of service standard is generally LOS E. Level of service “F” is the level of service at which improvements would normally be required.
6. Above delays and levels of service are summarized from calculations in **Appendices E through J**.
7. Items in **bold** represent significant impacts.
8. *: Delay is greater than 300 seconds per vehicle.

Source: Mott MacDonald

Table 3: Recommended Intersection Improvements

	N-S Street	E-W Street	Existing Intersection Control	Existing Plus Project Mitigation	Background Plus Project Mitigation	Cumulative Plus Project Mitigation
1	Natividad Road	East Laurel Drive	Signal	Add 3rd NB T, 3rd SB T (TFO Project No. 61)	Same as Existing Plus Project.	-
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	Change E Bernal - La Posada Signal Phasing to Split Phasing. (Not currently included in the Salinas TFO.)	Same as Existing Plus Project.	-
5	North Main Street (SR 183)	Rossi Street	Signal	Add 3rd NB T, 3rd SB T. (TFO Project 31)	Same as Existing Plus Project.	1. Add 3rd NB T & 3rd SB T: TFO Project 31 2. Provide a second left turn lane on the westbound Rossi Street approach to N. Main. (TFO Project 30, modified by the City to include a second westbound left turn lane on Rossi within the 106 foot right of way planned by TFO Project 30.)
7	Kern Street	US 101 Northbound Ramps - Mobray Way	One-Way Stop	-	-	Signalize intersection.
10	Sun Street	East Market Street	Two-Way Stop	Signalize intersection.	Same as Existing Plus Project.	Same as Existing Plus Project.
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	Signalize Intersection	Same as Existing Plus Project.	Same as Existing Plus Project.
14	Kern Street	East Market Street	Signal	-	-	Restripe westbound E. Market approach to provide left turn lane, 1 through lane and 1 right turn lane.

Notes:

1. LOS Stnd. = Level of Service Standard
2. L, T, R, EB, WB, NB, SB, RTO = Left, Through, Right, Eastbound, Westbound, Southbound, Northbound, Right Turn Overlap signal phase.

Source: Mott MacDonald

5 Background Conditions

This chapter describes Background Conditions, which represents traffic operations approximately five years into the future (i.e., the Year 2022). Note that this scenario does not include trips from the study project.

5.1 Background Traffic Volumes

Traffic volumes under Background conditions were derived by applying growth factors to the existing volumes on the study corridors in this analysis. More specifically, the corridors and their associated growth factors are the following:

1. E Laurel Drive – 2% (AM), 3% (PM)
2. Natividad Road – 2% (AM), 3% (PM)
3. Sherwood Drive – 2% (AM), 3% (PM)
4. E Rossi Street and W Rossi Street – 2% (AM), 3% (PM)
5. N Main Street:
   a. North of US 101 – 2% (AM), 3% (PM)
   b. South of US 101 – 10% (AM), 15% (PM)
6. E Market Street – 2% (AM), 3% (PM)
7. Front Street – 2% (AM), 3% (PM)
8. E Alisal Street – 2% (AM), 3% (PM)
9. Kern Street – 2% (AM), 3% (PM)
10. US 101 Onramps and Offramps – 2% (AM), 3% (PM)

The growth factors were primarily applied to the mainline traffic on each corridor. The lower of the two growth factors on intersecting streets was applied to the turning movements between those streets. The growth factors used are consistent with the net increase in traffic on these corridors attributable to approved projects in past traffic analyses in the study area.

The resulting traffic growth attributable to approved projects includes trips generated by the approved Police Station and the Salinas Ag Industrial Center, with the one exception the assignment of approved trips at the Front Street / Alisal Street intersection. The traffic assignment for the police station that is documented in the Police Station TIA was included in the Background Condition volumes because of the magnitude of trips that the Police Station is forecast to add at this intersection.

The Background Condition traffic volumes are depicted in **Figure 8.**

5.2 Background Condition Traffic Circulation

The intersection levels of service for the Background Condition are summarized in **Table 4**. The analysis of Background Conditions includes one modification to the road network. The westbound

Although most of the study intersections would operate at or better than their respective level of service standards under Background conditions, the following six intersections would operate below their standards:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N. Main Street (SR 183) / Rossi Street: LOS D (AM and PM)
7. Kern Street / US 101 Northbound Ramps – Mobray Way: Side Street approach LOS F (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM)

See **Appendix G** for the level of service calculations under Background Conditions.

Figure 8: Background Conditions – AM and PM Peak Hour Volumes

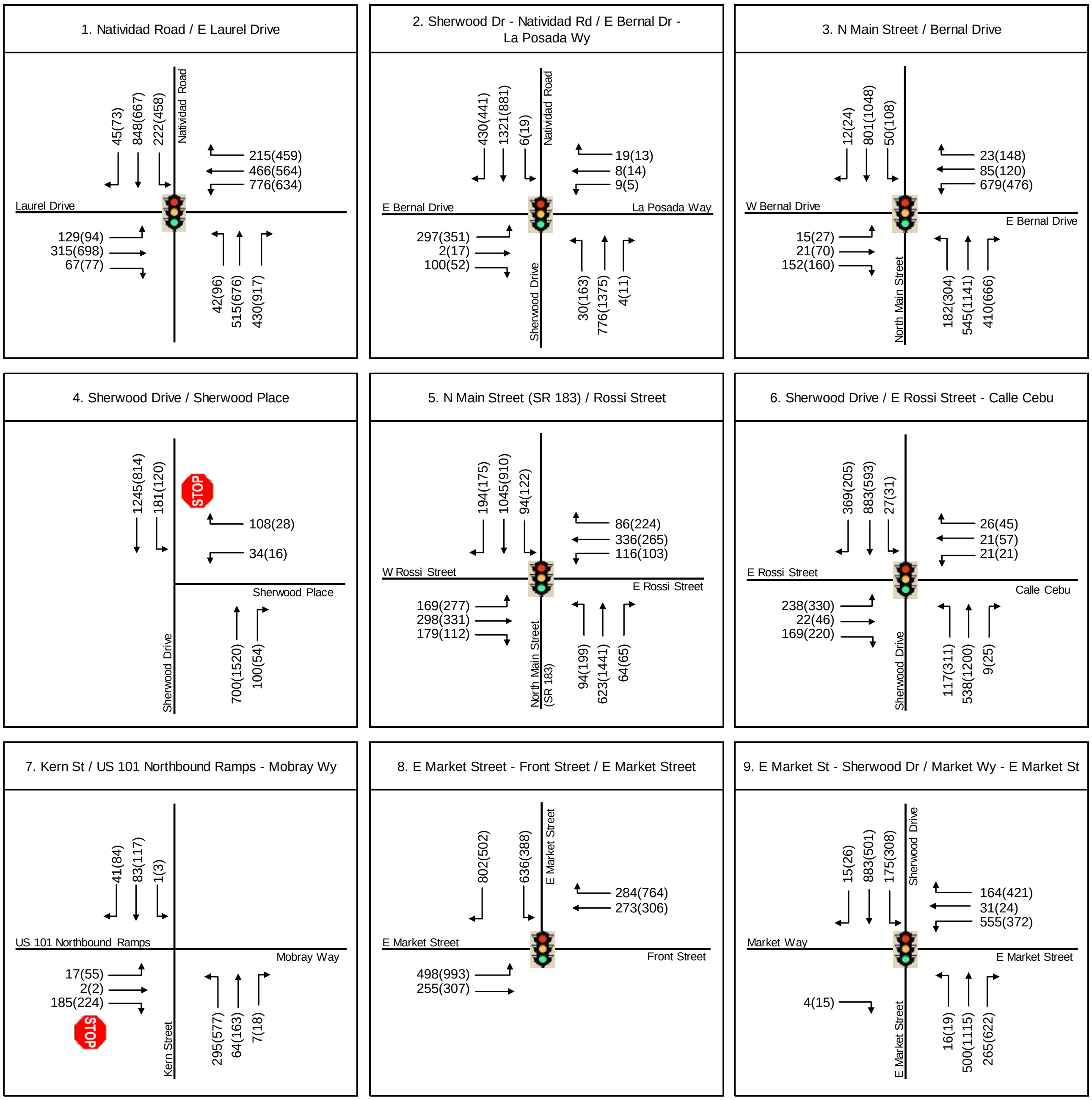
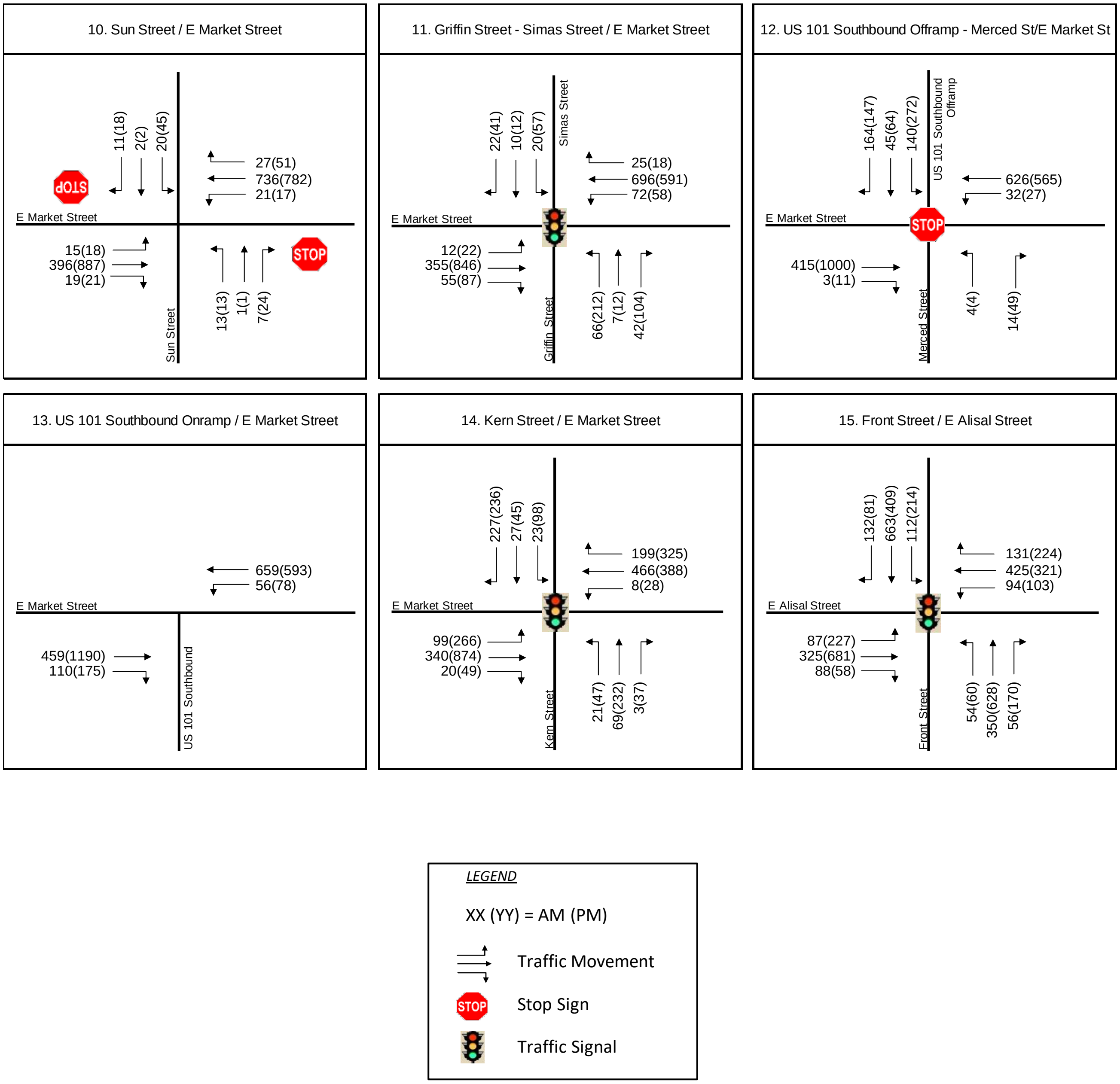


Figure 8: Background Conditions – AM and PM Peak Hour Volumes (Continued)



Source: Mott MacDonald

6 Background Plus Project Conditions

This chapter provides a description of the analysis under Background Plus Project traffic conditions, which analyzes Background Conditions plus anticipated traffic from the proposed project.

6.1 Background Plus Project Traffic Volumes

The project trip assignment (**Figure 6**) was added to the Background Condition volumes (**Figure 8)** to create the Background Plus Project Condition volumes shown in **Figure 9**.

6.2 Background Plus Project Conditions Traffic Circulation

6.2.1 Vehicle Circulation

Table 4 summarizes the levels of service at the study intersections under Background and Background Plus Project conditions. The following intersections would operate below their level of service standards and would be significantly impacted be the project based upon the significance criteria utilized for this study:

1. Natividad Road / E Laurel Drive: LOS E (AM and PM)
2. Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way: LOS E (AM), LOS F (PM)
5. N Main Street (SR 183) / Rossi Street: LOS D (PM)
10. Sun Street / E Market Street: Side-street approach LOS F (PM)
12. US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS F (PM), Side-street approach LOS F (AM and PM)

See **Appendix H** for the level of service calculations under Background Plus Project Conditions.

Below is a discussion of deficient operations and recommended improvements at the study intersections under Background Plus Project conditions. Recommended improvements are summarized in **Table 3**. The same intersections that are significantly impacted by the Project under Existing Conditions are significantly impacted under Background Conditions. No additional intersections are significantly impacted by the Project under Background Conditions and the mitigation measures recommended for Existing Conditions remain unchanged for Background Conditions.

- **<u>Intersection #1 – Natividad Road / E Laurel Drive:</u>**
  This intersection would operate at a deficient LOS E during the AM and PM peak hours, unchanged from Background Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Add a third northbound and third southbound lane to Natividad Road through this intersection. Intersection operations would improve during the AM and PM peak hour to LOS D.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 61).

Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #2 – Sherwood Drive – Natividad Road / E Bernal Drive – La Posada Way:** This intersection would operate at a deficient LOS E (AM) and F (PM), unchanged from Background Conditions. The project would add 16 AM peak hour and 17 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection that operates at a deficient level without the project.

  Mitigation: Convert the signal phasing on the east and west intersection approaches from concurrent phasing to split phasing. Intersection operations would improve during the AM and PM peak hour to LOS D.

  Project Responsibility: To ensure that the intersection of Sherwood Drive – Natividad Road / E. Bernal Drive-La Posada Way will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include the signal modifications at this intersection as one of the improvements that is funded by the TFO, or (2) if the signal modifications at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for modifying the signal phasing and ensure that the signal modification is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and modify the signal phasing ensuring that the signal modification is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #5 – N Main Street (SR 183) / Rossi Street:** This intersection, which is under Caltrans jurisdiction, would operate at a deficient LOS D during the AM and PM peak hours, unchanged from Background Conditions. The project would add 17 trips to this intersection during the AM peak hour and 15 trips to this intersection during the PM peak hour. The trips added by the Project would not increase the average vehicle delay during the AM peak hour, but would increase the PM peak hour vehicle delay by 0.1 seconds.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the PM peak hour by at least 0.1 seconds.

  Mitigation: Add a third northbound and third southbound lane on N. Main Street through this intersection. Intersection operations would improve during the PM peak hour to LOS C.

  Salinas TFO Project: This improvement is included in the City of Salinas TFO (Project 31).

  Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #10 – Sun Street / E Market Street:** Side-street operations at this intersection (the southbound Sun Street approach) would operate at a deficient LOS F during the PM peak hour, unchanged from Background Conditions. The project would add 31 trips to this approach during the PM peak hour.

Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection whose southbound approach operates at LOS F without the Project.

Mitigation: Signalize the intersection. The intersection would operate at LOS A during the AM and PM peak hours with signalization.

Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

Project Responsibility: To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits for installation of a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #12 – US 101 Southbound Offramp – Merced Street / E Market Street:** This intersection would operate at a deficient LOS F during the PM peak hour, while side-street operations (the southbound US 101 Southbound Offramp approach) would operate at a deficient LOS F during the AM and PM peak hours, unchanged from Background Conditions. The project would add 30 AM peak hour and 27 PM peak hour trips to this intersection.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay on the southbound off-ramp approach during the AM and PM peak hours by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: To ensure that the intersection of U.S. 101 Southbound Offramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or (2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

Figure 9: Background Plus Project Conditions – AM and PM Peak Hour Volumes

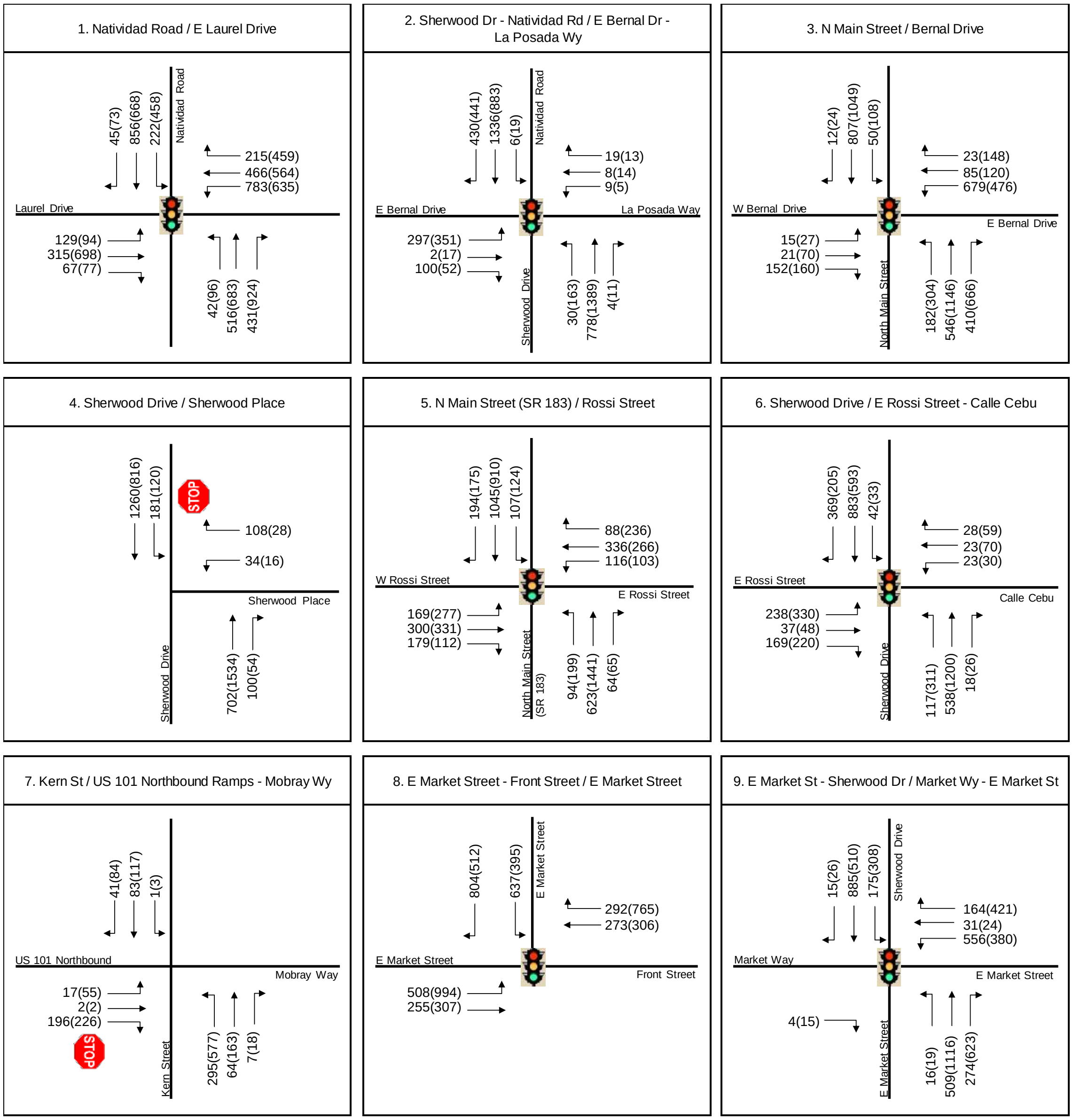
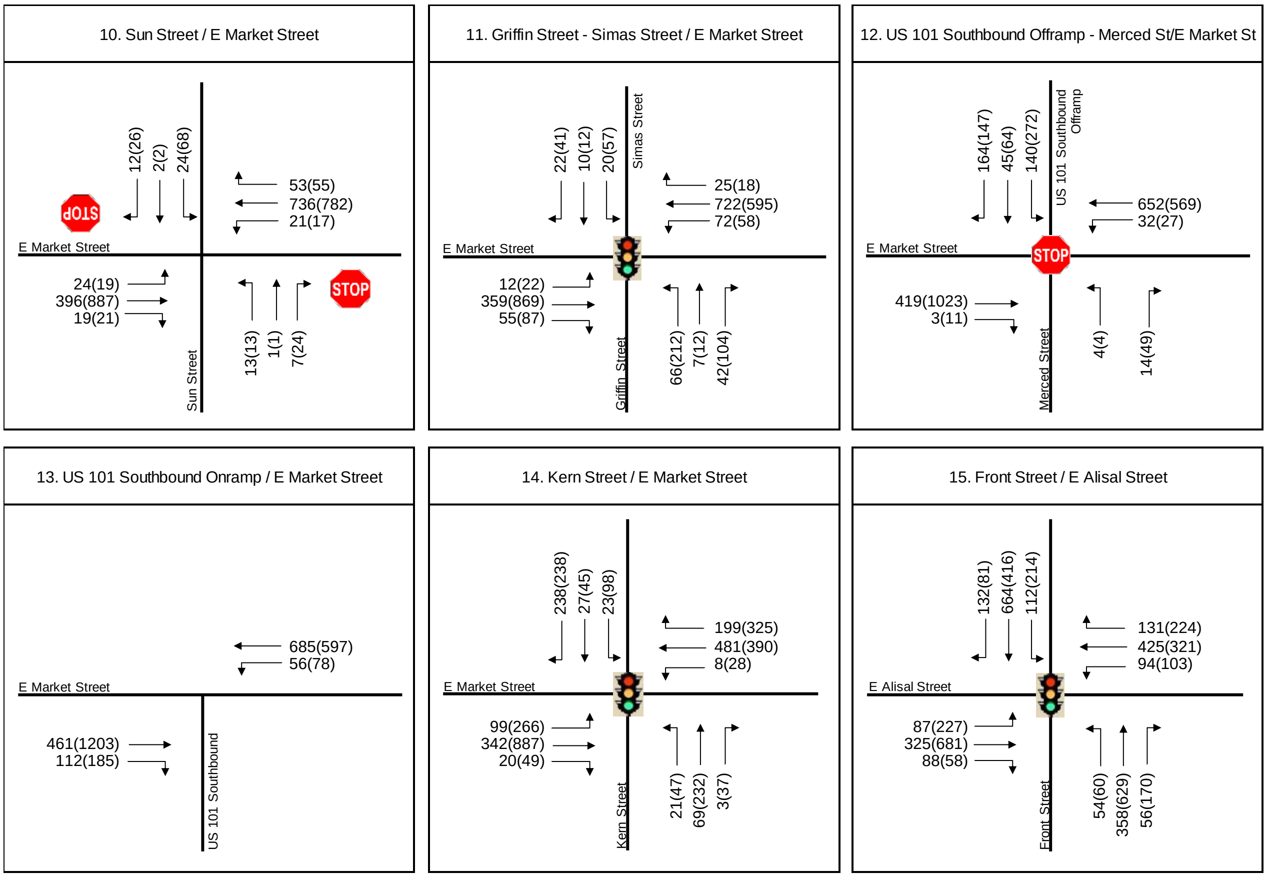


Figure 9: Background Plus Project Conditions – AM and PM Peak Hour Volumes (Continued



Source: Mott MacDonald

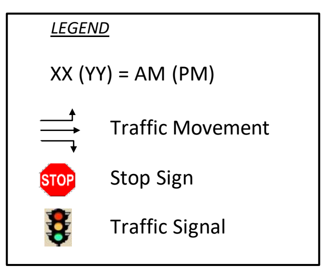


Table 4: Intersection Levels of Service – Background and Background Plus Project Conditions

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Background Conditions Delay (sec)	Background Conditions LOS	Background Plus Project Conditions Delay (sec)	Background Plus Project Conditions LOS
1	Natividad Road	East Laurel Drive	Signal	D	AM	63.9	E	**65.1**	**E**
					PM	66.7	E	**66.9**	**E**
			With Improvement		AM			*50.0*	*D*
					PM			*54.5*	*D*
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	D	AM	61.3	E	**62.5**	**E**
					PM	98.5	F	**99.8**	**F**
			With Improvement		*AM*			*36.4*	*D*
					PM			*54.5*	*D*
3	North Main Street	Bernal Drive	Signal	D	AM	47.4	D	47.6	D
					PM	42.3	D	42.3	D
4	Sherwood Drive	Sherwood Place	One-Way Stop	D (E)	AM	2.0 (19.9)	A (C)	2.0 (20.0)	A (C)
					PM	1.3 (26.7)	A (D)	1.3 (27.0)	A (D)
5	North Main Street (SR 183)	Rossi Street	Signal	C/D (Caltrans)	AM	35.8	D	35.8	D
					PM	47.1	D	**47.3**	**D**
			With Improvement		*AM*			*29.1*	*C*
					PM			*34.8*	*C*
6	Sherwood Drive	East Rossi Street - Calle Cebu	Signal	D	AM	23.5	C	24.6	C
					PM	32.6	C	33.6	C
7	Kern Street	US 101 Northbound Ramps - Mobray Way	One-Way Stop	C/D (E) (Caltrans)	AM	6.7 (10.9)	A (B)	6.8 (11.0)	A (B)
					PM	17.4 (56.6)	C (F)	17.4 (56.2)	C (F)
8	East Market Street - Front Street	East Market Street	Signal	D	AM	5.9	A	5.7	A
					PM	9.0	A	9.0	A
9	East Market Street - Sherwood Drive	Market Way - East Market Street	Signal	D	AM	19.2	B	19.2	B
					PM	23.3	C	23.4	C

Table 4: Intersection Levels of Service – Background and Background Plus Project Conditions (Continued)

	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Background Conditions Delay (sec)	Background Conditions LOS	Background Plus Project Conditions Delay (sec)	Background Plus Project Conditions LOS
10	Sun Street	East Market Street	Two-Way Stop	D (E/E)	AM	1.7 (25.2/33.5)	A (D/D)	2.1 (26.8/39.0)	A (D/E)
					PM	4.4 (35.0/92.0)	A (E/F)	**9.5 (36.1/166.0)**	**A (E/F)**
			With Improvement		*AM*			*4.9*	*A*
					PM			*6.2*	*A*
11	Griffin Street - Simas Street	East Market Street	Signal	D	AM	6.7	A	5.5	A
					PM	11.1	B	11.2	B
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	C/D (E/E) (Caltrans)	AM	22.1 (19.1/89.8)	C (C/F)	**24.6 (19.9/102.2)**	**C (C/F)**
					PM	81.8 (23.0/*)	F (C/F)	**84.7 (24.4/*)**	**F (C/F)**
			With Improvement		*AM*			*10.4*	*B*
					PM			*13.2*	*B*
13	US 101 Southbound Onramp	East Market Street	Uncontrolled	D (E)	AM	0.4 (0.0)	A (A)	0.4 (0.0)	A (A)
					PM	0.6 (0.0)	A (A)	0.6 (0.0)	A (A)
14	Kern Street	East Market Street	Signal	D	AM	17.9	B	18.2	B
					PM	22.8	C	22.8	C
15	Front Street	East Alisal Street	Signal	D (E)	AM	39.4	D	39.4	D
					PM	51.2	D	51.2	D

Notes:

1. LOS Stnd. = Level of Service Standard
2. XX (YY) = Overall (Side Street).
3. Analysis performed using *2000* and *2010 Highway Capacity Manual* methodologies.
4. Overall level of service standard for the City of Salinas is LOS D. Overall level of service standard for Caltrans is the transition between LOS C and LOS D (LOS C/D).
5. Worst approach level of service standard is generally LOS E. Level of service “F” is the level of service at which improvements would normally be required.
6. Above delays and levels of service are summarized from calculations in **Appendices E through J**.
7. Items in **bold** represent significant impacts.

Source: Mott MacDonald

7 Cumulative Without Project Conditions

This chapter describes the analysis results under Cumulative conditions without the study project developed. The Cumulative Without Project traffic condition is defined as buildout of the current City of Salinas General Plan. Note that this analysis scenario does not include traffic from the study project.

7.1 Derivation of Cumulative Without Project Condition Volumes

The Cumulative Without Project condition volumes in **Figure 10** are primarily on traffic forecasts documented in the City of Salinas General Plan Circulation Study prepared by Higgins Associates in 2002. Traffic forecasts documented in the following reports were also referenced:

1. Monterey County Jail Housing Addition Traffic Impact Analysis, Hatch Mott MacDonald, April 29, 2014.
2. Haciendas Phase III/IV Traffic Impact Analysis, Hatch Mott MacDonald, April 8, 2014.
3. Sun Street Solid Waste Transfer Station Access Plan Traffic Impact Analysis, Higgins Associates, August 27, 2007.
4. Tynan Village Mixed Use Development Traffic Impact Study Report, Higgins Associates, November 22, 2004.
5. Salinas Sphere of Influence Amendment and Annexation Supplemental TIA, Fehr & Peers, November 14, 2007.

The traffic volume forecasts shown on **Figure 10** reflect new road links and the level of service calculations include intersection improvements that are included in the City of Salinas Traffic Fee Ordinance and are planned for implementation in conjunction with buildout of the city's General Plan. These improvements include the following:

1. TFO Project No. 30: Rossi Street Widening – widen to four lanes between Main Street and Sherwood Drive.
2. TFO Project No. 31: Main Street Widening – widen from a four to six-lane arterial between Casentini Street and Market Street.
3. TFO Project No. 33A: Bernal Drive Extension – extend as a four-lane arterial from Sherwood Drive/Natividad Road intersection to Kern Street.
4. TFO Project No. 33B: Bernal Drive Widening – widen, construct sidewalk and retaining wall on north side between Main Street and Rosarita Drive.
5. TFO Project No. 34: Constitution Boulevard Extension – extend from Laurel Drive to Bernal Drive Extension.
6. TFO Project No. 45: Laurel Drive Widening – widen to six lanes between Natividad and Constitution. Add left turn channelization east of Constitution.
7. TFO Project No. 46: Main Street Widening – widen to six lanes between Market Street and Bernal by eliminating on-street parking and widening UP Structure north of Market Street.

8. TFO Project No. 61: Natividad Road/Laurel Drive Intersection – widen the Natividad Road north and south intersection legs to provide the following lane configuration on the intersection approaches:
    a. Northbound approach – 1 left turn lane, 3 through lanes, 1 right turn lane
    b. Southbound approach – 2 left turn lanes, 2 through lanes, 1 through/right turn lane.
    c. Eastbound approach – 1 left turn lane, 2 through lanes, 1 right turn lane.
    d. Westbound approach – 2 left turn lanes, 2 through lanes, 1 right turn lane.

7.2 Cumulative Without Project Condition Traffic Circulation

7.2.1 Vehicle Circulation

The intersection levels of service for the Cumulative Condition are summarized in **Table 5**. The following intersections would operate below their level of service standards:

#5: N Main Street (SR 183) / Rossi Street: LOS D (PM)

#7: Kern Street / US 101 Northbound Ramps – Mobray Way: Overall LOS F, Side Street approach LOS F (PM)

#10: Sun Street / E Market Street: Side-street approach LOS F (PM)

#12: US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS E (AM) and LOS F (PM), Side-street approach LOS F (AM and PM)

#14: Kern Street / E Market Street: LOS F (PM)

#15: Front Street / Alisal Street: LOS E (AM and PM)

See **Appendix I** for the level of service calculations under Cumulative Without Project Conditions.

Figure 10: Cumulative Without Project Conditions – AM and PM Peak Hour Volumes

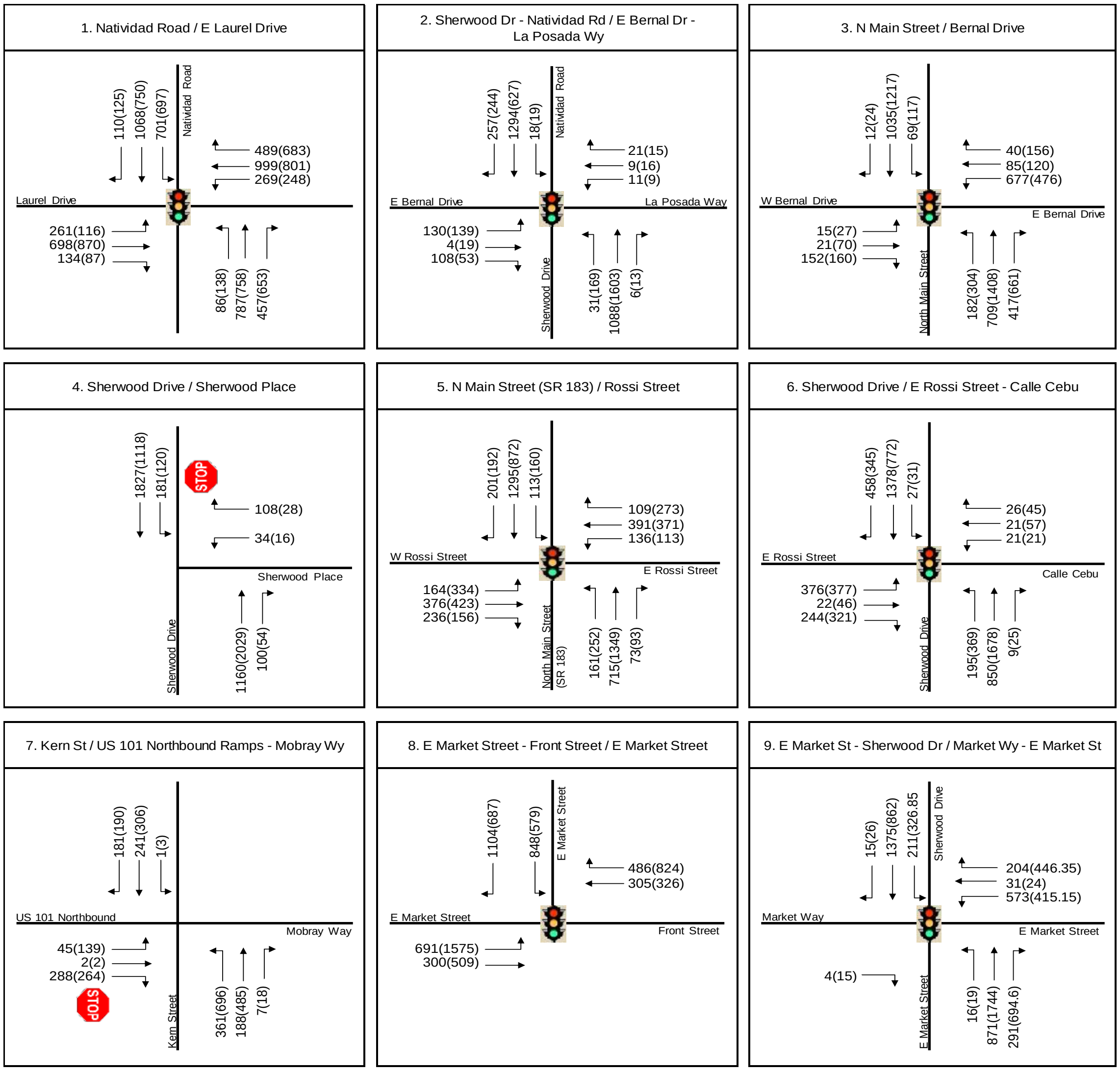
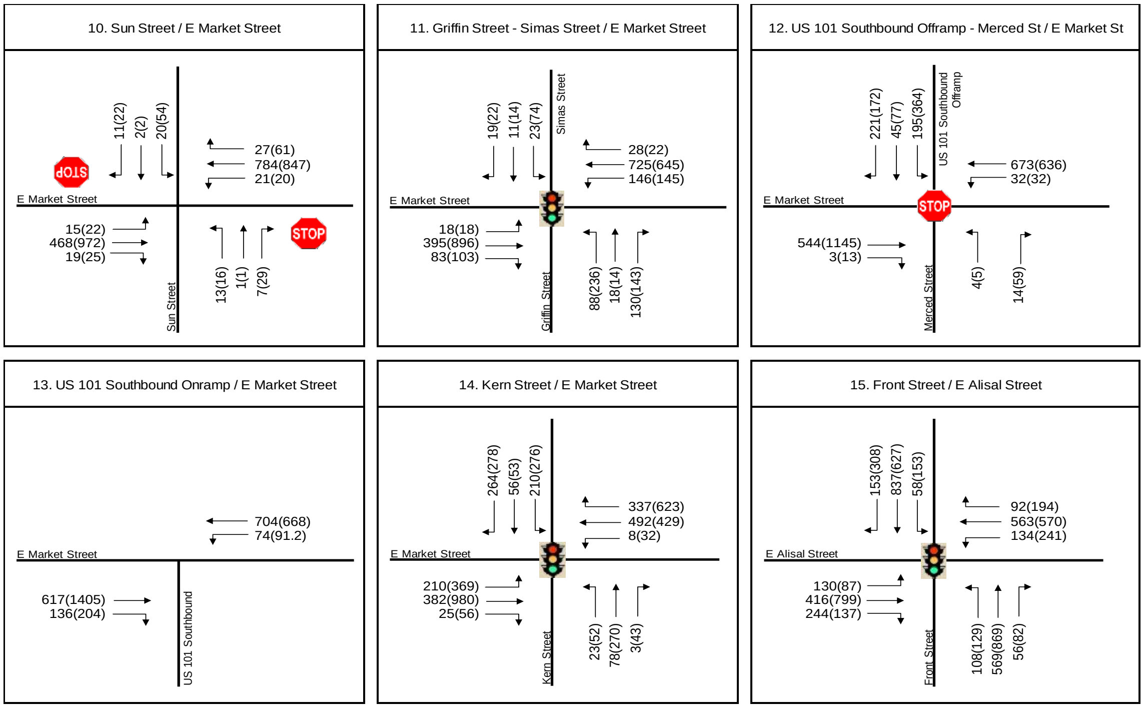
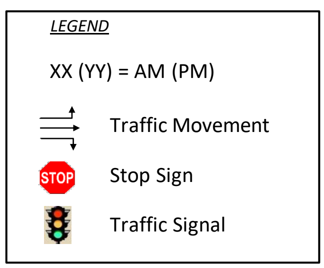


Figure 10: Cumulative Without Project Conditions – AM and PM Peak Hour Volumes (Continued)



Source: Mott MacDonald



8 Cumulative Plus Project Conditions

This chapter describes Cumulative Plus Project conditions, which represent traffic conditions with General Plan Buildout including the proposed GPA and Rezoning.

8.1 Derivation of Cumulative Plus Project Condition Volumes

The project trip assignment volumes Cumulative (**Figure 6**) were added to the Cumulative Without Project Condition volumes (**Figure 10**) to create the Cumulative Plus Project Condition volumes depicted in **Figure 11**.

8.2 Cumulative Plus Project Condition Traffic Circulation

8.2.1 Vehicle Circulation

Table 5 summarizes the levels of service at the study intersections under Cumulative Plus Project conditions. Although some of the study intersections would operate at or better than their respective level of service standards under Cumulative Plus Project conditions, the following intersections would continue to operate below their standard and the project would contribute to the cumulative impact:

#5: N Main Street (SR 183) / Rossi Street: LOS D (PM)

#7: Kern Street / US 101 Northbound Ramps – Mobray Way: Overall LOS F, Side Street approach LOS F (PM)

#10: Sun Street / E Market Street: Side-street approach LOS F (PM)

#12: US 101 Southbound Offramp – Merced Street / E Market Street: Overall LOS E (AM) and LOS F (PM), Side-street approach LOS F (AM and PM)

#14: Kern Street / E Market Street: LOS F (PM)

#15: Front Street / Alisal Street: LOS E (AM and PM)

See **Appendix J** for the level of service calculations under Cumulative Plus Project Conditions.

Below is a discussion of the deficient operations and recommended improvements at the study intersections under Cumulative Plus Project conditions. Recommended improvements are summarized in **Table 3**.

- **<u>Intersection #5 – N Main Street (SR 183) / Rossi Street:</u>**
  This intersection, which is under Caltrans jurisdiction, would operate at LOS C during the AM peak hour and a deficient LOS D during the PM peak hour unchanged from Cumulative Conditions. The project would add 17 trips to this intersection during the AM peak hour and 15 trips to this intersection during the PM peak hour. The trips added by the Project would not increase the average vehicle delay during the PM peak hour vehicle delay by 0.1 seconds.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay during the PM peak hour by at least 0.1 seconds. The Project's impact to this intersection is significant under Existing and Background Conditions.

  Mitigation:
  1) Add a third northbound through lane and third southbound through lane to N. Main Street at this intersection. The improvement would be achieved by converting the existing right turn lanes on northbound and southbound N. Main Street to through/right turn lanes.

2) Add a second left turn lane on the westbound Rossi Street approach. TFO Project 30 would widen Rossi Street to a four-lane divided arterial within a right of way of 106 feet.

With the second left turn lane included in the mitigation, the PM peak hour delay would be 41.8 seconds, which would be lower than the Cumulative Condition without project PM peak hour delay of 42.5 seconds. Therefore, the Project's cumulative impact would be mitigated.

Salinas TFO Project: Projects 30 and 31. The City would need to modify Project 30 to include the second left turn lane on the westbound Rossi Street approach to N. Main Street.

Salinas TFO Project: Salinas TFO Project 30 and Project 31.

Project Responsibility: Pay the Salinas traffic impact fees, which would represent the project's fair-share contribution of this improvement.

- **Intersection #7 – Kern Street / US 101 Northbound Ramps – Mobray Way:**
This intersection would operate at an overall LOS F with side-street operations (the eastbound US 101 Northbound Ramps approach) of LOS F during the PM peak hour, unchanged from Cumulative Without Project Conditions. The project would add 2 trips to the eastbound off-ramp approach during the PM peak hour. The project by itself would not significantly impact the intersection, but the project would contribute to the cumulative operating deficiency at the intersection. Traffic diversions associated with the Bernal Avenue Extension and the Constitution Boulevard Extension will contribute to the deficient operations at this intersection under Cumulative Conditions.

Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay on the eastbound off-ramp approach during the PM peak hour by at least 0.1 seconds.

Mitigation: Signalize the intersection. Intersection operations would improve during the AM peak hour to LOS B and to LOS C during the PM peak hour.

Salinas TFO Project: This improvement is not included in the City of Salinas TFO. It is recommended that this improvement be added to Salinas TFO Project 33A (Bernal Avenue Extension) and 34 (Constitution Boulevard Extension). Traffic diversions associated with the extensions of Bernal Avenue and Constitution Boulevard will create new turning movement patterns at the Kern Avenue/Northbound US 101 ramps intersection and these new turning patterns will necessitate modification of the existing intersection traffic control. For this reason, the costs for the new intersection traffic control should be included in the TFO.

Project Responsibility: This improvement is not currently included in the City's Capital Improvement Program nor the TFO. To mitigate the Project's cumulative impact, a mechanism would need to be in place that ensures the ultimate full funding and completion of the improvement. This could be accomplished by adding the improvement to the City TFO or Capital Improvement Program. The Project's cumulative impact would be mitigated by the following:

Alternative 1: Add the improvement to the TFO and pay the TFO fee.
Alternative 2: Include the improvement in the Capital Improvement Program and pay a pro-rata contribution toward implementation of the project that would be combined with future development impact fees to fully fund implementation of the improvement. The pro-rata contribution would be based upon the project's share of cumulative traffic growth, where cumulative traffic growth equals Cumulative With Project volumes minus Existing volumes. The equitable share contribution calculation is based on the average of AM and PM peak hour volumes. The project's equitable share of cumulative traffic growth is 1 percent (1%).

- **Intersection #10 – Sun Street / E Market Street:**
  Side-street operations at this intersection (the southbound Sun Street approach) would operate at a deficient LOS F during the PM peak hour, unchanged from Cumulative Conditions. The project would add 31 trips to this approach during the PM peak hour. The Project's impact to this intersection is significant under Existing and Background Conditions.

  Impact: The impact of the Project to the intersection is significant because the Project will add peak hour trips to the intersection whose southbound approach operates at LOS F without the Project.

  Mitigation: Signalize the intersection. The intersection would operate at LOS A during the AM and PM peak hours with signalization.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: The Project's impact to this intersection was identified as significant under Existing and Background Conditions. The mitigation required for Cumulative Conditions (signalization) is the same as the mitigation recommended for Existing and Background Conditions. Therefore, the Project's responsibility to mitigate cumulative impacts is the same as the responsibility identified for the Existing and Background Conditions, which is as follows: To ensure that the intersection of Sun Street and East Market Street will operate at acceptable levels of service, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits for installation of a traffic signal that will be operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #12 – US 101 Southbound Offramp – Merced Street / E Market Street:**
  This intersection would operate at a deficient LOS E during the AM peak hour and LOS F during the PM peak hour, while side-street operations (the southbound US 101 Southbound Offramp approach) would operate at a deficient LOS F during the AM and PM peak hours, unchanged from Cumulative Conditions. The project would add 30 AM peak hour and 27 PM peak hour trips to this intersection. The Project's impact to this intersection is significant under Existing and Background Conditions.

  Impact: The impact of the Project to the intersection is significant because the Project will increase the average vehicle delay on the southbound off-ramp approach during the AM and PM peak hours by at least 0.1 seconds.

  Mitigation: Signalize the intersection. Intersection operations would improve during the AM and PM peak hours to LOS B.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO.

  Project Responsibility: The Project's impact to this intersection was identified as significant under Existing and Background Conditions. The mitigation required for Cumulative Conditions (signalization) is the same as the mitigation recommended for Existing and Background Conditions. Therefore, the Project's responsibility to mitigate cumulative impacts is the same as the responsibility identified for the Existing and Background Conditions, which is as follows: To ensure that the intersection of U.S. 101 Southbound Offramp – Merced Street/East Market Street will operate at acceptable levels of service, the applicant shall either: (1) Prior to the City's issuance of the first grading permit for a specific development project at project site, pay a traffic impact fee provided the City has updated its

Traffic Fee Ordinance to include a traffic signal at this intersection as one of the improvements that is funded by the TFO, or (2) if the traffic signal at this intersection has not been included in the TFO, the applicant shall be responsible for either: (a) Fund the improvements and obtain the requisite encroachment or other permits for installation of a traffic signal and ensure that the signal is in operation prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site, or (b) Concurrent with the issuance of the first grading permit for a specific development project at project site, deposit funds with the City in order for the City to obtain the requisite permits and install the traffic signal ensuring that the signal is operational prior to the issuance of the first Certificate of Occupancy for a specific development project at the project site.

- **Intersection #14 – Kern Street / E Market Street:**
  This intersection would operate at a deficient LOS F during the PM peak hour, unchanged from Cumulative without Project Conditions. The project would add 17 PM peak hour trips to this intersection. The project by itself would not significantly impact the intersection, but the project would contribute to the cumulative operating deficiency at the intersection. Traffic diversions associated with the Bernal Avenue Extension and the Constitution Boulevard Extension will contribute to the deficient operations at this intersection under Cumulative Conditions.

  Impact: The impact of the Project to the intersection is significant because the Project will add trips to the intersection that operates at a deficient level without the project.

  Mitigation: Restripe the westbound E. Market Street approach as one exclusive left turn lane, one through lane and one exclusive right turn lane. With this improvement, the intersection would operate at LOS C during the AM peak hour and LOS D during the PM peak hour.

  Salinas TFO Project: This improvement is not included in the City of Salinas TFO. It is recommended that this improvement be added to Salinas TFO Project 33A (Bernal Avenue Extension) and 34 (Constitution Boulevard Extension). Traffic diversions associated with the extensions of Bernal Avenue and Constitution Boulevard will create new turning movement patterns at the Kern Avenue/E. Market Street intersection and these new turning patterns, including an increase in the volume of traffic turning right from westbound E. Market Street to northbound Kern Avenue, will necessitate modification of the existing intersection lane configuration. For this reason, the costs for the new intersection configuration should be included in the TFO.

  Project Responsibility: This improvement is not currently included in the City's Capital Improvement Program nor the TFO. To mitigate the Project's cumulative impact, a mechanism would need to be in place that ensures the ultimate full funding and completion of the improvement. This could be accomplished by adding the improvement to the City TFO or Capital Improvement Program. The Project's cumulative impact would be mitigated by the following:

  Alternative 1: If the improvement is added to the TFO, pay the TFO fee.
  Alternative 2: Include the improvement in the Capital Improvement Program and pay a pro-rata contribution toward implementation of the project that would be combined with future development impact fees to fully fund implementation of the improvement. The pro-rata contribution would be based upon the project's share of cumulative traffic growth, where cumulative traffic growth equals Cumulative With Project volumes minus Existing volumes. The equitable share contribution calculation is based on the average of the AM and PM peak hour volumes. The project's share of cumulative traffic growth is three percent (3%).

Figure 11: Cumulative Plus Project Conditions – AM and PM Peak Hour Volumes

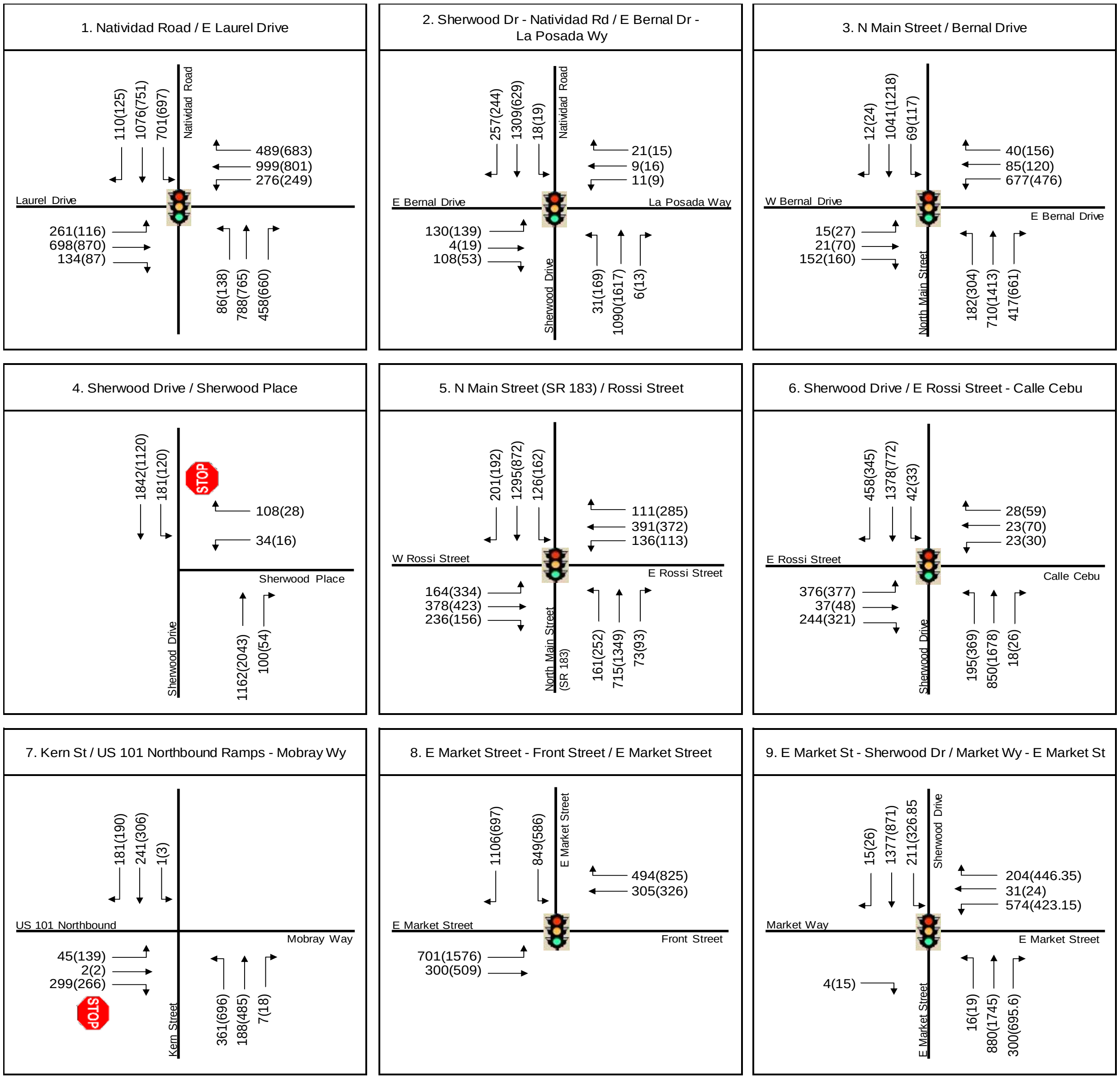
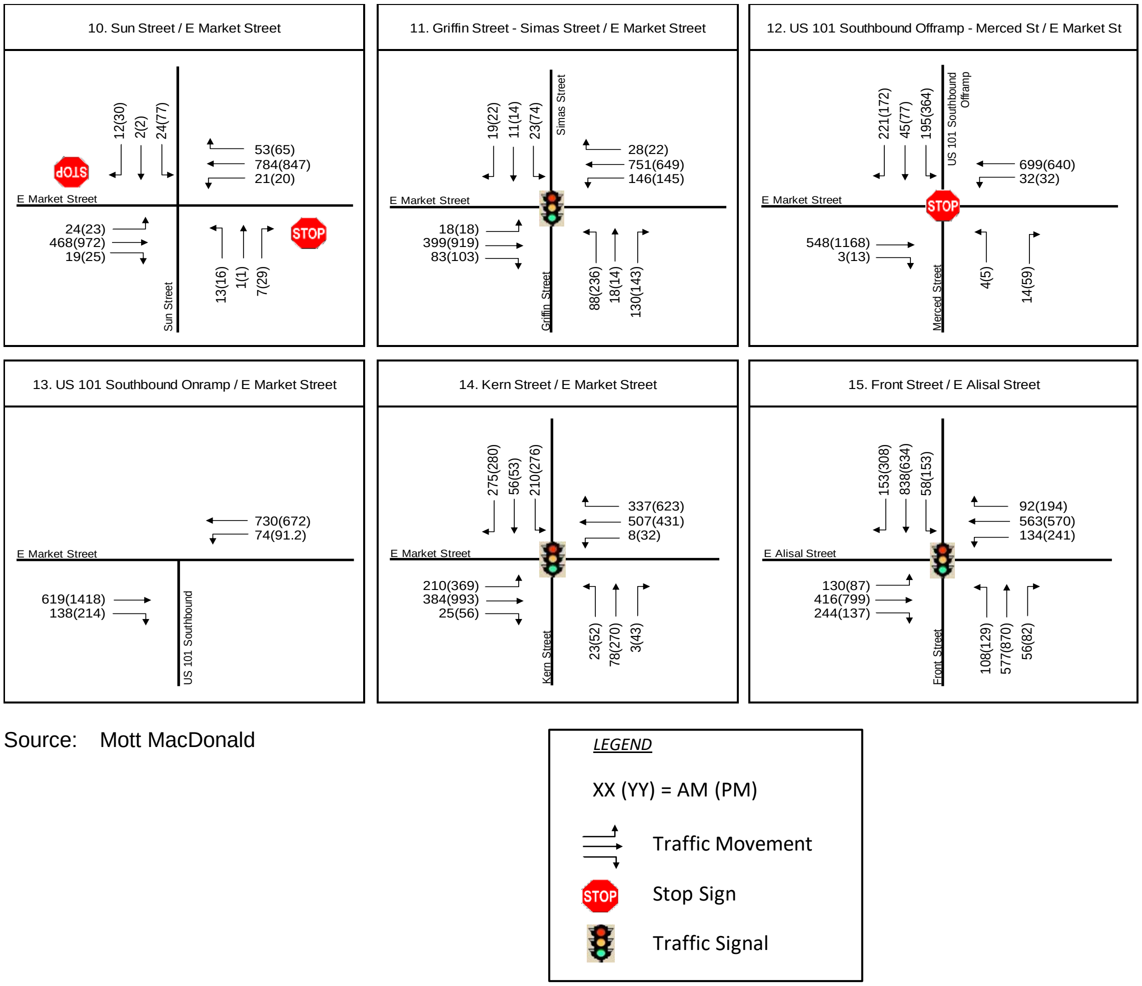


Figure 11: Cumulative Plus Project Conditions – AM and PM Peak Hour Volumes (Continued)



Source: Mott MacDonald

Table 5: Intersection Levels of Service – Cumulative Without Project and Cumulative Plus Project Conditions

#	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Cumulative Without Project Conditions Delay (sec)	Cumulative Without Project Conditions LOS	Cumulative Plus Project Conditions Delay (sec)	Cumulative Plus Project Conditions LOS
1	Natividad Road	East Laurel Drive	Signal	D	AM	53.7	D	53.8	D
					PM	52	D	52.1	D
2	Sherwood Drive - Natividad Road	East Bernal Drive - La Posada Way	Signal	D	AM	24.7	C	25.2	C
					PM	42.7	D	44.3	D
3	North Main Street	Bernal Drive	Signal	D	AM	44.2	D	44.2	D
					PM	44.8	D	44.8	D
4	Sherwood Drive	Sherwood Place	One-Way Stop	D (E)	AM	2.4 (37.6)	A (E)	2.4 (37.6)	A (E)
					PM	1.7 (48.1)	A (E)	1.7 (49.1)	A (E)
5	North Main Street (SR 183)	Rossi Street	Signal	C/D (Caltrans)	AM	34.6	C	34.8	C
					PM	42.5	D	**42.6**	**D**
			With Improvement		*AM*			*34.7*	*C*
					PM			*41.8*	*D*
6	Sherwood Drive	East Rossi Street - Calle Cebu	Signal	D	AM	44.2	D	46.0	D
					PM	45.7	D	48.3	D
7	Kern Street	US 101 Northbound Ramps - Mobray Way	One-Way Stop	C/D (E) (Caltrans)	AM	8.1 (21.3)	A (C)	8.2 (21.3)	A (C)
					PM	* (*)	F (F)	*** (*)**	F (F)
			With Improvement		*AM*			*12.3*	*B*
					PM			*26.4*	*C*
8	East Market Street - Front Street	East Market Street	Signal	D	AM	7.0	A	7.1	A
					PM	11.9	B	11.9	B
9	East Market Street - Sherwood Drive	Market Way - East Market Street	Signal	D	AM	24.6	C	24.7	C
					PM	45.0	D	43.5	D

Table 5: Intersection Levels of Service – Cumulative Without Project and Cumulative Plus Project Conditions (Continued)

#	N-S Street	E-W Street	Existing Intersection Control	LOS Stnd.	Peak Hour	Cumulative Without Project Conditions Delay (sec)	Cumulative Without Project Conditions LOS	Cumulative Plus Project Conditions Delay (sec)	Cumulative Plus Project Conditions LOS
10	Sun Street	East Market Street	Two-Way Stop	D (E/E)	AM	1.7 (27.9/35.5)	A (D/E)	2.1 (29.3/41.8)	A (D/E)
					PM	8.4 (48.8/180.2)	A (E/F)	**18.2 (49.8/*)**	**C (E/F)**
			With Improvement		*AM*			*3.8*	*A*
					PM			*4.9*	*A*
11	Griffin Street - Simas Street	East Market Street	Signal	D	AM	7.0	A	7.0	A
					PM	13.1	B	13.2	B
12	US 101 Southbound Offramp - Merced Street	East Market Street	Two-Way Stop	C/D (E/E)	AM	44.1 (23.2/164.0)	E (C/F)	**48.7 (24.2/184.3)**	**E (C/F)**
					PM	228.0 (*/*)	F (F/F)	**236.6 (*/*)**	**F (F/F)**
			With Improvement		*AM*			*10.1*	*B*
					PM			*14.9*	*B*
13	US 101 Southbound Onramp	East Market Street	Uncontrolled	D (E)	AM	0.5 (0.0)	A (A)	0.5 (0.0)	A (A)
					PM	0.7 (0.0)	A (A)	0.7 (0.0)	A (A)
14	Kern Street	East Market Street	Signal	D	AM	25.2	C	25.8	C
					PM	82.0	F	**81.9**	**F**
			With Improvement		*AM*			*23.3*	*C*
					PM			*48.1*	*D*
15	Front Street	East Alisal Street	Signal	D	AM	52.6	D	52.5	D
					PM	54.9	D	54.9	D

Notes:

1. LOS Stnd. = Level of Service Standard
2. XX (YY) = Overall (Side Street).
3. Analysis performed using *2000* and *2010 Highway Capacity Manual* methodologies.
4. Overall level of service standard for the City of Salinas is LOS D. Overall level of service standard for Caltrans is the transition between LOS C and LOS D (LOS C/D).
5. Worst approach level of service standard is generally LOS E. Level of service "F" is the level of service at which improvements would normally be required.
6. Above delays and levels of service are summarized from calculations in **Appendices E through J**.
7. * = Delay exceeds ability for 2000/2010 HCM to quantify.
8. Items in **bold** represent significant impacts.

Source: Mott MacDonald

9 References

9.1 List of References

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9.2 List of Contacts

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Rodeo Property Traffic Impact Analysis

Appendix

June 12, 2019

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Rodeo Property Traffic Impact Analysis

Appendix

June 12, 2019

SyWest Development

Issue and revision record

Revision	Date	Originator	Checker	Approver	Description
0	06/19/17	Jeffrey Waller	Julie Oates	Leo Trujillo	Administrative Draft Report
1	07/21/17	Julie Oates	Jeffrey Waller	Leo Trujillo	Draft Report
2	12/06/17	Jeffrey Waller	Julie Oates	Leo Trujillo	Revised Draft Report
3	04/13/18	J. Daniel Takacs	Julie Oates	Leo Trujillo	Revised Draft Report
4	05/17/18	J. Daniel Takacs	Julie Oates	Leo Trujillo	Revised Draft Report
5	08/28/18	J. Daniel Takacs	Shruti Malik	Shruti Malik	Revised Draft Report
6	05/29/19	J. Daniel Takacs	Ravi Narayanan	Shruti Malik	Revised Draft Report
7	06/12/19	J. Daniel Takacs	Ravi Narayanan	Shruti Malik	Final Report

Document reference: 382731 | 1 | 3

Information class: Standard

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 ALL-WAY STOP CONTROL (AWSC)

AWSC intersections require every vehicle to stop at the intersection before proceeding. Since each driver must stop, the judgement as to whether to proceed into the intersection is a function of traffic conditions on the other approaches. While giving priority to the driver on the right is a recognized rule in some areas, it is not a good descriptor of actual intersection operations. What happens is the development of a consensus of right-of-way that alternates between the drivers on the intersection approaches, a consensus that depends primarily on the intersection geometry and the arrival patterns at the stop line.

If no traffic is present on the other approaches, a driver can proceed immediately after the stop is made. If there is traffic on one or more of the other approaches, a driver proceeds only after determining that there are no vehicles currently in the intersection and that it is the driver's turn to proceed. Since no traffic signal controls the stream movement or allocates the right-of-way to each conflicting stream, the rate of departure is controlled by the interaction between the traffic streams themselves.

For AWSC intersections, the average control delay (in seconds per vehicle) is used as the primary measure of performance. Control delay is the increased time of travel for a vehicle approaching and passing through an AWSC intersection, compared with a free-flow vehicle if it were not required to slow down or stop at the intersection.

The criteria for AWSC intersections have different threshold values than do those for signalized intersections, primarily because drivers expect different levels of performance from different kinds of traffic control devices (i.e., traffic signals, two way stop or all way stop, etc.). The expectation is that a signalized intersection is designed to carry higher traffic volumes than an AWSC intersection and a higher level of control delay is acceptable at a signalized intersection for the same LOS.

For AWSC analysis using the HCM 2010 method, the LOS shown reflects the weighted average of the delay on each of the approaches.

LEVEL OF SERVICE (LOS) CRITERIA FOR AWSC 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 A3

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 Manuals)

Level of Service	Control Delay (seconds / vehicle)
A	0 - 10
B	>10 - 15
C	>15 - 25
D	>25 - 35
E	>35 - 50
F	>50

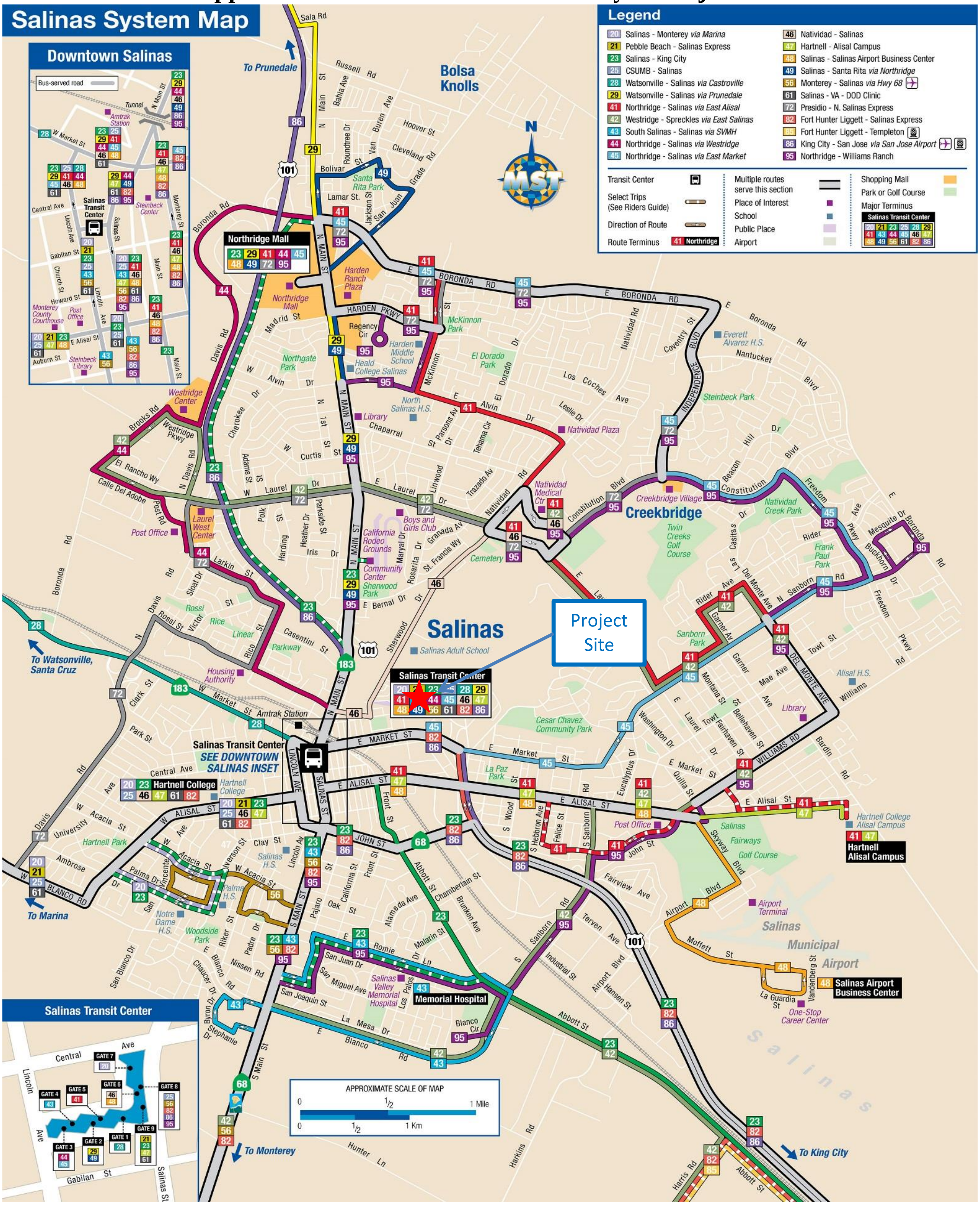
B. City of Salinas Bicycle Facilities

Appendix B - City of Salinas Bicycle Facilities

Basemap Source: *Transportation Agency for Monterey County Bicycle and Pedestrian Master Plan,* Alta Planning + Design, December 2011.

C. Transit Routes in Vicinity of Project Site

Appendix C - Transit Routes in Vicinity of Project Site



Basemap Source: Monterey-Salinas Transit, 2017.

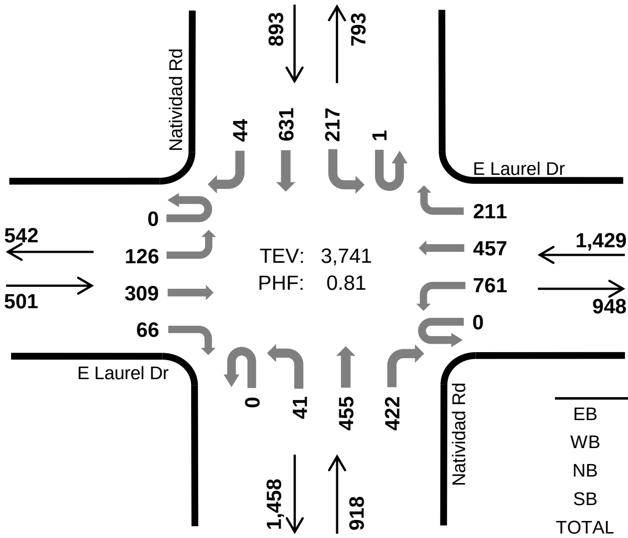
D. Traffic Count Data

Intersection	Count Date		Volume Adjustments
	AM	PM	
1. Nadividad Rd / E Laurel Dr	6/5/2017	6/5/2017	Yes
2. Sherwood Dr - Nativdad Rd / E Bernal Dr - La Posada Wy	6/2/2017	6/5/2017	Yes
3. N Main St / Bernal Dr	6/2/2017	6/2/2017	No
4. Sherwood Dr / Sherwood Pl	6/5/2017	6/5/2017	Yes
5. N Main Street (SR 183) / Rossi St	6/2/2017	6/2/2017	Yes
6. Sherwood Dr / E Rossi St - Calle Cebu	6/2/2017	6/5/2017	Yes
7. Kern St / US 101 Northbound Ramps - Mobray Wy	6/2/2017	6/5/2017	No
8. E Market St - Front St / E Market St	6/2/2017	6/5/2017	Yes
9. E Market St - Sherwood Dr / Market Pl - E Market St	6/2/2017	6/5/2017	Yes
10. Sun St / E Market St	6/2/2017	6/2/2017	Yes
11. Griffin St - Simas St / E Market St	6/2/2017	6/5/2017	Yes
12. US 101 Southbound Offramp - Merced St / E Market St	6/2/2017	6/5/2017	Yes
13. US 101 Southbound Onramp / E Market St	6/2/2017	6/5/2017	Yes
14. Kern St / E Market St	6/2/2017	6/5/2017	Yes
15. Front St / E Alisal St	6/2/2017	6/5/2017	Yes

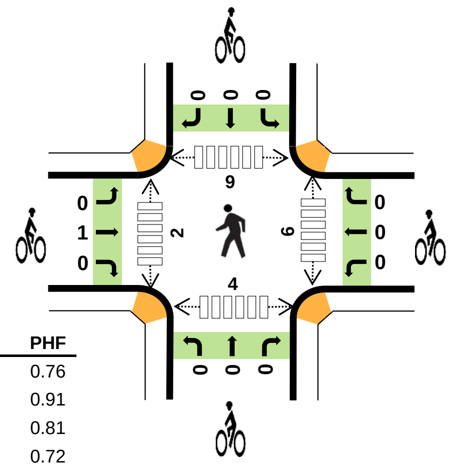
Natividad Rd
E Laurel Dr

Date: 06/05/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour



	HV %:	PHF
EB	0.6%	0.76
WB	0.6%	0.91
NB	1.3%	0.81
SB	0.8%	0.72
TOTAL	0.8%	0.81



Two-Hour Count Summaries

Interval Start	E Laurel Dr Eastbound UT	LT	TH	RT	E Laurel Dr Westbound UT	LT	TH	RT	Natividad Rd Northbound UT	LT	TH	RT	Natividad Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	14	39	6	0	132	60	22	0	2	57	43	0	34	111	8	528	0
7:15 AM	0	14	60	5	0	175	71	30	0	5	79	75	0	34	120	8	676	0
7:30 AM	**0**	**24**	**69**	**24**	**0**	**199**	**101**	**58**	**0**	**4**	**108**	**96**	**0**	**45**	**163**	**10**	**901**	0
7:45 AM	**0**	**41**	**105**	**19**	**0**	**211**	**137**	**44**	**0**	**10**	**141**	**131**	**0**	**89**	**207**	**14**	**1,149**	3,254
8:00 AM	**0**	**33**	**88**	**10**	**0**	**180**	**121**	**53**	**0**	**16**	**103**	**116**	**0**	**53**	**122**	**12**	**907**	3,633
8:15 AM	**0**	**28**	**47**	**13**	**0**	**171**	**98**	**56**	**0**	**11**	**103**	**79**	**1**	**30**	**139**	**8**	**784**	**3,741**
8:30 AM	0	16	52	19	0	141	89	46	0	6	76	78	2	31	107	9	672	3,512
8:45 AM	0	18	60	14	0	117	105	39	0	9	90	78	0	38	119	6	693	3,056
Count Total	0	188	520	110	0	1,326	782	348	0	63	757	696	3	354	1,088	75	6,310	0
Peak Hour All	**0**	**126**	**309**	**66**	**0**	**761**	**457**	**211**	**0**	**41**	**455**	**422**	**1**	**217**	**631**	**44**	**3,741**	**0**
Peak Hour HV	**0**	**3**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**1**	**7**	**4**	**0**	**0**	**3**	**4**	**30**	**0**
Peak Hour HV%	**-**	**2%**	**0%**	**0%**	**-**	**1%**	**0%**	**0%**	**-**	**2%**	**2%**	**1%**	**0%**	**0%**	**0%**	**9%**	**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	0	0	2	3	*5*	0	0	0	0	*0*	0	1	1	0	*2*
7:15 AM	2	3	0	1	*6*	0	0	0	0	*0*	0	1	1	1	*3*
7:30 AM	**1**	**1**	**5**	**3**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	*1*
7:45 AM	**0**	**6**	**4**	**1**	***11***	**1**	**0**	**0**	**0**	***1***	**4**	**0**	**3**	**1**	*8*
8:00 AM	**2**	**1**	**0**	**1**	***4***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**1**	**1**	*4*
8:15 AM	**0**	**0**	**3**	**2**	***5***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**4**	**2**	***8***
8:30 AM	0	1	0	2	*3*	0	0	0	1	*1*	1	1	3	0	*5*
8:45 AM	0	0	1	0	*1*	1	0	0	0	*1*	0	2	6	0	*8*
Count Total	5	12	15	13	*45*	2	0	0	1	*3*	7	7	20	5	*39*
Peak Hour	**3**	**8**	**12**	**7**	***30***	**1**	**0**	**0**	**0**	***1***	**6**	**2**	**9**	**4**	***21***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Laurel Dr Eastbound				E Laurel Dr Westbound				Natividad Rd Northbound				Natividad 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	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5	0
7:15 AM	0	1	1	0	0	0	1	2	0	0	0	0	0	1	0	0	6	0
7:30 AM	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**0**	**3**	**10**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**1**	**0**	**11**	32
8:00 AM	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	31
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**1**	**1**	**5**	**30**
8:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	3	23
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	13
Count Total	0	4	1	0	0	9	1	2	0	1	10	4	1	1	7	4	45	0
Peak Hour	**0**	**3**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**1**	**7**	**4**	**0**	**0**	**3**	**4**	**30**	**0**

Two-Hour Count Summaries - Bikes

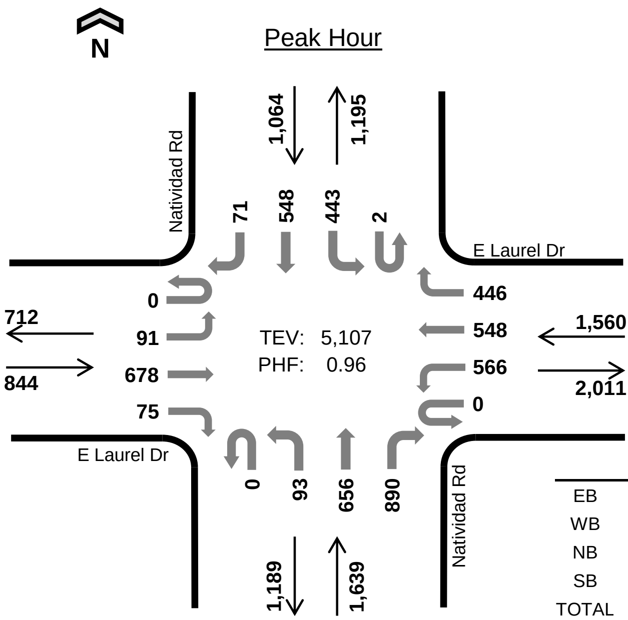
Interval Start	E Laurel Dr Eastbound			E Laurel Dr Westbound			Natividad Rd Northbound			Natividad Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**1**	**0**	**0**	**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**	**0**	**0**	**1**
8:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	2
8:45 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	2
Count Total	1	1	0	0	0	0	0	0	0	0	1	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.

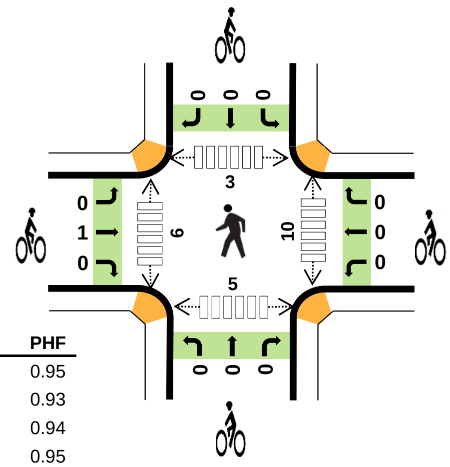
Natividad Rd
E Laurel Dr

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

Peak Hour



	HV %:	PHF
EB	0.1%	0.95
WB	0.1%	0.93
NB	0.1%	0.94
SB	0.2%	0.95
TOTAL	0.1%	0.96



Two-Hour Count Summaries

Interval Start	E Laurel Dr Eastbound UT	LT	TH	RT	E Laurel Dr Westbound UT	LT	TH	RT	Natividad Rd Northbound UT	LT	TH	RT	Natividad Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	30	139	18	0	130	122	106	0	10	139	164	0	84	128	22	1,092	0
4:15 PM	0	21	177	18	0	153	133	108	0	25	184	178	2	60	117	14	1,190	0
4:30 PM	0	23	143	16	0	119	151	112	0	19	185	173	0	84	143	24	1,192	0
4:45 PM	0	24	164	21	0	140	130	106	0	30	201	184	0	94	121	15	1,230	4,704
5:00 PM	**0**	**22**	**180**	**20**	**0**	**151**	**136**	**133**	**0**	**25**	**166**	**187**	**0**	**102**	**159**	**18**	**1,299**	4,911
5:15 PM	**0**	**18**	**176**	**19**	**0**	**155**	**139**	**112**	**0**	**20**	**160**	**254**	**0**	**113**	**137**	**23**	**1,326**	5,047
5:30 PM	**0**	**18**	**147**	**25**	**0**	**131**	**131**	**102**	**0**	**28**	**175**	**225**	**0**	**107**	**135**	**13**	**1,237**	5,092
5:45 PM	**0**	**33**	**175**	**11**	**0**	**129**	**142**	**99**	**0**	**20**	**155**	**224**	**2**	**121**	**117**	**17**	**1,245**	**5,107**
Count Total	0	189	1,301	148	0	1,108	1,084	878	0	177	1,365	1,589	4	765	1,057	146	9,811	0
Peak Hour All	**0**	**91**	**678**	**75**	**0**	**566**	**548**	**446**	**0**	**93**	**656**	**890**	**2**	**443**	**548**	**71**	**5,107**	**0**
Peak Hour HV	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**5**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**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	0	0	0	1	*1*	0	0	0	0	*0*	3	0	1	0	*4*
4:15 PM	0	0	3	3	*6*	0	0	0	0	*0*	1	1	3	2	*7*
4:30 PM	0	1	1	1	*3*	0	1	0	0	*1*	1	1	1	0	*3*
4:45 PM	0	1	0	0	*1*	2	0	0	0	*2*	1	2	4	0	*7*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***	**2**	**4**	**1**	**0**	*7*
5:15 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**6**	**0**	**0**	**0**	*6*
5:30 PM	**0**	**1**	**0**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**1**	**2**	*5*
5:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**1**	**3**	***6***
Count Total	1	3	5	7	*16*	3	1	0	0	*4*	16	10	12	7	*45*
Peak Hour	**1**	**1**	**1**	**2**	***5***	**1**	**0**	**0**	**0**	***1***	**10**	**6**	**3**	**5**	***24***

Deon Fouche: 415 - 757 - 7714
deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Laurel Dr Eastbound				E Laurel Dr Westbound				Natividad Rd Northbound				Natividad Rd 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	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	1	0	0	3	0	6	0
4:30 PM	0	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	3	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	11
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	10
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	6
5:30 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	5
5:45 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
Count Total	0	0	1	0	0	2	1	0	0	1	3	1	0	0	6	1	16	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**5**	**0**

Two-Hour Count Summaries - Bikes

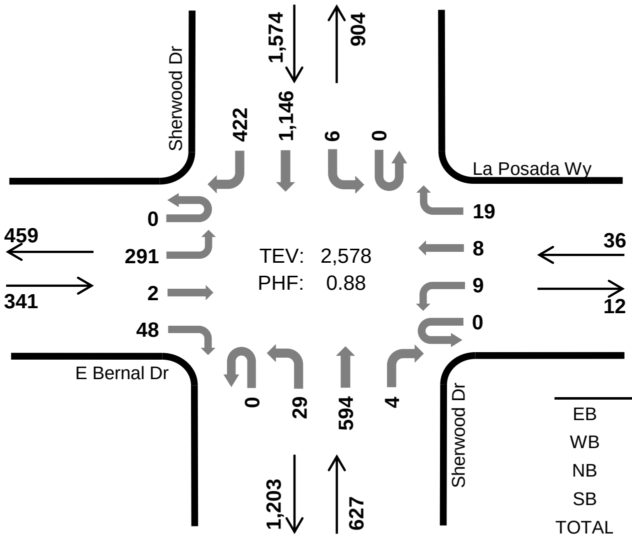
Interval Start	E Laurel Dr Eastbound			E Laurel Dr Westbound			Natividad Rd Northbound			Natividad Rd Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
4:45 PM	0	2	0	0	0	0	0	0	0	0	0	0	2	3
5:00 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	4
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**
Count Total	0	3	0	0	0	1	0	0	0	0	0	0	4	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.

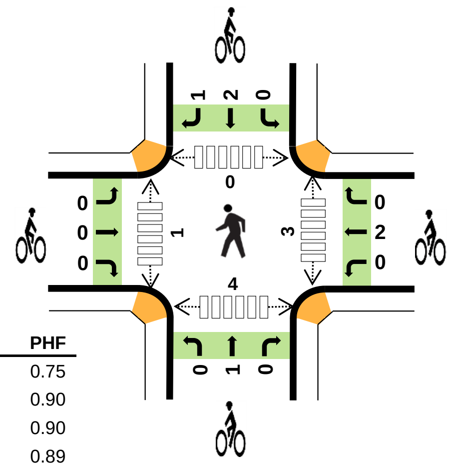
Sherwood Dr
E Bernal Dr

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:15 AM to 8:15 AM

Peak Hour



	HV %:	PHF
EB	0.6%	0.75
WB	0.0%	0.90
NB	0.6%	0.90
SB	0.4%	0.89
TOTAL	0.5%	0.88



Two-Hour Count Summaries

Interval Start	E Bernal Dr Eastbound UT	LT	TH	RT	La Posada Wy Westbound UT	LT	TH	RT	Sherwood Dr Northbound UT	LT	TH	RT	Sherwood Dr Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	44	0	7	0	2	4	0	0	3	88	0	0	0	184	68	400	0
7:15 AM	**0**	**53**	**0**	**8**	**0**	**2**	**0**	**6**	**0**	**8**	**129**	**2**	**0**	**0**	**254**	**103**	**565**	0
7:30 AM	**0**	**69**	**1**	**15**	**0**	**3**	**1**	**6**	**0**	**4**	**136**	**2**	**0**	**3**	**292**	**113**	**645**	0
7:45 AM	**0**	**100**	**0**	**14**	**0**	**0**	**3**	**7**	**0**	**9**	**163**	**0**	**0**	**2**	**325**	**113**	**736**	2,346
8:00 AM	**0**	**69**	**1**	**11**	**0**	**4**	**4**	**0**	**0**	**8**	**166**	**0**	**0**	**1**	**275**	**93**	**632**	**2,578**
8:15 AM	0	63	0	11	0	5	0	9	0	8	138	3	0	3	235	75	550	2,563
8:30 AM	0	44	2	10	0	6	1	4	0	7	118	0	0	1	216	62	471	2,389
8:45 AM	0	52	3	10	0	1	5	1	0	8	153	1	0	2	205	65	506	2,159
Count Total	0	494	7	86	0	23	18	33	0	55	1,091	8	0	12	1,986	692	4,505	0
Peak Hour All	**0**	**291**	**2**	**48**	**0**	**9**	**8**	**19**	**0**	**29**	**594**	**4**	**0**	**6**	**1,146**	**422**	**2,578**	**0**
Peak Hour HV	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**6**	**1**	**13**	**0**
Peak Hour HV%	**-**	**1%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**1%**	**25%**	**-**	**0%**	**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	0	0	0	*1*	0	0	0	0	*0*	1	0	0	2	*3*
7:15 AM	**1**	**0**	**3**	**0**	***4***	**0**	**1**	**0**	**2**	***3***	**1**	**0**	**0**	**2**	*3*
7:30 AM	**1**	**0**	**0**	**5**	***6***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
7:45 AM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**1**	*2*
8:00 AM	**0**	**0**	**1**	**2**	***3***	**0**	**0**	**1**	**1**	***2***	**2**	**0**	**0**	**1**	***3***
8:15 AM	0	0	2	3	*5*	1	0	1	0	*2*	0	0	0	0	*0*
8:30 AM	0	0	0	3	*3*	1	1	0	0	*2*	2	0	0	1	*3*
8:45 AM	1	0	3	2	*6*	0	0	0	0	*0*	0	0	0	1	*1*
Count Total	4	0	9	15	*28*	2	3	2	3	*10*	6	1	0	8	*15*
Peak Hour	**2**	**0**	**4**	**7**	***13***	**0**	**2**	**1**	**3**	***6***	**3**	**1**	**0**	**4**	***8***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Bernal Dr Eastbound				La Posada Wy Westbound				Sherwood Dr Northbound				Sherwood Dr 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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**4**	0
7:30 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**6**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	11
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**3**	**13**
8:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5	14
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	11
8:45 AM	0	1	0	0	0	0	0	0	0	0	3	0	0	0	0	2	6	17
Count Total	0	4	0	0	0	0	0	0	0	0	8	1	0	0	12	3	28	0
Peak Hour	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**6**	**1**	**13**	**0**

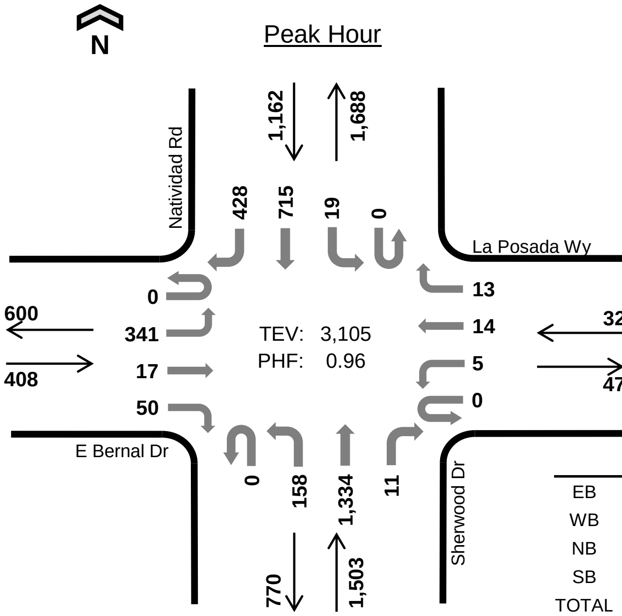
Two-Hour Count Summaries - Bikes

Interval Start	E Bernal Dr Eastbound			La Posada Wy Westbound			Sherwood Dr Northbound			Sherwood Dr Southbound			15-min Total	Rolling One Hour
	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**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**3**	0
7:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**2**	**6**
8:15 AM	1	0	0	0	0	0	0	1	0	0	0	0	2	5
8:30 AM	1	0	0	0	1	0	0	0	0	0	0	0	2	6
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Count Total	2	0	0	0	3	0	0	2	0	0	2	1	10	0
Peak Hour	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**2**	**1**	**6**	**0**

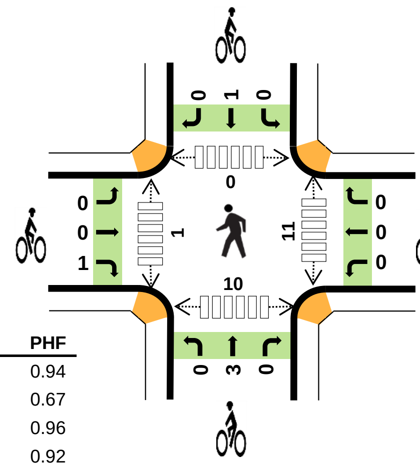
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Sherwood Dr
E Bernal Dr

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM



	HV %:	PHF
EB	0.0%	0.94
WB	0.0%	0.67
NB	0.1%	0.96
SB	0.2%	0.92
TOTAL	0.1%	0.96



Two-Hour Count Summaries

Interval Start	E Bernal Dr Eastbound UT	LT	TH	RT	La Posada Wy Westbound UT	LT	TH	RT	Sherwood Dr Northbound UT	LT	TH	RT	Natividad Rd Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	104	0	14	0	4	2	1	0	27	262	3	1	2	170	91	681	0
4:15 PM	0	87	0	13	0	3	1	5	0	35	311	4	0	4	182	79	724	0
4:30 PM	0	97	5	14	0	0	3	4	0	21	288	4	0	7	185	108	736	0
4:45 PM	**0**	**85**	**5**	**14**	**0**	**1**	**6**	**2**	**0**	**29**	**321**	**2**	**0**	**2**	**162**	**112**	**741**	2,882
5:00 PM	**0**	**95**	**2**	**11**	**0**	**1**	**2**	**2**	**0**	**38**	**329**	**2**	**0**	**2**	**193**	**120**	**797**	2,998
5:15 PM	**0**	**82**	**7**	**12**	**0**	**1**	**5**	**6**	**0**	**42**	**344**	**3**	**0**	**8**	**196**	**105**	**811**	3,085
5:30 PM	**0**	**79**	**3**	**13**	**0**	**2**	**1**	**3**	**0**	**49**	**340**	**4**	**0**	**7**	**164**	**91**	**756**	**3,105**
5:45 PM	0	82	4	17	0	2	5	5	0	31	289	2	0	2	166	88	693	3,057
Count Total	0	711	26	108	0	14	25	28	0	272	2,484	24	1	34	1,418	794	5,939	0
Peak Hour All	**0**	**341**	**17**	**50**	**0**	**5**	**14**	**13**	**0**	**158**	**1,334**	**11**	**0**	**19**	**715**	**428**	**3,105**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**3**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**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 EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	0	0	1	1	*2*	0	0	0	1	*1*	0	0	0	1	*1*
4:15 PM	1	0	1	0	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	1	2	*3*	1	0	2	1	*4*	0	0	0	0	*0*
4:45 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**3**	*3*
5:15 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**2**	**0**	***2***	**6**	**0**	**0**	**1**	*7*
5:30 PM	**0**	**0**	**0**	**1**	***1***	**1**	**0**	**0**	**0**	***1***	**5**	**1**	**0**	**6**	***12***
5:45 PM	0	0	0	0	*0*	0	0	1	0	*1*	1	0	0	2	*3*
Count Total	1	0	4	5	*10*	2	0	6	3	*11*	12	1	0	13	*26*
Peak Hour	**0**	**0**	**1**	**2**	***3***	**1**	**0**	**3**	**1**	***5***	**11**	**1**	**0**	**10**	***22***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Bernal Dr				La Posada Wy				Sherwood Dr				Natividad 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	0	0	0	0	0	1	0	0	0	1	0	2	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	3	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	5
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**3**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	1	0	0	0	0	0	0	0	0	4	0	0	0	3	2	10	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**3**	**0**

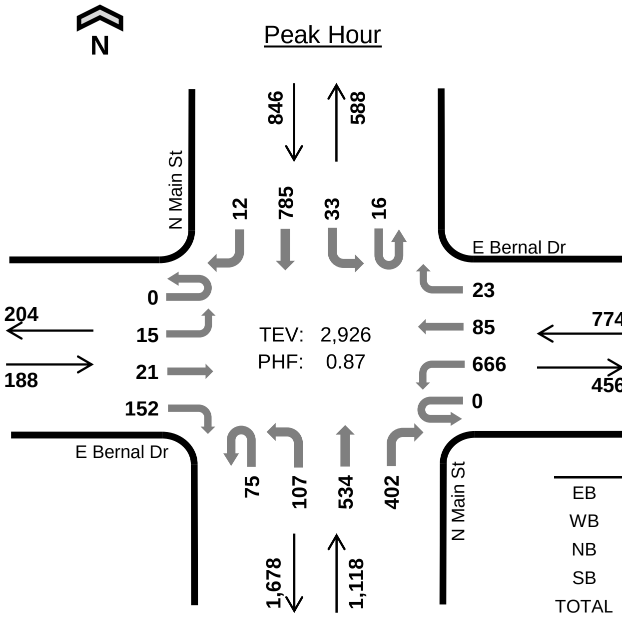
Two-Hour Count Summaries - Bikes

Interval Start	E Bernal Dr			La Posada Wy			Sherwood Dr			Natividad 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	1	0	1	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	2	0	0	1	0	4	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	6
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	6
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	8
5:30 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	5
Count Total	1	0	1	0	0	0	0	6	0	0	3	0	11	0
Peak Hour	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**0**	**5**	**0**

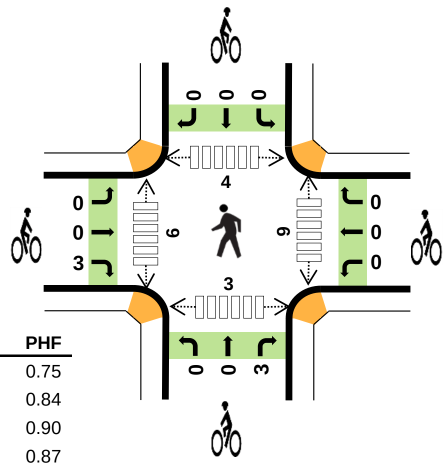
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

N Main St
E Bernal Dr

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	0.5%	0.75
WB	0.1%	0.84
NB	0.4%	0.90
SB	0.9%	0.87
TOTAL	0.5%	0.87



Two-Hour Count Summaries

Interval Start	E Bernal Dr Eastbound UT	LT	TH	RT	E Bernal Dr Westbound UT	LT	TH	RT	N Main St Northbound UT	LT	TH	RT	N Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	1	5	25	0	100	12	2	16	15	49	64	2	2	125	2	420	0
7:15 AM	0	1	4	24	0	137	18	3	19	24	76	68	3	4	171	0	552	0
7:30 AM	**0**	**3**	**6**	**38**	**0**	**178**	**20**	**4**	**18**	**26**	**98**	**95**	**0**	**9**	**196**	**2**	**693**	0
7:45 AM	**0**	**5**	**9**	**49**	**0**	**199**	**25**	**5**	**17**	**28**	**141**	**125**	**2**	**8**	**230**	**2**	**845**	2,510
8:00 AM	**0**	**2**	**3**	**30**	**0**	**168**	**15**	**9**	**22**	**28**	**136**	**105**	**10**	**7**	**177**	**4**	**716**	2,806
8:15 AM	**0**	**5**	**3**	**35**	**0**	**121**	**25**	**5**	**18**	**25**	**159**	**77**	**4**	**9**	**182**	**4**	**672**	**2,926**
8:30 AM	0	3	6	31	0	95	21	9	12	38	136	57	4	9	160	2	583	2,816
8:45 AM	0	2	2	28	0	79	25	8	19	39	125	66	1	8	143	5	550	2,521
Count Total	0	22	38	260	0	1,077	161	45	141	223	920	657	26	56	1,384	21	5,031	0
Peak Hour All	**0**	**15**	**21**	**152**	**0**	**666**	**85**	**23**	**75**	**107**	**534**	**402**	**16**	**33**	**785**	**12**	**2,926**	**0**
Peak Hour HV	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**2**	**1**	**0**	**0**	**8**	**0**	**15**	**0**
Peak Hour HV%	**-**	**7%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**1%**	**1%**	**0%**	**0%**	**0%**	**0%**	**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	0	0	2	2	*4*	1	0	3	0	*4*	0	0	2	0	*2*
7:15 AM	0	0	1	0	*1*	0	0	2	0	*2*	0	1	0	1	*2*
7:30 AM	**0**	**1**	**3**	**1**	***5***	**0**	**0**	**1**	**0**	***1***	**1**	**1**	**0**	**1**	*3*
7:45 AM	**1**	**0**	**1**	**4**	***6***	**1**	**0**	**1**	**0**	***2***	**2**	**4**	**1**	**1**	*8*
8:00 AM	**0**	**0**	**1**	**0**	***1***	**2**	**0**	**1**	**0**	***3***	**4**	**0**	**1**	**0**	*5*
8:15 AM	**0**	**0**	**0**	**3**	***3***	**0**	**0**	**0**	**0**	***0***	**2**	**1**	**2**	**1**	***6***
8:30 AM	0	1	3	0	*4*	0	1	2	0	*3*	0	4	0	0	*4*
8:45 AM	0	2	1	1	*4*	1	0	0	1	*2*	2	2	1	1	*6*
Count Total	1	4	12	11	*28*	5	1	10	1	*17*	11	13	7	5	*36*
Peak Hour	**1**	**1**	**5**	**8**	***15***	**3**	**0**	**3**	**0**	***6***	**9**	**6**	**4**	**3**	***22***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Bernal Dr Eastbound				E Bernal Dr Westbound				N Main St Northbound				N Main 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	0	0	0	0	0	0	0	0	1	0	1	0	0	2	0	4	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**1**	**0**	**0**	**1**	**0**	**5**	0
7:45 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**6**	16
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	13
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**15**
8:30 AM	0	0	0	0	0	1	0	0	0	0	1	2	0	0	0	0	4	14
8:45 AM	0	0	0	0	0	2	0	0	0	0	1	0	0	0	1	0	4	12
Count Total	0	1	0	0	0	4	0	0	1	2	4	5	0	0	11	0	28	0
Peak Hour	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**2**	**1**	**0**	**0**	**8**	**0**	**15**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Bernal Dr Eastbound			E Bernal Dr Westbound			N Main St Northbound			N Main St Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	1	0	0	0	0	0	2	1	0	0	0	4	0
7:15 AM	0	0	0	0	0	0	0	1	1	0	0	0	2	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	9
8:00 AM	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	8
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**
8:30 AM	0	0	0	0	1	0	0	0	2	0	0	0	3	8
8:45 AM	0	1	0	0	0	0	0	0	0	0	1	0	2	8
Count Total	0	2	3	0	1	0	0	3	7	0	1	0	17	0
Peak Hour	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**6**	**0**

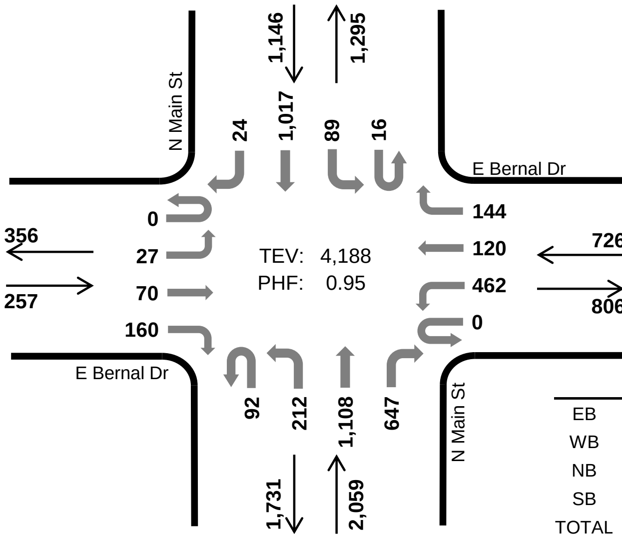
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

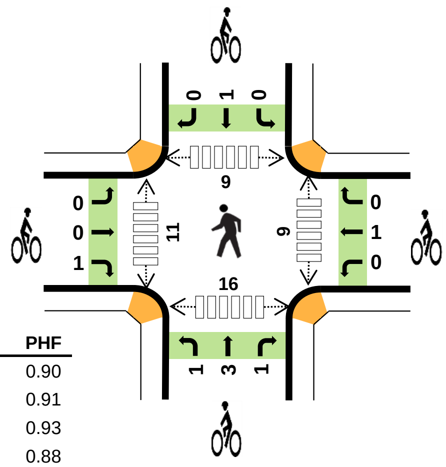
N Main St
E Bernal Dr

Date: 06/02/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

N

Peak Hour





	HV %:	PHF
EB	0.0%	0.90
WB	0.1%	0.91
NB	0.2%	0.93
SB	0.5%	0.88
TOTAL	0.3%	0.95

Two-Hour Count Summaries

Interval Start		E Bernal Dr Eastbound UT	LT	TH	RT	E Bernal Dr Westbound UT	LT	TH	RT	N Main St Northbound UT	LT	TH	RT	N Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	12	8	40	0	119	20	23	20	48	279	143	3	18	251	7	991	0
4:15 PM		0	4	22	39	0	97	30	24	22	46	296	149	4	25	276	5	1,039	0
4:30 PM		0	4	20	46	0	138	24	18	20	56	222	140	3	13	265	6	975	0
4:45 PM		0	7	11	35	0	119	30	26	28	58	293	157	5	34	252	7	1,062	4,067
5:00 PM		**0**	**5**	**17**	**37**	**0**	**125**	**28**	**31**	**21**	**62**	**250**	**180**	**4**	**19**	**256**	**3**	**1,038**	4,114
5:15 PM		**0**	**8**	**19**	**44**	**0**	**131**	**34**	**34**	**24**	**45**	**253**	**136**	**1**	**23**	**224**	**5**	**981**	4,056
5:30 PM		**0**	**7**	**13**	**38**	**0**	**100**	**29**	**36**	**28**	**46**	**303**	**176**	**5**	**24**	**287**	**8**	**1,100**	4,181
5:45 PM		**0**	**7**	**21**	**41**	**0**	**106**	**29**	**43**	**19**	**59**	**302**	**155**	**6**	**23**	**250**	**8**	**1,069**	**4,188**
Count Total		0	54	131	320	0	935	224	235	182	420	2,198	1,236	31	179	2,061	49	8,255	0
Peak Hour	**All**	**0**	**27**	**70**	**160**	**0**	**462**	**120**	**144**	**92**	**212**	**1,108**	**647**	**16**	**89**	**1,017**	**24**	**4,188**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**2**	**0**	**0**	**6**	**0**	**11**	**0**
	HV%	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**1%**	**0%**	**0%**	**0%**	**0%**	**0%**	**0%**	**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	0	0	1	2	*3*	1	0	2	1	*4*	2	0	1	1	*4*
4:15 PM	0	0	1	0	*1*	0	1	1	3	*5*	1	2	4	3	*10*
4:30 PM	0	1	0	1	*2*	0	0	1	0	*1*	7	2	7	3	*19*
4:45 PM	0	0	2	1	*3*	0	1	0	0	*1*	0	5	6	0	*11*
5:00 PM	**0**	**0**	**1**	**2**	***3***	**1**	**0**	**2**	**1**	***4***	**4**	**0**	**0**	**1**	*5*
5:15 PM	**0**	**1**	**1**	**1**	***3***	**0**	**0**	**2**	**0**	***2***	**1**	**3**	**5**	**7**	*16*
5:30 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**1**	**0**	***1***	**1**	**0**	**0**	**2**	*3*
5:45 PM	**0**	**0**	**2**	**2**	***4***	**0**	**1**	**0**	**0**	***1***	**3**	**8**	**4**	**6**	***21***
Count Total	0	2	8	10	*20*	2	3	9	5	*19*	19	20	27	23	*89*
Peak Hour	**0**	**1**	**4**	**6**	***11***	**1**	**1**	**5**	**1**	***8***	**9**	**11**	**9**	**16**	***45***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Bernal Dr Eastbound UT	LT	TH	RT	E Bernal Dr Westbound UT	LT	TH	RT	N Main St Northbound UT	LT	TH	RT	N Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	9
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**3**	9
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	11
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	10
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**2**	**0**	**4**	**11**
Count Total	0	0	0	0	0	1	0	1	0	0	6	2	0	0	10	0	20	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**2**	**0**	**0**	**6**	**0**	**11**	**0**

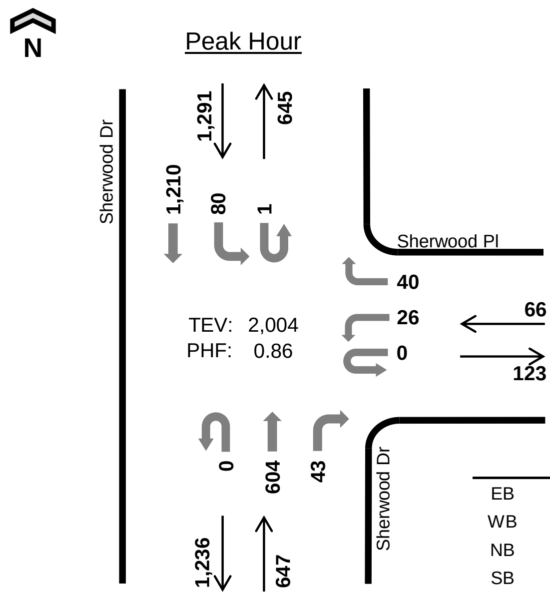
Two-Hour Count Summaries - Bikes

Interval Start	E Bernal Dr Eastbound LT	TH	RT	E Bernal Dr Westbound LT	TH	RT	N Main St Northbound LT	TH	RT	N Main St Southbound LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	1	0	0	0	0	0	2	0	0	1	0	4	0
4:15 PM	0	0	0	0	0	1	0	1	0	0	3	0	5	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	11
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**1**	**0**	**4**	11
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**2**	8
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	8
5:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**8**
Count Total	0	1	1	1	1	1	1	7	1	0	5	0	19	0
Peak Hour	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**3**	**1**	**0**	**1**	**0**	**8**	**0**

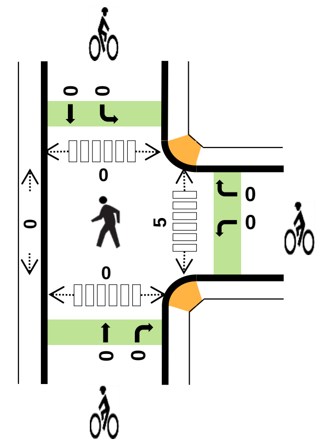
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Sherwood Dr
Sherwood Pl

Date: 06/05/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	-	-
WB	0.0%	0.61
NB	0.6%	0.88
SB	0.8%	0.83
TOTAL	0.7%	0.86



Two-Hour Count Summaries

Interval Start	0 Eastbound UT	LT	TH	RT	Sherwood Pl Westbound UT	LT	TH	RT	Sherwood Dr Northbound UT	LT	TH	RT	Sherwood Dr Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	0	0	0	0	0	0	0	0	0	72	3	0	0	196	0	271	0
7:15 AM	0	0	0	0	0	1	0	1	0	0	112	8	0	5	230	0	357	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**2**	**0**	**0**	**153**	**5**	**1**	**13**	**302**	**0**	**479**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**7**	**0**	**0**	**172**	**11**	**0**	**14**	**376**	**0**	**584**	1,691
8:00 AM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**17**	**0**	**0**	**154**	**14**	**0**	**29**	**238**	**0**	**458**	1,878
8:15 AM	**0**	**0**	**0**	**0**	**0**	**13**	**0**	**14**	**0**	**0**	**125**	**13**	**0**	**24**	**294**	**0**	**483**	**2,004**
8:30 AM	0	0	0	0	0	7	0	11	0	0	106	11	0	13	236	0	384	1,909
8:45 AM	0	0	0	0	0	8	0	6	0	0	126	14	0	14	200	0	368	1,693
Count Total	0	0	0	0	0	42	0	58	0	0	1,020	79	1	112	2,072	0	3,384	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**26**	**0**	**40**	**0**	**0**	**604**	**43**	**1**	**80**	**1,210**	**0**	**2,004**	**0**
Peak Hour HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**10**	**0**	**14**	**0**
Peak Hour HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**-**	**-**	**1%**	**0%**	**0%**	**0%**	**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
7:00 AM	0	0	2	1	*3*	0	0	2	0	*2*	1	0	0	0	*1*
7:15 AM	0	0	0	2	*2*	0	0	0	0	*0*	0	0	0	0	*0*
7:30 AM	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
7:45 AM	**0**	**0**	**1**	**6**	***7***	**0**	**0**	**0**	**0**	***0***	**3**	**0**	**0**	**0**	*3*
8:00 AM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
8:15 AM	**0**	**0**	**1**	**3**	***4***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	***1***
8:30 AM	0	0	0	3	*3*	0	0	0	2	*2*	1	0	0	1	*2*
8:45 AM	0	0	1	0	*1*	0	0	0	0	*0*	1	0	0	0	*1*
Count Total	0	0	7	16	*23*	0	0	2	2	*4*	8	0	0	1	*9*
Peak Hr	**0**	**0**	**4**	**10**	***14***	**0**	**0**	**0**	**0**	***0***	**5**	**0**	**0**	**0**	***5***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				Sherwood Pl				Sherwood Dr				Sherwood Dr				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	0	0	0	0	0	1	1	0	0	1	0	3	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**6**	**0**	**7**	13
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	12
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**4**	**14**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	16
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	10
Count Total	0	0	0	0	0	0	0	0	0	0	6	1	0	0	16	0	23	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**10**	**0**	**14**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	0			Sherwood Pl			Sherwood Dr			Sherwood Dr			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	2	0	0	0	0	2	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**	2
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	1	1	0	2	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	0	0	0	0	2	0	1	1	0	4	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.

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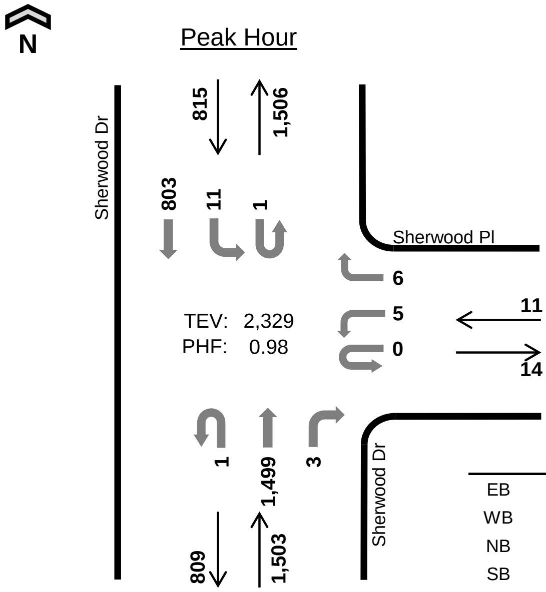
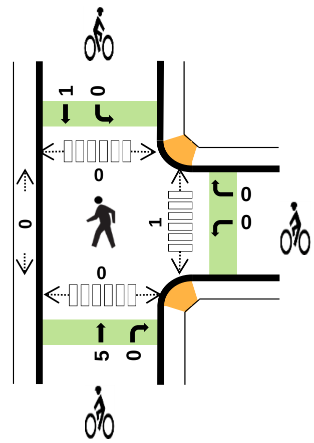
Sherwood Dr
Sherwood Pl

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

Peak Hour



	HV %:	PHF
EB	-	-
WB	0.0%	0.46
NB	0.1%	0.96
SB	0.5%	0.98
TOTAL	0.2%	0.98



Two-Hour Count Summaries

Interval Start	0 Eastbound UT	LT	TH	RT	Sherwood Pl Westbound UT	LT	TH	RT	Sherwood Dr Northbound UT	LT	TH	RT	Sherwood Dr Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	0	0	0	0	1	0	7	0	0	270	2	0	1	213	0	494	0
4:15 PM	0	0	0	0	0	2	0	5	1	0	369	7	0	3	199	0	586	0
4:30 PM	0	0	0	0	0	4	0	4	0	0	303	2	0	2	191	0	506	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	**0**	**0**	**360**	**0**	**1**	**2**	**204**	**0**	**573**	2,159
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**372**	**0**	**0**	**2**	**206**	**0**	**581**	2,246
5:15 PM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**392**	**1**	**0**	**0**	**198**	**0**	**593**	2,253
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**375**	**2**	**0**	**7**	**195**	**0**	**582**	**2,329**
5:45 PM	0	0	0	0	0	2	0	4	0	0	319	9	0	16	174	0	524	2,280
Count Total	0	0	0	0	0	14	0	26	2	0	2,760	23	1	33	1,580	0	4,439	0
Peak Hour All	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**6**	**1**	**0**	**1,499**	**3**	**1**	**11**	**803**	**0**	**2,329**	**0**
HV	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**5**	**0**
HV%	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**0%**	**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 EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	0	0	1	1	*2*	0	0	0	0	*0*	0	0	0	0	*0*
4:30 PM	0	0	1	1	*2*	0	0	2	1	*3*	0	0	0	0	*0*
4:45 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**0**	*1*
5:15 PM	**0**	**0**	**1**	**1**	***2***	**0**	**0**	**4**	**0**	***4***	**0**	**0**	**0**	**0**	*0*
5:30 PM	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***	**0**	**0**	**0**	**0**	***0***
5:45 PM	0	0	0	0	*0*	0	0	2	0	*2*	1	0	0	0	*1*
Count Total	0	0	4	7	*11*	0	0	9	2	*11*	2	0	0	0	*2*
Peak Hr	**0**	**0**	**1**	**4**	***5***	**0**	**0**	**5**	**1**	***6***	**1**	**0**	**0**	**0**	***1***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	0				Sherwood Pl				Sherwood Dr				Sherwood Dr				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	0	0	0	0	0	1	0	0	0	1	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	8
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	7
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	7
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	0	0	0	0	0	0	0	0	0	0	4	0	0	0	7	0	11	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**5**	**0**

Two-Hour Count Summaries - Bikes

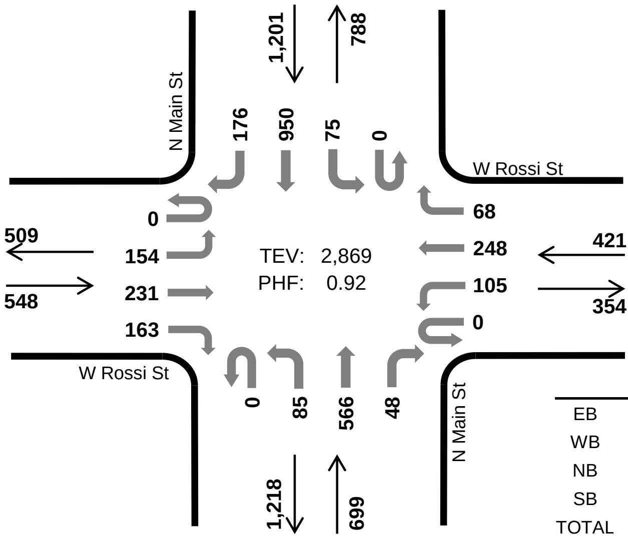
Interval Start	0			Sherwood Pl			Sherwood Dr			Sherwood Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	2	0	0	1	0	3	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	4
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**4**	8
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**6**
5:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	2	7
Count Total	0	0	0	0	0	0	0	9	0	0	2	0	11	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**0**	**6**	**0**

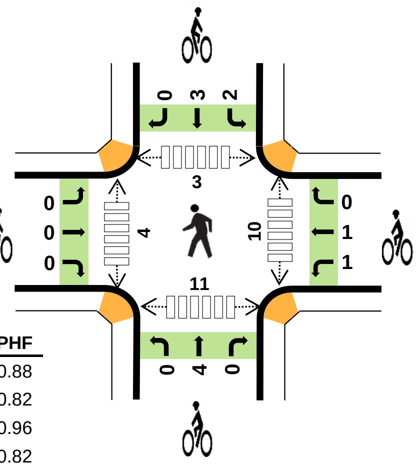
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

N Main St
W Rossi St

Date:	06/02/2017			
Count Period:	7:00 AM	to	9:00 AM	
Peak Hour:	7:45 AM	to	8:45 AM	

Peak Hour





	HV %:	PHF
EB	0.5%	0.88
WB	1.0%	0.82
NB	1.6%	0.96
SB	0.4%	0.82
TOTAL	0.8%	0.92

Two-Hour Count Summaries

Interval Start		W Rossi St Eastbound UT	LT	TH	RT	W Rossi St Westbound UT	LT	TH	RT	N Main St Northbound UT	LT	TH	RT	N Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM		0	16	48	19	0	16	73	11	0	13	69	10	0	13	134	50	472	0
7:15 AM		0	23	50	24	0	31	52	9	0	9	70	10	0	6	179	44	507	0
7:30 AM		0	26	46	29	0	32	56	8	0	14	102	9	0	15	231	37	605	0
7:45 AM		**0**	**41**	**73**	**42**	**0**	**29**	**56**	**15**	**0**	**15**	**135**	**12**	**0**	**14**	**305**	**45**	**782**	2,366
8:00 AM		**0**	**36**	**59**	**45**	**0**	**34**	**77**	**18**	**0**	**25**	**142**	**13**	**0**	**18**	**228**	**54**	**749**	2,643
8:15 AM		**0**	**40**	**47**	**36**	**0**	**24**	**56**	**14**	**0**	**21**	**146**	**8**	**0**	**23**	**217**	**38**	**670**	2,806
8:30 AM		**0**	**37**	**52**	**40**	**0**	**18**	**59**	**21**	**0**	**24**	**143**	**15**	**0**	**20**	**200**	**39**	**668**	**2,869**
8:45 AM		0	26	55	22	0	27	53	26	0	25	158	17	0	25	162	33	629	2,716
Count Total		0	245	430	257	0	211	482	122	0	146	965	94	0	134	1,656	340	5,082	0
Peak Hour	**All**	**0**	**154**	**231**	**163**	**0**	**105**	**248**	**68**	**0**	**85**	**566**	**48**	**0**	**75**	**950**	**176**	**2,869**	**0**
	HV	**0**	**0**	**1**	**2**	**0**	**4**	**0**	**0**	**0**	**1**	**9**	**1**	**0**	**1**	**4**	**0**	**23**	**0**
	HV%	**-**	**0%**	**0%**	**1%**	**-**	**4%**	**0%**	**0%**	**-**	**1%**	**2%**	**2%**	**-**	**1%**	**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
7:00 AM	2	3	2	4	*11*	0	0	2	1	*3*	1	0	1	4	*6*
7:15 AM	1	2	1	2	*6*	0	0	1	0	*1*	1	1	1	3	*6*
7:30 AM	3	4	4	2	*13*	1	0	2	3	*6*	4	1	0	5	*10*
7:45 AM	**0**	**0**	**3**	**1**	***4***	**0**	**0**	**2**	**3**	***5***	**2**	**0**	**1**	**4**	*7*
8:00 AM	**3**	**0**	**2**	**1**	***6***	**0**	**1**	**0**	**1**	***2***	**3**	**0**	**0**	**4**	*7*
8:15 AM	**0**	**2**	**3**	**1**	***6***	**0**	**0**	**0**	**0**	***0***	**3**	**3**	**0**	**2**	*8*
8:30 AM	**0**	**2**	**3**	**2**	***7***	**0**	**1**	**2**	**1**	***4***	**2**	**1**	**2**	**1**	*6*
8:45 AM	3	4	4	0	*11*	0	2	0	2	*4*	8	0	0	1	*9*
Count Total	12	17	22	13	*64*	1	4	9	11	*25*	24	6	5	24	*59*
Peak Hour	**3**	**4**	**11**	**5**	***23***	**0**	**2**	**4**	**5**	***11***	**10**	**4**	**3**	**11**	***28***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	W Rossi St Eastbound UT	LT	TH	RT	W Rossi St Westbound UT	LT	TH	RT	N Main St Northbound UT	LT	TH	RT	N Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	0	2	0	0	0	3	0	0	0	1	1	0	1	3	0	11	0
7:15 AM	0	0	1	0	0	0	0	2	0	0	1	0	0	0	2	0	6	0
7:30 AM	0	1	0	2	0	1	2	1	0	0	4	0	0	0	1	1	13	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**1**	**0**	**0**	**4**	34
8:00 AM	**0**	**0**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**6**	29
8:15 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**1**	**0**	**6**	29
8:30 AM	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**2**	**0**	**7**	**23**
8:45 AM	0	1	2	0	0	1	3	0	0	1	3	0	0	0	0	0	11	30
Count Total	0	2	6	4	0	6	8	3	0	2	18	2	0	2	10	1	64	0
Peak Hour	**0**	**0**	**1**	**2**	**0**	**4**	**0**	**0**	**0**	**1**	**9**	**1**	**0**	**1**	**4**	**0**	**23**	**0**

Two-Hour Count Summaries - Bikes

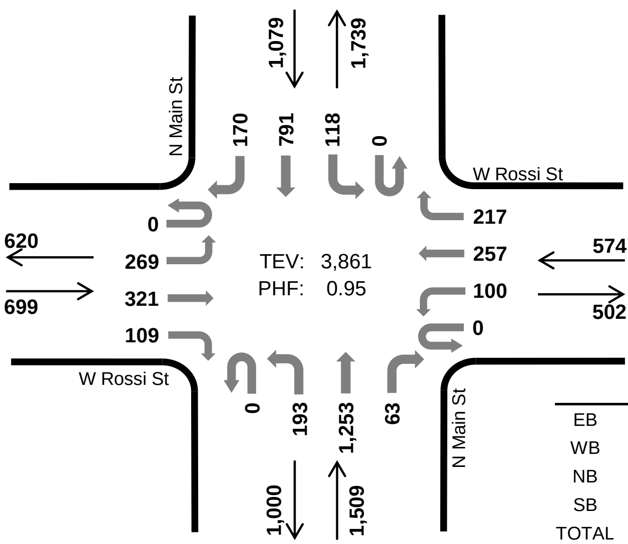
Interval Start	W Rossi St Eastbound LT	TH	RT	W Rossi St Westbound LT	TH	RT	N Main St Northbound LT	TH	RT	N Main St Southbound LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	0	0	0	0	0	0	2	0	0	1	0	3	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	0	0	1	0	0	0	1	1	0	1	2	0	6	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	**1**	**0**	**5**	15
8:00 AM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	14
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	13
8:30 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**4**	**11**
8:45 AM	0	0	0	0	1	1	0	0	0	0	2	0	4	10
Count Total	0	0	1	1	2	1	1	8	0	3	8	0	25	0
Peak Hour	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**4**	**0**	**2**	**3**	**0**	**11**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

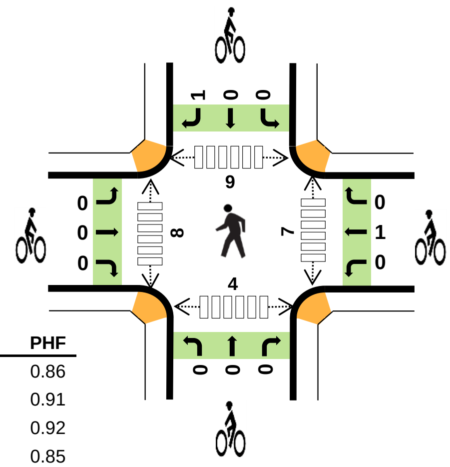
N Main St
W Rossi St

Date: 06/02/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

Peak Hour



	HV %:	PHF
EB	0.4%	0.86
WB	0.3%	0.91
NB	0.1%	0.92
SB	0.9%	0.85
TOTAL	0.4%	0.95



Two-Hour Count Summaries

Interval Start	W Rossi St Eastbound UT	LT	TH	RT	W Rossi St Westbound UT	LT	TH	RT	N Main St Northbound UT	LT	TH	RT	N Main St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	75	93	31	0	34	76	46	0	33	305	18	0	34	175	23	943	0
4:15 PM	0	51	58	24	0	22	48	38	0	38	357	17	0	46	224	42	965	0
4:30 PM	0	72	89	27	0	23	64	39	0	40	262	24	0	35	182	38	895	0
4:45 PM	**0**	**70**	**76**	**22**	**0**	**23**	**64**	**57**	**0**	**74**	**326**	**12**	**0**	**30**	**225**	**37**	**1,016**	3,819
5:00 PM	**0**	**79**	**97**	**27**	**0**	**31**	**74**	**52**	**0**	**41**	**285**	**17**	**0**	**27**	**161**	**48**	**939**	3,815
5:15 PM	**0**	**54**	**68**	**29**	**0**	**19**	**62**	**57**	**0**	**39**	**338**	**14**	**0**	**34**	**237**	**46**	**997**	3,847
5:30 PM	**0**	**66**	**80**	**31**	**0**	**27**	**57**	**51**	**0**	**39**	**304**	**20**	**0**	**27**	**168**	**39**	**909**	**3,861**
5:45 PM	0	70	68	22	0	20	50	42	0	50	304	12	0	32	201	33	904	3,749
Count Total	0	537	629	213	0	199	495	382	0	354	2,481	134	0	265	1,573	306	7,568	0
Peak Hour All	**0**	**269**	**321**	**109**	**0**	**100**	**257**	**217**	**0**	**193**	**1,253**	**63**	**0**	**118**	**791**	**170**	**3,861**	**0**
Peak Hour HV	**0**	**1**	**1**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**2**	**6**	**2**	**17**	**0**
Peak Hour HV%	**-**	**0%**	**0%**	**1%**	**-**	**1%**	**0%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**2%**	**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	3	0	2	2	*7*	0	2	0	2	*4*	5	1	2	4	*12*
4:15 PM	0	1	3	2	*6*	0	0	0	0	*0*	3	2	2	4	*11*
4:30 PM	0	2	1	2	*5*	0	1	0	2	*3*	1	3	2	0	*6*
4:45 PM	**0**	**1**	**0**	**1**	***2***	**0**	**1**	**0**	**0**	***1***	**2**	**0**	**3**	**0**	*5*
5:00 PM	**2**	**0**	**1**	**3**	***6***	**0**	**0**	**0**	**0**	***0***	**3**	**2**	**2**	**2**	*9*
5:15 PM	**1**	**1**	**1**	**4**	***7***	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**2**	**2**	*7*
5:30 PM	**0**	**0**	**0**	**2**	***2***	**0**	**0**	**0**	**1**	***1***	**2**	**3**	**2**	**0**	*7*
5:45 PM	0	0	5	0	*5*	0	0	0	1	*1*	2	0	0	1	*3*
Count Total	6	5	13	16	*40*	0	4	0	6	*10*	18	14	15	13	*60*
Peak Hour	**3**	**2**	**2**	**10**	***17***	**0**	**1**	**0**	**1**	***2***	**7**	**8**	**9**	**4**	***28***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	W Rossi St Eastbound				W Rossi St Westbound				N Main St Northbound				N Main 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	2	1	0	0	0	0	0	0	1	1	0	0	0	2	0	7	0
4:15 PM	0	0	0	0	0	1	0	0	0	0	3	0	0	0	2	0	6	0
4:30 PM	0	0	0	0	0	2	0	0	0	0	1	0	0	0	2	0	5	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	20
5:00 PM	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**1**	**6**	19
5:15 PM	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**3**	**0**	**7**	20
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**2**	17
5:45 PM	0	0	0	0	0	0	0	0	0	1	4	0	0	0	0	0	5	20
Count Total	0	3	2	1	0	4	0	1	0	2	11	0	0	2	12	2	40	0
Peak Hour	**0**	**1**	**1**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**2**	**6**	**2**	**17**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	W Rossi St Eastbound			W Rossi St Westbound			N Main St Northbound			N Main St Southbound			15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	2	0	0	0	0	0	2	0	4	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	1	0	0	0	0	0	2	0	3	0
4:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	8
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	4
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**2**
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Count Total	0	0	0	0	4	0	0	0	0	0	5	1	10	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714

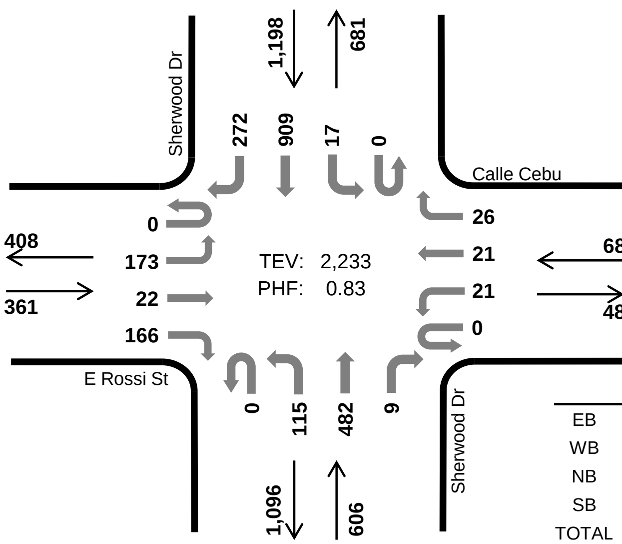
deon.fouche@idaxdata.com

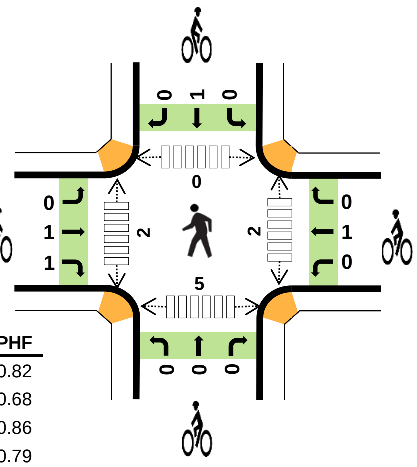
www.idaxdata.com

Sherwood Dr
E Rossi St

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour





	HV %:	PHF
EB	0.8%	0.82
WB	5.9%	0.68
NB	0.8%	0.86
SB	0.7%	0.79
TOTAL	0.9%	0.83

Two-Hour Count Summaries

Interval Start	E Rossi St Eastbound UT	LT	TH	RT	Calle Cebu Westbound UT	LT	TH	RT	Sherwood Dr Northbound UT	LT	TH	RT	Sherwood Dr Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	31	1	31	0	2	0	3	0	10	63	0	0	0	114	67	322	0
7:15 AM	0	46	1	22	0	4	2	1	0	10	93	1	0	2	164	78	424	0
7:30 AM	**0**	**30**	**2**	**37**	**0**	**7**	**11**	**7**	**0**	**17**	**108**	**1**	**0**	**3**	**211**	**69**	**503**	0
7:45 AM	**0**	**56**	**0**	**54**	**0**	**6**	**4**	**14**	**0**	**39**	**119**	**3**	**0**	**2**	**311**	**64**	**672**	1,921
8:00 AM	**0**	**51**	**9**	**35**	**0**	**4**	**2**	**2**	**0**	**32**	**144**	**1**	**0**	**6**	**198**	**80**	**564**	2,163
8:15 AM	**0**	**36**	**11**	**40**	**0**	**4**	**4**	**3**	**0**	**27**	**111**	**4**	**0**	**6**	**189**	**59**	**494**	**2,233**
8:30 AM	0	34	7	46	0	5	5	5	0	26	101	6	0	8	148	73	464	2,194
8:45 AM	0	48	9	42	0	4	3	8	0	40	117	1	0	4	177	46	499	2,021
Count Total	0	332	40	307	0	36	31	43	0	201	856	17	0	31	1,512	536	3,942	0
Peak Hour All	**0**	**173**	**22**	**166**	**0**	**21**	**21**	**26**	**0**	**115**	**482**	**9**	**0**	**17**	**909**	**272**	**2,233**	**0**
Peak Hour HV	**0**	**2**	**0**	**1**	**0**	**3**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**5**	**2**	**20**	**0**
Peak Hour HV%	**-**	**1%**	**0%**	**1%**	**-**	**14%**	**5%**	**0%**	**-**	**0%**	**1%**	**0%**	**-**	**6%**	**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
7:00 AM	3	0	2	0	*5*	0	0	0	0	*0*	1	0	1	1	*3*
7:15 AM	1	0	5	0	*6*	0	1	0	0	*1*	1	0	0	0	*1*
7:30 AM	**0**	**2**	**3**	**3**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**0**	**1**	*2*
7:45 AM	**1**	**2**	**0**	**2**	***5***	**0**	**0**	**0**	**1**	***1***	**1**	**0**	**0**	**2**	*3*
8:00 AM	**1**	**0**	**1**	**1**	***3***	**2**	**1**	**0**	**0**	***3***	**1**	**1**	**0**	**1**	*3*
8:15 AM	**1**	**0**	**1**	**2**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	***1***
8:30 AM	0	0	1	2	*3*	0	0	0	0	*0*	0	0	0	1	*1*
8:45 AM	2	0	9	2	*13*	0	1	0	0	*1*	1	0	1	0	*2*
Count Total	9	4	22	12	*47*	2	3	0	1	*6*	5	2	2	7	*16*
Peak Hour	**3**	**4**	**5**	**8**	***20***	**2**	**1**	**0**	**1**	***4***	**2**	**2**	**0**	**5**	***9***

Deon Fouche: 415 - 757 - 7714
deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Rossi St				Calle Cebu				Sherwood Dr				Sherwood Dr				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	3	0	0	0	0	0	1	1	0	0	0	0	0	5	0
7:15 AM	0	0	0	1	0	0	0	0	0	2	2	1	0	0	0	0	6	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**3**	**0**	**0**	**1**	**1**	**1**	**8**	0
7:45 AM	**0**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**5**	24
8:00 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**3**	22
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**4**	**20**
8:30 AM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	3	15
8:45 AM	0	1	0	1	0	0	0	0	0	3	6	0	0	0	2	0	13	23
Count Total	0	3	0	6	0	3	1	0	0	7	14	1	0	1	8	3	47	0
Peak Hour	**0**	**2**	**0**	**1**	**0**	**3**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**5**	**2**	**20**	**0**

Two-Hour Count Summaries - Bikes

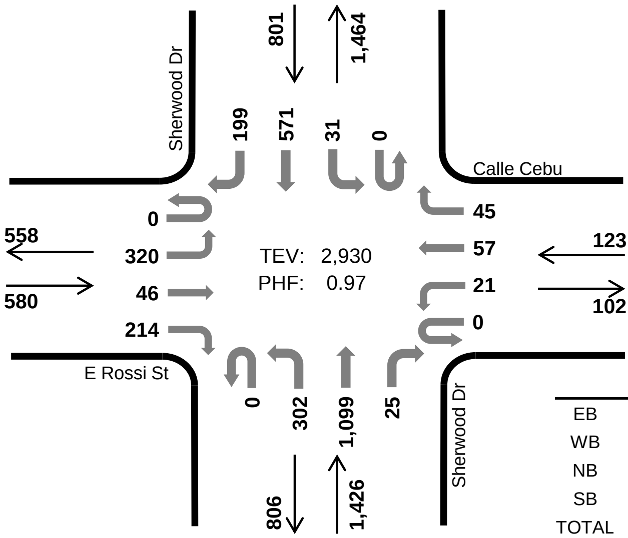
Interval Start	E Rossi St			Calle Cebu			Sherwood Dr			Sherwood Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	2
8:00 AM	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	5
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	4
Count Total	0	1	1	0	3	0	0	0	0	0	1	0	6	0
Peak Hour	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

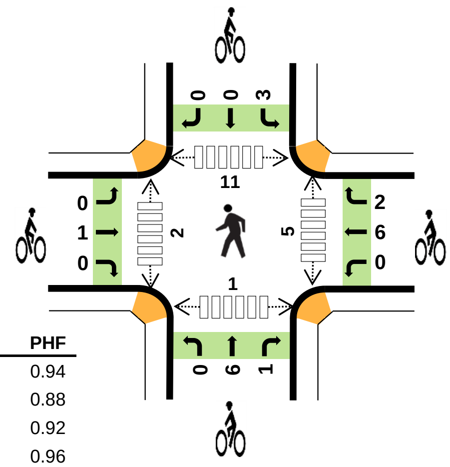
Sherwood Dr
E Rossi St

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

Peak Hour



	HV %:	PHF
EB	0.3%	0.94
WB	0.0%	0.88
NB	0.1%	0.92
SB	0.1%	0.96
TOTAL	0.2%	0.97



Two-Hour Count Summaries

Interval Start	E Rossi St Eastbound UT	LT	TH	RT	Calle Cebu Westbound UT	LT	TH	RT	Sherwood Dr Northbound UT	LT	TH	RT	Sherwood Dr Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	64	11	63	0	4	9	9	0	64	226	6	0	5	149	57	667	0
4:15 PM	0	64	9	60	0	12	13	10	0	71	288	2	0	7	149	42	727	0
4:30 PM	0	61	9	69	0	9	9	6	0	84	250	3	0	9	130	65	704	0
4:45 PM	**0**	**82**	**10**	**53**	**0**	**7**	**9**	**8**	**0**	**68**	**251**	**5**	**0**	**8**	**148**	**45**	**694**	2,792
5:00 PM	**0**	**70**	**13**	**58**	**0**	**1**	**14**	**14**	**0**	**83**	**270**	**7**	**0**	**6**	**147**	**54**	**737**	2,862
5:15 PM	**0**	**89**	**14**	**52**	**0**	**6**	**14**	**15**	**0**	**62**	**287**	**5**	**0**	**10**	**145**	**54**	**753**	2,888
5:30 PM	**0**	**79**	**9**	**51**	**0**	**7**	**20**	**8**	**0**	**89**	**291**	**8**	**0**	**7**	**131**	**46**	**746**	**2,930**
5:45 PM	0	77	15	59	0	5	8	15	0	52	235	2	0	6	118	50	642	2,878
Count Total	0	586	90	465	0	51	96	85	0	573	2,098	38	0	58	1,117	413	5,670	0
Peak Hour All	**0**	**320**	**46**	**214**	**0**	**21**	**57**	**45**	**0**	**302**	**1,099**	**25**	**0**	**31**	**571**	**199**	**2,930**	**0**
Peak Hour HV	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**0**
Peak Hour HV%	**-**	**0%**	**2%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**1%**	**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 EB	WB	NB	SB	Total	Bicycles EB	WB	NB	SB	Total	Pedestrians (Crossing Leg) East	West	North	South	Total
4:00 PM	3	0	2	0	*5*	2	2	0	0	*4*	0	0	1	1	*2*
4:15 PM	1	0	3	2	*6*	1	2	2	0	*5*	2	1	1	6	*10*
4:30 PM	1	0	3	2	*6*	1	3	1	1	*6*	1	0	1	2	*4*
4:45 PM	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**1**	**0**	***2***	**1**	**0**	**0**	**0**	*1*
5:00 PM	**1**	**0**	**1**	**1**	***3***	**1**	**2**	**2**	**0**	***5***	**1**	**1**	**3**	**0**	*5*
5:15 PM	**0**	**0**	**0**	**0**	***0***	**0**	**3**	**2**	**3**	***8***	**2**	**1**	**5**	**1**	*9*
5:30 PM	**0**	**0**	**1**	**0**	***1***	**0**	**2**	**2**	**0**	***4***	**1**	**0**	**3**	**0**	*4*
5:45 PM	1	0	0	0	*1*	0	3	0	1	*4*	2	0	1	0	*3*
Count Total	8	0	10	5	*23*	5	18	10	5	*38*	10	3	15	10	*38*
Peak Hour	**2**	**0**	**2**	**1**	***5***	**1**	**8**	**7**	**3**	***19***	**5**	**2**	**11**	**1**	***19***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Rossi St				Calle Cebu				Sherwood Dr				Sherwood Dr				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	1	0	0	0	0	0	2	0	0	0	0	0	0	5	0
4:15 PM	0	0	0	1	0	0	0	0	0	2	1	0	0	0	2	0	6	0
4:30 PM	0	0	0	1	0	0	0	0	0	1	2	0	0	0	0	2	6	0
4:45 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	18
5:00 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	16
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	10
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
5:45 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	5
Count Total	0	1	2	5	0	0	0	0	0	7	3	0	0	0	3	2	23	0
Peak Hour	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**5**	**0**

Two-Hour Count Summaries - Bikes

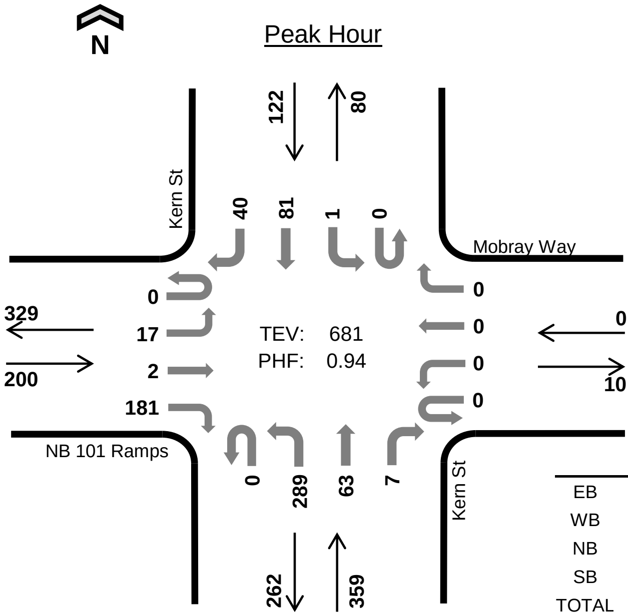
Interval Start	E Rossi St			Calle Cebu			Sherwood Dr			Sherwood Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	1	1	0	2	0	0	0	0	0	0	0	4	0
4:15 PM	1	0	0	0	2	0	0	2	0	0	0	0	5	0
4:30 PM	0	1	0	1	1	1	1	0	0	0	0	1	6	0
4:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	17
5:00 PM	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**5**	18
5:15 PM	**0**	**0**	**0**	**0**	**2**	**1**	**0**	**2**	**0**	**3**	**0**	**0**	**8**	21
5:30 PM	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**1**	**1**	**0**	**0**	**0**	**4**	**19**
5:45 PM	0	0	0	0	2	1	0	0	0	0	1	0	4	21
Count Total	1	3	1	1	13	4	1	8	1	3	1	1	38	0
Peak Hour	**0**	**1**	**0**	**0**	**6**	**2**	**0**	**6**	**1**	**3**	**0**	**0**	**19**	**0**

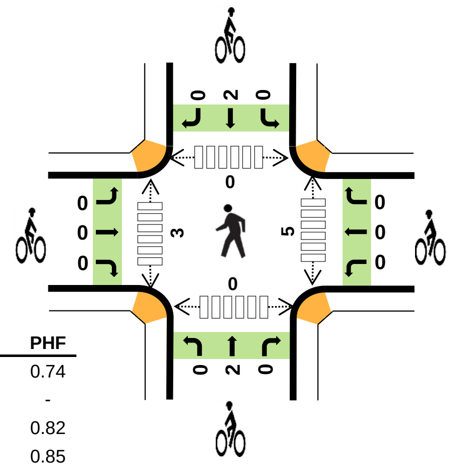
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kern St
NB 101 Ramps

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour





	HV %:	PHF
EB	6.5%	0.74
WB	-	-
NB	0.6%	0.82
SB	1.6%	0.85
TOTAL	2.5%	0.94

Two-Hour Count Summaries

Interval Start		NB 101 Ramps				Mobray Way				Kern St				Kern 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	3	0	34	0	0	0	0	1	46	6	1	0	0	17	12	120	0
7:15 AM		0	4	0	26	0	0	0	0	0	60	15	0	0	0	15	5	125	0
7:30 AM		**0**	**5**	**0**	**41**	**0**	**0**	**0**	**0**	**0**	**64**	**19**	**2**	**0**	**0**	**29**	**7**	**167**	0
7:45 AM		**0**	**5**	**0**	**63**	**0**	**0**	**0**	**0**	**0**	**69**	**10**	**1**	**0**	**0**	**19**	**12**	**179**	591
8:00 AM		**0**	**3**	**1**	**43**	**0**	**0**	**0**	**0**	**0**	**90**	**17**	**3**	**0**	**0**	**15**	**9**	**181**	652
8:15 AM		**0**	**4**	**1**	**34**	**0**	**0**	**0**	**0**	**0**	**66**	**17**	**1**	**0**	**1**	**18**	**12**	**154**	**681**
8:30 AM		0	6	0	32	0	0	0	0	0	52	21	0	0	0	20	9	140	654
8:45 AM		0	1	0	40	0	0	0	0	0	76	19	3	0	1	19	7	166	641
Count Total		0	31	2	313	0	0	0	0	1	523	124	11	0	2	152	73	1,232	0
Peak Hour	**All**	**0**	**17**	**2**	**181**	**0**	**0**	**0**	**0**	**0**	**289**	**63**	**7**	**0**	**1**	**81**	**40**	**681**	**0**
	HV	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**17**	**0**
	HV%	**-**	**0%**	**0%**	**7%**	**-**	**-**	**-**	**-**	**-**	**0%**	**3%**	**0%**	**-**	**0%**	**1%**	**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	2	0	2	1	*5*	0	0	1	2	*3*	0	0	0	0	*0*
7:15 AM	2	0	2	0	*4*	0	0	1	0	*1*	2	0	0	2	*4*
7:30 AM	**3**	**0**	**1**	**0**	***4***	**0**	**0**	**0**	**1**	***1***	**1**	**0**	**0**	**0**	*1*
7:45 AM	**3**	**0**	**1**	**2**	***6***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**0**	**0**	*2*
8:00 AM	**3**	**0**	**0**	**0**	***3***	**0**	**0**	**2**	**1**	***3***	**2**	**0**	**0**	**0**	*2*
8:15 AM	**4**	**0**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**1**	**2**	**0**	**0**	***3***
8:30 AM	6	0	1	0	*7*	0	0	0	0	*0*	1	1	0	0	*2*
8:45 AM	9	0	3	0	*12*	0	0	0	0	*0*	1	2	0	0	*3*
Count Total	32	0	10	3	*45*	0	0	4	4	*8*	9	6	0	2	*17*
Peak Hour	**13**	**0**	**2**	**2**	***17***	**0**	**0**	**2**	**2**	***4***	**5**	**3**	**0**	**0**	***8***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	NB 101 Ramps				Mobray Way				Kern St				Kern 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	0	2	0	0	0	0	0	2	0	0	0	0	0	1	5	0
7:15 AM	0	0	0	2	0	0	0	0	0	2	0	0	0	0	0	0	4	0
7:30 AM	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**4**	0
7:45 AM	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**6**	19
8:00 AM	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	17
8:15 AM	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**17**
8:30 AM	0	0	0	6	0	0	0	0	0	1	0	0	0	0	0	0	7	20
8:45 AM	0	0	0	9	0	0	0	0	0	2	1	0	0	0	0	0	12	26
Count Total	0	0	0	32	0	0	0	0	0	7	3	0	0	0	1	2	45	0
Peak Hour	**0**	**0**	**0**	**13**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**1**	**1**	**17**	**0**

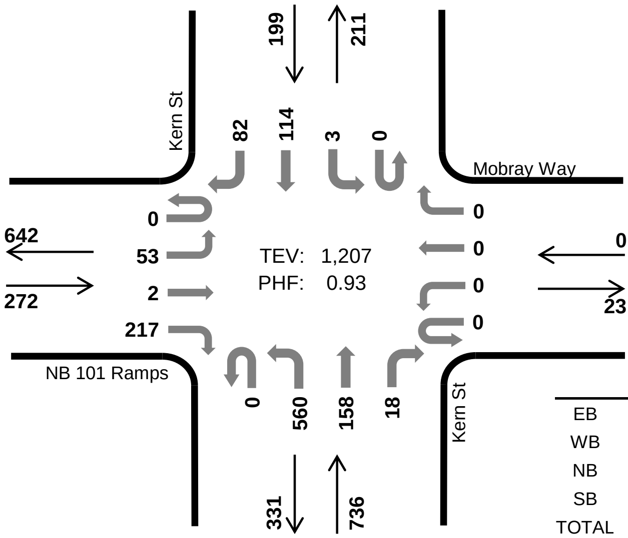
Two-Hour Count Summaries - Bikes

Interval Start	NB 101 Ramps			Mobray Way			Kern St			Kern 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	1	0	0	2	0	3	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**3**	5
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
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	0	0	0	0	3
Count Total	0	0	0	0	0	0	0	4	0	0	4	0	8	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**2**	**0**	**4**	**0**

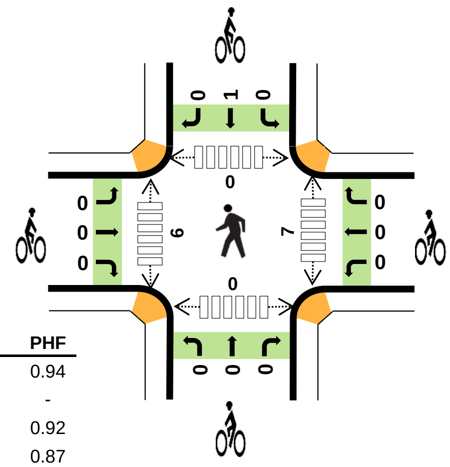
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kern St
NB 101 Ramps

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM



	HV %:	PHF
EB	5.5%	0.94
WB	-	-
NB	0.3%	0.92
SB	1.0%	0.87
TOTAL	1.6%	0.93



Two-Hour Count Summaries

Interval Start	NB 101 Ramps Eastbound UT	LT	TH	RT	Mobray Way Westbound UT	LT	TH	RT	Kern St Northbound UT	LT	TH	RT	Kern St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	6	0	46	0	0	0	0	0	121	36	6	0	1	18	17	251	0
4:15 PM	**0**	**9**	**0**	**63**	**0**	**0**	**0**	**0**	**0**	**137**	**47**	**4**	**0**	**1**	**27**	**21**	**309**	0
4:30 PM	**0**	**17**	**1**	**47**	**0**	**0**	**0**	**0**	**0**	**145**	**35**	**5**	**0**	**0**	**31**	**19**	**300**	0
4:45 PM	**0**	**13**	**0**	**57**	**0**	**0**	**0**	**0**	**0**	**126**	**30**	**6**	**0**	**0**	**27**	**16**	**275**	1,135
5:00 PM	**0**	**14**	**1**	**50**	**0**	**0**	**0**	**0**	**0**	**152**	**46**	**3**	**0**	**2**	**29**	**26**	**323**	**1,207**
5:15 PM	0	6	0	49	0	0	0	0	0	147	42	8	0	0	26	21	299	1,197
5:30 PM	0	8	1	62	0	0	0	0	0	130	35	4	0	1	27	18	286	1,183
5:45 PM	0	9	0	54	0	0	0	0	0	132	47	4	0	0	20	22	288	1,196
Count Total	0	82	3	428	0	0	0	0	0	1,090	318	40	0	5	205	160	2,331	0
Peak Hour All	**0**	**53**	**2**	**217**	**0**	**0**	**0**	**0**	**0**	**560**	**158**	**18**	**0**	**3**	**114**	**82**	**1,207**	**0**
Peak Hour HV	**0**	**1**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**1**	**19**	**0**
Peak Hour HV%	**-**	**2%**	**0%**	**6%**	**-**	**-**	**-**	**-**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**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
4:00 PM	3	0	4	0	*7*	0	0	0	0	*0*	1	1	1	0	*3*
4:15 PM	**6**	**0**	**1**	**0**	***7***	**0**	**0**	**0**	**1**	***1***	**4**	**3**	**0**	**0**	*7*
4:30 PM	**1**	**0**	**1**	**0**	***2***	**0**	**0**	**0**	**0**	***0***	**3**	**1**	**0**	**0**	*4*
4:45 PM	**4**	**0**	**0**	**0**	***4***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**0**	*0*
5:00 PM	**4**	**0**	**0**	**2**	***6***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**0**	***2***
5:15 PM	7	0	0	0	*7*	0	0	0	0	*0*	3	3	0	0	*6*
5:30 PM	4	0	0	0	*4*	0	0	0	0	*0*	2	0	0	0	*2*
5:45 PM	5	0	2	0	*7*	0	0	0	0	*0*	2	0	1	0	*3*
Count Total	34	0	8	2	*44*	0	0	0	1	*1*	15	10	2	0	*27*
Peak Hour	**15**	**0**	**2**	**2**	***19***	**0**	**0**	**0**	**1**	***1***	**7**	**6**	**0**	**0**	***13***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	NB 101 Ramps Eastbound				Mobray Way Westbound				Kern St Northbound				Kern 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	0	0	3	0	0	0	0	0	3	1	0	0	0	0	0	7	0
4:15 PM	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	0
4:30 PM	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:45 PM	**0**	**1**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	20
5:00 PM	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**6**	**19**
5:15 PM	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	7	19
5:30 PM	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4	21
5:45 PM	0	0	0	5	0	0	0	0	0	2	0	0	0	0	0	0	7	24
Count Total	0	1	0	33	0	0	0	0	0	6	2	0	0	0	1	1	44	0
Peak Hour	**0**	**1**	**0**	**14**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**1**	**1**	**19**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	NB 101 Ramps Eastbound			Mobray Way Westbound			Kern St Northbound			Kern St Southbound			15-min Total	Rolling One Hour
	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**	**1**	**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	0	0	0	0	1	0	1	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

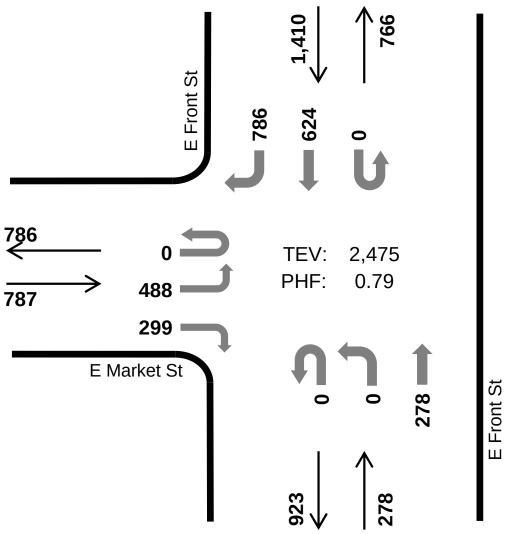
Deon Fouche: 415 - 757 - 7714

deon.fouche@idaxdata.com

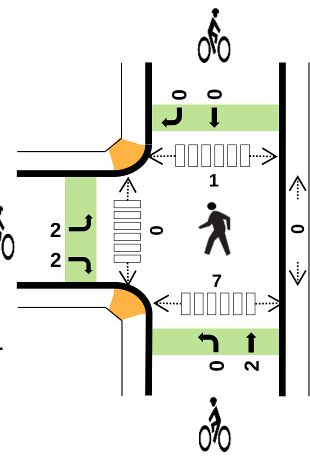
E Front St
E Market St

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour



	HV %:	PHF
EB	3.4%	0.84
WB	-	-
NB	0.7%	0.77
SB	2.1%	0.74
TOTAL	2.4%	0.79



Two-Hour Count Summaries

Interval Start	E Market St Eastbound UT	LT	TH	RT	0 Westbound UT	LT	TH	RT	E Front St Northbound UT	LT	TH	RT	E Front St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	81	0	40	0	0	0	0	0	0	32	0	0	0	71	123	347	0
7:15 AM	0	90	0	47	0	0	0	0	0	0	51	0	0	0	114	118	420	0
7:30 AM	**0**	**108**	**0**	**63**	**0**	**0**	**0**	**0**	**0**	**0**	**51**	**0**	**0**	**0**	**132**	**215**	**569**	0
7:45 AM	**0**	**139**	**0**	**96**	**0**	**0**	**0**	**0**	**0**	**0**	**69**	**0**	**0**	**0**	**215**	**262**	**781**	2,117
8:00 AM	**0**	**127**	**0**	**69**	**0**	**0**	**0**	**0**	**0**	**0**	**68**	**0**	**0**	**0**	**153**	**151**	**568**	2,338
8:15 AM	**0**	**114**	**0**	**71**	**0**	**0**	**0**	**0**	**0**	**0**	**90**	**0**	**0**	**0**	**124**	**158**	**557**	**2,475**
8:30 AM	0	93	0	57	0	0	0	0	0	0	70	0	0	0	113	131	464	2,370
8:45 AM	0	96	0	50	0	0	0	0	0	0	76	0	0	0	106	138	466	2,055
Count Total	0	848	0	493	0	0	0	0	0	0	507	0	0	0	1,028	1,296	4,172	0
Peak Hour All	**0**	**488**	**0**	**299**	**0**	**0**	**0**	**0**	**0**	**0**	**278**	**0**	**0**	**0**	**624**	**786**	**2,475**	**0**
HV	**0**	**24**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**5**	**25**	**59**	**0**
HV%	**-**	**5%**	**-**	**1%**	**-**	**-**	**-**	**-**	**-**	**-**	**1%**	**-**	**-**	**-**	**1%**	**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
7:00 AM	10	0	3	5	*18*	0	0	0	0	*0*	0	0	0	5	*5*
7:15 AM	7	0	1	3	*11*	1	0	0	0	*1*	0	0	0	4	*4*
7:30 AM	**11**	**0**	**2**	**8**	***21***	**0**	**0**	**2**	**0**	***2***	**0**	**0**	**0**	**1**	*1*
7:45 AM	**3**	**0**	**0**	**9**	***12***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**1**	**3**	*4*
8:00 AM	**5**	**0**	**0**	**6**	***11***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**1**	*1*
8:15 AM	**8**	**0**	**0**	**7**	***15***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**2**	*2*
8:30 AM	13	0	3	9	*25*	2	0	0	0	*2*	0	1	0	3	*4*
8:45 AM	10	0	5	8	*23*	0	0	0	0	*0*	0	0	0	1	*1*
Count Total	67	0	14	55	*136*	7	0	2	0	*9*	0	1	1	20	*22*
Peak Hr	**27**	**0**	**2**	**30**	***59***	**4**	**0**	**2**	**0**	***6***	**0**	**0**	**1**	**7**	*8*

Deon Fouche: 415 - 757 - 7714
deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				0				E Front St				E Front 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	6	0	4	0	0	0	0	0	0	3	0	0	0	0	5	18	0
7:15 AM	0	4	0	3	0	0	0	0	0	0	1	0	0	0	0	3	11	0
7:30 AM	**0**	**10**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**2**	**6**	**21**	0
7:45 AM	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**7**	**12**	62
8:00 AM	**0**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**11**	55
8:15 AM	**0**	**7**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**15**	**59**
8:30 AM	0	7	0	6	0	0	0	0	0	0	3	0	0	0	1	8	25	63
8:45 AM	0	4	0	6	0	0	0	0	0	0	5	0	0	0	1	7	23	74
Count Total	0	45	0	22	0	0	0	0	0	0	14	0	0	0	7	48	136	0
Peak Hour	**0**	**24**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**5**	**25**	**59**	**0**

Two-Hour Count Summaries - Bikes

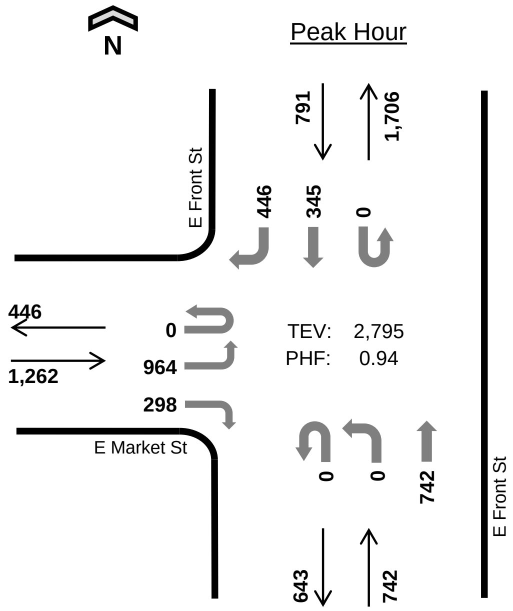
Interval Start	E Market St			0			E Front St			E Front St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	0
7:45 AM	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	5
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	5
8:15 AM	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**6**
8:30 AM	1	0	1	0	0	0	0	0	0	0	0	0	2	6
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	3	0	4	0	0	0	0	2	0	0	0	0	9	0
Peak Hour	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**6**	**0**

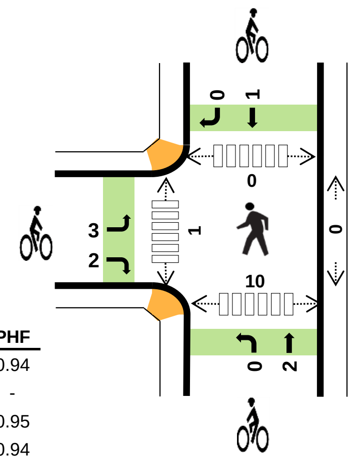
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

E Front St
E Market St

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM





	HV %:	PHF
EB	2.9%	0.94
WB	-	-
NB	0.4%	0.95
SB	1.8%	0.94
TOTAL	1.9%	0.94

Two-Hour Count Summaries

Interval Start		E Market St				0				E Front St				E Front 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	255	0	71	0	0	0	0	0	0	151	0	0	0	100	111	688	0
4:15 PM		0	238	0	71	0	0	0	0	0	0	154	0	0	0	119	136	718	0
4:30 PM		0	235	0	81	0	0	0	0	0	0	168	0	0	0	90	101	675	0
4:45 PM		**0**	**209**	**0**	**56**	**0**	**0**	**0**	**0**	**0**	**0**	**189**	**0**	**0**	**0**	**92**	**119**	**665**	2,746
5:00 PM		**0**	**258**	**0**	**70**	**0**	**0**	**0**	**0**	**0**	**0**	**180**	**0**	**0**	**0**	**87**	**108**	**703**	2,761
5:15 PM		**0**	**255**	**0**	**82**	**0**	**0**	**0**	**0**	**0**	**0**	**195**	**0**	**0**	**0**	**84**	**124**	**740**	2,783
5:30 PM		**0**	**242**	**0**	**90**	**0**	**0**	**0**	**0**	**0**	**0**	**178**	**0**	**0**	**0**	**82**	**95**	**687**	**2,795**
5:45 PM		0	173	0	61	0	0	0	0	0	0	106	0	0	0	78	116	534	2,664
Count Total		0	1,865	0	582	0	0	0	0	0	0	1,321	0	0	0	732	910	5,410	0
Peak Hour	**All**	**0**	**964**	**0**	**298**	**0**	**0**	**0**	**0**	**0**	**0**	**742**	**0**	**0**	**0**	**345**	**446**	**2,795**	**0**
	HV	**0**	**17**	**0**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**11**	**53**	**0**
	HV%	**-**	**2%**	**-**	**6%**	**-**	**-**	**-**	**-**	**-**	**-**	**0%**	**-**	**-**	**-**	**1%**	**2%**	**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
4:00 PM	11	0	3	3	*17*	0	0	0	0	*0*	0	0	0	2	*2*
4:15 PM	9	0	1	9	*19*	1	0	0	0	*1*	0	3	0	3	*6*
4:30 PM	15	0	2	1	*18*	4	0	0	0	*4*	0	2	0	7	*9*
4:45 PM	**11**	**0**	**0**	**4**	***15***	**3**	**0**	**0**	**1**	***4***	**0**	**0**	**0**	**2**	*2*
5:00 PM	**11**	**0**	**1**	**1**	***13***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**0**	**1**	*1*
5:15 PM	**7**	**0**	**1**	**5**	***13***	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**0**	**5**	*6*
5:30 PM	**7**	**0**	**1**	**4**	***12***	**1**	**0**	**1**	**0**	***2***	**0**	**0**	**0**	**2**	*2*
5:45 PM	9	0	0	7	*16*	0	0	0	1	*1*	0	2	0	0	*2*
Count Total	80	0	9	34	*123*	10	0	2	2	*14*	0	8	0	22	*30*
Peak Hr	**36**	**0**	**3**	**14**	***53***	**5**	**0**	**2**	**1**	***8***	**0**	**1**	**0**	**10**	***11***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				0				E Front St				E Front 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	5	0	6	0	0	0	0	0	0	3	0	0	0	0	3	17	0
4:15 PM	0	8	0	1	0	0	0	0	0	0	1	0	0	0	2	7	19	0
4:30 PM	0	10	0	5	0	0	0	0	0	0	2	0	0	0	0	1	18	0
4:45 PM	**0**	**9**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**2**	**15**	69
5:00 PM	**0**	**4**	**0**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**13**	65
5:15 PM	**0**	**2**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**5**	**13**	59
5:30 PM	**0**	**2**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**3**	**12**	**53**
5:45 PM	0	5	0	4	0	0	0	0	0	0	0	0	0	0	0	7	16	54
Count Total	0	45	0	35	0	0	0	0	0	0	9	0	0	0	5	29	123	0
Peak Hour	**0**	**17**	**0**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**3**	**11**	**53**	**0**

Two-Hour Count Summaries - Bikes

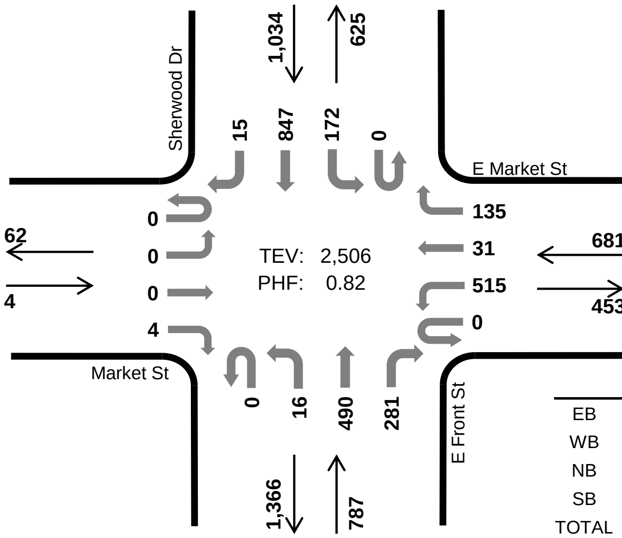
Interval Start	E Market St			0			E Front St			E Front St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	2	0	2	0	0	0	0	0	0	0	0	0	4	0
4:45 PM	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	9
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	10
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	10
5:30 PM	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**2**	**8**
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	5
Count Total	6	0	4	0	0	0	0	2	0	0	2	0	14	0
Peak Hour	**3**	**0**	**2**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**1**	**0**	**8**	**0**

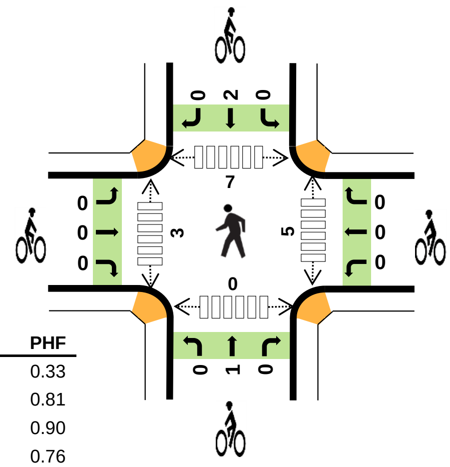
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

E Front St
Market St

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour





	HV %:	PHF
EB	0.0%	0.33
WB	3.8%	0.81
NB	2.2%	0.90
SB	1.1%	0.76
TOTAL	2.2%	0.82

Two-Hour Count Summaries

Interval Start		Market St				E Market St				E Front St				Sherwood Dr				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	4	0	73	6	16	0	4	59	42	0	34	111	3	352	0
7:15 AM		0	0	0	0	0	62	6	23	0	1	87	52	0	26	151	2	410	0
7:30 AM		**0**	**0**	**0**	**0**	**0**	**131**	**3**	**32**	**0**	**3**	**96**	**53**	**0**	**35**	**195**	**0**	**548**	0
7:45 AM		**0**	**0**	**0**	**1**	**0**	**159**	**4**	**47**	**0**	**4**	**134**	**80**	**0**	**55**	**281**	**3**	**768**	2,078
8:00 AM		**0**	**0**	**0**	**0**	**0**	**124**	**12**	**34**	**0**	**5**	**134**	**72**	**0**	**37**	**200**	**6**	**624**	2,350
8:15 AM		**0**	**0**	**0**	**3**	**0**	**101**	**12**	**22**	**0**	**4**	**126**	**76**	**0**	**45**	**171**	**6**	**566**	**2,506**
8:30 AM		0	0	0	2	0	90	3	39	0	5	109	57	0	34	150	5	494	2,452
8:45 AM		0	0	0	0	0	82	6	39	0	6	106	66	0	49	160	3	517	2,201
Count Total		0	0	0	10	0	822	52	252	0	32	851	498	0	315	1,419	28	4,279	0
Peak Hour	**All**	**0**	**0**	**0**	**4**	**0**	**515**	**31**	**135**	**0**	**16**	**490**	**281**	**0**	**172**	**847**	**15**	**2,506**	**0**
	HV	**0**	**0**	**0**	**0**	**0**	**23**	**1**	**2**	**0**	**0**	**3**	**14**	**0**	**5**	**6**	**0**	**54**	**0**
	HV%	**-**	**-**	**-**	**0%**	**-**	**4%**	**3%**	**1%**	**-**	**0%**	**1%**	**5%**	**-**	**3%**	**1%**	**0%**	**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	5	3	*13*	0	0	0	0	*0*	2	0	3	0	*5*
7:15 AM	0	7	5	1	*13*	0	0	0	0	*0*	1	0	0	0	*1*
7:30 AM	**0**	**7**	**9**	**4**	***20***	**0**	**0**	**0**	**0**	***0***	**1**	**2**	**2**	**0**	*5*
7:45 AM	**0**	**5**	**1**	**4**	***10***	**0**	**0**	**0**	**2**	***2***	**3**	**0**	**1**	**0**	*4*
8:00 AM	**0**	**7**	**3**	**2**	***12***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**1**	**0**	*1*
8:15 AM	**0**	**7**	**4**	**1**	***12***	**0**	**0**	**0**	**0**	***0***	**1**	**1**	**3**	**0**	***5***
8:30 AM	0	10	8	1	*19*	0	0	0	1	*1*	3	2	3	0	*8*
8:45 AM	0	9	10	3	*22*	0	0	0	1	*1*	1	1	2	0	*4*
Count Total	0	57	45	19	*121*	0	0	1	4	*5*	12	6	15	0	*33*
Peak Hour	**0**	**26**	**17**	**11**	***54***	**0**	**0**	**1**	**2**	***3***	**5**	**3**	**7**	**0**	***15***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Market St				E Market St				E Front St				Sherwood Dr				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	1	1	3	0	3	0	0	13	0
7:15 AM	0	0	0	0	0	4	0	3	0	0	2	3	0	1	0	0	13	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**6**	**1**	**0**	**0**	**0**	**3**	**6**	**0**	**1**	**3**	**0**	**20**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**3**	**0**	**10**	56
8:00 AM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**1**	**0**	**0**	**0**	**3**	**0**	**2**	**0**	**0**	**12**	55
8:15 AM	**0**	**0**	**0**	**0**	**0**	**6**	**0**	**1**	**0**	**0**	**0**	**4**	**0**	**1**	**0**	**0**	**12**	**54**
8:30 AM	0	0	0	0	0	9	0	1	0	0	1	7	0	1	0	0	19	53
8:45 AM	0	0	0	0	0	7	0	2	0	0	7	3	0	2	1	0	22	65
Count Total	0	0	0	0	0	47	1	9	0	1	14	30	0	12	7	0	121	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**23**	**1**	**2**	**0**	**0**	**3**	**14**	**0**	**5**	**6**	**0**	**54**	**0**

Two-Hour Count Summaries - Bikes

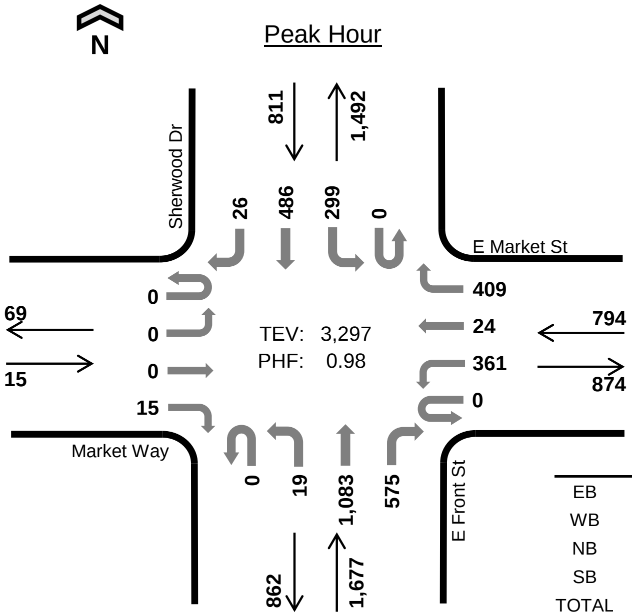
Interval Start	Market St			E Market St			E Front St			Sherwood Dr			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	2
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	3
8:15 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	4
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	3
Count Total	0	0	0	0	0	0	0	1	0	0	2	2	5	0
Peak Hour	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**0**	**3**	**0**

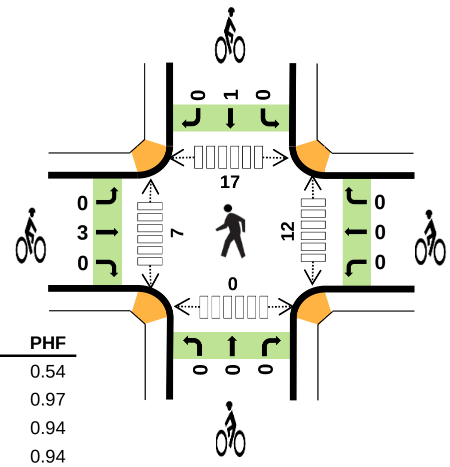
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

E Front St
Market Way

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:45 PM to 5:45 PM

Peak Hour





	HV %:	PHF
EB	6.7%	0.54
WB	2.0%	0.97
NB	1.1%	0.94
SB	0.2%	0.94
TOTAL	1.2%	0.98

Two-Hour Count Summaries

Interval Start	Market Way Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	E Front St Northbound UT	LT	TH	RT	Sherwood Dr Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	0	0	3	0	76	10	57	0	7	243	136	0	72	135	3	742	0
4:15 PM	0	0	0	7	0	105	4	85	0	5	235	154	0	84	149	7	835	0
4:30 PM	0	0	0	2	0	79	7	87	0	3	254	149	0	78	123	6	788	0
4:45 PM	**0**	**0**	**0**	**7**	**0**	**97**	**5**	**101**	**0**	**6**	**237**	**129**	**0**	**73**	**133**	**9**	**797**	3,162
5:00 PM	**0**	**0**	**0**	**1**	**0**	**92**	**8**	**94**	**0**	**6**	**297**	**129**	**0**	**83**	**114**	**7**	**831**	3,251
5:15 PM	**0**	**0**	**0**	**2**	**0**	**96**	**4**	**93**	**0**	**1**	**294**	**151**	**0**	**69**	**127**	**5**	**842**	3,258
5:30 PM	**0**	**0**	**0**	**5**	**0**	**76**	**7**	**121**	**0**	**6**	**255**	**166**	**0**	**74**	**112**	**5**	**827**	**3,297**
5:45 PM	0	0	0	3	0	95	8	72	0	2	221	98	0	62	113	3	677	3,177
Count Total	0	0	0	30	0	716	53	710	0	36	2,036	1,112	0	595	1,006	45	6,339	0
Peak Hour All	**0**	**0**	**0**	**15**	**0**	**361**	**24**	**409**	**0**	**19**	**1,083**	**575**	**0**	**299**	**486**	**26**	**3,297**	**0**
Peak Hour HV	**0**	**0**	**0**	**1**	**0**	**13**	**2**	**1**	**0**	**0**	**3**	**16**	**0**	**0**	**2**	**0**	**38**	**0**
Peak Hour HV%	**-**	**-**	**-**	**7%**	**-**	**4%**	**8%**	**0%**	**-**	**0%**	**0%**	**3%**	**-**	**0%**	**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	0	5	6	0	*11*	0	0	0	2	*2*	0	1	1	0	*2*
4:15 PM	0	7	8	2	*17*	3	0	0	1	*4*	1	3	1	0	*5*
4:30 PM	0	3	14	1	*18*	0	0	0	1	*1*	3	0	4	0	*7*
4:45 PM	**0**	**3**	**5**	**1**	***9***	**1**	**0**	**0**	**1**	***2***	**1**	**3**	**5**	**0**	*9*
5:00 PM	**0**	**4**	**5**	**1**	***10***	**0**	**0**	**0**	**0**	***0***	**2**	**4**	**4**	**0**	*10*
5:15 PM	**0**	**5**	**5**	**0**	***10***	**2**	**0**	**0**	**0**	***2***	**3**	**0**	**8**	**0**	*11*
5:30 PM	**1**	**4**	**4**	**0**	***9***	**0**	**0**	**0**	**0**	***0***	**6**	**0**	**0**	**0**	***6***
5:45 PM	0	7	4	1	*12*	0	0	0	1	*1*	1	3	6	0	*10*
Count Total	1	38	51	6	*96*	6	0	0	6	*12*	17	14	29	0	*60*
Peak Hour	**1**	**16**	**19**	**2**	***38***	**3**	**0**	**0**	**1**	***4***	**12**	**7**	**17**	**0**	***36***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	Market Way				E Market St				E Front St				Sherwood Dr				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	4	0	1	0	0	2	4	0	0	0	0	11	0
4:15 PM	0	0	0	0	0	6	0	1	0	0	1	7	0	2	0	0	17	0
4:30 PM	0	0	0	0	0	1	0	2	0	1	1	12	0	1	0	0	18	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**0**	**9**	55
5:00 PM	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**1**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**0**	**10**	54
5:15 PM	**0**	**0**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**0**	**0**	**10**	47
5:30 PM	**0**	**0**	**0**	**1**	**0**	**3**	**1**	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**9**	**38**
5:45 PM	0	0	0	0	0	6	0	1	0	0	0	4	0	1	0	0	12	41
Count Total	0	0	0	1	0	30	2	6	0	1	7	43	0	4	2	0	96	0
Peak Hour	**0**	**0**	**0**	**1**	**0**	**13**	**2**	**1**	**0**	**0**	**3**	**16**	**0**	**0**	**2**	**0**	**38**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	Market Way			E Market St			E Front St			Sherwood Dr			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	1	1	0	2	0
4:15 PM	0	3	0	0	0	0	0	0	0	0	1	0	4	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	0	1	0
4:45 PM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	9
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7
5:15 PM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	5
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	3
Count Total	0	6	0	0	0	0	0	0	0	2	4	0	12	0
Peak Hour	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**4**	**0**

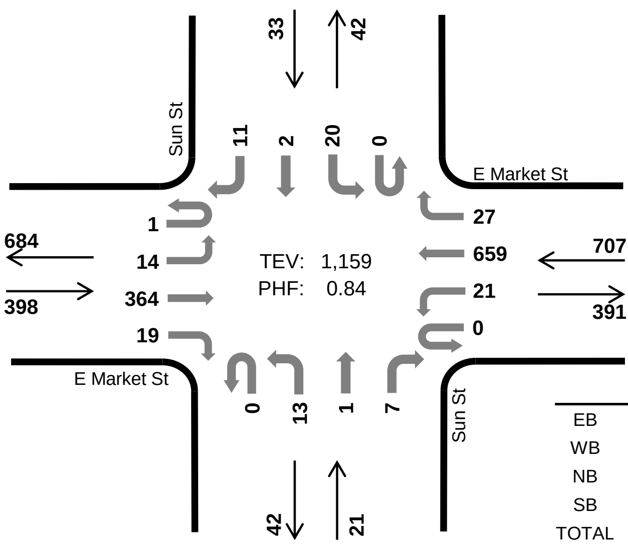
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

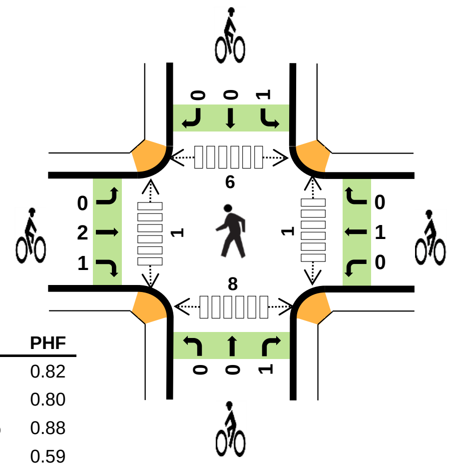
Sun St
E Market St

idax

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour





	HV %:	PHF
EB	5.5%	0.82
WB	3.1%	0.80
NB	14.3%	0.88
SB	0.0%	0.59
TOTAL	4.1%	0.84

Two-Hour Count Summaries

Interval Start		E Market St Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	Sun St Northbound UT	LT	TH	RT	Sun St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM		0	1	65	5	0	1	105	2	0	4	0	1	0	6	0	3	193	0
7:15 AM		0	0	66	2	0	1	84	10	0	4	0	2	0	2	0	0	171	0
7:30 AM		**1**	**1**	**70**	**4**	**0**	**4**	**168**	**5**	**0**	**2**	**0**	**2**	**0**	**3**	**0**	**1**	**261**	0
7:45 AM		**0**	**1**	**101**	**5**	**0**	**7**	**208**	**7**	**0**	**3**	**0**	**3**	**0**	**5**	**0**	**4**	**344**	969
8:00 AM		**0**	**6**	**81**	**6**	**0**	**6**	**151**	**6**	**0**	**4**	**0**	**2**	**0**	**4**	**1**	**1**	**268**	1,044
8:15 AM		**0**	**6**	**112**	**4**	**0**	**4**	**132**	**9**	**0**	**4**	**1**	**0**	**0**	**8**	**1**	**5**	**286**	**1,159**
8:30 AM		0	1	76	8	0	6	127	6	0	3	0	5	0	3	1	3	239	1,137
8:45 AM		0	2	91	6	0	7	110	5	0	4	2	6	0	4	0	3	240	1,033
Count Total		1	18	662	40	0	36	1,085	50	0	28	3	21	0	35	3	20	2,002	0
Peak Hour	**All**	**1**	**14**	**364**	**19**	**0**	**21**	**659**	**27**	**0**	**13**	**1**	**7**	**0**	**20**	**2**	**11**	**1,159**	**0**
	HV	**0**	**0**	**20**	**2**	**0**	**0**	**20**	**2**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**47**	**0**
	HV%	**0%**	**0%**	**5%**	**11%**	**-**	**0%**	**3%**	**7%**	**-**	**15%**	**0%**	**14%**	**-**	**0%**	**0%**	**0%**	**4%**	**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	2	4	0	*9*	0	1	0	0	*1*	0	0	5	0	*5*
7:15 AM	6	5	1	0	*12*	0	1	1	1	*3*	0	0	1	1	*2*
7:30 AM	**5**	**5**	**0**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**1**	**3**	*5*
7:45 AM	**5**	**4**	**0**	**0**	***9***	**1**	**1**	**1**	**0**	***3***	**0**	**0**	**1**	**1**	*2*
8:00 AM	**6**	**6**	**2**	**0**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**2**	**1**	*4*
8:15 AM	**6**	**7**	**1**	**0**	***14***	**2**	**0**	**0**	**1**	***3***	**0**	**0**	**2**	**3**	***5***
8:30 AM	6	7	1	0	*14*	1	1	0	0	*2*	0	0	4	2	*6*
8:45 AM	5	8	2	0	*15*	5	2	1	0	*8*	0	0	3	0	*3*
Count Total	42	44	11	0	*97*	9	6	3	2	*20*	1	1	19	11	*32*
Peak Hour	**22**	**22**	**3**	**0**	***47***	**3**	**1**	**1**	**1**	***6***	**1**	**1**	**6**	**8**	***16***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				Sun St				Sun 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	3	0	0	0	2	0	0	3	0	1	0	0	0	0	9	0
7:15 AM	0	0	6	0	0	0	4	1	0	1	0	0	0	0	0	0	12	0
7:30 AM	**0**	**0**	**5**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	0
7:45 AM	**0**	**0**	**4**	**1**	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	40
8:00 AM	**0**	**0**	**5**	**1**	**0**	**0**	**6**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**14**	45
8:15 AM	**0**	**0**	**6**	**0**	**0**	**0**	**7**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**47**
8:30 AM	0	0	5	1	0	0	7	0	0	1	0	0	0	0	0	0	14	51
8:45 AM	0	0	5	0	0	0	8	0	0	1	0	1	0	0	0	0	15	57
Count Total	0	0	39	3	0	0	41	3	0	8	0	3	0	0	0	0	97	0
Peak Hour	**0**	**0**	**20**	**2**	**0**	**0**	**20**	**2**	**0**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**47**	**0**

Two-Hour Count Summaries - Bikes

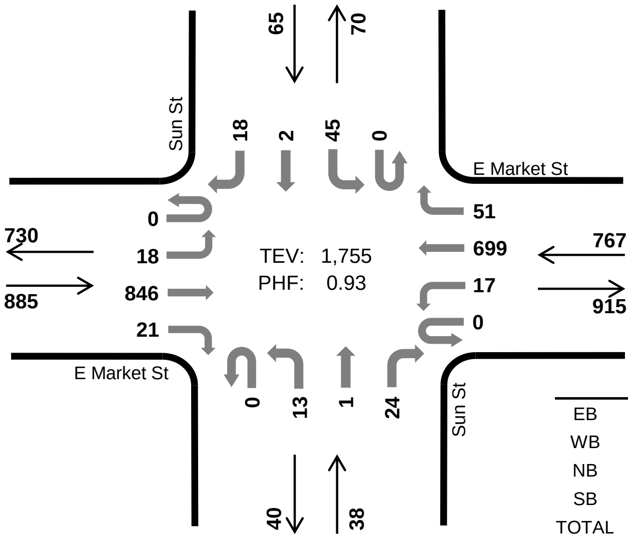
Interval Start	E Market St			E Market St			Sun St			Sun St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	1	0	1	0	0	0	0	1	3	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	7
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	6
8:15 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**3**	**6**
8:30 AM	0	1	0	0	1	0	0	0	0	0	0	0	2	8
8:45 AM	0	5	0	0	2	0	0	1	0	0	0	0	8	13
Count Total	0	8	1	0	5	1	1	1	1	1	0	1	20	0
Peak Hour	**0**	**2**	**1**	**0**	**1**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**6**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

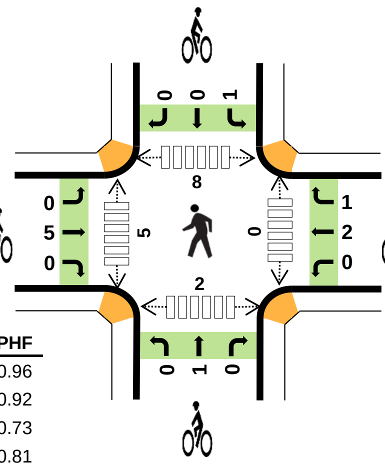
Sun St
E Market St

Date: 06/02/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:15 PM to 5:15 PM

Peak Hour



	HV %:	PHF
EB	2.6%	0.96
WB	2.1%	0.92
NB	0.0%	0.73
SB	0.0%	0.81
TOTAL	2.2%	0.93



Two-Hour Count Summaries

Interval Start	E Market St Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	Sun St Northbound UT	LT	TH	RT	Sun St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	5	189	9	0	7	143	13	0	3	0	5	0	9	1	2	386	0
4:15 PM	**0**	**3**	**197**	**8**	**0**	**3**	**173**	**15**	**0**	**6**	**1**	**6**	**0**	**10**	**0**	**4**	**426**	0
4:30 PM	**0**	**3**	**214**	**6**	**0**	**4**	**175**	**13**	**0**	**1**	**0**	**4**	**0**	**10**	**2**	**1**	**433**	0
4:45 PM	**0**	**4**	**215**	**4**	**0**	**8**	**156**	**11**	**0**	**2**	**0**	**6**	**0**	**16**	**0**	**4**	**426**	1,671
5:00 PM	**0**	**8**	**220**	**3**	**0**	**2**	**195**	**12**	**0**	**4**	**0**	**8**	**0**	**9**	**0**	**9**	**470**	**1,755**
5:15 PM	0	5	180	1	0	3	177	13	0	0	0	1	0	19	0	2	401	1,730
5:30 PM	0	1	210	2	0	3	161	15	0	0	0	3	0	8	2	3	408	1,705
5:45 PM	0	0	238	1	0	1	169	16	0	1	1	2	0	9	0	4	442	1,721
Count Total	0	29	1,663	34	0	31	1,349	108	0	17	2	35	0	90	5	29	3,392	0
Peak Hour All	**0**	**18**	**846**	**21**	**0**	**17**	**699**	**51**	**0**	**13**	**1**	**24**	**0**	**45**	**2**	**18**	**1,755**	**0**
Peak Hour HV	**0**	**1**	**22**	**0**	**0**	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**39**	**0**
Peak Hour HV%	**-**	**6%**	**3%**	**0%**	**-**	**0%**	**2%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**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	2	8	0	0	*10*	1	3	0	0	*4*	0	0	4	2	*6*
4:15 PM	**6**	**2**	**0**	**0**	***8***	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**3**	**0**	*3*
4:30 PM	**6**	**9**	**0**	**0**	***15***	**2**	**1**	**1**	**0**	***4***	**0**	**4**	**1**	**0**	*5*
4:45 PM	**5**	**2**	**0**	**0**	***7***	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**2**	**1**	*4*
5:00 PM	**6**	**3**	**0**	**0**	***9***	**2**	**1**	**0**	**0**	***3***	**0**	**0**	**2**	**1**	***3***
5:15 PM	9	2	0	0	*11*	1	1	0	3	*5*	0	2	2	0	*4*
5:30 PM	3	3	0	0	*6*	1	0	0	1	*2*	0	1	2	1	*4*
5:45 PM	5	3	0	0	*8*	2	1	0	0	*3*	0	1	2	0	*3*
Count Total	42	32	0	0	*74*	10	8	1	5	*24*	0	9	18	5	*32*
Peak Hour	**23**	**16**	**0**	**0**	***39***	**5**	**3**	**1**	**1**	***10***	**0**	**5**	**8**	**2**	***15***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				Sun St				Sun 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	8	0	0	0	0	0	0	0	0	0	10	0
4:15 PM	**0**	**0**	**6**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	0
4:30 PM	**0**	**0**	**6**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	0
4:45 PM	**0**	**1**	**4**	**0**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	40
5:00 PM	**0**	**0**	**6**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**39**
5:15 PM	0	0	9	0	0	0	2	0	0	0	0	0	0	0	0	0	11	42
5:30 PM	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0	0	6	33
5:45 PM	0	0	5	0	0	0	3	0	0	0	0	0	0	0	0	0	8	34
Count Total	0	1	41	0	0	0	32	0	0	0	0	0	0	0	0	0	74	0
Peak Hour	**0**	**1**	**22**	**0**	**0**	**0**	**16**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**39**	**0**

Two-Hour Count Summaries - Bikes

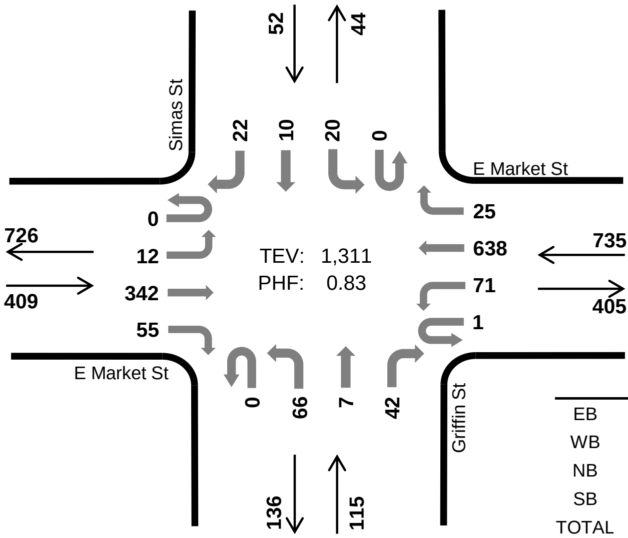
Interval Start	E Market St			E Market St			Sun St			Sun St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
4:00 PM	0	1	0	0	2	1	0	0	0	0	0	0	4	0
4:15 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	0
4:30 PM	**0**	**2**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**4**	0
4:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	11
5:00 PM	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**10**
5:15 PM	0	1	0	0	1	0	0	0	0	1	0	2	5	13
5:30 PM	0	1	0	0	0	0	0	0	0	0	0	1	2	11
5:45 PM	0	1	1	0	1	0	0	0	0	0	0	0	3	13
Count Total	0	9	1	0	6	2	0	1	0	2	0	3	24	0
Peak Hour	**0**	**5**	**0**	**0**	**2**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**10**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

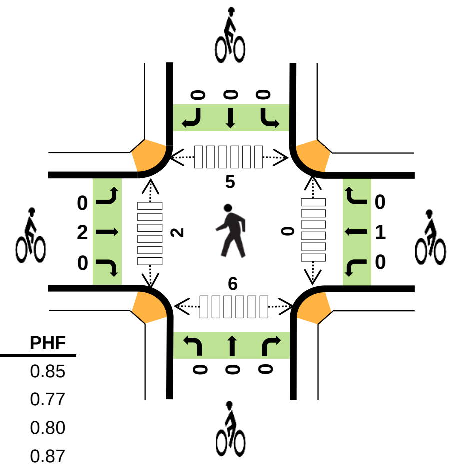
Griffin St
E Market St

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour



	HV %:	PHF
EB	5.6%	0.85
WB	4.1%	0.77
NB	7.0%	0.80
SB	3.8%	0.87
TOTAL	4.8%	0.83



Two-Hour Count Summaries

Interval Start	E Market St Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	Griffin St Northbound UT	LT	TH	RT	Simas St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	3	57	9	0	4	98	3	0	9	0	8	0	5	1	3	200	0
7:15 AM	0	4	60	11	0	12	86	7	0	12	0	5	0	5	2	3	207	0
7:30 AM	**0**	**1**	**75**	**6**	**1**	**12**	**161**	**5**	**0**	**21**	**1**	**9**	**0**	**5**	**3**	**6**	**306**	0
7:45 AM	**0**	**2**	**90**	**23**	**0**	**23**	**208**	**9**	**0**	**13**	**0**	**11**	**0**	**6**	**3**	**6**	**394**	1,107
8:00 AM	**0**	**3**	**77**	**11**	**0**	**27**	**139**	**2**	**0**	**13**	**3**	**8**	**0**	**4**	**2**	**5**	**294**	1,201
8:15 AM	**0**	**6**	**100**	**15**	**0**	**9**	**130**	**9**	**0**	**19**	**3**	**14**	**0**	**5**	**2**	**5**	**317**	**1,311**
8:30 AM	0	1	66	9	0	18	116	6	0	20	0	11	0	10	5	9	271	1,276
8:45 AM	0	10	73	17	0	23	106	6	0	14	1	20	0	9	4	11	294	1,176
Count Total	0	30	598	101	1	128	1,044	47	0	121	8	86	0	49	22	48	2,283	0
Peak Hour All	**0**	**12**	**342**	**55**	**1**	**71**	**638**	**25**	**0**	**66**	**7**	**42**	**0**	**20**	**10**	**22**	**1,311**	**0**
Peak Hour HV	**0**	**1**	**20**	**2**	**0**	**6**	**24**	**0**	**0**	**3**	**0**	**5**	**0**	**1**	**0**	**1**	**63**	**0**
Peak Hour HV%	**-**	**8%**	**6%**	**4%**	**0%**	**8%**	**4%**	**0%**	**-**	**5%**	**0%**	**12%**	**-**	**5%**	**0%**	**5%**	**5%**	**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	10	4	1	0	*15*	0	1	0	0	*1*	0	0	7	1	*8*
7:15 AM	5	4	2	1	*12*	0	2	0	0	*2*	0	0	1	0	*1*
7:30 AM	**6**	**3**	**4**	**1**	***14***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**1**	**1**	*3*
7:45 AM	**4**	**6**	**3**	**0**	***13***	**0**	**1**	**0**	**0**	***1***	**0**	**1**	**2**	**1**	*4*
8:00 AM	**7**	**11**	**0**	**1**	***19***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**1**	**1**	*2*
8:15 AM	**6**	**10**	**1**	**0**	***17***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**1**	**3**	***4***
8:30 AM	6	9	2	0	*17*	0	1	0	0	*1*	0	0	4	2	*6*
8:45 AM	6	11	4	2	*23*	4	2	0	0	*6*	0	1	2	1	*4*
Count Total	50	58	17	5	*130*	6	7	0	0	*13*	0	3	19	10	*32*
Peak Hour	**23**	**30**	**8**	**2**	***63***	**2**	**1**	**0**	**0**	***3***	**0**	**2**	**5**	**6**	***13***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	Griffin St Northbound UT	LT	TH	RT	Simas St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	0	10	0	0	1	2	1	0	0	0	1	0	0	0	0	15	0
7:15 AM	0	0	5	0	0	0	4	0	0	1	0	1	0	0	1	0	12	0
7:30 AM	**0**	**0**	**6**	**0**	**0**	**0**	**3**	**0**	**0**	**2**	**0**	**2**	**0**	**1**	**0**	**0**	**14**	0
7:45 AM	**0**	**0**	**4**	**0**	**0**	**1**	**5**	**0**	**0**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**13**	54
8:00 AM	**0**	**1**	**5**	**1**	**0**	**3**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**19**	58
8:15 AM	**0**	**0**	**5**	**1**	**0**	**2**	**8**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**17**	**63**
8:30 AM	0	0	5	1	0	2	6	1	0	1	0	1	0	0	0	0	17	66
8:45 AM	0	1	5	0	0	2	9	0	0	1	0	3	0	1	0	1	23	76
Count Total	0	2	45	3	0	11	45	2	0	6	0	11	0	2	1	2	130	0
Peak Hour	**0**	**1**	**20**	**2**	**0**	**6**	**24**	**0**	**0**	**3**	**0**	**5**	**0**	**1**	**0**	**1**	**63**	**0**

Two-Hour Count Summaries - Bikes

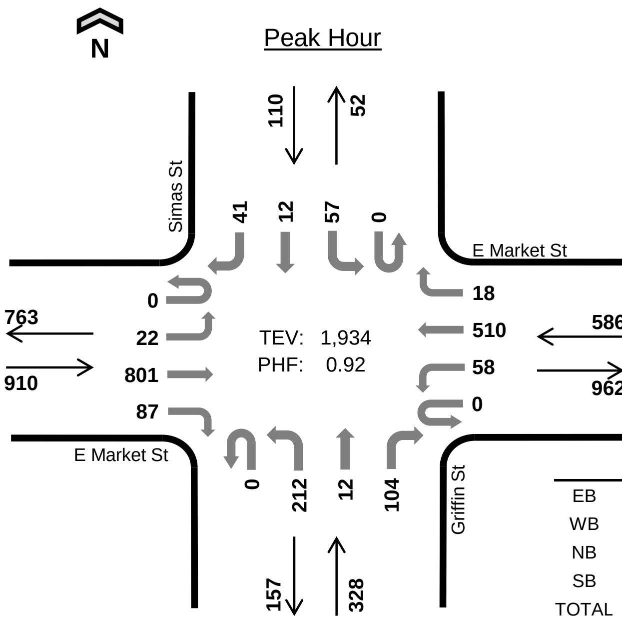
Interval Start	E Market St Eastbound LT	TH	RT	E Market St Westbound LT	TH	RT	Griffin St Northbound LT	TH	RT	Simas St Southbound LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	1	1	0	0	0	0	0	0	0	2	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	4
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	3
8:15 AM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**3**
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	4
8:45 AM	0	3	1	0	2	0	0	0	0	0	0	0	6	9
Count Total	0	5	1	1	5	1	0	0	0	0	0	0	13	0
Peak Hour	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

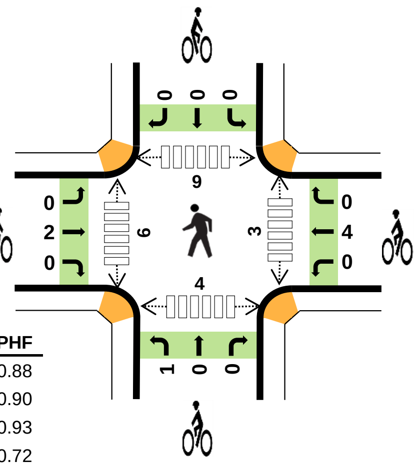
Griffin St
E Market St

Date:	06/05/2017
Count Period:	4:00 PM to 6:00 PM
Peak Hour:	4:45 PM to 5:45 PM

Peak Hour



	HV %:	PHF
EB	2.1%	0.88
WB	3.4%	0.90
NB	0.0%	0.93
SB	1.8%	0.72
TOTAL	2.1%	0.92



Two-Hour Count Summaries

Interval Start		E Market St Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	Griffin St Northbound UT	LT	TH	RT	Simas St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	5	169	32	0	20	113	5	0	50	3	23	0	12	3	7	442	0
4:15 PM		0	6	183	25	0	21	139	8	0	52	0	29	0	12	7	8	490	0
4:30 PM		0	5	221	16	0	14	123	6	0	44	1	29	0	13	5	5	482	0
4:45 PM		**0**	**4**	**186**	**19**	**0**	**11**	**118**	**3**	**0**	**54**	**0**	**33**	**0**	**12**	**3**	**10**	**453**	1,867
5:00 PM		**0**	**3**	**188**	**25**	**0**	**16**	**119**	**5**	**0**	**46**	**6**	**36**	**0**	**21**	**2**	**7**	**474**	1,899
5:15 PM		**0**	**6**	**200**	**20**	**0**	**12**	**146**	**5**	**0**	**55**	**1**	**22**	**0**	**6**	**1**	**10**	**484**	1,893
5:30 PM		**0**	**9**	**227**	**23**	**0**	**19**	**127**	**5**	**0**	**57**	**5**	**13**	**0**	**18**	**6**	**14**	**523**	**1,934**
5:45 PM		0	4	159	17	0	22	138	5	1	33	2	16	0	16	1	3	417	1,898
Count Total		0	42	1,533	177	0	135	1,023	42	1	391	18	201	0	110	28	64	3,765	0
Peak Hour	**All**	**0**	**22**	**801**	**87**	**0**	**58**	**510**	**18**	**0**	**212**	**12**	**104**	**0**	**57**	**12**	**41**	**1,934**	**0**
	HV	**0**	**1**	**18**	**0**	**0**	**1**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**41**	**0**
	HV%	**-**	**5%**	**2%**	**0%**	**-**	**2%**	**4%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**4%**	**0%**	**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	6	3	0	1	*10*	0	0	0	0	*0*	0	1	1	1	*3*
4:15 PM	8	8	0	0	*16*	1	1	0	0	*2*	0	3	4	1	*8*
4:30 PM	11	2	1	1	*15*	1	1	0	1	*3*	0	1	1	2	*4*
4:45 PM	**8**	**4**	**0**	**1**	***13***	**1**	**2**	**0**	**0**	***3***	**0**	**1**	**0**	**0**	*1*
5:00 PM	**6**	**6**	**0**	**1**	***13***	**0**	**0**	**1**	**0**	***1***	**1**	**3**	**4**	**0**	*8*
5:15 PM	**2**	**6**	**0**	**0**	***8***	**0**	**0**	**0**	**0**	***0***	**0**	**2**	**0**	**2**	*4*
5:30 PM	**3**	**4**	**0**	**0**	***7***	**1**	**2**	**0**	**0**	***3***	**2**	**0**	**5**	**2**	***9***
5:45 PM	6	8	0	0	*14*	0	0	0	0	*0*	0	3	2	0	*5*
Count Total	50	41	1	4	*96*	4	6	1	1	*12*	3	14	17	8	*42*
Peak Hour	**19**	**20**	**0**	**2**	***41***	**2**	**4**	**1**	**0**	***7***	**3**	**6**	**9**	**4**	***22***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				Griffin St				Simas 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	5	1	0	0	3	0	0	0	0	0	0	0	0	1	10	0
4:15 PM	0	0	7	1	0	1	7	0	0	0	0	0	0	0	0	0	16	0
4:30 PM	0	0	11	0	0	1	1	0	0	0	0	1	0	0	0	1	15	0
4:45 PM	**0**	**1**	**7**	**0**	**0**	**1**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**13**	54
5:00 PM	**0**	**0**	**6**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**13**	57
5:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	49
5:30 PM	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**41**
5:45 PM	0	0	6	0	0	0	8	0	0	0	0	0	0	0	0	0	14	42
Count Total	0	1	47	2	0	3	38	0	0	0	0	1	0	2	0	2	96	0
Peak Hour	**0**	**1**	**18**	**0**	**0**	**1**	**19**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**41**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Market St			E Market St			Griffin St			Simas 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	1	0	0	1	0	0	0	0	0	0	0	2	0
4:30 PM	0	1	0	0	1	0	0	0	0	0	1	0	3	0
4:45 PM	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	8
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	9
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	7
5:30 PM	**0**	**1**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**7**
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Count Total	0	4	0	0	6	0	1	0	0	0	1	0	12	0
Peak Hour	**0**	**2**	**0**	**0**	**4**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**7**	**0**

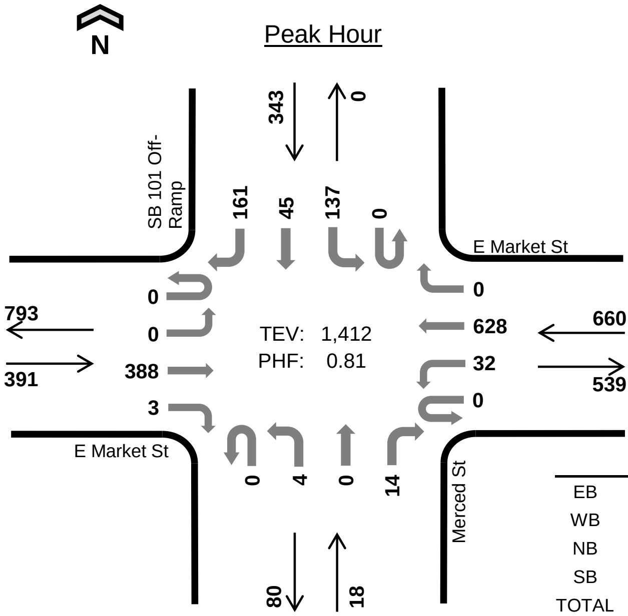
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Merced St
E Market St

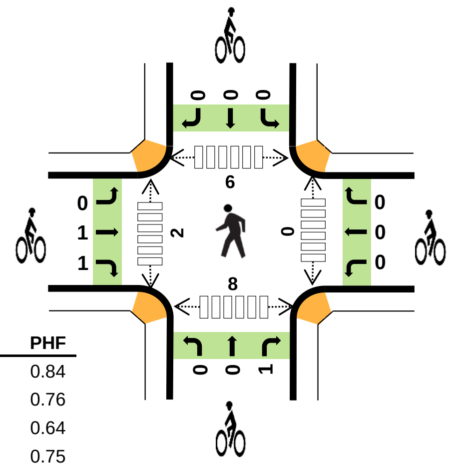
idax

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

Peak Hour



	HV %:	PHF
EB	6.4%	0.84
WB	3.9%	0.76
NB	0.0%	0.64
SB	1.2%	0.75
TOTAL	3.9%	0.81



Two-Hour Count Summaries

Interval Start	E Market St Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	Merced St Northbound UT	LT	TH	RT	SB 101 Off-Ramp Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	0	70	1	0	2	95	0	0	0	0	2	0	23	9	19	221	0
7:15 AM	0	0	60	0	0	4	87	0	0	1	0	2	0	20	5	22	201	0
7:30 AM	**0**	**0**	**90**	**0**	**0**	**5**	**156**	**0**	**0**	**2**	**0**	**3**	**0**	**18**	**12**	**27**	**313**	0
7:45 AM	**0**	**0**	**99**	**0**	**0**	**15**	**203**	**0**	**0**	**2**	**0**	**2**	**0**	**40**	**14**	**60**	**435**	1,170
8:00 AM	**0**	**0**	**84**	**2**	**0**	**4**	**152**	**0**	**0**	**0**	**0**	**2**	**0**	**44**	**11**	**45**	**344**	1,293
8:15 AM	**0**	**0**	**115**	**1**	**0**	**8**	**117**	**0**	**0**	**0**	**0**	**7**	**0**	**35**	**8**	**29**	**320**	**1,412**
8:30 AM	0	0	88	2	0	5	126	0	0	0	0	6	0	37	3	27	294	1,393
8:45 AM	0	0	111	0	0	4	121	0	0	2	0	2	0	31	6	24	301	1,259
Count Total	0	0	717	6	0	47	1,057	0	0	7	0	26	0	248	68	253	2,429	0
Peak Hour All	**0**	**0**	**388**	**3**	**0**	**32**	**628**	**0**	**0**	**4**	**0**	**14**	**0**	**137**	**45**	**161**	**1,412**	**0**
Peak Hour HV	**0**	**0**	**25**	**0**	**0**	**0**	**26**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**55**	**0**
Peak Hour HV%	**-**	**-**	**6%**	**0%**	**-**	**0%**	**4%**	**-**	**-**	**0%**	**-**	**0%**	**-**	**1%**	**0%**	**2%**	**4%**	**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	8	2	0	3	*13*	0	4	0	0	*4*	0	0	1	0	*1*
7:15 AM	6	4	0	1	*11*	0	1	0	0	*1*	0	0	2	1	*3*
7:30 AM	**9**	**4**	**0**	**0**	***13***	**0**	**0**	**0**	**0**	***0***	**0**	**1**	**3**	**1**	*5*
7:45 AM	**6**	**6**	**0**	**0**	***12***	**1**	**0**	**0**	**0**	***1***	**0**	**1**	**1**	**4**	*6*
8:00 AM	**3**	**8**	**0**	**3**	***14***	**0**	**0**	**1**	**0**	***1***	**0**	**0**	**2**	**1**	*3*
8:15 AM	**7**	**8**	**0**	**1**	***16***	**1**	**0**	**0**	**0**	***1***	**0**	**0**	**0**	**2**	*2*
8:30 AM	5	6	0	2	*13*	0	0	0	0	*0*	0	0	3	1	*4*
8:45 AM	8	10	0	3	*21*	3	2	0	0	*5*	0	0	6	2	*8*
Count Total	52	48	0	13	*113*	5	7	1	0	*13*	0	2	18	12	*32*
Peak Hour	**25**	**26**	**0**	**4**	***55***	**2**	**0**	**1**	**0**	***3***	**0**	**2**	**6**	**8**	***16***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	Merced St Northbound UT	LT	TH	RT	SB 101 Off-Ramp Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	0	8	0	0	0	2	0	0	0	0	0	0	1	0	2	13	0
7:15 AM	0	0	6	0	0	0	4	0	0	0	0	0	0	1	0	0	11	0
7:30 AM	**0**	**0**	**9**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**13**	0
7:45 AM	**0**	**0**	**6**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	49
8:00 AM	**0**	**0**	**3**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**14**	50
8:15 AM	**0**	**0**	**7**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**16**	**55**
8:30 AM	0	0	5	0	0	0	6	0	0	0	0	0	0	1	0	1	13	55
8:45 AM	0	0	8	0	0	0	10	0	0	0	0	0	0	2	1	0	21	64
Count Total	0	0	52	0	0	0	48	0	0	0	0	0	0	6	1	6	113	0
Peak Hour	**0**	**0**	**25**	**0**	**0**	**0**	**26**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**3**	**55**	**0**

Two-Hour Count Summaries - Bikes

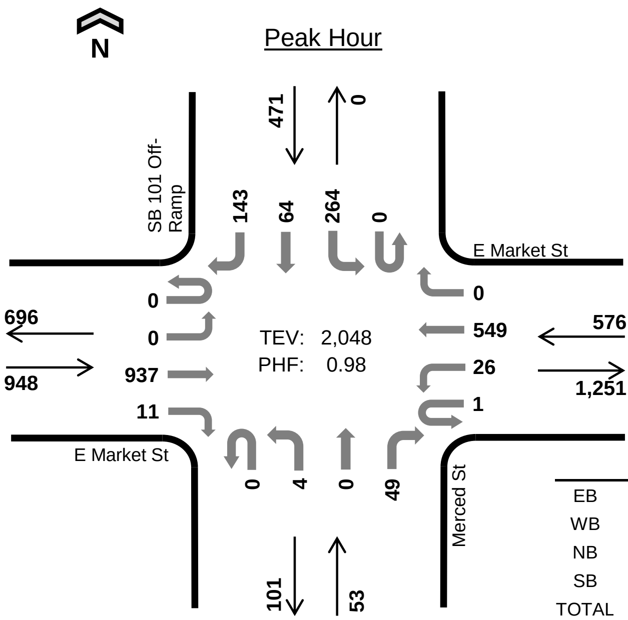
Interval Start	E Market St Eastbound LT	TH	RT	E Market St Westbound LT	TH	RT	Merced St Northbound LT	TH	RT	SB 101 Off-Ramp Southbound LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	0	0	0	4	0	0	0	0	0	0	0	4	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	6
8:00 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**1**	3
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:45 AM	0	3	0	0	2	0	0	0	0	0	0	0	5	7
Count Total	0	4	1	0	7	0	0	0	1	0	0	0	13	0
Peak Hour	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**3**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

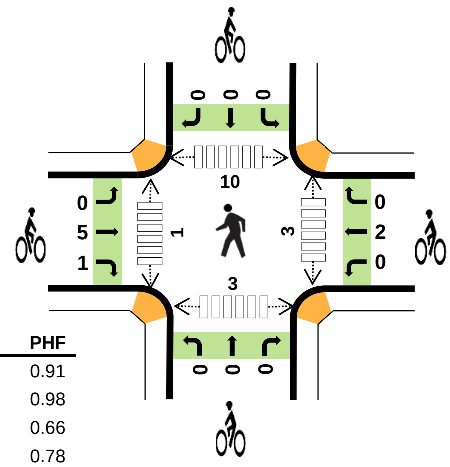
Merced St
E Market St

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

Peak Hour



	HV %:	PHF
EB	1.7%	0.91
WB	4.0%	0.98
NB	0.0%	0.66
SB	0.4%	0.78
TOTAL	2.0%	0.98



Two-Hour Count Summaries

Interval Start	E Market St Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	Merced St Northbound UT	LT	TH	RT	SB 101 Off-Ramp Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	0	224	5	0	11	117	0	0	2	0	13	0	62	6	44	484	0
4:15 PM	0	0	216	2	0	5	156	0	0	2	0	8	0	58	6	27	480	0
4:30 PM	0	0	261	5	0	7	119	0	0	0	0	10	0	56	10	36	504	0
4:45 PM	0	0	228	1	0	6	121	0	0	0	0	13	0	60	6	27	462	1,930
5:00 PM	**0**	**0**	**242**	**0**	**0**	**7**	**131**	**0**	**0**	**2**	**0**	**8**	**0**	**68**	**11**	**29**	**498**	1,944
5:15 PM	**0**	**0**	**229**	**5**	**0**	**5**	**142**	**0**	**0**	**1**	**0**	**19**	**0**	**59**	**14**	**31**	**505**	1,969
5:30 PM	**0**	**0**	**256**	**5**	**0**	**7**	**137**	**0**	**0**	**0**	**0**	**12**	**0**	**64**	**8**	**36**	**525**	1,990
5:45 PM	**0**	**0**	**210**	**1**	**1**	**7**	**139**	**0**	**0**	**1**	**0**	**10**	**0**	**73**	**31**	**47**	**520**	**2,048**
Count Total	0	0	1,866	24	1	55	1,062	0	0	8	0	93	0	500	92	277	3,978	0
Peak Hour All	**0**	**0**	**937**	**11**	**1**	**26**	**549**	**0**	**0**	**4**	**0**	**49**	**0**	**264**	**64**	**143**	**2,048**	**0**
HV	**0**	**0**	**16**	**0**	**0**	**0**	**23**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**41**	**0**
HV%	**-**	**-**	**2%**	**0%**	**0%**	**0%**	**4%**	**-**	**-**	**0%**	**-**	**0%**	**-**	**0%**	**0%**	**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
4:00 PM	5	4	0	1	*10*	0	0	0	0	*0*	0	0	3	1	*4*
4:15 PM	5	8	0	2	*15*	1	3	0	0	*4*	0	0	3	0	*3*
4:30 PM	9	2	0	3	*14*	0	3	0	0	*3*	0	0	1	1	*2*
4:45 PM	7	3	0	1	*11*	4	1	0	0	*5*	0	0	1	2	*3*
5:00 PM	**6**	**4**	**0**	**1**	***11***	**1**	**1**	**0**	**0**	***2***	**0**	**1**	**6**	**2**	*9*
5:15 PM	**2**	**6**	**0**	**1**	***9***	**1**	**0**	**0**	**0**	***1***	**3**	**0**	**2**	**1**	*6*
5:30 PM	**2**	**4**	**0**	**0**	***6***	**4**	**1**	**0**	**0**	***5***	**0**	**0**	**0**	**0**	*0*
5:45 PM	**6**	**9**	**0**	**0**	***15***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**2**	**0**	*2*
Count Total	42	40	0	9	*91*	11	9	0	0	*20*	3	1	18	7	*29*
Peak Hour	**16**	**23**	**0**	**2**	***41***	**6**	**2**	**0**	**0**	***8***	**3**	**1**	**10**	**3**	***17***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				Merced St				SB 101 Off-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	5	0	0	0	4	0	0	0	0	0	0	1	0	0	10	0
4:15 PM	0	0	5	0	0	0	8	0	0	0	0	0	0	1	0	1	15	0
4:30 PM	0	0	9	0	0	0	2	0	0	0	0	0	0	1	0	2	14	0
4:45 PM	0	0	7	0	0	0	3	0	0	0	0	0	0	0	0	1	11	50
5:00 PM	**0**	**0**	**6**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**11**	51
5:15 PM	**0**	**0**	**2**	**0**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**9**	45
5:30 PM	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	37
5:45 PM	**0**	**0**	**6**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**41**
Count Total	0	0	42	0	0	0	40	0	0	0	0	0	0	3	0	6	91	0
Peak Hour	**0**	**0**	**16**	**0**	**0**	**0**	**23**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**41**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Market St			E Market St			Merced St			SB 101 Off-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	1	0	1	2	0	0	0	0	0	0	0	4	0
4:30 PM	0	0	0	0	3	0	0	0	0	0	0	0	3	0
4:45 PM	0	4	0	0	1	0	0	0	0	0	0	0	5	12
5:00 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	14
5:15 PM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	11
5:30 PM	**0**	**4**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	13
5:45 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**
Count Total	0	10	1	1	8	0	0	0	0	0	0	0	20	0
Peak Hour	**0**	**5**	**1**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**

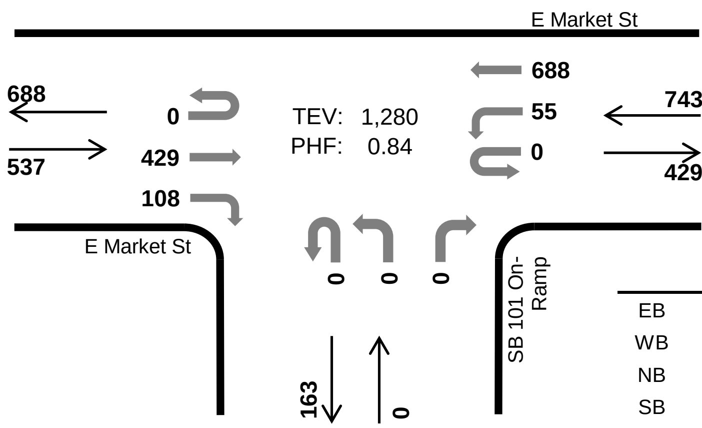
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

SB 101 On-Ramp
E Market St

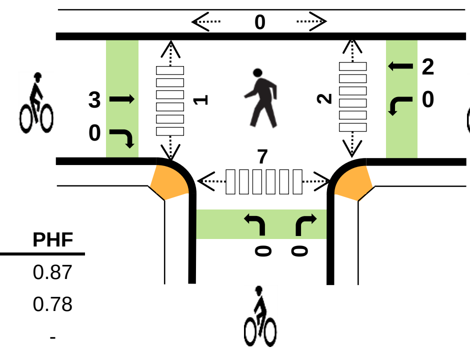
N

Peak Hour

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM



	HV %:	PHF
EB	4.7%	0.87
WB	3.6%	0.78
NB	-	-
SB	-	-
TOTAL	4.1%	0.84



Two-Hour Count Summaries

Interval Start	E Market St Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	SB 101 On-Ramp Northbound UT	LT	TH	RT	0 Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	0	81	14	0	20	101	0	0	0	0	0	0	0	0	0	216	0
7:15 AM	0	0	56	29	0	13	92	0	0	0	0	0	0	0	0	0	190	0
7:30 AM	**0**	**0**	**85**	**25**	**0**	**15**	**170**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**295**	0
7:45 AM	**0**	**0**	**111**	**32**	**0**	**17**	**220**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**380**	1,081
8:00 AM	**0**	**0**	**114**	**16**	**0**	**6**	**165**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**301**	1,166
8:15 AM	**0**	**0**	**119**	**35**	**0**	**17**	**133**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**304**	**1,280**
8:30 AM	0	0	100	25	0	7	130	0	0	0	0	0	0	0	0	0	262	1,247
8:45 AM	0	0	115	37	0	11	130	0	0	0	0	0	0	0	0	0	293	1,160
Count Total	0	0	781	213	0	106	1,141	0	0	0	0	0	0	0	0	0	2,241	0
Peak Hour All	**0**	**0**	**429**	**108**	**0**	**55**	**688**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,280**	**0**
HV	**0**	**0**	**12**	**13**	**0**	**1**	**26**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**52**	**0**
HV%	**-**	**-**	**3%**	**12%**	**-**	**2%**	**4%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**4%**	**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	8	2	0	0	*10*	0	4	0	0	*4*	0	0	0	0	*0*
7:15 AM	9	4	0	0	*13*	0	1	0	0	*1*	0	0	0	1	*1*
7:30 AM	**10**	**4**	**0**	**0**	***14***	**0**	**0**	**0**	**0**	***0***	**1**	**0**	**0**	**3**	*4*
7:45 AM	**6**	**6**	**0**	**0**	***12***	**2**	**1**	**0**	**0**	***3***	**0**	**0**	**0**	**1**	*1*
8:00 AM	**4**	**8**	**0**	**0**	***12***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**1**	*1*
8:15 AM	**5**	**9**	**0**	**0**	***14***	**1**	**0**	**0**	**0**	***1***	**1**	**1**	**0**	**2**	*4*
8:30 AM	6	6	0	0	*12*	0	1	0	0	*1*	0	0	0	1	*1*
8:45 AM	13	11	0	0	*24*	2	3	0	0	*5*	0	0	0	2	*2*
Count Total	61	50	0	0	*111*	5	11	0	0	*16*	2	1	0	11	*14*
Peak Hr	**25**	**27**	**0**	**0**	***52***	**3**	**2**	**0**	**0**	***5***	**2**	**1**	**0**	**7**	***10***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				SB 101 On-Ramp				0				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	5	3	0	0	2	0	0	0	0	0	0	0	0	0	10	0
7:15 AM	0	0	3	6	0	0	4	0	0	0	0	0	0	0	0	0	13	0
7:30 AM	**0**	**0**	**8**	**2**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	0
7:45 AM	**0**	**0**	**2**	**4**	**0**	**0**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	49
8:00 AM	**0**	**0**	**2**	**2**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	51
8:15 AM	**0**	**0**	**0**	**5**	**0**	**1**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**52**
8:30 AM	0	0	2	4	0	0	6	0	0	0	0	0	0	0	0	0	12	50
8:45 AM	0	0	6	7	0	1	10	0	0	0	0	0	0	0	0	0	24	62
Count Total	0	0	28	33	0	2	48	0	0	0	0	0	0	0	0	0	111	0
Peak Hour	**0**	**0**	**12**	**13**	**0**	**1**	**26**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**52**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Market St			E Market St			SB 101 On-Ramp			0			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	4	0	0	0	0	0	0	0	4	0
7:15 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	0
7:45 AM	**0**	**2**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	8
8:00 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	5
8:15 AM	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	6
8:45 AM	0	2	0	0	3	0	0	0	0	0	0	0	5	8
Count Total	0	5	0	0	11	0	0	0	0	0	0	0	16	0
Peak Hour	**0**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

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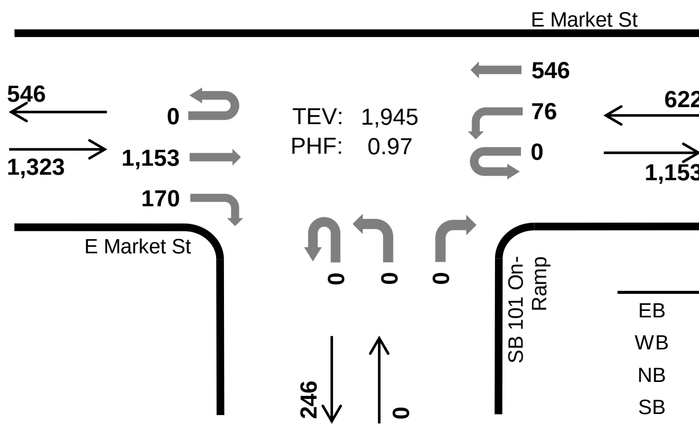
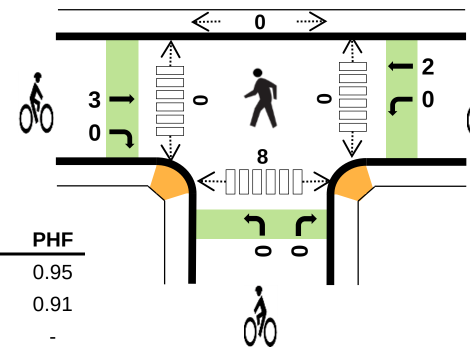
SB 101 On-Ramp
E Market St

N

Peak Hour

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM





	HV %:	PHF
EB	1.4%	0.95
WB	4.7%	0.91
NB	-	-
SB	-	-
TOTAL	2.4%	0.97

Two-Hour Count Summaries

Interval Start		E Market St Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	SB 101 On-Ramp Northbound UT	LT	TH	RT	0 Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	0	259	52	0	18	119	0	0	0	0	0	0	0	0	0	448	0
4:15 PM		0	0	257	41	0	24	153	0	0	0	0	0	0	0	0	0	475	0
4:30 PM		0	0	302	47	0	19	117	0	0	0	0	0	0	0	0	0	485	0
4:45 PM		0	0	269	42	0	20	123	0	0	0	0	0	0	0	0	0	454	1,862
5:00 PM		**0**	**0**	**289**	**55**	**0**	**17**	**127**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**488**	1,902
5:15 PM		**0**	**0**	**271**	**50**	**0**	**23**	**148**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**492**	1,919
5:30 PM		**0**	**0**	**311**	**38**	**0**	**21**	**133**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**503**	1,937
5:45 PM		**0**	**0**	**282**	**27**	**0**	**15**	**138**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**462**	**1,945**
Count Total		0	0	2,240	352	0	157	1,058	0	0	0	0	0	0	0	0	0	3,807	0
Peak Hour	**All**	**0**	**0**	**1,153**	**170**	**0**	**76**	**546**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1,945**	**0**
	HV	**0**	**0**	**6**	**12**	**0**	**2**	**27**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**47**	**0**
	HV%	**-**	**-**	**1%**	**7%**	**-**	**3%**	**5%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**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	8	3	0	0	*11*	0	0	0	0	*0*	0	0	0	0	*0*
4:15 PM	9	9	0	0	*18*	1	2	0	0	*3*	0	0	0	0	*0*
4:30 PM	12	1	0	0	*13*	1	3	0	0	*4*	0	0	0	0	*0*
4:45 PM	6	3	0	0	*9*	0	2	0	0	*2*	0	0	0	2	*2*
5:00 PM	**7**	**5**	**0**	**0**	***12***	**2**	**0**	**0**	**0**	***2***	**0**	**0**	**0**	**5**	*5*
5:15 PM	**2**	**8**	**0**	**0**	***10***	**0**	**0**	**0**	**0**	***0***	**0**	**0**	**0**	**2**	*2*
5:30 PM	**1**	**7**	**0**	**0**	***8***	**1**	**1**	**0**	**0**	***2***	**0**	**0**	**0**	**1**	*1*
5:45 PM	**8**	**9**	**0**	**0**	***17***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**0**	***0***
Count Total	53	45	0	0	*98*	5	9	0	0	*14*	0	0	0	10	*10*
Peak Hr	**18**	**29**	**0**	**0**	***47***	**3**	**2**	**0**	**0**	***5***	**0**	**0**	**0**	**8**	***8***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				SB 101 On-Ramp				0				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	5	3	0	0	3	0	0	0	0	0	0	0	0	0	11	0
4:15 PM	0	0	2	7	0	2	7	0	0	0	0	0	0	0	0	0	18	0
4:30 PM	0	0	2	10	0	0	1	0	0	0	0	0	0	0	0	0	13	0
4:45 PM	0	0	0	6	0	0	3	0	0	0	0	0	0	0	0	0	9	51
5:00 PM	**0**	**0**	**2**	**5**	**0**	**1**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**12**	52
5:15 PM	**0**	**0**	**0**	**2**	**0**	**0**	**8**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	44
5:30 PM	**0**	**0**	**0**	**1**	**0**	**1**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	39
5:45 PM	**0**	**0**	**4**	**4**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**17**	**47**
Count Total	0	0	15	38	0	4	41	0	0	0	0	0	0	0	0	0	98	0
Peak Hour	**0**	**0**	**6**	**12**	**0**	**2**	**27**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**47**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Market St			E Market St			SB 101 On-Ramp			0			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	1	0	0	2	0	0	0	0	0	0	0	3	0
4:30 PM	0	1	0	0	3	0	0	0	0	0	0	0	4	0
4:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	9
5:00 PM	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	11
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	8
5:30 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	6
5:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
Count Total	0	5	0	0	9	0	0	0	0	0	0	0	14	0
Peak Hour	**0**	**3**	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

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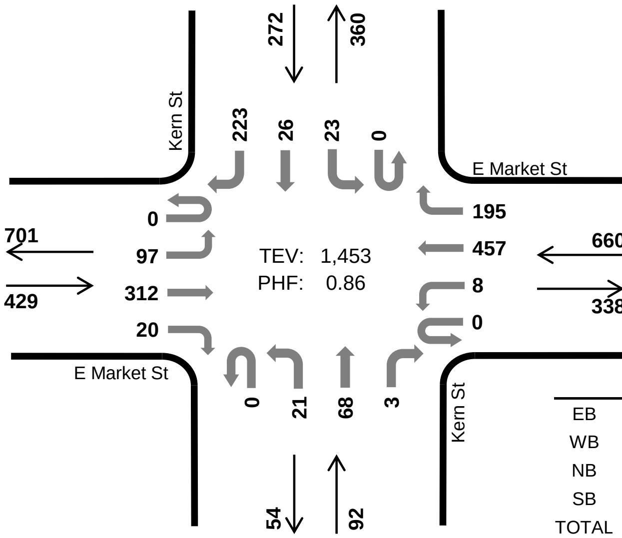
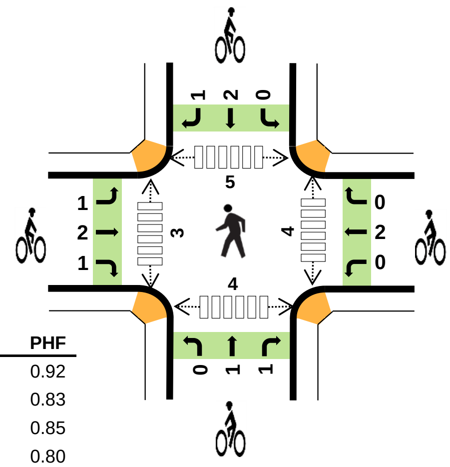
Kern St
E Market St

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:30 AM to 8:30 AM

N

Peak Hour





	HV %:	PHF
EB	3.0%	0.92
WB	1.4%	0.83
NB	0.0%	0.85
SB	5.5%	0.80
TOTAL	2.5%	0.86

Two-Hour Count Summaries

Interval Start		E Market St Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	Kern St Northbound UT	LT	TH	RT	Kern St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM		0	19	62	4	0	1	58	31	0	3	9	0	0	6	2	46	241	0
7:15 AM		0	18	34	5	0	2	73	50	0	10	6	0	0	5	1	39	243	0
7:30 AM		**0**	**22**	**58**	**3**	**0**	**0**	**120**	**38**	**0**	**6**	**15**	**0**	**0**	**6**	**8**	**53**	**329**	0
7:45 AM		**0**	**20**	**92**	**5**	**0**	**1**	**147**	**51**	**0**	**6**	**15**	**2**	**0**	**9**	**8**	**68**	**424**	1,237
8:00 AM		**0**	**26**	**80**	**7**	**0**	**4**	**117**	**66**	**0**	**3**	**18**	**0**	**0**	**3**	**3**	**56**	**383**	1,379
8:15 AM		**0**	**29**	**82**	**5**	**0**	**3**	**73**	**40**	**0**	**6**	**20**	**1**	**0**	**5**	**7**	**46**	**317**	**1,453**
8:30 AM		0	31	75	5	0	3	92	34	0	7	18	2	0	8	7	46	328	1,452
8:45 AM		0	35	71	4	0	1	75	40	0	3	30	2	0	8	6	47	322	1,350
Count Total		0	200	554	38	0	15	755	350	0	44	131	7	0	50	42	401	2,587	0
Peak Hour	**All**	**0**	**97**	**312**	**20**	**0**	**8**	**457**	**195**	**0**	**21**	**68**	**3**	**0**	**23**	**26**	**223**	**1,453**	**0**
	HV	**0**	**1**	**12**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**37**	**0**
	HV%	**-**	**1%**	**4%**	**0%**	**-**	**0%**	**2%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**0%**	**7%**	**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	7	0	0	1	*8*	0	0	0	1	*1*	0	0	0	0	*0*
7:15 AM	2	4	0	2	*8*	0	1	0	0	*1*	0	0	2	1	*3*
7:30 AM	**8**	**0**	**0**	**2**	***10***	**0**	**0**	**1**	**1**	***2***	**2**	**0**	**3**	**2**	*7*
7:45 AM	**1**	**0**	**0**	**6**	***7***	**2**	**1**	**1**	**0**	***4***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**2**	**5**	**0**	**2**	***9***	**0**	**1**	**0**	**1**	***2***	**1**	**0**	**1**	**2**	*4*
8:15 AM	**2**	**4**	**0**	**5**	***11***	**2**	**0**	**0**	**1**	***3***	**1**	**3**	**1**	**0**	***5***
8:30 AM	2	1	0	7	*10*	0	1	0	1	*2*	1	1	4	1	*7*
8:45 AM	5	1	0	10	*16*	1	1	1	0	*3*	0	0	2	0	*2*
Count Total	29	15	0	35	*79*	5	5	3	5	*18*	5	4	13	6	*28*
Peak Hour	**13**	**9**	**0**	**15**	***37***	**4**	**2**	**2**	**3**	***11***	**4**	**3**	**5**	**4**	***16***

Deon Fouche: 415 - 757 - 7714 deon.fouche@idaxdata.com

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St				E Market St				Kern St				Kern 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	2	5	0	0	0	0	0	0	0	0	0	0	0	0	1	8	0
7:15 AM	0	0	2	0	0	0	3	1	0	0	0	0	0	0	0	2	8	0
7:30 AM	**0**	**1**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**10**	0
7:45 AM	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**7**	33
8:00 AM	**0**	**0**	**2**	**0**	**0**	**0**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**9**	34
8:15 AM	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**11**	**37**
8:30 AM	0	2	0	0	0	0	1	0	0	0	0	0	0	0	0	7	10	37
8:45 AM	0	3	2	0	0	0	0	1	0	0	0	0	0	0	0	10	16	46
Count Total	0	8	21	0	0	0	13	2	0	0	0	0	0	0	0	35	79	0
Peak Hour	**0**	**1**	**12**	**0**	**0**	**0**	**9**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**15**	**37**	**0**

Two-Hour Count Summaries - Bikes

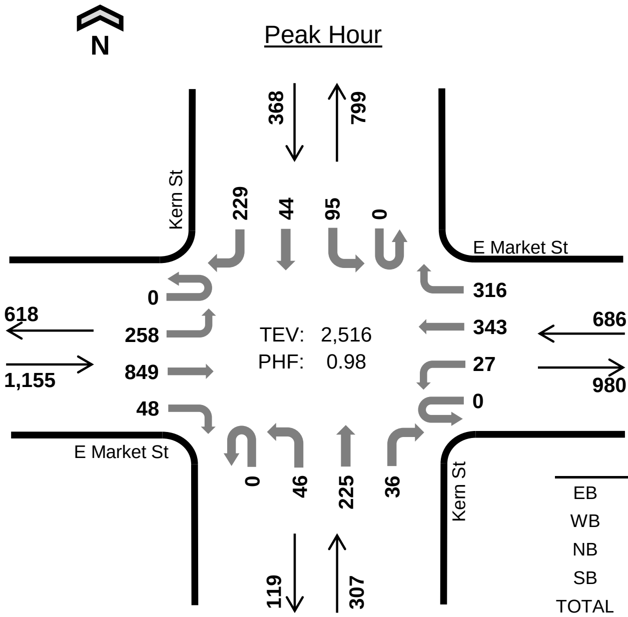
Interval Start	E Market St			E Market St			Kern St			Kern St			15-min Total	Rolling One Hour
	Eastbound			Westbound			Northbound			Southbound				
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	0
7:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
7:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**2**	0
7:45 AM	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**4**	8
8:00 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**2**	9
8:15 AM	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**11**
8:30 AM	0	0	0	0	1	0	0	0	0	0	0	1	2	11
8:45 AM	0	1	0	0	1	0	1	0	0	0	0	0	3	10
Count Total	1	3	1	0	4	1	1	1	1	0	2	3	18	0
Peak Hour	**1**	**2**	**1**	**0**	**2**	**0**	**0**	**1**	**1**	**0**	**2**	**1**	**11**	**0**

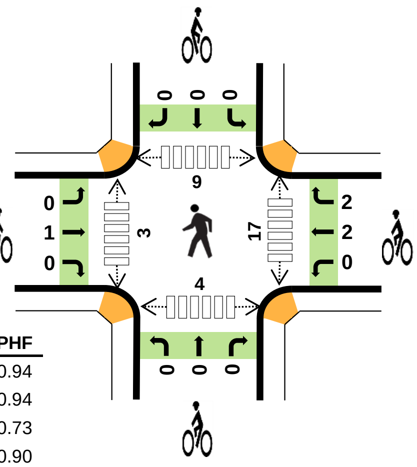
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Kern St
E Market St

Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 5:00 PM to 6:00 PM

Peak Hour





	HV %:	PHF
EB	0.3%	0.94
WB	0.6%	0.94
NB	0.0%	0.73
SB	6.8%	0.90
TOTAL	1.3%	0.98

Two-Hour Count Summaries

Interval Start		E Market St Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	Kern St Northbound UT	LT	TH	RT	Kern St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM		0	60	178	12	0	10	92	69	0	13	48	8	0	19	5	39	553	0
4:15 PM		0	65	184	12	0	3	101	79	0	6	43	11	0	18	11	56	589	0
4:30 PM		0	71	214	9	0	8	78	47	0	12	71	6	0	20	16	47	599	0
4:45 PM		0	64	185	8	0	3	81	59	0	13	48	11	0	16	8	42	538	2,279
5:00 PM		**0**	**76**	**221**	**10**	**0**	**8**	**72**	**87**	**0**	**12**	**51**	**9**	**0**	**17**	**9**	**64**	**636**	2,362
5:15 PM		**0**	**51**	**199**	**13**	**0**	**11**	**96**	**67**	**0**	**17**	**81**	**7**	**0**	**30**	**11**	**55**	**638**	2,411
5:30 PM		**0**	**63**	**222**	**14**	**0**	**4**	**91**	**87**	**0**	**4**	**47**	**11**	**0**	**28**	**13**	**61**	**645**	2,457
5:45 PM		**0**	**68**	**207**	**11**	**0**	**4**	**84**	**75**	**0**	**13**	**46**	**9**	**0**	**20**	**11**	**49**	**597**	**2,516**
Count Total		0	518	1,610	89	0	51	695	570	0	90	435	72	0	168	84	413	4,795	0
Peak Hour	**All**	**0**	**258**	**849**	**48**	**0**	**27**	**343**	**316**	**0**	**46**	**225**	**36**	**0**	**95**	**44**	**229**	**2,516**	**0**
	HV	**0**	**2**	**1**	**0**	**0**	**1**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**24**	**32**	**0**
	HV%	**-**	**1%**	**0%**	**0%**	**-**	**4%**	**1%**	**0%**	**-**	**0%**	**0%**	**0%**	**-**	**0%**	**2%**	**10%**	**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	1	0	4	*7*	0	1	1	0	*2*	0	2	2	0	*4*
4:15 PM	2	1	0	4	*7*	1	2	0	0	*3*	3	0	0	0	*3*
4:30 PM	2	0	1	1	*4*	1	2	1	0	*4*	5	1	2	1	*9*
4:45 PM	0	0	1	3	*4*	0	0	0	0	*0*	3	0	3	2	*8*
5:00 PM	**1**	**2**	**0**	**5**	***8***	**0**	**1**	**0**	**0**	***1***	**2**	**2**	**2**	**1**	*7*
5:15 PM	**0**	**0**	**0**	**6**	***6***	**0**	**1**	**0**	**0**	***1***	**8**	**1**	**1**	**3**	*13*
5:30 PM	**0**	**0**	**0**	**9**	***9***	**1**	**1**	**0**	**0**	***2***	**4**	**0**	**3**	**0**	*7*
5:45 PM	**2**	**2**	**0**	**5**	***9***	**0**	**1**	**0**	**0**	***1***	**3**	**0**	**3**	**0**	***6***
Count Total	9	6	2	37	*54*	3	9	2	0	*14*	28	6	16	7	*57*
Peak Hour	**3**	**4**	**0**	**25**	***32***	**1**	**4**	**0**	**0**	***5***	**17**	**3**	**9**	**4**	***33***

Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Market St Eastbound UT	LT	TH	RT	E Market St Westbound UT	LT	TH	RT	Kern St Northbound UT	LT	TH	RT	Kern St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	2	0	0	0	0	0	1	0	0	0	0	0	0	0	4	7	0
4:15 PM	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	4	7	0
4:30 PM	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	1	4	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	4	22
5:00 PM	**0**	**0**	**1**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**8**	23
5:15 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**6**	22
5:30 PM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**9**	27
5:45 PM	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**9**	**32**
Count Total	0	5	4	0	0	1	3	2	0	0	1	1	0	0	1	36	54	0
Peak Hour	**0**	**2**	**1**	**0**	**0**	**1**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**24**	**32**	**0**

Two-Hour Count Summaries - Bikes

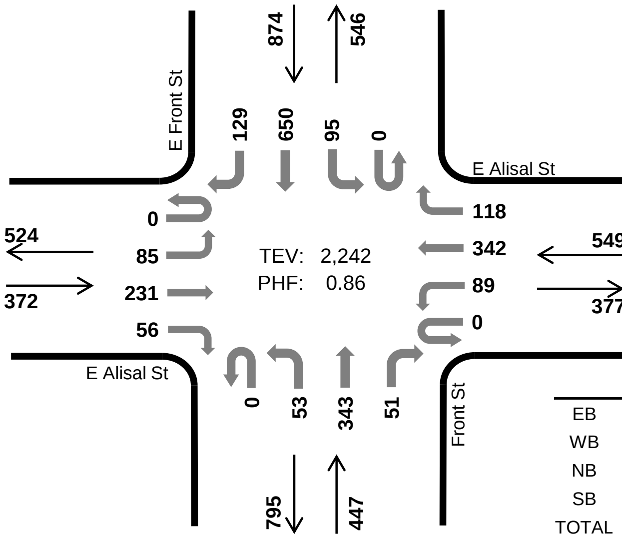
Interval Start	E Market St Eastbound LT	TH	RT	E Market St Westbound LT	TH	RT	Kern St Northbound LT	TH	RT	Kern St Southbound LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	2	0
4:15 PM	0	1	0	0	2	0	0	0	0	0	0	0	3	0
4:30 PM	0	1	0	0	2	0	1	0	0	0	0	0	4	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	9
5:00 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	8
5:15 PM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	6
5:30 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	4
5:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**
Count Total	0	3	0	0	6	3	1	1	0	0	0	0	14	0
Peak Hour	**0**	**1**	**0**	**0**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**5**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

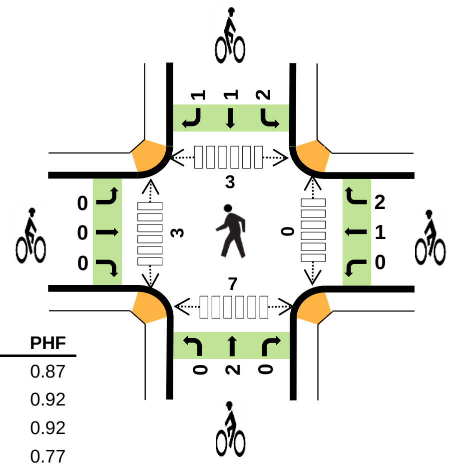
Front St
E Alisal St

Date: 06/02/2017
Count Period: 7:00 AM to 9:00 AM
Peak Hour: 7:45 AM to 8:45 AM

Peak Hour



	HV %:	PHF
EB	2.2%	0.87
WB	2.9%	0.92
NB	4.5%	0.92
SB	1.9%	0.77
TOTAL	2.7%	0.86



Two-Hour Count Summaries

Interval Start	E Alisal St Eastbound UT	LT	TH	RT	E Alisal St Westbound UT	LT	TH	RT	Front St Northbound UT	LT	TH	RT	E Front St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
7:00 AM	0	8	31	10	0	7	32	20	0	5	49	1	0	10	81	11	265	0
7:15 AM	0	9	33	8	0	4	31	19	0	9	67	5	0	14	127	7	333	0
7:30 AM	0	19	42	14	0	20	58	13	0	12	72	9	0	23	141	27	450	0
7:45 AM	**0**	**19**	**60**	**14**	**0**	**28**	**101**	**21**	**0**	**13**	**96**	**13**	**0**	**32**	**212**	**40**	**649**	1,697
8:00 AM	**0**	**26**	**63**	**18**	**0**	**26**	**93**	**30**	**0**	**14**	**89**	**12**	**0**	**23**	**165**	**51**	**610**	2,042
8:15 AM	**0**	**19**	**54**	**11**	**0**	**23**	**66**	**32**	**0**	**12**	**91**	**12**	**0**	**17**	**157**	**19**	**513**	2,222
8:30 AM	**0**	**21**	**54**	**13**	**0**	**12**	**82**	**35**	**0**	**14**	**67**	**14**	**0**	**23**	**116**	**19**	**470**	**2,242**
8:45 AM	0	16	51	12	0	16	60	24	0	7	93	15	0	14	128	17	453	2,046
Count Total	0	137	388	100	0	136	523	194	0	86	624	81	0	156	1,127	191	3,743	0
Peak Hour All	**0**	**85**	**231**	**56**	**0**	**89**	**342**	**118**	**0**	**53**	**343**	**51**	**0**	**95**	**650**	**129**	**2,242**	**0**
Peak Hour HV	**0**	**0**	**4**	**4**	**0**	**2**	**10**	**4**	**0**	**2**	**17**	**1**	**0**	**4**	**13**	**0**	**61**	**0**
Peak Hour HV%	**-**	**0%**	**2%**	**7%**	**-**	**2%**	**3%**	**3%**	**-**	**4%**	**5%**	**2%**	**-**	**4%**	**2%**	**0%**	**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	3	2	7	*15*	0	0	0	0	*0*	0	0	0	0	*0*
7:15 AM	1	0	7	5	*13*	1	1	0	1	*3*	0	2	0	0	*2*
7:30 AM	3	2	5	6	*16*	1	2	0	0	*3*	1	0	0	1	*2*
7:45 AM	**3**	**1**	**5**	**2**	***11***	**0**	**1**	**1**	**2**	***4***	**0**	**0**	**0**	**0**	*0*
8:00 AM	**3**	**4**	**4**	**5**	***16***	**0**	**1**	**1**	**1**	***3***	**0**	**2**	**0**	**0**	*2*
8:15 AM	**2**	**4**	**7**	**3**	***16***	**0**	**1**	**0**	**0**	***1***	**0**	**0**	**0**	**2**	*2*
8:30 AM	**0**	**7**	**4**	**7**	***18***	**0**	**0**	**0**	**1**	***1***	**0**	**1**	**3**	**5**	***9***
8:45 AM	5	0	7	9	*21*	1	0	0	1	*2*	0	1	0	1	*2*
Count Total	20	21	41	44	*126*	3	6	2	6	*17*	1	6	3	9	*19*
Peak Hour	**8**	**16**	**20**	**17**	***61***	**0**	**3**	**2**	**4**	***9***	**0**	**3**	**3**	**7**	***13***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Alisal St				E Alisal St				Front St				E Front 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	0	2	0	0	0	3	0	0	2	0	0	2	5	0	15	0
7:15 AM	0	0	1	0	0	0	0	0	0	2	5	0	0	2	3	0	13	0
7:30 AM	0	1	2	0	0	0	1	1	0	0	4	1	0	1	5	0	16	0
7:45 AM	**0**	**0**	**2**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**4**	**1**	**0**	**0**	**2**	**0**	**11**	55
8:00 AM	**0**	**0**	**0**	**3**	**0**	**2**	**2**	**0**	**0**	**1**	**3**	**0**	**0**	**2**	**3**	**0**	**16**	56
8:15 AM	**0**	**0**	**2**	**0**	**0**	**0**	**4**	**0**	**0**	**0**	**7**	**0**	**0**	**2**	**1**	**0**	**16**	59
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**4**	**0**	**1**	**3**	**0**	**0**	**0**	**7**	**0**	**18**	**61**
8:45 AM	0	3	1	1	0	0	0	0	0	0	7	0	0	0	8	1	21	71
Count Total	0	5	8	7	0	2	11	8	0	4	35	2	0	9	34	1	126	0
Peak Hour	**0**	**0**	**4**	**4**	**0**	**2**	**10**	**4**	**0**	**2**	**17**	**1**	**0**	**4**	**13**	**0**	**61**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Alisal St			E Alisal St			Front St			E Front 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	1	0	0	1	0	0	0	0	0	1	0	3	0
7:30 AM	0	1	0	0	0	2	0	0	0	0	0	0	3	0
7:45 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**1**	**0**	**4**	10
8:00 AM	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	**0**	**1**	**0**	**0**	**3**	13
8:15 AM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	11
8:30 AM	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**9**
8:45 AM	0	1	0	0	0	0	0	0	0	0	1	0	2	7
Count Total	0	3	0	0	2	4	0	2	0	2	3	1	17	0
Peak Hour	**0**	**0**	**0**	**0**	**1**	**2**	**0**	**2**	**0**	**2**	**1**	**1**	**9**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

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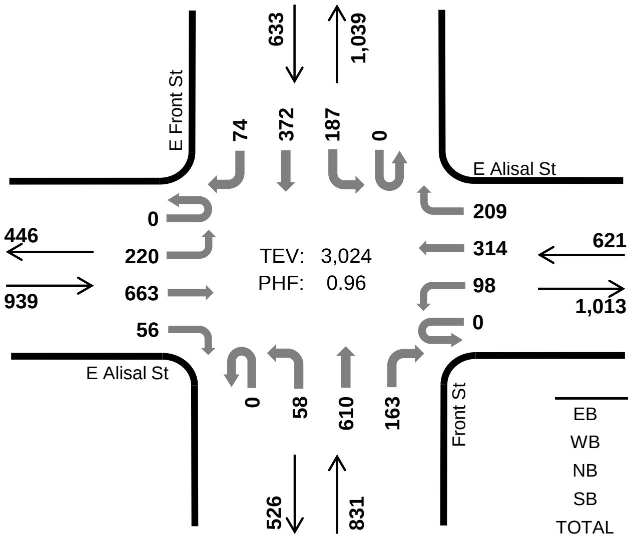
Front St
E Alisal St

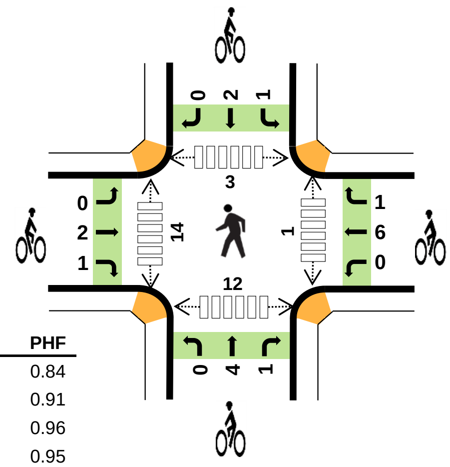
Date: 06/05/2017
Count Period: 4:00 PM to 6:00 PM
Peak Hour: 4:30 PM to 5:30 PM

N

Peak Hour



	HV %:	PHF
EB	0.9%	0.84
WB	0.6%	0.91
NB	2.6%	0.96
SB	4.9%	0.95
TOTAL	2.1%	0.96



Two-Hour Count Summaries

Interval Start	E Alisal St Eastbound UT	LT	TH	RT	E Alisal St Westbound UT	LT	TH	RT	Front St Northbound UT	LT	TH	RT	E Front St Southbound UT	LT	TH	RT	15-min Total	Rolling One Hour
4:00 PM	0	32	143	6	1	32	75	49	0	17	151	33	0	47	101	19	706	0
4:15 PM	0	43	146	13	0	18	68	61	0	16	143	34	0	47	97	27	713	0
4:30 PM	**0**	**52**	**150**	**14**	**0**	**33**	**86**	**51**	**0**	**22**	**148**	**47**	**0**	**54**	**81**	**25**	**763**	0
4:45 PM	**0**	**40**	**141**	**16**	**0**	**23**	**80**	**61**	**0**	**15**	**164**	**33**	**0**	**38**	**101**	**20**	**732**	2,914
5:00 PM	**0**	**65**	**173**	**10**	**0**	**22**	**72**	**46**	**0**	**10**	**150**	**45**	**0**	**45**	**89**	**13**	**740**	2,948
5:15 PM	**0**	**63**	**199**	**16**	**0**	**20**	**76**	**51**	**0**	**11**	**148**	**38**	**0**	**50**	**101**	**16**	**789**	**3,024**
5:30 PM	0	46	134	11	0	11	61	39	0	15	151	39	0	62	100	16	685	2,946
5:45 PM	0	29	105	9	0	12	59	35	0	7	108	20	0	38	75	18	515	2,729
Count Total	0	370	1,191	95	1	171	577	393	0	113	1,163	289	0	381	745	154	5,643	0
Peak Hour All	**0**	**220**	**663**	**56**	**0**	**98**	**314**	**209**	**0**	**58**	**610**	**163**	**0**	**187**	**372**	**74**	**3,024**	**0**
Peak Hour HV	**0**	**0**	**5**	**3**	**0**	**0**	**4**	**0**	**0**	**0**	**22**	**0**	**0**	**3**	**27**	**1**	**65**	**0**
Peak Hour HV%	**-**	**0%**	**1%**	**5%**	**-**	**0%**	**1%**	**0%**	**-**	**0%**	**4%**	**0%**	**-**	**2%**	**7%**	**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
4:00 PM	1	2	6	8	*17*	2	0	0	1	*3*	0	1	1	0	*2*
4:15 PM	1	1	4	2	*8*	0	0	1	1	*2*	0	2	1	2	*5*
4:30 PM	**1**	**1**	**6**	**11**	***19***	**2**	**1**	**0**	**0**	***3***	**0**	**11**	**0**	**4**	*15*
4:45 PM	**3**	**0**	**3**	**4**	***10***	**0**	**1**	**1**	**1**	***3***	**0**	**1**	**0**	**1**	*2*
5:00 PM	**0**	**3**	**5**	**10**	***18***	**0**	**4**	**4**	**0**	***8***	**1**	**1**	**2**	**1**	*5*
5:15 PM	**4**	**0**	**8**	**6**	***18***	**1**	**1**	**0**	**2**	***4***	**0**	**1**	**1**	**6**	***8***
5:30 PM	1	1	5	8	*15*	1	1	1	0	*3*	0	9	0	5	*14*
5:45 PM	1	1	4	5	*11*	0	0	0	0	*0*	0	5	1	4	*10*
Count Total	12	9	41	54	*116*	6	8	7	5	*26*	1	31	6	23	*61*
Peak Hour	**8**	**4**	**22**	**31**	***65***	**3**	**7**	**5**	**3**	***18***	**1**	**14**	**3**	**12**	***30***

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Two-Hour Count Summaries - Heavy Vehicles

Interval Start	E Alisal St				E Alisal St				Front St				E Front 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	0	0	0	1	1	0	1	5	0	0	1	7	0	17	0
4:15 PM	0	0	1	0	0	0	0	1	0	1	3	0	0	0	2	0	8	0
4:30 PM	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**6**	**0**	**0**	**2**	**9**	**0**	**19**	0
4:45 PM	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**4**	**0**	**10**	54
5:00 PM	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**0**	**0**	**5**	**0**	**0**	**1**	**8**	**1**	**18**	55
5:15 PM	**0**	**0**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0**	**0**	**0**	**6**	**0**	**18**	**65**
5:30 PM	0	0	1	0	0	0	1	0	0	0	5	0	0	0	8	0	15	61
5:45 PM	0	0	1	0	0	1	0	0	0	1	2	1	0	0	5	0	11	62
Count Total	0	0	9	3	0	1	6	2	0	3	37	1	0	4	49	1	116	0
Peak Hour	**0**	**0**	**5**	**3**	**0**	**0**	**4**	**0**	**0**	**0**	**22**	**0**	**0**	**3**	**27**	**1**	**65**	**0**

Two-Hour Count Summaries - Bikes

Interval Start	E Alisal St			E Alisal St			Front St			E Front 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	2	0	0	0	0	0	0	0	1	0	0	3	0
4:15 PM	0	0	0	0	0	0	0	1	0	1	0	0	2	0
4:30 PM	**0**	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	0
4:45 PM	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**1**	**0**	**3**	11
5:00 PM	**0**	**0**	**0**	**0**	**3**	**1**	**0**	**3**	**1**	**0**	**0**	**0**	**8**	16
5:15 PM	**0**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	**1**	**0**	**4**	**18**
5:30 PM	0	1	0	0	0	1	0	0	1	0	0	0	3	18
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	15
Count Total	0	5	1	0	6	2	0	5	2	3	2	0	26	0
Peak Hour	**0**	**2**	**1**	**0**	**6**	**1**	**0**	**4**	**1**	**1**	**2**	**0**	**18**	**0**

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

E. Intersection Level of Service Calculations – Existing Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	309	66	761	457	211	41	505	422	218	831	44
Future Volume (veh/h)	126	309	66	761	457	211	41	505	422	218	831	44
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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	156	381	0	940	564	0	51	623	0	269	1026	54
Adj No. of Lanes	1	2	1	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	416	543	243	975	720	322	79	941	1542	322	1076	57
Arrive On Green	0.23	0.15	0.00	0.29	0.21	0.00	0.04	0.27	0.00	0.09	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3420	180
Grp Volume(v), veh/h	156	381	0	940	564	0	51	623	0	269	531	549
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1831
Q Serve(g_s), s	9.8	13.6	0.0	36.3	20.3	0.0	3.8	20.8	0.0	10.2	39.0	39.0
Cycle Q Clear(g_c), s	9.8	13.6	0.0	36.3	20.3	0.0	3.8	20.8	0.0	10.2	39.0	39.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	416	543	243	975	720	322	79	941	1542	322	557	576
V/C Ratio(X)	0.37	0.70	0.00	0.96	0.78	0.00	0.64	0.66	0.00	0.84	0.95	0.95
Avail Cap(c_a), veh/h	416	826	370	975	1250	559	96	941	1542	371	561	580
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	53.3	0.0	46.6	49.9	0.0	62.4	43.4	0.0	59.2	44.6	44.6
Incr Delay (d2), s/veh	0.6	1.7	0.0	20.5	1.9	0.0	10.2	1.7	0.0	13.8	26.7	26.1
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	4.9	6.7	0.0	19.8	10.0	0.0	2.1	10.4	0.0	5.5	23.1	23.9
LnGrp Delay(d),s/veh	43.2	55.0	0.0	67.2	51.8	0.0	72.5	45.2	0.0	73.0	71.2	70.7
LnGrp LOS	D	D		E	D		E	D		E	E	E
Approach Vol, veh/h		537			1504			674			1349	
Approach Delay, s/veh		51.6			61.4			47.2			71.4	
Approach LOS		D			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	19.2	42.1	45.0	26.5	12.7	48.6	37.2	34.2
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	14.3	35.0	38.2	31.0	7.2	42.1	21.6	47.6
Max Q Clear Time (g_c+I1), s	12.2	22.8	38.3	15.6	5.8	41.0	11.8	22.3
Green Ext Time (p_c), s	0.2	8.3	0.0	1.9	0.0	0.8	2.1	4.0

Intersection Summary			
HCM 2010 Ctrl Delay			61.1
HCM 2010 LOS			E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	291	2	98	9	8	19	29	761	4	6	1295	422
Future Volume (veh/h)	291	2	98	9	8	19	29	761	4	6	1295	422
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	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	331	2	111	10	9	22	33	865	5	7	1472	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	1	506	46	50	58	76	1670	10	22	1531	685
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.04	0.46	0.46	0.01	0.43	0.00
Sat Flow, veh/h	498	3	1577	0	155	180	1774	3608	21	1774	3539	1583
Grp Volume(v), veh/h	333	0	111	41	0	0	33	424	446	7	1472	0
Grp Sat Flow(s),veh/h/ln	501	0	1577	335	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	5.0	0.0	0.0	0.0	1.8	16.4	16.4	0.4	39.0	0.0
Cycle Q Clear(g_c), s	31.0	0.0	5.0	31.0	0.0	0.0	1.8	16.4	16.4	0.4	39.0	0.0
Prop In Lane	0.99		1.00	0.24		0.54	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	235	0	506	154	0	0	76	819	860	22	1531	685
V/C Ratio(X)	1.42	0.00	0.22	0.27	0.00	0.00	0.44	0.52	0.52	0.32	0.96	0.00
Avail Cap(c_a), veh/h	235	0	506	154	0	0	129	819	860	129	1550	693
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.7	0.0	24.0	26.0	0.0	0.0	45.1	18.3	18.3	47.3	26.6	0.0
Incr Delay (d2), s/veh	211.0	0.0	0.2	0.9	0.0	0.0	3.9	0.6	0.5	8.0	14.6	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	20.0	0.0	2.2	0.8	0.0	0.0	0.9	8.0	8.4	0.2	22.1	0.0
LnGrp Delay(d),s/veh	248.7	0.0	24.2	26.9	0.0	0.0	49.1	18.9	18.9	55.3	41.3	0.0
LnGrp LOS	F		C	C			D	B	B	E	D	
Approach Vol, veh/h		444			41			903			1479	
Approach Delay, s/veh		192.6			26.9			20.0			41.3	
Approach LOS		F			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	51.5		37.1	10.9	48.6		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	42.3		31.0	7.0	42.3		31.0
Max Q Clear Time (g_c+I1), s	2.4	18.4		33.0	3.8	41.0		33.0
Green Ext Time (p_c), s	0.0	18.2		0.0	0.0	0.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	57.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	21	152	666	85	23	182	534	402	49	785	12
Future Volume (veh/h)	15	21	152	666	85	23	182	534	402	49	785	12
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		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	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	24	0	766	98	4	209	614	146	56	902	14
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	91	77	835	452	382	235	1666	738	84	1988	31
Arrive On Green	0.05	0.05	0.00	0.24	0.24	0.24	0.13	0.47	0.47	0.05	0.39	0.39
Sat Flow, veh/h	1774	1863	1583	3442	1863	1575	1774	3539	1568	1774	5158	80
Grp Volume(v), veh/h	17	24	0	766	98	4	209	614	146	56	593	323
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1721	1863	1575	1774	1770	1568	1774	1695	1848
Q Serve(g_s), s	1.2	1.6	0.0	27.8	5.4	0.2	14.8	14.2	7.0	4.0	16.7	16.7
Cycle Q Clear(g_c), s	1.2	1.6	0.0	27.8	5.4	0.2	14.8	14.2	7.0	4.0	16.7	16.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	87	91	77	835	452	382	235	1666	738	84	1306	712
V/C Ratio(X)	0.20	0.26	0.00	0.92	0.22	0.01	0.89	0.37	0.20	0.67	0.45	0.45
Avail Cap(c_a), veh/h	305	320	272	890	482	407	276	1666	738	133	1306	712
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	58.7	0.0	47.2	38.8	36.8	54.6	21.7	19.8	60.0	29.3	29.3
Incr Delay (d2), s/veh	1.1	1.5	0.0	13.7	0.2	0.0	25.1	0.6	0.6	8.8	1.1	2.1
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	0.6	0.9	0.0	14.8	2.8	0.1	8.9	7.1	3.1	2.2	8.0	8.9
LnGrp Delay(d),s/veh	59.6	60.2	0.0	61.0	39.0	36.8	79.6	22.3	20.4	68.8	30.4	31.4
LnGrp LOS	E	E		E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		41			868			969			972	
Approach Delay, s/veh		59.9			58.4			34.4			33.0	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.1	66.4		12.4	23.1	55.4		37.1
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	9.6	38.9		22.0	19.9	28.6		33.1
Max Q Clear Time (g_c+I1), s	6.0	16.2		3.6	16.8	18.7		29.8
Green Ext Time (p_c), s	0.0	11.9		0.1	0.2	6.8		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	41.6
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	108	686	100	181	1221
Future Vol, veh/h	34	108	686	100	181	1221
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	126	798	116	210	1420

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1934	404	0	0	803	0
Stage 1	803	-	-	-	-	-
Stage 2	1131	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	58	596	-	-	817	-
Stage 1	401	-	-	-	-	-
Stage 2	270	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	43	593	-	-	817	-
Mov Cap-2 Maneuver	139	-	-	-	-	-
Stage 1	399	-	-	-	-	-
Stage 2	201	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.5	0	1.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	139	593	817	-
HCM Lane V/C Ratio	-	-	0.284	0.212	0.258	-
HCM Control Delay (s)	-	-	40.9	12.7	10.9	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	1.1	0.8	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	271	163	105	305	78	85	566	58	85	950	176
Future Volume (veh/h)	154	271	163	105	305	78	85	566	58	85	950	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		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	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	167	295	38	114	332	0	92	615	17	92	1033	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	324	473	400	154	452	385	166	1205	533	169	1229	550
Arrive On Green	0.09	0.25	0.25	0.09	0.25	0.00	0.09	0.34	0.34	0.09	0.34	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	3504	1552	1792	3575	1599
Grp Volume(v), veh/h	167	295	38	114	332	0	92	615	17	92	1033	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1752	1552	1792	1787	1599
Q Serve(g_s), s	3.9	11.7	1.5	5.4	14.0	0.0	4.2	11.8	0.6	4.1	22.5	0.0
Cycle Q Clear(g_c), s	3.9	11.7	1.5	5.4	14.0	0.0	4.2	11.8	0.6	4.1	22.5	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	324	473	400	154	452	385	166	1205	533	169	1229	550
V/C Ratio(X)	0.52	0.62	0.10	0.74	0.73	0.00	0.55	0.51	0.03	0.54	0.84	0.00
Avail Cap(c_a), veh/h	367	648	548	166	627	533	188	1205	533	221	1286	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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.4	28.0	24.2	37.4	29.2	0.0	36.4	22.0	18.3	36.4	25.5	0.0
Incr Delay (d2), s/veh	0.9	1.6	0.1	13.9	3.2	0.0	2.1	0.4	0.0	2.0	5.0	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	1.9	6.3	0.7	3.2	7.5	0.0	2.1	5.7	0.3	2.1	11.9	0.0
LnGrp Delay(d),s/veh	37.3	29.6	24.3	51.4	32.4	0.0	38.6	22.4	18.4	38.4	30.5	0.0
LnGrp LOS	D	C	C	D	C		D	C	B	D	C	
Approach Vol, veh/h		500			446			724			1125	
Approach Delay, s/veh		31.8			37.3			24.3			31.1	
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	12.2	34.4	11.6	26.1	12.2	34.4	12.0	25.7
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 10	28.9	* 8	29.0	* 9	30.3	* 8.9	* 29
Max Q Clear Time (g_c+I1), s	6.1	13.8	7.4	13.7	6.2	24.5	5.9	16.0
Green Ext Time (p_c), s	0.0	9.8	0.0	4.2	0.0	4.5	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	30.5
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	22	166	21	21	26	115	527	9	27	866	362
Future Volume (veh/h)	233	22	166	21	21	26	115	527	9	27	866	362
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	1900	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	300	0	0	25	25	0	139	635	11	33	1043	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	6	6	6
Cap, veh/h	467	0	209	36	36	63	174	1749	30	44	1428	639
Arrive On Green	0.13	0.00	0.00	0.04	0.04	0.00	0.10	0.49	0.49	0.03	0.42	0.00
Sat Flow, veh/h	3548	0	1583	909	909	1583	1774	3560	62	1707	3406	1524
Grp Volume(v), veh/h	300	0	0	50	0	0	139	316	330	33	1043	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1817	0	1583	1774	1770	1852	1707	1703	1524
Q Serve(g_s), s	6.4	0.0	0.0	2.2	0.0	0.0	6.1	8.8	8.8	1.5	20.4	0.0
Cycle Q Clear(g_c), s	6.4	0.0	0.0	2.2	0.0	0.0	6.1	8.8	8.8	1.5	20.4	0.0
Prop In Lane	1.00		1.00	0.50		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	467	0	209	72	0	63	174	870	910	44	1428	639
V/C Ratio(X)	0.64	0.00	0.00	0.69	0.00	0.00	0.80	0.36	0.36	0.74	0.73	0.00
Avail Cap(c_a), veh/h	1201	0	536	615	0	536	238	983	1028	148	1729	774
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	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.8	0.0	0.0	37.8	0.0	0.0	35.2	12.6	12.6	38.6	19.4	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.0	11.0	0.0	0.0	12.6	0.3	0.2	21.4	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	3.2	0.0	0.0	1.3	0.0	0.0	3.6	4.4	4.6	1.0	9.8	0.0
LnGrp Delay(d),s/veh	34.3	0.0	0.0	48.9	0.0	0.0	47.8	12.8	12.8	60.0	20.7	0.0
LnGrp LOS	C			D			D	B	B	E	C	
Approach Vol, veh/h		300			50			785			1076	
Approach Delay, s/veh		34.3			48.9			19.0			21.9	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	46.0		16.1	14.6	40.3		8.8
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	6.9	44.3		27.0	10.7	40.5		27.0
Max Q Clear Time (g_c+I1), s	3.5	10.8		8.4	8.1	22.4		4.2
Green Ext Time (p_c), s	0.0	15.6		1.0	0.1	11.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	23.1
HCM 2010 LOS	C

Notes
User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	2	181	0	0	0	289	63	7	1	81	40
Future Vol, veh/h	17	2	181	0	0	0	289	63	7	1	81	40
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	7	7	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	2	193	0	0	0	307	67	7	1	86	43

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	801	811	112	134	0	0	81	0	0
Stage 1	115	115	-	-	-	-	-	-	-
Stage 2	686	696	-	-	-	-	-	-	-
Critical Hdwy	6.47	6.57	6.27	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.47	5.57	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.47	5.57	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	347	308	928	1451	-	-	1517	-	-
Stage 1	898	791	-	-	-	-	-	-	-
Stage 2	491	436	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	271	0	924	1451	-	-	1517	-	-
Mov Cap-2 Maneuver	271	0	-	-	-	-	-	-	-
Stage 1	893	0	-	-	-	-	-	-	-
Stage 2	385	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	6.6	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1451	-	-	271	924	1517	-	-
HCM Lane V/C Ratio	0.212	-	-	0.075	0.208	0.001	-	-
HCM Control Delay (s)	8.1	-	-	19.4	9.9	7.4	0	-
HCM Lane LOS	A	-	-	C	A	A	A	-
HCM 95th %tile Q(veh)	0.8	-	-	0.2	0.8	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	488	250	624	786	0	278
Future Volume (vph)	488	250	624	786	0	278
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	618	316	790	995	0	352
RTOR Reduction (vph)	0	0	0	0	0	158
Lane Group Flow (vph)	618	316	790	995	0	194
Confl. Peds. (#/hr)						9
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	12.3	39.0	15.5	39.0		15.5
Effective Green, g (s)	12.3	39.0	15.5	39.0		15.5
Actuated g/C Ratio	0.32	1.00	0.40	1.00		0.40
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1611	1591	1385	3592		1123
v/s Ratio Prot	0.12		c0.23	c0.28		0.07
v/s Ratio Perm		0.20				
v/c Ratio	0.38	0.20	0.57	0.28		0.17
Uniform Delay, d1	10.4	0.0	9.2	0.0		7.6
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.2	0.3	0.6	0.0		0.1
Delay (s)	10.6	0.3	9.7	0.0		7.7
Level of Service	B	A	A	A		A
Approach Delay (s)	7.1			4.3	7.7	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	39.0	Sum of lost time (s)	11.2
Intersection Capacity Utilization	45.8%	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												
Traffic Volume (veh/h)	0	0	4	544	31	161	16	490	260	172	866	15
Future Volume (veh/h)	0	0	4	544	31	161	16	490	260	172	866	15
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		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	1900	1863	1863	1827	1827	1827	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	690	0	42	20	598	0	210	1056	18
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	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, %	2	2	2	4	4	4	2	2	2	2	2	2
Cap, veh/h	0	3	55	916	0	406	59	1204	948	259	1613	27
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.03	0.34	0.00	0.15	0.45	0.45
Sat Flow, veh/h	0	1863	1583	3480	0	1541	1774	3539	2787	1774	3561	61
Grp Volume(v), veh/h	0	0	0	690	0	42	20	598	0	210	525	549
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1740	0	1541	1774	1770	1393	1774	1770	1852
Q Serve(g_s), s	0.0	0.0	0.0	11.1	0.0	1.3	0.7	8.2	0.0	7.0	14.1	14.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	11.1	0.0	1.3	0.7	8.2	0.0	7.0	14.1	14.1
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	0	3	55	916	0	406	59	1204	948	259	802	839
V/C Ratio(X)	0.00	0.00	0.00	0.75	0.00	0.10	0.34	0.50	0.00	0.81	0.65	0.65
Avail Cap(c_a), veh/h	0	61	104	1482	0	656	232	1553	1223	346	890	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)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	20.7	0.0	17.0	28.9	16.0	0.0	25.3	13.0	13.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.1	3.4	0.3	0.0	10.3	1.5	1.4
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	0.0	0.0	0.0	5.4	0.0	0.5	0.4	4.0	0.0	4.2	7.2	7.5
LnGrp Delay(d),s/veh	0.0	0.0	0.0	21.9	0.0	17.1	32.3	16.3	0.0	35.6	14.5	14.4
LnGrp LOS				C		B	C	B		D	B	B
Approach Vol, veh/h		0			732			618			1284	
Approach Delay, s/veh		0.0			21.7			16.8			17.9	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	25.9		0.0	7.1	32.8		21.2
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	11.9	26.8		2.0	8.0	30.7		26.0
Max Q Clear Time (g_c+I1), s	9.0	10.2		0.0	2.7	16.1		13.1
Green Ext Time (p_c), s	0.2	10.2		0.0	0.0	9.3		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	18.7
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	388	19	21	722	27	13	1	7	20	2	11
Future Vol, veh/h	15	388	19	21	722	27	13	1	7	20	2	11
Conflicting Peds, #/hr	7	0	11	11	0	7	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	6	6	6	3	3	3	14	14	14	2	2	2
Mvmt Flow	18	462	23	25	860	32	15	1	8	24	2	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	899	0	0	496	0	0	1003	1469	253	1200	1464	455
Stage 1	-	-	-	-	-	-	520	520	-	933	933	-
Stage 2	-	-	-	-	-	-	483	949	-	267	531	-
Critical Hdwy	4.22	-	-	4.16	-	-	7.78	6.78	7.18	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.23	-	-	3.64	4.14	3.44	3.52	4.02	3.32
Pot Cap-1 Maneuver	727	-	-	1057	-	-	180	113	711	141	127	552
Stage 1	-	-	-	-	-	-	478	501	-	286	343	-
Stage 2	-	-	-	-	-	-	503	311	-	715	524	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	726	-	-	1057	-	-	160	102	704	129	115	547
Mov Cap-2 Maneuver	-	-	-	-	-	-	160	102	-	129	115	-
Stage 1	-	-	-	-	-	-	457	479	-	274	325	-
Stage 2	-	-	-	-	-	-	464	294	-	681	501	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	24.7	32.2
HCM LOS			C	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	208	726	-	-	1057	-	-	171
HCM Lane V/C Ratio	0.12	0.025	-	-	0.024	-	-	0.23
HCM Control Delay (s)	24.7	10.1	0.2	-	8.5	0.2	-	32.2
HCM Lane LOS	C	B	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-	-	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	348	55	72	682	25	66	7	42	20	10	22
Future Volume (veh/h)	12	348	55	72	682	25	66	7	42	20	10	22
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		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	1776	1776	1900	1827	1827
Adj Flow Rate, veh/h	14	419	66	87	822	30	80	8	0	24	12	27
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	4	4	4
Cap, veh/h	412	1423	223	565	1648	60	389	29	255	326	126	262
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.17	0.17	0.00	0.17	0.17	0.17
Sat Flow, veh/h	619	2948	461	886	3415	125	1088	171	1509	871	743	1548
Grp Volume(v), veh/h	14	241	244	87	418	434	88	0	0	36	0	27
Grp Sat Flow(s),veh/h/ln	619	1703	1707	886	1736	1804	1259	0	1509	1615	0	1548
Q Serve(g_s), s	0.5	2.9	2.9	2.2	5.5	5.5	1.7	0.0	0.0	0.0	0.0	0.5
Cycle Q Clear(g_c), s	6.0	2.9	2.9	5.1	5.5	5.5	2.3	0.0	0.0	0.6	0.0	0.5
Prop In Lane	1.00		0.27	1.00		0.07	0.91		1.00	0.67		1.00
Lane Grp Cap(c), veh/h	412	822	823	565	837	870	418	0	255	452	0	262
V/C Ratio(X)	0.03	0.29	0.30	0.15	0.50	0.50	0.21	0.00	0.00	0.08	0.00	0.10
Avail Cap(c_a), veh/h	524	1131	1133	739	1178	1224	1221	0	1168	1356	0	1199
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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.0	5.2	5.2	6.8	5.9	5.9	12.6	0.0	0.0	11.8	0.0	11.8
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.1	0.5	0.4	0.2	0.0	0.0	0.1	0.0	0.2
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	0.1	1.4	1.4	0.6	2.7	2.8	0.8	0.0	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	8.0	5.4	5.4	6.9	6.4	6.4	12.9	0.0	0.0	11.9	0.0	12.0
LnGrp LOS	A	A	A	A	A	A	B			B		B
Approach Vol, veh/h		499			939			88			63	
Approach Delay, s/veh		5.5			6.4			12.9			11.9	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		22.3		11.3		22.3		11.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		8.0		2.6		7.5		4.3
Green Ext Time (p_c), s		7.7		0.7		8.1		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	19.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	407	3	32	614	0	4	0	14	137	45	161
Future Vol, veh/h	0	407	3	32	614	0	4	0	14	137	45	161
Conflicting Peds, #/hr	0	0	9	6	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	6	6	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	502	4	40	758	0	5	0	17	169	56	199

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	515	0	0	1001	-	262	1088	1352	381
Stage 1	-	-	-	-	-	-	513	-	-	837	837	-
Stage 2	-	-	-	-	-	-	488	-	-	251	515	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1033	-	0	197	0	737	170	149	617
Stage 1	0	-	-	-	-	0	512	0	-	327	380	-
Stage 2	0	-	-	-	-	0	530	0	-	731	533	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1033	-	-	89	-	731	~ 161	142	616
Mov Cap-2 Maneuver	-	-	-	-	-	-	89	-	-	~ 161	142	-
Stage 1	-	-	-	-	-	-	512	-	-	327	365	-
Stage 2	-	-	-	-	-	-	292	-	-	714	528	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	18.4	78.9
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	89	731	-	-	1033	-	161	356
HCM Lane V/C Ratio	0.055	0.024	-	-	0.038	-	1.051	0.714
HCM Control Delay (s)	47.8	10	-	-	8.6	-	142.2	36.8
HCM Lane LOS	E	B	-	-	A	-	F	E
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	8.5	5.3

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	450	108	55	646	0	0
Future Vol, veh/h	450	108	55	646	0	0
Conflicting Peds, #/hr	0	10	10	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	5	5	2	2	4	4
Mvmt Flow	556	133	68	798	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	699	0	1167	354
Stage 1	-	-	-	-	632	-
Stage 2	-	-	-	-	535	-
Critical Hdwy	-	-	4.14	-	6.88	6.98
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	2.22	-	3.54	3.34
Pot Cap-1 Maneuver	-	-	893	-	184	637
Stage 1	-	-	-	-	486	-
Stage 2	-	-	-	-	546	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	893	-	168	631
Mov Cap-2 Maneuver	-	-	-	-	168	-
Stage 1	-	-	-	-	481	-
Stage 2	-	-	-	-	504	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	893	-
HCM Lane V/C Ratio	-	-	-	0.076	-
HCM Control Delay (s)	0	-	-	9.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	333	20	8	457	195	21	68	3	23	26	223
Future Volume (veh/h)	97	333	20	8	457	195	21	68	3	23	26	223
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	0.99		0.99	0.99		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	1845	1845	1900	1863	1863	1900	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	113	387	23	9	531	227	24	79	3	27	30	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	213	1554	92	29	862	367	385	307	12	337	309	263
Arrive On Green	0.12	0.46	0.46	0.02	0.36	0.36	0.17	0.17	0.17	0.17	0.17	0.00
Sat Flow, veh/h	1757	3361	199	1774	2412	1027	1363	1782	68	1251	1792	1524
Grp Volume(v), veh/h	113	201	209	9	389	369	24	0	82	27	30	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1808	1774	1770	1670	1363	0	1850	1251	1792	1524
Q Serve(g_s), s	2.6	3.0	3.0	0.2	7.7	7.7	0.6	0.0	1.6	0.8	0.6	0.0
Cycle Q Clear(g_c), s	2.6	3.0	3.0	0.2	7.7	7.7	1.2	0.0	1.6	2.4	0.6	0.0
Prop In Lane	1.00		0.11	1.00		0.62	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	213	810	836	29	633	597	385	0	319	337	309	263
V/C Ratio(X)	0.53	0.25	0.25	0.31	0.61	0.62	0.06	0.00	0.26	0.08	0.10	0.00
Avail Cap(c_a), veh/h	327	875	903	292	846	798	1017	0	1176	917	1140	969
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	1.00	0.00
Uniform Delay (d), s/veh	17.5	6.9	6.9	20.6	11.2	11.2	15.3	0.0	15.2	16.3	14.8	0.0
Incr Delay (d2), s/veh	2.0	0.2	0.2	5.7	1.0	1.0	0.1	0.0	0.4	0.1	0.1	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	1.3	1.4	1.5	0.1	3.8	3.7	0.2	0.0	0.9	0.3	0.3	0.0
LnGrp Delay(d),s/veh	19.5	7.1	7.1	26.3	12.2	12.3	15.4	0.0	15.6	16.4	14.9	0.0
LnGrp LOS	B	A	A	C	B	B	B		B	B	B	
Approach Vol, veh/h		523			767			106			57	
Approach Delay, s/veh		9.8			12.4			15.6			15.6	
Approach LOS		A			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	24.7		11.9	10.3	20.3		11.9
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	21.2		27.0	7.9	20.3		27.0
Max Q Clear Time (g_c+I1), s	2.2	5.0		4.4	4.6	9.7		3.6
Green Ext Time (p_c), s	0.0	6.8		0.7	0.1	5.3		0.7

Intersection Summary			
HCM 2010 Ctrl Delay			11.8
HCM 2010 LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	321	86	89	422	118	53	343	51	95	650	129
Future Volume (veh/h)	85	321	86	89	422	118	53	343	51	95	650	129
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		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	1863	1863	1863	1808	1808	1862	1810	1810	1810	1863	1863	1863
Adj Flow Rate, veh/h	99	373	12	103	491	137	62	399	11	110	756	33
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	133	915	406	131	689	191	110	1019	455	139	1100	489
Arrive On Green	0.08	0.26	0.26	0.08	0.26	0.26	0.06	0.30	0.30	0.08	0.31	0.31
Sat Flow, veh/h	1774	3539	1569	1722	2655	736	1723	3438	1535	1774	3539	1574
Grp Volume(v), veh/h	99	373	12	103	317	311	62	399	11	110	756	33
Grp Sat Flow(s),veh/h/ln	1774	1770	1569	1722	1717	1674	1723	1719	1535	1774	1770	1574
Q Serve(g_s), s	4.6	7.3	0.5	4.9	14.0	14.2	2.9	7.7	0.4	5.1	15.7	1.2
Cycle Q Clear(g_c), s	4.6	7.3	0.5	4.9	14.0	14.2	2.9	7.7	0.4	5.1	15.7	1.2
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	915	406	131	445	434	110	1019	455	139	1100	489
V/C Ratio(X)	0.74	0.41	0.03	0.79	0.71	0.72	0.56	0.39	0.02	0.79	0.69	0.07
Avail Cap(c_a), veh/h	148	1139	505	144	553	539	144	1410	629	152	1460	649
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	38.0	25.8	23.2	38.1	28.2	28.3	38.1	23.5	20.9	38.0	25.3	20.3
Incr Delay (d2), s/veh	16.4	0.3	0.0	23.0	3.2	3.5	4.5	0.2	0.0	22.5	0.9	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	2.9	3.6	0.2	3.2	7.1	7.0	1.5	3.7	0.2	3.4	7.8	0.5
LnGrp Delay(d),s/veh	54.4	26.1	23.3	61.1	31.4	31.7	42.6	23.7	20.9	60.5	26.2	20.4
LnGrp LOS	D	C	C	E	C	C	D	C	C	E	C	C
Approach Vol, veh/h		484			731			472			899	
Approach Delay, s/veh		31.8			35.7			26.2			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	12.7	31.0	12.5	27.8	11.4	32.2	12.4	27.9
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	7.2	34.4	7.0	27.0	7.0	34.6	7.0	27.0
Max Q Clear Time (g_c+I1), s	7.1	9.7	6.9	9.3	4.9	17.7	6.6	16.2
Green Ext Time (p_c), s	0.0	9.1	0.0	6.2	0.0	7.6	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay	31.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	678	75	616	548	446	93	656	890	445	648	71
Future Volume (veh/h)	91	678	75	616	548	446	93	656	890	445	648	71
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		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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	95	706	0	642	571	0	97	683	0	464	675	74
Adj No. of Lanes	1	2	1	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	819	366	628	735	329	121	833	1172	437	946	104
Arrive On Green	0.21	0.23	0.00	0.19	0.21	0.00	0.07	0.24	0.00	0.13	0.29	0.29
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3215	352
Grp Volume(v), veh/h	95	706	0	642	571	0	97	683	0	464	371	378
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1798
Q Serve(g_s), s	5.4	22.9	0.0	22.2	18.5	0.0	6.5	21.9	0.0	15.2	22.4	22.5
Cycle Q Clear(g_c), s	5.4	22.9	0.0	22.2	18.5	0.0	6.5	21.9	0.0	15.2	22.4	22.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	365	819	366	628	735	329	121	833	1172	437	520	529
V/C Ratio(X)	0.26	0.86	0.00	1.02	0.78	0.00	0.80	0.82	0.00	1.06	0.71	0.71
Avail Cap(c_a), veh/h	365	916	410	628	1164	521	151	889	1216	437	520	529
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	44.2	0.0	48.8	44.6	0.0	55.0	43.4	0.0	52.3	37.8	37.8
Incr Delay (d2), s/veh	0.4	7.8	0.0	41.6	1.8	0.0	21.5	5.8	0.0	60.7	4.6	4.5
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	2.7	12.1	0.0	13.9	9.1	0.0	3.9	11.4	0.0	10.8	11.6	11.8
LnGrp Delay(d),s/veh	40.3	52.0	0.0	90.4	46.4	0.0	76.6	49.3	0.0	113.0	42.3	42.3
LnGrp LOS	D	D		F	D		E	D		F	D	D
Approach Vol, veh/h		801			1213			780			1213	
Approach Delay, s/veh		50.7			69.7			52.7			69.4	
Approach LOS		D			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	22.0	35.0	29.0	33.8	15.0	42.0	30.8	32.0
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	15.2	30.1	22.2	31.0	10.2	35.1	13.2	40.0
Max Q Clear Time (g_c+I1), s	17.2	23.9	24.2	24.9	8.5	24.5	7.4	20.5
Green Ext Time (p_c), s	0.0	4.1	0.0	2.3	0.0	6.5	2.5	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	62.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	341	17	50	5	14	13	159	1335	11	19	855	428
Future Volume (veh/h)	341	17	50	5	14	13	159	1335	11	19	855	428
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		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	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	355	18	52	5	15	14	166	1391	11	20	891	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	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	212	7	564	48	125	88	201	1372	11	55	1057	473
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.11	0.38	0.38	0.03	0.30	0.00
Sat Flow, veh/h	362	18	1570	0	348	244	1774	3598	28	1774	3539	1583
Grp Volume(v), veh/h	373	0	52	34	0	0	166	684	718	20	891	0
Grp Sat Flow(s),veh/h/ln	381	0	1570	592	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	1.9	0.0	0.0	0.0	7.9	32.9	32.9	1.0	20.4	0.0
Cycle Q Clear(g_c), s	31.0	0.0	1.9	31.0	0.0	0.0	7.9	32.9	32.9	1.0	20.4	0.0
Prop In Lane	0.95		1.00	0.15		0.41	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	218	0	564	261	0	0	201	675	708	55	1057	473
V/C Ratio(X)	1.71	0.00	0.09	0.13	0.00	0.00	0.82	1.01	1.01	0.36	0.84	0.00
Avail Cap(c_a), veh/h	218	0	564	261	0	0	247	675	708	144	1120	501
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.4	0.0	18.3	20.5	0.0	0.0	37.4	26.7	26.7	41.0	28.3	0.0
Incr Delay (d2), s/veh	338.0	0.0	0.1	0.2	0.0	0.0	16.8	38.0	37.3	4.0	5.7	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	25.6	0.0	0.8	0.5	0.0	0.0	4.8	23.1	24.1	0.5	10.7	0.0
LnGrp Delay(d),s/veh	371.4	0.0	18.4	20.7	0.0	0.0	54.2	64.7	64.0	45.0	34.1	0.0
LnGrp LOS	F		B	C			D	F	F	D	C	
Approach Vol, veh/h		425			34			1568			911	
Approach Delay, s/veh		328.2			20.7			63.3			34.3	
Approach LOS		F			C			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	39.7		37.1	16.6	32.6		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	32.3		31.0	12.0	27.3		31.0
Max Q Clear Time (g_c+I1), s	3.0	34.9		33.0	9.9	22.4		33.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	3.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		92.1
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	70	160	462	120	144	304	1108	647	105	1017	24
Future Volume (veh/h)	27	70	160	462	120	144	304	1108	647	105	1017	24
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		0.99	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	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	74	168	486	126	152	320	1166	681	111	1071	25
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	257	211	558	302	251	347	1534	676	135	1603	37
Arrive On Green	0.14	0.14	0.14	0.16	0.16	0.16	0.20	0.43	0.43	0.08	0.31	0.31
Sat Flow, veh/h	1774	1863	1528	3442	1863	1551	1774	3539	1560	1774	5110	119
Grp Volume(v), veh/h	28	74	168	486	126	152	320	1166	681	111	710	386
Grp Sat Flow(s),veh/h/ln	1774	1863	1528	1721	1863	1551	1774	1770	1560	1774	1695	1839
Q Serve(g_s), s	1.8	4.6	13.6	17.6	7.8	11.7	22.7	35.6	55.5	7.9	23.3	23.3
Cycle Q Clear(g_c), s	1.8	4.6	13.6	17.6	7.8	11.7	22.7	35.6	55.5	7.9	23.3	23.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	245	257	211	558	302	251	347	1534	676	135	1064	577
V/C Ratio(X)	0.11	0.29	0.80	0.87	0.42	0.60	0.92	0.76	1.01	0.82	0.67	0.67
Avail Cap(c_a), veh/h	305	320	263	592	320	267	398	1534	676	159	1064	577
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	48.3	49.5	53.5	52.3	48.2	49.8	50.5	30.6	36.3	58.3	38.1	38.1
Incr Delay (d2), s/veh	0.2	0.6	12.8	12.9	0.9	3.5	24.8	3.6	36.5	24.7	3.3	6.0
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	2.4	6.5	9.4	4.1	5.2	13.5	18.1	30.7	4.8	11.3	12.8
LnGrp Delay(d),s/veh	48.5	50.2	66.3	65.2	49.1	53.3	75.4	34.2	72.8	83.0	41.5	44.2
LnGrp LOS	D	D	E	E	D	D	E	C	F	F	D	D
Approach Vol, veh/h		270			764			2167			1207	
Approach Delay, s/veh		60.0			60.2			52.4			46.1	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.8	61.6		23.7	31.1	46.3		26.8
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	11.5	48.1		22.0	28.7	30.9		22.0
Max Q Clear Time (g_c+I1), s	9.9	57.5		15.6	24.7	25.3		19.6
Green Ext Time (p_c), s	0.0	0.0		0.5	0.4	5.2		0.8

Intersection Summary	
HCM 2010 Ctrl Delay	52.5
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	1476	54	120	790
Future Vol, veh/h	16	28	1476	54	120	790
Conflicting Peds, #/hr	0	0	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	29	1506	55	122	806

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2160	759	0	0	1512	0
Stage 1	1512	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	41	349	-	-	438	-
Stage 1	169	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	29	347	-	-	438	-
Mov Cap-2 Maneuver	115	-	-	-	-	-
Stage 1	168	-	-	-	-	-
Stage 2	348	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.4	0	2.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	115	347	438	-
HCM Lane V/C Ratio	-	-	0.142	0.082	0.28	-
HCM Control Delay (s)	-	-	41.4	16.3	16.4	-
HCM Lane LOS	-	-	E	C	C	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	1.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	321	109	100	257	217	193	1253	63	118	791	170
Future Volume (veh/h)	269	321	109	100	257	217	193	1253	63	118	791	170
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	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	283	338	21	105	271	0	203	1319	25	124	833	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	448	375	135	393	334	236	1410	620	160	1278	572
Arrive On Green	0.10	0.24	0.24	0.08	0.21	0.00	0.13	0.40	0.40	0.09	0.36	0.00
Sat Flow, veh/h	3476	1881	1573	1747	1835	1560	1756	3504	1540	1792	3575	1599
Grp Volume(v), veh/h	283	338	21	105	271	0	203	1319	25	124	833	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1573	1747	1835	1560	1756	1752	1540	1792	1787	1599
Q Serve(g_s), s	7.7	16.2	1.0	5.7	13.2	0.0	11.0	35.0	1.0	6.6	19.0	0.0
Cycle Q Clear(g_c), s	7.7	16.2	1.0	5.7	13.2	0.0	11.0	35.0	1.0	6.6	19.0	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	353	448	375	135	393	334	236	1410	620	160	1278	572
V/C Ratio(X)	0.80	0.75	0.06	0.78	0.69	0.00	0.86	0.94	0.04	0.77	0.65	0.00
Avail Cap(c_a), veh/h	404	562	470	144	499	424	291	1453	639	166	1278	572
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	42.7	34.4	28.6	44.0	35.2	0.0	41.2	27.8	17.6	43.3	26.2	0.0
Incr Delay (d2), s/veh	9.3	4.9	0.1	20.8	3.2	0.0	17.9	11.4	0.0	18.7	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	4.1	9.1	0.4	3.6	7.1	0.0	6.5	19.1	0.4	4.1	9.6	0.0
LnGrp Delay(d),s/veh	52.0	39.2	28.6	64.8	38.4	0.0	59.1	39.2	17.7	62.0	27.3	0.0
LnGrp LOS	D	D	C	E	D		E	D	B	E	C	
Approach Vol, veh/h		642			376			1547			957	
Approach Delay, s/veh		44.5			45.8			41.4			31.8	
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	12.9	44.5	11.7	28.0	17.3	40.1	14.1	25.7
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9	40.3	* 8	29.0	* 16	33.2	* 11	* 26
Max Q Clear Time (g_c+I1), s	8.6	37.0	7.7	18.2	13.0	21.0	9.7	15.2
Green Ext Time (p_c), s	0.0	2.1	0.0	3.3	0.1	10.1	0.1	3.4

Intersection Summary		
HCM 2010 Ctrl Delay		39.9
HCM 2010 LOS		D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	46	214	21	57	45	302	1165	25	31	576	199
Future Volume (veh/h)	320	46	214	21	57	45	302	1165	25	31	576	199
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		0.95	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	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	364	0	33	22	59	5	311	1201	26	32	594	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	522	0	231	54	144	162	349	1507	33	44	899	402
Arrive On Green	0.15	0.00	0.15	0.11	0.11	0.11	0.20	0.43	0.43	0.03	0.25	0.00
Sat Flow, veh/h	3548	0	1567	499	1339	1508	1774	3541	77	1774	3539	1583
Grp Volume(v), veh/h	364	0	33	81	0	5	311	600	627	32	594	0
Grp Sat Flow(s),veh/h/ln	1774	0	1567	1838	0	1508	1774	1770	1848	1774	1770	1583
Q Serve(g_s), s	8.2	0.0	1.5	3.5	0.0	0.2	14.4	24.8	24.8	1.5	12.7	0.0
Cycle Q Clear(g_c), s	8.2	0.0	1.5	3.5	0.0	0.2	14.4	24.8	24.8	1.5	12.7	0.0
Prop In Lane	1.00		1.00	0.27		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	522	0	231	198	0	162	349	753	787	44	899	402
V/C Ratio(X)	0.70	0.00	0.14	0.41	0.00	0.03	0.89	0.80	0.80	0.72	0.66	0.00
Avail Cap(c_a), veh/h	1137	0	502	589	0	483	383	781	816	84	966	432
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.1	0.0	31.3	35.1	0.0	33.6	33.0	21.0	21.0	40.8	28.2	0.0
Incr Delay (d2), s/veh	1.7	0.0	0.3	1.4	0.0	0.1	20.9	5.6	5.4	19.6	1.5	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	4.2	0.0	0.7	1.8	0.0	0.1	9.0	13.2	13.7	1.0	6.4	0.0
LnGrp Delay(d),s/veh	35.8	0.0	31.6	36.4	0.0	33.7	53.9	26.6	26.4	60.3	29.7	0.0
LnGrp LOS	D		C	D		C	D	C	C	E	C	
Approach Vol, veh/h		397			86			1538			626	
Approach Delay, s/veh		35.5			36.3			32.1			31.3	
Approach LOS		D			D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	42.7		18.0	23.4	28.2		14.7				
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6				
Max Green Setting (Gmax), s	4.0	37.2		27.0	18.2	23.0		27.0				
Max Q Clear Time (g_c+I1), s	3.5	26.8		10.2	16.4	14.7		5.5				
Green Ext Time (p_c), s	0.0	7.7		1.3	0.2	6.4		0.4				
Intersection Summary												
HCM 2010 Ctrl Delay			32.5									
HCM 2010 LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	15											
Movement	**EBL**	**EBT**	**EBR**	**WBL**	**WBT**	**WBR**	**NBL**	**NBT**	**NBR**	**SBL**	**SBT**	**SBR**
Lane Configurations												
Traffic Vol, veh/h	53	2	217	0	0	0	560	158	18	3	114	82
Future Vol, veh/h	53	2	217	0	0	0	560	158	18	3	114	82
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	7	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	57	2	233	0	0	0	602	170	19	3	123	88

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1564	1581	174	218	0	0	196	0	0
Stage 1	180	180	-	-	-	-	-	-	-
Stage 2	1384	1401	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	6.26	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.46	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.46	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	120	107	859	1352	-	-	1377	-	-
Stage 1	841	743	-	-	-	-	-	-	-
Stage 2	228	203	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	66	0	853	1352	-	-	1377	-	-
Mov Cap-2 Maneuver	66	0	-	-	-	-	-	-	-
Stage 1	834	0	-	-	-	-	-	-	-
Stage 2	126	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	46.3	7.4	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1352	-	-	66	853	1377	-	-
HCM Lane V/C Ratio	0.445	-	-	0.896	0.274	0.002	-	-
HCM Control Delay (s)	9.8	-	-	186.3	10.8	7.6	0	-
HCM Lane LOS	A	-	-	F	B	A	A	-
HCM 95th %tile Q(veh)	2.4	-	-	4.3	1.1	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	964	298	377	487	0	742
Future Volume (vph)	964	298	377	487	0	742
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1026	317	401	518	0	789
RTOR Reduction (vph)	0	0	0	0	0	33
Lane Group Flow (vph)	1026	317	401	518	0	756
Confl. Peds. (#/hr)						13
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	16.9	46.4	18.3	46.4		18.3
Effective Green, g (s)	16.9	46.4	18.3	46.4		18.3
Actuated g/C Ratio	0.36	1.00	0.39	1.00		0.39
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1861	1591	1374	3592		1115
v/s Ratio Prot	c0.20		0.12	0.14		c0.27
v/s Ratio Perm		0.20				
v/c Ratio	0.55	0.20	0.29	0.14		0.68
Uniform Delay, d1	11.7	0.0	9.6	0.0		11.6
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.4	0.3	0.1	0.0		1.7
Delay (s)	12.1	0.3	9.7	0.0		13.3
Level of Service	B	A	A	A		B
Approach Delay (s)	9.3			4.3	13.3	
Approach LOS	A			A	B	

Intersection Summary

HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	46.4	Sum of lost time (s)	11.2
Intersection Capacity Utilization	55.2%	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												
Traffic Volume (veh/h)	0	0	15	361	24	409	19	1083	604	299	486	26
Future Volume (veh/h)	0	0	15	361	24	409	19	1083	604	299	486	26
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		0.97	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	1900	1776	1776	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	385	0	176	19	1105	0	305	496	27
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	3	50	700	0	304	56	1324	1042	333	1809	98
Arrive On Green	0.00	0.00	0.00	0.20	0.00	0.20	0.03	0.37	0.00	0.19	0.53	0.53
Sat Flow, veh/h	0	1776	1509	3548	0	1542	1774	3539	2787	1774	3413	185
Grp Volume(v), veh/h	0	0	0	385	0	176	19	1105	0	305	257	266
Grp Sat Flow(s),veh/h/ln	0	1776	1509	1774	0	1542	1774	1770	1393	1774	1770	1828
Q Serve(g_s), s	0.0	0.0	0.0	6.2	0.0	6.6	0.7	18.0	0.0	10.7	5.1	5.1
Cycle Q Clear(g_c), s	0.0	0.0	0.0	6.2	0.0	6.6	0.7	18.0	0.0	10.7	5.1	5.1
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	0	3	50	700	0	304	56	1324	1042	333	938	969
V/C Ratio(X)	0.00	0.00	0.00	0.55	0.00	0.58	0.34	0.83	0.00	0.92	0.27	0.27
Avail Cap(c_a), veh/h	0	56	95	1454	0	632	224	1495	1177	333	938	969
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	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	22.9	0.0	23.1	30.1	18.1	0.0	25.3	8.2	8.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	1.7	3.6	3.9	0.0	29.2	0.2	0.2
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	3.1	0.0	2.9	0.4	9.5	0.0	7.9	2.5	2.6
LnGrp Delay(d),s/veh	0.0	0.0	0.0	23.6	0.0	24.8	33.7	21.9	0.0	54.4	8.3	8.3
LnGrp LOS				C		C	C	C		D	A	A
Approach Vol, veh/h		0			561			1124			828	
Approach Delay, s/veh		0.0			24.0			22.1			25.3	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.0	28.8		0.0	7.1	38.7		17.6
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	11.9	26.8		2.0	8.0	30.7		26.0
Max Q Clear Time (g_c+I1), s	12.7	20.0		0.0	2.7	7.1		8.6
Green Ext Time (p_c), s	0.0	3.7		0.0	0.0	12.7		1.9

Intersection Summary		
HCM 2010 Ctrl Delay		23.6
HCM 2010 LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	861	21	17	759	51	13	1	24	45	2	18
Future Vol, veh/h	18	861	21	17	759	51	13	1	24	45	2	18
Conflicting Peds, #/hr	10	0	8	8	0	10	6	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	926	23	18	816	55	14	1	26	48	2	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	881	0	0	956	0	0	1436	1902	483	1393	1885	451
Stage 1	-	-	-	-	-	-	984	984	-	890	890	-
Stage 2	-	-	-	-	-	-	452	918	-	503	995	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	757	-	-	715	-	-	94	68	530	101	70	556
Stage 1	-	-	-	-	-	-	267	325	-	304	359	-
Stage 2	-	-	-	-	-	-	557	349	-	519	321	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	753	-	-	714	-	-	80	60	525	87	62	548
Mov Cap-2 Maneuver	-	-	-	-	-	-	80	60	-	87	62	-
Stage 1	-	-	-	-	-	-	251	305	-	285	338	-
Stage 2	-	-	-	-	-	-	505	329	-	465	301	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	33	79.8
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	169	753	-	-	714	-	-	112
HCM Lane V/C Ratio	0.242	0.026	-	-	0.026	-	-	0.624
HCM Control Delay (s)	33	9.9	0.3	-	10.2	0.2	-	79.8
HCM Lane LOS	D	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	0.9	0.1	-	-	0.1	-	-	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	821	87	58	574	18	212	12	104	57	12	41
Future Volume (veh/h)	22	821	87	58	574	18	212	12	104	57	12	41
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)	0.99		0.98	1.00		0.98	0.99		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	1863	1863	1900	1845	1845	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	24	892	95	63	624	20	230	13	0	62	13	45
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
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
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	417	1472	157	294	1583	51	485	19	463	530	98	460
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.29	0.29	0.00	0.29	0.29	0.29
Sat Flow, veh/h	778	3222	343	561	3464	111	1146	65	1583	1331	336	1574
Grp Volume(v), veh/h	24	490	497	63	315	329	243	0	0	75	0	45
Grp Sat Flow(s),veh/h/ln	778	1770	1796	561	1752	1823	1211	0	1583	1668	0	1574
Q Serve(g_s), s	1.0	9.7	9.7	4.4	5.6	5.6	7.5	0.0	0.0	0.0	0.0	1.0
Cycle Q Clear(g_c), s	6.6	9.7	9.7	14.1	5.6	5.6	9.0	0.0	0.0	1.4	0.0	1.0
Prop In Lane	1.00		0.19	1.00		0.06	0.95		1.00	0.83		1.00
Lane Grp Cap(c), veh/h	417	808	820	294	801	833	504	0	463	629	0	460
V/C Ratio(X)	0.06	0.61	0.61	0.21	0.39	0.39	0.48	0.00	0.00	0.12	0.00	0.10
Avail Cap(c_a), veh/h	433	845	858	312	856	890	862	0	882	1013	0	876
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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.6	9.5	9.5	14.8	8.4	8.4	15.5	0.0	0.0	12.2	0.0	12.0
Incr Delay (d2), s/veh	0.1	1.2	1.1	0.4	0.3	0.3	0.7	0.0	0.0	0.1	0.0	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	0.2	4.9	5.0	0.7	2.7	2.8	2.9	0.0	0.0	0.7	0.0	0.4
LnGrp Delay(d),s/veh	10.6	10.7	10.7	15.2	8.7	8.7	16.2	0.0	0.0	12.3	0.0	12.1
LnGrp LOS	B	B	B	B	A	A	B			B		B
Approach Vol, veh/h		1011			707			243			120	
Approach Delay, s/veh		10.7			9.3			16.2			12.2	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		27.4		19.3		27.4		19.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		11.7		3.4		16.1		11.0
Green Ext Time (p_c), s		7.4		2.0		5.0		1.8

Intersection Summary		
HCM 2010 Ctrl Delay		10.9
HCM 2010 LOS		B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection

Int Delay, s/veh 69.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	971	11	27	549	0	4	0	49	264	64	143
Future Vol, veh/h	0	971	11	27	549	0	4	0	49	264	64	143
Conflicting Peds, #/hr	0	0	8	8	0	0	1	0	3	3	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	991	11	28	560	0	4	0	50	269	65	146

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1010	0	0	1373	-	512	1113	1625	281
Stage 1	-	-	-	-	-	-	1004	-	-	615	615	-
Stage 2	-	-	-	-	-	-	369	-	-	498	1010	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	670	-	0	105	0	507	~ 163	101	716
Stage 1	0	-	-	-	-	0	259	0	-	445	480	-
Stage 2	0	-	-	-	-	0	623	0	-	523	316	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	668	-	-	36	-	502	~ 142	96	715
Mov Cap-2 Maneuver	-	-	-	-	-	-	36	-	-	~ 142	96	-
Stage 1	-	-	-	-	-	-	259	-	-	445	460	-
Stage 2	-	-	-	-	-	-	407	-	-	470	314	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	20.9	$ 303.4
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	36	502	-	-	668	-	142	239
HCM Lane V/C Ratio	0.113	0.1	-	-	0.041	-	1.897	0.884
HCM Control Delay (s)	117.4	13	-	-	10.6	-	$ 482	75.6
HCM Lane LOS	F	B	-	-	B	-	F	F
HCM 95th %tile Q(veh)	0.4	0.3	-	-	0.1	-	20.8	7.3

Notes

~: Volume exceeds capacity $: Delay exceeds 300s   +: Computation Not Defined   *: All major volume in platoon

Intersection

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Int Delay, s/veh	0.5					
Lane Configurations						
Traffic Vol, veh/h	1155	170	76	576	0	0
Future Vol, veh/h	1155	170	76	576	0	0
Conflicting Peds, #/hr	0	11	11	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	1191	175	78	594	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1377	0	1743	694
Stage 1	-	-	-	-	1289	-
Stage 2	-	-	-	-	454	-
Critical Hdwy	-	-	4.2	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.25	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	479	-	78	385
Stage 1	-	-	-	-	222	-
Stage 2	-	-	-	-	606	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	479	-	65	381
Mov Cap-2 Maneuver	-	-	-	-	65	-
Stage 1	-	-	-	-	220	-
Stage 2	-	-	-	-	507	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	479	-
HCM Lane V/C Ratio	-	-	-	0.164	-
HCM Control Delay (s)	0	-	-	14	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	849	48	27	377	316	46	225	36	95	44	229
Future Volume (veh/h)	258	849	48	27	377	316	46	225	36	95	44	229
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		0.98	1.00		0.98	0.99		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	1863	1863	1900	1776	1776	1776
Adj Flow Rate, veh/h	263	866	49	28	385	322	47	230	37	97	45	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	7	7	7
Cap, veh/h	306	1343	76	78	484	400	511	474	76	317	539	458
Arrive On Green	0.17	0.39	0.39	0.04	0.27	0.27	0.30	0.30	0.30	0.30	0.30	0.00
Sat Flow, veh/h	1774	3404	193	1774	1823	1506	1352	1562	251	1046	1776	1509
Grp Volume(v), veh/h	263	450	465	28	374	333	47	0	267	97	45	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1827	1774	1770	1559	1352	0	1813	1046	1776	1509
Q Serve(g_s), s	8.3	11.8	11.8	0.9	11.3	11.4	1.5	0.0	6.9	4.8	1.0	0.0
Cycle Q Clear(g_c), s	8.3	11.8	11.8	0.9	11.3	11.4	2.5	0.0	6.9	11.7	1.0	0.0
Prop In Lane	1.00		0.11	1.00		0.97	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	306	698	721	78	470	414	511	0	550	317	539	458
V/C Ratio(X)	0.86	0.64	0.64	0.36	0.79	0.80	0.09	0.00	0.49	0.31	0.08	0.00
Avail Cap(c_a), veh/h	306	698	721	217	565	498	738	0	854	492	836	711
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	1.00	0.00
Uniform Delay (d), s/veh	23.0	14.1	14.1	26.6	19.6	19.7	15.2	0.0	16.3	21.1	14.3	0.0
Incr Delay (d2), s/veh	20.9	2.0	2.0	2.8	6.5	7.9	0.1	0.0	0.7	0.5	0.1	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	5.8	6.1	6.3	0.5	6.3	5.8	0.6	0.0	3.5	1.4	0.5	0.0
LnGrp Delay(d),s/veh	43.9	16.1	16.1	29.4	26.1	27.6	15.2	0.0	17.0	21.6	14.3	0.0
LnGrp LOS	D	B	B	C	C	C	B		B	C	B	
Approach Vol, veh/h		1178			735			314			142	
Approach Delay, s/veh		22.3			26.9			16.7			19.3	
Approach LOS		C			C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	27.7		22.0	15.0	20.3		22.0				
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6				
Max Green Setting (Gmax), s	7.0	21.2		27.0	9.9	18.3		27.0				
Max Q Clear Time (g_c+I1), s	2.9	13.8		13.7	10.3	13.4		8.9				
Green Ext Time (p_c), s	0.0	5.3		2.0	0.0	1.8		2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			22.8									
HCM 2010 LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	663	56	98	314	209	58	610	163	199	397	79
Future Volume (veh/h)	220	663	56	98	314	209	58	610	163	199	397	79
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		0.99	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	1825	1825	1862	1845	1845	1845	1810	1810	1810
Adj Flow Rate, veh/h	229	691	13	102	327	218	60	635	55	207	414	26
Adj No. of Lanes	1	2	1	1	2	0	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	3	3	3	5	5	5
Cap, veh/h	215	1025	451	128	485	316	101	974	433	191	1139	502
Arrive On Green	0.12	0.29	0.29	0.07	0.24	0.24	0.06	0.28	0.28	0.11	0.33	0.33
Sat Flow, veh/h	1774	3539	1559	1739	2005	1307	1757	3505	1559	1723	3438	1514
Grp Volume(v), veh/h	229	691	13	102	282	263	60	635	55	207	414	26
Grp Sat Flow(s),veh/h/ln	1774	1770	1559	1739	1734	1578	1757	1752	1559	1723	1719	1514
Q Serve(g_s), s	11.9	16.9	0.6	5.7	14.5	14.9	3.3	15.7	2.6	10.9	9.0	1.1
Cycle Q Clear(g_c), s	11.9	16.9	0.6	5.7	14.5	14.9	3.3	15.7	2.6	10.9	9.0	1.1
Prop In Lane	1.00		1.00	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	1025	451	128	420	382	101	974	433	191	1139	502
V/C Ratio(X)	1.07	0.67	0.03	0.80	0.67	0.69	0.60	0.65	0.13	1.08	0.36	0.05
Avail Cap(c_a), veh/h	215	1055	465	170	476	433	127	1276	568	191	1385	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.2	30.8	25.0	44.8	33.7	33.9	45.2	31.3	26.6	43.7	25.0	22.4
Incr Delay (d2), s/veh	80.1	1.7	0.0	17.4	3.1	3.9	5.5	0.7	0.1	89.1	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	10.6	8.5	0.3	3.3	7.2	6.9	1.7	7.7	1.1	9.9	4.3	0.5
LnGrp Delay(d),s/veh	123.3	32.5	25.1	62.2	36.8	37.8	50.7	32.1	26.7	132.8	25.2	22.4
LnGrp LOS	F	C	C	E	D	D	D	C	C	F	C	C
Approach Vol, veh/h		933			647			750			647	
Approach Delay, s/veh		54.7			41.2			33.2			59.5	
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	17.0	33.4	13.3	34.6	11.7	38.7	18.0	29.9
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	10.9	35.8	9.6	29.3	7.1	39.6	11.9	27.0
Max Q Clear Time (g_c+I1), s	12.9	17.7	7.7	18.9	5.3	11.0	13.9	16.9
Green Ext Time (p_c), s	0.0	7.2	0.0	5.7	0.0	8.7	0.0	5.6

Intersection Summary		
HCM 2010 Ctrl Delay		47.4
HCM 2010 LOS		D

F. Intersection Level of Service Calculations – Existing Plus Project Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	309	66	768	457	211	41	506	423	218	839	44
Future Volume (veh/h)	126	309	66	768	457	211	41	506	423	218	839	44
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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	156	381	0	948	564	0	51	625	0	269	1036	54
Adj No. of Lanes	1	2	1	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	416	543	243	975	720	322	79	942	1543	321	1078	56
Arrive On Green	0.23	0.15	0.00	0.29	0.21	0.00	0.04	0.27	0.00	0.09	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3422	178
Grp Volume(v), veh/h	156	381	0	948	564	0	51	625	0	269	536	554
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1831
Q Serve(g_s), s	9.8	13.6	0.0	36.8	20.3	0.0	3.8	20.9	0.0	10.2	39.5	39.5
Cycle Q Clear(g_c), s	9.8	13.6	0.0	36.8	20.3	0.0	3.8	20.9	0.0	10.2	39.5	39.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	416	543	243	975	720	322	79	942	1543	321	557	577
V/C Ratio(X)	0.38	0.70	0.00	0.97	0.78	0.00	0.64	0.66	0.00	0.84	0.96	0.96
Avail Cap(c_a), veh/h	416	826	369	975	1249	559	96	942	1543	370	561	580
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.7	53.4	0.0	46.8	49.9	0.0	62.4	43.4	0.0	59.2	44.7	44.7
Incr Delay (d2), s/veh	0.6	1.7	0.0	22.4	1.9	0.0	10.2	1.8	0.0	13.8	28.3	27.8
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	4.9	6.7	0.0	20.3	10.0	0.0	2.1	10.5	0.0	5.5	23.7	24.5
LnGrp Delay(d),s/veh	43.3	55.0	0.0	69.2	51.8	0.0	72.6	45.2	0.0	73.0	73.0	72.5
LnGrp LOS	D	E		E	D		E	D		E	E	E
Approach Vol, veh/h		537			1512			676			1359	
Approach Delay, s/veh		51.6			62.7			47.3			72.8	
Approach LOS		D			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	19.2	42.2	45.0	26.5	12.7	48.7	37.2	34.2
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	14.3	35.0	38.2	31.0	7.2	42.1	21.6	47.6
Max Q Clear Time (g_c+I1), s	12.2	22.9	38.8	15.6	5.8	41.5	11.8	22.3
Green Ext Time (p_c), s	0.2	8.3	0.0	1.9	0.0	0.3	2.1	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	62.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	291	2	98	9	8	19	29	763	4	6	1310	422
Future Volume (veh/h)	291	2	98	9	8	19	29	763	4	6	1310	422
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	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	331	2	111	10	9	22	33	867	5	7	1489	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	1	504	46	50	58	75	1676	10	22	1538	688
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.04	0.46	0.46	0.01	0.43	0.00
Sat Flow, veh/h	498	3	1577	0	155	180	1774	3608	21	1774	3539	1583
Grp Volume(v), veh/h	333	0	111	41	0	0	33	425	447	7	1489	0
Grp Sat Flow(s),veh/h/ln	501	0	1577	335	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	5.0	0.0	0.0	0.0	1.8	16.4	16.4	0.4	39.8	0.0
Cycle Q Clear(g_c), s	31.0	0.0	5.0	31.0	0.0	0.0	1.8	16.4	16.4	0.4	39.8	0.0
Prop In Lane	0.99		1.00	0.24		0.54	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	234	0	504	153	0	0	75	822	864	22	1538	688
V/C Ratio(X)	1.42	0.00	0.22	0.27	0.00	0.00	0.44	0.52	0.52	0.32	0.97	0.00
Avail Cap(c_a), veh/h	234	0	504	153	0	0	128	822	864	128	1544	691
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.9	0.0	24.1	26.2	0.0	0.0	45.3	18.3	18.3	47.5	26.8	0.0
Incr Delay (d2), s/veh	213.1	0.0	0.2	0.9	0.0	0.0	3.9	0.6	0.5	8.0	16.0	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	20.1	0.0	2.2	0.8	0.0	0.0	0.9	8.2	8.6	0.2	22.8	0.0
LnGrp Delay(d),s/veh	250.9	0.0	24.3	27.1	0.0	0.0	49.2	18.9	18.8	55.5	42.7	0.0
LnGrp LOS	F		C	C			D	B	B	E	D	
Approach Vol, veh/h		444			41			905			1496	
Approach Delay, s/veh		194.3			27.1			20.0			42.8	
Approach LOS		F			C			B			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	51.8		37.1	10.9	48.9		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	42.3		31.0	7.0	42.3		31.0
Max Q Clear Time (g_c+I1), s	2.4	18.4		33.0	3.8	41.8		33.0
Green Ext Time (p_c), s	0.0	18.3		0.0	0.0	0.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	58.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	21	152	666	85	23	182	535	402	49	791	12
Future Volume (veh/h)	15	21	152	666	85	23	182	535	402	49	791	12
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		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	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	24	0	766	98	4	209	615	146	56	909	14
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	91	77	835	452	382	235	1666	738	84	1988	31
Arrive On Green	0.05	0.05	0.00	0.24	0.24	0.24	0.13	0.47	0.47	0.05	0.39	0.39
Sat Flow, veh/h	1774	1863	1583	3442	1863	1575	1774	3539	1568	1774	5159	79
Grp Volume(v), veh/h	17	24	0	766	98	4	209	615	146	56	597	326
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1721	1863	1575	1774	1770	1568	1774	1695	1848
Q Serve(g_s), s	1.2	1.6	0.0	27.8	5.4	0.2	14.8	14.2	7.0	4.0	16.8	16.8
Cycle Q Clear(g_c), s	1.2	1.6	0.0	27.8	5.4	0.2	14.8	14.2	7.0	4.0	16.8	16.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	87	91	77	835	452	382	235	1666	738	84	1306	712
V/C Ratio(X)	0.20	0.26	0.00	0.92	0.22	0.01	0.89	0.37	0.20	0.67	0.46	0.46
Avail Cap(c_a), veh/h	305	320	272	890	482	407	276	1666	738	133	1306	712
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	58.7	0.0	47.2	38.8	36.8	54.6	21.7	19.8	60.0	29.4	29.4
Incr Delay (d2), s/veh	1.1	1.5	0.0	13.7	0.2	0.0	25.1	0.6	0.6	8.8	1.2	2.1
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	0.6	0.9	0.0	14.8	2.8	0.1	8.9	7.1	3.1	2.2	8.1	9.0
LnGrp Delay(d),s/veh	59.6	60.2	0.0	61.0	39.0	36.8	79.6	22.3	20.4	68.8	30.5	31.5
LnGrp LOS	E	E		E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		41			868			970			979	
Approach Delay, s/veh		59.9			58.4			34.4			33.0	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.1	66.4		12.4	23.1	55.4		37.1
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	9.6	38.9		22.0	19.9	28.6		33.1
Max Q Clear Time (g_c+I1), s	6.0	16.2		3.6	16.8	18.8		29.8
Green Ext Time (p_c), s	0.0	11.9		0.1	0.2	6.7		1.3

Intersection Summary		
HCM 2010 Ctrl Delay		41.6
HCM 2010 LOS		D

Intersection	
Int Delay, s/veh	2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	108	688	100	181	1236
Future Vol, veh/h	34	108	688	100	181	1236
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	126	800	116	210	1437

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1945	405	0	0	805	0
Stage 1	805	-	-	-	-	-
Stage 2	1140	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	57	595	-	-	815	-
Stage 1	400	-	-	-	-	-
Stage 2	267	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	42	592	-	-	815	-
Mov Cap-2 Maneuver	137	-	-	-	-	-
Stage 1	398	-	-	-	-	-
Stage 2	198	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.6	0	1.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	137	592	815	-
HCM Lane V/C Ratio	-	-	0.289	0.212	0.258	-
HCM Control Delay (s)	-	-	41.6	12.7	10.9	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	1.1	0.8	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	154	273	163	105	305	80	85	566	58	85	950	176
Future Volume (veh/h)	154	273	163	105	305	80	85	566	58	85	950	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		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	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	167	297	38	114	332	0	92	615	17	92	1033	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	323	473	400	154	453	385	166	1205	533	169	1229	550
Arrive On Green	0.09	0.25	0.25	0.09	0.25	0.00	0.09	0.34	0.34	0.09	0.34	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	3504	1552	1792	3575	1599
Grp Volume(v), veh/h	167	297	38	114	332	0	92	615	17	92	1033	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1752	1552	1792	1787	1599
Q Serve(g_s), s	3.9	11.8	1.5	5.4	14.0	0.0	4.2	11.8	0.6	4.1	22.5	0.0
Cycle Q Clear(g_c), s	3.9	11.8	1.5	5.4	14.0	0.0	4.2	11.8	0.6	4.1	22.5	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	323	473	400	154	453	385	166	1205	533	169	1229	550
V/C Ratio(X)	0.52	0.63	0.09	0.74	0.73	0.00	0.55	0.51	0.03	0.54	0.84	0.00
Avail Cap(c_a), veh/h	367	648	548	166	627	533	188	1205	533	221	1286	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	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.4	28.0	24.2	37.4	29.2	0.0	36.4	22.0	18.3	36.4	25.5	0.0
Incr Delay (d2), s/veh	0.9	1.7	0.1	13.9	3.2	0.0	2.1	0.4	0.0	2.0	5.0	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	1.9	6.3	0.7	3.2	7.5	0.0	2.1	5.7	0.3	2.1	11.9	0.0
LnGrp Delay(d),s/veh	37.3	29.7	24.3	51.4	32.4	0.0	38.6	22.4	18.4	38.4	30.5	0.0
LnGrp LOS	D	C	C	D	C		D	C	B	D	C	
Approach Vol, veh/h		502			446			724			1125	
Approach Delay, s/veh		31.8			37.3			24.3			31.1	
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	12.2	34.4	11.6	26.1	12.2	34.4	12.0	25.7
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 10	28.9	* 8	29.0	* 9	30.3	* 8.9	* 29
Max Q Clear Time (g_c+I1), s	6.1	13.8	7.4	13.8	6.2	24.5	5.9	16.0
Green Ext Time (p_c), s	0.0	9.8	0.0	4.2	0.0	4.5	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	30.5
HCM 2010 LOS	C

Notes
* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	233	37	166	23	23	28	115	527	9	42	866	362
Future Volume (veh/h)	233	37	166	23	23	28	115	527	9	42	866	362
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		0.99	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	1900	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	313	0	0	28	28	3	139	635	11	51	1043	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	6	6	6
Cap, veh/h	478	0	214	42	42	72	174	1696	29	64	1416	634
Arrive On Green	0.13	0.00	0.00	0.05	0.05	0.05	0.10	0.48	0.48	0.04	0.42	0.00
Sat Flow, veh/h	3548	0	1583	909	909	1574	1774	3560	62	1707	3406	1524
Grp Volume(v), veh/h	313	0	0	56	0	3	139	316	330	51	1043	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1817	0	1574	1774	1770	1852	1707	1703	1524
Q Serve(g_s), s	6.8	0.0	0.0	2.5	0.0	0.1	6.2	9.2	9.2	2.4	20.9	0.0
Cycle Q Clear(g_c), s	6.8	0.0	0.0	2.5	0.0	0.1	6.2	9.2	9.2	2.4	20.9	0.0
Prop In Lane	1.00		1.00	0.50		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	478	0	214	83	0	72	174	843	882	64	1416	634
V/C Ratio(X)	0.65	0.00	0.00	0.67	0.00	0.04	0.80	0.37	0.37	0.80	0.74	0.00
Avail Cap(c_a), veh/h	1181	0	527	605	0	524	234	907	949	202	1700	761
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.3	0.0	0.0	38.1	0.0	37.0	35.8	13.5	13.5	38.7	20.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.0	9.1	0.0	0.2	13.2	0.3	0.3	20.0	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	3.4	0.0	0.0	1.4	0.0	0.1	3.7	4.5	4.7	1.5	10.0	0.0
LnGrp Delay(d),s/veh	34.8	0.0	0.0	47.2	0.0	37.2	49.0	13.8	13.8	58.7	21.3	0.0
LnGrp LOS	C			D		D	D	B	B	E	C	
Approach Vol, veh/h		313			59			785			1094	
Approach Delay, s/veh		34.8			46.7			20.0			23.1	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.8	45.4		16.5	14.7	40.5		9.3
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	9.6	41.6		27.0	10.7	40.5		27.0
Max Q Clear Time (g_c+I1), s	4.4	11.2		8.8	8.2	22.9		4.5
Green Ext Time (p_c), s	0.0	14.9		1.0	0.1	10.8		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.3
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	2	192	0	0	0	289	63	7	1	81	40
Future Vol, veh/h	17	2	192	0	0	0	289	63	7	1	81	40
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	7	7	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	2	204	0	0	0	307	67	7	1	86	43

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	801	811	112				134	0	0	81	0	0
Stage 1	115	115	-				-	-	-	-	-	-
Stage 2	686	696	-				-	-	-	-	-	-
Critical Hdwy	6.47	6.57	6.27				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.47	5.57	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.47	5.57	-				-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	347	308	928				1451	-	-	1517	-	-
Stage 1	898	791	-				-	-	-	-	-	-
Stage 2	491	436	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	271	0	924				1451	-	-	1517	-	-
Mov Cap-2 Maneuver	271	0	-				-	-	-	-	-	-
Stage 1	893	0	-				-	-	-	-	-	-
Stage 2	385	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.8	6.6	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1451	-	-	271	924	1517	-	-
HCM Lane V/C Ratio	0.212	-	-	0.075	0.221	0.001	-	-
HCM Control Delay (s)	8.1	-	-	19.4	10	7.4	0	-
HCM Lane LOS	A	-	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.8	-	-	0.2	0.8	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	498	250	625	788	0	286
Future Volume (vph)	498	250	625	788	0	286
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	630	316	791	997	0	362
RTOR Reduction (vph)	0	0	0	0	0	152
Lane Group Flow (vph)	630	316	791	997	0	210
Confl. Peds. (#/hr)						9
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	12.3	39.0	15.5	39.0		15.5
Effective Green, g (s)	12.3	39.0	15.5	39.0		15.5
Actuated g/C Ratio	0.32	1.00	0.40	1.00		0.40
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1611	1591	1385	3592		1123
v/s Ratio Prot	0.12		c0.23	c0.28		0.07
v/s Ratio Perm		0.20				
v/c Ratio	0.39	0.20	0.57	0.28		0.19
Uniform Delay, d1	10.4	0.0	9.2	0.0		7.6
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.2	0.3	0.6	0.0		0.1
Delay (s)	10.6	0.3	9.7	0.0		7.7
Level of Service	B	A	A	A		A
Approach Delay (s)	7.1			4.3	7.7	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	39.0	Sum of lost time (s)	11.2
Intersection Capacity Utilization	46.0%	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												
Traffic Volume (veh/h)	0	0	4	545	31	161	16	499	269	172	868	15
Future Volume (veh/h)	0	0	4	545	31	161	16	499	269	172	868	15
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		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	1900	1863	1863	1827	1827	1827	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	692	0	42	20	609	0	210	1059	18
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	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, %	2	2	2	4	4	4	2	2	2	2	2	2
Cap, veh/h	0	3	55	917	0	406	58	1209	952	259	1618	27
Arrive On Green	0.00	0.00	0.00	0.26	0.00	0.26	0.03	0.34	0.00	0.15	0.45	0.45
Sat Flow, veh/h	0	1863	1583	3480	0	1541	1774	3539	2787	1774	3561	61
Grp Volume(v), veh/h	0	0	0	692	0	42	20	609	0	210	526	551
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1740	0	1541	1774	1770	1393	1774	1770	1852
Q Serve(g_s), s	0.0	0.0	0.0	11.2	0.0	1.3	0.7	8.4	0.0	7.0	14.2	14.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	11.2	0.0	1.3	0.7	8.4	0.0	7.0	14.2	14.2
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	0	3	55	917	0	406	58	1209	952	259	804	841
V/C Ratio(X)	0.00	0.00	0.00	0.75	0.00	0.10	0.34	0.50	0.00	0.81	0.65	0.65
Avail Cap(c_a), veh/h	0	61	104	1474	0	652	231	1545	1217	344	885	926
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	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	20.8	0.0	17.1	29.0	16.1	0.0	25.4	13.0	13.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.1	3.4	0.3	0.0	10.4	1.5	1.5
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	0.0	0.0	0.0	5.5	0.0	0.6	0.4	4.1	0.0	4.2	7.2	7.5
LnGrp Delay(d),s/veh	0.0	0.0	0.0	22.1	0.0	17.2	32.5	16.4	0.0	35.9	14.5	14.5
LnGrp LOS				C		B	C	B		D	B	B
Approach Vol, veh/h		0			734			629			1287	
Approach Delay, s/veh		0.0			21.8			16.9			18.0	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.0	26.1		0.0	7.1	33.0		21.3
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	11.9	26.8		2.0	8.0	30.7		26.0
Max Q Clear Time (g_c+I1), s	9.0	10.4		0.0	2.7	16.2		13.2
Green Ext Time (p_c), s	0.2	10.2		0.0	0.0	9.3		2.4

Intersection Summary	
HCM 2010 Ctrl Delay	18.8
HCM 2010 LOS	B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	388	19	21	722	53	13	1	7	20	2	12
Future Vol, veh/h	24	388	19	21	722	53	13	1	7	20	2	12
Conflicting Peds, #/hr	7	0	11	11	0	7	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	6	6	6	3	3	3	14	14	14	2	2	2
Mvmt Flow	29	462	23	25	860	63	15	1	8	24	2	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	930	0	0	496	0	0	1024	1521	253	1237	1501	470
Stage 1	-	-	-	-	-	-	541	541	-	948	948	-
Stage 2	-	-	-	-	-	-	483	980	-	289	553	-
Critical Hdwy	4.22	-	-	4.16	-	-	7.78	6.78	7.18	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.23	-	-	3.64	4.14	3.44	3.52	4.02	3.32
Pot Cap-1 Maneuver	707	-	-	1057	-	-	174	105	711	132	121	540
Stage 1	-	-	-	-	-	-	464	490	-	280	338	-
Stage 2	-	-	-	-	-	-	503	301	-	694	513	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	706	-	-	1057	-	-	152	93	704	118	107	535
Mov Cap-2 Maneuver	-	-	-	-	-	-	152	93	-	118	107	-
Stage 1	-	-	-	-	-	-	433	458	-	263	319	-
Stage 2	-	-	-	-	-	-	461	284	-	646	479	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.4	25.8	34.7
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	198	706	-	-	1057	-	-	161
HCM Lane V/C Ratio	0.126	0.04	-	-	0.024	-	-	0.251
HCM Control Delay (s)	25.8	10.3	0.3	-	8.5	0.2	-	34.7
HCM Lane LOS	D	B	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-	-	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	352	55	72	708	25	66	7	42	20	10	22
Future Volume (veh/h)	12	352	55	72	708	25	66	7	42	20	10	22
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		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	1776	1776	1900	1827	1827
Adj Flow Rate, veh/h	14	424	66	87	853	30	80	8	0	24	12	27
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	4	4	4
Cap, veh/h	403	1440	223	566	1668	59	385	29	254	323	125	260
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.17	0.17	0.00	0.17	0.17	0.17
Sat Flow, veh/h	601	2954	457	882	3420	120	1087	171	1509	873	743	1548
Grp Volume(v), veh/h	14	243	247	87	433	450	88	0	0	36	0	27
Grp Sat Flow(s),veh/h/ln	601	1703	1707	882	1736	1805	1258	0	1509	1616	0	1548
Q Serve(g_s), s	0.6	2.9	2.9	2.2	5.8	5.8	1.8	0.0	0.0	0.0	0.0	0.5
Cycle Q Clear(g_c), s	6.3	2.9	2.9	5.2	5.8	5.8	2.3	0.0	0.0	0.6	0.0	0.5
Prop In Lane	1.00		0.27	1.00		0.07	0.91		1.00	0.67		1.00
Lane Grp Cap(c), veh/h	403	830	833	566	846	880	414	0	254	448	0	260
V/C Ratio(X)	0.03	0.29	0.30	0.15	0.51	0.51	0.21	0.00	0.00	0.08	0.00	0.10
Avail Cap(c_a), veh/h	504	1117	1120	727	1164	1211	1206	0	1155	1341	0	1185
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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.1	5.2	5.2	6.8	5.9	5.9	12.8	0.0	0.0	12.0	0.0	12.0
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.1	0.5	0.5	0.3	0.0	0.0	0.1	0.0	0.2
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	0.1	1.4	1.4	0.6	2.8	2.9	0.8	0.0	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	8.1	5.4	5.4	6.9	6.4	6.4	13.1	0.0	0.0	12.1	0.0	12.1
LnGrp LOS	A	A	A	A	A	A	B			B		B
Approach Vol, veh/h		504			970			88			63	
Approach Delay, s/veh		5.5			6.5			13.1			12.1	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		22.7		11.3		22.7		11.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		8.3		2.6		7.8		4.3
Green Ext Time (p_c), s		7.8		0.7		8.2		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	21.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	411	3	32	640	0	4	0	14	137	45	161
Future Vol, veh/h	0	411	3	32	640	0	4	0	14	137	45	161
Conflicting Peds, #/hr	0	0	9	6	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	6	6	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	507	4	40	790	0	5	0	17	169	56	199

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	520	0	0	1022	-	265	1123	1389	397
Stage 1	-	-	-	-	-	-	518	-	-	869	869	-
Stage 2	-	-	-	-	-	-	504	-	-	254	520	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1028	-	0	190	0	733	~ 160	141	602
Stage 1	0	-	-	-	-	0	509	0	-	313	367	-
Stage 2	0	-	-	-	-	0	518	0	-	728	530	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1028	-	-	83	-	727	~ 152	134	601
Mov Cap-2 Maneuver	-	-	-	-	-	-	83	-	-	~ 152	134	-
Stage 1	-	-	-	-	-	-	509	-	-	313	353	-
Stage 2	-	-	-	-	-	-	280	-	-	711	525	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	19.2	90.8
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	83	727	-	-	1028	-	152	341
HCM Lane V/C Ratio	0.059	0.024	-	-	0.038	-	1.113	0.746
HCM Control Delay (s)	51.1	10.1	-	-	8.6	-	165.9	40.9
HCM Lane LOS	F	B	-	-	A	-	F	E
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	9.1	5.8

Notes

~: Volume exceeds capacity $: Delay exceeds 300s   +: Computation Not Defined   *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	452	110	55	672	0	0
Future Vol, veh/h	452	110	55	672	0	0
Conflicting Peds, #/hr	0	10	10	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	5	5	2	2	4	4
Mvmt Flow	558	136	68	830	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	704	0	1187	357
Stage 1	-	-	-	-	636	-
Stage 2	-	-	-	-	551	-
Critical Hdwy	-	-	4.14	-	6.88	6.98
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	2.22	-	3.54	3.34
Pot Cap-1 Maneuver	-	-	890	-	178	634
Stage 1	-	-	-	-	484	-
Stage 2	-	-	-	-	536	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	890	-	163	628
Mov Cap-2 Maneuver	-	-	-	-	163	-
Stage 1	-	-	-	-	479	-
Stage 2	-	-	-	-	495	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	890	-
HCM Lane V/C Ratio	-	-	-	0.076	-
HCM Control Delay (s)	0	-	-	9.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	97	335	20	8	472	195	21	68	3	23	26	234
Future Volume (veh/h)	97	335	20	8	472	195	21	68	3	23	26	234
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	0.99		0.99	0.99		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	1845	1845	1900	1863	1863	1900	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	113	390	23	9	549	227	24	79	3	27	30	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	213	1564	92	29	879	362	384	306	12	336	308	262
Arrive On Green	0.12	0.47	0.47	0.02	0.36	0.36	0.17	0.17	0.17	0.17	0.17	0.00
Sat Flow, veh/h	1757	3363	198	1774	2438	1005	1363	1782	68	1251	1792	1524
Grp Volume(v), veh/h	113	203	210	9	398	378	24	0	82	27	30	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1808	1774	1770	1674	1363	0	1850	1251	1792	1524
Q Serve(g_s), s	2.6	3.0	3.0	0.2	7.9	8.0	0.6	0.0	1.6	0.8	0.6	0.0
Cycle Q Clear(g_c), s	2.6	3.0	3.0	0.2	7.9	8.0	1.2	0.0	1.6	2.5	0.6	0.0
Prop In Lane	1.00		0.11	1.00		0.60	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	213	815	841	29	638	604	384	0	318	336	308	262
V/C Ratio(X)	0.53	0.25	0.25	0.31	0.62	0.63	0.06	0.00	0.26	0.08	0.10	0.00
Avail Cap(c_a), veh/h	325	870	897	291	841	796	1011	0	1169	911	1133	963
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	1.00	0.00
Uniform Delay (d), s/veh	17.6	6.9	6.9	20.8	11.3	11.3	15.4	0.0	15.3	16.4	14.9	0.0
Incr Delay (d2), s/veh	2.1	0.2	0.2	5.7	1.0	1.1	0.1	0.0	0.4	0.1	0.1	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	1.4	1.4	1.5	0.1	4.0	3.9	0.2	0.0	0.9	0.3	0.3	0.0
LnGrp Delay(d),s/veh	19.7	7.1	7.1	26.5	12.3	12.4	15.5	0.0	15.7	16.5	15.0	0.0
LnGrp LOS	B	A	A	C	B	B	B		B	B	B	
Approach Vol, veh/h		526			785			106			57	
Approach Delay, s/veh		9.8			12.5			15.7			15.7	
Approach LOS		A			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	25.0		11.9	10.3	20.5		11.9
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	21.2		27.0	7.9	20.3		27.0
Max Q Clear Time (g_c+I1), s	2.2	5.0		4.5	4.6	10.0		3.6
Green Ext Time (p_c), s	0.0	7.0		0.7	0.1	5.3		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	11.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	321	86	89	422	118	53	351	51	95	651	129
Future Volume (veh/h)	85	321	86	89	422	118	53	351	51	95	651	129
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		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	1863	1863	1863	1808	1808	1862	1810	1810	1810	1863	1863	1863
Adj Flow Rate, veh/h	99	373	12	103	491	137	62	408	11	110	757	33
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	133	915	406	131	688	191	110	1021	456	139	1102	490
Arrive On Green	0.08	0.26	0.26	0.08	0.26	0.26	0.06	0.30	0.30	0.08	0.31	0.31
Sat Flow, veh/h	1774	3539	1569	1722	2655	736	1723	3438	1535	1774	3539	1574
Grp Volume(v), veh/h	99	373	12	103	317	311	62	408	11	110	757	33
Grp Sat Flow(s),veh/h/ln	1774	1770	1569	1722	1717	1674	1723	1719	1535	1774	1770	1574
Q Serve(g_s), s	4.6	7.3	0.5	4.9	14.1	14.2	2.9	8.0	0.4	5.1	15.7	1.2
Cycle Q Clear(g_c), s	4.6	7.3	0.5	4.9	14.1	14.2	2.9	8.0	0.4	5.1	15.7	1.2
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	133	915	406	131	445	434	110	1021	456	139	1102	490
V/C Ratio(X)	0.74	0.41	0.03	0.79	0.71	0.72	0.56	0.40	0.02	0.79	0.69	0.07
Avail Cap(c_a), veh/h	148	1138	504	144	552	538	144	1408	629	152	1458	649
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	38.0	25.8	23.3	38.1	28.2	28.3	38.2	23.6	20.9	38.0	25.3	20.3
Incr Delay (d2), s/veh	16.5	0.3	0.0	23.1	3.2	3.5	4.5	0.3	0.0	22.6	0.9	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	2.9	3.6	0.2	3.2	7.1	7.0	1.5	3.8	0.2	3.4	7.8	0.5
LnGrp Delay(d),s/veh	54.6	26.1	23.3	61.3	31.5	31.8	42.7	23.8	20.9	60.6	26.2	20.4
LnGrp LOS	D	C	C	E	C	C	D	C	C	E	C	C
Approach Vol, veh/h		484			731			481			900	
Approach Delay, s/veh		31.8			35.8			26.2			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	12.7	31.0	12.5	27.8	11.5	32.3	12.4	27.9
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	7.2	34.4	7.0	27.0	7.0	34.6	7.0	27.0
Max Q Clear Time (g_c+I1), s	7.1	10.0	6.9	9.3	4.9	17.7	6.6	16.2
Green Ext Time (p_c), s	0.0	9.1	0.0	6.2	0.0	7.6	0.0	4.7

Intersection Summary		
HCM 2010 Ctrl Delay		31.3
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	678	75	617	548	446	93	663	897	445	649	71
Future Volume (veh/h)	91	678	75	617	548	446	93	663	897	445	649	71
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		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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	95	706	0	643	571	0	97	691	0	464	676	74
Adj No. of Lanes	1	2	1	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	819	366	628	734	329	121	834	1173	436	947	104
Arrive On Green	0.21	0.23	0.00	0.19	0.21	0.00	0.07	0.24	0.00	0.13	0.29	0.29
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3216	352
Grp Volume(v), veh/h	95	706	0	643	571	0	97	691	0	464	372	378
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1798
Q Serve(g_s), s	5.4	23.0	0.0	22.2	18.5	0.0	6.5	22.2	0.0	15.2	22.5	22.5
Cycle Q Clear(g_c), s	5.4	23.0	0.0	22.2	18.5	0.0	6.5	22.2	0.0	15.2	22.5	22.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	365	819	366	628	734	329	121	834	1173	436	521	529
V/C Ratio(X)	0.26	0.86	0.00	1.02	0.78	0.00	0.80	0.83	0.00	1.06	0.71	0.71
Avail Cap(c_a), veh/h	365	915	409	628	1163	520	151	889	1216	436	521	529
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	44.2	0.0	48.8	44.7	0.0	55.1	43.5	0.0	52.3	37.8	37.8
Incr Delay (d2), s/veh	0.4	7.9	0.0	42.2	1.8	0.0	21.6	6.3	0.0	60.9	4.6	4.5
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	2.7	12.1	0.0	14.0	9.1	0.0	3.9	11.6	0.0	10.8	11.6	11.8
LnGrp Delay(d),s/veh	40.3	52.1	0.0	91.0	46.5	0.0	76.6	49.8	0.0	113.2	42.3	42.3
LnGrp LOS	D	D		F	D		E	D		F	D	D
Approach Vol, veh/h		801			1214			788			1214	
Approach Delay, s/veh		50.7			70.1			53.1			69.4	
Approach LOS		D			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	22.0	35.0	29.0	33.8	15.0	42.1	30.8	32.1
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	15.2	30.1	22.2	31.0	10.2	35.1	13.2	40.0
Max Q Clear Time (g_c+I1), s	17.2	24.2	24.2	25.0	8.5	24.5	7.4	20.5
Green Ext Time (p_c), s	0.0	3.9	0.0	2.3	0.0	6.5	2.5	3.8

Intersection Summary		
HCM 2010 Ctrl Delay		62.7
HCM 2010 LOS		E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	341	17	50	5	14	13	158	1349	11	19	857	428
Future Volume (veh/h)	341	17	50	5	14	13	158	1349	11	19	857	428
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		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	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	355	18	52	5	15	14	165	1405	11	20	893	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	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	212	7	564	48	125	88	200	1374	11	55	1061	475
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.11	0.38	0.38	0.03	0.30	0.00
Sat Flow, veh/h	362	18	1570	0	348	244	1774	3599	28	1774	3539	1583
Grp Volume(v), veh/h	373	0	52	34	0	0	165	691	725	20	893	0
Grp Sat Flow(s),veh/h/ln	381	0	1570	592	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	1.9	0.0	0.0	0.0	7.9	32.9	32.9	1.0	20.4	0.0
Cycle Q Clear(g_c), s	31.0	0.0	1.9	31.0	0.0	0.0	7.9	32.9	32.9	1.0	20.4	0.0
Prop In Lane	0.95		1.00	0.15		0.41	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	218	0	564	261	0	0	200	675	709	55	1061	475
V/C Ratio(X)	1.71	0.00	0.09	0.13	0.00	0.00	0.82	1.02	1.02	0.36	0.84	0.00
Avail Cap(c_a), veh/h	218	0	564	261	0	0	243	675	709	144	1128	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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.4	0.0	18.3	20.5	0.0	0.0	37.4	26.7	26.7	41.0	28.3	0.0
Incr Delay (d2), s/veh	338.4	0.0	0.1	0.2	0.0	0.0	17.2	40.5	39.8	4.0	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	25.6	0.0	0.8	0.5	0.0	0.0	4.8	23.5	24.6	0.5	10.8	0.0
LnGrp Delay(d),s/veh	371.8	0.0	18.4	20.7	0.0	0.0	54.7	67.1	66.5	45.0	33.9	0.0
LnGrp LOS	F		B	C			D	F	F	D	C	
Approach Vol, veh/h		425			34			1581			913	
Approach Delay, s/veh		328.6			20.7			65.5			34.2	
Approach LOS		F			C			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	39.7		37.1	16.5	32.7		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	32.3		31.0	11.8	27.5		31.0
Max Q Clear Time (g_c+I1), s	3.0	34.9		33.0	9.9	22.4		33.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.1	3.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	93.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	70	160	462	120	144	304	1113	647	105	1018	24
Future Volume (veh/h)	27	70	160	462	120	144	304	1113	647	105	1018	24
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		0.99	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	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	74	168	486	126	152	320	1172	681	111	1072	25
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	257	211	558	302	251	347	1534	676	135	1603	37
Arrive On Green	0.14	0.14	0.14	0.16	0.16	0.16	0.20	0.43	0.43	0.08	0.31	0.31
Sat Flow, veh/h	1774	1863	1528	3442	1863	1551	1774	3539	1560	1774	5110	119
Grp Volume(v), veh/h	28	74	168	486	126	152	320	1172	681	111	711	386
Grp Sat Flow(s),veh/h/ln	1774	1863	1528	1721	1863	1551	1774	1770	1560	1774	1695	1839
Q Serve(g_s), s	1.8	4.6	13.6	17.6	7.8	11.7	22.7	35.9	55.5	7.9	23.3	23.3
Cycle Q Clear(g_c), s	1.8	4.6	13.6	17.6	7.8	11.7	22.7	35.9	55.5	7.9	23.3	23.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	245	257	211	558	302	251	347	1534	676	135	1064	577
V/C Ratio(X)	0.11	0.29	0.80	0.87	0.42	0.60	0.92	0.76	1.01	0.82	0.67	0.67
Avail Cap(c_a), veh/h	305	320	263	592	320	267	398	1534	676	159	1064	577
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	48.3	49.5	53.5	52.3	48.2	49.8	50.5	30.7	36.3	58.3	38.1	38.1
Incr Delay (d2), s/veh	0.2	0.6	12.8	12.9	0.9	3.5	24.8	3.7	36.5	24.7	3.3	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	0.9	2.4	6.5	9.4	4.1	5.2	13.5	18.4	30.7	4.8	11.4	12.8
LnGrp Delay(d),s/veh	48.5	50.2	66.3	65.2	49.1	53.3	75.4	34.4	72.8	83.0	41.5	44.2
LnGrp LOS	D	D	E	E	D	D	E	C	F	F	D	D
Approach Vol, veh/h		270			764			2173			1208	
Approach Delay, s/veh		60.0			60.2			52.5			46.2	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.8	61.6		23.7	31.1	46.3		26.8
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	11.5	48.1		22.0	28.7	30.9		22.0
Max Q Clear Time (g_c+I1), s	9.9	57.5		15.6	24.7	25.3		19.6
Green Ext Time (p_c), s	0.0	0.0		0.5	0.4	5.2		0.8

Intersection Summary			
HCM 2010 Ctrl Delay			52.5
HCM 2010 LOS			D

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	1490	54	120	792
Future Vol, veh/h	16	28	1490	54	120	792
Conflicting Peds, #/hr	0	0	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	29	1520	55	122	808

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2175	766	0	0	1526	0
Stage 1	1526	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	40	345	-	-	433	-
Stage 1	166	-	-	-	-	-
Stage 2	482	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	29	343	-	-	433	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	165	-	-	-	-	-
Stage 2	346	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	25.8	0	2.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	113	343	433	-
HCM Lane V/C Ratio	-	-	0.144	0.083	0.283	-
HCM Control Delay (s)	-	-	42.2	16.4	16.6	-
HCM Lane LOS	-	-	E	C	C	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	1.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	321	109	100	258	229	193	1253	63	120	791	170
Future Volume (veh/h)	269	321	109	100	258	229	193	1253	63	120	791	170
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	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	283	338	21	105	272	0	203	1319	25	126	833	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	448	375	135	393	334	236	1410	620	160	1278	572
Arrive On Green	0.10	0.24	0.24	0.08	0.21	0.00	0.13	0.40	0.40	0.09	0.36	0.00
Sat Flow, veh/h	3476	1881	1573	1747	1835	1560	1756	3504	1540	1792	3575	1599
Grp Volume(v), veh/h	283	338	21	105	272	0	203	1319	25	126	833	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1573	1747	1835	1560	1756	1752	1540	1792	1787	1599
Q Serve(g_s), s	7.7	16.2	1.0	5.7	13.3	0.0	11.0	35.1	1.0	6.7	19.0	0.0
Cycle Q Clear(g_c), s	7.7	16.2	1.0	5.7	13.3	0.0	11.0	35.1	1.0	6.7	19.0	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	353	448	375	135	393	334	236	1410	620	160	1278	572
V/C Ratio(X)	0.80	0.75	0.06	0.78	0.69	0.00	0.86	0.94	0.04	0.79	0.65	0.00
Avail Cap(c_a), veh/h	404	561	469	144	498	424	291	1453	639	166	1278	572
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	42.7	34.4	28.6	44.0	35.2	0.0	41.2	27.8	17.6	43.3	26.2	0.0
Incr Delay (d2), s/veh	9.3	4.9	0.1	20.8	3.3	0.0	17.9	11.4	0.0	20.2	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	4.2	9.1	0.4	3.6	7.1	0.0	6.5	19.1	0.4	4.2	9.6	0.0
LnGrp Delay(d),s/veh	52.0	39.2	28.7	64.8	38.5	0.0	59.1	39.2	17.7	63.6	27.3	0.0
LnGrp LOS	D	D	C	E	D		E	D	B	E	C	
Approach Vol, veh/h		642			377			1547			959	
Approach Delay, s/veh		44.5			45.8			41.5			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	12.9	44.5	11.7	28.1	17.3	40.1	14.1	25.7
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9	40.3	* 8	29.0	* 16	33.2	* 11	* 26
Max Q Clear Time (g_c+I1), s	8.7	37.1	7.7	18.2	13.0	21.0	9.7	15.3
Green Ext Time (p_c), s	0.0	2.0	0.0	3.3	0.1	10.1	0.1	3.4

Intersection Summary			
HCM 2010 Ctrl Delay			40.0
HCM 2010 LOS			D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	48	214	30	70	69	302	1165	26	33	576	199
Future Volume (veh/h)	320	48	214	30	70	69	302	1165	26	33	576	199
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		0.96	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	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	365	0	33	31	72	30	311	1201	27	34	594	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	519	0	229	68	157	186	347	1482	33	46	881	394
Arrive On Green	0.15	0.00	0.15	0.12	0.12	0.12	0.20	0.42	0.42	0.03	0.25	0.00
Sat Flow, veh/h	3548	0	1567	552	1283	1517	1774	3538	80	1774	3539	1583
Grp Volume(v), veh/h	365	0	33	103	0	30	311	601	627	34	594	0
Grp Sat Flow(s),veh/h/ln	1774	0	1567	1835	0	1517	1774	1770	1847	1774	1770	1583
Q Serve(g_s), s	8.5	0.0	1.6	4.5	0.0	1.5	14.8	25.8	25.9	1.6	13.1	0.0
Cycle Q Clear(g_c), s	8.5	0.0	1.6	4.5	0.0	1.5	14.8	25.8	25.9	1.6	13.1	0.0
Prop In Lane	1.00		1.00	0.30		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	519	0	229	225	0	186	347	741	774	46	881	394
V/C Ratio(X)	0.70	0.00	0.14	0.46	0.00	0.16	0.90	0.81	0.81	0.74	0.67	0.00
Avail Cap(c_a), veh/h	1107	0	489	573	0	474	373	761	794	82	941	421
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.1	0.0	32.2	35.3	0.0	34.0	33.9	22.1	22.1	41.9	29.3	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.3	1.5	0.0	0.4	22.3	6.5	6.2	20.8	1.8	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	4.3	0.0	0.7	2.4	0.0	0.7	9.4	13.8	14.4	1.1	6.6	0.0
LnGrp Delay(d),s/veh	36.9	0.0	32.5	36.8	0.0	34.4	56.2	28.6	28.4	62.6	31.1	0.0
LnGrp LOS	D		C	D		C	E	C	C	E	C	
Approach Vol, veh/h		398			133			1539			628	
Approach Delay, s/veh		36.5			36.2			34.1			32.8	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	43.0		18.3	23.7	28.3		16.2
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	4.0	37.2		27.0	18.2	23.0		27.0
Max Q Clear Time (g_c+I1), s	3.6	27.9		10.5	16.8	15.1		6.5
Green Ext Time (p_c), s	0.0	7.1		1.3	0.2	6.1		0.6

Intersection Summary

HCM 2010 Ctrl Delay 34.2

HCM 2010 LOS C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	14.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	2	219	0	0	0	560	158	18	3	114	82
Future Vol, veh/h	53	2	219	0	0	0	560	158	18	3	114	82
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	7	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	57	2	235	0	0	0	602	170	19	3	123	88

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	1564	1581	174				218	0	0	196	0	0
Stage 1	180	180	-				-	-	-	-	-	-
Stage 2	1384	1401	-				-	-	-	-	-	-
Critical Hdwy	6.46	6.56	6.26				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.46	5.56	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.46	5.56	-				-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	120	107	859				1352	-	-	1377	-	-
Stage 1	841	743	-				-	-	-	-	-	-
Stage 2	228	203	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	66	0	853				1352	-	-	1377	-	-
Mov Cap-2 Maneuver	66	0	-				-	-	-	-	-	-
Stage 1	834	0	-				-	-	-	-	-	-
Stage 2	126	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	46	7.4	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1352	-	-	66	853	1377	-	-
HCM Lane V/C Ratio	0.445	-	-	0.896	0.276	0.002	-	-
HCM Control Delay (s)	9.8	-	-	186.3	10.8	7.6	0	-
HCM Lane LOS	A	-	-	F	B	A	A	-
HCM 95th %tile Q(veh)	2.4	-	-	4.3	1.1	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	965	298	384	497	0	743
Future Volume (vph)	965	298	384	497	0	743
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1027	317	409	529	0	790
RTOR Reduction (vph)	0	0	0	0	0	33
Lane Group Flow (vph)	1027	317	409	529	0	757
Confl. Peds. (#/hr)						13
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	16.9	46.5	18.4	46.5		18.4
Effective Green, g (s)	16.9	46.5	18.4	46.5		18.4
Actuated g/C Ratio	0.36	1.00	0.40	1.00		0.40
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1857	1591	1379	3592		1119
v/s Ratio Prot	c0.20		0.12	0.15		c0.27
v/s Ratio Perm		0.20				
v/c Ratio	0.55	0.20	0.30	0.15		0.68
Uniform Delay, d1	11.8	0.0	9.6	0.0		11.6
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.4	0.3	0.1	0.0		1.6
Delay (s)	12.2	0.3	9.7	0.0		13.2
Level of Service	B	A	A	A		B
Approach Delay (s)	9.4			4.3	13.2	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	8.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	46.5	Sum of lost time (s)	11.2
Intersection Capacity Utilization	55.3%	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 (veh/h)	0	0	15	369	24	409	19	1084	605	299	495	26
Future Volume (veh/h)	0	0	15	369	24	409	19	1084	605	299	495	26
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		0.97	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	1900	1776	1776	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	394	0	176	19	1106	0	305	505	27
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	3	50	701	0	305	56	1324	1042	332	1811	97
Arrive On Green	0.00	0.00	0.00	0.20	0.00	0.20	0.03	0.37	0.00	0.19	0.53	0.53
Sat Flow, veh/h	0	1776	1509	3548	0	1542	1774	3539	2787	1774	3416	182
Grp Volume(v), veh/h	0	0	0	394	0	176	19	1106	0	305	261	271
Grp Sat Flow(s),veh/h/ln	0	1776	1509	1774	0	1542	1774	1770	1393	1774	1770	1829
Q Serve(g_s), s	0.0	0.0	0.0	6.4	0.0	6.6	0.7	18.1	0.0	10.7	5.2	5.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	6.4	0.0	6.6	0.7	18.1	0.0	10.7	5.2	5.2
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	0	3	50	701	0	305	56	1324	1042	332	938	969
V/C Ratio(X)	0.00	0.00	0.00	0.56	0.00	0.58	0.34	0.84	0.00	0.92	0.28	0.28
Avail Cap(c_a), veh/h	0	56	95	1453	0	632	224	1494	1176	332	938	969
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	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	23.0	0.0	23.1	30.1	18.1	0.0	25.3	8.2	8.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.7	0.0	1.7	3.6	3.9	0.0	29.3	0.2	0.2
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	3.2	0.0	2.9	0.4	9.5	0.0	8.0	2.5	2.6
LnGrp Delay(d),s/veh	0.0	0.0	0.0	23.7	0.0	24.8	33.7	22.0	0.0	54.6	8.4	8.4
LnGrp LOS				C		C	C	C		D	A	A
Approach Vol, veh/h		0			570			1125			837	
Approach Delay, s/veh		0.0			24.0			22.2			25.2	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.0	28.8		0.0	7.1	38.8		17.7
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	11.9	26.8		2.0	8.0	30.7		26.0
Max Q Clear Time (g_c+I1), s	12.7	20.1		0.0	2.7	7.2		8.6
Green Ext Time (p_c), s	0.0	3.7		0.0	0.0	12.7		1.9

Intersection Summary	
HCM 2010 Ctrl Delay	23.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	861	21	17	759	55	13	1	24	68	2	26
Future Vol, veh/h	19	861	21	17	759	55	13	1	24	68	2	26
Conflicting Peds, #/hr	10	0	8	8	0	10	6	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	926	23	18	816	59	14	1	26	73	2	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	885	0	0	956	0	0	1438	1908	483	1397	1889	454
Stage 1	-	-	-	-	-	-	986	986	-	892	892	-
Stage 2	-	-	-	-	-	-	452	922	-	505	997	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	754	-	-	715	-	-	94	68	530	101	70	553
Stage 1	-	-	-	-	-	-	266	324	-	303	358	-
Stage 2	-	-	-	-	-	-	557	347	-	518	320	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	750	-	-	714	-	-	79	60	525	86	62	545
Mov Cap-2 Maneuver	-	-	-	-	-	-	79	60	-	86	62	-
Stage 1	-	-	-	-	-	-	249	303	-	283	337	-
Stage 2	-	-	-	-	-	-	496	327	-	462	299	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	33.4	142.2
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	167	750	-	-	714	-	-	110
HCM Lane V/C Ratio	0.245	0.027	-	-	0.026	-	-	0.938
HCM Control Delay (s)	33.4	9.9	0.3	-	10.2	0.2	-	142.2
HCM Lane LOS	D	A	A	-	B	A	-	F
HCM 95th %tile Q(veh)	0.9	0.1	-	-	0.1	-	-	5.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	844	87	58	578	18	212	12	104	57	12	41
Future Volume (veh/h)	22	844	87	58	578	18	212	12	104	57	12	41
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)	0.99		0.98	1.00		0.98	0.99		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	1863	1863	1900	1845	1845	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	24	917	95	63	628	20	230	13	0	62	13	45
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
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
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	416	1482	154	287	1589	51	484	19	462	529	98	460
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.29	0.29	0.00	0.29	0.29	0.29
Sat Flow, veh/h	775	3232	335	548	3465	110	1146	65	1583	1332	336	1574
Grp Volume(v), veh/h	24	502	510	63	317	331	243	0	0	75	0	45
Grp Sat Flow(s),veh/h/ln	775	1770	1798	548	1752	1823	1211	0	1583	1668	0	1574
Q Serve(g_s), s	1.0	10.1	10.1	4.6	5.6	5.6	7.6	0.0	0.0	0.0	0.0	1.0
Cycle Q Clear(g_c), s	6.6	10.1	10.1	14.7	5.6	5.6	9.0	0.0	0.0	1.4	0.0	1.0
Prop In Lane	1.00		0.19	1.00		0.06	0.95		1.00	0.83		1.00
Lane Grp Cap(c), veh/h	416	811	824	287	804	836	503	0	462	627	0	460
V/C Ratio(X)	0.06	0.62	0.62	0.22	0.39	0.40	0.48	0.00	0.00	0.12	0.00	0.10
Avail Cap(c_a), veh/h	429	841	854	302	851	886	857	0	877	1008	0	872
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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.6	9.6	9.6	15.1	8.4	8.4	15.6	0.0	0.0	12.3	0.0	12.1
Incr Delay (d2), s/veh	0.1	1.3	1.3	0.4	0.3	0.3	0.7	0.0	0.0	0.1	0.0	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	0.2	5.2	5.3	0.7	2.7	2.8	2.9	0.0	0.0	0.7	0.0	0.4
LnGrp Delay(d),s/veh	10.6	10.9	10.9	15.5	8.7	8.7	16.3	0.0	0.0	12.3	0.0	12.2
LnGrp LOS	B	B	B	B	A	A	B			B		B
Approach Vol, veh/h		1036			711			243			120	
Approach Delay, s/veh		10.9			9.3			16.3			12.3	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		27.6		19.3		27.6		19.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		12.1		3.4		16.7		11.0
Green Ext Time (p_c), s		7.3		2.0		4.7		1.8

Intersection Summary			
HCM 2010 Ctrl Delay			11.1
HCM 2010 LOS			B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	72.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	994	11	27	553	0	4	0	49	264	64	143
Future Vol, veh/h	0	994	11	27	553	0	4	0	49	264	64	143
Conflicting Peds, #/hr	0	0	8	8	0	0	1	0	3	3	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	1014	11	28	564	0	4	0	50	269	65	146

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1034	0	0	1399	-	524	1129	1653	283
Stage 1	-	-	-	-	-	-	1028	-	-	619	619	-
Stage 2	-	-	-	-	-	-	371	-	-	510	1034	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	656	-	0	100	0	498	~ 159	97	714
Stage 1	0	-	-	-	-	0	251	0	-	443	478	-
Stage 2	0	-	-	-	-	0	622	0	-	514	308	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	654	-	-	32	-	493	~ 138	92	713
Mov Cap-2 Maneuver	-	-	-	-	-	-	32	-	-	~ 138	92	-
Stage 1	-	-	-	-	-	-	251	-	-	443	458	-
Stage 2	-	-	-	-	-	-	406	-	-	461	306	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	22.2	$ 321.3
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	32	493	-	-	654	-	138	231
HCM Lane V/C Ratio	0.128	0.101	-	-	0.042	-	1.952	0.914
HCM Control Delay (s)	133.3	13.1	-	-	10.7	-	$ 507.6	83.7
HCM Lane LOS	F	B	-	-	B	-	F	F
HCM 95th %tile Q(veh)	0.4	0.3	-	-	0.1	-	21.2	7.7

Notes

~: Volume exceeds capacity $: Delay exceeds 300s   +: Computation Not Defined   *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1168	170	76	580	0	0
Future Vol, veh/h	1168	170	76	580	0	0
Conflicting Peds, #/hr	0	11	11	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	1204	175	78	598	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1390	0	1759	701
Stage 1	-	-	-	-	1303	-
Stage 2	-	-	-	-	456	-
Critical Hdwy	-	-	4.2	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.25	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	473	-	76	381
Stage 1	-	-	-	-	218	-
Stage 2	-	-	-	-	605	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	473	-	63	377
Mov Cap-2 Maneuver	-	-	-	-	63	-
Stage 1	-	-	-	-	216	-
Stage 2	-	-	-	-	505	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.6	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	473	-
HCM Lane V/C Ratio	-	-	-	0.166	-
HCM Control Delay (s)	0	-	-	14.1	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	862	48	27	379	316	46	225	36	95	44	231
Future Volume (veh/h)	258	862	48	27	379	316	46	225	36	95	44	231
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		0.98	1.00		0.98	0.99		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	1863	1863	1900	1776	1776	1776
Adj Flow Rate, veh/h	263	880	49	28	387	322	47	230	37	97	45	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	7	7	7
Cap, veh/h	306	1344	75	78	486	399	511	474	76	317	539	458
Arrive On Green	0.17	0.39	0.39	0.04	0.27	0.27	0.30	0.30	0.30	0.30	0.30	0.00
Sat Flow, veh/h	1774	3408	190	1774	1827	1503	1352	1562	251	1046	1776	1509
Grp Volume(v), veh/h	263	457	472	28	375	334	47	0	267	97	45	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1770	1560	1352	0	1813	1046	1776	1509
Q Serve(g_s), s	8.3	12.1	12.1	0.9	11.3	11.5	1.5	0.0	6.9	4.8	1.0	0.0
Cycle Q Clear(g_c), s	8.3	12.1	12.1	0.9	11.3	11.5	2.5	0.0	6.9	11.7	1.0	0.0
Prop In Lane	1.00		0.10	1.00		0.96	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	306	698	721	78	470	415	511	0	550	317	539	458
V/C Ratio(X)	0.86	0.65	0.65	0.36	0.80	0.81	0.09	0.00	0.49	0.31	0.08	0.00
Avail Cap(c_a), veh/h	306	698	721	217	565	498	738	0	854	492	836	711
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	1.00	0.00
Uniform Delay (d), s/veh	23.0	14.2	14.2	26.6	19.6	19.7	15.2	0.0	16.3	21.1	14.3	0.0
Incr Delay (d2), s/veh	20.9	2.2	2.1	2.8	6.6	8.0	0.1	0.0	0.7	0.5	0.1	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	5.8	6.3	6.5	0.5	6.4	5.8	0.6	0.0	3.5	1.4	0.5	0.0
LnGrp Delay(d),s/veh	44.0	16.4	16.3	29.4	26.2	27.7	15.2	0.0	17.0	21.6	14.3	0.0
LnGrp LOS	D	B	B	C	C	C	B		B	C	B	
Approach Vol, veh/h		1192			737			314			142	
Approach Delay, s/veh		22.4			27.0			16.7			19.3	
Approach LOS		C			C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.6	27.7		22.0	15.0	20.3		22.0				
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6				
Max Green Setting (Gmax), s	7.0	21.2		27.0	9.9	18.3		27.0				
Max Q Clear Time (g_c+I1), s	2.9	14.1		13.7	10.3	13.5		8.9				
Green Ext Time (p_c), s	0.0	5.2		2.0	0.0	1.8		2.3				

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)	220	663	56	98	314	209	58	611	163	199	404	79
Future Volume (veh/h)	220	663	56	98	314	209	58	611	163	199	404	79
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		0.99	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	1825	1825	1862	1845	1845	1845	1810	1810	1810
Adj Flow Rate, veh/h	229	691	13	102	327	218	60	636	55	207	421	26
Adj No. of Lanes	1	2	1	1	2	0	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	3	3	3	5	5	5
Cap, veh/h	215	1024	451	128	485	316	101	975	434	191	1140	502
Arrive On Green	0.12	0.29	0.29	0.07	0.24	0.24	0.06	0.28	0.28	0.11	0.33	0.33
Sat Flow, veh/h	1774	3539	1559	1739	2005	1306	1757	3505	1560	1723	3438	1514
Grp Volume(v), veh/h	229	691	13	102	282	263	60	636	55	207	421	26
Grp Sat Flow(s),veh/h/ln	1774	1770	1559	1739	1734	1578	1757	1752	1560	1723	1719	1514
Q Serve(g_s), s	11.9	17.0	0.6	5.7	14.5	14.9	3.3	15.7	2.6	10.9	9.2	1.1
Cycle Q Clear(g_c), s	11.9	17.0	0.6	5.7	14.5	14.9	3.3	15.7	2.6	10.9	9.2	1.1
Prop In Lane	1.00		1.00	1.00		0.83	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	215	1024	451	128	420	382	101	975	434	191	1140	502
V/C Ratio(X)	1.07	0.67	0.03	0.80	0.67	0.69	0.60	0.65	0.13	1.08	0.37	0.05
Avail Cap(c_a), veh/h	215	1054	464	170	476	433	127	1275	567	191	1384	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.2	30.9	25.1	44.8	33.7	33.9	45.3	31.3	26.6	43.7	25.0	22.4
Incr Delay (d2), s/veh	80.4	1.7	0.0	17.4	3.1	3.9	5.5	0.7	0.1	89.3	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	10.6	8.5	0.3	3.3	7.2	6.9	1.8	7.7	1.1	9.9	4.4	0.5
LnGrp Delay(d),s/veh	123.6	32.5	25.1	62.2	36.8	37.9	50.8	32.0	26.7	133.1	25.2	22.4
LnGrp LOS	F	C	C	E	D	D	D	C	C	F	C	C
Approach Vol, veh/h		933			647			751			654	
Approach Delay, s/veh		54.8			41.3			33.2			59.3	
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	17.0	33.5	13.3	34.6	11.7	38.7	18.0	29.9
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	10.9	35.8	9.6	29.3	7.1	39.6	11.9	27.0
Max Q Clear Time (g_c+I1), s	12.9	17.7	7.7	19.0	5.3	11.2	13.9	16.9
Green Ext Time (p_c), s	0.0	7.3	0.0	5.7	0.0	8.7	0.0	5.6

Intersection Summary	
HCM 2010 Ctrl Delay	47.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	126	309	66	768	457	211	41	506	423	218	839	44
Future Volume (veh/h)	126	309	66	768	457	211	41	506	423	218	839	44
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	1835	1835	1835	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	156	381	0	948	564	0	51	625	0	269	1036	54
Adj No. of Lanes	1	2	1	2	2	1	1	3	0	2	3	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	433	567	254	1017	753	337	86	1117	0	323	1312	68
Arrive On Green	0.24	0.16	0.00	0.30	0.22	0.00	0.05	0.22	0.00	0.09	0.27	0.27
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5253	0	3442	4949	258
Grp Volume(v), veh/h	156	381	0	948	564	0	51	625	0	269	709	381
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	0	1721	1695	1817
Q Serve(g_s), s	8.5	11.9	0.0	31.8	17.7	0.0	3.3	12.8	0.0	9.0	22.8	22.8
Cycle Q Clear(g_c), s	8.5	11.9	0.0	31.8	17.7	0.0	3.3	12.8	0.0	9.0	22.8	22.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.00	1.00		0.14
Lane Grp Cap(c), veh/h	433	567	254	1017	753	337	86	1117	0	323	899	482
V/C Ratio(X)	0.36	0.67	0.00	0.93	0.75	0.00	0.59	0.56	0.00	0.83	0.79	0.79
Avail Cap(c_a), veh/h	433	936	419	1070	1407	629	109	1280	0	323	963	516
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	46.3	0.0	39.9	43.0	0.0	54.6	40.7	0.0	52.2	40.0	40.0
Incr Delay (d2), s/veh	0.5	1.4	0.0	13.8	1.5	0.0	6.4	0.4	0.0	16.7	4.2	7.7
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	4.3	5.9	0.0	16.8	8.7	0.0	1.8	6.1	0.0	5.0	11.2	12.4
LnGrp Delay(d),s/veh	37.2	47.7	0.0	53.6	44.5	0.0	61.0	41.1	0.0	68.9	44.2	47.7
LnGrp LOS	D	D		D	D		E	D		E	D	D
Approach Vol, veh/h		537			1512			676			1359	
Approach Delay, s/veh		44.6			50.2			42.6			50.1	
Approach LOS		D			D			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	17.8	32.5	42.0	24.9	12.5	37.9	34.7	32.1
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	11.0	29.5	37.0	31.0	7.2	33.3	20.7	47.3
Max Q Clear Time (g_c+I1), s	11.0	14.8	33.8	13.9	5.3	24.8	10.5	19.7
Green Ext Time (p_c), s	0.0	9.6	1.3	1.9	0.0	6.2	2.1	4.1

Intersection Summary	
HCM 2010 Ctrl Delay	48.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	678	75	617	548	446	93	663	897	445	649	71
Future Volume (veh/h)	91	678	75	617	548	446	93	663	897	445	649	71
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		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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	95	706	0	643	571	0	97	691	0	464	676	74
Adj No. of Lanes	1	2	1	2	2	1	1	3	1	2	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	413	807	361	735	739	330	121	1032	665	477	1272	138
Arrive On Green	0.23	0.23	0.00	0.22	0.21	0.00	0.07	0.20	0.00	0.14	0.27	0.27
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4655	505
Grp Volume(v), veh/h	95	706	0	643	571	0	97	691	0	464	491	259
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1770
Q Serve(g_s), s	5.4	23.9	0.0	22.7	19.2	0.0	6.7	15.6	0.0	16.7	15.3	15.5
Cycle Q Clear(g_c), s	5.4	23.9	0.0	22.7	19.2	0.0	6.7	15.6	0.0	16.7	15.3	15.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	413	807	361	735	739	330	121	1032	665	477	926	483
V/C Ratio(X)	0.23	0.87	0.00	0.87	0.77	0.00	0.80	0.67	0.00	0.97	0.53	0.54
Avail Cap(c_a), veh/h	413	884	396	1071	1542	690	220	1275	740	477	926	483
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	46.2	0.0	46.9	46.1	0.0	57.0	45.6	0.0	53.2	38.3	38.4
Incr Delay (d2), s/veh	0.3	9.2	0.0	5.8	1.8	0.0	11.4	1.0	0.0	34.1	0.6	1.2
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	2.7	12.7	0.0	11.2	9.4	0.0	3.7	7.4	0.0	10.2	7.2	7.7
LnGrp Delay(d),s/veh	38.8	55.4	0.0	52.7	47.8	0.0	68.4	46.6	0.0	87.3	38.9	39.6
LnGrp LOS	D	E		D	D		E	D		F	D	D
Approach Vol, veh/h		801			1214			788			1214	
Approach Delay, s/veh		53.4			50.4			49.3			57.5	
Approach LOS		D			D			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	24.0	32.0	33.7	34.4	15.3	40.7	35.0	33.1
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	17.2	31.1	39.2	31.0	15.4	32.9	15.3	54.9
Max Q Clear Time (g_c+I1), s	18.7	17.6	24.7	25.9	8.7	17.5	7.4	21.2
Green Ext Time (p_c), s	0.0	6.7	2.2	2.0	0.1	8.5	3.1	4.3

Intersection Summary		
HCM 2010 Ctrl Delay		52.9
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	291	2	98	9	8	19	29	763	4	6	1310	422
Future Volume (veh/h)	291	2	98	9	8	19	29	763	4	6	1310	422
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		0.98	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	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	331	2	111	10	9	22	33	867	5	7	1489	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	388	2	346	19	17	41	73	1728	10	22	1593	713
Arrive On Green	0.22	0.22	0.22	0.05	0.05	0.05	0.04	0.48	0.48	0.01	0.45	0.00
Sat Flow, veh/h	1764	11	1575	406	366	894	1774	3608	21	1774	3539	1583
Grp Volume(v), veh/h	333	0	111	41	0	0	33	425	447	7	1489	0
Grp Sat Flow(s),veh/h/ln	1775	0	1575	1665	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	19.2	0.0	6.3	2.6	0.0	0.0	1.9	17.5	17.5	0.4	42.4	0.0
Cycle Q Clear(g_c), s	19.2	0.0	6.3	2.6	0.0	0.0	1.9	17.5	17.5	0.4	42.4	0.0
Prop In Lane	0.99		1.00	0.24		0.54	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	390	0	346	77	0	0	73	847	890	22	1593	713
V/C Ratio(X)	0.85	0.00	0.32	0.53	0.00	0.00	0.45	0.50	0.50	0.32	0.93	0.00
Avail Cap(c_a), veh/h	518	0	459	110	0	0	117	847	890	117	1639	733
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.8	0.0	34.8	49.6	0.0	0.0	49.8	19.0	19.0	52.0	27.7	0.0
Incr Delay (d2), s/veh	10.3	0.0	0.5	5.6	0.0	0.0	4.4	0.5	0.4	8.2	10.2	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	10.5	0.0	2.8	1.3	0.0	0.0	1.0	8.6	9.0	0.3	22.9	0.0
LnGrp Delay(d),s/veh	50.1	0.0	35.3	55.2	0.0	0.0	54.2	19.5	19.4	60.2	38.0	0.0
LnGrp LOS	D		D	E			D	B	B	E	D	
Approach Vol, veh/h		444			41			905			1496	
Approach Delay, s/veh		46.4			55.2			20.7			38.1	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	57.7		29.5	11.2	54.6		11.0
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	49.2		31.0	7.0	49.2		7.0
Max Q Clear Time (g_c+I1), s	2.4	19.5		21.2	3.9	44.4		4.6
Green Ext Time (p_c), s	0.0	21.6		1.7	0.0	3.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	34.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	341	17	50	5	14	13	158	1349	11	19	857	428
Future Volume (veh/h)	341	17	50	5	14	13	158	1349	11	19	857	428
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		0.96	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	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	355	18	52	5	15	14	165	1405	11	20	893	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	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	422	21	390	11	32	30	198	1469	11	53	1155	517
Arrive On Green	0.25	0.25	0.25	0.04	0.04	0.04	0.11	0.41	0.41	0.03	0.33	0.00
Sat Flow, veh/h	1692	86	1564	249	747	697	1774	3599	28	1774	3539	1583
Grp Volume(v), veh/h	373	0	52	34	0	0	165	691	725	20	893	0
Grp Sat Flow(s),veh/h/ln	1778	0	1564	1692	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	19.1	0.0	2.5	1.9	0.0	0.0	8.7	36.3	36.4	1.1	21.8	0.0
Cycle Q Clear(g_c), s	19.1	0.0	2.5	1.9	0.0	0.0	8.7	36.3	36.4	1.1	21.8	0.0
Prop In Lane	0.95		1.00	0.15		0.41	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	443	0	390	74	0	0	198	722	758	53	1155	517
V/C Ratio(X)	0.84	0.00	0.13	0.46	0.00	0.00	0.83	0.96	0.96	0.37	0.77	0.00
Avail Cap(c_a), veh/h	575	0	505	123	0	0	257	723	759	129	1192	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	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.2	0.0	28.0	44.8	0.0	0.0	41.7	27.6	27.6	45.6	29.1	0.0
Incr Delay (d2), s/veh	8.6	0.0	0.2	4.5	0.0	0.0	16.2	23.2	22.6	4.3	3.1	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	10.4	0.0	1.1	1.0	0.0	0.0	5.2	22.3	23.3	0.6	11.2	0.0
LnGrp Delay(d),s/veh	42.9	0.0	28.1	49.2	0.0	0.0	57.9	50.8	50.2	49.9	32.2	0.0
LnGrp LOS	D		C	D			E	D	D	D	C	
Approach Vol, veh/h		425			34			1581			913	
Approach Delay, s/veh		41.1			49.2			51.3			32.6	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.7	46.0		30.0	17.5	38.1		10.3
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	39.2		31.0	13.9	32.3		7.0
Max Q Clear Time (g_c+I1), s	3.1	38.4		21.1	10.7	23.8		3.9
Green Ext Time (p_c), s	0.0	0.8		1.8	0.1	7.4		0.0

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)	154	273	163	105	305	80	85	566	58	85	950	176
Future Volume (veh/h)	154	273	163	105	305	80	85	566	58	85	950	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		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	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	167	297	45	114	332	0	92	615	63	92	1033	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	491	415	162	469	398	173	1451	147	176	1606	0
Arrive On Green	0.10	0.26	0.26	0.09	0.26	0.00	0.10	0.31	0.31	0.10	0.31	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	4641	471	1792	5305	0
Grp Volume(v), veh/h	167	297	45	114	332	0	92	443	235	92	1033	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1678	1755	1792	1712	0
Q Serve(g_s), s	3.6	11.0	1.7	5.0	13.1	0.0	4.0	8.3	8.4	3.9	13.7	0.0
Cycle Q Clear(g_c), s	3.6	11.0	1.7	5.0	13.1	0.0	4.0	8.3	8.4	3.9	13.7	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	341	491	415	162	469	398	173	1049	549	176	1606	0
V/C Ratio(X)	0.49	0.60	0.11	0.70	0.71	0.00	0.53	0.42	0.43	0.52	0.64	0.00
Avail Cap(c_a), veh/h	389	687	581	216	707	601	199	1145	599	235	1843	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	33.9	25.8	22.3	35.0	26.9	0.0	34.1	21.6	21.7	34.0	23.5	0.0
Incr Delay (d2), s/veh	0.8	1.5	0.1	5.3	2.4	0.0	1.9	0.3	0.5	1.8	0.6	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	1.8	5.9	0.8	2.7	7.0	0.0	2.0	3.9	4.2	2.0	6.6	0.0
LnGrp Delay(d),s/veh	34.7	27.2	22.5	40.3	29.3	0.0	36.0	21.9	22.2	35.8	24.1	0.0
LnGrp LOS	C	C	C	D	C		D	C	C	D	C	
Approach Vol, veh/h		509			446			770			1125	
Approach Delay, s/veh		29.3			32.1			23.7			25.1	
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	30.2	11.6	25.6	12.0	30.2	12.0	25.2
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 10	27.1	* 9.8	29.0	* 9	28.5	* 8.9	* 31
Max Q Clear Time (g_c+I1), s	5.9	10.4	7.0	13.0	6.0	15.7	5.6	15.1
Green Ext Time (p_c), s	0.1	10.6	0.0	4.3	0.0	8.7	0.1	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	26.5
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	269	321	109	100	258	229	193	1253	63	120	791	170
Future Volume (veh/h)	269	321	109	100	258	229	193	1253	63	120	791	170
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	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	283	338	23	105	272	0	203	1319	66	126	833	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	474	397	151	429	365	238	1675	84	180	1574	0
Arrive On Green	0.10	0.25	0.25	0.09	0.23	0.00	0.14	0.34	0.34	0.10	0.31	0.00
Sat Flow, veh/h	3476	1881	1574	1747	1835	1560	1756	4906	245	1792	5305	0
Grp Volume(v), veh/h	283	338	23	105	272	0	203	902	483	126	833	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1574	1747	1835	1560	1756	1678	1795	1792	1712	0
Q Serve(g_s), s	6.8	13.9	0.9	5.0	11.3	0.0	9.6	20.6	20.6	5.8	11.4	0.0
Cycle Q Clear(g_c), s	6.8	13.9	0.9	5.0	11.3	0.0	9.6	20.6	20.6	5.8	11.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.00
Lane Grp Cap(c), veh/h	363	474	397	151	429	365	238	1146	613	180	1574	0
V/C Ratio(X)	0.78	0.71	0.06	0.70	0.63	0.00	0.85	0.79	0.79	0.70	0.53	0.00
Avail Cap(c_a), veh/h	425	641	537	164	589	500	248	1187	635	194	1648	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	37.1	29.0	24.1	37.8	29.3	0.0	35.9	25.2	25.2	37.0	24.4	0.0
Incr Delay (d2), s/veh	7.2	2.8	0.1	10.1	1.9	0.0	22.7	3.5	6.4	9.0	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	3.6	7.6	0.4	2.8	6.0	0.0	6.2	10.1	11.3	3.3	5.4	0.0
LnGrp Delay(d),s/veh	44.3	31.8	24.2	47.9	31.2	0.0	58.6	28.7	31.6	46.1	24.7	0.0
LnGrp LOS	D	C	C	D	C		E	C	C	D	C	
Approach Vol, veh/h		644			377			1588			959	
Approach Delay, s/veh		37.0			35.8			33.4			27.5	
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	12.7	34.5	11.5	26.3	15.7	31.5	13.1	24.8
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9.2	30.1	* 8	29.0	* 12	27.3	* 10	* 27
Max Q Clear Time (g_c+I1), s	7.8	22.6	7.0	15.9	11.6	13.4	8.8	13.3
Green Ext Time (p_c), s	0.0	6.5	0.0	3.7	0.0	11.1	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay	32.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	388	19	21	722	53	13	1	7	20	2	12
Future Volume (veh/h)	24	388	19	21	722	53	13	1	7	20	2	12
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	0.99		0.99	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	1792	1900	1900	1845	1900	1900	1667	1900	1900	1863	1900
Adj Flow Rate, veh/h	29	462	23	25	860	63	15	1	8	24	2	14
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	6	6	6	3	3	3	14	14	14	2	2	2
Cap, veh/h	147	1418	69	126	1483	107	313	45	94	319	55	111
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	67	3039	148	35	3178	230	686	215	450	727	263	533
Grp Volume(v), veh/h	264	0	250	499	0	449	24	0	0	40	0	0
Grp Sat Flow(s),veh/h/ln	1651	0	1603	1808	0	1635	1351	0	0	1524	0	0
Q Serve(g_s), s	0.0	0.0	3.4	0.0	0.0	7.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.2	0.0	3.4	6.8	0.0	7.0	0.4	0.0	0.0	0.6	0.0	0.0
Prop In Lane	0.11		0.09	0.05		0.14	0.62		0.33	0.60		0.35
Lane Grp Cap(c), veh/h	886	0	748	953	0	763	452	0	0	485	0	0
V/C Ratio(X)	0.30	0.00	0.33	0.52	0.00	0.59	0.05	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	1067	0	947	1171	0	966	876	0	0	963	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.8	0.0	5.8	6.7	0.0	6.8	11.0	0.0	0.0	11.1	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.3	0.4	0.0	0.7	0.0	0.0	0.0	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	1.6	0.0	1.5	3.4	0.0	3.3	0.2	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d),s/veh	5.9	0.0	6.1	7.2	0.0	7.5	11.0	0.0	0.0	11.1	0.0	0.0
LnGrp LOS	A		A	A		A	B			B		
Approach Vol, veh/h		514			948			24			40	
Approach Delay, s/veh		6.0			7.3			11.0			11.1	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		12.8		21.7		12.8		21.7
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		18.4		20.4		18.4		20.4
Max Q Clear Time (g_c+I1), s		2.4		5.4		2.6		9.0
Green Ext Time (p_c), s		0.2		8.3		0.2		6.9

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	861	21	17	759	55	13	1	24	68	2	26
Future Volume (veh/h)	19	861	21	17	759	55	13	1	24	68	2	26
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	0.99		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	1845	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	20	926	23	18	816	59	14	1	26	73	2	28
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	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, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	109	1740	43	108	1667	119	183	52	191	332	32	76
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.19	0.19	0.19	0.19	0.19	0.19
Sat Flow, veh/h	24	3355	82	22	3215	229	303	271	994	900	167	398
Grp Volume(v), veh/h	504	0	465	468	0	425	41	0	0	103	0	0
Grp Sat Flow(s),veh/h/ln	1798	0	1663	1814	0	1652	1568	0	0	1465	0	0
Q Serve(g_s), s	0.0	0.0	7.2	0.0	0.0	6.4	0.0	0.0	0.0	1.4	0.0	0.0
Cycle Q Clear(g_c), s	7.0	0.0	7.2	6.3	0.0	6.4	0.8	0.0	0.0	2.2	0.0	0.0
Prop In Lane	0.04		0.05	0.04		0.14	0.34		0.63	0.71		0.27
Lane Grp Cap(c), veh/h	1029	0	863	1038	0	857	425	0	0	440	0	0
V/C Ratio(X)	0.49	0.00	0.54	0.45	0.00	0.50	0.10	0.00	0.00	0.23	0.00	0.00
Avail Cap(c_a), veh/h	1266	0	1092	1275	0	1085	1046	0	0	1029	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.2	0.0	6.2	6.0	0.0	6.0	13.0	0.0	0.0	13.5	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.5	0.3	0.0	0.4	0.1	0.0	0.0	0.3	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	3.6	0.0	3.4	3.2	0.0	2.9	0.4	0.0	0.0	1.0	0.0	0.0
LnGrp Delay(d),s/veh	6.5	0.0	6.7	6.3	0.0	6.5	13.1	0.0	0.0	13.8	0.0	0.0
LnGrp LOS	A		A	A		A	B			B		
Approach Vol, veh/h		969			893			41			103	
Approach Delay, s/veh		6.6			6.4			13.1			13.8	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		25.7		13.0		25.7		13.0
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		25.4		23.4		25.4		23.4
Max Q Clear Time (g_c+I1), s		9.2		4.2		8.4		2.8
Green Ext Time (p_c), s		10.8		0.7		11.2		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	411	3	32	640	0	4	0	14	137	45	161
Future Volume (veh/h)	0	411	3	32	640	0	4	0	14	137	45	161
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		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	0	1792	1900	1827	1827	0	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	507	4	40	790	0	5	0	17	169	56	199
Adj No. of Lanes	0	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	6	6	4	4	0	2	2	2	2	2	2
Cap, veh/h	0	1369	11	433	1373	0	403	0	510	451	116	412
Arrive On Green	0.00	0.40	0.40	0.40	0.40	0.00	0.32	0.00	0.32	0.32	0.32	0.32
Sat Flow, veh/h	0	3552	27	864	3563	0	686	0	1580	1388	359	1276
Grp Volume(v), veh/h	0	249	262	40	790	0	5	0	17	169	0	255
Grp Sat Flow(s),veh/h/ln	0	1703	1787	864	1736	0	686	0	1580	1388	0	1635
Q Serve(g_s), s	0.0	4.1	4.1	1.4	7.1	0.0	0.1	0.0	0.3	4.4	0.0	5.0
Cycle Q Clear(g_c), s	0.0	4.1	4.1	5.5	7.1	0.0	5.1	0.0	0.3	9.5	0.0	5.0
Prop In Lane	0.00		0.02	1.00		0.00	1.00		1.00	1.00		0.78
Lane Grp Cap(c), veh/h	0	673	707	433	1373	0	403	0	510	451	0	528
V/C Ratio(X)	0.00	0.37	0.37	0.09	0.58	0.00	0.01	0.00	0.03	0.37	0.00	0.48
Avail Cap(c_a), veh/h	0	873	917	535	1781	0	559	0	731	645	0	756
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.5	8.5	10.5	9.4	0.0	12.8	0.0	9.2	14.7	0.0	10.8
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.1	0.4	0.0	0.0	0.0	0.0	0.5	0.0	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	0.0	2.0	2.1	0.3	3.4	0.0	0.0	0.0	0.1	1.8	0.0	2.3
LnGrp Delay(d),s/veh	0.0	8.9	8.8	10.6	9.8	0.0	12.9	0.0	9.2	15.2	0.0	11.5
LnGrp LOS		A	A	B	A		B		A	B		B
Approach Vol, veh/h		511			830			22			424	
Approach Delay, s/veh		8.8			9.8			10.1			13.0	
Approach LOS		A			A			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.3		18.4		21.3		18.4				
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6				
Max Green Setting (Gmax), s		20.4		18.4		20.4		18.4				
Max Q Clear Time (g_c+I1), s		6.1		11.5		9.1		7.1				
Green Ext Time (p_c), s		7.5		1.3		6.4		1.7				
Intersection Summary												
HCM 2010 Ctrl Delay			10.3									
HCM 2010 LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	994	11	27	553	0	4	0	49	264	64	143
Future Volume (veh/h)	0	994	11	27	553	0	4	0	49	264	64	143
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		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	0	1863	1900	1827	1827	0	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	1014	11	28	564	0	4	0	50	269	65	146
Adj No. of Lanes	0	2	0	1	2	0	0	1	1	1	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, %	0	2	2	4	4	0	2	2	2	2	2	2
Cap, veh/h	0	1475	16	252	1427	0	448	0	548	491	177	398
Arrive On Green	0.00	0.41	0.41	0.41	0.41	0.00	0.35	0.00	0.35	0.35	0.35	0.35
Sat Flow, veh/h	0	3679	39	537	3563	0	844	0	1579	1347	510	1146
Grp Volume(v), veh/h	0	500	525	28	564	0	4	0	50	269	0	211
Grp Sat Flow(s),veh/h/ln	0	1770	1855	537	1736	0	844	0	1579	1347	0	1657
Q Serve(g_s), s	0.0	10.7	10.7	2.1	5.3	0.0	0.1	0.0	1.0	8.7	0.0	4.4
Cycle Q Clear(g_c), s	0.0	10.7	10.7	12.8	5.3	0.0	4.5	0.0	1.0	13.2	0.0	4.4
Prop In Lane	0.00		0.02	1.00		0.00	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	0	728	763	252	1427	0	448	0	548	491	0	575
V/C Ratio(X)	0.00	0.69	0.69	0.11	0.40	0.00	0.01	0.00	0.09	0.55	0.00	0.37
Avail Cap(c_a), veh/h	0	780	818	267	1530	0	507	0	628	559	0	659
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.2	11.2	16.5	9.6	0.0	13.0	0.0	10.2	16.3	0.0	11.3
Incr Delay (d2), s/veh	0.0	2.3	2.2	0.2	0.2	0.0	0.0	0.0	0.1	1.0	0.0	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	0.0	5.6	5.9	0.3	2.5	0.0	0.0	0.0	0.4	3.3	0.0	2.1
LnGrp Delay(d),s/veh	0.0	13.5	13.4	16.7	9.8	0.0	13.0	0.0	10.3	17.3	0.0	11.7
LnGrp LOS		B	B	B	A		B		B	B		B
Approach Vol, veh/h		1025			592			54			480	
Approach Delay, s/veh		13.5			10.1			10.5			14.8	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		24.6		21.7		24.6		21.7
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		20.4		18.4		20.4		18.4
Max Q Clear Time (g_c+I1), s		12.7		15.2		14.8		6.5
Green Ext Time (p_c), s		5.5		0.8		4.2		1.9

Intersection Summary			
HCM 2010 Ctrl Delay			12.8
HCM 2010 LOS			B

G. Intersection Level of Service Calculations – Background Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	315	67	776	466	215	42	515	430	222	848	45
Future Volume (veh/h)	129	315	67	776	466	215	42	515	430	222	848	45
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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	159	389	0	958	575	0	52	636	0	274	1047	56
Adj No. of Lanes	1	2	1	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	413	549	246	973	728	326	80	937	1537	326	1075	57
Arrive On Green	0.23	0.16	0.00	0.29	0.21	0.00	0.04	0.26	0.00	0.09	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3417	183
Grp Volume(v), veh/h	159	389	0	958	575	0	52	636	0	274	542	561
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1830
Q Serve(g_s), s	10.1	13.9	0.0	37.5	20.9	0.0	3.9	21.5	0.0	10.5	40.4	40.4
Cycle Q Clear(g_c), s	10.1	13.9	0.0	37.5	20.9	0.0	3.9	21.5	0.0	10.5	40.4	40.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	413	549	246	973	728	326	80	937	1537	326	557	576
V/C Ratio(X)	0.38	0.71	0.00	0.98	0.79	0.00	0.65	0.68	0.00	0.84	0.97	0.97
Avail Cap(c_a), veh/h	413	822	368	973	1241	555	96	937	1537	374	557	576
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.1	53.5	0.0	47.3	50.0	0.0	62.7	44.0	0.0	59.4	45.2	45.2
Incr Delay (d2), s/veh	0.6	1.7	0.0	25.1	2.0	0.0	11.3	2.0	0.0	14.1	31.4	30.9
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	5.0	6.9	0.0	21.0	10.3	0.0	2.1	10.8	0.0	5.6	24.6	25.3
LnGrp Delay(d),s/veh	43.7	55.2	0.0	72.4	52.0	0.0	74.1	46.0	0.0	73.5	76.6	76.1
LnGrp LOS	D	E		E	D		E	D		E	E	E
Approach Vol, veh/h		548			1533			688			1377	
Approach Delay, s/veh		51.9			64.7			48.1			75.8	
Approach LOS		D			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	19.5	42.1	45.1	26.8	12.8	48.8	37.2	34.7
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	14.5	34.7	38.3	31.0	7.2	42.0	21.8	47.5
Max Q Clear Time (g_c+I1), s	12.5	23.5	39.5	15.9	5.9	42.4	12.1	22.9
Green Ext Time (p_c), s	0.2	7.9	0.0	1.9	0.0	0.0	2.1	4.1

Intersection Summary		
HCM 2010 Ctrl Delay		63.9
HCM 2010 LOS		E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	297	2	100	9	8	19	30	776	4	6	1321	430
Future Volume (veh/h)	297	2	100	9	8	19	30	776	4	6	1321	430
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	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	338	2	114	10	9	22	34	882	5	7	1501	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	1	503	46	50	57	77	1681	10	22	1540	689
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.04	0.47	0.47	0.01	0.44	0.00
Sat Flow, veh/h	498	3	1577	0	155	180	1774	3608	20	1774	3539	1583
Grp Volume(v), veh/h	340	0	114	41	0	0	34	433	454	7	1501	0
Grp Sat Flow(s),veh/h/ln	501	0	1577	335	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	5.2	0.0	0.0	0.0	1.8	16.8	16.8	0.4	40.4	0.0
Cycle Q Clear(g_c), s	31.0	0.0	5.2	31.0	0.0	0.0	1.8	16.8	16.8	0.4	40.4	0.0
Prop In Lane	0.99		1.00	0.24		0.54	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	233	0	503	153	0	0	77	825	866	22	1540	689
V/C Ratio(X)	1.46	0.00	0.23	0.27	0.00	0.00	0.44	0.52	0.52	0.32	0.97	0.00
Avail Cap(c_a), veh/h	233	0	503	153	0	0	128	825	866	128	1540	689
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.0	0.0	24.3	26.3	0.0	0.0	45.4	18.3	18.3	47.6	26.9	0.0
Incr Delay (d2), s/veh	227.5	0.0	0.2	0.9	0.0	0.0	4.0	0.6	0.6	8.0	17.2	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	21.0	0.0	2.3	0.8	0.0	0.0	1.0	8.3	8.7	0.2	23.3	0.0
LnGrp Delay(d),s/veh	265.5	0.0	24.5	27.2	0.0	0.0	49.3	19.0	18.9	55.6	44.1	0.0
LnGrp LOS	F		C	C			D	B	B	E	D	
Approach Vol, veh/h		454			41			921			1508	
Approach Delay, s/veh		205.0			27.2			20.1			44.2	
Approach LOS		F			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	52.1		37.1	11.0	49.1		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	42.3		31.0	7.0	42.3		31.0
Max Q Clear Time (g_c+I1), s	2.4	18.8		33.0	3.8	42.4		33.0
Green Ext Time (p_c), s	0.0	18.3		0.0	0.0	0.0		0.0

Intersection Summary			
HCM 2010 Ctrl Delay			61.3
HCM 2010 LOS			E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	21	152	679	85	23	182	545	410	50	801	12
Future Volume (veh/h)	15	21	152	679	85	23	182	545	410	50	801	12
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		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	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	24	0	780	98	4	209	626	146	57	921	14
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	91	77	845	457	387	517	1655	733	84	1153	18
Arrive On Green	0.05	0.05	0.00	0.25	0.25	0.25	0.29	0.47	0.47	0.05	0.22	0.22
Sat Flow, veh/h	1774	1863	1583	3442	1863	1576	1774	3539	1568	1774	5159	78
Grp Volume(v), veh/h	17	24	0	780	98	4	209	626	146	57	605	330
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1721	1863	1576	1774	1770	1568	1774	1695	1848
Q Serve(g_s), s	1.2	1.6	0.0	28.3	5.4	0.2	12.1	14.6	7.0	4.0	21.6	21.6
Cycle Q Clear(g_c), s	1.2	1.6	0.0	28.3	5.4	0.2	12.1	14.6	7.0	4.0	21.6	21.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	87	91	77	845	457	387	517	1655	733	84	757	413
V/C Ratio(X)	0.20	0.26	0.00	0.92	0.21	0.01	0.40	0.38	0.20	0.68	0.80	0.80
Avail Cap(c_a), veh/h	305	320	272	890	482	407	517	1655	733	133	757	413
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	58.7	0.0	47.1	38.5	36.5	36.4	22.0	20.0	60.0	47.0	47.0
Incr Delay (d2), s/veh	1.1	1.5	0.0	14.5	0.2	0.0	0.5	0.7	0.6	9.1	8.6	14.9
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	0.6	0.9	0.0	15.1	2.8	0.1	6.0	7.3	3.2	2.2	11.0	12.7
LnGrp Delay(d),s/veh	59.6	60.2	0.0	61.6	38.7	36.5	36.9	22.7	20.6	69.1	55.6	61.9
LnGrp LOS	E	E		E	D	D	D	C	C	E	E	E
Approach Vol, veh/h		41			882			981			992	
Approach Delay, s/veh		59.9			59.0			25.4			58.5	
Approach LOS		E			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	65.9		12.4	43.4	34.7		37.5
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	9.6	38.9		22.0	19.9	28.6		33.1
Max Q Clear Time (g_c+I1), s	6.0	16.6		3.6	14.1	23.6		30.3
Green Ext Time (p_c), s	0.0	5.6		0.1	2.4	2.6		1.1

Intersection Summary			
HCM 2010 Ctrl Delay			47.4
HCM 2010 LOS			D

Intersection						
Int Delay, s/veh	2					

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	108	700	100	181	1245
Future Vol, veh/h	34	108	700	100	181	1245
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	126	814	116	210	1448

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1964	412	0	0	819	0
Stage 1	819	-	-	-	-	-
Stage 2	1145	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	55	589	-	-	805	-
Stage 1	394	-	-	-	-	-
Stage 2	265	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	40	586	-	-	805	-
Mov Cap-2 Maneuver	135	-	-	-	-	-
Stage 1	392	-	-	-	-	-
Stage 2	196	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	19.9	0	1.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	135	586	805	-
HCM Lane V/C Ratio	-	-	0.293	0.214	0.261	-
HCM Control Delay (s)	-	-	42.4	12.8	11	-
HCM Lane LOS	-	-	E	B	B	-
HCM 95th %tile Q(veh)	-	-	1.1	0.8	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	298	179	116	336	86	94	623	64	94	1045	194
Future Volume (veh/h)	169	298	179	116	336	86	94	623	64	94	1045	194
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		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	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	184	324	55	126	365	0	102	677	20	102	1136	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	492	417	156	478	406	166	1191	527	169	1215	544
Arrive On Green	0.09	0.26	0.26	0.09	0.26	0.00	0.09	0.34	0.34	0.09	0.34	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	3504	1551	1792	3575	1599
Grp Volume(v), veh/h	184	324	55	126	365	0	102	677	20	102	1136	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1752	1551	1792	1787	1599
Q Serve(g_s), s	4.4	13.4	2.3	6.2	16.0	0.0	4.9	13.8	0.8	4.8	26.8	0.0
Cycle Q Clear(g_c), s	4.4	13.4	2.3	6.2	16.0	0.0	4.9	13.8	0.8	4.8	26.8	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	315	492	417	156	478	406	166	1191	527	169	1215	544
V/C Ratio(X)	0.58	0.66	0.13	0.81	0.76	0.00	0.61	0.57	0.04	0.60	0.93	0.00
Avail Cap(c_a), veh/h	319	626	530	160	625	531	181	1191	527	245	1243	556
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	38.0	28.7	24.6	39.0	29.8	0.0	37.9	23.5	19.2	37.9	27.8	0.0
Incr Delay (d2), s/veh	2.3	2.0	0.2	24.2	4.5	0.0	4.5	0.6	0.0	2.5	12.8	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	2.2	7.2	1.0	4.0	8.7	0.0	2.6	6.8	0.3	2.5	15.3	0.0
LnGrp Delay(d),s/veh	40.3	30.7	24.8	63.2	34.3	0.0	42.4	24.2	19.3	40.4	40.6	0.0
LnGrp LOS	D	C	C	E	C		D	C	B	D	D	
Approach Vol, veh/h		563			491			799			1238	
Approach Delay, s/veh		33.3			41.7			26.4			40.6	
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	12.4	35.0	12.0	27.7	12.4	35.0	12.1	27.6
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 12	27.4	* 8	29.0	* 9	30.3	* 8	* 30
Max Q Clear Time (g_c+I1), s	6.8	15.8	8.2	15.4	6.9	28.8	6.4	18.0
Green Ext Time (p_c), s	0.1	8.6	0.0	4.4	0.0	0.8	0.1	4.1

Intersection Summary		
HCM 2010 Ctrl Delay		35.8
HCM 2010 LOS		D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	22	169	21	21	26	117	538	9	27	883	369
Future Volume (veh/h)	238	22	169	21	21	26	117	538	9	27	883	369
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	1900	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	306	0	0	25	25	0	141	648	11	33	1064	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	6	6	6
Cap, veh/h	472	0	210	36	36	63	176	1762	30	44	1435	642
Arrive On Green	0.13	0.00	0.00	0.04	0.04	0.00	0.10	0.49	0.49	0.03	0.42	0.00
Sat Flow, veh/h	3548	0	1583	909	909	1583	1774	3561	60	1707	3406	1524
Grp Volume(v), veh/h	306	0	0	50	0	0	141	322	337	33	1064	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1817	0	1583	1774	1770	1852	1707	1703	1524
Q Serve(g_s), s	6.6	0.0	0.0	2.2	0.0	0.0	6.3	9.1	9.1	1.6	21.3	0.0
Cycle Q Clear(g_c), s	6.6	0.0	0.0	2.2	0.0	0.0	6.3	9.1	9.1	1.6	21.3	0.0
Prop In Lane	1.00		1.00	0.50		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	472	0	210	73	0	63	176	875	916	44	1435	642
V/C Ratio(X)	0.65	0.00	0.00	0.69	0.00	0.00	0.80	0.37	0.37	0.75	0.74	0.00
Avail Cap(c_a), veh/h	1184	0	528	606	0	528	237	969	1014	146	1701	761
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	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.3	0.0	0.0	38.3	0.0	0.0	35.7	12.6	12.6	39.1	19.7	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.0	11.0	0.0	0.0	13.2	0.3	0.2	21.8	1.5	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	3.3	0.0	0.0	1.3	0.0	0.0	3.7	4.4	4.7	1.0	10.2	0.0
LnGrp Delay(d),s/veh	34.8	0.0	0.0	49.4	0.0	0.0	48.9	12.9	12.9	60.9	21.2	0.0
LnGrp LOS	C			D			D	B	B	E	C	
Approach Vol, veh/h		306			50			800			1097	
Approach Delay, s/veh		34.8			49.4			19.2			22.4	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.9	46.8		16.4	14.8	40.9		8.8
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	6.9	44.3		27.0	10.8	40.4		27.0
Max Q Clear Time (g_c+I1), s	3.6	11.1		8.6	8.3	23.3		4.2
Green Ext Time (p_c), s	0.0	16.0		1.0	0.1	10.8		0.2

Intersection Summary		
HCM 2010 Ctrl Delay		23.5
HCM 2010 LOS		C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	6.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	2	185	0	0	0	295	64	7	1	83	41
Future Vol, veh/h	17	2	185	0	0	0	295	64	7	1	83	41
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	7	7	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	2	197	0	0	0	314	68	7	1	88	44

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	816	827	115				137	0	0	83	0	0
Stage 1	117	117	-				-	-	-	-	-	-
Stage 2	699	710	-				-	-	-	-	-	-
Critical Hdwy	6.47	6.57	6.27				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.47	5.57	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.47	5.57	-				-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	340	301	924				1447	-	-	1514	-	-
Stage 1	896	789	-				-	-	-	-	-	-
Stage 2	484	429	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	263	0	920				1447	-	-	1514	-	-
Mov Cap-2 Maneuver	263	0	-				-	-	-	-	-	-
Stage 1	891	0	-				-	-	-	-	-	-
Stage 2	377	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.9	6.6	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1447	-	-	263	920	1514	-	-
HCM Lane V/C Ratio	0.217	-	-	0.077	0.214	0.001	-	-
HCM Control Delay (s)	8.2	-	-	19.8	10	7.4	0	-
HCM Lane LOS	A	-	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.8	-	-	0.2	0.8	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	498	255	636	802	0	284
Future Volume (vph)	498	255	636	802	0	284
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	630	323	805	1015	0	359
RTOR Reduction (vph)	0	0	0	0	0	101
Lane Group Flow (vph)	630	323	805	1015	0	258
Confl. Peds. (#/hr)						9
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	12.8	49.0	25.0	49.0		25.0
Effective Green, g (s)	12.8	49.0	25.0	49.0		25.0
Actuated g/C Ratio	0.26	1.00	0.51	1.00		0.51
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1335	1591	1778	3592		1442
v/s Ratio Prot	c0.12		c0.23	0.28		0.09
v/s Ratio Perm		0.20				
v/c Ratio	0.47	0.20	0.45	0.28		0.18
Uniform Delay, d1	15.3	0.0	7.6	0.0		6.5
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.3	0.3	0.2	0.0		0.1
Delay (s)	15.5	0.3	7.8	0.0		6.5
Level of Service	B	A	A	A		A
Approach Delay (s)	10.4			3.5	6.5	
Approach LOS	B			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	49.0	Sum of lost time (s)	11.2
Intersection Capacity Utilization	46.4%	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												
Traffic Volume (veh/h)	0	0	4	555	31	164	16	500	265	175	883	15
Future Volume (veh/h)	0	0	4	555	31	164	16	500	265	175	883	15
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		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	1900	1863	1863	1827	1827	1827	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	704	0	48	20	610	0	213	1077	18
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	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, %	2	2	2	4	4	4	2	2	2	2	2	2
Cap, veh/h	0	3	55	926	0	410	58	1204	948	261	1619	27
Arrive On Green	0.00	0.00	0.00	0.27	0.00	0.27	0.03	0.34	0.00	0.15	0.45	0.45
Sat Flow, veh/h	0	1863	1583	3480	0	1541	1774	3539	2787	1774	3562	60
Grp Volume(v), veh/h	0	0	0	704	0	48	20	610	0	213	535	560
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1740	0	1541	1774	1770	1393	1774	1770	1852
Q Serve(g_s), s	0.0	0.0	0.0	11.6	0.0	1.5	0.7	8.5	0.0	7.2	14.7	14.7
Cycle Q Clear(g_c), s	0.0	0.0	0.0	11.6	0.0	1.5	0.7	8.5	0.0	7.2	14.7	14.7
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	0	3	55	926	0	410	58	1204	948	261	804	842
V/C Ratio(X)	0.00	0.00	0.00	0.76	0.00	0.12	0.34	0.51	0.00	0.82	0.67	0.67
Avail Cap(c_a), veh/h	0	60	103	1456	0	645	228	1527	1202	340	875	915
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	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	21.0	0.0	17.3	29.4	16.3	0.0	25.7	13.2	13.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.1	3.4	0.3	0.0	11.1	1.7	1.6
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	0.0	0.0	0.0	5.6	0.0	0.6	0.4	4.2	0.0	4.4	7.5	7.9
LnGrp Delay(d),s/veh	0.0	0.0	0.0	22.3	0.0	17.4	32.8	16.7	0.0	36.8	15.0	14.9
LnGrp LOS				C		B	C	B		D	B	B
Approach Vol, veh/h		0			752			630			1308	
Approach Delay, s/veh		0.0			22.0			17.2			18.5	
Approach LOS					C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.2	26.2		0.0	7.1	33.3		21.6
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	11.9	26.8		2.0	8.0	30.7		26.0
Max Q Clear Time (g_c+I1), s	9.2	10.5		0.0	2.7	16.7		13.6
Green Ext Time (p_c), s	0.2	10.2		0.0	0.0	9.2		2.4

Intersection Summary			
HCM 2010 Ctrl Delay			19.2
HCM 2010 LOS			B

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	396	19	21	736	27	13	1	7	20	2	11
Future Vol, veh/h	15	396	19	21	736	27	13	1	7	20	2	11
Conflicting Peds, #/hr	7	0	11	11	0	7	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	6	6	6	3	3	3	14	14	14	2	2	2
Mvmt Flow	18	471	23	25	876	32	15	1	8	24	2	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	915	0	0	505	0	0	1020	1494	258	1221	1490	463
Stage 1	-	-	-	-	-	-	529	529	-	949	949	-
Stage 2	-	-	-	-	-	-	491	965	-	272	541	-
Critical Hdwy	4.22	-	-	4.16	-	-	7.78	6.78	7.18	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.23	-	-	3.64	4.14	3.44	3.52	4.02	3.32
Pot Cap-1 Maneuver	716	-	-	1049	-	-	175	109	706	136	123	546
Stage 1	-	-	-	-	-	-	472	496	-	280	337	-
Stage 2	-	-	-	-	-	-	498	306	-	711	519	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	715	-	-	1049	-	-	156	98	699	124	111	541
Mov Cap-2 Maneuver	-	-	-	-	-	-	156	98	-	124	111	-
Stage 1	-	-	-	-	-	-	451	474	-	268	319	-
Stage 2	-	-	-	-	-	-	458	289	-	676	496	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	25.2	33.5
HCM LOS			D	D

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	203	715	-	-	1049	-	-	165
HCM Lane V/C Ratio	0.123	0.025	-	-	0.024	-	-	0.238
HCM Control Delay (s)	25.2	10.2	0.2	-	8.5	0.2	-	33.5
HCM Lane LOS	D	B	A	-	A	A	-	D
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-	-	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	355	55	72	696	25	66	7	42	20	10	22
Future Volume (veh/h)	12	355	55	72	696	25	66	7	42	20	10	22
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		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	1776	1776	1900	1827	1827
Adj Flow Rate, veh/h	14	428	66	87	839	30	80	8	0	24	12	27
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	4	4	4
Cap, veh/h	407	1437	220	563	1660	59	386	29	254	324	125	261
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.17	0.17	0.00	0.17	0.17	0.17
Sat Flow, veh/h	609	2958	453	879	3418	122	1087	171	1509	872	743	1548
Grp Volume(v), veh/h	14	245	249	87	426	443	88	0	0	36	0	27
Grp Sat Flow(s),veh/h/ln	609	1703	1708	879	1736	1804	1258	0	1509	1615	0	1548
Q Serve(g_s), s	0.5	2.9	3.0	2.2	5.7	5.7	1.8	0.0	0.0	0.0	0.0	0.5
Cycle Q Clear(g_c), s	6.2	2.9	3.0	5.2	5.7	5.7	2.3	0.0	0.0	0.6	0.0	0.5
Prop In Lane	1.00		0.27	1.00		0.07	0.91		1.00	0.67		1.00
Lane Grp Cap(c), veh/h	407	827	830	563	843	876	415	0	254	449	0	261
V/C Ratio(X)	0.03	0.30	0.30	0.15	0.51	0.51	0.21	0.00	0.00	0.08	0.00	0.10
Avail Cap(c_a), veh/h	512	1122	1126	728	1169	1216	1212	0	1160	1346	0	1190
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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.0	5.2	5.2	6.8	5.9	5.9	12.8	0.0	0.0	11.9	0.0	11.9
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.1	0.5	0.5	0.3	0.0	0.0	0.1	0.0	0.2
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	0.1	1.4	1.4	0.6	2.7	2.8	0.8	0.0	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	8.1	5.4	5.4	6.9	6.4	6.4	13.0	0.0	0.0	12.0	0.0	12.1
LnGrp LOS	A	A	A	A	A	A	B			B		B
Approach Vol, veh/h		508			956			88			63	
Approach Delay, s/veh		5.5			6.4			13.0			12.0	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		22.5		11.3		22.5		11.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		8.2		2.6		7.7		4.3
Green Ext Time (p_c), s		7.8		0.7		8.2		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	6.7
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	22.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	415	3	32	626	0	4	0	14	140	45	164
Future Vol, veh/h	0	415	3	32	626	0	4	0	14	140	45	164
Conflicting Peds, #/hr	0	0	9	6	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	6	6	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	512	4	40	773	0	5	0	17	173	56	202

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	525	0	0	1018	-	267	1108	1377	388
Stage 1	-	-	-	-	-	-	523	-	-	852	852	-
Stage 2	-	-	-	-	-	-	495	-	-	256	525	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1024	-	0	191	0	731	~ 164	144	611
Stage 1	0	-	-	-	-	0	505	0	-	321	374	-
Stage 2	0	-	-	-	-	0	525	0	-	726	528	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1024	-	-	84	-	725	~ 155	137	610
Mov Cap-2 Maneuver	-	-	-	-	-	-	84	-	-	~ 155	137	-
Stage 1	-	-	-	-	-	-	505	-	-	321	359	-
Stage 2	-	-	-	-	-	-	284	-	-	709	523	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	19.1	89.8
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	84	725	-	-	1024	-	155	350
HCM Lane V/C Ratio	0.059	0.024	-	-	0.039	-	1.115	0.737
HCM Control Delay (s)	50.5	10.1	-	-	8.7	-	165.1	39.3
HCM Lane LOS	F	B	-	-	A	-	F	E
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	9.2	5.6

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	459	110	56	659	0	0
Future Vol, veh/h	459	110	56	659	0	0
Conflicting Peds, #/hr	0	10	10	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	5	5	2	2	4	4
Mvmt Flow	567	136	69	814	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	712	0	1190	361
Stage 1	-	-	-	-	645	-
Stage 2	-	-	-	-	545	-
Critical Hdwy	-	-	4.14	-	6.88	6.98
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	2.22	-	3.54	3.34
Pot Cap-1 Maneuver	-	-	884	-	178	630
Stage 1	-	-	-	-	479	-
Stage 2	-	-	-	-	539	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	884	-	163	624
Mov Cap-2 Maneuver	-	-	-	-	163	-
Stage 1	-	-	-	-	474	-
Stage 2	-	-	-	-	497	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	884	-
HCM Lane V/C Ratio	-	-	-	0.078	-
HCM Control Delay (s)	0	-	-	9.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	340	20	8	466	199	21	69	3	23	27	227
Future Volume (veh/h)	99	340	20	8	466	199	21	69	3	23	27	227
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		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	1845	1845	1900	1863	1863	1900	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	115	395	23	9	542	231	24	80	3	27	31	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	193	1336	78	29	732	311	70	296	11	74	305	259
Arrive On Green	0.11	0.40	0.40	0.02	0.30	0.30	0.04	0.17	0.17	0.04	0.17	0.00
Sat Flow, veh/h	1757	3365	195	1774	2413	1025	1774	1783	67	1707	1792	1524
Grp Volume(v), veh/h	115	205	213	9	397	376	24	0	83	27	31	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1808	1774	1770	1668	1774	0	1850	1707	1792	1524
Q Serve(g_s), s	3.2	4.1	4.1	0.3	10.4	10.4	0.7	0.0	2.0	0.8	0.8	0.0
Cycle Q Clear(g_c), s	3.2	4.1	4.1	0.3	10.4	10.4	0.7	0.0	2.0	0.8	0.8	0.0
Prop In Lane	1.00		0.11	1.00		0.61	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	193	696	718	29	537	506	70	0	307	74	305	259
V/C Ratio(X)	0.60	0.29	0.30	0.31	0.74	0.74	0.34	0.00	0.27	0.36	0.10	0.00
Avail Cap(c_a), veh/h	242	696	718	241	654	616	241	0	971	249	958	814
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	1.00	0.00
Uniform Delay (d), s/veh	21.8	10.6	10.6	25.0	16.1	16.1	24.1	0.0	18.7	23.9	18.0	0.0
Incr Delay (d2), s/veh	2.9	0.2	0.2	5.9	3.5	3.9	2.9	0.0	0.5	3.0	0.1	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	1.7	2.0	2.1	0.2	5.5	5.3	0.4	0.0	1.1	0.4	0.4	0.0
LnGrp Delay(d),s/veh	24.7	10.8	10.8	30.9	19.6	20.0	26.9	0.0	19.2	26.9	18.2	0.0
LnGrp LOS	C	B	B	C	B	B	C		B	C	B	
Approach Vol, veh/h		533			782			107			58	
Approach Delay, s/veh		13.8			19.9			20.9			22.2	
Approach LOS		B			B			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	5.9	25.5	6.6	13.3	10.7	20.7	6.8	13.1
Change Period (Y+Rc), s	5.1	5.1	4.6	4.6	5.1	5.1	4.6	4.6
Max Green Setting (Gmax), s	7.0	19.1	7.0	27.5	7.1	19.0	7.5	27.0
Max Q Clear Time (g_c+I1), s	2.3	6.1	2.7	2.8	5.2	12.4	2.8	4.0
Green Ext Time (p_c), s	0.0	6.1	0.0	0.6	0.0	3.1	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	17.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	325	88	94	425	131	54	350	56	112	663	132
Future Volume (veh/h)	87	325	88	94	425	131	54	350	56	112	663	132
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		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	1863	1863	1863	1808	1808	1808	1810	1810	1810	1863	1863	1863
Adj Flow Rate, veh/h	101	378	18	109	494	28	63	407	12	130	771	30
Adj No. of Lanes	1	2	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	128	1022	454	133	532	450	106	966	431	149	1074	476
Arrive On Green	0.07	0.29	0.29	0.08	0.29	0.29	0.06	0.28	0.28	0.08	0.30	0.30
Sat Flow, veh/h	1774	3539	1570	1722	1808	1530	1723	3438	1535	1774	3539	1568
Grp Volume(v), veh/h	101	378	18	109	494	28	63	407	12	130	771	30
Grp Sat Flow(s),veh/h/ln	1774	1770	1570	1722	1808	1530	1723	1719	1535	1774	1770	1568
Q Serve(g_s), s	5.1	7.7	0.7	5.7	24.1	1.2	3.2	8.8	0.5	6.6	17.6	1.2
Cycle Q Clear(g_c), s	5.1	7.7	0.7	5.7	24.1	1.2	3.2	8.8	0.5	6.6	17.6	1.2
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	128	1022	454	133	532	450	106	966	431	149	1074	476
V/C Ratio(X)	0.79	0.37	0.04	0.82	0.93	0.06	0.60	0.42	0.03	0.87	0.72	0.06
Avail Cap(c_a), veh/h	137	1054	468	133	538	456	133	1289	575	149	1350	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	25.7	23.2	41.2	31.1	23.0	41.5	26.6	23.6	41.1	28.1	22.4
Incr Delay (d2), s/veh	24.9	0.2	0.0	31.8	22.6	0.1	5.3	0.3	0.0	39.7	1.4	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	3.4	3.8	0.3	3.9	15.3	0.5	1.7	4.2	0.2	4.9	8.8	0.5
LnGrp Delay(d),s/veh	66.3	25.9	23.2	73.0	53.7	23.1	46.7	26.9	23.6	80.8	29.5	22.5
LnGrp LOS	E	C	C	E	D	C	D	C	C	F	C	C
Approach Vol, veh/h		497			631			482			931	
Approach Delay, s/veh		34.0			55.7			29.4			36.4	
Approach LOS		C			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	13.7	31.6	13.1	32.3	11.7	33.6	12.6	32.8
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	7.6	34.0	7.0	27.0	7.0	34.6	7.0	27.0
Max Q Clear Time (g_c+I1), s	8.6	10.8	7.7	9.7	5.2	19.6	7.1	26.1
Green Ext Time (p_c), s	0.0	9.0	0.0	5.6	0.0	7.2	0.0	0.5

Intersection Summary	
HCM 2010 Ctrl Delay	39.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	698	77	634	564	459	96	676	917	458	667	73
Future Volume (veh/h)	94	698	77	634	564	459	96	676	917	458	667	73
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		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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	98	727	0	660	588	0	100	704	0	477	695	76
Adj No. of Lanes	1	2	1	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	831	372	624	753	337	124	833	1169	434	938	102
Arrive On Green	0.20	0.23	0.00	0.18	0.22	0.00	0.07	0.24	0.00	0.13	0.29	0.29
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3216	351
Grp Volume(v), veh/h	98	727	0	660	588	0	100	704	0	477	382	389
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1798
Q Serve(g_s), s	5.6	23.9	0.0	22.2	19.2	0.0	6.7	22.9	0.0	15.2	23.5	23.6
Cycle Q Clear(g_c), s	5.6	23.9	0.0	22.2	19.2	0.0	6.7	22.9	0.0	15.2	23.5	23.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	360	831	372	624	753	337	124	833	1169	434	516	524
V/C Ratio(X)	0.27	0.87	0.00	1.06	0.78	0.00	0.81	0.84	0.00	1.10	0.74	0.74
Avail Cap(c_a), veh/h	360	910	407	624	1234	552	153	883	1208	434	516	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	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.6	44.4	0.0	49.2	44.6	0.0	55.3	44.0	0.0	52.7	38.6	38.6
Incr Delay (d2), s/veh	0.4	9.0	0.0	52.3	1.8	0.0	22.1	7.3	0.0	73.1	5.6	5.6
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	2.8	12.7	0.0	14.8	9.4	0.0	4.0	12.0	0.0	11.6	12.3	12.5
LnGrp Delay(d),s/veh	41.0	53.4	0.0	101.5	46.4	0.0	77.4	51.3	0.0	125.8	44.2	44.2
LnGrp LOS	D	D		F	D		E	D		F	D	D
Approach Vol, veh/h		825			1248			804			1248	
Approach Delay, s/veh		51.9			75.6			54.5			75.4	
Approach LOS		D			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	22.0	35.2	29.0	34.4	15.2	42.0	30.6	32.8
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	15.2	30.1	22.2	31.0	10.4	34.9	10.5	42.7
Max Q Clear Time (g_c+I1), s	17.2	24.9	24.2	25.9	8.7	25.6	7.6	21.2
Green Ext Time (p_c), s	0.0	3.4	0.0	2.1	0.0	6.0	1.4	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	66.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	17	52	5	14	13	163	1375	11	19	881	441
Future Volume (veh/h)	351	17	52	5	14	13	163	1375	11	19	881	441
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		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	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	366	18	54	5	15	14	170	1432	11	20	918	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	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	210	6	559	47	124	87	198	1391	11	55	1083	484
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.11	0.39	0.39	0.03	0.31	0.00
Sat Flow, veh/h	362	18	1570	0	348	244	1774	3599	28	1774	3539	1583
Grp Volume(v), veh/h	384	0	54	34	0	0	170	704	739	20	918	0
Grp Sat Flow(s),veh/h/ln	380	0	1570	592	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	2.0	0.0	0.0	0.0	8.2	33.6	33.6	1.0	21.2	0.0
Cycle Q Clear(g_c), s	31.0	0.0	2.0	31.0	0.0	0.0	8.2	33.6	33.6	1.0	21.2	0.0
Prop In Lane	0.95		1.00	0.15		0.41	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	216	0	559	258	0	0	198	684	718	55	1083	484
V/C Ratio(X)	1.78	0.00	0.10	0.13	0.00	0.00	0.86	1.03	1.03	0.37	0.85	0.00
Avail Cap(c_a), veh/h	216	0	559	258	0	0	198	684	718	143	1204	539
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	0.0	18.7	20.8	0.0	0.0	38.0	26.7	26.7	41.3	28.3	0.0
Incr Delay (d2), s/veh	367.3	0.0	0.1	0.2	0.0	0.0	29.6	42.0	41.4	4.0	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	27.2	0.0	0.9	0.6	0.0	0.0	5.6	24.3	25.4	0.5	11.1	0.0
LnGrp Delay(d),s/veh	401.1	0.0	18.7	21.0	0.0	0.0	67.6	68.7	68.1	45.4	33.7	0.0
LnGrp LOS	F		B	C			E	F	F	D	C	
Approach Vol, veh/h		438			34			1613			938	
Approach Delay, s/veh		353.9			21.0			68.3			34.0	
Approach LOS		F			C			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	40.4		37.1	16.5	33.4		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	32.3		31.0	9.7	29.6		31.0
Max Q Clear Time (g_c+I1), s	3.0	35.6		33.0	10.2	23.2		33.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.5		0.0

Intersection Summary			
HCM 2010 Ctrl Delay			98.5
HCM 2010 LOS			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	70	160	476	120	148	304	1141	666	108	1048	24
Future Volume (veh/h)	27	70	160	476	120	148	304	1141	666	108	1048	24
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		0.94	1.00		0.98	1.00		0.99	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	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	74	10	501	126	21	320	1201	299	114	1103	25
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	158	126	565	306	255	347	1709	754	138	1867	42
Arrive On Green	0.08	0.08	0.08	0.16	0.16	0.16	0.20	0.48	0.48	0.08	0.37	0.37
Sat Flow, veh/h	1774	1863	1493	3442	1863	1551	1774	3539	1562	1774	5114	116
Grp Volume(v), veh/h	28	74	10	501	126	21	320	1201	299	114	731	397
Grp Sat Flow(s),veh/h/ln	1774	1863	1493	1721	1863	1551	1774	1770	1562	1774	1695	1840
Q Serve(g_s), s	1.9	4.8	0.8	18.2	7.8	1.5	22.7	34.0	15.7	8.1	22.3	22.4
Cycle Q Clear(g_c), s	1.9	4.8	0.8	18.2	7.8	1.5	22.7	34.0	15.7	8.1	22.3	22.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	150	158	126	565	306	255	347	1709	754	138	1238	672
V/C Ratio(X)	0.19	0.47	0.08	0.89	0.41	0.08	0.92	0.70	0.40	0.83	0.59	0.59
Avail Cap(c_a), veh/h	305	320	257	592	320	267	398	1709	754	159	1238	672
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	54.5	55.9	54.0	52.3	48.0	45.3	50.5	25.9	21.2	58.2	32.9	32.9
Incr Delay (d2), s/veh	0.6	2.2	0.3	14.8	0.9	0.1	24.8	2.4	1.6	25.7	2.1	3.8
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	1.0	2.6	0.3	9.9	4.1	0.6	13.5	17.1	7.1	5.0	10.8	12.1
LnGrp Delay(d),s/veh	55.1	58.0	54.3	67.1	48.9	45.5	75.4	28.4	22.7	83.9	35.0	36.7
LnGrp LOS	E	E	D	E	D	D	E	C	C	F	C	D
Approach Vol, veh/h		112			648			1820			1242	
Approach Delay, s/veh		57.0			62.8			35.7			40.0	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.1	67.9		16.9	31.1	52.8		27.1
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	11.5	48.1		22.0	28.7	30.9		22.0
Max Q Clear Time (g_c+I1), s	10.1	36.0		6.8	24.7	24.4		20.2
Green Ext Time (p_c), s	0.0	10.5		0.3	0.4	6.0		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	42.3
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	1520	54	120	814
Future Vol, veh/h	16	28	1520	54	120	814
Conflicting Peds, #/hr	0	0	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	29	1551	55	122	831

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2217	782	0	0	1557	0
Stage 1	1557	-	-	-	-	-
Stage 2	660	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	37	337	-	-	421	-
Stage 1	159	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	26	335	-	-	421	-
Mov Cap-2 Maneuver	108	-	-	-	-	-
Stage 1	158	-	-	-	-	-
Stage 2	338	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	26.7	0	2.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	108	335	421	-
HCM Lane V/C Ratio	-	-	0.151	0.085	0.291	-
HCM Control Delay (s)	-	-	44.2	16.7	17	-
HCM Lane LOS	-	-	E	C	C	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	1.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	331	112	103	265	224	199	1441	65	122	910	175
Future Volume (veh/h)	277	331	112	103	265	224	199	1441	65	122	910	175
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	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	292	348	21	108	279	0	209	1517	29	128	958	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	336	430	359	126	375	318	238	1572	692	146	1409	630
Arrive On Green	0.10	0.23	0.23	0.07	0.20	0.00	0.14	0.45	0.45	0.08	0.39	0.00
Sat Flow, veh/h	3476	1881	1572	1747	1835	1560	1756	3504	1543	1792	3575	1599
Grp Volume(v), veh/h	292	348	21	108	279	0	209	1517	29	128	958	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1572	1747	1835	1560	1756	1752	1543	1792	1787	1599
Q Serve(g_s), s	9.2	19.4	1.2	6.8	15.8	0.0	12.9	46.6	1.2	7.8	24.5	0.0
Cycle Q Clear(g_c), s	9.2	19.4	1.2	6.8	15.8	0.0	12.9	46.6	1.2	7.8	24.5	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	336	430	359	126	375	318	238	1572	692	146	1409	630
V/C Ratio(X)	0.87	0.81	0.06	0.85	0.74	0.00	0.88	0.97	0.04	0.88	0.68	0.00
Avail Cap(c_a), veh/h	336	493	412	126	448	381	284	1594	702	146	1409	630
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	49.2	40.4	33.3	50.7	41.3	0.0	46.9	29.6	17.1	50.2	27.7	0.0
Incr Delay (d2), s/veh	20.4	9.1	0.1	39.4	5.9	0.0	21.5	15.0	0.0	40.5	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	5.3	11.1	0.5	4.7	8.6	0.0	7.7	25.6	0.5	5.5	12.4	0.0
LnGrp Delay(d),s/veh	69.7	49.4	33.4	90.1	47.2	0.0	68.4	44.6	17.2	90.8	29.1	0.0
LnGrp LOS	E	D	C	F	D		E	D	B	F	C	
Approach Vol, veh/h		661			387			1755			1086	
Approach Delay, s/veh		57.9			59.2			47.0			36.3	
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	13.2	55.0	12.2	30.2	19.2	49.0	14.9	27.5
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9	50.3	* 8	29.0	* 18	41.4	* 11	* 27
Max Q Clear Time (g_c+I1), s	9.8	48.6	8.8	21.4	14.9	26.5	11.2	17.8
Green Ext Time (p_c), s	0.0	1.0	0.0	2.7	0.1	12.9	0.0	3.1

Intersection Summary		
HCM 2010 Ctrl Delay		47.1
HCM 2010 LOS		D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	46	220	21	57	45	311	1200	25	31	593	205
Future Volume (veh/h)	330	46	220	21	57	45	311	1200	25	31	593	205
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		0.95	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	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	374	0	51	22	59	4	321	1237	26	32	611	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	523	0	231	53	142	160	362	1594	34	43	957	428
Arrive On Green	0.15	0.00	0.15	0.11	0.11	0.11	0.20	0.45	0.45	0.02	0.27	0.00
Sat Flow, veh/h	3548	0	1567	499	1339	1507	1774	3544	74	1774	3539	1583
Grp Volume(v), veh/h	374	0	51	81	0	4	321	618	645	32	611	0
Grp Sat Flow(s),veh/h/ln	1774	0	1567	1838	0	1507	1774	1770	1849	1774	1770	1583
Q Serve(g_s), s	9.1	0.0	2.6	3.8	0.0	0.2	16.0	26.8	26.9	1.6	13.9	0.0
Cycle Q Clear(g_c), s	9.1	0.0	2.6	3.8	0.0	0.2	16.0	26.8	26.9	1.6	13.9	0.0
Prop In Lane	1.00		1.00	0.27		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	523	0	231	195	0	160	362	796	832	43	957	428
V/C Ratio(X)	0.72	0.00	0.22	0.42	0.00	0.03	0.89	0.78	0.78	0.74	0.64	0.00
Avail Cap(c_a), veh/h	1052	0	465	545	0	447	481	914	954	82	1030	461
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.0	0.0	34.2	38.1	0.0	36.5	35.2	21.2	21.2	44.1	29.3	0.0
Incr Delay (d2), s/veh	1.8	0.0	0.5	1.4	0.0	0.1	14.5	3.7	3.6	21.6	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	4.6	0.0	1.2	2.0	0.0	0.1	9.3	13.9	14.5	1.1	6.9	0.0
LnGrp Delay(d),s/veh	38.8	0.0	34.7	39.5	0.0	36.5	49.8	24.9	24.7	65.7	30.5	0.0
LnGrp LOS	D		C	D		D	D	C	C	E	C	
Approach Vol, veh/h		425			85			1584			643	
Approach Delay, s/veh		38.3			39.3			29.9			32.2	
Approach LOS		D			D			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	47.8		19.0	25.4	31.4		15.2				
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6				
Max Green Setting (Gmax), s	4.2	47.0		27.0	24.7	26.5		27.0				
Max Q Clear Time (g_c+I1), s	3.6	28.9		11.1	18.0	15.9		5.8				
Green Ext Time (p_c), s	0.0	12.1		1.4	0.6	8.0		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay			32.0									
HCM 2010 LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	17.4											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	2	224	0	0	0	577	163	18	3	117	84
Future Vol, veh/h	55	2	224	0	0	0	577	163	18	3	117	84
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	7	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	2	241	0	0	0	620	175	19	3	126	90

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	1610	1626	178				223	0	0	202	0	0
Stage 1	184	184	-				-	-	-	-	-	-
Stage 2	1426	1442	-				-	-	-	-	-	-
Critical Hdwy	6.46	6.56	6.26				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.46	5.56	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.46	5.56	-				-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	113	100	855				1346	-	-	1370	-	-
Stage 1	838	740	-				-	-	-	-	-	-
Stage 2	217	194	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	60	0	849				1346	-	-	1370	-	-
Mov Cap-2 Maneuver	60	0	-				-	-	-	-	-	-
Stage 1	830	0	-				-	-	-	-	-	-
Stage 2	116	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	56.6	7.6	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1346	-	-	60	849	1370	-	-
HCM Lane V/C Ratio	0.461	-	-	1.022	0.284	0.002	-	-
HCM Control Delay (s)	9.9	-	-	236	10.9	7.6	0	-
HCM Lane LOS	A	-	-	F	B	A	A	-
HCM 95th %tile Q(veh)	2.5	-	-	4.9	1.2	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	993	307	388	502	0	764
Future Volume (vph)	993	307	388	502	0	764
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1056	327	413	534	0	813
RTOR Reduction (vph)	0	0	0	0	0	29
Lane Group Flow (vph)	1056	327	413	534	0	784
Confl. Peds. (#/hr)						13
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	17.2	46.8	18.4	46.8		18.4
Effective Green, g (s)	17.2	46.8	18.4	46.8		18.4
Actuated g/C Ratio	0.37	1.00	0.39	1.00		0.39
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1878	1591	1370	3592		1111
v/s Ratio Prot	c0.21		0.12	0.15		c0.28
v/s Ratio Perm		0.21				
v/c Ratio	0.56	0.21	0.30	0.15		0.71
Uniform Delay, d1	11.8	0.0	9.8	0.0		11.9
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.4	0.3	0.1	0.0		2.1
Delay (s)	12.2	0.3	9.9	0.0		14.0
Level of Service	B	A	A	A		B
Approach Delay (s)	9.4			4.3	14.0	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	46.8	Sum of lost time (s)	11.2
Intersection Capacity Utilization	56.6%	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 (veh/h)	0	0	15	372	24	421	19	1115	622	308	501	26
Future Volume (veh/h)	0	0	15	372	24	421	19	1115	622	308	501	26
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		0.97	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	1900	1776	1776	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	397	0	156	19	1138	0	314	511	27
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	2	48	660	0	287	54	1415	1114	359	1954	103
Arrive On Green	0.00	0.00	0.00	0.19	0.00	0.19	0.03	0.40	0.00	0.20	0.57	0.57
Sat Flow, veh/h	0	1776	1509	3548	0	1540	1774	3539	2787	1774	3419	180
Grp Volume(v), veh/h	0	0	0	397	0	156	19	1138	0	314	264	274
Grp Sat Flow(s),veh/h/ln	0	1776	1509	1774	0	1540	1774	1770	1393	1774	1770	1829
Q Serve(g_s), s	0.0	0.0	0.0	7.4	0.0	6.6	0.8	20.6	0.0	12.4	5.4	5.5
Cycle Q Clear(g_c), s	0.0	0.0	0.0	7.4	0.0	6.6	0.8	20.6	0.0	12.4	5.4	5.5
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	0	2	48	660	0	287	54	1415	1114	359	1011	1046
V/C Ratio(X)	0.00	0.00	0.00	0.60	0.00	0.54	0.35	0.80	0.00	0.87	0.26	0.26
Avail Cap(c_a), veh/h	0	49	88	1276	0	554	196	1552	1222	417	1011	1046
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	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	27.0	0.0	26.6	34.3	19.2	0.0	27.9	7.8	7.8
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	1.6	3.8	2.9	0.0	16.5	0.1	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	0.0	0.0	0.0	3.7	0.0	2.9	0.4	10.5	0.0	7.7	2.7	2.8
LnGrp Delay(d),s/veh	0.0	0.0	0.0	27.8	0.0	28.3	38.1	22.1	0.0	44.4	7.9	7.9
LnGrp LOS				C		C	D	C		D	A	A
Approach Vol, veh/h		0			553			1157			852	
Approach Delay, s/veh		0.0			28.0			22.4			21.4	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	19.7	34.0		0.0	7.3	46.4		18.6
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	17.0	31.7		2.0	8.0	40.7		26.0
Max Q Clear Time (g_c+I1), s	14.4	22.6		0.0	2.8	7.5		9.4
Green Ext Time (p_c), s	0.3	6.3		0.0	0.0	15.6		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	23.3
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	18	887	21	17	782	51	13	1	24	45	2	18
Future Vol, veh/h	18	887	21	17	782	51	13	1	24	45	2	18
Conflicting Peds, #/hr	10	0	8	8	0	10	6	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	19	954	23	18	841	55	14	1	26	48	2	19

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	906	0	0	984	0	0	1476	1954	497	1432	1938	464
Stage 1	-	-	-	-	-	-	1012	1012	-	915	915	-
Stage 2	-	-	-	-	-	-	464	942	-	517	1023	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	740	-	-	698	-	-	88	63	519	95	65	545
Stage 1	-	-	-	-	-	-	256	315	-	294	350	-
Stage 2	-	-	-	-	-	-	548	340	-	509	311	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	736	-	-	697	-	-	75	55	515	81	57	537
Mov Cap-2 Maneuver	-	-	-	-	-	-	75	55	-	81	57	-
Stage 1	-	-	-	-	-	-	240	295	-	275	329	-
Stage 2	-	-	-	-	-	-	495	319	-	454	291	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.5	35	92
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	160	736	-	-	697	-	-	104
HCM Lane V/C Ratio	0.255	0.026	-	-	0.026	-	-	0.672
HCM Control Delay (s)	35	10	0.3	-	10.3	0.3	-	92
HCM Lane LOS	E	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	1	0.1	-	-	0.1	-	-	3.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	846	87	58	581	18	212	12	104	57	12	41
Future Volume (veh/h)	22	846	87	58	581	18	212	12	104	57	12	41
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)	0.99		0.98	1.00		0.98	0.99		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	1863	1863	1900	1845	1845	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	24	920	95	63	632	20	230	13	0	62	13	45
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
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
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	414	1483	153	286	1590	50	484	19	462	529	98	460
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.29	0.29	0.00	0.29	0.29	0.29
Sat Flow, veh/h	772	3233	334	546	3466	110	1146	65	1583	1332	336	1574
Grp Volume(v), veh/h	24	503	512	63	319	333	243	0	0	75	0	45
Grp Sat Flow(s),veh/h/ln	772	1770	1798	546	1752	1823	1210	0	1583	1668	0	1574
Q Serve(g_s), s	1.0	10.1	10.1	4.6	5.7	5.7	7.6	0.0	0.0	0.0	0.0	1.0
Cycle Q Clear(g_c), s	6.7	10.1	10.1	14.7	5.7	5.7	9.0	0.0	0.0	1.4	0.0	1.0
Prop In Lane	1.00		0.19	1.00		0.06	0.95		1.00	0.83		1.00
Lane Grp Cap(c), veh/h	414	812	825	286	804	836	503	0	462	627	0	460
V/C Ratio(X)	0.06	0.62	0.62	0.22	0.40	0.40	0.48	0.00	0.00	0.12	0.00	0.10
Avail Cap(c_a), veh/h	427	840	854	301	851	885	857	0	877	1008	0	871
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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.6	9.6	9.6	15.2	8.4	8.4	15.6	0.0	0.0	12.3	0.0	12.1
Incr Delay (d2), s/veh	0.1	1.3	1.3	0.4	0.3	0.3	0.7	0.0	0.0	0.1	0.0	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	0.2	5.2	5.3	0.7	2.7	2.8	2.9	0.0	0.0	0.7	0.0	0.4
LnGrp Delay(d),s/veh	10.7	10.9	10.9	15.6	8.7	8.7	16.3	0.0	0.0	12.4	0.0	12.2
LnGrp LOS	B	B	B	B	A	A	B			B		B
Approach Vol, veh/h		1039			715			243			120	
Approach Delay, s/veh		10.9			9.3			16.3			12.3	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		27.6		19.3		27.6		19.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		12.1		3.4		16.7		11.0
Green Ext Time (p_c), s		7.3		2.0		4.7		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	11.1
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	81.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1000	11	27	565	0	4	0	49	272	64	147
Future Vol, veh/h	0	1000	11	27	565	0	4	0	49	272	64	147
Conflicting Peds, #/hr	0	0	8	8	0	0	1	0	3	3	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	1020	11	28	577	0	4	0	50	278	65	150

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1040	0	0	1411	-	527	1145	1672	289
Stage 1	-	-	-	-	-	-	1034	-	-	632	632	-
Stage 2	-	-	-	-	-	-	377	-	-	513	1040	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	653	-	0	98	0	496	~ 154	95	708
Stage 1	0	-	-	-	-	0	248	0	-	435	472	-
Stage 2	0	-	-	-	-	0	616	0	-	512	306	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	651	-	-	30	-	491	~ 133	90	707
Mov Cap-2 Maneuver	-	-	-	-	-	-	30	-	-	~ 133	90	-
Stage 1	-	-	-	-	-	-	248	-	-	435	452	-
Stage 2	-	-	-	-	-	-	397	-	-	459	304	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	23	$ 358.9
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	30	491	-	-	651	-	133	230
HCM Lane V/C Ratio	0.136	0.102	-	-	0.042	-	2.087	0.936
HCM Control Delay (s)	143.1	13.2	-	-	10.8	-	$ 568.5	88.7
HCM Lane LOS	F	B	-	-	B	-	F	F
HCM 95th %tile Q(veh)	0.4	0.3	-	-	0.1	-	22.7	8.1

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1190	175	78	593	0	0
Future Vol, veh/h	1190	175	78	593	0	0
Conflicting Peds, #/hr	0	11	11	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	1227	180	80	611	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1418	0	1794	715
Stage 1	-	-	-	-	1328	-
Stage 2	-	-	-	-	466	-
Critical Hdwy	-	-	4.2	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.25	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	461	-	72	373
Stage 1	-	-	-	-	212	-
Stage 2	-	-	-	-	598	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	461	-	59	369
Mov Cap-2 Maneuver	-	-	-	-	59	-
Stage 1	-	-	-	-	210	-
Stage 2	-	-	-	-	494	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	461	-
HCM Lane V/C Ratio	-	-	-	0.174	-
HCM Control Delay (s)	0	-	-	14.5	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	874	49	28	388	325	47	232	37	98	45	236
Future Volume (veh/h)	266	874	49	28	388	325	47	232	37	98	45	236
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		0.98	1.00		0.98	0.99		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	1863	1863	1900	1776	1776	1776
Adj Flow Rate, veh/h	271	892	50	29	396	332	48	237	38	100	46	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	7	7	7
Cap, veh/h	323	1425	80	79	510	423	497	471	75	298	535	455
Arrive On Green	0.18	0.42	0.42	0.04	0.28	0.28	0.30	0.30	0.30	0.30	0.30	0.00
Sat Flow, veh/h	1774	3406	191	1774	1820	1510	1351	1563	251	1039	1776	1509
Grp Volume(v), veh/h	271	463	479	29	385	343	48	0	275	100	46	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1770	1561	1351	0	1813	1039	1776	1509
Q Serve(g_s), s	9.2	12.9	12.9	1.0	12.5	12.7	1.7	0.0	7.8	5.5	1.2	0.0
Cycle Q Clear(g_c), s	9.2	12.9	12.9	1.0	12.5	12.7	2.8	0.0	7.8	13.3	1.2	0.0
Prop In Lane	1.00		0.10	1.00		0.97	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	323	740	765	79	496	437	497	0	546	298	535	455
V/C Ratio(X)	0.84	0.63	0.63	0.37	0.78	0.78	0.10	0.00	0.50	0.34	0.09	0.00
Avail Cap(c_a), veh/h	422	740	765	198	517	456	672	0	782	433	765	651
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	1.00	0.00
Uniform Delay (d), s/veh	24.7	14.4	14.4	29.1	20.7	20.8	16.7	0.0	18.0	23.5	15.7	0.0
Incr Delay (d2), s/veh	11.0	1.7	1.6	2.9	7.0	8.4	0.1	0.0	0.7	0.7	0.1	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	5.5	6.7	6.9	0.5	7.1	6.5	0.6	0.0	4.0	1.6	0.6	0.0
LnGrp Delay(d),s/veh	35.7	16.0	16.0	31.9	27.8	29.2	16.8	0.0	18.7	24.2	15.8	0.0
LnGrp LOS	D	B	B	C	C	C	B		B	C	B	
Approach Vol, veh/h		1213			757			323			146	
Approach Delay, s/veh		20.4			28.6			18.5			21.5	
Approach LOS		C			C			B			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.9	31.3		23.5	16.5	22.7		23.5				
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6				
Max Green Setting (Gmax), s	7.0	26.2		27.0	14.9	18.3		27.0				
Max Q Clear Time (g_c+I1), s	3.0	14.9		15.3	11.2	14.7		9.8				
Green Ext Time (p_c), s	0.0	7.6		2.0	0.3	2.9		2.3				
Intersection Summary												
HCM 2010 Ctrl Delay			22.8									
HCM 2010 LOS			C									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	681	58	103	321	224	60	628	170	214	409	81
Future Volume (veh/h)	227	681	58	103	321	224	60	628	170	214	409	81
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		0.99	1.00		0.97
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	1825	1825	1825	1845	1845	1845	1810	1810	1810
Adj Flow Rate, veh/h	236	709	13	107	334	46	62	654	62	223	426	26
Adj No. of Lanes	1	2	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	3	3	3	5	5	5
Cap, veh/h	210	1005	442	133	442	372	101	974	433	204	1166	508
Arrive On Green	0.12	0.28	0.28	0.08	0.24	0.24	0.06	0.28	0.28	0.12	0.34	0.34
Sat Flow, veh/h	1774	3539	1558	1739	1825	1534	1757	3505	1559	1723	3438	1500
Grp Volume(v), veh/h	236	709	13	107	334	46	62	654	62	223	426	26
Grp Sat Flow(s),veh/h/ln	1774	1770	1558	1739	1825	1534	1757	1752	1559	1723	1719	1500
Q Serve(g_s), s	11.9	18.0	0.6	6.1	17.0	2.4	3.5	16.6	3.0	11.9	9.4	1.2
Cycle Q Clear(g_c), s	11.9	18.0	0.6	6.1	17.0	2.4	3.5	16.6	3.0	11.9	9.4	1.2
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	210	1005	442	133	442	372	101	974	433	204	1166	508
V/C Ratio(X)	1.12	0.71	0.03	0.80	0.76	0.12	0.62	0.67	0.14	1.09	0.37	0.05
Avail Cap(c_a), veh/h	210	1022	450	171	491	412	166	1214	540	204	1273	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.3	32.2	26.0	45.6	35.3	29.7	46.3	32.2	27.3	44.3	25.0	22.3
Incr Delay (d2), s/veh	99.0	2.2	0.0	18.6	6.0	0.1	6.0	1.0	0.1	89.7	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	11.6	9.1	0.3	3.6	9.4	1.0	1.9	8.2	1.3	10.7	4.5	0.5
LnGrp Delay(d),s/veh	143.2	34.4	26.0	64.2	41.2	29.9	52.2	33.2	27.4	134.0	25.2	22.4
LnGrp LOS	F	C	C	E	D	C	D	C	C	F	C	C
Approach Vol, veh/h		958			487			778			675	
Approach Delay, s/veh		61.1			45.2			34.3			61.1	
Approach LOS		E			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	18.0	34.0	13.8	34.6	11.9	40.2	18.0	30.4
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	11.9	34.8	9.9	29.0	9.5	37.2	11.9	27.0
Max Q Clear Time (g_c+I1), s	13.9	18.6	8.1	20.0	5.5	11.4	13.9	19.0
Green Ext Time (p_c), s	0.0	7.0	0.0	4.6	0.0	8.7	0.0	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	51.2
HCM 2010 LOS	D

H. Intersection Level of Service Calculations – Background Plus Project Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	315	67	783	466	215	42	516	431	222	856	45
Future Volume (veh/h)	129	315	67	783	466	215	42	516	431	222	856	45
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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	159	389	0	967	575	0	52	637	0	274	1057	56
Adj No. of Lanes	1	2	1	2	2	1	1	2	2	2	2	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	411	548	245	969	728	326	79	943	1538	326	1082	57
Arrive On Green	0.23	0.15	0.00	0.29	0.21	0.00	0.04	0.27	0.00	0.09	0.32	0.32
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3419	181
Grp Volume(v), veh/h	159	389	0	967	575	0	52	637	0	274	547	566
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1830
Q Serve(g_s), s	10.1	14.0	0.0	38.1	20.9	0.0	3.9	21.5	0.0	10.5	40.9	40.9
Cycle Q Clear(g_c), s	10.1	14.0	0.0	38.1	20.9	0.0	3.9	21.5	0.0	10.5	40.9	40.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	411	548	245	969	728	326	79	943	1538	326	560	579
V/C Ratio(X)	0.39	0.71	0.00	1.00	0.79	0.00	0.65	0.68	0.00	0.84	0.98	0.98
Avail Cap(c_a), veh/h	411	821	367	969	1236	553	93	943	1538	373	560	579
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	53.6	0.0	47.7	50.1	0.0	62.8	43.9	0.0	59.5	45.2	45.2
Incr Delay (d2), s/veh	0.6	1.7	0.0	28.5	2.0	0.0	12.3	1.9	0.0	14.2	32.1	31.6
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	5.0	6.9	0.0	21.6	10.3	0.0	2.2	10.8	0.0	5.6	24.9	25.8
LnGrp Delay(d),s/veh	43.9	55.3	0.0	76.2	52.1	0.0	75.2	45.8	0.0	73.7	77.3	76.8
LnGrp LOS	D	E		E	D		E	D		E	E	E
Approach Vol, veh/h		548			1542			689			1387	
Approach Delay, s/veh		52.0			67.2			48.0			76.4	
Approach LOS		D			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	19.5	42.4	45.0	26.8	12.8	49.1	37.1	34.7				
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8				
Max Green Setting (Gmax), s	14.5	34.8	38.2	31.0	7.0	42.3	21.8	47.4				
Max Q Clear Time (g_c+I1), s	12.5	23.5	40.1	16.0	5.9	42.9	12.1	22.9				
Green Ext Time (p_c), s	0.2	8.0	0.0	1.9	0.0	0.0	2.1	4.1				
Intersection Summary												
HCM 2010 Ctrl Delay			65.1									
HCM 2010 LOS			E									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	297	2	100	9	8	19	30	778	4	6	1336	430
Future Volume (veh/h)	297	2	100	9	8	19	30	778	4	6	1336	430
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	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	338	2	114	10	9	22	34	884	5	7	1518	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	233	1	503	46	50	57	77	1682	10	22	1540	689
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.04	0.47	0.47	0.01	0.44	0.00
Sat Flow, veh/h	498	3	1577	0	155	180	1774	3608	20	1774	3539	1583
Grp Volume(v), veh/h	340	0	114	41	0	0	34	434	455	7	1518	0
Grp Sat Flow(s),veh/h/ln	501	0	1577	335	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	5.2	0.0	0.0	0.0	1.8	16.8	16.8	0.4	41.2	0.0
Cycle Q Clear(g_c), s	31.0	0.0	5.2	31.0	0.0	0.0	1.8	16.8	16.8	0.4	41.2	0.0
Prop In Lane	0.99		1.00	0.24		0.54	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	233	0	503	153	0	0	77	825	866	22	1540	689
V/C Ratio(X)	1.46	0.00	0.23	0.27	0.00	0.00	0.44	0.53	0.53	0.32	0.99	0.00
Avail Cap(c_a), veh/h	233	0	503	153	0	0	128	825	866	128	1540	689
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.0	0.0	24.3	26.3	0.0	0.0	45.4	18.4	18.4	47.6	27.2	0.0
Incr Delay (d2), s/veh	227.5	0.0	0.2	0.9	0.0	0.0	4.0	0.6	0.6	8.0	19.5	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	21.0	0.0	2.3	0.8	0.0	0.0	1.0	8.3	8.7	0.2	24.2	0.0
LnGrp Delay(d),s/veh	265.5	0.0	24.5	27.2	0.0	0.0	49.3	19.0	18.9	55.6	46.7	0.0
LnGrp LOS	F		C	C			D	B	B	E	D	
Approach Vol, veh/h		454			41			923			1525	
Approach Delay, s/veh		205.0			27.2			20.1			46.7	
Approach LOS		F			C			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.0	52.1		37.1	11.0	49.1		37.1				
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1				
Max Green Setting (Gmax), s	7.0	42.3		31.0	7.0	42.3		31.0				
Max Q Clear Time (g_c+I1), s	2.4	18.8		33.0	3.8	43.2		33.0				
Green Ext Time (p_c), s	0.0	18.3		0.0	0.0	0.0		0.0				
Intersection Summary												
HCM 2010 Ctrl Delay			62.5									
HCM 2010 LOS			E									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	21	152	679	85	23	182	546	410	50	807	12
Future Volume (veh/h)	15	21	152	679	85	23	182	546	410	50	807	12
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		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	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	24	0	780	98	4	209	628	146	57	928	14
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	87	91	77	845	457	387	517	1655	733	84	1153	17
Arrive On Green	0.05	0.05	0.00	0.25	0.25	0.25	0.29	0.47	0.47	0.05	0.22	0.22
Sat Flow, veh/h	1774	1863	1583	3442	1863	1576	1774	3539	1568	1774	5160	78
Grp Volume(v), veh/h	17	24	0	780	98	4	209	628	146	57	609	333
Grp Sat Flow(s),veh/h/ln	1774	1863	1583	1721	1863	1576	1774	1770	1568	1774	1695	1848
Q Serve(g_s), s	1.2	1.6	0.0	28.3	5.4	0.2	12.1	14.7	7.0	4.0	21.8	21.8
Cycle Q Clear(g_c), s	1.2	1.6	0.0	28.3	5.4	0.2	12.1	14.7	7.0	4.0	21.8	21.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	87	91	77	845	457	387	517	1655	733	84	757	413
V/C Ratio(X)	0.20	0.26	0.00	0.92	0.21	0.01	0.40	0.38	0.20	0.68	0.80	0.81
Avail Cap(c_a), veh/h	305	320	272	890	482	407	517	1655	733	133	757	413
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	58.7	0.0	47.1	38.5	36.5	36.4	22.1	20.0	60.0	47.1	47.1
Incr Delay (d2), s/veh	1.1	1.5	0.0	14.5	0.2	0.0	0.5	0.7	0.6	9.1	8.9	15.4
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	0.9	0.0	15.1	2.8	0.1	6.0	7.3	3.2	2.2	11.1	12.8
LnGrp Delay(d),s/veh	59.6	60.2	0.0	61.6	38.7	36.5	36.9	22.7	20.6	69.1	55.9	62.4
LnGrp LOS	E	E		E	D	D	D	C	C	E	E	E
Approach Vol, veh/h		41			882			983			999	
Approach Delay, s/veh		59.9			59.0			25.4			58.8	
Approach LOS		E			E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.2	65.9		12.4	43.4	34.7		37.5
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	9.6	38.9		22.0	19.9	28.6		33.1
Max Q Clear Time (g_c+I1), s	6.0	16.7		3.6	14.1	23.8		30.3
Green Ext Time (p_c), s	0.0	5.6		0.1	2.4	2.5		1.1

Intersection Summary		
HCM 2010 Ctrl Delay	47.6	
HCM 2010 LOS	D	

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	108	702	100	181	1260
Future Vol, veh/h	34	108	702	100	181	1260
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	40	126	816	116	210	1465

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1974	413	0	0	821	0
Stage 1	821	-	-	-	-	-
Stage 2	1153	-	-	-	-	-
Critical Hdwy	7.54	6.94	-	-	4.14	-
Critical Hdwy Stg 1	6.54	-	-	-	-	-
Critical Hdwy Stg 2	6.54	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 37	588	-	-	804	-
Stage 1	335	-	-	-	-	-
Stage 2	210	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 29	585	-	-	804	-
Mov Cap-2 Maneuver	108	-	-	-	-	-
Stage 1	335	-	-	-	-	-
Stage 2	155	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	23.2	0	1.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	108	585	804	-
HCM Lane V/C Ratio	-	-	0.366	0.215	0.262	-
HCM Control Delay (s)	-	-	56.4	12.8	11.1	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	1.5	0.8	1	-

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)	169	300	179	116	336	88	94	623	64	107	1045	194
Future Volume (veh/h)	169	300	179	116	336	88	94	623	64	107	1045	194
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		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	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	184	326	55	126	365	0	102	677	20	116	1136	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	313	490	415	156	476	405	165	1194	529	173	1227	549
Arrive On Green	0.09	0.26	0.26	0.09	0.26	0.00	0.09	0.34	0.34	0.10	0.34	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	3504	1551	1792	3575	1599
Grp Volume(v), veh/h	184	326	55	126	365	0	102	677	20	116	1136	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1752	1551	1792	1787	1599
Q Serve(g_s), s	4.5	13.6	2.3	6.2	16.1	0.0	4.9	13.9	0.8	5.5	26.9	0.0
Cycle Q Clear(g_c), s	4.5	13.6	2.3	6.2	16.1	0.0	4.9	13.9	0.8	5.5	26.9	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	313	490	415	156	476	405	165	1194	529	173	1227	549
V/C Ratio(X)	0.59	0.67	0.13	0.81	0.77	0.00	0.62	0.57	0.04	0.67	0.93	0.00
Avail Cap(c_a), veh/h	317	622	526	159	621	528	180	1202	532	188	1234	552
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	38.4	29.0	24.9	39.2	30.0	0.0	38.2	23.6	19.3	38.3	27.7	0.0
Incr Delay (d2), s/veh	2.4	2.1	0.2	24.6	4.6	0.0	4.7	0.6	0.0	7.2	11.8	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	2.3	7.4	1.0	4.1	8.7	0.0	2.6	6.8	0.3	3.1	15.3	0.0
LnGrp Delay(d),s/veh	40.8	31.2	25.0	63.8	34.7	0.0	42.9	24.3	19.4	45.6	39.6	0.0
LnGrp LOS	D	C	C	E	C		D	C	B	D	D	
Approach Vol, veh/h		565			491			799			1252	
Approach Delay, s/veh		33.7			42.1			26.5			40.1	
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	12.7	35.3	12.0	27.8	12.5	35.5	12.1	27.7
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9.2	30.1	* 8	29.0	* 9	30.3	* 8	* 30
Max Q Clear Time (g_c+I1), s	7.5	15.9	8.2	15.6	6.9	28.9	6.5	18.1
Green Ext Time (p_c), s	0.0	10.2	0.0	4.4	0.0	1.3	0.1	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	35.8
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	37	169	23	23	28	117	538	18	42	883	369
Future Volume (veh/h)	238	37	169	23	23	28	117	538	18	42	883	369
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		0.99	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	1900	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	319	0	0	28	28	3	141	648	22	51	1064	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	6	6	6
Cap, veh/h	482	0	215	42	42	72	175	1676	57	64	1424	637
Arrive On Green	0.14	0.00	0.00	0.05	0.05	0.05	0.10	0.48	0.48	0.04	0.42	0.00
Sat Flow, veh/h	3548	0	1583	909	909	1574	1774	3493	119	1707	3406	1524
Grp Volume(v), veh/h	319	0	0	56	0	3	141	328	342	51	1064	0
Grp Sat Flow(s),veh/h/ln	1774	0	1583	1817	0	1574	1774	1770	1842	1707	1703	1524
Q Serve(g_s), s	7.0	0.0	0.0	2.5	0.0	0.2	6.4	9.8	9.8	2.4	21.8	0.0
Cycle Q Clear(g_c), s	7.0	0.0	0.0	2.5	0.0	0.2	6.4	9.8	9.8	2.4	21.8	0.0
Prop In Lane	1.00		1.00	0.50		1.00	1.00		0.06	1.00		1.00
Lane Grp Cap(c), veh/h	482	0	215	83	0	72	175	849	883	64	1424	637
V/C Ratio(X)	0.66	0.00	0.00	0.67	0.00	0.04	0.80	0.39	0.39	0.80	0.75	0.00
Avail Cap(c_a), veh/h	1163	0	519	596	0	516	233	894	930	199	1671	747
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	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	0.0	0.0	38.7	0.0	37.6	36.3	13.7	13.7	39.3	20.3	0.0
Incr Delay (d2), s/veh	1.6	0.0	0.0	9.1	0.0	0.2	13.9	0.3	0.3	19.9	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	3.6	0.0	0.0	1.5	0.0	0.1	3.8	4.8	5.0	1.5	10.5	0.0
LnGrp Delay(d),s/veh	35.3	0.0	0.0	47.8	0.0	37.8	50.2	14.0	14.0	59.2	21.9	0.0
LnGrp LOS	D			D		D	D	B	B	E	C	
Approach Vol, veh/h		319			59			811			1115	
Approach Delay, s/veh		35.3			47.3			20.3			23.6	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	46.3		16.8	14.9	41.2		9.4
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	9.6	41.6		27.0	10.8	40.4		27.0
Max Q Clear Time (g_c+I1), s	4.4	11.8		9.0	8.4	23.8		4.5
Green Ext Time (p_c), s	0.0	15.3		1.0	0.1	10.7		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	6.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	2	196	0	0	0	295	64	7	1	83	41
Future Vol, veh/h	17	2	196	0	0	0	295	64	7	1	83	41
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	7	7	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	18	2	209	0	0	0	314	68	7	1	88	44

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	816	827	115	137	0	0	83	0	0
Stage 1	117	117	-	-	-	-	-	-	-
Stage 2	699	710	-	-	-	-	-	-	-
Critical Hdwy	6.47	6.57	6.27	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.47	5.57	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.47	5.57	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	340	301	924	1447	-	-	1514	-	-
Stage 1	896	789	-	-	-	-	-	-	-
Stage 2	484	429	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	263	0	920	1447	-	-	1514	-	-
Mov Cap-2 Maneuver	263	0	-	-	-	-	-	-	-
Stage 1	891	0	-	-	-	-	-	-	-
Stage 2	377	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	6.6	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1447	-	-	263	920	1514	-	-
HCM Lane V/C Ratio	0.217	-	-	0.077	0.227	0.001	-	-
HCM Control Delay (s)	8.2	-	-	19.8	10.1	7.4	0	-
HCM Lane LOS	A	-	-	C	B	A	A	-
HCM 95th %tile Q(veh)	0.8	-	-	0.2	0.9	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	508	255	637	804	0	292
Future Volume (vph)	508	255	637	804	0	292
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.79	0.79	0.79	0.79	0.79	0.79
Adj. Flow (vph)	643	323	806	1018	0	370
RTOR Reduction (vph)	0	0	0	0	0	146
Lane Group Flow (vph)	643	323	806	1018	0	224
Confl. Peds. (#/hr)						9
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	12.6	39.3	15.5	39.3		15.5
Effective Green, g (s)	12.6	39.3	15.5	39.3		15.5
Actuated g/C Ratio	0.32	1.00	0.39	1.00		0.39
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1638	1591	1374	3592		1115
v/s Ratio Prot	0.13		c0.23	c0.28		0.08
v/s Ratio Perm		0.20				
v/c Ratio	0.39	0.20	0.59	0.28		0.20
Uniform Delay, d1	10.4	0.0	9.4	0.0		7.8
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.2	0.3	0.6	0.0		0.1
Delay (s)	10.5	0.3	10.0	0.0		7.9
Level of Service	B	A	B	A		A
Approach Delay (s)	7.1			4.5	7.9	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay	5.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	39.3	Sum of lost time (s)	11.2
Intersection Capacity Utilization	46.6%	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												
Traffic Volume (veh/h)	0	0	4	556	31	164	16	509	274	175	885	15
Future Volume (veh/h)	0	0	4	556	31	164	16	509	274	175	885	15
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		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	1900	1863	1863	1827	1827	1827	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	705	0	48	20	621	0	213	1079	18
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	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, %	2	2	2	4	4	4	2	2	2	2	2	2
Cap, veh/h	0	3	55	926	0	410	58	1209	952	261	1623	27
Arrive On Green	0.00	0.00	0.00	0.27	0.00	0.27	0.03	0.34	0.00	0.15	0.46	0.46
Sat Flow, veh/h	0	1863	1583	3480	0	1541	1774	3539	2787	1774	3562	59
Grp Volume(v), veh/h	0	0	0	705	0	48	20	621	0	213	536	561
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1740	0	1541	1774	1770	1393	1774	1770	1852
Q Serve(g_s), s	0.0	0.0	0.0	11.6	0.0	1.5	0.7	8.7	0.0	7.3	14.8	14.8
Cycle Q Clear(g_c), s	0.0	0.0	0.0	11.6	0.0	1.5	0.7	8.7	0.0	7.3	14.8	14.8
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	0	3	55	926	0	410	58	1209	952	261	807	844
V/C Ratio(X)	0.00	0.00	0.00	0.76	0.00	0.12	0.34	0.51	0.00	0.82	0.66	0.66
Avail Cap(c_a), veh/h	0	60	103	1450	0	642	227	1520	1197	338	871	911
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	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	21.1	0.0	17.3	29.5	16.4	0.0	25.8	13.3	13.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	1.3	0.0	0.1	3.4	0.3	0.0	11.3	1.7	1.7
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	0.0	0.0	0.0	5.8	0.0	0.6	0.4	4.3	0.0	4.4	7.5	7.9
LnGrp Delay(d),s/veh	0.0	0.0	0.0	22.4	0.0	17.5	33.0	16.7	0.0	37.1	15.0	14.9
LnGrp LOS				C		B	C	B		D	B	B
Approach Vol, veh/h		0			753			641			1310	
Approach Delay, s/veh		0.0			22.1			17.3			18.6	
Approach LOS					C			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	14.3	26.4		0.0	7.2	33.5		21.7				
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1				
Max Green Setting (Gmax), s	11.9	26.8		2.0	8.0	30.7		26.0				
Max Q Clear Time (g_c+I1), s	9.3	10.7		0.0	2.7	16.8		13.6				
Green Ext Time (p_c), s	0.2	10.2		0.0	0.0	9.2		2.4				
Intersection Summary												
HCM 2010 Ctrl Delay			19.2									
HCM 2010 LOS			B									

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	396	19	21	736	53	13	1	7	24	2	12
Future Vol, veh/h	24	396	19	21	736	53	13	1	7	24	2	12
Conflicting Peds, #/hr	7	0	11	11	0	7	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	84	84	84	84	84	84	84	84	84	84	84	84
Heavy Vehicles, %	6	6	6	3	3	3	14	14	14	2	2	2
Mvmt Flow	29	471	23	25	876	63	15	1	8	29	2	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	946	0	0	505	0	0	1042	1547	258	1258	1527	479
Stage 1	-	-	-	-	-	-	551	551	-	965	965	-
Stage 2	-	-	-	-	-	-	491	996	-	293	562	-
Critical Hdwy	4.22	-	-	4.16	-	-	7.78	6.78	7.18	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.23	-	-	3.64	4.14	3.44	3.52	4.02	3.32
Pot Cap-1 Maneuver	697	-	-	1049	-	-	168	101	706	128	116	533
Stage 1	-	-	-	-	-	-	457	485	-	274	331	-
Stage 2	-	-	-	-	-	-	498	295	-	691	508	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	696	-	-	1049	-	-	146	89	699	114	102	528
Mov Cap-2 Maneuver	-	-	-	-	-	-	146	89	-	114	102	-
Stage 1	-	-	-	-	-	-	426	452	-	256	312	-
Stage 2	-	-	-	-	-	-	455	278	-	641	474	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.4	26.8	39
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	190	696	-	-	1049	-	-	150
HCM Lane V/C Ratio	0.132	0.041	-	-	0.024	-	-	0.302
HCM Control Delay (s)	26.8	10.4	0.3	-	8.5	0.2	-	39
HCM Lane LOS	D	B	A	-	A	A	-	E
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-	-	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	359	55	72	722	25	0	7	42	20	10	22
Future Volume (veh/h)	12	359	55	72	722	25	0	7	42	20	10	22
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	0.99		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	1776	1776	1900	1827	1827
Adj Flow Rate, veh/h	14	433	66	87	870	30	0	8	0	24	12	27
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	4	4	4
Cap, veh/h	434	1526	231	605	1763	61	0	205	174	281	88	179
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.00	0.12	0.00	0.12	0.12	0.12
Sat Flow, veh/h	592	2963	449	875	3423	118	0	1776	1509	794	766	1549
Grp Volume(v), veh/h	14	248	251	87	441	459	0	8	0	36	0	27
Grp Sat Flow(s),veh/h/ln	592	1703	1709	875	1736	1805	0	1776	1509	1560	0	1549
Q Serve(g_s), s	0.5	2.6	2.6	2.0	5.2	5.2	0.0	0.1	0.0	0.0	0.0	0.5
Cycle Q Clear(g_c), s	5.7	2.6	2.6	4.6	5.2	5.2	0.0	0.1	0.0	0.6	0.0	0.5
Prop In Lane	1.00		0.26	1.00		0.07	0.00		1.00	0.67		1.00
Lane Grp Cap(c), veh/h	434	877	880	605	894	930	0	205	174	370	0	179
V/C Ratio(X)	0.03	0.28	0.29	0.14	0.49	0.49	0.00	0.04	0.00	0.10	0.00	0.15
Avail Cap(c_a), veh/h	546	1199	1203	784	1249	1299	0	1458	1239	1423	0	1271
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	0.00	1.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	6.9	4.4	4.4	5.7	5.0	5.0	0.0	12.4	0.0	12.6	0.0	12.6
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.1	0.4	0.4	0.0	0.1	0.0	0.1	0.0	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	0.1	1.2	1.2	0.5	2.6	2.7	0.0	0.1	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	6.9	4.5	4.5	5.8	5.4	5.4	0.0	12.5	0.0	12.8	0.0	13.0
LnGrp LOS	A	A	A	A	A	A		B		B		B
Approach Vol, veh/h		513			987			8			63	
Approach Delay, s/veh		4.6			5.4			12.5			12.9	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		22.4		9.3		22.4		9.3
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		7.7		2.6		7.2		2.1
Green Ext Time (p_c), s		8.2		0.2		8.5		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	5.5
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	24.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	419	3	32	652	0	4	0	14	140	45	164
Future Vol, veh/h	0	419	3	32	652	0	4	0	14	140	45	164
Conflicting Peds, #/hr	0	0	9	6	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	81	81	81	81	81	81	81	81	81	81	81	81
Heavy Vehicles, %	6	6	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	517	4	40	805	0	5	0	17	173	56	202

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	530	0	0	1039	-	269	1143	1414	404
Stage 1	-	-	-	-	-	-	528	-	-	884	884	-
Stage 2	-	-	-	-	-	-	511	-	-	259	530	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	1020	-	0	185	0	729	~ 155	136	596
Stage 1	0	-	-	-	-	0	502	0	-	307	362	-
Stage 2	0	-	-	-	-	0	514	0	-	723	525	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	1020	-	-	78	-	723	~ 147	130	595
Mov Cap-2 Maneuver	-	-	-	-	-	-	78	-	-	~ 147	130	-
Stage 1	-	-	-	-	-	-	502	-	-	307	348	-
Stage 2	-	-	-	-	-	-	273	-	-	706	521	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	19.9	102.2
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	78	723	-	-	1020	-	147	336
HCM Lane V/C Ratio	0.063	0.024	-	-	0.039	-	1.176	0.768
HCM Control Delay (s)	54.3	10.1	-	-	8.7	-	189.5	43.7
HCM Lane LOS	F	B	-	-	A	-	F	E
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	9.8	6.1

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection							
Int Delay, s/veh	0.4						

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	461	112	56	685	0	0
Future Vol, veh/h	461	112	56	685	0	0
Conflicting Peds, #/hr	0	10	10	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	81	81	81	81	81	81
Heavy Vehicles, %	5	5	2	2	4	4
Mvmt Flow	569	138	69	846	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	717	0	1209	364
Stage 1	-	-	-	-	648	-
Stage 2	-	-	-	-	561	-
Critical Hdwy	-	-	4.14	-	6.88	6.98
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	2.22	-	3.54	3.34
Pot Cap-1 Maneuver	-	-	880	-	172	627
Stage 1	-	-	-	-	477	-
Stage 2	-	-	-	-	529	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	880	-	157	621
Mov Cap-2 Maneuver	-	-	-	-	157	-
Stage 1	-	-	-	-	472	-
Stage 2	-	-	-	-	488	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	880	-
HCM Lane V/C Ratio	-	-	-	0.079	-
HCM Control Delay (s)	0	-	-	9.4	-
HCM Lane LOS	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	0.3	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	342	20	8	481	199	21	69	3	23	27	238
Future Volume (veh/h)	99	342	20	8	481	199	21	69	3	23	27	238
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		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	1845	1845	1900	1863	1863	1900	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	115	398	23	9	559	231	24	80	3	27	31	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	193	1341	77	29	744	307	70	295	11	74	304	259
Arrive On Green	0.11	0.40	0.40	0.02	0.31	0.31	0.04	0.17	0.17	0.04	0.17	0.00
Sat Flow, veh/h	1757	3367	194	1774	2437	1004	1774	1783	67	1707	1792	1524
Grp Volume(v), veh/h	115	207	214	9	406	384	24	0	83	27	31	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1808	1774	1770	1672	1774	0	1850	1707	1792	1524
Q Serve(g_s), s	3.2	4.1	4.2	0.3	10.7	10.7	0.7	0.0	2.0	0.8	0.8	0.0
Cycle Q Clear(g_c), s	3.2	4.1	4.2	0.3	10.7	10.7	0.7	0.0	2.0	0.8	0.8	0.0
Prop In Lane	1.00		0.11	1.00		0.60	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	193	698	720	29	540	510	70	0	306	74	304	259
V/C Ratio(X)	0.60	0.30	0.30	0.31	0.75	0.75	0.34	0.00	0.27	0.36	0.10	0.00
Avail Cap(c_a), veh/h	242	698	720	241	652	616	241	0	968	248	955	812
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	1.00	0.00
Uniform Delay (d), s/veh	21.9	10.6	10.6	25.1	16.2	16.2	24.1	0.0	18.8	24.0	18.1	0.0
Incr Delay (d2), s/veh	2.9	0.2	0.2	5.9	4.0	4.3	2.9	0.0	0.5	3.0	0.1	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	1.7	2.1	2.1	0.2	5.8	5.5	0.4	0.0	1.1	0.4	0.4	0.0
LnGrp Delay(d),s/veh	24.8	10.8	10.8	30.9	20.1	20.4	27.0	0.0	19.3	26.9	18.2	0.0
LnGrp LOS	C	B	B	C	C	C	C		B	C	B	
Approach Vol, veh/h		536			799			107			58	
Approach Delay, s/veh		13.8			20.4			21.0			22.3	
Approach LOS		B			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	5.9	25.7	6.6	13.4	10.8	20.8	6.8	13.1
Change Period (Y+Rc), s	5.1	5.1	4.6	4.6	5.1	5.1	4.6	4.6
Max Green Setting (Gmax), s	7.0	19.1	7.0	27.5	7.1	19.0	7.5	27.0
Max Q Clear Time (g_c+I1), s	2.3	6.2	2.7	2.8	5.2	12.7	2.8	4.0
Green Ext Time (p_c), s	0.0	6.2	0.0	0.6	0.0	3.0	0.0	0.5

Intersection Summary			
HCM 2010 Ctrl Delay			18.2
HCM 2010 LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	325	88	94	425	131	54	358	56	112	664	132
Future Volume (veh/h)	87	325	88	94	425	131	54	358	56	112	664	132
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		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	1863	1863	1863	1808	1808	1808	1810	1810	1810	1863	1863	1863
Adj Flow Rate, veh/h	101	378	18	109	494	26	63	416	12	130	772	31
Adj No. of Lanes	1	2	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	128	1022	453	133	531	450	106	968	432	149	1076	477
Arrive On Green	0.07	0.29	0.29	0.08	0.29	0.29	0.06	0.28	0.28	0.08	0.30	0.30
Sat Flow, veh/h	1774	3539	1570	1722	1808	1530	1723	3438	1535	1774	3539	1568
Grp Volume(v), veh/h	101	378	18	109	494	26	63	416	12	130	772	31
Grp Sat Flow(s),veh/h/ln	1774	1770	1570	1722	1808	1530	1723	1719	1535	1774	1770	1568
Q Serve(g_s), s	5.1	7.7	0.7	5.7	24.1	1.1	3.2	9.0	0.5	6.6	17.6	1.3
Cycle Q Clear(g_c), s	5.1	7.7	0.7	5.7	24.1	1.1	3.2	9.0	0.5	6.6	17.6	1.3
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	128	1022	453	133	531	450	106	968	432	149	1076	477
V/C Ratio(X)	0.79	0.37	0.04	0.82	0.93	0.06	0.60	0.43	0.03	0.88	0.72	0.07
Avail Cap(c_a), veh/h	137	1053	467	133	538	455	133	1288	575	149	1349	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	25.7	23.2	41.3	31.1	23.0	41.5	26.6	23.6	41.1	28.1	22.4
Incr Delay (d2), s/veh	24.9	0.2	0.0	32.0	22.7	0.1	5.3	0.3	0.0	40.0	1.4	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	3.4	3.8	0.3	3.9	15.3	0.5	1.7	4.3	0.2	4.9	8.8	0.6
LnGrp Delay(d),s/veh	66.4	25.9	23.3	73.3	53.9	23.1	46.8	27.0	23.6	81.1	29.5	22.5
LnGrp LOS	E	C	C	E	D	C	D	C	C	F	C	C
Approach Vol, veh/h		497			629			491			933	
Approach Delay, s/veh		34.1			56.0			29.4			36.5	
Approach LOS		C			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	13.7	31.7	13.1	32.3	11.7	33.7	12.6	32.8				
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1				
Max Green Setting (Gmax), s	7.6	34.0	7.0	27.0	7.0	34.6	7.0	27.0				
Max Q Clear Time (g_c+I1), s	8.6	11.0	7.7	9.7	5.2	19.6	7.1	26.1				
Green Ext Time (p_c), s	0.0	9.1	0.0	5.6	0.0	7.3	0.0	0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			39.4									
HCM 2010 LOS			D									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	698	77	635	564	459	96	683	924	458	668	73
Future Volume (veh/h)	94	698	77	635	564	459	96	683	924	458	668	73
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		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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	98	727	0	661	588	0	100	711	0	477	696	76
Adj No. of Lanes	1	2	1	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	360	831	372	624	753	337	124	834	1170	433	939	102
Arrive On Green	0.20	0.23	0.00	0.18	0.22	0.00	0.07	0.24	0.00	0.13	0.29	0.29
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	3539	2787	3442	3217	351
Grp Volume(v), veh/h	98	727	0	661	588	0	100	711	0	477	383	389
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1770	1393	1721	1770	1798
Q Serve(g_s), s	5.6	23.9	0.0	22.2	19.2	0.0	6.7	23.2	0.0	15.2	23.6	23.6
Cycle Q Clear(g_c), s	5.6	23.9	0.0	22.2	19.2	0.0	6.7	23.2	0.0	15.2	23.6	23.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	360	831	372	624	753	337	124	834	1170	433	516	525
V/C Ratio(X)	0.27	0.88	0.00	1.06	0.78	0.00	0.81	0.85	0.00	1.10	0.74	0.74
Avail Cap(c_a), veh/h	360	909	407	624	1233	552	153	883	1208	433	516	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.6	44.5	0.0	49.2	44.6	0.0	55.3	44.1	0.0	52.7	38.6	38.6
Incr Delay (d2), s/veh	0.4	9.0	0.0	53.0	1.8	0.0	22.1	7.7	0.0	73.2	5.6	5.6
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	2.8	12.7	0.0	14.9	9.4	0.0	4.0	12.3	0.0	11.6	12.3	12.5
LnGrp Delay(d),s/veh	41.0	53.4	0.0	102.2	46.4	0.0	77.4	51.8	0.0	126.0	44.3	44.2
LnGrp LOS	D	D		F	D		E	D		F	D	D
Approach Vol, veh/h		825			1249			811			1249	
Approach Delay, s/veh		52.0			76.0			55.0			75.5	
Approach LOS		D			E			E			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	22.0	35.2	29.0	34.4	15.2	42.0	30.6	32.9
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	15.2	30.1	22.2	31.0	10.4	34.9	10.5	42.7
Max Q Clear Time (g_c+I1), s	17.2	25.2	24.2	25.9	8.7	25.6	7.6	21.2
Green Ext Time (p_c), s	0.0	3.2	0.0	2.1	0.0	6.0	1.4	4.0

Intersection Summary	
HCM 2010 Ctrl Delay	66.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	17	52	5	14	13	163	1389	11	19	883	441
Future Volume (veh/h)	351	17	52	5	14	13	163	1389	11	19	883	441
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		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	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	366	18	54	5	15	14	170	1447	11	20	920	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	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	210	6	559	47	124	87	198	1391	11	55	1083	484
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.11	0.39	0.39	0.03	0.31	0.00
Sat Flow, veh/h	362	18	1570	0	348	244	1774	3600	27	1774	3539	1583
Grp Volume(v), veh/h	384	0	54	34	0	0	170	711	747	20	920	0
Grp Sat Flow(s),veh/h/ln	380	0	1570	592	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	0.0	0.0	2.0	0.0	0.0	0.0	8.2	33.6	33.6	1.0	21.2	0.0
Cycle Q Clear(g_c), s	31.0	0.0	2.0	31.0	0.0	0.0	8.2	33.6	33.6	1.0	21.2	0.0
Prop In Lane	0.95		1.00	0.15		0.41	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	216	0	559	258	0	0	198	684	718	55	1083	484
V/C Ratio(X)	1.78	0.00	0.10	0.13	0.00	0.00	0.86	1.04	1.04	0.37	0.85	0.00
Avail Cap(c_a), veh/h	216	0	559	258	0	0	198	684	718	143	1204	539
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	33.8	0.0	18.7	20.8	0.0	0.0	38.0	26.7	26.7	41.3	28.3	0.0
Incr Delay (d2), s/veh	367.3	0.0	0.1	0.2	0.0	0.0	29.6	45.1	44.6	4.0	5.5	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	27.2	0.0	0.9	0.6	0.0	0.0	5.6	24.9	26.0	0.5	11.2	0.0
LnGrp Delay(d),s/veh	401.1	0.0	18.7	21.0	0.0	0.0	67.6	71.8	71.2	45.4	33.8	0.0
LnGrp LOS	F		B	C			E	F	F	D	C	
Approach Vol, veh/h		438			34			1628			940	
Approach Delay, s/veh		353.9			21.0			71.1			34.1	
Approach LOS		F			C			E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	40.4		37.1	16.5	33.4		37.1
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	32.3		31.0	9.7	29.6		31.0
Max Q Clear Time (g_c+I1), s	3.0	35.6		33.0	10.2	23.2		33.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	3.4		0.0

Intersection Summary			
HCM 2010 Ctrl Delay			99.8
HCM 2010 LOS			F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	70	160	476	120	148	304	1146	666	108	1049	24
Future Volume (veh/h)	27	70	160	476	120	148	304	1146	666	108	1049	24
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		0.94	1.00		0.98	1.00		0.99	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	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	74	10	501	126	21	320	1206	299	114	1104	25
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	158	126	565	306	255	347	1709	754	138	1867	42
Arrive On Green	0.08	0.08	0.08	0.16	0.16	0.16	0.20	0.48	0.48	0.08	0.37	0.37
Sat Flow, veh/h	1774	1863	1493	3442	1863	1551	1774	3539	1562	1774	5114	116
Grp Volume(v), veh/h	28	74	10	501	126	21	320	1206	299	114	732	397
Grp Sat Flow(s),veh/h/ln	1774	1863	1493	1721	1863	1551	1774	1770	1562	1774	1695	1840
Q Serve(g_s), s	1.9	4.8	0.8	18.2	7.8	1.5	22.7	34.2	15.7	8.1	22.4	22.4
Cycle Q Clear(g_c), s	1.9	4.8	0.8	18.2	7.8	1.5	22.7	34.2	15.7	8.1	22.4	22.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	150	158	126	565	306	255	347	1709	754	138	1238	672
V/C Ratio(X)	0.19	0.47	0.08	0.89	0.41	0.08	0.92	0.71	0.40	0.83	0.59	0.59
Avail Cap(c_a), veh/h	305	320	257	592	320	267	398	1709	754	159	1238	672
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	54.5	55.9	54.0	52.3	48.0	45.3	50.5	26.0	21.2	58.2	32.9	32.9
Incr Delay (d2), s/veh	0.6	2.2	0.3	14.8	0.9	0.1	24.8	2.5	1.6	25.7	2.1	3.8
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	1.0	2.6	0.3	9.9	4.1	0.6	13.5	17.2	7.1	5.0	10.8	12.1
LnGrp Delay(d),s/veh	55.1	58.0	54.3	67.1	48.9	45.5	75.4	28.4	22.7	83.9	35.0	36.7
LnGrp LOS	E	E	D	E	D	D	E	C	C	F	C	D
Approach Vol, veh/h		112			648			1825			1243	
Approach Delay, s/veh		57.0			62.8			35.7			40.0	
Approach LOS		E			E			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	16.1	67.9		16.9	31.1	52.8		27.1				
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1				
Max Green Setting (Gmax), s	11.5	48.1		22.0	28.7	30.9		22.0				
Max Q Clear Time (g_c+I1), s	10.1	36.2		6.8	24.7	24.4		20.2				
Green Ext Time (p_c), s	0.0	10.4		0.3	0.4	5.9		0.6				
Intersection Summary												
HCM 2010 Ctrl Delay			42.3									
HCM 2010 LOS			D									

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	1534	54	120	816
Future Vol, veh/h	16	28	1534	54	120	816
Conflicting Peds, #/hr	0	0	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	29	1565	55	122	833

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2232	789	0	0	1571	0
Stage 1	1571	-	-	-	-	-
Stage 2	661	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	36	333	-	-	416	-
Stage 1	157	-	-	-	-	-
Stage 2	475	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	25	331	-	-	416	-
Mov Cap-2 Maneuver	107	-	-	-	-	-
Stage 1	156	-	-	-	-	-
Stage 2	336	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	27	0	2.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	107	331	416	-
HCM Lane V/C Ratio	-	-	0.153	0.086	0.294	-
HCM Control Delay (s)	-	-	44.6	16.9	17.2	-
HCM Lane LOS	-	-	E	C	C	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	1.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	331	112	103	266	236	199	1441	65	124	910	175
Future Volume (veh/h)	277	331	112	103	266	236	199	1441	65	124	910	175
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	1881	1881	1881	1835	1835	1835	1844	1844	1844	1881	1881	1881
Adj Flow Rate, veh/h	292	348	21	108	280	0	209	1517	29	131	958	0
Adj No. of Lanes	2	1	1	1	1	1	1	2	1	1	2	1
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	336	430	359	126	375	318	238	1572	692	146	1409	630
Arrive On Green	0.10	0.23	0.23	0.07	0.20	0.00	0.14	0.45	0.45	0.08	0.39	0.00
Sat Flow, veh/h	3476	1881	1572	1747	1835	1560	1756	3504	1543	1792	3575	1599
Grp Volume(v), veh/h	292	348	21	108	280	0	209	1517	29	131	958	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1572	1747	1835	1560	1756	1752	1543	1792	1787	1599
Q Serve(g_s), s	9.2	19.4	1.2	6.8	15.8	0.0	12.9	46.6	1.2	8.0	24.5	0.0
Cycle Q Clear(g_c), s	9.2	19.4	1.2	6.8	15.8	0.0	12.9	46.6	1.2	8.0	24.5	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	336	430	359	126	375	318	238	1572	692	146	1409	630
V/C Ratio(X)	0.87	0.81	0.06	0.85	0.75	0.00	0.88	0.97	0.04	0.90	0.68	0.00
Avail Cap(c_a), veh/h	336	493	412	126	448	381	284	1594	702	146	1409	630
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	49.2	40.4	33.3	50.7	41.3	0.0	46.9	29.6	17.1	50.3	27.7	0.0
Incr Delay (d2), s/veh	20.4	9.1	0.1	39.4	6.0	0.0	21.5	15.0	0.0	45.4	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	5.3	11.1	0.5	4.7	8.6	0.0	7.7	25.6	0.5	5.8	12.4	0.0
LnGrp Delay(d),s/veh	69.7	49.4	33.4	90.1	47.3	0.0	68.4	44.6	17.2	95.7	29.1	0.0
LnGrp LOS	E	D	C	F	D		E	D	B	F	C	
Approach Vol, veh/h		661			388			1755			1089	
Approach Delay, s/veh		57.9			59.2			47.0			37.1	
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	13.2	55.0	12.2	30.2	19.2	49.0	14.9	27.5
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9	50.3	* 8	29.0	* 18	41.4	* 11	* 27
Max Q Clear Time (g_c+I1), s	10.0	48.6	8.8	21.4	14.9	26.5	11.2	17.8
Green Ext Time (p_c), s	0.0	1.0	0.0	2.7	0.1	12.9	0.0	3.1

Intersection Summary	
HCM 2010 Ctrl Delay	47.3
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	48	220	30	70	59	311	1200	26	33	593	205
Future Volume (veh/h)	330	48	220	30	70	59	311	1200	26	33	593	205
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		0.96	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	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	375	0	51	31	72	19	321	1237	27	34	611	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	520	0	230	66	153	180	360	1572	34	45	942	421
Arrive On Green	0.15	0.00	0.15	0.12	0.12	0.12	0.20	0.44	0.44	0.03	0.27	0.00
Sat Flow, veh/h	3548	0	1567	552	1283	1515	1774	3540	77	1774	3539	1583
Grp Volume(v), veh/h	375	0	51	103	0	19	321	618	646	34	611	0
Grp Sat Flow(s),veh/h/ln	1774	0	1567	1835	0	1515	1774	1770	1848	1774	1770	1583
Q Serve(g_s), s	9.4	0.0	2.7	4.9	0.0	1.0	16.5	27.9	27.9	1.8	14.3	0.0
Cycle Q Clear(g_c), s	9.4	0.0	2.7	4.9	0.0	1.0	16.5	27.9	27.9	1.8	14.3	0.0
Prop In Lane	1.00		1.00	0.30		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	520	0	230	218	0	180	360	786	821	45	942	421
V/C Ratio(X)	0.72	0.00	0.22	0.47	0.00	0.11	0.89	0.79	0.79	0.76	0.65	0.00
Avail Cap(c_a), veh/h	1025	0	453	530	0	438	469	890	929	80	1004	449
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.1	0.0	35.2	38.4	0.0	36.7	36.2	22.2	22.2	45.3	30.4	0.0
Incr Delay (d2), s/veh	1.9	0.0	0.5	1.6	0.0	0.3	15.6	4.2	4.1	23.2	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	4.8	0.0	1.2	2.6	0.0	0.5	9.6	14.5	15.1	1.2	7.1	0.0
LnGrp Delay(d),s/veh	40.0	0.0	35.7	40.0	0.0	37.0	51.9	26.4	26.3	68.5	31.8	0.0
LnGrp LOS	D		D	D		D	D	C	C	E	C	
Approach Vol, veh/h		426			122			1585			645	
Approach Delay, s/veh		39.5			39.5			31.5			33.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	48.3		19.3	25.8	31.7		16.7
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	4.2	47.0		27.0	24.7	26.5		27.0
Max Q Clear Time (g_c+I1), s	3.8	29.9		11.4	18.5	16.3		6.9
Green Ext Time (p_c), s	0.0	11.6		1.4	0.5	7.7		0.5

Intersection Summary			
HCM 2010 Ctrl Delay			33.6
HCM 2010 LOS			C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	20.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	55	2	226	0	0	0	577	163	18	3	117	84
Future Vol, veh/h	55	2	226	0	0	0	577	163	18	3	117	84
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	7	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	59	2	243	0	0	0	620	175	19	3	126	90

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1610	1626	178	223	0	0	202	0	0
Stage 1	184	184	-	-	-	-	-	-	-
Stage 2	1426	1442	-	-	-	-	-	-	-
Critical Hdwy	7.16	6.56	6.26	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.16	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.16	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	82	100	855	1346	-	-	1370	-	-
Stage 1	809	740	-	-	-	-	-	-	-
Stage 2	165	194	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	~ 52	53	849	1346	-	-	1370	-	-
Mov Cap-2 Maneuver	~ 52	53	-	-	-	-	-	-	-
Stage 1	433	733	-	-	-	-	-	-	-
Stage 2	89	105	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	71.2	7.6	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1346	-	-	52	849	1370	-	-
HCM Lane V/C Ratio	0.461	-	-	1.179	0.286	0.002	-	-
HCM Control Delay (s)	9.9	-	-	$ 310.2	10.9	7.6	0	-
HCM Lane LOS	A	-	-	F	B	A	A	-
HCM 95th %tile Q(veh)	2.5	-	-	5.4	1.2	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	994	307	395	512	0	765
Future Volume (vph)	994	307	395	512	0	765
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	1057	327	420	545	0	814
RTOR Reduction (vph)	0	0	0	0	0	29
Lane Group Flow (vph)	1057	327	420	545	0	785
Confl. Peds. (#/hr)						13
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	17.2	46.8	18.4	46.8		18.4
Effective Green, g (s)	17.2	46.8	18.4	46.8		18.4
Actuated g/C Ratio	0.37	1.00	0.39	1.00		0.39
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1878	1591	1370	3592		1111
v/s Ratio Prot	c0.21		0.12	0.15		c0.28
v/s Ratio Perm		0.21				
v/c Ratio	0.56	0.21	0.31	0.15		0.71
Uniform Delay, d1	11.8	0.0	9.8	0.0		11.9
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.4	0.3	0.1	0.0		2.1
Delay (s)	12.2	0.3	9.9	0.0		14.0
Level of Service	B	A	A	A		B
Approach Delay (s)	9.4			4.3	14.0	
Approach LOS	A			A	B	

Intersection Summary			
HCM 2000 Control Delay	9.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	46.8	Sum of lost time (s)	11.2
Intersection Capacity Utilization	56.6%	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 (veh/h)	0	0	15	380	24	421	19	1116	623	308	510	26
Future Volume (veh/h)	0	0	15	380	24	421	19	1116	623	308	510	26
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		0.97	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	1900	1776	1776	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	405	0	156	19	1139	0	314	520	27
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	2	48	667	0	289	54	1412	1112	359	1953	101
Arrive On Green	0.00	0.00	0.00	0.19	0.00	0.19	0.03	0.40	0.00	0.20	0.57	0.57
Sat Flow, veh/h	0	1776	1509	3548	0	1540	1774	3539	2787	1774	3422	177
Grp Volume(v), veh/h	0	0	0	405	0	156	19	1139	0	314	268	279
Grp Sat Flow(s),veh/h/ln	0	1776	1509	1774	0	1540	1774	1770	1393	1774	1770	1830
Q Serve(g_s), s	0.0	0.0	0.0	7.6	0.0	6.6	0.8	20.7	0.0	12.4	5.6	5.6
Cycle Q Clear(g_c), s	0.0	0.0	0.0	7.6	0.0	6.6	0.8	20.7	0.0	12.4	5.6	5.6
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	0	2	48	667	0	289	54	1412	1112	359	1010	1044
V/C Ratio(X)	0.00	0.00	0.00	0.61	0.00	0.54	0.35	0.81	0.00	0.87	0.27	0.27
Avail Cap(c_a), veh/h	0	49	88	1271	0	552	196	1546	1218	416	1010	1044
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	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	27.0	0.0	26.6	34.5	19.3	0.0	28.0	7.9	7.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.9	0.0	1.6	3.8	3.0	0.0	16.7	0.1	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	0.0	0.0	0.0	3.8	0.0	2.9	0.4	10.6	0.0	7.8	2.7	2.8
LnGrp Delay(d),s/veh	0.0	0.0	0.0	27.9	0.0	28.2	38.2	22.3	0.0	44.7	8.0	8.0
LnGrp LOS				C		C	D	C		D	A	A
Approach Vol, veh/h		0			561			1158			861	
Approach Delay, s/veh		0.0			28.0			22.6			21.4	
Approach LOS					C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	19.8	34.0		0.0	7.3	46.5		18.7				
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1				
Max Green Setting (Gmax), s	17.0	31.7		2.0	8.0	40.7		26.0				
Max Q Clear Time (g_c+I1), s	14.4	22.7		0.0	2.8	7.6		9.6				
Green Ext Time (p_c), s	0.3	6.2		0.0	0.0	15.7		1.9				
Intersection Summary												
HCM 2010 Ctrl Delay			23.4									
HCM 2010 LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.

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	19	887	21	17	782	55	13	1	24	68	2	26
Future Vol, veh/h	19	887	21	17	782	55	13	1	24	68	2	26
Conflicting Peds, #/hr	10	0	8	8	0	10	6	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	954	23	18	841	59	14	1	26	73	2	28

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	910	0	0	984	0	0	1478	1961	497	1436	1942	466
Stage 1	-	-	-	-	-	-	1014	1014	-	917	917	-
Stage 2	-	-	-	-	-	-	464	947	-	519	1025	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	738	-	-	698	-	-	88	63	519	94	64	543
Stage 1	-	-	-	-	-	-	256	314	-	293	349	-
Stage 2	-	-	-	-	-	-	548	338	-	508	311	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	734	-	-	697	-	-	73	55	515	80	56	535
Mov Cap-2 Maneuver	-	-	-	-	-	-	73	55	-	80	56	-
Stage 1	-	-	-	-	-	-	239	293	-	273	328	-
Stage 2	-	-	-	-	-	-	486	317	-	451	290	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.5	36.1	166
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	156	734	-	-	697	-	-	103
HCM Lane V/C Ratio	0.262	0.028	-	-	0.026	-	-	1.002
HCM Control Delay (s)	36.1	10	0.3	-	10.3	0.3	-	166
HCM Lane LOS	E	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	1	0.1	-	-	0.1	-	-	6.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	869	87	58	595	18	212	12	104	57	12	41
Future Volume (veh/h)	22	869	87	58	595	18	212	12	104	57	12	41
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)	0.99		0.98	1.00		0.98	0.99		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	1863	1863	1900	1845	1845	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	24	945	95	63	647	20	230	13	0	62	13	45
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
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
Percent Heavy Veh, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	409	1493	150	280	1597	49	483	19	462	528	98	459
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.29	0.29	0.00	0.29	0.29	0.29
Sat Flow, veh/h	761	3243	326	534	3469	107	1145	65	1583	1332	336	1574
Grp Volume(v), veh/h	24	516	524	63	327	340	243	0	0	75	0	45
Grp Sat Flow(s),veh/h/ln	761	1770	1799	534	1752	1823	1210	0	1583	1668	0	1574
Q Serve(g_s), s	1.0	10.5	10.5	4.8	5.8	5.8	7.6	0.0	0.0	0.0	0.0	1.0
Cycle Q Clear(g_c), s	6.9	10.5	10.5	15.3	5.8	5.8	9.1	0.0	0.0	1.5	0.0	1.0
Prop In Lane	1.00		0.18	1.00		0.06	0.95		1.00	0.83		1.00
Lane Grp Cap(c), veh/h	409	815	828	280	807	840	501	0	462	626	0	459
V/C Ratio(X)	0.06	0.63	0.63	0.23	0.40	0.41	0.48	0.00	0.00	0.12	0.00	0.10
Avail Cap(c_a), veh/h	418	836	850	292	847	881	852	0	872	1003	0	867
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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.7	9.7	9.7	15.5	8.4	8.4	15.7	0.0	0.0	12.3	0.0	12.2
Incr Delay (d2), s/veh	0.1	1.5	1.5	0.4	0.3	0.3	0.7	0.0	0.0	0.1	0.0	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	0.2	5.4	5.4	0.7	2.9	3.0	2.9	0.0	0.0	0.7	0.0	0.4
LnGrp Delay(d),s/veh	10.8	11.2	11.2	15.9	8.8	8.8	16.4	0.0	0.0	12.4	0.0	12.3
LnGrp LOS	B	B	B	B	A	A	B			B		B
Approach Vol, veh/h		1064			730			243			120	
Approach Delay, s/veh		11.2			9.4			16.4			12.4	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		27.8		19.4		27.8		19.4
Change Period (Y+Rc), s		6.1		5.6		* 6.1		5.6
Max Green Setting (Gmax), s		22.3		26.0		* 23		26.0
Max Q Clear Time (g_c+I1), s		12.5		3.5		17.3		11.1
Green Ext Time (p_c), s		7.2		2.0		4.4		1.8

Intersection Summary	
HCM 2010 Ctrl Delay	11.2
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	84.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1023	11	27	569	0	4	0	49	272	64	147
Future Vol, veh/h	0	1023	11	27	569	0	4	0	49	272	64	147
Conflicting Peds, #/hr	0	0	8	8	0	0	1	0	3	3	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	1044	11	28	581	0	4	0	50	278	65	150

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1063	0	0	1436	-	539	1161	1699	291
Stage 1	-	-	-	-	-	-	1057	-	-	636	636	-
Stage 2	-	-	-	-	-	-	379	-	-	525	1063	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	639	-	0	94	0	487	~ 150	91	706
Stage 1	0	-	-	-	-	0	240	0	-	433	470	-
Stage 2	0	-	-	-	-	0	615	0	-	504	298	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	637	-	-	27	-	482	~ 130	86	705
Mov Cap-2 Maneuver	-	-	-	-	-	-	27	-	-	~ 130	86	-
Stage 1	-	-	-	-	-	-	240	-	-	433	449	-
Stage 2	-	-	-	-	-	-	395	-	-	450	296	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.5	24.4	$ 376.6
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	27	482	-	-	637	-	130	221
HCM Lane V/C Ratio	0.151	0.104	-	-	0.043	-	2.135	0.974
HCM Control Delay (s)	160.8	13.3	-	-	10.9	-	$ 591.1	100.2
HCM Lane LOS	F	B	-	-	B	-	F	F
HCM 95th %tile Q(veh)	0.5	0.3	-	-	0.1	-	23	8.6

Notes

~: Volume exceeds capacity $: Delay exceeds 300s   +: Computation Not Defined   *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1203	185	78	597	0	0
Future Vol, veh/h	1203	185	78	597	0	0
Conflicting Peds, #/hr	0	11	11	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	1240	191	80	615	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1442	0	1816	726
Stage 1	-	-	-	-	1347	-
Stage 2	-	-	-	-	469	-
Critical Hdwy	-	-	4.2	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.25	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	451	-	69	367
Stage 1	-	-	-	-	207	-
Stage 2	-	-	-	-	596	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	451	-	56	363
Mov Cap-2 Maneuver	-	-	-	-	56	-
Stage 1	-	-	-	-	205	-
Stage 2	-	-	-	-	490	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1.7	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	451	-
HCM Lane V/C Ratio	-	-	-	0.178	-
HCM Control Delay (s)	0	-	-	14.7	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	266	887	49	28	390	325	47	232	37	98	45	238
Future Volume (veh/h)	266	887	49	28	390	325	47	232	37	98	45	238
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		0.98	1.00		0.98	0.99		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	1863	1863	1900	1776	1776	1776
Adj Flow Rate, veh/h	271	905	50	29	398	332	48	237	38	100	46	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	7	7	7
Cap, veh/h	323	1426	79	79	511	422	496	471	75	298	535	454
Arrive On Green	0.18	0.42	0.42	0.04	0.28	0.28	0.30	0.30	0.30	0.30	0.30	0.00
Sat Flow, veh/h	1774	3409	188	1774	1824	1507	1351	1563	251	1039	1776	1509
Grp Volume(v), veh/h	271	470	485	29	386	344	48	0	275	100	46	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1770	1561	1351	0	1813	1039	1776	1509
Q Serve(g_s), s	9.2	13.2	13.2	1.0	12.6	12.7	1.7	0.0	7.8	5.5	1.2	0.0
Cycle Q Clear(g_c), s	9.2	13.2	13.2	1.0	12.6	12.7	2.8	0.0	7.8	13.3	1.2	0.0
Prop In Lane	1.00		0.10	1.00		0.97	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	323	740	765	79	496	438	496	0	546	298	535	454
V/C Ratio(X)	0.84	0.63	0.63	0.37	0.78	0.79	0.10	0.00	0.50	0.34	0.09	0.00
Avail Cap(c_a), veh/h	422	740	765	198	517	456	672	0	782	433	765	650
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	1.00	0.00
Uniform Delay (d), s/veh	24.7	14.4	14.4	29.1	20.7	20.8	16.7	0.0	18.0	23.5	15.7	0.0
Incr Delay (d2), s/veh	11.0	1.8	1.7	2.9	7.1	8.5	0.1	0.0	0.7	0.7	0.1	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	5.5	6.8	7.0	0.5	7.1	6.5	0.6	0.0	4.0	1.6	0.6	0.0
LnGrp Delay(d),s/veh	35.7	16.2	16.2	32.0	27.9	29.3	16.8	0.0	18.8	24.2	15.8	0.0
LnGrp LOS	D	B	B	C	C	C	B		B	C	B	
Approach Vol, veh/h		1226			759			323			146	
Approach Delay, s/veh		20.5			28.7			18.5			21.5	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.9	31.3		23.5	16.5	22.7		23.5
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	26.2		27.0	14.9	18.3		27.0
Max Q Clear Time (g_c+I1), s	3.0	15.2		15.3	11.2	14.7		9.8
Green Ext Time (p_c), s	0.0	7.5		2.0	0.3	2.8		2.3

Intersection Summary	
HCM 2010 Ctrl Delay	22.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	227	681	58	103	321	224	60	629	170	214	416	81
Future Volume (veh/h)	227	681	58	103	321	224	60	629	170	214	416	81
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		0.99	1.00		0.97
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	1825	1825	1825	1845	1845	1845	1810	1810	1810
Adj Flow Rate, veh/h	236	709	13	107	334	46	62	655	62	223	433	26
Adj No. of Lanes	1	2	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	3	3	3	5	5	5
Cap, veh/h	210	1004	442	133	442	372	101	975	434	204	1167	509
Arrive On Green	0.12	0.28	0.28	0.08	0.24	0.24	0.06	0.28	0.28	0.12	0.34	0.34
Sat Flow, veh/h	1774	3539	1558	1739	1825	1534	1757	3505	1560	1723	3438	1500
Grp Volume(v), veh/h	236	709	13	107	334	46	62	655	62	223	433	26
Grp Sat Flow(s),veh/h/ln	1774	1770	1558	1739	1825	1534	1757	1752	1560	1723	1719	1500
Q Serve(g_s), s	11.9	18.0	0.6	6.1	17.1	2.4	3.5	16.7	3.0	11.9	9.6	1.2
Cycle Q Clear(g_c), s	11.9	18.0	0.6	6.1	17.1	2.4	3.5	16.7	3.0	11.9	9.6	1.2
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	210	1004	442	133	442	372	101	975	434	204	1167	509
V/C Ratio(X)	1.12	0.71	0.03	0.80	0.76	0.12	0.62	0.67	0.14	1.09	0.37	0.05
Avail Cap(c_a), veh/h	210	1021	450	171	490	412	166	1214	540	204	1273	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	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.3	32.2	26.0	45.6	35.3	29.8	46.3	32.2	27.3	44.3	25.1	22.3
Incr Delay (d2), s/veh	99.2	2.2	0.0	18.6	6.0	0.1	6.0	1.0	0.1	90.0	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	11.6	9.1	0.3	3.6	9.4	1.0	1.9	8.2	1.3	10.7	4.5	0.5
LnGrp Delay(d),s/veh	143.5	34.4	26.0	64.2	41.3	29.9	52.3	33.2	27.4	134.3	25.3	22.4
LnGrp LOS	F	C	C	E	D	C	D	C	C	F	C	C
Approach Vol, veh/h		958			487			779			682	
Approach Delay, s/veh		61.2			45.3			34.3			60.8	
Approach LOS		E			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	18.0	34.1	13.8	34.6	11.9	40.2	18.0	30.4
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	11.9	34.8	9.9	29.0	9.5	37.2	11.9	27.0
Max Q Clear Time (g_c+I1), s	13.9	18.7	8.1	20.0	5.5	11.6	13.9	19.1
Green Ext Time (p_c), s	0.0	7.1	0.0	4.6	0.0	8.7	0.0	4.2

Intersection Summary	
HCM 2010 Ctrl Delay	51.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	129	315	67	783	466	215	42	516	431	222	856	45
Future Volume (veh/h)	129	315	67	783	466	215	42	516	431	222	856	45
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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	159	389	0	967	575	0	52	637	0	274	1057	56
Adj No. of Lanes	1	2	1	2	2	1	1	3	1	2	3	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	438	572	256	1028	760	340	86	1131	832	310	1306	69
Arrive On Green	0.25	0.16	0.00	0.30	0.22	0.00	0.05	0.22	0.00	0.09	0.26	0.26
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4944	262
Grp Volume(v), veh/h	159	389	0	967	575	0	52	637	0	274	724	389
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1816
Q Serve(g_s), s	8.8	12.3	0.0	33.0	18.4	0.0	3.4	13.2	0.0	9.4	23.8	23.8
Cycle Q Clear(g_c), s	8.8	12.3	0.0	33.0	18.4	0.0	3.4	13.2	0.0	9.4	23.8	23.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	438	572	256	1028	760	340	86	1131	832	310	895	480
V/C Ratio(X)	0.36	0.68	0.00	0.94	0.76	0.00	0.61	0.56	0.00	0.88	0.81	0.81
Avail Cap(c_a), veh/h	438	923	413	1061	1388	621	107	1267	874	310	944	506
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	46.9	0.0	40.4	43.5	0.0	55.4	41.1	0.0	53.4	40.9	40.9
Incr Delay (d2), s/veh	0.5	1.4	0.0	15.3	1.6	0.0	6.7	0.5	0.0	24.6	5.1	9.2
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	4.4	6.1	0.0	17.6	9.0	0.0	1.8	6.2	0.0	5.5	11.8	13.2
LnGrp Delay(d),s/veh	37.5	48.4	0.0	55.6	45.1	0.0	62.2	41.5	0.0	78.1	46.0	50.2
LnGrp LOS	D	D		E	D		E	D		E	D	D
Approach Vol, veh/h		548			1542			689			1387	
Approach Delay, s/veh		45.2			51.7			43.1			53.5	
Approach LOS		D			D			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	17.5	33.2	42.8	25.3	12.5	38.2	35.4	32.7
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	10.7	29.6	37.2	31.0	7.2	33.1	20.9	47.3
Max Q Clear Time (g_c+I1), s	11.4	15.2	35.0	14.3	5.4	25.8	10.8	20.4
Green Ext Time (p_c), s	0.0	9.6	1.0	2.0	0.0	5.6	2.2	4.2

Intersection Summary		
HCM 2010 Ctrl Delay		50.0
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	698	77	635	564	459	96	683	924	458	668	73
Future Volume (veh/h)	94	698	77	635	564	459	96	683	924	458	668	73
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		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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	98	727	0	661	588	0	100	711	0	477	696	76
Adj No. of Lanes	1	2	1	2	2	1	1	3	1	2	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	417	806	360	752	747	334	124	1003	663	511	1284	139
Arrive On Green	0.24	0.23	0.00	0.22	0.21	0.00	0.07	0.20	0.00	0.15	0.28	0.28
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4656	504
Grp Volume(v), veh/h	98	727	0	661	588	0	100	711	0	477	505	267
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1770
Q Serve(g_s), s	5.8	25.8	0.0	24.4	20.6	0.0	7.2	16.9	0.0	17.7	16.4	16.6
Cycle Q Clear(g_c), s	5.8	25.8	0.0	24.4	20.6	0.0	7.2	16.9	0.0	17.7	16.4	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	417	806	360	752	747	334	124	1003	663	511	935	488
V/C Ratio(X)	0.23	0.90	0.00	0.88	0.79	0.00	0.81	0.71	0.00	0.93	0.54	0.55
Avail Cap(c_a), veh/h	417	848	379	1106	1547	692	219	1223	732	511	935	488
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	48.6	0.0	48.7	48.0	0.0	59.3	48.5	0.0	54.4	39.9	39.9
Incr Delay (d2), s/veh	0.3	12.5	0.0	5.8	1.9	0.0	11.5	1.5	0.0	24.5	0.6	1.3
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	2.9	14.0	0.0	12.0	10.2	0.0	3.9	8.0	0.0	10.1	7.7	8.3
LnGrp Delay(d),s/veh	40.3	61.0	0.0	54.5	49.9	0.0	70.8	49.9	0.0	78.9	40.5	41.2
LnGrp LOS	D	E		D	D		E	D		E	D	D
Approach Vol, veh/h		825			1249			811			1249	
Approach Delay, s/veh		58.6			52.3			52.5			55.3	
Approach LOS		E			D			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	26.0	32.3	35.5	35.6	15.8	42.5	36.5	34.5
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	19.2	31.1	42.2	31.0	16.0	34.3	15.8	57.4
Max Q Clear Time (g_c+I1), s	19.7	18.9	26.4	27.8	9.2	18.6	7.8	22.6
Green Ext Time (p_c), s	0.0	6.0	2.3	1.4	0.1	8.9	3.2	4.5

Intersection Summary		
HCM 2010 Ctrl Delay		54.5
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	297	2	100	9	8	19	30	778	4	6	1336	430
Future Volume (veh/h)	297	2	100	9	8	19	30	778	4	6	1336	430
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		0.98	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	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	338	2	114	10	9	22	34	884	5	7	1518	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	393	2	351	19	17	41	74	1724	10	22	1588	710
Arrive On Green	0.22	0.22	0.22	0.05	0.05	0.05	0.04	0.48	0.48	0.01	0.45	0.00
Sat Flow, veh/h	1764	10	1575	406	366	893	1774	3608	20	1774	3539	1583
Grp Volume(v), veh/h	340	0	114	41	0	0	34	434	455	7	1518	0
Grp Sat Flow(s),veh/h/ln	1775	0	1575	1665	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	19.7	0.0	6.5	2.6	0.0	0.0	2.0	18.2	18.2	0.4	44.4	0.0
Cycle Q Clear(g_c), s	19.7	0.0	6.5	2.6	0.0	0.0	2.0	18.2	18.2	0.4	44.4	0.0
Prop In Lane	0.99		1.00	0.24		0.54	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	396	0	351	77	0	0	74	846	888	22	1588	710
V/C Ratio(X)	0.86	0.00	0.32	0.53	0.00	0.00	0.46	0.51	0.51	0.32	0.96	0.00
Avail Cap(c_a), veh/h	513	0	456	109	0	0	116	846	888	116	1625	727
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	40.0	0.0	34.9	50.0	0.0	0.0	50.2	19.3	19.3	52.5	28.5	0.0
Incr Delay (d2), s/veh	11.1	0.0	0.5	5.7	0.0	0.0	4.4	0.5	0.5	8.2	13.2	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	10.9	0.0	2.9	1.3	0.0	0.0	1.1	8.9	9.4	0.3	24.4	0.0
LnGrp Delay(d),s/veh	51.1	0.0	35.4	55.7	0.0	0.0	54.6	19.9	19.8	60.7	41.8	0.0
LnGrp LOS	D		D	E			D	B	B	E	D	
Approach Vol, veh/h		454			41			923			1525	
Approach Delay, s/veh		47.2			55.7			21.1			41.9	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	58.0		30.0	11.3	54.9		11.0
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	49.2		31.0	7.0	49.2		7.0
Max Q Clear Time (g_c+I1), s	2.4	20.2		21.7	4.0	46.4		4.6
Green Ext Time (p_c), s	0.0	21.7		1.7	0.0	1.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	36.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	351	17	52	5	14	13	163	1389	11	19	883	441
Future Volume (veh/h)	351	17	52	5	14	13	163	1389	11	19	883	441
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		0.95	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	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	366	18	54	5	15	14	170	1447	11	20	920	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	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	416	20	384	10	31	29	200	1606	12	52	1282	574
Arrive On Green	0.25	0.25	0.25	0.04	0.04	0.04	0.11	0.45	0.45	0.03	0.36	0.00
Sat Flow, veh/h	1695	83	1564	248	745	695	1774	3600	27	1774	3539	1583
Grp Volume(v), veh/h	384	0	54	34	0	0	170	711	747	20	920	0
Grp Sat Flow(s),veh/h/ln	1778	0	1564	1688	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	22.6	0.0	2.9	2.1	0.0	0.0	10.2	40.4	40.4	1.2	24.3	0.0
Cycle Q Clear(g_c), s	22.6	0.0	2.9	2.1	0.0	0.0	10.2	40.4	40.4	1.2	24.3	0.0
Prop In Lane	0.95		1.00	0.15		0.41	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	437	0	384	70	0	0	200	789	829	52	1282	574
V/C Ratio(X)	0.88	0.00	0.14	0.49	0.00	0.00	0.85	0.90	0.90	0.39	0.72	0.00
Avail Cap(c_a), veh/h	509	0	448	109	0	0	252	800	840	114	1327	594
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.4	0.0	32.0	50.9	0.0	0.0	47.2	27.8	27.9	51.7	29.8	0.0
Incr Delay (d2), s/veh	14.5	0.0	0.2	5.2	0.0	0.0	19.3	13.2	12.8	4.6	1.8	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	12.9	0.0	1.3	1.1	0.0	0.0	6.1	22.4	23.7	0.7	12.2	0.0
LnGrp Delay(d),s/veh	53.9	0.0	32.2	56.1	0.0	0.0	66.5	41.0	40.6	56.4	31.6	0.0
LnGrp LOS	D		C	E			E	D	D	E	C	
Approach Vol, veh/h		438			34			1628			940	
Approach Delay, s/veh		51.2			56.1			43.5			32.2	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.0	55.2		32.8	19.1	46.1		10.6
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	49.1		31.1	15.4	40.7		7.0
Max Q Clear Time (g_c+I1), s	3.2	42.4		24.6	12.2	26.3		4.1
Green Ext Time (p_c), s	0.0	6.0		1.4	0.1	12.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay		41.3
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	300	179	116	336	88	94	623	64	107	1045	194
Future Volume (veh/h)	169	300	179	116	336	88	94	623	64	107	1045	194
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		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	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	184	326	57	126	365	0	102	677	70	116	1136	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	0
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	327	508	430	158	488	415	171	1466	150	180	1638	0
Arrive On Green	0.09	0.27	0.27	0.09	0.27	0.00	0.10	0.32	0.32	0.10	0.32	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	4635	475	1792	5305	0
Grp Volume(v), veh/h	184	326	57	126	365	0	102	489	258	116	1136	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1678	1754	1792	1712	0
Q Serve(g_s), s	4.2	12.8	2.3	5.9	15.3	0.0	4.7	9.8	9.9	5.2	16.2	0.0
Cycle Q Clear(g_c), s	4.2	12.8	2.3	5.9	15.3	0.0	4.7	9.8	9.9	5.2	16.2	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	327	508	430	158	488	415	171	1061	555	180	1638	0
V/C Ratio(X)	0.56	0.64	0.13	0.80	0.75	0.00	0.60	0.46	0.47	0.65	0.69	0.00
Avail Cap(c_a), veh/h	336	651	551	184	666	566	189	1174	614	197	1809	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	36.3	27.0	23.2	37.3	28.2	0.0	36.2	22.9	23.0	36.2	24.9	0.0
Incr Delay (d2), s/veh	1.7	1.6	0.2	17.8	3.5	0.0	3.5	0.3	0.6	5.5	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	2.1	6.8	1.0	3.6	8.2	0.0	2.4	4.5	4.9	2.9	7.8	0.0
LnGrp Delay(d),s/veh	38.0	28.7	23.3	55.1	31.7	0.0	39.7	23.2	23.6	41.7	26.0	0.0
LnGrp LOS	D	C	C	E	C		D	C	C	D	C	
Approach Vol, veh/h		567			491			849			1252	
Approach Delay, s/veh		31.1			37.7			25.3			27.4	
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	12.6	31.9	11.8	27.5	12.4	32.1	12.1	27.2
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 9.2	29.3	* 8.8	29.0	* 9	29.5	* 8.1	* 30
Max Q Clear Time (g_c+I1), s	7.2	11.9	7.9	14.8	6.7	18.2	6.2	17.3
Green Ext Time (p_c), s	0.0	11.8	0.0	4.5	0.0	8.5	0.1	4.4

Intersection Summary			
HCM 2010 Ctrl Delay			29.1
HCM 2010 LOS			C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	277	331	112	103	266	236	199	1441	65	124	910	175
Future Volume (veh/h)	277	331	112	103	266	236	199	1441	65	124	910	175
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	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	292	348	24	108	280	0	209	1517	68	131	958	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	462	386	139	404	343	243	1900	85	165	1739	0
Arrive On Green	0.11	0.25	0.25	0.08	0.22	0.00	0.14	0.39	0.39	0.09	0.34	0.00
Sat Flow, veh/h	3476	1881	1574	1747	1835	1560	1756	4935	221	1792	5305	0
Grp Volume(v), veh/h	292	348	24	108	280	0	209	1032	553	131	958	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1574	1747	1835	1560	1756	1678	1800	1792	1712	0
Q Serve(g_s), s	7.8	16.2	1.1	5.7	13.3	0.0	11.0	25.8	25.8	6.8	14.3	0.0
Cycle Q Clear(g_c), s	7.8	16.2	1.1	5.7	13.3	0.0	11.0	25.8	25.8	6.8	14.3	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		0.00
Lane Grp Cap(c), veh/h	365	462	386	139	404	343	243	1292	693	165	1739	0
V/C Ratio(X)	0.80	0.75	0.06	0.78	0.69	0.00	0.86	0.80	0.80	0.79	0.55	0.00
Avail Cap(c_a), veh/h	434	579	484	163	520	442	308	1335	716	205	1739	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	41.3	33.0	27.3	42.7	33.9	0.0	39.8	25.8	25.8	42.0	25.4	0.0
Incr Delay (d2), s/veh	8.2	4.7	0.1	16.7	3.1	0.0	16.4	3.4	6.2	14.4	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	4.1	9.0	0.5	3.4	7.0	0.0	6.5	12.5	14.0	4.0	6.8	0.0
LnGrp Delay(d),s/veh	49.5	37.7	27.4	59.4	37.1	0.0	56.3	29.2	32.0	56.4	25.8	0.0
LnGrp LOS	D	D	C	E	D		E	C	C	E	C	
Approach Vol, veh/h		664			388			1794			1089	
Approach Delay, s/veh		42.5			43.3			33.2			29.5	
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	12.9	41.8	11.7	28.1	17.3	37.4	14.1	25.7				
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9				
Max Green Setting (Gmax), s	* 11	37.6	* 8.8	29.1	* 17	31.8	* 12	* 27				
Max Q Clear Time (g_c+I1), s	8.8	27.8	7.7	18.2	13.0	16.3	9.8	15.3				
Green Ext Time (p_c), s	0.0	8.6	0.0	3.4	0.1	13.2	0.2	3.5				
Intersection Summary												
HCM 2010 Ctrl Delay			34.8									
HCM 2010 LOS			C									

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	2	196	0	0	0	295	64	7	1	83	41
Future Volume (veh/h)	17	2	196	0	0	0	295	64	7	1	83	41
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				0.99		0.99	0.99		0.99
Parking Bus, Adj	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	1776	1776				1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	18	2	25				314	68	7	1	88	44
Adj No. of Lanes	0	1	1				1	1	0	0	1	0
Peak Hour Factor	0.94	0.94	0.94				0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	7	7	7				2	2	2	2	2	2
Cap, veh/h	118	13	116				855	650	67	174	458	227
Arrive On Green	0.08	0.08	0.08				0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1529	170	1509				1244	1660	171	4	1169	580
Grp Volume(v), veh/h	20	0	25				314	0	75	133	0	0
Grp Sat Flow(s),veh/h/ln	1699	0	1509				1244	0	1831	1753	0	0
Q Serve(g_s), s	0.2	0.0	0.3				2.7	0.0	0.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.2	0.0	0.3				3.7	0.0	0.5	1.1	0.0	0.0
Prop In Lane	0.90		1.00				1.00		0.09	0.01		0.33
Lane Grp Cap(c), veh/h	131	0	116				855	0	717	859	0	0
V/C Ratio(X)	0.15	0.00	0.22				0.37	0.00	0.10	0.15	0.00	0.00
Avail Cap(c_a), veh/h	1451	0	1289				1595	0	1807	1900	0	0
HCM Platoon Ratio	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	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	9.1	0.0	9.1				4.9	0.0	4.1	4.2	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.9				0.3	0.0	0.1	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
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.2				1.5	0.0	0.3	0.5	0.0	0.0
LnGrp Delay(d),s/veh	9.6	0.0	10.0				5.2	0.0	4.1	4.3	0.0	0.0
LnGrp LOS	A		B				A		A	A		
Approach Vol, veh/h		45						389			133	
Approach Delay, s/veh		9.9						5.0			4.3	
Approach LOS		A						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		13.9		7.2		13.9		
Change Period (Y+Rc), s		5.6		5.6		5.6		
Max Green Setting (Gmax), s		20.8		18.0		20.8		
Max Q Clear Time (g_c+I1), s		5.7		2.3		3.1		
Green Ext Time (p_c), s		2.1		0.1		2.2		

Intersection Summary		
HCM 2010 Ctrl Delay		5.2
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	2	226	0	0	0	577	163	18	3	117	84
Future Volume (veh/h)	55	2	226	0	0	0	577	163	18	3	117	84
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Adj Sat Flow, veh/h/ln	1900	1792	1792				1863	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	59	2	23				620	175	19	3	126	90
Adj No. of Lanes	0	1	1				1	1	0	0	1	0
Peak Hour Factor	0.93	0.93	0.93				0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6				2	2	2	2	2	2
Cap, veh/h	178	6	164				917	990	108	98	609	427
Arrive On Green	0.11	0.11	0.11				0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1654	56	1524				1156	1651	179	4	1015	711
Grp Volume(v), veh/h	61	0	23				620	0	194	219	0	0
Grp Sat Flow(s),veh/h/ln	1710	0	1524				1156	0	1830	1730	0	0
Q Serve(g_s), s	1.3	0.0	0.5				13.0	0.0	1.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.3	0.0	0.5				15.2	0.0	1.8	2.2	0.0	0.0
Prop In Lane	0.97		1.00				1.00		0.10	0.01		0.41
Lane Grp Cap(c), veh/h	185	0	164				917	0	1098	1133	0	0
V/C Ratio(X)	0.33	0.00	0.14				0.68	0.00	0.18	0.19	0.00	0.00
Avail Cap(c_a), veh/h	802	0	715				1453	0	1947	1931	0	0
HCM Platoon Ratio	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	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.8	0.0	15.5				5.7	0.0	3.4	3.5	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.4				0.9	0.0	0.1	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
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.2				5.2	0.0	0.9	1.1	0.0	0.0
LnGrp Delay(d),s/veh	16.9	0.0	15.9				6.6	0.0	3.5	3.6	0.0	0.0
LnGrp LOS	B		B				A		A	A		
Approach Vol, veh/h		84						814			219	
Approach Delay, s/veh		16.6						5.9			3.6	
Approach LOS		B						A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		28.6		9.7		28.6		
Change Period (Y+Rc), s		5.6		5.6		5.6		
Max Green Setting (Gmax), s		40.8		18.0		40.8		
Max Q Clear Time (g_c+I1), s		17.2		3.3		4.2		
Green Ext Time (p_c), s		5.8		0.3		6.3		

Intersection Summary	
HCM 2010 Ctrl Delay	6.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	396	19	21	736	53	13	1	7	24	2	12
Future Volume (veh/h)	24	396	19	21	736	53	13	1	7	24	2	12
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	0.99		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	1792	1900	1900	1845	1900	1900	1667	1900	1900	1863	1900
Adj Flow Rate, veh/h	29	471	23	25	876	63	15	1	8	29	2	14
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	6	6	6	3	3	3	14	14	14	2	2	2
Cap, veh/h	155	1713	82	129	1795	127	240	30	49	262	23	50
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.11	0.11	0.11	0.11	0.11	0.11
Sat Flow, veh/h	67	3041	145	32	3188	226	634	280	457	818	217	468
Grp Volume(v), veh/h	268	0	255	508	0	456	24	0	0	45	0	0
Grp Sat Flow(s),veh/h/ln	1649	0	1604	1810	0	1636	1370	0	0	1503	0	0
Q Serve(g_s), s	0.0	0.0	2.8	0.0	0.0	5.7	0.0	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	2.6	0.0	2.8	5.6	0.0	5.7	0.5	0.0	0.0	0.9	0.0	0.0
Prop In Lane	0.11		0.09	0.05		0.14	0.62		0.33	0.64		0.31
Lane Grp Cap(c), veh/h	1046	0	903	1131	0	921	319	0	0	335	0	0
V/C Ratio(X)	0.26	0.00	0.28	0.45	0.00	0.50	0.08	0.00	0.00	0.13	0.00	0.00
Avail Cap(c_a), veh/h	1638	0	1555	1842	0	1586	3101	0	0	3450	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.8	0.0	3.8	4.5	0.0	4.5	13.7	0.0	0.0	13.9	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.3	0.0	0.4	0.1	0.0	0.0	0.2	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	1.3	0.0	1.2	2.9	0.0	2.6	0.2	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d),s/veh	3.9	0.0	4.0	4.7	0.0	4.9	13.8	0.0	0.0	14.1	0.0	0.0
LnGrp LOS	A		A	A		A	B			B		
Approach Vol, veh/h		523			964			24			45	
Approach Delay, s/veh		4.0			4.8			13.8			14.1	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		24.7		9.2		24.7		9.2
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		32.9		75.9		32.9		75.9
Max Q Clear Time (g_c+I1), s		4.8		2.9		7.7		2.5
Green Ext Time (p_c), s		12.0		0.4		11.4		0.4

Intersection Summary	
HCM 2010 Ctrl Delay	4.9
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	887	21	17	782	55	13	1	24	68	2	26
Future Volume (veh/h)	19	887	21	17	782	55	13	1	24	68	2	26
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	0.99		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	1845	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	20	954	23	18	841	59	14	1	26	73	2	28
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	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, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	1718	41	119	1648	114	188	47	164	321	34	66
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.16	0.16	0.16	0.16	0.16	0.16
Sat Flow, veh/h	23	3358	80	22	3222	223	291	284	997	868	206	401
Grp Volume(v), veh/h	519	0	478	481	0	437	41	0	0	103	0	0
Grp Sat Flow(s),veh/h/ln	1798	0	1664	1814	0	1653	1572	0	0	1474	0	0
Q Serve(g_s), s	0.0	0.0	6.8	0.0	0.0	6.1	0.0	0.0	0.0	1.2	0.0	0.0
Cycle Q Clear(g_c), s	6.6	0.0	6.8	5.9	0.0	6.1	0.7	0.0	0.0	2.0	0.0	0.0
Prop In Lane	0.04		0.05	0.04		0.14	0.34		0.63	0.71		0.27
Lane Grp Cap(c), veh/h	1028	0	851	1036	0	845	398	0	0	420	0	0
V/C Ratio(X)	0.50	0.00	0.56	0.46	0.00	0.52	0.10	0.00	0.00	0.25	0.00	0.00
Avail Cap(c_a), veh/h	1183	0	1002	1192	0	996	934	0	0	929	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.7	0.0	5.8	5.6	0.0	5.6	12.4	0.0	0.0	12.9	0.0	0.0
Incr Delay (d2), s/veh	0.4	0.0	0.6	0.3	0.0	0.5	0.1	0.0	0.0	0.3	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	3.4	0.0	3.2	3.0	0.0	2.8	0.3	0.0	0.0	0.9	0.0	0.0
LnGrp Delay(d),s/veh	6.1	0.0	6.4	5.9	0.0	6.1	12.5	0.0	0.0	13.2	0.0	0.0
LnGrp LOS	A		A	A		A	B			B		
Approach Vol, veh/h		997			918			41			103	
Approach Delay, s/veh		6.2			6.0			12.5			13.2	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		23.3		11.3		23.3		11.3
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6
Max Green Setting (Gmax), s		20.8		18.0		20.8		18.0
Max Q Clear Time (g_c+I1), s		8.8		4.0		8.1		2.7
Green Ext Time (p_c), s		8.8		0.6		9.3		0.6

Intersection Summary	
HCM 2010 Ctrl Delay	6.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	419	3	32	652	0	4	0	14	140	45	164
Future Volume (veh/h)	0	419	3	32	652	0	4	0	14	140	45	164
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		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	0	1792	1900	1827	1827	0	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	517	4	40	805	0	5	0	17	173	56	202
Adj No. of Lanes	0	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	0	6	6	4	4	0	2	2	2	2	2	2
Cap, veh/h	0	1373	11	427	1376	0	401	0	515	451	116	417
Arrive On Green	0.00	0.40	0.40	0.40	0.40	0.00	0.33	0.00	0.33	0.33	0.33	0.33
Sat Flow, veh/h	0	3553	27	856	3563	0	683	0	1580	1388	355	1279
Grp Volume(v), veh/h	0	254	267	40	805	0	5	0	17	173	0	258
Grp Sat Flow(s),veh/h/ln	0	1703	1787	856	1736	0	683	0	1580	1388	0	1634
Q Serve(g_s), s	0.0	4.3	4.3	1.4	7.3	0.0	0.1	0.0	0.3	4.6	0.0	5.1
Cycle Q Clear(g_c), s	0.0	4.3	4.3	5.7	7.3	0.0	5.2	0.0	0.3	9.8	0.0	5.1
Prop In Lane	0.00		0.01	1.00		0.00	1.00		1.00	1.00		0.78
Lane Grp Cap(c), veh/h	0	675	708	427	1376	0	401	0	515	451	0	532
V/C Ratio(X)	0.00	0.38	0.38	0.09	0.59	0.00	0.01	0.00	0.03	0.38	0.00	0.48
Avail Cap(c_a), veh/h	0	862	905	521	1757	0	547	0	722	633	0	746
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.6	8.6	10.6	9.6	0.0	13.0	0.0	9.3	14.9	0.0	10.9
Incr Delay (d2), s/veh	0.0	0.3	0.3	0.1	0.4	0.0	0.0	0.0	0.0	0.5	0.0	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	0.0	2.0	2.1	0.3	3.5	0.0	0.0	0.0	0.1	1.8	0.0	2.4
LnGrp Delay(d),s/veh	0.0	9.0	9.0	10.7	10.0	0.0	13.0	0.0	9.3	15.4	0.0	11.6
LnGrp LOS		A	A	B	A		B		A	B		B
Approach Vol, veh/h		521			845			22			431	
Approach Delay, s/veh		9.0			10.0			10.1			13.1	
Approach LOS		A			A			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		21.6		18.7		21.6		18.7				
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6				
Max Green Setting (Gmax), s		20.4		18.4		20.4		18.4				
Max Q Clear Time (g_c+I1), s		6.3		11.8		9.3		7.2				
Green Ext Time (p_c), s		7.6		1.2		6.4		1.7				
Intersection Summary												
HCM 2010 Ctrl Delay			10.4									
HCM 2010 LOS			B									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1023	11	27	569	0	4	0	49	272	64	147
Future Volume (veh/h)	0	1023	11	27	569	0	4	0	49	272	64	147
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		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	0	1863	1900	1827	1827	0	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	1044	11	28	581	0	4	0	50	278	65	150
Adj No. of Lanes	0	2	0	1	2	0	0	1	1	1	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, %	0	2	2	4	4	0	2	2	2	2	2	2
Cap, veh/h	0	1556	16	246	1505	0	431	0	548	474	174	401
Arrive On Green	0.00	0.43	0.43	0.43	0.43	0.00	0.35	0.00	0.35	0.35	0.35	0.35
Sat Flow, veh/h	0	3681	38	522	3563	0	834	0	1579	1347	500	1155
Grp Volume(v), veh/h	0	515	540	28	581	0	4	0	50	278	0	215
Grp Sat Flow(s),veh/h/ln	0	1770	1856	522	1736	0	834	0	1579	1347	0	1655
Q Serve(g_s), s	0.0	11.9	11.9	2.3	5.8	0.0	0.1	0.0	1.1	10.0	0.0	5.0
Cycle Q Clear(g_c), s	0.0	11.9	11.9	14.2	5.8	0.0	5.1	0.0	1.1	15.1	0.0	5.0
Prop In Lane	0.00		0.02	1.00		0.00	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	0	767	805	246	1505	0	431	0	548	474	0	575
V/C Ratio(X)	0.00	0.67	0.67	0.11	0.39	0.00	0.01	0.00	0.09	0.59	0.00	0.37
Avail Cap(c_a), veh/h	0	845	886	269	1658	0	468	0	600	518	0	628
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.6	11.6	17.2	9.8	0.0	14.4	0.0	11.2	18.2	0.0	12.5
Incr Delay (d2), s/veh	0.0	1.8	1.7	0.2	0.2	0.0	0.0	0.0	0.1	1.5	0.0	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	0.0	6.1	6.4	0.3	2.8	0.0	0.0	0.0	0.5	3.9	0.0	2.3
LnGrp Delay(d),s/veh	0.0	13.4	13.3	17.4	10.0	0.0	14.4	0.0	11.3	19.7	0.0	12.9
LnGrp LOS		B	B	B	B		B		B	B		B
Approach Vol, veh/h		1055			609			54			493	
Approach Delay, s/veh		13.3			10.3			11.5			16.7	
Approach LOS		B			B			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		27.8		23.3		27.8		23.3				
Change Period (Y+Rc), s		5.6		5.6		5.6		5.6				
Max Green Setting (Gmax), s		24.4		19.4		24.4		19.4				
Max Q Clear Time (g_c+I1), s		13.9		17.1		16.2		7.1				
Green Ext Time (p_c), s		7.3		0.6		6.0		2.0				
Intersection Summary												
HCM 2010 Ctrl Delay			13.2									
HCM 2010 LOS			B									

I. Intersection Level of Service Calculations – Cumulative Without Project Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	579	112	269	823	489	80	720	382	566	1082	92
Future Volume (veh/h)	238	579	112	269	823	489	80	720	382	566	1082	92
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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	251	609	0	283	866	0	84	758	0	596	1139	97
Adj No. of Lanes	1	2	1	2	2	1	1	3	1	2	3	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	1108	496	350	895	709	107	853	429	682	1458	124
Arrive On Green	0.16	0.31	0.00	0.10	0.26	0.00	0.06	0.17	0.00	0.20	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4774	406
Grp Volume(v), veh/h	251	609	0	283	866	0	84	758	0	596	809	427
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1790
Q Serve(g_s), s	16.8	17.4	0.0	9.9	29.9	0.0	5.7	17.7	0.0	20.4	26.5	26.5
Cycle Q Clear(g_c), s	16.8	17.4	0.0	9.9	29.9	0.0	5.7	17.7	0.0	20.4	26.5	26.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	283	1108	496	350	895	709	107	853	429	682	1036	547
V/C Ratio(X)	0.89	0.55	0.00	0.81	0.97	0.00	0.78	0.89	0.00	0.87	0.78	0.78
Avail Cap(c_a), veh/h	341	1108	496	588	895	709	266	908	446	911	1036	547
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	34.7	0.0	53.3	44.7	0.0	56.3	49.5	0.0	47.3	38.5	38.5
Incr Delay (d2), s/veh	20.6	0.6	0.0	4.5	22.6	0.0	11.8	10.3	0.0	7.4	3.9	7.2
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	9.9	8.5	0.0	4.9	17.1	0.0	3.1	9.1	0.0	10.4	12.9	14.2
LnGrp Delay(d),s/veh	70.6	35.2	0.0	57.8	67.3	0.0	68.2	59.8	0.0	54.7	42.4	45.7
LnGrp LOS	E	D		E	E		E	E		D	D	D
Approach Vol, veh/h		860			1149			842			1832	
Approach Delay, s/veh		45.6			64.9			60.6			47.2	
Approach LOS		D			E			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	30.9	27.2	19.4	44.2	14.1	43.9	25.5	38.0
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	32.2	21.7	21.1	33.5	18.2	35.7	23.4	31.2
Max Q Clear Time (g_c+I1), s	22.4	19.7	11.9	19.4	7.7	28.5	18.8	31.9
Green Ext Time (p_c), s	1.7	0.6	0.6	4.1	0.1	5.8	0.6	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.7
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	4	108	11	9	21	31	1088	6	18	1294	257
Future Volume (veh/h)	130	4	108	11	9	21	31	1088	6	18	1294	257
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		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	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	141	4	117	12	10	23	34	1183	7	20	1407	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	7	377	86	79	107	85	1655	10	57	1568	701
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.05	0.46	0.46	0.03	0.44	0.00
Sat Flow, veh/h	867	31	1575	100	328	447	1774	3607	21	1774	3539	1583
Grp Volume(v), veh/h	145	0	117	45	0	0	34	580	610	20	1407	0
Grp Sat Flow(s),veh/h/ln	898	0	1575	875	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	0.1	0.0	4.5	0.2	0.0	0.0	1.4	19.3	19.3	0.8	26.8	0.0
Cycle Q Clear(g_c), s	13.3	0.0	4.5	13.4	0.0	0.0	1.4	19.3	19.3	0.8	26.8	0.0
Prop In Lane	0.97		1.00	0.27		0.51	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	312	0	377	272	0	0	85	812	853	57	1568	701
V/C Ratio(X)	0.46	0.00	0.31	0.17	0.00	0.00	0.40	0.71	0.71	0.35	0.90	0.00
Avail Cap(c_a), veh/h	568	0	670	556	0	0	170	812	853	170	1568	701
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.1	0.0	22.8	22.1	0.0	0.0	33.7	15.9	15.9	34.6	18.8	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.5	0.3	0.0	0.0	3.1	5.3	5.1	3.7	8.5	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	2.8	0.0	2.0	0.7	0.0	0.0	0.7	10.6	11.0	0.5	14.7	0.0
LnGrp Delay(d),s/veh	27.2	0.0	23.3	22.4	0.0	0.0	36.8	21.2	21.0	38.3	27.3	0.0
LnGrp LOS	C		C	C			D	C	C	D	C	
Approach Vol, veh/h		262			45			1224			1427	
Approach Delay, s/veh		25.5			22.4			21.5			27.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	40.3		23.7	10.3	39.1		23.7
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	32.3		31.0	7.0	32.3		31.0
Max Q Clear Time (g_c+I1), s	2.8	21.3		15.3	3.4	28.8		15.4
Green Ext Time (p_c), s	0.0	9.9		1.3	0.0	3.3		1.3

Intersection Summary	
HCM 2010 Ctrl Delay	24.7
HCM 2010 LOS	C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	21	152	677	85	40	182	709	417	69	1035	12
Future Volume (veh/h)	15	21	152	677	85	40	182	709	417	69	1035	12
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		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	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	23	17	752	94	8	202	788	122	77	1150	13
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	110	92	751	406	344	210	1569	695	102	1983	22
Arrive On Green	0.06	0.06	0.06	0.22	0.22	0.22	0.12	0.44	0.44	0.06	0.38	0.38
Sat Flow, veh/h	1774	1863	1561	3442	1863	1575	1774	3539	1567	1774	5183	59
Grp Volume(v), veh/h	17	23	17	752	94	8	202	788	122	77	752	411
Grp Sat Flow(s),veh/h/ln	1774	1863	1561	1721	1863	1575	1774	1770	1567	1774	1695	1852
Q Serve(g_s), s	1.0	1.3	1.1	24.0	4.6	0.4	12.5	17.5	5.2	4.7	19.4	19.4
Cycle Q Clear(g_c), s	1.0	1.3	1.1	24.0	4.6	0.4	12.5	17.5	5.2	4.7	19.4	19.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	105	110	92	751	406	344	210	1569	695	102	1297	709
V/C Ratio(X)	0.16	0.21	0.18	1.00	0.23	0.02	0.96	0.50	0.18	0.75	0.58	0.58
Avail Cap(c_a), veh/h	355	373	312	751	406	344	210	1569	695	121	1297	709
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	49.1	49.3	49.2	43.0	35.4	33.8	48.3	21.9	18.5	51.1	26.9	26.9
Incr Delay (d2), s/veh	0.7	0.9	0.9	33.2	0.3	0.0	51.6	1.2	0.6	19.7	1.9	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	0.5	0.7	0.5	14.8	2.4	0.2	9.1	8.8	2.3	2.9	9.4	10.6
LnGrp Delay(d),s/veh	49.9	50.2	50.2	76.2	35.7	33.8	99.8	23.1	19.0	70.8	28.8	30.4
LnGrp LOS	D	D	D	F	D	C	F	C	B	E	C	C
Approach Vol, veh/h		57			854			1112			1240	
Approach Delay, s/veh		50.1			71.3			36.6			32.0	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	54.9		12.6	19.1	48.2		30.1
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	7.5	32.1		22.0	13.0	26.6		24.0
Max Q Clear Time (g_c+I1), s	6.7	19.5		3.3	14.5	21.4		26.0
Green Ext Time (p_c), s	0.0	9.6		0.1	0.0	4.5		0.0

Intersection Summary			
HCM 2010 Ctrl Delay			44.2
HCM 2010 LOS			D

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	108	1160	100	181	1827
Future Vol, veh/h	34	108	1160	100	181	1827
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	121	1303	112	203	2053

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2741	657	0	0	1308	0
Stage 1	1308	-	-	-	-	-
Stage 2	1433	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 16	407	-	-	525	-
Stage 1	217	-	-	-	-	-
Stage 2	186	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 10	405	-	-	525	-
Mov Cap-2 Maneuver	72	-	-	-	-	-
Stage 1	216	-	-	-	-	-
Stage 2	114	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	37.6	0	1.5
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	72	405	525	-
HCM Lane V/C Ratio	-	-	0.531	0.3	0.387	-
HCM Control Delay (s)	-	-	101.3	17.6	16.1	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	2.2	1.2	1.8	-

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)	164	376	236	136	391	109	161	715	73	113	1295	201
Future Volume (veh/h)	164	376	236	136	391	109	161	715	73	113	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		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	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	173	396	127	143	412	0	169	753	77	119	1363	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	298	510	431	177	525	446	202	1543	157	166	1594	0
Arrive On Green	0.09	0.27	0.27	0.10	0.29	0.00	0.12	0.33	0.33	0.09	0.31	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	4640	471	1792	5305	0
Grp Volume(v), veh/h	173	396	127	143	412	0	169	543	287	119	1363	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1678	1755	1792	1712	0
Q Serve(g_s), s	4.4	17.9	5.8	7.4	19.1	0.0	8.7	11.9	12.0	6.0	23.0	0.0
Cycle Q Clear(g_c), s	4.4	17.9	5.8	7.4	19.1	0.0	8.7	11.9	12.0	6.0	23.0	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	298	510	431	177	525	446	202	1116	584	166	1594	0
V/C Ratio(X)	0.58	0.78	0.29	0.81	0.78	0.00	0.84	0.49	0.49	0.72	0.85	0.00
Avail Cap(c_a), veh/h	606	593	502	356	646	549	244	1116	584	287	1702	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	40.6	31.1	26.7	40.6	30.3	0.0	40.0	24.5	24.6	40.7	29.9	0.0
Incr Delay (d2), s/veh	1.3	5.9	0.5	6.5	5.5	0.0	17.8	0.3	0.6	4.2	4.3	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	2.2	10.2	2.6	3.9	10.4	0.0	5.2	5.6	5.9	3.1	11.5	0.0
LnGrp Delay(d),s/veh	41.9	37.0	27.1	47.1	35.8	0.0	57.8	24.9	25.2	44.9	34.2	0.0
LnGrp LOS	D	D	C	D	D		E	C	C	D	C	
Approach Vol, veh/h		696			555			999			1482	
Approach Delay, s/veh		36.4			38.7			30.5			35.0	
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	12.8	36.1	13.5	29.9	14.8	34.1	12.1	31.3
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 15	28.6	* 19	29.1	* 13	30.6	* 16	* 33
Max Q Clear Time (g_c+I1), s	8.0	14.0	9.4	19.9	10.7	25.0	6.4	21.1
Green Ext Time (p_c), s	0.1	11.5	0.2	4.3	0.1	3.7	0.3	4.9

Intersection Summary	
HCM 2010 Ctrl Delay	34.6
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	376	22	244	21	21	26	195	850	9	27	1378	458
Future Volume (veh/h)	376	22	244	21	21	26	195	850	9	27	1378	458
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		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	1900	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	445	0	108	24	24	0	222	966	10	31	1566	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	6	6	6
Cap, veh/h	560	0	247	35	35	61	226	2059	21	38	1597	714
Arrive On Green	0.16	0.00	0.16	0.04	0.04	0.00	0.13	0.57	0.57	0.02	0.47	0.00
Sat Flow, veh/h	3548	0	1565	909	909	1583	1774	3589	37	1707	3406	1524
Grp Volume(v), veh/h	445	0	108	48	0	0	222	476	500	31	1566	0
Grp Sat Flow(s),veh/h/ln	1774	0	1565	1817	0	1583	1774	1770	1856	1707	1703	1524
Q Serve(g_s), s	14.4	0.0	7.5	3.1	0.0	0.0	14.9	18.8	18.8	2.2	54.0	0.0
Cycle Q Clear(g_c), s	14.4	0.0	7.5	3.1	0.0	0.0	14.9	18.8	18.8	2.2	54.0	0.0
Prop In Lane	1.00		1.00	0.50		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	560	0	247	70	0	61	226	1015	1065	38	1597	714
V/C Ratio(X)	0.79	0.00	0.44	0.69	0.00	0.00	0.98	0.47	0.47	0.81	0.98	0.00
Avail Cap(c_a), veh/h	802	0	354	411	0	358	226	1015	1065	101	1597	714
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.4	0.0	45.5	56.7	0.0	0.0	52.0	14.9	14.9	58.1	31.2	0.0
Incr Delay (d2), s/veh	3.6	0.0	1.2	11.3	0.0	0.0	55.0	0.3	0.3	31.6	18.1	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	7.3	0.0	3.3	1.8	0.0	0.0	10.7	9.2	9.7	1.4	29.2	0.0
LnGrp Delay(d),s/veh	52.0	0.0	46.7	68.1	0.0	0.0	107.0	15.2	15.2	89.8	49.3	0.0
LnGrp LOS	D		D	E			F	B	B	F	D	
Approach Vol, veh/h		553			48			1198			1597	
Approach Delay, s/veh		51.0			68.1			32.2			50.0	
Approach LOS		D			E			C			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.5	75.3		24.5	22.0	62.8		10.2				
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6				
Max Green Setting (Gmax), s	7.1	64.1		27.0	15.2	56.0		27.0				
Max Q Clear Time (g_c+I1), s	4.2	20.8		16.4	16.9	56.0		5.1				
Green Ext Time (p_c), s	0.0	30.8		1.6	0.0	0.0		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			44.2									
HCM 2010 LOS			D									

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	8.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	2	288	0	0	0	361	188	7	1	241	181
Future Vol, veh/h	45	2	288	0	0	0	361	188	7	1	241	181
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	7	7	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	47	2	303	0	0	0	380	198	7	1	254	191

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1318	1328	354	449	0	0	212	0	0
Stage 1	356	356	-	-	-	-	-	-	-
Stage 2	962	972	-	-	-	-	-	-	-
Critical Hdwy	6.47	6.57	6.27	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.47	5.57	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.47	5.57	-	-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	169	152	679	1111	-	-	1358	-	-
Stage 1	698	620	-	-	-	-	-	-	-
Stage 2	363	324	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	110	0	676	1111	-	-	1358	-	-
Mov Cap-2 Maneuver	110	0	-	-	-	-	-	-	-
Stage 1	694	0	-	-	-	-	-	-	-
Stage 2	238	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.3	6.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1111	-	-	110	676	1358	-	-
HCM Lane V/C Ratio	0.342	-	-	0.45	0.448	0.001	-	-
HCM Control Delay (s)	9.9	-	-	62.1	14.6	7.7	0	-
HCM Lane LOS	A	-	-	F	B	A	A	-
HCM 95th %tile Q(veh)	1.5	-	-	1.9	2.3	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	691	300	848	1104	0	486
Future Volume (vph)	691	300	848	1104	0	486
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	785	341	964	1255	0	552
RTOR Reduction (vph)	0	0	0	0	0	51
Lane Group Flow (vph)	785	341	964	1255	0	502
Confl. Peds. (#/hr)						9
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	16.3	55.0	27.5	55.0		27.5
Effective Green, g (s)	16.3	55.0	27.5	55.0		27.5
Actuated g/C Ratio	0.30	1.00	0.50	1.00		0.50
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1514	1591	1742	3592		1414
v/s Ratio Prot	c0.15		c0.28	0.35		0.18
v/s Ratio Perm		0.21				
v/c Ratio	0.52	0.21	0.55	0.35		0.35
Uniform Delay, d1	16.1	0.0	9.5	0.0		8.4
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.3	0.3	0.4	0.1		0.2
Delay (s)	16.4	0.3	9.9	0.1		8.5
Level of Service	B	A	A	A		A
Approach Delay (s)	11.5			4.3	8.5	
Approach LOS	B			A	A	

Intersection Summary			
HCM 2000 Control Delay	7.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.2
Intersection Capacity Utilization	56.1%	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												
Traffic Volume (veh/h)	0	0	4	573	31	204	16	871	291	211	1375	15
Future Volume (veh/h)	0	0	4	573	31	204	16	871	291	211	1375	15
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		0.99	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	1863	1827	1827	1827	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	676	0	75	18	990	0	240	1562	17
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	4	4	4	2	2	2	2	2	2
Cap, veh/h	0	2	48	844	0	373	51	1426	1123	281	1908	21
Arrive On Green	0.00	0.00	0.00	0.24	0.00	0.24	0.03	0.40	0.00	0.16	0.53	0.53
Sat Flow, veh/h	0	1863	1583	3480	0	1539	1774	3539	2787	1774	3586	39
Grp Volume(v), veh/h	0	0	0	676	0	75	18	990	0	240	770	809
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1740	0	1539	1774	1770	1393	1774	1770	1856
Q Serve(g_s), s	0.0	0.0	0.0	14.2	0.0	3.0	0.8	18.1	0.0	10.3	28.1	28.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	14.2	0.0	3.0	0.8	18.1	0.0	10.3	28.1	28.2
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	0	2	48	844	0	373	51	1426	1123	281	942	987
V/C Ratio(X)	0.00	0.00	0.00	0.80	0.00	0.20	0.35	0.69	0.00	0.86	0.82	0.82
Avail Cap(c_a), veh/h	0	48	87	1162	0	514	182	1572	1238	321	942	987
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	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	27.7	0.0	23.5	37.1	19.3	0.0	31.9	15.1	15.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.9	0.0	0.3	4.0	1.2	0.0	17.9	5.7	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	0.0	0.0	0.0	7.2	0.0	1.3	0.4	9.0	0.0	6.4	15.0	15.7
LnGrp Delay(d),s/veh	0.0	0.0	0.0	30.6	0.0	23.8	41.1	20.5	0.0	49.9	20.8	20.7
LnGrp LOS				C		C	D	C		D	C	C
Approach Vol, veh/h		0			751			1008			1819	
Approach Delay, s/veh		0.0			29.9			20.8			24.6	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.4	36.5		0.0	7.4	46.5		24.0
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	14.1	34.6		2.0	8.0	40.7		26.0
Max Q Clear Time (g_c+I1), s	12.3	20.1		0.0	2.8	30.2		16.2
Green Ext Time (p_c), s	0.1	11.3		0.0	0.0	9.5		2.2

Intersection Summary	
HCM 2010 Ctrl Delay	24.6
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	1.7											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	15	468	19	21	784	27	13	1	7	20	2	11
Future Vol, veh/h	15	468	19	21	784	27	13	1	7	20	2	11
Conflicting Peds, #/hr	7	0	11	11	0	7	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	6	6	6	3	3	3	14	14	14	2	2	2
Mvmt Flow	17	532	22	24	891	31	15	1	8	23	2	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	929	0	0	564	0	0	1084	1564	288	1262	1560	470
Stage 1	-	-	-	-	-	-	588	588	-	961	961	-
Stage 2	-	-	-	-	-	-	496	976	-	301	599	-
Critical Hdwy	4.22	-	-	4.16	-	-	7.78	6.78	7.18	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.23	-	-	3.64	4.14	3.44	3.52	4.02	3.32
Pot Cap-1 Maneuver	708	-	-	997	-	-	156	99	674	127	111	540
Stage 1	-	-	-	-	-	-	433	465	-	275	333	-
Stage 2	-	-	-	-	-	-	494	302	-	683	489	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	707	-	-	997	-	-	138	89	667	116	100	535
Mov Cap-2 Maneuver	-	-	-	-	-	-	138	89	-	116	100	-
Stage 1	-	-	-	-	-	-	413	444	-	264	314	-
Stage 2	-	-	-	-	-	-	454	285	-	650	467	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.5	0.4	27.9	35.5
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	181	707	-	-	997	-	-	155
HCM Lane V/C Ratio	0.132	0.024	-	-	0.024	-	-	0.242
HCM Control Delay (s)	27.9	10.2	0.2	-	8.7	0.2	-	35.5
HCM Lane LOS	D	B	A	-	A	A	-	E
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.1	-	-	0.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	395	83	146	725	28	88	18	130	23	11	19
Future Volume (veh/h)	18	395	83	146	725	28	88	18	130	23	11	19
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		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	1776	1776	1900	1827	1827
Adj Flow Rate, veh/h	20	449	94	166	824	32	100	20	0	26	12	22
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	4	4	4
Cap, veh/h	413	1420	295	543	1724	67	357	55	260	327	119	267
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.17	0.17	0.00	0.17	0.17	0.17
Sat Flow, veh/h	617	2804	583	840	3406	132	1019	317	1509	933	692	1548
Grp Volume(v), veh/h	20	271	272	166	420	436	120	0	0	38	0	22
Grp Sat Flow(s),veh/h/ln	617	1703	1684	840	1736	1802	1336	0	1509	1625	0	1548
Q Serve(g_s), s	0.8	3.4	3.5	5.3	5.7	5.7	2.4	0.0	0.0	0.0	0.0	0.4
Cycle Q Clear(g_c), s	6.5	3.4	3.5	8.7	5.7	5.7	3.0	0.0	0.0	0.6	0.0	0.4
Prop In Lane	1.00		0.35	1.00		0.07	0.83		1.00	0.68		1.00
Lane Grp Cap(c), veh/h	413	862	853	543	879	912	412	0	260	447	0	267
V/C Ratio(X)	0.05	0.31	0.32	0.31	0.48	0.48	0.29	0.00	0.00	0.09	0.00	0.08
Avail Cap(c_a), veh/h	473	1029	1018	637	1072	1114	1160	0	1090	1258	0	1118
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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.0	5.3	5.3	7.9	5.9	5.9	13.8	0.0	0.0	12.7	0.0	12.6
Incr Delay (d2), s/veh	0.0	0.2	0.2	0.3	0.4	0.4	0.4	0.0	0.0	0.1	0.0	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	0.1	1.6	1.6	1.2	2.8	2.9	1.1	0.0	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	8.0	5.5	5.5	8.2	6.3	6.2	14.1	0.0	0.0	12.8	0.0	12.8
LnGrp LOS	A	A	A	A	A	A	B			B		B
Approach Vol, veh/h		563			1022			120			60	
Approach Delay, s/veh		5.6			6.6			14.1			12.8	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		11.9		24.5		11.9		24.5
Change Period (Y+Rc), s		5.6		6.1		5.6		* 6.1
Max Green Setting (Gmax), s		26.3		22.0		26.3		* 23
Max Q Clear Time (g_c+I1), s		5.0		8.5		2.6		10.7
Green Ext Time (p_c), s		0.9		8.1		0.9		7.4

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	44.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	544	3	32	673	0	4	0	14	195	45	221
Future Vol, veh/h	0	544	3	32	673	0	4	0	14	195	45	221
Conflicting Peds, #/hr	0	0	9	6	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	6	6	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	618	3	36	765	0	5	0	16	222	51	251

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	631	0	0	1112	-	320	1147	1469	384
Stage 1	-	-	-	-	-	-	629	-	-	838	838	-
Stage 2	-	-	-	-	-	-	483	-	-	309	631	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	934	-	0	163	0	676	~ 154	126	614
Stage 1	0	-	-	-	-	0	437	0	-	327	380	-
Stage 2	0	-	-	-	-	0	534	0	-	676	473	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	934	-	-	62	-	670	~ 146	120	613
Mov Cap-2 Maneuver	-	-	-	-	-	-	62	-	-	~ 146	120	-
Stage 1	-	-	-	-	-	-	437	-	-	327	365	-
Stage 2	-	-	-	-	-	-	260	-	-	660	469	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	23.2	164
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	62	670	-	-	934	-	146	362
HCM Lane V/C Ratio	0.073	0.024	-	-	0.039	-	1.518	0.835
HCM Control Delay (s)	67.6	10.5	-	-	9	-	$ 320.5	49.3
HCM Lane LOS	F	B	-	-	A	-	F	E
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	15	7.5

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection						
Int Delay, s/veh	0.5					

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	617	136	74	704	0	0
Future Vol, veh/h	617	136	74	704	0	0
Conflicting Peds, #/hr	0	10	10	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	5	5	2	2	4	4
Mvmt Flow	701	155	84	800	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	866	0	1356	438
Stage 1	-	-	-	-	788	-
Stage 2	-	-	-	-	568	-
Critical Hdwy	-	-	4.14	-	7.58	6.98
Critical Hdwy Stg 1	-	-	-	-	6.58	-
Critical Hdwy Stg 2	-	-	-	-	6.58	-
Follow-up Hdwy	-	-	2.22	-	3.54	3.34
Pot Cap-1 Maneuver	-	-	773	-	106	561
Stage 1	-	-	-	-	346	-
Stage 2	-	-	-	-	470	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	773	-	96	556
Mov Cap-2 Maneuver	-	-	-	-	96	-
Stage 1	-	-	-	-	346	-
Stage 2	-	-	-	-	419	-

Approach	EB	WB	NB
HCM Control Delay, s	0	1	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	773	-
HCM Lane V/C Ratio	-	-	-	0.109	-
HCM Control Delay (s)	0	-	-	10.2	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	382	25	8	492	337	23	78	3	210	56	264
Future Volume (veh/h)	210	382	25	8	492	337	23	78	3	210	56	264
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	0.99		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	1845	1845	1900	1863	1863	1900	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	233	424	28	9	547	374	26	87	3	233	62	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	281	1539	101	29	636	434	457	504	17	422	505	429
Arrive On Green	0.16	0.46	0.46	0.02	0.32	0.32	0.28	0.28	0.28	0.28	0.28	0.00
Sat Flow, veh/h	1757	3337	220	1774	2003	1369	1329	1790	62	1246	1792	1524
Grp Volume(v), veh/h	233	222	230	9	483	438	26	0	90	233	62	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1804	1774	1770	1603	1329	0	1851	1246	1792	1524
Q Serve(g_s), s	7.9	4.8	4.8	0.3	15.7	15.8	0.9	0.0	2.3	10.7	1.6	0.0
Cycle Q Clear(g_c), s	7.9	4.8	4.8	0.3	15.7	15.8	2.5	0.0	2.3	12.9	1.6	0.0
Prop In Lane	1.00		0.12	1.00		0.85	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	281	808	832	29	561	509	457	0	521	422	505	429
V/C Ratio(X)	0.83	0.27	0.28	0.31	0.86	0.86	0.06	0.00	0.17	0.55	0.12	0.00
Avail Cap(c_a), veh/h	341	808	832	202	614	556	667	0	814	619	788	670
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	1.00	0.00
Uniform Delay (d), s/veh	25.0	10.2	10.2	29.9	19.7	19.7	17.3	0.0	16.7	21.5	16.4	0.0
Incr Delay (d2), s/veh	13.3	0.2	0.2	6.0	11.2	12.2	0.1	0.0	0.2	1.1	0.1	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	4.9	2.3	2.4	0.2	9.4	8.7	0.3	0.0	1.2	3.8	0.8	0.0
LnGrp Delay(d),s/veh	38.2	10.4	10.4	35.9	30.9	31.9	17.4	0.0	16.8	22.7	16.5	0.0
LnGrp LOS	D	B	B	D	C	C	B		B	C	B	
Approach Vol, veh/h		685			930			116			295	
Approach Delay, s/veh		19.9			31.4			16.9			21.4	
Approach LOS		B			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	33.4		21.9	14.9	24.6		21.9
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	26.2		27.0	11.9	21.3		27.0
Max Q Clear Time (g_c+I1), s	2.3	6.8		14.9	9.9	17.8		4.5
Green Ext Time (p_c), s	0.0	9.1		1.4	0.1	1.7		1.7

Intersection Summary			
HCM 2010 Ctrl Delay			25.2
HCM 2010 LOS			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	416	244	134	563	92	108	569	56	58	837	153
Future Volume (veh/h)	130	416	244	134	563	92	108	569	56	58	837	153
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		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	1863	1863	1863	1808	1808	1808	1810	1810	1810	1863	1863	1863
Adj Flow Rate, veh/h	144	462	271	149	626	102	120	632	62	64	930	170
Adj No. of Lanes	1	2	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	153	1155	513	177	620	525	130	1082	483	92	1030	456
Arrive On Green	0.09	0.33	0.33	0.10	0.34	0.34	0.08	0.31	0.31	0.05	0.29	0.29
Sat Flow, veh/h	1774	3539	1572	1722	1808	1531	1723	3438	1535	1774	3539	1567
Grp Volume(v), veh/h	144	462	271	149	626	102	120	632	62	64	930	170
Grp Sat Flow(s),veh/h/ln	1774	1770	1572	1722	1808	1531	1723	1719	1535	1774	1770	1567
Q Serve(g_s), s	9.6	12.1	16.7	10.1	40.9	5.6	8.3	18.4	3.4	4.2	30.2	10.3
Cycle Q Clear(g_c), s	9.6	12.1	16.7	10.1	40.9	5.6	8.3	18.4	3.4	4.2	30.2	10.3
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	153	1155	513	177	620	525	130	1082	483	92	1030	456
V/C Ratio(X)	0.94	0.40	0.53	0.84	1.01	0.19	0.92	0.58	0.13	0.70	0.90	0.37
Avail Cap(c_a), veh/h	153	1155	513	271	620	525	130	1082	483	104	1050	465
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	54.2	31.1	32.7	52.6	39.2	27.6	54.8	34.3	29.2	55.7	40.7	33.6
Incr Delay (d2), s/veh	55.1	0.2	1.0	13.5	38.7	0.2	55.9	0.8	0.1	16.1	10.7	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	7.1	5.9	7.4	5.5	27.0	2.4	6.0	8.8	1.5	2.5	16.3	4.5
LnGrp Delay(d),s/veh	109.3	31.4	33.7	66.1	78.0	27.8	110.8	35.1	29.3	71.8	51.4	34.1
LnGrp LOS	F	C	C	E	F	C	F	D	C	E	D	C
Approach Vol, veh/h		877			877			814			1164	
Approach Delay, s/veh		44.9			70.1			45.8			50.0	
Approach LOS		D			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	12.3	43.7	18.3	45.1	15.1	40.8	16.4	47.0
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	7.0	37.4	18.8	32.4	9.0	35.4	10.3	40.9
Max Q Clear Time (g_c+I1), s	6.2	20.4	12.1	18.7	10.3	32.2	11.6	42.9
Green Ext Time (p_c), s	0.0	10.8	0.2	7.3	0.0	2.6	0.0	0.0

Intersection Summary			
HCM 2010 Ctrl Delay			52.6
HCM 2010 LOS			D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	870	87	248	801	683	138	758	653	697	750	125
Future Volume (veh/h)	116	870	87	248	801	683	138	758	653	697	750	125
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		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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	118	888	0	253	817	0	141	773	0	711	765	112
Adj No. of Lanes	1	2	1	2	2	1	1	3	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	154	964	431	319	976	437	168	1021	467	767	1474	214
Arrive On Green	0.09	0.27	0.00	0.09	0.28	0.00	0.09	0.20	0.00	0.22	0.33	0.33
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4483	651
Grp Volume(v), veh/h	118	888	0	253	817	0	141	773	0	711	577	300
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1744
Q Serve(g_s), s	8.2	30.8	0.0	9.2	27.8	0.0	9.9	18.1	0.0	25.5	17.4	17.6
Cycle Q Clear(g_c), s	8.2	30.8	0.0	9.2	27.8	0.0	9.9	18.1	0.0	25.5	17.4	17.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	154	964	431	319	976	437	168	1021	467	767	1114	573
V/C Ratio(X)	0.77	0.92	0.00	0.79	0.84	0.00	0.84	0.76	0.00	0.93	0.52	0.52
Avail Cap(c_a), veh/h	154	995	445	623	1320	590	285	1224	530	801	1114	573
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.4	44.6	0.0	56.0	42.8	0.0	56.2	47.6	0.0	48.0	34.3	34.4
Incr Delay (d2), s/veh	20.7	13.2	0.0	4.5	3.6	0.0	10.4	2.3	0.0	16.3	0.4	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	4.9	16.8	0.0	4.5	13.9	0.0	5.3	8.7	0.0	13.9	8.2	8.6
LnGrp Delay(d),s/veh	77.1	57.9	0.0	60.4	46.4	0.0	66.6	49.8	0.0	64.3	34.7	35.2
LnGrp LOS	E	E		E	D		E	D		E	C	D
Approach Vol, veh/h		1006			1070			914			1588	
Approach Delay, s/veh		60.1			49.7			52.4			48.1	
Approach LOS		E			D			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	35.0	32.1	18.7	40.5	18.8	48.3	17.0	42.1
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	29.4	30.4	23.2	35.5	20.3	39.5	10.9	47.8
Max Q Clear Time (g_c+I1), s	27.5	20.1	11.2	32.8	11.9	19.6	10.2	29.8
Green Ext Time (p_c), s	0.6	4.8	0.7	1.6	0.2	11.4	0.4	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	52.0
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	19	53	9	16	15	169	1603	13	19	627	244
Future Volume (veh/h)	139	19	53	9	16	15	169	1603	13	19	627	244
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)	0.99		0.99	0.99		0.99	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	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	142	19	54	9	16	15	172	1636	13	19	640	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
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	247	29	462	62	103	70	208	1659	13	52	1320	591
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.12	0.46	0.46	0.03	0.37	0.00
Sat Flow, veh/h	588	97	1567	46	349	237	1774	3598	29	1774	3539	1583
Grp Volume(v), veh/h	161	0	54	40	0	0	172	804	845	19	640	0
Grp Sat Flow(s),veh/h/ln	685	0	1567	632	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	0.4	0.0	2.3	0.4	0.0	0.0	8.7	41.2	41.3	1.0	12.7	0.0
Cycle Q Clear(g_c), s	24.0	0.0	2.3	24.1	0.0	0.0	8.7	41.2	41.3	1.0	12.7	0.0
Prop In Lane	0.88		1.00	0.22		0.37	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	276	0	462	234	0	0	208	816	856	52	1320	591
V/C Ratio(X)	0.58	0.00	0.12	0.17	0.00	0.00	0.83	0.99	0.99	0.37	0.48	0.00
Avail Cap(c_a), veh/h	337	0	530	303	0	0	348	816	856	135	1320	591
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.3	0.0	23.6	24.9	0.0	0.0	39.6	24.4	24.4	43.7	22.0	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.1	0.3	0.0	0.0	8.1	27.8	27.4	4.3	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	4.1	0.0	1.0	0.8	0.0	0.0	4.7	26.2	27.4	0.5	6.3	0.0
LnGrp Delay(d),s/veh	33.2	0.0	23.7	25.3	0.0	0.0	47.7	52.2	51.9	48.0	22.3	0.0
LnGrp LOS	C		C	C			D	D	D	D	C	
Approach Vol, veh/h		215			40			1821			659	
Approach Delay, s/veh		30.8			25.3			51.6			23.0	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	49.1		33.4	17.6	41.0		33.4
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	42.3		31.0	18.0	31.3		31.0
Max Q Clear Time (g_c+I1), s	3.0	43.3		26.0	10.7	14.7		26.1
Green Ext Time (p_c), s	0.0	0.0		0.5	0.3	13.5		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	42.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	70	160	476	120	156	304	1408	661	117	1217	24
Future Volume (veh/h)	27	70	160	476	120	156	304	1408	661	117	1217	24
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		0.94	1.00		0.98	1.00		0.99	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	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	72	13	491	124	24	313	1452	313	121	1255	25
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	156	125	558	302	252	336	1748	771	123	1919	38
Arrive On Green	0.08	0.08	0.08	0.16	0.16	0.16	0.19	0.49	0.49	0.07	0.37	0.37
Sat Flow, veh/h	1774	1863	1493	3442	1863	1551	1774	3539	1562	1774	5131	102
Grp Volume(v), veh/h	28	72	13	491	124	24	313	1452	313	121	829	451
Grp Sat Flow(s),veh/h/ln	1774	1863	1493	1721	1863	1551	1774	1770	1562	1774	1695	1843
Q Serve(g_s), s	1.9	4.7	1.0	17.8	7.6	1.7	22.2	45.1	16.2	8.7	25.9	26.0
Cycle Q Clear(g_c), s	1.9	4.7	1.0	17.8	7.6	1.7	22.2	45.1	16.2	8.7	25.9	26.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	149	156	125	558	302	252	336	1748	771	123	1268	689
V/C Ratio(X)	0.19	0.46	0.10	0.88	0.41	0.10	0.93	0.83	0.41	0.98	0.65	0.65
Avail Cap(c_a), veh/h	305	320	257	592	320	267	337	1748	771	123	1268	689
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	54.6	55.9	54.2	52.4	48.1	45.6	51.1	27.8	20.5	59.5	33.2	33.2
Incr Delay (d2), s/veh	0.6	2.1	0.4	13.8	0.9	0.2	31.9	4.8	1.6	74.9	2.6	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	1.0	2.5	0.4	9.5	4.0	0.7	13.8	23.1	7.3	6.8	12.6	14.1
LnGrp Delay(d),s/veh	55.2	58.0	54.6	66.1	49.0	45.8	83.0	32.6	22.1	134.3	35.8	38.0
LnGrp LOS	E	E	D	E	D	D	F	C	C	F	D	D
Approach Vol, veh/h		113			639			2078			1401	
Approach Delay, s/veh		56.9			62.1			38.6			45.0	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.0	69.3		16.8	30.3	54.0		26.9
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	8.9	50.7		22.0	24.3	35.3		22.0
Max Q Clear Time (g_c+I1), s	10.7	47.1		6.7	24.2	28.0		19.8
Green Ext Time (p_c), s	0.0	3.5		0.4	0.0	7.0		0.7

Intersection Summary			
HCM 2010 Ctrl Delay			44.8
HCM 2010 LOS			D

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	2029	54	120	1118
Future Vol, veh/h	16	28	2029	54	120	1118
Conflicting Peds, #/hr	0	0	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	29	2070	55	122	1141

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2891	1041	0	0	2076	0
Stage 1	2076	-	-	-	-	-
Stage 2	815	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 13	227	-	-	264	-
Stage 1	82	-	-	-	-	-
Stage 2	396	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 7	226	-	-	264	-
Mov Cap-2 Maneuver	57	-	-	-	-	-
Stage 1	82	-	-	-	-	-
Stage 2	213	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	48.1	0	2.9
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	57	226	264	-
HCM Lane V/C Ratio	-	-	0.286	0.126	0.464	-
HCM Control Delay (s)	-	-	91.8	23.2	29.9	-
HCM Lane LOS	-	-	F	C	D	-
HCM 95th %tile Q(veh)	-	-	1	0.4	2.3	-

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)	334	423	156	113	371	273	252	1349	93	160	872	192
Future Volume (veh/h)	334	423	156	113	371	273	252	1349	93	160	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		0.99	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	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	341	432	67	115	379	0	257	1377	95	163	890	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	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	407	527	441	142	448	381	289	1652	114	194	1479	0
Arrive On Green	0.12	0.28	0.28	0.08	0.24	0.00	0.16	0.34	0.34	0.11	0.29	0.00
Sat Flow, veh/h	3476	1881	1577	1747	1835	1560	1756	4803	331	1792	5305	0
Grp Volume(v), veh/h	341	432	67	115	379	0	257	962	510	163	890	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1577	1747	1835	1560	1756	1678	1778	1792	1712	0
Q Serve(g_s), s	9.6	21.6	3.2	6.5	19.8	0.0	14.4	26.5	26.5	9.0	15.0	0.0
Cycle Q Clear(g_c), s	9.6	21.6	3.2	6.5	19.8	0.0	14.4	26.5	26.5	9.0	15.0	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	407	527	441	142	448	381	289	1155	611	194	1479	0
V/C Ratio(X)	0.84	0.82	0.15	0.81	0.85	0.00	0.89	0.83	0.83	0.84	0.60	0.00
Avail Cap(c_a), veh/h	443	551	462	153	477	405	336	1180	625	228	1479	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	43.4	33.8	27.2	45.4	36.2	0.0	41.0	30.3	30.3	43.9	30.8	0.0
Incr Delay (d2), s/veh	11.9	9.5	0.2	24.4	13.0	0.0	21.2	5.2	9.3	19.6	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	5.3	12.5	1.4	4.1	11.6	0.0	8.7	13.0	14.5	5.5	7.2	0.0
LnGrp Delay(d),s/veh	55.3	43.3	27.4	69.8	49.2	0.0	62.2	35.5	39.6	63.5	31.5	0.0
LnGrp LOS	E	D	C	E	D		E	D	D	E	C	
Approach Vol, veh/h		840			494			1729			1053	
Approach Delay, s/veh		46.9			54.0			40.7			36.4	
Approach LOS		D			D			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	15.1	39.9	12.4	33.0	20.7	34.3	16.0	29.4
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 13	35.3	* 8.8	29.4	* 19	28.9	* 13	* 26
Max Q Clear Time (g_c+I1), s	11.0	28.5	8.5	23.6	16.4	17.0	11.6	21.8
Green Ext Time (p_c), s	0.1	6.1	0.0	2.9	0.2	10.1	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	42.5
HCM 2010 LOS	D

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	46	321	21	57	45	369	1678	25	31	772	345
Future Volume (veh/h)	377	46	321	21	57	45	369	1678	25	31	772	345
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		0.95	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	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	423	0	140	22	59	4	380	1730	26	32	796	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	533	0	235	49	132	148	409	1886	28	40	1135	508
Arrive On Green	0.15	0.00	0.15	0.10	0.10	0.10	0.23	0.53	0.53	0.02	0.32	0.00
Sat Flow, veh/h	3548	0	1568	499	1339	1501	1774	3569	54	1774	3539	1583
Grp Volume(v), veh/h	423	0	140	81	0	4	380	856	900	32	796	0
Grp Sat Flow(s),veh/h/ln	1774	0	1568	1838	0	1501	1774	1770	1853	1774	1770	1583
Q Serve(g_s), s	14.3	0.0	10.3	5.2	0.0	0.3	26.0	54.8	55.2	2.2	24.5	0.0
Cycle Q Clear(g_c), s	14.3	0.0	10.3	5.2	0.0	0.3	26.0	54.8	55.2	2.2	24.5	0.0
Prop In Lane	1.00		1.00	0.27		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	533	0	235	181	0	148	409	935	979	40	1135	508
V/C Ratio(X)	0.79	0.00	0.59	0.45	0.00	0.03	0.93	0.92	0.92	0.79	0.70	0.00
Avail Cap(c_a), veh/h	772	0	341	400	0	327	475	958	1003	57	1135	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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.9	0.0	49.2	52.7	0.0	50.5	46.7	26.7	26.8	60.3	36.9	0.0
Incr Delay (d2), s/veh	3.6	0.0	2.4	1.7	0.0	0.1	23.0	13.0	12.9	37.5	2.0	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	7.3	0.0	4.6	2.7	0.0	0.1	15.4	30.0	31.5	1.5	12.2	0.0
LnGrp Delay(d),s/veh	54.5	0.0	51.6	54.4	0.0	50.6	69.7	39.7	39.7	97.9	38.9	0.0
LnGrp LOS	D		D	D		D	E	D	D	F	D	
Approach Vol, veh/h		563			85			2136			828	
Approach Delay, s/veh		53.8			54.3			45.0			41.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.6	72.4		24.2	35.4	46.6		17.8
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	4.0	67.2		27.0	33.2	38.0		27.0
Max Q Clear Time (g_c+I1), s	4.2	57.2		16.3	28.0	26.5		7.2
Green Ext Time (p_c), s	0.0	8.3		1.6	0.6	10.3		0.3

Intersection Summary	
HCM 2010 Ctrl Delay	45.7
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	424.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	2	264	0	0	0	696	485	18	3	306	190
Future Vol, veh/h	139	2	264	0	0	0	696	485	18	3	306	190
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	7	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	145	2	275	0	0	0	725	505	19	3	319	198

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	2396	2412	425	524	0	0	531	0	0
Stage 1	431	431	-	-	-	-	-	-	-
Stage 2	1965	1981	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	6.26	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.46	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.46	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 36	32	621	1043	-	-	1036	-	-
Stage 1	647	576	-	-	-	-	-	-	-
Stage 2	~ 117	104	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	~ 11	0	617	1043	-	-	1036	-	-
Mov Cap-2 Maneuver	~ 11	0	-	-	-	-	-	-	-
Stage 1	640	0	-	-	-	-	-	-	-
Stage 2	~ 35	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 2177.1	9.2	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1043	-	-	11	617	1036	-	-
HCM Lane V/C Ratio	0.695	-	-	13.352	0.446	0.003	-	-
HCM Control Delay (s)	15.9	-	$	6224.5	15.4	8.5	0	-
HCM Lane LOS	C	-	-	F	C	A	A	-
HCM 95th %tile Q(veh)	5.9	-	-	19.8	2.3	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1575	509	579	687	0	824
Future Volume (vph)	1575	509	579	687	0	824
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1641	530	603	716	0	858
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	1641	530	603	716	0	853
Confl. Peds. (#/hr)						13
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	25.2	59.8	23.4	59.8		23.4
Effective Green, g (s)	25.2	59.8	23.4	59.8		23.4
Actuated g/C Ratio	0.42	1.00	0.39	1.00		0.39
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	2153	1591	1363	3592		1106
v/s Ratio Prot	c0.32		0.17	0.20		c0.30
v/s Ratio Perm		0.33				
v/c Ratio	0.76	0.33	0.44	0.20		0.77
Uniform Delay, d1	14.7	0.0	13.4	0.0		15.9
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.6	0.6	0.2	0.0		3.4
Delay (s)	16.4	0.6	13.6	0.0		19.2
Level of Service	B	A	B	A		B
Approach Delay (s)	12.5			6.2	19.2	
Approach LOS	B			A	B	

Intersection Summary			
HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	59.8	Sum of lost time (s)	11.2
Intersection Capacity Utilization	69.9%	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 (veh/h)	0	0	15	415	24	446	19	1774	695	327	862	26
Future Volume (veh/h)	0	0	15	415	24	446	19	1774	695	327	862	26
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		0.97	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	1900	1776	1776	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	440	0	219	19	1810	0	334	880	27
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	1	41	596	0	258	47	1847	1454	351	2431	75
Arrive On Green	0.00	0.00	0.00	0.17	0.00	0.17	0.03	0.52	0.00	0.20	0.69	0.69
Sat Flow, veh/h	0	1776	1509	3548	0	1535	1774	3539	2787	1774	3505	108
Grp Volume(v), veh/h	0	0	0	440	0	219	19	1810	0	334	444	463
Grp Sat Flow(s),veh/h/ln	0	1776	1509	1774	0	1535	1774	1770	1393	1774	1770	1843
Q Serve(g_s), s	0.0	0.0	0.0	16.1	0.0	18.9	1.4	68.3	0.0	25.4	14.0	14.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	16.1	0.0	18.9	1.4	68.3	0.0	25.4	14.0	14.0
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	0	1	41	596	0	258	47	1847	1454	351	1227	1278
V/C Ratio(X)	0.00	0.00	0.00	0.74	0.00	0.85	0.41	0.98	0.00	0.95	0.36	0.36
Avail Cap(c_a), veh/h	0	26	62	676	0	293	104	1860	1464	351	1227	1278
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	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	53.9	0.0	55.1	65.4	31.9	0.0	54.1	8.6	8.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.7	0.0	18.6	5.6	16.3	0.0	35.4	0.2	0.2
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	8.2	0.0	9.3	0.8	37.4	0.0	15.9	6.8	7.1
LnGrp Delay(d),s/veh	0.0	0.0	0.0	57.6	0.0	73.7	71.0	48.2	0.0	89.5	8.7	8.7
LnGrp LOS				E		E	E	D		F	A	A
Approach Vol, veh/h		0			659			1829			1241	
Approach Delay, s/veh		0.0			63.0			48.4			30.5	
Approach LOS					E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	32.1	76.3		0.0	8.7	99.7		28.0
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1
Max Green Setting (Gmax), s	27.0	71.7		2.0	8.0	90.7		26.0
Max Q Clear Time (g_c+I1), s	27.4	70.3		0.0	3.4	16.0		20.9
Green Ext Time (p_c), s	0.0	0.9		0.0	0.0	49.2		1.2

Intersection Summary	
HCM 2010 Ctrl Delay	45.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	8.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	22	972	25	20	847	61	16	1	29	54	2	22
Future Vol, veh/h	22	972	25	20	847	61	16	1	29	54	2	22
Conflicting Peds, #/hr	10	0	8	8	0	10	6	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	23	1023	26	21	892	64	17	1	31	57	2	23

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	966	0	0	1057	0	0	1586	2099	534	1535	2080	494
Stage 1	-	-	-	-	-	-	1091	1091	-	976	976	-
Stage 2	-	-	-	-	-	-	495	1008	-	559	1104	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	703	-	-	655	-	-	73	51	491	79	53	521
Stage 1	-	-	-	-	-	-	229	289	-	270	327	-
Stage 2	-	-	-	-	-	-	525	316	-	481	285	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	699	-	-	654	-	-	59	43	487	64	45	513
Mov Cap-2 Maneuver	-	-	-	-	-	-	59	43	-	64	45	-
Stage 1	-	-	-	-	-	-	209	264	-	246	301	-
Stage 2	-	-	-	-	-	-	460	291	-	413	260	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.6	48.3	180.2
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	130	699	-	-	654	-	-	84
HCM Lane V/C Ratio	0.372	0.033	-	-	0.032	-	-	0.977
HCM Control Delay (s)	48.3	10.3	0.4	-	10.7	0.4	-	180.2
HCM Lane LOS	E	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	1.5	0.1	-	-	0.1	-	-	5.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	896	103	145	645	22	236	14	143	74	14	22
Future Volume (veh/h)	18	896	103	145	645	22	236	14	143	74	14	22
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		0.98	0.99		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	1863	1863	1900	1845	1845	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	19	943	108	153	679	23	248	15	0	78	15	23
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
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, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	435	1793	205	299	1939	66	405	19	439	479	84	436
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.28	0.28	0.00	0.28	0.28	0.28
Sat Flow, veh/h	739	3196	366	529	3457	117	1112	67	1583	1398	305	1573
Grp Volume(v), veh/h	19	522	529	153	344	358	263	0	0	93	0	23
Grp Sat Flow(s),veh/h/ln	739	1770	1793	529	1752	1822	1180	0	1583	1702	0	1573
Q Serve(g_s), s	1.0	13.3	13.3	18.3	7.8	7.8	13.0	0.0	0.0	0.0	0.0	0.8
Cycle Q Clear(g_c), s	8.8	13.3	13.3	31.6	7.8	7.8	15.9	0.0	0.0	2.9	0.0	0.8
Prop In Lane	1.00		0.20	1.00		0.06	0.94		1.00	0.84		1.00
Lane Grp Cap(c), veh/h	435	993	1006	299	983	1022	424	0	439	564	0	436
V/C Ratio(X)	0.04	0.53	0.53	0.51	0.35	0.35	0.62	0.00	0.00	0.17	0.00	0.05
Avail Cap(c_a), veh/h	448	1025	1039	312	1027	1068	545	0	578	691	0	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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.1	9.9	9.9	19.7	8.7	8.7	26.0	0.0	0.0	19.9	0.0	19.2
Incr Delay (d2), s/veh	0.0	0.5	0.5	1.4	0.2	0.2	1.5	0.0	0.0	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	0.2	6.5	6.6	2.8	3.8	3.9	5.1	0.0	0.0	1.4	0.0	0.3
LnGrp Delay(d),s/veh	11.1	10.4	10.3	21.1	8.9	8.9	27.5	0.0	0.0	20.1	0.0	19.2
LnGrp LOS	B	B	B	C	A	A	C			C		B
Approach Vol, veh/h		1070			855			263			116	
Approach Delay, s/veh		10.4			11.1			27.5			19.9	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		25.7		46.7		25.7		46.7
Change Period (Y+Rc), s		5.6		6.1		5.6		* 6.1
Max Green Setting (Gmax), s		26.4		41.9		26.4		* 42
Max Q Clear Time (g_c+I1), s		17.9		15.3		4.9		33.6
Green Ext Time (p_c), s		1.4		16.1		2.2		6.9

Intersection Summary	
HCM 2010 Ctrl Delay	13.1
HCM 2010 LOS	B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	228

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1145	13	32	636	0	5	0	59	364	77	172
Future Vol, veh/h	0	1145	13	32	636	0	5	0	59	364	77	172
Conflicting Peds, #/hr	0	0	8	8	0	0	1	0	3	3	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	1168	13	33	649	0	5	0	60	371	79	176

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1190	0	0	1613	-	602	1301	1904	325
Stage 1	-	-	-	-	-	-	1183	-	-	714	714	-
Stage 2	-	-	-	-	-	-	430	-	-	587	1190	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	571	-	0	69	0	443	~ 118	~ 68	671
Stage 1	0	-	-	-	-	0	201	0	-	388	433	-
Stage 2	0	-	-	-	-	0	574	0	-	463	259	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	569	-	-	-	-	438	~ 97	~ 64	670
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	~ 97	~ 64	-
Stage 1	-	-	-	-	-	-	201	-	-	388	408	-
Stage 2	-	-	-	-	-	-	322	-	-	398	257	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.6		$ 930.2
HCM LOS			-	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	438	-	-	569	-	97	171
HCM Lane V/C Ratio	-	0.137	-	-	0.057	-	3.829	1.486
HCM Control Delay (s)	-	14.5	-	-	11.7		$ 1363.6	296.7
HCM Lane LOS	-	B	-	-	B	-	F	F
HCM 95th %tile Q(veh)	-	0.5	-	-	0.2	-	38	16.2

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1405	204	91	668	0	0
Future Vol, veh/h	1405	204	91	668	0	0
Conflicting Peds, #/hr	0	11	11	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	1448	210	94	689	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1670	0	2097	840
Stage 1	-	-	-	-	1565	-
Stage 2	-	-	-	-	532	-
Critical Hdwy	-	-	4.2	-	7.54	6.94
Critical Hdwy Stg 1	-	-	-	-	6.54	-
Critical Hdwy Stg 2	-	-	-	-	6.54	-
Follow-up Hdwy	-	-	2.25	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	367	-	30	309
Stage 1	-	-	-	-	116	-
Stage 2	-	-	-	-	499	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	367	-	24	306
Mov Cap-2 Maneuver	-	-	-	-	24	-
Stage 1	-	-	-	-	116	-
Stage 2	-	-	-	-	371	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	367	-
HCM Lane V/C Ratio	-	-	-	0.256	-
HCM Control Delay (s)	0	-	-	18.1	-
HCM Lane LOS	A	-	-	C	-
HCM 95th %tile Q(veh)	-	-	-	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	369	980	56	32	429	623	52	270	43	276	53	278
Future Volume (veh/h)	369	980	56	32	429	623	52	270	43	276	53	278
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		0.98	1.00		0.99	0.99		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	1863	1863	1900	1776	1776	1776
Adj Flow Rate, veh/h	377	1000	57	33	438	636	53	276	44	282	54	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	7	7	7
Cap, veh/h	371	1552	88	75	511	449	520	554	88	287	629	534
Arrive On Green	0.21	0.46	0.46	0.04	0.29	0.29	0.35	0.35	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1774	3403	194	1774	1770	1553	1341	1565	249	999	1776	1509
Grp Volume(v), veh/h	377	520	537	33	438	636	53	0	320	282	54	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1827	1774	1770	1553	1341	0	1814	999	1776	1509
Q Serve(g_s), s	20.9	22.6	22.6	1.8	23.4	28.9	2.7	0.0	13.8	21.6	2.0	0.0
Cycle Q Clear(g_c), s	20.9	22.6	22.6	1.8	23.4	28.9	4.8	0.0	13.8	35.4	2.0	0.0
Prop In Lane	1.00		0.11	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	371	807	833	75	511	449	520	0	642	287	629	534
V/C Ratio(X)	1.02	0.64	0.64	0.44	0.86	1.42	0.10	0.00	0.50	0.98	0.09	0.00
Avail Cap(c_a), veh/h	371	807	833	124	511	449	520	0	642	287	629	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	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.5	21.0	21.0	46.8	33.6	35.6	23.1	0.0	25.3	41.8	21.5	0.0
Incr Delay (d2), s/veh	51.1	1.8	1.7	4.1	13.5	200.4	0.1	0.0	0.6	47.8	0.1	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	15.5	11.4	11.7	1.0	13.3	37.3	1.0	0.0	7.0	11.6	1.0	0.0
LnGrp Delay(d),s/veh	90.7	22.7	22.7	50.8	47.1	235.9	23.2	0.0	25.9	89.6	21.6	0.0
LnGrp LOS	F	C	C	D	D	F	C		C	F	C	
Approach Vol, veh/h		1434			1107			373			336	
Approach Delay, s/veh		40.6			155.7			25.5			78.6	
Approach LOS		D			F			C			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	50.7		40.0	26.0	34.0		40.0				
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6				
Max Green Setting (Gmax), s	7.0	42.8		35.4	20.9	28.9		35.4				
Max Q Clear Time (g_c+I1), s	3.8	24.6		37.4	22.9	30.9		15.8				
Green Ext Time (p_c), s	0.0	13.4		0.0	0.0	0.0		3.8				
Intersection Summary												
HCM 2010 Ctrl Delay			82.0									
HCM 2010 LOS			F									

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	799	135	241	570	194	129	869	82	153	627	308
Future Volume (veh/h)	87	799	135	241	570	194	129	869	82	153	627	308
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		0.99	1.00		0.97
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	1825	1825	1825	1845	1845	1845	1810	1810	1810
Adj Flow Rate, veh/h	91	832	141	251	594	202	134	905	85	159	653	321
Adj No. of Lanes	1	2	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	3	3	3	5	5	5
Cap, veh/h	111	920	404	275	649	548	160	988	440	183	1022	444
Arrive On Green	0.06	0.26	0.26	0.16	0.36	0.36	0.09	0.28	0.28	0.11	0.30	0.30
Sat Flow, veh/h	1774	3539	1556	1739	1825	1540	1757	3505	1560	1723	3438	1494
Grp Volume(v), veh/h	91	832	141	251	594	202	134	905	85	159	653	321
Grp Sat Flow(s),veh/h/ln	1774	1770	1556	1739	1825	1540	1757	1752	1560	1723	1719	1494
Q Serve(g_s), s	6.4	28.7	9.3	17.9	39.2	12.3	9.5	31.5	5.2	11.5	20.8	24.3
Cycle Q Clear(g_c), s	6.4	28.7	9.3	17.9	39.2	12.3	9.5	31.5	5.2	11.5	20.8	24.3
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	111	920	404	275	649	548	160	988	440	183	1022	444
V/C Ratio(X)	0.82	0.90	0.35	0.91	0.91	0.37	0.84	0.92	0.19	0.87	0.64	0.72
Avail Cap(c_a), veh/h	111	923	406	288	664	560	221	1053	468	190	1022	444
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	58.4	45.2	38.0	52.2	38.8	30.2	56.4	43.9	34.4	55.5	38.5	39.7
Incr Delay (d2), s/veh	36.4	12.2	0.5	30.4	17.2	0.4	17.8	11.8	0.2	31.3	1.3	5.7
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	4.3	15.5	4.1	11.0	22.9	5.3	5.4	16.8	2.3	7.1	10.1	10.7
LnGrp Delay(d),s/veh	94.8	57.4	38.5	82.6	56.0	30.6	74.3	55.6	34.6	86.8	39.8	45.4
LnGrp LOS	F	E	D	F	E	C	E	E	C	F	D	D
Approach Vol, veh/h		1064			1047			1124			1133	
Approach Delay, s/veh		58.1			57.5			56.3			48.0	
Approach LOS		E			E			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	19.5	41.7	26.1	38.9	17.6	43.6	14.0	51.0
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	13.9	37.9	20.9	32.9	15.9	35.9	7.9	45.9
Max Q Clear Time (g_c+I1), s	13.5	33.5	19.9	30.7	11.5	26.3	8.4	41.2
Green Ext Time (p_c), s	0.0	2.0	0.1	1.8	0.1	7.3	0.0	3.7

Intersection Summary		
HCM 2010 Ctrl Delay		54.9
HCM 2010 LOS		D

J. Intersection Level of Service Calculations – Cumulative Plus Project Conditions

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	238	579	112	276	823	489	80	721	383	566	1090	92
Future Volume (veh/h)	238	579	112	276	823	489	80	721	383	566	1090	92
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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	251	609	0	291	866	0	84	759	0	596	1147	97
Adj No. of Lanes	1	2	1	2	2	1	1	3	1	2	3	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	1099	492	358	894	709	107	854	433	682	1460	123
Arrive On Green	0.16	0.31	0.00	0.11	0.26	0.00	0.06	0.17	0.00	0.20	0.31	0.31
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4777	404
Grp Volume(v), veh/h	251	609	0	291	866	0	84	759	0	596	814	430
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1791
Q Serve(g_s), s	16.8	17.4	0.0	10.2	29.9	0.0	5.7	17.8	0.0	20.4	26.7	26.7
Cycle Q Clear(g_c), s	16.8	17.4	0.0	10.2	29.9	0.0	5.7	17.8	0.0	20.4	26.7	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.23
Lane Grp Cap(c), veh/h	283	1099	492	358	894	709	107	854	433	682	1036	547
V/C Ratio(X)	0.89	0.55	0.00	0.81	0.97	0.00	0.78	0.89	0.00	0.87	0.79	0.79
Avail Cap(c_a), veh/h	341	1099	492	588	894	709	265	907	450	911	1036	547
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	34.9	0.0	53.2	44.7	0.0	56.4	49.5	0.0	47.3	38.6	38.6
Incr Delay (d2), s/veh	20.6	0.6	0.0	4.5	22.6	0.0	11.8	10.4	0.0	7.4	4.1	7.5
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	9.9	8.6	0.0	5.0	17.2	0.0	3.1	9.1	0.0	10.4	13.0	14.3
LnGrp Delay(d),s/veh	70.7	35.5	0.0	57.7	67.3	0.0	68.2	59.9	0.0	54.7	42.6	46.1
LnGrp LOS	E	D		E	E		E	E		D	D	D
Approach Vol, veh/h		860			1157			843			1840	
Approach Delay, s/veh		45.8			64.9			60.7			47.4	
Approach LOS		D			E			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	30.9	27.2	19.7	43.9	14.1	44.0	25.5	38.0
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	32.2	21.7	21.1	33.5	18.2	35.7	23.4	31.2
Max Q Clear Time (g_c+I1), s	22.4	19.8	12.2	19.4	7.7	28.7	18.8	31.9
Green Ext Time (p_c), s	1.7	0.6	0.6	4.1	0.1	5.7	0.6	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	53.8
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	4	108	11	9	21	31	1090	6	18	1309	257
Future Volume (veh/h)	130	4	108	11	9	21	31	1090	6	18	1309	257
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		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	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	141	4	117	12	10	23	34	1185	7	20	1423	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
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
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	7	377	86	79	107	85	1655	10	57	1568	701
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.05	0.46	0.46	0.03	0.44	0.00
Sat Flow, veh/h	867	31	1575	100	328	447	1774	3607	21	1774	3539	1583
Grp Volume(v), veh/h	145	0	117	45	0	0	34	581	611	20	1423	0
Grp Sat Flow(s),veh/h/ln	898	0	1575	875	0	0	1774	1770	1859	1774	1770	1583
Q Serve(g_s), s	0.1	0.0	4.5	0.2	0.0	0.0	1.4	19.3	19.3	0.8	27.3	0.0
Cycle Q Clear(g_c), s	13.3	0.0	4.5	13.4	0.0	0.0	1.4	19.3	19.3	0.8	27.3	0.0
Prop In Lane	0.97		1.00	0.27		0.51	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	312	0	377	272	0	0	85	812	853	57	1568	701
V/C Ratio(X)	0.46	0.00	0.31	0.17	0.00	0.00	0.40	0.72	0.72	0.35	0.91	0.00
Avail Cap(c_a), veh/h	568	0	670	556	0	0	170	812	853	170	1568	701
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	26.1	0.0	22.8	22.1	0.0	0.0	33.7	15.9	15.9	34.6	18.9	0.0
Incr Delay (d2), s/veh	1.1	0.0	0.5	0.3	0.0	0.0	3.1	5.4	5.1	3.7	9.2	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	0.0	2.0	0.7	0.0	0.0	0.7	10.6	11.1	0.5	15.3	0.0
LnGrp Delay(d),s/veh	27.2	0.0	23.3	22.4	0.0	0.0	36.8	21.3	21.0	38.3	28.2	0.0
LnGrp LOS	C		C	C			D	C	C	D	C	
Approach Vol, veh/h		262			45			1226			1443	
Approach Delay, s/veh		25.5			22.4			21.6			28.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	40.3		23.7	10.3	39.1		23.7
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	32.3		31.0	7.0	32.3		31.0
Max Q Clear Time (g_c+I1), s	2.8	21.3		15.3	3.4	29.3		15.4
Green Ext Time (p_c), s	0.0	9.9		1.3	0.0	2.8		1.3

Intersection Summary			
HCM 2010 Ctrl Delay			25.2
HCM 2010 LOS			C

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	21	152	677	85	40	182	710	417	69	1041	12
Future Volume (veh/h)	15	21	152	677	85	40	182	710	417	69	1041	12
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		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	1863	1863	1863	1900
Adj Flow Rate, veh/h	17	23	17	752	94	8	202	789	122	77	1157	13
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	105	110	92	751	406	344	210	1569	695	102	1983	22
Arrive On Green	0.06	0.06	0.06	0.22	0.22	0.22	0.12	0.44	0.44	0.06	0.38	0.38
Sat Flow, veh/h	1774	1863	1561	3442	1863	1575	1774	3539	1567	1774	5184	58
Grp Volume(v), veh/h	17	23	17	752	94	8	202	789	122	77	757	413
Grp Sat Flow(s),veh/h/ln	1774	1863	1561	1721	1863	1575	1774	1770	1567	1774	1695	1852
Q Serve(g_s), s	1.0	1.3	1.1	24.0	4.6	0.4	12.5	17.6	5.2	4.7	19.5	19.5
Cycle Q Clear(g_c), s	1.0	1.3	1.1	24.0	4.6	0.4	12.5	17.6	5.2	4.7	19.5	19.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	105	110	92	751	406	344	210	1569	695	102	1297	709
V/C Ratio(X)	0.16	0.21	0.18	1.00	0.23	0.02	0.96	0.50	0.18	0.75	0.58	0.58
Avail Cap(c_a), veh/h	355	373	312	751	406	344	210	1569	695	121	1297	709
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	49.1	49.3	49.2	43.0	35.4	33.8	48.3	21.9	18.5	51.1	27.0	27.0
Incr Delay (d2), s/veh	0.7	0.9	0.9	33.2	0.3	0.0	51.6	1.2	0.6	19.7	1.9	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	0.5	0.7	0.5	14.8	2.4	0.2	9.1	8.8	2.3	2.9	9.5	10.7
LnGrp Delay(d),s/veh	49.9	50.2	50.2	76.2	35.7	33.8	99.8	23.1	19.0	70.8	28.9	30.5
LnGrp LOS	D	D	D	F	D	C	F	C	B	E	C	C
Approach Vol, veh/h		57			854			1113			1247	
Approach Delay, s/veh		50.1			71.3			36.6			32.0	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	54.9		12.6	19.1	48.2		30.1
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	7.5	32.1		22.0	13.0	26.6		24.0
Max Q Clear Time (g_c+I1), s	6.7	19.6		3.3	14.5	21.5		26.0
Green Ext Time (p_c), s	0.0	9.6		0.1	0.0	4.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay	44.2
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	2.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	34	108	1162	100	181	1842
Future Vol, veh/h	34	108	1162	100	181	1842
Conflicting Peds, #/hr	0	0	0	5	5	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	38	121	1306	112	203	2070

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2753	658	0	0	1311	0
Stage 1	1311	-	-	-	-	-
Stage 2	1442	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 16	407	-	-	524	-
Stage 1	216	-	-	-	-	-
Stage 2	184	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 10	405	-	-	524	-
Mov Cap-2 Maneuver	72	-	-	-	-	-
Stage 1	215	-	-	-	-	-
Stage 2	113	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	37.6	0	1.4
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	72	405	524	-
HCM Lane V/C Ratio	-	-	0.531	0.3	0.388	-
HCM Control Delay (s)	-	-	101.3	17.6	16.2	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	2.2	1.2	1.8	-

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)	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		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	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	173	398	127	143	412	0	169	753	77	133	1363	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	3	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	295	509	431	176	525	446	202	1552	158	168	1608	0
Arrive On Green	0.08	0.27	0.27	0.10	0.29	0.00	0.11	0.33	0.33	0.09	0.31	0.00
Sat Flow, veh/h	3476	1881	1592	1747	1835	1560	1756	4640	471	1792	5305	0
Grp Volume(v), veh/h	173	398	127	143	412	0	169	543	287	133	1363	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1747	1835	1560	1756	1678	1755	1792	1712	0
Q Serve(g_s), s	4.5	18.2	5.9	7.5	19.2	0.0	8.8	12.0	12.1	6.8	23.1	0.0
Cycle Q Clear(g_c), s	4.5	18.2	5.9	7.5	19.2	0.0	8.8	12.0	12.1	6.8	23.1	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	295	509	431	176	525	446	202	1122	587	168	1608	0
V/C Ratio(X)	0.59	0.78	0.29	0.81	0.78	0.00	0.84	0.48	0.49	0.79	0.85	0.00
Avail Cap(c_a), veh/h	567	588	498	336	640	544	241	1122	587	302	1737	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	41.0	31.4	26.9	41.0	30.6	0.0	40.4	24.6	24.7	41.3	29.9	0.0
Incr Delay (d2), s/veh	1.4	6.2	0.5	6.6	5.6	0.0	18.2	0.3	0.6	6.2	3.9	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	2.2	10.3	2.6	3.9	10.5	0.0	5.3	5.6	5.9	3.7	11.4	0.0
LnGrp Delay(d),s/veh	42.4	37.7	27.4	47.6	36.2	0.0	58.6	24.9	25.3	47.5	33.8	0.0
LnGrp LOS	D	D	C	D	D		E	C	C	D	C	
Approach Vol, veh/h		698			555			999			1496	
Approach Delay, s/veh		37.0			39.1			30.7			35.0	
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	12.9	36.5	13.6	30.1	14.9	34.5	12.1	31.6				
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9				
Max Green Setting (Gmax), s	* 16	28.6	* 18	29.1	* 13	31.5	* 15	* 33				
Max Q Clear Time (g_c+I1), s	8.8	14.1	9.5	20.2	10.8	25.1	6.5	21.2				
Green Ext Time (p_c), s	0.1	11.5	0.2	4.2	0.1	4.0	0.3	4.9				

Intersection Summary			
HCM 2010 Ctrl Delay			34.8
HCM 2010 LOS			C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	376	37	244	23	23	28	195	850	18	42	1378	458
Future Volume (veh/h)	376	37	244	23	23	28	195	850	18	42	1378	458
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		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	1900	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	457	0	108	26	26	2	222	966	20	48	1566	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	6	6	6
Cap, veh/h	570	0	251	38	38	66	224	1971	41	61	1584	709
Arrive On Green	0.16	0.00	0.16	0.04	0.04	0.04	0.13	0.56	0.56	0.04	0.47	0.00
Sat Flow, veh/h	3548	0	1566	909	909	1572	1774	3546	73	1707	3406	1524
Grp Volume(v), veh/h	457	0	108	52	0	2	222	482	504	48	1566	0
Grp Sat Flow(s),veh/h/ln	1774	0	1566	1817	0	1572	1774	1770	1850	1707	1703	1524
Q Serve(g_s), s	14.9	0.0	7.5	3.4	0.0	0.1	15.0	20.0	20.0	3.4	54.8	0.0
Cycle Q Clear(g_c), s	14.9	0.0	7.5	3.4	0.0	0.1	15.0	20.0	20.0	3.4	54.8	0.0
Prop In Lane	1.00		1.00	0.50		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	570	0	251	76	0	66	224	984	1028	61	1584	709
V/C Ratio(X)	0.80	0.00	0.43	0.68	0.00	0.03	0.99	0.49	0.49	0.79	0.99	0.00
Avail Cap(c_a), veh/h	796	0	351	408	0	353	224	984	1028	101	1584	709
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	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.7	0.0	45.6	56.9	0.0	55.3	52.5	16.3	16.3	57.6	31.9	0.0
Incr Delay (d2), s/veh	4.1	0.0	1.2	10.2	0.0	0.2	57.5	0.4	0.4	19.8	19.8	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	7.6	0.0	3.3	1.9	0.0	0.1	10.9	9.9	10.3	1.9	30.0	0.0
LnGrp Delay(d),s/veh	52.8	0.0	46.7	67.1	0.0	55.5	110.0	16.7	16.7	77.4	51.7	0.0
LnGrp LOS	D		D	E		E	F	B	B	E	D	
Approach Vol, veh/h		565			54			1208			1614	
Approach Delay, s/veh		51.6			66.7			33.8			52.5	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.1	73.7		24.9	22.0	62.8		10.6
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6
Max Green Setting (Gmax), s	7.1	64.1		27.0	15.2	56.0		27.0
Max Q Clear Time (g_c+I1), s	5.4	22.0		16.9	17.0	56.8		5.4
Green Ext Time (p_c), s	0.0	30.2		1.6	0.0	0.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay	46.0
HCM 2010 LOS	D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	8.2											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	45	2	299	0	0	0	361	188	7	1	241	181
Future Vol, veh/h	45	2	299	0	0	0	361	188	7	1	241	181
Conflicting Peds, #/hr	0	0	0	0	0	0	5	0	7	7	0	5
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	7	7	7	2	2	2	2	2	2	2	2	2
Mvmt Flow	47	2	315	0	0	0	380	198	7	1	254	191

Major/Minor	Minor2						Major1			Major2		
Conflicting Flow All	1318	1328	354				449	0	0	212	0	0
Stage 1	356	356	-				-	-	-	-	-	-
Stage 2	962	972	-				-	-	-	-	-	-
Critical Hdwy	6.47	6.57	6.27				4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.47	5.57	-				-	-	-	-	-	-
Critical Hdwy Stg 2	5.47	5.57	-				-	-	-	-	-	-
Follow-up Hdwy	3.563	4.063	3.363				2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	169	152	679				1111	-	-	1358	-	-
Stage 1	698	620	-				-	-	-	-	-	-
Stage 2	363	324	-				-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	110	0	676				1111	-	-	1358	-	-
Mov Cap-2 Maneuver	110	0	-				-	-	-	-	-	-
Stage 1	694	0	-				-	-	-	-	-	-
Stage 2	238	0	-				-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	21.3	6.4	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1111	-	-	110	676	1358	-	-
HCM Lane V/C Ratio	0.342	-	-	0.45	0.466	0.001	-	-
HCM Control Delay (s)	9.9	-	-	62.1	14.9	7.7	0	-
HCM Lane LOS	A	-	-	F	B	A	A	-
HCM 95th %tile Q(veh)	1.5	-	-	1.9	2.5	0	-	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	701	300	849	1106	0	494
Future Volume (vph)	701	300	849	1106	0	494
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	797	341	965	1257	0	561
RTOR Reduction (vph)	0	0	0	0	0	48
Lane Group Flow (vph)	797	341	965	1257	0	513
Confl. Peds. (#/hr)						9
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	16.3	55.0	27.5	55.0		27.5
Effective Green, g (s)	16.3	55.0	27.5	55.0		27.5
Actuated g/C Ratio	0.30	1.00	0.50	1.00		0.50
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	1514	1591	1742	3592		1414
v/s Ratio Prot	c0.16		c0.28	0.35		0.18
v/s Ratio Perm		0.21				
v/c Ratio	0.53	0.21	0.55	0.35		0.36
Uniform Delay, d1	16.1	0.0	9.5	0.0		8.4
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.3	0.3	0.4	0.1		0.2
Delay (s)	16.5	0.3	9.9	0.1		8.6
Level of Service	B	A	A	A		A
Approach Delay (s)	11.6			4.3	8.6	
Approach LOS	B			A	A	

Intersection Summary			
HCM 2000 Control Delay	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	55.0	Sum of lost time (s)	11.2
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												
Traffic Volume (veh/h)	0	0	4	574	31	204	16	880	300	211	1377	15
Future Volume (veh/h)	0	0	4	574	31	204	16	880	300	211	1377	15
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		0.99	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	1863	1827	1827	1827	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	677	0	75	18	1000	0	240	1565	17
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	4	4	4	2	2	2	2	2	2
Cap, veh/h	0	2	48	844	0	374	51	1426	1123	281	1908	21
Arrive On Green	0.00	0.00	0.00	0.24	0.00	0.24	0.03	0.40	0.00	0.16	0.53	0.53
Sat Flow, veh/h	0	1863	1583	3480	0	1539	1774	3539	2787	1774	3586	39
Grp Volume(v), veh/h	0	0	0	677	0	75	18	1000	0	240	772	810
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1740	0	1539	1774	1770	1393	1774	1770	1856
Q Serve(g_s), s	0.0	0.0	0.0	14.3	0.0	3.0	0.8	18.3	0.0	10.3	28.2	28.3
Cycle Q Clear(g_c), s	0.0	0.0	0.0	14.3	0.0	3.0	0.8	18.3	0.0	10.3	28.2	28.3
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	0	2	48	844	0	374	51	1426	1123	281	942	987
V/C Ratio(X)	0.00	0.00	0.00	0.80	0.00	0.20	0.35	0.70	0.00	0.86	0.82	0.82
Avail Cap(c_a), veh/h	0	48	87	1160	0	513	182	1571	1237	321	942	987
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	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	27.8	0.0	23.5	37.1	19.4	0.0	32.0	15.1	15.2
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.9	0.0	0.3	4.0	1.3	0.0	18.0	5.8	5.6
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	0.0	0.0	0.0	7.2	0.0	1.3	0.4	9.1	0.0	6.4	15.0	15.9
LnGrp Delay(d),s/veh	0.0	0.0	0.0	30.7	0.0	23.8	41.2	20.6	0.0	49.9	20.9	20.8
LnGrp LOS				C		C	D	C		D	C	C
Approach Vol, veh/h		0			752			1018			1822	
Approach Delay, s/veh		0.0			30.0			21.0			24.7	
Approach LOS					C			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	17.4	36.5		0.0	7.4	46.6		24.0				
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1				
Max Green Setting (Gmax), s	14.1	34.6		2.0	8.0	40.7		26.0				
Max Q Clear Time (g_c+I1), s	12.3	20.3		0.0	2.8	30.3		16.3				
Green Ext Time (p_c), s	0.1	11.1		0.0	0.0	9.4		2.2				
Intersection Summary												
HCM 2010 Ctrl Delay			24.7									
HCM 2010 LOS			C									

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	24	468	19	21	784	53	13	1	7	24	2	12
Future Vol, veh/h	24	468	19	21	784	53	13	1	7	24	2	12
Conflicting Peds, #/hr	7	0	11	11	0	7	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	6	6	6	3	3	3	14	14	14	2	2	2
Mvmt Flow	27	532	22	24	891	60	15	1	8	27	2	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	958	0	0	564	0	0	1104	1614	288	1297	1595	485
Stage 1	-	-	-	-	-	-	608	608	-	976	976	-
Stage 2	-	-	-	-	-	-	496	1006	-	321	619	-
Critical Hdwy	4.22	-	-	4.16	-	-	7.78	6.78	7.18	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.78	5.78	-	6.54	5.54	-
Follow-up Hdwy	2.26	-	-	2.23	-	-	3.64	4.14	3.44	3.52	4.02	3.32
Pot Cap-1 Maneuver	690	-	-	997	-	-	151	92	674	119	106	528
Stage 1	-	-	-	-	-	-	421	455	-	270	327	-
Stage 2	-	-	-	-	-	-	494	292	-	665	478	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	689	-	-	997	-	-	131	81	667	106	93	523
Mov Cap-2 Maneuver	-	-	-	-	-	-	131	81	-	106	93	-
Stage 1	-	-	-	-	-	-	393	425	-	253	308	-
Stage 2	-	-	-	-	-	-	452	275	-	618	446	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.8	0.4	29.3	41.8
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	172	689	-	-	997	-	-	140
HCM Lane V/C Ratio	0.139	0.04	-	-	0.024	-	-	0.308
HCM Control Delay (s)	29.3	10.4	0.3	-	8.7	0.2	-	41.8
HCM Lane LOS	D	B	A	-	A	A	-	E
HCM 95th %tile Q(veh)	0.5	0.1	-	-	0.1	-	-	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	18	399	83	146	751	28	88	18	130	23	11	19
Future Volume (veh/h)	18	399	83	146	751	28	88	18	130	23	11	19
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		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	1776	1776	1900	1827	1827
Adj Flow Rate, veh/h	20	453	94	166	853	32	100	20	0	26	12	22
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	6	6	6	4	4	4	7	7	7	4	4	4
Cap, veh/h	404	1428	294	543	1734	65	356	54	259	326	119	266
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.17	0.17	0.00	0.17	0.17	0.17
Sat Flow, veh/h	600	2809	579	837	3411	128	1019	316	1509	933	692	1548
Grp Volume(v), veh/h	20	273	274	166	434	451	120	0	0	38	0	22
Grp Sat Flow(s),veh/h/ln	600	1703	1685	837	1736	1803	1335	0	1509	1625	0	1548
Q Serve(g_s), s	0.8	3.4	3.5	5.3	6.0	6.0	2.4	0.0	0.0	0.0	0.0	0.4
Cycle Q Clear(g_c), s	6.8	3.4	3.5	8.8	6.0	6.0	3.1	0.0	0.0	0.6	0.0	0.4
Prop In Lane	1.00		0.34	1.00		0.07	0.83		1.00	0.68		1.00
Lane Grp Cap(c), veh/h	404	866	856	543	882	917	410	0	259	445	0	266
V/C Ratio(X)	0.05	0.32	0.32	0.31	0.49	0.49	0.29	0.00	0.00	0.09	0.00	0.08
Avail Cap(c_a), veh/h	459	1024	1013	632	1067	1109	1155	0	1085	1253	0	1113
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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	8.1	5.3	5.3	7.9	5.9	5.9	13.8	0.0	0.0	12.8	0.0	12.7
Incr Delay (d2), s/veh	0.1	0.2	0.2	0.3	0.4	0.4	0.4	0.0	0.0	0.1	0.0	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	0.1	1.6	1.6	1.2	2.9	3.0	1.1	0.0	0.0	0.3	0.0	0.2
LnGrp Delay(d),s/veh	8.2	5.5	5.5	8.2	6.3	6.3	14.2	0.0	0.0	12.9	0.0	12.9
LnGrp LOS	A	A	A	A	A	A	B			B		B
Approach Vol, veh/h		567			1051			120			60	
Approach Delay, s/veh		5.6			6.6			14.2			12.9	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		11.9		24.7		11.9		24.7
Change Period (Y+Rc), s		5.6		6.1		5.6		* 6.1
Max Green Setting (Gmax), s		26.3		22.0		26.3		* 23
Max Q Clear Time (g_c+I1), s		5.1		8.8		2.6		10.8
Green Ext Time (p_c), s		0.9		8.2		0.9		7.5

Intersection Summary	
HCM 2010 Ctrl Delay	7.0
HCM 2010 LOS	A

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	48.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	548	3	32	699	0	4	0	14	195	45	221
Future Vol, veh/h	0	548	3	32	699	0	4	0	14	195	45	221
Conflicting Peds, #/hr	0	0	9	6	0	0	2	0	0	0	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	6	6	6	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	623	3	36	794	0	5	0	16	222	51	251

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	635	0	0	1130	-	322	1178	1502	399
Stage 1	-	-	-	-	-	-	633	-	-	867	867	-
Stage 2	-	-	-	-	-	-	497	-	-	311	635	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	931	-	0	158	0	674	~ 146	121	601
Stage 1	0	-	-	-	-	0	434	0	-	314	368	-
Stage 2	0	-	-	-	-	0	523	0	-	674	471	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	931	-	-	58	-	668	~ 138	115	600
Mov Cap-2 Maneuver	-	-	-	-	-	-	58	-	-	~ 138	115	-
Stage 1	-	-	-	-	-	-	434	-	-	314	354	-
Stage 2	-	-	-	-	-	-	250	-	-	658	467	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	24.2	184.3
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	58	668	-	-	931	-	138	350
HCM Lane V/C Ratio	0.078	0.024	-	-	0.039	-	1.606	0.864
HCM Control Delay (s)	72.3	10.5	-	-	9	-	$ 360.8	54.9
HCM Lane LOS	F	B	-	-	A	-	F	F
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0.1	-	15.7	8.1

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	619	138	74	730	0	0
Future Vol, veh/h	619	138	74	730	0	0
Conflicting Peds, #/hr	0	10	10	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	5	5	2	2	4	4
Mvmt Flow	703	157	84	830	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	870	0	1375	440
Stage 1	-	-	-	-	792	-
Stage 2	-	-	-	-	583	-
Critical Hdwy	-	-	4.14	-	6.88	6.98
Critical Hdwy Stg 1	-	-	-	-	5.88	-
Critical Hdwy Stg 2	-	-	-	-	5.88	-
Follow-up Hdwy	-	-	2.22	-	3.54	3.34
Pot Cap-1 Maneuver	-	-	770	-	134	559
Stage 1	-	-	-	-	402	-
Stage 2	-	-	-	-	516	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	770	-	118	554
Mov Cap-2 Maneuver	-	-	-	-	118	-
Stage 1	-	-	-	-	398	-
Stage 2	-	-	-	-	460	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.9	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	770	-
HCM Lane V/C Ratio	-	-	-	0.109	-
HCM Control Delay (s)	0	-	-	10.2	-
HCM Lane LOS	A	-	-	B	-
HCM 95th %tile Q(veh)	-	-	-	0.4	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	384	25	8	507	337	23	78	3	210	56	275
Future Volume (veh/h)	210	384	25	8	507	337	23	78	3	210	56	275
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	0.99		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	1845	1845	1900	1863	1863	1900	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	233	427	28	9	563	374	26	87	3	233	62	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	281	1546	101	29	648	430	456	503	17	421	504	428
Arrive On Green	0.16	0.46	0.46	0.02	0.32	0.32	0.28	0.28	0.28	0.28	0.28	0.00
Sat Flow, veh/h	1757	3338	218	1774	2029	1348	1329	1790	62	1246	1792	1524
Grp Volume(v), veh/h	233	223	232	9	491	446	26	0	90	233	62	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1804	1774	1770	1607	1329	0	1851	1246	1792	1524
Q Serve(g_s), s	7.9	4.8	4.9	0.3	16.1	16.1	0.9	0.0	2.3	10.7	1.6	0.0
Cycle Q Clear(g_c), s	7.9	4.8	4.9	0.3	16.1	16.1	2.5	0.0	2.3	13.0	1.6	0.0
Prop In Lane	1.00		0.12	1.00		0.84	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	281	811	835	29	565	513	456	0	520	421	504	428
V/C Ratio(X)	0.83	0.28	0.28	0.31	0.87	0.87	0.06	0.00	0.17	0.55	0.12	0.00
Avail Cap(c_a), veh/h	338	811	835	201	610	554	663	0	809	615	784	666
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	1.00	0.00
Uniform Delay (d), s/veh	25.1	10.2	10.2	30.0	19.8	19.8	17.5	0.0	16.8	21.7	16.5	0.0
Incr Delay (d2), s/veh	13.5	0.2	0.2	6.0	12.2	13.2	0.1	0.0	0.2	1.1	0.1	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	4.9	2.3	2.4	0.2	9.7	8.9	0.3	0.0	1.2	3.8	0.8	0.0
LnGrp Delay(d),s/veh	38.6	10.4	10.4	36.1	32.0	33.0	17.5	0.0	16.9	22.8	16.6	0.0
LnGrp LOS	D	B	B	D	C	C	B		B	C	B	
Approach Vol, veh/h		688			946			116			295	
Approach Delay, s/veh		19.9			32.5			17.1			21.5	
Approach LOS		B			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	33.7		22.0	15.0	24.8		22.0
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	26.2		27.0	11.9	21.3		27.0
Max Q Clear Time (g_c+I1), s	2.3	6.9		15.0	9.9	18.1		4.5
Green Ext Time (p_c), s	0.0	9.2		1.4	0.1	1.6		1.7

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)	130	416	244	134	563	92	108	577	56	58	838	153
Future Volume (veh/h)	130	416	244	134	563	92	108	577	56	58	838	153
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		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	1863	1863	1863	1808	1808	1808	1810	1810	1810	1863	1863	1863
Adj Flow Rate, veh/h	144	462	271	149	626	102	120	641	62	64	931	170
Adj No. of Lanes	1	2	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	3	3	3	5	5	5	2	2	2
Cap, veh/h	153	1183	525	177	634	537	130	1057	472	91	1004	445
Arrive On Green	0.09	0.33	0.33	0.10	0.35	0.35	0.08	0.31	0.31	0.05	0.28	0.28
Sat Flow, veh/h	1774	3539	1572	1722	1808	1531	1723	3438	1535	1774	3539	1567
Grp Volume(v), veh/h	144	462	271	149	626	102	120	641	62	64	931	170
Grp Sat Flow(s),veh/h/ln	1774	1770	1572	1722	1808	1531	1723	1719	1535	1774	1770	1567
Q Serve(g_s), s	9.6	11.9	16.6	10.2	41.1	5.5	8.3	19.0	3.5	4.2	30.6	10.4
Cycle Q Clear(g_c), s	9.6	11.9	16.6	10.2	41.1	5.5	8.3	19.0	3.5	4.2	30.6	10.4
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	153	1183	525	177	634	537	130	1057	472	91	1004	445
V/C Ratio(X)	0.94	0.39	0.52	0.84	0.99	0.19	0.92	0.61	0.13	0.70	0.93	0.38
Avail Cap(c_a), veh/h	153	1183	525	271	634	537	130	1057	472	104	1019	451
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	54.3	30.5	32.0	52.7	38.5	27.0	54.9	35.2	29.9	55.8	41.6	34.4
Incr Delay (d2), s/veh	55.5	0.2	0.9	13.5	32.5	0.2	56.4	1.0	0.1	16.3	13.9	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	7.1	5.9	7.3	5.5	26.2	2.4	6.0	9.1	1.5	2.5	16.8	4.6
LnGrp Delay(d),s/veh	109.8	30.7	32.9	66.2	71.1	27.2	111.3	36.2	30.0	72.0	55.5	34.9
LnGrp LOS	F	C	C	E	E	C	F	D	C	E	E	C
Approach Vol, veh/h		877			877			823			1165	
Approach Delay, s/veh		44.4			65.1			46.7			53.4	
Approach LOS		D			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	12.3	42.8	18.4	46.0	15.1	40.0	16.4	48.0
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	7.0	36.4	18.8	33.4	9.0	34.4	10.3	41.9
Max Q Clear Time (g_c+I1), s	6.2	21.0	12.2	18.6	10.3	32.6	11.6	43.1
Green Ext Time (p_c), s	0.0	10.1	0.2	7.6	0.0	1.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay	52.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	870	87	249	801	683	138	765	660	697	751	125
Future Volume (veh/h)	116	870	87	249	801	683	138	765	660	697	751	125
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		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	1835	1835	1835	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	118	888	0	254	817	0	141	781	0	711	766	112
Adj No. of Lanes	1	2	1	2	2	1	1	3	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	154	963	431	320	975	436	168	1022	468	767	1474	214
Arrive On Green	0.09	0.27	0.00	0.09	0.28	0.00	0.09	0.20	0.00	0.22	0.33	0.33
Sat Flow, veh/h	1774	3539	1583	3390	3486	1560	1774	5085	1583	3442	4483	651
Grp Volume(v), veh/h	118	888	0	254	817	0	141	781	0	711	578	300
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1695	1743	1560	1774	1695	1583	1721	1695	1744
Q Serve(g_s), s	8.2	30.8	0.0	9.3	27.9	0.0	9.9	18.3	0.0	25.6	17.4	17.6
Cycle Q Clear(g_c), s	8.2	30.8	0.0	9.3	27.9	0.0	9.9	18.3	0.0	25.6	17.4	17.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	154	963	431	320	975	436	168	1022	468	767	1115	573
V/C Ratio(X)	0.77	0.92	0.00	0.79	0.84	0.00	0.84	0.76	0.00	0.93	0.52	0.52
Avail Cap(c_a), veh/h	154	994	445	622	1318	590	285	1223	530	800	1115	573
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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	44.7	0.0	56.0	42.8	0.0	56.2	47.7	0.0	48.1	34.3	34.4
Incr Delay (d2), s/veh	20.4	13.3	0.0	4.5	3.7	0.0	10.4	2.4	0.0	16.4	0.4	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	4.9	16.8	0.0	4.5	13.9	0.0	5.3	8.8	0.0	13.9	8.3	8.6
LnGrp Delay(d),s/veh	76.9	58.0	0.0	60.5	46.5	0.0	66.6	50.1	0.0	64.5	34.7	35.3
LnGrp LOS	E	E		E	D		E	D		E	C	D
Approach Vol, veh/h		1006			1071			922			1589	
Approach Delay, s/veh		60.2			49.8			52.6			48.1	
Approach LOS		E			D			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	35.0	32.2	18.7	40.5	18.8	48.4	17.1	42.2
Change Period (Y+Rc), s	6.8	6.8	6.8	6.1	6.8	6.8	6.1	6.8
Max Green Setting (Gmax), s	29.4	30.4	23.2	35.5	20.3	39.5	10.9	47.8
Max Q Clear Time (g_c+I1), s	27.6	20.3	11.3	32.8	11.9	19.6	10.2	29.9
Green Ext Time (p_c), s	0.6	4.7	0.7	1.6	0.2	11.5	0.4	5.5

Intersection Summary	
HCM 2010 Ctrl Delay	52.1
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	19	53	9	16	15	169	1617	13	19	629	244
Future Volume (veh/h)	139	19	53	9	16	15	169	1617	13	19	629	244
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)	0.99		0.99	0.99		0.99	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	1900	1863	1863	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	142	19	54	9	16	15	172	1650	13	19	642	0
Adj No. of Lanes	0	1	1	0	1	0	1	2	0	1	2	1
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	247	29	463	61	103	70	208	1658	13	52	1319	590
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.12	0.46	0.46	0.03	0.37	0.00
Sat Flow, veh/h	586	97	1567	45	348	236	1774	3599	28	1774	3539	1583
Grp Volume(v), veh/h	161	0	54	40	0	0	172	811	852	19	642	0
Grp Sat Flow(s),veh/h/ln	683	0	1567	629	0	0	1774	1770	1857	1774	1770	1583
Q Serve(g_s), s	0.4	0.0	2.3	0.4	0.0	0.0	8.7	41.9	42.0	1.0	12.8	0.0
Cycle Q Clear(g_c), s	24.1	0.0	2.3	24.2	0.0	0.0	8.7	41.9	42.0	1.0	12.8	0.0
Prop In Lane	0.88		1.00	0.22		0.37	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	276	0	463	234	0	0	208	815	856	52	1319	590
V/C Ratio(X)	0.58	0.00	0.12	0.17	0.00	0.00	0.83	0.99	1.00	0.37	0.49	0.00
Avail Cap(c_a), veh/h	335	0	529	301	0	0	348	815	856	135	1319	590
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	0.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.3	0.0	23.6	24.9	0.0	0.0	39.6	24.6	24.7	43.7	22.1	0.0
Incr Delay (d2), s/veh	2.0	0.0	0.1	0.3	0.0	0.0	8.1	30.1	29.7	4.3	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	4.1	0.0	1.0	0.8	0.0	0.0	4.7	27.1	28.4	0.5	6.3	0.0
LnGrp Delay(d),s/veh	33.3	0.0	23.7	25.3	0.0	0.0	47.7	54.7	54.4	48.0	22.4	0.0
LnGrp LOS	C		C	C			D	D	D	D	C	
Approach Vol, veh/h		215			40			1835			661	
Approach Delay, s/veh		30.9			25.3			53.9			23.1	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	49.1		33.5	17.6	41.0		33.5
Change Period (Y+Rc), s	6.8	6.8		6.1	6.8	6.8		6.1
Max Green Setting (Gmax), s	7.0	42.3		31.0	18.0	31.3		31.0
Max Q Clear Time (g_c+I1), s	3.0	44.0		26.1	10.7	14.8		26.2
Green Ext Time (p_c), s	0.0	0.0		0.5	0.3	13.5		0.5

Intersection Summary	
HCM 2010 Ctrl Delay	44.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	70	160	476	120	156	304	1413	661	117	1218	24
Future Volume (veh/h)	27	70	160	476	120	156	304	1413	661	117	1218	24
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		0.94	1.00		0.98	1.00		0.99	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	1863	1863	1863	1900
Adj Flow Rate, veh/h	28	72	13	491	124	24	313	1457	313	121	1256	25
Adj No. of Lanes	1	1	1	2	1	1	1	2	1	1	3	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	149	156	125	558	302	252	336	1748	771	123	1919	38
Arrive On Green	0.08	0.08	0.08	0.16	0.16	0.16	0.19	0.49	0.49	0.07	0.37	0.37
Sat Flow, veh/h	1774	1863	1493	3442	1863	1551	1774	3539	1562	1774	5131	102
Grp Volume(v), veh/h	28	72	13	491	124	24	313	1457	313	121	830	451
Grp Sat Flow(s),veh/h/ln	1774	1863	1493	1721	1863	1551	1774	1770	1562	1774	1695	1843
Q Serve(g_s), s	1.9	4.7	1.0	17.8	7.6	1.7	22.2	45.3	16.2	8.7	26.0	26.0
Cycle Q Clear(g_c), s	1.9	4.7	1.0	17.8	7.6	1.7	22.2	45.3	16.2	8.7	26.0	26.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	149	156	125	558	302	252	336	1748	771	123	1268	689
V/C Ratio(X)	0.19	0.46	0.10	0.88	0.41	0.10	0.93	0.83	0.41	0.98	0.65	0.65
Avail Cap(c_a), veh/h	305	320	257	592	320	267	337	1748	771	123	1268	689
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	54.6	55.9	54.2	52.4	48.1	45.6	51.1	27.9	20.5	59.5	33.2	33.2
Incr Delay (d2), s/veh	0.6	2.1	0.4	13.8	0.9	0.2	31.9	4.9	1.6	74.9	2.6	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	1.0	2.5	0.4	9.5	4.0	0.7	13.8	23.2	7.3	6.8	12.6	14.1
LnGrp Delay(d),s/veh	55.2	58.0	54.6	66.1	49.0	45.8	83.0	32.7	22.1	134.3	35.9	38.0
LnGrp LOS	E	E	D	E	D	D	F	C	C	F	D	D
Approach Vol, veh/h		113			639			2083			1402	
Approach Delay, s/veh		56.9			62.1			38.7			45.1	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	15.0	69.3		16.8	30.3	54.0		26.9
Change Period (Y+Rc), s	6.1	6.1		6.1	6.1	6.1		6.1
Max Green Setting (Gmax), s	8.9	50.7		22.0	24.3	35.3		22.0
Max Q Clear Time (g_c+I1), s	10.7	47.3		6.7	24.2	28.0		19.8
Green Ext Time (p_c), s	0.0	3.2		0.4	0.0	6.9		0.7

Intersection Summary			
HCM 2010 Ctrl Delay			44.8
HCM 2010 LOS			D

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	2043	54	120	1120
Future Vol, veh/h	16	28	2043	54	120	1120
Conflicting Peds, #/hr	0	0	0	6	6	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	-	350	195	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	16	29	2085	55	122	1143

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2907	1048	0	0	2091	0
Stage 1	2091	-	-	-	-	-
Stage 2	816	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 12	224	-	-	261	-
Stage 1	81	-	-	-	-	-
Stage 2	395	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 6	223	-	-	261	-
Mov Cap-2 Maneuver	56	-	-	-	-	-
Stage 1	81	-	-	-	-	-
Stage 2	210	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	49.1	0	2.9
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	56	223	261	-
HCM Lane V/C Ratio	-	-	0.292	0.128	0.469	-
HCM Control Delay (s)	-	-	93.8	23.5	30.4	-
HCM Lane LOS	-	-	F	C	D	-
HCM 95th %tile Q(veh)	-	-	1	0.4	2.3	-

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)	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		0.99	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	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	341	432	67	115	380	0	257	1377	95	165	890	0
Adj No. of Lanes	2	1	1	1	1	1	1	3	0	1	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	407	527	442	142	448	381	289	1648	114	196	1480	0
Arrive On Green	0.12	0.28	0.28	0.08	0.24	0.00	0.16	0.34	0.34	0.11	0.29	0.00
Sat Flow, veh/h	3476	1881	1577	1747	1835	1560	1756	4802	331	1792	5305	0
Grp Volume(v), veh/h	341	432	67	115	380	0	257	962	510	165	890	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1577	1747	1835	1560	1756	1678	1778	1792	1712	0
Q Serve(g_s), s	9.7	21.6	3.2	6.5	19.9	0.0	14.4	26.6	26.6	9.1	15.0	0.0
Cycle Q Clear(g_c), s	9.7	21.6	3.2	6.5	19.9	0.0	14.4	26.6	26.6	9.1	15.0	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	407	527	442	142	448	381	289	1152	610	196	1480	0
V/C Ratio(X)	0.84	0.82	0.15	0.81	0.85	0.00	0.89	0.84	0.84	0.84	0.60	0.00
Avail Cap(c_a), veh/h	442	550	461	153	476	405	335	1178	624	228	1480	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	43.5	33.8	27.2	45.4	36.2	0.0	41.1	30.4	30.4	43.9	30.8	0.0
Incr Delay (d2), s/veh	12.0	9.5	0.2	24.5	13.2	0.0	21.3	5.3	9.5	20.1	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	5.3	12.6	1.4	4.1	11.7	0.0	8.7	13.1	14.6	5.6	7.2	0.0
LnGrp Delay(d),s/veh	55.5	43.4	27.4	69.9	49.5	0.0	62.4	35.7	39.9	64.0	31.5	0.0
LnGrp LOS	E	D	C	E	D		E	D	D	E	C	
Approach Vol, veh/h		840			495			1729			1055	
Approach Delay, s/veh		47.0			54.2			40.9			36.6	
Approach LOS		D			D			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	15.2	39.9	12.4	33.1	20.8	34.4	16.0	29.4
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 13	35.3	* 8.8	29.4	* 19	28.9	* 13	* 26
Max Q Clear Time (g_c+I1), s	11.1	28.6	8.5	23.6	16.4	17.0	11.7	21.9
Green Ext Time (p_c), s	0.1	6.0	0.0	2.9	0.2	10.1	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay	42.6
HCM 2010 LOS	D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	377	46	321	30	70	59	369	1678	26	33	772	345
Future Volume (veh/h)	377	46	321	30	70	59	369	1678	26	33	772	345
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		0.95	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	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	423	0	140	31	72	19	380	1730	27	34	796	0
Adj No. of Lanes	2	0	1	0	1	1	1	2	0	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	530	0	234	60	140	164	408	1858	29	43	1116	499
Arrive On Green	0.15	0.00	0.15	0.11	0.11	0.11	0.23	0.52	0.52	0.02	0.32	0.00
Sat Flow, veh/h	3548	0	1567	552	1283	1509	1774	3566	56	1774	3539	1583
Grp Volume(v), veh/h	423	0	140	103	0	19	380	857	900	34	796	0
Grp Sat Flow(s),veh/h/ln	1774	0	1567	1835	0	1509	1774	1770	1852	1774	1770	1583
Q Serve(g_s), s	14.5	0.0	10.5	6.7	0.0	1.4	26.5	56.8	57.2	2.4	25.1	0.0
Cycle Q Clear(g_c), s	14.5	0.0	10.5	6.7	0.0	1.4	26.5	56.8	57.2	2.4	25.1	0.0
Prop In Lane	1.00		1.00	0.30		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	530	0	234	200	0	164	408	922	965	43	1116	499
V/C Ratio(X)	0.80	0.00	0.60	0.52	0.00	0.12	0.93	0.93	0.93	0.79	0.71	0.00
Avail Cap(c_a), veh/h	758	0	335	392	0	322	466	941	985	56	1116	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	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	51.9	0.0	50.2	53.2	0.0	50.8	47.7	28.1	28.2	61.3	38.2	0.0
Incr Delay (d2), s/veh	3.9	0.0	2.4	2.0	0.0	0.3	23.9	15.0	15.0	41.3	2.2	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	7.4	0.0	4.7	3.5	0.0	0.6	15.7	31.5	33.0	1.7	12.6	0.0
LnGrp Delay(d),s/veh	55.8	0.0	52.6	55.2	0.0	51.1	71.6	43.1	43.2	102.7	40.4	0.0
LnGrp LOS	E		D	E		D	E	D	D	F	D	
Approach Vol, veh/h		563			122			2137			830	
Approach Delay, s/veh		55.0			54.6			48.2			42.9	
Approach LOS		E			D			D			D	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.9	72.6		24.5	35.9	46.6		19.4				
Change Period (Y+Rc), s	6.8	6.8		5.6	6.8	6.8		5.6				
Max Green Setting (Gmax), s	4.0	67.2		27.0	33.2	38.0		27.0				
Max Q Clear Time (g_c+I1), s	4.4	59.2		16.5	28.5	27.1		8.7				
Green Ext Time (p_c), s	0.0	6.6		1.6	0.5	9.8		0.5				
Intersection Summary												
HCM 2010 Ctrl Delay			48.3									
HCM 2010 LOS			D									

Notes

User approved volume balancing among the lanes for turning movement.

Intersection	
Int Delay, s/veh	424.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	139	2	266	0	0	0	696	485	18	3	306	190
Future Vol, veh/h	139	2	266	0	0	0	696	485	18	3	306	190
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	7	7	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	50	-	-	-	75	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	-	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	96	96	96	96	96	96	96	96	96	96	96	96
Heavy Vehicles, %	6	6	6	2	2	2	2	2	2	2	2	2
Mvmt Flow	145	2	277	0	0	0	725	505	19	3	319	198

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	2396	2412	425	524	0	0	531	0	0
Stage 1	431	431	-	-	-	-	-	-	-
Stage 2	1965	1981	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.56	6.26	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.46	5.56	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.46	5.56	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.054	3.354	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 36	32	621	1043	-	-	1036	-	-
Stage 1	647	576	-	-	-	-	-	-	-
Stage 2	~ 117	104	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	~ 11	0	617	1043	-	-	1036	-	-
Mov Cap-2 Maneuver	~ 11	0	-	-	-	-	-	-	-
Stage 1	640	0	-	-	-	-	-	-	-
Stage 2	~ 35	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 2166.5	9.2	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	SBL	SBT	SBR
Capacity (veh/h)	1043	-	-	11	617	1036	-	-
HCM Lane V/C Ratio	0.695	-	-	13.352	0.449	0.003	-	-
HCM Control Delay (s)	15.9	-		$ 6224.5	15.5	8.5	0	-
HCM Lane LOS	C	-	-	F	C	A	A	-
HCM 95th %tile Q(veh)	5.9	-	-	19.8	2.3	0	-	-

Notes

~: Volume exceeds capacity $: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1575	509	586	697	0	825
Future Volume (vph)	1575	509	586	697	0	825
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Grade (%)	-3%			-3%	-3%	
Total Lost time (s)	5.6	4.0	5.6	5.6		5.6
Lane Util. Factor	0.91	1.00	0.97	0.95		0.88
Frpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.85	1.00	1.00		0.85
Flt Protected	1.00	1.00	0.95	1.00		1.00
Satd. Flow (prot)	5111	1591	3485	3592		2828
Flt Permitted	1.00	1.00	0.95	1.00		1.00
Satd. Flow (perm)	5111	1591	3485	3592		2828
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1641	530	610	726	0	859
RTOR Reduction (vph)	0	0	0	0	0	5
Lane Group Flow (vph)	1641	530	610	726	0	854
Confl. Peds. (#/hr)						13
Heavy Vehicles (%)	3%	3%	2%	2%	2%	2%
Turn Type	NA	Free	Prot	NA		Over
Protected Phases	6		8	2 8		8
Permitted Phases		Free				8
Actuated Green, G (s)	25.2	59.8	23.4	59.8		23.4
Effective Green, g (s)	25.2	59.8	23.4	59.8		23.4
Actuated g/C Ratio	0.42	1.00	0.39	1.00		0.39
Clearance Time (s)	5.6		5.6			5.6
Vehicle Extension (s)	3.0		3.0			3.0
Lane Grp Cap (vph)	2153	1591	1363	3592		1106
v/s Ratio Prot	c0.32		0.18	0.20		c0.30
v/s Ratio Perm		0.33				
v/c Ratio	0.76	0.33	0.45	0.20		0.77
Uniform Delay, d1	14.7	0.0	13.4	0.0		15.9
Progression Factor	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.6	0.6	0.2	0.0		3.4
Delay (s)	16.4	0.6	13.7	0.0		19.3
Level of Service	B	A	B	A		B
Approach Delay (s)	12.5			6.3	19.3	
Approach LOS	B			A	B	

Intersection Summary

HCM 2000 Control Delay	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	59.8	Sum of lost time (s)	11.2
Intersection Capacity Utilization	69.9%	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 (veh/h)	0	0	15	423	24	446	19	1745	696	327	871	26
Future Volume (veh/h)	0	0	15	423	24	446	19	1745	696	327	871	26
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		0.97	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	1900	1776	1776	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	449	0	219	19	1781	0	334	889	27
Adj No. of Lanes	0	1	1	2	0	1	1	2	2	1	2	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	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	1	41	598	0	259	47	1838	1447	353	2427	74
Arrive On Green	0.00	0.00	0.00	0.17	0.00	0.17	0.03	0.52	0.00	0.20	0.69	0.69
Sat Flow, veh/h	0	1776	1509	3548	0	1535	1774	3539	2787	1774	3506	106
Grp Volume(v), veh/h	0	0	0	449	0	219	19	1781	0	334	449	467
Grp Sat Flow(s),veh/h/ln	0	1776	1509	1774	0	1535	1774	1770	1393	1774	1770	1843
Q Serve(g_s), s	0.0	0.0	0.0	16.3	0.0	18.7	1.4	66.0	0.0	25.2	14.2	14.2
Cycle Q Clear(g_c), s	0.0	0.0	0.0	16.3	0.0	18.7	1.4	66.0	0.0	25.2	14.2	14.2
Prop In Lane	0.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	0	1	41	598	0	259	47	1838	1447	353	1225	1276
V/C Ratio(X)	0.00	0.00	0.00	0.75	0.00	0.85	0.41	0.97	0.00	0.95	0.37	0.37
Avail Cap(c_a), veh/h	0	26	62	681	0	295	105	1872	1474	353	1225	1276
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	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	53.6	0.0	54.6	64.9	31.5	0.0	53.5	8.6	8.6
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.1	0.0	18.1	5.6	14.1	0.0	33.8	0.2	0.2
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	8.3	0.0	9.3	0.8	35.8	0.0	15.7	6.9	7.2
LnGrp Delay(d),s/veh	0.0	0.0	0.0	57.7	0.0	72.7	70.5	45.6	0.0	87.4	8.8	8.8
LnGrp LOS				E		E	E	D		F	A	A
Approach Vol, veh/h		0			668			1800			1250	
Approach Delay, s/veh		0.0			62.6			45.9			29.8	
Approach LOS					E			D			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	32.1	75.5		0.0	8.7	98.9		28.0				
Change Period (Y+Rc), s	5.1	5.1		3.0	5.1	5.1		5.1				
Max Green Setting (Gmax), s	27.0	71.7		2.0	8.0	90.7		26.0				
Max Q Clear Time (g_c+I1), s	27.2	68.0		0.0	3.4	16.2		20.7				
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	48.4		1.3				

Intersection Summary			
HCM 2010 Ctrl Delay			43.5
HCM 2010 LOS			D

Notes

User approved volume balancing among the lanes for turning movement.

Intersection												
Int Delay, s/veh	18.2											

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	23	972	25	20	847	65	16	1	29	77	2	30
Future Vol, veh/h	23	972	25	20	847	65	16	1	29	77	2	30
Conflicting Peds, #/hr	10	0	8	8	0	10	6	0	1	0	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	3	3	3	2	2	2	2	2	2	2	2	2
Mvmt Flow	24	1023	26	21	892	68	17	1	31	81	2	32

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	970	0	0	1057	0	0	1588	2105	534	1540	2084	496
Stage 1	-	-	-	-	-	-	1093	1093	-	978	978	-
Stage 2	-	-	-	-	-	-	495	1012	-	562	1106	-
Critical Hdwy	4.16	-	-	4.14	-	-	7.54	6.54	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	5.54	-	6.54	5.54	-
Follow-up Hdwy	2.23	-	-	2.22	-	-	3.52	4.02	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	700	-	-	655	-	-	72	51	491	~ 79	52	519
Stage 1	-	-	-	-	-	-	229	288	-	269	327	-
Stage 2	-	-	-	-	-	-	525	315	-	479	284	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	696	-	-	654	-	-	57	43	487	~ 64	44	511
Mov Cap-2 Maneuver	-	-	-	-	-	-	57	43	-	~ 64	44	-
Stage 1	-	-	-	-	-	-	208	262	-	244	301	-
Stage 2	-	-	-	-	-	-	452	290	-	410	258	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.6	0.6	49.8	$ 319.8
HCM LOS			E	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	127	696	-	-	654	-	-	83
HCM Lane V/C Ratio	0.381	0.035	-	-	0.032	-	-	1.382
HCM Control Delay (s)	49.8	10.4	0.4	-	10.7	0.4	-	$ 319.8
HCM Lane LOS	E	B	A	-	B	A	-	F
HCM 95th %tile Q(veh)	1.6	0.1	-	-	0.1	-	-	8.8

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)	18	919	103	145	649	22	236	14	143	74	14	22
Future Volume (veh/h)	18	919	103	145	649	22	236	14	143	74	14	22
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		0.98	0.99		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	1863	1863	1900	1845	1845	1900	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	19	967	108	153	683	23	248	15	0	78	15	23
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	1
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, %	2	2	2	3	3	3	2	2	2	2	2	2
Cap, veh/h	434	1804	201	292	1946	66	404	19	438	478	84	435
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.28	0.28	0.00	0.28	0.28	0.28
Sat Flow, veh/h	736	3206	358	517	3458	116	1112	67	1583	1399	304	1573
Grp Volume(v), veh/h	19	534	541	153	346	360	263	0	0	93	0	23
Grp Sat Flow(s),veh/h/ln	736	1770	1794	517	1752	1822	1179	0	1583	1703	0	1573
Q Serve(g_s), s	1.1	13.8	13.8	19.2	7.8	7.8	13.1	0.0	0.0	0.0	0.0	0.8
Cycle Q Clear(g_c), s	8.9	13.8	13.8	33.0	7.8	7.8	16.0	0.0	0.0	2.9	0.0	0.8
Prop In Lane	1.00		0.20	1.00		0.06	0.94		1.00	0.84		1.00
Lane Grp Cap(c), veh/h	434	996	1010	292	986	1025	422	0	438	562	0	435
V/C Ratio(X)	0.04	0.54	0.54	0.52	0.35	0.35	0.62	0.00	0.00	0.17	0.00	0.05
Avail Cap(c_a), veh/h	443	1017	1031	302	1019	1060	540	0	573	686	0	570
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	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	11.1	10.0	10.0	20.3	8.7	8.7	26.2	0.0	0.0	20.1	0.0	19.4
Incr Delay (d2), s/veh	0.0	0.5	0.5	1.5	0.2	0.2	1.5	0.0	0.0	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	0.2	6.8	6.9	2.8	3.8	4.0	5.1	0.0	0.0	1.4	0.0	0.3
LnGrp Delay(d),s/veh	11.1	10.5	10.5	21.8	8.9	8.9	27.7	0.0	0.0	20.2	0.0	19.4
LnGrp LOS	B	B	B	C	A	A	C			C		B
Approach Vol, veh/h		1094			859			263			116	
Approach Delay, s/veh		10.5			11.2			27.7			20.1	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		25.8		47.1		25.8		47.1
Change Period (Y+Rc), s		5.6		6.1		5.6		* 6.1
Max Green Setting (Gmax), s		26.4		41.9		26.4		* 42
Max Q Clear Time (g_c+I1), s		18.0		15.8		4.9		35.0
Green Ext Time (p_c), s		1.4		16.2		2.2		6.1

Intersection Summary			
HCM 2010 Ctrl Delay			13.2
HCM 2010 LOS			B

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Intersection	
Int Delay, s/veh	236.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1168	13	32	640	0	5	0	59	364	77	172
Future Vol, veh/h	0	1168	13	32	640	0	5	0	59	364	77	172
Conflicting Peds, #/hr	0	0	8	8	0	0	1	0	3	3	0	1
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	240	-	-	0	-	85	120	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	2	2	2	4	4	4	2	2	2	2	2	2
Mvmt Flow	0	1192	13	33	653	0	5	0	60	371	79	176

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	1213	0	0	1638	-	614	1317	1931	328
Stage 1	-	-	-	-	-	-	1206	-	-	718	718	-
Stage 2	-	-	-	-	-	-	432	-	-	599	1213	-
Critical Hdwy	-	-	-	4.18	-	-	7.54	-	6.94	7.54	6.54	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.54	-	-	6.54	5.54	-
Follow-up Hdwy	-	-	-	2.24	-	-	3.52	-	3.32	3.52	4.02	3.32
Pot Cap-1 Maneuver	0	-	-	560	-	0	66	0	435	~ 115	~ 65	668
Stage 1	0	-	-	-	-	0	195	0	-	386	431	-
Stage 2	0	-	-	-	-	0	572	0	-	455	253	-
Platoon blocked, %		-	-		-							
Mov Cap-1 Maneuver	-	-	-	558	-	-	-	-	430	~ 94	~ 61	667
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	~ 94	~ 61	-
Stage 1	-	-	-	-	-	-	195	-	-	386	406	-
Stage 2	-	-	-	-	-	-	320	-	-	390	251	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.6		$ 975.8
HCM LOS			-	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT	SBLn1	SBLn2
Capacity (veh/h)	-	430	-	-	558	-	94	164
HCM Lane V/C Ratio	-	0.14	-	-	0.059	-	3.951	1.549
HCM Control Delay (s)	-	14.7	-	-	11.9	-	$ 1420.8	$ 325.4
HCM Lane LOS	-	B	-	-	B	-	F	F
HCM 95th %tile Q(veh)	-	0.5	-	-	0.2	-	38.3	16.9

Notes

~: Volume exceeds capacity $: Delay exceeds 300s   +: Computation Not Defined   *: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1418	214	91	672	0	0
Future Vol, veh/h	1418	214	91	672	0	0
Conflicting Peds, #/hr	0	11	11	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	115	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	2	2	5	5	2	2
Mvmt Flow	1462	221	94	693	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1693	0	2117	852
Stage 1	-	-	-	-	1583	-
Stage 2	-	-	-	-	534	-
Critical Hdwy	-	-	4.2	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	-	-	2.25	-	3.52	3.32
Pot Cap-1 Maneuver	-	-	360	-	43	303
Stage 1	-	-	-	-	154	-
Stage 2	-	-	-	-	552	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	360	-	31	300
Mov Cap-2 Maneuver	-	-	-	-	31	-
Stage 1	-	-	-	-	152	-
Stage 2	-	-	-	-	408	-

Approach	EB	WB	NB
HCM Control Delay, s	0	2.2	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	360	-
HCM Lane V/C Ratio	-	-	-	0.261	-
HCM Control Delay (s)	0	-	-	18.5	-
HCM Lane LOS	A	-	-	C	-
HCM 95th %tile Q(veh)	-	-	-	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	369	993	56	32	431	623	52	270	43	276	53	280
Future Volume (veh/h)	369	993	56	32	431	623	52	270	43	276	53	280
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		0.98	1.00		0.99	0.99		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	1863	1863	1900	1776	1776	1776
Adj Flow Rate, veh/h	377	1013	57	33	440	636	53	276	44	282	54	0
Adj No. of Lanes	1	2	0	1	2	0	1	1	0	1	1	1
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	7	7	7
Cap, veh/h	371	1553	87	75	511	449	520	554	88	287	629	534
Arrive On Green	0.21	0.46	0.46	0.04	0.29	0.29	0.35	0.35	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1774	3406	192	1774	1770	1553	1341	1565	249	999	1776	1509
Grp Volume(v), veh/h	377	526	544	33	440	636	53	0	320	282	54	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1770	1553	1341	0	1814	999	1776	1509
Q Serve(g_s), s	20.9	23.0	23.0	1.8	23.5	28.9	2.7	0.0	13.8	21.6	2.0	0.0
Cycle Q Clear(g_c), s	20.9	23.0	23.0	1.8	23.5	28.9	4.8	0.0	13.8	35.4	2.0	0.0
Prop In Lane	1.00		0.10	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	371	807	833	75	511	449	520	0	642	287	629	534
V/C Ratio(X)	1.02	0.65	0.65	0.44	0.86	1.42	0.10	0.00	0.50	0.98	0.09	0.00
Avail Cap(c_a), veh/h	371	807	833	124	511	449	520	0	642	287	629	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	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.5	21.1	21.1	46.8	33.6	35.6	23.1	0.0	25.3	41.8	21.5	0.0
Incr Delay (d2), s/veh	51.1	1.9	1.8	4.1	13.9	200.4	0.1	0.0	0.6	47.8	0.1	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	15.5	11.7	12.1	1.0	13.5	37.3	1.0	0.0	7.0	11.6	1.0	0.0
LnGrp Delay(d),s/veh	90.7	22.9	22.9	50.8	47.5	235.9	23.2	0.0	25.9	89.6	21.6	0.0
LnGrp LOS	F	C	C	D	D	F	C		C	F	C	
Approach Vol, veh/h		1447			1109			373			336	
Approach Delay, s/veh		40.6			155.7			25.5			78.6	
Approach LOS		D			F			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.3	50.7		40.0	26.0	34.0		40.0
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	42.8		35.4	20.9	28.9		35.4
Max Q Clear Time (g_c+I1), s	3.8	25.0		37.4	22.9	30.9		15.8
Green Ext Time (p_c), s	0.0	13.3		0.0	0.0	0.0		3.8

Intersection Summary		
HCM 2010 Ctrl Delay		81.9
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	799	137	241	570	194	129	870	82	153	634	308
Future Volume (veh/h)	87	799	137	241	570	194	129	870	82	153	634	308
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		0.99	1.00		0.97
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	1825	1825	1825	1845	1845	1845	1810	1810	1810
Adj Flow Rate, veh/h	91	832	143	251	594	202	134	906	85	159	660	321
Adj No. of Lanes	1	2	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	3	3	3	5	5	5
Cap, veh/h	111	920	404	275	649	548	160	988	440	183	1022	444
Arrive On Green	0.06	0.26	0.26	0.16	0.36	0.36	0.09	0.28	0.28	0.11	0.30	0.30
Sat Flow, veh/h	1774	3539	1556	1739	1825	1540	1757	3505	1560	1723	3438	1494
Grp Volume(v), veh/h	91	832	143	251	594	202	134	906	85	159	660	321
Grp Sat Flow(s),veh/h/ln	1774	1770	1556	1739	1825	1540	1757	1752	1560	1723	1719	1494
Q Serve(g_s), s	6.4	28.7	9.5	17.9	39.2	12.3	9.5	31.6	5.2	11.5	21.1	24.3
Cycle Q Clear(g_c), s	6.4	28.7	9.5	17.9	39.2	12.3	9.5	31.6	5.2	11.5	21.1	24.3
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	111	920	404	275	649	548	160	988	440	183	1022	444
V/C Ratio(X)	0.82	0.90	0.35	0.91	0.91	0.37	0.84	0.92	0.19	0.87	0.65	0.72
Avail Cap(c_a), veh/h	111	923	406	288	664	560	221	1053	468	190	1022	444
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	58.4	45.2	38.1	52.2	38.8	30.2	56.4	43.9	34.4	55.5	38.6	39.7
Incr Delay (d2), s/veh	36.4	12.2	0.5	30.4	17.2	0.4	17.8	11.9	0.2	31.3	1.4	5.7
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	4.3	15.5	4.1	11.0	22.9	5.3	5.4	16.9	2.3	7.1	10.2	10.7
LnGrp Delay(d),s/veh	94.9	57.4	38.6	82.6	56.0	30.6	74.3	55.8	34.6	86.8	40.0	45.4
LnGrp LOS	F	E	D	F	E	C	E	E	C	F	D	D
Approach Vol, veh/h		1066			1047			1125			1140	
Approach Delay, s/veh		58.1			57.5			56.4			48.0	
Approach LOS		E			E			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	19.5	41.7	26.1	38.9	17.6	43.6	14.0	51.0
Change Period (Y+Rc), s	6.1	6.1	6.1	6.1	6.1	6.1	6.1	6.1
Max Green Setting (Gmax), s	13.9	37.9	20.9	32.9	15.9	35.9	7.9	45.9
Max Q Clear Time (g_c+I1), s	13.5	33.6	19.9	30.7	11.5	26.3	8.4	41.2
Green Ext Time (p_c), s	0.0	2.0	0.1	1.8	0.1	7.3	0.0	3.7

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)	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		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	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	173	398	128	143	412	0	169	753	77	133	1363	0
Adj No. of Lanes	2	1	1	2	1	1	1	3	0	1	3	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, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	283	510	431	273	495	421	201	1690	172	165	1756	0
Arrive On Green	0.08	0.27	0.27	0.08	0.27	0.00	0.11	0.36	0.36	0.09	0.34	0.00
Sat Flow, veh/h	3476	1881	1592	3390	1835	1560	1756	4640	471	1792	5305	0
Grp Volume(v), veh/h	173	398	128	143	412	0	169	543	287	133	1363	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1592	1695	1835	1560	1756	1678	1756	1792	1712	0
Q Serve(g_s), s	4.7	19.0	6.2	3.9	20.5	0.0	9.2	11.9	12.1	7.1	23.1	0.0
Cycle Q Clear(g_c), s	4.7	19.0	6.2	3.9	20.5	0.0	9.2	11.9	12.1	7.1	23.1	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	283	510	431	273	495	421	201	1222	639	165	1756	0
V/C Ratio(X)	0.61	0.78	0.30	0.52	0.83	0.00	0.84	0.44	0.45	0.81	0.78	0.00
Avail Cap(c_a), veh/h	286	567	480	279	566	481	231	1222	639	282	1913	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	43.1	32.8	28.1	42.9	33.4	0.0	42.2	23.4	23.5	43.3	28.6	0.0
Incr Delay (d2), s/veh	3.3	6.6	0.5	1.3	9.5	0.0	20.4	0.3	0.5	6.8	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	2.4	10.8	2.8	1.9	11.7	0.0	5.6	5.6	5.9	3.8	11.2	0.0
LnGrp Delay(d),s/veh	46.4	39.4	28.6	44.2	42.9	0.0	62.6	23.7	24.0	50.1	30.6	0.0
LnGrp LOS	D	D	C	D	D		E	C	C	D	C	
Approach Vol, veh/h		699			555			999			1496	
Approach Delay, s/veh		39.1			43.3			30.4			32.3	
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	13.1	40.8	12.0	31.2	15.3	38.6	12.1	31.1
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 15	33.7	* 8	29.3	* 13	36.2	* 8	* 30
Max Q Clear Time (g_c+I1), s	9.1	14.1	5.9	21.0	11.2	25.1	6.7	22.5
Green Ext Time (p_c), s	0.1	14.7	0.1	4.0	0.1	8.1	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay	34.7
HCM 2010 LOS	C

Notes

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

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		0.99	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	1881	1881	1881	1835	1835	1835	1844	1844	1881	1881	1881	1919
Adj Flow Rate, veh/h	341	432	43	115	380	0	257	1377	95	165	890	0
Adj No. of Lanes	2	1	1	2	1	1	1	3	0	1	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	407	535	448	259	447	380	289	1652	114	196	1484	0
Arrive On Green	0.12	0.28	0.28	0.08	0.24	0.00	0.16	0.34	0.34	0.11	0.29	0.00
Sat Flow, veh/h	3476	1881	1577	3390	1835	1560	1756	4803	331	1792	5305	0
Grp Volume(v), veh/h	341	432	43	115	380	0	257	962	510	165	890	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1577	1695	1835	1560	1756	1678	1778	1792	1712	0
Q Serve(g_s), s	9.7	21.5	2.0	3.3	19.9	0.0	14.4	26.5	26.5	9.1	15.0	0.0
Cycle Q Clear(g_c), s	9.7	21.5	2.0	3.3	19.9	0.0	14.4	26.5	26.5	9.1	15.0	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	407	535	448	259	447	380	289	1154	611	196	1484	0
V/C Ratio(X)	0.84	0.81	0.10	0.44	0.85	0.00	0.89	0.83	0.83	0.84	0.60	0.00
Avail Cap(c_a), veh/h	442	563	472	270	474	403	335	1181	625	228	1484	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	43.5	33.4	26.5	44.4	36.3	0.0	41.1	30.4	30.4	43.9	30.8	0.0
Incr Delay (d2), s/veh	12.0	8.4	0.1	0.9	13.5	0.0	21.3	5.2	9.3	20.2	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	5.3	12.4	0.9	1.6	11.7	0.0	8.7	13.1	14.6	5.6	7.2	0.0
LnGrp Delay(d),s/veh	55.5	41.9	26.6	45.3	49.8	0.0	62.4	35.6	39.7	64.1	31.4	0.0
LnGrp LOS	E	D	C	D	D		E	D	D	E	C	
Approach Vol, veh/h		816			495			1729			1055	
Approach Delay, s/veh		46.8			48.8			40.8			36.5	
Approach LOS		D			D			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	15.2	40.0	11.9	33.5	20.8	34.5	16.0	29.4
Change Period (Y+Rc), s	* 4.2	5.4	* 4.2	4.9	* 4.2	5.4	* 4.2	* 4.9
Max Green Setting (Gmax), s	* 13	35.4	* 8	30.1	* 19	29.0	* 13	* 26
Max Q Clear Time (g_c+I1), s	11.1	28.5	5.3	23.5	16.4	17.0	11.7	21.9
Green Ext Time (p_c), s	0.1	6.1	0.1	3.2	0.2	10.1	0.1	2.2

Intersection Summary			
HCM 2010 Ctrl Delay			41.8
HCM 2010 LOS			D

Notes

User approved pedestrian interval to be less than phase max green.

* HCM 2010 computational engine requires equal clearance times for the phases crossing the barrier.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	2	299	0	0	0	361	188	7	1	241	181
Future Volume (veh/h)	45	2	299	0	0	0	361	188	7	1	241	181
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Adj Sat Flow, veh/h/ln	1900	1776	1776				1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	47	2	30				380	198	7	1	254	51
Adj No. of Lanes	0	1	1				1	1	0	1	1	0
Peak Hour Factor	0.95	0.95	0.95				0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	7	7	7				2	2	2	2	2	2
Cap, veh/h	123	5	114				478	991	35	5	430	86
Arrive On Green	0.08	0.08	0.08				0.27	0.55	0.55	0.00	0.29	0.29
Sat Flow, veh/h	1625	69	1509				1774	1788	63	1774	1503	302
Grp Volume(v), veh/h	49	0	30				380	0	205	1	0	305
Grp Sat Flow(s),veh/h/ln	1694	0	1509				1774	0	1851	1774	0	1805
Q Serve(g_s), s	1.0	0.0	0.7				7.3	0.0	2.0	0.0	0.0	5.3
Cycle Q Clear(g_c), s	1.0	0.0	0.7				7.3	0.0	2.0	0.0	0.0	5.3
Prop In Lane	0.96		1.00				1.00		0.03	1.00		0.17
Lane Grp Cap(c), veh/h	128	0	114				478	0	1026	5	0	517
V/C Ratio(X)	0.38	0.00	0.26				0.79	0.00	0.20	0.21	0.00	0.59
Avail Cap(c_a), veh/h	833	0	742				848	0	1694	242	0	1035
HCM Platoon Ratio	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	16.1	0.0	16.0				12.4	0.0	4.1	18.2	0.0	11.2
Incr Delay (d2), s/veh	1.9	0.0	1.2				3.0	0.0	0.1	19.8	0.0	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
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.0				3.9	0.0	1.1	0.0	0.0	2.8
LnGrp Delay(d),s/veh	18.0	0.0	17.2				15.5	0.0	4.2	38.0	0.0	12.3
LnGrp LOS	B		B				B		A	D		B
Approach Vol, veh/h		79						585			306	
Approach Delay, s/veh		17.7						11.5			12.4	
Approach LOS		B						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		
Phs Duration (G+Y+Rc), s	4.6	24.8		7.3	14.4	15.0		
Change Period (Y+Rc), s	4.5	4.5		4.5	4.5	4.5		
Max Green Setting (Gmax), s	5.0	33.5		18.0	17.5	21.0		
Max Q Clear Time (g_c+I1), s	2.0	4.0		3.0	9.3	7.3		
Green Ext Time (p_c), s	0.0	3.3		0.2	0.8	2.6		

Intersection Summary			
HCM 2010 Ctrl Delay			12.3
HCM 2010 LOS			B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	2	266	0	0	0	696	485	18	3	306	190
Future Volume (veh/h)	139	2	266	0	0	0	696	485	18	3	306	190
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				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
Adj Sat Flow, veh/h/ln	1900	1792	1792				1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	145	2	74				725	505	19	3	319	43
Adj No. of Lanes	0	1	1				1	1	0	1	1	0
Peak Hour Factor	0.96	0.96	0.96				0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6				2	2	2	2	2	2
Cap, veh/h	194	3	176				777	1248	47	10	429	58
Arrive On Green	0.12	0.12	0.12				0.44	0.70	0.70	0.01	0.27	0.27
Sat Flow, veh/h	1685	23	1524				1774	1783	67	1774	1605	216
Grp Volume(v), veh/h	147	0	74				725	0	524	3	0	362
Grp Sat Flow(s),veh/h/ln	1708	0	1524				1774	0	1851	1774	0	1821
Q Serve(g_s), s	6.9	0.0	3.7				32.0	0.0	9.8	0.1	0.0	15.0
Cycle Q Clear(g_c), s	6.9	0.0	3.7				32.0	0.0	9.8	0.1	0.0	15.0
Prop In Lane	0.99		1.00				1.00		0.04	1.00		0.12
Lane Grp Cap(c), veh/h	197	0	176				777	0	1295	10	0	486
V/C Ratio(X)	0.75	0.00	0.42				0.93	0.00	0.40	0.30	0.00	0.74
Avail Cap(c_a), veh/h	393	0	351				959	0	1530	172	0	697
HCM Platoon Ratio	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	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.3	0.0	33.9				22.0	0.0	5.2	40.9	0.0	27.7
Incr Delay (d2), s/veh	5.5	0.0	1.6				13.7	0.0	0.2	15.9	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	0.1				18.5	0.0	5.0	0.1	0.0	7.9
LnGrp Delay(d),s/veh	40.9	0.0	35.5				35.7	0.0	5.4	56.7	0.0	30.2
LnGrp LOS	D		D				D		A	E		C
Approach Vol, veh/h		221						1249			365	
Approach Delay, s/veh		39.1						23.0			30.5	
Approach LOS		D						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		
Phs Duration (G+Y+Rc), s	5.1	63.3		14.1	40.8	27.6		
Change Period (Y+Rc), s	4.6	5.6		4.6	4.6	5.6		
Max Green Setting (Gmax), s	8.0	68.2		19.0	44.6	31.6		
Max Q Clear Time (g_c+I1), s	2.1	11.8		8.9	34.0	17.0		
Green Ext Time (p_c), s	0.0	7.1		0.7	2.1	5.0		

Intersection Summary			
HCM 2010 Ctrl Delay			26.4
HCM 2010 LOS			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	468	19	21	784	53	13	1	7	24	2	12
Future Volume (veh/h)	24	468	19	21	784	53	13	1	7	24	2	12
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	0.99		1.00	0.99		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	1792	1900	1900	1845	1900	1900	1667	1900	1900	1863	1900
Adj Flow Rate, veh/h	27	532	22	24	891	60	15	1	8	27	2	14
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	6	6	6	3	3	3	14	14	14	2	2	2
Cap, veh/h	184	1740	70	166	1792	119	305	5	39	312	6	41
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.08	0.08	0.08	0.08	0.08	0.08
Sat Flow, veh/h	51	3113	126	29	3206	213	872	58	465	955	71	495
Grp Volume(v), veh/h	300	0	281	513	0	462	24	0	0	43	0	0
Grp Sat Flow(s),veh/h/ln	1682	0	1607	1809	0	1639	1395	0	0	1521	0	0
Q Serve(g_s), s	0.0	0.0	2.3	0.0	0.0	4.4	0.0	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear(g_c), s	2.2	0.0	2.3	4.3	0.0	4.4	0.3	0.0	0.0	0.6	0.0	0.0
Prop In Lane	0.09		0.08	0.05		0.13	0.62		0.33	0.63		0.33
Lane Grp Cap(c), veh/h	1096	0	899	1161	0	916	349	0	0	360	0	0
V/C Ratio(X)	0.27	0.00	0.31	0.44	0.00	0.50	0.07	0.00	0.00	0.12	0.00	0.00
Avail Cap(c_a), veh/h	1330	0	1150	1434	0	1172	1174	0	0	1285	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	2.9	0.0	3.0	3.4	0.0	3.4	10.7	0.0	0.0	10.8	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.3	0.0	0.4	0.1	0.0	0.0	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	1.1	0.0	1.1	2.1	0.0	2.0	0.2	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d),s/veh	3.1	0.0	3.2	3.7	0.0	3.8	10.8	0.0	0.0	11.0	0.0	0.0
LnGrp LOS	A		A	A		A	B			B		
Approach Vol, veh/h		581			975			24			43	
Approach Delay, s/veh		3.1			3.7			10.8			11.0	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		18.6		6.6		18.6		6.6
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0
Max Q Clear Time (g_c+I1), s		4.3		2.6		6.4		2.3
Green Ext Time (p_c), s		8.3		0.2		7.4		0.2

Intersection Summary		
HCM 2010 Ctrl Delay		3.8
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	23	972	25	20	847	65	16	1	29	77	2	30
Future Volume (veh/h)	23	972	25	20	847	65	16	1	29	77	2	30
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	0.99		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	1845	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	24	1023	26	21	892	68	17	1	31	81	2	32
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	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, %	3	3	3	2	2	2	2	2	2	2	2	2
Cap, veh/h	131	1971	49	129	1883	142	201	28	136	324	8	55
Arrive On Green	0.59	0.59	0.59	0.59	0.59	0.59	0.13	0.13	0.13	0.13	0.13	0.13
Sat Flow, veh/h	26	3340	84	23	3191	240	386	208	1024	1013	63	415
Grp Volume(v), veh/h	557	0	516	513	0	468	49	0	0	115	0	0
Grp Sat Flow(s),veh/h/ln	1787	0	1663	1805	0	1650	1619	0	0	1491	0	0
Q Serve(g_s), s	0.0	0.0	6.0	0.0	0.0	5.3	0.0	0.0	0.0	1.4	0.0	0.0
Cycle Q Clear(g_c), s	5.8	0.0	6.0	5.1	0.0	5.3	0.9	0.0	0.0	2.2	0.0	0.0
Prop In Lane	0.04		0.05	0.04		0.15	0.35		0.63	0.70		0.28
Lane Grp Cap(c), veh/h	1170	0	981	1180	0	974	364	0	0	387	0	0
V/C Ratio(X)	0.48	0.00	0.53	0.44	0.00	0.48	0.13	0.00	0.00	0.30	0.00	0.00
Avail Cap(c_a), veh/h	1370	0	1179	1381	0	1170	995	0	0	985	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	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	3.9	0.0	4.0	3.8	0.0	3.8	12.6	0.0	0.0	13.1	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.4	0.3	0.0	0.4	0.2	0.0	0.0	0.4	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	2.9	0.0	2.7	2.7	0.0	2.4	0.4	0.0	0.0	1.0	0.0	0.0
LnGrp Delay(d),s/veh	4.2	0.0	4.4	4.0	0.0	4.2	12.7	0.0	0.0	13.5	0.0	0.0
LnGrp LOS	A		A	A		A	B			B		
Approach Vol, veh/h		1073			981			49			115	
Approach Delay, s/veh		4.3			4.1			12.7			13.5	
Approach LOS		A			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		23.6		8.8		23.6		8.8
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		23.0		18.0		23.0		18.0
Max Q Clear Time (g_c+I1), s		8.0		4.2		7.3		2.9
Green Ext Time (p_c), s		11.2		0.7		11.6		0.7

Intersection Summary	
HCM 2010 Ctrl Delay	4.9
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	548	3	32	699	0	4	0	14	195	45	221
Future Volume (veh/h)	0	548	3	32	699	0	4	0	14	195	45	221
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		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	0	1792	1900	1827	1827	0	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	623	3	36	794	0	5	0	16	222	51	251
Adj No. of Lanes	0	2	0	1	2	0	0	1	1	1	1	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	6	6	4	4	0	2	2	2	2	2	2
Cap, veh/h	0	1356	7	386	1355	0	437	0	595	507	103	508
Arrive On Green	0.00	0.39	0.39	0.39	0.39	0.00	0.38	0.00	0.38	0.38	0.38	0.38
Sat Flow, veh/h	0	3565	17	778	3563	0	666	0	1581	1390	274	1348
Grp Volume(v), veh/h	0	305	321	36	794	0	5	0	16	222	0	302
Grp Sat Flow(s),veh/h/ln	0	1703	1789	778	1736	0	666	0	1581	1390	0	1622
Q Serve(g_s), s	0.0	5.1	5.1	1.4	7.0	0.0	0.1	0.0	0.2	5.6	0.0	5.5
Cycle Q Clear(g_c), s	0.0	5.1	5.1	6.5	7.0	0.0	5.6	0.0	0.2	11.3	0.0	5.5
Prop In Lane	0.00		0.01	1.00		0.00	1.00		1.00	1.00		0.83
Lane Grp Cap(c), veh/h	0	664	698	386	1355	0	437	0	595	507	0	611
V/C Ratio(X)	0.00	0.46	0.46	0.09	0.59	0.00	0.01	0.00	0.03	0.44	0.00	0.49
Avail Cap(c_a), veh/h	0	795	835	446	1620	0	534	0	738	632	0	757
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	8.7	8.7	11.2	9.3	0.0	11.4	0.0	7.6	13.6	0.0	9.2
Incr Delay (d2), s/veh	0.0	0.5	0.5	0.1	0.4	0.0	0.0	0.0	0.0	0.6	0.0	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	0.0	2.5	2.6	0.3	3.4	0.0	0.0	0.0	0.1	2.2	0.0	2.5
LnGrp Delay(d),s/veh	0.0	9.2	9.2	11.3	9.7	0.0	11.4	0.0	7.6	14.2	0.0	9.8
LnGrp LOS		A	A	B	A		B		A	B		A
Approach Vol, veh/h		626			830			21			524	
Approach Delay, s/veh		9.2			9.8			8.5			11.7	
Approach LOS		A			A			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		19.6		19.0		19.6		19.0
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		18.0		18.0		18.0		18.0
Max Q Clear Time (g_c+I1), s		7.1		13.3		9.0		7.6
Green Ext Time (p_c), s		6.7		1.2		5.8		2.0

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)	0	1168	13	32	640	0	5	0	59	364	77	172
Future Volume (veh/h)	0	1168	13	32	640	0	5	0	59	364	77	172
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		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	0	1863	1900	1827	1827	0	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	0	1192	13	33	653	0	5	0	60	371	79	176
Adj No. of Lanes	0	2	0	1	2	0	0	1	1	1	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, %	0	2	2	4	4	0	2	2	2	2	2	2
Cap, veh/h	0	1593	17	221	1542	0	436	0	591	488	192	428
Arrive On Green	0.00	0.44	0.44	0.44	0.44	0.00	0.37	0.00	0.37	0.37	0.37	0.37
Sat Flow, veh/h	0	3679	39	453	3563	0	778	0	1580	1335	514	1144
Grp Volume(v), veh/h	0	588	617	33	653	0	5	0	60	371	0	255
Grp Sat Flow(s),veh/h/ln	0	1770	1855	453	1736	0	778	0	1580	1335	0	1658
Q Serve(g_s), s	0.0	13.7	13.7	3.2	6.4	0.0	0.2	0.0	1.2	12.7	0.0	5.6
Cycle Q Clear(g_c), s	0.0	13.7	13.7	16.9	6.4	0.0	5.8	0.0	1.2	18.5	0.0	5.6
Prop In Lane	0.00		0.02	1.00		0.00	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	0	786	824	221	1542	0	436	0	591	488	0	620
V/C Ratio(X)	0.00	0.75	0.75	0.15	0.42	0.00	0.01	0.00	0.10	0.76	0.00	0.41
Avail Cap(c_a), veh/h	0	805	844	226	1578	0	436	0	591	488	0	620
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	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	11.4	11.4	18.5	9.4	0.0	13.6	0.0	10.1	18.9	0.0	11.5
Incr Delay (d2), s/veh	0.0	3.8	3.6	0.3	0.2	0.0	0.0	0.0	0.1	6.8	0.0	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	0.0	7.4	7.7	0.4	3.0	0.0	0.1	0.0	0.5	5.9	0.0	2.6
LnGrp Delay(d),s/veh	0.0	15.3	15.1	18.8	9.6	0.0	13.6	0.0	10.2	25.7	0.0	11.9
LnGrp LOS		B	B	B	A		B		B	C		B
Approach Vol, veh/h		1205			686			65			626	
Approach Delay, s/veh		15.2			10.0			10.4			20.1	
Approach LOS		B			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		26.5		23.0		26.5		23.0
Change Period (Y+Rc), s		4.5		4.5		4.5		4.5
Max Green Setting (Gmax), s		22.5		18.5		22.5		18.5
Max Q Clear Time (g_c+I1), s		15.7		20.5		18.9		7.8
Green Ext Time (p_c), s		5.5		0.0		3.0		2.4

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)	210	384	25	8	507	337	23	78	3	210	56	275
Future Volume (veh/h)	210	384	25	8	507	337	23	78	3	210	56	275
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	0.99		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	1845	1845	1900	1863	1863	1863	1863	1863	1900	1792	1792	1792
Adj Flow Rate, veh/h	233	427	28	9	563	127	26	87	3	233	62	0
Adj No. of Lanes	1	2	0	1	1	1	1	1	0	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	2	2	2	2	2	2	6	6	6
Cap, veh/h	277	1712	112	28	691	582	422	483	17	387	483	411
Arrive On Green	0.16	0.51	0.51	0.02	0.37	0.37	0.27	0.27	0.27	0.27	0.27	0.00
Sat Flow, veh/h	1757	3339	218	1774	1863	1568	1328	1790	62	1245	1792	1524
Grp Volume(v), veh/h	233	223	232	9	563	127	26	0	90	233	62	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1804	1774	1863	1568	1328	0	1851	1245	1792	1524
Q Serve(g_s), s	9.5	5.2	5.3	0.4	20.0	4.1	1.1	0.0	2.7	13.0	1.9	0.0
Cycle Q Clear(g_c), s	9.5	5.2	5.3	0.4	20.0	4.1	3.0	0.0	2.7	15.7	1.9	0.0
Prop In Lane	1.00		0.12	1.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	277	899	925	28	691	582	422	0	499	387	483	411
V/C Ratio(X)	0.84	0.25	0.25	0.32	0.81	0.22	0.06	0.00	0.18	0.60	0.13	0.00
Avail Cap(c_a), veh/h	356	983	1012	169	845	711	552	0	681	510	659	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	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.0	10.0	10.0	35.7	20.8	15.8	21.4	0.0	20.6	26.6	20.3	0.0
Incr Delay (d2), s/veh	13.3	0.1	0.1	6.2	5.1	0.2	0.1	0.0	0.2	1.5	0.1	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	5.6	2.5	2.6	0.2	11.2	1.8	0.4	0.0	1.4	4.6	1.0	0.0
LnGrp Delay(d),s/veh	43.3	10.1	10.1	42.0	25.9	16.0	21.5	0.0	20.8	28.1	20.4	0.0
LnGrp LOS	D	B	B	D	C	B	C		C	C	C	
Approach Vol, veh/h		688			699			116			295	
Approach Delay, s/veh		21.4			24.3			20.9			26.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.3	42.8		24.4	16.7	32.3		24.4
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6
Max Green Setting (Gmax), s	7.0	41.2		27.0	14.9	33.3		27.0
Max Q Clear Time (g_c+I1), s	2.4	7.3		17.7	11.5	22.0		5.0
Green Ext Time (p_c), s	0.0	8.4		1.2	0.2	5.2		1.7

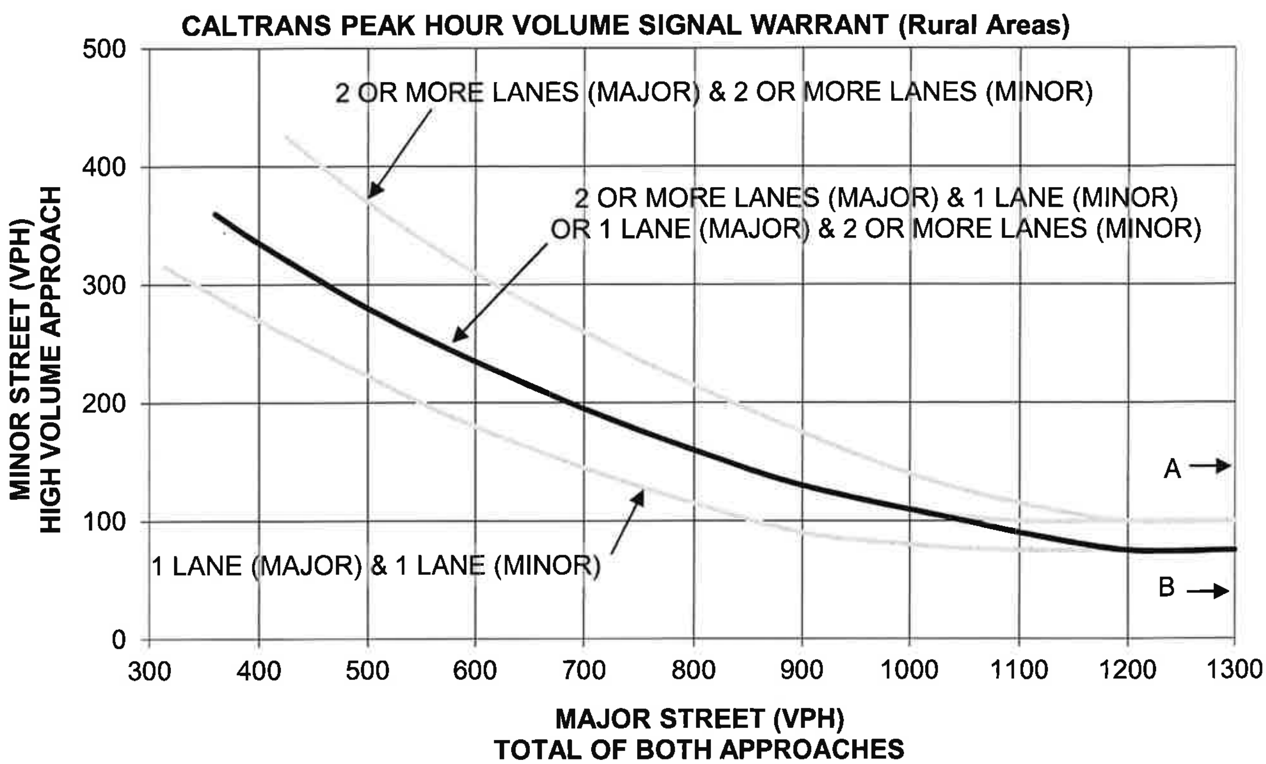
Intersection Summary			
HCM 2010 Ctrl Delay			23.3
HCM 2010 LOS			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	369	993	56	32	431	623	52	270	43	276	53	280
Future Volume (veh/h)	369	993	56	32	431	623	52	270	43	276	53	280
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		0.98	1.00		0.99	0.99		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	1900	1776	1776	1776
Adj Flow Rate, veh/h	377	1013	57	33	440	443	53	276	44	282	54	0
Adj No. of Lanes	1	2	0	1	1	1	1	1	0	1	1	1
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	7	7	7
Cap, veh/h	364	1553	87	75	546	455	520	554	88	287	629	534
Arrive On Green	0.20	0.46	0.46	0.04	0.29	0.29	0.35	0.35	0.35	0.35	0.35	0.00
Sat Flow, veh/h	1774	3406	192	1774	1863	1554	1341	1565	249	999	1776	1509
Grp Volume(v), veh/h	377	526	544	33	440	443	53	0	320	282	54	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1828	1774	1863	1554	1341	0	1814	999	1776	1509
Q Serve(g_s), s	20.5	23.0	23.0	1.8	21.9	28.2	2.7	0.0	13.8	21.6	2.0	0.0
Cycle Q Clear(g_c), s	20.5	23.0	23.0	1.8	21.9	28.2	4.8	0.0	13.8	35.4	2.0	0.0
Prop In Lane	1.00		0.10	1.00		1.00	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	364	807	833	75	546	455	520	0	642	287	629	534
V/C Ratio(X)	1.04	0.65	0.65	0.44	0.81	0.97	0.10	0.00	0.50	0.98	0.09	0.00
Avail Cap(c_a), veh/h	364	807	833	124	546	455	520	0	642	287	629	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	1.00	1.00	0.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.8	21.1	21.1	46.8	32.7	35.0	23.1	0.0	25.3	41.8	21.5	0.0
Incr Delay (d2), s/veh	57.0	1.9	1.8	4.1	8.7	35.1	0.1	0.0	0.6	47.8	0.1	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	15.8	11.7	12.1	1.0	12.6	16.5	1.0	0.0	7.0	11.6	1.0	0.0
LnGrp Delay(d),s/veh	96.7	22.9	22.9	50.8	41.4	70.1	23.2	0.0	25.9	89.6	21.6	0.0
LnGrp LOS	F	C	C	D	D	E	C		C	F	C	
Approach Vol, veh/h		1447			916			373			336	
Approach Delay, s/veh		42.1			55.6			25.5			78.6	
Approach LOS		D			E			C			E	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.3	50.7		40.0	25.6	34.4		40.0				
Change Period (Y+Rc), s	5.1	5.1		4.6	5.1	5.1		4.6				
Max Green Setting (Gmax), s	7.0	42.8		35.4	20.5	29.3		35.4				
Max Q Clear Time (g_c+I1), s	3.8	25.0		37.4	22.5	30.2		15.8				
Green Ext Time (p_c), s	0.0	11.1		0.0	0.0	0.0		3.8				
Intersection Summary												
HCM 2010 Ctrl Delay			48.1									
HCM 2010 LOS			D									

K. Warrant Worksheets

Warrant 3A - Peak Hour Warrant

Intersection #4 - Sherwood Drive / Sherwood Place



Scenario	Sherwood North/South	Sherwood East/West	Warrant Met?
A. Cum+Pro AM	3285	142	Yes
B. Cum+Pro PM	3337	44	No

Notes:

1. 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.
2. Bold line applies to intersection geometry.
3. Northbound and Westbound right turn movement have been excluded from this analysis, as they are free right turns and would not be controlled by a potential signal at this location.

Warrant 3 (Part B) - Peak Hour Delay
#4 - Sherwood Drive / Sherwood Place

Number of Approaches to Intersection:		3 approaches	**Minimum Entering Vehicles:**	**650**
Total Entering Volumes:	Cum+Pro AM:	3,486 vehicles		
	Cum+Pro PM:	3,491 vehicles		

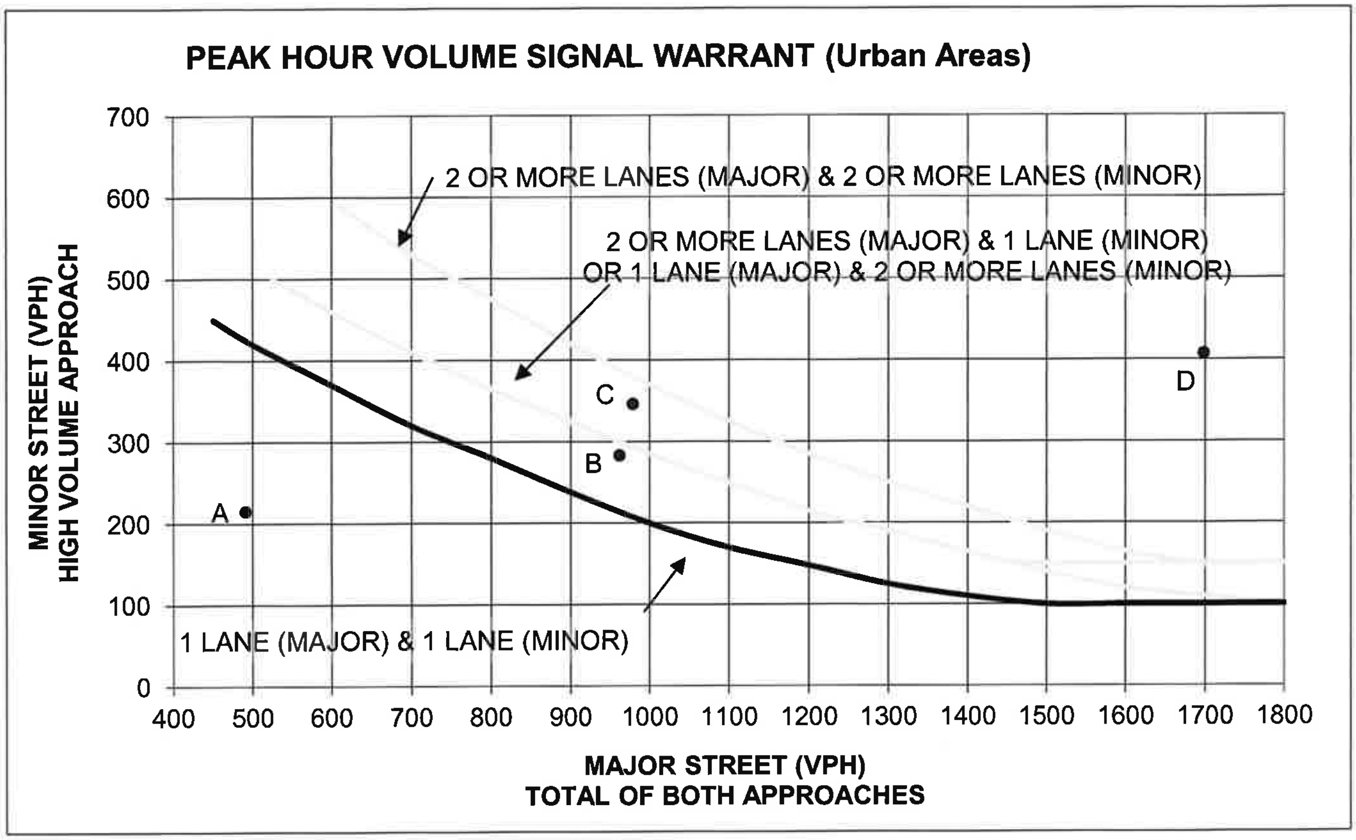
Street	Direction	Scenario	Peak Hour	No. of Stopped Vehicles	Average Vehicle Delay (sec)	Total Vehicle Delay (sec)	Total Delay (hours)	Min. 4 Veh-Hrs of Delay? (Approach)	At least 100 Veh? (Approach)	At least 650 Veh? (Intersection)	Warrant Met?
Sherwood Place	WB	Cum+Pro	AM	142	37.6	5,339	1.48	NO	Yes	Yes	**NO**
Sherwood Place	WB	Cum+Pro	PM	44	49.1	2,160	0.60	NO	NO	Yes	**NO**

Notes:
1. Warrant based on level of service calculations.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. Cum+Pro = Cumulative Plus Project.

Warrant 3A - Peak Hour Warrant

Intersection #7 -

Kern Street / US 101 Northbound Ramps - Mobray Way



Scenario	Kern North/South	US 101 NB East/West	Warrant Met?
A. Bk+Pro AM	491	215	No
B. Bk+Pro PM	962	283	Yes
C. Cum+Pro AM	979	346	Yes
D. Cum+Pro PM	1698	407	Yes

Notes:

1. 150 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 100 VPH applies as the lower threshold volume for a minor street approaching with one lane.
2. Bold line applies to intersection geometry.

Warrant 3 (Part B) - Peak Hour Delay
#7 - Kern Street / US 101 Northbound Ramps - Mobray Way

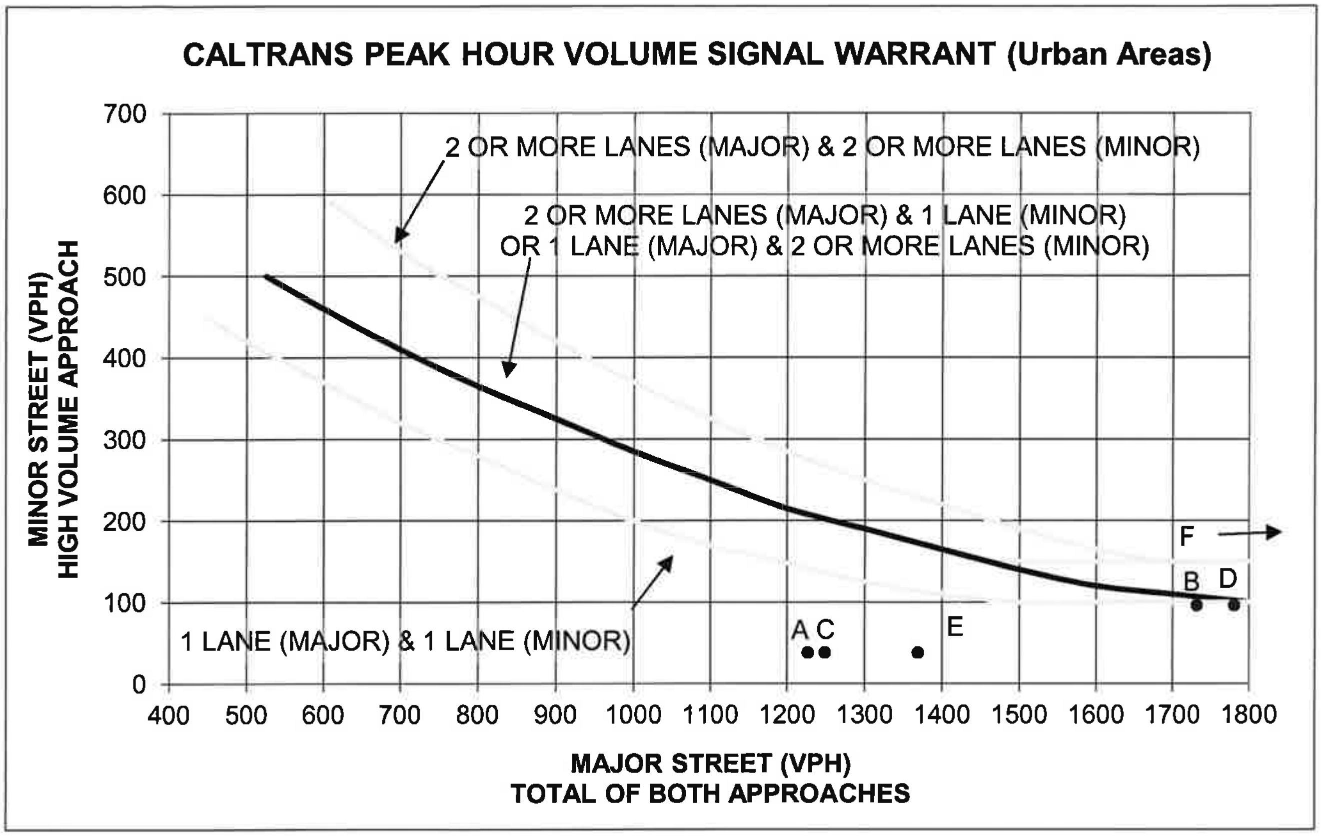
Number of Approaches to Intersection:		4 approaches	**Minimum Entering Vehicles:**	**800 vehicles**
Total Entering Volumes:	Bk+Pro AM:	706 vehicles		
	Bk+Pro PM:	1,248 vehicles		
	Cum+Pro AM:	910 vehicles		
	Cum+Pro PM:	1,676 vehicles		

Street	Direction	Scenario	Peak Hour	No. of Stopped Vehicles	Average Vehicle Delay (sec)	Total Vehicle Delay (sec)	Total Delay (hours)	Min. 4 Veh-Hrs of Delay? (Approach)	At least 100 Veh? (Approach)	At least 800 Veh? (Intersection)	Warrant Met?
US 101 NB	EB	Bk+Pro	AM	215	11.0	2,365.0	0.66	NO	Yes	NO	**NO**
US 101 NB	EB	Bk+Pro	PM	283	71.2	20,149.6	5.60	Yes	Yes	Yes	**Yes**
US 101 NB	EB	Cum+Pro	AM	346	21.3	7,369.8	2.05	NO	Yes	Yes	**NO**
US 101 NB	EB	Cum+Pro	PM	407	266.5	108,465.5	30.13	Yes	Yes	Yes	**Yes**

Notes:
1. Warrant based on level of service calculations.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. Bk+Pro, Cum+Pro = Background Plus Project, Cumulative Plus Project

Warrant 3A - Peak-Hour Warrant

Intersection #10 - Sun Street - E Market Street



Scenario	E Market East/West	Sun North/South	Warrant Met?
A. Ex+Pro AM	1227	38	No
B. Ex+Pro PM	1732	96	No
C. Bk+Pro AM	1249	38	No
D. Bk+Pro PM	1781	96	No
E. Cum+Pro AM	1369	38	No
F. Cum+Pro PM	1952	109	Yes

Notes:

1. 150 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 100 VPH applies as the lower threshold volume for a minor street approaching with one lane.
2. Bold line applies to intersection geometry.

Warrant 3 (Part B) - Peak Hour Delay
#10 - Sun Street / E Market Street

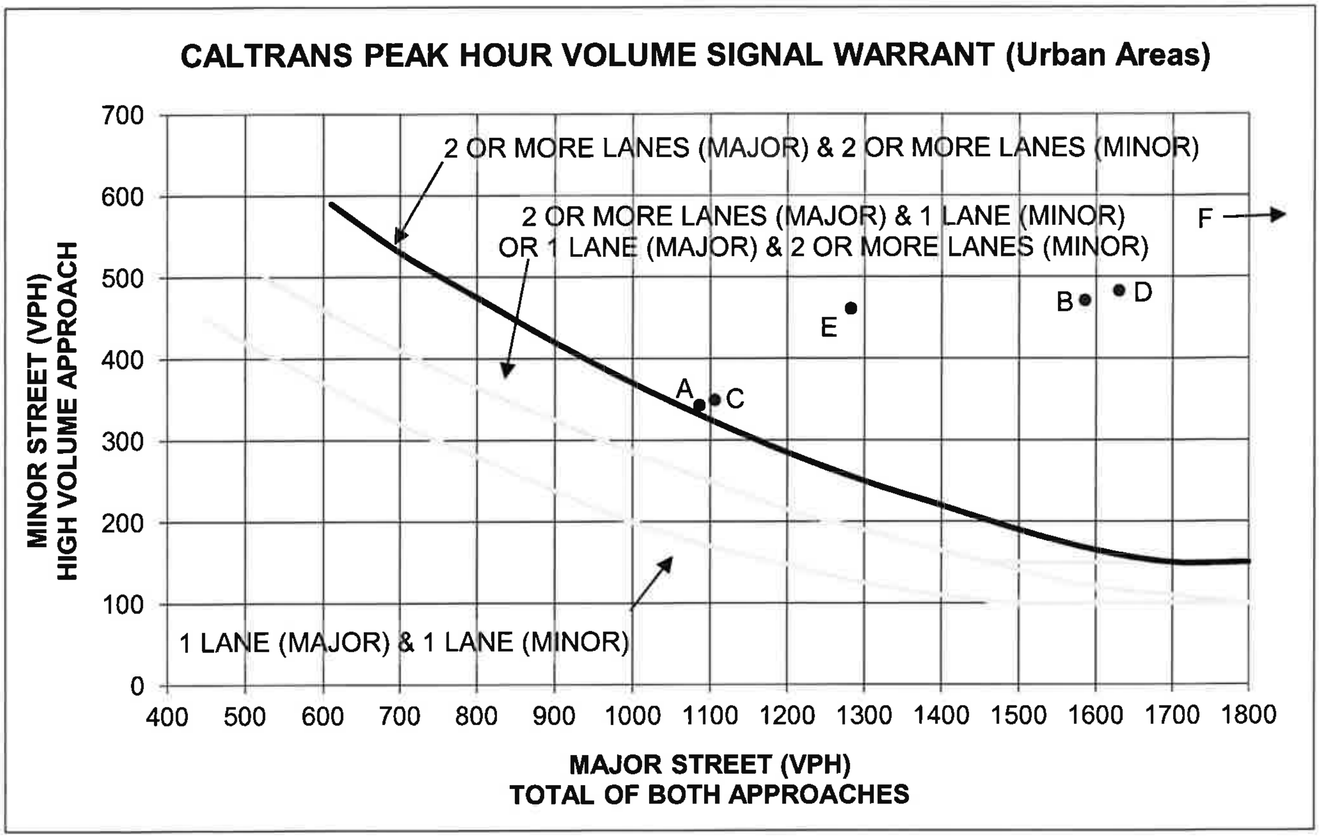
Number of Approaches to Intersection:		4 approaches	**Minimum Entering Vehicles:**	**800**
Total Entering Volumes:	Ex+Pro AM:	1,284 vehicles	Cum+Pro AM:	1,470 vehicles
	Ex+Pro PM:	1,875 vehicles	Cum+Pro PM:	2,058 vehicles
	Bk+Pro AM:	1,306 vehicles		
	Bk+Pro PM:	1,924 vehicles		

Street	Direction	Scenario	Peak Hour	No. of Stopped Vehicles	Average Vehicle Delay (sec)	Total Vehicle Delay (sec)	Total Delay (hours)	Min. 4 Veh-Hrs of Delay? (Approach)	At least 100 Veh? (Approach)	At least 800 Veh? (Intersection)	Warrant Met?
Sun	NB	Ex+Pro	AM	21	25.8	542	0.15	NO	NO	Yes	**NO**
Sun	SB	Ex+Pro	AM	34	34.7	1,180	0.33	NO	NO	Yes	**NO**
Sun	NB	Ex+Pro	PM	38	33.4	1,269	0.35	NO	NO	Yes	**NO**
Sun	SB	Ex+Pro	PM	96	142.2	13,651	3.79	NO	NO	Yes	**NO**
Sun	NB	Bk+Pro	AM	21	26.8	563	0.16	NO	NO	Yes	**NO**
Sun	SB	Bk+Pro	AM	38	39	1,482	0.41	NO	NO	Yes	**NO**
Sun	NB	Bk+Pro	PM	38	36.1	1,372	0.38	NO	NO	Yes	**NO**
Sun	SB	Bk+Pro	PM	96	166	15,936	4.43	Yes	NO	Yes	**NO**
Sun	NB	Cum+Pro	AM	21	29.3	615	0.17	NO	NO	Yes	**NO**
Sun	SB	Cum+Pro	AM	38	41.8	1,588	0.44	NO	NO	Yes	**NO**
Sun	NB	Cum+Pro	PM	46	49.8	2,291	0.64	NO	NO	Yes	**NO**
Sun	SB	Cum+Pro	PM	109	319.8	34,858	9.68	Yes	Yes	Yes	**Yes**

Notes:
1. Warrant based on level of service calculations.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. Ex+Pro, Bk+Pro, Cum+Pro = Existing Plus Project, Background Plus Project, Cumulative Plus Project

Warrant 3A - Peak-Hour Warrant

Intersection #12 - Merced Street - US 101 Southbound Offramp / E Market Street



Scenario	E Market East/West	Merced North/South	Warrant Met?
A. Ex+Pro AM	1086	343	Yes
B. Ex+Pro PM	1585	471	Yes
C. Bk+Pro AM	1106	349	Yes
D. Bk+Pro PM	1630	483	Yes
E. Cum+Pro AM	1282	461	Yes
F. Cum+Pro PM	1853	613	Yes

Notes:

1. 150 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 100 VPH applies as the lower threshold volume for a minor street approaching with one lane.

2. Bold line applies to intersection geometry.

Warrant 3 (Part B) - Peak Hour Delay
#12 - Merced Street / US 101 Southbound Offramp / E Market Street

Number of Approaches to Intersection:		4 approaches	**Minimum Entering Vehicles:**		**800**
Total Entering Volumes:	Ex+Pro AM:	1,450 vehicles		Cum+Pro AM:	1,737 vehicles
	Ex+Pro PM:	2,116 vehicles		Cum+Pro PM:	2,536 vehicles
	Bk+Pro AM:	1,476 vehicles			
	Bk+Pro PM:	2,173 vehicles			

Street	Direction	Scenario	Peak Hour	No. of Stopped Vehicles	Average Vehicle Delay (sec)	Total Vehicle Delay (sec)	Total Delay (hours)	Min. 4 Veh-Hrs of Delay? (Approach)	At least 100 Veh? (Approach)	At least 800 Veh? (Intersection)	Warrant Met?
Merced	NB	Ex+Pro	AM	18	19.2	346	0.10	NO	NO	Yes	**NO**
US 101 SB Offramp	SB	Ex+Pro	AM	343	90.8	31,144	8.65	Yes	Yes	Yes	**Yes**
Merced	NB	Ex+Pro	PM	53	22.2	1,177	0.33	NO	NO	Yes	**NO**
US 101 SB Offramp	SB	Ex+Pro	PM	471	321.3	151,332	42.04	Yes	Yes	Yes	**Yes**
Merced	NB	Bk+Pro	AM	18	19.9	358	0.10	NO	NO	Yes	**NO**
US 101 SB Offramp	SB	Bk+Pro	AM	349	102.2	35,668	9.91	Yes	Yes	Yes	**Yes**
Merced	NB	Bk+Pro	PM	53	24.4	1,293	0.36	NO	NO	Yes	**NO**
US 101 SB Offramp	SB	Bk+Pro	PM	483	376.6	181,898	50.53	Yes	Yes	Yes	**Yes**
Merced	NB	Cum+Pro	AM	18	24.2	436	0.12	NO	NO	Yes	**NO**
US 101 SB Offramp	SB	Cum+Pro	AM	461	184.3	84,962	23.60	Yes	Yes	Yes	**Yes**
Merced	NB	Cum+Pro	PM[4]	64	2,500.0	160,000	44.44	Yes	NO	Yes	**NO**
US 101 SB Offramp	SB	Cum+Pro	PM	613	975.8	598,165	166.16	Yes	Yes	Yes	**Yes**

Notes:
1. Warrant based on level of service calculations.
2. NB, SB, EB, WB = Northbound, Southbound, Eastbound, Westbound.
3. Ex+Pro, Bk+Pro, Cum+Pro = Existing Plus Project, Background Plus Project, Cumulative Plus Project
4. Delay exceeds ability to be quantified by analysis software; therefore, delay is assumed to be 2,500 seconds.

L. Traffic Volume Count Comparisons

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON
INTERSECTION 1

		AM PEAK HOUR																
Intersection 1		Eastbound				Westbound				Northbound				Southbound				
Natividad / Laurel		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		126	309	66	501	761	457	211	1429	41	455	422	918	218	631	44	893	3741
Rodeo Property TIA Existing Volume		126	309	66	501	761	457	211	1429	41	505	422	968	218	831	44	1093	3991
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	50	0	50	0	200	0	200	250
Hacienda Phase III/IV TIA	1/14/2014	128	415	95	638	769	606	382	1757	36	571	516	1123	299	761	59	1119	4637
Difference	Rodeo Volumes - Hacienda TIA	-2	-106	-29	-137	-8	-149	-171	-328	5	-66	-94	-155	-81	70	-15	-26	-646
Ratio	Rodeo Volumes / Hacienda TIA	0.98	0.74	0.69	0.79	0.99	0.75	0.55	0.81	1.14	0.88	0.82	0.86	0.73	1.09	0.75	0.98	0.86

		PM PEAK HOUR																
Intersection 1		Eastbound				Westbound				Northbound				Southbound				
Natividad / Laurel		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		91	678	75	844	566	548	446	1560	93	656	890	1639	445	548	71	1064	5107
Rodeo Property TIA Existing Volume		91	678	75	844	616	548	446	1610	93	656	890	1639	445	648	71	1164	5257
Adjustment to Rodeo Property Count		0	0	0	0	50	0	0	50	0	0	0	0	0	100	0	100	150
Hacienda Phase III/IV TIA	1/14/2014	92	685	65	842	616	569	407	1592	86	578	846	1510	382	505	70	957	4901
Difference	Rodeo Volumes - Hacienda TIA	-1	-7	10	2	0	-21	39	18	7	78	44	129	63	143	1	207	356
Ratio	Rodeo Volumes / Hacienda TIA	0.99	0.99	1.15	1	1	0.96	1.1	1.01	1.08	1.13	1.05	1.09	1.16	1.28	1.01	1.22	1.07

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON
INTERSECTION 2

		AM PEAK HOUR																
Intersection 2		Eastbound				Westbound				Northbound				Southbound				
Natividad-Sherwood / Bernal		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		291	2	48	341	9	8	19	36	29	594	4	627	6	1146	422	1574	2578
Rodeo Property TIA Existing Volume		291	2	98	391	9	8	19	36	29	761	4	794	6	1295	422	1723	2944
Adjustment to Rodeo Property Count		0	0	50	50	0	0	0	0	0	167	0	167	0	149	0	149	366
Hacienda Phase III/IV TIA	1/14/2014	300	5	88	393	12	7	25	44	55	812	6	873	16	1300	388	1704	3014
Difference	Rodeo Volumes - Hacienda TIA	-9	-3	10	-2	-3	1	-6	-8	-26	-51	-2	-79	-10	-5	34	19	-70
Ratio	Rodeo Volumes / Hacienda TIA	0.97	0.4	1.11	0.99	0.75	1.14	0.76	0.82	0.53	0.94	0.67	0.91	0.38	1	1.09	1.01	0.98

		PM PEAK HOUR																
Intersection 2		Eastbound				Westbound				Northbound				Southbound				
Natividad-Sherwood / Bernal		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		341	17	50	408	5	14	13	32	158	1334	11	1503	19	715	428	1162	3105
Rodeo Property TIA Existing Volume		341	17	50	408	5	14	13	32	158	1335	11	1504	19	855	428	1302	3246
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	1	0	1	0	140	0	140	141
Hacienda Phase III/IV TIA	1/14/2014	365	9	60	434	9	8	19	36	169	1283	13	1465	12	793	377	1182	3117
Difference	Rodeo Volumes - Hacienda TIA	-24	8	-10	-26	-4	6	-6	-4	-11	52	-2	39	7	62	51	120	129
Ratio	Rodeo Volumes / Hacienda TIA	0.93	1.89	0.83	0.94	0.56	1.75	0.68	0.89	0.93	1.04	0.85	1.03	1.58	1.08	1.14	1.1	1.04

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON
INTERSECTION 3

Intersection 3	AM PEAK HOUR																
	Eastbound				Westbound				Northbound				Southbound				
Main / Bernal	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	15	21	152	188	666	85	23	774	182	534	402	1118	49	785	12	846	2926
Rodeo Property TIA Existing Volume	15	21	152	188	666	85	23	774	182	534	402	1118	49	785	12	846	2926
Adjustment to Rodeo Property Count	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection 3	PM PEAK HOUR																
	Eastbound				Westbound				Northbound				Southbound				
Main / Bernal	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	27	70	160	257	462	120	144	726	304	1108	647	2059	105	1017	24	1146	4188
Rodeo Property TIA Existing Volume	27	70	160	257	462	120	144	726	304	1108	647	2059	105	1017	24	1146	4188
Adjustment to Rodeo Property Count	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON
INTERSECTION 4

		AM PEAK HOUR																
Intersection 4		Eastbound				Westbound				Northbound				Southbound				
Sherwood / Sherwood Place		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		0	0	0	0	26	0	40	66	0	604	43	647	81	1210	0	1291	2004
Rodeo Property TIA Existing Volume		0	0	0	0	34	0	108	142	0	686	100	786	181	1221	0	1402	2330
Adjustment to Rodeo Property Count		0	0	0	0	8	0	68	76	0	82	57	139	100	11	0	111	326
Hacienda Phase III/IV TIA	1/14/2014	0	0	0	0	34	0	108	142	0	765	100	865	181	1219	0	1400	2407
Difference	Rodeo Volumes - Hacienda TIA	0	0	0	0	0	0	0	0	0	-79	0	-79	0	2	0	2	-77
Ratio	Rodeo Volumes / Hacienda TIA					1		1	1		0.9	1	0.91	1	1		1	0.97

		PM PEAK HOUR																
Intersection 4		Eastbound				Westbound				Northbound				Southbound				
Sherwood / Sherwood Place		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		0	0	0	0	5	0	6	11	0	1500	3	1503	12	803	0	815	2329
Rodeo Property TIA Existing Volume		0	0	0	0	16	0	28	44	0	1476	54	1530	120	790	0	910	2484
Adjustment to Rodeo Property Count		0	0	0	0	11	0	22	33	0	-24	51	27	108	-13	0	95	155
Hacienda Phase III/IV TIA	1/14/2014	0	0	0	0	34	0	108	142	0	765	100	865	181	1219	0	1400	2407
Difference	Rodeo Volumes - Hacienda TIA	0	0	0	0	-18	0	-80	-98	0	711	-46	665	-61	-429	0	-490	77
Ratio	Rodeo Volumes / Hacienda TIA					0.47		0.26	0.31		1.93	0.54	1.77	0.66	0.65		0.65	1.03

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON
INTERSECTION 5

		AM PEAK HOUR																
Intersection 5		Eastbound				Westbound				Northbound				Southbound				
Main / Rossi		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		154	231	163	548	105	248	68	421	85	566	48	699	75	950	176	1201	2869
Rodeo Property TIA Existing Volume		154	271	163	588	105	305	78	488	85	566	58	709	85	950	176	1211	2996
Adjustment to Rodeo Property Count		0	40	0	40	0	57	10	67	0	0	10	10	10	0	0	10	127
Hacienda Phase III/IV TIA	1/14/2014	124	261	194	579	111	269	73	453	104	594	59	757	84	1069	180	1333	3122
Difference	Rodeo Volumes - Hacienda TIA	30	10	-31	9	-6	36	5	35	-19	-28	-1	-48	1	-119	-4	-122	-126
Ratio	Rodeo Volumes / Hacienda TIA	1.24	1.04	0.84	1.02	0.95	1.13	1.07	1.08	0.82	0.95	0.98	0.94	1.01	0.89	0.98	0.91	0.96

		PM PEAK HOUR																
Intersection 5		Eastbound				Westbound				Northbound				Southbound				
Main / Rossi		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		269	321	109	699	100	257	217	574	193	1253	63	1509	118	791	170	1079	3861
Rodeo Property TIA Existing Volume		269	321	109	699	100	257	217	574	193	1253	63	1509	118	791	170	1079	3861
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hacienda Phase III/IV TIA	1/14/2014	230	276	122	628	88	258	194	540	158	1182	70	1410	103	762	148	1013	3591
Difference	Rodeo Volumes - Hacienda TIA	39	45	-13	71	12	-1	23	34	35	71	-7	99	15	29	22	66	270
Ratio	Rodeo Volumes / Hacienda TIA	1.17	1.16	0.89	1.11	1.14	1	1.12	1.06	1.22	1.06	0.9	1.07	1.15	1.04	1.15	1.07	1.08

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON
INTERSECTION 6

		AM PEAK HOUR																
Intersection 6		Eastbound				Westbound				Northbound				Southbound				
Sherwood / Rossi-Calle Cebu		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		173	22	166	361	21	21	26	68	115	482	9	606	17	909	272	1198	2233
Rodeo Property TIA Existing Volume		233	22	166	421	21	21	26	68	115	527	9	651	27	866	362	1255	2395
Adjustment to Rodeo Property Count		60	0	0	60	0	0	0	0	0	45	0	45	10	-43	90	57	162
Hacienda Phase III/IV TIA	1/14/2014	250	19	156	425	12	24	26	62	130	588	3	721	28	913	301	1242	2450
Difference	Rodeo Volumes - Hacienda TIA	-17	3	10	-4	9	-3	0	6	-15	-61	6	-70	-1	-47	61	13	-55
Ratio	Rodeo Volumes / Hacienda TIA	0.93	1.16	1.06	0.99	1.75	0.88	1	1.1	0.88	0.9	3	0.9	0.96	0.95	1.2	1.01	0.98
City of Salinas Count	9/14/2016	275	15	167	457	21	24	30	75	93	646	5	744	21	1011	331	1363	2639
Difference	Rodeo Volumes - Salinas Count	-42	7	-1	-36	0	-3	-4	-7	22	-119	4	-93	6	-145	31	-108	-244
Ratio	Rodeo Volumes / Salinas Count	0.85	1.47	0.99	0.92	1	0.88	0.87	0.91	1.24	0.82	1.8	0.88	1.29	0.86	1.09	0.92	0.91

		PM PEAK HOUR																
Intersection 6		Eastbound				Westbound				Northbound				Southbound				
Sherwood / Rossi-Calle Cebu		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		320	46	214	580	21	57	45	123	302	1099	25	1426	31	571	199	801	2930
Rodeo Property TIA Existing Volume		320	46	214	580	21	57	45	123	302	1165	25	1492	31	576	199	806	3001
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	66	0	66	0	5	0	5	71
Hacienda Phase III/IV TIA	1/14/2014	261	29	207	497	8	56	41	105	256	1189	9	1454	20	518	223	761	2817
Difference	Rodeo Volumes - Hacienda TIA	59	17	7	83	13	1	4	18	46	-24	16	38	11	58	-24	45	184
Ratio	Rodeo Volumes / Hacienda TIA	1.23	1.59	1.03	1.17	2.63	1.02	1.1	1.17	1.18	0.98	2.78	1.03	1.55	1.11	0.89	1.06	1.07
City of Salinas Count	9/14/2016	310	47	225	582	45	55	84	184	247	1126	24	1397	26	632	249	907	3070
Difference	Rodeo Volumes - Salinas Count	10	-1	-11	-2	-24	2	-39	-61	55	39	1	95	5	-56	-50	-101	-69
Ratio	Rodeo Volumes / Salinas Count	1.03	0.98	0.95	1	0.47	1.04	0.54	0.67	1.22	1.03	1.04	1.07	1.19	0.91	0.8	0.89	0.98

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON
INTERSECTION 7

Intersection 7	AM PEAK HOUR																
	Eastbound				Westbound				Northbound				Southbound				
Kern / NB 101 Ramps	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	17	2	181	200	0	0	0	0	289	63	7	359	1	81	40	122	681
Rodeo Property TIA Existing Volume	17	2	181	200	0	0	0	0	289	63	7	359	1	81	40	122	681
Adjustment to Rodeo Property Count	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection 7	PM PEAK HOUR																
	Eastbound				Westbound				Northbound				Southbound				
Kern / NB 101 Ramps	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	53	2	217	272	0	0	0	0	560	158	18	736	3	114	82	199	1207
Rodeo Property TIA Existing Volume	53	2	217	272	0	0	0	0	560	158	18	736	3	114	82	199	1207
Adjustment to Rodeo Property Count	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 8

	AM PEAK HOUR																
Intersection 8	Eastbound				Westbound				Northbound				Southbound				
Front / E. Market	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	488	299	0	787	0	0	278	278	0	0	0	0	624	0	786	1410	2475
Rodeo Property TIA Existing Volume	488	250	0	738	0	268	278	546	0	0	0	0	624	0	786	1410	2694
Adjustment to Rodeo Property Count	0	-49	0	-49	0	268	0	268	0	0	0	0	0	0	0	0	219

	PM PEAK HOUR																
Intersection 8	Eastbound				Westbound				Northbound				Southbound				
Front / E. Market	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	964	298	0	1262	0	0	742	742	0	0	0	0	345	0	446	791	2795
Rodeo Property TIA Existing Volume	964	298	0	1262	0	297	742	1039	0	0	0	0	377	0	487	864	3165
Adjustment to Rodeo Property Count	0	0	0	0	0	297	0	297	0	0	0	0	32	0	41	73	370

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON
INTERSECTION 9

		AM PEAK HOUR																
Intersection 9		Eastbound				Westbound				Northbound				Southbound				
Sherwood / E. Market		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		0	0	4	4	515	31	135	681	16	490	281	787	172	847	15	1034	2506
Rodeo Property TIA Existing Volume		0	0	4	4	544	31	161	736	16	490	260	766	172	866	15	1053	2559
Adjustment to Rodeo Property Count		0	0	0	0	29	0	26	55	0	0	-21	-21	0	19	0	19	53
Hacienda Phase III/IV TIA	1/14/2014	0	0	3	3	287	19	188	494	21	567	197	785	192	842	20	1054	2336
Difference	Rodeo Volumes - Hacienda TIA	0	0	1	1	257	12	-27	242	-5	-77	63	-19	-20	24	-5	-1	223
Ratio	Rodeo Volumes / Hacienda TIA			1.33	1.33	1.9	1.63	0.86	1.49	0.76	0.86	1.32	0.98	0.9	1.03	0.75	1	1.1

		PM PEAK HOUR																
Intersection 9		Eastbound				Westbound				Northbound				Southbound				
Sherwood / E. Market		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		0	0	15	15	361	24	409	794	19	1083	575	1677	299	486	26	811	3297
Rodeo Property TIA Existing Volume		0	0	15	15	361	24	409	794	19	1083	604	1706	299	486	26	811	3326
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	0	29	29	0	0	0	0	29
Hacienda Phase III/IV TIA	1/14/2014	0	0	18	18	241	38	328	607	25	1159	344	1528	233	496	20	749	2902
Difference	Rodeo Volumes - Hacienda TIA	0	0	-3	-3	120	-14	81	187	-6	-76	260	178	66	-10	6	62	424
Ratio	Rodeo Volumes / Hacienda TIA			0.83	0.83	1.5	0.63	1.25	1.31	0.76	0.93	1.76	1.12	1.28	0.98	1.3	1.08	1.15

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON
INTERSECTION 10

		AM PEAK HOUR																
Intersection 10		Eastbound				Westbound				Northbound				Southbound				
Sun / E. Market		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		15	364	19	398	21	659	27	707	13	1	7	21	20	2	11	33	1159
Rodeo Property TIA Existing Volume		15	388	19	422	21	722	27	770	13	1	7	21	20	2	11	33	1246
Adjustment to Rodeo Property Count		0	24	0	24	0	63	0	63	0	0	0	0	0	0	0	0	87
Sun Street Transfer Station	2006/2011	14	387	23	424	19	657	23	699	12	1	4	17	22	0	11	33	1173
Difference	Rodeo Vols - Sun St Transfer Sta TIA	1	1	-4	-2	2	65	4	71	1	0	3	4	-2	2	0	0	73
Ratio	Rodeo Vols / Sun St Transfer Sta TIA	1.07	1	0.83	1	1.11	1.1	1.17	1.1	1.08	1	1.75	1.24	0.91		1	1	1.06

		PM PEAK HOUR																
Intersection 10		Eastbound				Westbound				Northbound				Southbound				
Sun / E. Market		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		18	846	21	885	17	699	51	767	13	1	24	38	45	2	18	65	1755
Rodeo Property TIA Existing Volume		18	861	21	900	21	722	27	770	13	1	24	38	45	2	18	65	1773
Adjustment to Rodeo Property Count		0	15	0	15	4	23	-24	3	0	0	0	0	0	0	0	0	18
Sun Street Transfer Station	2006/2011	10	781	16	807	1	633	55	689	15	0	9	24	42	1	15	58	1578
Difference	Rodeo Vols - Sun St Transfer Sta TIA	8	80	5	93	20	89	-28	81	-2	1	15	14	3	1	3	7	195
Ratio	Rodeo Vols / Sun St Transfer Sta TIA	1.8	1.1	1.31	1.12	21	1.14	0.49	1.12	0.87		2.67	1.58	1.07	2	1.2	1.12	1.12

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON
INTERSECTION 11

		AM PEAK HOUR																
Intersection 11		Eastbound				Westbound				Northbound				Southbound				
E. Market / Griffin - Simas		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		12	342	55	409	72	638	25	735	66	7	42	115	20	10	22	52	1311
Rodeo Property TIA Existing Volume		12	348	55	415	72	682	25	779	66	7	42	115	20	10	22	52	1361
Adjustment to Rodeo Property Count		0	6	0	6	0	44	0	44	0	0	0	0	0	0	0	0	50
Sun Street Transfer Station	2006/2011	18	327	68	413	92	593	22	707	93	16	99	208	19	10	13	42	1370
Difference	Rodeo Vols - Sun St Transfer Sta TIA	-6	21	-13	2	-20	89	3	72	-27	-9	-57	-93	1	0	9	10	-9
Ratio	Rodeo Vols / Sun St Transfer Sta TIA	0.67	1.06	0.81	1	0.78	1.15	1.14	1.1	0.71	0.44	0.42	0.55	1.05		1.69	1.24	0.99
City of Salinas Counts	1/3/2017	6	339	74	419	66	724	21	811	63	7	39	109	14	8	10	32	1371
Difference	Rodeo Vols - City Counts	6	9	-19	-4	6	-42	4	-32	3	0	3	6	6	2	12	20	-10
Ratio	Rodeo Vols / City Counts	2	1.03	0.74	0.99	1.09	0.94	1.19	0.96	1.05	1	1.08	1.06	1.43	1.25	2.2	1.63	0.99

		PM PEAK HOUR																
Intersection 11		Eastbound				Westbound				Northbound				Southbound				
E. Market / Griffin - Simas		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		22	801	87	910	58	510	18	586	212	12	104	328	57	12	41	110	1934
Rodeo Property TIA Existing Volume		22	821	87	930	58	574	18	650	212	12	104	328	57	12	41	110	2018
Adjustment to Rodeo Property Count		0	20	0	20	0	64	0	64	0	0	0	0	0	0	0	0	84
Sun Street Transfer Station	2006/2011	9	721	102	832	84	496	13	593	172	16	139	327	59	17	21	97	1849
Difference	Rodeo Vols - Sun St Transfer Sta TIA	13	100	-15	98	-26	78	5	57	40	-4	-35	1	-2	-5	20	13	169
Ratio	Rodeo Vols / Sun St Transfer Sta TIA	2.44	1.14	0.85	1.12	0.69	1.16	1.38	1.1	1.23	0.75	0.75	1	0.97		1.95	1.13	1.09
City of Salinas Counts	1/3/2017	18	814	114	946	50	541	38	629	168	8	106	282	43	9	18	70	1927
Difference	Rodeo Vols - City Counts	4	7	-27	-16	8	33	-20	21	44	4	-2	46	14	3	23	40	91
Ratio	Rodeo Vols / City Counts	1.22	1.01	0.76	0.98	1.16	1.06	0.47	1.03	1.26	1.5	0.98	1.16	1.33	1.33	2.28	1.57	1.05

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 12

	AM PEAK HOUR																
Intersection 12	Eastbound				Westbound				Northbound				Southbound				
E. Market / SB 101 Off-ramp	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	0	388	3	391	32	628	0	660	4	0	14	18	137	45	161	343	1412
Rodeo Property TIA Existing Volume	0	407	3	410	32	614	0	646	4	0	14	18	137	45	161	343	1417
Adjustment to Rodeo Property Count	0	19	0	19	0	-14	0	-14	0	0	0	0	0	0	0	0	5

	PM PEAK HOUR																
Intersection 12	Eastbound				Westbound				Northbound				Southbound				
E. Market / SB 101 Off-ramp	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	0	937	11	948	27	549	0	576	4	0	49	53	264	64	143	471	2048
Rodeo Property TIA Existing Volume	0	971	11	982	27	549	0	576	4	0	49	53	264	64	143	471	2082
Adjustment to Rodeo Property Count	0	34	0	34	0	0	0	0	0	0	0	0	0	0	0	0	34

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON
INTERSECTION 13

Intersection 13 E. Market / SB US 101 On-ramp	AM PEAK HOUR																
	Eastbound				Westbound				Northbound				Southbound				
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	0	429	108	537	55	688	0	743	0	0	0	0	0	0	0	0	1280
Rodeo Property TIA Existing Volume	0	450	108	558	55	646	0	701	0	0	0	0	0	0	0	0	1259
Adjustment to Rodeo Property Count	0	21	0	21	0	-42	0	-42	0	0	0	0	0	0	0	0	-21

Intersection 13 E. Market / SB US 101 On-ramp	PM PEAK HOUR																
	Eastbound				Westbound				Northbound				Southbound				
	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts	0	1153	170	1323	76	576	0	652	0	0	0	0	0	0	0	0	1975
Rodeo Property TIA Existing Volume	0	1155	170	1325	76	576	0	652	0	0	0	0	0	0	0	0	1977
Adjustment to Rodeo Property Count	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON
INTERSECTION 14

		AM PEAK HOUR																
Intersection 14		Eastbound				Westbound				Northbound				Southbound				
Kern / E. Market		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		97	333	20	450	8	457	195	660	21	68	3	92	23	26	223	272	1474
Rodeo Property TIA Existing Volume		97	312	20	429	8	457	195	660	21	68	3	92	23	26	272	321	1502
Adjustment to Rodeo Property Count		0	-21	0	-21	0	0	0	0	0	0	0	0	0	0	49	49	28
City of Salinas Counts	10/3/2016																	1546

		PM PEAK HOUR																
Intersection 14		Eastbound				Westbound				Northbound				Southbound				
Kern / E. Market		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		258	849	48	1155	27	343	316	686	46	225	36	307	95	44	229	368	2516
Rodeo Property TIA Existing Volume		258	849	48	1155	27	377	316	720	46	225	36	307	95	44	229	368	2550
Adjustment to Rodeo Property Count		0	0	0	0	0	34	0	34	0	0	0	0	0	0	0	0	34
City of Salinas Counts	10/3/2016																	2515

RODEO PROPERTY TIA TRAFFIC COUNT COMPARISON

INTERSECTION 15

Intersection 15		AM PEAK HOUR																
		Eastbound				Westbound				Northbound				Southbound				
Front/ Alisal		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		85	231	56	372	89	342	118	549	53	343	51	447	95	650	129	874	2242
Rodeo Property TIA Existing Volume		85	321	86	492	89	422	118	629	53	343	51	447	95	650	129	874	2442
Adjustment to Rodeo Property Count		0	90	30	120	0	80	0	80	0	0	0	0	0	0	0	0	200
Police Station TIA		54	207	50	311	66	293	106	465	39	270	34	343	74	543	97	714	1833
Difference	Rodeo Volumes - Police Sta TIA	31	114	36	181	23	129	12	164	14	73	17	104	21	107	32	160	609
Ratio	Rodeo Volumes / Police Sta TIA	1.57	1.55	1.72	1.58	1.35	1.44	1.11	1.35	1.36	1.27	1.5	1.3	1.28	1.2	1.33	1.22	1.33
Hacienda Phase III/IV TIA		94	290	80	464	97	451	118	666	54	317	51	422	98	660	97	855	2407
Difference	Rodeo Volumes - Hacienda TIA	-9	31	6	28	-8	-29	0	-37	-1	26	0	25	-3	-10	32	19	35
Ratio	Rodeo Volumes / Hacienda TIA	0.9	1.11	1.08	1.06	0.92	0.94	1	0.94	0.98	1.08	1	1.06	0.97	0.98	1.33	1.02	1.01
City of Salinas Counts	9/21/2016	120	253	70	443	88	411	100	599	64	320	52	436	109	640	120	869	2347
Difference	Rodeo Volumes - City Counts	-35	68	16	49	1	11	18	30	-11	23	-1	11	-14	10	9	5	95
Ratio	Rodeo Volumes / Counts	0.71	1.27	1.23	1.11	1.01	1.03	1.18	1.05	0.83	1.07	0.98	1.03	0.87	1.02	1.08	1.01	1.04

Intersection 15		PM PEAK HOUR																
		Eastbound				Westbound				Northbound				Southbound				
Front/ Alisal		Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	Left	Thru	Right	Total	TOTAL
Rodeo Property Counts		220	663	56	939	98	314	209	621	58	610	163	831	187	372	74	633	3024
Rodeo Property TIA Existing Volume		220	663	56	939	98	314	209	621	58	610	163	831	199	397	79	675	3066
Adjustment to Rodeo Property Count		0	0	0	0	0	0	0	0	0	0	0	0	12	25	5	42	42
Police Station TIA		208	692	48	948	89	331	212	632	38	634	169	841	179	357	69	605	3026
Difference	Rodeo Volumes - Police Sta TIA	12	-29	8	-9	9	-17	-3	-11	20	-24	-6	-10	20	40	10	70	40
Ratio	Rodeo Volumes / Police Sta TIA	1.06	0.96	1.17	0.99	1.1	0.95	0.99	0.98	1.53	0.96	0.96	0.99	1.11	1.11	1.14	1.12	1.01
Hacienda Phase III/IV TIA		170	670	71	911	80	372	178	630	49	611	169	829	190	358	70	618	2988
Difference	Rodeo Volumes - Hacienda TIA	50	-7	-15	28	18	-58	31	-9	9	-1	-6	2	9	39	9	57	78
Ratio	Rodeo Volumes / Hacienda TIA	1.29	0.99	0.79	1.03	1.23	0.84	1.17	0.99	1.18	1	0.96	1	1.05	1.11	1.13	1.09	1.03
City of Salinas Counts	9/21/2016	211	776	61	1048	81	377	165	623	33	625	155	813	158	386	105	649	3133
Difference	Rodeo Volumes - City Counts	9	-113	-5	-109	17	-63	44	-2	25	-15	8	18	41	11	-26	26	-67
Ratio	Rodeo Volumes / Counts	1.04	0.85	0.92	0.9	1.21	0.83	1.27	1	1.76	0.98	1.05	1.02	1.26	1.03	0.75	1.04	0.98