

City of Salinas

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# 2019 Engineering and Traffic Survey For Speed Limits Technical Report

**PREPARED BY:**  
**City of Salinas**  
**Public Works Department**  
**Traffic and Transportation Division**  
**200 Lincoln Avenue**  
**Salinas, CA 93901**



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## **CERTIFICATION**

I, Andrew Easterling, do hereby certify that this Engineering and Traffic Survey for the City of Salinas was performed under my supervision. I certify that I am experienced in performing surveys of this type and duly registered in the State of California as a professional Civil Engineer.



  
Andrew Easterling PE, TE, PTOE  
Traffic Engineer

## INTRODUCTION:

The 2019 Engineering and Traffic (E&T) Survey in the City of Salinas fulfills California Vehicle Code (CVC) Sections 22357 and 22358, which require local agencies to follow certain procedures established by the State of California. This E&T Survey is intended to serve as the basis for establishing and enforcing the speed limits for specific streets in the City. The work herein by the City Transportation and Traffic Engineering Division staff, in accordance with the California CVC Section 40802, reviews the established speed limit sections to determine whether changes in existing conditions have occurred which may require adjusting the posted speed limit.

Engineering and traffic surveys for speed limits are regularly conducted once every five (5) years by governing municipalities for the purpose of complying with Section 40802 of the CVC and the national Uniform Vehicle Code. E&T surveys may be extended to every seven (7) years if the arresting officer has completed device training and the device has been recently calibrated. E&T surveys may be extended every ten (10) years if a registered engineer evaluates the section of the highway and determines that no significant changes in roadway or surrounding land uses have occurred as specified in the CVC. An E&T survey should be conducted on new roadways or where traffic conditions have changed significantly.

The California Manual of Uniform Traffic Control Devices (MUTCD), as required under CVC 21400, defines standards for posting speed limits that rely upon collecting speed data in the field to determine the 85th percentile speed, which is subsequently rounded upward or downward to the nearest 5 mile per hour increment. The California MUTCD allows for options to further reduce the speed limit. That methodology was applied to the fourteen (14) segments. **Table 1: Engineering and Traffic Survey Summary** summarizes the findings and recommendations for speed limits on those segments. The results of the E&T survey will be valid until 2024, unless extended through additional criteria.

## METHODOLOGY:

On January 1, 2012, CVC 21400(b) became effective requiring the California, Department of Transportation (Caltrans) to revise the California MUTCD so that speed limits are based on field-collected speed data. A spot speed survey that typically consists of measuring vehicle speeds with an electronic device, most commonly a radar speed detector. Traffic traveling at free-flow speeds in each direction for a two-way street is collected and compiled to create a data set. The most significant data point collected is the 85th percentile speed, which is the speed at or below which 85 percent of motor vehicles travel. The 85<sup>th</sup> percentile speed is the industry standard data point which typically represents one standard deviation above the average speed and establishes the upper limit of what is considered reasonable and prudent. The reason that speed limit areas are established and posted is to guard reasonable drivers from the unreasonable behavior of a reckless or otherwise dangerous drivers. As with other laws, speed limits are established based on the consensus of the majority of those who drive a section of roadway as to what speed is reasonable and safe.

As specified in the California MUTCD Section 2B.13, the posted speed limit “shall be established at the nearest 5-mph increment of the 85th percentile speed of free-flowing traffic.” Additionally, the MUTCD allows the posted speed limit to be lowered by no more than 5 mph from a rounded speed, using one of two options that depend on whether the 85th percentile speed has been rounded down or up. The options may be applied as follows:

1. MUTCD Section 2B.13 states, “The posted speed may be reduced by 5 mph from the nearest 5-mph increment of the 85th percentile speed, in compliance with CVC Sections 627 and 22358.5.” The cited CVC Section 627 defines an E&T survey that is required to consider prevailing speeds, accident records, and conditions not readily apparent to the driver, and optionally consider residential density as well as pedestrian and bicycle safety. According to the MUTCD, this option requires documentation of an E&T survey that “shall document in writing the conditions and justification for the lower speed limit and be approved by a registered Civil or Traffic Engineer.” The basis for a speed limit that is more than 5 mph lower than the 85th percentile speed is something other than prevailing speeds. In regards to conditions not readily apparent to the driver, CVC 22358 states that “physical conditions such as width, curvature, grade and surface conditions, or any other condition readily apparent to a driver, in the absence of other factors, would not require special downward speed zoning.”
2. MUTCD Section 2B.13 12a also states “For cases in which the nearest 5-mph increment of the 85th percentile speed would require a rounding up, then the 5 2016 Traffic Speed Zone Survey City of Salinas speed limit may be

rounded down to the nearest 5-mph increment below the 85th percentile speed, if no further reduction is used.” An Option 2 round-down, which became available when CVC Section 21400(b) went into effect January 1, 2012, requires no engineering and traffic survey to post the speed limit sign. The E&T survey is required nevertheless, however, to allow radar or similar devices to be used for enforcement.

Neither the Vehicle Code nor the MUTCD provide much specific guidance regarding accident data or pedestrian or bicycle safety. In contrast, CVC 627(c)(1) provides specific guidance on residential density. Many residential neighborhoods in Salinas meet the density threshold of 16 separate dwelling houses or business structures per quarter mile. The statute does not apply to roads within a business district.

While the California MUTCD allows two options for lowering the posted speed, it has no provision for raising the speed limit above the nearest 5-mph increment of the 85th percentile speed.

### **SUMMARY OF RECOMMENDATIONS:**

The results of the Engineering and Traffic Survey for fourteen (14) roadway sections are listed in **Table 1: Engineering and Traffic Survey Summary**:



## Unchanged

**34) Harden Parkway between North Main Street and El Dorado Drive** - This segment of Harden Parkway is classified as a minor arterial in the City of Salinas General Plan. The surrounding land use includes backing residential, retail, office and park areas. Speed data collected May 30, 2019 revealed the 85<sup>th</sup> percentile speed of 42 mph. The 10 mph pace ranges from 33 mph to 42 mph and suggests the 85<sup>th</sup> percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1, the existing posted speed limit of 35 mph should be retained.

**44) Riker Street between West Alisal Street and Blanco Road** - This segment of Riker Street is classified as a collector in the City of Salinas General Plan. The surrounding land use includes fronting residential areas. Speed data collected May 30, 2019 revealed the 85<sup>th</sup> percentile speed of 32 mph. The 10 mph pace ranges from 23 mph to 32 mph and suggests the 85<sup>th</sup> percentile is within this range. Since the roadway width is 40 feet and there is fronting residential, the roadway meets the criteria of a local road. Therefore, the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1, the existing posted speed limit of 25 mph should be retained.

**51) Larkin Street between Davis Road and Rico Street** - This segment of Larkin Street is classified as a collector in the City of Salinas General Plan. The surrounding land use includes fronting residential areas, a school and a park. Speed data collected May 28, 2019 revealed the 85<sup>th</sup> percentile speed of 32 mph. The 10 mph pace ranges from 25 mph to 34 mph and suggests the 85<sup>th</sup> percentile is within this range. Since the roadway width is 40 feet and there is fronting residential, the roadway meets the criteria of a local road. Therefore, the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1, the existing posted speed limit of 25 mph should be retained.

**59) East Market Street between Sherwood Drive and Sanborn Road** - This segment of East Market Street is classified as a major arterial in the City of Salinas General Plan. The surrounding land use includes office, commercial, and light industrial areas. Speed data collected May 28, 2019 revealed the 85<sup>th</sup> percentile speed of 39 mph. The 10 mph pace ranges from 28 mph to 37 mph and suggests the 85<sup>th</sup> percentile is above this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded up and reduced by 5 mph per MUTCD option 2, the existing posted speed limit of 35 mph should be retained.

**64) Sanborn Road between Del Monte Avenue and Boronda Road** - This segment of Sanborn Road is classified as a major arterial in the City of Salinas General Plan. The surrounding land use includes backing residential homes, commercial areas and a school. Speed data collected May 16, 2019 revealed the 85<sup>th</sup> percentile speed of 38 mph. The 10 mph pace ranges from 28 mph to 37 mph and suggests the 85<sup>th</sup> percentile is above this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded up and reduced by 5 mph per MUTCD option 2, the existing posted speed limit of 35 mph should be retained.

**66) Sanborn Road between East Laurel Drive and US Highway 101** - This segment of Sanborn Road is classified as a major arterial in the City of Salinas General Plan. The surrounding land use includes residential homes, commercial and office areas. Speed data collected May 28, 2019 revealed the 85<sup>th</sup> percentile speed of 42 mph. The 10 mph pace ranges from 33 mph to 42 mph and suggests the 85<sup>th</sup> percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1, the existing posted speed limit of 35 mph should be retained.

**80) Boronda Road between Constitution Boulevard and Williams Road** - This segment of Boronda Road is classified as a major arterial in the City of Salinas General Plan. The surrounding land use includes backing residential homes, and retail areas. Speed data collected May 28, 2019 revealed the 85<sup>th</sup> percentile speed of 51 mph. The 10 mph pace ranges from 37 mph to 46 mph and suggests the 85<sup>th</sup> percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1, the existing posted speed limit of 45 mph should be retained.

**83) East Laurel Drive between North Main Street and Natividad Road** - This segment of East Laurel Drive is classified as a major arterial in the City of Salinas General Plan. The surrounding land use includes residential homes, retail and office areas and a school. Speed data collected May 28, 2019 revealed the 85<sup>th</sup> percentile speed of 40 mph. The 10 mph pace ranges from 32 mph to 41 mph and suggests the 85<sup>th</sup> percentile is within this range. Based on the surrounding land

use, and the 10 mph pace range, and the prevailing speeds rounded up and reduced by 5 mph per MUTCD option 2, the existing posted speed limit of 35 mph should be retained.

**88) Work Street between East Alisal Street and Sanborn Road** - This segment of Work Street is classified as a minor arterial in the City of Salinas General Plan. The surrounding land use includes retail and industrial areas. Speed data collected May 28, 2019 revealed the 85<sup>th</sup> percentile speed of 40 mph. The 10 mph pace ranges from 32 mph to 41 mph and suggests the 85<sup>th</sup> percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded up and reduced by 5 mph per MUTCD option 2, the existing posted speed limit of 35 mph should be retained.

**97) Garner Avenue between Rider Avenue and Williams Road** - This segment of Garner Avenue is classified as a minor arterial in the City of Salinas General Plan. The surrounding land use includes residential areas and a school. Speed data collected June 20, 2019 revealed the 85<sup>th</sup> percentile speed of 32 mph. The 10 mph pace ranges from 23 mph to 32 mph and suggests the 85<sup>th</sup> percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1, the speed limit of 25 mph should be posted.

Garner Avenue currently lacks speed limit signs. The last speed survey certified a 25mph speed limit on Garner Avenue between Rider Avenue and Sanborn Road, and a 30mph speed limit between Sanborn Road and Williams Road. The 30mph segment E&TS was certified but never formerly adopted by City Council. The physical conditions and surrounding land uses are consistent between both relatively short segments; therefore it is recommended that the speed zones be combined into one 0.9 mile long speed zone consistent with MUTCD guidelines. The 2019 E&TS will supersede previous E&TS reports.

**101) Rico Street between Larkin Street and Rossi Street**- This segment of Larkin Street is classified as a collector in the City of Salinas General Plan. The surrounding land use includes fronting residential homes uses. Speed data was collected May 16, 2019 revealed the 85<sup>th</sup>-percentile speed of 36 mph. The 10 mph pace ranges from 27 mph to 36 mph and suggests the 85<sup>th</sup> percentile is within this range. Since the roadway width is 40 feet and there is fronting residential, the roadway meets the criteria of a local road. Therefore, the existing posted speed limit of 25 mph should be retained.

## Decreased

**37) Independence Boulevard between Constitution Boulevard to Boronda Road** - This segment of Independence Boulevard is classified as a collector in the City of Salinas General Plan. The surrounding land use includes backing residential areas and a school. Speed data collected May 28, 2019 revealed the 85<sup>th</sup> percentile speed of 35 mph. The 10 mph pace ranges from 26 mph to 35 mph and suggests the 85<sup>th</sup> percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded up and reduced by 5 mph per MUTCD option 2, the existing posted speed limit of 35 mph should be reduced to 30 mph.

## Increased

**82) Front Street between East Market Street and John Street** – This segment of Front Street is classified as a major arterial in the City of Salinas General Plan. The surrounding land use includes industrial, and retail areas. Speed data collected June 5, 2019 revealed the 85<sup>th</sup> percentile speed of 35 mph. The 10 mph pace ranges from 26 mph to 35 mph and suggests the 85<sup>th</sup> percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded up and reduced by 5 mph per MUTCD option 2, the speed limit of 30 mph should be posted.

Front Street is currently signed with both 35mph and 25mph speed limit signs. The last speed survey certified a 25mph speed limit on Front St between E Alisal and John St, however existing signs reflect a 35mph speed limit. It should be noted the previous speed engineering and traffic survey did not comply with MUTCD guidelines and left speed limit gaps in the transportation network. The 2019 E&TS recommends a 30 mph speed zone, which will replace existing invalid 25mph/35mph posted speed limit signs and extending the speed zone between East Market Street and John Street.

**87) Skyway Boulevard between Airport Boulevard and Alisal Street** - This segment of Skyway Boulevard is classified as

a minor arterial in the City of Salinas General Plan. The surrounding land use is public/semipublic uses. Speed data was collected May 16, 2019 revealed the 85<sup>th</sup>-percentile speed of 47 mph. The 10 mph pace ranges from 37 mph to 46 mph and suggests the 85<sup>th</sup> percentile is above this range. Based on the surrounding land use, the 10 mph pace range, and the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1 in compliance with CVC Sections 627 and 22358.5, the existing posted speed limit of 35 mph should be increased to 40 mph.

## **CONCLUSIONS:**

The Engineering and Traffic surveys contained in **Appendix A** of this report are intended to establish or justify posted speed limits that can be enforced by radar. The posted speed limits advise the motorist and enforcement agencies of speeds considered reasonable for a particular section of highway for prevailing conditions. The posted speed limits are not absolute maximums, but rather prima facie speed limits for which violations would be cited under the Basic Speed Law (Section 22350 of the CVC). CVC 22350 states that a person shall not drive a vehicle at a speed greater than is safe, having regard for traffic, roadway and weather conditions. A prima facie limit merely suggests a safe speed under normal conditions.

Table 1: Engineering and Traffic Survey Summary

No.	STREET SEGMENT	SEGMENT	Existing Speed Limit (mph)	85 <sup>th</sup> -Percentile Speed (mph)			MUTCD Applied Reduction Option	SURVEY EXPIRATION
				Measured	Rounded	Recommended		
34	Harden Parkway	N Main Street to El Dorado Drive	35	42	40	35	1	05/20/24
37	Independence Boulevard	Provincetown Drive to Boronda Road	35	35	35	30	2	05/28/24
44	Riker Street	West Alisal St to West Blanco Road	25	32	30	25	1	05/30/24
51	Larkin Street	Davis Road to Rico Street	25	32	30	25	1	05/28/24
59	Market Street, East	Sherwood Drive to Sanborn Road	35	39	40	35	2	05/28/24
64	Sanborn Road	Del Monte Avenue to Boronda Road	35	38	40	35	2	05/16/24
66	Sanborn Road	E Laurel Drive to US 101	35	42	40	35	1	05/28/24
80	Boronda Road	Constitution Blvd to Williams Road	45	51	50	45	1	05/22/24
82	Front Street	E Market Street to John Street	25/35*	35	35	30	2	06/05/24
83	Laurel Drive, East	N Main Street to Natividad Road	35	40	40	35	2	05/28/24
87	Skyway Boulevard	Mortensen Avenue to Alisal Street	35	47	45	40	1	05/16/24
88	Work Street	East Alisal Street & Sanborn Road	35	42	40	35	1	06/05/24
97	Garner Avenue	Rider Avenue to Williams Road	35	32	30	25	1	06/20/24
101	Rico Street	Larkin Street to Rossi Street	25	37	35	25	-	05/16/24

\*Inconsistent Speed limit surveys and signs

## **COLLISION HISTORY**

The Engineering and Traffic Survey forms summarize the available collision information for each of the street segments. The collision information was obtained from the City of Salinas from January 1, 2017 to December 31, 2018. For this analysis, only collisions during the 2-year period between January 1, 2017 to December 31, 2018 were considered. The collisions were reviewed and only corridor related collisions, those not related to signalized intersections, were summarized for each segment. Based on the number of total collisions studied over the 2-year period and average daily traffic (ADT) counts, a collision rate was calculated for each segment. The collision rates for each segment were compared to the statewide average rate listed in the 2014 Collision Data on California State Highways, to provide a general comparison of the collision rates on the segments to expected collisions rates for similar types of roadways, shown in **Table 2: Collision Rate Summary**.

<b>Lane Type</b>	<b>Total Statewide Urban Collision Rate (2014, 2015, 2016) (Total per million vehicle miles)</b>
2 and 3 lane	1.52
4+ lanes (undivided)	2.12
4+ lanes (divided)	1.26

Table 2: Collision Rate Summary

No.	STREET SEGMENT	SEGMENT	Existing Facility	Length (mi)	AADT	Collisions (2 years)	Collision Rate (Acc./MVM)	Statewide Collision Rate (Acc./MVM)
34	Harden Parkway	McKinnon Street to El Dorado Drive	4+ lanes (divided)	1.10	7,680	10	1.68	1.26
37	Independence Boulevard	Provincetown Drive to Boronda Road	2 and 3 lane	1.06	3,925	6	1.98	1.52
44	Riker Street	West Alisal St to West Blanco Road	2 and 3 lane	1.01	3,820	4	1.42	1.52
51	Larkin Street	Davis Road to Rico Street	2 and 3 lane	0.63	3,502	2	1.26	1.52
59	Market Street, East	Sherwood Drive to Sanborn Road	4+ lanes (undivided)	1.29	14,947	37	2.61	2.12
64	Sanborn Road	Del Monte Avenue to Boronda Road	4+ lanes (divided)	0.97	12,539	8	1.35	1.26
66	Sanborn Road	E Laurel Drive to US 101	4+ lanes (divided)	1.23	18,978	25	1.47	1.26
80	Boronda Road	Constitution Blvd to Williams Road	2 and 3 lane	1.27	14,499	7	0.52	1.52
82	Front Street	E Market Street to John Street	4+ lanes (divided)	0.71	15,050	4	0.51	1.14
83	Laurel Drive, East	N Main Street to Natividad Road	4+ lanes (undivided)	0.78	21,199	11	0.92	1.26
87	Skyway Boulevard	Mortensen Avenue to Alisal Street	4+ lanes (undivided)	0.56	12,450	2	0.39	1.26
88	Work Street	East Alisal Street & Sanborn Road	4+ lanes (undivided)	1.19	6,950	3	0.49	1.26
97	Garner Avenue	Rider Avenue to Wiliams Road	2 and 3 lane	0.96	7,520	19	3.58	1.52
101	Rico Street	Larkin Street to Rossi Street	2 and 3 lane	0.40	9,559	1	0.35	1.52








**APPENDIX A**  
**ENGINEERING AND TRAFFIC SURVEYS**





**COMMENTS:**

This segment of Rico Street is classified as a collector in the City of Salinas General Plan. The surrounding land use includes fronting residential homes uses. Speed data was collected May 16, 2019 revealed the 85th-percentile speed of 36 mph. The 10 mph pace ranges from 27 mph to 36 mph and suggests the 85th percentile is within this range. Since the roadway width is 40 feet and there is fronting residential, the roadway meets the criteria of a local road. Therefore, the existing posted speed limit of 25 mph should be retained.

AREA	DESCRIPTION	MAP SYMBOL	
Distance	Approximately 2,145 Feet	 ALL WAY STOP	
Vertical Alignment	Flat	 SIGNAL	
Street Width	40 Feet	 SPEED SIGN	
No. Lanes and Median	2-Lane Residential Collector	 CITY LIMITS	
Proposed Speed Zone	25 MPH	 CROSSWALK	
85th Percentile Speed	36 MPH	 SCHOOL CROSSWALK	
Traffic Volume (Date)	9,559		
Accident Data (2 years)	1 Collisions(2017 - 2018)		
Street Segment Collision Rate = (Collisions) (1,000,000) (Years) (365) (ADT) (Length in Miles)	0.35 Acc./MVM		





# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Rico Street</u>	Direction:	<u>WBD/EBD</u>	Comments:		
Between:	<u>Larkin Street &amp; Rossi Street</u>	<b>No.101</b>				
Survey Location:						
Speed Limit:	<u>25</u> MPH					
Date:	<u>05/16/19</u>				Day:	<u>Thursday</u>
Hours: From:	<u>3:17PM</u>				To:	<u>3:51PM</u>
Weather:	<u>Cloudy</u>					
Observer(s):	<u>Chris &amp; Herendira</u>					

MPH	Frequency	Percent	Cumulative %	
7	0	0.00%	0.00%	
8	0	0.00%	0.00%	
9	0	0.00%	0.00%	
10	0	0.00%	0.00%	
11	0	0.00%	0.00%	
12	0	0.00%	0.00%	
13	0	0.00%	0.00%	
14	0	0.00%	0.00%	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	1	1.00%	1.00%	
22	1	1.00%	2.00%	
23	2	2.00%	4.00%	
24	4	4.00%	8.00%	
25	6	6.00%	14.00%	
26	3	3.00%	17.00%	
27	5	5.00%	22.00%	
28	7	7.00%	29.00%	
29	9	9.00%	38.00%	
30	6	6.00%	44.00%	
31	4	4.00%	48.00%	
32	13	13.00%	61.00%	
33	6	6.00%	67.00%	
34	6	6.00%	73.00%	
35	11	11.00%	84.00%	
36	4	4.00%	88.00%	
37	5	5.00%	93.00%	
38	3	3.00%	96.00%	
39	1	1.00%	97.00%	
40	0	0.00%	97.00%	
41	2	2.00%	99.00%	
42	0	0.00%	99.00%	
43	0	0.00%	99.00%	
44	0	0.00%	99.00%	
45	0	0.00%	99.00%	
46	0	0.00%	99.00%	
47	0	0.00%	99.00%	
48	0	0.00%	99.00%	
49	0	0.00%	99.00%	
50	0	0.00%	99.00%	
51	1	1.00%	100.00%	
Totals:	100	100.00%		

#### Data Analysis:

Time Mean Speed:	31.3	MPH
Sample Variance:	23.55	
Standard Deviation:	4.9	
Variance of the Mean:	0.2355	
Standard Error of the Mean:	0.5	
10 MPH Pace:	27	To: 36 MPH
Percent in Pace:	71.0%	
Vehicles in Pace:	71	
50th Percentile Speed:	32	MPH
85th Percentile Speed:	36	MPH
90th Percentile Speed:	37	MPH
95th Percentile Speed:	38	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Rico Street</u>	Direction:	<u>WBD</u>	Comments:  <b>No.101</b>
Between:	<u>Larkin Street &amp; Rossi Street</u>			
Survey Location:				
Speed Limit:	<u>25</u> MPH			
Date:	<u>05/16/19</u>	Day:	<u>Thursday</u>	
Hours: From:	<u>3:17PM</u>	To:	<u>3:51PM</u>	
Weather:	<u>Cloudy</u>			
Observer(s):	<u>Chris &amp; Herendira</u>			

MPH	Frequency	Percent	Cumulative %	
7	0	0.00%	0.00%	
8	0	0.00%	0.00%	
9	0	0.00%	0.00%	
10	0	0.00%	0.00%	
11	0	0.00%	0.00%	
12	0	0.00%	0.00%	
13	0	0.00%	0.00%	
14	0	0.00%	0.00%	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	1	2.00%	2.00%	
24	1	2.00%	4.00%	
25	3	6.00%	10.00%	
26	2	4.00%	14.00%	
27	4	8.00%	22.00%	
28	3	6.00%	28.00%	
29	6	12.00%	40.00%	
30	4	8.00%	48.00%	
31	3	6.00%	54.00%	
32	4	8.00%	62.00%	
33	3	6.00%	68.00%	
34	3	6.00%	74.00%	
35	7	14.00%	88.00%	
36	2	4.00%	92.00%	
37	2	4.00%	96.00%	
38	2	4.00%	100.00%	
39	0	0.00%	100.00%	
40	0	0.00%	100.00%	
41	0	0.00%	100.00%	
42	0	0.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
45	0	0.00%	100.00%	
46	0	0.00%	100.00%	
47	0	0.00%	100.00%	
48	0	0.00%	100.00%	
49	0	0.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
Totals:	50	100.00%		

**Data Analysis:**

Time Mean Speed:	31.0	MPH
Sample Variance:	15.61	
Standard Deviation:	4.0	
Variance of the Mean:	0.3122	
Standard Error of the Mean:	0.6	
10 MPH Pace:	26	To: 35 MPH
Percent in Pace:	78.0%	
Vehicles in Pace:	39	
50th Percentile Speed:	31	MPH
85th Percentile Speed:	35	MPH
90th Percentile Speed:	36	MPH
95th Percentile Speed:	37	MPH

**Cumulative Frequency Distribution**

**Frequency Distribution**



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Rico Street</u>	Direction:	<u>EBD</u>	Comments:  <b>No.101</b>
Between:	<u>Larkin Street &amp; Rossi Street</u>			
Survey Location:				
Speed Limit:	<u>25</u> MPH			
Date:	<u>05/16/19</u>	Day:	<u>Thursday</u>	
Hours: From:	<u>3:17PM</u>	To:	<u>3:51PM</u>	
Weather:	<u>Cloudy</u>			
Observer(s):	<u>Chris &amp; Herendira</u>			

MPH	Frequency	Percent	Cumulative %	
7	0	0.00%	0.00%	
8	0	0.00%	0.00%	
9	0	0.00%	0.00%	
10	0	0.00%	0.00%	
11	0	0.00%	0.00%	
12	0	0.00%	0.00%	
13	0	0.00%	0.00%	
14	0	0.00%	0.00%	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	1	2.00%	2.00%	
22	1	2.00%	4.00%	
23	1	2.00%	6.00%	
24	3	6.00%	12.00%	
25	3	6.00%	18.00%	
26	1	2.00%	20.00%	
27	1	2.00%	22.00%	
28	4	8.00%	30.00%	
29	3	6.00%	36.00%	
30	2	4.00%	40.00%	
31	1	2.00%	42.00%	
32	9	18.00%	60.00%	
33	3	6.00%	66.00%	
34	3	6.00%	72.00%	
35	4	8.00%	80.00%	
36	2	4.00%	84.00%	
37	3	6.00%	90.00%	
38	1	2.00%	92.00%	
39	1	2.00%	94.00%	
40	0	0.00%	94.00%	
41	2	4.00%	98.00%	
42	0	0.00%	98.00%	
43	0	0.00%	98.00%	
44	0	0.00%	98.00%	
45	0	0.00%	98.00%	
46	0	0.00%	98.00%	
47	0	0.00%	98.00%	
48	0	0.00%	98.00%	
49	0	0.00%	98.00%	
50	0	0.00%	98.00%	
51	1	2.00%	100.00%	
Totals:	50	100.00%		

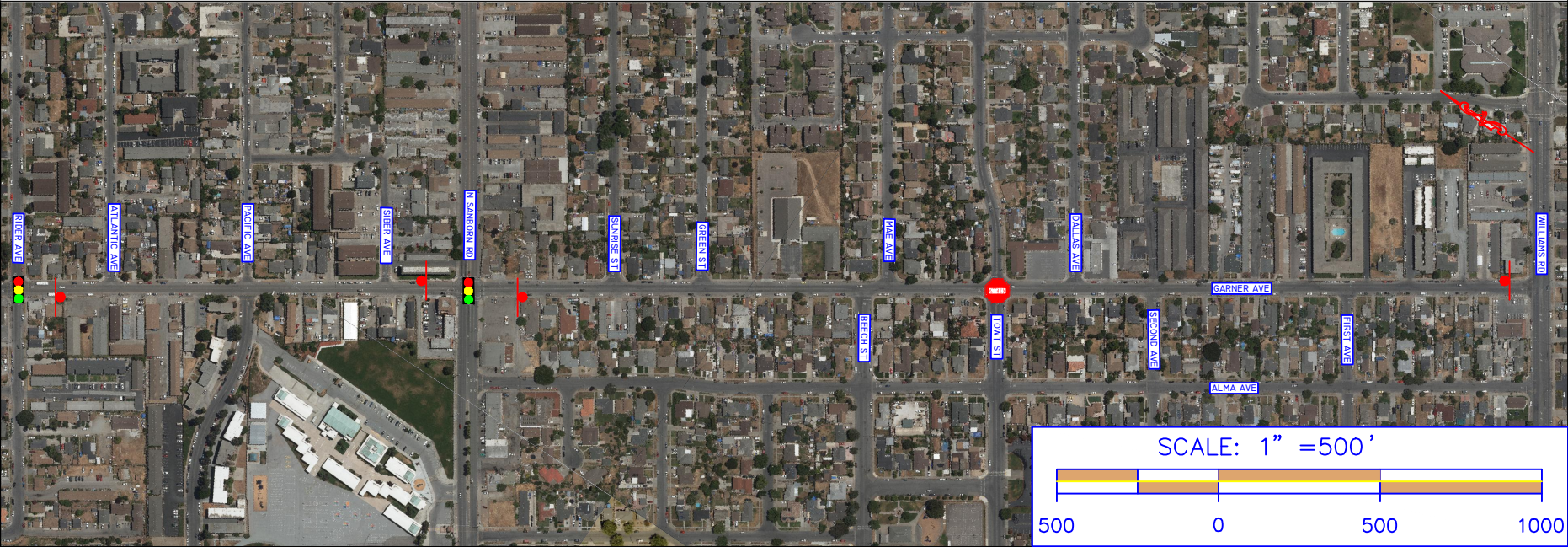
#### Data Analysis:

Time Mean Speed:	31.6	MPH
Sample Variance:	31.80	
Standard Deviation:	5.6	
Variance of the Mean:	0.6360	
Standard Error of the Mean:	0.8	
10 MPH Pace:	28	To: 37 MPH
Percent in Pace:	68.0%	
Vehicles in Pace:	34	
50th Percentile Speed:	32	MPH
85th Percentile Speed:	37	MPH
90th Percentile Speed:	37	MPH
95th Percentile Speed:	41	MPH

#### Cumulative Frequency Distribution








#### Frequency Distribution

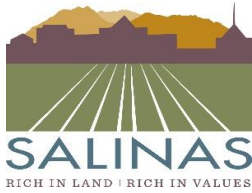




**COMMENTS:**

This segment of Garner Avenue is classified as a minor arterial in the City of Salinas General Plan. The surrounding land use includes residential areas and a school. Speed data collected June 20, 2019 revealed the 85th percentile speed of 32 mph. The 10 mph pace ranges from 23 mph to 32 mph and suggests the 85th percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1, the speed limit of 25 mph should be posted.

AREA	DESCRIPTION	MAP SYMBOL	
Distance	Approximately 5,100 Feet	 ALL WAY STOP  SIGNAL  SPEED SIGN  CITY LIMITS  CROSSWALK  SCHOOL CROSSWALK	
Vertical Alignment	Flat		
Street Width	42 Feet		
No. Lanes and Median	2-Lane Minor Arterial		
Existing Speed Zone	32 MPH		
Proposed Speed Zone	25 MPH		
Traffic Volume (Date)	7,520		
Accident Data (2 years)	19 Collisions (2017 - 2018)		
Street Segment Collision Rate = $\frac{\text{Collisions}}{\text{Years}} \cdot \frac{1,000,000}{\text{ADT} \cdot \text{Length in Miles}}$	3.58 Acc./MVM		



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	Garner Avenue	Direction:	WBD/EBD	No. 97	Comments:
Between:	Rider Avenue & Williams Road				
Survey Location:	Sunrise Steet & Mar Street				
Speed Limit:	25 MPH				
Date:	06/20/19	Day:	Thursday		
Hours:	From: 159	To:	227		
Weather:	Overcast				
Observer(s):	Chris B. & Victor C.				

MPH	Frequency	Percent	Cumulative %	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	1	1.00%	1.00%	
22	1	1.00%	2.00%	
23	3	3.00%	5.00%	
24	4	4.00%	9.00%	
25	3	3.00%	12.00%	
26	7	7.00%	19.00%	
27	7	7.00%	26.00%	
28	16	16.00%	42.00%	
29	14	14.00%	56.00%	
30	13	13.00%	69.00%	
31	11	11.00%	80.00%	
32	8	8.00%	88.00%	
33	2	2.00%	90.00%	
34	1	1.00%	91.00%	
35	3	3.00%	94.00%	
36	3	3.00%	97.00%	
37	2	2.00%	99.00%	
38	0	0.00%	99.00%	
39	1	1.00%	100.00%	
40	0	0.00%	100.00%	
41	0	0.00%	100.00%	
42	0	0.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
45	0	0.00%	100.00%	
46	0	0.00%	100.00%	
47	0	0.00%	100.00%	
48	0	0.00%	100.00%	
49	0	0.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
Totals:	100	100.00%		

#### Data Analysis:

Time Mean Speed:	29.2	MPH
Sample Variance:	11.52	
Standard Deviation:	3.4	
Variance of the Mean:	0.1152	
Standard Error of the Mean:	0.3	
10 MPH Pace:	23	To: 32 MPH
Percent in Pace:	86.0%	
Vehicles in Pace:	86	
50th Percentile Speed:	29	MPH
85th Percentile Speed:	32	MPH
90th Percentile Speed:	33	MPH
95th Percentile Speed:	36	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Garner Avenue</u>	Direction:	<u>WBD</u>		Comments:
Between:	<u>Rider Avenue &amp; Williams Road</u>	<b>No. 97</b>			
Survey Location:	<u>Sunrise Steet &amp; Mar Street</u>				
Speed Limit:	<u>25</u> MPH				
Date:	<u>06/20/19</u>				
Hours:	From: <u>01:59</u>	To:	<u>02:27</u>		
Weather:	<u>Overcast</u>				
Observer(s):	<u>Chris B. &amp; Victor C.</u>				

MPH	Frequency	Percent	Cumulative %	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	1	2.00%	2.00%	
22	1	2.00%	4.00%	
23	3	6.00%	10.00%	
24	3	6.00%	16.00%	
25	1	2.00%	18.00%	
26	2	4.00%	22.00%	
27	1	2.00%	24.00%	
28	8	16.00%	40.00%	
29	8	16.00%	56.00%	
30	7	14.00%	70.00%	
31	5	10.00%	80.00%	
32	5	10.00%	90.00%	
33	2	4.00%	94.00%	
34	0	0.00%	94.00%	
35	1	2.00%	96.00%	
36	1	2.00%	98.00%	
37	0	0.00%	98.00%	
38	0	0.00%	98.00%	
39	1	2.00%	100.00%	
40	0	0.00%	100.00%	
41	0	0.00%	100.00%	
42	0	0.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
45	0	0.00%	100.00%	
46	0	0.00%	100.00%	
47	0	0.00%	100.00%	
48	0	0.00%	100.00%	
49	0	0.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
Totals:	50	100.00%		

#### Data Analysis:

Time Mean Speed:	28.9	MPH
Sample Variance:	12.87	
Standard Deviation:	3.6	
Variance of the Mean:	0.2574	
Standard Error of the Mean:	0.5	
10 MPH Pace:	23	To: 32 MPH
Percent in Pace:	86.0%	
Vehicles in Pace:	43	
50th Percentile Speed:	29	MPH
85th Percentile Speed:	32	MPH
90th Percentile Speed:	32	MPH
95th Percentile Speed:	35	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution





# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	Garner Avenue	Direction:	EBD	Comments:
Between:	Rider Avenue & Williams Road	No. 97		
Survey Location:	Sunrise Steet & Mar Street			
Speed Limit:	25 MPH			
Date:	06/20/19			
Hours:	From: 159	To:	227	
Weather:	Overcast			
Observer(s):	Chris B. & Victor C.			

MPH	Frequency	Percent	Cumulative %	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	1	2.00%	2.00%	
25	2	4.00%	6.00%	
26	5	10.00%	16.00%	
27	6	12.00%	28.00%	
28	8	16.00%	44.00%	
29	6	12.00%	56.00%	
30	6	12.00%	68.00%	
31	6	12.00%	80.00%	
32	3	6.00%	86.00%	
33	0	0.00%	86.00%	
34	1	2.00%	88.00%	
35	2	4.00%	92.00%	
36	2	4.00%	96.00%	
37	2	4.00%	100.00%	
38	0	0.00%	100.00%	
39	0	0.00%	100.00%	
40	0	0.00%	100.00%	
41	0	0.00%	100.00%	
42	0	0.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
45	0	0.00%	100.00%	
46	0	0.00%	100.00%	
47	0	0.00%	100.00%	
48	0	0.00%	100.00%	
49	0	0.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
Totals:	50	100.00%		

#### Data Analysis:

Time Mean Speed:	29.5	MPH
Sample Variance:	10.21	
Standard Deviation:	3.2	
Variance of the Mean:	0.2042	
Standard Error of the Mean:	0.5	
10 MPH Pace:	23	To: 32 MPH
Percent in Pace:	86.0%	
Vehicles in Pace:	43	
50th Percentile Speed:	29	MPH
85th Percentile Speed:	32	MPH
90th Percentile Speed:	35	MPH
95th Percentile Speed:	36	MPH







#### Cumulative Frequency Distribution

#### Frequency Distribution



**COMMENTS:**

This segment of Work Street is classified as a minor arterial in the City of Salinas General Plan. The surrounding land use includes retail and industrial areas. Speed data collected June 05, 2019 revealed the 85th percentile speed of 42 mph. The 10 mph pace ranges from 32 mph to 41 mph and suggests the 85th percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded up and reduced by 5 mph per MUTCD option 2, the existing posted speed limit of 35 mph should be retained.

AREA	DESCRIPTION	MAP SYMBOL
Distance	Approximately 6,300 Feet	<div> ALL WAY STOP</div> <div> SIGNAL</div> <div> SPEED SIGN</div> <div> CITY LIMITS</div> <div> CROSSWALK</div> <div> SCHOOL CROSSWALK</div>
Vertical Alignment	Flat	
Street Width	Varies (60 to 85 Feet)	
No. Lanes and Median	4-Lane Minor Arterial	
Existing Speed Zone	35 MPH	
85 <sup>th</sup> Percentile Speed	42 MPH	
Traffic Volume (Date)	6,950	
Accident Data (2 years)	3 Collisions (2017 - 2018)	
Street Segment Collision Rate = (Collisions) (1,000,000) (Years) (365) (ADT) (Length in Miles)	0.49 Acc./MVM	







# CITY OF SALINAS

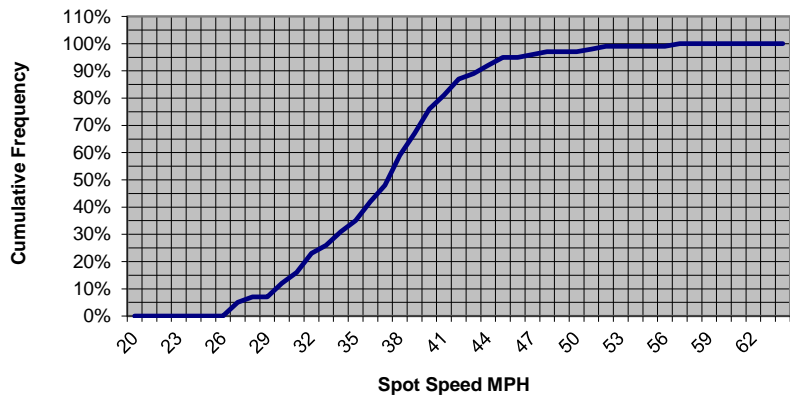
## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

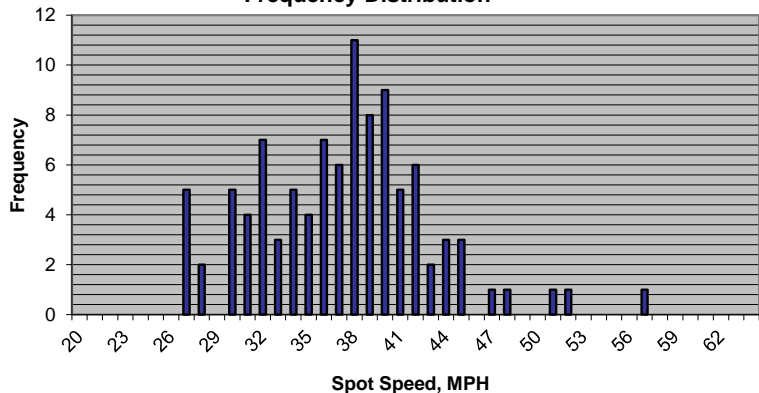
Street:	Work Street	Direction:	NBD/SBD		Comments:
Between:	East Alisal & Sanborn Road	No. 88			
Survey Location:	John Street & Sanborn Road				
Speed Limit:	35 MPH				
Date:	06/05/19				
Hours:	From: 1:30PM	To:	1:53PM		
Weather:	Sunny				
Observer(s):	Daniel E. & Victor C.				

MPH	Frequency	Percent	Cumulative %	
20	0	0.00%	0.00%	<b>Data Analysis:</b>
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	0	0.00%	0.00%	
25	0	0.00%	0.00%	
26	0	0.00%	0.00%	
27	5	5.00%	5.00%	
28	2	2.00%	7.00%	
29	0	0.00%	7.00%	
30	5	5.00%	12.00%	Time Mean Speed: 37.3 MPH
31	4	4.00%	16.00%	Sample Variance: 31.73
32	7	7.00%	23.00%	Standard Deviation: 5.6
33	3	3.00%	26.00%	Variance of the Mean: 0.3173
34	5	5.00%	31.00%	Standard Error of the Mean: 0.6
35	4	4.00%	35.00%	10 MPH Pace: 32 To: 41 MPH
36	7	7.00%	42.00%	Percent in Pace: 65.0%
37	6	6.00%	48.00%	Vehicles in Pace: 65
38	11	11.00%	59.00%	50th Percentile Speed: 38 MPH
39	8	8.00%	67.00%	85th Percentile Speed: 42 MPH
40	9	9.00%	76.00%	90th Percentile Speed: 44 MPH
41	5	5.00%	81.00%	95th Percentile Speed: 46 MPH
42	6	6.00%	87.00%	
43	2	2.00%	89.00%	
44	3	3.00%	92.00%	
45	3	3.00%	95.00%	
46	0	0.00%	95.00%	
47	1	1.00%	96.00%	
48	1	1.00%	97.00%	
49	0	0.00%	97.00%	
50	0	0.00%	97.00%	
51	1	1.00%	98.00%	
52	1	1.00%	99.00%	
53	0	0.00%	99.00%	
54	0	0.00%	99.00%	
55	0	0.00%	99.00%	
56	0	0.00%	99.00%	
57	1	1.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
60	0	0.00%	100.00%	
61	0	0.00%	100.00%	
62	0	0.00%	100.00%	
63	0	0.00%	100.00%	
64	0	0.00%	100.00%	
Totals:	100	100.00%		

Cumulative Frequency Distribution



Frequency Distribution





# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Work Street</u>	Direction:	<u>NBD</u>	<b>Comments:</b>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">No. 88</div>
Between:	<u>East Alisal &amp; Sanborn Road</u>			
Survey Location:	<u>John Street &amp; Sanborn Road</u>			
Speed Limit:	<u>35</u> MPH			
Date:	<u>06/05/19</u>	Day:	<u>Wednesday</u>	
Hours:	From: <u>1:30PM</u>	To:	<u>1:53PM</u>	
Weather:	<u>Sunny</u>			
Observer(s):	<u>Daniel E. &amp; Victor C.</u>			

MPH	Frequency	Percent	Cumulative %	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	0	0.00%	0.00%	
25	0	0.00%	0.00%	
26	0	0.00%	0.00%	
27	3	6.00%	6.00%	
28	0	0.00%	6.00%	
29	0	0.00%	6.00%	
30	1	2.00%	8.00%	
31	1	2.00%	10.00%	
32	4	8.00%	18.00%	
33	2	4.00%	22.00%	
34	1	2.00%	24.00%	
35	2	4.00%	28.00%	
36	4	8.00%	36.00%	
37	4	8.00%	44.00%	
38	7	14.00%	58.00%	
39	4	8.00%	66.00%	
40	6	12.00%	78.00%	
41	1	2.00%	80.00%	
42	3	6.00%	86.00%	
43	0	0.00%	86.00%	
44	2	4.00%	90.00%	
45	2	4.00%	94.00%	
46	0	0.00%	94.00%	
47	0	0.00%	94.00%	
48	1	2.00%	96.00%	
49	0	0.00%	96.00%	
50	0	0.00%	96.00%	
51	1	2.00%	98.00%	
52	1	2.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
60	0	0.00%	100.00%	
61	0	0.00%	100.00%	
62	0	0.00%	100.00%	
63	0	0.00%	100.00%	
64	0	0.00%	100.00%	
<b>Totals:</b>	<b>50</b>	<b>100.00%</b>		

#### Data Analysis:

Time Mean Speed:	37.8	MPH
Sample Variance:	29.43	
Standard Deviation:	5.4	
Variance of the Mean:	0.5886	
Standard Error of the Mean:	0.8	
10 MPH Pace:	31	To: 40 MPH
Percent in Pace:	70.0%	
Vehicles in Pace:	35	
50th Percentile Speed:	38	MPH
85th Percentile Speed:	42	MPH
90th Percentile Speed:	44	MPH
95th Percentile Speed:	48	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

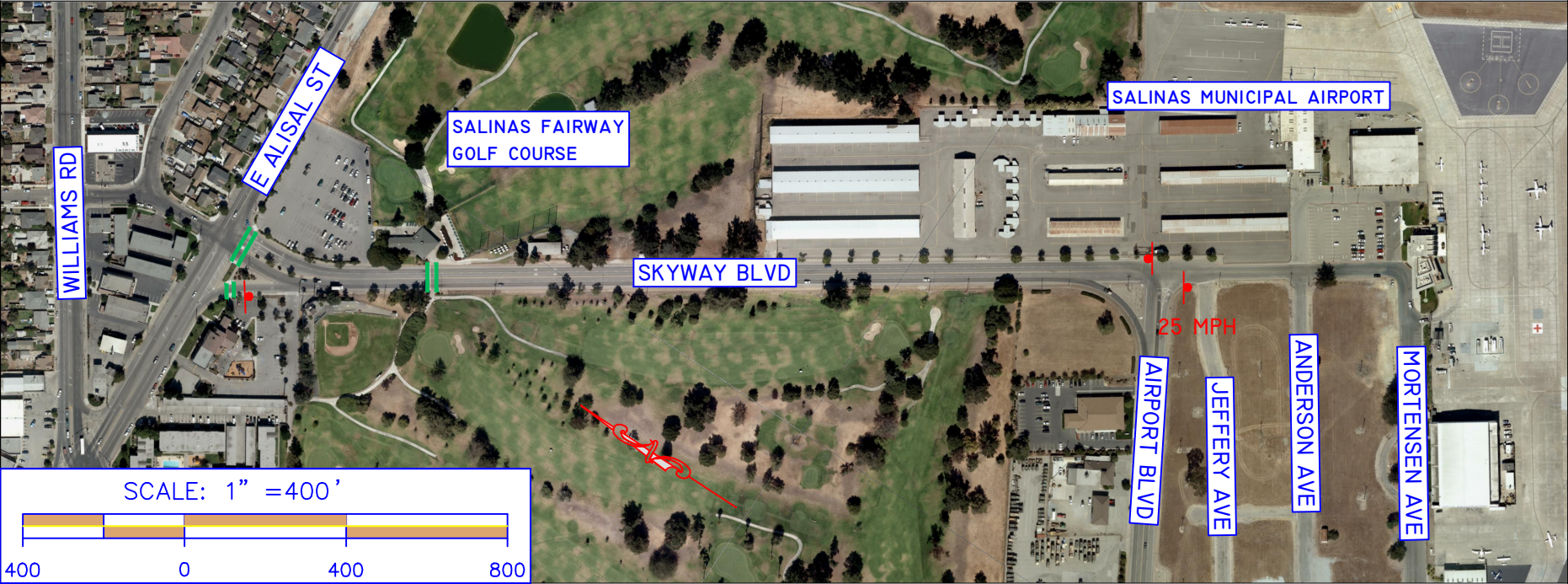
Street:	<u>Work Street</u>	Direction:	<u>SBD</u>	Comments:
Between:	<u>East Alisal &amp; Sanborn Road</u>	<b>No. 88</b>		
Survey Location:	<u>John Street &amp; Sanborn Road</u>			
Speed Limit:	<u>35</u> MPH			
Date:	<u>06/05/19</u>			
Hours:	From: <u>1:30PM</u>	To:	<u>1:53PM</u>	
Weather:	<u>Sunny</u>			
Observer(s):	<u>Daniel E. &amp; Victor C.</u>			

MPH	Frequency	Percent	Cumulative %	
20	0	0.00%	0.00%	<b>Data Analysis:</b>
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	0	0.00%	0.00%	
25	0	0.00%	0.00%	
26	0	0.00%	0.00%	
27	2	4.00%	4.00%	
28	2	4.00%	8.00%	
29	0	0.00%	8.00%	
30	4	8.00%	16.00%	Time Mean Speed: <u>36.7</u> MPH
31	3	6.00%	22.00%	Sample Variance: <u>34.11</u>
32	3	6.00%	28.00%	Standard Deviation: <u>5.8</u>
33	1	2.00%	30.00%	Variance of the Mean: <u>0.6822</u>
34	4	8.00%	38.00%	Standard Error of the Mean: <u>0.8</u>
35	2	4.00%	42.00%	10 MPH Pace: <u>34</u> To: <u>43</u> MPH
36	3	6.00%	48.00%	Percent in Pace: <u>62.0%</u>
37	2	4.00%	52.00%	Vehicles in Pace: <u>31</u>
38	4	8.00%	60.00%	50th Percentile Speed: <u>37</u> MPH
39	4	8.00%	68.00%	85th Percentile Speed: <u>42</u> MPH
40	3	6.00%	74.00%	90th Percentile Speed: <u>43</u> MPH
41	4	8.00%	82.00%	95th Percentile Speed: <u>45</u> MPH
42	3	6.00%	88.00%	
43	2	4.00%	92.00%	
44	1	2.00%	94.00%	
45	1	2.00%	96.00%	
46	0	0.00%	96.00%	
47	1	2.00%	98.00%	
48	0	0.00%	98.00%	
49	0	0.00%	98.00%	
50	0	0.00%	98.00%	
51	0	0.00%	98.00%	
52	0	0.00%	98.00%	
53	0	0.00%	98.00%	
54	0	0.00%	98.00%	
55	0	0.00%	98.00%	
56	0	0.00%	98.00%	
57	1	2.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
60	0	0.00%	100.00%	
61	0	0.00%	100.00%	
62	0	0.00%	100.00%	
63	0	0.00%	100.00%	
64	0	0.00%	100.00%	
Totals:	50	100.00%		

**Cumulative Frequency Distribution**








**Frequency Distribution**

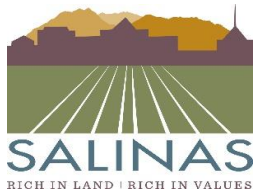




COMMENTS:

This segment of Skyway Boulevard is classified as a minor arterial in the City of Salinas General Plan. The surrounding land use is public/semipublic uses. Speed data was collected May 16, 2019 revealed the 85th-percentile speed of 47 mph. The 10 mph pace ranges from 37 mph to 46 mph and suggests the 85th percentile is above this range. Based on the surrounding land use, the 10 mph pace range, and the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1 in compliance with CVC Sections 627 and 22358.5, the existing posted speed limit of 35 mph should be increased to 40 mph.

AREA	DESCRIPTION	MAP SYMBOL	
Distance	Approximately 2,950 Feet	<div> ALL WAY STOP</div> <div> SIGNAL</div> <div> SPEED SIGN</div> <div> CITY LIMITS</div> <div> CROSSWALK</div> <div> SCHOOL CROSSWALK</div>	
Vertical Alignment	Flat		
Street Width	63 Feet		
No. Lanes and Median	4-Lane Minor Arterial		
Proposing Speed Zone	35 MPH		
85 <sup>th</sup> Percentile Speed	40 MPH		
Traffic Volume (Date)	12,450		
Accident Data (2 years)	2 Collisions (2017 - 2018)		
Street Segment Collision Rate = (Collisions) (1,000,000) (Years) (365) (ADT) (Length in Miles)	0.39 Acc./MVM		



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Skyway Boulevard</u>	Direction:	<u>EBD/WBD</u>		Comments:
Between:	<u>Mortensen Avenue &amp; Alisal Street</u>			<b>No.87</b>	
Survey Location:					
Speed Limit:	<u>35</u> MPH				
Date:	<u>05/16/19</u>	Day:	<u>Thursday</u>		
Hours:	From: <u>2:43PM</u>	To:	<u>3:02PM</u>		
Weather:	<u>Cloudy</u>				
Observer(s):	<u>Chris &amp; Herendira</u>				

MPH	Frequency	Percent	Cumulative %	
12	0	0.00%	0.00%	
13	0	0.00%	0.00%	
14	0	0.00%	0.00%	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	0	0.00%	0.00%	
25	0	0.00%	0.00%	
26	0	0.00%	0.00%	
27	0	0.00%	0.00%	
28	0	0.00%	0.00%	
29	1	1.00%	1.00%	
30	1	1.00%	2.00%	
31	0	0.00%	2.00%	
32	0	0.00%	2.00%	
33	1	1.00%	3.00%	
34	3	3.00%	6.00%	
35	6	6.00%	12.00%	
36	4	4.00%	16.00%	
37	5	5.00%	21.00%	
38	9	9.00%	30.00%	
39	5	5.00%	35.00%	
40	8	8.00%	43.00%	
41	9	9.00%	52.00%	
42	3	3.00%	55.00%	
43	12	12.00%	67.00%	
44	3	3.00%	70.00%	
45	7	7.00%	77.00%	
46	6	6.00%	83.00%	
47	4	4.00%	87.00%	
48	3	3.00%	90.00%	
49	3	3.00%	93.00%	
50	1	1.00%	94.00%	
51	2	2.00%	96.00%	
52	2	2.00%	98.00%	
53	1	1.00%	99.00%	
54	0	0.00%	99.00%	
55	0	0.00%	99.00%	
56	1	1.00%	100.00%	
Totals:	100	100.00%		

#### Data Analysis:

Time Mean Speed:	41.7	MPH
Sample Variance:	26.77	
Standard Deviation:	5.2	
Variance of the Mean:	0.2677	
Standard Error of the Mean:	0.5	
10 MPH Pace:	37	To: 46 MPH
Percent in Pace:	67.0%	
Vehicles in Pace:	67	
50th Percentile Speed:	41	MPH
85th Percentile Speed:	47	MPH
90th Percentile Speed:	48	MPH
95th Percentile Speed:	51	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Skyway Boulevard</u>	Direction:	<u>EBD</u>	Comments:  <b>No.87</b>
Between:	<u>Mortensen Avenue &amp; Alisal Street</u>			
Survey Location:				
Speed Limit:	<u>35</u> MPH			
Date:	<u>05/16/19</u>	Day:	<u>Thursday</u>	
Hours:	From: <u>2:43PM</u>	To:	<u>3:02PM</u>	
Weather:	<u>Cloudy</u>			
Observer(s):	<u>Chris &amp; Herendira</u>			

MPH	Frequency	Percent	Cumulative %		<i><b>Data Analysis:</b></i>
12	0	0.00%	0.00%		
13	0	0.00%	0.00%		
14	0	0.00%	0.00%		
15	0	0.00%	0.00%		
16	0	0.00%	0.00%		
17	0	0.00%	0.00%		
18	0	0.00%	0.00%		
19	0	0.00%	0.00%		
20	0	0.00%	0.00%		
21	0	0.00%	0.00%		
22	0	0.00%	0.00%		
23	0	0.00%	0.00%		
24	0	0.00%	0.00%		
25	0	0.00%	0.00%		
26	0	0.00%	0.00%		
27	0	0.00%	0.00%		
28	0	0.00%	0.00%		
29	0	0.00%	0.00%		
30	1	2.00%	2.00%		
31	0	0.00%	2.00%		
32	0	0.00%	2.00%		
33	1	2.00%	4.00%		
34	0	0.00%	4.00%		
35	1	2.00%	6.00%		
36	2	4.00%	10.00%		
37	3	6.00%	16.00%		
38	8	16.00%	32.00%		
39	4	8.00%	40.00%		
40	5	10.00%	50.00%		
41	3	6.00%	56.00%		
42	2	4.00%	60.00%		
43	7	14.00%	74.00%		
44	0	0.00%	74.00%		
45	3	6.00%	80.00%		
46	2	4.00%	84.00%		
47	4	8.00%	92.00%		
48	0	0.00%	92.00%		
49	3	6.00%	98.00%		
50	0	0.00%	98.00%		
51	0	0.00%	98.00%		
52	1	2.00%	100.00%		
53	0	0.00%	100.00%		
54	0	0.00%	100.00%		
55	0	0.00%	100.00%		
56	0	0.00%	100.00%		
Totals:	50	100.00%			

**Cumulative Frequency Distribution**

**Frequency Distribution**



# CITY OF SALINAS

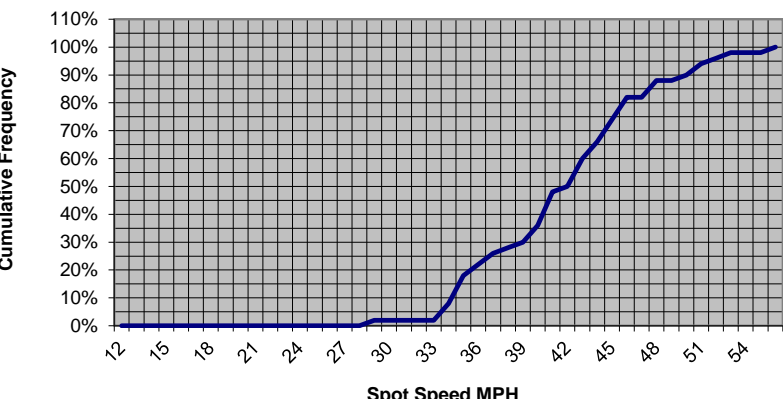
## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Skyway Boulevard</u>	Direction: <u>WBD</u>	Comments:  <div style="border: 1px solid black; padding: 2px; margin-top: 10px;">No.87</div>
Between:	<u>Mortensen Avenue &amp; Alisal Street</u>		
Survey Location:			
Speed Limit:	<u>35</u> MPH		
Date:	<u>05/16/19</u>	Day: <u>Thursday</u>	
Hours: From:	<u>2:43PM</u>	To: <u>3:02PM</u>	
Weather:	<u>Cloudy</u>		
Observer(s):	<u>Chris &amp; Herendira</u>		

MPH	Frequency	Percent	Cumulative %	Data Analysis:			
12	0	0.00%	0.00%	<div>Time Mean Speed: 42.1 MPH</div> <div>Sample Variance: 33.44</div> <div>Standard Deviation: 5.8</div> <div>Variance of the Mean: 0.6688</div> <div>Standard Error of the Mean: 0.8</div> <div>10 MPH Pace: 37 To: 46 MPH</div> <div>Percent in Pace: 60.0%</div> <div>Vehicles in Pace: 30</div> <div>50th Percentile Speed: 42 MPH</div> <div>85th Percentile Speed: 48 MPH</div> <div>90th Percentile Speed: 50 MPH</div> <div>95th Percentile Speed: 52 MPH</div>			
13	0	0.00%	0.00%				
14	0	0.00%	0.00%				
15	0	0.00%	0.00%				
16	0	0.00%	0.00%				
17	0	0.00%	0.00%				
18	0	0.00%	0.00%				
19	0	0.00%	0.00%				
20	0	0.00%	0.00%				
21	0	0.00%	0.00%				
22	0	0.00%	0.00%				
23	0	0.00%	0.00%				
24	0	0.00%	0.00%				
25	0	0.00%	0.00%				
26	0	0.00%	0.00%				
27	0	0.00%	0.00%				
28	0	0.00%	0.00%				
29	1	2.00%	2.00%				
30	0	0.00%	2.00%				
31	0	0.00%	2.00%				
32	0	0.00%	2.00%				
33	0	0.00%	2.00%				
34	3	6.00%	8.00%				
35	5	10.00%	18.00%				
36	2	4.00%	22.00%				
37	2	4.00%	26.00%				
38	1	2.00%	28.00%				
39	1	2.00%	30.00%				
40	3	6.00%	36.00%				
41	6	12.00%	48.00%				
42	1	2.00%	50.00%				
43	5	10.00%	60.00%				
44	3	6.00%	66.00%				
45	4	8.00%	74.00%				
46	4	8.00%	82.00%				
47	0	0.00%	82.00%				
48	3	6.00%	88.00%				
49	0	0.00%	88.00%				
50	1	2.00%	90.00%				
51	2	4.00%	94.00%				
52	1	2.00%	96.00%				
53	1	2.00%	98.00%				
54	0	0.00%	98.00%				
55	0	0.00%	98.00%				
56	1	2.00%	100.00%				
Totals:	50	100.00%					

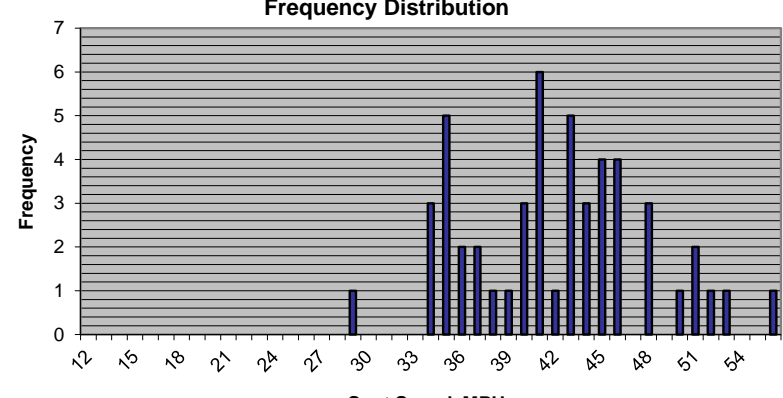
Cumulative Frequency Distribution



Cumulative Frequency

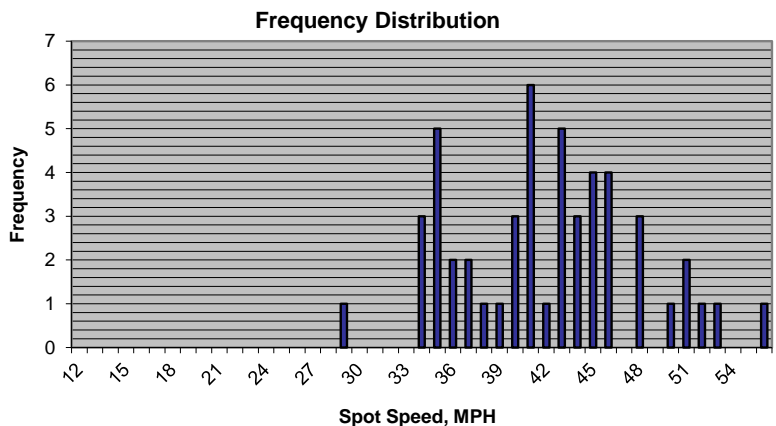
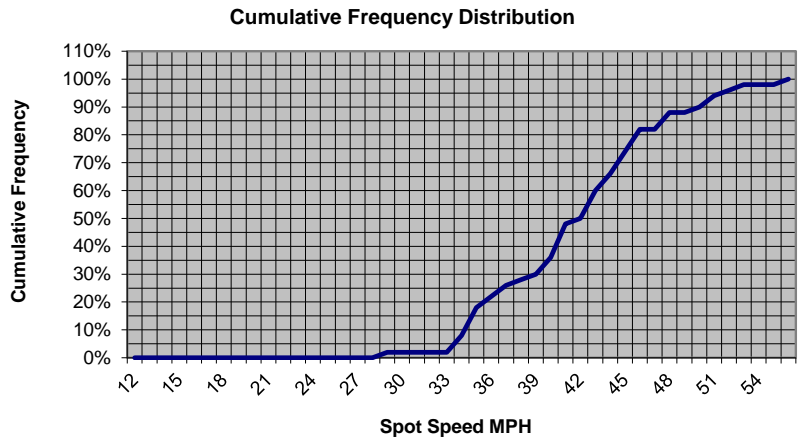
Spot Speed MPH

Frequency Distribution

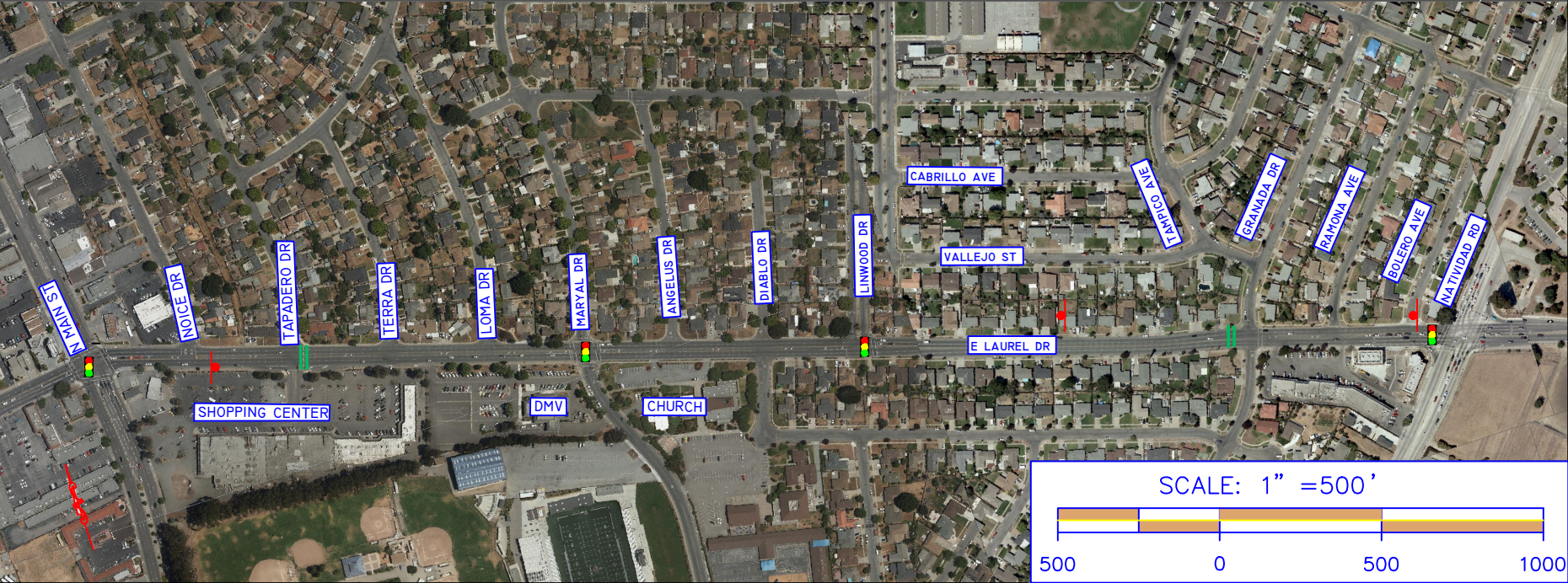


Frequency

Spot Speed, MPH














**COMMENTS:**

This segment of East Laurel Drive is classified as a major arterial in the City of Salinas General Plan. The surrounding land use includes residential homes, retail and office areas and a school. Speed data collected May 28, 2019 revealed the 85th percentile speed of 40 mph. The 10 mph pace ranges from 32 mph to 41 mph and suggests the 85th percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded up and reduced by 5 mph per MUTCD option 2, the existing posted speed limit of 35 mph should be retained.

AREA	DESCRIPTION	MAP SYMBOL	
Distance	Approximately 4,100 Feet	<div> ALL WAY STOP</div> <div> SIGNAL</div> <div> SPEED SIGN</div> <div> CITY LIMITS</div> <div> CROSSWALK</div> <div> SCHOOL CROSSWALK</div>	
Vertical Alignment	Flat		
Street Width	60 Feet		
No. Lanes and Median	4-Lane Major Arterial		
Existing Speed Zone	35 MPH		
85 <sup>th</sup> Percentile Speed	40 MPH		
Traffic Volume (Date)	21,199		
Accident Data (2 years)	11 Collisions (2017 - 2018)		
Street Segment Collision Rate = (Collisions) (1,000,000) (Years) (365) (ADT) (Length in Miles)	0.90 Acc./MVM		





# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	East Laurel Drive	Direction:	WBD/EBD	No. 83	Comments:
Between:	North Main Street & Natividad Road				
Survey Location:	Granada Avenue & Linwood Drive				
Speed Limit:	35 MPH				
Date:	05/28/19	Day:	Tuesday		
Hours:	From: 1:58PM	To:	2:13PM		
Weather:	Sunny				
Observer(s):	Alejandro B. & Victor C.				

MPH	Frequency	Percent	Cumulative %	<i>Data Analysis:</i>
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	0	0.00%	0.00%	
25	0	0.00%	0.00%	
26	0	0.00%	0.00%	
27	1	1.00%	1.00%	
28	1	1.00%	2.00%	
29	0	0.00%	2.00%	
30	2	2.00%	4.00%	
31	1	1.00%	5.00%	
32	6	6.00%	11.00%	
33	7	7.00%	18.00%	
34	11	11.00%	29.00%	
35	9	9.00%	38.00%	
36	11	11.00%	49.00%	
37	14	14.00%	63.00%	
38	5	5.00%	68.00%	
39	7	7.00%	75.00%	
40	10	10.00%	85.00%	
41	2	2.00%	87.00%	
42	1	1.00%	88.00%	
43	3	3.00%	91.00%	
44	4	4.00%	95.00%	
45	2	2.00%	97.00%	
46	1	1.00%	98.00%	
47	0	0.00%	98.00%	
48	1	1.00%	99.00%	
49	0	0.00%	99.00%	
50	0	0.00%	99.00%	
51	1	1.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
60	0	0.00%	100.00%	
61	0	0.00%	100.00%	
62	0	0.00%	100.00%	
63	0	0.00%	100.00%	
64	0	0.00%	100.00%	
Totals:	100	100.00%		

**Time Mean Speed:** 37.0 MPH

**Sample Variance:** 17.50

**Standard Deviation:** 4.2

**Variance of the Mean:** 0.1750

**Standard Error of the Mean:** 0.4

**10 MPH Pace:** 32 To: 41 MPH

**Percent in Pace:** 82.0%

**Vehicles in Pace:** 82

**50th Percentile Speed:** 37 MPH

**85th Percentile Speed:** 40 MPH

**90th Percentile Speed:** 43 MPH

**95th Percentile Speed:** 44 MPH

**Cumulative Frequency Distribution**

**Frequency Distribution**



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	East Laurel Drive	Direction:	WBD		
Between:	North Main Street & Natividad Road	No. 83 Comments:			
Survey Location:	Granada Avenue & Linwood Drive				
Speed Limit:	35 MPH				
Date:	05/28/19	Day:	Tuesday		
Hours:	From: 1:58PM	To:	2:13PM		
Weather:	Sunny				
Observer(s):	Alejandro B. & Victor C.				

MPH	Frequency	Percent	Cumulative %	
20	0	0.00%	0.00%	<b>Data Analysis:</b>
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	0	0.00%	0.00%	
25	0	0.00%	0.00%	
26	0	0.00%	0.00%	
27	1	2.00%	2.00%	
28	1	2.00%	4.00%	
29	0	0.00%	4.00%	
30	2	4.00%	8.00%	Time Mean Speed: 36.1 MPH
31	1	2.00%	10.00%	Sample Variance: 15.10
32	4	8.00%	18.00%	Standard Deviation: 3.9
33	3	6.00%	24.00%	Variance of the Mean: 0.3020
34	4	8.00%	32.00%	Standard Error of the Mean: 0.5
35	5	10.00%	42.00%	10 MPH Pace: 31 To: 40 MPH
36	6	12.00%	54.00%	Percent in Pace: 82.0%
37	8	16.00%	70.00%	Vehicles in Pace: 41
38	3	6.00%	76.00%	50th Percentile Speed: 36 MPH
39	2	4.00%	80.00%	85th Percentile Speed: 40 MPH
40	5	10.00%	90.00%	90th Percentile Speed: 40 MPH
41	1	2.00%	92.00%	95th Percentile Speed: 43 MPH
42	0	0.00%	92.00%	
43	2	4.00%	96.00%	
44	1	2.00%	98.00%	
45	1	2.00%	100.00%	
46	0	0.00%	100.00%	
47	0	0.00%	100.00%	
48	0	0.00%	100.00%	
49	0	0.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
60	0	0.00%	100.00%	
61	0	0.00%	100.00%	
62	0	0.00%	100.00%	
63	0	0.00%	100.00%	
64	0	0.00%	100.00%	
Totals:	50	100.00%		

**Cumulative Frequency Distribution**

**Frequency Distribution**



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

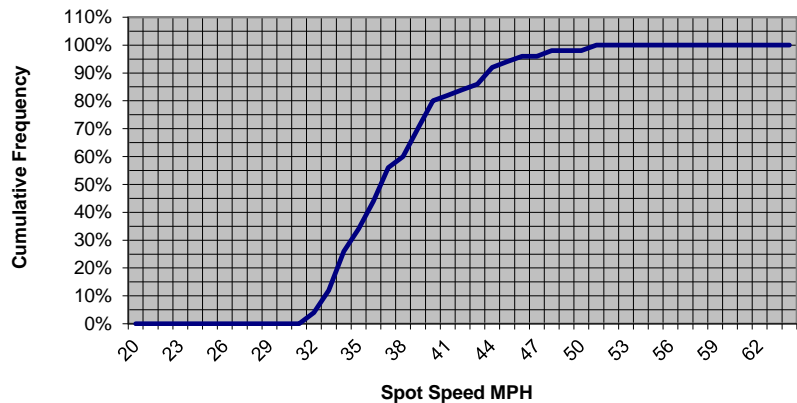
Street:	East Laurel Drive	Direction:	EBD	Comments:
Between:	North Main Street & Natividad Road	No. 83		
Survey Location:	Granada Avenue & Linwood Drive			
Speed Limit:	35 MPH			
Date:	05/28/19	Day:	Tuesday	
Hours:	From: 1:58PM	To:	2:13PM	
Weather:	Sunny			
Observer(s):	Alejandro B. & Victor C.			

MPH	Frequency	Percent	Cumulative %
20	0	0.00%	0.00%
21	0	0.00%	0.00%
22	0	0.00%	0.00%
23	0	0.00%	0.00%
24	0	0.00%	0.00%
25	0	0.00%	0.00%
26	0	0.00%	0.00%
27	0	0.00%	0.00%
28	0	0.00%	0.00%
29	0	0.00%	0.00%
30	0	0.00%	0.00%
31	0	0.00%	0.00%
32	2	4.00%	4.00%
33	4	8.00%	12.00%
34	7	14.00%	26.00%
35	4	8.00%	34.00%
36	5	10.00%	44.00%
37	6	12.00%	56.00%
38	2	4.00%	60.00%
39	5	10.00%	70.00%
40	5	10.00%	80.00%
41	1	2.00%	82.00%
42	1	2.00%	84.00%
43	1	2.00%	86.00%
44	3	6.00%	92.00%
45	1	2.00%	94.00%
46	1	2.00%	96.00%
47	0	0.00%	96.00%
48	1	2.00%	98.00%
49	0	0.00%	98.00%
50	0	0.00%	98.00%
51	1	2.00%	100.00%
52	0	0.00%	100.00%
53	0	0.00%	100.00%
54	0	0.00%	100.00%
55	0	0.00%	100.00%
56	0	0.00%	100.00%
57	0	0.00%	100.00%
58	0	0.00%	100.00%
59	0	0.00%	100.00%
60	0	0.00%	100.00%
61	0	0.00%	100.00%
62	0	0.00%	100.00%
63	0	0.00%	100.00%
64	0	0.00%	100.00%
Totals:	50	100.00%	

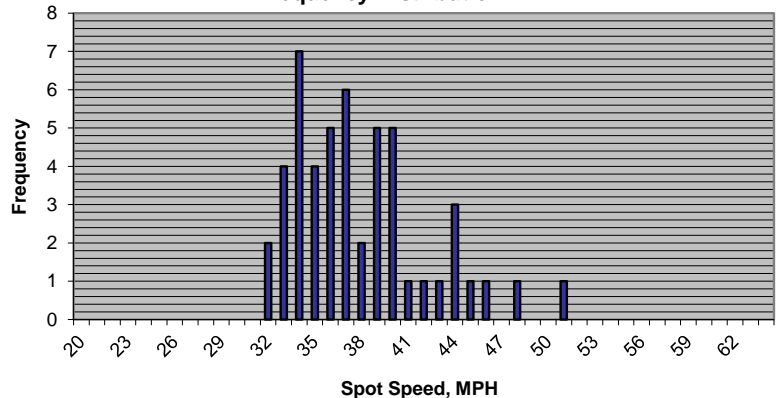
#### Data Analysis:

Time Mean Speed:	37.9	MPH
Sample Variance:	18.58	
Standard Deviation:	4.3	
Variance of the Mean:	0.3716	
Standard Error of the Mean:	0.6	
10 MPH Pace:	32	To: 41 MPH
Percent in Pace:	82.0%	
Vehicles in Pace:	41	
50th Percentile Speed:	37	MPH
85th Percentile Speed:	43	MPH
90th Percentile Speed:	44	MPH
95th Percentile Speed:	46	MPH

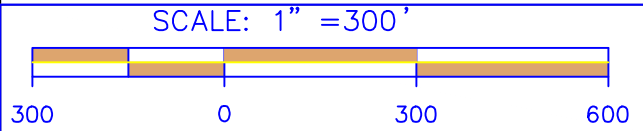
Cumulative Frequency Distribution



Frequency Distribution













COMMENTS:

This segment of Front Street is classified as a major arterial in the City of Salinas General Plan. The surrounding land use includes industrial, and retail areas. Speed data collected June 5, 2019 revealed the 85th percentile speed of 35 mph. The 10 mph pace ranges from 26 mph to 35 mph and suggests the 85th percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded up and reduced by 5 mph per MUTCD option 2, the speed limit of 30 mph should be posted.

AREA	DESCRIPTION	MAP SYMBOL	
Distance	Approximately 3,770 Feet	<div> ALL WAY STOP</div> <div> SIGNAL</div> <div> SPEED SIGN</div> <div> CITY LIMITS</div> <div> CROSSWALK</div> <div> SCHOOL CROSSWALK</div>	
Vertical Alignment	Flat		
Street Width	85 Feet		
No. Lanes and Median	4-Lane Major Arterial		
Proposing Speed Zone	30 MPH		
85 <sup>th</sup> Percentile Speed	35 MPH		
Traffic Volume (Date)	15,050		
Accident Data (2 years)	4 Collisions (2017 - 2018)		
Street Segment Collision Rate = (Collisions) (1,000,000) (Years) (365) (ADT) (Length in Miles)	0.51 Acc./MVM		



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Front Street</u>	Direction:	<u>NBD</u>		Comments:
Between:	<u>East Market Street &amp; John Street</u>	<b>No. 82</b>			
Survey Location:	<u>Alisal Street &amp; San Luis Street</u>				
Speed Limit:	<u>25</u> MPH				
Date:	<u>06/05/19</u>				
Hours:	From: <u>12:20PM</u>	To:	<u>12:40PM</u>		
Weather:	<u>Sunny</u>				
Observer(s):	<u>Daniel E. &amp; Victor C.</u>				

MPH	Frequency	Percent	Cumulative %	
15	0	0.00%	0.00%	<b>Data Analysis:</b>
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	1	2.00%	2.00%	
25	3	6.00%	8.00%	Time Mean Speed: <u>31.1</u> MPH
26	2	4.00%	12.00%	Sample Variance: <u>15.11</u>
27	4	8.00%	20.00%	Standard Deviation: <u>3.9</u>
28	3	6.00%	26.00%	Variance of the Mean: <u>0.3022</u>
29	6	12.00%	38.00%	Standard Error of the Mean: <u>0.5</u>
30	5	10.00%	48.00%	10 MPH Pace: <u>26</u> To: <u>35</u> MPH
31	4	8.00%	56.00%	Percent in Pace: <u>80.0%</u>
32	5	10.00%	66.00%	Vehicles in Pace: <u>40</u>
33	1	2.00%	68.00%	50th Percentile Speed: <u>31</u> MPH
34	6	12.00%	80.00%	85th Percentile Speed: <u>35</u> MPH
35	4	8.00%	88.00%	90th Percentile Speed: <u>36</u> MPH
36	1	2.00%	90.00%	95th Percentile Speed: <u>38</u> MPH
37	1	2.00%	92.00%	
38	2	4.00%	96.00%	
39	2	4.00%	100.00%	
40	0	0.00%	100.00%	
41	0	0.00%	100.00%	
42	0	0.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
45	0	0.00%	100.00%	
46	0	0.00%	100.00%	
47	0	0.00%	100.00%	
48	0	0.00%	100.00%	
49	0	0.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
Totals:	50	100.00%		

**Cumulative Frequency Distribution**

**Frequency Distribution**



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

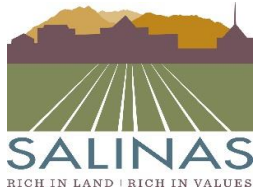
Street:	Front Street	Direction:	SBD	Comments:
Between:	East Market Street & John Street	No. 82		
Survey Location:	Alisal Street & San Luis Street			
Speed Limit:	25 MPH			
Date:	06/05/19			
Hours:	From: 12:20PM	To:	12:40PM	
Weather:	Sunny			
Observer(s):	Daniel E. & Victor C.			

MPH	Frequency	Percent	Cumulative %	Data Analysis:				
15	0	0.00%	0.00%	<div><div>Time Mean Speed:</div><div>Sample Variance:</div><div>Standard Deviation:</div><div>Variance of the Mean:</div><div>Standard Error of the Mean:</div><div>10 MPH Pace:</div><div>Percent in Pace:</div><div>Vehicles in Pace:</div><div>50th Percentile Speed:</div><div>85th Percentile Speed:</div><div>90th Percentile Speed:</div><div>95th Percentile Speed:</div></div>	31.7	MPH		
16	0	0.00%	0.00%		21.86			
17	0	0.00%	0.00%		4.7			
18	0	0.00%	0.00%		0.4372			
19	0	0.00%	0.00%		0.7			
20	0	0.00%	0.00%		26	To:	35	MPH
21	0	0.00%	0.00%		70.0%			
22	2	4.00%	4.00%		35			
23	0	0.00%	4.00%		32	MPH		
24	2	4.00%	8.00%		37	MPH		
25	2	4.00%	12.00%	38	MPH			
26	2	4.00%	16.00%	39	MPH			
27	2	4.00%	20.00%					
28	3	6.00%	26.00%					
29	4	8.00%	34.00%					
30	1	2.00%	36.00%					
31	4	8.00%	44.00%					
32	4	8.00%	52.00%					
33	7	14.00%	66.00%					
34	2	4.00%	70.00%					
35	6	12.00%	82.00%					
36	1	2.00%	84.00%					
37	2	4.00%	88.00%					
38	3	6.00%	94.00%					
39	1	2.00%	96.00%					
40	1	2.00%	98.00%					
41	1	2.00%	100.00%					
42	0	0.00%	100.00%					
43	0	0.00%	100.00%					
44	0	0.00%	100.00%					
45	0	0.00%	100.00%					
46	0	0.00%	100.00%					
47	0	0.00%	100.00%					
48	0	0.00%	100.00%					
49	0	0.00%	100.00%					
50	0	0.00%	100.00%					
51	0	0.00%	100.00%					
52	0	0.00%	100.00%					
53	0	0.00%	100.00%					
54	0	0.00%	100.00%					
55	0	0.00%	100.00%					
56	0	0.00%	100.00%					
57	0	0.00%	100.00%					
58	0	0.00%	100.00%					
59	0	0.00%	100.00%					
Totals:	50	100.00%						

Cumulative Frequency Distribution

Frequency Distribution





# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	Front Street	Direction:	NBD/SBD		Comments:
Between:	East Market Street & John Street	No. 82			
Survey Location:	Alisal Street & San Luis Street				
Speed Limit:	25 MPH				
Date:	06/05/19				
Hours:	From: 12:20PM	To:	12:40PM		
Weather:	Sunny				
Observer(s):	Daniel E. & Victor C.				

MPH	Frequency	Percent	Cumulative %	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	2	2.00%	2.00%	
23	0	0.00%	2.00%	
24	3	3.00%	5.00%	
25	5	5.00%	10.00%	
26	4	4.00%	14.00%	
27	6	6.00%	20.00%	
28	6	6.00%	26.00%	
29	10	10.00%	36.00%	
30	6	6.00%	42.00%	
31	8	8.00%	50.00%	
32	9	9.00%	59.00%	
33	8	8.00%	67.00%	
34	8	8.00%	75.00%	
35	10	10.00%	85.00%	
36	2	2.00%	87.00%	
37	3	3.00%	90.00%	
38	5	5.00%	95.00%	
39	3	3.00%	98.00%	
40	1	1.00%	99.00%	
41	1	1.00%	100.00%	
42	0	0.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
45	0	0.00%	100.00%	
46	0	0.00%	100.00%	
47	0	0.00%	100.00%	
48	0	0.00%	100.00%	
49	0	0.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
Totals:	100	100.00%		

#### Data Analysis:

Time Mean Speed:	31.4	MPH
Sample Variance:	18.38	
Standard Deviation:	4.3	
Variance of the Mean:	0.1838	
Standard Error of the Mean:	0.4	
10 MPH Pace:	26	To: 35 MPH
Percent in Pace:	75.0%	
Vehicles in Pace:	75	
50th Percentile Speed:	31	MPH
85th Percentile Speed:	35	MPH
90th Percentile Speed:	37	MPH
95th Percentile Speed:	38	MPH

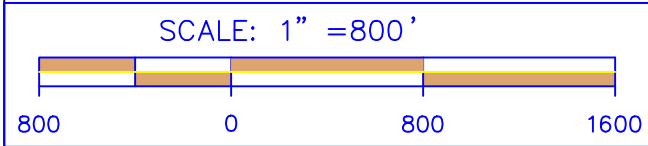
#### Cumulative Frequency Distribution

#### Frequency Distribution

**CITY OF SALINAS  
DEVELOPMENT & ENGINEERING SERVICES  
TRAFFIC SURVEY**

STREET: **EAST BORONDA ROAD**  
BETWEEN: **CONSTITUTION BLVD. & WILLIAMS RD.**  
SURVEY DATE: **05/22/19 (EXPIRES IN 2024)**

**80**



**COMMENTS:**

This segment of Boronda Road is classified as a major arterial in the City of Salinas General Plan. The surrounding land use includes backing residential homes, and retail areas. Speed data collected May 22, 2019 revealed the 85th percentile speed of 51 mph. The 10 mph pace ranges from 37 mph to 46 mph and suggests the 85th percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1, the existing posted speed limit of 45 mph should be retained.

AREA	DESCRIPTION	MAP SYMBOL	
Distance	Approximately 6,707 Feet	ALL WAY STOP SIGNAL SPEED SIGN CITY LIMITS CROSSWALK SCHOOL CROSSWALK	
Vertical Alignment	Flat		
Street Width	45 Feet		
No. Lanes and Median	2-Lane Major Arterial		
Existing Speed Zone	45 MPH		
85 <sup>th</sup> Percentile Speed	51 MPH		
Traffic Volume (Date)	14,499		
Accident Data (2 years)	7 Collisions (2017 - 2018)		
Street Segment Collision Rate = (Collisions) (1,000,000) (Years) (365) (ADT) (Length in Miles)	0.52 Acc./MVM		





# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

<b>Street:</b>	<u>Boronda Road</u>	<b>Direction:</b>	<u>NBD/SBD</u>	<b>Comments:</b>	
<b>Between:</b>	<u>Constitution Blvd &amp; Williams Road</u>	<b>No. 80</b>			
<b>Survey Location:</b>	<u>Constitution Blvd &amp; Rider Avenue</u>				
<b>Speed Limit:</b>	<u>45 MPH</u>				
<b>Date:</b>	<u>05/22/19</u>				
<b>Hours:</b>	<b>From:</b>	<u>3:31PM</u>	<b>To:</b>	<u>3:47PM</u>	
<b>Weather:</b>	<u>Sunny</u>				
<b>Observer(s):</b>	<u>Giovanni N. &amp; Victor C.</u>				

MPH	Frequency	Percent	Cumulative %	Data Analysis:			
25	0	0.00%	0.00%	<div><div>Time Mean Speed:44.7MPH</div><div>Sample Variance:36.50</div><div>Standard Deviation:6.0</div><div>Variance of the Mean:0.3650</div><div>Standard Error of the Mean:0.6</div><div>10 MPH Pace:37To:46MPH</div><div>Percent in Pace:63.0%</div><div>Vehicles in Pace:63</div><div>50th Percentile Speed:43MPH</div><div>85th Percentile Speed:51MPH</div><div>90th Percentile Speed:53MPH</div><div>95th Percentile Speed:55MPH</div></div>			
26	0	0.00%	0.00%				
27	0	0.00%	0.00%				
28	0	0.00%	0.00%				
29	0	0.00%	0.00%				
30	1	1.00%	1.00%				
31	0	0.00%	1.00%				
32	0	0.00%	1.00%				
33	0	0.00%	1.00%				
34	0	0.00%	1.00%				
35	0	0.00%	1.00%				
36	1	1.00%	2.00%				
37	3	3.00%	5.00%				
38	7	7.00%	12.00%				
39	8	8.00%	20.00%				
40	9	9.00%	29.00%				
41	11	11.00%	40.00%				
42	6	6.00%	46.00%				
43	5	5.00%	51.00%				
44	1	1.00%	52.00%				
45	7	7.00%	59.00%				
46	6	6.00%	65.00%				
47	3	3.00%	68.00%				
48	3	3.00%	71.00%				
49	8	8.00%	79.00%				
50	4	4.00%	83.00%				
51	3	3.00%	86.00%				
52	2	2.00%	88.00%				
53	4	4.00%	92.00%				
54	1	1.00%	93.00%				
55	2	2.00%	95.00%				
56	1	1.00%	96.00%				
57	0	0.00%	96.00%				
58	1	1.00%	97.00%				
59	1	1.00%	98.00%				
60	1	1.00%	99.00%				
61	0	0.00%	99.00%				
62	1	1.00%	100.00%				
63	0	0.00%	100.00%				
64	0	0.00%	100.00%				
65	0	0.00%	100.00%				
66	0	0.00%	100.00%				
67	0	0.00%	100.00%				
68	0	0.00%	100.00%				
69	0	0.00%	100.00%				
Totals:	100	100.00%					

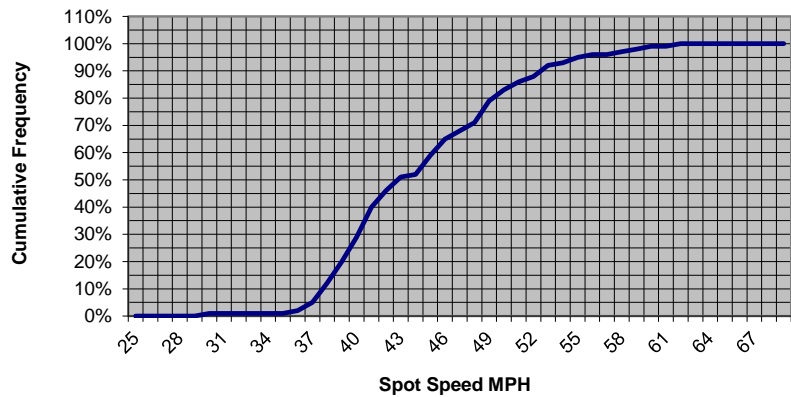
Cumulative Frequency Distribution

Spot Speed (MPH)	Cumulative Frequency (%)
25	0.00
26	0.00
27	0.00
28	0.00
29	0.00
30	0.00
31	1.00
32	1.00
33	1.00
34	1.00
35	1.00
36	2.00
37	5.00
38	12.00
39	20.00
40	29.00
41	40.00
42	46.00
43	51.00
44	52.00
45	59.00
46	65.00
47	68.00
48	71.00
49	79.00
50	83.00
51	86.00
52	88.00
53	92.00
54	93.00
55	95.00
56	96.00
57	96.00
58	97.00
59	98.00
60	99.00
61	99.00
62	100.00
63	100.00
64	100.00
65	100.00
66	100.00
67	100.00

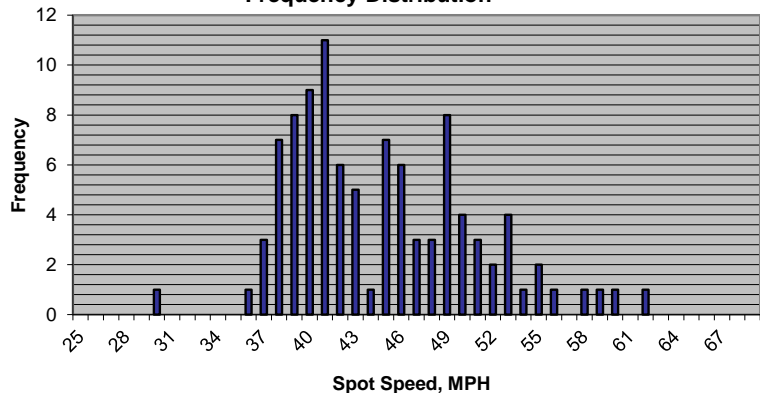
Frequency Distribution

Spot Speed (MPH)	Frequency
25	0
26	0
27	0
28	0
29	0
30	0
31	1
32	0
33	0
34	0
35	0
36	1
37	3
38	7
39	8
40	9
41	11
42	6
43	5
44	1
45	7
46	6
47	3
48	3
49	8
50	4
51	3
52	2
53	4
54	1
55	2
56	1
57	0
58	1
59	1
60	1
61	0
62	1
63	0
64	0
65	0
66	0
67	0

**Cumulative Frequency Distribution**



**Frequency Distribution**





# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Boronda Road</u>	Direction:	<u>NBD</u>	Comments:  <div style="border: 1px solid black; padding: 2px; margin-top: 10px;">No. 80</div>
Between:	<u>Constitution Blvd &amp; Williams Road</u>			
Survey Location:	<u>Constitution Blvd &amp; Rider Avenue</u>			
Speed Limit:	<u>45</u> MPH			
Date:	<u>05/22/19</u>	Day:	<u>Wednesday</u>	
Hours: From:	<u>3:31PM</u>	To:	<u>3:47PM</u>	
Weather:	<u>Sunny</u>			
Observer(s):	<u>Giovanni N. &amp; Victor C.</u>			

MPH	Frequency	Percent	Cumulative %	
25	0	0.00%	0.00%	
26	0	0.00%	0.00%	
27	0	0.00%	0.00%	
28	0	0.00%	0.00%	
29	0	0.00%	0.00%	
30	1	2.00%	2.00%	
31	0	0.00%	2.00%	
32	0	0.00%	2.00%	
33	0	0.00%	2.00%	
34	0	0.00%	2.00%	
35	0	0.00%	2.00%	
36	0	0.00%	2.00%	
37	0	0.00%	2.00%	
38	3	6.00%	8.00%	
39	0	0.00%	8.00%	
40	4	8.00%	16.00%	
41	4	8.00%	24.00%	
42	1	2.00%	26.00%	
43	2	4.00%	30.00%	
44	0	0.00%	30.00%	
45	5	10.00%	40.00%	
46	4	8.00%	48.00%	
47	3	6.00%	54.00%	
48	2	4.00%	58.00%	
49	4	8.00%	66.00%	
50	3	6.00%	72.00%	
51	3	6.00%	78.00%	
52	1	2.00%	80.00%	
53	3	6.00%	86.00%	
54	1	2.00%	88.00%	
55	1	2.00%	90.00%	
56	1	2.00%	92.00%	
57	0	0.00%	92.00%	
58	1	2.00%	94.00%	
59	1	2.00%	96.00%	
60	1	2.00%	98.00%	
61	0	0.00%	98.00%	
62	1	2.00%	100.00%	
63	0	0.00%	100.00%	
64	0	0.00%	100.00%	
65	0	0.00%	100.00%	
66	0	0.00%	100.00%	
67	0	0.00%	100.00%	
68	0	0.00%	100.00%	
69	0	0.00%	100.00%	
Totals:	50	100.00%		

#### Data Analysis:

Time Mean Speed:	47.1	MPH
Sample Variance:	41.45	
Standard Deviation:	6.4	
Variance of the Mean:	0.8290	
Standard Error of the Mean:	0.9	
10 MPH Pace:	40	To: 49 MPH
Percent in Pace:	58.0%	
Vehicles in Pace:	29	
50th Percentile Speed:	47	MPH
85th Percentile Speed:	53	MPH
90th Percentile Speed:	55	MPH
95th Percentile Speed:	59	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

<b>Street:</b>	<u>Boronda Road</u>	<b>Direction:</b>	<u>SBD</u>	<b>Comments:</b>     <b>No. 80</b>
<b>Between:</b>	<u>Constitution Blvd &amp; Williams Road</u>			
<b>Survey Location:</b>	<u>Constitution Blvd &amp; Rider Avenue</u>			
<b>Speed Limit:</b>	<u>45</u> MPH			
<b>Date:</b>	<u>05/22/19</u>	<b>Day:</b>	<u>Wednesday</u>	
<b>Hours:</b>	<b>From:</b> <u>3:31PM</u>	<b>To:</b>	<u>3:47PM</u>	
<b>Weather:</b>	<u>Sunny</u>			
<b>Observer(s):</b>	<u>Giovanni N. &amp; Victor C.</u>			

MPH	Frequency	Percent	Cumulative %	
25	0	0.00%	0.00%	
26	0	0.00%	0.00%	
27	0	0.00%	0.00%	
28	0	0.00%	0.00%	
29	0	0.00%	0.00%	
30	0	0.00%	0.00%	
31	0	0.00%	0.00%	
32	0	0.00%	0.00%	
33	0	0.00%	0.00%	
34	0	0.00%	0.00%	
35	0	0.00%	0.00%	
36	1	2.00%	2.00%	
37	3	6.00%	8.00%	
38	4	8.00%	16.00%	
39	8	16.00%	32.00%	
40	5	10.00%	42.00%	
41	7	14.00%	56.00%	
42	5	10.00%	66.00%	
43	3	6.00%	72.00%	
44	1	2.00%	74.00%	
45	2	4.00%	78.00%	
46	2	4.00%	82.00%	
47	0	0.00%	82.00%	
48	1	2.00%	84.00%	
49	4	8.00%	92.00%	
50	1	2.00%	94.00%	
51	0	0.00%	94.00%	
52	1	2.00%	96.00%	
53	1	2.00%	98.00%	
54	0	0.00%	98.00%	
55	1	2.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
60	0	0.00%	100.00%	
61	0	0.00%	100.00%	
62	0	0.00%	100.00%	
63	0	0.00%	100.00%	
64	0	0.00%	100.00%	
65	0	0.00%	100.00%	
66	0	0.00%	100.00%	
67	0	0.00%	100.00%	
68	0	0.00%	100.00%	
69	0	0.00%	100.00%	
<b>Totals:</b>	50	100.00%		

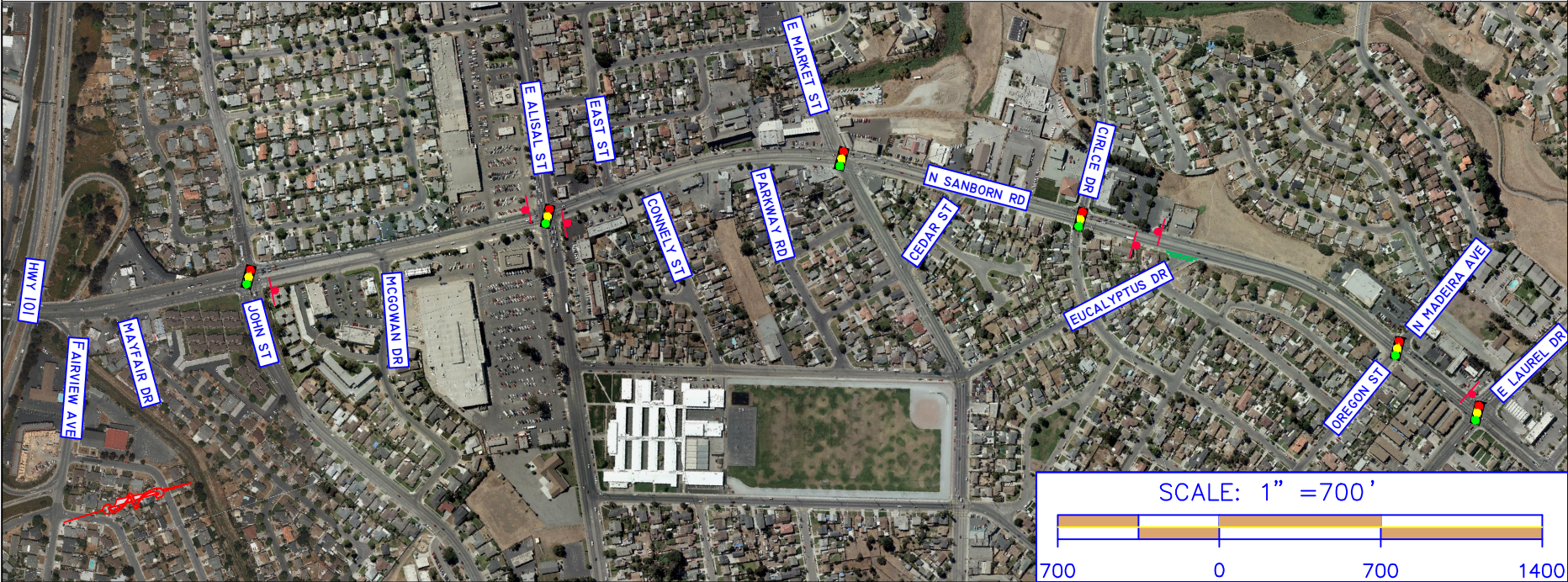
#### Data Analysis:

Time Mean Speed:	42.3	MPH
Sample Variance:	20.64	
Standard Deviation:	4.5	
Variance of the Mean:	0.4128	
Standard Error of the Mean:	0.6	
10 MPH Pace:	37	To: 46 MPH
Percent in Pace:	80.0%	
Vehicles in Pace:	40	
50th Percentile Speed:	41	MPH
85th Percentile Speed:	49	MPH
90th Percentile Speed:	49	MPH
95th Percentile Speed:	52	MPH

#### Cumulative Frequency Distribution








#### Frequency Distribution





COMMENTS:

This segment of Sanborn Road is classified as a major arterial in the City of Salinas General Plan. The surrounding land use includes residential homes, commercial and office areas. Speed data collected May 28, 2019 revealed the 85th percentile speed of 42 mph. The 10 mph pace ranges from 33 mph to 42 mph and suggests the 85th percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1, the existing posted speed limit of 35 mph should be retained.

AREA	DESCRIPTION	MAP SYMBOL	
Distance	Approximately 6,500 Feet	<div> ALL WAY STOP</div> <div> SIGNAL</div> <div> SPEED SIGN</div> <div> CITY LIMITS</div> <div> CROSSWALK</div> <div> SCHOOL CROSSWALK</div>	
Vertical Alignment	Flat		
Street Width	56 Feet		
No. Lanes and Median	4/5-Lane Major Arterial		
Existing Speed Zone	35 MPH		
85 <sup>th</sup> Percentile Speed	42 MPH		
Traffic Volume (Date)	18,978		
Accident Data (2 years)	25 Collisions (2017 - 2018)		
Street Segment Collision Rate = (Collisions) (1,000,000) (Years) (365) (ADT) (Length in Miles)	1.47 Acc./MVM		



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

<b>Street:</b>	<u>Sanborn Road</u>	<b>Direction:</b>	<u>NBD/SBD</u>		<b>Comments:</b>
<b>Between:</b>	<u>East Laurel Drive &amp; HWY 101</u>	<b>No. 66</b>			
<b>Survey Location:</b>	<u>Circle Drive &amp; North Madeira Avenue</u>				
<b>Speed Limit:</b>	<u>35</u> MPH				
<b>Date:</b>	<u>05/28/19</u>				
<b>Hours:</b>	<b>From:</b>	<u>2:27PM</u>	<b>To:</b>	<u>2:42PM</u>	
<b>Weather:</b>	<u>Sunny</u>				
<b>Observer(s):</b>	<u>Alejandro B. &amp; Victor C.</u>				

MPH	Frequency	Percent	Cumulative %	
25	0	0.00%	0.00%	
26	0	0.00%	0.00%	
27	0	0.00%	0.00%	
28	0	0.00%	0.00%	
29	0	0.00%	0.00%	
30	0	0.00%	0.00%	
31	2	2.00%	2.00%	
32	4	4.00%	6.00%	
33	3	3.00%	9.00%	
34	4	4.00%	13.00%	
35	10	10.00%	23.00%	
36	9	9.00%	32.00%	
37	5	5.00%	37.00%	
38	9	9.00%	46.00%	
39	10	10.00%	56.00%	
40	9	9.00%	65.00%	
41	10	10.00%	75.00%	
42	15	15.00%	90.00%	
43	1	1.00%	91.00%	
44	2	2.00%	93.00%	
45	2	2.00%	95.00%	
46	3	3.00%	98.00%	
47	2	2.00%	100.00%	
48	0	0.00%	100.00%	
49	0	0.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
60	0	0.00%	100.00%	
61	0	0.00%	100.00%	
62	0	0.00%	100.00%	
63	0	0.00%	100.00%	
64	0	0.00%	100.00%	
65	0	0.00%	100.00%	
66	0	0.00%	100.00%	
67	0	0.00%	100.00%	
68	0	0.00%	100.00%	
69	0	0.00%	100.00%	
<b>Totals:</b>	100	100.00%		

#### Data Analysis:

Time Mean Speed:	38.7	MPH
Sample Variance:	14.03	
Standard Deviation:	3.7	
Variance of the Mean:	0.1403	
Standard Error of the Mean:	0.4	
10 MPH Pace:	33	To: 42 MPH
Percent in Pace:	84.0%	
Vehicles in Pace:	84	
50th Percentile Speed:	39	MPH
85th Percentile Speed:	42	MPH
90th Percentile Speed:	42	MPH
95th Percentile Speed:	45	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution





# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	Sanborn Road	Direction:	NBD		Comments:
Between:	East Laurel Drive & HWY 101	No. 66			
Survey Location:	Circle Drive & North Madeira Avenue				
Speed Limit:	35 MPH				
Date:	05/28/19	Day:	Tuesday		
Hours:	From: 2:27PM	To:	2:42PM		
Weather:	Sunny				
Observer(s):	Alejandro B. & Victor C.				

MPH	Frequency	Percent	Cumulative %	
25	0	0.00%	0.00%	
26	0	0.00%	0.00%	
27	0	0.00%	0.00%	
28	0	0.00%	0.00%	
29	0	0.00%	0.00%	
30	0	0.00%	0.00%	
31	0	0.00%	0.00%	
32	1	2.00%	2.00%	
33	0	0.00%	2.00%	
34	0	0.00%	2.00%	
35	2	4.00%	6.00%	
36	5	10.00%	16.00%	
37	3	6.00%	22.00%	
38	6	12.00%	34.00%	
39	5	10.00%	44.00%	
40	8	16.00%	60.00%	
41	8	16.00%	76.00%	
42	7	14.00%	90.00%	
43	1	2.00%	92.00%	
44	1	2.00%	94.00%	
45	1	2.00%	96.00%	
46	2	4.00%	100.00%	
47	0	0.00%	100.00%	
48	0	0.00%	100.00%	
49	0	0.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
60	0	0.00%	100.00%	
61	0	0.00%	100.00%	
62	0	0.00%	100.00%	
63	0	0.00%	100.00%	
64	0	0.00%	100.00%	
65	0	0.00%	100.00%	
66	0	0.00%	100.00%	
67	0	0.00%	100.00%	
68	0	0.00%	100.00%	
69	0	0.00%	100.00%	
Totals:	50	100.00%		

#### Data Analysis:

Time Mean Speed:	39.6	MPH
Sample Variance:	8.19	
Standard Deviation:	2.9	
Variance of the Mean:	0.1638	
Standard Error of the Mean:	0.4	
10 MPH Pace:	35	To: 44 MPH
Percent in Pace:	92.0%	
Vehicles in Pace:	46	
50th Percentile Speed:	40	MPH
85th Percentile Speed:	42	MPH
90th Percentile Speed:	42	MPH
95th Percentile Speed:	45	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

<b>Street:</b>	<u>Sanborn Road</u>	<b>Direction:</b>	<u>SBD</u>		<b>Comments:</b>
<b>Between:</b>	<u>East Laurel Drive &amp; HWY 101</u>	<b>No. 66</b>			
<b>Survey Location:</b>	<u>Circle Drive &amp; North Madeira Avenue</u>				
<b>Speed Limit:</b>	<u>35 MPH</u>				
<b>Date:</b>	<u>05/28/19</u>				
<b>Hours:</b>	<b>From:</b>	<u>2:27PM</u>	<b>To:</b>	<u>2:42PM</u>	
<b>Weather:</b>	<u>Sunny</u>				
<b>Observer(s):</b>	<u>Alejandro B. &amp; Victor C.</u>				

MPH	Frequency	Percent	Cumulative %	Data Analysis:			
25	0	0.00%	0.00%	<div>Time Mean Speed: 37.7 MPH</div> <div>Sample Variance: 18.32</div> <div>Standard Deviation: 4.3</div> <div>Variance of the Mean: 0.3664</div> <div>Standard Error of the Mean: 0.6</div> <div>10 MPH Pace: 33 To: 42 MPH</div> <div>Percent in Pace: 80.0%</div> <div>Vehicles in Pace: 40</div> <div>50th Percentile Speed: 37 MPH</div> <div>85th Percentile Speed: 42 MPH</div> <div>90th Percentile Speed: 42 MPH</div> <div>95th Percentile Speed: 46 MPH</div>			
26	0	0.00%	0.00%				
27	0	0.00%	0.00%				
28	0	0.00%	0.00%				
29	0	0.00%	0.00%				
30	0	0.00%	0.00%				
31	2	4.00%	4.00%				
32	3	6.00%	10.00%				
33	3	6.00%	16.00%				
34	4	8.00%	24.00%				
35	8	16.00%	40.00%				
36	4	8.00%	48.00%				
37	2	4.00%	52.00%				
38	3	6.00%	58.00%				
39	5	10.00%	68.00%				
40	1	2.00%	70.00%				
41	2	4.00%	74.00%				
42	8	16.00%	90.00%				
43	0	0.00%	90.00%				
44	1	2.00%	92.00%				
45	1	2.00%	94.00%				
46	1	2.00%	96.00%				
47	2	4.00%	100.00%				
48	0	0.00%	100.00%				
49	0	0.00%	100.00%				
50	0	0.00%	100.00%				
51	0	0.00%	100.00%				
52	0	0.00%	100.00%				
53	0	0.00%	100.00%				
54	0	0.00%	100.00%				
55	0	0.00%	100.00%				
56	0	0.00%	100.00%				
57	0	0.00%	100.00%				
58	0	0.00%	100.00%				
59	0	0.00%	100.00%				
60	0	0.00%	100.00%				
61	0	0.00%	100.00%				
62	0	0.00%	100.00%				
63	0	0.00%	100.00%				
64	0	0.00%	100.00%				
65	0	0.00%	100.00%				
66	0	0.00%	100.00%				
67	0	0.00%	100.00%				
68	0	0.00%	100.00%				
69	0	0.00%	100.00%				
Totals:	50	100.00%					

Cumulative Frequency Distribution

Spot Speed MPH	Cumulative Frequency (%)
25	0.00%
26	0.00%
27	0.00%
28	0.00%
29	0.00%
30	0.00%
31	4.00%
32	10.00%
33	16.00%
34	24.00%
35	40.00%
36	48.00%
37	52.00%
38	58.00%
39	68.00%
40	70.00%
41	74.00%
42	90.00%
43	90.00%
44	92.00%
45	94.00%
46	96.00%
47	100.00%
48	100.00%
49	100.00%
50	100.00%
51	100.00%
52	100.00%
53	100.00%
54	100.00%
55	100.00%
56	100.00%
57	100.00%
58	100.00%
59	100.00%
60	100.00%
61	100.00%
62	100.00%
63	100.00%
64	100.00%
65	100.00%

Frequency Distribution








Spot Speed, MPH	Frequency
25	0
26	0
27	0
28	0
29	0
30	2
31	3
32	3
33	4
34	8
35	4
36	2
37	3
38	5
39	1
40	2
41	8
42	1
43	1
44	1
45	2
46	0
47	0
48	0
49	0
50	0
51	0
52	0
53	0
54	0
55	0
56	0
57	0
58	0
59	0
60	0
61	0
62	0
63	0
64	0
65	0





**COMMENTS:**

This segment of Sanborn Road is classified as a major arterial in the City of Salinas General Plan. The surrounding land use includes backing residential homes, commercial areas and a school. Speed data collected May 16, 2019 revealed the 85th percentile speed of 38 mph. The 10 mph pace ranges from 28 mph to 37 mph and suggests the 85th percentile is above this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded up and reduced by 5 mph per MUTCD option 2, the existing posted speed limit of 35 mph should be retained.

AREA	DESCRIPTION	MAP SYMBOL	
Distance	Approximately 5,100 Feet	<div> ALL WAY STOP</div> <div> SIGNAL</div> <div> SPEED SIGN</div> <div> CITY LIMITS</div> <div> CROSSWALK</div> <div> SCHOOL CROSSWALK</div>	
Vertical Alignment	Flat		
Street Width	Varies (64 to 86 Feet)		
No. Lanes and Median	4-Lane Major Arterial		
Existing Speed Zone	35 MPH		
85 <sup>th</sup> Percentile Speed	38 MPH		
Traffic Volume (Date)	12,539		
Accident Data (2 years)	12 Collisions (2017 - 2018)		
Street Segment Collision Rate = (Collisions) (1,000,000) (Years) (365) (ADT) (Length in Miles)	1.35 Acc./MVM		





# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

<b>Street:</b>	<u>Sanborn Road</u>	<b>Direction:</b>	<u>EBD/WBD</u>	<b>Comments:</b>	
<b>Between:</b>	<u>Del Monte Avenue &amp; Boronda Road</u>				
<b>Survey Location:</b>					
<b>Speed Limit:</b>	<u>35</u> MPH				
<b>Date:</b>	<u>05/16/19</u>	<b>Day:</b>	<u>Thursday</u>		
<b>Hours:</b>	<b>From:</b> <u>1:40PM</u>	<b>To:</b>	<u>2:08PM</u>		
<b>Weather:</b>	<u>Cloudy</u>				
<b>Observer(s):</b>	<u>Chris &amp; Herendira</u>				

MPH	Frequency	Percent	Cumulative %	<i>Data Analysis:</i>
5	0	0.00%	0.00%	
6	0	0.00%	0.00%	
7	0	0.00%	0.00%	
8	0	0.00%	0.00%	
9	0	0.00%	0.00%	
10	0	0.00%	0.00%	
11	0	0.00%	0.00%	
12	0	0.00%	0.00%	
13	0	0.00%	0.00%	
14	0	0.00%	0.00%	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	1	1.00%	1.00%	
23	1	1.00%	2.00%	
24	2	2.00%	4.00%	
25	0	0.00%	4.00%	
26	5	5.00%	9.00%	
27	2	2.00%	11.00%	
28	8	8.00%	19.00%	
29	7	7.00%	26.00%	
30	6	6.00%	32.00%	
31	4	4.00%	36.00%	
32	9	9.00%	45.00%	
33	8	8.00%	53.00%	
34	7	7.00%	60.00%	
35	10	10.00%	70.00%	
36	7	7.00%	77.00%	
37	5	5.00%	82.00%	
38	6	6.00%	88.00%	
39	4	4.00%	92.00%	
40	2	2.00%	94.00%	
41	1	1.00%	95.00%	
42	1	1.00%	96.00%	
43	2	2.00%	98.00%	
44	0	0.00%	98.00%	
45	1	1.00%	99.00%	
46	0	0.00%	99.00%	
47	0	0.00%	99.00%	
48	0	0.00%	99.00%	
49	1	1.00%	100.00%	
<b>Totals:</b>	100	100.00%		

**Cumulative Frequency Distribution**

**Frequency Distribution**



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Sanborn Road</u>	Direction:	<u>EBD</u>	<b>Comments:</b>  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">No. 64</div>
Between:	<u>Del Monte Avenue &amp; Boronda Road</u>			
Survey Location:				
Speed Limit:	<u>35</u> MPH			
Date:	<u>05/16/19</u>	Day:	<u>Thursday</u>	
Hours: From:	<u>1:40PM</u>	To:	<u>2:08PM</u>	
Weather:	<u>Cloudy</u>			
Observer(s):	<u>Chris &amp; Herendira</u>			

MPH	Frequency	Percent	Cumulative %	
5	0	0.00%	0.00%	
6	0	0.00%	0.00%	
7	0	0.00%	0.00%	
8	0	0.00%	0.00%	
9	0	0.00%	0.00%	
10	0	0.00%	0.00%	
11	0	0.00%	0.00%	
12	0	0.00%	0.00%	
13	0	0.00%	0.00%	
14	0	0.00%	0.00%	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	0	0.00%	0.00%	
25	0	0.00%	0.00%	
26	1	2.00%	2.00%	
27	2	4.00%	6.00%	
28	2	4.00%	10.00%	
29	1	2.00%	12.00%	
30	2	4.00%	16.00%	
31	3	6.00%	22.00%	
32	5	10.00%	32.00%	
33	5	10.00%	42.00%	
34	3	6.00%	48.00%	
35	6	12.00%	60.00%	
36	3	6.00%	66.00%	
37	5	10.00%	76.00%	
38	5	10.00%	86.00%	
39	1	2.00%	88.00%	
40	1	2.00%	90.00%	
41	1	2.00%	92.00%	
42	0	0.00%	92.00%	
43	2	4.00%	96.00%	
44	0	0.00%	96.00%	
45	1	2.00%	98.00%	
46	0	0.00%	98.00%	
47	0	0.00%	98.00%	
48	0	0.00%	98.00%	
49	1	2.00%	100.00%	
<b>Totals:</b>	<b>50</b>	<b>100.00%</b>		

#### Data Analysis:

Time Mean Speed:	34.8	MPH
Sample Variance:	21.94	
Standard Deviation:	4.7	
Variance of the Mean:	0.4388	
Standard Error of the Mean:	0.7	
10 MPH Pace:	29	To: 38 MPH
Percent in Pace:	76.0%	
Vehicles in Pace:	38	
50th Percentile Speed:	35	MPH
85th Percentile Speed:	38	MPH
90th Percentile Speed:	40	MPH
95th Percentile Speed:	43	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

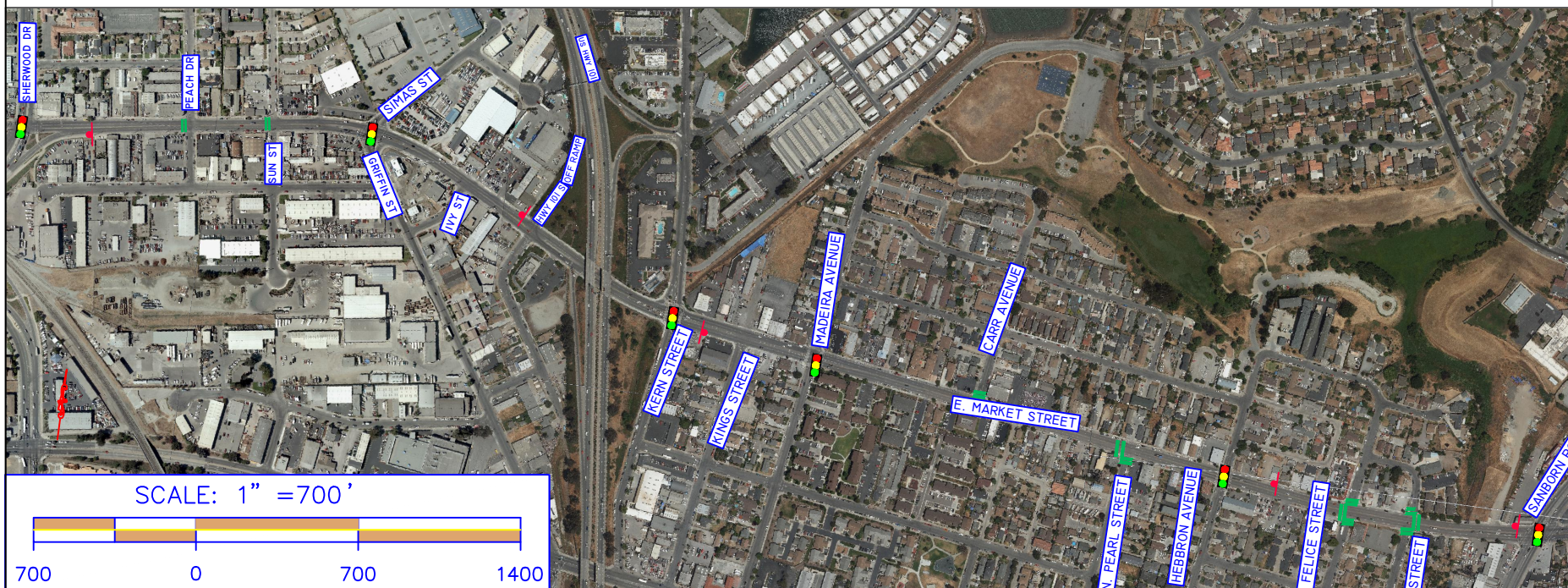
Street:	<u>Sanborn Road</u>	Direction:	<u>WBD</u>	Comments:  <div style="border: 1px solid black; padding: 2px; margin-top: 10px;">No. 64</div>
Between:	<u>Del Monte Avenue &amp; Boronda Road</u>			
Survey Location:				
Speed Limit:	<u>35</u> MPH			
Date:	<u>05/16/19</u>	Day:	<u>Thursday</u>	
Hours: From:	<u>1:40PM</u>	To:	<u>2:08PM</u>	
Weather:	<u>Cloudy</u>			
Observer(s):	<u>Chris &amp; Herendira</u>			

MPH	Frequency	Percent	Cumulative %	Data Analysis:			
5	0	0.00%	0.00%	<div>Time Mean Speed: Sample Variance: Standard Deviation: Variance of the Mean: Standard Error of the Mean: 10 MPH Pace: Percent in Pace: Vehicles in Pace: 50th Percentile Speed: 85th Percentile Speed: 90th Percentile Speed: 95th Percentile Speed:</div>	31.5	MPH	<div>To: 35 MPH</div>
6	0	0.00%	0.00%		21.89		
7	0	0.00%	0.00%		4.7		
8	0	0.00%	0.00%		0.4378		
9	0	0.00%	0.00%		0.7		
10	0	0.00%	0.00%				
11	0	0.00%	0.00%				
12	0	0.00%	0.00%				
13	0	0.00%	0.00%				
14	0	0.00%	0.00%				
15	0	0.00%	0.00%				
16	0	0.00%	0.00%				
17	0	0.00%	0.00%				
18	0	0.00%	0.00%				
19	0	0.00%	0.00%				
20	0	0.00%	0.00%				
21	0	0.00%	0.00%				
22	1	2.00%	2.00%				
23	1	2.00%	4.00%				
24	2	4.00%	8.00%				
25	0	0.00%	8.00%				
26	4	8.00%	16.00%				
27	0	0.00%	16.00%				
28	6	12.00%	28.00%				
29	6	12.00%	40.00%				
30	4	8.00%	48.00%				
31	1	2.00%	50.00%				
32	4	8.00%	58.00%				
33	3	6.00%	64.00%				
34	4	8.00%	72.00%				
35	4	8.00%	80.00%				
36	4	8.00%	88.00%				
37	0	0.00%	88.00%				
38	1	2.00%	90.00%				
39	3	6.00%	96.00%				
40	1	2.00%	98.00%				
41	0	0.00%	98.00%				
42	1	2.00%	100.00%				
43	0	0.00%	100.00%				
44	0	0.00%	100.00%				
45	0	0.00%	100.00%				
46	0	0.00%	100.00%				
47	0	0.00%	100.00%				
48	0	0.00%	100.00%				
49	0	0.00%	100.00%				
Totals:	50	100.00%					

Cumulative Frequency Distribution








Frequency Distribution





**COMMENTS:**

This segment of East Market Street is classified as a major arterial in the City of Salinas General Plan. The surrounding land use includes office, commercial, and light industrial areas. Speed data collected May 28, 2019 revealed the 85th percentile speed of 39 mph. The 10 mph pace ranges from 28 mph to 37 mph and suggests the 85th percentile is above this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded up and reduced by 5 mph per MUTCD option 2, the existing posted speed limit of 35 mph should be retained

AREA	DESCRIPTION	MAP SYMBOL	
Distance	Approximately 6,800 Feet	 ALL WAY STOP  SIGNAL  SPEED SIGN  CITY LIMITS  CROSSWALK  SCHOOL CROSSWALK	
Vertical Alignment	Flat		
Street Width	Varies (46 to 60 Feet)		
No. Lanes and Median	4-Lane Major Arterial		
Existing Speed Zone	35 MPH		
85 <sup>th</sup> Percentile Speed	39 MPH		
Traffic Volume (Date)	14,947		
Accident Data (2 years)	37 Collisions (2017 - 2018)		
Street Segment Collision Rate = $\frac{\text{Collisions}}{\text{Years} \times 365 \times \text{ADT} \times \text{Length in Miles}}$	2.61 Acc./MVM		





# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

<b>Street:</b>	<u>Market Street</u>	<b>Direction:</b>	<u>WBD/EBD</u>	<b>Comments:</b>	
<b>Between:</b>	<u>Sherwood Drive U.S. HWY 101</u>	<b>No. 59</b>			
<b>Survey Location:</b>	<u>Sun Street &amp; Peach Drive</u>				
<b>Speed Limit:</b>	<u>35</u> MPH				
<b>Date:</b>	<u>05/28/19</u>				
<b>Hours:</b>	<b>From:</b>	<u>2:58PM</u>	<b>To:</b>	<u>3:18PM</u>	
<b>Weather:</b>	<u>Sunny</u>				
<b>Observer(s):</b>	<u>Alejandro B. &amp; Victor C.</u>				

MPH	Frequency	Percent	Cumulative %	Data Analysis:			
20	0	0.00%	0.00%	<div>Time Mean Speed: 34.8 MPH</div> <div>Sample Variance: 21.95</div> <div>Standard Deviation: 4.7</div> <div>Variance of the Mean: 0.2195</div> <div>Standard Error of the Mean: 0.5</div> <div>10 MPH Pace: 28 To: 37 MPH</div> <div>Percent in Pace: 76.0%</div> <div>Vehicles in Pace: 76</div> <div>50th Percentile Speed: 34 MPH</div> <div>85th Percentile Speed: 39 MPH</div> <div>90th Percentile Speed: 41 MPH</div> <div>95th Percentile Speed: 44 MPH</div>			
21	0	0.00%	0.00%				
22	0	0.00%	0.00%				
23	0	0.00%	0.00%				
24	0	0.00%	0.00%				
25	0	0.00%	0.00%				
26	2	2.00%	2.00%				
27	2	2.00%	4.00%				
28	1	1.00%	5.00%				
29	5	5.00%	10.00%				
30	5	5.00%	15.00%				
31	10	10.00%	25.00%				
32	6	6.00%	31.00%				
33	10	10.00%	41.00%				
34	10	10.00%	51.00%				
35	14	14.00%	65.00%				
36	10	10.00%	75.00%				
37	5	5.00%	80.00%				
38	1	1.00%	81.00%				
39	5	5.00%	86.00%				
40	3	3.00%	89.00%				
41	2	2.00%	91.00%				
42	2	2.00%	93.00%				
43	1	1.00%	94.00%				
44	2	2.00%	96.00%				
45	0	0.00%	96.00%				
46	0	0.00%	96.00%				
47	2	2.00%	98.00%				
48	0	0.00%	98.00%				
49	2	2.00%	100.00%				
50	0	0.00%	100.00%				
51	0	0.00%	100.00%				
52	0	0.00%	100.00%				
53	0	0.00%	100.00%				
54	0	0.00%	100.00%				
55	0	0.00%	100.00%				
56	0	0.00%	100.00%				
57	0	0.00%	100.00%				
58	0	0.00%	100.00%				
59	0	0.00%	100.00%				
60	0	0.00%	100.00%				
61	0	0.00%	100.00%				
62	0	0.00%	100.00%				
63	0	0.00%	100.00%				
64	0	0.00%	100.00%				
Totals:	100	100.00%					

Cumulative Frequency Distribution

Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	Market Street	Direction:	WBD		
Between:	Sherwood Drive U.S. HWY 101	No. 59 Comments:			
Survey Location:	Sun Street & Peach Drive				
Speed Limit:	35 MPH				
Date:	05/28/19				
Hours:	From: 2:58PM	To:	3:18PM		
Weather:	Sunny				
Observer(s):	Alejandro B. & Victor C.				

MPH	Frequency	Percent	Cumulative %	
20	0	0.00%	0.00%	<b>Data Analysis:</b>
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	0	0.00%	0.00%	
25	0	0.00%	0.00%	
26	2	4.00%	4.00%	
27	2	4.00%	8.00%	
28	1	2.00%	10.00%	
29	5	10.00%	20.00%	
30	4	8.00%	28.00%	Time Mean Speed: 33.6 MPH
31	6	12.00%	40.00%	Sample Variance: 23.84
32	2	4.00%	44.00%	Standard Deviation: 4.9
33	4	8.00%	52.00%	Variance of the Mean: 0.4768
34	6	12.00%	64.00%	Standard Error of the Mean: 0.7
35	4	8.00%	72.00%	10 MPH Pace: 28 To: 37 MPH
36	4	8.00%	80.00%	Percent in Pace: 78.0%
37	3	6.00%	86.00%	Vehicles in Pace: 39
38	0	0.00%	86.00%	50th Percentile Speed: 33 MPH
39	3	6.00%	92.00%	85th Percentile Speed: 37 MPH
40	0	0.00%	92.00%	90th Percentile Speed: 39 MPH
41	0	0.00%	92.00%	95th Percentile Speed: 43 MPH
42	1	2.00%	94.00%	
43	1	2.00%	96.00%	
44	0	0.00%	96.00%	
45	0	0.00%	96.00%	
46	0	0.00%	96.00%	
47	1	2.00%	98.00%	
48	0	0.00%	98.00%	
49	1	2.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
60	0	0.00%	100.00%	
61	0	0.00%	100.00%	
62	0	0.00%	100.00%	
63	0	0.00%	100.00%	
64	0	0.00%	100.00%	
Totals:	50	100.00%		

**Cumulative Frequency Distribution**

**Frequency Distribution**



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	Market Street	Direction:	EBD		Comments:
Between:	Sherwood Drive U.S. HWY 101	No. 59			
Survey Location:	Sun Street & Peach Drive				
Speed Limit:	35 MPH				
Date:	05/28/19				
Hours:	From: 2:58PM	To:	3:18PM		
Weather:	Sunny				
Observer(s):	Alejandro B. & Victor C.				

MPH	Frequency	Percent	Cumulative %	
20	0	0.00%	0.00%	<b>Data Analysis:</b>
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	0	0.00%	0.00%	
25	0	0.00%	0.00%	
26	0	0.00%	0.00%	
27	0	0.00%	0.00%	
28	0	0.00%	0.00%	
29	0	0.00%	0.00%	
30	1	2.00%	2.00%	Time Mean Speed: 36.0 MPH
31	4	8.00%	10.00%	Sample Variance: 17.47
32	4	8.00%	18.00%	Standard Deviation: 4.2
33	6	12.00%	30.00%	Variance of the Mean: 0.3494
34	4	8.00%	38.00%	Standard Error of the Mean: 0.6
35	10	20.00%	58.00%	10 MPH Pace: 31 To: 40 MPH
36	6	12.00%	70.00%	Percent in Pace: 84.0%
37	2	4.00%	74.00%	Vehicles in Pace: 42
38	1	2.00%	76.00%	50th Percentile Speed: 35 MPH
39	2	4.00%	80.00%	85th Percentile Speed: 40 MPH
40	3	6.00%	86.00%	90th Percentile Speed: 41 MPH
41	2	4.00%	90.00%	95th Percentile Speed: 44 MPH
42	1	2.00%	92.00%	
43	0	0.00%	92.00%	
44	2	4.00%	96.00%	
45	0	0.00%	96.00%	
46	0	0.00%	96.00%	
47	1	2.00%	98.00%	
48	0	0.00%	98.00%	
49	1	2.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
60	0	0.00%	100.00%	
61	0	0.00%	100.00%	
62	0	0.00%	100.00%	
63	0	0.00%	100.00%	
64	0	0.00%	100.00%	
Totals:	50	100.00%		

**Cumulative Frequency Distribution**








**Frequency Distribution**





COMMENTS:

This segment of Larkin Street is classified as a collector in the City of Salinas General Plan. The surrounding land use includes fronting residential areas, a school and a park. Speed data collected May 28, 2019 revealed the 85th percentile speed of 32 mph. The 10 mph pace ranges from 25 mph to 34 mph and suggests the 85th percentile is within this range. Since the roadway width is 40 feet and there is fronting residential, the roadway meets the criteria of a local road. Therefore, the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1, the existing posted speed limit of 25 mph should be retained.

AREA	DESCRIPTION	MAP SYMBOL	
Distance	Approximately 3,300 Feet	<div> ALL WAY STOP</div> <div> SIGNAL</div> <div> SPEED SIGN</div> <div> CITY LIMITS</div> <div> CROSSWALK</div> <div> SCHOOL CROSSWALK</div>	
Vertical Alignment	Flat		
Street Width	Varies (43 to 45 Feet)		
No. Lanes and Median	2-Lane Collector		
Existing Speed Zone	25 MPH		
85 <sup>th</sup> Percentile Speed	32 MPH		
Traffic Volume (Date)	3,502		
Accident Data (2 years)	2 Collisions (2017-2018)		
Street Segment Collision Rate = (Collisions) (1,000,000) (Years) (365) (ADT) (Length in Miles)	1.26 Acc./MVM		





# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

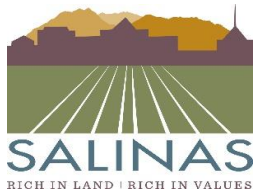
### RADAR SURVEY

Street:	<u>Larkin Street</u>	Direction:	<u>EBD/WBD</u>		Comments:
Between:	<u>Davis Road &amp; Rico Steet</u>	No. 51			
Survey Location:	<u>Larkin Circle &amp; Sherman Drive</u>				
Speed Limit:	<u>25</u> MPH				
Date:	<u>05/28/19</u>				
Hours:	From: <u>1:10PM</u>	To:	<u>1:46PM</u>		
Weather:	<u>Sunny</u>				
Observer(s):	<u>Alejandro B. &amp; Victor C.</u>				

MPH	Frequency	Percent	Cumulative %	
15	0	0.00%	0.00%	<b>Data Analysis:</b>
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	1	1.00%	1.00%	
22	2	2.00%	3.00%	
23	0	0.00%	3.00%	
24	2	2.00%	5.00%	
25	11	11.00%	16.00%	Time Mean Speed: <u>29.0</u> MPH
26	8	8.00%	24.00%	Sample Variance: <u>10.77</u>
27	5	5.00%	29.00%	Standard Deviation: <u>3.3</u>
28	17	17.00%	46.00%	Variance of the Mean: <u>0.1077</u>
29	14	14.00%	60.00%	Standard Error of the Mean: <u>0.3</u>
30	6	6.00%	66.00%	10 MPH Pace: <u>25</u> To: <u>34</u> MPH
31	10	10.00%	76.00%	Percent in Pace: <u>90.0%</u>
32	13	13.00%	89.00%	Vehicles in Pace: <u>90</u>
33	3	3.00%	92.00%	50th Percentile Speed: <u>29</u> MPH
34	3	3.00%	95.00%	85th Percentile Speed: <u>32</u> MPH
35	1	1.00%	96.00%	90th Percentile Speed: <u>33</u> MPH
36	3	3.00%	99.00%	95th Percentile Speed: <u>34</u> MPH
37	0	0.00%	99.00%	
38	0	0.00%	99.00%	
39	1	1.00%	100.00%	
40	0	0.00%	100.00%	
41	0	0.00%	100.00%	
42	0	0.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
45	0	0.00%	100.00%	
46	0	0.00%	100.00%	
47	0	0.00%	100.00%	
48	0	0.00%	100.00%	
49	0	0.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
Totals:	100	100.00%		

**Cumulative Frequency Distribution**

**Frequency Distribution**



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Larkin Street</u>	Direction:	<u>EBD</u>	No. 51	Comments:
Between:	<u>Davis Road &amp; Rico Steet</u>				
Survey Location:	<u>Larkin Circle &amp; Sherman Drive</u>				
Speed Limit:	<u>25</u> MPH				
Date:	<u>05/28/19</u>	Day:	<u>Tuesday</u>		
Hours:	From: <u>1:10PM</u>	To:	<u>1:46PM</u>		
Weather:	<u>Sunny</u>				
Observer(s):	<u>Alejandro B. &amp; Victor C.</u>				

MPH	Frequency	Percent	Cumulative %	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	1	2.00%	2.00%	
22	0	0.00%	2.00%	
23	0	0.00%	2.00%	
24	1	2.00%	4.00%	
25	8	16.00%	20.00%	
26	6	12.00%	32.00%	
27	2	4.00%	36.00%	
28	8	16.00%	52.00%	
29	6	12.00%	64.00%	
30	4	8.00%	72.00%	
31	2	4.00%	76.00%	
32	8	16.00%	92.00%	
33	2	4.00%	96.00%	
34	1	2.00%	98.00%	
35	0	0.00%	98.00%	
36	1	2.00%	100.00%	
37	0	0.00%	100.00%	
38	0	0.00%	100.00%	
39	0	0.00%	100.00%	
40	0	0.00%	100.00%	
41	0	0.00%	100.00%	
42	0	0.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
45	0	0.00%	100.00%	
46	0	0.00%	100.00%	
47	0	0.00%	100.00%	
48	0	0.00%	100.00%	
49	0	0.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
Totals:	50	100.00%		

#### Data Analysis:

Time Mean Speed:	28.5	MPH
Sample Variance:	9.52	
Standard Deviation:	3.1	
Variance of the Mean:	0.1904	
Standard Error of the Mean:	0.4	
10 MPH Pace:	24	To: 33 MPH
Percent in Pace:	94.0%	
Vehicles in Pace:	47	
50th Percentile Speed:	28	MPH
85th Percentile Speed:	32	MPH
90th Percentile Speed:	32	MPH
95th Percentile Speed:	33	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

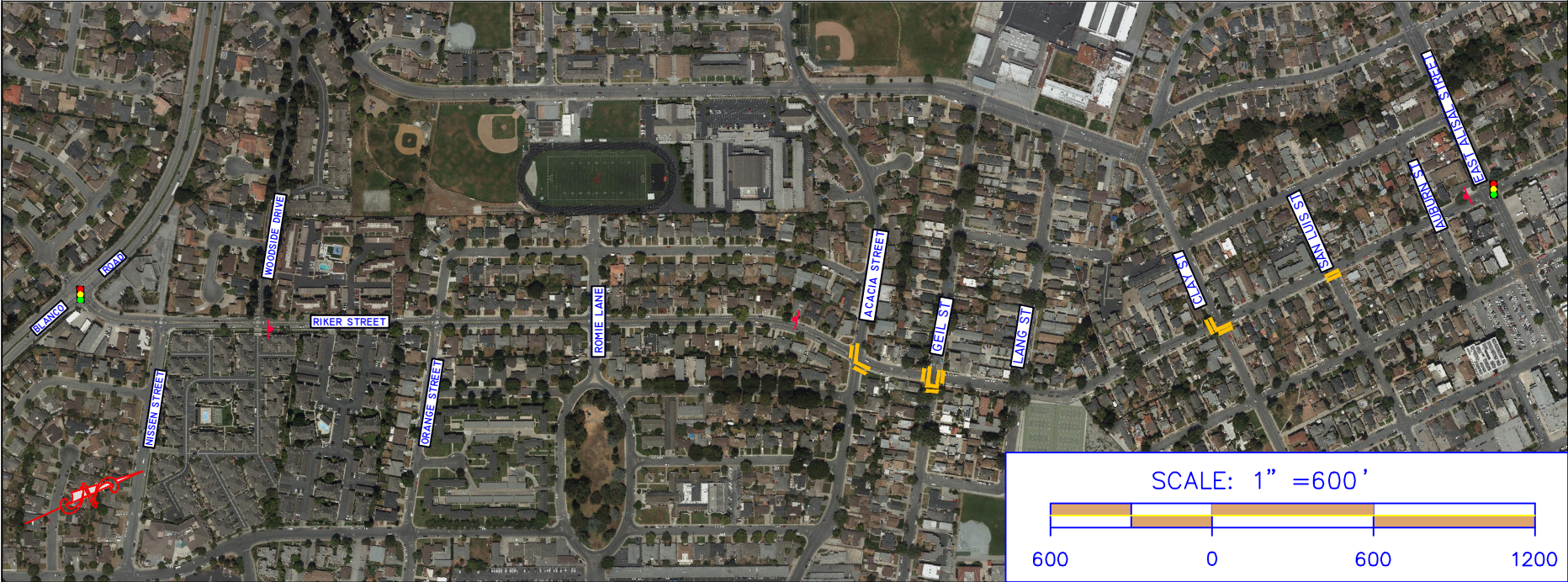
Street:	<u>Larkin Street</u>	Direction:	<u>WBD</u>	<b>Comments:</b>     <b>No. 51</b>
Between:	<u>Davis Road &amp; Rico Steet</u>			
Survey Location:	<u>Larkin Circle &amp; Sherman Drive</u>			
Speed Limit:	<u>25</u> MPH			
Date:	<u>05/28/19</u>	Day:	<u>Tuesday</u>	
Hours:	From: <u>1:10PM</u>	To:	<u>1:46PM</u>	
Weather:	<u>Sunny</u>			
Observer(s):	<u>Alejandro B. &amp; Victor C.</u>			

MPH	Frequency	Percent	Cumulative %	Data Analysis:			
15	0	0.00%	0.00%	<div>Time Mean Speed: 29.5 MPH</div> <div>Sample Variance: 11.77</div> <div>Standard Deviation: 3.4</div> <div>Variance of the Mean: 0.2354</div> <div>Standard Error of the Mean: 0.5</div> <div>10 MPH Pace: 25 To: 34 MPH</div> <div>Percent in Pace: 86.0%</div> <div>Vehicles in Pace: 43</div> <div>50th Percentile Speed: 29 MPH</div> <div>85th Percentile Speed: 32 MPH</div> <div>90th Percentile Speed: 34 MPH</div> <div>95th Percentile Speed: 36 MPH</div>			
16	0	0.00%	0.00%				
17	0	0.00%	0.00%				
18	0	0.00%	0.00%				
19	0	0.00%	0.00%				
20	0	0.00%	0.00%				
21	0	0.00%	0.00%				
22	2	4.00%	4.00%				
23	0	0.00%	4.00%				
24	1	2.00%	6.00%				
25	3	6.00%	12.00%				
26	2	4.00%	16.00%				
27	3	6.00%	22.00%				
28	9	18.00%	40.00%				
29	8	16.00%	56.00%				
30	2	4.00%	60.00%				
31	8	16.00%	76.00%				
32	5	10.00%	86.00%				
33	1	2.00%	88.00%				
34	2	4.00%	92.00%				
35	1	2.00%	94.00%				
36	2	4.00%	98.00%				
37	0	0.00%	98.00%				
38	0	0.00%	98.00%				
39	1	2.00%	100.00%				
40	0	0.00%	100.00%				
41	0	0.00%	100.00%				
42	0	0.00%	100.00%				
43	0	0.00%	100.00%				
44	0	0.00%	100.00%				
45	0	0.00%	100.00%				
46	0	0.00%	100.00%				
47	0	0.00%	100.00%				
48	0	0.00%	100.00%				
49	0	0.00%	100.00%				
50	0	0.00%	100.00%				
51	0	0.00%	100.00%				
52	0	0.00%	100.00%				
53	0	0.00%	100.00%				
54	0	0.00%	100.00%				
55	0	0.00%	100.00%				
56	0	0.00%	100.00%				
57	0	0.00%	100.00%				
58	0	0.00%	100.00%				
59	0	0.00%	100.00%				
Totals:	50	100.00%					

Cumulative Frequency Distribution

Frequency Distribution





COMMENTS:

This segment of Riker Street is classified as a collector in the City of Salinas General Plan. The surrounding land use includes fronting residential areas. Speed data collected May 30, 2019 revealed the 85th percentile speed of 32 mph. The 10 mph pace ranges from 23 mph to 32 mph and suggests the 85th percentile is within this range. Since the roadway width is 40 feet and there is fronting residential, the roadway meets the criteria of a local road. Therefore, the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1, the existing posted speed limit of 25 mph should be retained.

AREA		DESCRIPTION		MAP SYMBOL		
Distance	Approximately 5,350 Feet		ALL-WAY STOP			
Vertical Alignment	Flat		SIGNAL			
Street Width	40 Feet		SPEED SIGN			
No. Lanes and Median	2 Lane Arterial		CITY LIMITS			
Existing Speed Zone	25 MPH		CROSSWALK			
85th Percentile Speed	32 MPH		SCHOOL CROSSWALK			
Traffic Volume (Date)	3,820		CROSSING GUARD			
Accident Data (2 years)	4 Collisions (2017 - 2018)					
Street Segment Collision Rate = (Collisions) (1,000,000) (Years) (365) (ADT) (Length in Miles)	1.42 Acc./MVM					





# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Riker Street</u>	Direction:	<u>SBD/NBD</u>		Comments:
Between:	<u>West Alisal &amp; West Blanco Road</u>				
Survey Location:					
Speed Limit:	<u>25</u> MPH				
Date:	<u>05/30/19</u>	Day:	<u>Thursday</u>		
Hours:	From: <u>2:42PM</u>	To:	<u>3:25PM</u>		
Weather:	<u>Overcast</u>				
Observer(s):	<u>Chris &amp; Herendira</u>				

MPH	Frequency	Percent	Cumulative %	
0	0	0.00%	0.00%	
1	0	0.00%	0.00%	
2	0	0.00%	0.00%	
3	0	0.00%	0.00%	
4	0	0.00%	0.00%	
5	0	0.00%	0.00%	
6	0	0.00%	0.00%	
7	0	0.00%	0.00%	
8	0	0.00%	0.00%	
9	0	0.00%	0.00%	
10	0	0.00%	0.00%	
11	0	0.00%	0.00%	
12	0	0.00%	0.00%	
13	0	0.00%	0.00%	
14	0	0.00%	0.00%	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	2	2.00%	2.00%	
18	0	0.00%	2.00%	
19	0	0.00%	2.00%	
20	2	2.00%	4.00%	
21	3	3.00%	7.00%	
22	3	3.00%	10.00%	
23	5	5.00%	15.00%	
24	6	6.00%	21.00%	
25	12	12.00%	33.00%	
26	9	9.00%	42.00%	
27	7	7.00%	49.00%	
28	8	8.00%	57.00%	
29	8	8.00%	65.00%	
30	8	8.00%	73.00%	
31	5	5.00%	78.00%	
32	10	10.00%	88.00%	
33	3	3.00%	91.00%	
34	1	1.00%	92.00%	
35	3	3.00%	95.00%	
36	1	1.00%	96.00%	
37	2	2.00%	98.00%	
38	2	2.00%	100.00%	
39	0	0.00%	100.00%	
40	0	0.00%	100.00%	
41	0	0.00%	100.00%	
42	0	0.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
Totals:	100	100.00%		

#### Data Analysis:

Time Mean Speed:	27.8	MPH
Sample Variance:	19.41	
Standard Deviation:	4.4	
Variance of the Mean:	0.1941	
Standard Error of the Mean:	0.4	
10 MPH Pace:	23	To: 32 MPH
Percent in Pace:	78.0%	
Vehicles in Pace:	78	
50th Percentile Speed:	28	MPH
85th Percentile Speed:	32	MPH
90th Percentile Speed:	33	MPH
95th Percentile Speed:	35	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Riker Street</u>	Direction:	<u>NBD</u>	Comments:  <div style="border: 1px solid black; padding: 2px; margin-top: 10px;">No. 44</div>
Between:	<u>West Alisal &amp; West Blanco Road</u>			
Survey Location:				
Speed Limit:	<u>25</u> MPH			
Date:	<u>05/30/19</u>	Day:	<u>Thursday</u>	
Hours: From:	<u>2:42PM</u>	To:	<u>3:25PM</u>	
Weather:	<u>Overcast</u>			
Observer(s):	<u>Chris &amp; Herendira</u>			

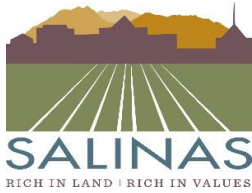
MPH	Frequency	Percent	Cumulative %	
0	0	0.00%	0.00%	
1	0	0.00%	0.00%	
2	0	0.00%	0.00%	
3	0	0.00%	0.00%	
4	0	0.00%	0.00%	
5	0	0.00%	0.00%	
6	0	0.00%	0.00%	
7	0	0.00%	0.00%	
8	0	0.00%	0.00%	
9	0	0.00%	0.00%	
10	0	0.00%	0.00%	
11	0	0.00%	0.00%	
12	0	0.00%	0.00%	
13	0	0.00%	0.00%	
14	0	0.00%	0.00%	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	2	4.00%	4.00%	
18	0	0.00%	4.00%	
19	0	0.00%	4.00%	
20	0	0.00%	4.00%	
21	0	0.00%	4.00%	
22	3	6.00%	10.00%	
23	1	2.00%	12.00%	
24	5	10.00%	22.00%	
25	7	14.00%	36.00%	
26	7	14.00%	50.00%	
27	1	2.00%	52.00%	
28	4	8.00%	60.00%	
29	1	2.00%	62.00%	
30	4	8.00%	70.00%	
31	3	6.00%	76.00%	
32	4	8.00%	84.00%	
33	3	6.00%	90.00%	
34	1	2.00%	92.00%	
35	1	2.00%	94.00%	
36	1	2.00%	96.00%	
37	2	4.00%	100.00%	
38	0	0.00%	100.00%	
39	0	0.00%	100.00%	
40	0	0.00%	100.00%	
41	0	0.00%	100.00%	
42	0	0.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
Totals:	50	100.00%		

#### Data Analysis:

Time Mean Speed:	27.7	MPH
Sample Variance:	21.18	
Standard Deviation:	4.6	
Variance of the Mean:	0.4236	
Standard Error of the Mean:	0.7	
10 MPH Pace:	24	To: 33 MPH
Percent in Pace:	78.0%	
Vehicles in Pace:	39	
50th Percentile Speed:	26	MPH
85th Percentile Speed:	33	MPH
90th Percentile Speed:	33	MPH
95th Percentile Speed:	36	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

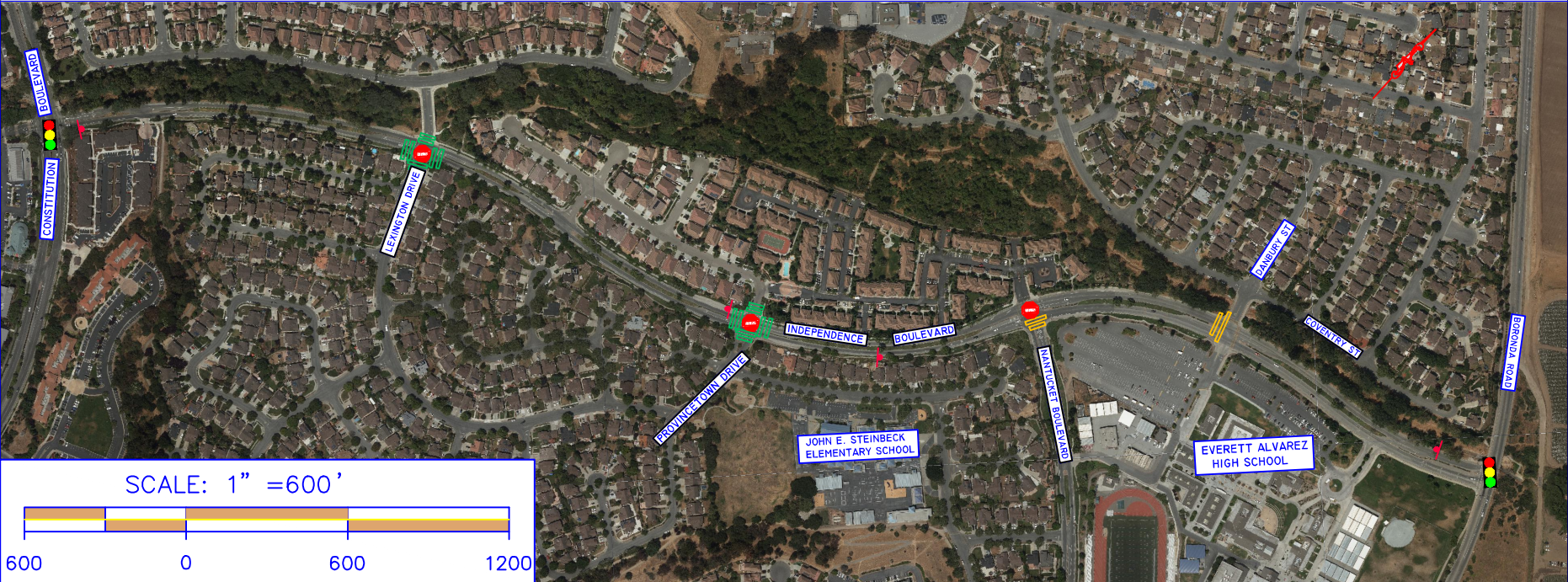
Street:	<u>Riker Street</u>	Direction:	<u>SBD</u>	Comments:		
Between:	<u>West Alisal &amp; West Blanco Road</u>	No. 44				
Survey Location:						
Speed Limit:	<u>25</u> MPH					
Date:	<u>05/30/19</u>				Day:	<u>Thursday</u>
Hours:	From: <u>2:42PM</u>				To:	<u>3:25PM</u>
Weather:	<u>Overcast</u>					
Observer(s):	<u>Chris &amp; Herendira</u>					

MPH	Frequency	Percent	Cumulative %	<i>Data Analysis:</i>
0	0	0.00%	0.00%	
1	0	0.00%	0.00%	
2	0	0.00%	0.00%	
3	0	0.00%	0.00%	
4	0	0.00%	0.00%	
5	0	0.00%	0.00%	
6	0	0.00%	0.00%	
7	0	0.00%	0.00%	
8	0	0.00%	0.00%	
9	0	0.00%	0.00%	
10	0	0.00%	0.00%	
11	0	0.00%	0.00%	
12	0	0.00%	0.00%	
13	0	0.00%	0.00%	
14	0	0.00%	0.00%	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	2	4.00%	4.00%	
21	3	6.00%	10.00%	
22	0	0.00%	10.00%	
23	4	8.00%	18.00%	
24	1	2.00%	20.00%	
25	5	10.00%	30.00%	
26	2	4.00%	34.00%	
27	6	12.00%	46.00%	
28	4	8.00%	54.00%	
29	7	14.00%	68.00%	
30	4	8.00%	76.00%	
31	2	4.00%	80.00%	
32	6	12.00%	92.00%	
33	0	0.00%	92.00%	
34	0	0.00%	92.00%	
35	2	4.00%	96.00%	
36	0	0.00%	96.00%	
37	0	0.00%	96.00%	
38	2	4.00%	100.00%	
39	0	0.00%	100.00%	
40	0	0.00%	100.00%	
41	0	0.00%	100.00%	
42	0	0.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
Totals:	50	100.00%		

**Cumulative Frequency Distribution**








**Frequency Distribution**





**COMMENTS:**

This segment of Independence Boulevard is classified as a collector in the City of Salinas General Plan. The surrounding land use includes backing residential areas and a school. Speed data collected May 28, 2019 revealed the 85th percentile speed of 35 mph. The 10 mph pace ranges from 26 mph to 35 mph and suggests the 85th percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded up and reduced by 5 mph per MUTCD option 2, the existing posted speed limit of 35 mph should be reduced to 30 mph.

AREA	DESCRIPTION	MAP SYMBOL
Distance	Approximately 5,600 Feet	<div> ALL-WAY STOP</div> <div> SIGNAL</div> <div> SPEED SIGN</div> <div> CITY LIMITS</div> <div> CROSSWALK</div> <div> SCHOOL CROSSWALK</div> <div> CROSSING GUARD</div>
Vertical Alignment	Flat	
Street Width	Varies (56 to 86 Feet)	
No. Lanes and Median	2-Lane Divided Arterial	
Proposed Speed Zone	30 MPH	
85th Percentile Speed	35 MPH	
Traffic Volume (Date)	3,925	
Accident Data (2 years)	6 Collisions (2017 - 2018)	
Street Segment Collision Rate = (Collisions) (1,000,000) (Years) (365) (ADT) (Length in Miles)	1.98 Acc./MVM	







# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Independence Boulevard</u>	Direction:	<u>NBD/SBD</u>		Comments:
Between:	<u>Constitution Boulevard &amp; Boronda Road</u>				
Survey Location:					
Speed Limit:	<u>35</u> MPH				
Date:	<u>05/28/19</u>	Day:	<u>Tuesday</u>		
Hours:	From: <u>11:40AM</u>	To:	<u>12:20PM</u>		
Weather:	<u>Sunny</u>				
Observer(s):	<u>Alejandro &amp; Victor</u>				

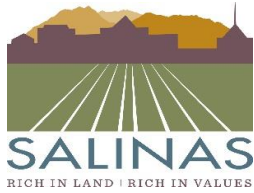
MPH	Frequency	Percent	Cumulative %	
0	0	0.00%	0.00%	
1	0	0.00%	0.00%	
2	0	0.00%	0.00%	
3	0	0.00%	0.00%	
4	0	0.00%	0.00%	
5	0	0.00%	0.00%	
6	0	0.00%	0.00%	
7	0	0.00%	0.00%	
8	0	0.00%	0.00%	
9	0	0.00%	0.00%	
10	0	0.00%	0.00%	
11	0	0.00%	0.00%	
12	0	0.00%	0.00%	
13	0	0.00%	0.00%	
14	0	0.00%	0.00%	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	2	2.00%	2.00%	
25	2	2.00%	4.00%	
26	5	5.00%	9.00%	
27	10	10.00%	19.00%	
28	9	9.00%	28.00%	
29	6	6.00%	34.00%	
30	6	6.00%	40.00%	
31	9	9.00%	49.00%	
32	11	11.00%	60.00%	
33	13	13.00%	73.00%	
34	5	5.00%	78.00%	
35	9	9.00%	87.00%	
36	4	4.00%	91.00%	
37	4	4.00%	95.00%	
38	1	1.00%	96.00%	
39	1	1.00%	97.00%	
40	1	1.00%	98.00%	
41	1	1.00%	99.00%	
42	1	1.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
Totals:	100	100.00%		

#### Data Analysis:

Time Mean Speed:	31.4	MPH
Sample Variance:	14.75	
Standard Deviation:	3.8	
Variance of the Mean:	0.1475	
Standard Error of the Mean:	0.4	
10 MPH Pace:	26	To: 35 MPH
Percent in Pace:	83.0%	
Vehicles in Pace:	83	
50th Percentile Speed:	32	MPH
85th Percentile Speed:	35	MPH
90th Percentile Speed:	36	MPH
95th Percentile Speed:	37	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Independence Boulevard</u>	Direction: <u>SBD</u>	Comments:  <div style="border: 1px solid black; padding: 5px; margin-top: 10px;">No. 37</div>
Between:	<u>Constitution Boulevard &amp; Boronda Road</u>		
Survey Location:			
Speed Limit:	<u>35</u> MPH		
Date:	<u>05/28/19</u>	Day: <u>Tuesday</u>	
Hours: From:	<u>11:40AM</u>	To: <u>12:20PM</u>	
Weather:	<u>Sunny</u>		
Observer(s):	<u>Alejandro &amp; Victor</u>		

MPH	Frequency	Percent	Cumulative %	
0	0	0.00%	0.00%	
1	0	0.00%	0.00%	
2	0	0.00%	0.00%	
3	0	0.00%	0.00%	
4	0	0.00%	0.00%	
5	0	0.00%	0.00%	
6	0	0.00%	0.00%	
7	0	0.00%	0.00%	
8	0	0.00%	0.00%	
9	0	0.00%	0.00%	
10	0	0.00%	0.00%	
11	0	0.00%	0.00%	
12	0	0.00%	0.00%	
13	0	0.00%	0.00%	
14	0	0.00%	0.00%	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	1	2.00%	2.00%	
25	2	4.00%	6.00%	
26	2	4.00%	10.00%	
27	6	12.00%	22.00%	
28	3	6.00%	28.00%	
29	3	6.00%	34.00%	
30	2	4.00%	38.00%	
31	4	8.00%	46.00%	
32	5	10.00%	56.00%	
33	7	14.00%	70.00%	
34	2	4.00%	74.00%	
35	5	10.00%	84.00%	
36	3	6.00%	90.00%	
37	1	2.00%	92.00%	
38	1	2.00%	94.00%	
39	1	2.00%	96.00%	
40	1	2.00%	98.00%	
41	0	0.00%	98.00%	
42	1	2.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
Totals:	50	100.00%		

#### Data Analysis:

Time Mean Speed:	31.6	MPH
Sample Variance:	17.26	
Standard Deviation:	4.2	
Variance of the Mean:	0.3452	
Standard Error of the Mean:	0.6	
10 MPH Pace:	27	To: 36 MPH
Percent in Pace:	80.0%	
Vehicles in Pace:	40	
50th Percentile Speed:	32	MPH
85th Percentile Speed:	36	MPH
90th Percentile Speed:	36	MPH
95th Percentile Speed:	39	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Independence Boulevard</u>	Direction:	<u>NBD</u>	<b>No. 37</b>  <b>Comments:</b>
Between:	<u>Constitution Boulevard &amp; Boronda Road</u>			
Survey Location:				
Speed Limit:	<u>35</u> MPH			
Date:	<u>05/28/19</u>	Day:	<u>Tuesday</u>	
Hours:	From: <u>11:40AM</u>	To:	<u>12:20PM</u>	
Weather:	<u>Sunny</u>			
Observer(s):	<u>Alejandro &amp; Victor</u>			

MPH	Frequency	Percent	Cumulative %	
0	0	0.00%	0.00%	
1	0	0.00%	0.00%	
2	0	0.00%	0.00%	
3	0	0.00%	0.00%	
4	0	0.00%	0.00%	
5	0	0.00%	0.00%	
6	0	0.00%	0.00%	
7	0	0.00%	0.00%	
8	0	0.00%	0.00%	
9	0	0.00%	0.00%	
10	0	0.00%	0.00%	
11	0	0.00%	0.00%	
12	0	0.00%	0.00%	
13	0	0.00%	0.00%	
14	0	0.00%	0.00%	
15	0	0.00%	0.00%	
16	0	0.00%	0.00%	
17	0	0.00%	0.00%	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	1	2.00%	2.00%	
25	0	0.00%	2.00%	
26	3	6.00%	8.00%	
27	4	8.00%	16.00%	
28	6	12.00%	28.00%	
29	3	6.00%	34.00%	
30	4	8.00%	42.00%	
31	5	10.00%	52.00%	
32	6	12.00%	64.00%	
33	6	12.00%	76.00%	
34	3	6.00%	82.00%	
35	4	8.00%	90.00%	
36	1	2.00%	92.00%	
37	3	6.00%	98.00%	
38	0	0.00%	98.00%	
39	0	0.00%	98.00%	
40	0	0.00%	98.00%	
41	1	2.00%	100.00%	
42	0	0.00%	100.00%	
43	0	0.00%	100.00%	
44	0	0.00%	100.00%	
Totals:	50	100.00%		

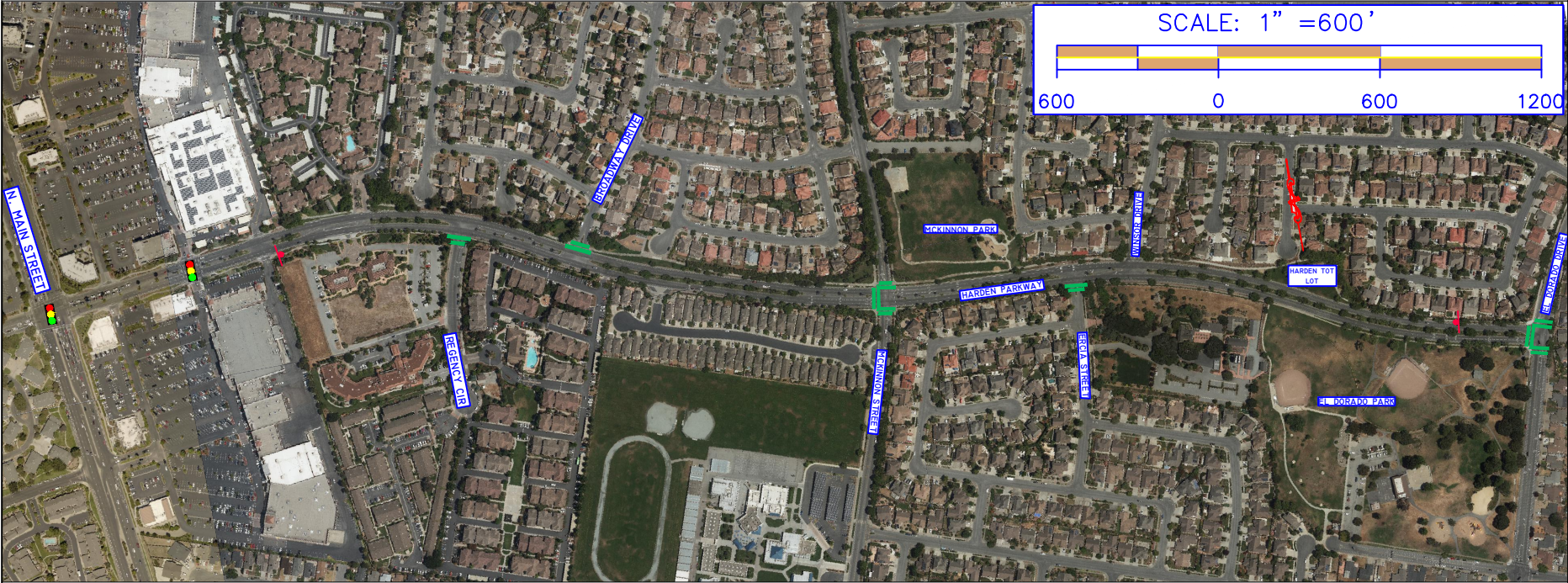
#### Data Analysis:

Time Mean Speed:	31.2	MPH
Sample Variance:	12.45	
Standard Deviation:	3.5	
Variance of the Mean:	0.2490	
Standard Error of the Mean:	0.5	
10 MPH Pace:	26	To: 35 MPH
Percent in Pace:	88.0%	
Vehicles in Pace:	44	
50th Percentile Speed:	31	MPH
85th Percentile Speed:	35	MPH
90th Percentile Speed:	35	MPH
95th Percentile Speed:	37	MPH

#### Cumulative Frequency Distribution









#### Frequency Distribution





COMMENTS:

This segment of Harden Parkway is classified as a minor arterial in the City of Salinas General Plan. The surrounding land use includes backing residential, retail, office and park areas. Speed data collected May 30, 2019 revealed the 85th percentile speed of 42 mph. The 10 mph pace ranges from 33 mph to 42 mph and suggests the 85th percentile is within this range. Based on the surrounding land use, and the 10 mph pace range, and the prevailing speeds rounded down and reduced by 5 mph per MUTCD option 1, the existing posted speed limit of 35 mph should be retained.

AREA	DESCRIPTION	MAP SYMBOL	
Distance	Approximately 5,600 Feet	<div> ALL-WAY STOP</div> <div> SIGNAL</div> <div> SPEED SIGN</div> <div> CITY LIMITS</div> <div> CROSSWALK</div> <div> SCHOOL CROSSWALK</div> <div> CROSSING GUARD</div>	
Vertical Alignment	Flat		
Street Width	51 Feet		
No. Lanes and Median	4-Lane Minor Arterial		
Existing Speed Zone	35 MPH		
85th Percentile Speed	42 MPH		
Traffic Volume (Date)	7,680		
Accident Data (2 years)	10 Collision (2017-2018)		
Street Segment Collision Rate = (Collisions) (1,000,000) (Years) (365) (ADT) (Length in Miles)	1.68 Acc./MVM		





# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Harden Parkway</u>	Direction:	<u>WBD/EBD</u>		Comments:
Between:	<u>Mckinnon Street &amp; El Dorado Drive</u>				<b>No.34</b>
Survey Location:					
Speed Limit:	<u>35</u> MPH				
Date:	<u>05/30/19</u>	Day:	<u>Thursday</u>		
Hours: From:	<u>1:20PM</u>	To:	<u>1:55PM</u>		
Weather:	<u>Overcast</u>				
Observer(s):	<u>Chris &amp; Herendira</u>				

MPH	Frequency	Percent	Cumulative %	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	1	1.00%	1.00%	
24	1	1.00%	2.00%	
25	1	1.00%	3.00%	
26	2	2.00%	5.00%	
27	3	3.00%	8.00%	
28	3	3.00%	11.00%	
29	5	5.00%	16.00%	
30	2	2.00%	18.00%	
31	2	2.00%	20.00%	
32	6	6.00%	26.00%	
33	7	7.00%	33.00%	
34	5	5.00%	38.00%	
35	6	6.00%	44.00%	
36	9	9.00%	53.00%	
37	6	6.00%	59.00%	
38	5	5.00%	64.00%	
39	5	5.00%	69.00%	
40	5	5.00%	74.00%	
41	2	2.00%	76.00%	
42	10	10.00%	86.00%	
43	4	4.00%	90.00%	
44	4	4.00%	94.00%	
45	1	1.00%	95.00%	
46	2	2.00%	97.00%	
47	0	0.00%	97.00%	
48	1	1.00%	98.00%	
49	1	1.00%	99.00%	
50	0	0.00%	99.00%	
51	0	0.00%	99.00%	
52	0	0.00%	99.00%	
53	0	0.00%	99.00%	
54	0	0.00%	99.00%	
55	0	0.00%	99.00%	
56	0	0.00%	99.00%	
57	0	0.00%	99.00%	
58	0	0.00%	99.00%	
59	0	0.00%	99.00%	
60	0	0.00%	99.00%	
61	0	0.00%	99.00%	
62	1	1.00%	100.00%	
Totals:	100	100.00%		

**Data Analysis:**

Time Mean Speed:	36.4	MPH
Sample Variance:	39.30	
Standard Deviation:	6.3	
Variance of the Mean:	0.3930	
Standard Error of the Mean:	0.6	
10 MPH Pace:	33	To: 42 MPH
Percent in Pace:	60.0%	
Vehicles in Pace:	60	
50th Percentile Speed:	36	MPH
85th Percentile Speed:	42	MPH
90th Percentile Speed:	43	MPH
95th Percentile Speed:	45	MPH

**Cumulative Frequency Distribution**

**Frequency Distribution**



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Harden Parkway</u>	Direction:	<u>WBD</u>	Comments:  <div style="border: 1px solid black; padding: 2px; margin-top: 10px;">No.34</div>
Between:	<u>Mckinnon Street &amp; El Dorado Drive</u>			
Survey Location:				
Speed Limit:	<u>35</u> MPH			
Date:	<u>05/30/19</u>	Day:	<u>Thursday</u>	
Hours:	From: <u>1:20PM</u>	To:	<u>1:55PM</u>	
Weather:	<u>Overcast</u>			
Observer(s):	<u>Chris &amp; Herendira</u>			

MPH	Frequency	Percent	Cumulative %	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	0	0.00%	0.00%	
24	0	0.00%	0.00%	
25	0	0.00%	0.00%	
26	2	4.00%	4.00%	
27	1	2.00%	6.00%	
28	0	0.00%	6.00%	
29	2	4.00%	10.00%	
30	0	0.00%	10.00%	
31	1	2.00%	12.00%	
32	1	2.00%	14.00%	
33	4	8.00%	22.00%	
34	1	2.00%	24.00%	
35	2	4.00%	28.00%	
36	3	6.00%	34.00%	
37	5	10.00%	44.00%	
38	4	8.00%	52.00%	
39	2	4.00%	56.00%	
40	4	8.00%	64.00%	
41	2	4.00%	68.00%	
42	9	18.00%	86.00%	
43	3	6.00%	92.00%	
44	2	4.00%	96.00%	
45	0	0.00%	96.00%	
46	1	2.00%	98.00%	
47	0	0.00%	98.00%	
48	0	0.00%	98.00%	
49	0	0.00%	98.00%	
50	0	0.00%	98.00%	
51	0	0.00%	98.00%	
52	0	0.00%	98.00%	
53	0	0.00%	98.00%	
54	0	0.00%	98.00%	
55	0	0.00%	98.00%	
56	0	0.00%	98.00%	
57	0	0.00%	98.00%	
58	0	0.00%	98.00%	
59	0	0.00%	98.00%	
60	0	0.00%	98.00%	
61	0	0.00%	98.00%	
62	1	2.00%	100.00%	
Totals:	50	100.00%		

#### Data Analysis:

Time Mean Speed:	38.1	MPH
Sample Variance:	36.20	
Standard Deviation:	6.0	
Variance of the Mean:	0.7240	
Standard Error of the Mean:	0.9	
10 MPH Pace:	33	To: 42 MPH
Percent in Pace:	72.0%	
Vehicles in Pace:	36	
50th Percentile Speed:	38	MPH
85th Percentile Speed:	42	MPH
90th Percentile Speed:	43	MPH
95th Percentile Speed:	44	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution



# CITY OF SALINAS

## DEPARTMENT OF DEVELOPMENT & ENGINEERING SERVICES

### RADAR SURVEY

Street:	<u>Harden Parkway</u>	Direction:	<u>EBD</u>	Comments:  <div style="border: 1px solid black; padding: 2px; margin-top: 10px;">No.34</div>
Between:	<u>Mckinnon Street &amp; El Dorado Drive</u>			
Survey Location:				
Speed Limit:	<u>35</u> MPH			
Date:	<u>05/30/19</u>	Day:	<u>Thursday</u>	
Hours: From:	<u>1:20PM</u>	To:	<u>1:55PM</u>	
Weather:	<u>Overcast</u>			
Observer(s):	<u>Chris &amp; Herendira</u>			

MPH	Frequency	Percent	Cumulative %	
18	0	0.00%	0.00%	
19	0	0.00%	0.00%	
20	0	0.00%	0.00%	
21	0	0.00%	0.00%	
22	0	0.00%	0.00%	
23	1	2.00%	2.00%	
24	1	2.00%	4.00%	
25	1	2.00%	6.00%	
26	0	0.00%	6.00%	
27	2	4.00%	10.00%	
28	3	6.00%	16.00%	
29	3	6.00%	22.00%	
30	2	4.00%	26.00%	
31	1	2.00%	28.00%	
32	5	10.00%	38.00%	
33	3	6.00%	44.00%	
34	4	8.00%	52.00%	
35	4	8.00%	60.00%	
36	6	12.00%	72.00%	
37	1	2.00%	74.00%	
38	1	2.00%	76.00%	
39	3	6.00%	82.00%	
40	1	2.00%	84.00%	
41	0	0.00%	84.00%	
42	1	2.00%	86.00%	
43	1	2.00%	88.00%	
44	2	4.00%	92.00%	
45	1	2.00%	94.00%	
46	1	2.00%	96.00%	
47	0	0.00%	96.00%	
48	1	2.00%	98.00%	
49	1	2.00%	100.00%	
50	0	0.00%	100.00%	
51	0	0.00%	100.00%	
52	0	0.00%	100.00%	
53	0	0.00%	100.00%	
54	0	0.00%	100.00%	
55	0	0.00%	100.00%	
56	0	0.00%	100.00%	
57	0	0.00%	100.00%	
58	0	0.00%	100.00%	
59	0	0.00%	100.00%	
60	0	0.00%	100.00%	
61	0	0.00%	100.00%	
62	0	0.00%	100.00%	
Totals:	50	100.00%		

#### Data Analysis:

Time Mean Speed:	34.6	MPH
Sample Variance:	37.17	
Standard Deviation:	6.1	
Variance of the Mean:	0.7434	
Standard Error of the Mean:	0.9	
10 MPH Pace:	27	To: 36 MPH
Percent in Pace:	66.0%	
Vehicles in Pace:	33	
50th Percentile Speed:	34	MPH
85th Percentile Speed:	42	MPH
90th Percentile Speed:	44	MPH
95th Percentile Speed:	46	MPH

#### Cumulative Frequency Distribution

#### Frequency Distribution