



City of Redlands

Engineering and Traffic Surveys on Various Streets Throughout the City of Redlands to Update Speed Limits

Prepared by
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July 16, 2015

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Prepared for:
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OC14-0364

FEHR  PEERS

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INTRODUCTION

The City of Redlands routinely prepares Engineering & Traffic Surveys (E&TS) to justify posted speed limits throughout the City and to allow the Police Department to enforce the speed limits using an electronic device. Over 100 roadway segments recently expired or are about to expire assuming a 5-year expiration (which may be extended to 7 or 10 years as described on page 3 of this report), so these were collectively analyzed as part of this report.

The methodology used to collect and analyze the necessary data and to recommend speed limits for 110 roadway segments is contained within this report. Rather than a single report with all results presented in tabular form similar to the City's 2009 report, this report includes a 1-page E&TS that contains all pertinent data and information for each road segment. While the forms are compiled within this report, each individual E&TS (with attached speed survey results) will meet the minimum legal requirements and can be separated from the remainder of the document. This approach is useful because surveys are often requested by the public. Rather than providing the full report for each request, the individual survey for the relevant roadway segment may be provided instead. Furthermore, should a subset of the road segments require an updated survey, possibly because a roadway has been widened or significantly modified, then the individual E&TS may be replaced with an updated E&TS.



REGULATORY SETTING

The 2015 California Vehicle Code (CVC) and the 2014 California Manual on Uniform Traffic Control Devices (CA MUTCD) set forth the laws and standards that govern the establishment of speed limits. Adhering to these laws and standards is critical so that citations issued by law enforcement officers are upheld in court. Fehr & Peers' technical approach, described in the next section of this report, is consistent with the CVC and CA MUTCD. A new publication, 2014 California Manual for Setting Speed Limits (Caltrans), was also used for reference.

The maximum speed limit was set by legislation at 65 mph or 55 mph for 2-lane undivided roadways (CVC Section 22349). Local authorities may, however, declare by ordinance a prima facie speed limit of 60, 55, 50, 45, 40, 35, 30, or 25 mph if the statutory maximum is believed to be higher than is reasonable or safe for a given section of roadway (CVC 22358). The determination to reduce the limit must be made based on the findings of an Engineering and Traffic Survey (E&TS), otherwise a citation would not be upheld in court if the citing officer utilized radar or other electronic device as proof of the vehicle speed, as it would be determined that the section of roadway on which the violation occurred was a speed trap (CVC Sections 40802 and 40803).

Furthermore, the CVC (Section 22352) defines prima facie speed limits of 15 mph and 25 mph as follows:

15 mph Prima Facie

- On the approach to an uncontrolled railway grade crossing with obstructed views
- On the approach to an uncontrolled intersection with obstructed views
- On an alley

25 mph Prima Facie

- On any roadway within a business or residence district meeting the definitions of such districts as provided for in the CVC (CVC Sections 235 and 515)
- On a roadway adjacent to a school with proper SCHOOL warning signs
- On a roadway adjacent to a senior center of facility with proper SENIOR warning signs

The posting of speed limit signs is not required at these locations; however, the use of radar for enforcement does still require justification of these speed limits by an E&TS, except for "local" roads and school zones. "Local" roads are defined based on their function on the California Road System (CRS) Maps originally approved by the Federal Highway Administration and maintained by the California Department of Transportation. If the roadway does not appear on the map, then it may be considered "local" if it provides access to abutting residential properties and (1) is no more than 40 feet wide, (2) is not more than ½ mile long of uninterrupted length (i.e., without signal control), and (3) does not include more than one travel lane in each direction (CVC Section 40802).

When an E&TS is required, it must contain three elements: (1) prevailing speeds as determined by traffic engineering measurement; (2) collision history; and (3) highway, traffic, and roadside conditions not readily apparent to the driver (CVC 627). The survey may also consider residential density and pedestrian and bicyclist safety.



The procedures for establishing a recommended speed limit based on the findings of an E&TS are contained within the CA MUTCD Section 2B.13, and will be described in more detail in the Methodology section of this report. An E&TS is to be updated every five years, except that they may be updated every seven years if the following conditions are met (CVC Section 40802):

- The arresting officer has completed at least 24 hours of certified training if using radar; and
- The arresting officer has completed at least two additional hours of certified training when using a device other than radar; and
- The electronic device meets or exceeds federal operational standards and has been calibrated within three years.

If an E&TS is initially set to expire after five years and a speeding ticket is issued after the expiration, the prosecution may prove to the court that the officer and equipment met the above requirements and that the speed of the accused was unsafe so that the E&TS is valid for seven years. Furthermore, an E&TS may be valid for 10 years if a registered engineer determines that the conditions of the roadway have not changed significantly from when the original survey was prepared, considering adjacent land use, roadway width and traffic volumes, among other factors.



METHODOLOGY

DATA COLLECTION

The forms of data that were collected included speed surveys, traffic volumes, and collision records. Fehr & Peers utilized the services of National Data & Surveying Services (NDS) to collect the speed surveys and volumes, as they have properly certified equipment and trained staff for this purpose.

Speed surveys were conducted according to the following parameters:

- Free flow conditions as defined by vehicle headways of three to five seconds, unimpeded by traffic signals, stop signs, construction, traffic accidents or law enforcement presence
- During off-peak hours avoiding inclement weather conditions and/or wet pavement
- Representing a minimum of 100 vehicles, or if very low volumes no less than 50 (or a maximum of two hours per location)
- By way of portable radar equipment that has been calibrated within the last three years and verified for accuracy within 3 mph operated by certified radar specialists
- From an inconspicuous vehicle without safety lights (if parking is available)

Traffic Radar Certifications are contained within **Appendix A**.

Traffic volumes were collected using pneumatic tubes for a mid-week 24-hour period.

Collision records were gathered from the CHP's Statewide Integrated Traffic Records System (SWITRS) covering 2010 to 2012, which is the most current data published.

FIELD REVIEW

Each of the following information was compiled for each roadway segment:

- Width (reported as the width of the majority of the segment if it varies), length, number of lanes, traffic control along segment (a count of traffic signals and stop signs not including the end points)
- Presence of mid-block crosswalks, bike facilities (Class 2 bike lane or Class 3 bike route), sidewalk, on-street parking, driveways, and street lighting
- General roadway (pavement) condition, as defined by:
 - Excellent: recently repaved
 - Good: minor to moderate cracking
 - Fair: moderate cracking with some base failures
 - Poor: significant cracking and/or base failures
- Part of a truck route
- Adjacent land use
- Vertical and horizontal curvature
- Lateral visibility (this is typically limited on narrow, curvy roadways with vegetation or other obstructions close to the roadway)



While some of the above characteristics are not directly considered when determining an appropriate speed limit, they are useful for defining current roadway and roadside conditions. These descriptions could become critical in the future if a registered engineer needs to determine whether conditions of the roadway have not changed significantly enough so as to justify the E&TS valid for up to 10 years.

ANALYSIS

Analyses completed as part of this study includes the calculation of speed data and collision rates, as well as the determination of a recommended speed limit. Each is described below.

Speed Data

The travel speed of at least 100 vehicles was recorded using radar (or up to a maximum of two hours of data collection on low volume roadways). The sample included motorists in both directions, except for a few locations that were collected in one direction only along the City boundary where only one direction is within City right of way. The following is a list of descriptive statistics calculated for each segment:

- 85th percentile speed: the speed at which 85% of the sample vehicles are traveling at or below under free flow conditions. This is considered the speed which a majority of motorists deems safe given the apparent conditions of the roadway. This is often referred to as the “critical speed” by engineers and law enforcement.
- 10 mph pace: the 10-mph increment that contains the largest percentage of recorded speeds
- Percent in pace: the percentage contained within the 10 mph pace

While the 10 mph pace and percent in pace values are useful for understanding motorist behavior, the 85th percentile speed is directly used for the determination of a speed limit, as described in more detail below.

Collision Rates

Collision rates were calculated for each road segment as the total number of collisions per million vehicle miles traveled on that segment and compared to a statewide average for the same type of roadway facility. The number of collisions for which speed was reportedly a factor was also determined and presented on each E&TS. High collision rates are a factor that may be used to determine an appropriate speed limit, as described below.

Determination of Recommended Speed Limits

An initial recommended maximum speed limit for each roadway segment was identified using the procedures set forth in the CA MUTCD (Section 2B.13). Specifically, each was set at the nearest 5 mph of the 85th percentile speed, which is the speed that a majority of drivers believes to be reasonable and safe. Furthermore, two options were then considered for each segment:

1. The maximum limit could be reduced by 5 mph if certain conditions were present that are not readily apparent to the driver (referred to as *downward speed zoning*); or



2. If the limit was rounded up from the 85th percentile speed to the nearest 5 mph increment, then the limit could optionally be rounded down instead; however, no further reduction would be allowed.

The appropriateness of downward speed zoning is determined based on field conditions and collision history. The CVC specifically states that physical conditions that are readily apparent to the driver cannot be considered, such as width, curvature, grade and surface conditions (Section 22358.5). While these factors were noted in the field for each segment, they were not solely considered as justification for any recommendation to apply downward speed zoning. Rather, collision history, driveway density, presence of a two-way left-turn lane (TWLTL) and pedestrian and bicyclist safety were considered as part of this determination. If downward speed zoning was applied for a road segment, then the justification was documented on the corresponding E&TS.



RECOMMENDATIONS

As described previously, an E&TS must contain the following three elements: (1) prevailing speeds as determined by traffic engineering measurement; (2) collision history; and (3) highway, traffic, and roadside conditions not readily apparent to the driver (CVC 627). As such, each E&TS contains the following elements:

- A map and photo illustrating the road segment location
- Results of prevailing speed measurements (85th percentile and pace speed) with speed survey results attached
- Description of physical roadway characteristics and surrounding land use, traffic volumes, and posted speed limit
- Collision history for most recent three years of available collision data
- Identification of conditions not readily apparent to a driver
- Recommended speed limit with justification for downward speed zoning, if any
- Statement that survey is in compliance with relevant CVC and CA MUTCD sections
- Stamp and signature of licensed engineer

The E&TS forms are contained within **Appendix B**, including speed survey results attached to each. **Appendix C** contains a summary of collision records. Collision records are typically only attached to each individual E&TS if collision history was part of the justification for downward speed zoning; however, this was not the case for any of the Redlands study segments. Recommended speed limits are summarized in **Table 1** and on **Figure 1**. Of the 110 roadway segment studied, the following is a summary of recommendations:

Number of segments unchanged = 57
Number of segments with new speed limits established = 5
Number of segments decreasing by 5 mph = 13
Number of segments decreasing by 10 mph = 4
Number of segments increasing by 5 mph = 20
Number of segments increasing by 10 mph = 10
Number of segments increasing by 15 mph = 1

Figure 1 also provides the location of existing signs that require replacement due to a speed limit change and proposed new sign locations. In total, 160 sign panels on existing posts or street light poles are recommended for replacement, and 36 new sign panels are recommended for installation on either a new post or a nearby street light pole. Existing and proposed sign locations shown on Figure 1 are approximate only. Consideration of specific field conditions is necessary for all new installations.

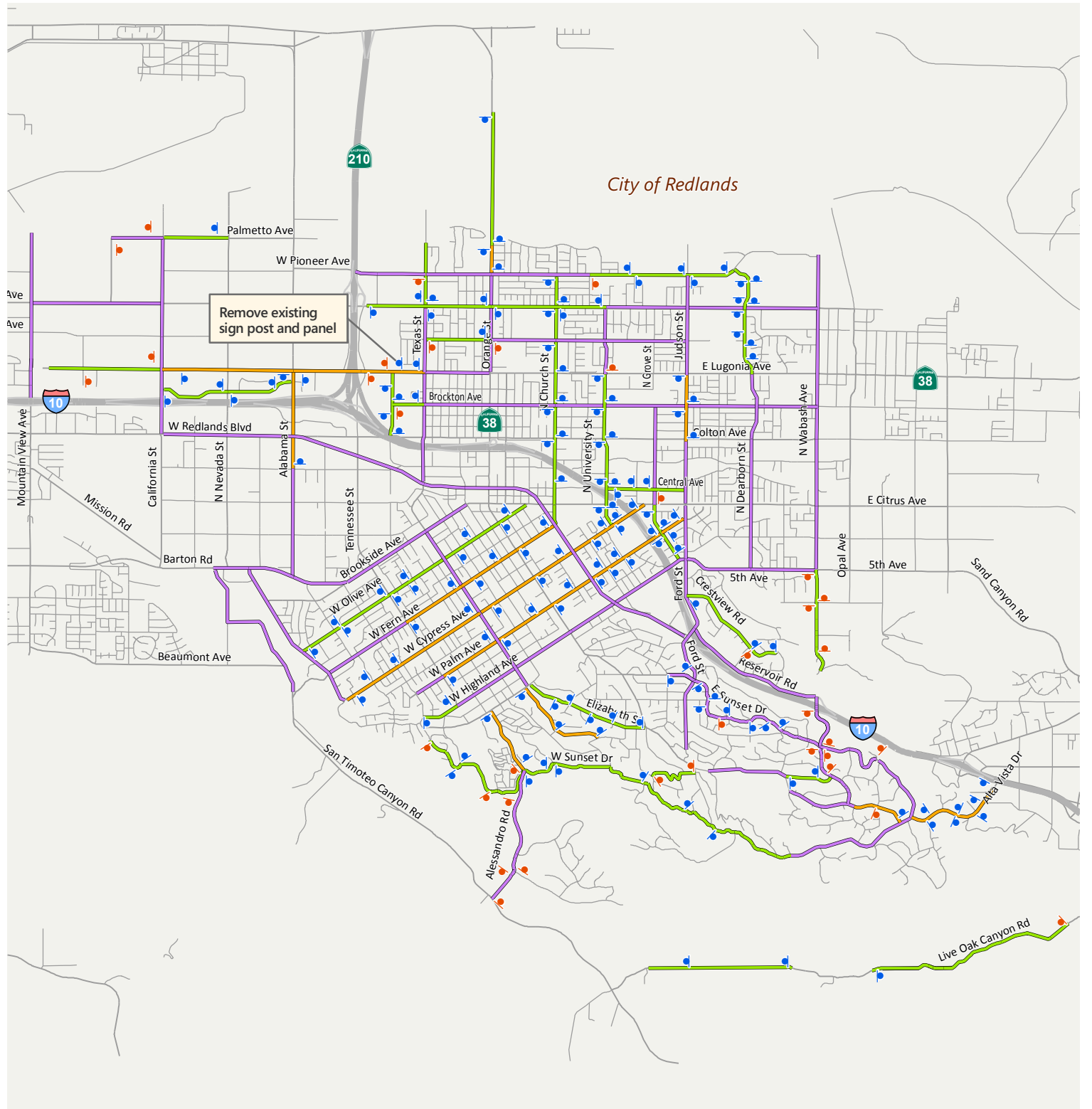
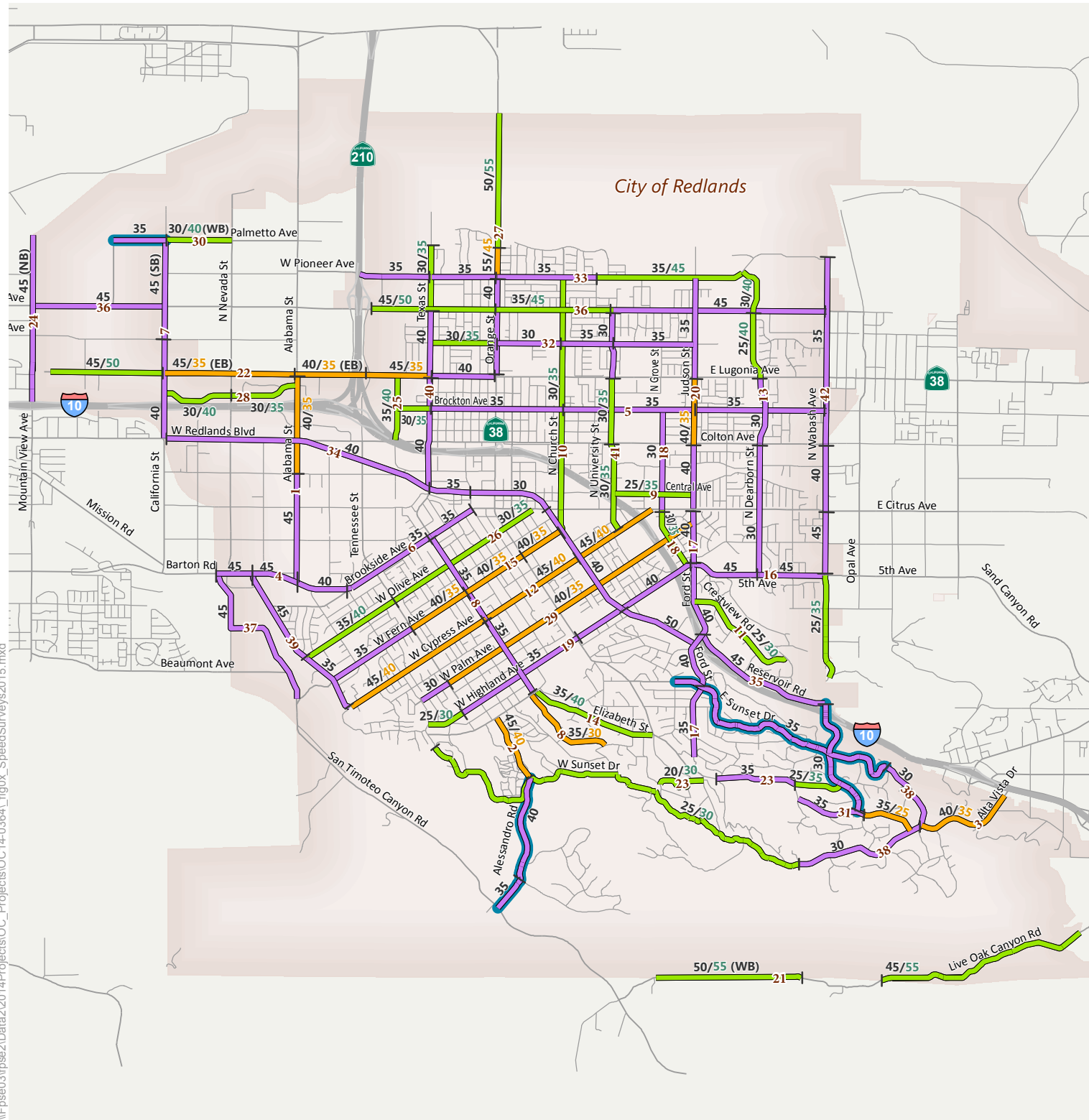


TABLE 1 - SUMMARY OF RECOMMENDATIONS

Street	Segment	Existing Limit (mph)	85th Percentile Speed (mph)	Recommended Limit (mph)	Speed Limit Change?	MPH change	Downward Speed Zoning Justification
1.1	Alabama Street	45	47	45	NO	0	N/A
1.2	Alabama Street	40	34	35	YES	-5	N/A
2.1	Alessandro Road	45	43	40	YES	-5	N/A
2.2	Alessandro Road	Not Posted	47	40	YES	N/A	Limited lateral visibility due to narrow, curvy roadway and vegetation in area with residential driveways and bicyclists
2.3	Alessandro Road	Not Posted	35	35	YES	N/A	N/A
3.1	Alta Vista Drive	40	42	35	YES	-5	Residential area with driveways but no sidewalks, equestrian activity
4.1	Barton Road	45	47	45	NO	0	N/A
4.2	Barton Road	45	47	45	NO	0	N/A
4.3	Barton Road	40	45	40	NO	0	Frequency of bicyclist activity
5.1	Brockton Avenue	30	37	35	YES	5	N/A
5.2	Brockton Avenue	35	35	35	NO	0	N/A
5.3	Brockton Avenue	35	34	35	NO	0	N/A
5.4	Brockton Avenue	35	40	35	NO	0	High density residential driveways
6.1	Brookside Avenue	35	41	35	NO	0	Frequency of bicyclist activity
6.2	Brookside Avenue	35	39	35	NO	0	N/A
7.1	California Street	40	40	40	NO	0	N/A
7.2	California Street	40	41	40	NO	0	N/A
8.2	Center Street	35	37	35	NO	0	N/A
8.3	Center Street	35	37	35	NO	0	N/A
8.4	Center Street	35	37	30	YES	-5	Limited lateral visibility due to narrow, curvy roadway and vegetation with residential driveways
9.1	Central Avenue	25	40	35	YES	10	High density residential driveways
10.1	Church Street	30	40	35	YES	5	High density residential driveways, frequency of bicyclist activity
11.1	Crestview Road	25	37	30	YES	5	High density residential driveways
12.1	Cypress Avenue	45	41	40	YES	-5	N/A
12.2	Cypress Avenue	45	46	40	YES	-5	High density residential driveways and frequency of bicyclists
12.3	Cypress Avenue	45	41	40	YES	-5	N/A
13.1	Dearborn Street	30	37	30	NO	0	High density residential driveways
13.2	Dearborn Street	30	36	30	NO	0	High density residential driveways
13.3	Dearborn Street	25	43	40	YES	15	N/A
13.4	Dearborn Street	30	43	40	YES	10	N/A
14.1	Elizabeth Street	35	43	40	YES	5	N/A
15.1	Fern Avenue	40	40	35	YES	-5	TWLT, high density residential driveways and frequency of bicyclists
15.2	Fern Avenue	40	39	35	YES	-5	N/A
15.3	Fern Avenue	40	42	35	YES	-5	TWLT, high density residential driveways and frequency of bicyclists
15.4	Fern Avenue	35	37	35	NO	0	N/A
16.1	Fifth Avenue	45	45	45	NO	0	N/A
16.2	Fifth Avenue	45	47	45	NO	0	N/A
17.1	Ford Street	40	45	40	NO	0	High density residential driveways
17.2	Ford Street	40	41	40	NO	0	N/A
17.3	Ford Street	40	43	40	NO	0	N/A
17.4	Ford Street	35	41	35	NO	0	Frequency of bicyclists with bike lanes and institutional land uses
18.1	Grove Street	30	38	35	YES	5	N/A
18.2	Grove Street	40	37	30	NO	0	Student housing and on-street parking resulting in high pedestrian activity with limited sidewalk
19.1	Highland Avenue	40	47	40	NO	0	High density residential driveways, frequent bicyclists, TWLTL
19.2	Highland Avenue	35	41	35	NO	0	N/A
19.3	Highland Avenue	25	34	30	YES	5	N/A
20.1	Judson Street	40	43	40	NO	0	N/A
20.2	Judson Street	40	41	35	YES	-5	High density residential driveways, frequent bicyclists, TWLTL
20.3	Judson Street	35	39	35	NO	0	N/A
21.1	Live Oak Canyon Road	50	56	55	YES	5	N/A
21.2	Live Oak Canyon Road	45	56	55	YES	10	N/A
22.1	Lugonia Avenue	45	52	50	YES	5	N/A
22.2	Lugonia Avenue	45	38	35	YES	-10	N/A
22.3	Lugonia Avenue	40	35	35	YES	-5	N/A

TABLE 1 - SUMMARY OF RECOMMENDATIONS

Street	Segment	Existing Limit (mph)	85th Percentile Speed (mph)	Recommended Limit (mph)	Speed Limit Change?	MPH change	Downward Speed Zoning Justification
22.4	Lugonia Avenue	45	38	35	YES	-10	N/A
22.5	Lugonia Avenue	40	45	40	NO	0	High density residential driveways
23.1	Mariposa Drive	25	40	35	YES	10	High density residential driveways
23.2	Mariposa Drive	35	40	35	NO	0	High density residential driveways and no sidewalks
23.3	Mariposa Drive	20	35	30	YES	10	High density residential driveways w/ limited visibility and no sidewalks
24.1	Mountain View Avenue	45	47	45	NO	0	N/A
25.1	New York Street	35	44	40	YES	5	N/A
26.1	Olive Avenue	30	38	35	YES	5	N/A
26.2	Olive Avenue	35	44	40	YES	5	N/A
27.1	Orange Street	40	41	40	NO	0	N/A
27.2	Orange Street	55	49	45	YES	-10	N/A
27.3	Orange Street	50	55	55	YES	5	N/A
28.1	Orange Tree Lane	30	43	40	YES	10	N/A
28.2	Orange Tree Lane	30	38	35	YES	5	N/A
29.1	Palm Avenue	40	33	30	NO	0	N/A
29.2	Palm Avenue	30	40	35	YES	-5	High density residential driveways
30.1	Palmetto Avenue	30	46	40	YES	10	Large volume of heavy trucks traveling slow and parking in middle of roadway
30.2	Palmetto Avenue	Not Posted	40	35	YES	N/A	Large volume of heavy trucks traveling slow and parking in middle of roadway
31.1	Palo Alto Drive	35	42	35	NO	0	High density residential driveways
31.2	Palo Alto Drive	35	28	25	YES	-10	N/A
32.1	Pennsylvania Avenue	30	39	35	YES	5	N/A
32.2	Pennsylvania Avenue	30	32	30	NO	0	N/A
32.3	Pennsylvania Avenue	35	40	35	NO	0	High density residential driveways
32.4	Pennsylvania Avenue	35	40	35	NO	0	High density residential driveways
33.1	Pioneer Avenue	35	41	35	NO	0	High density residential driveways
33.2	Pioneer Avenue	35	40	35	NO	0	High density residential driveways
33.3	Pioneer Avenue	35	46	45	YES	10	N/A
33.4	Pioneer Avenue	35	39	35	NO	0	N/A
34.1	Redlands Boulevard	40	45	40	NO	0	High density commercial driveways on both sides with partial TWLTL
34.2	Redlands Boulevard	35	41	35	NO	0	High density commercial driveways on both sides with TWLTL
34.3	Redlands Boulevard	30	36	30	NO	0	Several multi-lane uncontrolled crosswalks with high pedestrian activity and frequency of bicyclists
34.4	Redlands Boulevard	35	41	40	YES	5	N/A
34.5	Redlands Boulevard	50	53	50	NO	0	N/A
35.1	Reservoir Road	45	46	45	NO	0	N/A
36.1	San Bernardino Avenue	45	51	50	YES	5	N/A
36.2	San Bernardino Avenue	35	46	45	YES	10	N/A
36.3	San Bernardino Avenue	45	48	45	NO	0	N/A
36.4	San Bernardino Avenue	45	51	45	NO	0	TWLTL in industrial area; large volume of heavy trucks traveling slow
37.1	San Timoteo Canyon Rd	45	46	45	NO	0	N/A
38.1	Sunset Drive	30	36	30	NO	0	Limited lateral visibility due to curves and vegetation with residential driveways and no sidewalk
38.2	Sunset Drive	30	35	30	NO	0	Limited lateral visibility due to curves and vegetation with residential driveways and no sidewalk
38.3	Sunset Drive	25	34	30	YES	5	N/A
38.4	Sunset Drive	Not Posted	38	35	YES	N/A	N/A
39.1	Terracina Boulevard	45	45	45	NO	0	N/A
39.2	Terracina Boulevard	35	38	35	NO	0	N/A
40.1	Texas Street	40	41	40	NO	0	N/A
40.2	Texas Street	40	42	40	NO	0	N/A
40.3	Texas Street	30	38	35	YES	5	N/A
41.1	University Street	30	41	35	YES	5	High density residential driveways, on-street parking without sidewalk
41.2	University Street	30	40	35	YES	5	Student housing and on-street parking resulting in high pedestrian activity with gaps in sidewalk
41.3	University Street	30	32	30	NO	0	N/A
42.1	Wabash Avenue	45	46	45	NO	0	N/A
42.2	Wabash Avenue	40	43	40	NO	0	N/A
42.3	Wabash Avenue	35	39	35	NO	0	N/A
42.4	Wabash Avenue	25	40	35	YES	10	Limited lateral visibility due to curves and vegetation with residential driveways and no sidewalk
42.5	Wabash Avenue	Not Posted	34	30	YES	N/A	N/A



- | | | | |
|--------------------------------|-------------------------------|--------------------------------------|-----------------------------|
| XX Existing Speed Limit | — No Change in Speed Limit | — Establishment of a New Speed Limit | Redlands City Limit |
| XX Proposed Higher Speed Limit | — Proposed Higher Speed Limit | XX Roadway ID | • New Sign on Existing Post |
| XX Proposed Lower Speed Limit | — Proposed Lower Speed Limit | Segment Delineator | • New Sign on New Post |



Figure 1
City of Redlands 2015 Speed Limit Recommendations

**APPENDIX A: NATIONAL DATA & SURVEYING SERVICES (NDS)
TRAFFIC RADAR CERTIFICATIONS**





TRAFFIC RADAR CERTIFICATION

TESTED TO NHTSA SPECIFICATIONS / IACP CRITICAL PERFORMANCE STANDARDS
(NHTSA) National Highway and Traffic Safety Administration.
(IACP) International Association of Chiefs of Police.

16202 Keats Circle
Westminster, Calif. 92683

R.H.F. is a certified independent testing and repair facility.

1	TEST ID	Date Received 6-21-13	Certification Number 65020					
2	DEVICE ID	Manufacturer MPH	Model: K-15	Type (I-IV) III	Directional radar <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Same direction <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
		Counting unit S/N 1499	Antenna-1 S/N N/A		Antenna-2 S/N N/A			
3	§ 2.4 / § 5.4 TUNING FORK CALIBRATION	Low speed fork S/N 1214	Last date calib.	Freq. (Hz)	Speed (mph) 35	Measured (Hz) 2511	PASS	FAIL
		High speed fork S/N	Last date calib.	Freq. (Hz)	Speed (mph)	Measured (Hz)		
4	§ 2.5 / § 5.5 RADAR DEVICE TUNING FORK TESTS	Lo fork		High fork		PASS	FAIL	
		Stationary mode	Fork speed (mph) 35	Disp. Speed (mph) 65				
		Moving mode Opposite Direction	TARGET SPEED (Hi fork - Lo fork)	Expected. (mph) N/A	Displayed. (mph) N/A			
		Moving mode Same Direction	TARGET SPEED Hi fork + Lo fork Ho fork - Lo fork	Expected. (mph) N/A	Displayed. (mph) N/A			
5	§ 2.6.1. / § 5.6.1 TRANSMISSION FREQUENCY STABILITY	Standard supply Voltage (V) 13.6 V	Antenna 1 Freq. GHz 24.153	Antenna 2 Freq. GHz N/A		PASS	FAIL	
		Standard supply Voltage - 20% (V) 10.8 V	Antenna 1 Freq. GHz 24.153	Antenna 2 Freq. GHz N/A				
		Standard supply voltage + 20% (V) 16.3 V	Antenna 1 Freq. GHz 24.153	Antenna 2 Freq. GHz N/A				
6	§ 2.6.5 / § 5.6.5 POWER DENSITY	Mfg. Spec. (max mW/cm) ≤ 5	Antenna 1 Power (mW/cm) .3	Antenna 2 Power (mW/cm) N/A		PASS	FAIL	
7	§ 2.8 / § 5.8 LOW VOLTAGE	Mfg. spec. (V) ≤ 10.8V	LVA activates (V) NIA	LVA deactivates (V) NIA		PASS	FAIL	
8	§ 2.9.1 / § 5.9.1 DOPPLER AUDIO	A. Audio tone correlates with received Doppler signal B. Functioning audio volume-adjustment control			<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		PASS	FAIL
9	§ 2.12.4 / § 5.12.4 INTERNAL CIRCUIT	Mfg. Spec. 32	Test results 32			PASS	FAIL	
10	§ 2.12.6.5 / § 5.12.6.5 DIRECTIONAL	A. Selects only targets moving towards radar B. Selects only targets moving away from radar			<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N.A. <input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N.A.		PASS	FAIL
11	§ 2.12.7 / § 2.12.8 / 5.12.7 / 5.12.8 LOW AND HIGH SPEED DISPLAY TEST	Stationary mode: target channel (mph)	Low speed spec. 20	Lo speed disp. 20		PASS	FAIL	
			Hi speed spec. 199	Hi speed disp. 199				
		Moving Mode target channel (mph)	Low speed spec. N/A	Lo speed disp. N/A				
			Hi speed spec. N/A	Hi speed disp. N/A				
		Moving Mode: patrol channel (mph)	Low speed spec. N/A	Lo speed disp. N/A				
			Hi speed spec. N/A	Hi speed disp. N/A				
12	§ 2.13 / § 5.13 RFI TEST	N/A				PASS	FAIL	
13	LABORATORY COMMENTS							
14	NHTSA/IACP CERTIFICATION	<i>This radar device meets or exceeds the minimal operational standards of the National Traffic Highway Safety Administration. California Vehicle Code Section 40802</i>					<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL	
		Certified by: Ford Bauman			Date: 6-21-13			
15	INVENTORY	<input type="checkbox"/> Fork Cert <input type="checkbox"/> Manual <input type="checkbox"/> 2 nd Ant. <input type="checkbox"/> Remote <input type="checkbox"/> Bat. <input type="checkbox"/> Carrying Case Other: (please list)						



TRAFFIC RADAR CERTIFICATION

TESTED TO NHTSA SPECIFICATIONS / IACP CRITICAL PERFORMANCE STANDARDS
 (NHTSA) National Highway and Traffic Safety Administration.
 (IACP) International Association of Chiefs of Police.

16202 Keats Circle
 Westminster, Calif. 92683

R.H.F. is a certified independent testing and repair facility.

1	TEST ID	Date Received 12-16-13	Certification Number 65948				
2	DEVICE ID	Manufacturer ASTRO PRODUCTS	Model: PHANTOM	Type (I-IV) III	Directional radar Yes / No	Same direction Yes / No	
		Counting unit S/N 1619	Antenna-1 S/N N/A	Antenna-2 S/N N/A			
3	§ 2.4 / § 5.4 TUNING FORK CALIBRATION	Low speed fork S/N	Last date calib.	Freq. (Hz)	Speed (mph)	Measured (Hz)	PASS FAIL
		High speed fork S/N 1619TF	Last date calib.	Freq. (Hz)	Speed (mph) 55	Measured (Hz) 3979	
4	§ 2.5 / § 5.5 RADAR DEVICE TUNING FORK TESTS	Stationary mode	Fork speed (mph)	Lo fork 35	High fork 65	Disp. Speed (mph)	PASS FAIL
		Moving mode Opposite Direction	TARGET SPEED (Hi fork - Lo fork)	Expected. (mph) N/A	Displayed. (mph) N/A		
		Moving mode Same Direction	TARGET SPEED Hi fork + Lo fork Ho fork - Lo fork	Expected. (mph) N/A	Displayed. (mph) N/A		
5	§ 2.6.1 / § 5.6.1 TRANSMISSION FREQUENCY STABILITY	Standard supply Voltage (V) 13.6 V	Antenna 1 Freq. GHz 24.163	Antenna 2 Freq. GHz N/A			PASS FAIL
		Standard supply Voltage - 20% (V) 10.8 V	Antenna 1 Freq. GHz 24.163	Antenna 2 Freq. GHz N/A			
		Standard supply voltage + 20% (V) 16.3 V	Antenna 1 Freq. GHz 24.163	Antenna 2 Freq. GHz N/A			
6	§ 2.6.5 / § 5.6.5 POWER DENSITY	Mfg. Spec. (max mW/cm) ≤ 5	Antenna 1 Power (mW/cm) .4	Antenna 2 Power (mW/cm) N/A			PASS FAIL
7	§ 2.8 / § 5.8 LOW VOLTAGE	Mfg. spec. (V) ≤ 10.8V	LVA activates (V) 7.9	LVA deactivates (V) 8.5			PASS FAIL
8	§ 2.9.1 / § 5.9.1 DOPPLER AUDIO	A. Audio tone correlates with received Doppler signal B. Functioning audio volume-adjustment control			Yes / No / N.A. Yes / No / N.A.		PASS FAIL
9	§ 2.12.4 / § 5.12.4 INTERNAL CIRCUIT	Mfg. Spec.	60	Test results	60		PASS FAIL
10	§ 2.12.6.5 / § 5.12.6.5 DIRECTIONAL	A. Selects only targets moving towards radar B. Selects only targets moving away from radar			Yes / No / N.A. Yes / No / N.A.		PASS FAIL
11	§ 2.12.7 / § 2.12.8 / 5.12.7 / 5.12.8 LOW AND HIGH SPEED DISPLAY TEST	Stationary mode: target channel (mph)	Low speed spec. 20	Lo speed disp. 20			PASS FAIL
			Hi speed spec. 199	Hi speed disp. 199			
		Moving Mode target channel (mph)	Low speed spec. N/A	Lo speed disp. N/A			
			Hi speed spec. N/A	Hi speed disp. N/A			
		Moving Mode: patrol channel (mph)	Low speed spec. N/A	Lo speed disp. N/A			
			Hi speed spec. N/A	Hi speed disp. N/A			
12	§ 2.13 / § 5.13 RFI TEST						PASS FAIL
13	LABORATORY COMMENTS						
14	NHTSA/IACP CERTIFICATION	This radar device meets or exceeds the minimal operational standards of the National Traffic Highway Safety Administration. California Vehicle Code Section 40802					☑ PASS ☐ FAIL
		Certified by: <i>Fred T. Bauman</i>			Date: 12-16-13		
15	INVENTORY	☐ Fork Cert	☐ Manual	☐ 2 nd Ant.	☐ Remote	☐ Bat.	
		☐ Carrying Case		Other: (please list)			



TRAFFIC RADAR CERTIFICATION

TESTED TO NHTSA SPECIFICATIONS / IACP CRITICAL PERFORMANCE STANDARDS
 (NHTSA) National Highway and Traffic Safety Administration.
 (IACP) International Association of Chiefs of Police.

16202 Keats Circle
 Westminster, Calif. 92683

R.H.F. is a certified independent testing and repair facility.

1	TEST ID	Date Received 12-16-13	Certification Number 65947				
2	DEVICE ID	Manufacturer ASTRO PRODUCTS	Model: PHANTOM	Type (I-IV) III	Directional radar Yes / No	Same direction Yes / No	
		Counting unit S/N 1618	Antenna-1 S/N N/A		Antenna-2 S/N N/A		
3	§ 2.4 / § 5.4 TUNING FORK CALIBRATION	Low speed fork S/N	Last date calib.	Freq. (Hz)	Speed (mph)	Measured (Hz)	
		High speed fork S/N 1618 TF	Last date calib.	Freq. (Hz)	Speed (mph) 55	Measured (Hz) 3982	
4	§ 2.5 / § 5.5 RADAR DEVICE TUNING FORK TESTS	Stationary mode		Lo fork	High fork		
		Fork speed (mph)		35	65		
		Disp. Speed (mph)		35	65		
		Moving mode Opposite Direction	TARGET SPEED (Hi fork - Lo fork)	Expected. (mph) N/A	Displayed. (mph) N/A		
Moving mode Same Direction	TARGET SPEED Hi fork + Lo fork Ho fork - Lo fork	Expected. (mph) N/A	Displayed. (mph) N/A				
5	§ 2.6.1 / § 5.6.1 TRANSMISSION FREQUENCY STABILITY	Standard supply Voltage (V) 13.6 V	Antenna 1 Freq. GHz 24.154	Antenna 2 Freq. GHz N/A		PASS FAIL	
		Standard supply Voltage - 20% (V) 10.8 V	Antenna 1 Freq. GHz 24.154	Antenna 2 Freq. GHz N/A			
		Standard supply voltage + 20% (V) 16.3 V	Antenna 1 Freq. GHz 24.154	Antenna 2 Freq. GHz N/A			
6	§ 2.6.5 / § 5.6.5 POWER DENSITY	Mfg. Spec. (max mW/cm) ≤ 5	Antenna 1 Power (mW/cm) .5	Antenna 2 Power (mW/cm) N/A		PASS FAIL	
7	§ 2.8 / § 5.8 LOW VOLTAGE	Mfg. spec. (V) ≤ 10.8V	LVA activates (V) 7.5	LVA deactivates (V) 8.2		PASS FAIL	
8	§ 2.9.1 / § 5.9.1 DOPPLER AUDIO	A. Audio tone correlates with received Doppler signal		Yes / No		PASS FAIL	
		B. Functioning audio volume-adjustment control		Yes / No		PASS FAIL	
9	§ 2.12.4 / § 5.12.4 INTERNAL CIRCUIT	Mfg. Spec.	60	Test results	60	PASS FAIL	
10	§ 2.12.6.5 / § 5.12.6.5 DIRECTIONAL	A. Selects only targets moving towards radar		Yes / No / N.A.		PASS FAIL	
		B. Selects only targets moving away from radar		Yes / No / N.A.			
11	§ 2.12.7 / § 2.12.8 / 5.12.7 / 5.12.8 LOW AND HIGH SPEED DISPLAY TEST	Stationary mode: target channel (mph)		Low speed spec. 20	Lo speed disp. 20		
				Hi speed spec. 199	Hi speed disp. 199		
		Moving Mode target channel (mph)		Low speed spec. N/A	Lo speed disp. N/A		PASS FAIL
				Hi speed spec. N/A	Hi speed disp. N/A		
		Moving Mode: patrol channel (mph)		Low speed spec. N/A	Lo speed disp. N/A		
				Hi speed spec. N/A	Hi speed disp. N/A		
12	§ 2.13 / § 5.13 RFI TEST					PASS FAIL	
13	LABORATORY COMMENTS						
14	NHTSA/IACP CERTIFICATION	This radar device meets or exceeds the minimal operational standards of the National Traffic Highway Safety Administration. California Vehicle Code Section 40802					<input checked="" type="checkbox"/> PASS <input type="checkbox"/> FAIL
		Certified by: Ford Bauman			Date: 12-16-13		
15	INVENTORY	Fork Cert Manual		2nd Ant. Remote		Bat.	
		Carrying Case		Other: (please list)			

APPENDIX B: ENGINEERING & TRAFFIC SURVEYS



ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Alabama Street from Barton Road to Park Avenue

Date: 3/12/2015 Time: 9:00 AM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed: 100
 85th Percentile: 47
 10 mph Pace: 37 - 46
 Percent in Pace: 72%
 Posted Speed Limit: 45 mph

COLLISION HISTORY

Dates Observed: 1/1/10-12/31/12
 Speed-Related Collisions: 0
 Total Collisions: 7
 Annual Collision Rate: 2.3
 Collision Rate (Per Million Vehicle Miles): 0.9
 Statewide Collision Rate: 2.55

TRAFFIC FACTORS

Average Daily Traffic: 9,267
 Width: 84'
 Lane Configuration: 4 Lanes, TWLTL
 Traffic Control: 2 signals
 Mid-block Crosswalks: No
 Bike Facilities: No
 Truck Route: Yes
 On-Street Parking: No
 Adjacent Land Use: Commercial, Residential
 Other:

ROADWAY FACTORS

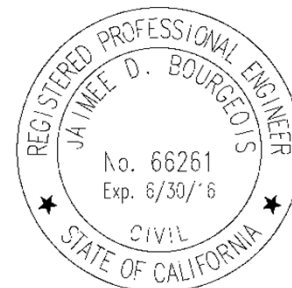
Length of Segment: 0.8 Miles
 Vertical Curve: No
 Horizontal Curve: No
 Lateral Visibility: Good
 Sidewalks: Partial
 Driveways: Yes
 Street Lighting: Yes
 Road Condition: Poor

CONCLUSIONS

Recommended Speed Limit: 45
 Speed Limit Change: NO
 Justification for 5 mph down: N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/12/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/12/2015

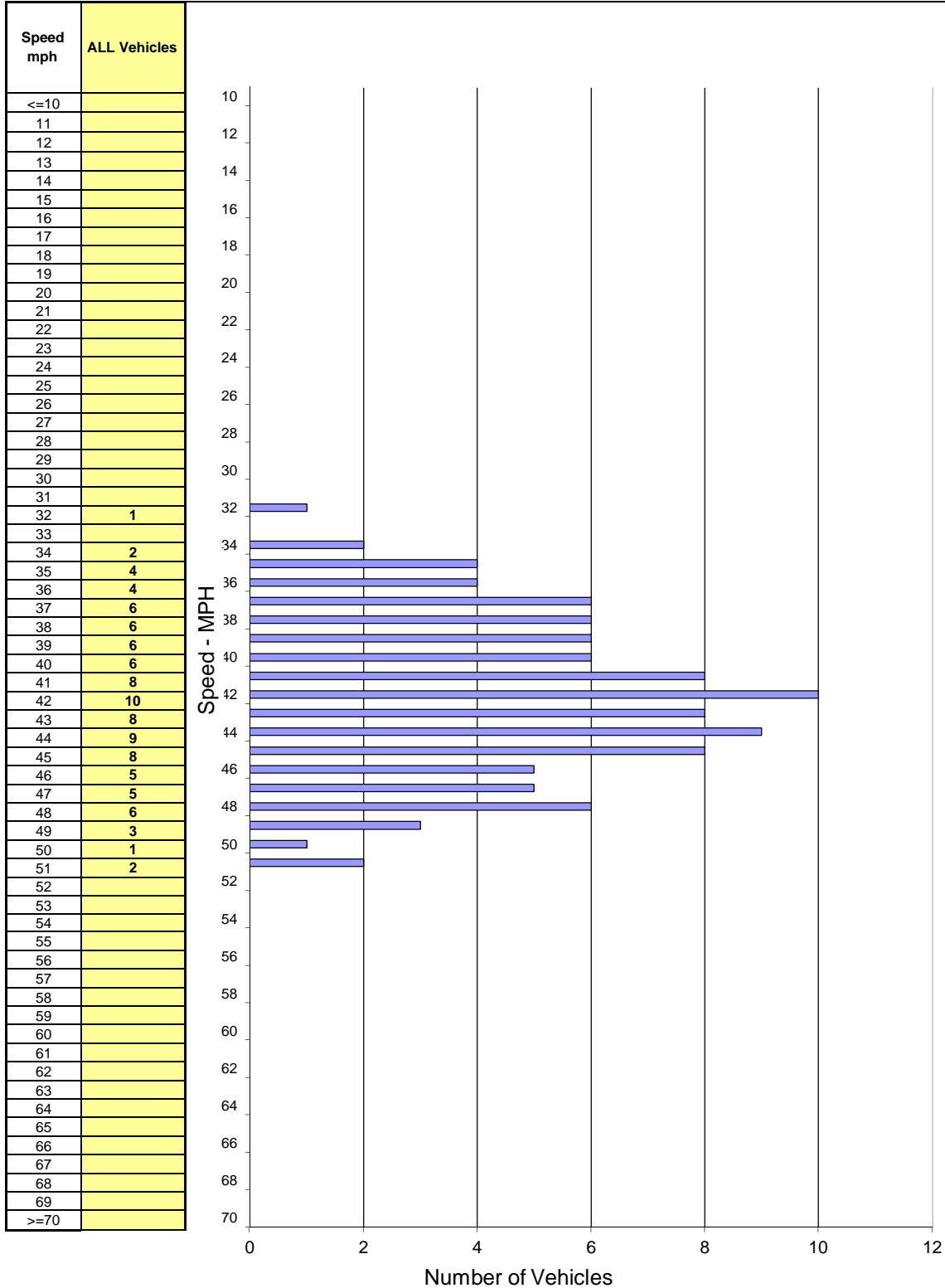
Location: Alabama St Bet Barton Rd & Park Ave

DAY: Thursday

Posted Speed: 45 MPH

Project#: 15-6046-1.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	32 - 51	42 mph	47 mph	37 - 46	72	72%	11% / 11	17% / 17

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Alabama Street from Park Avenue to Lugonia Avenue

Date: 4/2/2015 Time: 10:24 AM

Recorded By: NDS Weather: Sunny



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	34
10 mph Pace:	26 - 35
Percent in Pace:	86%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	12
Total Collisions:	31
Annual Collision Rate:	10.3
Collision Rate (Per Million Vehicle Miles):	2.8
Statewide Collision Rate:	1.85

TRAFFIC FACTORS

Average Daily Traffic:	12,715
Width:	96'
Lane Configuration:	4 Lanes, median
Traffic Control:	5 signals
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	No
Adjacent Land Use:	Commerical
Other:	

ROADWAY FACTORS

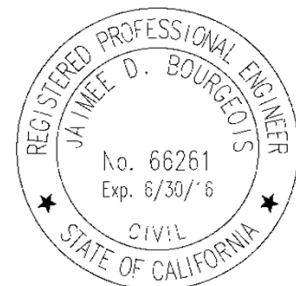
Length of Segment:	0.8 Miles
Vertical Curve:	Yes
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/2/2022



Spot Speed Study

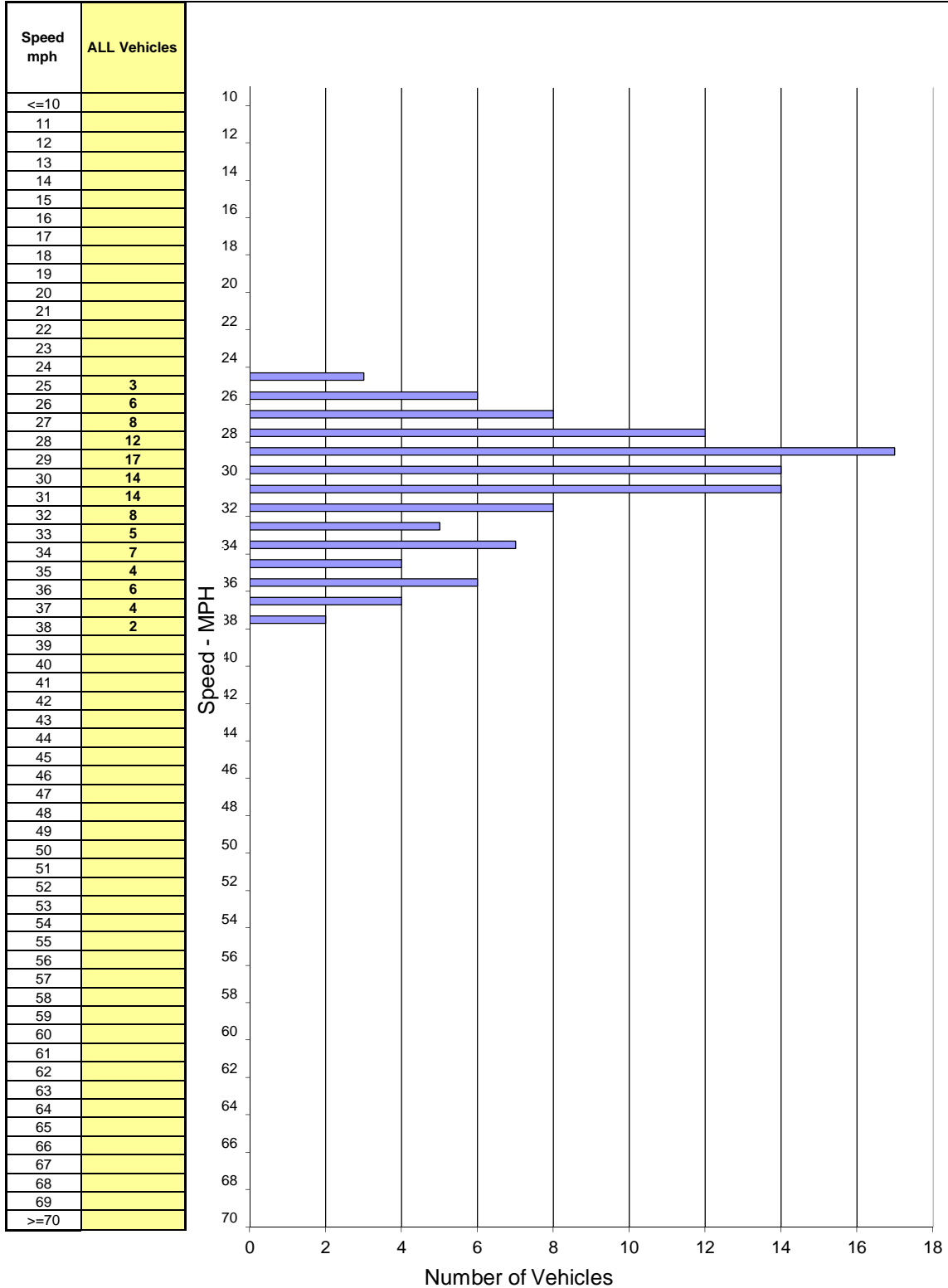
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/2/2015
DAY: Thursday

Location: Alabama St Bet Park Ave & Lugonia Ave
Posted Speed: 30 MPH Project#: 15-6046-1.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	25 - 38	30 mph	34 mph	26 - 35	95	86%	2% / 3	11% / 12

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Alessandro Road from Crescent Avenue to Sunset Drive

Date: 3/13/2015 Time: 2:08 PM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	43
10 mph Pace:	36 - 45
Percent in Pace:	75%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	2
Annual Collision Rate:	0.7
Collision Rate (Per Million Vehicle Miles):	0.7
Statewide Collision Rate:	1.9

TRAFFIC FACTORS

Average Daily Traffic:	4,247
Width:	50'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	No
Adjacent Land Use:	Residential, Cemetary
Other:	

ROADWAY FACTORS

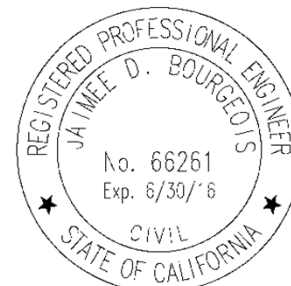
Length of Segment:	0.6 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	None
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/13/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/13/2015

Location: Alessandro Rd Bet Crescent Ave & Sunset Dr

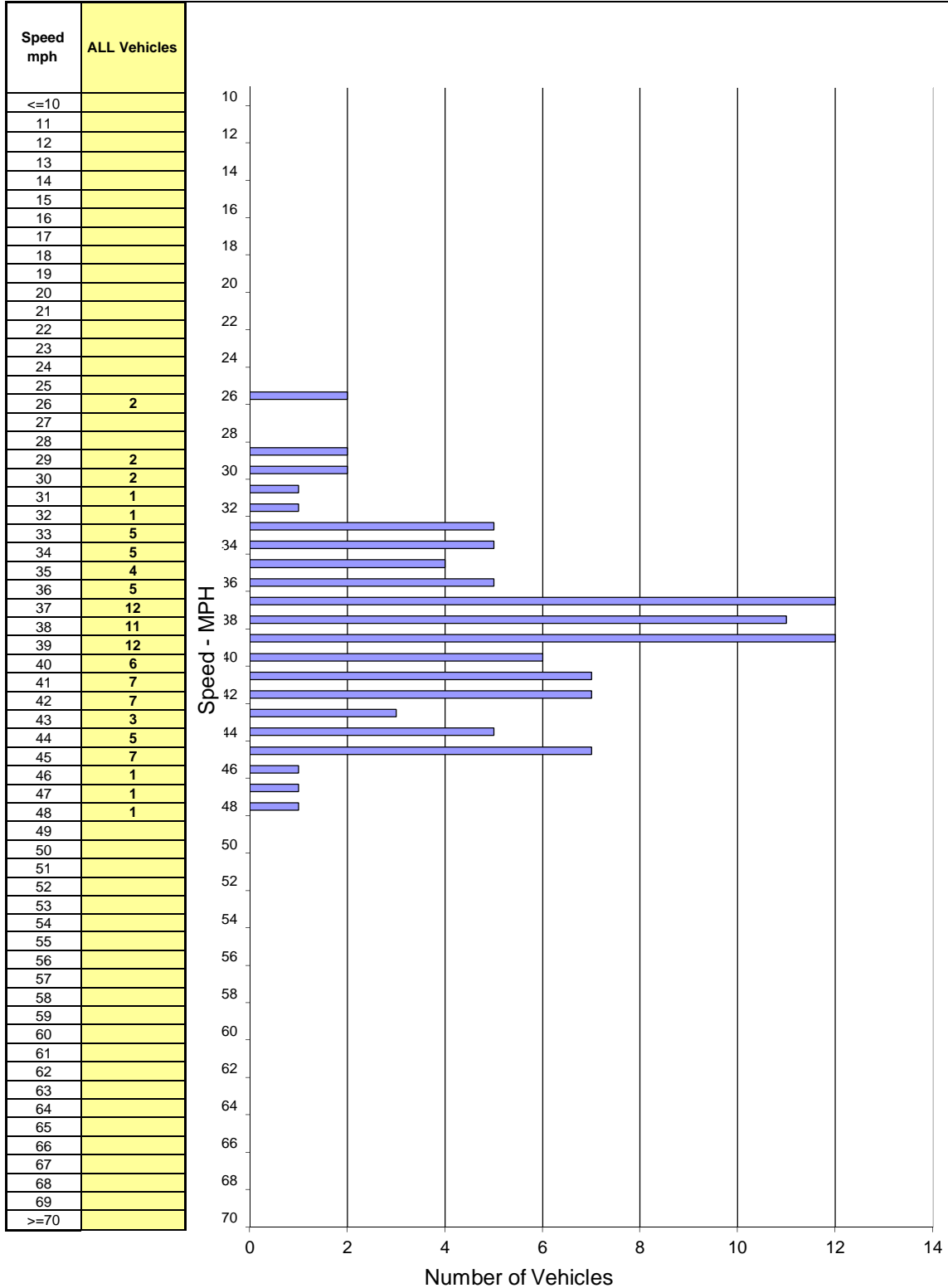
DAY: Friday

Posted Speed:

45 MPH

Project#: 15-6046-2.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	26 - 48	38 mph	43 mph	36 - 45	75	75%	22% / 22	3% / 3

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Alessandro Road from Sunset Drive to Creekside Drive

Date: 4/9/2015 Time: 2:30 PM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	47
10 mph Pace:	38 - 47
Percent in Pace:	72%
Posted Speed Limit:	Not Posted

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

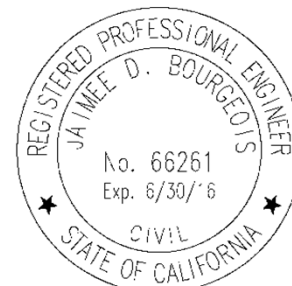
Average Daily Traffic:	4,779
Width:	26'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	0
On-Street Parking:	No
Adjacent Land Use:	Residential, Agricultural
Other:	

ROADWAY FACTORS

Length of Segment:	0.8 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Limited
Sidewalks:	None
Driveways:	Yes
Street Lighting:	Limited
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	YES
Justification for 5 mph down:	Limited lateral visibility due to narrow, curvy roadway and vegetation in area with residential driveways and bicyclists
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	4/9/2022



Spot Speed Study

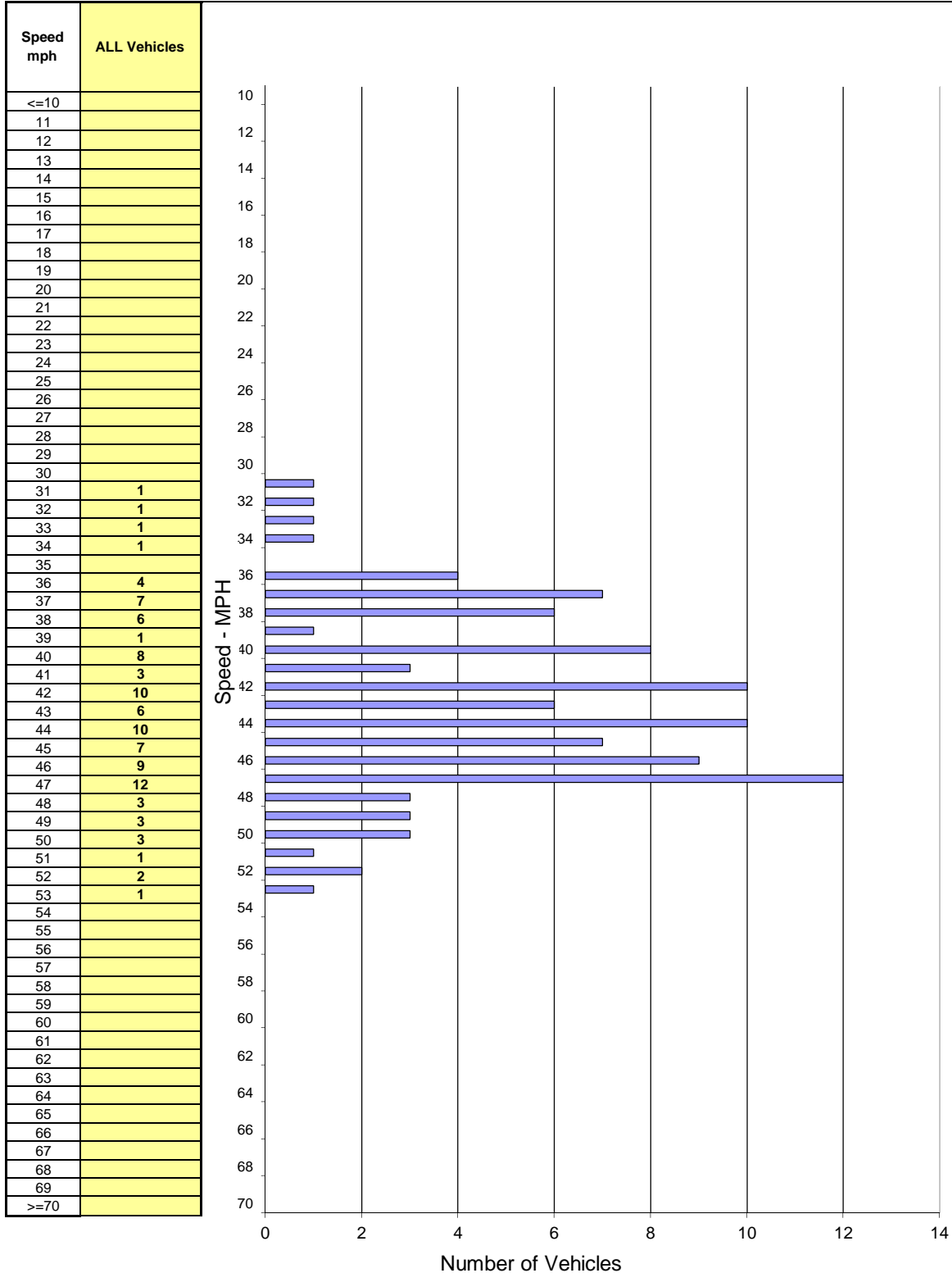
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/9/2015
DAY: Thursday

Location: Alessandro Rd Bet. Sunset Dr & Creekside Dr
Posted Speed: 45 MPH Project#: 15-6046-2.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	31 - 53	44 mph	47 mph	38 - 47	72	72%	15% / 15	13% / 13

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Alessandro Road from Creekside Drive to San Timoteo Canyon Road

Date: 4/9/2015 Time: 1:51 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	35
10 mph Pace:	27 - 36
Percent in Pace:	52%
Posted Speed Limit:	Not Posted

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	4,334
Width:	26'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	0
On-Street Parking:	No
Adjacent Land Use:	Agricultural
Other:	

ROADWAY FACTORS

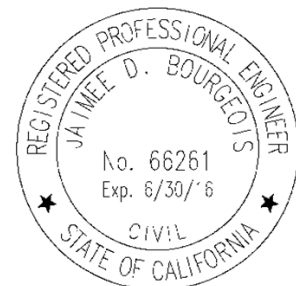
Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	None
Driveways:	no
Street Lighting:	no
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/9/2022



Spot Speed Study

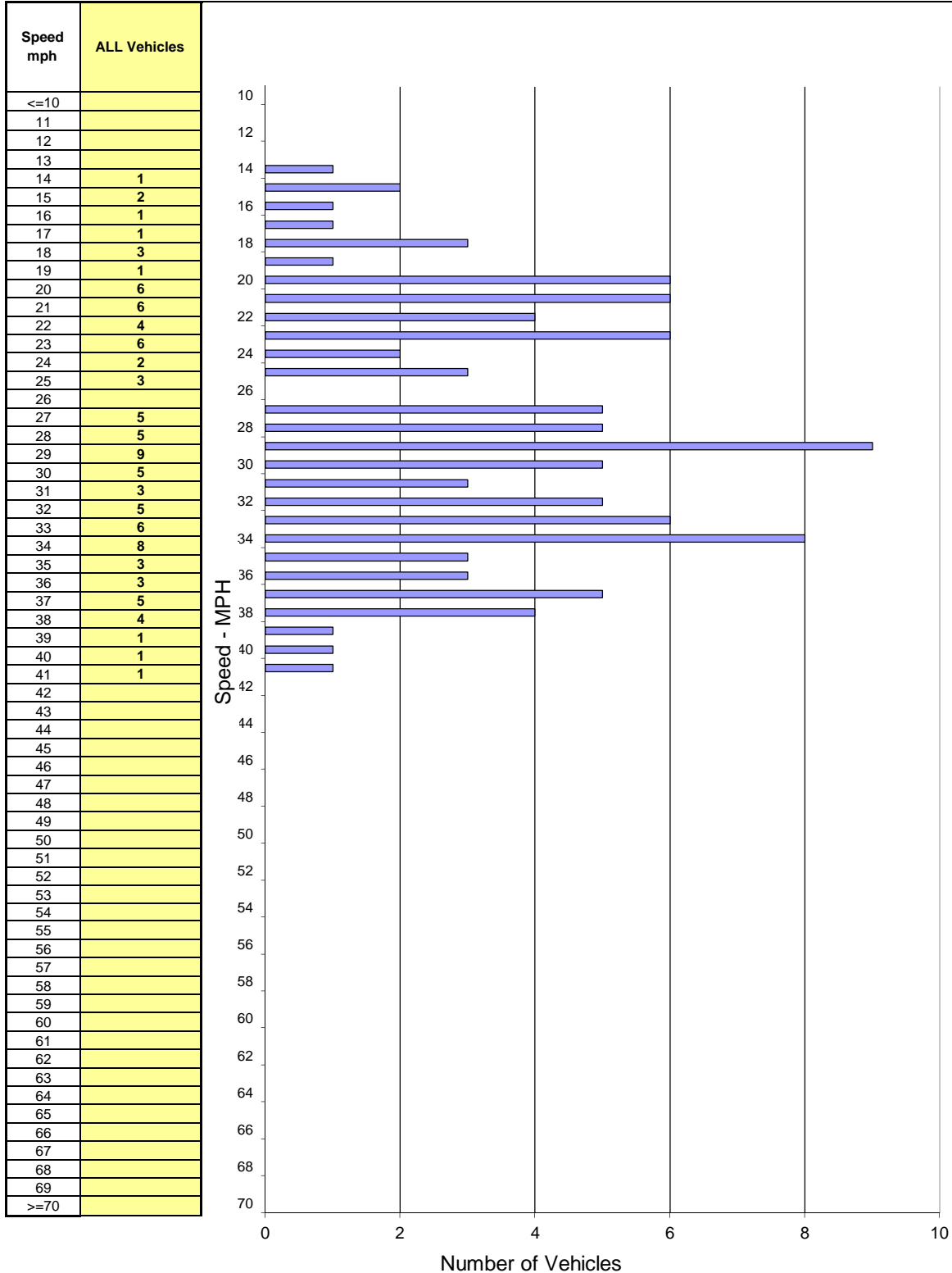
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/9/2015
DAY: Thursday

Location: Alessandro Rd Bet. Creekside Dr & San Timoteo Canyon Rd
Posted Speed: None Posted Project#: 15-6046-2.3

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	14 - 41	29 mph	35 mph	27 - 36	52	52%	36% / 36	12% / 12

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Alta Vista Drive from Florida Street to Sunset Drive

Date: 3/13/2015 Time: 12:15 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	42
10 mph Pace:	33 - 42
Percent in Pace:	64%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	0.5
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

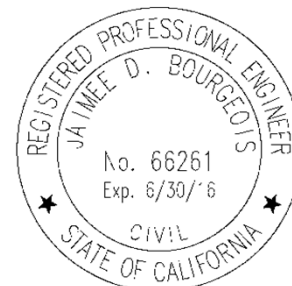
Average Daily Traffic:	2,556
Width:	41'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

Length of Segment:	0.7 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	None
Driveways:	Yes
Street Lighting:	No
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	Residential area with driveways but no sidewalks, equestrian activity
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/13/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/13/2015

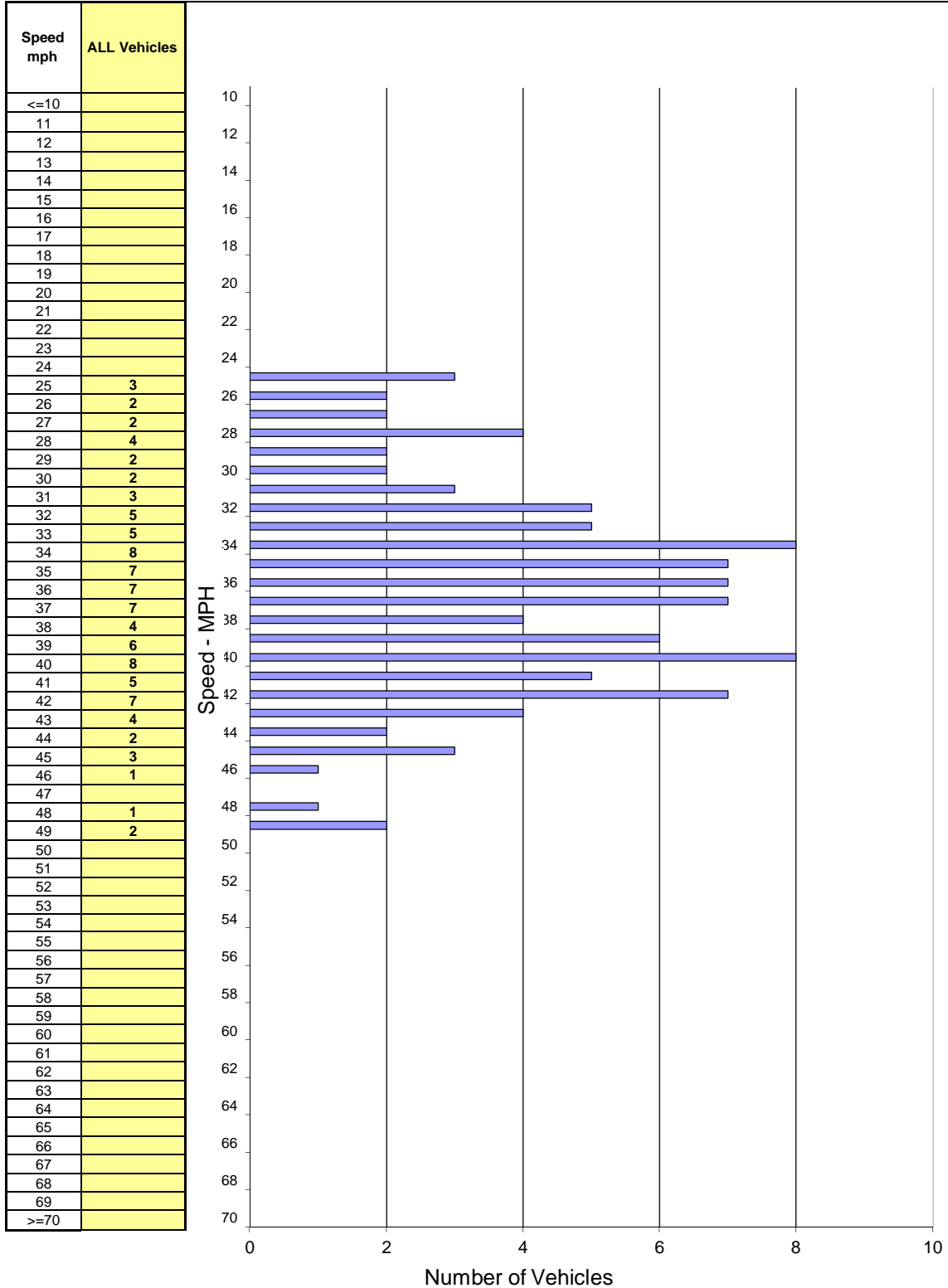
Location: Alta Vista Dr Bet Florida St & Sunset Dr

DAY: Friday

Posted Speed: 35 MPH

Project#: 15-6046-3.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	25 - 49	36 mph	42 mph	33 - 42	64	64%	23% / 23	13% / 13

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Barton Road from West City Limit to Terracina Boulevard

Date: 3/12/2015 Time: 10:35 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	47
10 mph Pace:	39 - 48
Percent in Pace:	72%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	9
Annual Collision Rate:	3.0
Collision Rate (Per Million Vehicle Miles):	2.5
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	16,226
Width:	86'
Lane Configuration:	4 Lanes, TWLTL
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	Yes
On-Street Parking:	No
Adjacent Land Use:	Medical, Commercial
Other:	

ROADWAY FACTORS

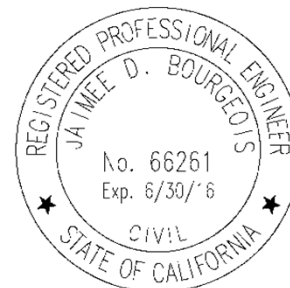
Length of Segment:	0.2 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	45
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/12/2022



Spot Speed Study

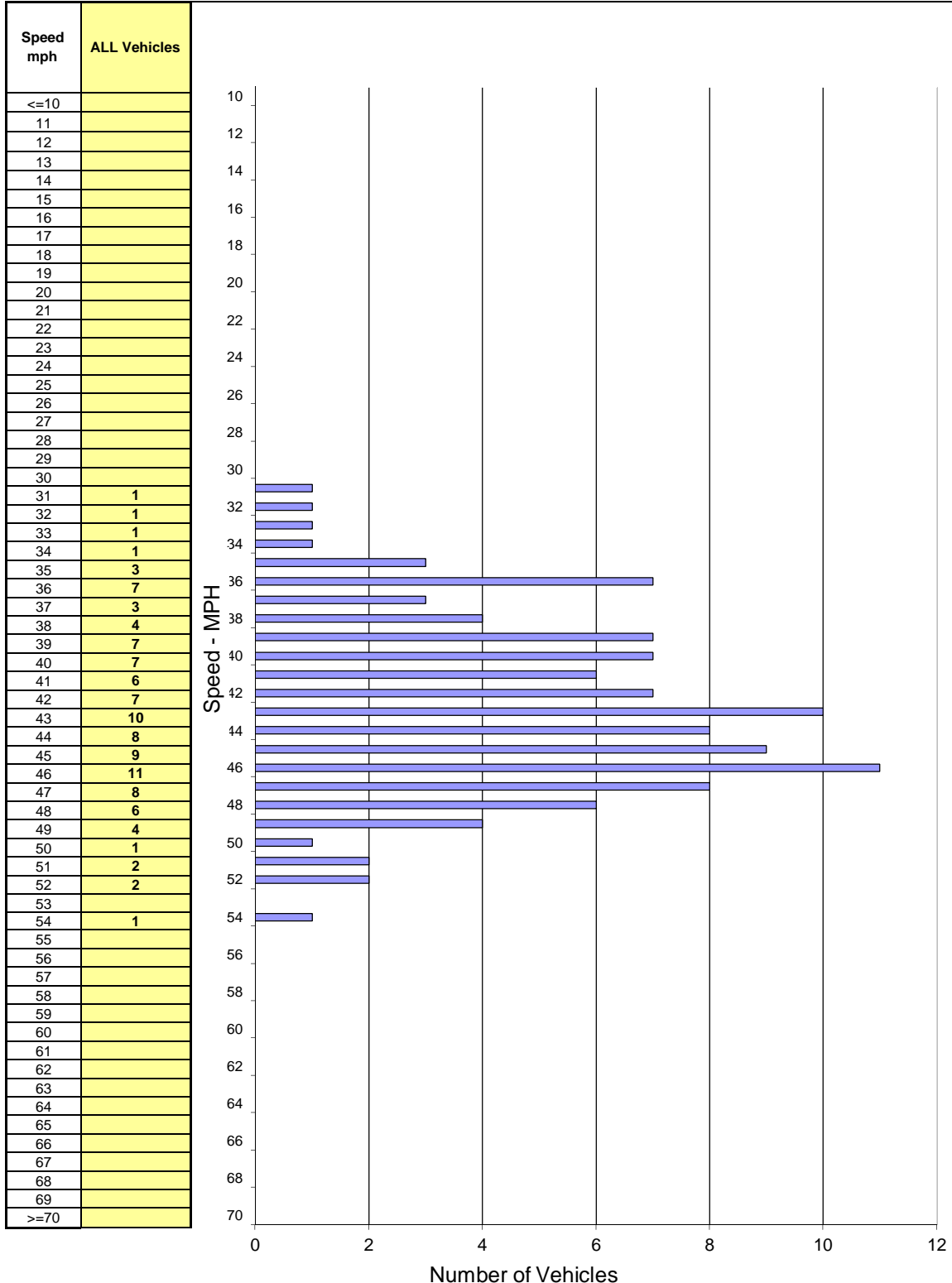
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/12/2015
DAY: Thursday

Location: Barton Rd Bet West City Limit & Terracina Blvd
Posted Speed: 45 MPH Project#: 15-6046-4.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	31 - 54	43 mph	47 mph	39 - 48	79	72%	19% / 21	10% / 10

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Barton Road from Terracina Boulevard to Alabama Street

Date: 3/12/2015 Time: 11:40 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	47
10 mph Pace:	38 - 47
Percent in Pace:	75%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	3
Annual Collision Rate:	1.0
Collision Rate (Per Million Vehicle Miles):	0.6
Statewide Collision Rate:	1.85

TRAFFIC FACTORS

Average Daily Traffic:	15,862
Width:	86'
Lane Configuration:	4 Lanes, median
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	Yes
On-Street Parking:	No
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

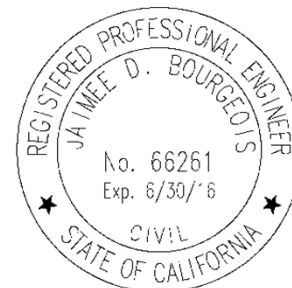
Length of Segment:	0.3 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	45
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/12/2022



Spot Speed Study

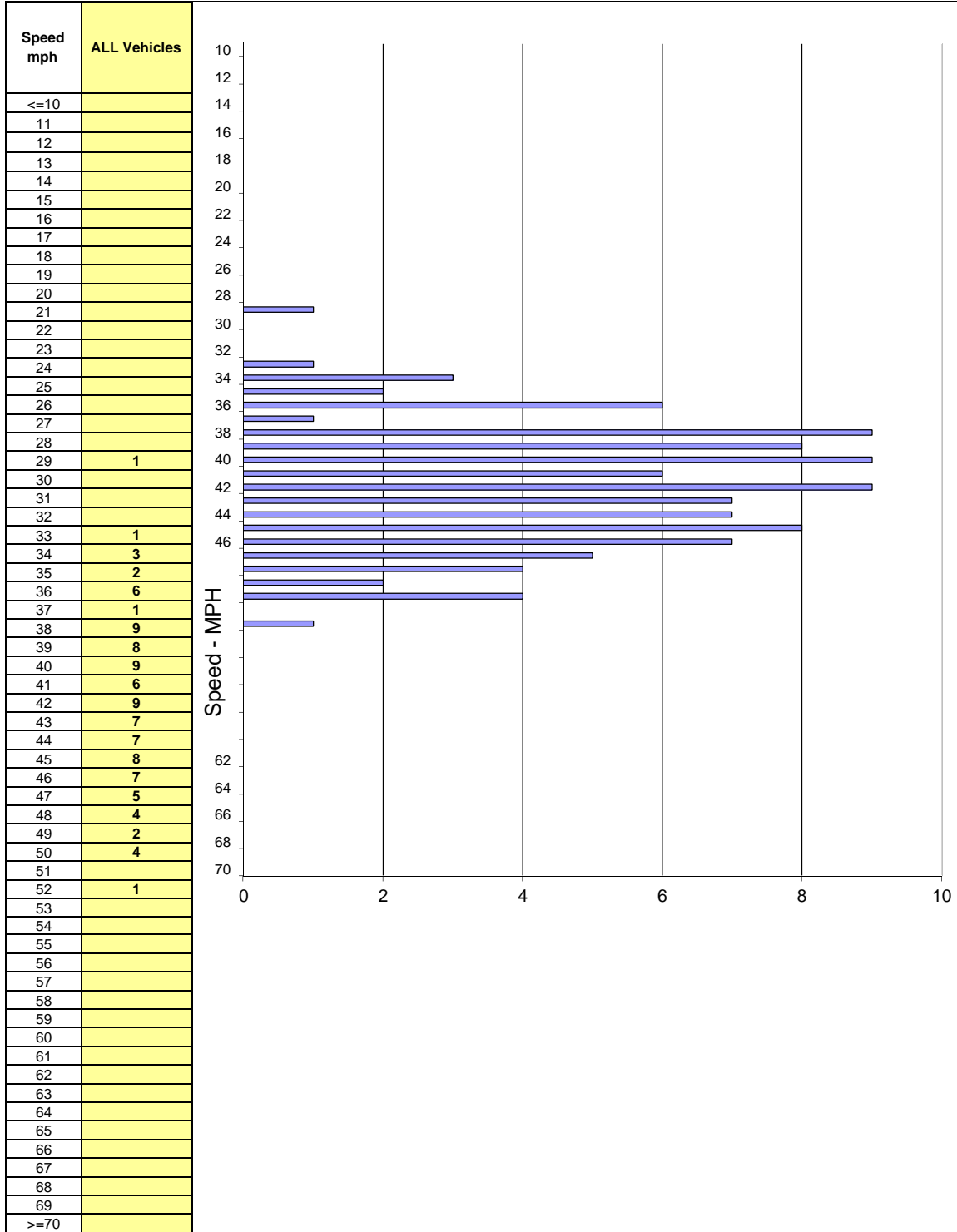
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/12/2015
DAY: Thursday

Location: Barton Rd Bet Terracina Blvd & Alabama St
Posted Speed: 45 MPH Project#: 15-6046-4.2

Eastbound & Westbound Spot Speeds



Number of Vehicles

SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	29 - 52	42 mph	47 mph	38 - 47	75	75%	14% / 14	11% / 11

ENGINEERING AND TRAFFIC SURVEY

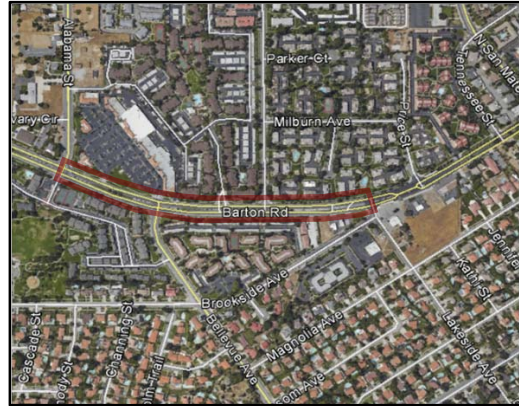
City of Redlands



Barton Road from Alabama Street to Lakeside Avenue

Date: 3/12/2015 Time: 12:30 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	45
10 mph Pace:	35 - 44
Percent in Pace:	78%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	2
Total Collisions:	10
Annual Collision Rate:	3.3
Collision Rate (Per Million Vehicle Miles):	1.6
Statewide Collision Rate:	1.85

TRAFFIC FACTORS

Average Daily Traffic:	14,593
Width:	88'
Lane Configuration:	4 Lanes, median
Traffic Control:	1 signal
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	No
On-Street Parking:	No
Adjacent Land Use:	Residential, Commercial
Other:	

ROADWAY FACTORS

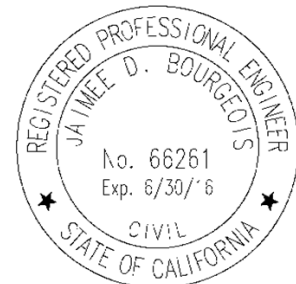
Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	NO
Justification for 5 mph down:	Frequency of bicyclist activity

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/12/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/12/2015

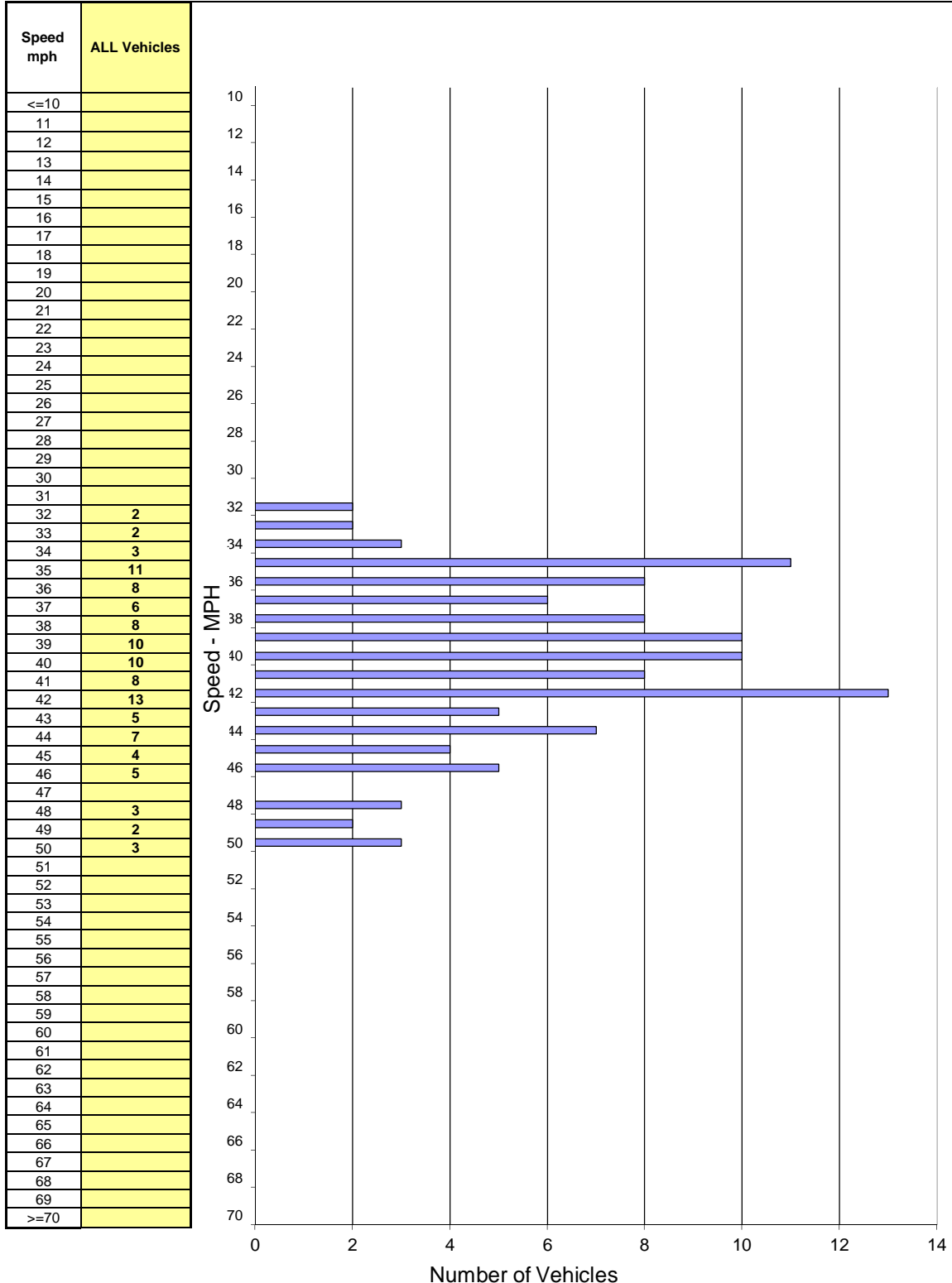
Location: Barton Ave Bet Alabama St & Lakeside Ave

DAY: Thursday

Posted Speed: 40 MPH

Project#: 15-6046-4.3

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	32 - 50	40 mph	45 mph	35 - 44	86	78%	6% / 7	16% / 17

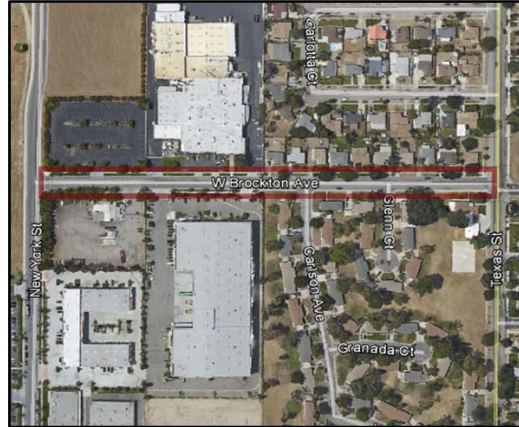
ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Brockton Avenue from New York Street to Texas Street

Date: 3/13/2015 Time: 2:45 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	37
10 mph Pace:	28 - 37
Percent in Pace:	70%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	3.3
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	924
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Industrial
Other:	Lane lines unmarked

ROADWAY FACTORS

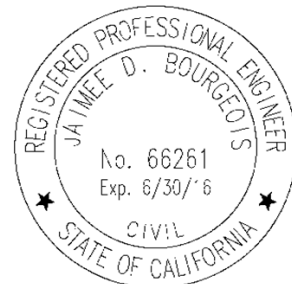
Length of Segment:	0.3 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor-Fair

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/13/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/13/2015

Location: Brockton Ave Bet New York St & Texas St

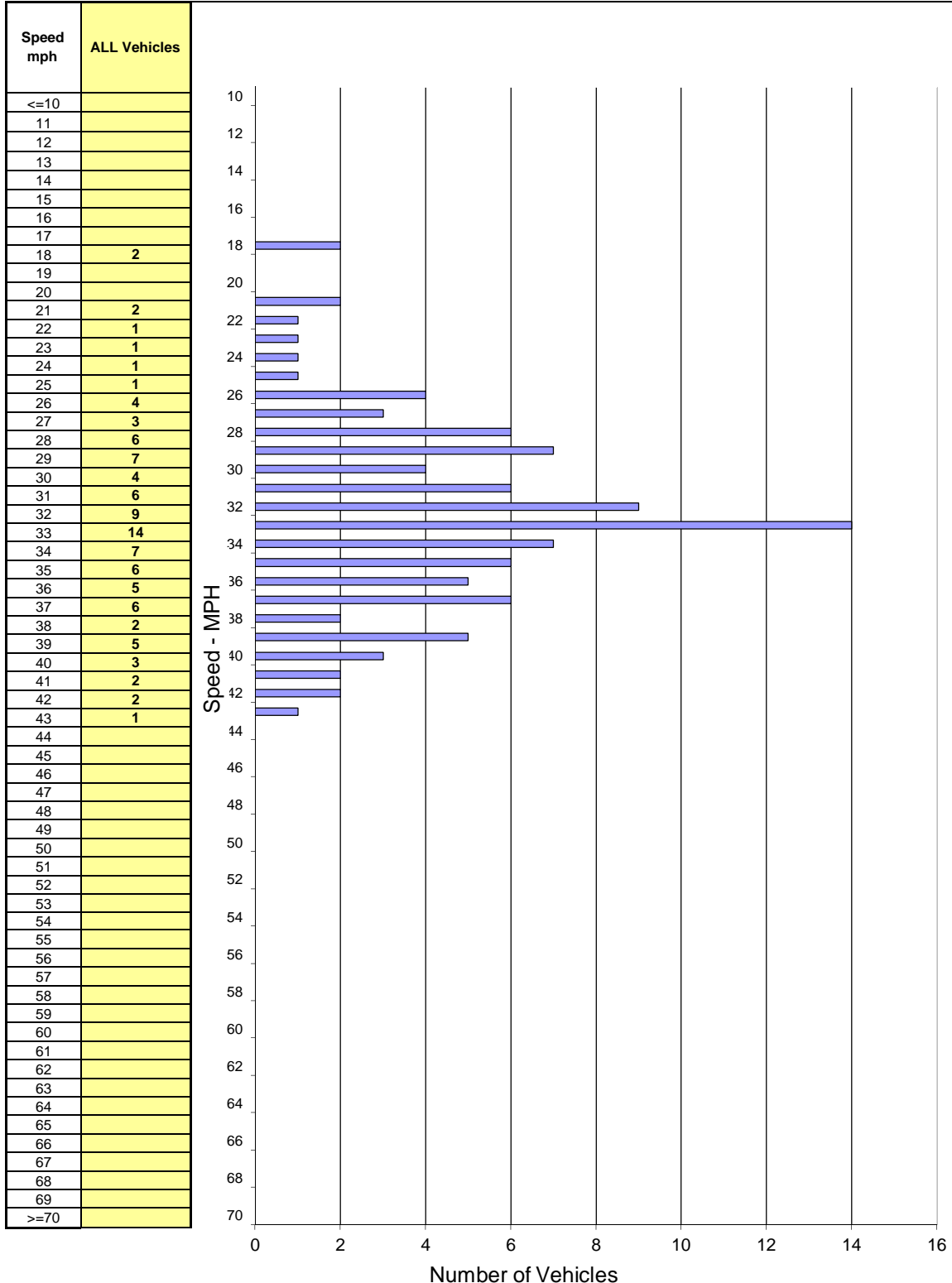
DAY: Friday

Posted Speed:

30 MPH

Project#: 15-6046-5.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	18 - 43	33 mph	37 mph	28 - 37	70	70%	15% / 15	15% / 15

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Brockton Avenue from Texas Street to Church Street

Date: 3/13/2015 Time: 12:10 PM
 Recorded By: NDS Weather: Clear



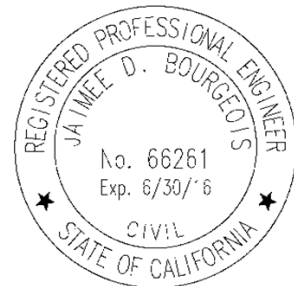
PREVAILING SPEED DATA	
No. of Vehicles Surveyed:	100
85th Percentile:	35
10 mph Pace:	27 - 36
Percent in Pace:	80%
Posted Speed Limit:	35 mph

COLLISION HISTORY	
Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	11
Annual Collision Rate:	3.7
Collision Rate (Per Million Vehicle Miles):	4.1
Statewide Collision Rate:	2.95

TRAFFIC FACTORS	
Average Daily Traffic:	2,707
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	1 signal
Mid-block Crosswalks:	No
Bike Facilities:	Class 3 Partial
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	Striped parking lane on both sides From Orange St to Church St

ROADWAY FACTORS	
Length of Segment:	0.9 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent

CONCLUSIONS	
Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	N/A
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/13/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/13/2015

Location: Brockton Ave Bet Texas St & Church St

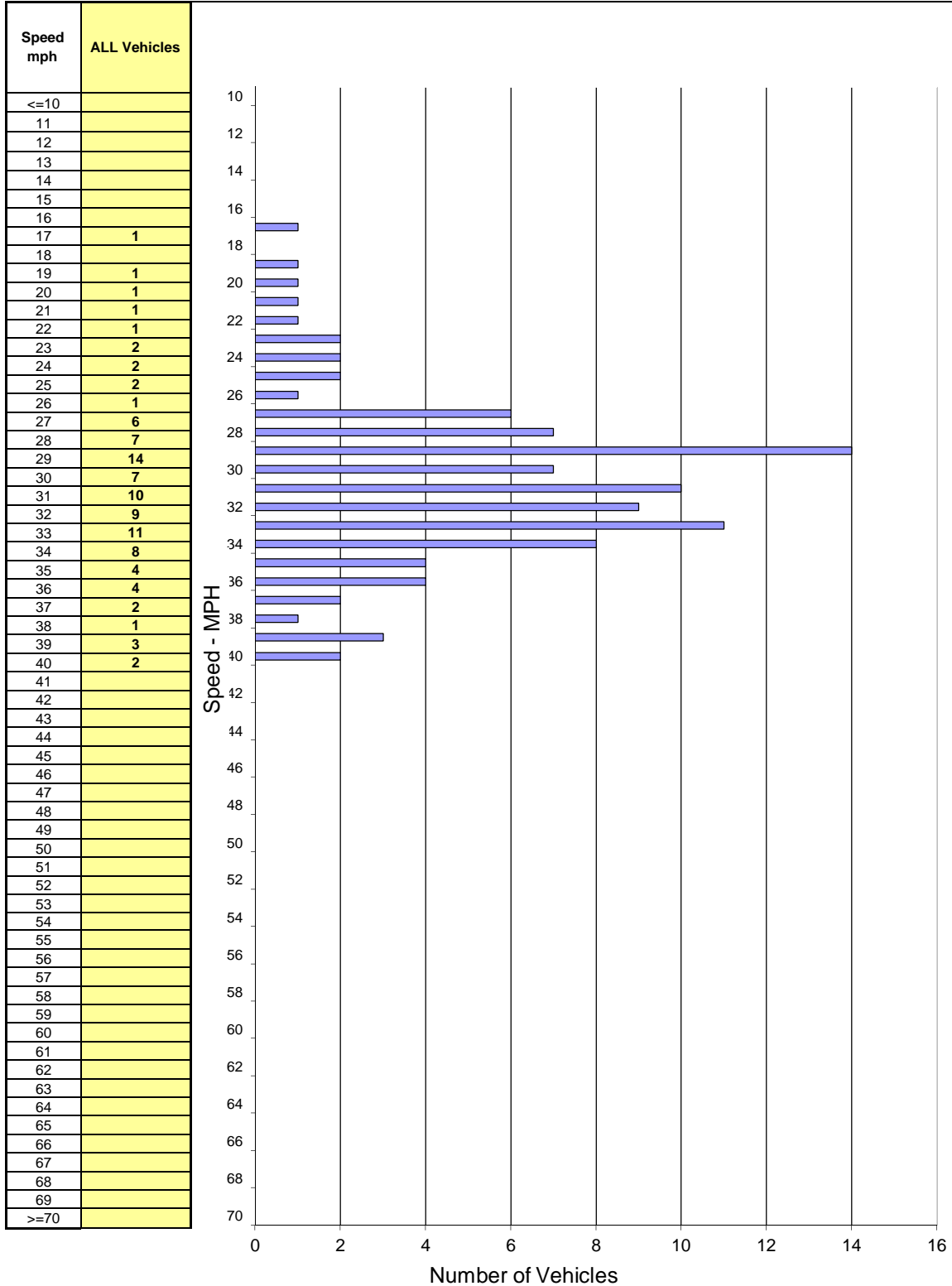
DAY: Friday

Posted Speed:

35 MPH

Project#: 15-6046-5.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	17 - 40	31 mph	35 mph	27 - 36	80	80%	12% / 12	8% / 8

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Brockton Avenue from Church Street to Judson Street

Date: 3/13/2015 Time: 10:00 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	34
10 mph Pace:	25 - 34
Percent in Pace:	78%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	2
Total Collisions:	4
Annual Collision Rate:	1.3
Collision Rate (Per Million Vehicle Miles):	0.8
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	5,023
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	2 stops
Mid-block Crosswalks:	Yes, 2
Bike Facilities:	Class 3
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	Striped parking lane on both sides

ROADWAY FACTORS

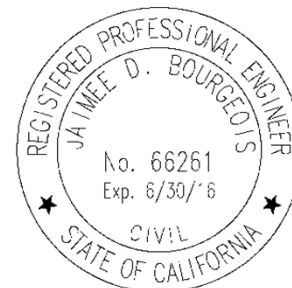
Length of Segment:	0.9 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/13/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/13/2015

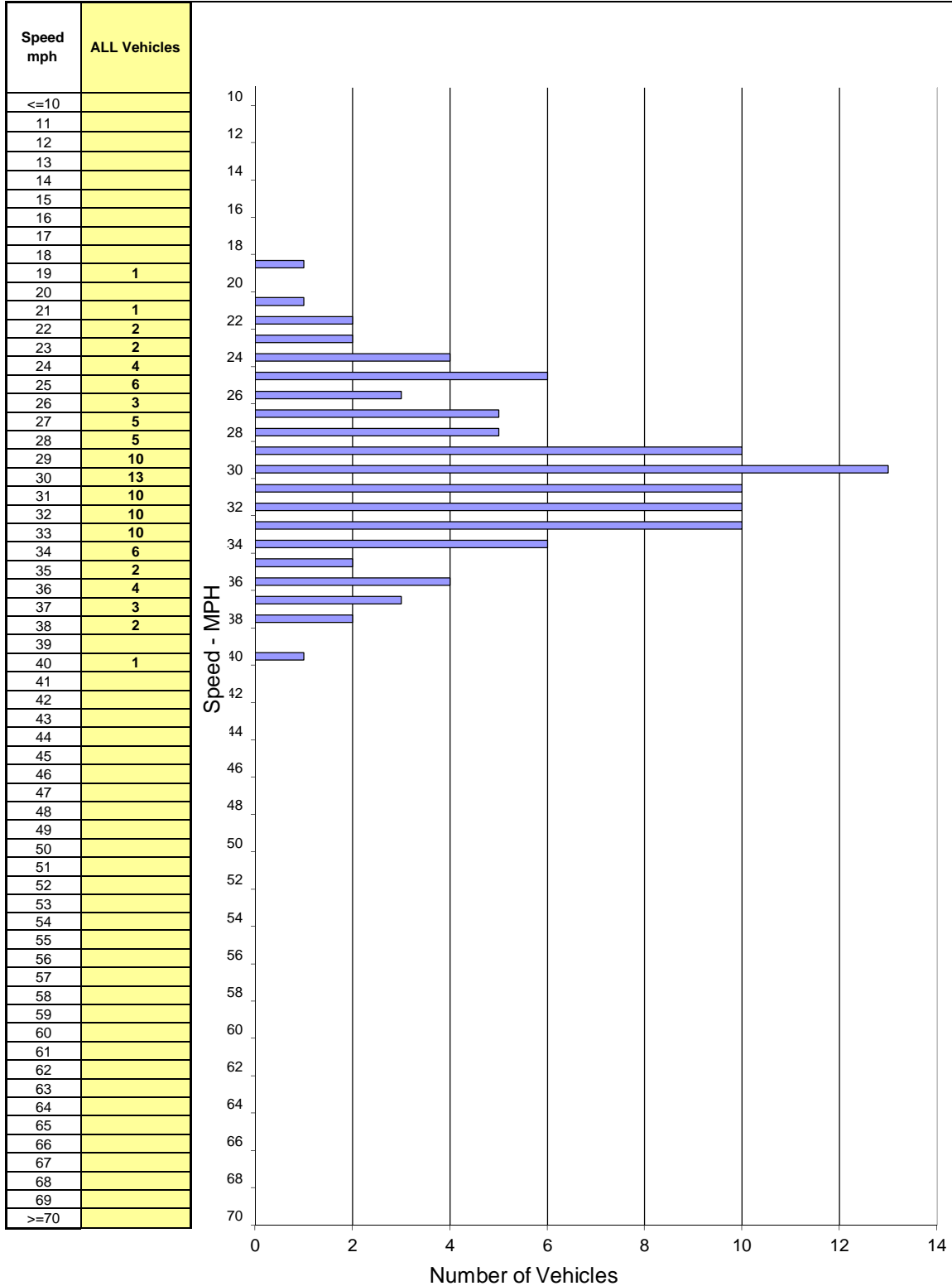
Location: Brockton Ave Bet Church St & Judson St

DAY: Friday

Posted Speed: 35 MPH

Project#: 15-6046-5.3

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	19 - 40	30 mph	34 mph	25 - 34	78	78%	10% / 10	12% / 12

ENGINEERING AND TRAFFIC SURVEY

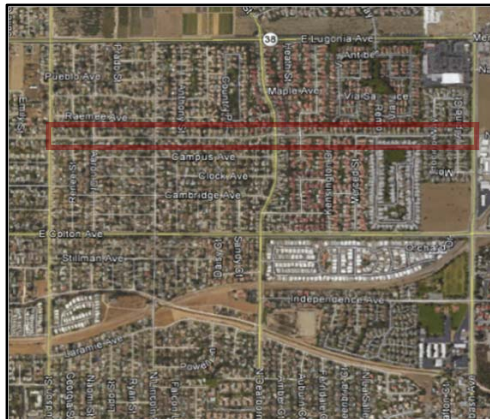
City of Redlands



Brockton Avenue from Judson Street to Wabash Avenue

Date: 3/13/2015 Time: 10:50 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	40
10 mph Pace:	28 - 37
Percent in Pace:	64%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	4
Annual Collision Rate:	1.3
Collision Rate (Per Million Vehicle Miles):	1.8
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

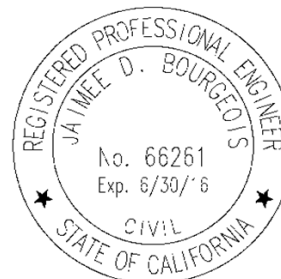
Average Daily Traffic:	2,198
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	2 stops
Mid-block Crosswalks:	No
Bike Facilities:	Class 3 Partial
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	Between Dearborn and Judson, Class 3 bike facilities with striped parking lane on both sides

ROADWAY FACTORS

Length of Segment:	0.9 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair- Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	High density residential driveways
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/13/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/13/2015

Location: Brockton Ave Bet Judson St & Wabash Ave

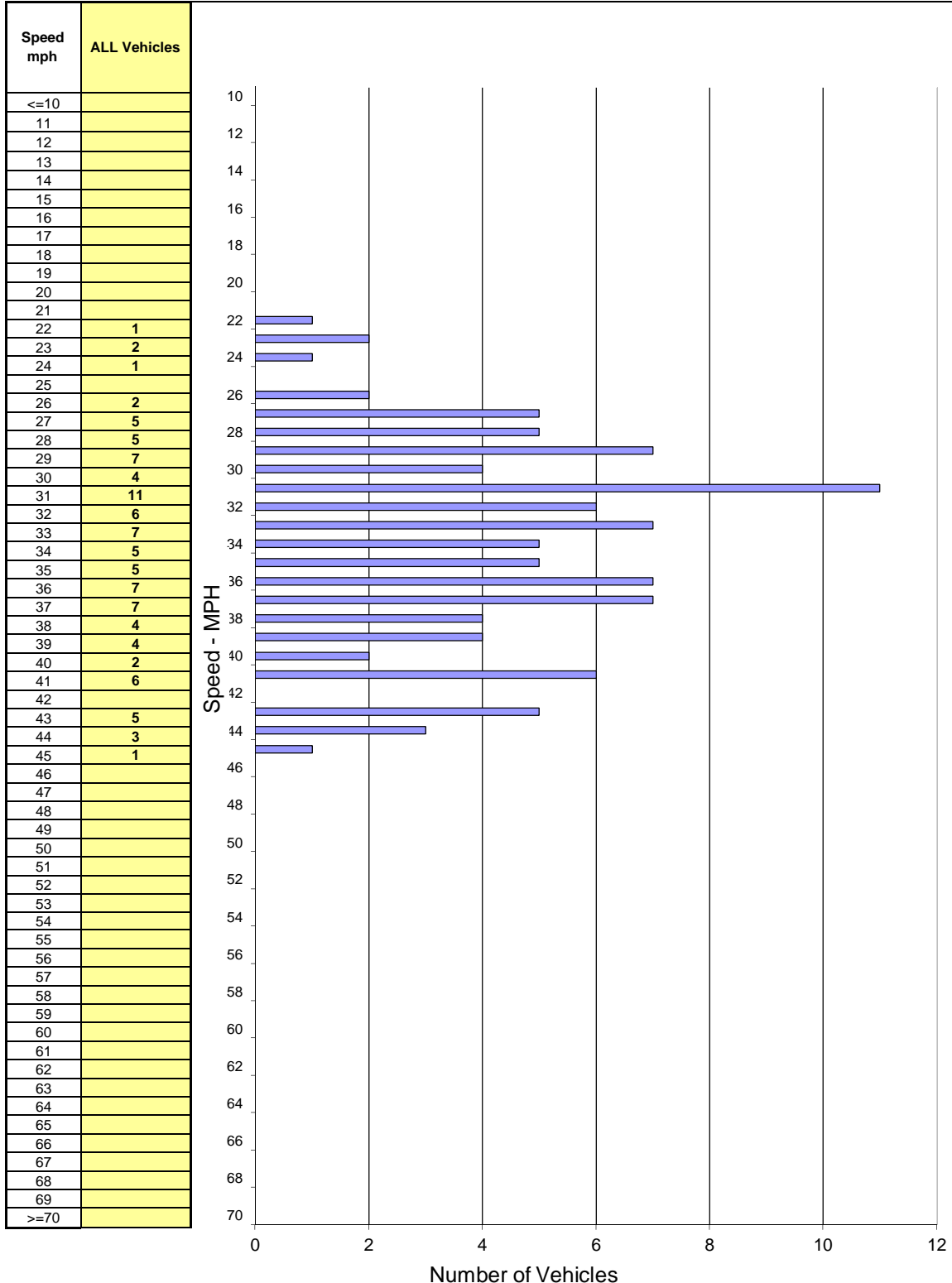
DAY: Friday

Posted Speed:

35 MPH

Project#: 15-6046-5.4

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	22 - 45	33 mph	40 mph	28 - 37	64	64%	11% / 11	25% / 25

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Brookside Avenue from Lakeside Avenue to Center Street

Date: 3/12/2015 Time: 1:16 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	41
10 mph Pace:	31 - 40
Percent in Pace:	78%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	17
Annual Collision Rate:	5.7
Collision Rate (Per Million Vehicle Miles):	2.1
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	12,232
Width:	66'
Lane Configuration:	2 Lanes, median
Traffic Control:	1 signal
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Commercial
Other:	Striped parking lane on both sides

ROADWAY FACTORS

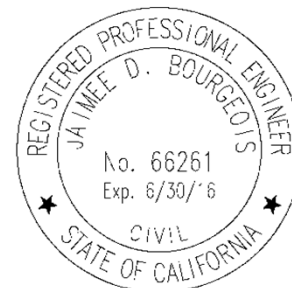
Length of Segment:	0.6 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	Frequency of bicyclist activity

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/12/2022



Spot Speed Study

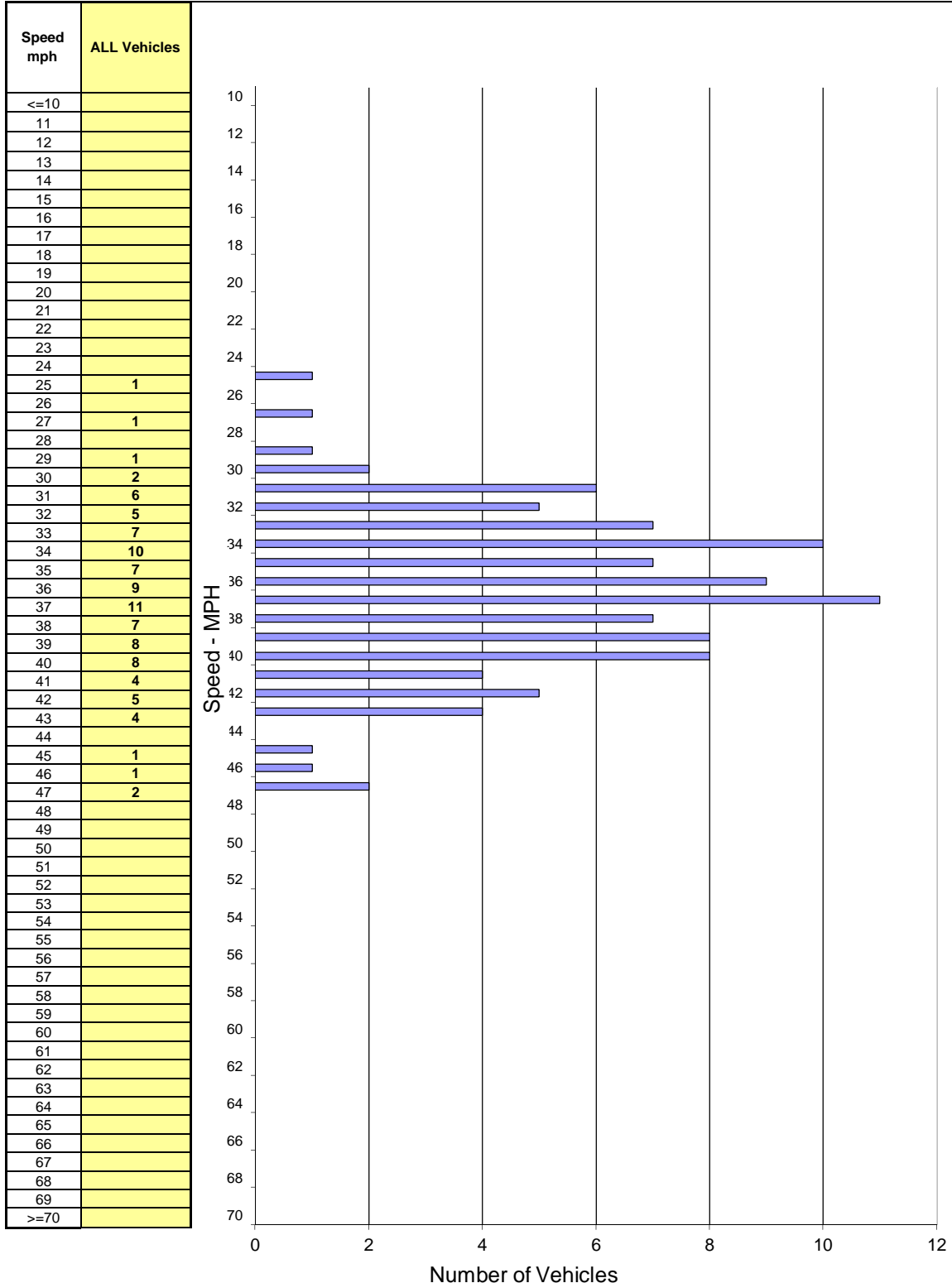
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/12/2015
DAY: Thursday

Location: Brookside Ave Bet. Lakeside Ave & Center St
Posted Speed: 35 MPH Project#: 15-6046-6.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	25 - 47	37 mph	41 mph	31 - 40	78	78%	5% / 5	17% / 17

ENGINEERING AND TRAFFIC SURVEY

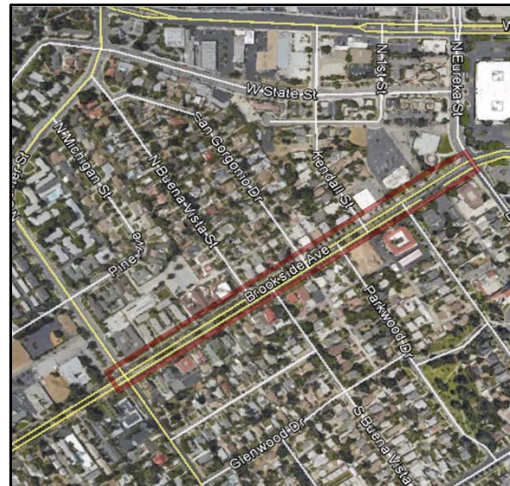
City of Redlands



Brookside Avenue from Center Street to Eureka Street

Date: 3/12/2015 Time: 2:20 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	120
85th Percentile:	39
10 mph Pace:	30 - 39
Percent in Pace:	78%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	9
Annual Collision Rate:	3.0
Collision Rate (Per Million Vehicle Miles):	2.5
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	10,907
Width:	86'
Lane Configuration:	2 Lanes, median
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Offices, Residential
Other:	Striped parking lane on both sides

ROADWAY FACTORS

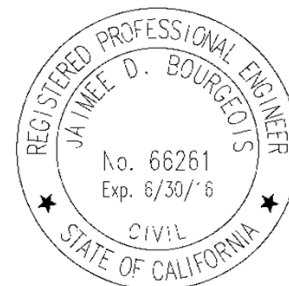
Length of Segment:	0.3 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/12/2022



Spot Speed Study

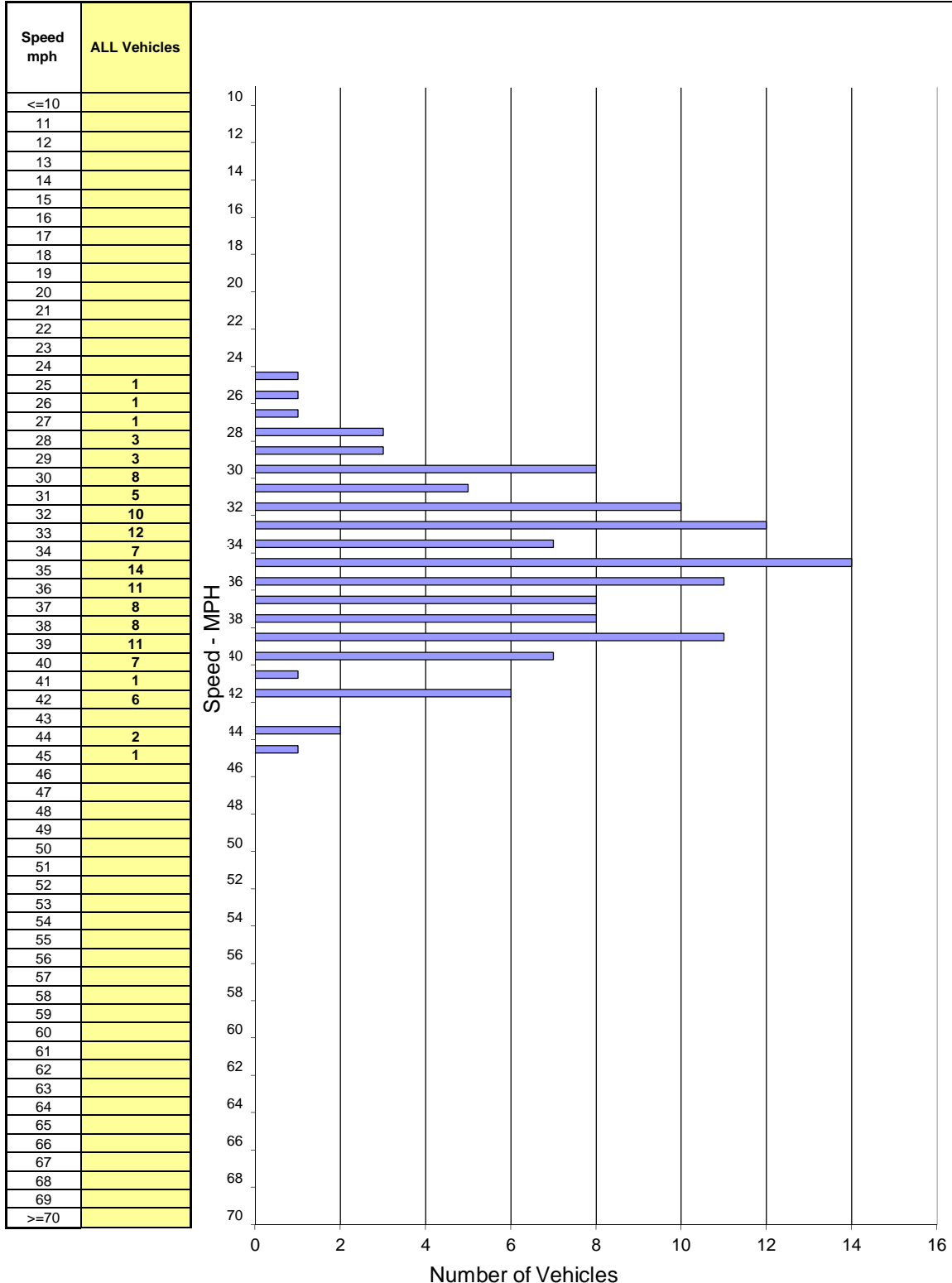
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/12/2015
DAY: Thursday

Location: Brookside Ave Bet. Center St & Eureka St
Posted Speed: 35 MPH Project#: 15-6046-6.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	120	25 - 45	35 mph	39 mph	30 - 39	94	78%	7% / 9	15% / 17

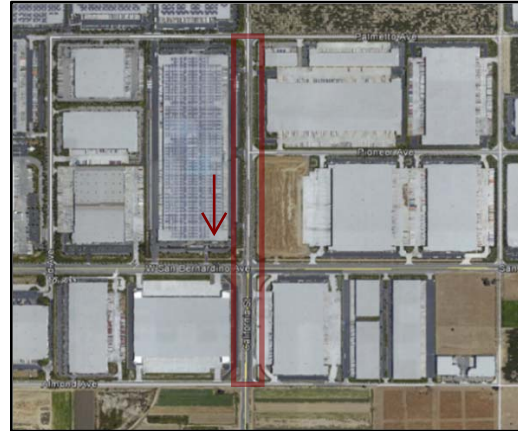
ENGINEERING AND TRAFFIC SURVEY

City of Redlands

California Street from Palmetto Avenue to Almond Avenue (Southbound)

Date: 3/13/2015 Time: 10:40 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	55
85th Percentile:	40
10 mph Pace:	31 - 40
Percent in Pace:	82%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	2
Annual Collision Rate:	0.7
Collision Rate (Per Million Vehicle Miles):	0.7
Statewide Collision Rate:	1.85

TRAFFIC FACTORS

Average Daily Traffic:	3,810
Width:	78'
Lane Configuration:	4 Lanes, median
Traffic Control:	1 signal
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Industrial
Other:	

ROADWAY FACTORS

Length of Segment:	0.7 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	No
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/13/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/13/2015

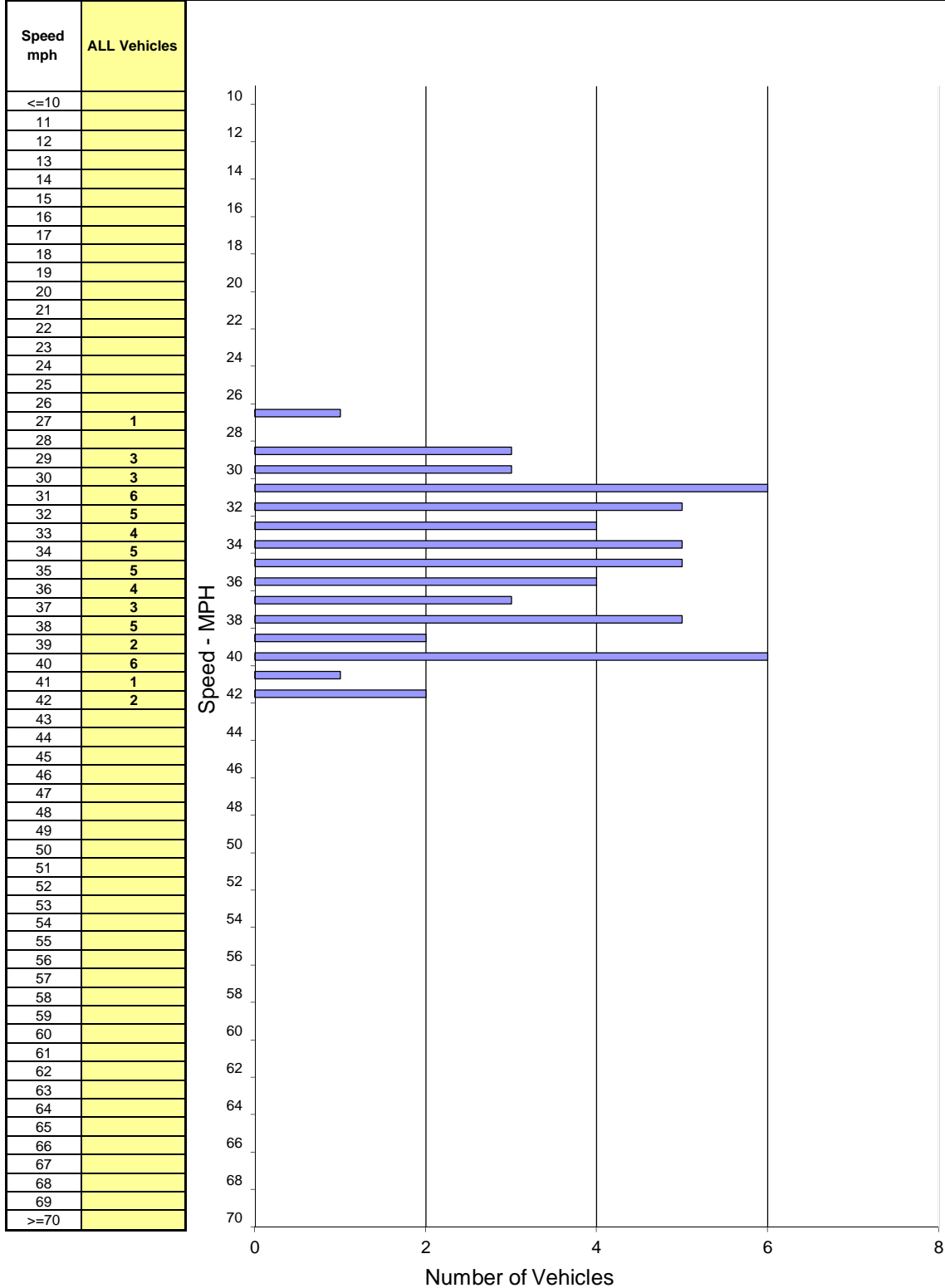
Location: California St SB Bet. Palmetto Ave & Almond Ave

DAY: Friday

Posted Speed: 40 MPH

Project#: 15-6046-7.1

Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	55	27 - 42	35 mph	40 mph	31 - 40	45	82%	12% / 7	6% / 3

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



California Street from Almond Avenue to Redlands Boulevard

Date: 3/13/2015 Time: 11:20 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed: 110
 85th Percentile: 41
 10 mph Pace: 33 - 42
 Percent in Pace: 81%
 Posted Speed Limit: 40 mph

COLLISION HISTORY

Dates Observed: 1/1/10-12/31/12
 Speed-Related Collisions: 4
 Total Collisions: 13
 Annual Collision Rate: 4.3
 Collision Rate (Per Million Vehicle Miles): 2.3
 Statewide Collision Rate: 1.85

TRAFFIC FACTORS

Average Daily Traffic: 10,136
 Width: 70'
 Lane Configuration: 4 Lanes, median
 Traffic Control: 3 signals
 Mid-block Crosswalks: No
 Bike Facilities: No
 Truck Route: Yes
 On-Street Parking: No
 Adjacent Land Use: Commerical, Amusement Park, Medical
 Other:

ROADWAY FACTORS

Length of Segment: 0.5 Miles
 Vertical Curve: No
 Horizontal Curve: No
 Lateral Visibility: Good
 Sidewalks: Partial
 Driveways: Yes
 Street Lighting: Yes
 Road Condition: Fair

CONCLUSIONS

Recommended Speed Limit: 40
 Speed Limit Change: NO
 Justification for 5 mph down: N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/13/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/13/2015

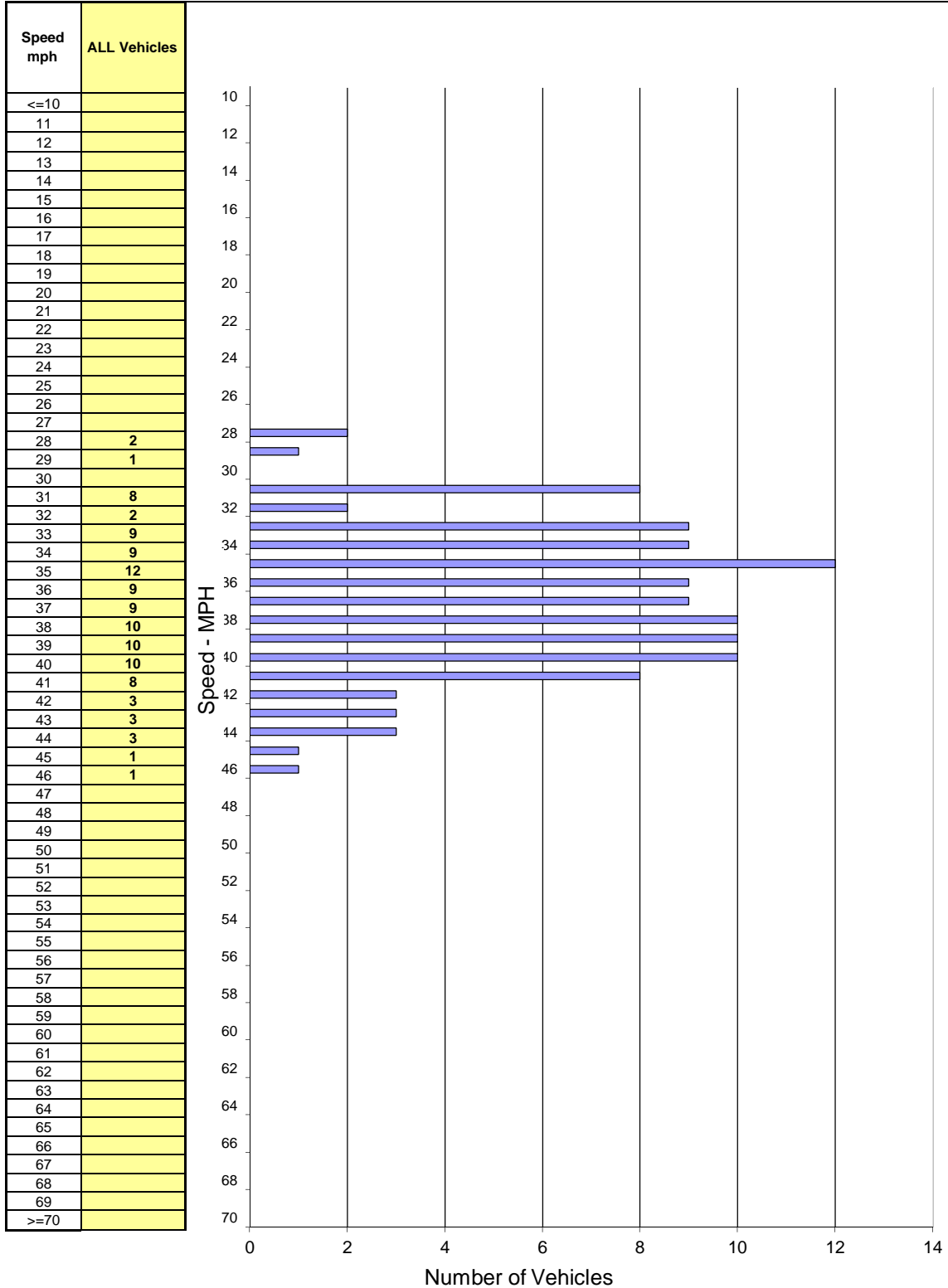
Location: California St Bet. Almond Ave & Redlands Blvd

DAY: Friday

Posted Speed: 40 MPH

Project#: 15-6046-7.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	28 - 46	37 mph	41 mph	33 - 42	89	81%	11% / 13	8% / 8

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Center Street from Brookside Ave to Cypress Ave

Date: 3/13/2015 Time: 9:41 AM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	37
10 mph Pace:	29 - 38
Percent in Pace:	80%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	3
Annual Collision Rate:	1.0
Collision Rate (Per Million Vehicle Miles):	0.5
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	5,482
Width:	45'
Lane Configuration:	2 Lanes
Traffic Control:	2 stops
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	

ROADWAY FACTORS

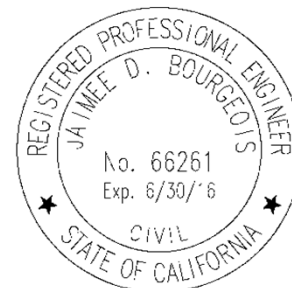
Length of Segment:	1.0 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/13/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/13/2015

Location: Center St bet. Brookside Ave & Cypress Ave

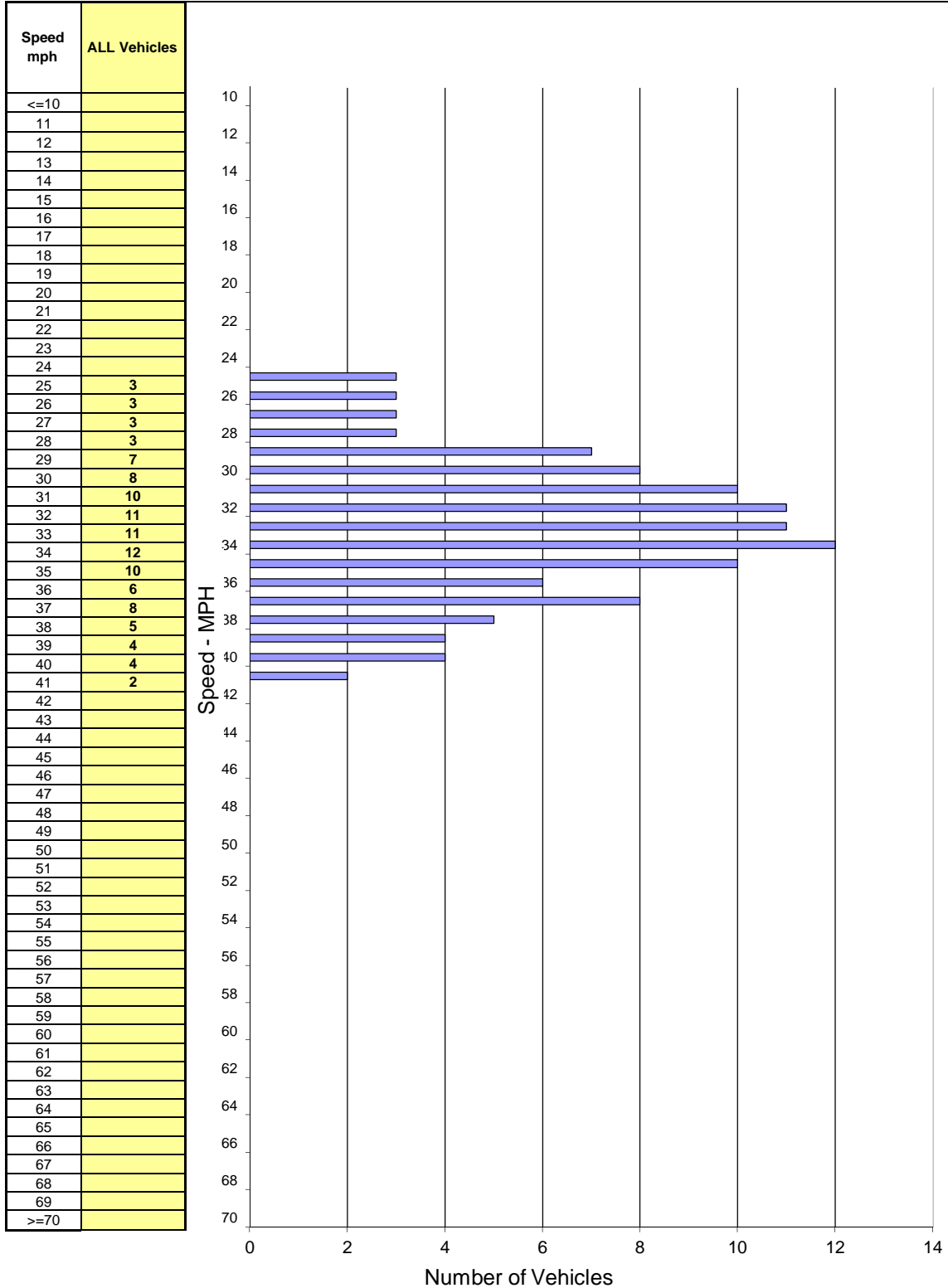
DAY: Friday

Posted Speed:

35 MPH

Project#: 15-6046-8.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	25 - 41	33 mph	37 mph	29 - 38	88	80%	10% / 12	10% / 10

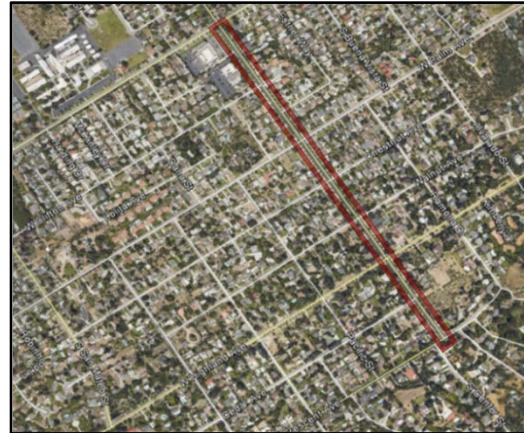
ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Center Street from Cypress Ave to Crescent Ave

Date: 3/13/2015 Time: 1:15 PM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	37
10 mph Pace:	29 - 38
Percent in Pace:	80%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	8
Annual Collision Rate:	2.7
Collision Rate (Per Million Vehicle Miles):	2.1
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	5,872
Width:	50'
Lane Configuration:	2 Lanes
Traffic Control:	2 stops
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Commercial
Other:	

ROADWAY FACTORS

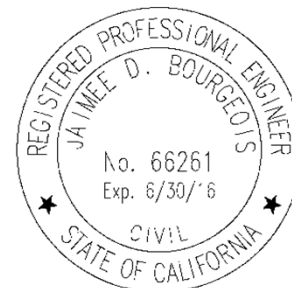
Length of Segment:	0.6 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/13/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/13/2015

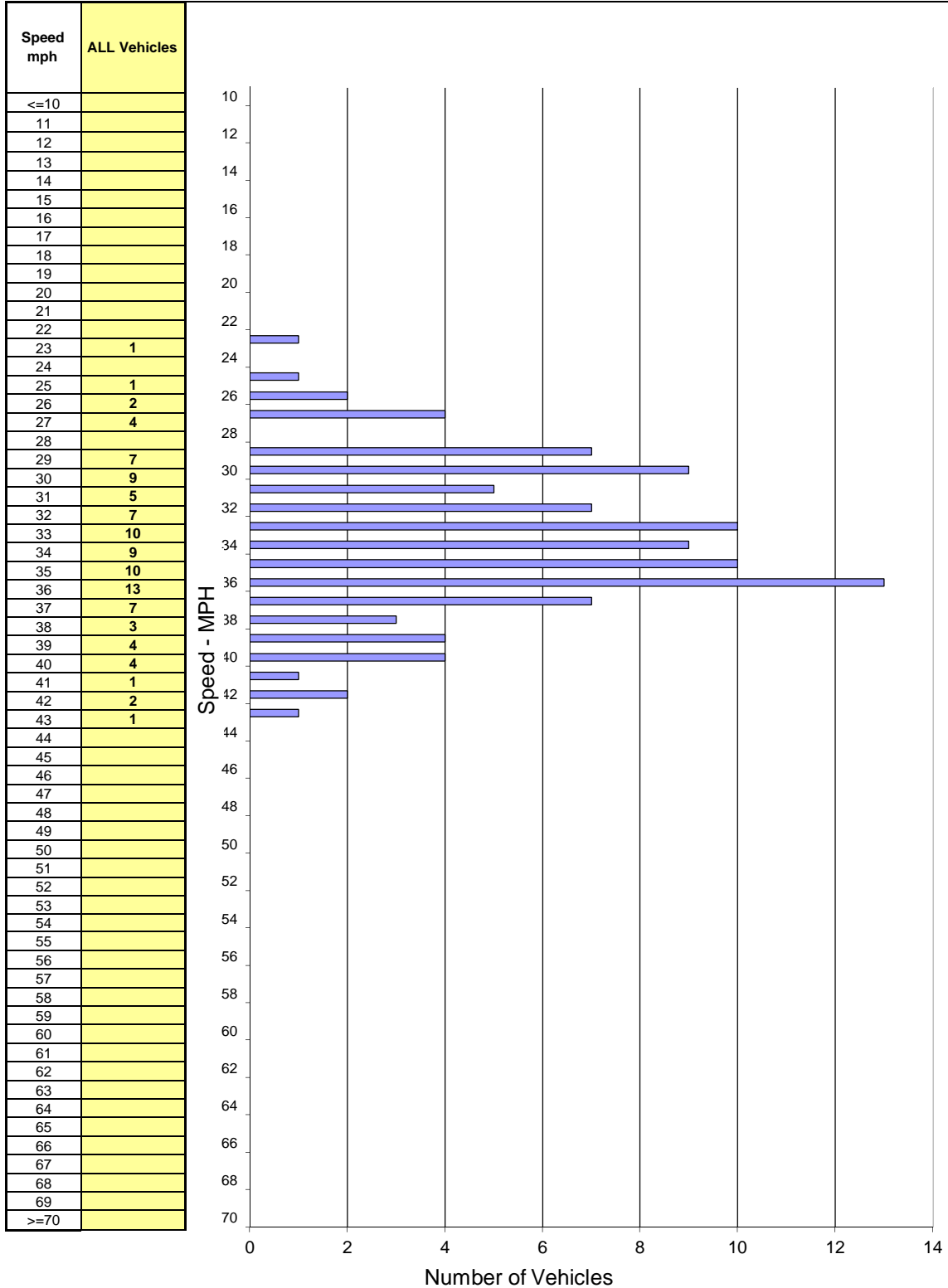
Location: Center St Bet. Cypress Ave & Crescent Ave

DAY: Friday

Posted Speed: 35 MPH

Project#: 15-6046-8.3

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	23 - 43	34 mph	37 mph	29 - 38	80	80%	8% / 8	12% / 12

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Center Street from Crescent Ave to Ridge St

Date: 3/13/2015 Time: 1:15 PM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	37
10 mph Pace:	27 - 36
Percent in Pace:	67%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

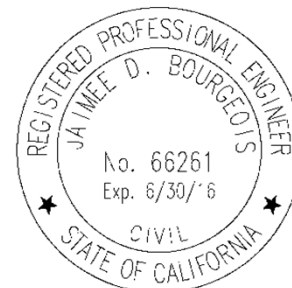
Average Daily Traffic:	658
Width:	28'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

Length of Segment:	0.7 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Limited
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	No
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	YES
Justification for 5 mph down:	Limited lateral visibility due to narrow, curvy roadway and vegetation with residential driveways
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/13/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/13/2015

Location: Center St Bet. Crescent Ave & Ridge St

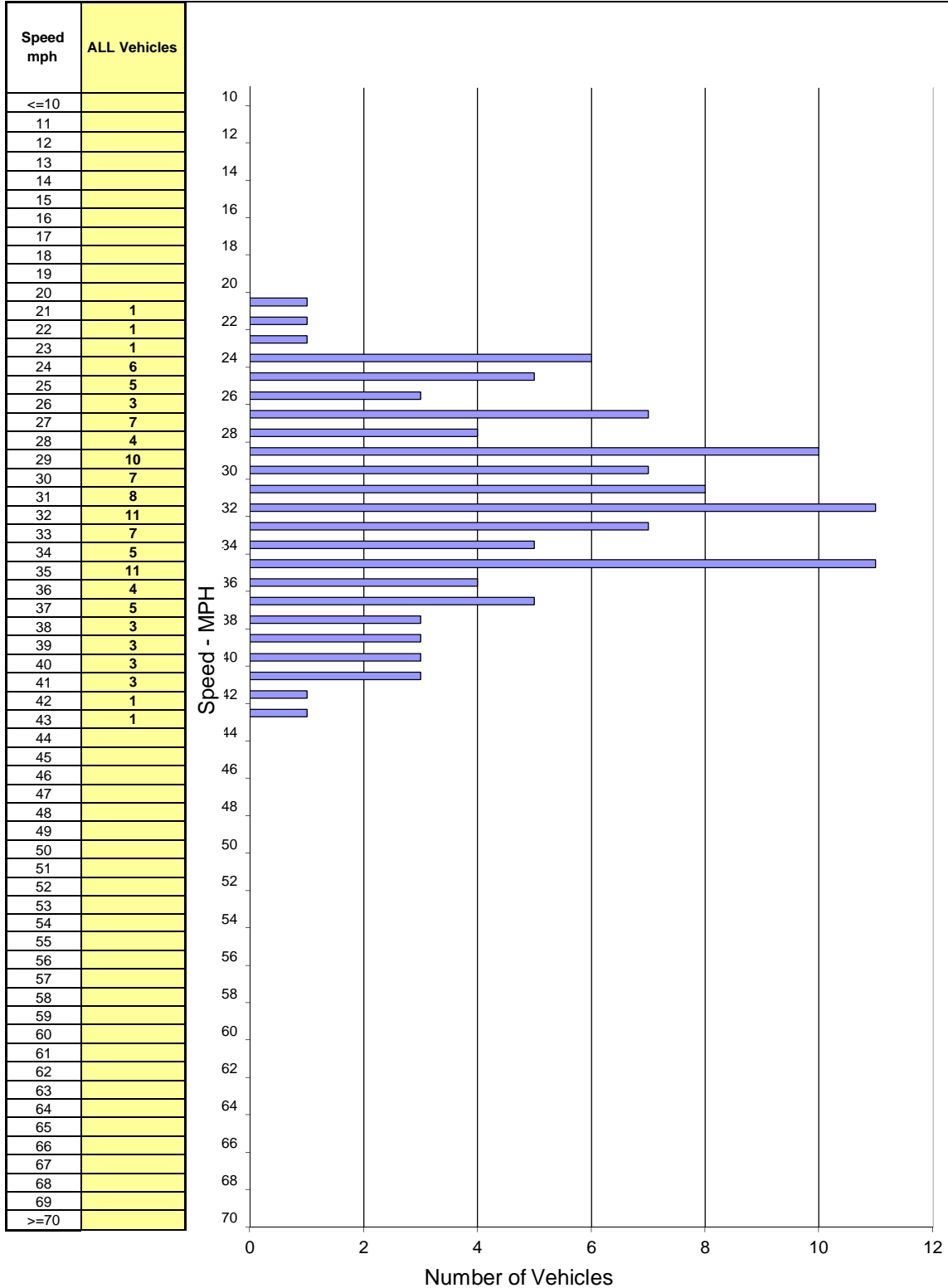
DAY: Friday

Posted Speed:

35 MPH

Project#: 15-6046-8.4

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	21 - 43	32 mph	37 mph	27 - 36	74	67%	15% / 17	18% / 19

ENGINEERING AND TRAFFIC SURVEY

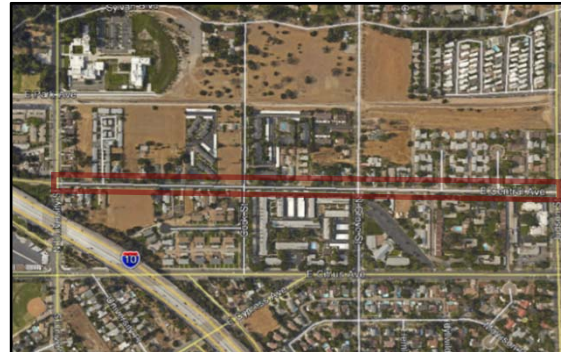
City of Redlands



Central Avenue from University Street to Judson Street

Date: 3/23/2015 Time: 3:00 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	40
10 mph Pace:	27 - 36
Percent in Pace:	63%
Posted Speed Limit:	25 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	2
Annual Collision Rate:	0.7
Collision Rate (Per Million Vehicle Miles):	2.4
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,548
Width:	36'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	Lane lines unmarked

ROADWAY FACTORS

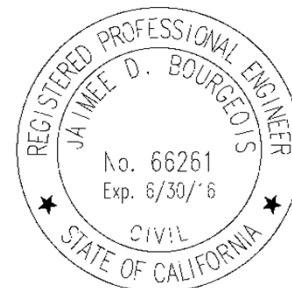
Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	High density residential driveways

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

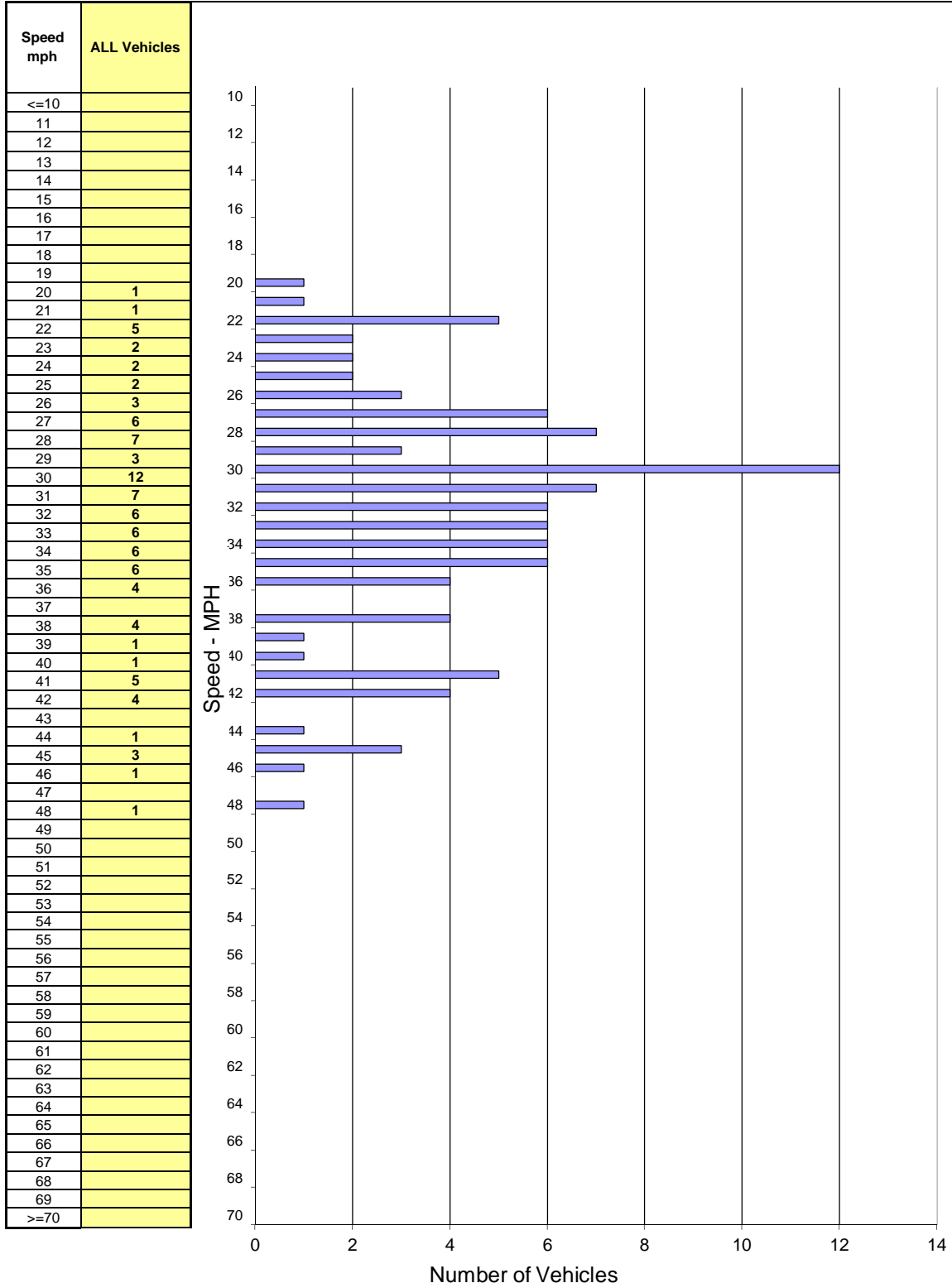
Location: Central Ave bet. University St & Judson St

DAY: Monday

Posted Speed: 25 MPH

Project#: 15-6046-9.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	20 - 48	31 mph	40 mph	27 - 36	63	63%	16% / 16	21% / 21

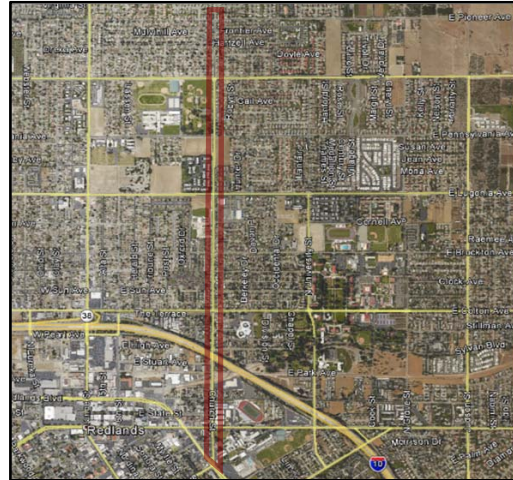
ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Church Street from Pioneer Avenue to Redlands Boulevard

Date: 4/1/2015 Time: 9:30 AM

Recorded By: NDS Weather: Partly Cloudy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	40
10 mph Pace:	32 - 41
Percent in Pace:	76%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	2
Total Collisions:	18
Annual Collision Rate:	6.0
Collision Rate (Per Million Vehicle Miles):	1.1
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

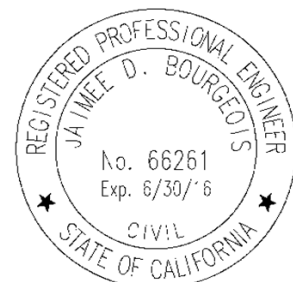
Average Daily Traffic:	7,914
Width:	64'
Lane Configuration:	2 Lanes
Traffic Control:	2 signals, 4 stops
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional, Commercial, Light Industrial
Other:	Bike lanes from Colton to San Bern.; TWLTL Lugonia to San Bern.

ROADWAY FACTORS

Length of Segment:	1.9 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	High density residential driveways, frequency of bicyclist activity
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	4/1/2022



Spot Speed Study

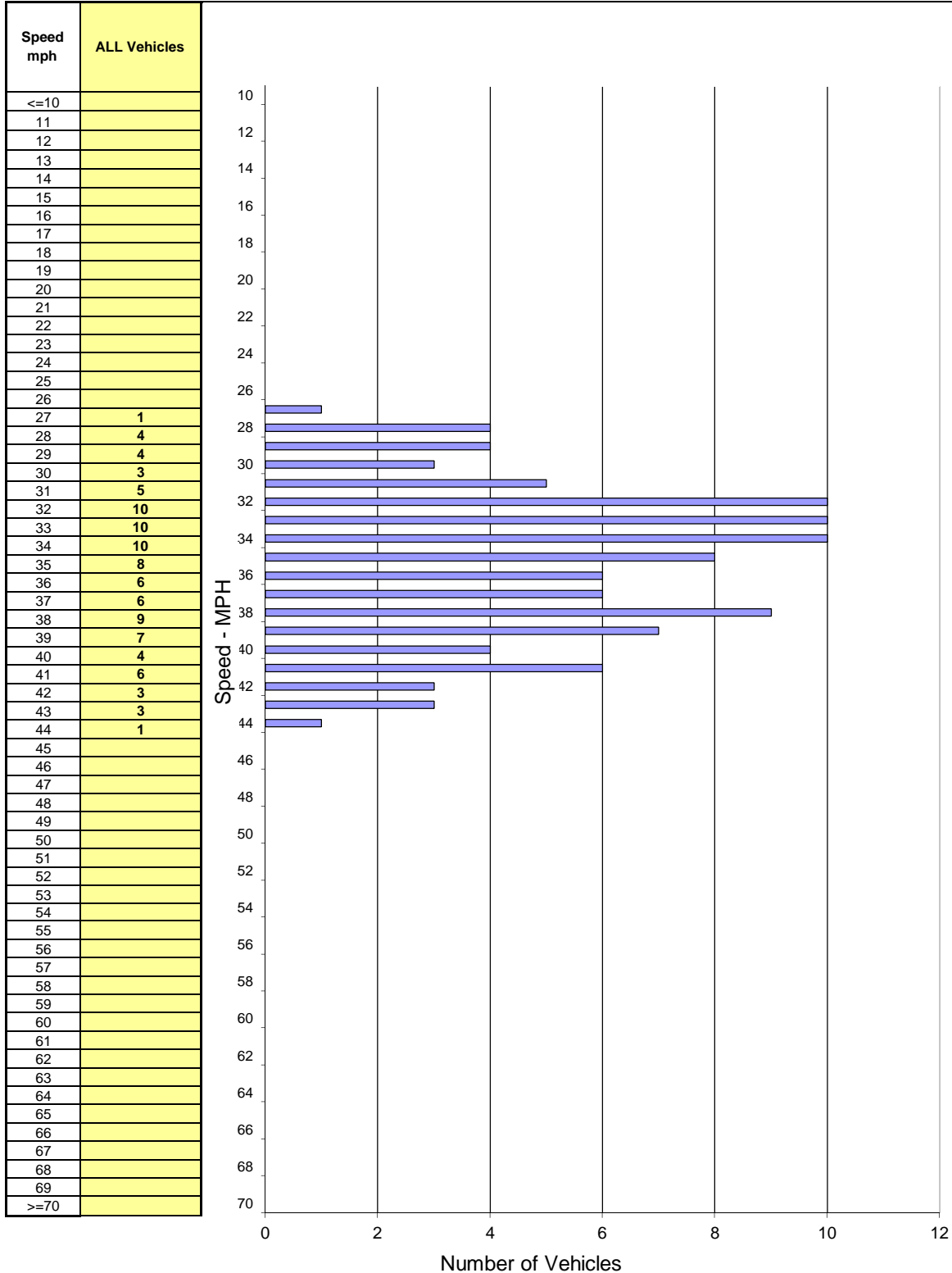
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/1/2015
DAY: Wednesday

Location: Church St Bet. Pioneer Ave & Redlands Blvd
Posted Speed: 30 MPH Project#: 15-6046-10.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	27 - 44	35 mph	40 mph	32 - 41	76	76%	17% / 17	7% / 7

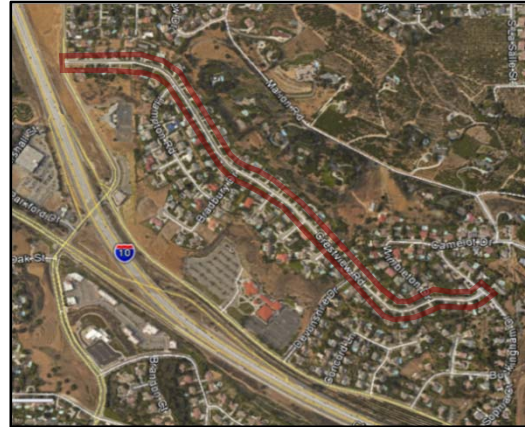
ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Crestview Road from Ford Street to Buckingham Drive

Date: 3/23/2015 Time: 12:30 PM
 Recorded By: NDS Weather: Partly Cloudy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	30
85th Percentile:	37
10 mph Pace:	26 - 35
Percent in Pace:	63%
Posted Speed Limit:	25 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	2.4
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	424
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

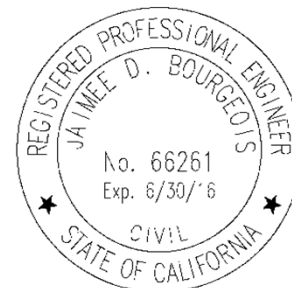
Length of Segment:	0.9 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	YES
Justification for 5 mph down:	High density residential driveways

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

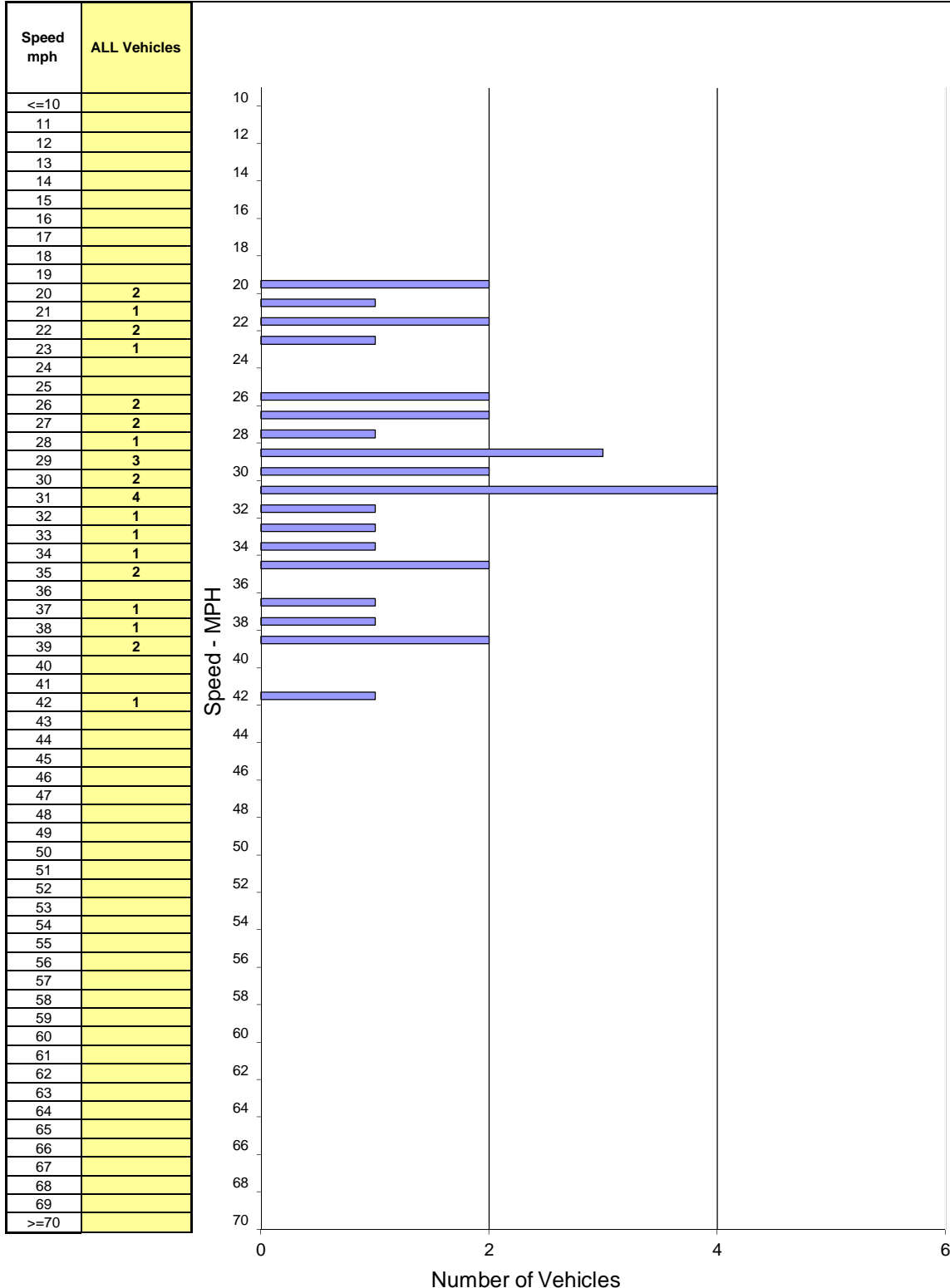
Location: Crestview Rd bet. Ford St & Buckingham Dr

DAY: Monday

Posted Speed: 25 MPH

Project#: 15-6046-11.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	30	20 - 42	30 mph	37 mph	26 - 35	19	63%	20% / 6	17% / 5

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Cypress Avenue from Terracina Blvd to Center St

Date: 3/16/2015 Time: 9:30 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	41
10 mph Pace:	34 - 43
Percent in Pace:	85%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	2
Annual Collision Rate:	0.7
Collision Rate (Per Million Vehicle Miles):	0.5
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	4,948
Width:	70'
Lane Configuration:	4 Lanes, TWLTL
Traffic Control:	3 stops
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	

ROADWAY FACTORS

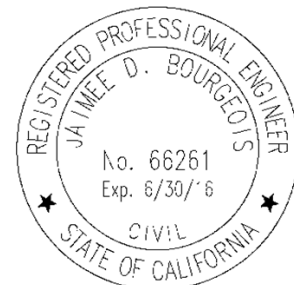
Length of Segment:	0.7 Miles
Vertical Curve:	Yes
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/16/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/16/2015

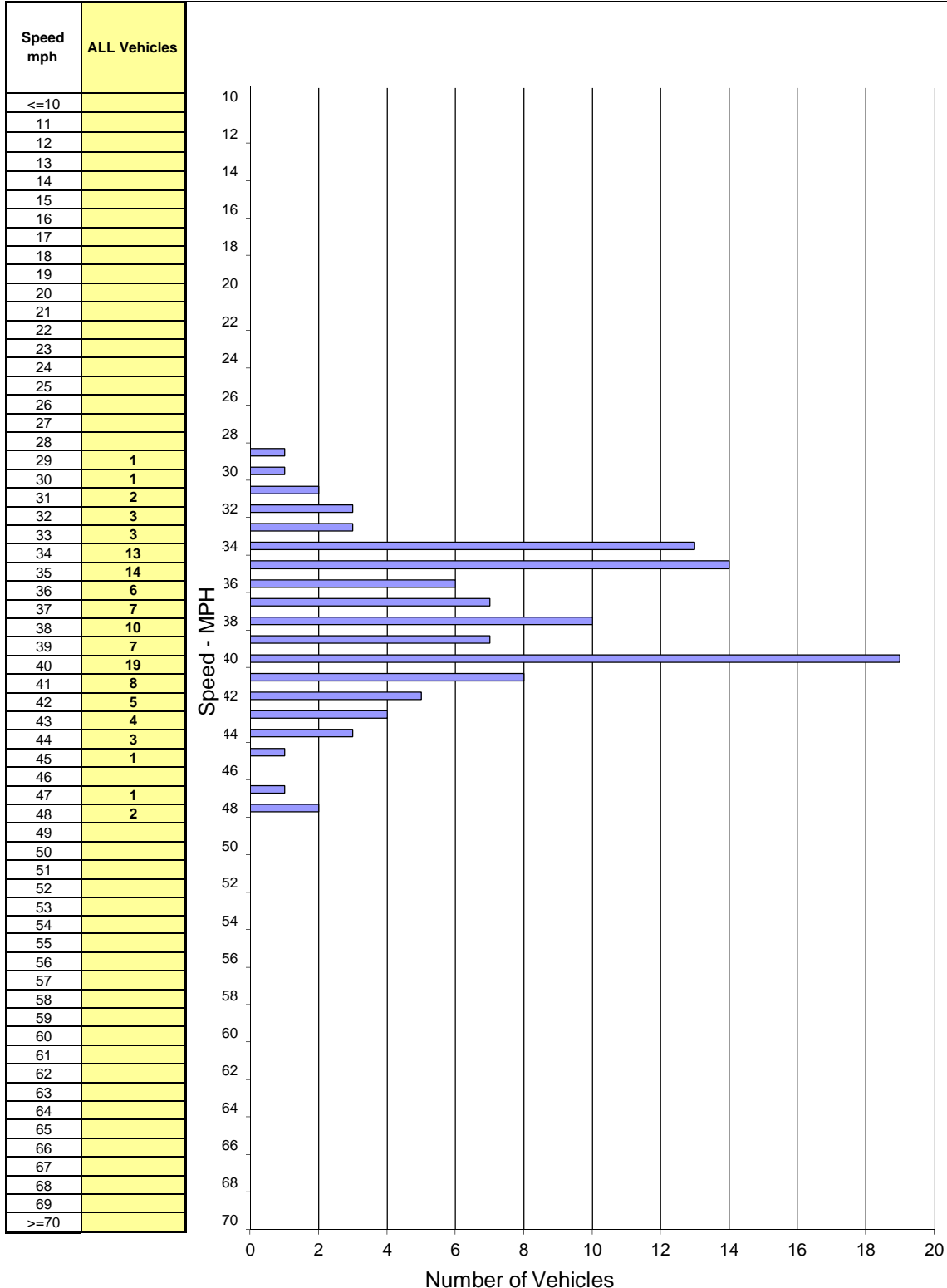
Location: Cypress Ave Bet. Terracina Blvd & Center St

DAY: Monday

Posted Speed: 45 MPH

Project#: 15-6046-12.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	29 - 48	38 mph	41 mph	34 - 43	93	85%	9% / 10	7% / 7

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Cypress Avenue from Center St to Redlands Blvd

Date: 3/16/2015 Time: 10:30 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	120
85th Percentile:	46
10 mph Pace:	38 - 47
Percent in Pace:	81%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	6
Annual Collision Rate:	2.0
Collision Rate (Per Million Vehicle Miles):	0.5
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

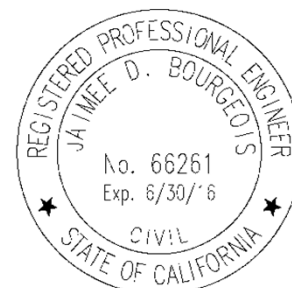
Average Daily Traffic:	8,389
Width:	68'
Lane Configuration:	4 Lanes
Traffic Control:	2 stops
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	Bike & Parking Lanes (Center to Cajon), 4 Lanes From Redlands Blvd

ROADWAY FACTORS

Length of Segment:	1.2 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good to Excellent

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	YES
Justification for 5 mph down:	High density residential driveways and frequency of bicyclists
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/16/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/16/2015

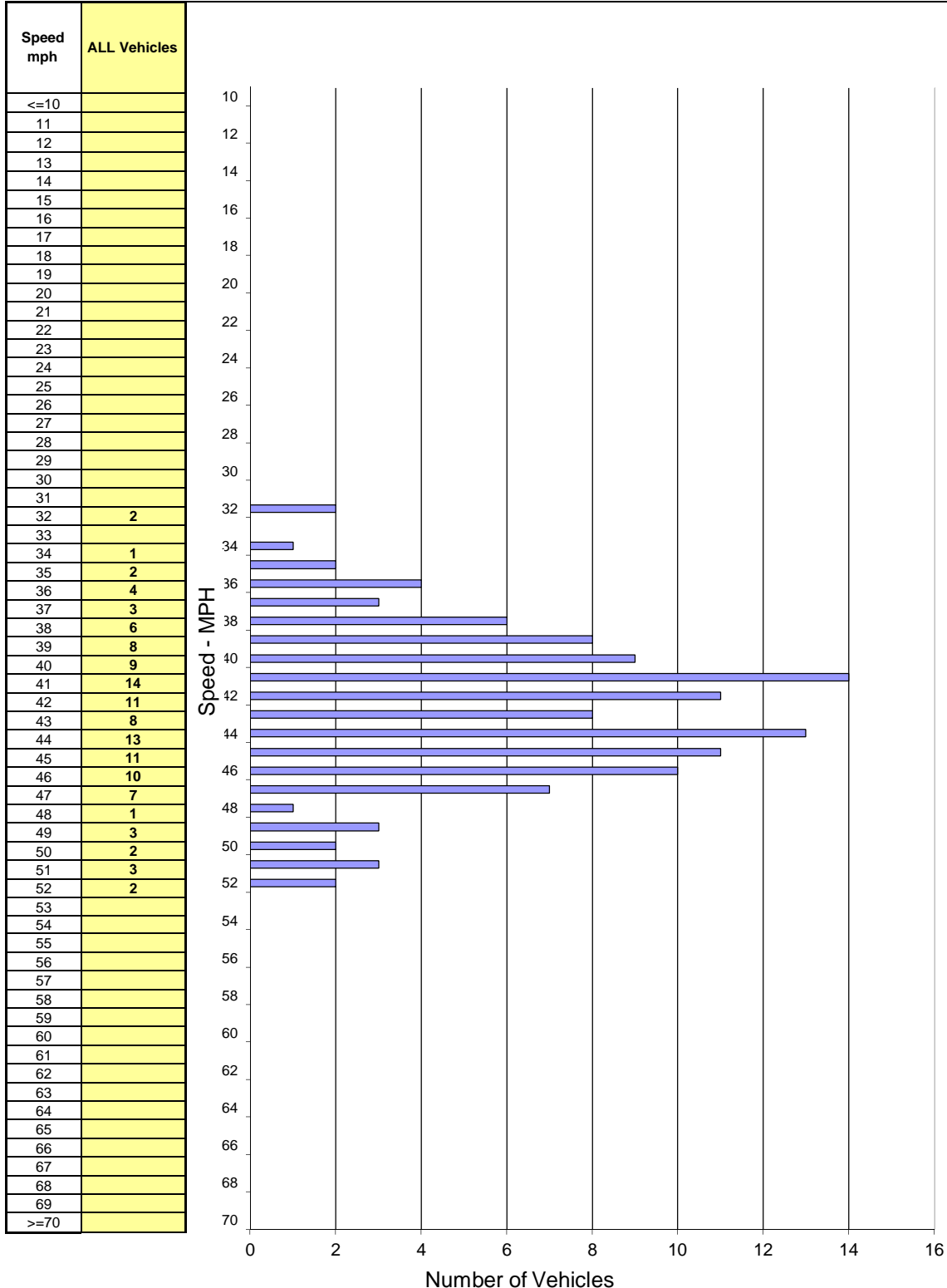
Location: Cypress Ave Bet. Center St & Redlands Blvd

DAY: Monday

Posted Speed: 45 MPH

Project#: 15-6046-12.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	120	32 - 52	42 mph	46 mph	38 - 47	97	81%	10% / 12	10% / 11

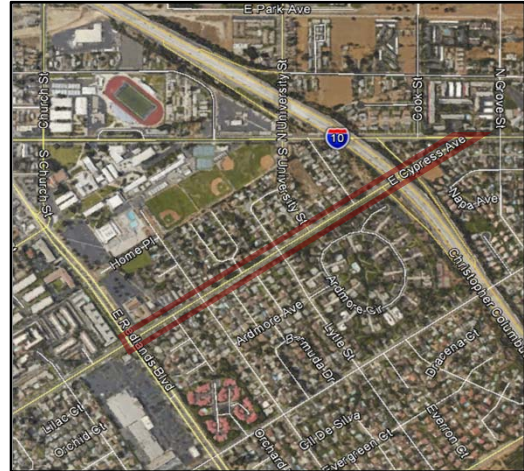
ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Cypress Avenue from Redlands Blvd to Citrus Ave

Date: 3/16/2015 Time: 10:35 AM
 Recorded By: NDS Weather: Clear



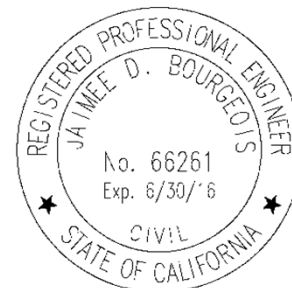
PREVAILING SPEED DATA	
No. of Vehicles Surveyed:	100
85th Percentile:	41
10 mph Pace:	32 - 41
Percent in Pace:	79%
Posted Speed Limit:	45 mph

COLLISION HISTORY	
Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	3
Total Collisions:	6
Annual Collision Rate:	2.0
Collision Rate (Per Million Vehicle Miles):	0.9
Statewide Collision Rate:	1.3

TRAFFIC FACTORS	
Average Daily Traffic:	9,658
Width:	58'
Lane Configuration:	3 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	2 Lanes EB, 1 Lane WB

ROADWAY FACTORS	
Length of Segment:	0.6 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS	
Recommended Speed Limit:	40
Speed Limit Change:	YES
Justification for 5 mph down:	N/A
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/16/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/16/2015

Location: Cypress Ave Bet. Redlands Blvd & Citrus Ave

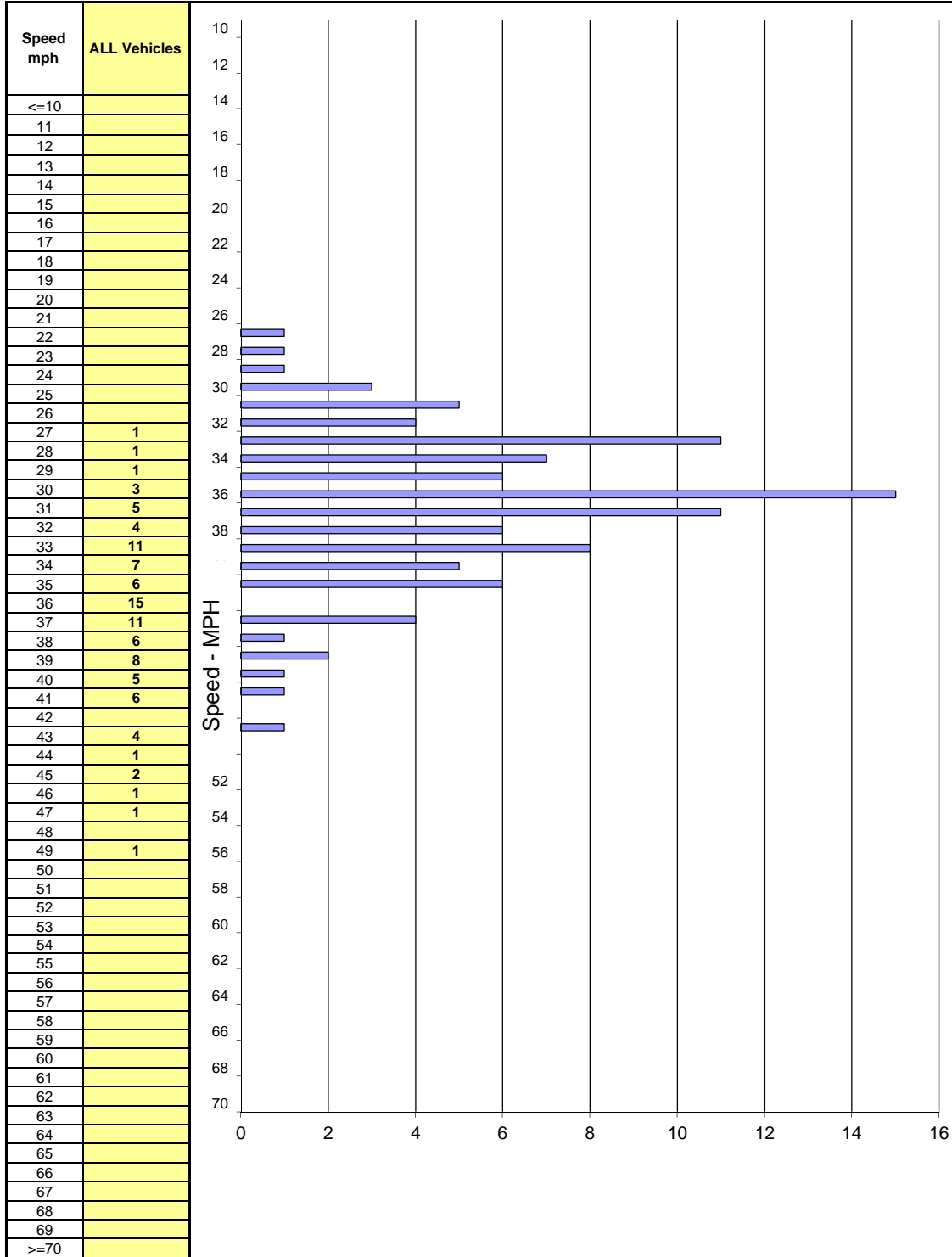
DAY: Monday

Posted Speed:

45 MPH

Project #: 15-6046-12.3

Eastbound & Westbound Spot Speeds



Number of Vehicles

SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	27 - 49	36 mph	41 mph	32 - 41	79	79%	11% / 11	10% / 10

ENGINEERING AND TRAFFIC SURVEY

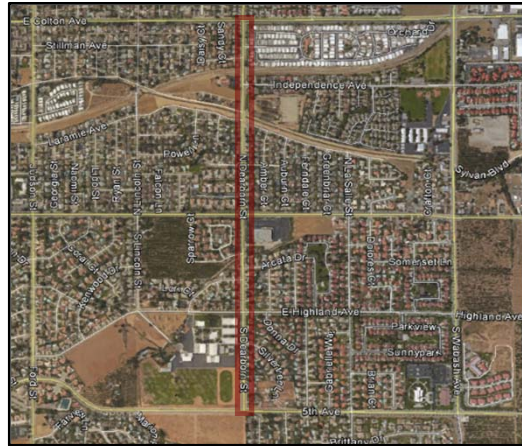
City of Redlands



Dearborn Street from 5th Ave to Colton Ave

Date: 3/16/2015 Time: 11:30 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	37
10 mph Pace:	29 - 38
Percent in Pace:	82%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	5
Annual Collision Rate:	1.7
Collision Rate (Per Million Vehicle Miles):	1.1
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	4,792
Width:	64'
Lane Configuration:	2 Lanes, TWLTL
Traffic Control:	2 stops
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	0
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	

ROADWAY FACTORS

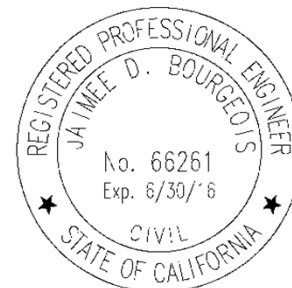
Length of Segment:	0.9 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	NO
Justification for 5 mph down:	High density residential driveways

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/16/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/16/2015

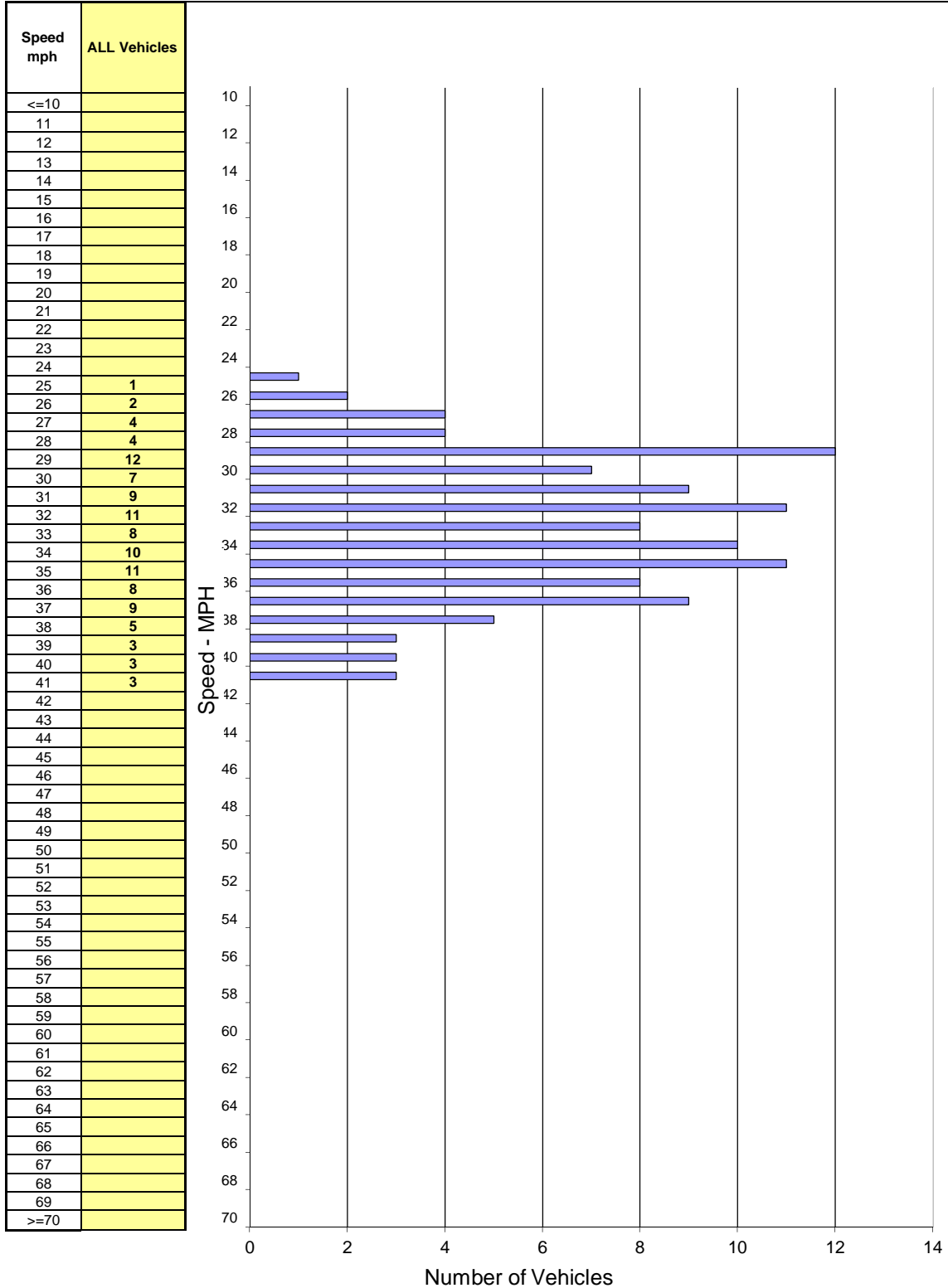
Location: Dearborn St Bet. 5th Ave & Colton Ave

DAY: Monday

Posted Speed: 30 MPH

Project#: 15-6046-13.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	25 - 41	33 mph	37 mph	29 - 38	90	82%	10% / 11	9% / 9

ENGINEERING AND TRAFFIC SURVEY

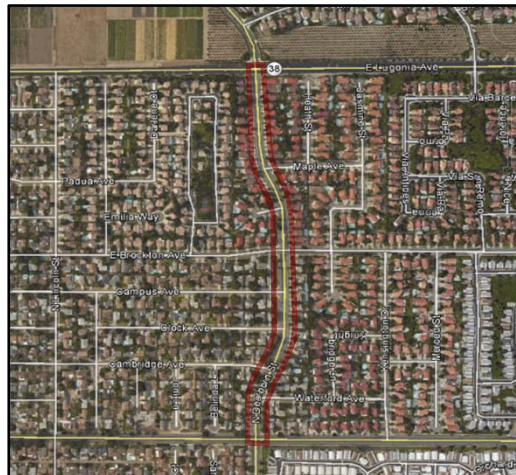
City of Redlands



Dearborn Street from Colton Ave to Lugonia Ave

Date: 3/16/2015 Time: 9:30 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	36
10 mph Pace:	27 - 36
Percent in Pace:	76%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	0.6
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	2,935
Width:	64'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

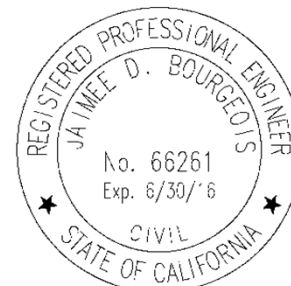
Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	NO
Justification for 5 mph down:	High density residential driveways

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/16/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/16/2015

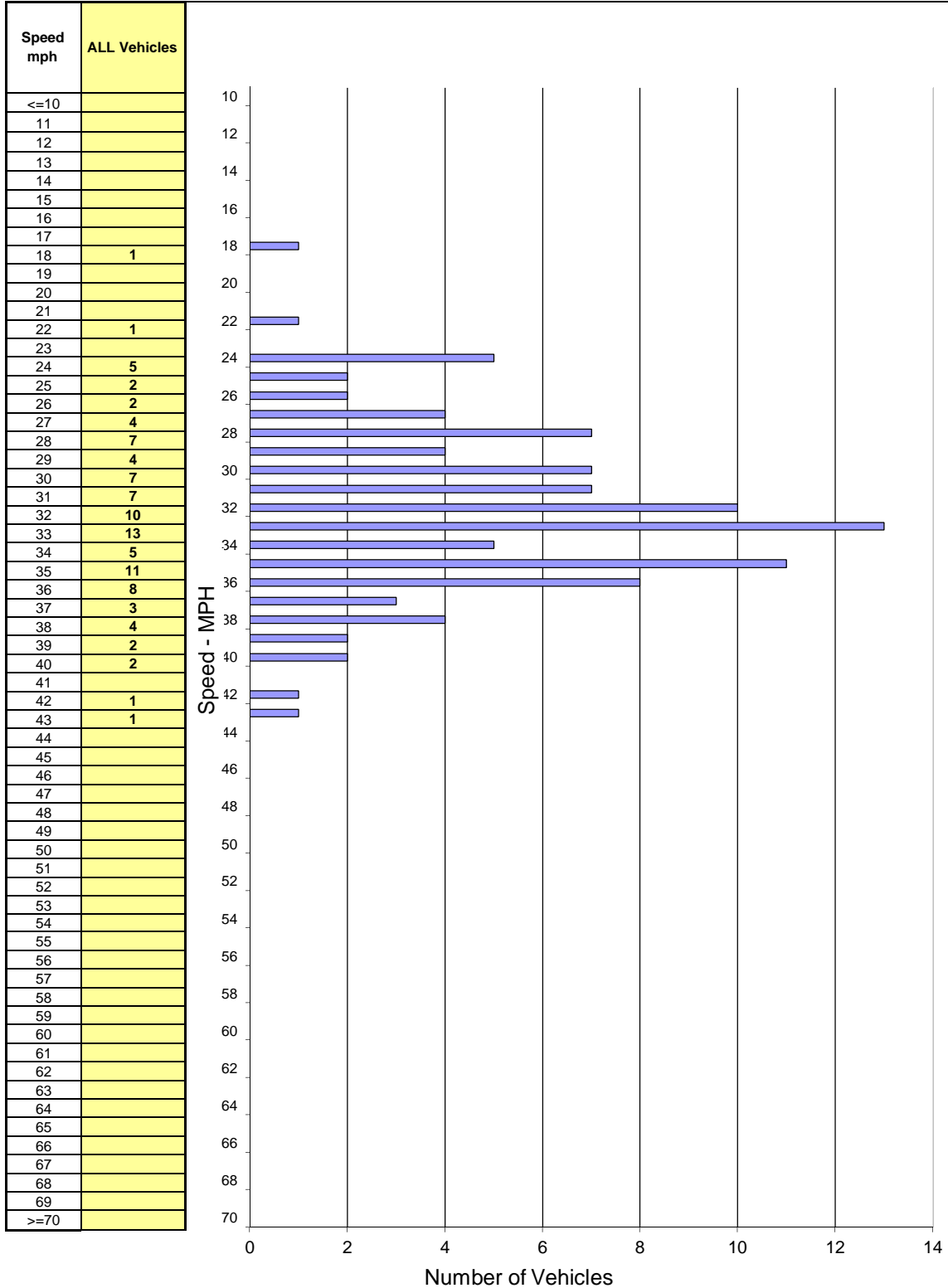
Location: Dearborn St Bet. Colton Ave & Lugonia Ave

DAY: Monday

Posted Speed: 30 MPH

Project#: 15-6046-13.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	18 - 43	32 mph	36 mph	27 - 36	76	76%	11% / 11	13% / 13

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Dearborn Street from Lugonia Ave to San Bernardino Ave

Date: 3/27/2015 Time: 11:10 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	43
10 mph Pace:	34 - 43
Percent in Pace:	58%
Posted Speed Limit:	25 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	1.2
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,577
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	Lane lines unmarked

ROADWAY FACTORS

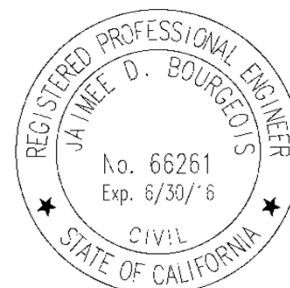
Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

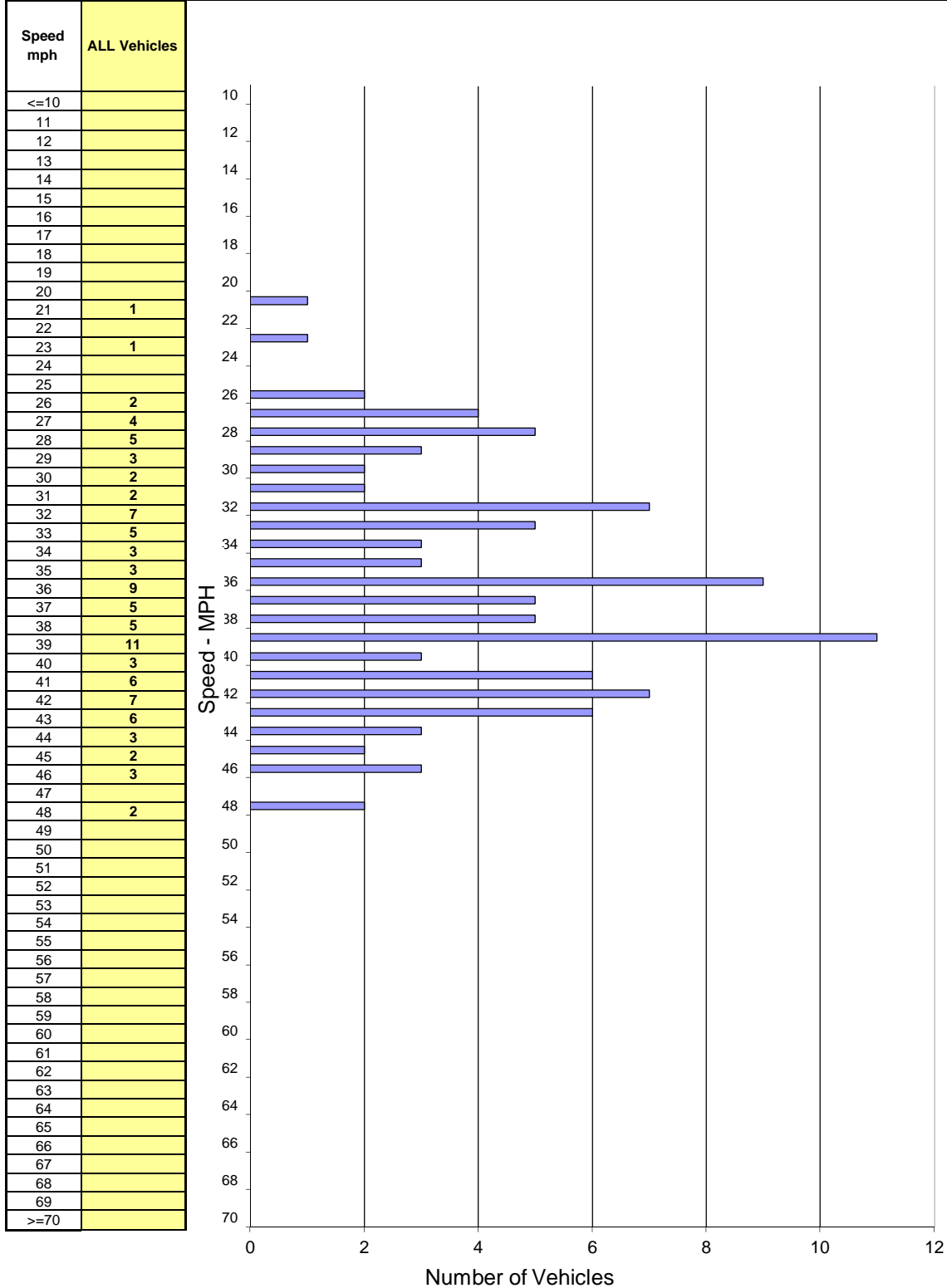
Location: Dearborn St bet. Lugonia Ave & San Bernardino Ave

DAY: Friday

Posted Speed: 25 MPH

Project#: 15-6046-13.3

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	21 - 48	37 mph	43 mph	34 - 43	58	58%	32% / 32	10% / 10

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Dearborn Street from San Bernardino Ave to Sessums Dr

Date: 3/27/2015 Time: 9:00 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	72
85th Percentile:	43
10 mph Pace:	29 - 38
Percent in Pace:	63%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,797
Width:	48'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Park, Agricultural
Other:	

ROADWAY FACTORS

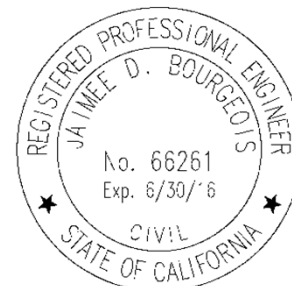
Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	East Side
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

Location: Dearborn St bet. San Bernardino Ave & Sessums Dr

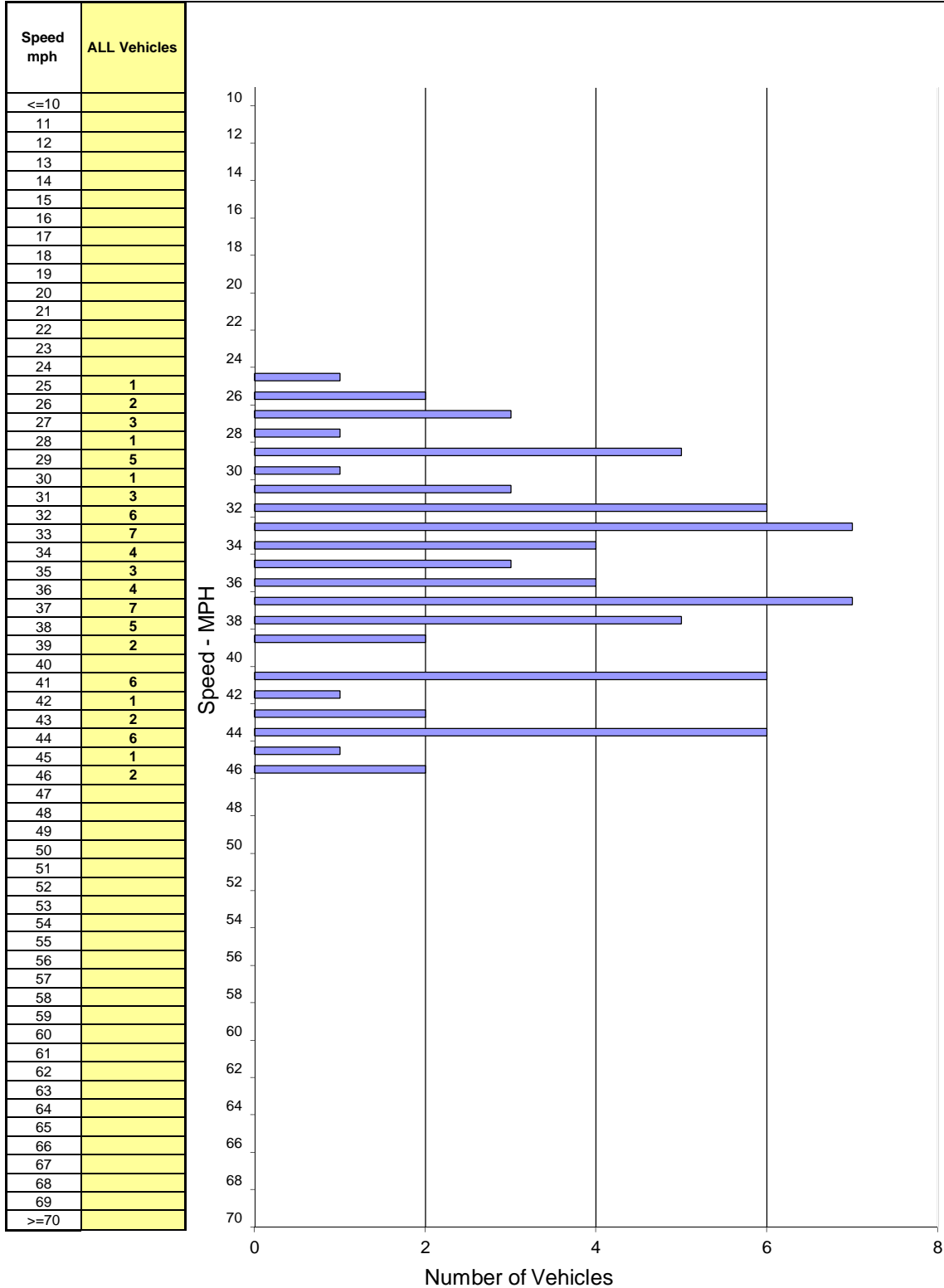
DAY: Friday

Posted Speed:

30 MPH

Project#: 15-6046-13.4

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	72	25 - 46	35 mph	43 mph	29 - 38	45	63%	9% / 7	28% / 20

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Elizabeth Street from Garden Street to Crescent Avenue

Date: 3/23/2015 Time: 10:40 AM

Recorded By: NDS Weather: Partly Cloudy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	43
10 mph Pace:	34 - 43
Percent in Pace:	68%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	0.7
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,478
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Partial
Adjacent Land Use:	Residential, Institutional
Other:	

ROADWAY FACTORS

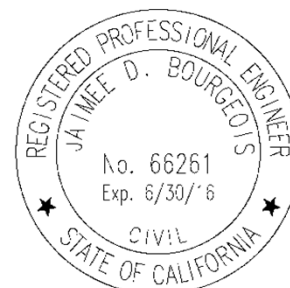
Length of Segment:	0.9 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

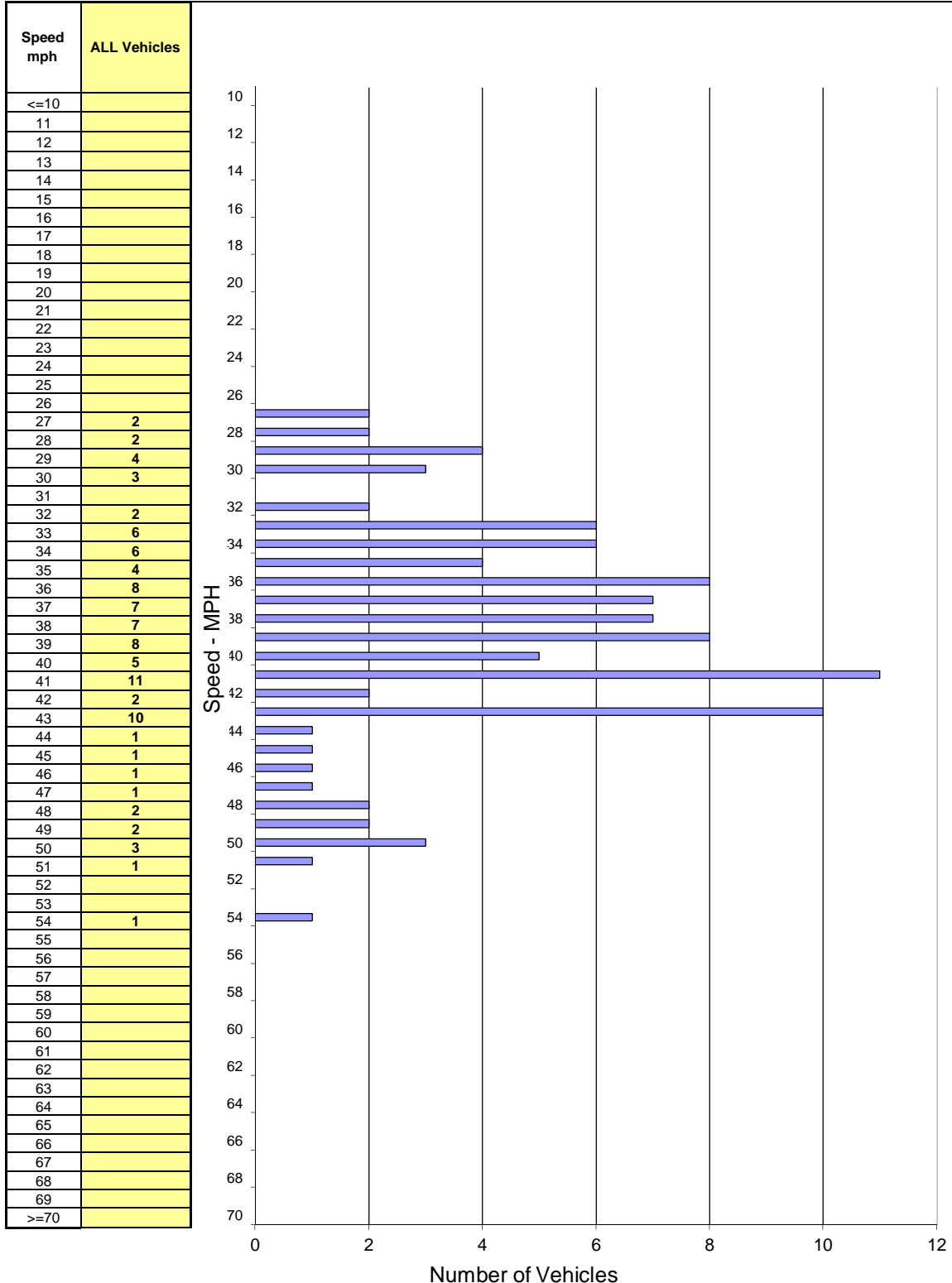
Location: Elizabeth St bet. Garden St & Crescent Ave

DAY: Monday

Posted Speed: 35 MPH

Project#: 15-6046-14.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	27 - 54	38 mph	43 mph	34 - 43	68	68%	19% / 19	13% / 13

ENGINEERING AND TRAFFIC SURVEY

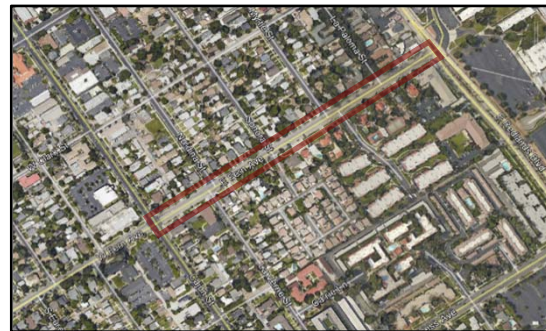
City of Redlands



Fern Avenue from Redlands Boulevard to Cajon St

Date: 3/16/2015 Time: 12:45 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	120
85th Percentile:	40
10 mph Pace:	32 - 41
Percent in Pace:	88%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	3
Annual Collision Rate:	1.0
Collision Rate (Per Million Vehicle Miles):	1.8
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

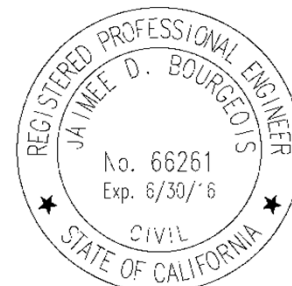
Average Daily Traffic:	5,026
Width:	60'
Lane Configuration:	2 Lanes, TWLTL
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

Length of Segment:	0.3 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	TWLTL, high density residential driveways and frequency of bicyclists
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/16/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/16/2015

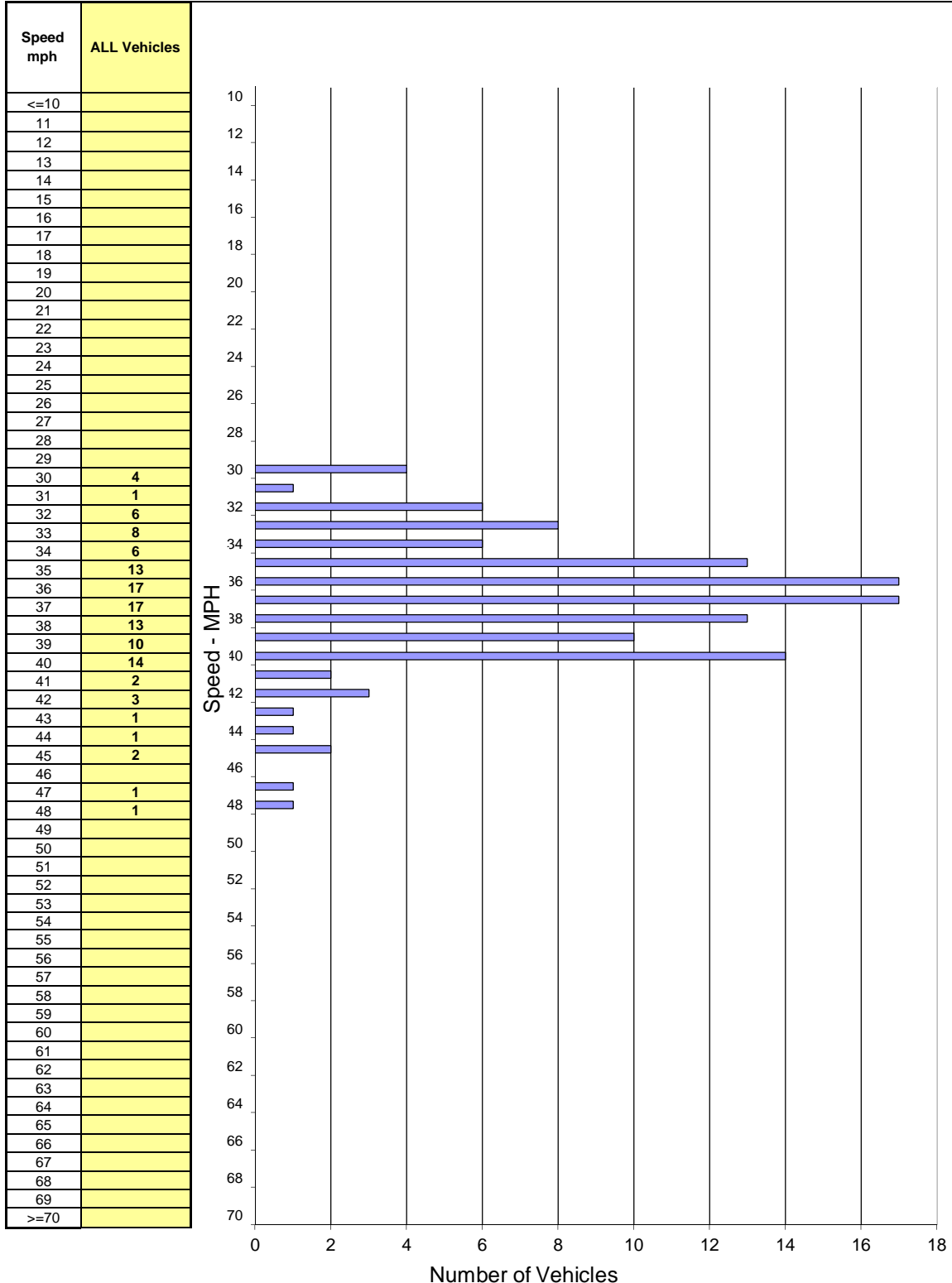
Location: Fern Ave Bet. Redlands Blvd & Cajon St

DAY: Monday

Posted Speed: 40 MPH

Project#: 15-6046-15.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	120	30 - 48	37 mph	40 mph	32 - 41	106	88%	4% / 5	8% / 9

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Fern Avenue from Cajon St to Center St

Date: 3/16/2015 Time: 1:30 PM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	39
10 mph Pace:	31 - 40
Percent in Pace:	92%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	8
Annual Collision Rate:	2.7
Collision Rate (Per Million Vehicle Miles):	4.4
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	4,150
Width:	60'
Lane Configuration:	2 Lanes, TWLTL
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Medical, Institutional
Other:	

ROADWAY FACTORS

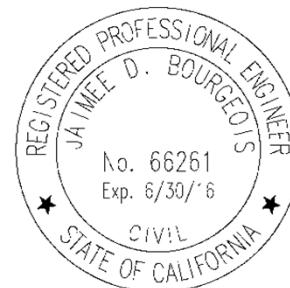
Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/16/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/16/2015

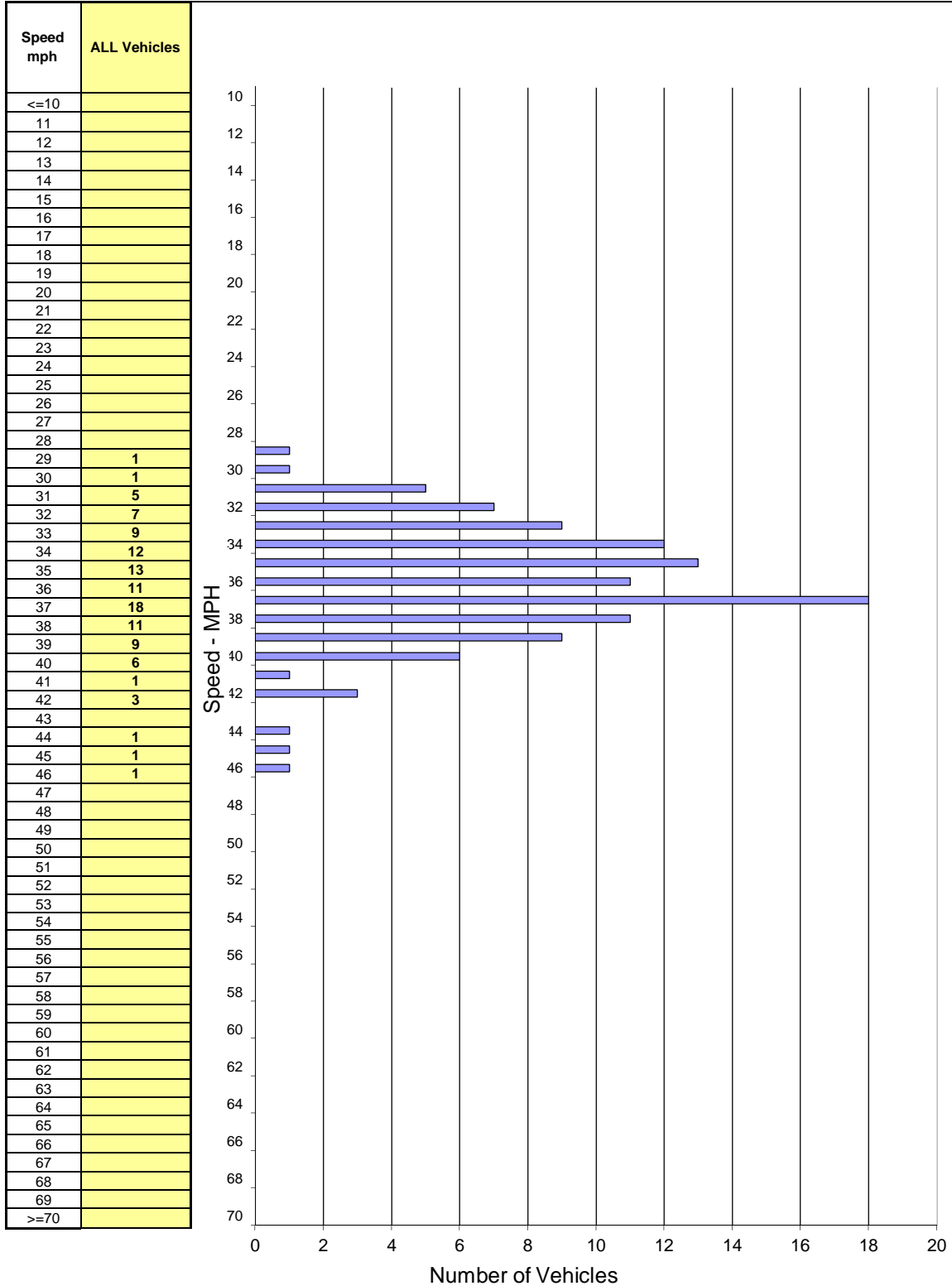
Location: Fern Ave Bet. Cajon St & Center St

DAY: Monday

Posted Speed: 40 MPH

Project#: 15-6046-15.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	29 - 46	36 mph	39 mph	31 - 40	101	92%	1% / 2	7% / 7

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Fern Avenue from Center St to San Mateo St

Date: 3/23/2015 Time: 9:30 AM
 Recorded By: NDS Weather: Partly Cloudy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	42
10 mph Pace:	32 - 41
Percent in Pace:	74%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	6
Annual Collision Rate:	2.0
Collision Rate (Per Million Vehicle Miles):	3.2
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

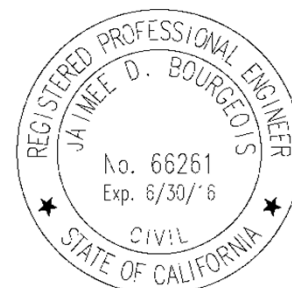
Average Daily Traffic:	4,274
Width:	60'
Lane Configuration:	2 Lanes, TWLTL
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	

ROADWAY FACTORS

Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	No
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	TWLTL, high density residential driveways and frequency of bicyclists
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

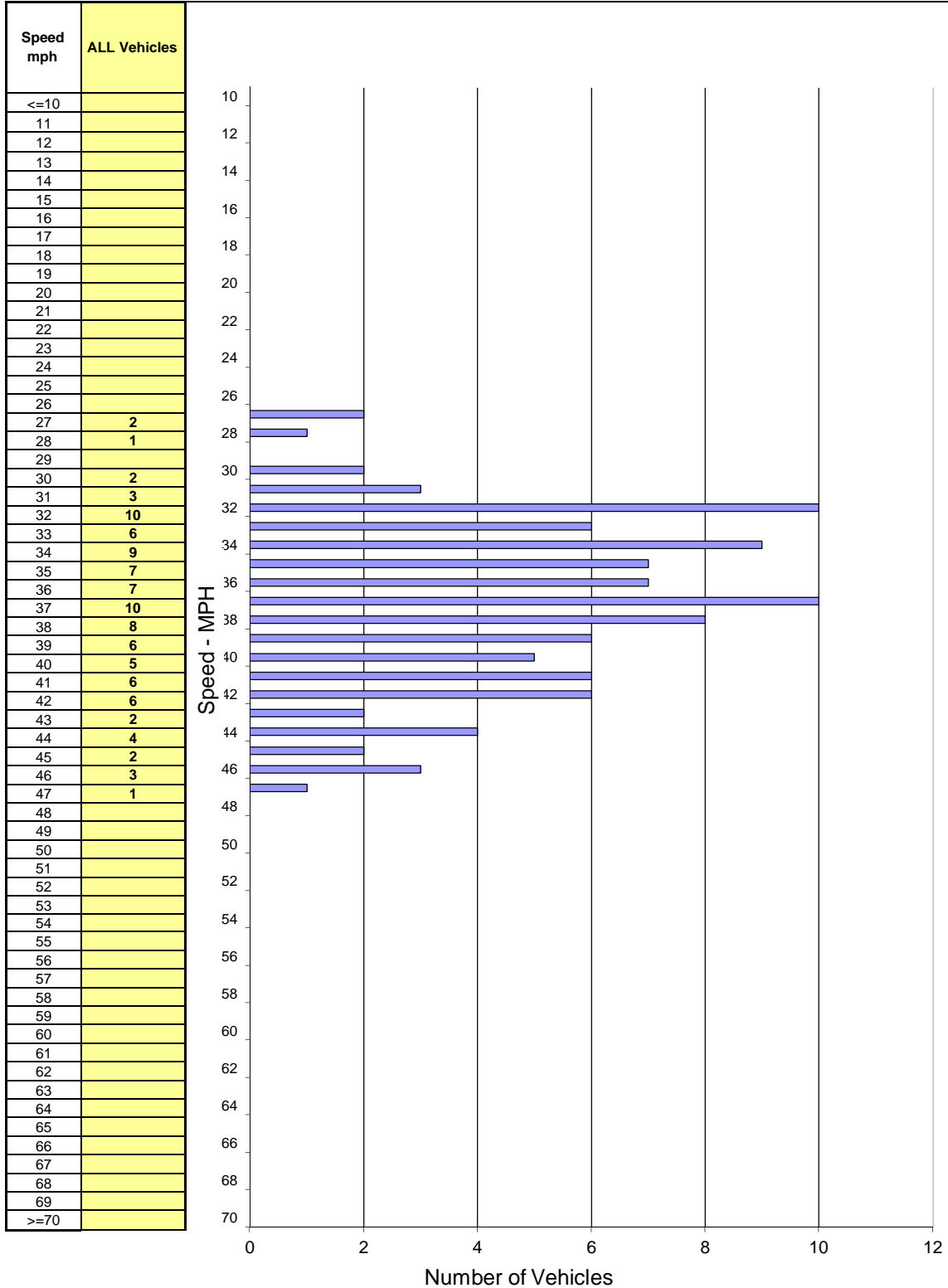
Location: Fern Ave bet. Center St & San Mateo St

DAY: Monday

Posted Speed: 40 MPH

Project#: 15-6046-15.3

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	27 - 47	37 mph	42 mph	32 - 41	74	74%	8% / 8	18% / 18

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Fern Avenue from San Mateo St to Terracina Blvd

Date: 3/16/2015 Time: 11:20 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	37
10 mph Pace:	29 - 38
Percent in Pace:	73%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	7
Annual Collision Rate:	2.3
Collision Rate (Per Million Vehicle Miles):	2.5
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	3,644
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	Class 3
Truck Route:	0
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	Shared bike lane, striped parking lane on both sides

ROADWAY FACTORS

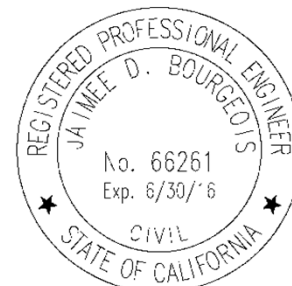
Length of Segment:	0.7 Miles
Vertical Curve:	Yes
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/16/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/16/2015

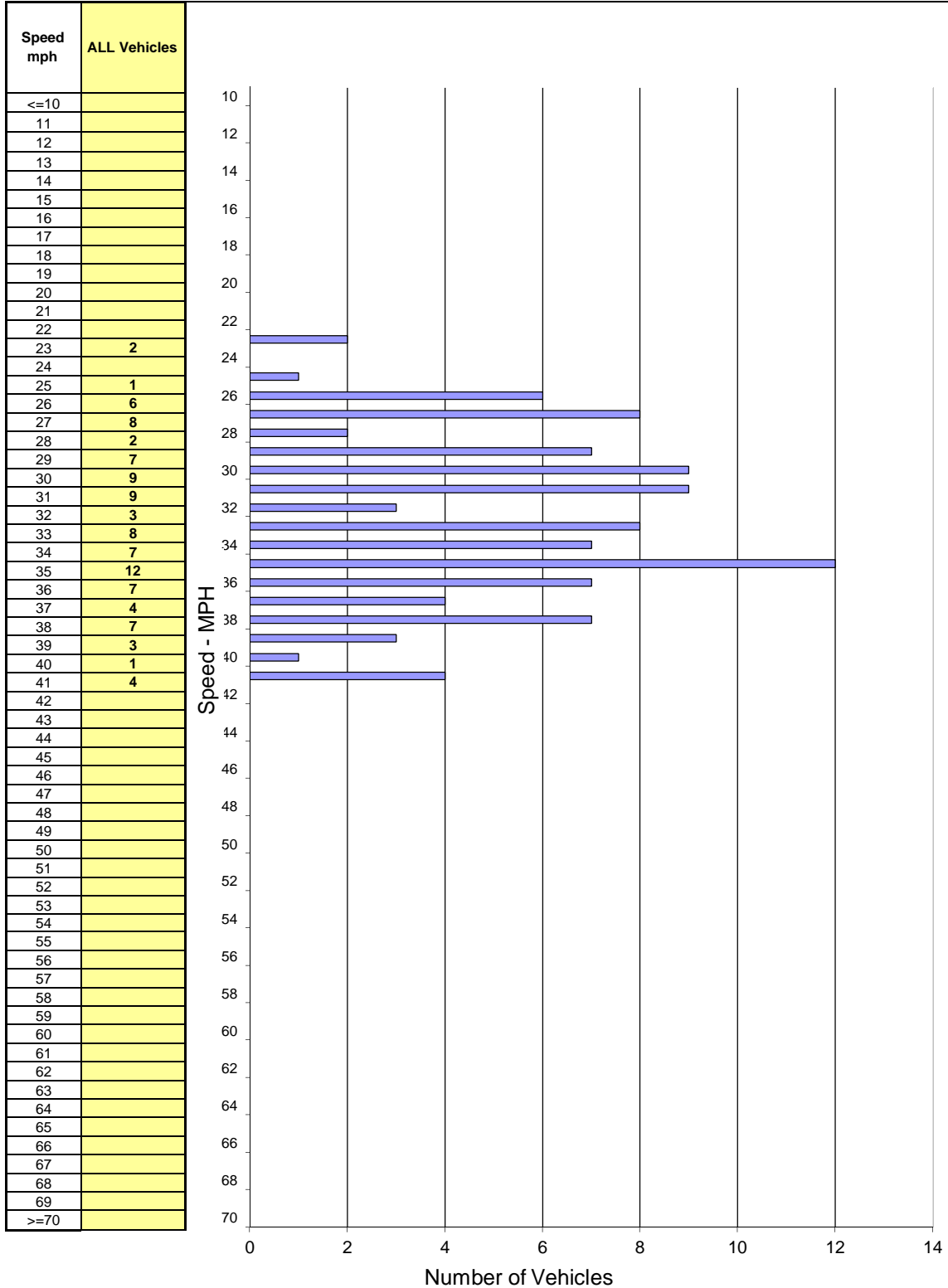
Location: Fern Ave Bet. San Mateo St & Terracina Blvd

DAY: Monday

Posted Speed: 35 MPH

Project#: 15-6046-15.4

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	23 - 41	33 mph	37 mph	29 - 38	73	73%	19% / 19	8% / 8

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Fifth Avenue from Ford Street to Dearborn Street

Date: 3/23/2015 Time: 9:30 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	45
10 mph Pace:	37 - 46
Percent in Pace:	77%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	7,607
Width:	64'
Lane Configuration:	4 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Agricultural, Institutional
Other:	

ROADWAY FACTORS

Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	45
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

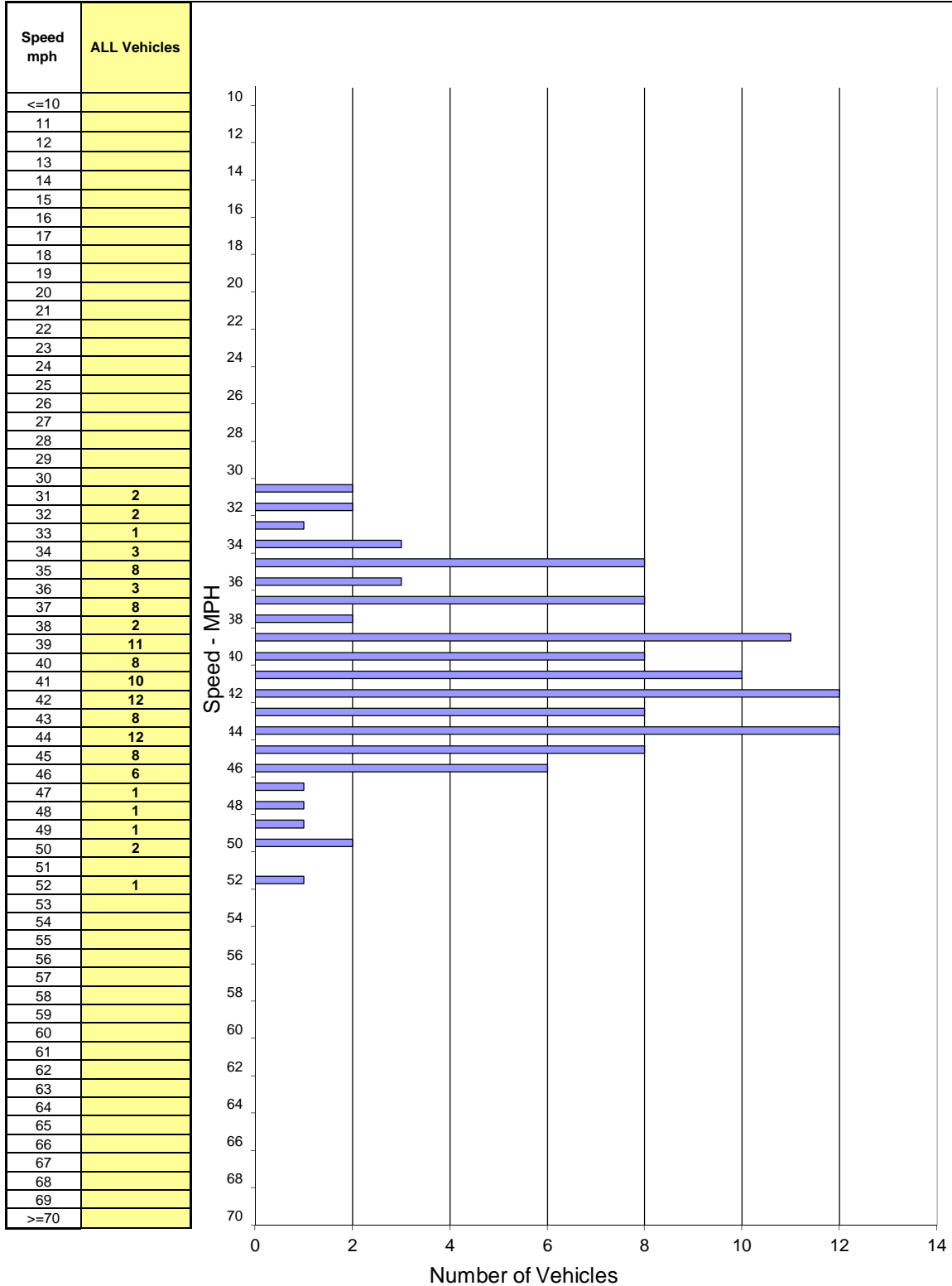
Location: 5th Ave bet. Ford St & Dearborn St

DAY: Monday

Posted Speed: 45 MPH

Project#: 15-6046-16.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	31 - 52	41 mph	45 mph	37 - 46	85	77%	17% / 19	6% / 6

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Fifth Avenue from Dearborn Street to Wabash Avenue

Date: 3/23/2015 Time: 10:16 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	47
10 mph Pace:	38 - 47
Percent in Pace:	80%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	4,768
Width:	64'
Lane Configuration:	4 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	

ROADWAY FACTORS

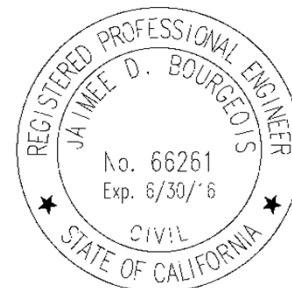
Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	45
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

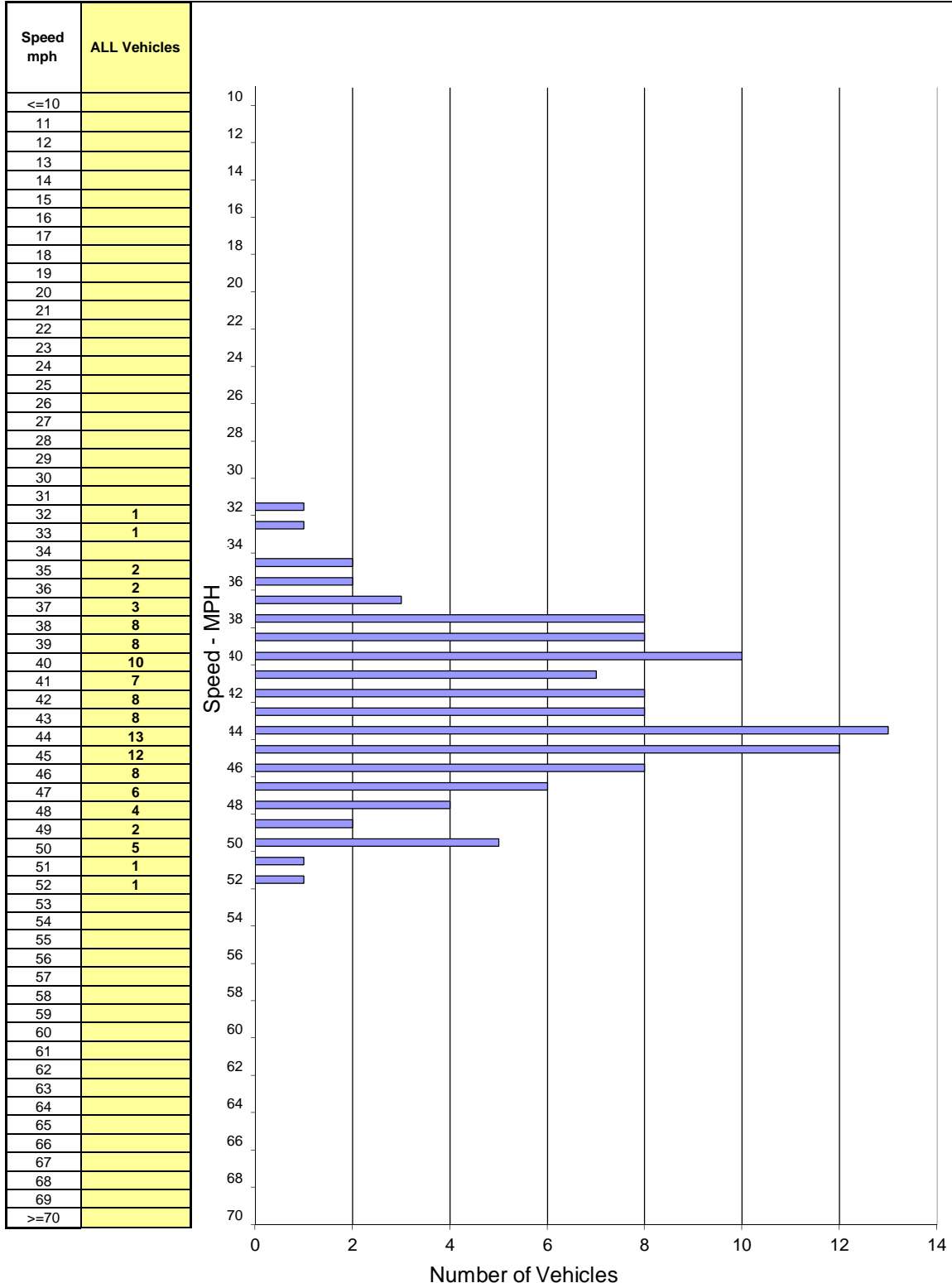
Location: 5th Ave bet. Dearborn St & Wabash Ave

DAY: Monday

Posted Speed: 45 MPH

Project#: 15-6046-16.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	32 - 52	43 mph	47 mph	38 - 47	88	80%	8% / 9	12% / 13

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Ford Street from Citrus Ave to Fifth Ave

Date: 3/16/2015 Time: 3:45 PM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	45
10 mph Pace:	34 - 43
Percent in Pace:	68%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	8
Annual Collision Rate:	2.7
Collision Rate (Per Million Vehicle Miles):	3.6
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	5,085
Width:	64'
Lane Configuration:	4 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

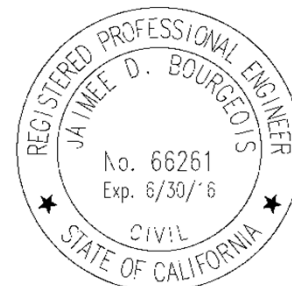
Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	NO
Justification for 5 mph down:	High density residential driveways

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/16/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/16/2015

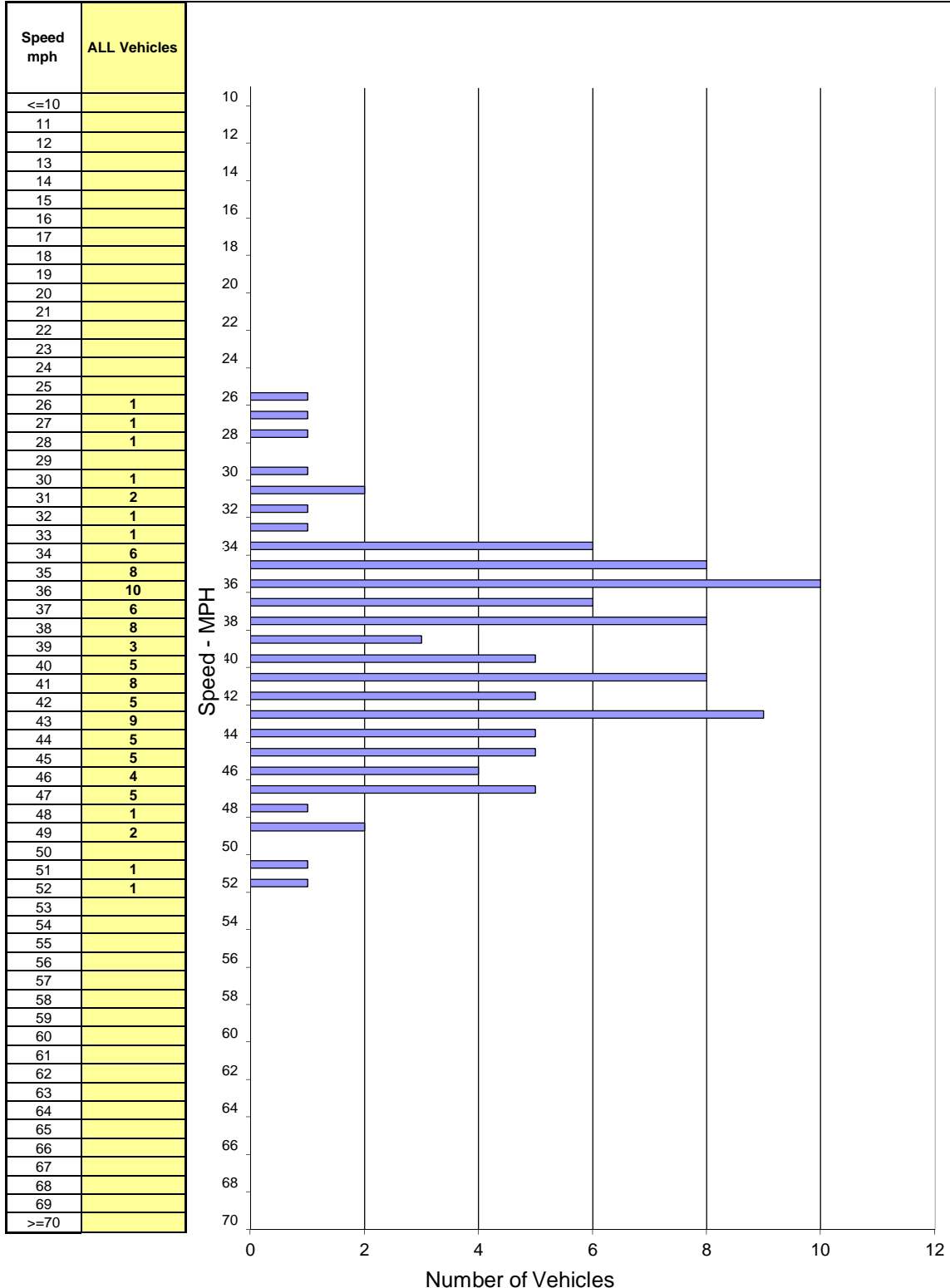
Location: Ford St Bet. Citrus Ave & Fifth Ave

DAY: Monday

Posted Speed: 40 MPH

Project#: 15-6046-17.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	26 - 52	40 mph	45 mph	34 - 43	68	68%	8% / 8	24% / 24

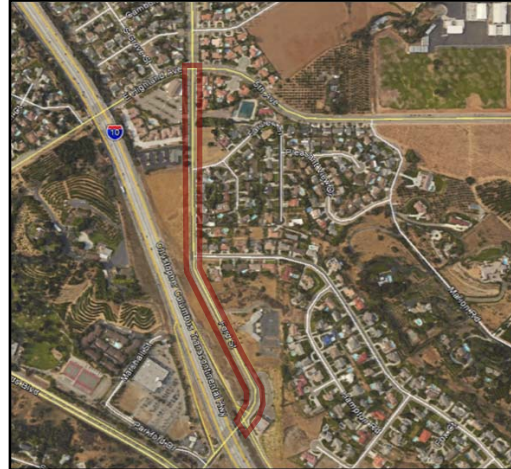
ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Ford Street from Fifth Ave to Reservoir Rd

Date: 3/17/2015 Time: 11:25 AM
 Recorded By: NDS Weather: Hazy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	41
10 mph Pace:	32 - 41
Percent in Pace:	75%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	2
Annual Collision Rate:	0.7
Collision Rate (Per Million Vehicle Miles):	0.5
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	8,908
Width:	33'-64'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop NB, none SB
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Partial
Adjacent Land Use:	Residential, Institutional, Office
Other:	

ROADWAY FACTORS

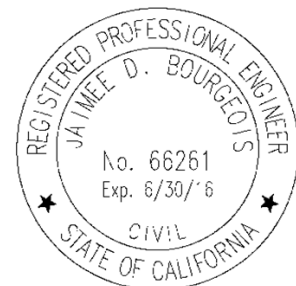
Length of Segment:	0.4 Miles
Vertical Curve:	Yes
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/17/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/17/2015

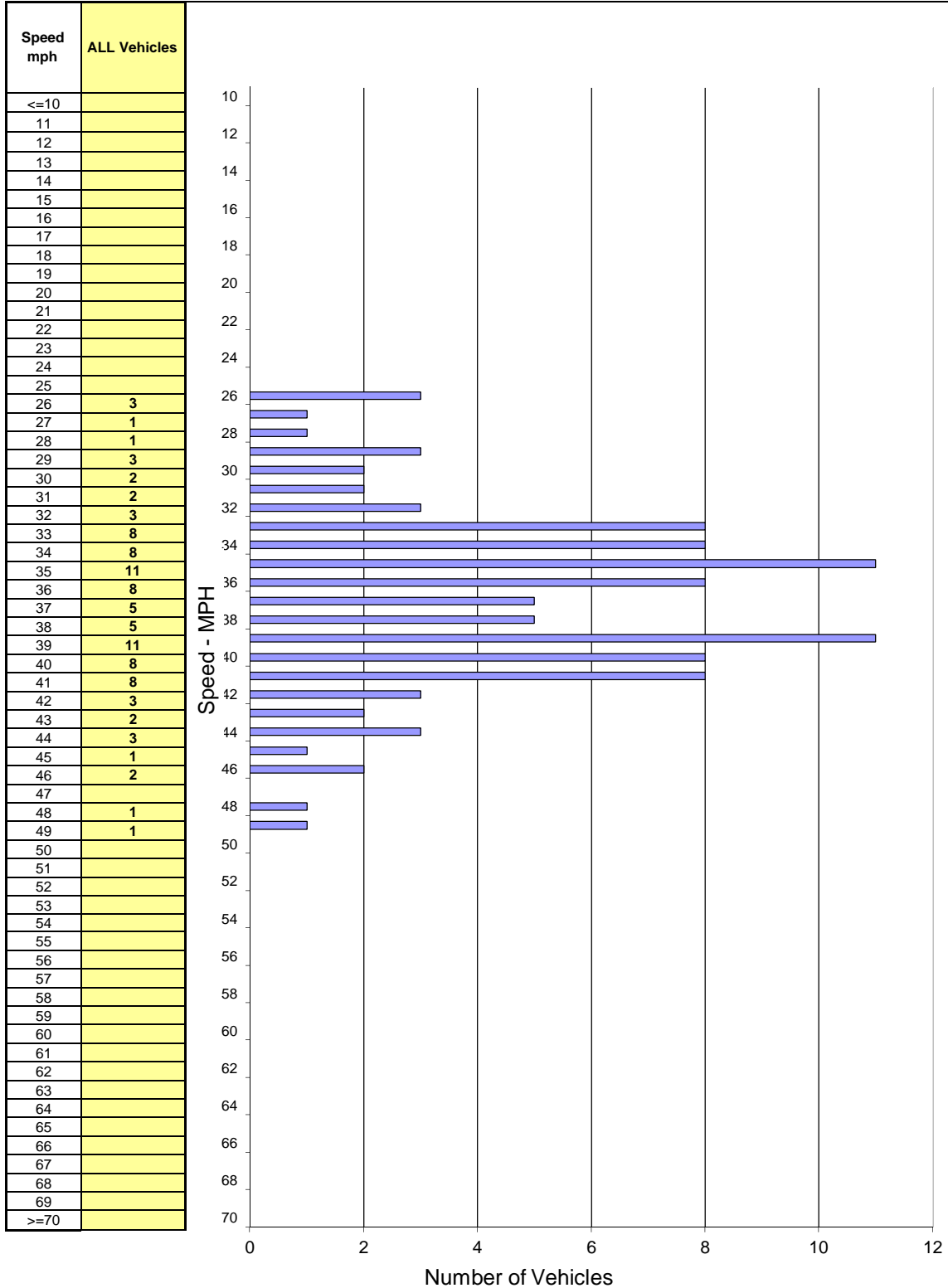
Location: Ford St Bet. Fifth Ave & Reservoir Rd

DAY: Tuesday

Posted Speed: 40 MPH

Project#: 15-6046-17.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	26 - 49	36 mph	41 mph	32 - 41	75	75%	12% / 12	13% / 13

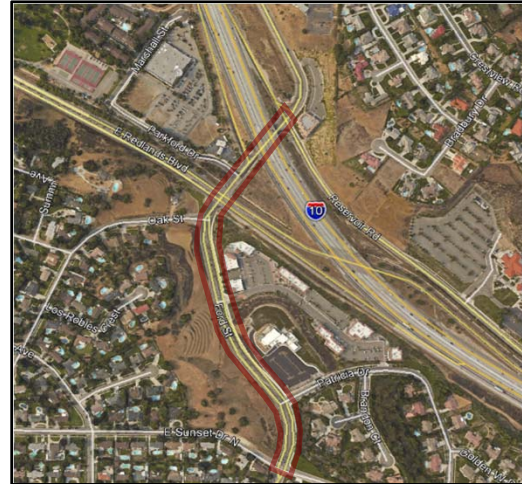
ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Ford Street from Reservoir Rd to Sunset Dr

Date: 3/17/2015 Time: 12:30 PM
 Recorded By: NDS Weather: Hazy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	43
10 mph Pace:	34 - 43
Percent in Pace:	66%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	6
Annual Collision Rate:	2.0
Collision Rate (Per Million Vehicle Miles):	1.6
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	8,544
Width:	62'
Lane Configuration:	4 Lanes, median
Traffic Control:	1 signal
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	No
Adjacent Land Use:	Commercial, Office
Other:	

ROADWAY FACTORS

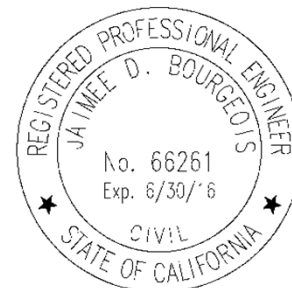
Length of Segment:	0.4 Miles
Vertical Curve:	Yes
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Partial east side
Driveways:	No
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/17/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/17/2015

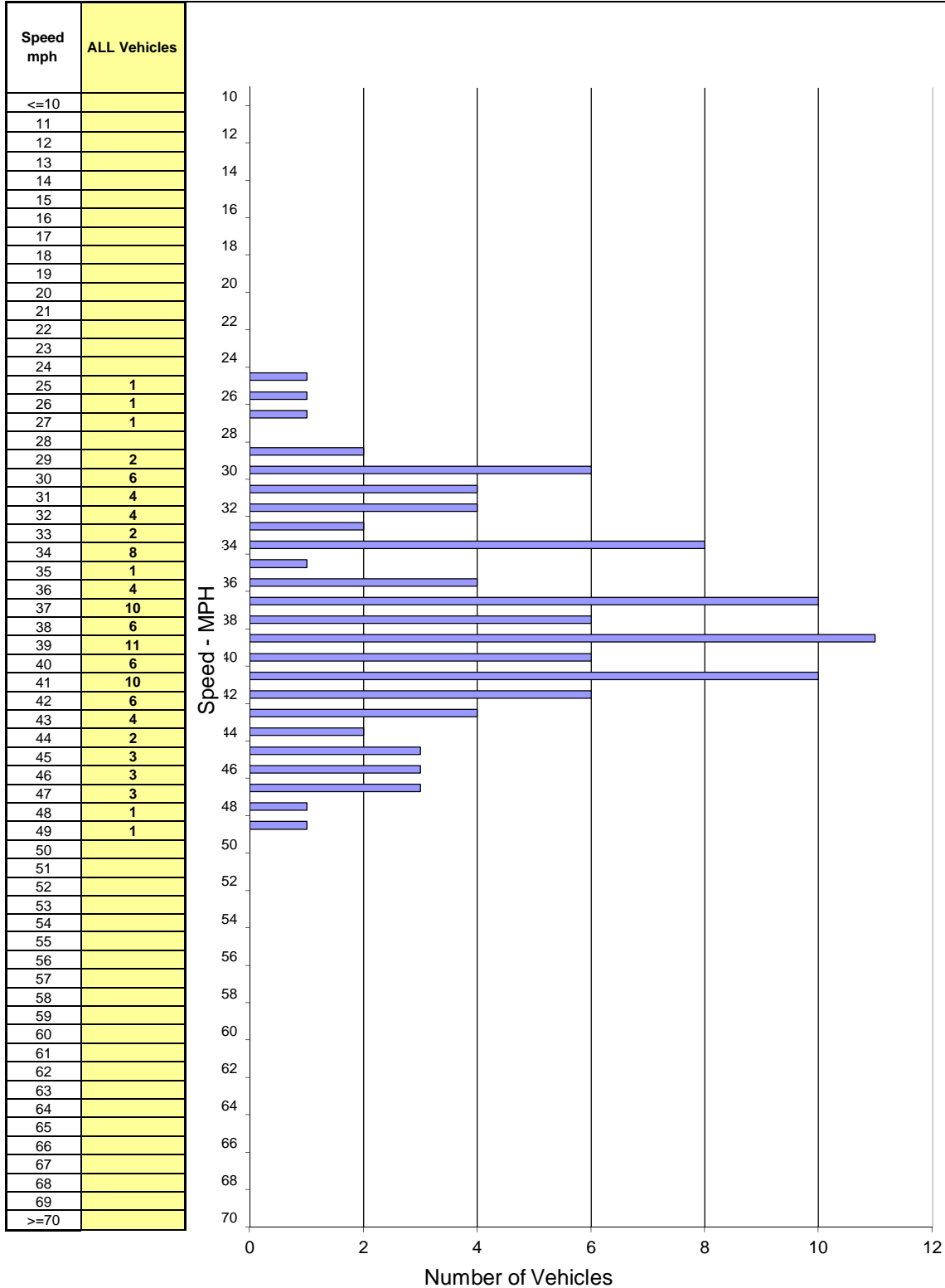
Location: Ford St Bet. Reservoir Rd & Sunset Dr

DAY: Tuesday

Posted Speed: 40 MPH

Project#: 15-6046-17.3

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	25 - 49	38 mph	43 mph	34 - 43	66	66%	21% / 21	13% / 13

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Ford Street from Sunset Dr to Garden Hill Dr

Date: 3/23/2015 Time: 9:43 AM
 Recorded By: NDS Weather: Cloudy



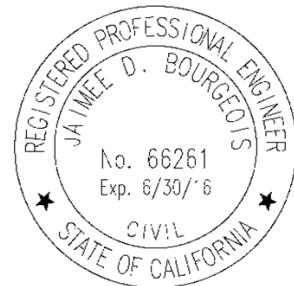
PREVAILING SPEED DATA	
No. of Vehicles Surveyed:	100
85th Percentile:	41
10 mph Pace:	32 - 41
Percent in Pace:	82%
Posted Speed Limit:	35 mph

COLLISION HISTORY	
Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	0.9
Statewide Collision Rate:	2.95

TRAFFIC FACTORS	
Average Daily Traffic:	2,628
Width:	64'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	

ROADWAY FACTORS	
Length of Segment:	0.4 Miles
Vertical Curve:	Yes
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor

CONCLUSIONS	
Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	Frequency of bicyclists with bike lanes and institutional land uses
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

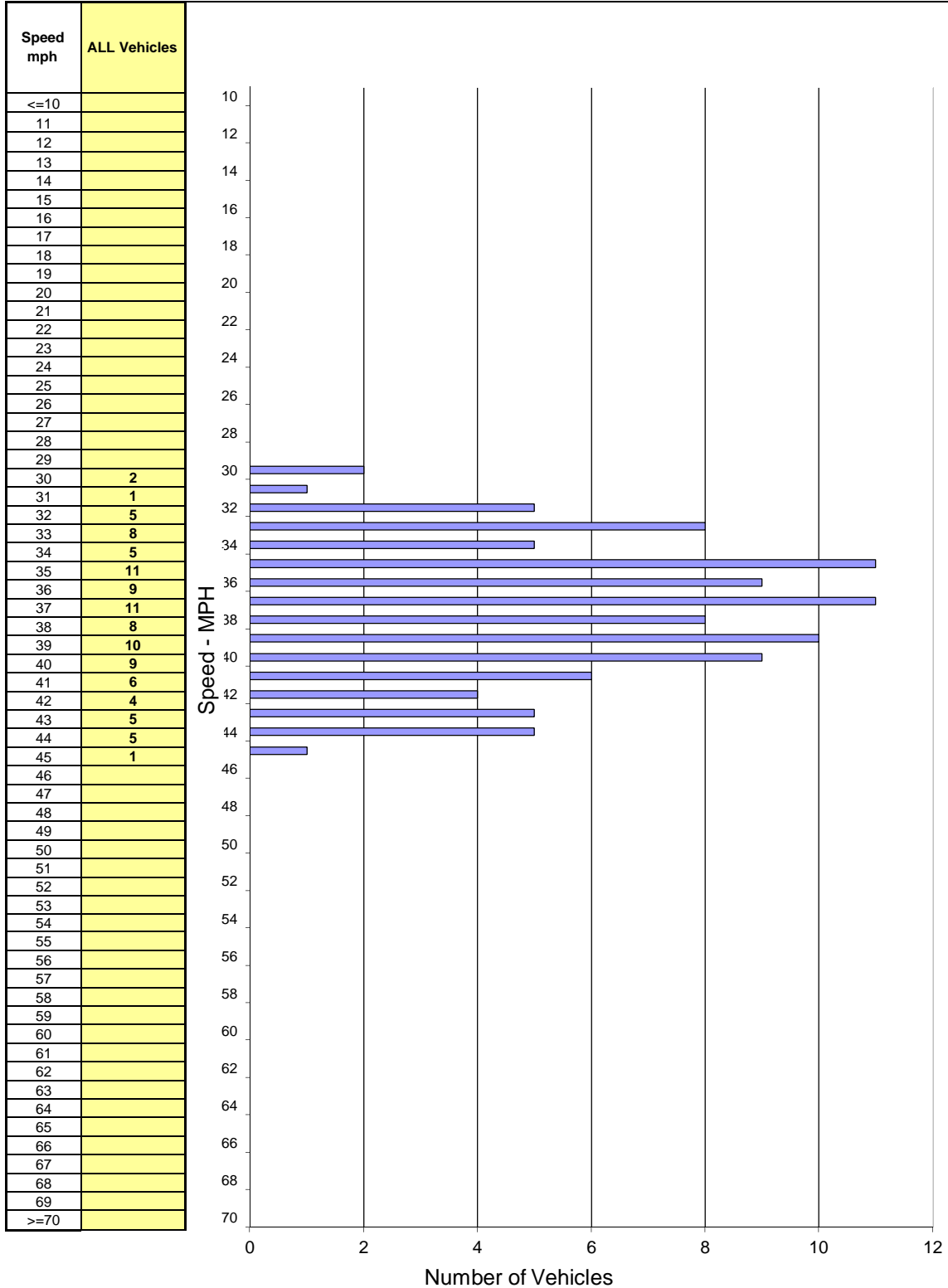
Location: Ford St bet. Sunset Dr & Garden Hill Dr

DAY: Monday

Posted Speed: 35 MPH

Project#: 15-6046-17.4

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	30 - 45	37 mph	41 mph	32 - 41	82	82%	3% / 3	15% / 15

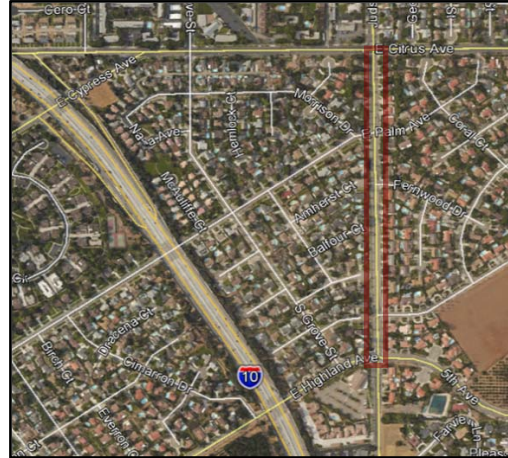
ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Grove Street from Highland Ave to Citrus Ave

Date: 3/16/2015 Time: 1:25 PM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	73
85th Percentile:	38
10 mph Pace:	29 - 38
Percent in Pace:	70%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	3
Annual Collision Rate:	1.0
Collision Rate (Per Million Vehicle Miles):	6.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,134
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	Lane lines unmarked

ROADWAY FACTORS

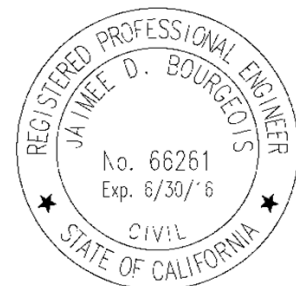
Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/16/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/16/2015

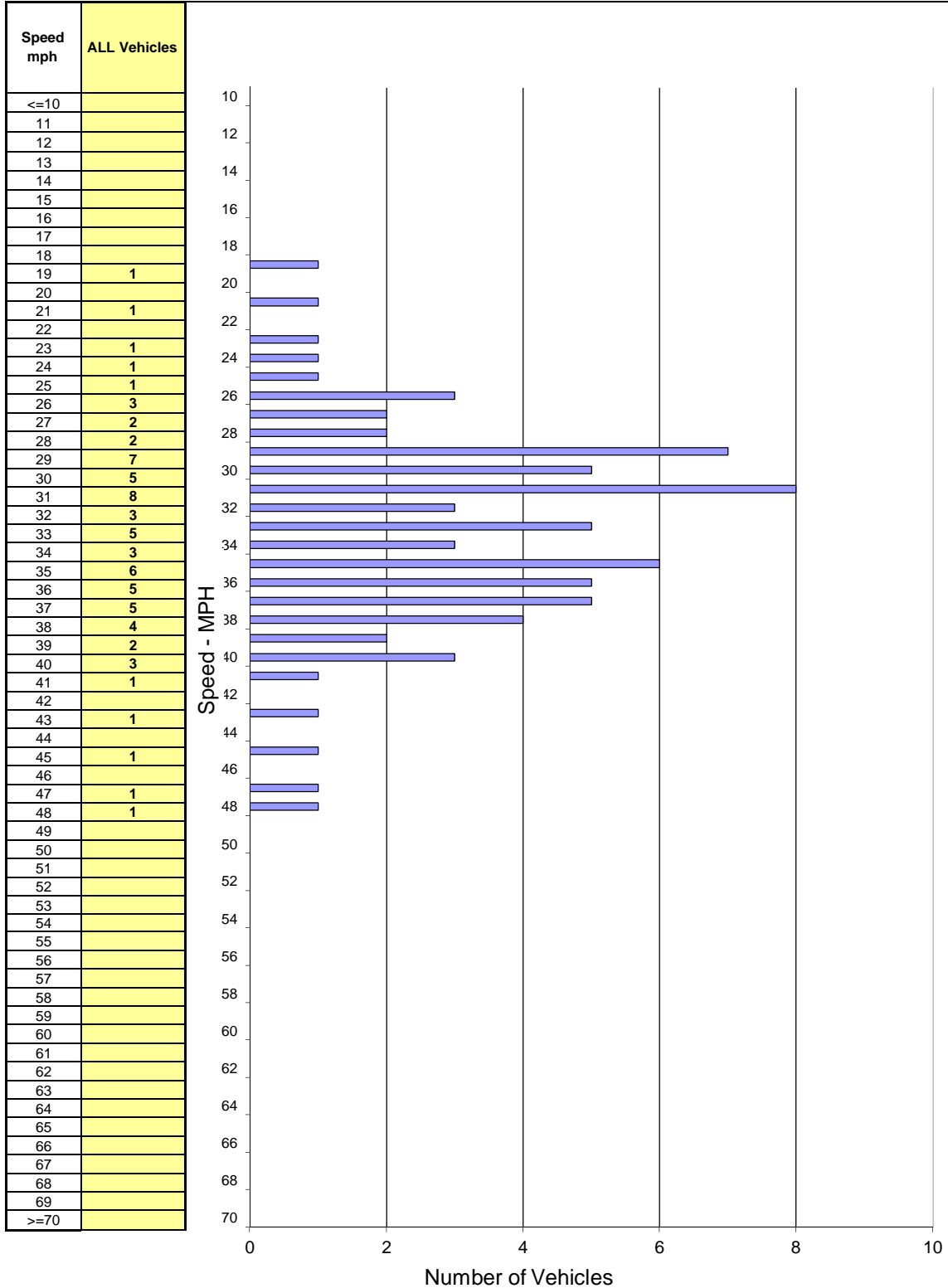
Location: Grove St bet. Highland Ave & Citrus Ave

DAY: Monday

Posted Speed: 30 MPH

Project#: 15-6046-18.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	73	19 - 48	33 mph	38 mph	29 - 38	51	70%	16% / 12	14% / 10

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Grove Street from Citrus Ave to Brockton Ave

Date: 3/16/2015 Time: 12:25 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA	
No. of Vehicles Surveyed:	100
85th Percentile:	37
10 mph Pace:	28 - 37
Percent in Pace:	78%
Posted Speed Limit:	30 mph

COLLISION HISTORY	
Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	2
Total Collisions:	5
Annual Collision Rate:	1.7
Collision Rate (Per Million Vehicle Miles):	1.9
Statewide Collision Rate:	2.95

TRAFFIC FACTORS	
Average Daily Traffic:	3,358
Width:	25'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Partial
Adjacent Land Use:	Residential, Institutional, Agricultural
Other:	Lane lines unmarked

ROADWAY FACTORS	
Length of Segment:	0.7 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS	
Recommended Speed Limit:	30
Speed Limit Change:	NO
Justification for 5 mph down:	Student housing and on-street parking resulting in high pedestrian activity with limited sidewalk
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/16/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/16/2015

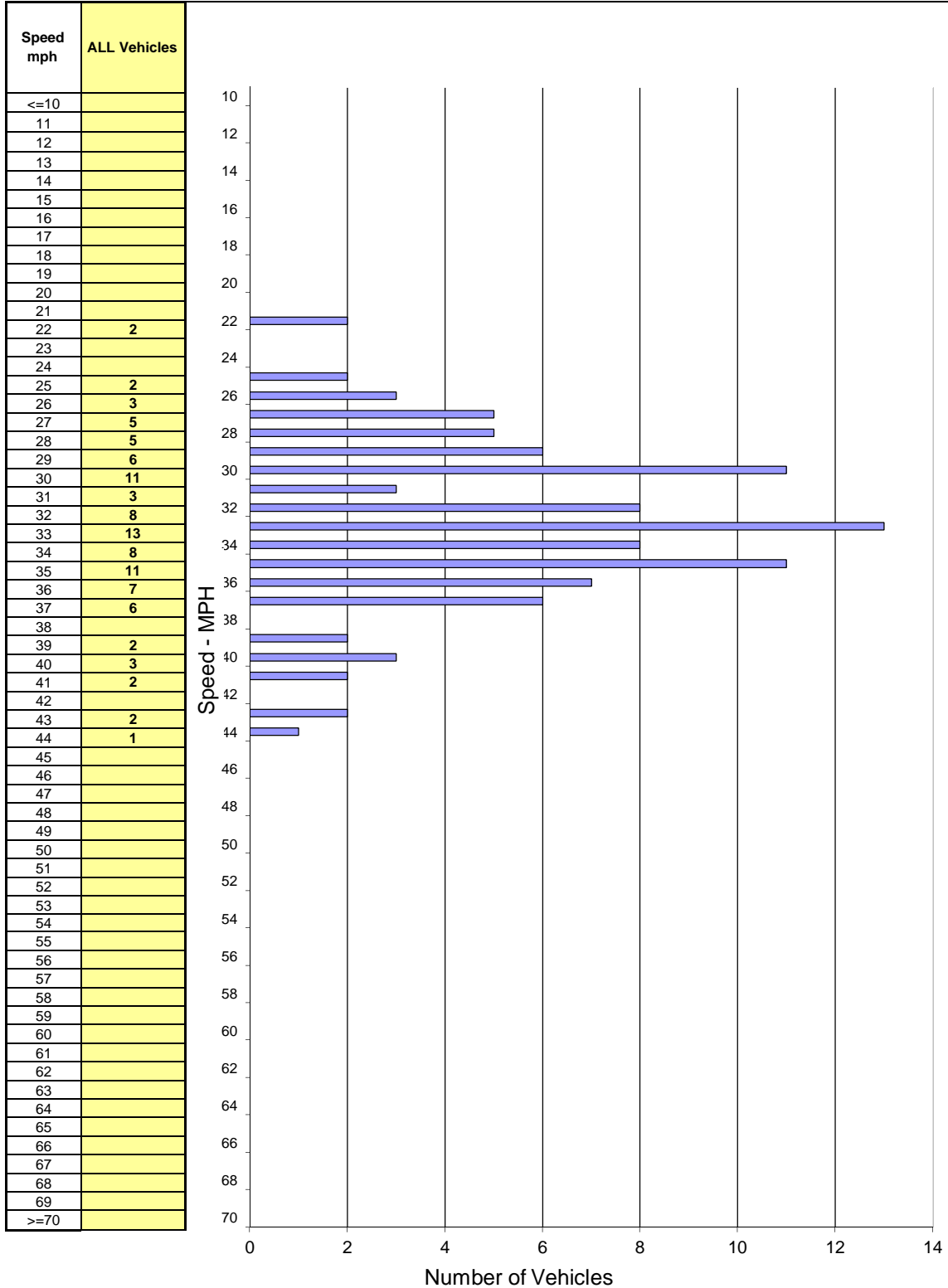
Location: Grove St Bet. Citrus Ave & Brockton St

DAY: Monday

Posted Speed: 30 MPH

Project#: 15-6046-18.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	22 - 44	33 mph	37 mph	28 - 37	78	78%	12% / 12	10% / 10

ENGINEERING AND TRAFFIC SURVEY

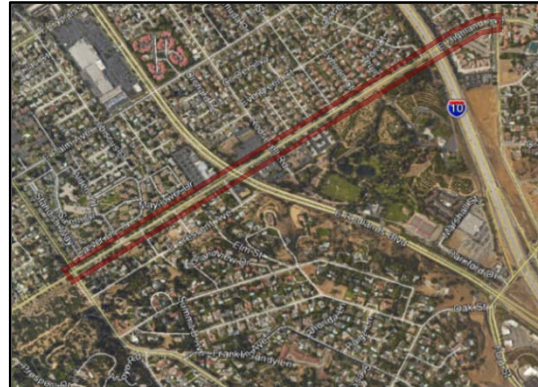
City of Redlands



Highland Avenue from Ford Street to Cajon Street

Date: 3/17/2015 Time: 10:40 AM

Recorded By: NDS Weather: Hazy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	47
10 mph Pace:	38 - 47
Percent in Pace:	77%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	2
Total Collisions:	4
Annual Collision Rate:	1.3
Collision Rate (Per Million Vehicle Miles):	0.7
Statewide Collision Rate:	1.3

TRAFFIC FACTORS

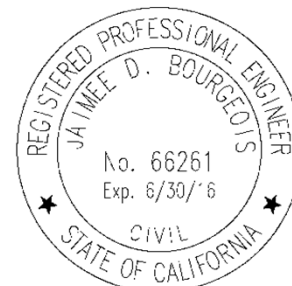
Average Daily Traffic:	4,876
Width:	52'
Lane Configuration:	3 Lanes, TWLTL
Traffic Control:	1 signal
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	No
On-Street Parking:	Partial
Adjacent Land Use:	Residential, Offices
Other:	w/o Redlands Blvd. Class 2 bike lanes, 2 lanes & TWLTL

ROADWAY FACTORS

Length of Segment:	1.0 Mile
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent-Good

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	NO
Justification for 5 mph down:	High density residential driveways, frequent bicyclists, TWLTL
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/17/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/17/2015

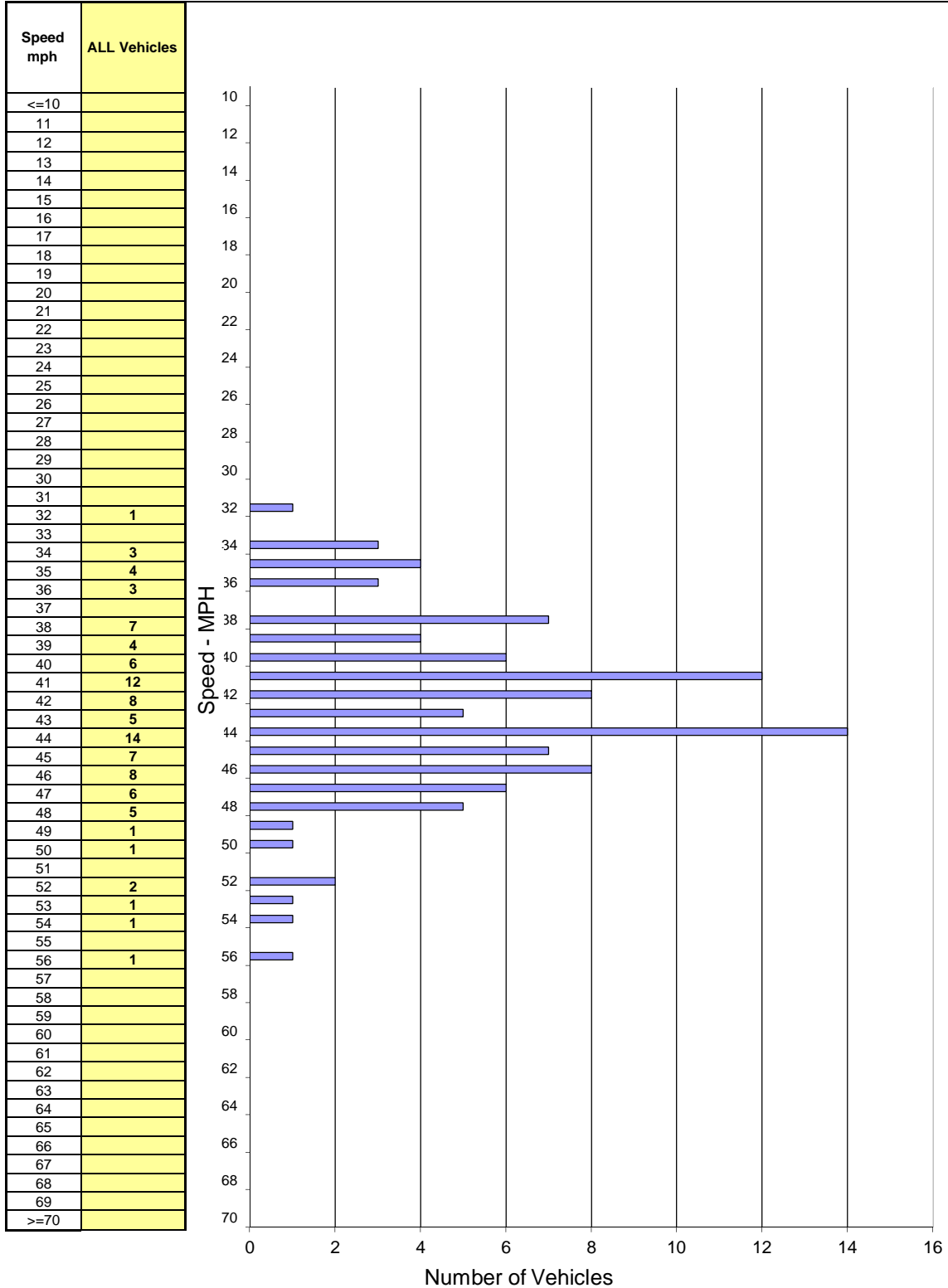
Location: Highland Ave Bet. Ford St & Cajon St

DAY: Tuesday

Posted Speed: 40 MPH

Project#: 15-6046-19.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	32 - 56	43 mph	47 mph	38 - 47	77	77%	11% / 11	12% / 12

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Highland Avenue from Cajon Street to San Mateo Street

Date: 3/17/2015 Time: 10:00 AM

Recorded By: NDS Weather: Hazy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	41
10 mph Pace:	31 - 40
Percent in Pace:	78%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	2
Total Collisions:	8
Annual Collision Rate:	2.7
Collision Rate (Per Million Vehicle Miles):	1.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	7,421
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Park
Other:	

ROADWAY FACTORS

Length of Segment:	1.0 Mile
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	High density residential driveways
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/17/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/17/2015

Location: Highland Ave Bet. Cajon St & San Mateo St

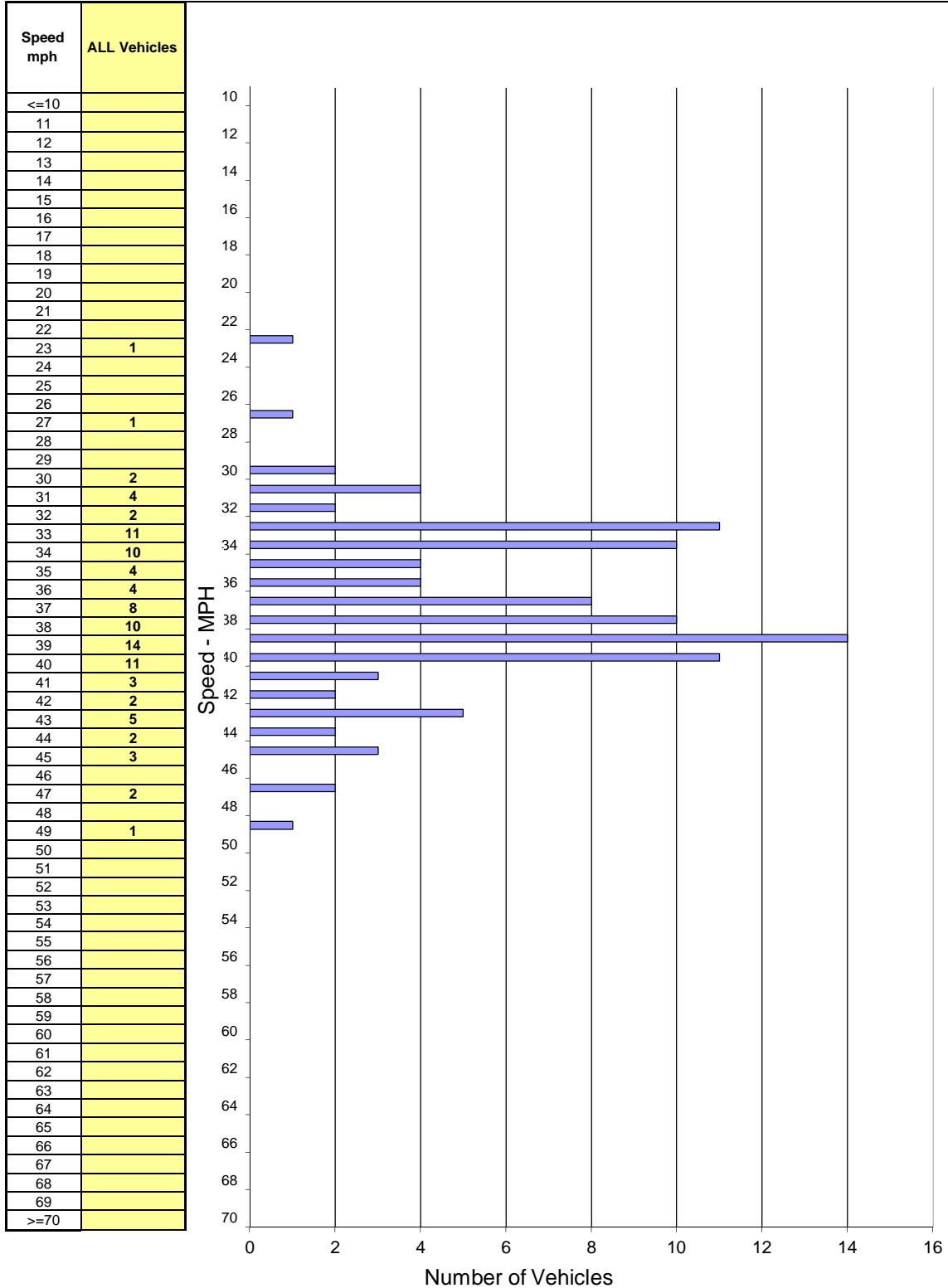
DAY: Tuesday

Posted Speed:

35 MPH

Project#: 15-6046-19.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	23 - 49	38 mph	41 mph	31 - 40	78	78%	4% / 4	18% / 18

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Highland Avenue from San Mateo Street to Serpentine Drive

Date: 3/23/2015 Time: 11:15 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	34
10 mph Pace:	25 - 34
Percent in Pace:	75%
Posted Speed Limit:	25 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,609
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

Length of Segment:	0.3 Miles
Vertical Curve:	Yes
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

Location: Highland Ave bet. San Mateo & Serpentine Dr

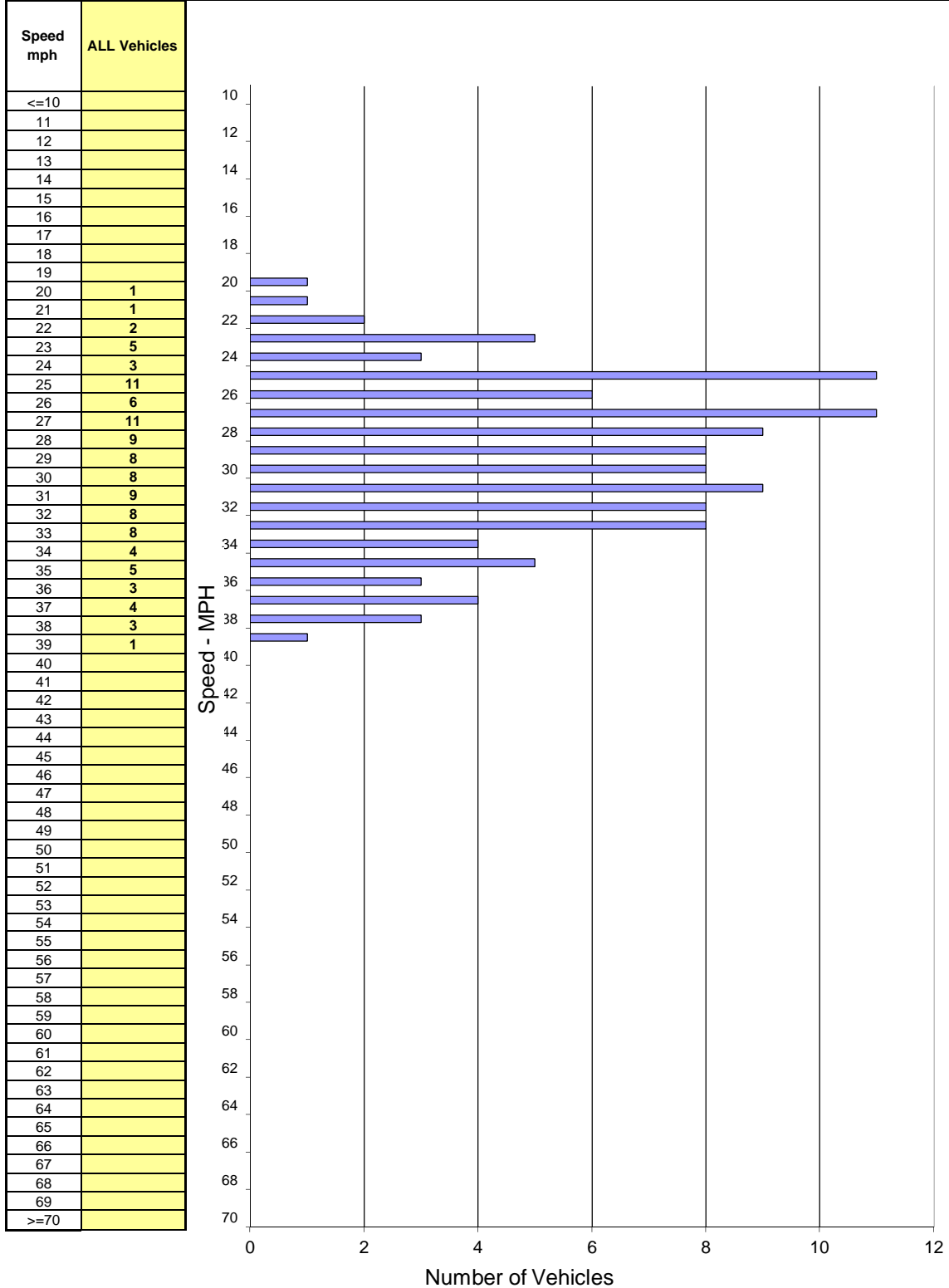
DAY: Monday

Posted Speed:

25 MPH

Project#: 15-6046-19.3

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	20 - 39	29 mph	34 mph	25 - 34	82	75%	10% / 12	15% / 16

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Judson Street from Citrus Ave to Colton Ave

Date: 3/23/2015

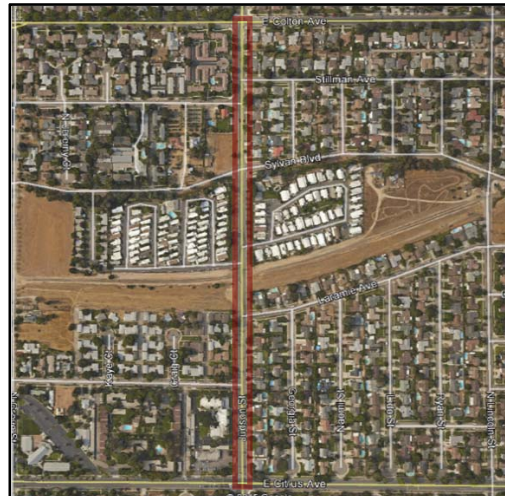
Time:

12:35 PM

Recorded By: NDS

Weather:

Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	116
85th Percentile:	43
10 mph Pace:	34 - 43
Percent in Pace:	78%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	8
Annual Collision Rate:	2.7
Collision Rate (Per Million Vehicle Miles):	2.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	6,209
Width:	64'
Lane Configuration:	2 Lanes, TWLTL
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

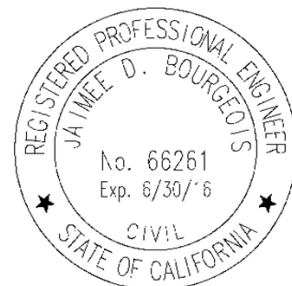
Length of Segment:	0.6 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

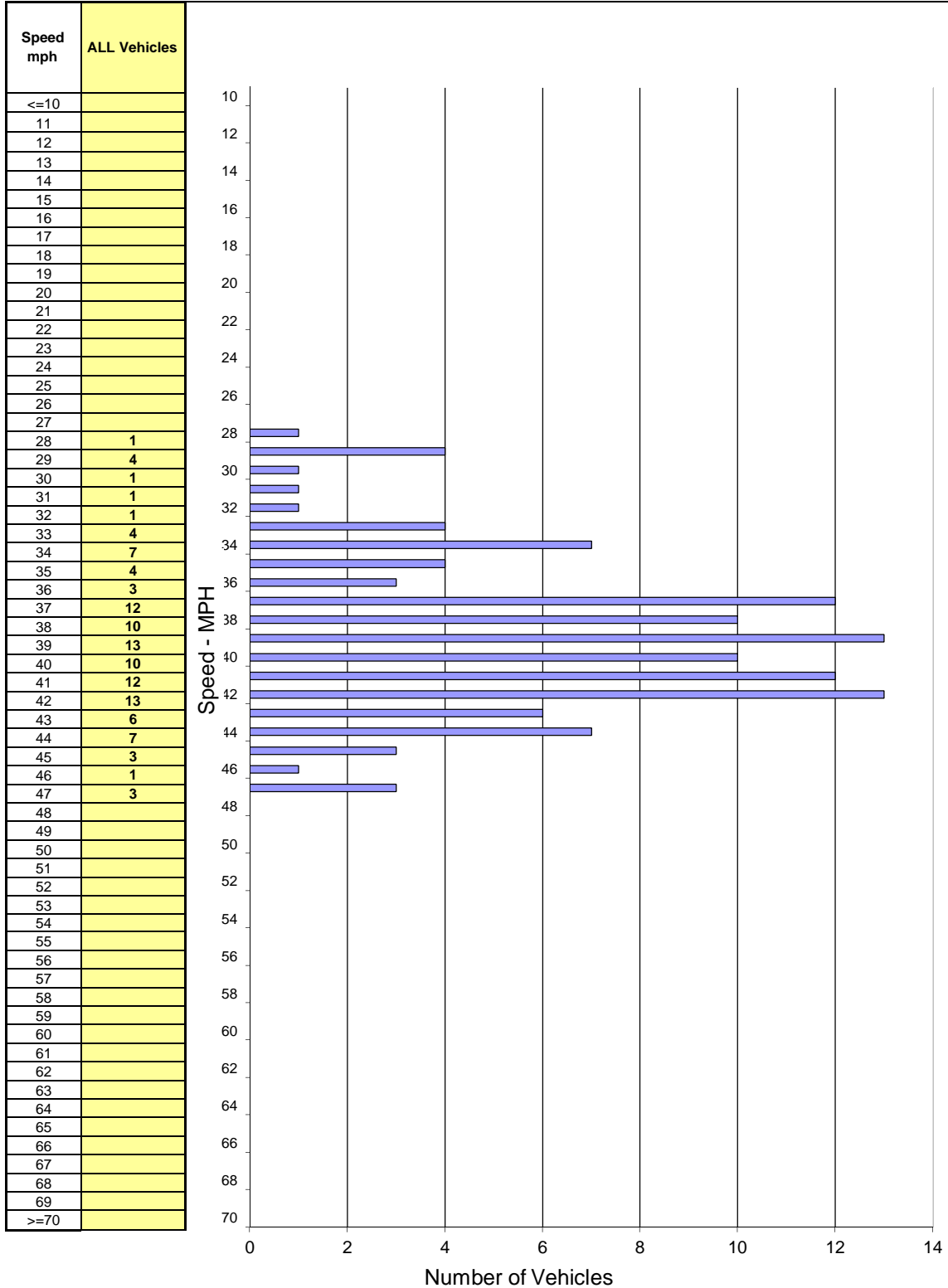
Location: Judson St bet. Citrus Ave & Colton Ave

DAY: Monday

Posted Speed: 40 MPH

Project#: 15-6046-20.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	116	28 - 47	39 mph	43 mph	34 - 43	90	78%	10% / 12	13% / 14

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Judson Street from Colton Ave to Lugonia Ave

Date: 3/23/2015

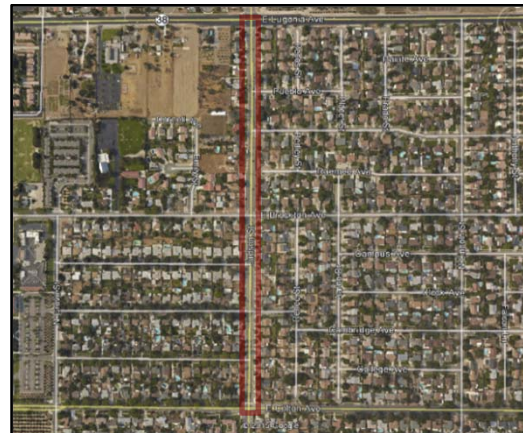
Time:

1:15 PM

Recorded By: NDS

Weather:

Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	41
10 mph Pace:	33 - 42
Percent in Pace:	85%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	6
Annual Collision Rate:	2.0
Collision Rate (Per Million Vehicle Miles):	2.7
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

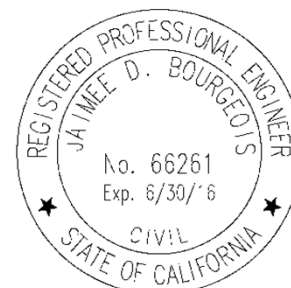
Average Daily Traffic:	5,080
Width:	64'
Lane Configuration:	2 Lanes, TWLTL
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both (gaps on west side)
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	High density residential driveways, frequent bicyclists, TWLTL
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

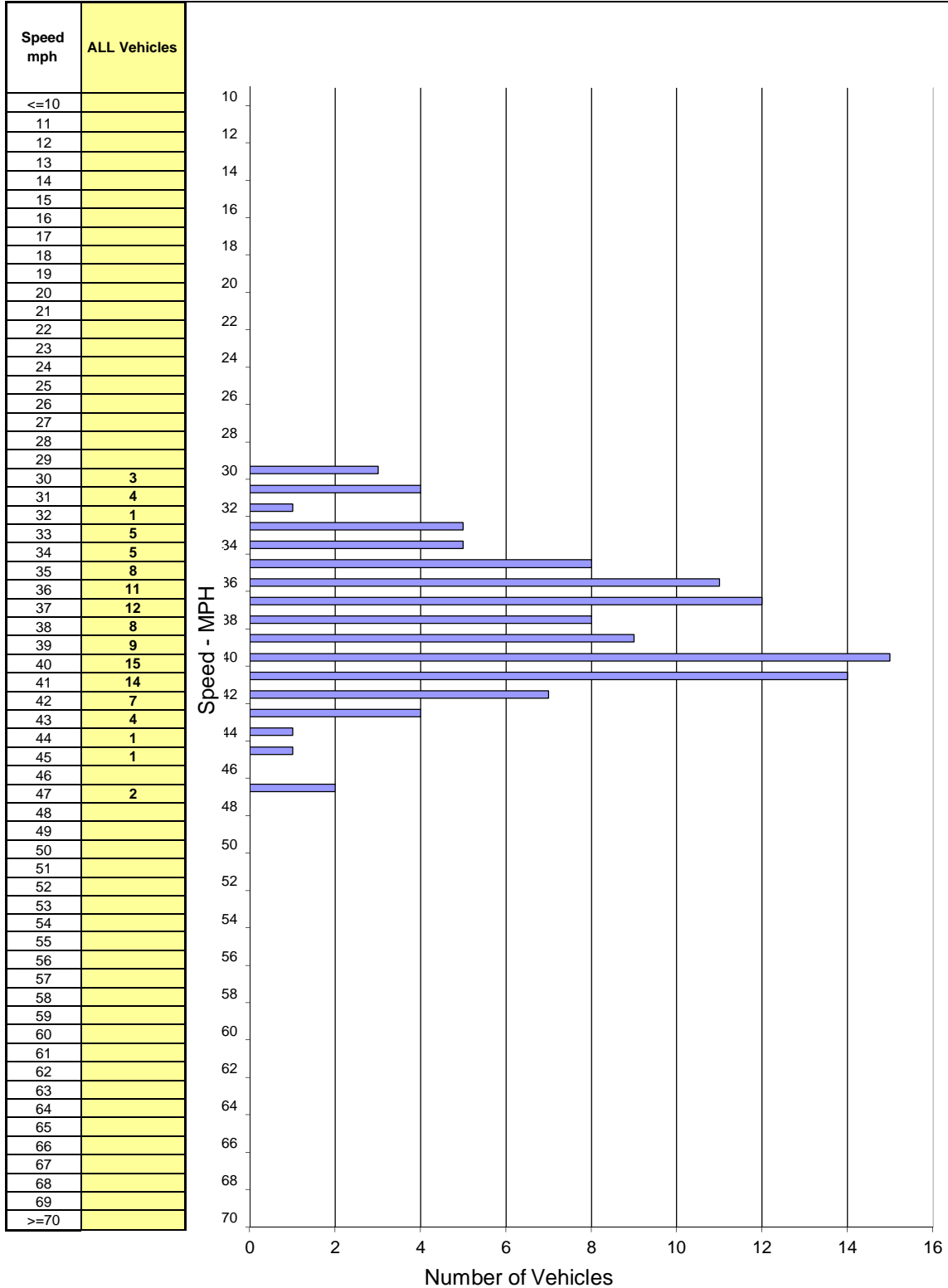
Location: Judson St bet. Colton Ave & Lugonia Ave

DAY: Monday

Posted Speed: 40 MPH

Project#: 15-6046-20.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	30 - 47	38 mph	41 mph	33 - 42	94	85%	7% / 8	8% / 8

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Judson Street from Lugonia Ave to Pioneer Ave

Date: 3/23/2015 Time: 11:02 AM

Recorded By: NDS Weather: Cloudy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	39
10 mph Pace:	30 - 39
Percent in Pace:	84%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	2
Annual Collision Rate:	0.7
Collision Rate (Per Million Vehicle Miles):	1.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	2,545
Width:	44'
Lane Configuration:	2 Lanes
Traffic Control:	2 stops
Mid-block Crosswalks:	No
Bike Facilities:	Class 2
Truck Route:	Yes
On-Street Parking:	Partial
Adjacent Land Use:	Residential, Institutional, Agricultural
Other:	Class 2 bike lanes & parking lane s/o San Bernardino; narrows n/o San Bernardino

ROADWAY FACTORS

Length of Segment:	0.7 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Limited
Sidewalks:	West side s/o Penn.; east side at school frontage
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair- Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

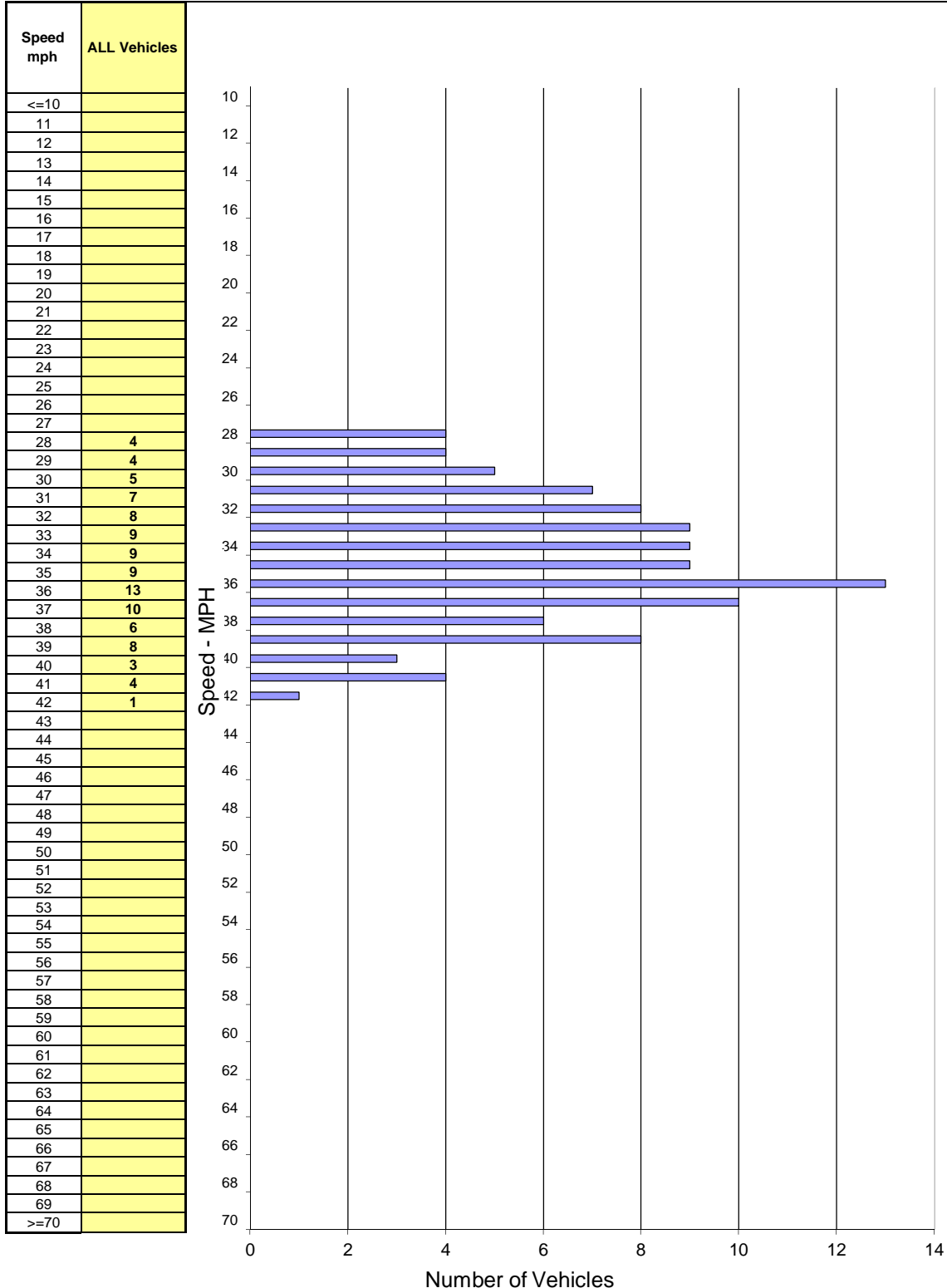
Location: Judson St bet. Lugonia Ave & Pioneer Ave

DAY: Monday

Posted Speed: 35 MPH

Project#: 15-6046-20.3

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	28 - 42	35 mph	39 mph	30 - 39	84	84%	8% / 8	8% / 8

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Live Oak Canyon Rd from Canyon Oaks Drive to 30306 Live Oak Canyon Road (Westbound)

Date: 3/23/2015 Time: 12:25 PM

Recorded By: NDS Weather: Cloudy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	65
85th Percentile:	56
10 mph Pace:	46 - 55
Percent in Pace:	78%
Posted Speed Limit:	50 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	4,368
Width:	26'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	No
Adjacent Land Use:	Agricultural, Residential
Other:	

ROADWAY FACTORS

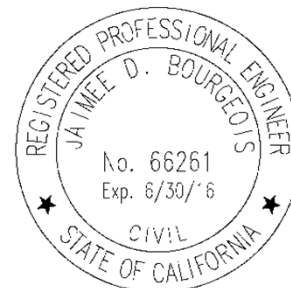
Length of Segment:	1.1 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	None
Driveways:	Yes
Street Lighting:	No
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	55
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

Location: Live Oak Canyon Rd .3 miles E/O San Timoteo Canyon Rd

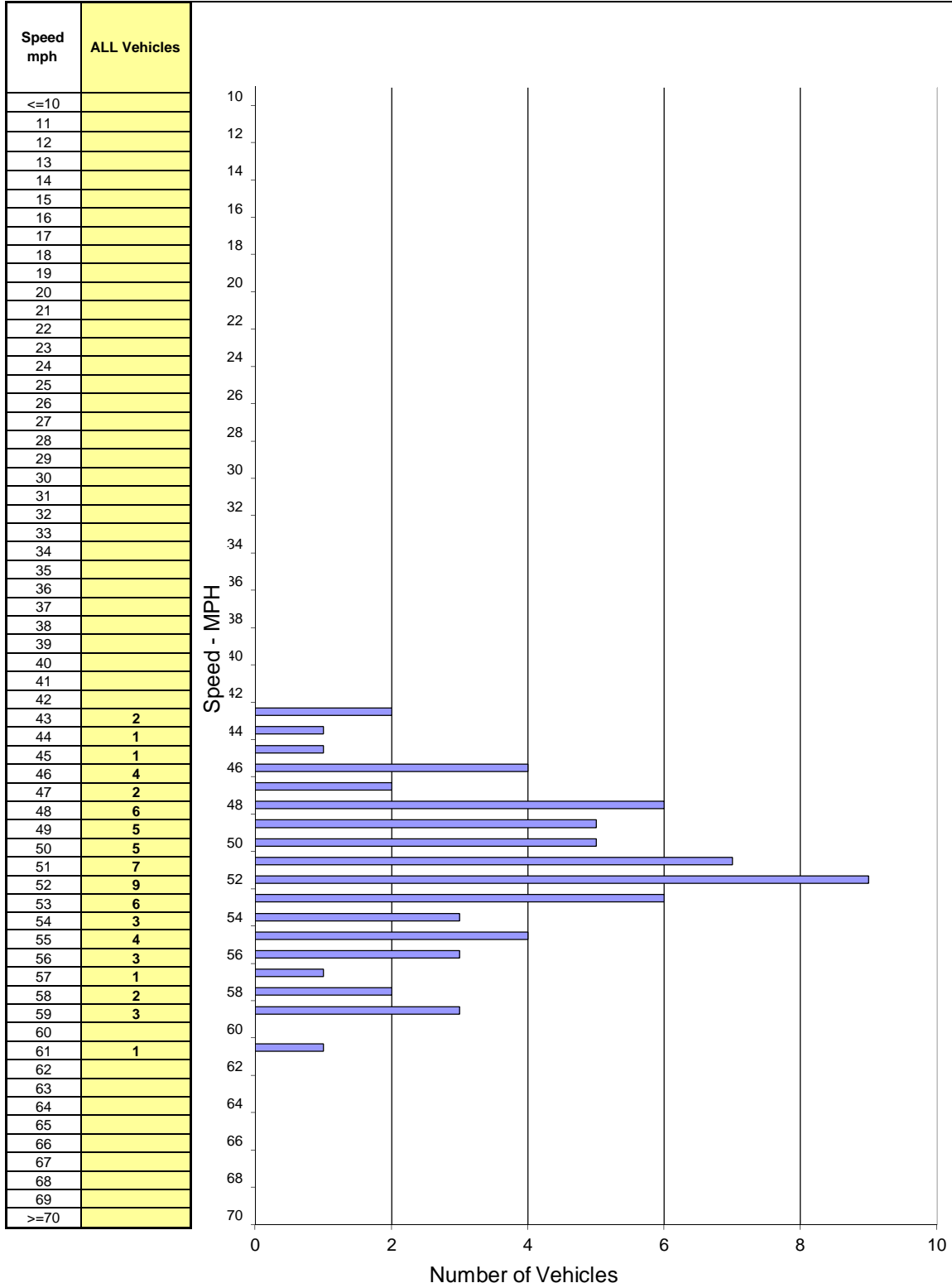
DAY: Monday

Posted Speed:

50 MPH

Project#: 15-6046-21.1

Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	65	43 - 61	51 mph	56 mph	46 - 55	51	78%	6% / 4	16% / 10

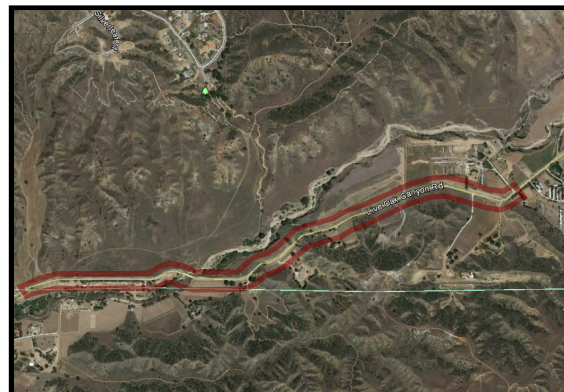
ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Live Oak Canyon Rd from 30320 Live Oak Canyon Road to 32036 Live Oak Canyon Road

Date: 3/23/2015 Time: 1:40 PM

Recorded By: NDS Weather: Sunny



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	56
10 mph Pace:	50 - 59
Percent in Pace:	87%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	0.1
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	4,501
Width:	26'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	No
Adjacent Land Use:	Agricultural, Residential
Other:	

ROADWAY FACTORS

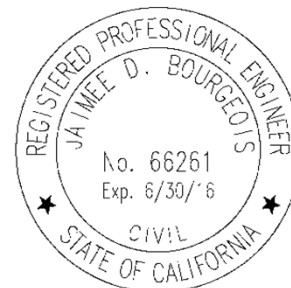
Length of Segment:	1.5 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good, some limited spots
Sidewalks:	None
Driveways:	Yes
Street Lighting:	No
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	55
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

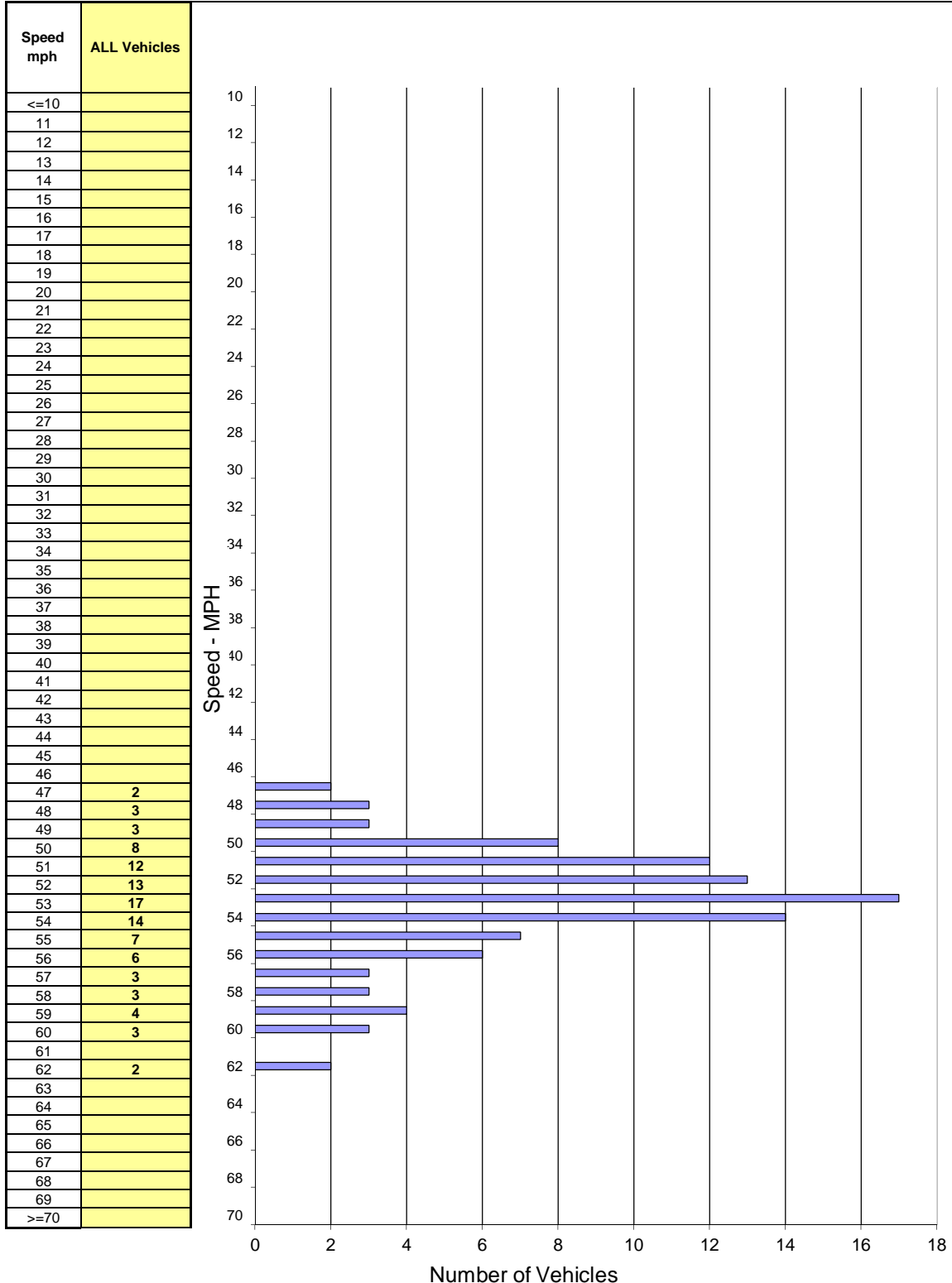
Location: Live Oak Canyon Rd 1300 ft W/O Bridge

DAY: Monday

Posted Speed: 45 MPH

Project#: 15-6046-21.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	47 - 62	53 mph	56 mph	50 - 59	87	87%	8% / 8	5% / 5

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Lugonia Avenue from 1500' w/o Research Ave to California St

Date: 3/23/2015 Time: 3:36 PM

Recorded By: NDS Weather: Sunny



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	52
10 mph Pace:	42 - 51
Percent in Pace:	74%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	0.4
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	2,695
Width:	54'
Lane Configuration:	2-4 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Agriculture, Residential, Office
Other:	

ROADWAY FACTORS

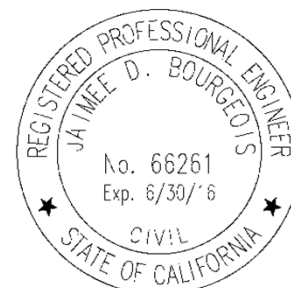
Length of Segment:	0.9 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair-Good

CONCLUSIONS

Recommended Speed Limit:	50
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

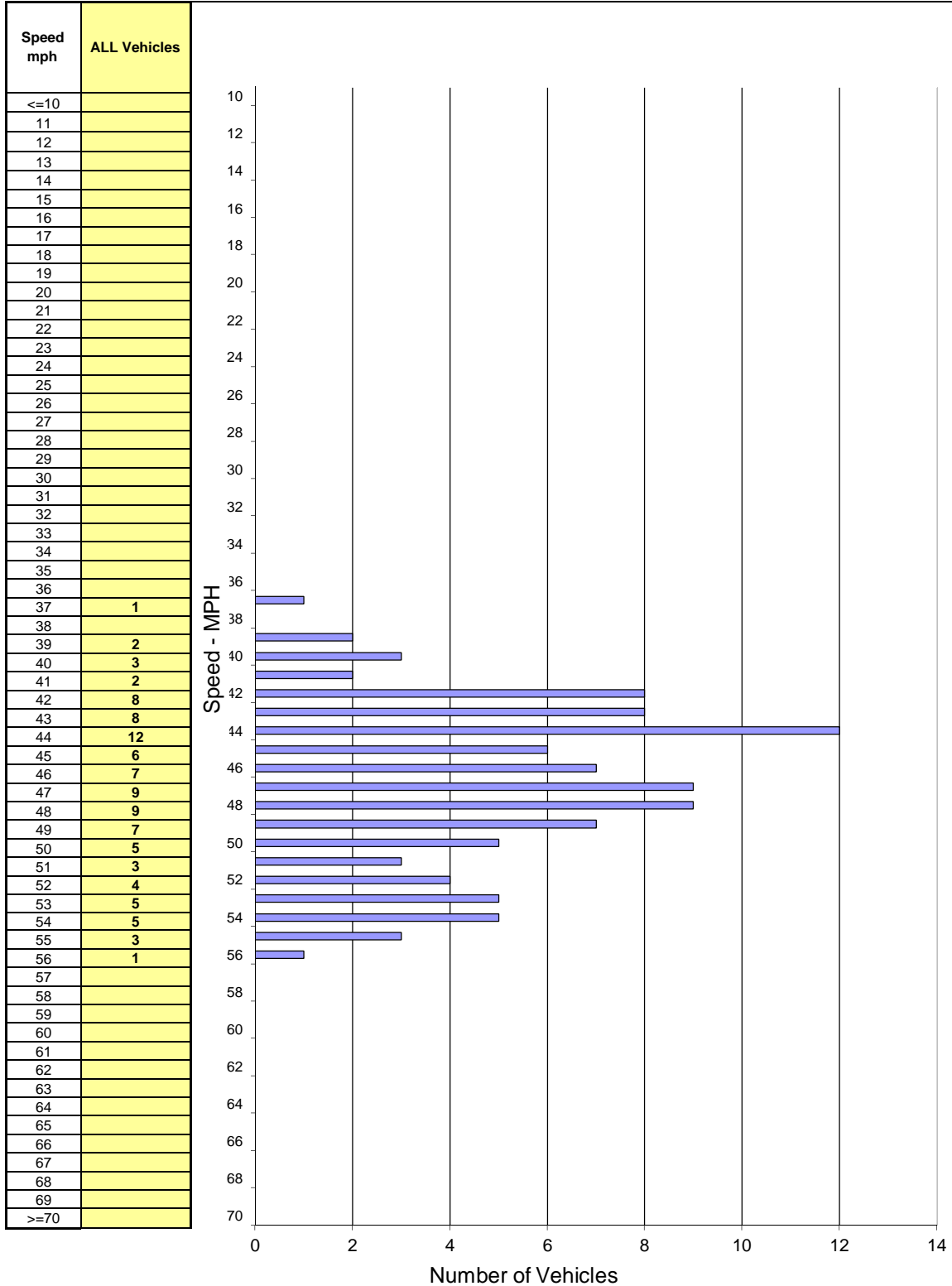
Location: Lugonia Ave 1500 ft W/O Research Ave to California St

DAY: Monday

Posted Speed: 45 MPH

Project#: 15-6046-22.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	37 - 56	47 mph	52 mph	42 - 51	74	74%	8% / 8	18% / 18

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Lugonia Avenue from California St to Alabama St (Eastbound)

Date: 4/8/2015 Time: 1:30 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	50
85th Percentile:	38
10 mph Pace:	30 - 39
Percent in Pace:	80%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	3
Total Collisions:	15
Annual Collision Rate:	5.0
Collision Rate (Per Million Vehicle Miles):	1.9
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	7,400
Width:	40'
Lane Configuration:	2-4 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Partial
Adjacent Land Use:	Commerical, Civic, Agricultural
Other:	4 Lanes adjacent to commerical

ROADWAY FACTORS

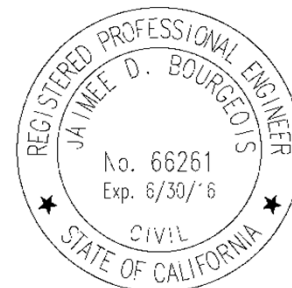
Length of Segment:	1.0 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/8/2022



Spot Speed Study

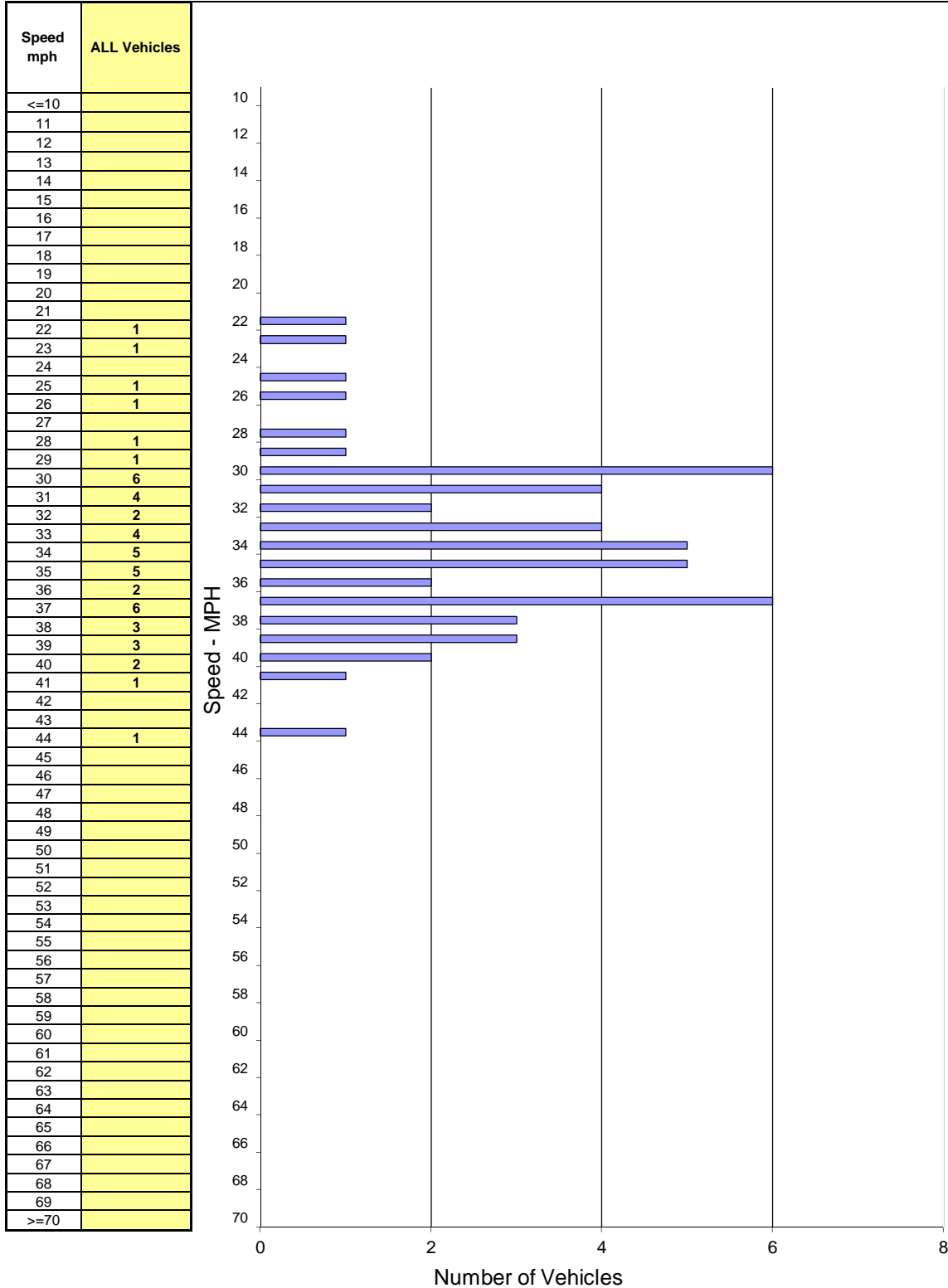
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/8/2015
DAY: Wednesday

Location: Lugonia Ave Bet California St & Alabama St
Posted Speed: 45 MPH Project#: 15-6046-22.2

Eastbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	50	22 - 44	34 mph	38 mph	30 - 39	40	80%	12% / 6	8% / 4

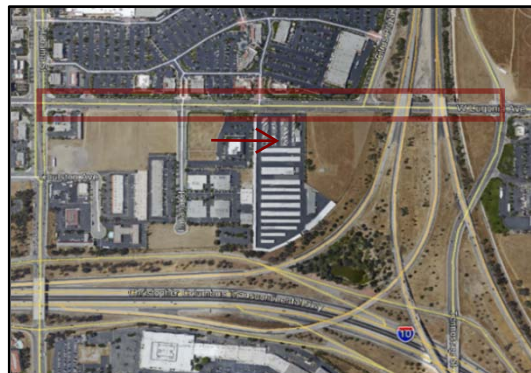
ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Lugonia Avenue from Alabama St to Tennessee St (Eastbound)

Date: 4/8/2015 Time: 2:00 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	50
85th Percentile:	35
10 mph Pace:	27 - 36
Percent in Pace:	84%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	5
Total Collisions:	13
Annual Collision Rate:	4.3
Collision Rate (Per Million Vehicle Miles):	1.4
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	17,019
Width:	64'
Lane Configuration:	4 Lanes
Traffic Control:	3 signals
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	No
Adjacent Land Use:	Commercial
Other:	

ROADWAY FACTORS

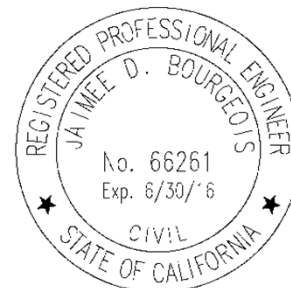
Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/8/2022



Spot Speed Study

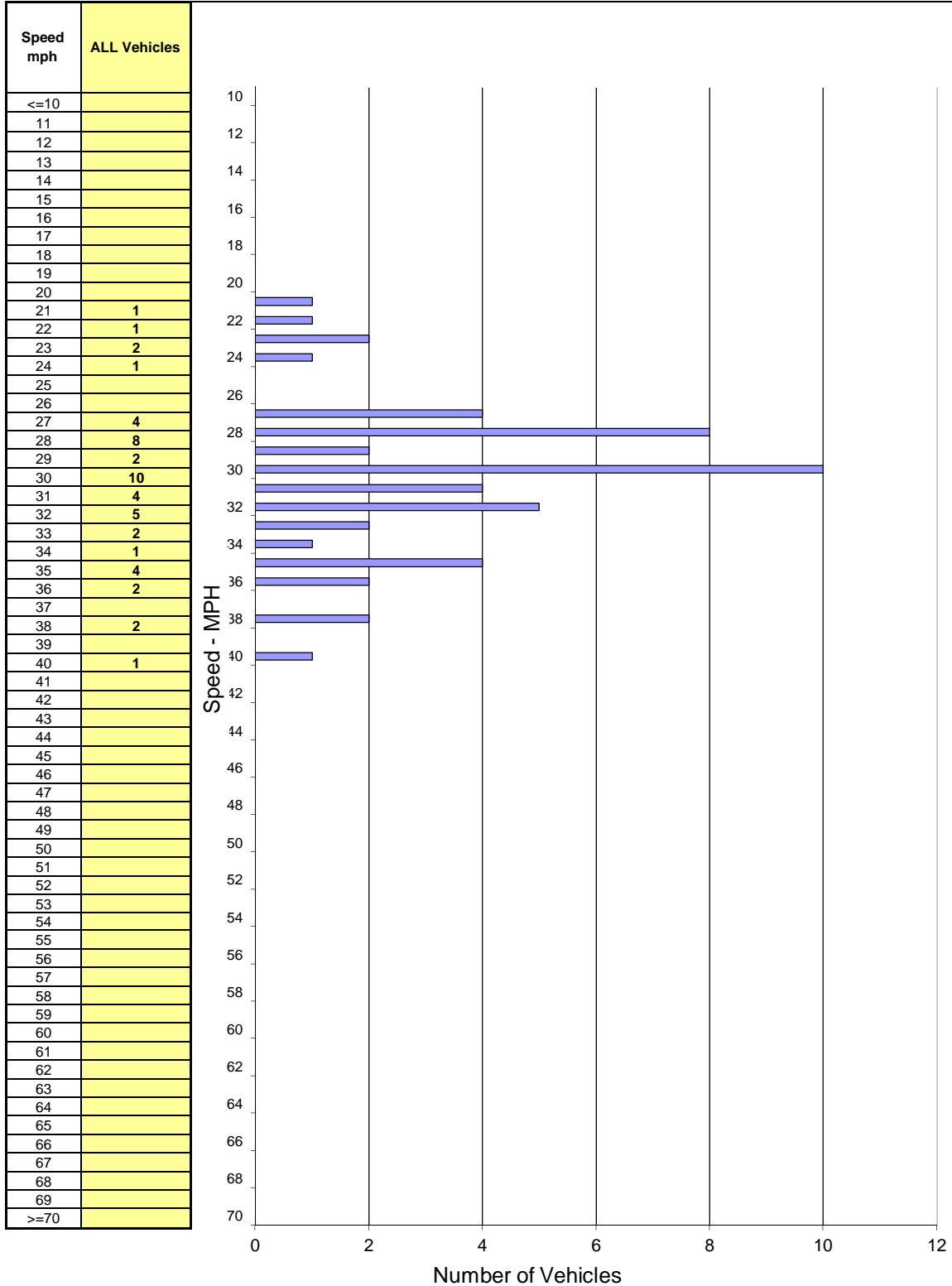
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/8/2015
DAY: Wednesday

Location: Lugonia Ave Bet Alabama St & Tennessee St
Posted Speed: 40 MPH Project#: 15-6046-22.3

Eastbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	50	21 - 40	30 mph	35 mph	27 - 36	42	84%	10% / 5	6% / 3

ENGINEERING AND TRAFFIC SURVEY

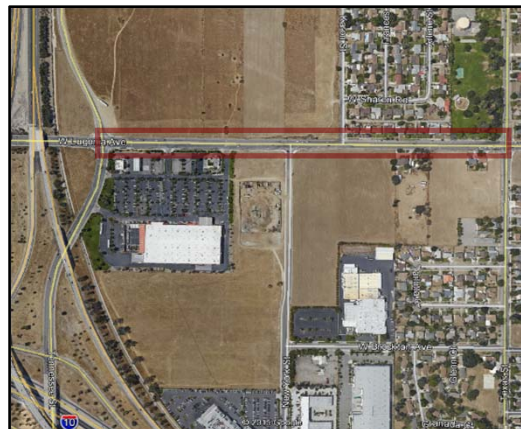
City of Redlands



Lugonia Avenue from Tennessee St to Texas St

Date: 5/26/2015 Time: 10:40 AM

Recorded By: NDS Weather: Cloudy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	38
10 mph Pace:	28 - 37
Percent in Pace:	69%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	4
Total Collisions:	8
Annual Collision Rate:	2.7
Collision Rate (Per Million Vehicle Miles):	1.0
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	17,980
Width:	64'
Lane Configuration:	2-4 Lanes
Traffic Control:	2 signals
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Partial
Adjacent Land Use:	Commercial, Residential, Vacant
Other:	

ROADWAY FACTORS

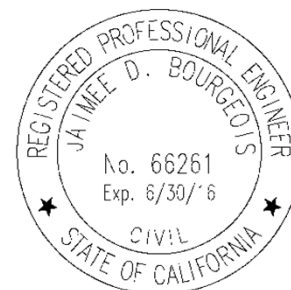
Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 5/26/2022



Spot Speed Study

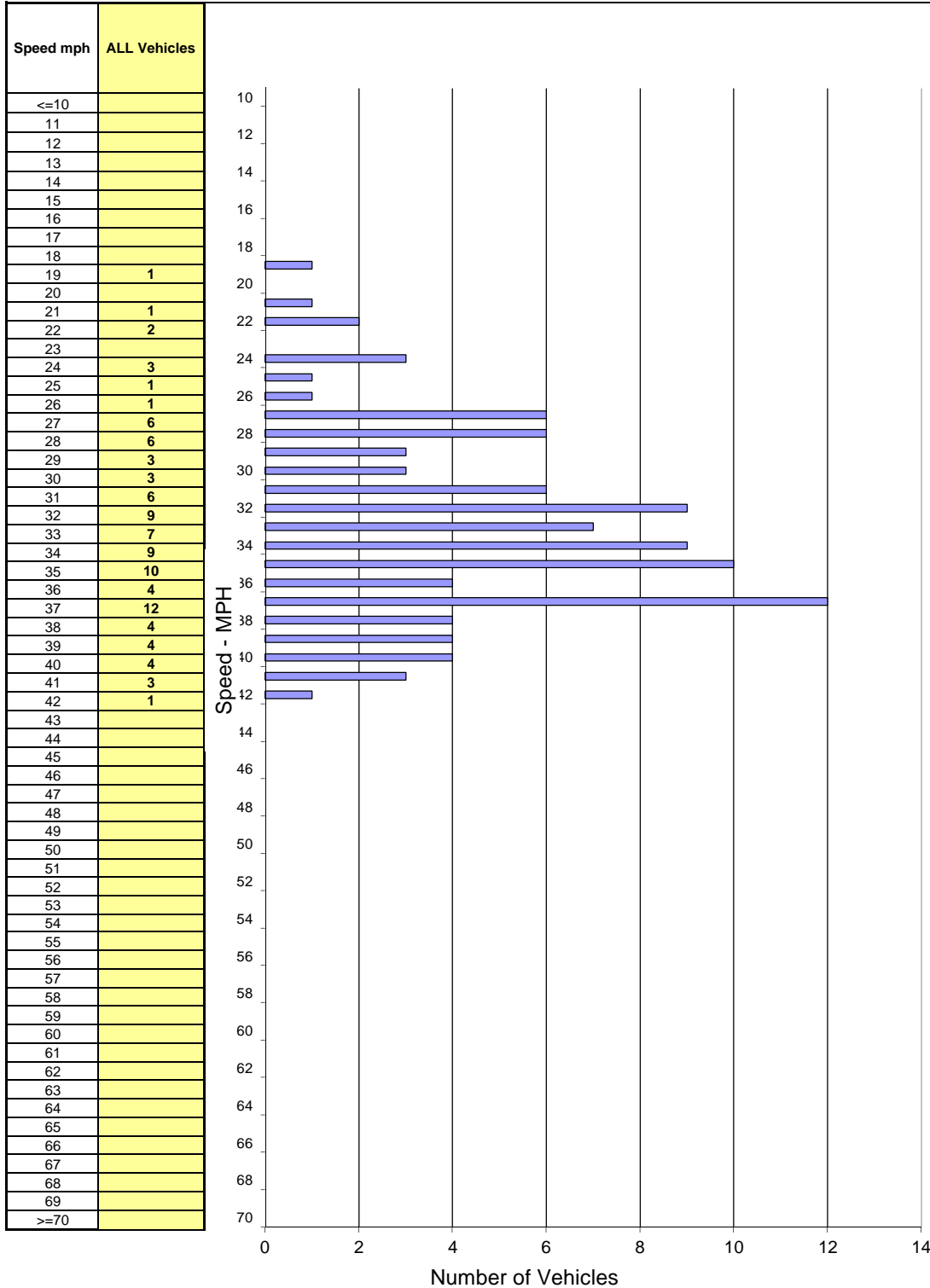
Prepared by: National Data & Surveying Services

City of Redlands

WEATHER: **Cloudy**
 DATE: **5/26/2015**
 DAY: **Tuesday**
 TIME: **10:40 AM**

Location: **Lugonia Ave bet. Tennessee St & Texas St**
 Posted Speed: **45 MPH** Project#: **15-6083-22.4**

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	19 - 42	34 mph	38 mph	28 - 37	69	69%	15% / 15	16% / 16

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Lugonia Avenue from Texas St to Orange St

Date: 3/23/2015 Time: 2:45 PM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	112
85th Percentile:	45
10 mph Pace:	36 - 45
Percent in Pace:	83%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	9
Annual Collision Rate:	3.0
Collision Rate (Per Million Vehicle Miles):	1.1
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	14,959
Width:	64'
Lane Configuration:	4 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	

ROADWAY FACTORS

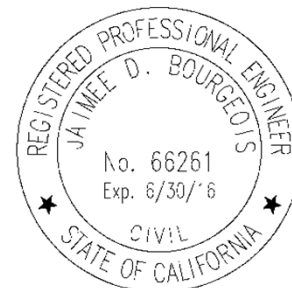
Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	NO
Justification for 5 mph down:	High density residential driveways

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/23/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/23/2015

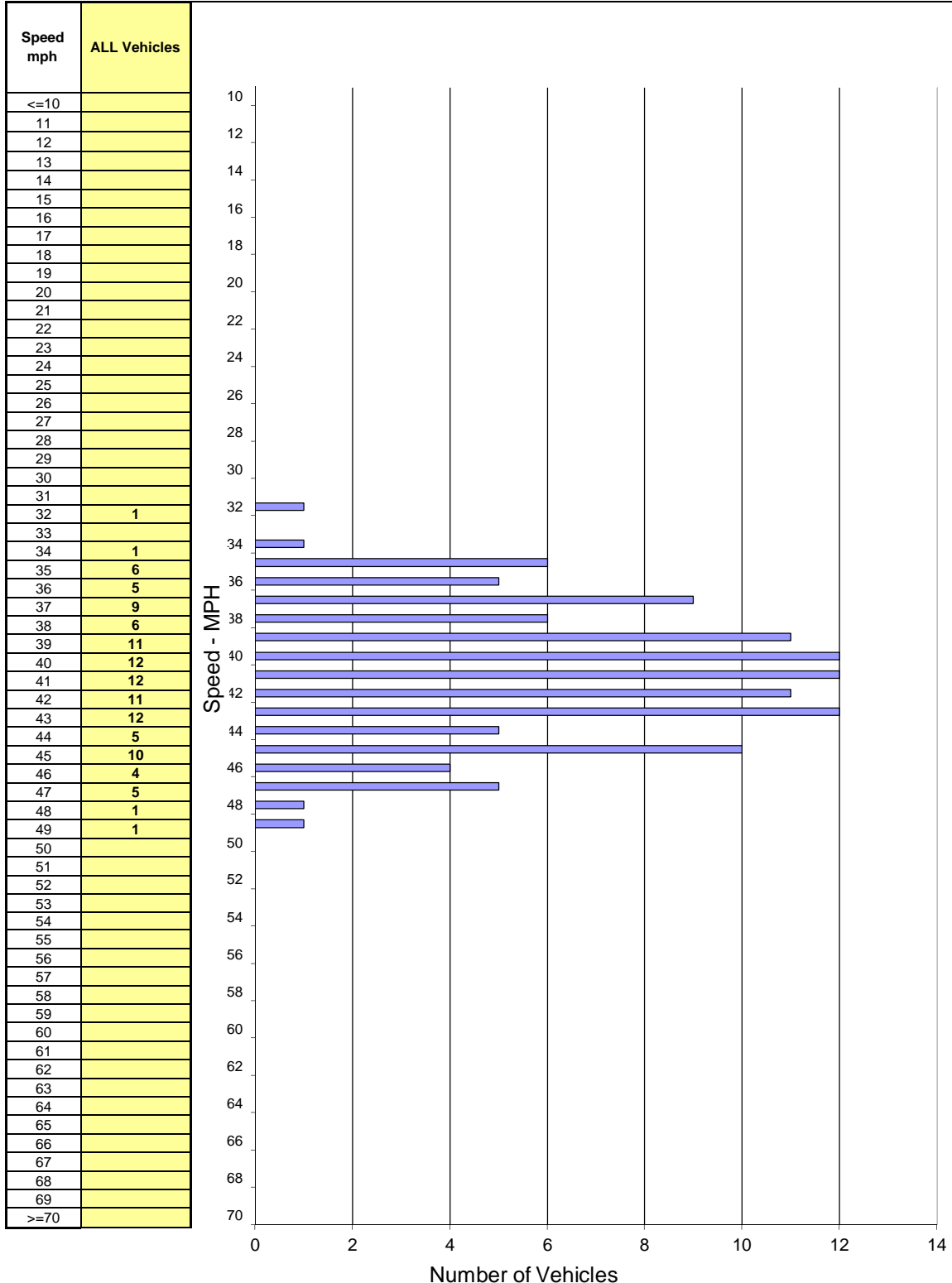
Location: Lugonia Ave bet. Texas St & Orange St

DAY: Monday

Posted Speed: 40 MPH

Project#: 15-6046-22.5

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	112	32 - 49	41 mph	45 mph	36 - 45	93	83%	7% / 8	10% / 11

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Mariposa Drive from Wabash Avenue to Country Club Drive

Date: 3/27/2015 Time: 12:24 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	68
85th Percentile:	40
10 mph Pace:	30 - 39
Percent in Pace:	66%
Posted Speed Limit:	25 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	461
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	Lane lines unmarked

ROADWAY FACTORS

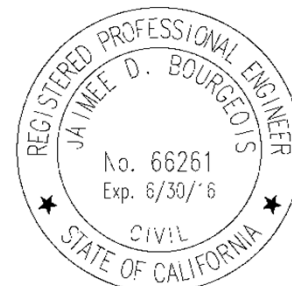
Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	High density residential driveways

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

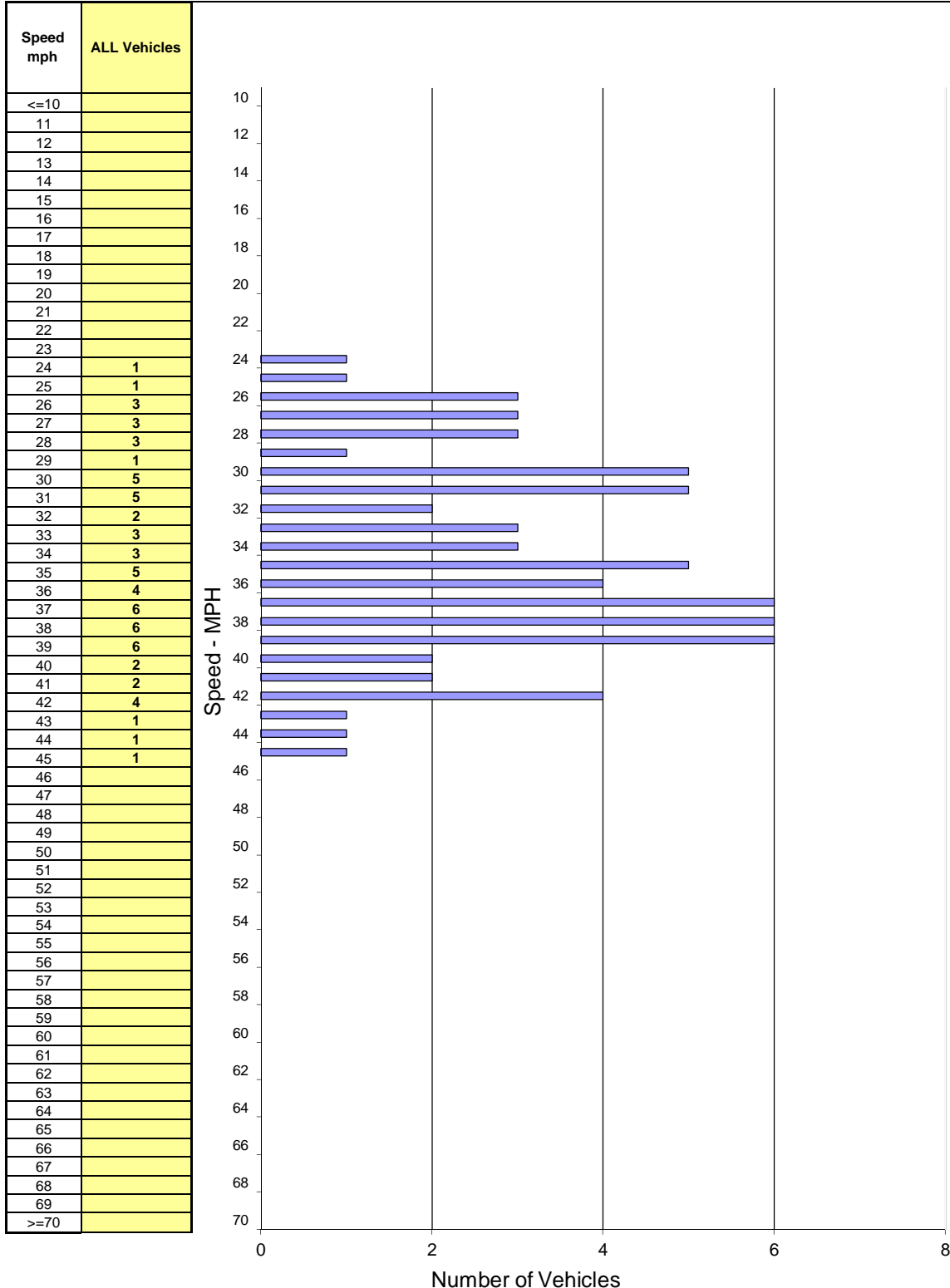
Location: Mariposa Dr bet. Wabash Ave & Country Club Dr

DAY: Friday

Posted Speed: 25 MPH

Project#: 15-6046-23.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	68	24 - 45	35 mph	40 mph	30 - 39	45	66%	17% / 12	17% / 11

ENGINEERING AND TRAFFIC SURVEY

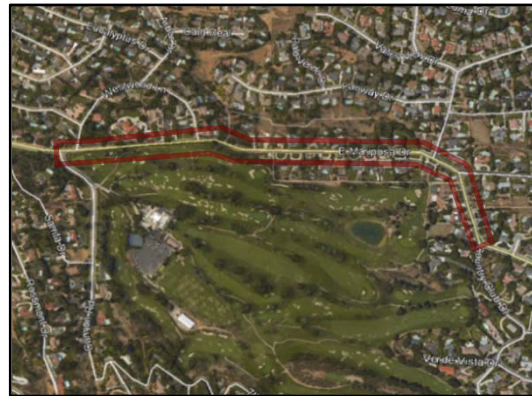
City of Redlands



Mariposa Drive from Country Club Dr to Garden St

Date: 3/27/2015 Time: 2:33 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	40
10 mph Pace:	33 - 42
Percent in Pace:	78%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	2,464
Width:	30'-40'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Country Club
Other:	

ROADWAY FACTORS

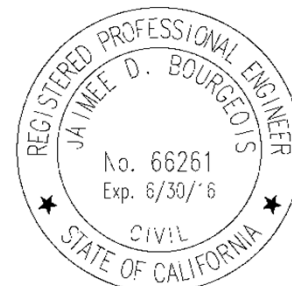
Length of Segment:	0.6 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	None
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor-Good

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	High density residential driveways and no sidewalks

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

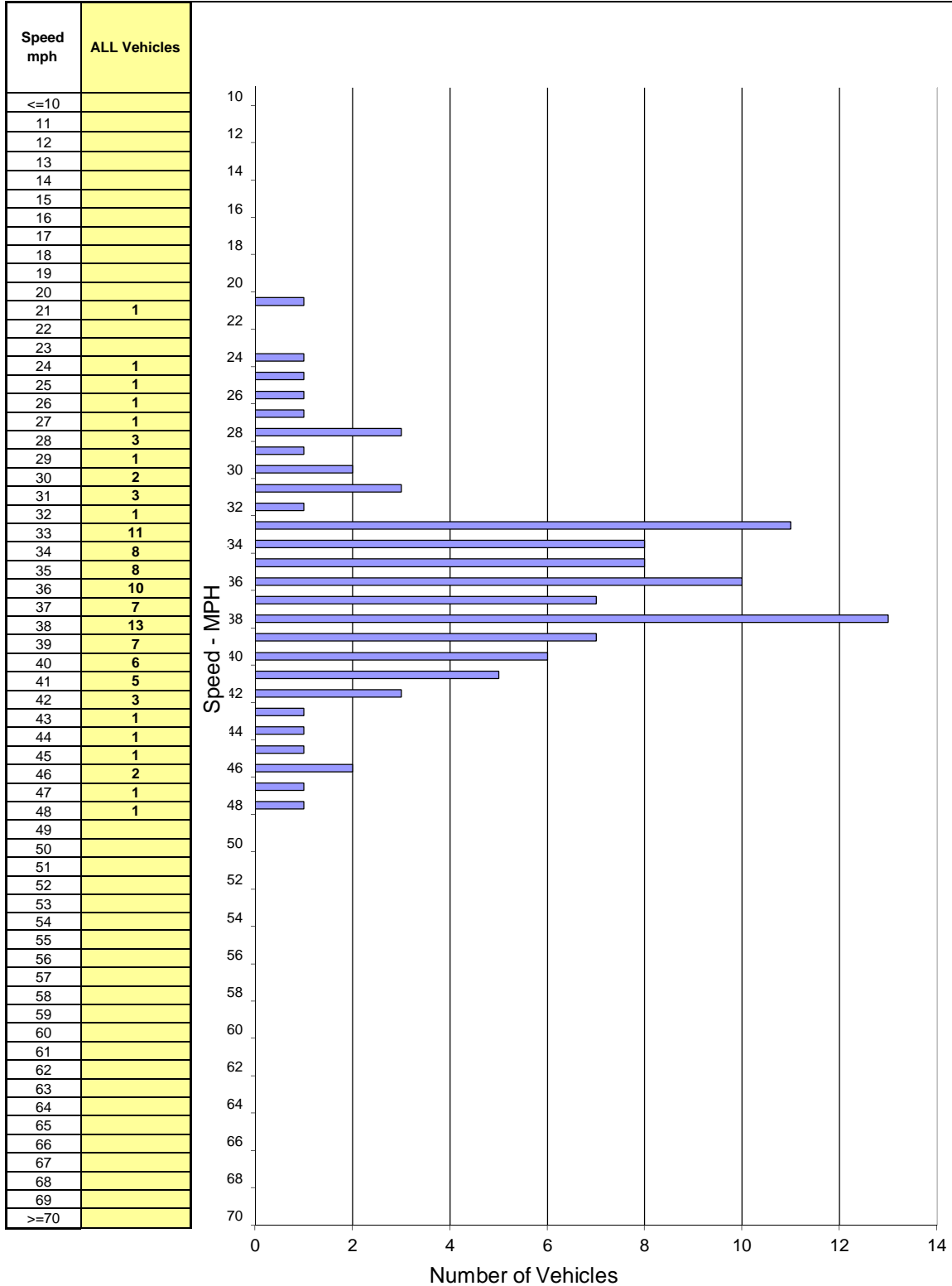
Location: Mariposa Dr bet. Country Club Dr & Garden St

DAY: Friday

Posted Speed: 35 MPH

Project#: 15-6046-23.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	21 - 48	36 mph	40 mph	33 - 42	78	78%	15% / 15	7% / 7

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Mariposa Drive from Halsey St to Dwight St

Date: 4/3/2015

Time:

2:00 PM

Recorded By: NDS

Weather:

Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	61
85th Percentile:	35
10 mph Pace:	25 - 34
Percent in Pace:	70%
Posted Speed Limit:	20 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

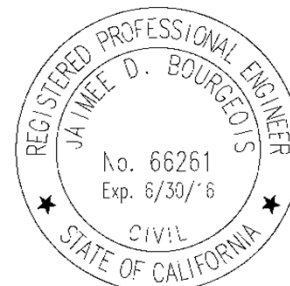
Average Daily Traffic:	161
Width:	30'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	No
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

Length of Segment:	0.3 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Limited
Sidewalks:	None
Driveways:	Yes
Street Lighting:	No
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	YES
Justification for 5 mph down:	High density residential driveways w/ limited visibility and no sidewalks
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	4/3/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/3/2015

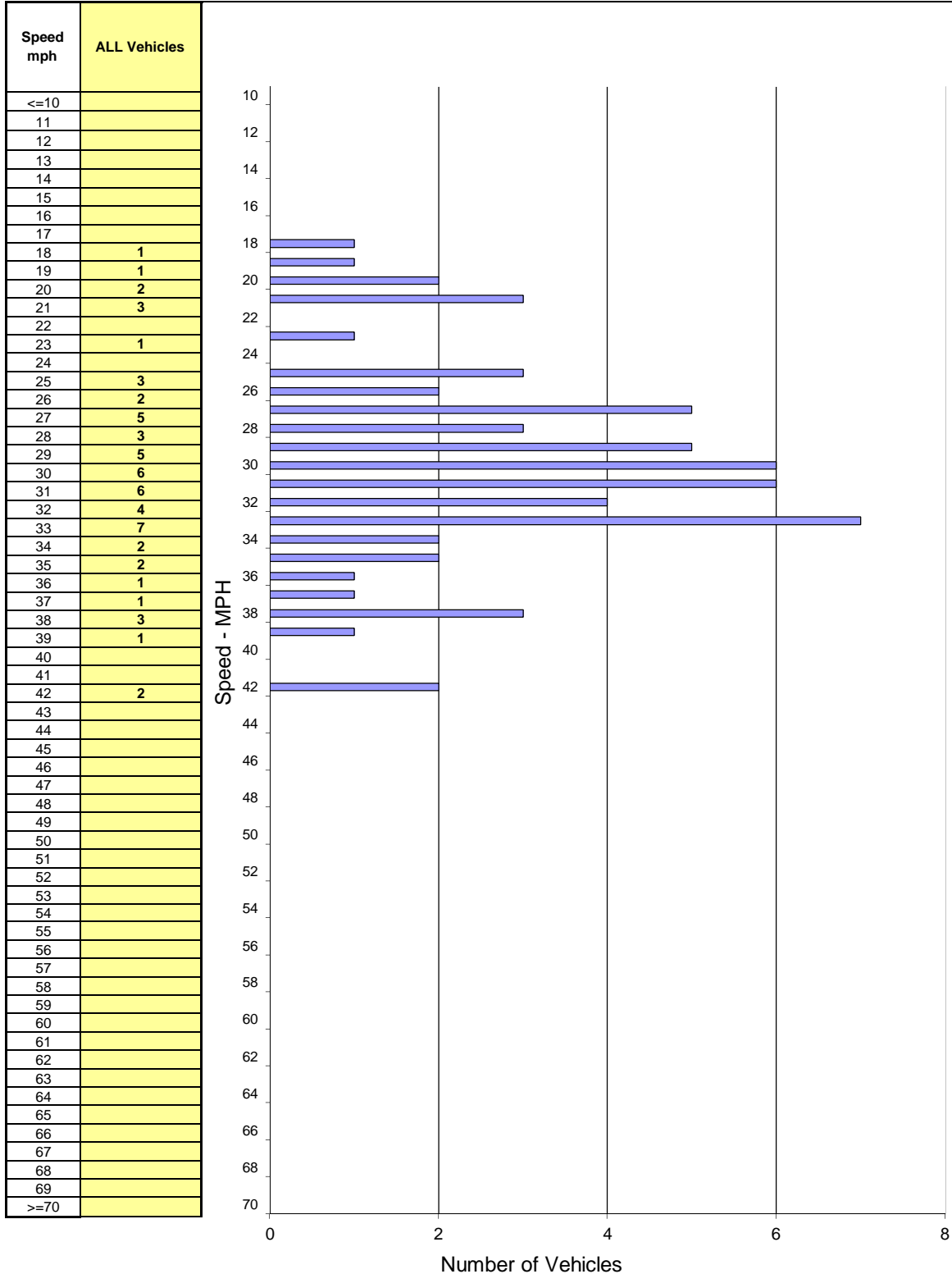
Location: Mariposa Dr Bet. Halsey St & Dwight St

DAY: Friday

Posted Speed: 25 MPH

Project#: 15-6046-23.3

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	61	18 - 42	30 mph	35 mph	25 - 34	43	70%	13% / 8	17% / 10

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Mountain View Ave from I-10 Freeway to Central Avenue (Northbound)

Date: 3/27/2015 Time: 1:20 PM

Recorded By: NDS Weather: Sunny



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	60
85th Percentile:	47
10 mph Pace:	35 - 44
Percent in Pace:	70%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	3
Annual Collision Rate:	1.0
Collision Rate (Per Million Vehicle Miles):	0.2
Statewide Collision Rate:	1.3

TRAFFIC FACTORS

Average Daily Traffic:	11,096
Width:	55'
Lane Configuration:	2-3 Lanes, TWLTL
Traffic Control:	2 signals
Mid-block Crosswalks:	No
Bike Facilities:	Partial (along bridge)
Truck Route:	No
On-Street Parking:	No
Adjacent Land Use:	Industrial, Residential, Vacant
Other:	

ROADWAY FACTORS

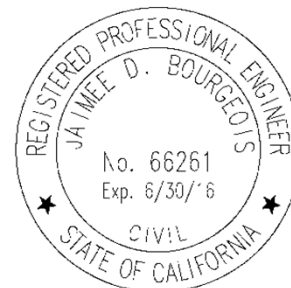
Length of Segment:	1.3 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor-Good

CONCLUSIONS

Recommended Speed Limit:	45
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

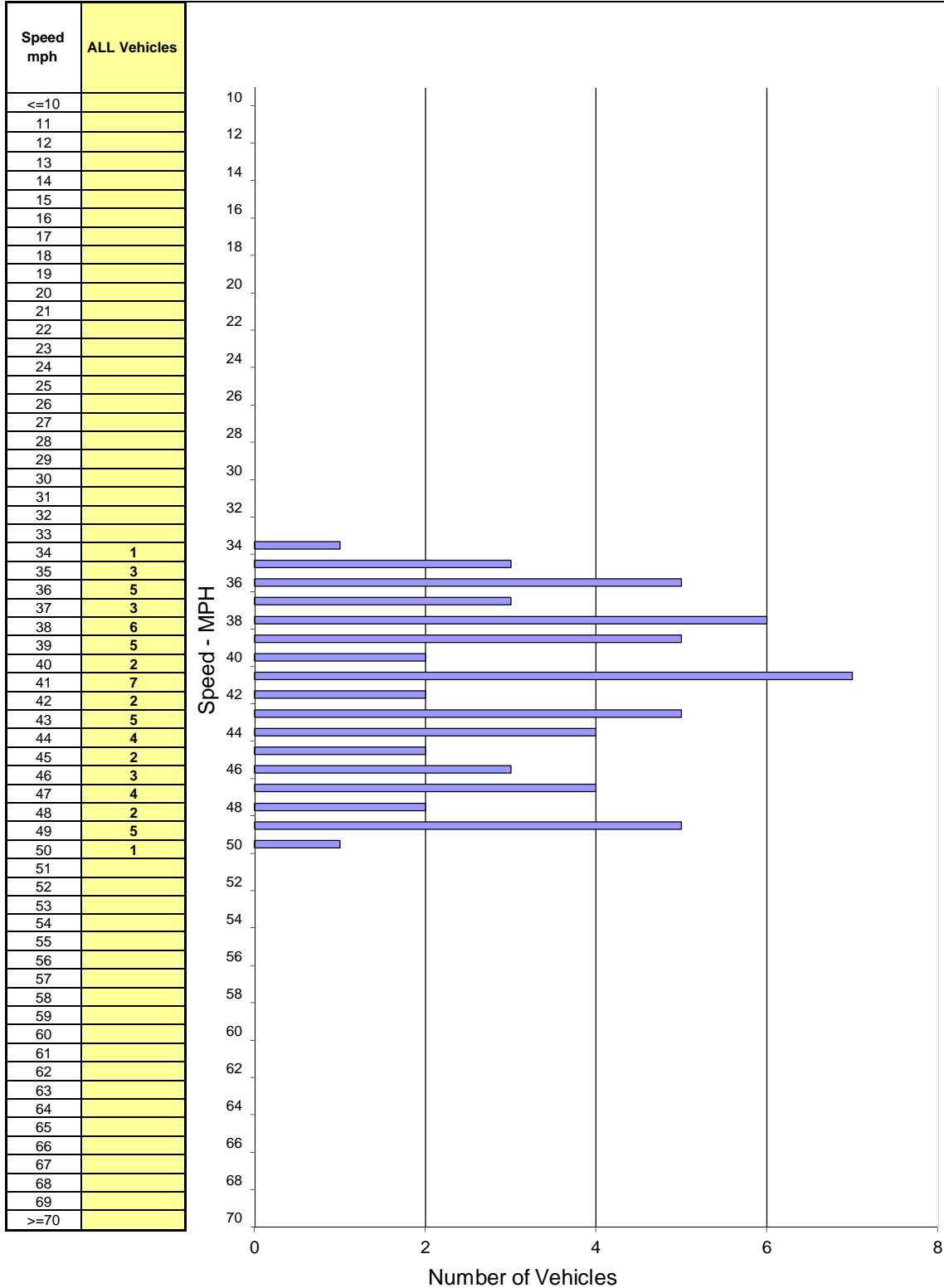
Location: Mountain View Ave bet. Lugonia Ave & City Limits

DAY: Friday

Posted Speed: 45 MPH

Project#: 15-6046-24.1

Northbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	60	34 - 50	41 mph	47 mph	35 - 44	42	70%	1% / 1	29% / 17

ENGINEERING AND TRAFFIC SURVEY

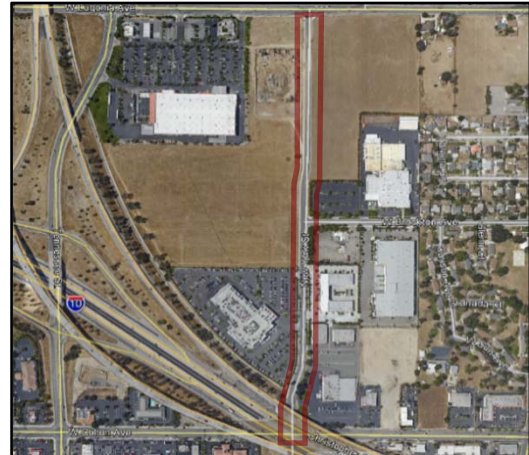
City of Redlands



New York Street from Colton Ave to Lugonia Ave

Date: 3/27/2015 Time: 11:13 AM

Recorded By: NDS Weather: Sunny



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	44
10 mph Pace:	35 - 44
Percent in Pace:	83%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	3
Annual Collision Rate:	1.0
Collision Rate (Per Million Vehicle Miles):	1.8
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	3,842
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Commerical, Vacant
Other:	

ROADWAY FACTORS

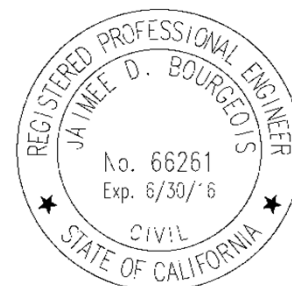
Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	West side, partial east side
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

Location: New York St bet. Colton Ave & Lugonia Ave

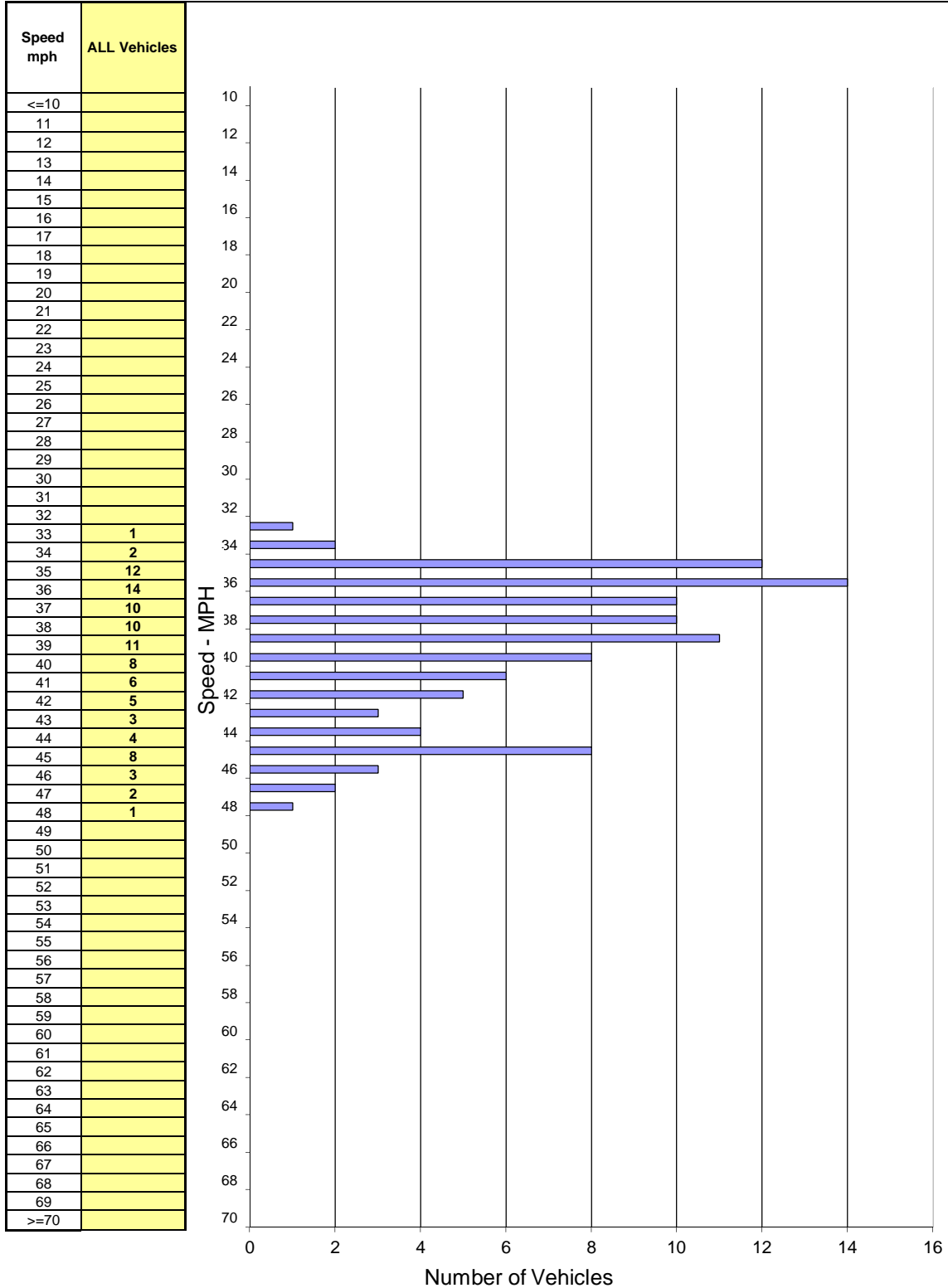
DAY: Friday

Posted Speed:

35 MPH

Project#: 15-6046-25.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	33 - 48	39 mph	44 mph	35 - 44	83	83%	3% / 3	14% / 14

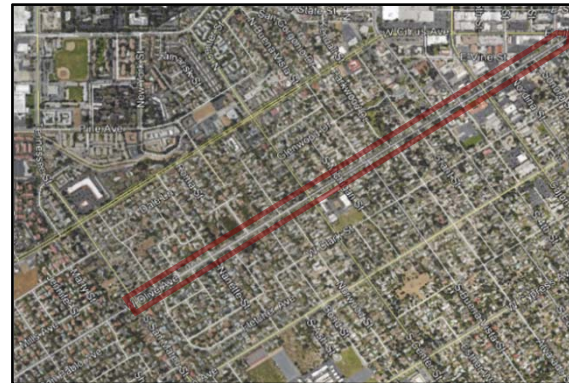
ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Olive Avenue from Citrus Avenue to San Mateo Street

Date: 4/1/2015 Time: 10:20 AM
 Recorded By: NDS Weather: Partly Cloudy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	38
10 mph Pace:	30 - 39
Percent in Pace:	78%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	11
Annual Collision Rate:	3.7
Collision Rate (Per Million Vehicle Miles):	2.1
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	4,329
Width:	60'
Lane Configuration:	2 Lanes, TWLTL e/o Center
Traffic Control:	1 Stop, 1 Signal
Mid-block Crosswalks:	No
Bike Facilities:	Class 2 e/o Center
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional, Office
Other:	

ROADWAY FACTORS

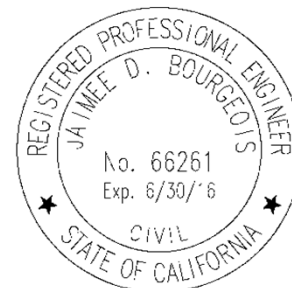
Length of Segment:	1.1 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor-Good

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/1/2022



Spot Speed Study

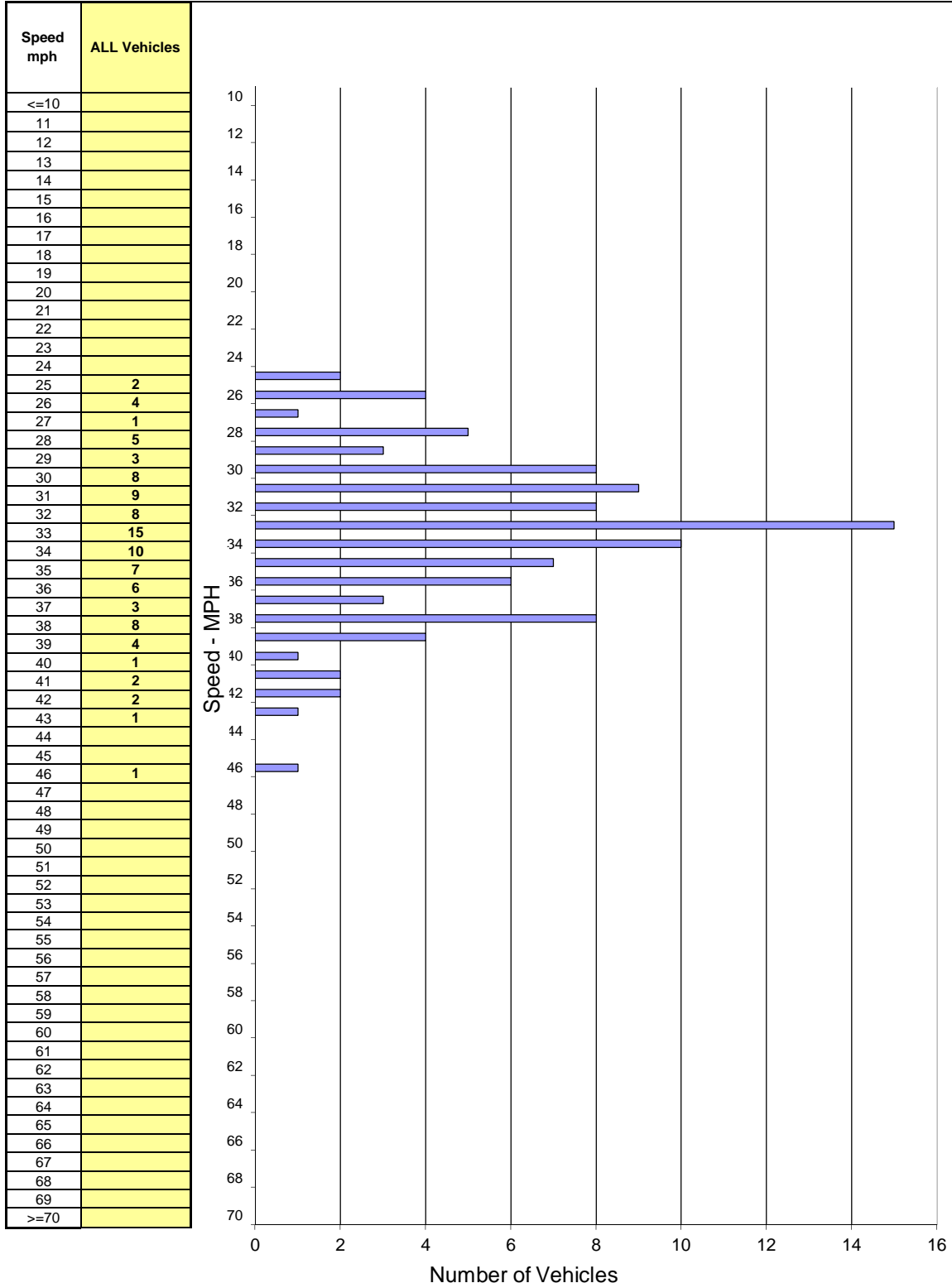
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/1/2015
DAY: Wednesday

Location: Olive Ave bet. Citrus Ave & San Mateo St
Posted Speed: 30 MPH Project#: 15-6046-26.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	25 - 46	33 mph	38 mph	30 - 39	78	78%	15% / 15	7% / 7

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Olive Avenue from San Mateo Street to Terracina Boulevard

Date: 3/27/2015 Time: 2:48 PM

Recorded By: NDS Weather: Sunny



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	44
10 mph Pace:	35 - 44
Percent in Pace:	90%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	3
Annual Collision Rate:	1.0
Collision Rate (Per Million Vehicle Miles):	1.3
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	2,954
Width:	64'
Lane Configuration:	2 Lanes
Traffic Control:	2 Stops
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	

ROADWAY FACTORS

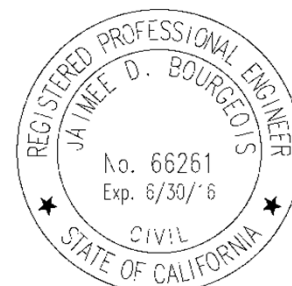
Length of Segment:	0.7 Miles
Vertical Curve:	Yes
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides, short gaps
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

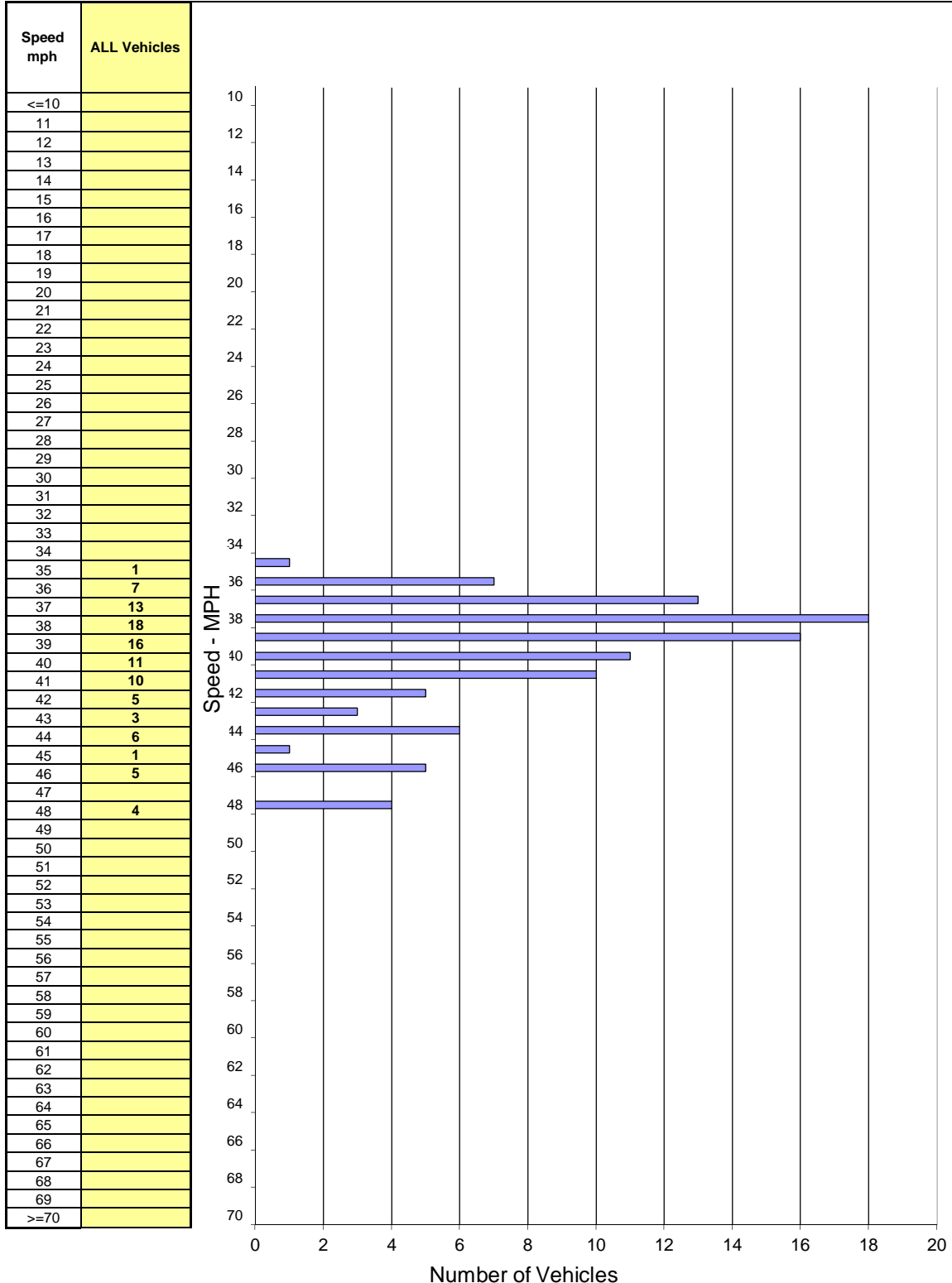
Location: Olive Ave bet. San Mateo St & Terracina Blvd

DAY: Friday

Posted Speed: 35 MPH

Project#: 15-6046-26.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	35 - 48	39 mph	44 mph	35 - 44	90	90%	0% / 0	10% / 10

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Orange Street from Lugonia Ave to Pioneer Ave
 Date: 3/27/2015 Time: 2:40 PM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	41
10 mph Pace:	33 - 42
Percent in Pace:	81%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	2
Total Collisions:	11
Annual Collision Rate:	3.7
Collision Rate (Per Million Vehicle Miles):	1.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	10,933
Width:	64'
Lane Configuration:	2-4 Lanes
Traffic Control:	2 signals
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Partial
Adjacent Land Use:	Residential, Commercial, Institutional
Other:	

ROADWAY FACTORS

Length of Segment:	0.9 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides, gap on east side
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

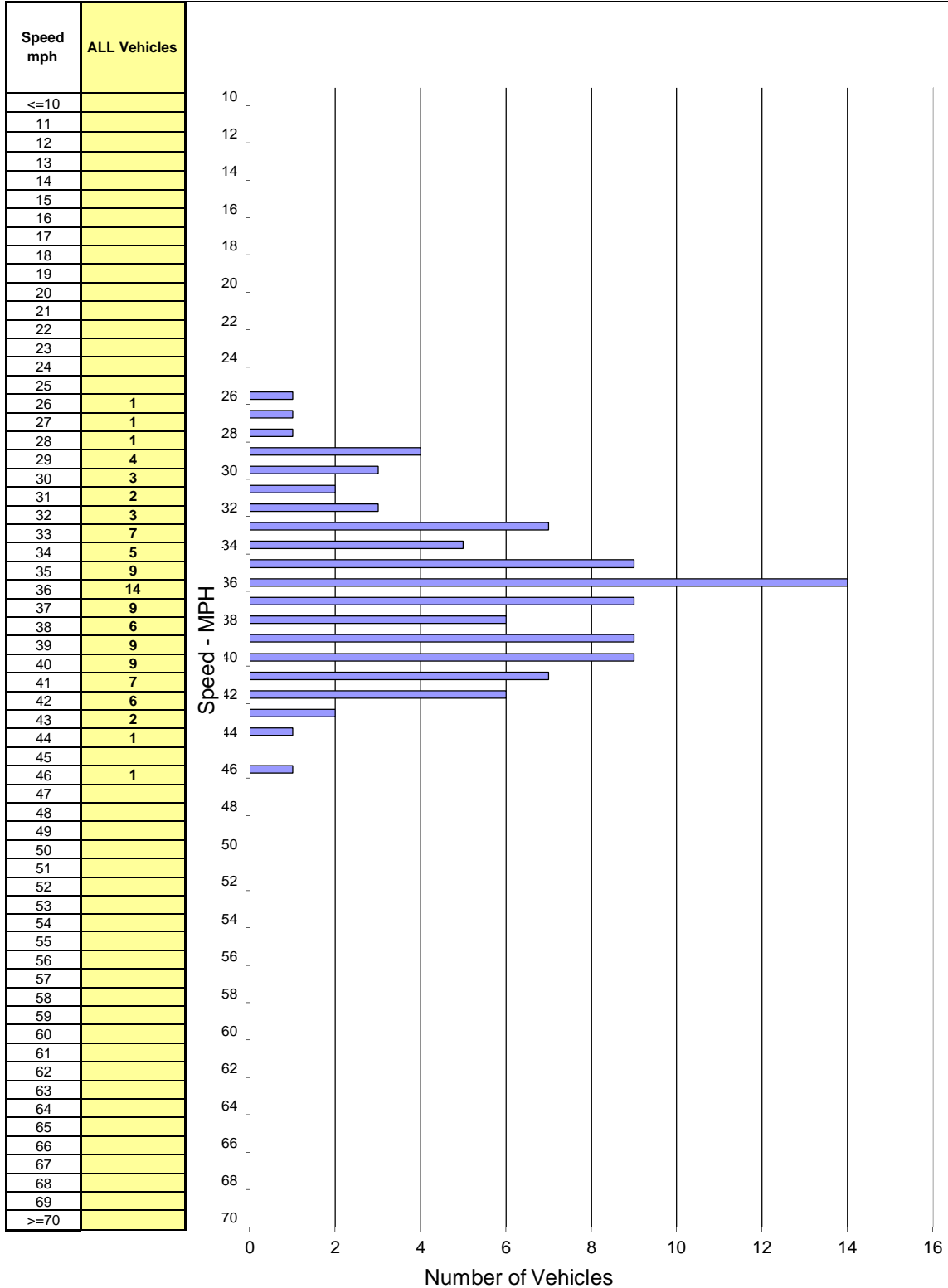
Location: Orange St bet. Lugonia Ave & Pioneer Ave

DAY: Friday

Posted Speed: 40 MPH

Project#: 15-6046-27.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	26 - 46	36 mph	41 mph	33 - 42	81	81%	15% / 15	4% / 4

ENGINEERING AND TRAFFIC SURVEY

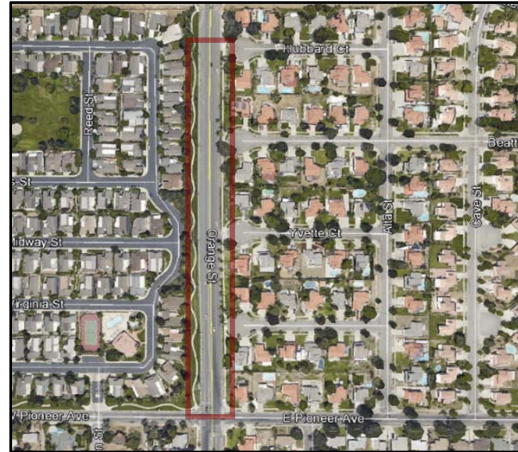
City of Redlands



Orange Street from Pioneer Ave to Hubbard Ct

Date: 3/27/2015 Time: 1:25 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	49
10 mph Pace:	38 - 47
Percent in Pace:	64%
Posted Speed Limit:	55 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	2
Annual Collision Rate:	0.7
Collision Rate (Per Million Vehicle Miles):	0.5
Statewide Collision Rate:	1.9

TRAFFIC FACTORS

Average Daily Traffic:	13,062
Width:	64'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

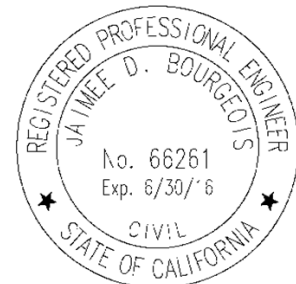
Length of Segment:	0.3 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	No
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	45
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

Location: Orange St bet. Pioneer Ave & Hubbard Ct

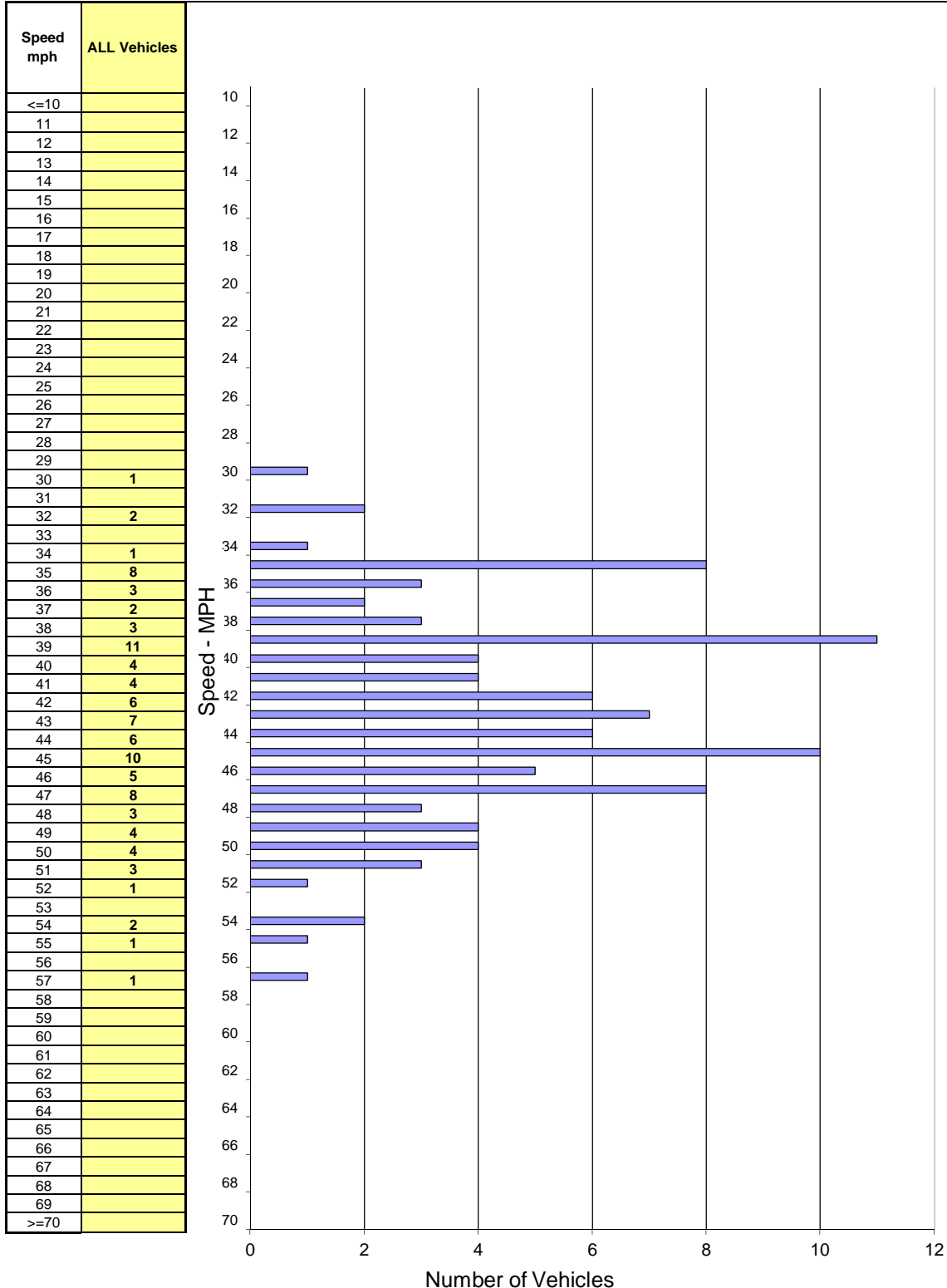
DAY: Friday

Posted Speed:

55 MPH

Project#: 15-6046-27.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	30 - 57	43 mph	49 mph	38 - 47	64	64%	17% / 17	19% / 19

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Orange Street from Hubbard Ct to City Limits

Date: 3/27/2015 Time: 2:10 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	55
10 mph Pace:	47 - 56
Percent in Pace:	73%
Posted Speed Limit:	50 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	3
Total Collisions:	4
Annual Collision Rate:	1.3
Collision Rate (Per Million Vehicle Miles):	0.3
Statewide Collision Rate:	1.9

TRAFFIC FACTORS

Average Daily Traffic:	12,820
Width:	25'
Lane Configuration:	2 Lanes
Traffic Control:	1 signal
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	No
Adjacent Land Use:	Open
Other:	

ROADWAY FACTORS

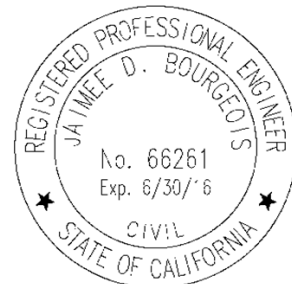
Length of Segment:	1.1 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	None
Driveways:	No
Street Lighting:	No
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	55
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

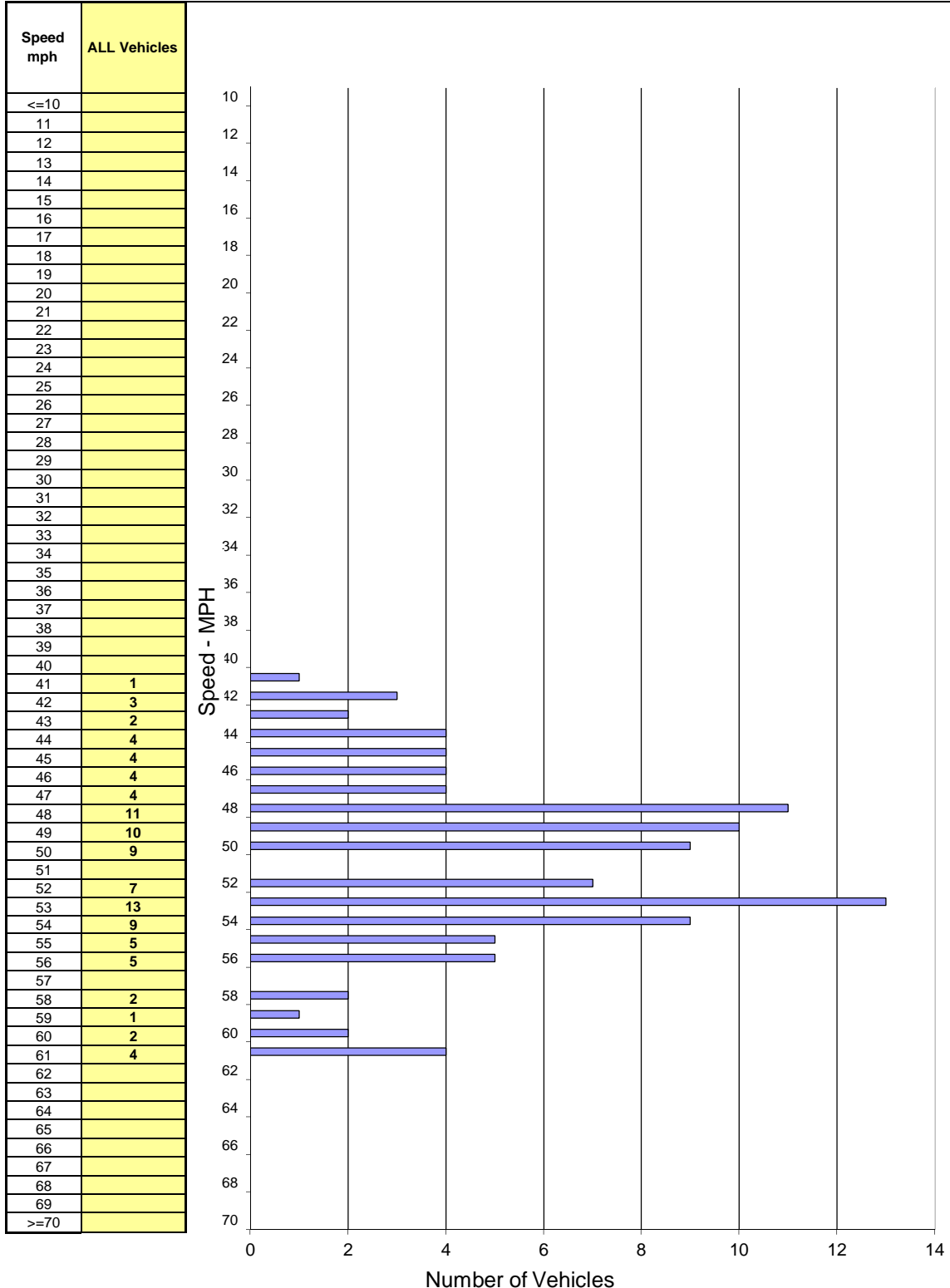
Location: Orange St bet. Hubbard Ct & City Limits

DAY: Friday

Posted Speed: 50 MPH

Project#: 15-6046-27.3

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	41 - 61	50 mph	55 mph	47 - 56	73	73%	18% / 18	9% / 9

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Orange Tree Lane from California Street to Nevada Street

Date: 3/27/2015 Time: 12:15 PM

Recorded By: NDS Weather: Sunny



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	43
10 mph Pace:	35 - 44
Percent in Pace:	91%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	0.6
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	3,920
Width:	48'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Commercial/Service, Office
Other:	

ROADWAY FACTORS

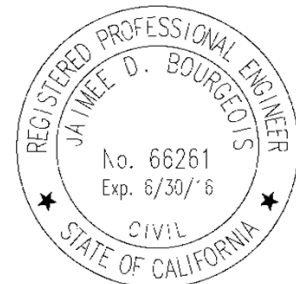
Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Both sides, gaps on south side
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

Location: Orange Tree Ln bet. California St & Nevada St

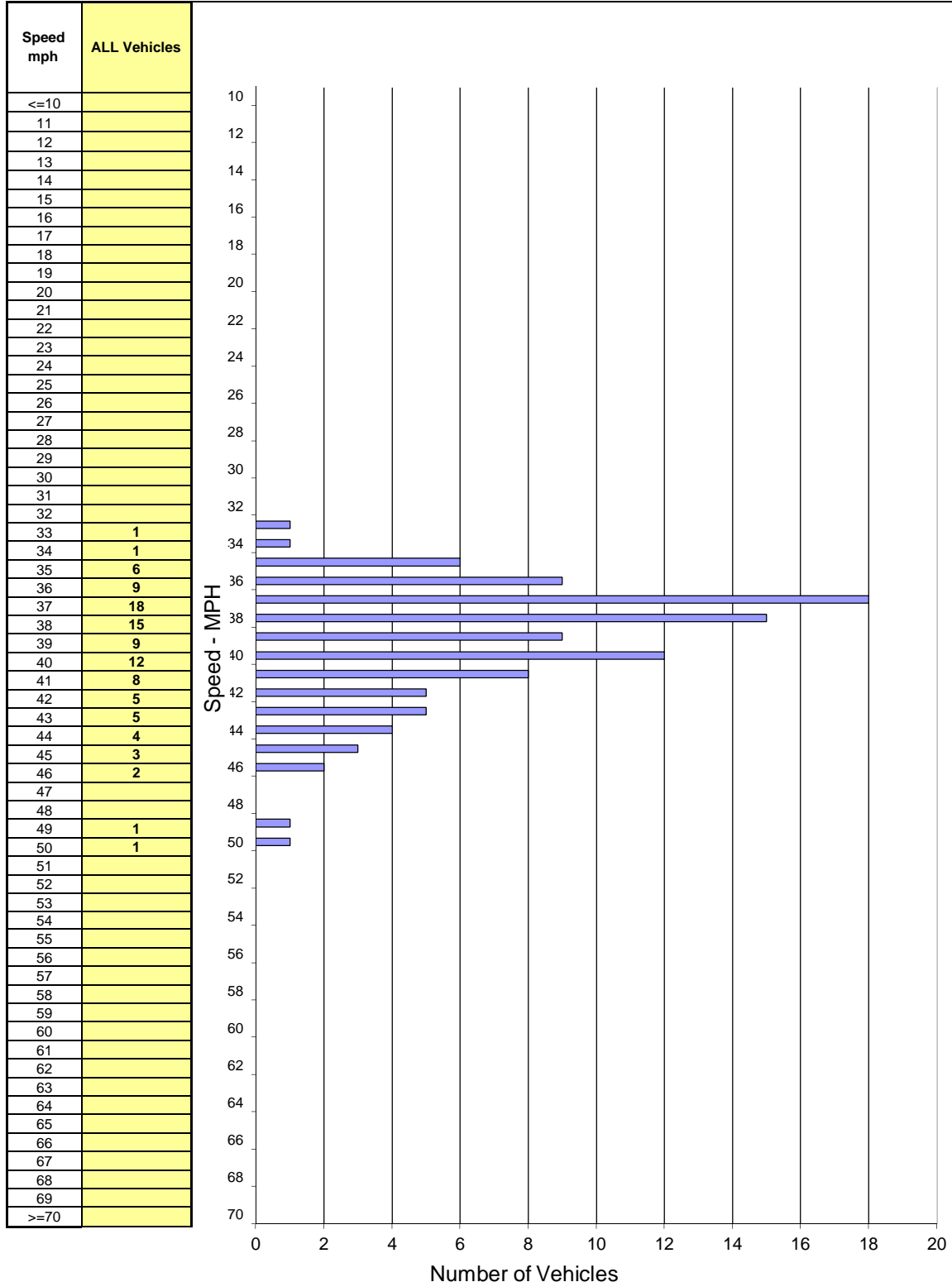
DAY: Friday

Posted Speed:

30 MPH

Project#: 15-6046-28.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	33 - 50	38 mph	43 mph	35 - 44	91	91%	2% / 2	7% / 7

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Orange Tree Lane from Nevada Street to Alabama Street

Date: 4/3/2015 Time: 12:32 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	38
10 mph Pace:	29 - 38
Percent in Pace:	79%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	0.5
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	3,471
Width:	48'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Business Park, Vacant
Other:	

ROADWAY FACTORS

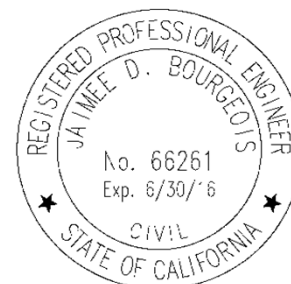
Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Both sides, gaps where vacant
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor-Fair

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/3/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/3/2015

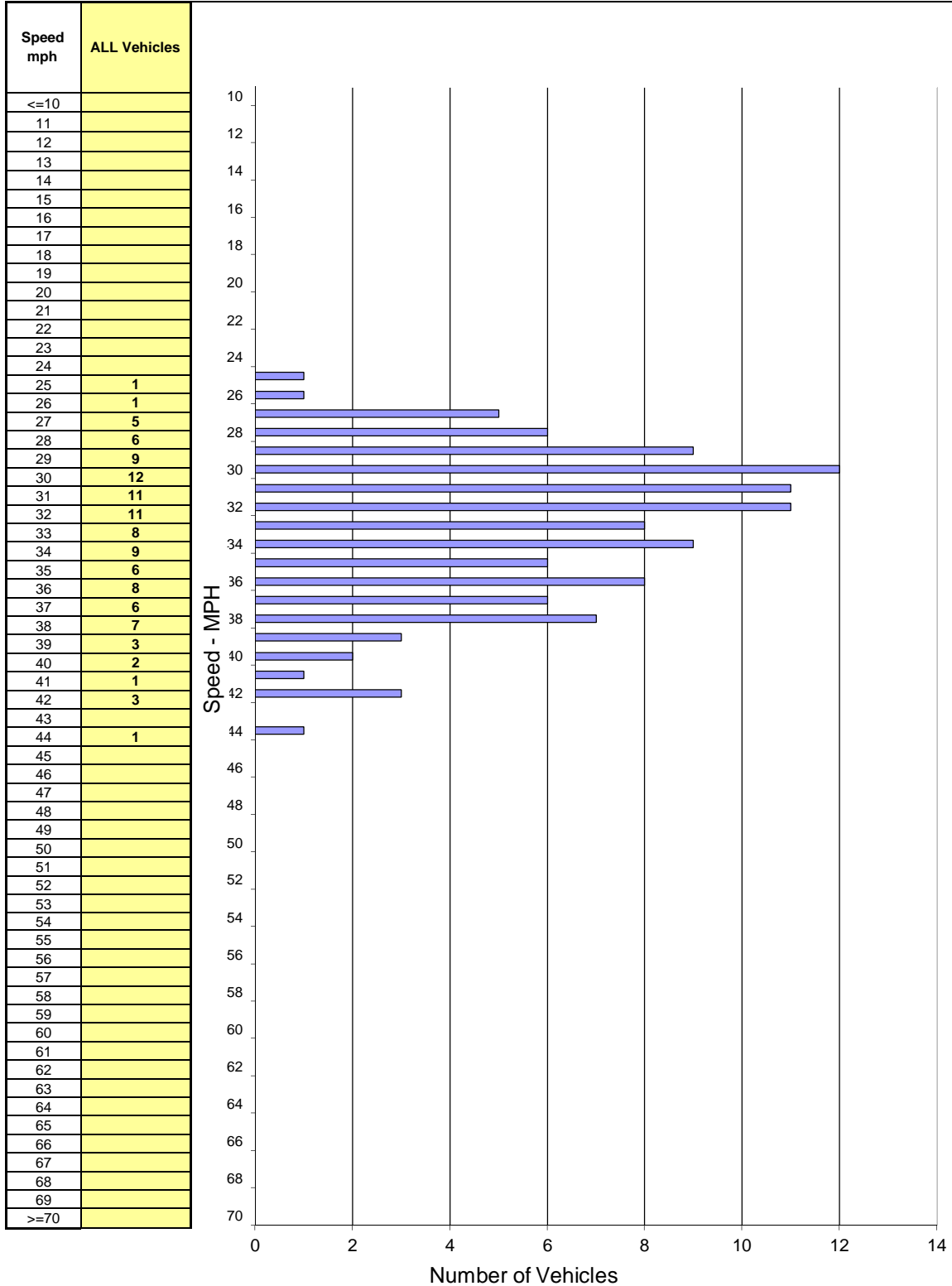
Location: Orange Tree Ln Bet. Alabama St & Nevada St

DAY: Friday

Posted Speed: 30 MPH

Project#: 15-6046-28.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	25 - 44	32 mph	38 mph	29 - 38	87	79%	11% / 13	10% / 10

ENGINEERING AND TRAFFIC SURVEY

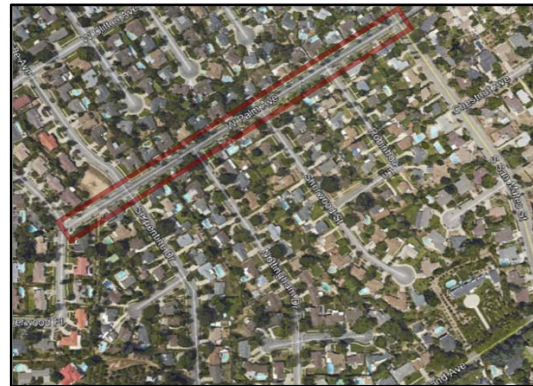
City of Redlands



Palm Avenue from Serpentine Drive to San Mateo Street

Date: 3/27/2015 Time: 10:30 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	33
10 mph Pace:	24 - 33
Percent in Pace:	69%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	4.1
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,108
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	Lane lines unmarked

ROADWAY FACTORS

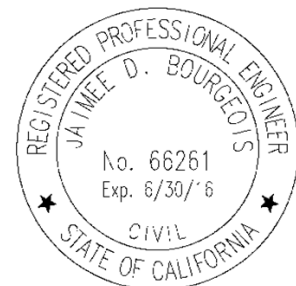
Length of Segment:	0.2 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

Location: Palm Ave bet. Serpentine Dr & San Mateo St

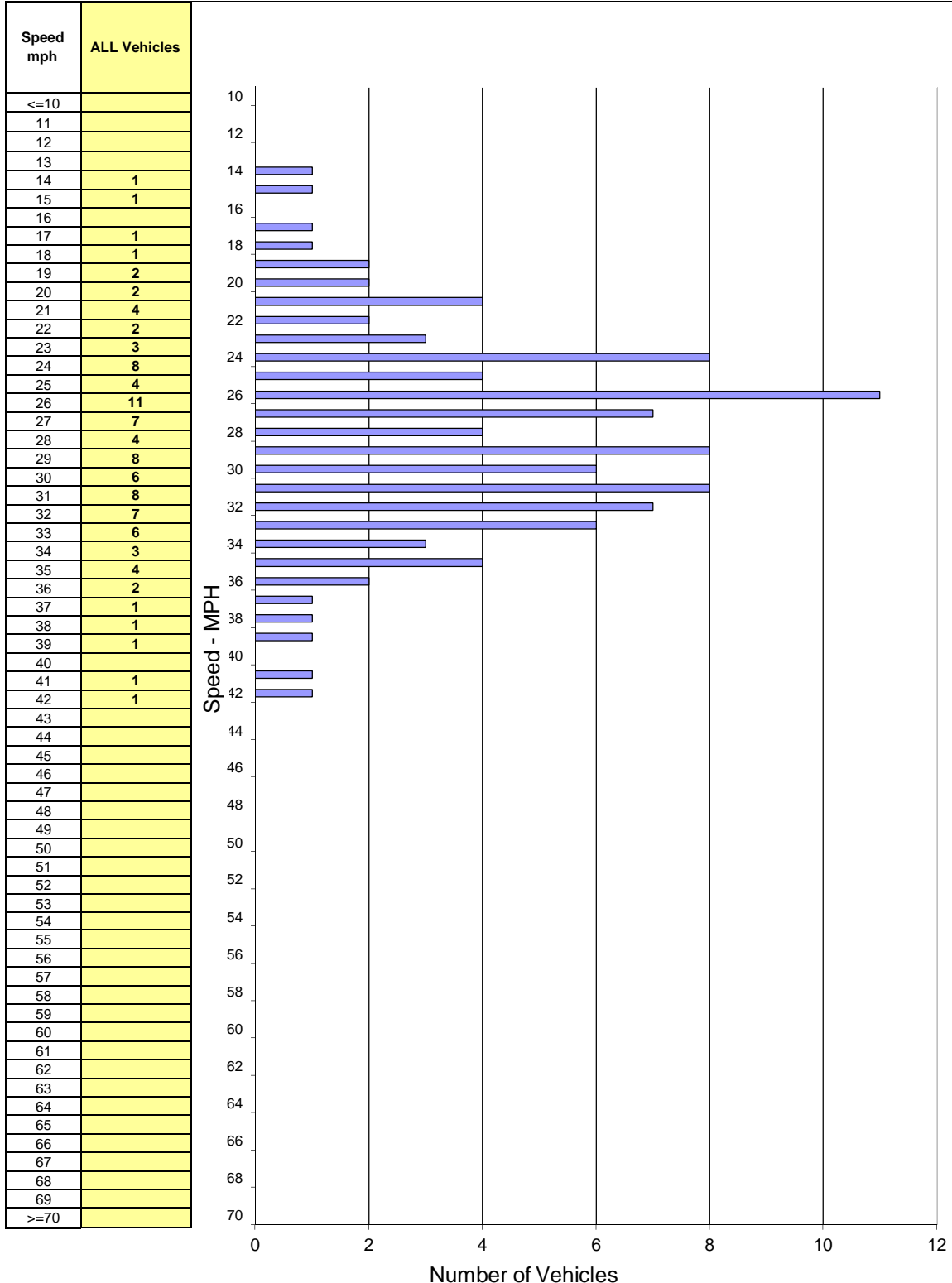
DAY: Friday

Posted Speed:

30 MPH

Project#: 15-6046-29.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	14 - 42	28 mph	33 mph	24 - 33	69	69%	17% / 17	14% / 14

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Palm Avenue from San Mateo Street to Ford Street

Date: 3/27/2015 Time: 10:00 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	40
10 mph Pace:	29 - 38
Percent in Pace:	70%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	3
Total Collisions:	12
Annual Collision Rate:	4.0
Collision Rate (Per Million Vehicle Miles):	2.7
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,925
Width:	50'
Lane Configuration:	2 Lanes
Traffic Control:	4 stops, 1 signal
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	

ROADWAY FACTORS

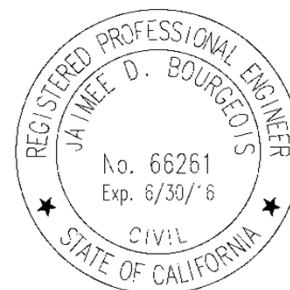
Length of Segment:	2.1 Miles
Vertical Curve:	Yes
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	High density residential driveways

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

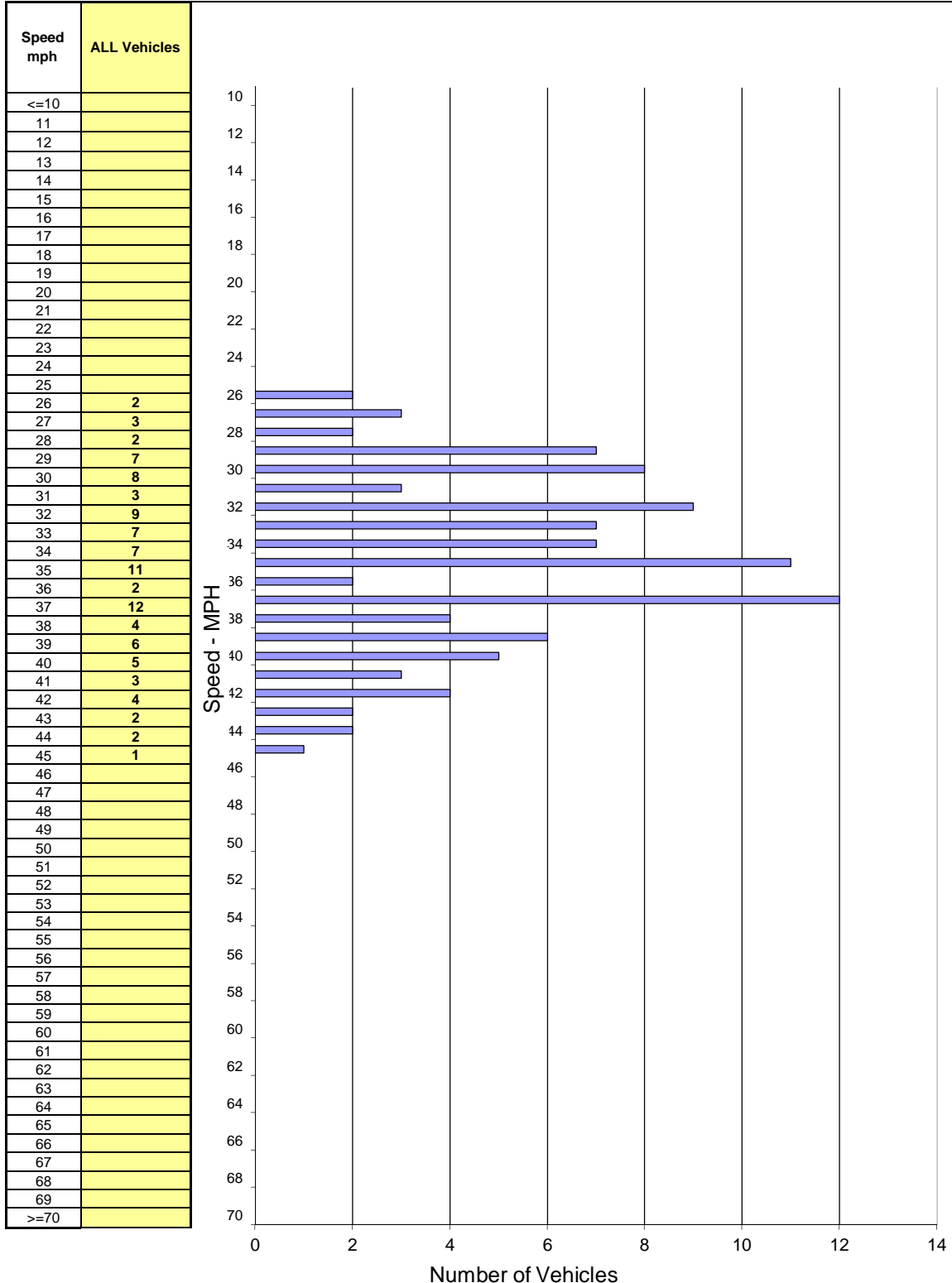
Location: Palm Ave bet. San Mateo St & Ford St

DAY: Friday

Posted Speed: 40 MPH

Project#: 15-6046-29.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	26 - 45	35 mph	40 mph	29 - 38	70	70%	7% / 7	23% / 23

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Palmetto Avenue from Nevada Street to California Street (Westbound)

Date: 3/27/2015 Time: 9:59 AM

Recorded By: NDS Weather: Sunny



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	50
85th Percentile:	46
10 mph Pace:	35 - 44
Percent in Pace:	52%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	1.0
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

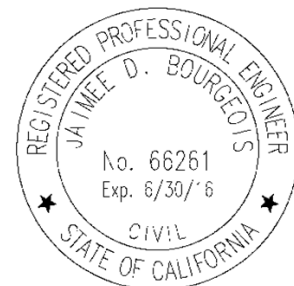
Average Daily Traffic:	1,752
Width:	44'
Lane Configuration:	2 Lanes, TWLTL
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	No
Adjacent Land Use:	Industrial
Other:	

ROADWAY FACTORS

Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	YES
Justification for 5 mph down:	Large volume of heavy trucks traveling slow and parking in middle of roadway
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/27/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/27/2015

Location: Palmetto Ave WB bet. Nevada St & California St

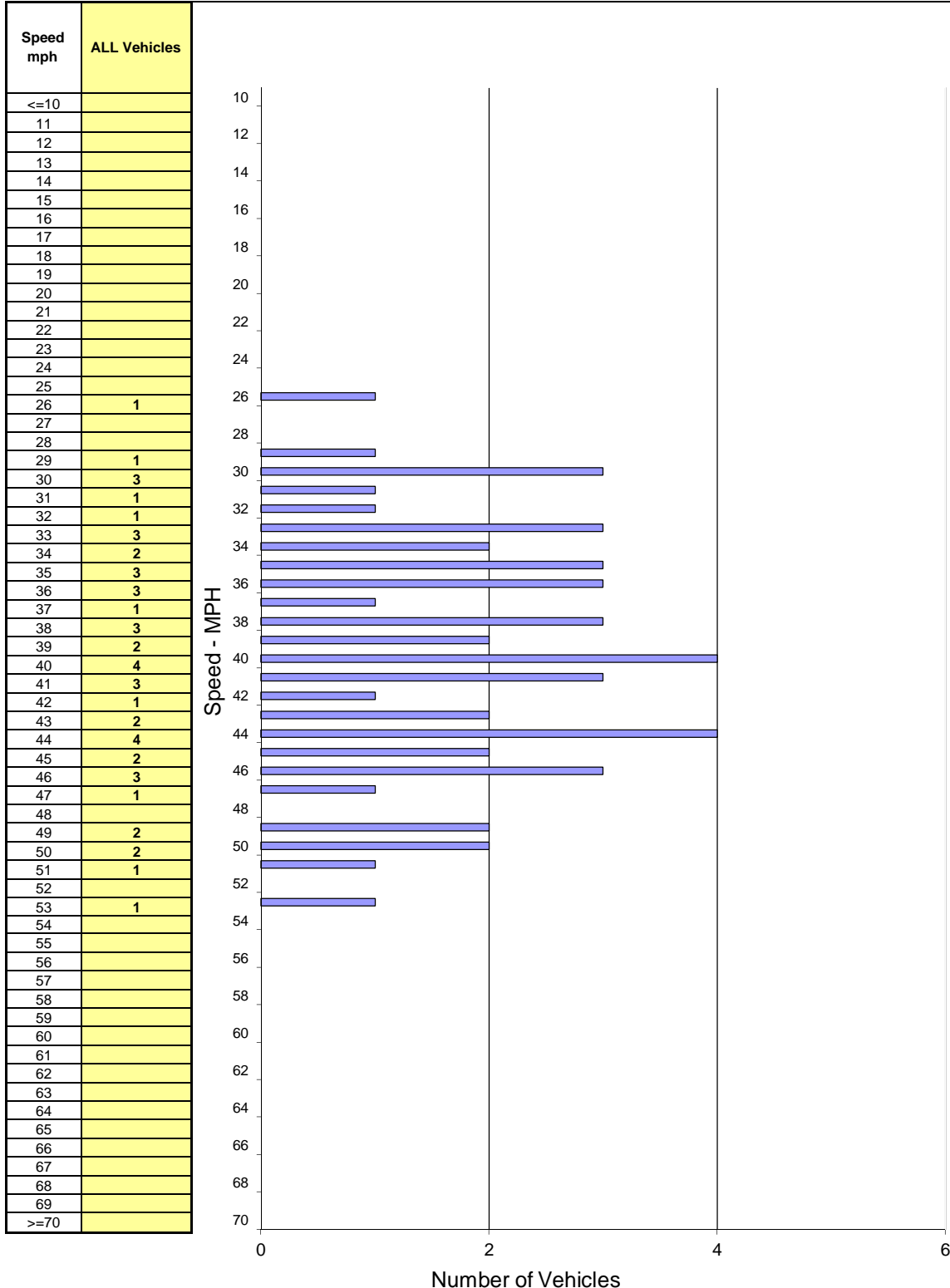
DAY: Friday

Posted Speed:

30 MPH

Project#: 15-6046-30.1

Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	50	26 - 53	40 mph	46 mph	35 - 44	26	52%	24% / 12	24% / 12

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Palmetto Avenue from California Street to Marigold Avenue

Date: 4/3/2015 Time: 2:38 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	40
10 mph Pace:	32 - 41
Percent in Pace:	78%
Posted Speed Limit:	N/A

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,697
Width:	64'
Lane Configuration:	4 Lanes, TWLTL
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	No
Adjacent Land Use:	Industrial
Other:	

ROADWAY FACTORS

Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	Large volume of heavy trucks traveling slow and parking in middle of roadway
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	4/3/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

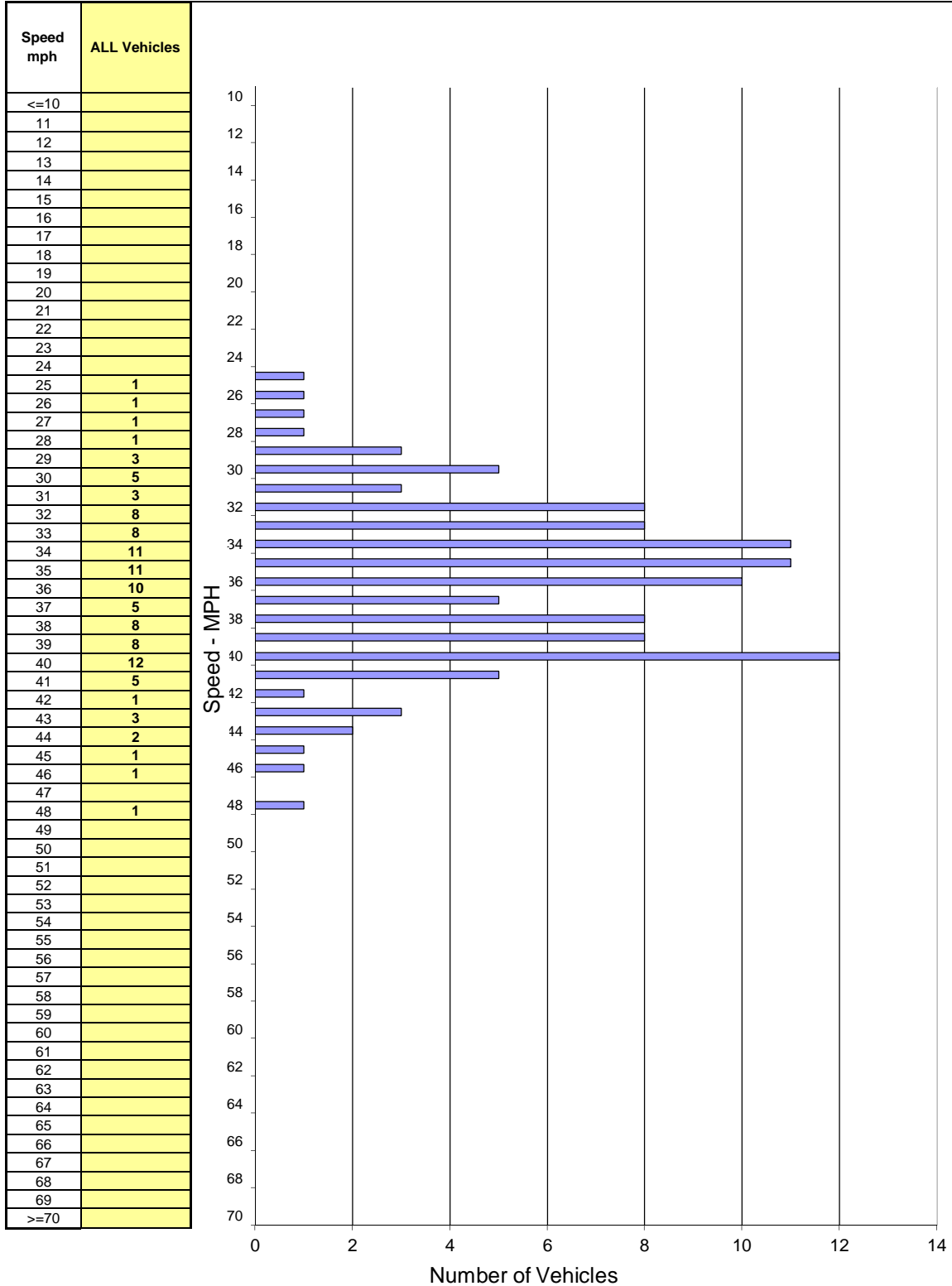
DATE: 4/3/2015

Location: Palmetto Ave Bet. California St & Marigold Ave

DAY: Friday

Posted Speed: None Posted Project#: 15-6046-30.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	25 - 48	36 mph	40 mph	32 - 41	86	78%	13% / 15	9% / 9

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Palo Alto Drive from Country Club Dr to Mirasol Dr

Date: 4/8/2015 Time: 2:54 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	42
10 mph Pace:	35 - 44
Percent in Pace:	74%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,251
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

Length of Segment:	0.3 Miles
Vertical Curve:	Yes
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	North side
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	High density residential driveways
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	4/8/2022



Spot Speed Study

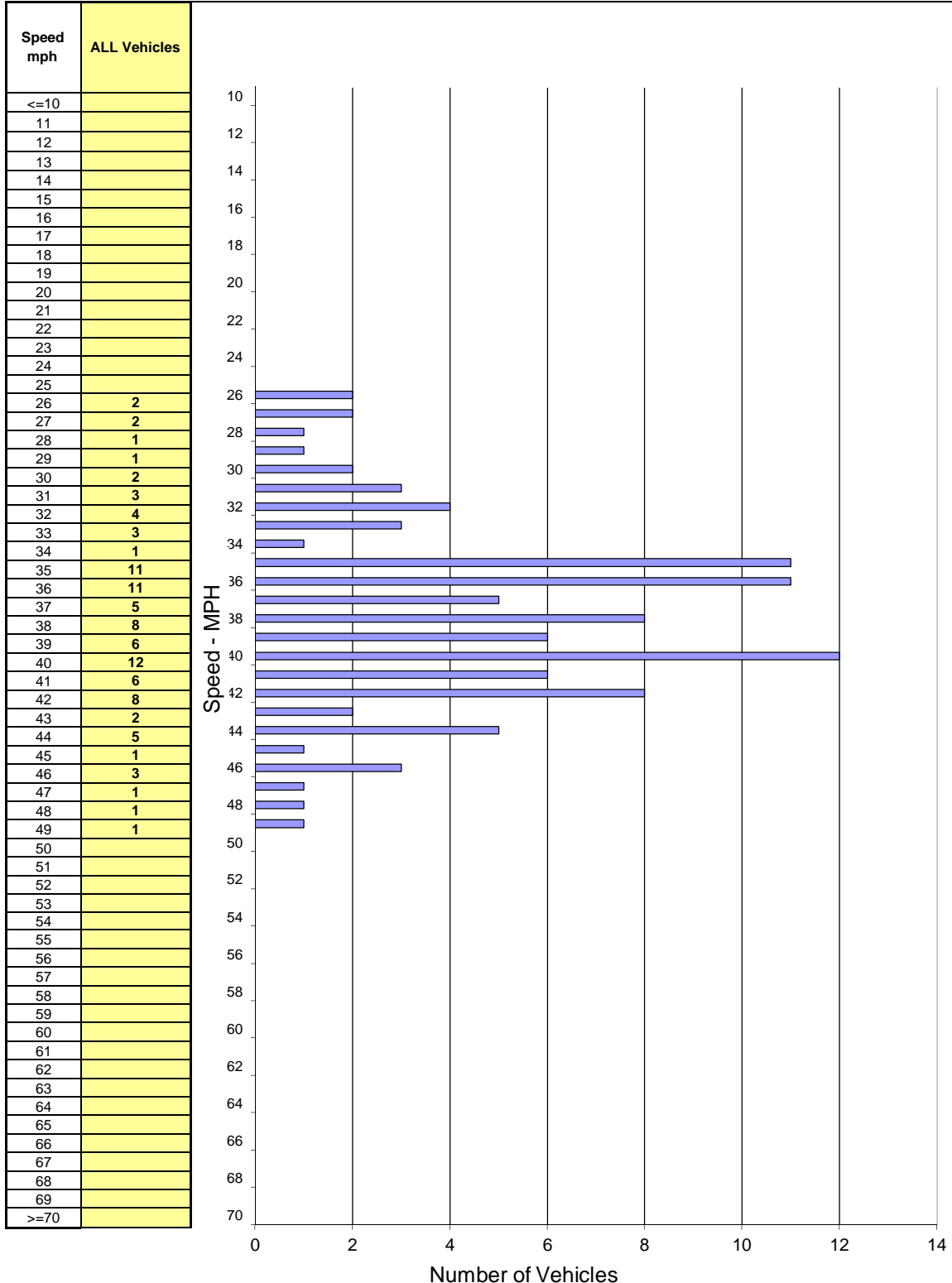
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/8/2015
DAY: Wednesday

Location: Palo Alto Dr Bet Country Club Dr & Mirasol Dr
Posted Speed: 35 MPH Project#: 15-6046-31.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	26 - 49	38 mph	42 mph	35 - 44	74	74%	19% / 19	7% / 7

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Palo Alto Drive from Mirasol Drive and Sunset Drive

Date: 4/3/2015 Time: 10:35 AM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	28
10 mph Pace:	19 - 28
Percent in Pace:	85%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	729
Width:	44'
Lane Configuration:	2 Lanes
Traffic Control:	2 Stops
Mid-block Crosswalks:	No
Bike Facilities:	Class 3
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	

ROADWAY FACTORS

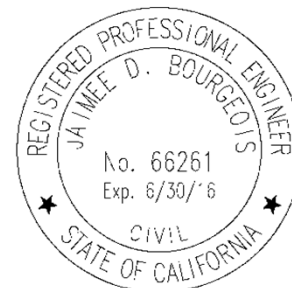
Length of Segment:	0.6 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	North side (gap near Sunset)
Driveways:	Yes
Street Lighting:	No
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	25
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/3/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/3/2015

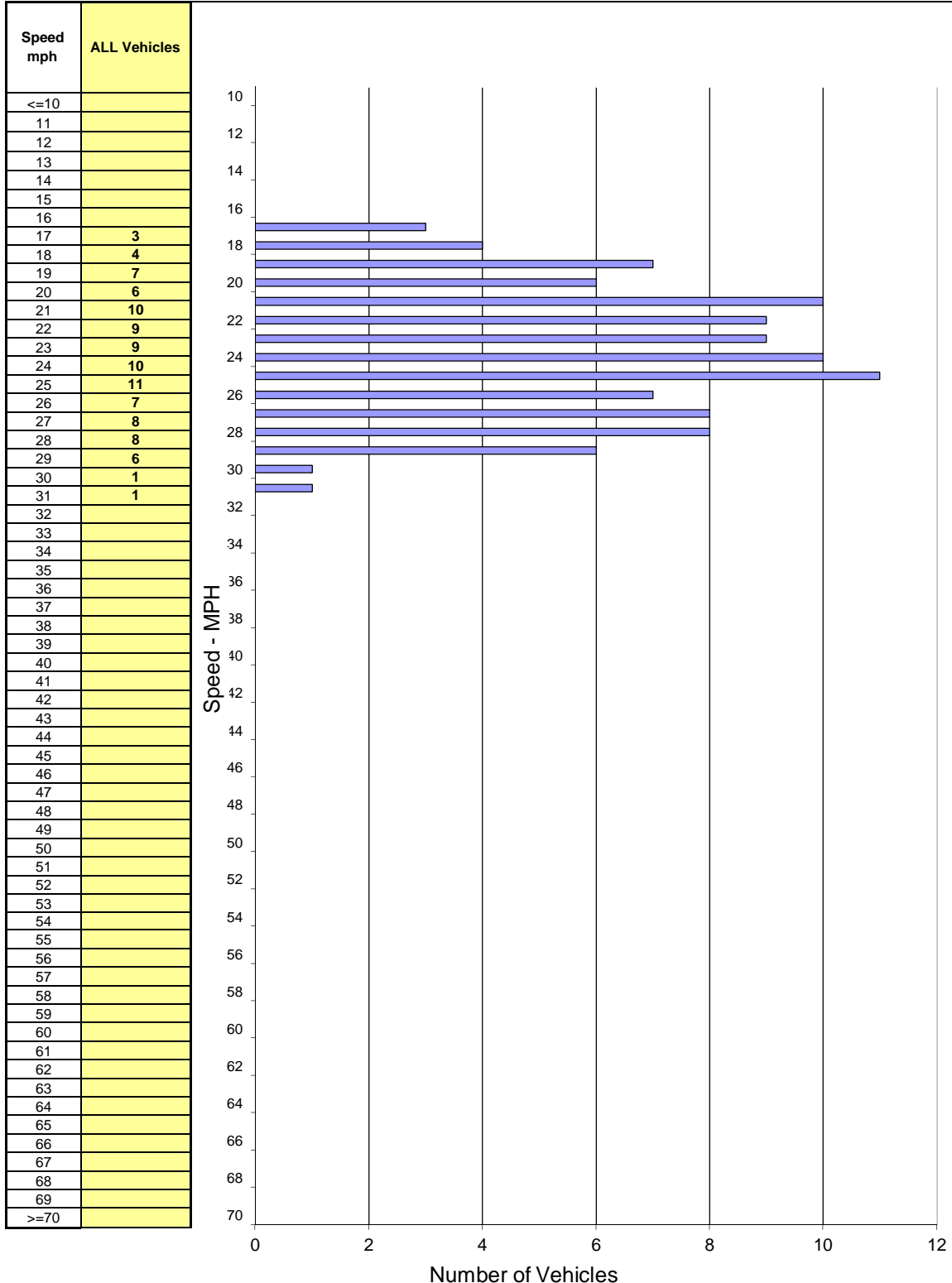
Location: Palo Alto Dr Bet. Mirasol Dr & Sunset Dr

DAY: Friday

Posted Speed: 35 MPH

Project#: 15-6046-31.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	17 - 31	24 mph	28 mph	19 - 28	85	85%	7% / 7	8% / 8

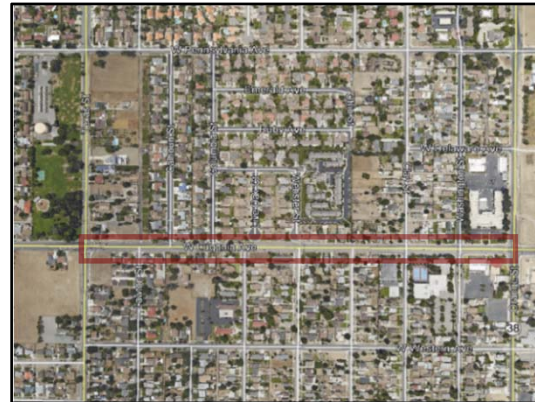
ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Pennsylvania Avenue from Texas Street to Orange Street

Date: 4/6/2015 Time: 9:00 AM
 Recorded By: NDS Weather: Partly Cloudy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	39
10 mph Pace:	30 - 39
Percent in Pace:	74%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	2
Annual Collision Rate:	0.7
Collision Rate (Per Million Vehicle Miles):	1.4
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	2,626
Width:	30'-40'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	Class 3
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

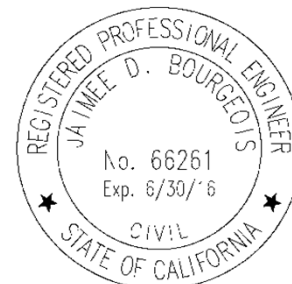
Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/6/2022



Spot Speed Study

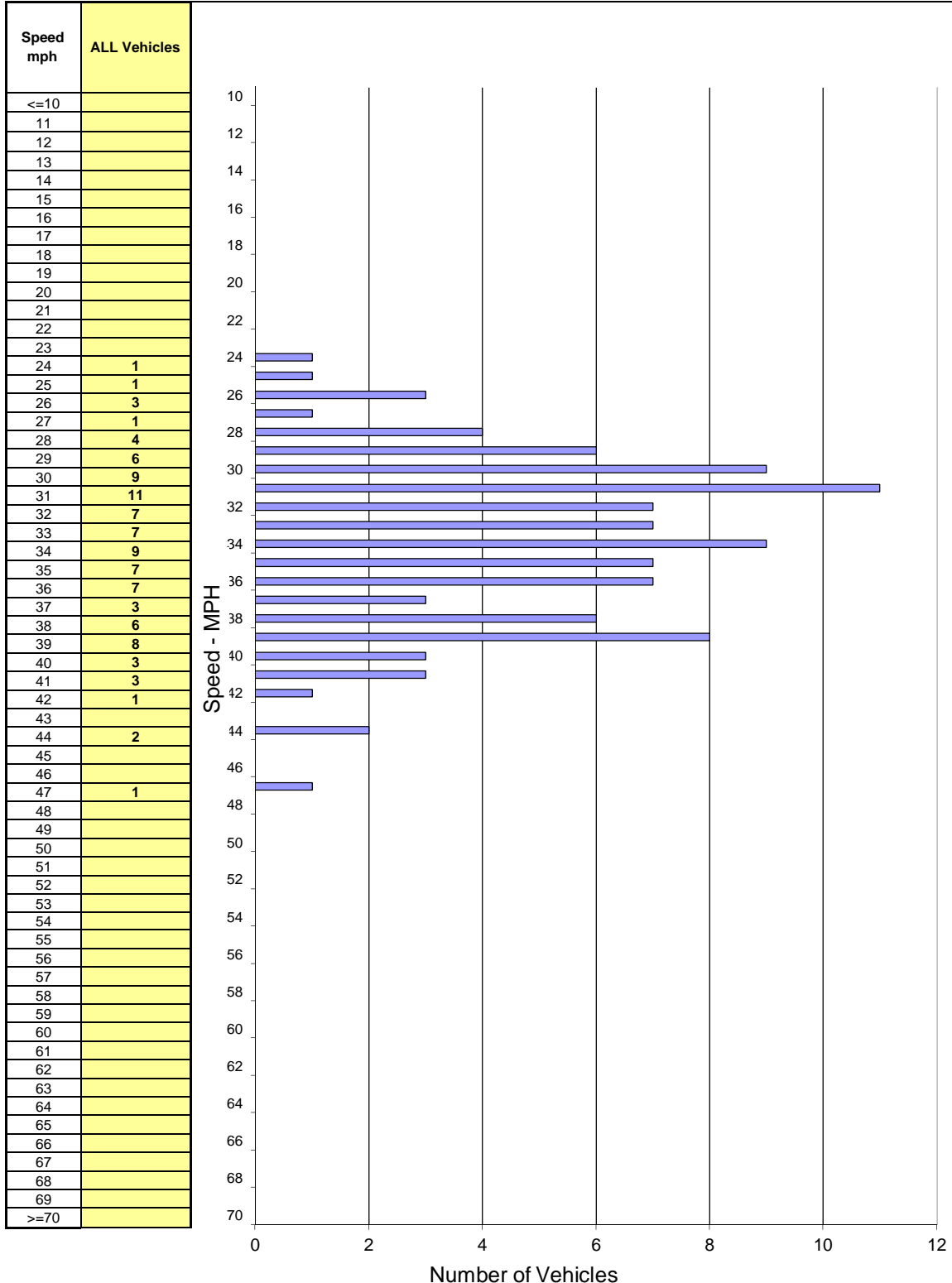
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/6/2015
DAY: Monday

Location: Pennsylvania Ave Bet. Texas St & Orange St
Posted Speed: 30 MPH Project#: 15-6046-32.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	24 - 47	33 mph	39 mph	30 - 39	74	74%	16% / 16	10% / 10

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Pennsylvania Avenue from Orange Street to Church Street

Date: 5/22/2015 Time: 10:30 AM

Recorded By: NDS Weather: Mostly Cloudy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	32
10 mph Pace:	20 - 29
Percent in Pace:	61%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	2,460
Width:	32'-40'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	0
On-Street Parking:	Yes
Adjacent Land Use:	Institutional, Residential
Other:	

ROADWAY FACTORS

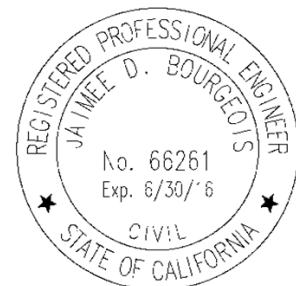
Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 5/22/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 5/22/2015

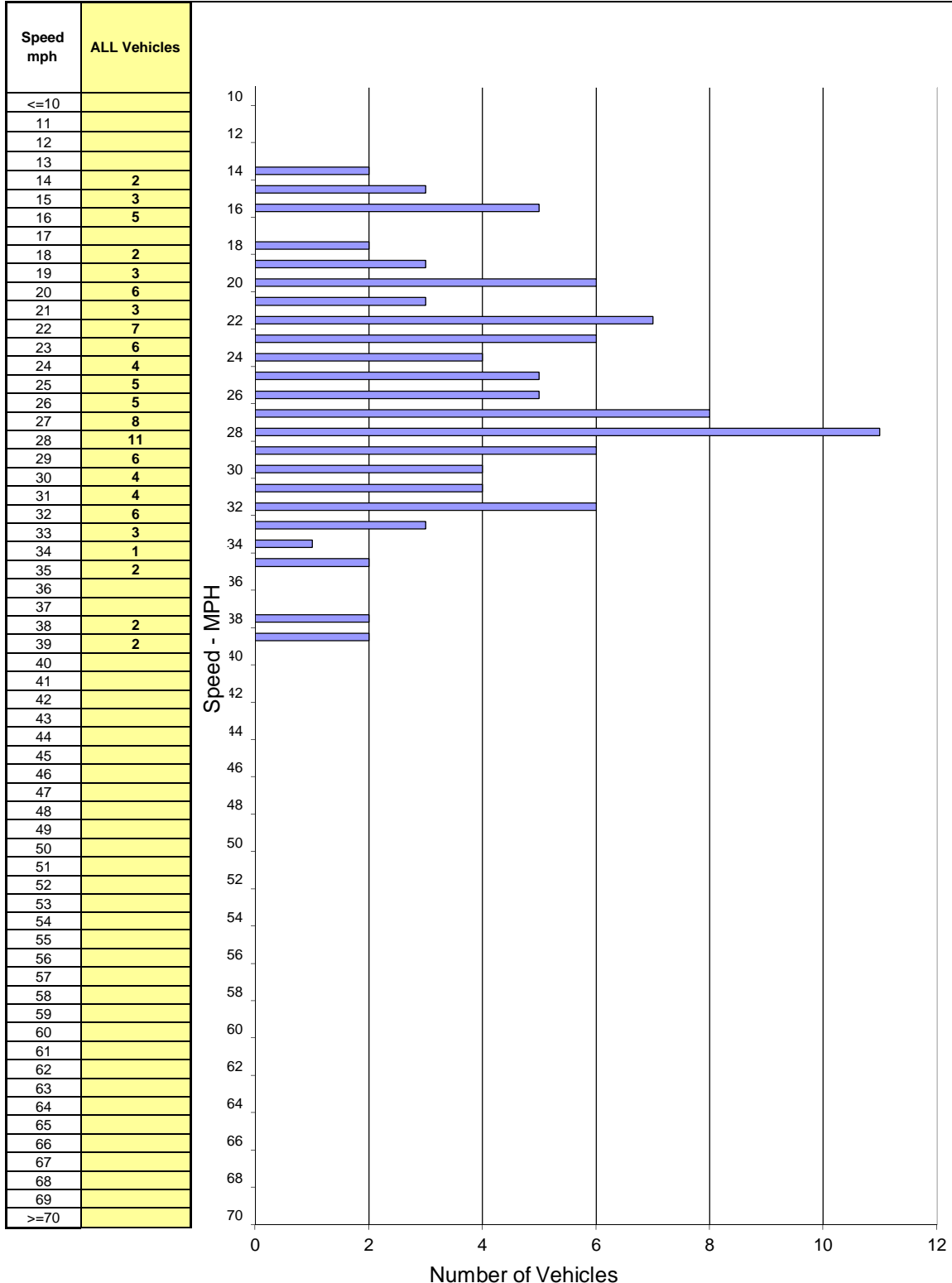
Location: Pennsylvania Ave Between Orange St & Church St

DAY: Friday

Posted Speed: 30 MPH

Project#: 15-6082-32.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	14 - 39	26 mph	32 mph	20 - 29	61	61%	15% / 15	24% / 24

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Pennsylvania Avenue from Church Street to University Avenue

Date: 4/6/2015 Time: 10:30 AM

Recorded By: NDS Weather: Partly Cloudy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	85
85th Percentile:	40
10 mph Pace:	30 - 39
Percent in Pace:	66%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	2
Annual Collision Rate:	0.7
Collision Rate (Per Million Vehicle Miles):	2.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	2,294
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	Lane lines unmarked

ROADWAY FACTORS

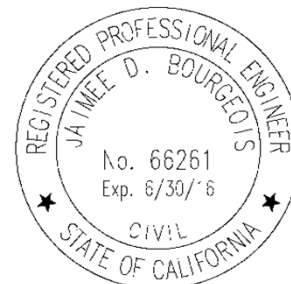
Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	High density residential driveways

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/6/2022



Spot Speed Study

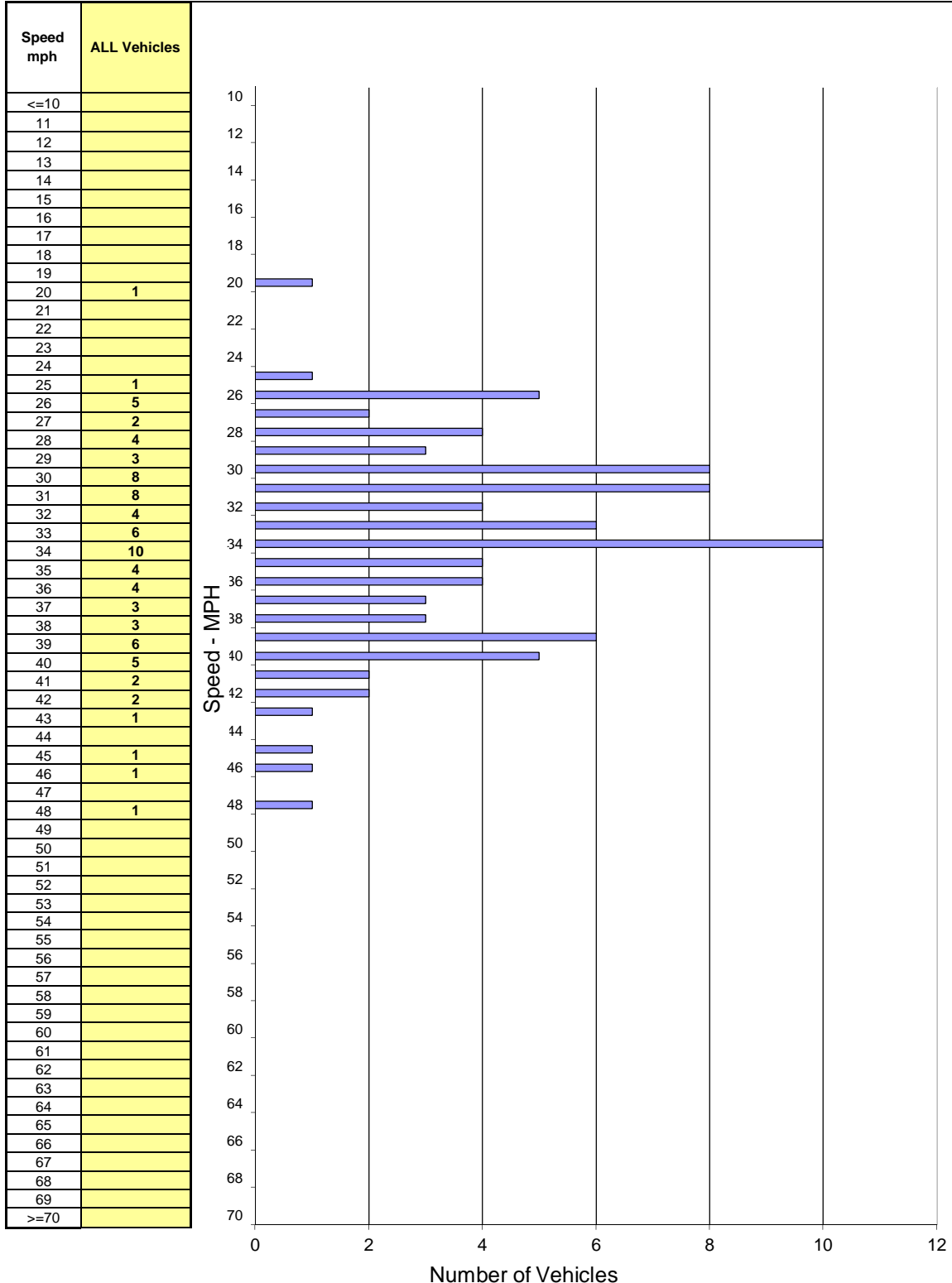
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/6/2015
DAY: Monday

Location: Pennsylvania Ave Bet. Church St & University Ave
Posted Speed: 35 MPH Project#: 15-6046-32.3

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	85	20 - 48	34 mph	40 mph	30 - 39	56	66%	18% / 16	16% / 13

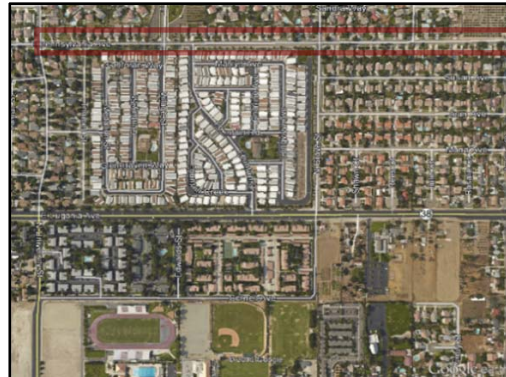
ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Pennsylvania Avenue from University Avenue to Judson Street

Date: 4/8/2015 Time: 11:22 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	88
85th Percentile:	40
10 mph Pace:	31 - 40
Percent in Pace:	67%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	2
Annual Collision Rate:	0.7
Collision Rate (Per Million Vehicle Miles):	5.9
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	513
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	Class 3
Truck Route:	0
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	Lanes unmarked w/o Grove, striped parking lane and bike facility e/o Grove

ROADWAY FACTORS

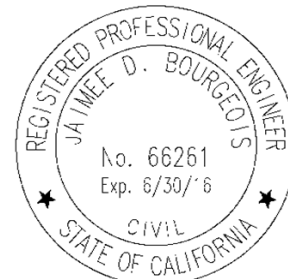
Length of Segment:	0.6 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides (gap on northeast end)
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair- Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	High density residential driveways

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/8/2022



Spot Speed Study

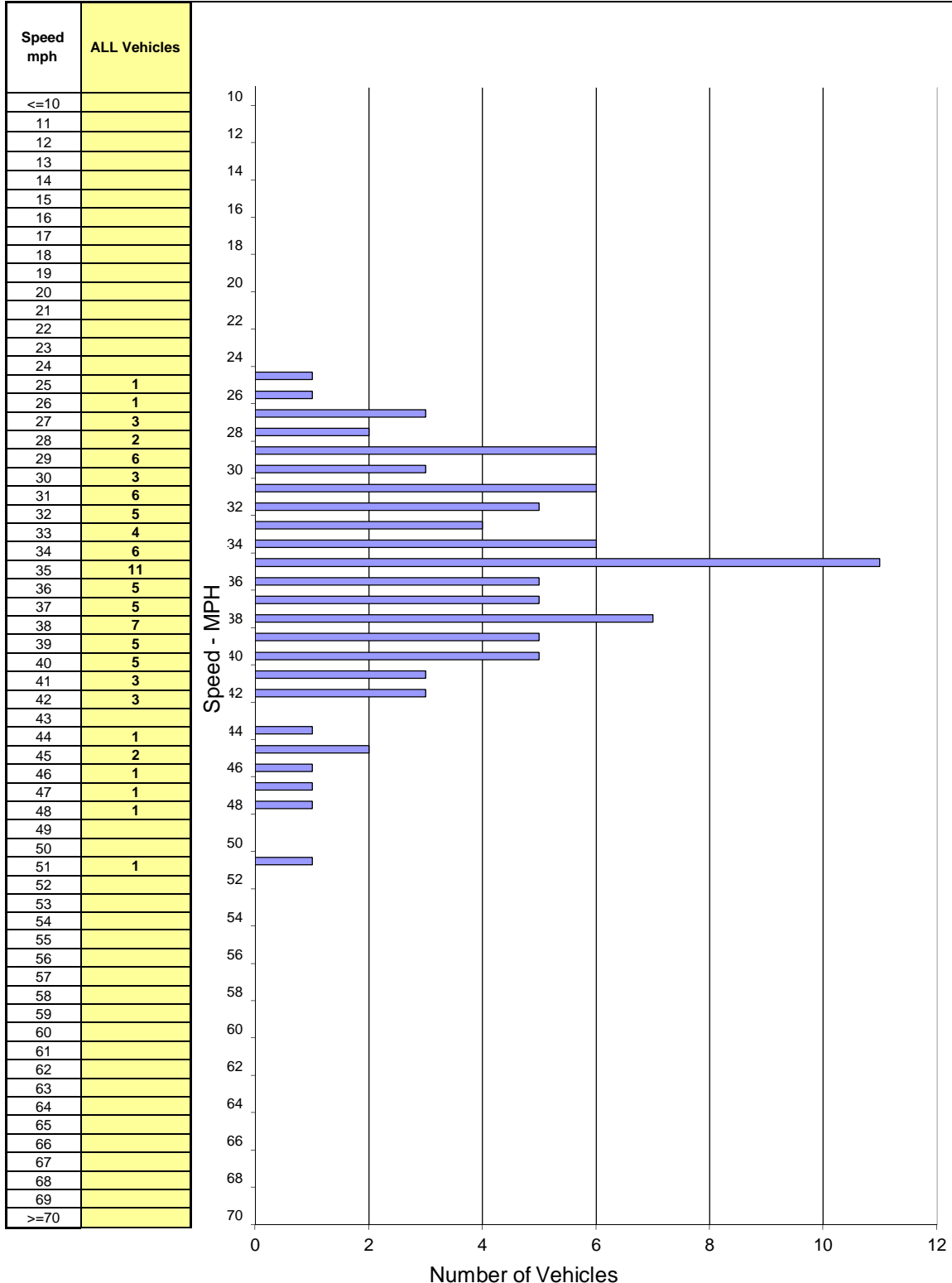
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/8/2015
DAY: Wednesday

Location: Pennsylvania Avenue Bet. University Ave & Judson St
Posted Speed: 35 MPH Project#: 15-6046-32.4

Eastbound & Westbound Spot Speeds



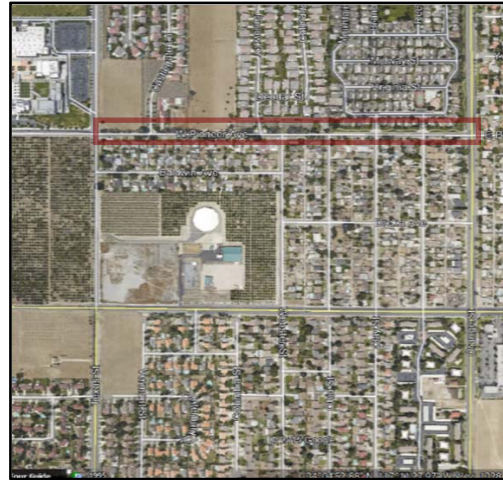
SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	88	25 - 51	35 mph	40 mph	31 - 40	59	67%	18% / 16	15% / 13

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Pioneer Avenue from Texas Street to Orange St
 Date: 3/30/2015 Time: 9:30 AM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	41
10 mph Pace:	29 - 38
Percent in Pace:	61%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	2
Total Collisions:	3
Annual Collision Rate:	1.0
Collision Rate (Per Million Vehicle Miles):	1.3
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

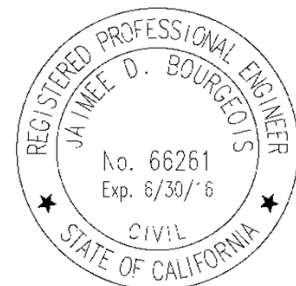
Average Daily Traffic:	5,275
Width:	36'-38'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides (some gaps)
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	High density residential driveways
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/30/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/30/2015

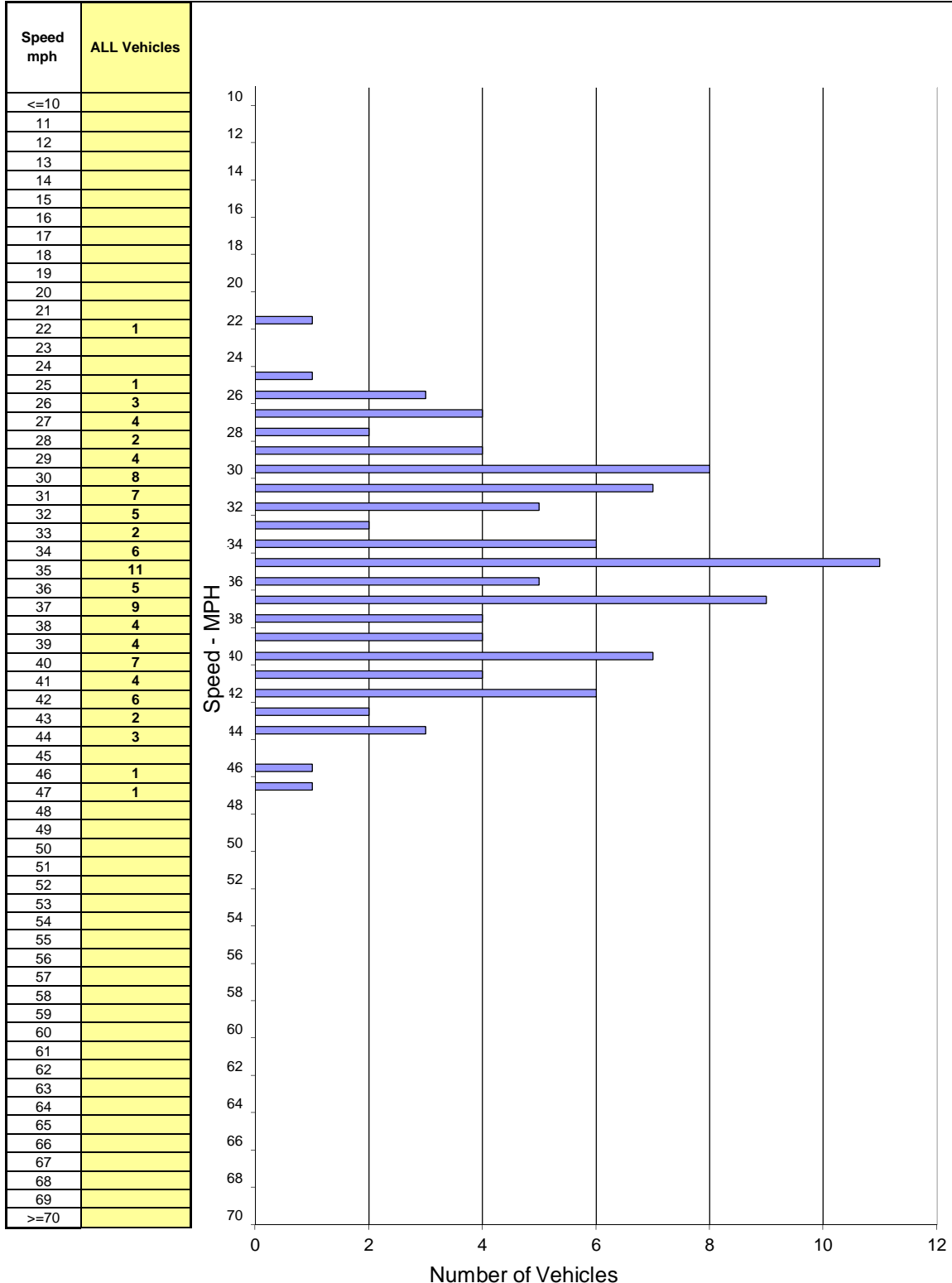
Location: Pioneer Ave bet. Texas St & Orange St

DAY: Monday

Posted Speed: 35 MPH

Project#: 15-6046-33.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	22 - 47	35 mph	41 mph	29 - 38	61	61%	11% / 11	28% / 28

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Pioneer Avenue from Orange St to Occidental Dr

Date: 3/30/2015 Time: 1:10 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	40
10 mph Pace:	31 - 40
Percent in Pace:	74%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	2,861
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	Lanes lines unmarked

ROADWAY FACTORS

Length of Segment:	0.7 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	High density residential driveways

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/30/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/30/2015

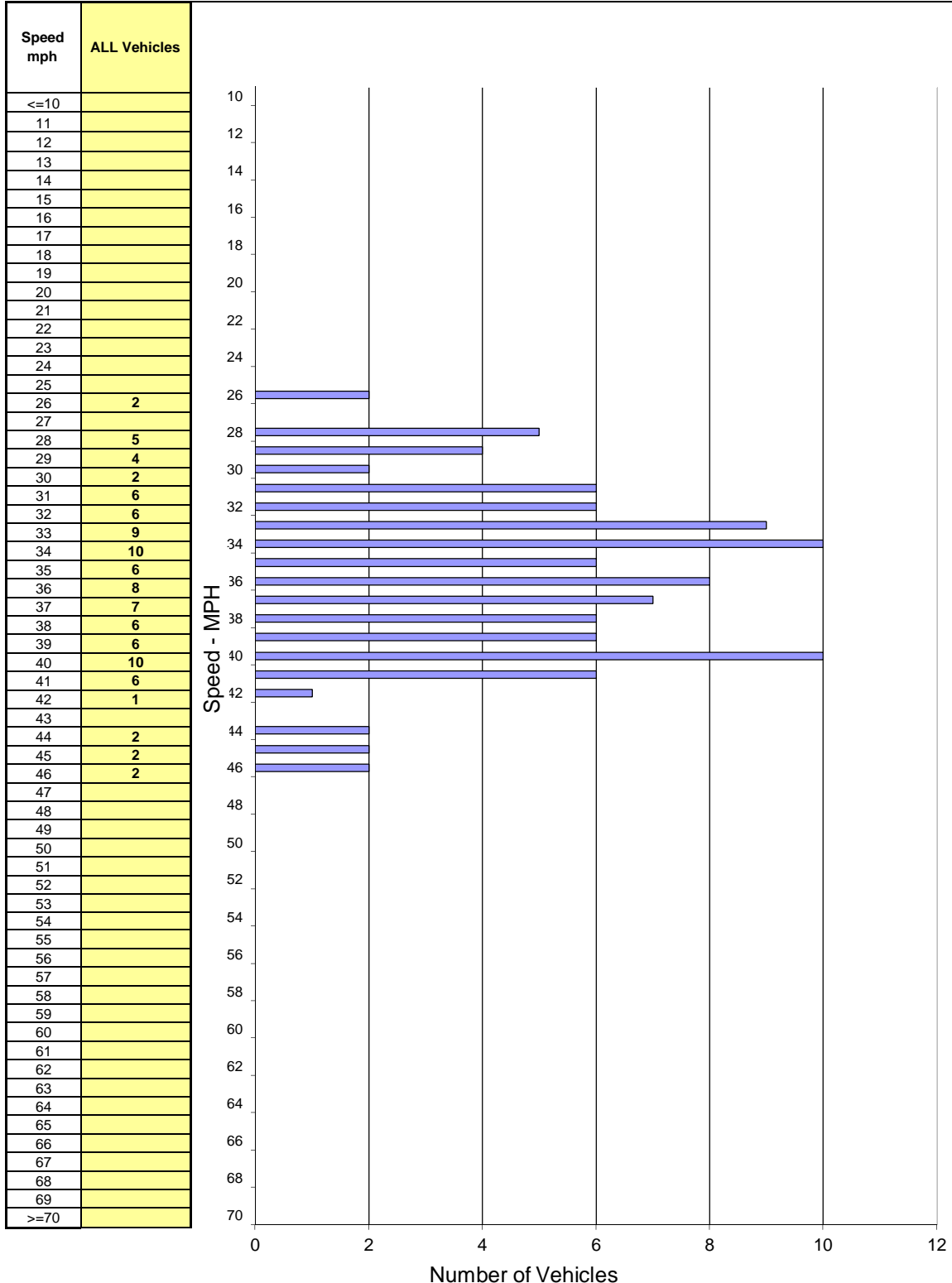
Location: Pioneer Ave bet. Orange St & Occidental St

DAY: Monday

Posted Speed: 35 MPH

Project#: 15-6046-33.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	26 - 46	35 mph	40 mph	31 - 40	74	74%	13% / 13	13% / 13

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Pioneer Avenue from Occidental Dr to Dearborn St

Date: 3/30/2015 Time: 1:50 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	46
10 mph Pace:	35 - 44
Percent in Pace:	64%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,721
Width:	34'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Partial
Adjacent Land Use:	Agricultural, Residential
Other:	Lanes unmarked Judson to Occidental

ROADWAY FACTORS

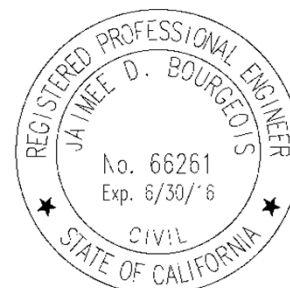
Length of Segment:	1.1 Miles
Vertical Curve:	Yes
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	A few segments
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor-Fair

CONCLUSIONS

Recommended Speed Limit:	45
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/30/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/30/2015

Location: Pioneer Ave bet. Occidental Dr & Dearborn St

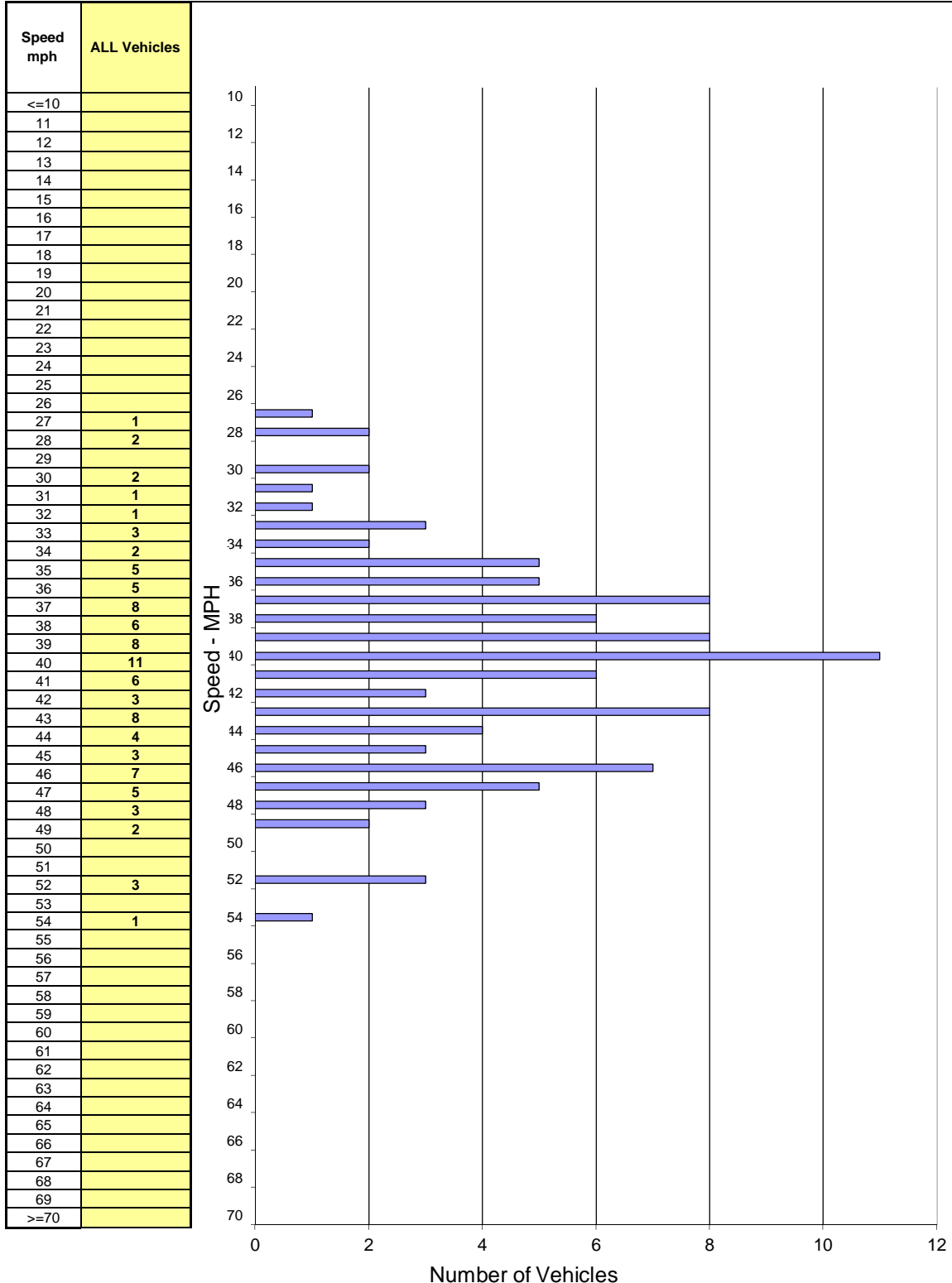
DAY: Monday

Posted Speed:

35 MPH

Project#: 15-6046-33.3

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	27 - 54	40 mph	46 mph	35 - 44	64	64%	12% / 12	24% / 24

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Pioneer Avenue from Texas Street to I-210 Freeway

Date: 4/3/2015 Time: 1:33 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	39
10 mph Pace:	30 - 39
Percent in Pace:	71%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	5,348
Width:	45'
Lane Configuration:	2 Lanes, painted median
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	0
On-Street Parking:	Partial
Adjacent Land Use:	Institutional, Agricultural
Other:	

ROADWAY FACTORS

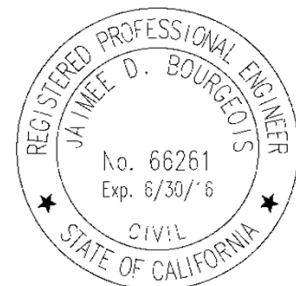
Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Portion of north side
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/3/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/3/2015

Location: Pioneer Ave Bet. Texas St & 210 Fwy

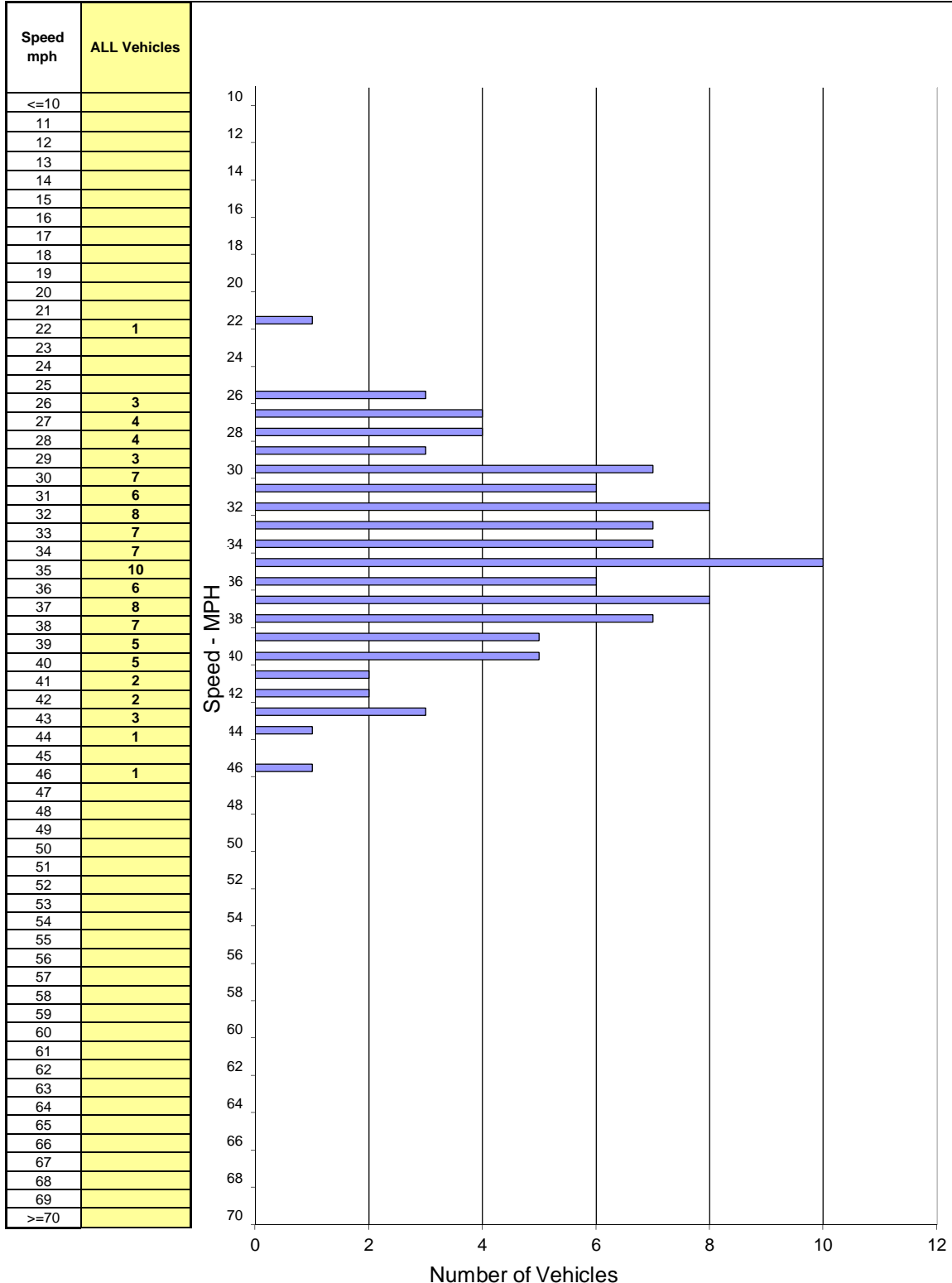
DAY: Friday

Posted Speed:

25 MPH

Project#: 15-6046-33.4

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	22 - 46	34 mph	39 mph	30 - 39	71	71%	15% / 15	14% / 14

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Redlands Boulevard from California Street to Texas Street

Date: 4/3/2015 Time: 10:55 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	45
10 mph Pace:	36 - 45
Percent in Pace:	85%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	12
Total Collisions:	37
Annual Collision Rate:	12.3
Collision Rate (Per Million Vehicle Miles):	2.3
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	7,427
Width:	78'
Lane Configuration:	4 Lanes, raised median and TWLTL
Traffic Control:	5 signals
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Commercial, Light Industrial, Vacant
Other:	

ROADWAY FACTORS

Length of Segment:	2.0 Miles
Vertical Curve:	No
Horizontal Curve:	Yes (large radius)
Lateral Visibility:	Good
Sidewalks:	Both sides (some gaps)
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	NO
Justification for 5 mph down:	High density commercial driveways on both sides with partial TWLTL
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	4/3/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/3/2015

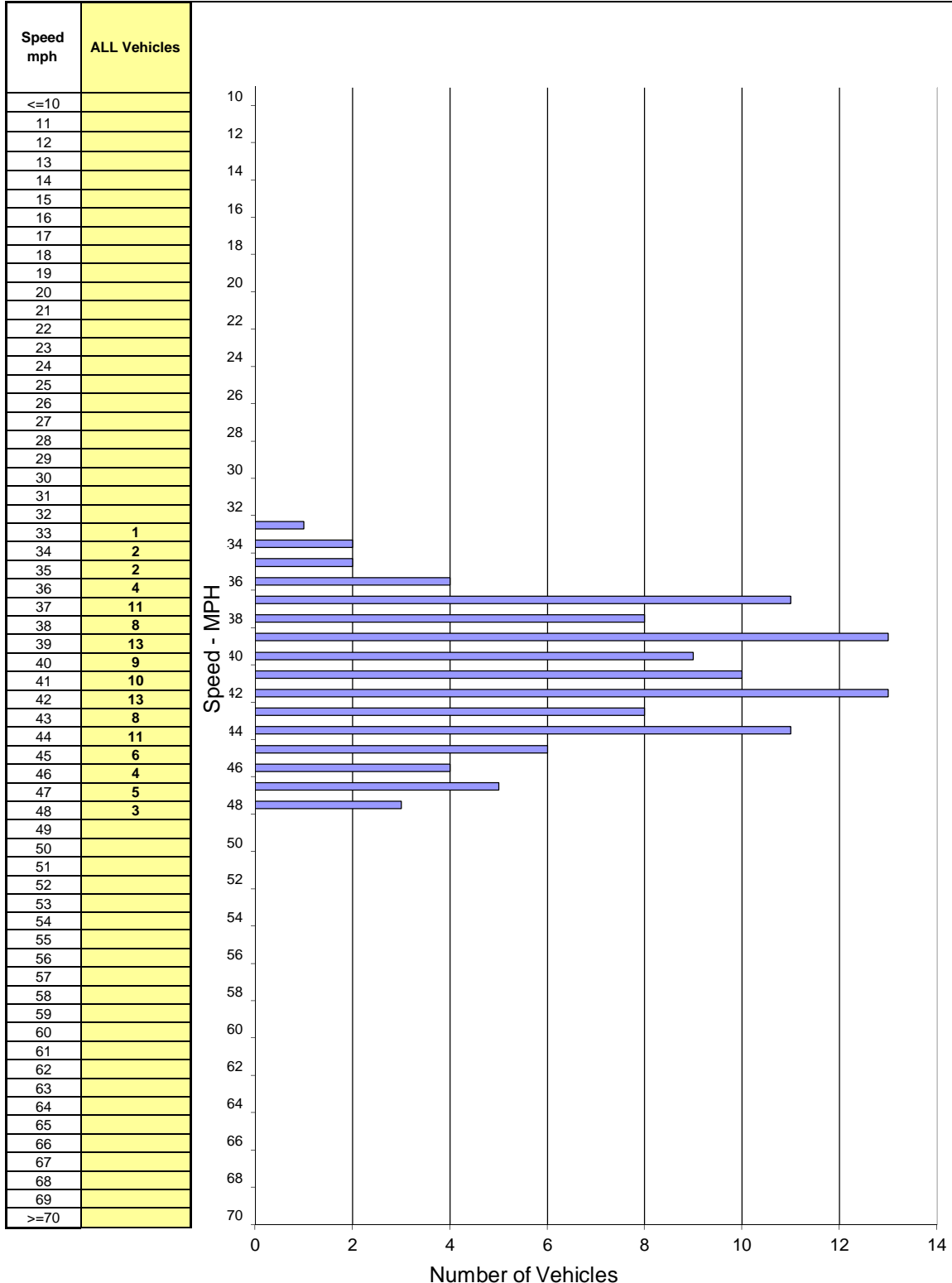
Location: Redlands Blvd Bet. Texas St & California St

DAY: Friday

Posted Speed: 40 MPH

Project#: 15-6046-34.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	33 - 48	41 mph	45 mph	36 - 45	93	85%	4% / 5	11% / 12

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Redlands Boulevard from Texas Street to Eureka Street

Date: 3/30/2015 Time: 12:20 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	41
10 mph Pace:	32 - 41
Percent in Pace:	74%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	4
Annual Collision Rate:	1.3
Collision Rate (Per Million Vehicle Miles):	0.9
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

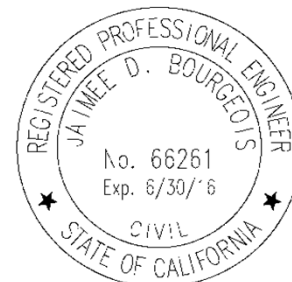
Average Daily Traffic:	13,044
Width:	78'
Lane Configuration:	4 Lanes, TWLTL
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Commercial
Other:	

ROADWAY FACTORS

Length of Segment:	0.3 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	High density commercial driveways on both sides with TWLTL
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/30/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/30/2015

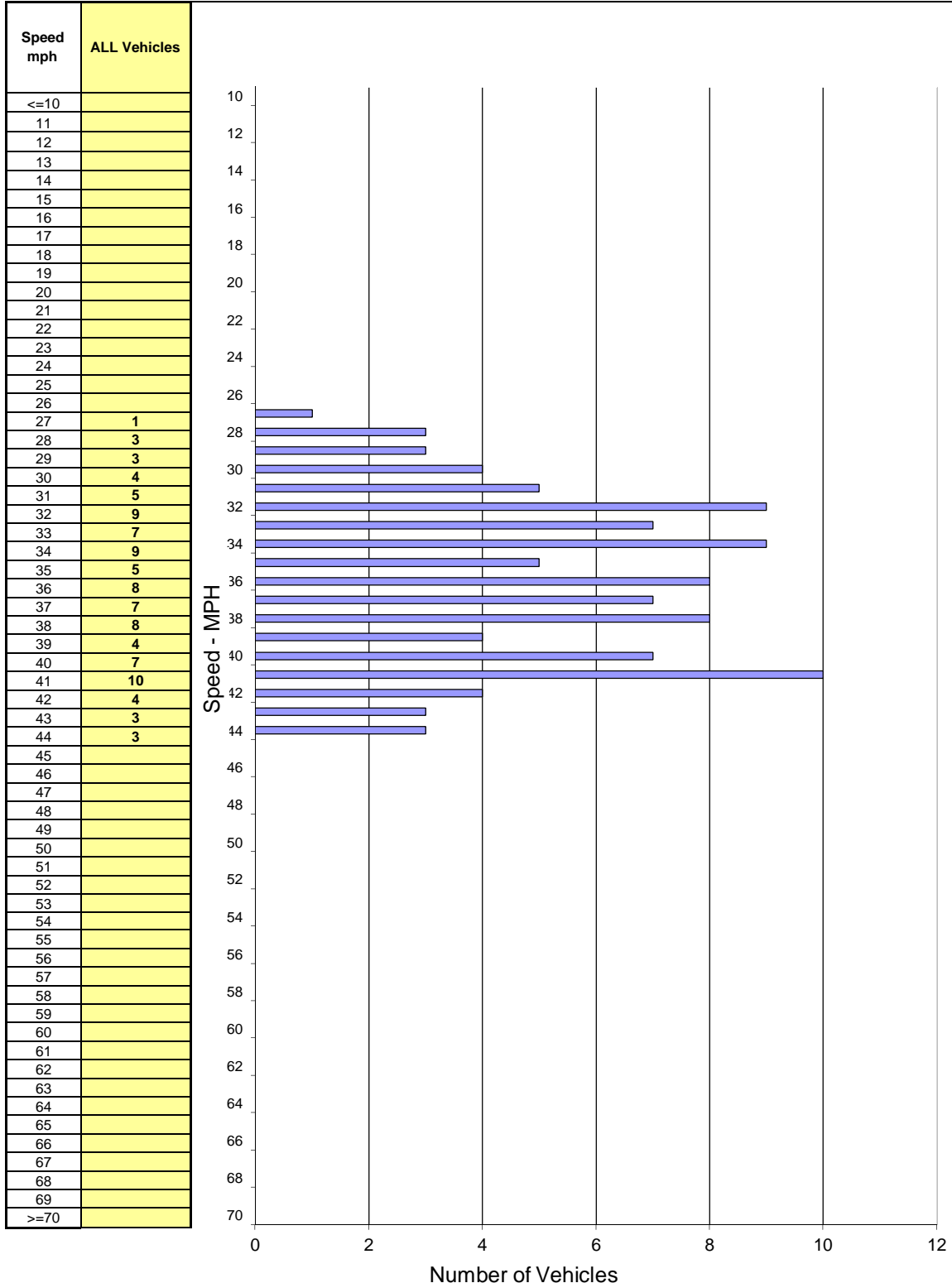
Location: Redlands Blvd bet. Texas St & Eureka St

DAY: Monday

Posted Speed: 35 MPH

Project#: 15-6046-34.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	27 - 44	36 mph	41 mph	32 - 41	74	74%	16% / 16	10% / 10

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Redlands Boulevard from Eureka Street to Citrus Avenue

Date: 3/30/2015 Time: 11:40 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	36
10 mph Pace:	28 - 37
Percent in Pace:	84%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	3
Total Collisions:	15
Annual Collision Rate:	5.0
Collision Rate (Per Million Vehicle Miles):	1.5
Statewide Collision Rate:	1.85

TRAFFIC FACTORS

Average Daily Traffic:	15,059
Width:	76'
Lane Configuration:	4 Lanes, raised median
Traffic Control:	3 signals
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Commercial
Other:	

ROADWAY FACTORS

Length of Segment:	0.6 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	NO
Justification for 5 mph down:	Several multi-lane uncontrolled crosswalks with high pedestrian activity and frequency of bicyclists
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	3/30/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/30/2015

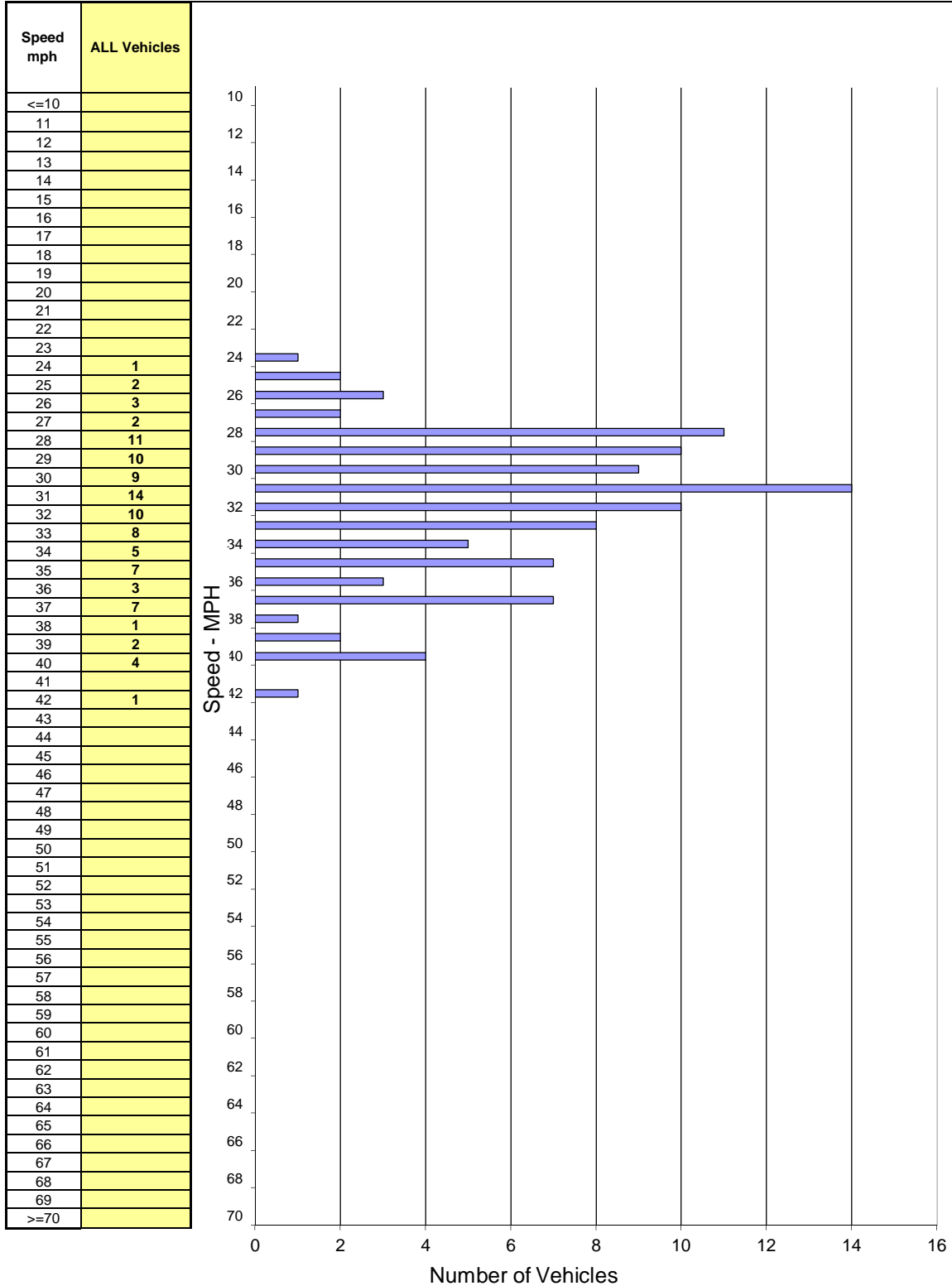
Location: Redlands Blvd bet. Eureka St & Citrus Ave

DAY: Monday

Posted Speed: 30 MPH

Project#: 15-6046-34.3

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	24 - 42	31 mph	36 mph	28 - 37	84	84%	8% / 8	8% / 8

ENGINEERING AND TRAFFIC SURVEY

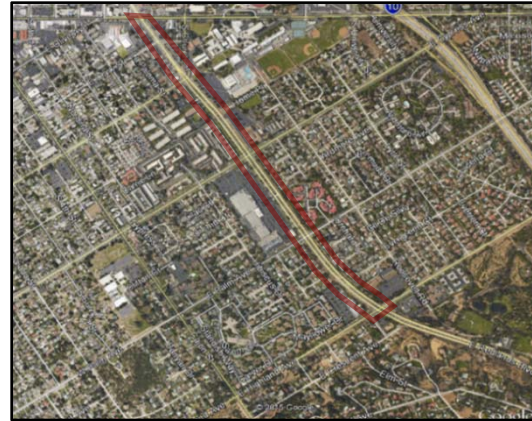
City of Redlands



Redlands Boulevard from Citrus Avenue to Highland Avenue

Date: 3/30/2015 Time: 10:40 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	41
10 mph Pace:	32 - 41
Percent in Pace:	76%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	3
Total Collisions:	11
Annual Collision Rate:	3.7
Collision Rate (Per Million Vehicle Miles):	0.7
Statewide Collision Rate:	1.85

TRAFFIC FACTORS

Average Daily Traffic:	13,998
Width:	88'
Lane Configuration:	4 Lanes, raised median
Traffic Control:	4 signals
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Partial, west side
Adjacent Land Use:	Commercial, Residential, Institutional
Other:	

ROADWAY FACTORS

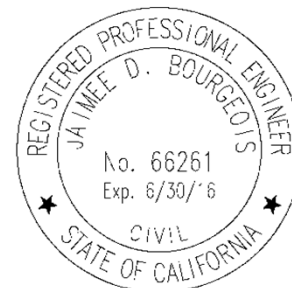
Length of Segment:	1.0 Mile
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	n/o Church
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/30/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/30/2015

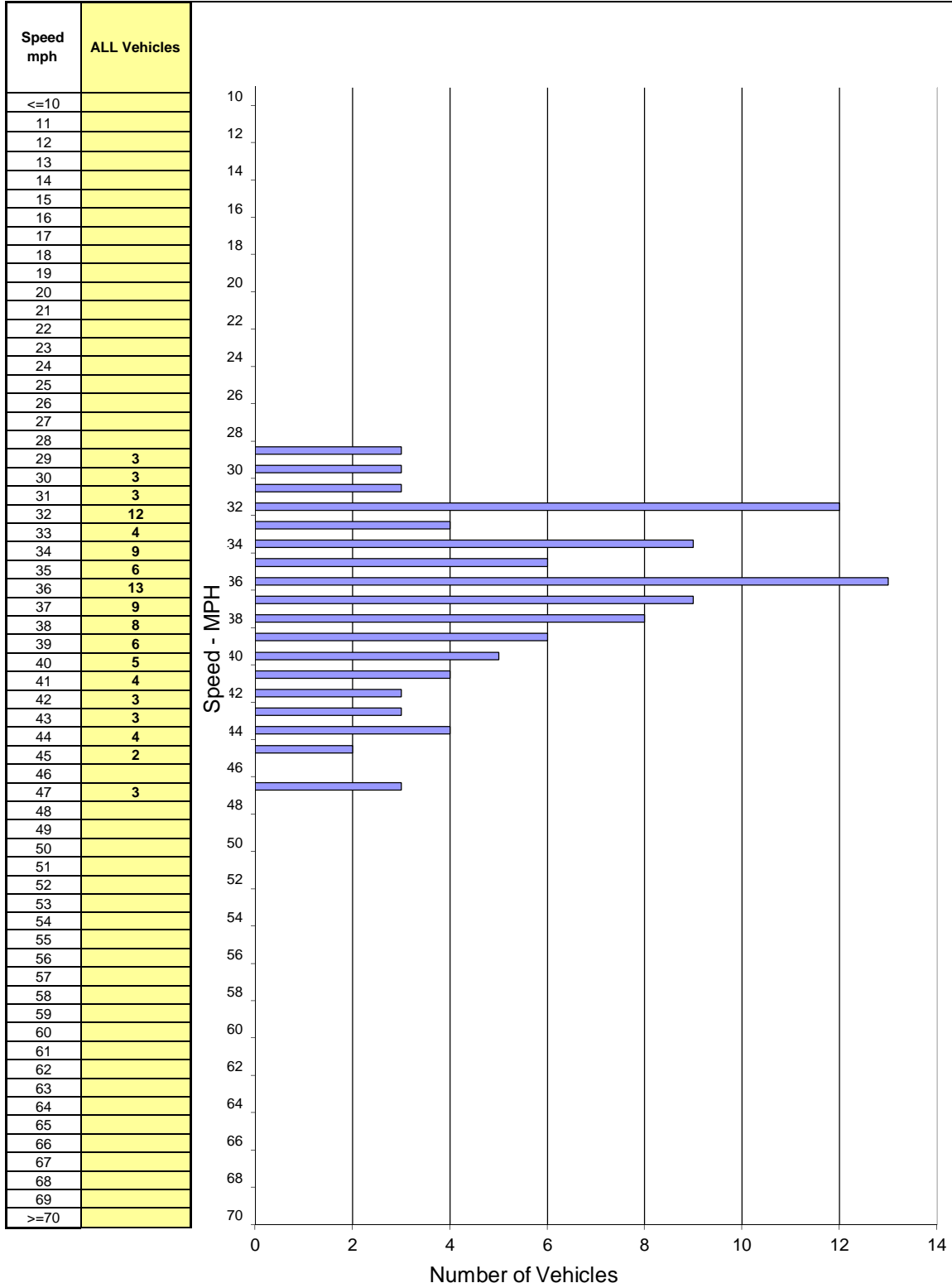
Location: Redlands Blvd bet. Citrus Ave & Highland Ave

DAY: Monday

Posted Speed: 35 MPH

Project#: 15-6046-34.4

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	29 - 47	36 mph	41 mph	32 - 41	76	76%	9% / 9	15% / 15

ENGINEERING AND TRAFFIC SURVEY

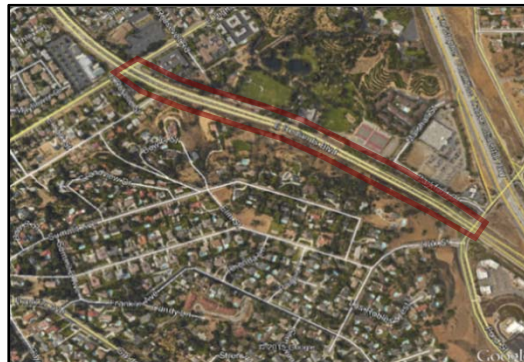
City of Redlands



Redlands Boulevard from Highland Avenue to Ford Street

Date: 4/1/2015 Time: 1:10 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	53
10 mph Pace:	43 - 52
Percent in Pace:	73%
Posted Speed Limit:	50 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	6
Annual Collision Rate:	2.0
Collision Rate (Per Million Vehicle Miles):	0.8
Statewide Collision Rate:	1.85

TRAFFIC FACTORS

Average Daily Traffic:	11,369
Width:	74'
Lane Configuration:	4 Lanes, median
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	No
Adjacent Land Use:	Park, Residential
Other:	

ROADWAY FACTORS

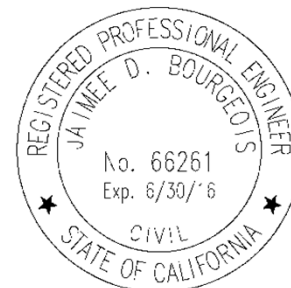
Length of Segment:	0.6 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	None
Driveways:	No
Street Lighting:	No
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	50
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/1/2022



Spot Speed Study

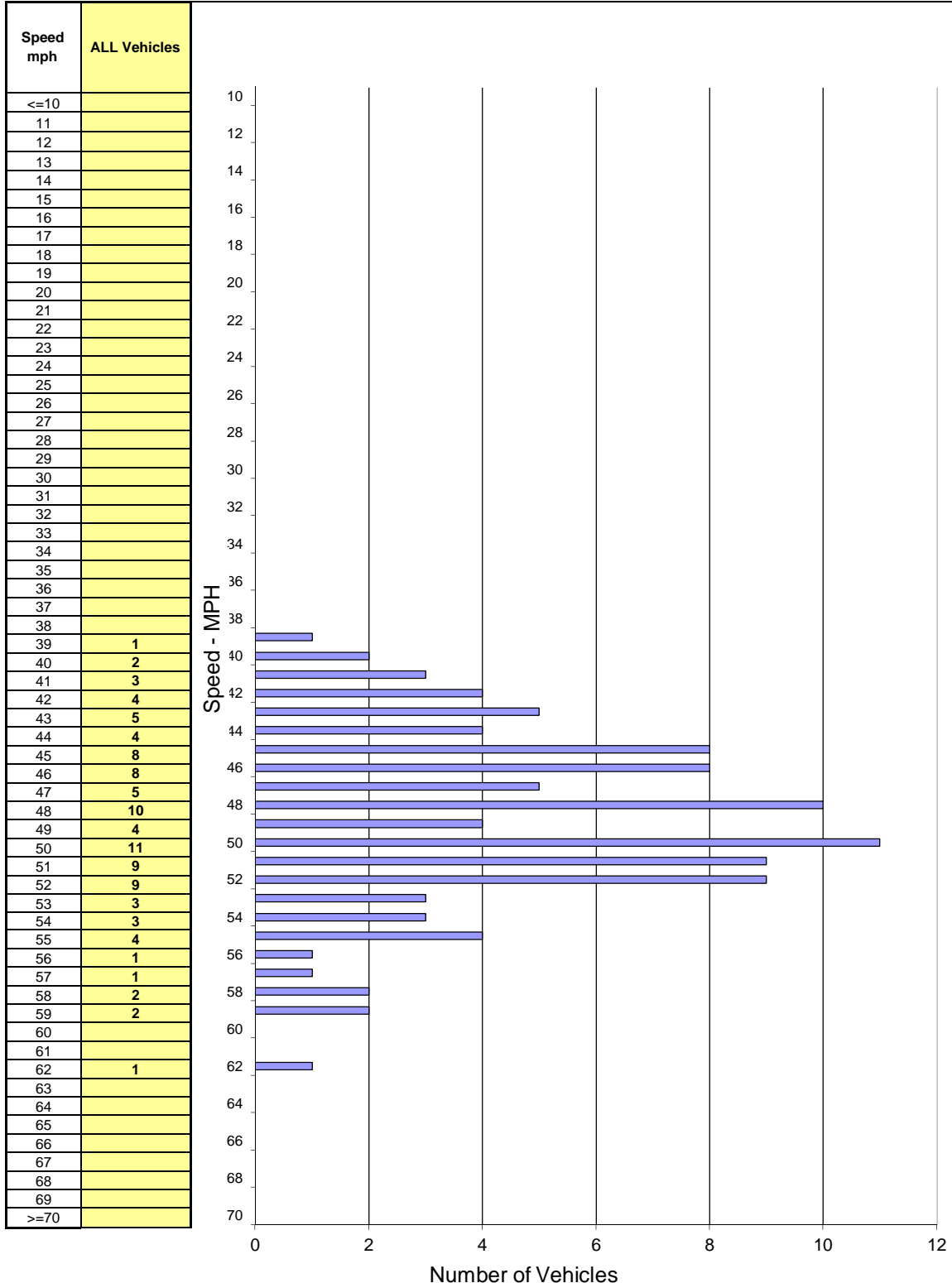
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/1/2015
DAY: Wednesday

Location: Redlands Blvd bet. Highland Ave & Ford St
Posted Speed: 50 MPH Project#: 15-6046-34.5

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	39 - 62	48 mph	53 mph	43 - 52	73	73%	10% / 10	17% / 17

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Reservoir Road from Ford Street to Wabash Avenue

Date: 4/1/2015 Time: 1:45 PM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	46
10 mph Pace:	36 - 45
Percent in Pace:	68%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	0.2
Statewide Collision Rate:	1.9

TRAFFIC FACTORS

Average Daily Traffic:	3,391
Width:	36'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	0
On-Street Parking:	No
Adjacent Land Use:	Church, Residential, Agricultural
Other:	

ROADWAY FACTORS

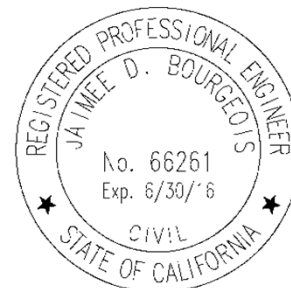
Length of Segment:	1.1 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Partial on north side
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	45
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/1/2022



Spot Speed Study

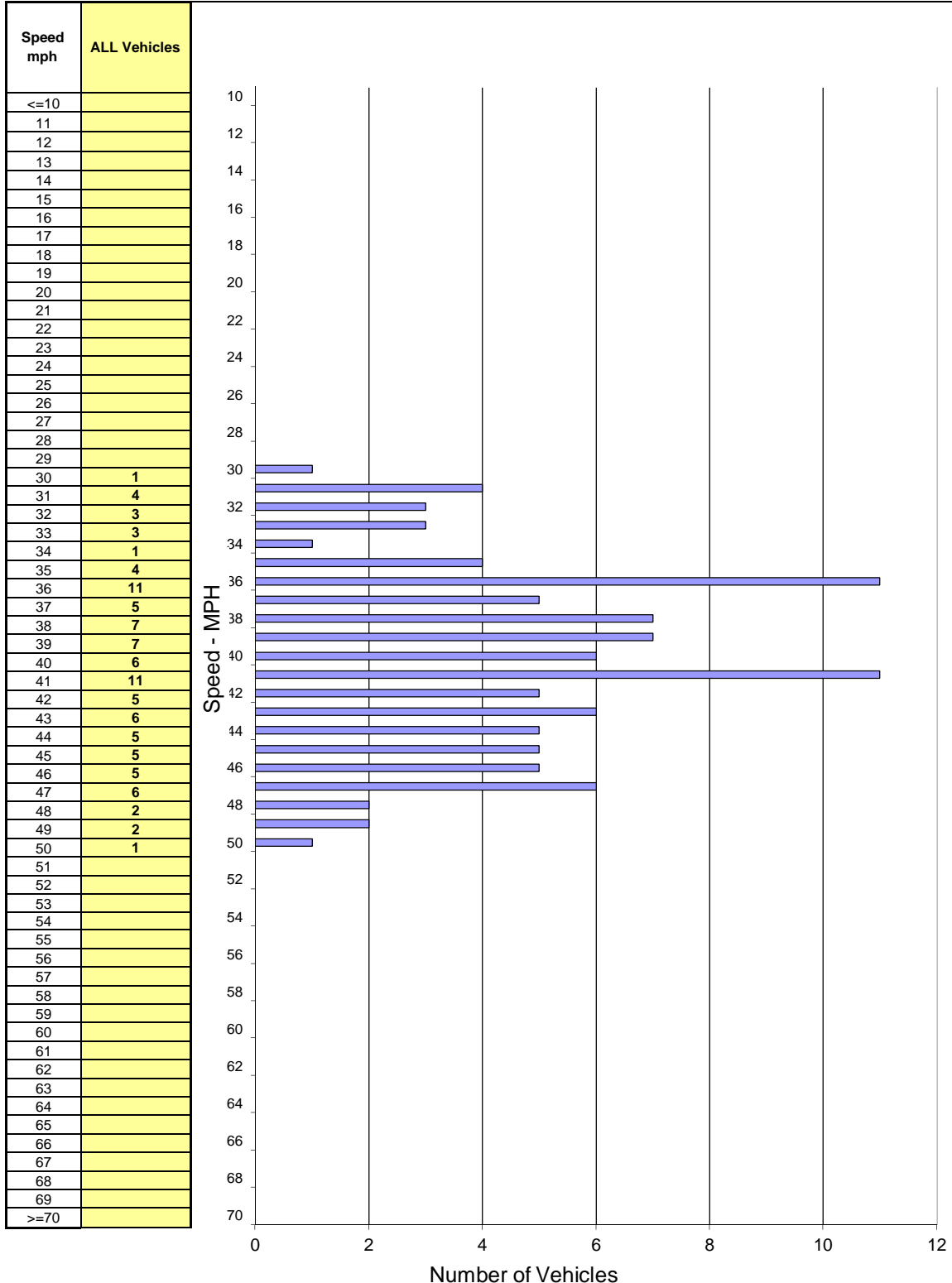
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/1/2015
DAY: Wednesday

Location: Reservoir Rd bet. Ford St & Wabash Ave
Posted Speed: 45 MPH Project#: 15-6046-35.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	30 - 50	40 mph	46 mph	36 - 45	68	68%	16% / 16	16% / 16

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



San Bernardino Avenue from Tennessee Street to Orange Street

Date: 3/30/2015 Time: 12:30 PM

Recorded By: NDS Weather: Sunny



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	51
10 mph Pace:	44 - 53
Percent in Pace:	93%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	3
Total Collisions:	13
Annual Collision Rate:	4.3
Collision Rate (Per Million Vehicle Miles):	1.1
Statewide Collision Rate:	1.9

TRAFFIC FACTORS

Average Daily Traffic:	11,903
Width:	64'
Lane Configuration:	2 Lanes
Traffic Control:	1 signal
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Partial
Adjacent Land Use:	Agricultural, Residential
Other:	

ROADWAY FACTORS

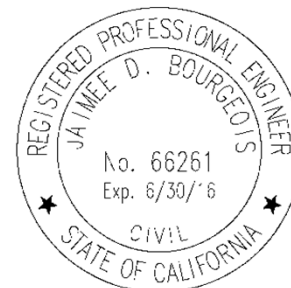
Length of Segment:	0.9 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Partial both sides
Driveways:	No
Street Lighting:	Partial
Road Condition:	Poor-Fair

CONCLUSIONS

Recommended Speed Limit:	50
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/30/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/30/2015

Location: San Bernardino Ave bet. Tennessee St & Orange St

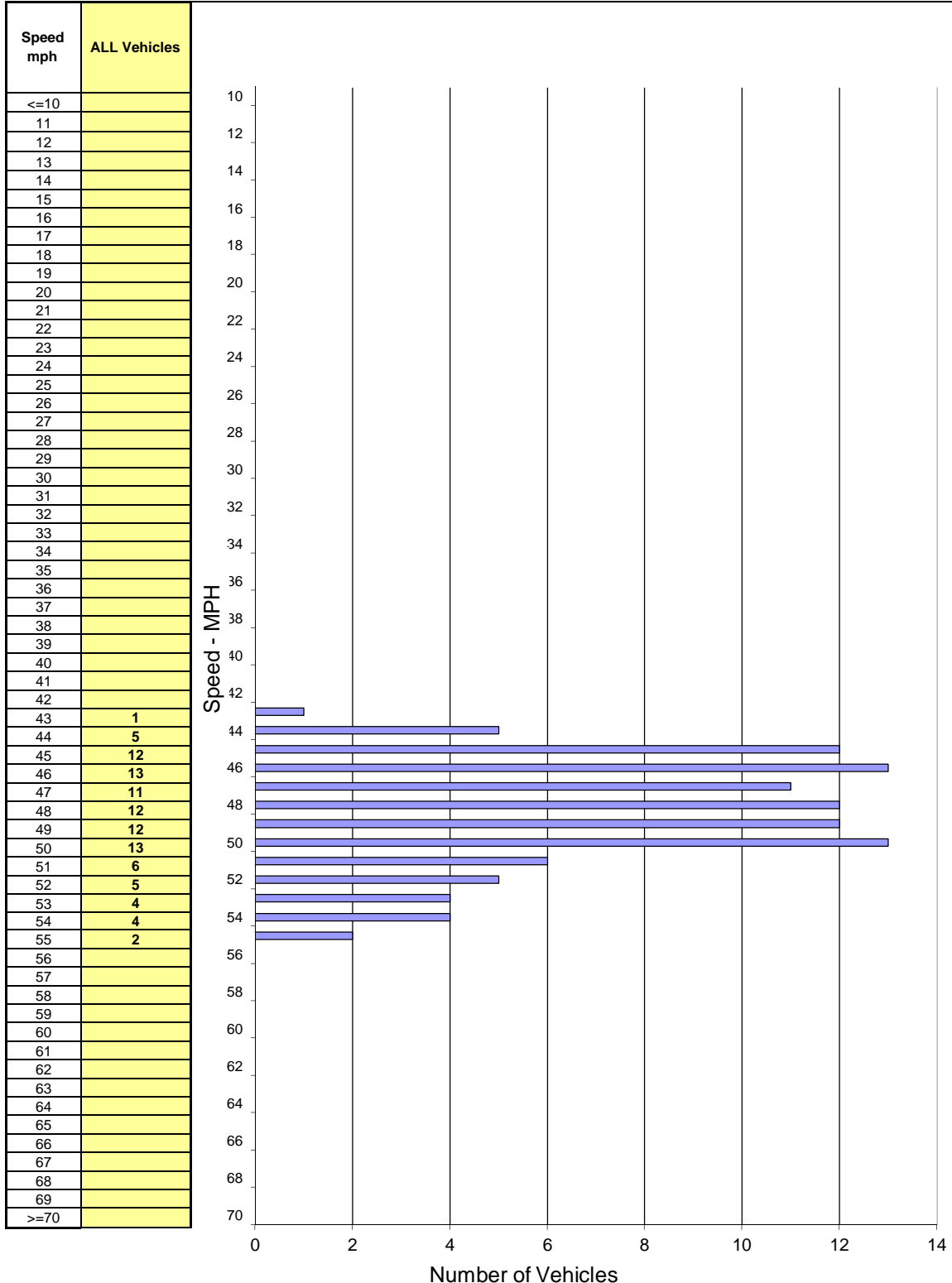
DAY: Monday

Posted Speed:

45 MPH

Project#: 15-6046-36.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	43 - 55	48 mph	51 mph	44 - 53	93	93%	1% / 1	6% / 6

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

San Bernardino Avenue from Orange Street to University Street

Date: 3/30/2015 Time: 9:36 AM

Recorded By: NDS Weather: Sunny



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	46
10 mph Pace:	37 - 46
Percent in Pace:	88%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	9
Annual Collision Rate:	3.0
Collision Rate (Per Million Vehicle Miles):	1.1
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	9,355
Width:	64'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Institutional, Residential
Other:	

ROADWAY FACTORS

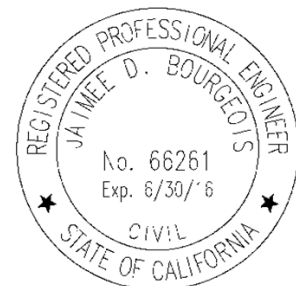
Length of Segment:	0.8 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Very few
Street Lighting:	Partial
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	45
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/30/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/30/2015

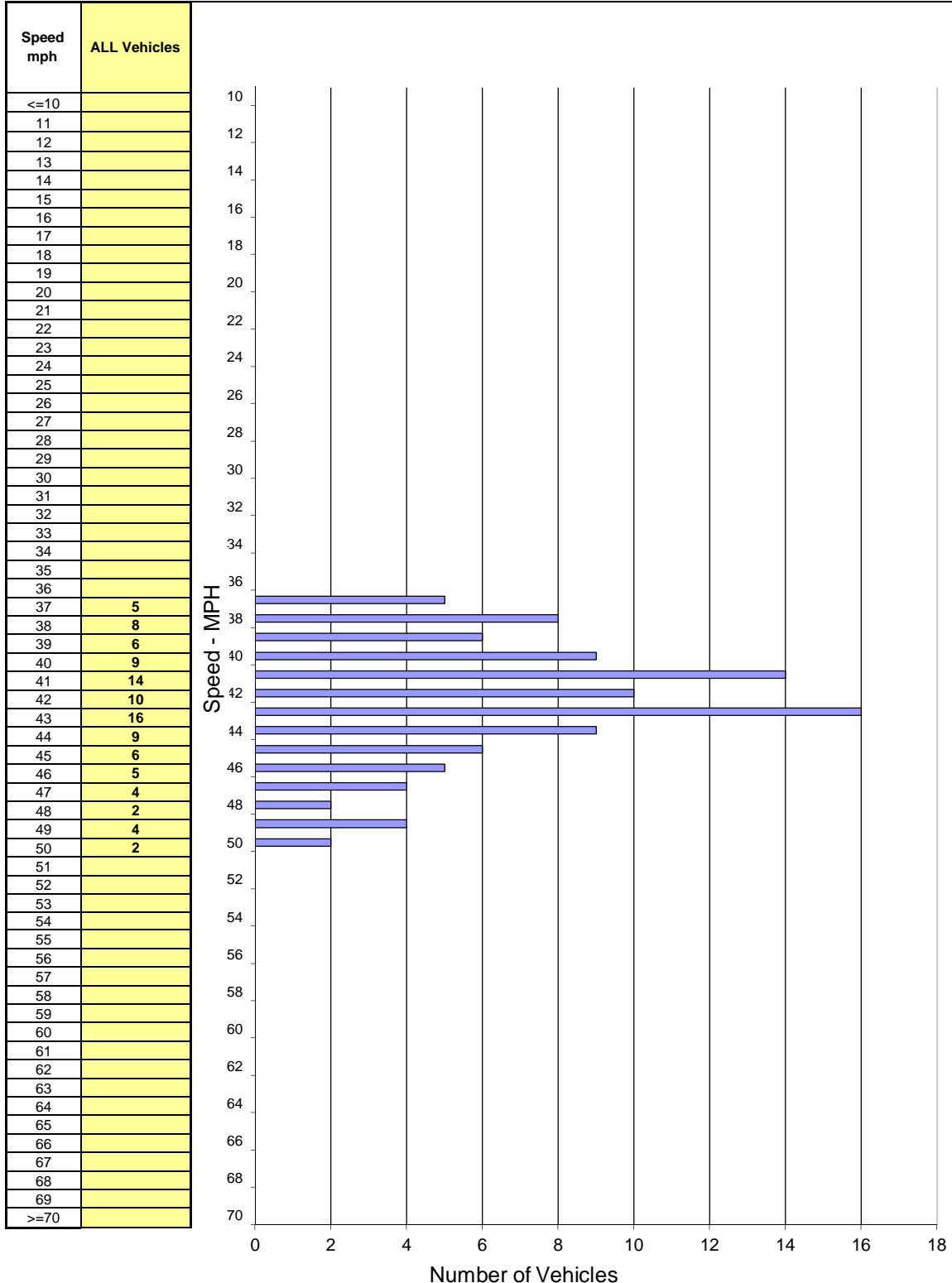
Location: San Bernardino Ave bet. Orange St & University St

DAY: Monday

Posted Speed: 35 MPH

Project#: 15-6046-36.2

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	37 - 50	42 mph	46 mph	37 - 46	88	88%	0% / 0	12% / 12

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

San Bernardino Avenue from University Street to Wabash Avenue
Date: 3/30/2015 Time: 11:15 AM
Recorded By: NDS Weather: Sunny



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	48
10 mph Pace:	42 - 51
Percent in Pace:	94%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	3
Annual Collision Rate:	1.0
Collision Rate (Per Million Vehicle Miles):	0.4
Statewide Collision Rate:	1.9

TRAFFIC FACTORS

Average Daily Traffic:	6,087
Width:	64'-72'
Lane Configuration:	2-4 Lanes
Traffic Control:	2 stops
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Agricultural, Residential
Other:	

ROADWAY FACTORS

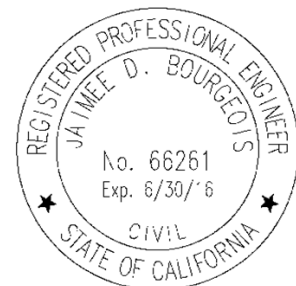
Length of Segment:	1.2 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Very few
Street Lighting:	Partial
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	45
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/30/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/30/2015

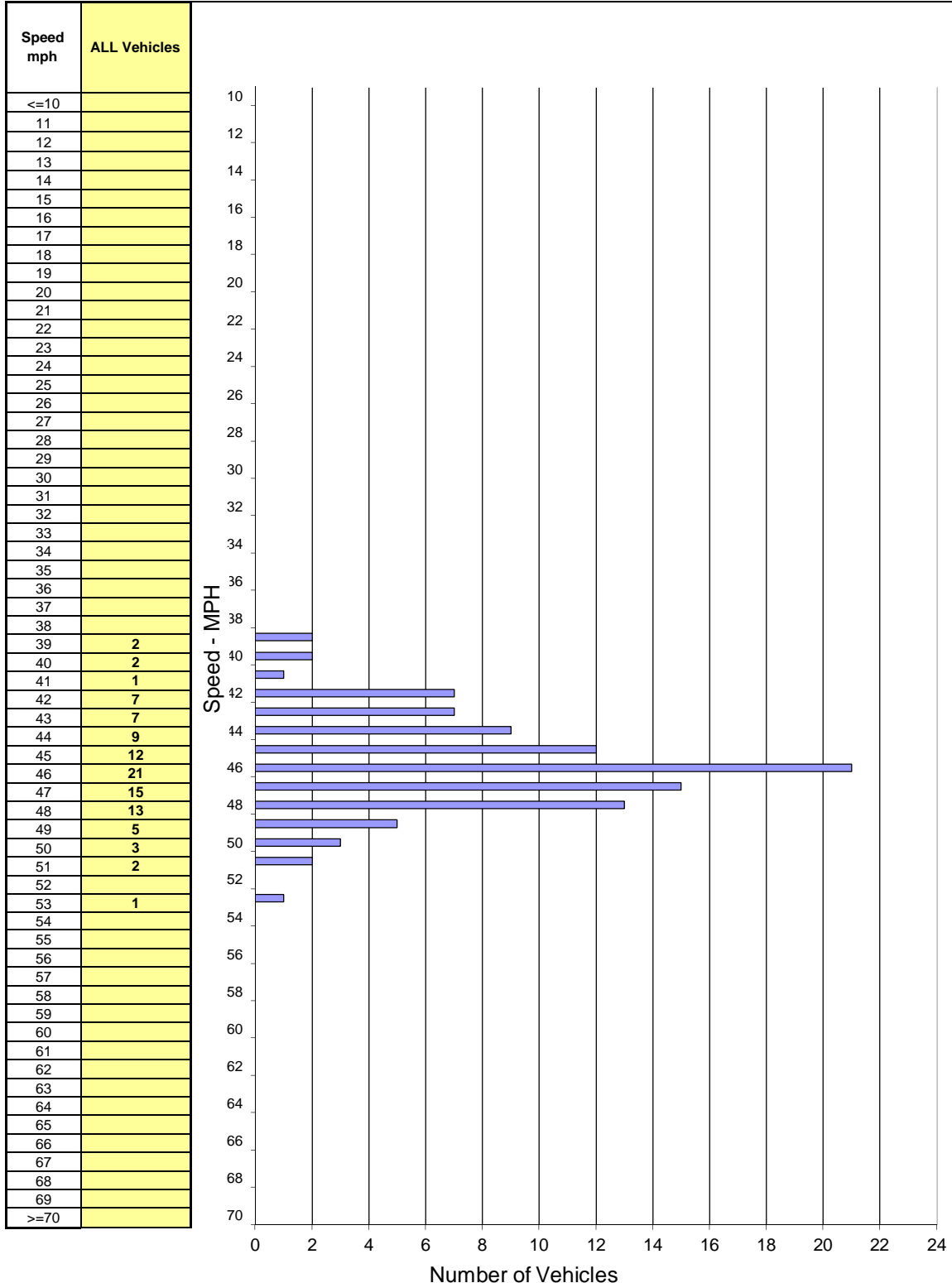
Location: San Bernardino Ave bet. University St & Wabash Ave

DAY: Monday

Posted Speed: 45 MPH

Project#: 15-6046-36.3

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	39 - 53	46 mph	48 mph	42 - 51	94	94%	5% / 5	1% / 1

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

San Bernardino Avenue from Mountain View Avenue to California Street

Date: 4/2/2015 Time: 10:40 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed: 100
 85th Percentile: 51
 10 mph Pace: 41 - 50
 Percent in Pace: 59%
 Posted Speed Limit: 45 mph

COLLISION HISTORY

Dates Observed: 1/1/10-12/31/12
 Speed-Related Collisions: 1
 Total Collisions: 9
 Annual Collision Rate: 3.0
 Collision Rate (Per Million Vehicle Miles): 0.9
 Statewide Collision Rate: 1.95

TRAFFIC FACTORS

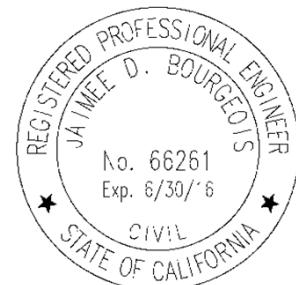
Average Daily Traffic: 9,789
 Width: 94'-104'
 Lane Configuration: 6 Lanes, TWLTL
 Traffic Control: 1 signal
 Mid-block Crosswalks: No
 Bike Facilities: No
 Truck Route: Yes
 On-Street Parking: Yes
 Adjacent Land Use: Industrial
 Other:

ROADWAY FACTORS

Length of Segment: 0.9 Miles
 Vertical Curve: No
 Horizontal Curve: No
 Lateral Visibility: Good
 Sidewalks: Both sides
 Driveways: Yes
 Street Lighting: Yes
 Road Condition: Good

CONCLUSIONS

Recommended Speed Limit: 45
 Speed Limit Change: NO
 Justification for 5 mph down: TWLTL in industrial area; large volume of heavy trucks traveling slow
 Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.
 Survey Expires: 4/2/2022



Spot Speed Study

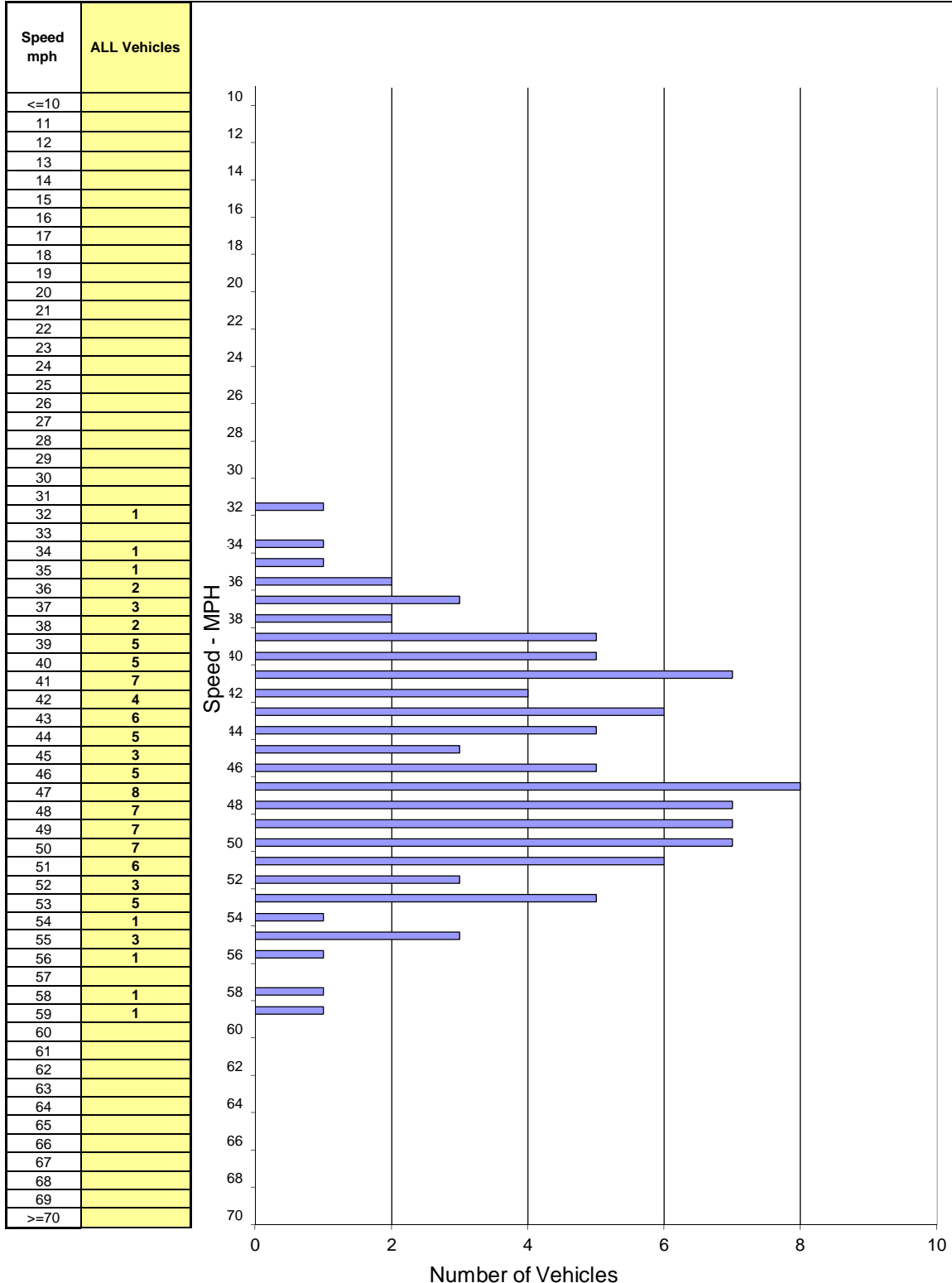
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/2/2015
DAY: Thursday

Location: San Bernardino Ave bet. Mountain View Ave & California St
Posted Speed: 45 MPH Project#: 15-6046-36.4

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	32 - 59	46 mph	51 mph	41 - 50	59	59%	20% / 20	21% / 21

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



San Timoteo Canyon Rd from Fern Avenue to Barton Road

Date: 4/1/2015 Time: 11:30 AM

Recorded By: NDS Weather: Hazy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	46
10 mph Pace:	35 - 44
Percent in Pace:	72%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	5
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	1.9

TRAFFIC FACTORS

Average Daily Traffic:	6,991
Width:	23'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	No
Adjacent Land Use:	Residential, Agricultural
Other:	

ROADWAY FACTORS

Length of Segment:	1.2 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	None
Driveways:	Yes
Street Lighting:	No
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	45
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/1/2022



Spot Speed Study

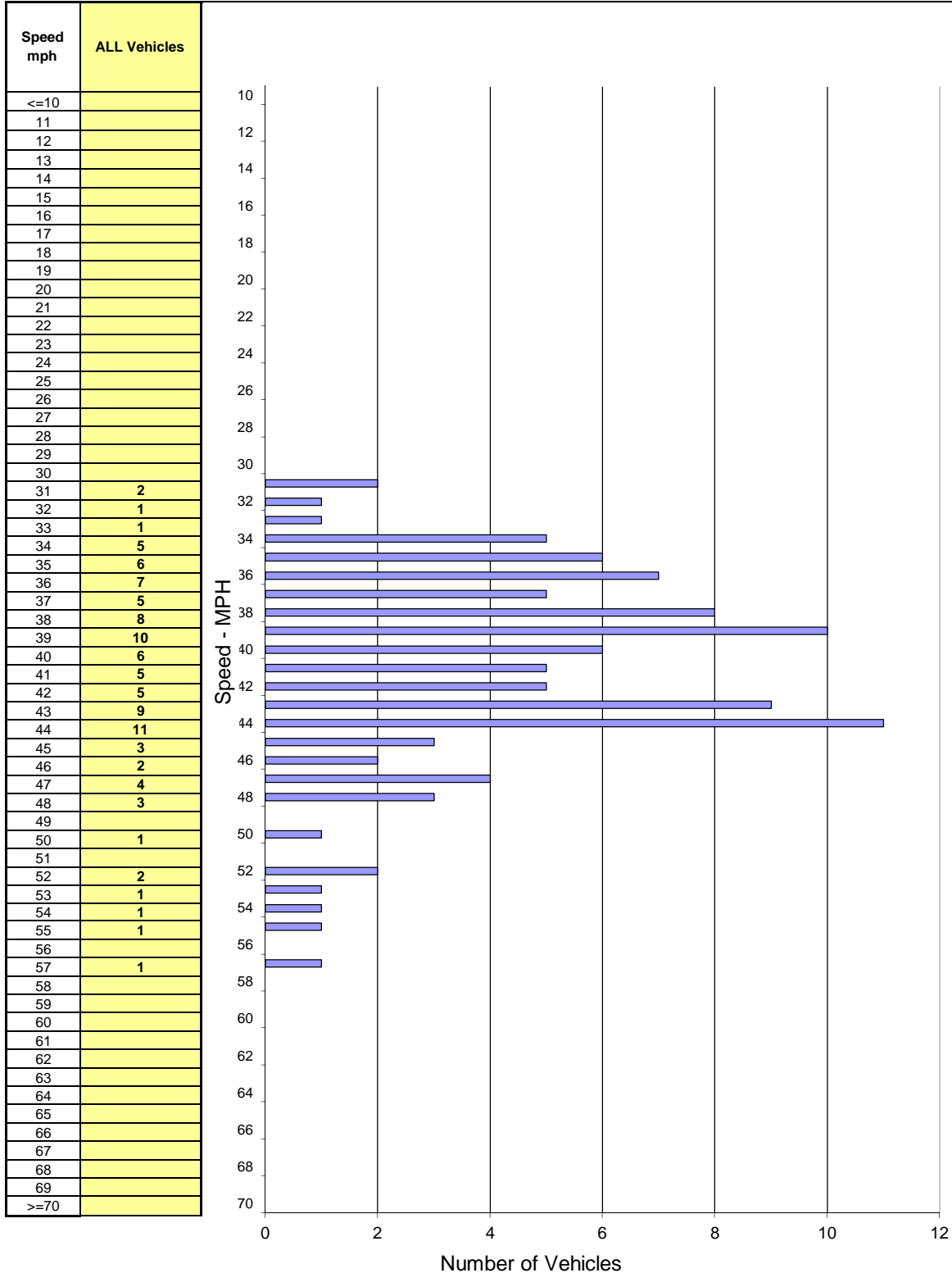
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/1/2015
DAY: Wednesday

Location: San Timoteo Cyn Rd bet. Fern Ave & Barton Rd
Posted Speed: 45 MPH Project#: 15-6046-37.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	31 - 57	40 mph	46 mph	35 - 44	72	72%	9% / 9	19% / 19

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Sunset Drive from Vinton Way to Alta Vista Dr

Date: 4/3/2015 Time: 10:00 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	79
85th Percentile:	36
10 mph Pace:	28 - 37
Percent in Pace:	76%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	1
Annual Collision Rate:	0.3
Collision Rate (Per Million Vehicle Miles):	0.9
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,064
Width:	44'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Partial
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

Length of Segment:	1.0 Mile
Vertical Curve:	Yes
Horizontal Curve:	Yes
Lateral Visibility:	Limited
Sidewalks:	None
Driveways:	Yes
Street Lighting:	No
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	NO
Justification for 5 mph down:	Limited lateral visibility due to curves and vegetation with residential driveways and no sidewalk
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	4/3/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/3/2015

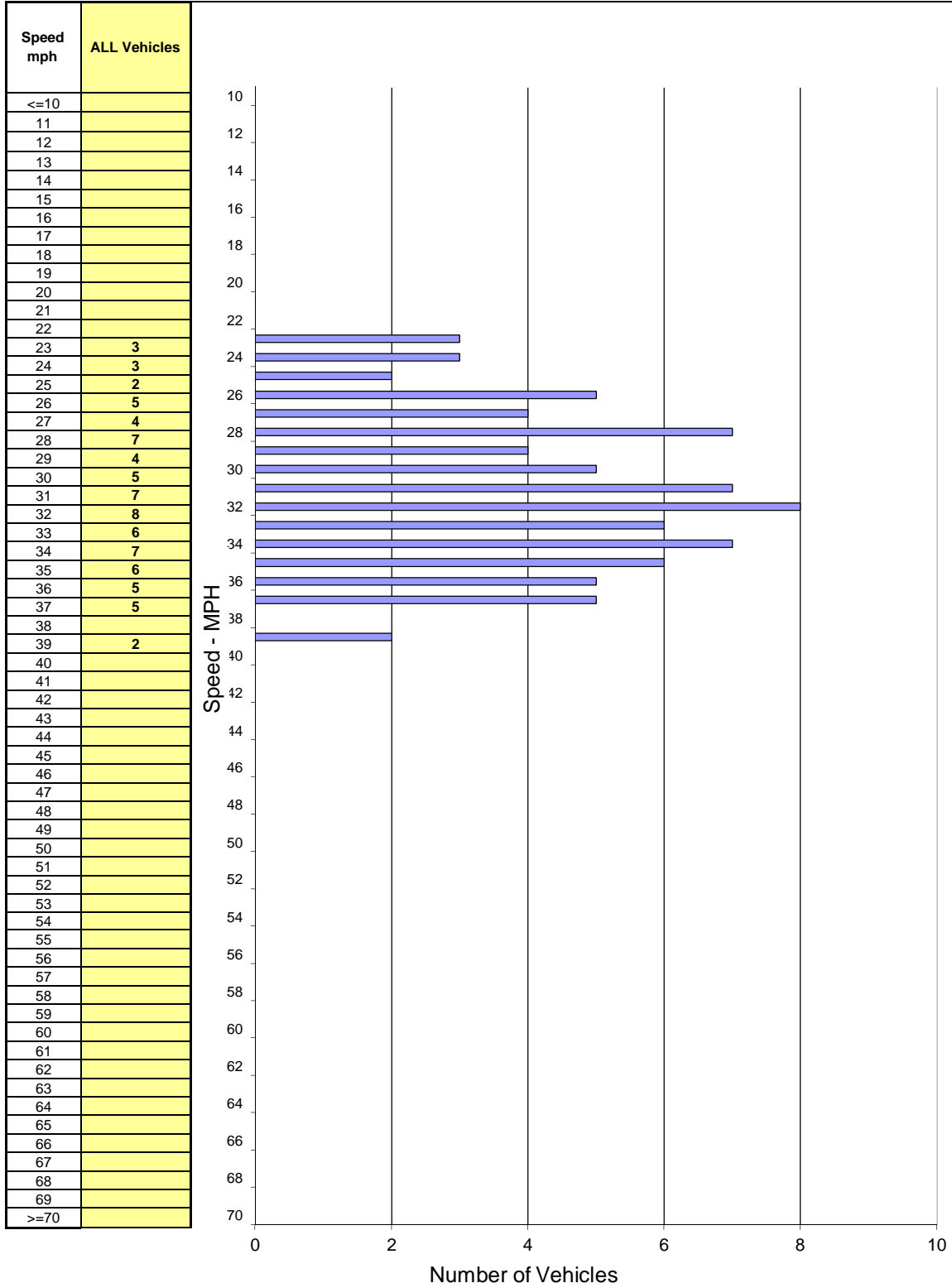
Location: Sunset Dr Bet. Vinton Way & Alta Vista Dr

DAY: Friday

Posted Speed: 30 MPH

Project#: 15-6046-38.1

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	79	23 - 39	31 mph	36 mph	28 - 37	60	76%	21% / 17	3% / 2

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Sunset Drive from Alta Vista Dr to Panorama Point

Date: 4/3/2015 Time: 2:00 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	61
85th Percentile:	35
10 mph Pace:	25 - 34
Percent in Pace:	70%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	451
Width:	36'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	No
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Limited
Sidewalks:	None
Driveways:	Yes
Street Lighting:	No
Road Condition:	Fair

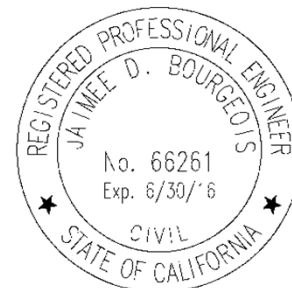
CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	NO

Justification for 5 mph down: Limited lateral visibility due to curves and vegetation with residential driveways and no sidewalk

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/3/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/3/2015

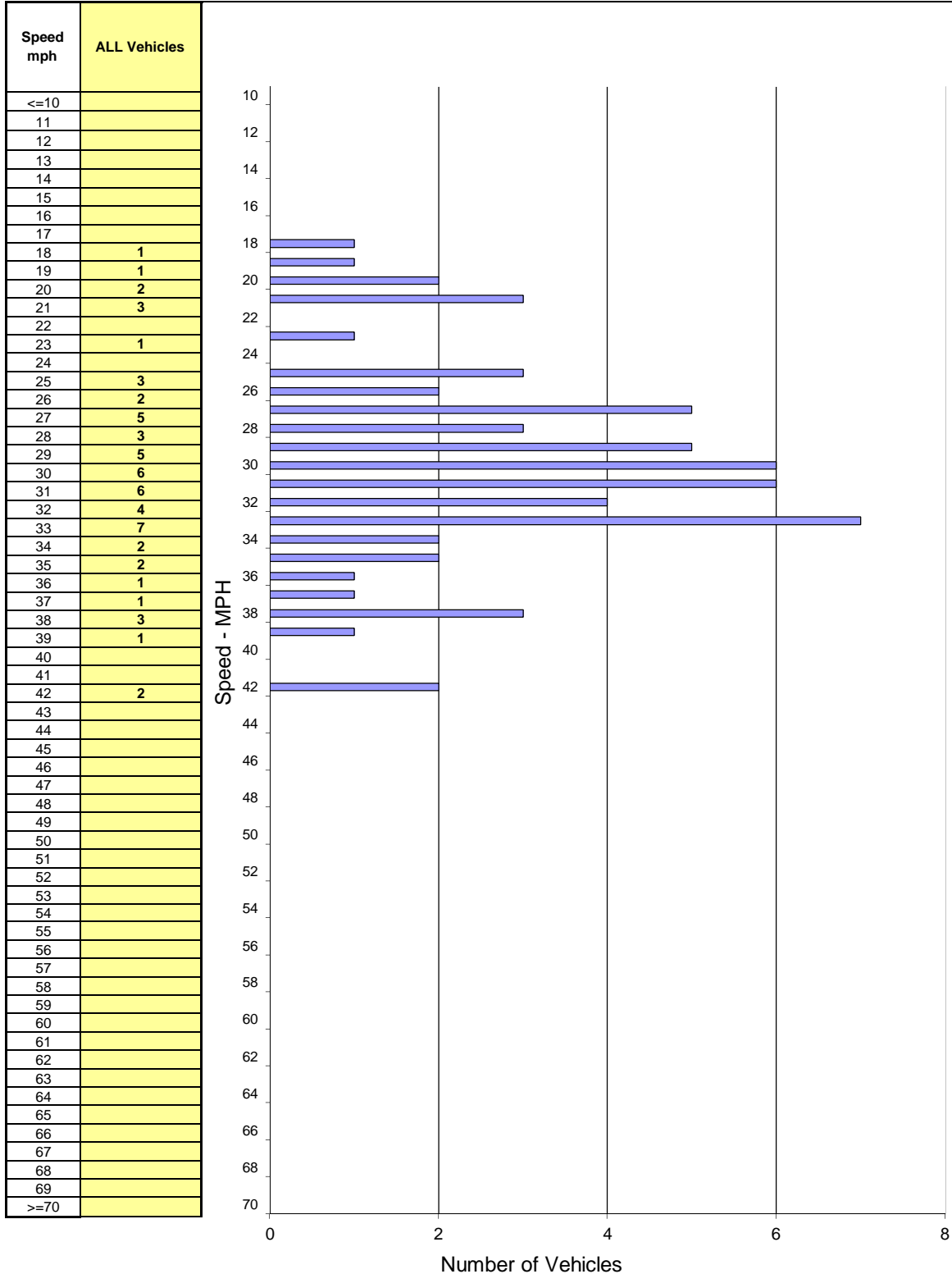
Location: Sunset Dr N Bet. Alta Vista Dr & Panorama point

DAY: Friday

Posted Speed: 30 MPH

Project#: 15-6046-38.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	61	18 - 42	30 mph	35 mph	25 - 34	43	70%	13% / 8	17% / 10

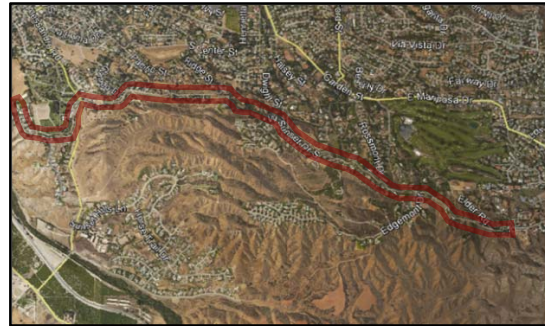
ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Sunset Drive from Serpentine Rd to Vinton Way

Date: 4/9/2015 Time: 3:02 PM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	85
85th Percentile:	34
10 mph Pace:	25 - 34
Percent in Pace:	82%
Posted Speed Limit:	25 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	4
Annual Collision Rate:	1.3
Collision Rate (Per Million Vehicle Miles):	1.7
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	727
Width:	26'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	0
On-Street Parking:	No
Adjacent Land Use:	Residential, Cemetery
Other:	Very Curvy

ROADWAY FACTORS

Length of Segment:	3.0 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Extremely Limited
Sidewalks:	None
Driveways:	Yes
Street Lighting:	No
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/9/2022



Spot Speed Study

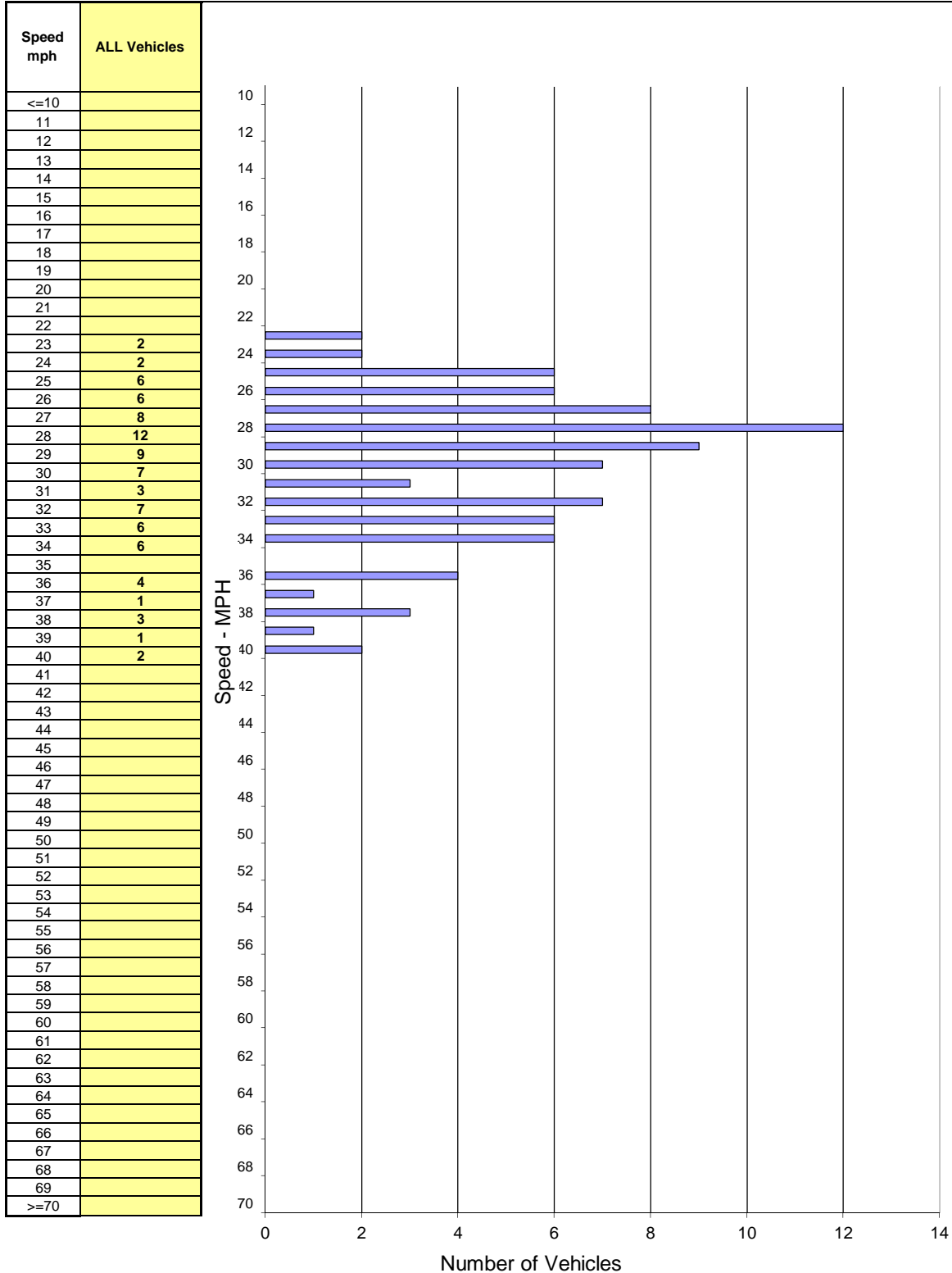
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/9/2015
DAY: Thursday

Location: Sunset Dr bet. Serpentine Rd & Vinton Wy
Posted Speed: 25 MPH Project#: 15-6046-38.3

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	85	23 - 40	29 mph	34 mph	25 - 34	70	82%	4% / 4	13% / 11

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Sunset Drive from Panorama Point to Franklin Avenue

Date: 4/9/2015

Time:

11:19 AM

Recorded By: NDS

Weather:

Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	38
10 mph Pace:	27 - 36
Percent in Pace:	65%
Posted Speed Limit:	Not Posted mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	3
Total Collisions:	5
Annual Collision Rate:	1.7
Collision Rate (Per Million Vehicle Miles):	4.9
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	621
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	0
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	

ROADWAY FACTORS

Length of Segment:	1.5 Miles
Vertical Curve:	Yes
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/9/2022



Spot Speed Study

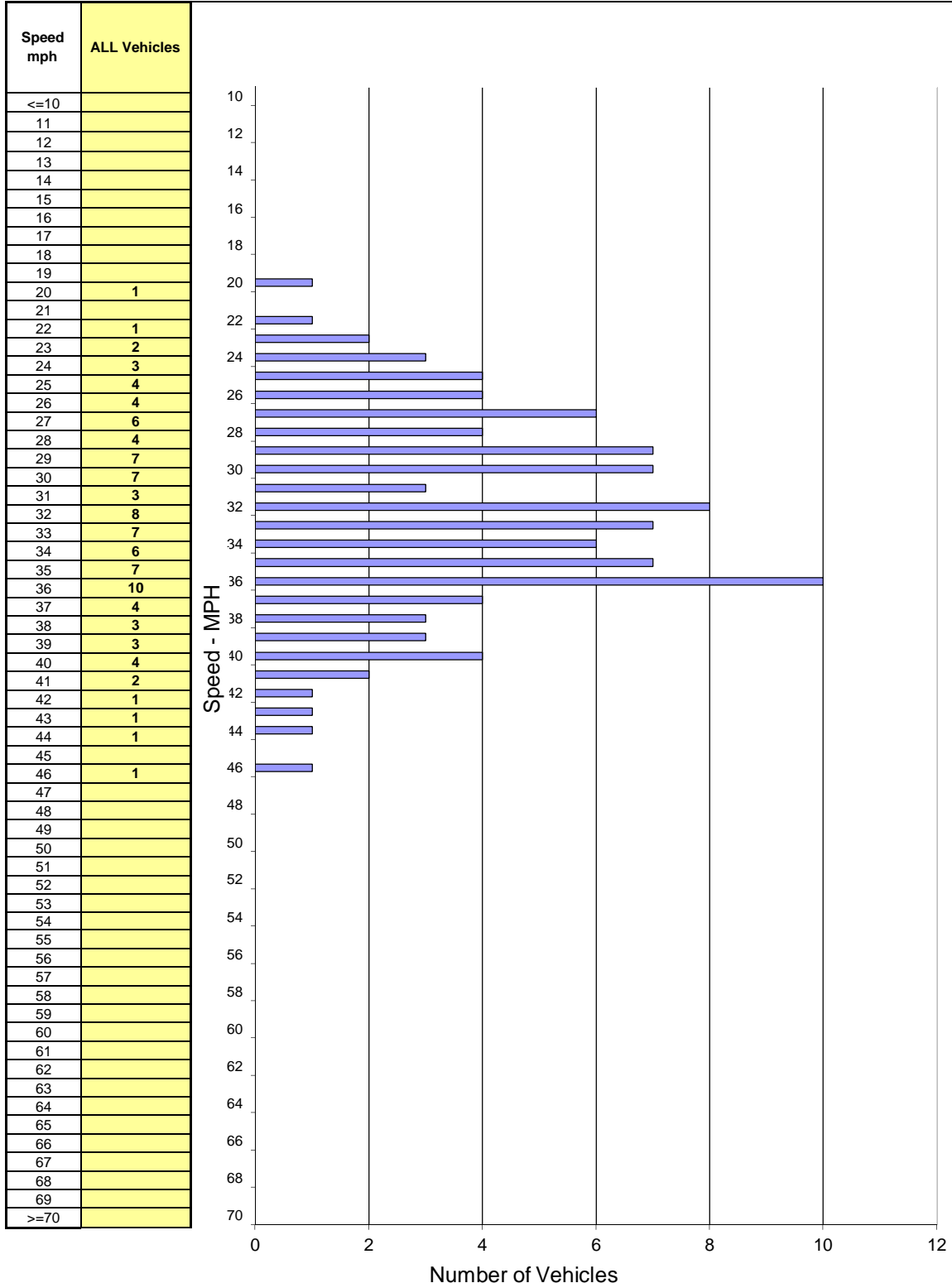
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/9/2015
DAY: Thursday

Location: Sunset Dr Bet. Panorama Pt & Franklin Ave
Posted Speed: 35 MPH Project#: 15-6046-38.4

Eastbound & Westbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	20 - 46	32 mph	38 mph	27 - 36	65	65%	15% / 15	20% / 20

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Terracina Boulevard from Barton Road to Olive Avenue

Date: 4/1/2015 Time: 12:25 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	45
10 mph Pace:	38 - 47
Percent in Pace:	73%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	1.9

TRAFFIC FACTORS

Average Daily Traffic:	10,875
Width:	56'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Agricultural
Other:	

ROADWAY FACTORS

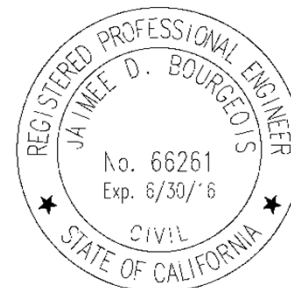
Length of Segment:	0.7 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Yes (gap at southwest end)
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	45
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/1/2022



Spot Speed Study

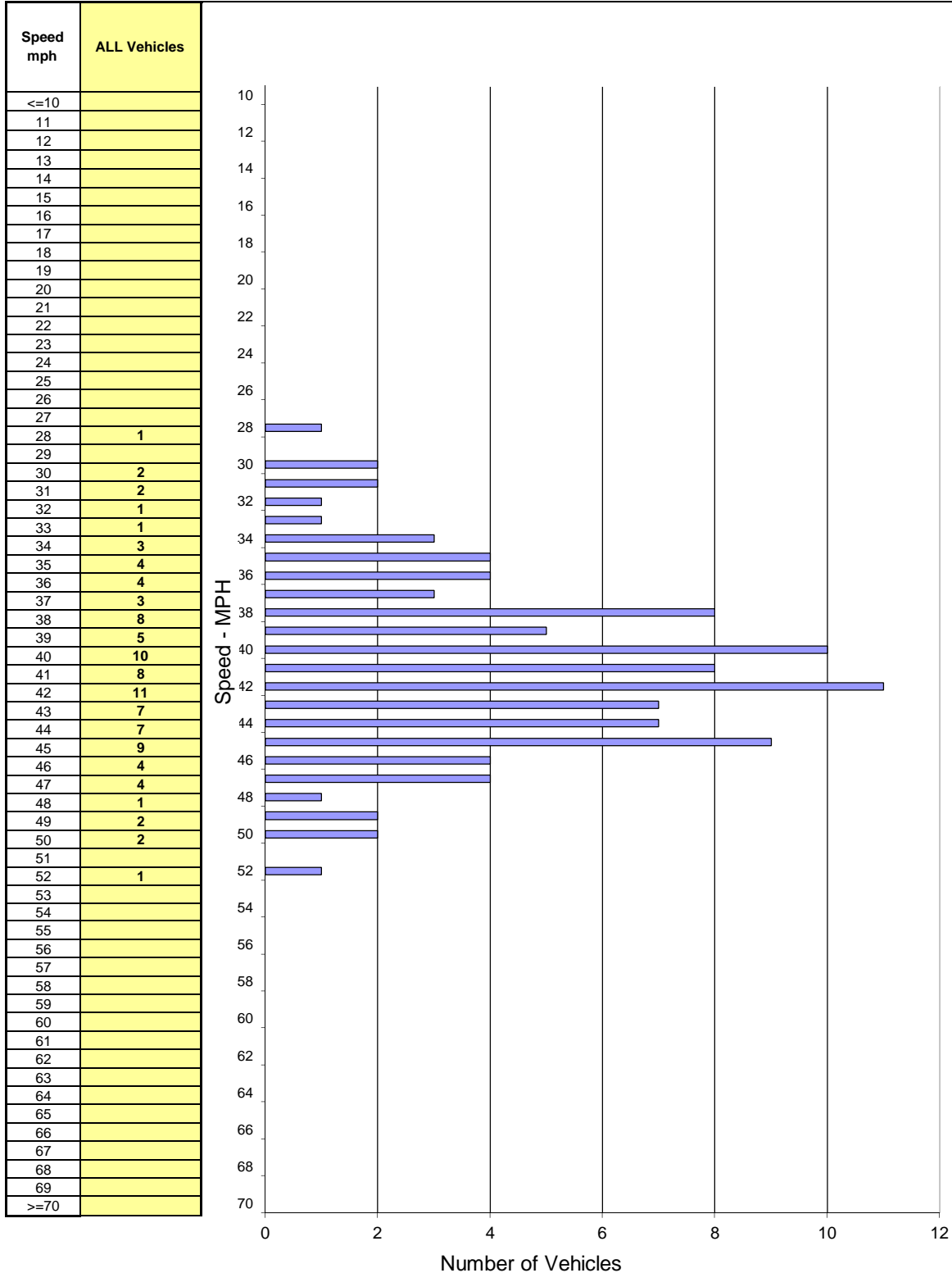
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/1/2015
DAY: Wednesday

Location: Terracina Blvd bet. Barton Rd & Olive Ave
Posted Speed: 45 MPH Project#: 15-6046-39.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	28 - 52	41 mph	45 mph	38 - 47	73	73%	21% / 21	6% / 6

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Terracina Boulevard from Olive Avenue to Cypress Avenue

Date: 4/2/2015 Time: 11:40 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	38
10 mph Pace:	29 - 38
Percent in Pace:	81%
Posted Speed Limit:	35 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	5
Annual Collision Rate:	1.7
Collision Rate (Per Million Vehicle Miles):	0.9
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	10,146
Width:	72'
Lane Configuration:	4 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Medical, Residential
Other:	

ROADWAY FACTORS

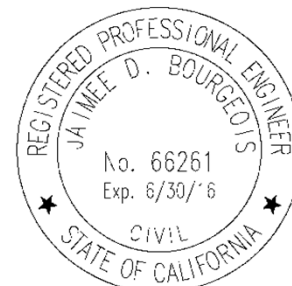
Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/2/2022



Spot Speed Study

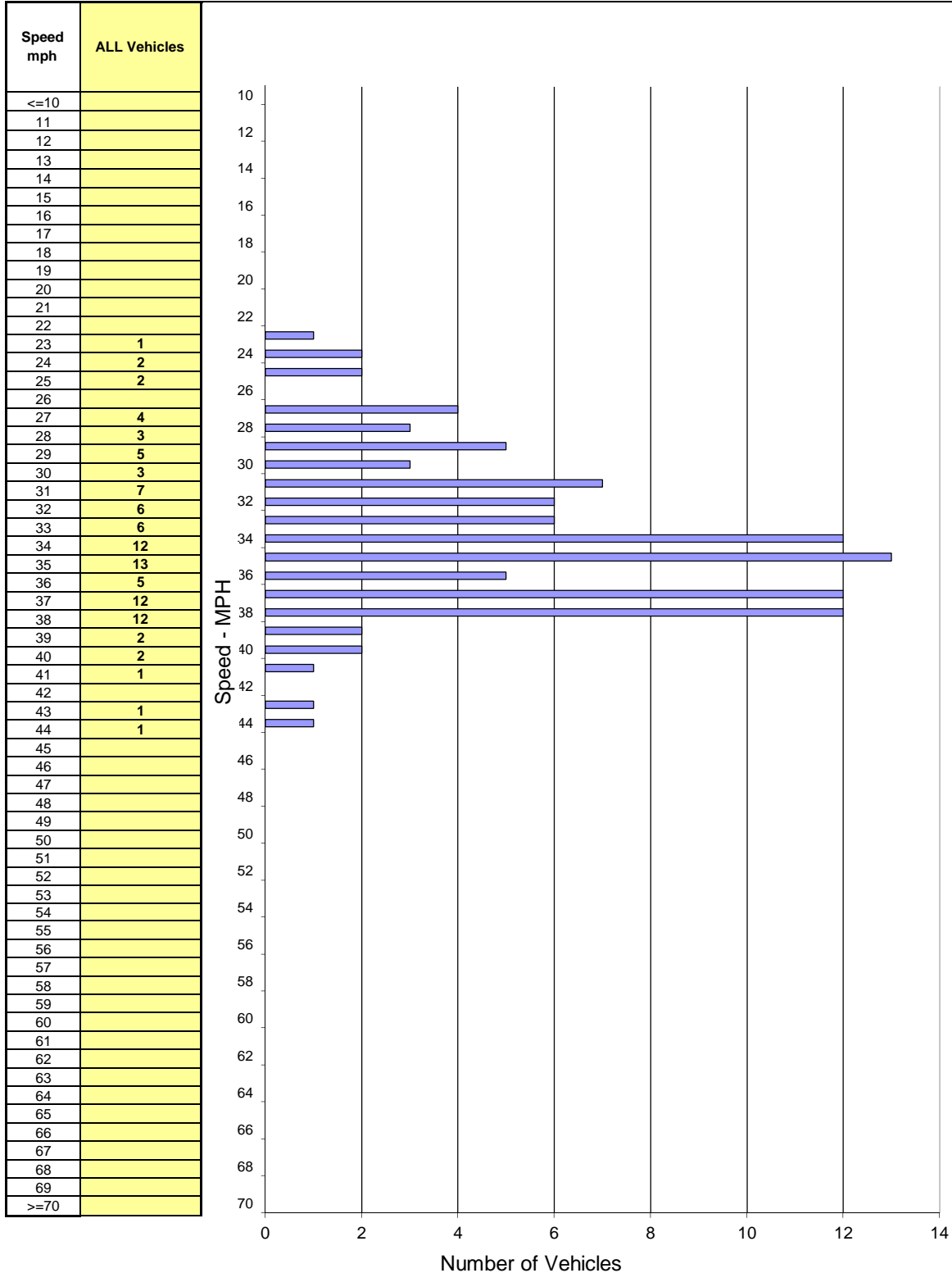
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/2/2015
DAY: Thursday

Location: Terracina Blvd bet. Olive Ave & Cypress Ave
Posted Speed: 35 MPH Project#: 15-6046-39.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	23 - 44	34 mph	38 mph	29 - 38	81	81%	12% / 12	7% / 7

ENGINEERING AND TRAFFIC SURVEY

City of Redlands

Texas Street from Redlands Boulevard to Lugonia Ave

Date: 4/3/2015 Time: 9:55 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	41
10 mph Pace:	32 - 41
Percent in Pace:	80%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	3
Total Collisions:	16
Annual Collision Rate:	5.3
Collision Rate (Per Million Vehicle Miles):	2.0
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	9,359
Width:	40'-64'
Lane Configuration:	2-4 Lanes
Traffic Control:	1 stop, 1 signal
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Institutional, Residential, Commercial
Other:	2 lanes n/o Colton

ROADWAY FACTORS

Length of Segment:	0.8 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides (some gaps)
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/3/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/3/2015

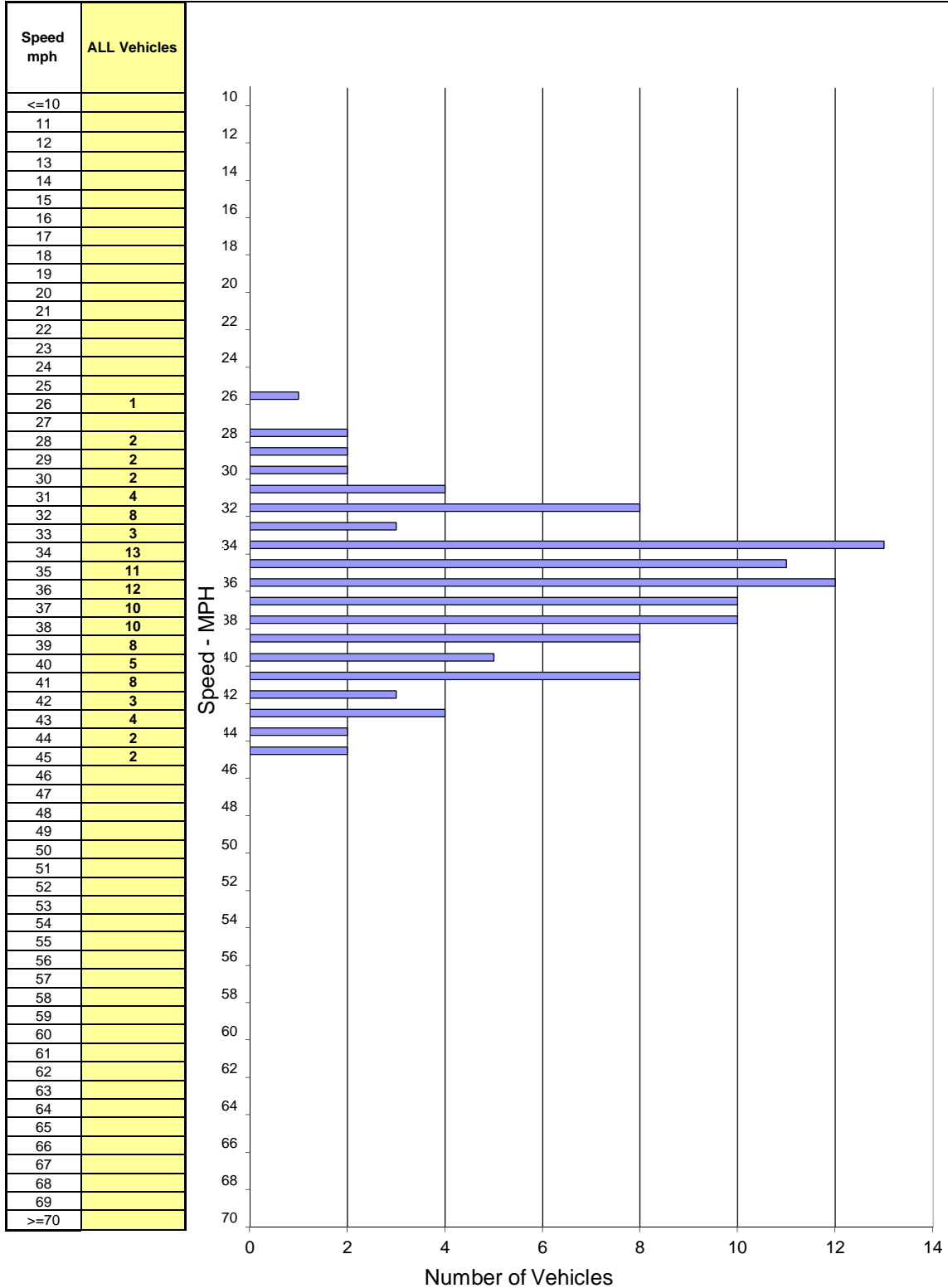
Location: Texas St Bet. Redlands Blvd & Lugonia Ave

DAY: Friday

Posted Speed: 40 MPH

Project#: 15-6046-40.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	26 - 45	36 mph	41 mph	32 - 41	88	80%	10% / 11	10% / 11

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Texas Street from Lugonia Ave to San Bernardino Ave

Date: 3/30/2015 Time: 2:06 PM
 Recorded By: NDS Weather: Sunny



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	42
10 mph Pace:	36 - 45
Percent in Pace:	98%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	10
Annual Collision Rate:	3.3
Collision Rate (Per Million Vehicle Miles):	3.3
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	5,576
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Park, Vacant
Other:	

ROADWAY FACTORS

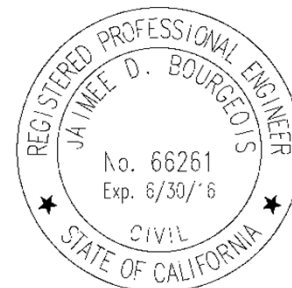
Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	East side only
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 3/30/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 3/30/2015

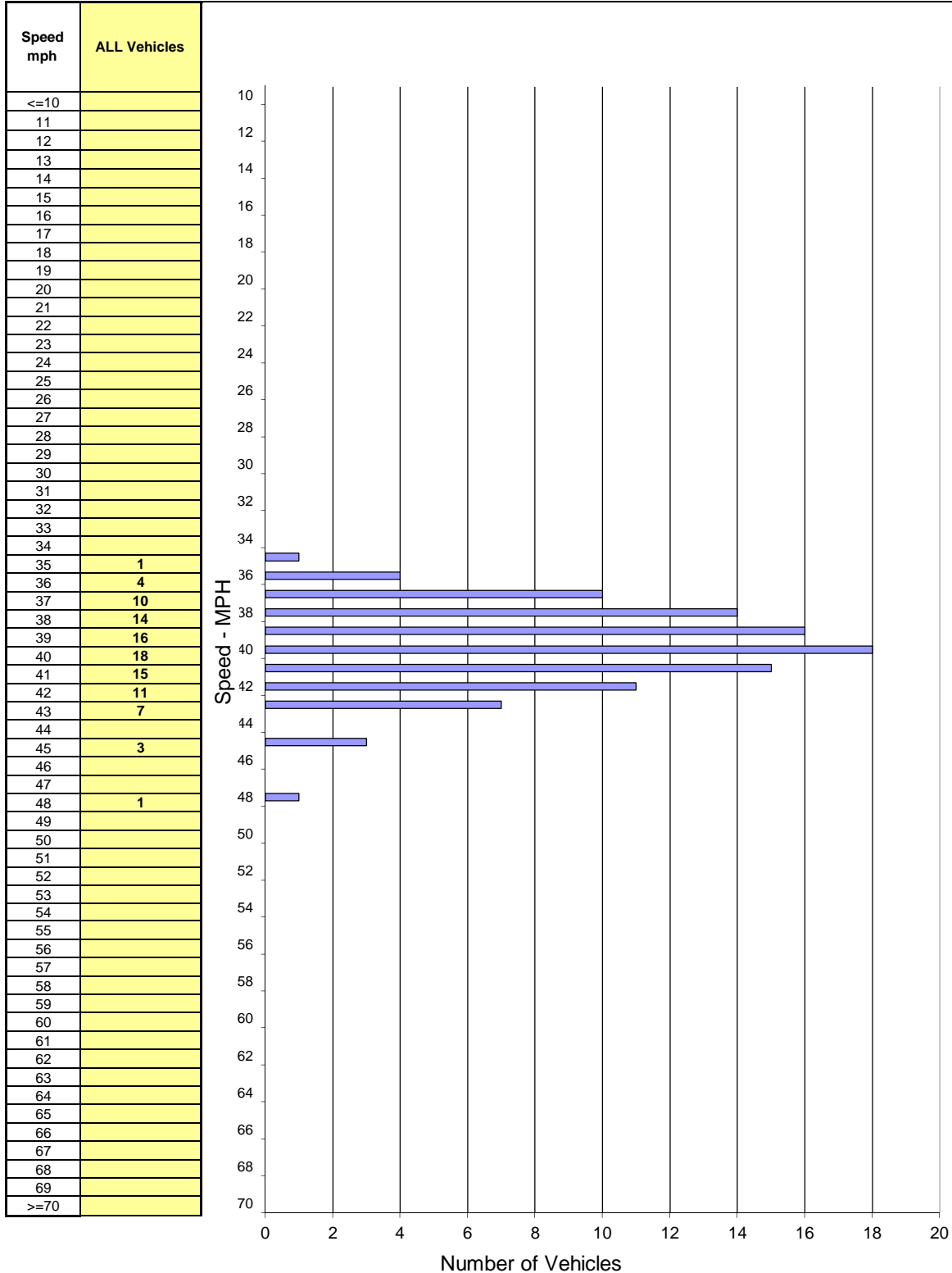
Location: Texas St bet. Lugonia Ave & San Bernardino Ave

DAY: Monday

Posted Speed: 40 MPH

Project#: 15-6046-40.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	35 - 48	40 mph	42 mph	36 - 45	98	98%	1% / 1	1% / 1

ENGINEERING AND TRAFFIC SURVEY

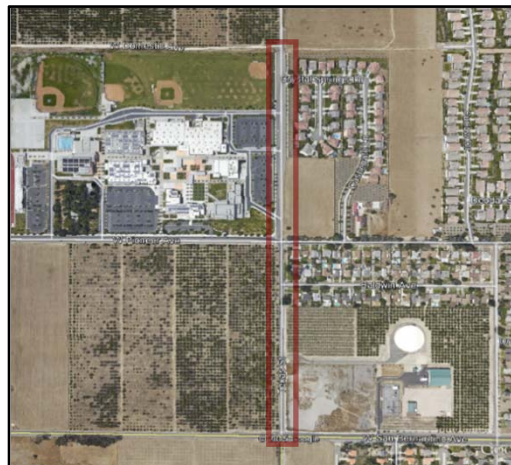
City of Redlands



Texas Street from San Bernardino Ave to Domestic Ave

Date: 4/2/2015 Time: 9:30 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	38
10 mph Pace:	30 - 39
Percent in Pace:	72%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	4
Annual Collision Rate:	1.3
Collision Rate (Per Million Vehicle Miles):	2.1
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	3,402
Width:	32-64'
Lane Configuration:	2 Lanes, portion w/ TWLTL
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Agricultural, Institutional
Other:	TWLTL n/o Pioneer

ROADWAY FACTORS

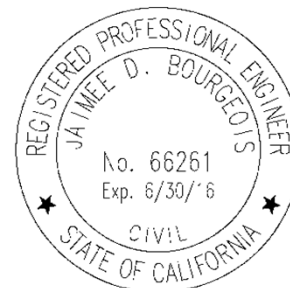
Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides (some gaps)
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/2/2022



Spot Speed Study

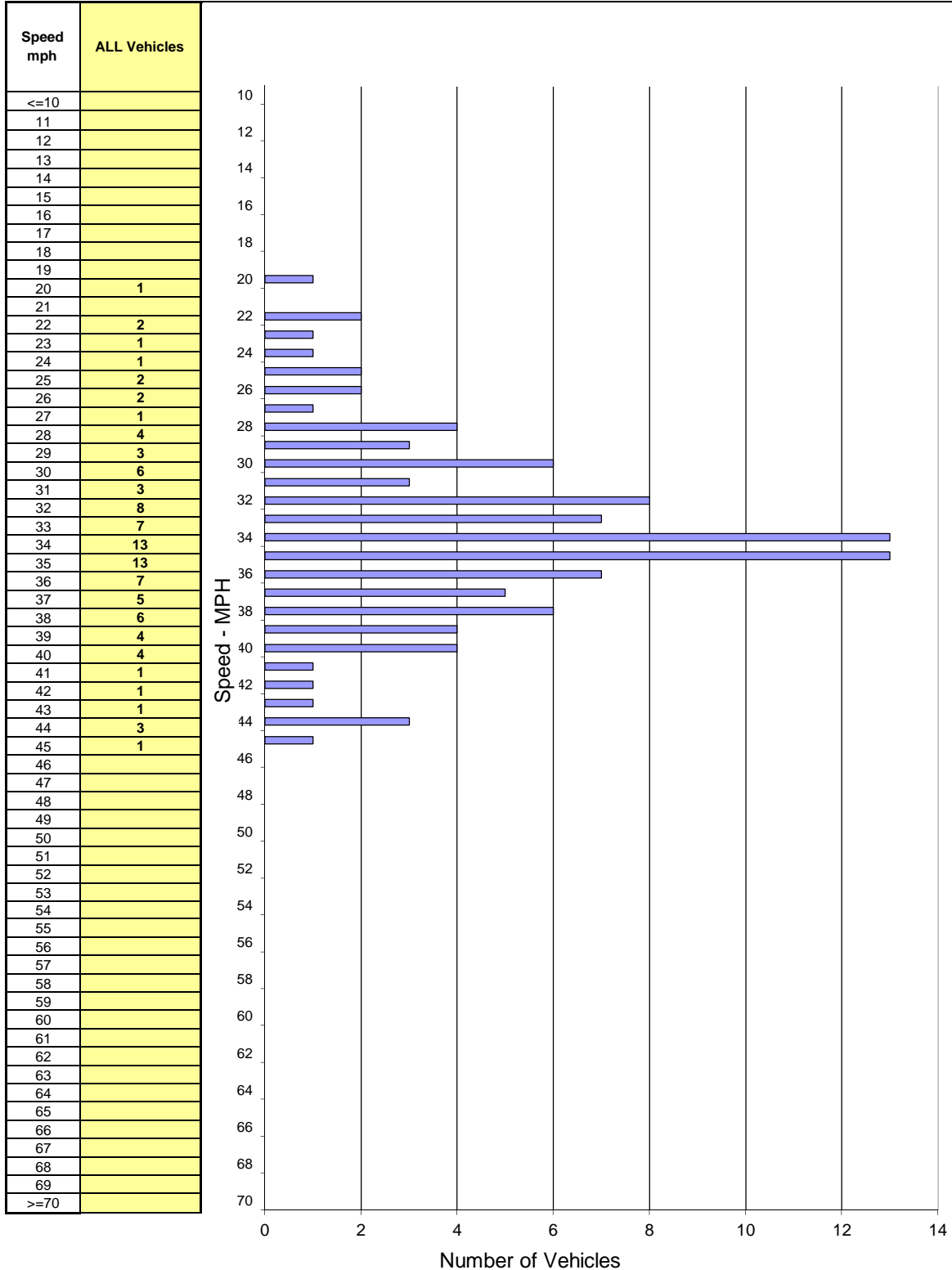
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/2/2015
DAY: Thursday

Location: Texas St bet. San Bernardino Ave & Domestic Ave
Posted Speed: 30 MPH Project#: 15-6046-40.3

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	20 - 45	34 mph	38 mph	30 - 39	72	72%	17% / 17	11% / 11

ENGINEERING AND TRAFFIC SURVEY

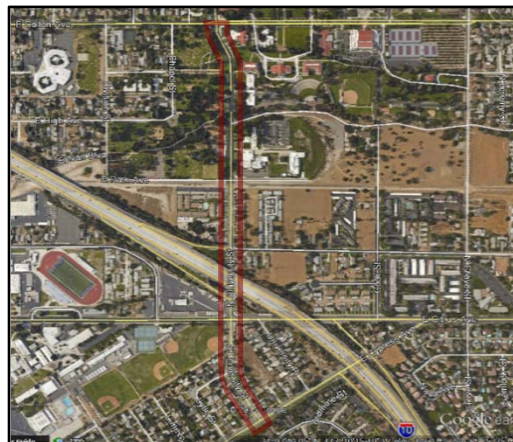
City of Redlands



University Street from Cypress Avenue to Colton Ave

Date: 4/2/2015 Time: 12:40 PM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	41
10 mph Pace:	31 - 40
Percent in Pace:	72%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	3
Total Collisions:	20
Annual Collision Rate:	6.7
Collision Rate (Per Million Vehicle Miles):	1.5
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

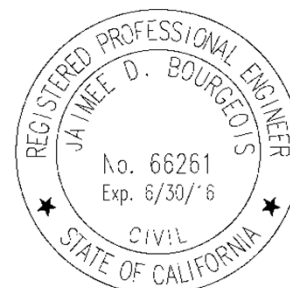
Average Daily Traffic:	17,201
Width:	60'
Lane Configuration:	2-4 Lanes
Traffic Control:	1 signal
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Park, Institutional, Residential
Other:	4 lanes s/o tracks

ROADWAY FACTORS

Length of Segment:	0.7 Miles
Vertical Curve:	No
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent-Fair

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	High density residential driveways, on-street parking w/out sidewalk
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	4/2/2022



Spot Speed Study

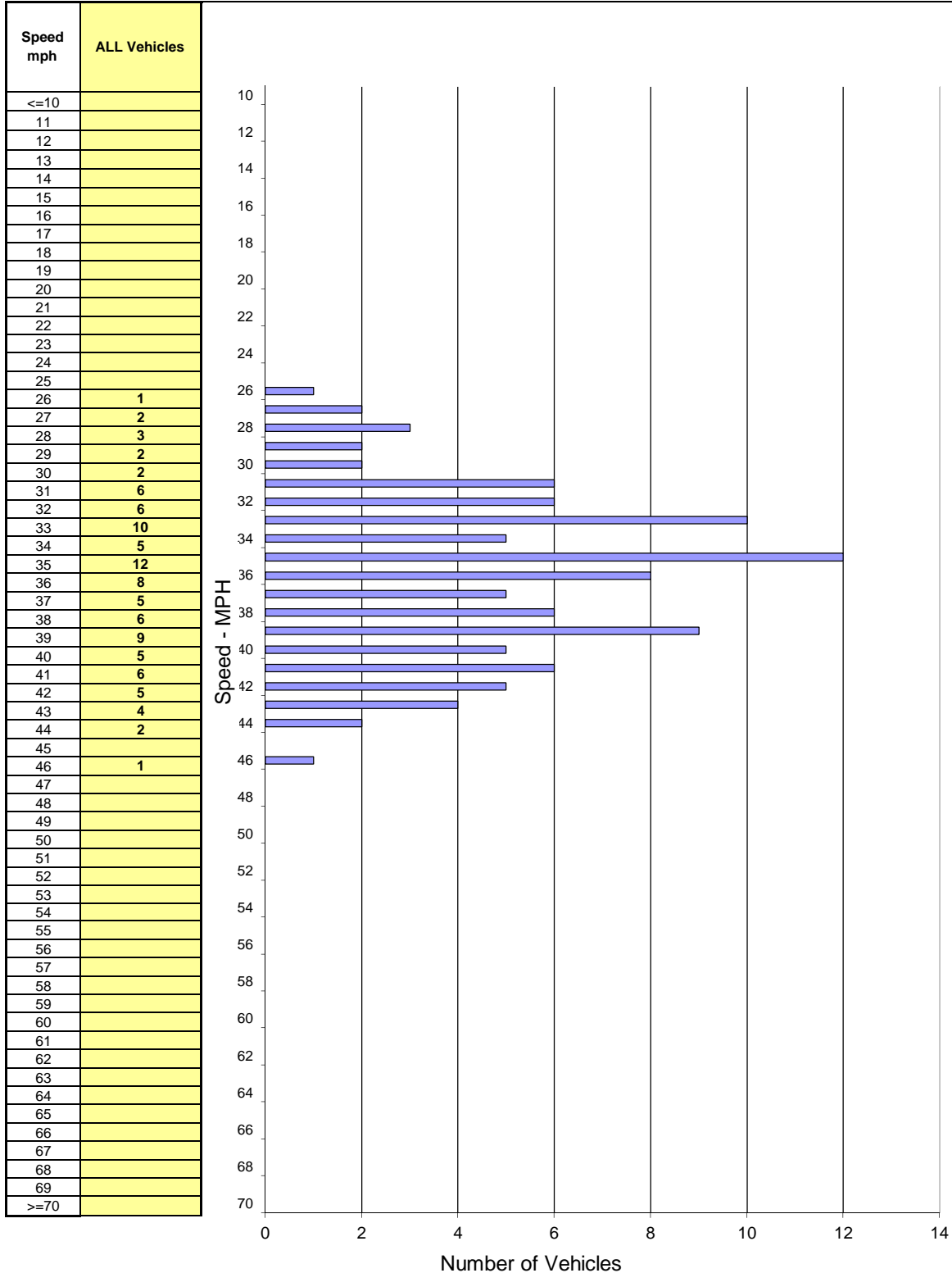
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/2/2015
DAY: Thursday

Location: University St bet. Cypress Ave & Colton Ave
Posted Speed: 30 MPH Project#: 15-6046-41.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	26 - 46	36 mph	41 mph	31 - 40	72	72%	10% / 10	18% / 18

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



University Street from Colton Ave to Lugonia Ave

Date: 4/3/2015 Time: 9:30 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	120
85th Percentile:	40
10 mph Pace:	31 - 40
Percent in Pace:	83%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	1
Total Collisions:	6
Annual Collision Rate:	2.0
Collision Rate (Per Million Vehicle Miles):	1.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	10,506
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional, Vacant
Other:	

ROADWAY FACTORS

Length of Segment:	0.5 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides w/ gaps
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Excellent

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	Student housing and on-street parking resulting in high pedestrian activity with gaps in sidewalk
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	4/3/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/3/2015

Location: University St Bet. Colton Ave & Lugonia Ave

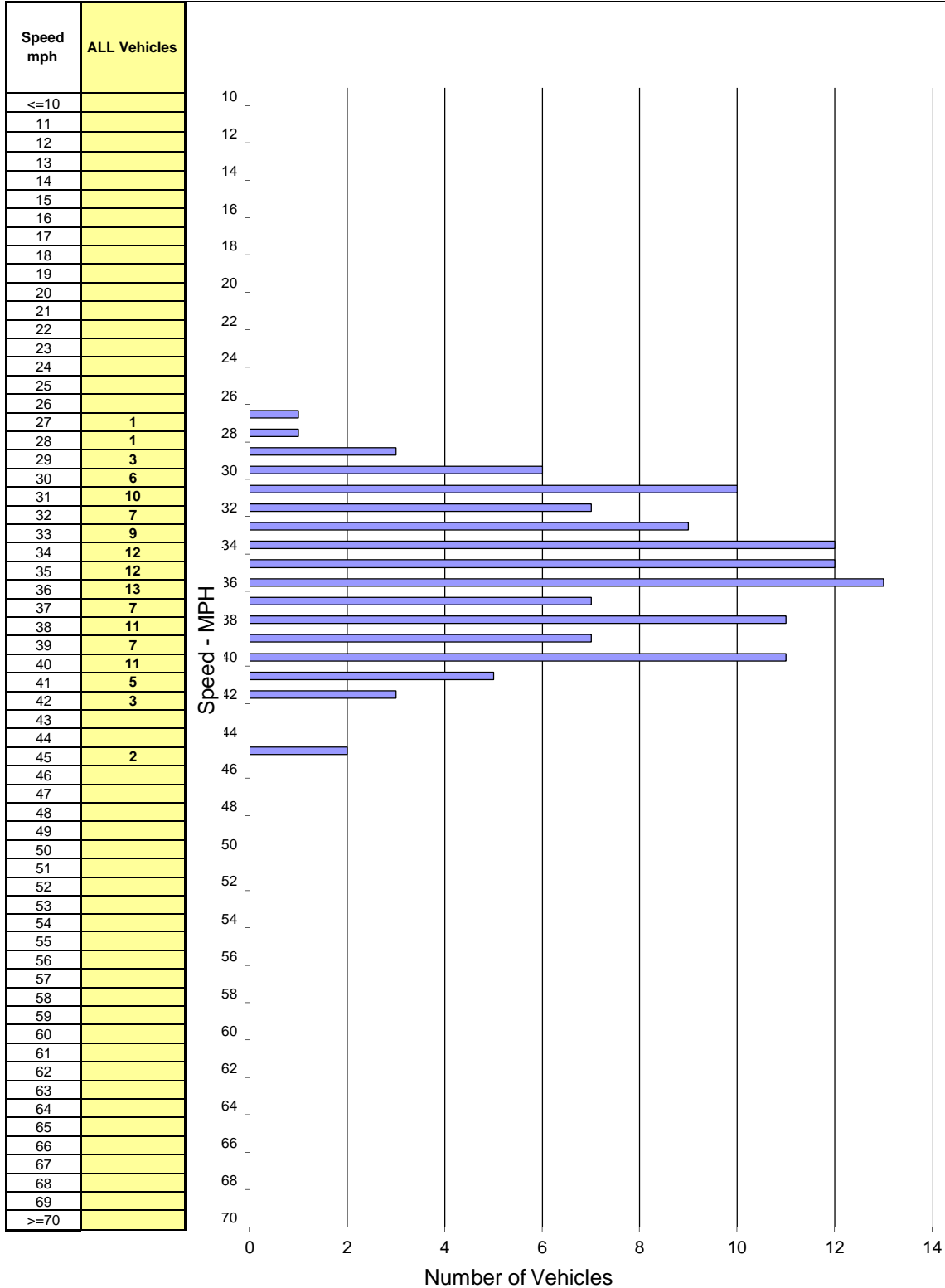
DAY: Friday

Posted Speed:

30 MPH

Project#: 15-6046-41.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	120	27 - 45	35 mph	40 mph	31 - 40	99	83%	9% / 11	9% / 10

ENGINEERING AND TRAFFIC SURVEY

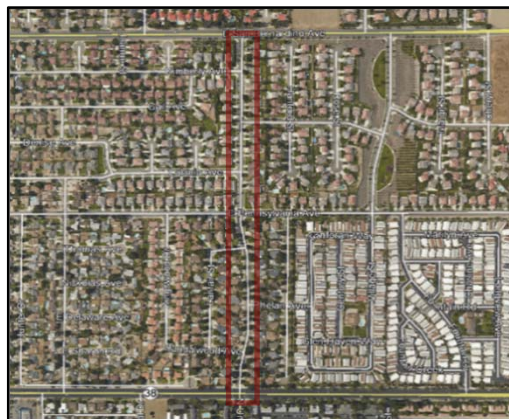
City of Redlands



University Street from Lugonia Ave to San Bernardino Ave

Date: 4/9/2015 Time: 9:40 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	32
10 mph Pace:	23 - 32
Percent in Pace:	76%
Posted Speed Limit:	30 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	4
Annual Collision Rate:	1.3
Collision Rate (Per Million Vehicle Miles):	5.6
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,637
Width:	40'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	No
On-Street Parking:	Yes
Adjacent Land Use:	Residential
Other:	Lane lines unmarked

ROADWAY FACTORS

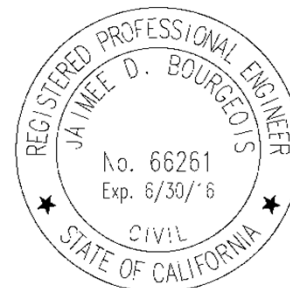
Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Good

CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/9/2022



Spot Speed Study

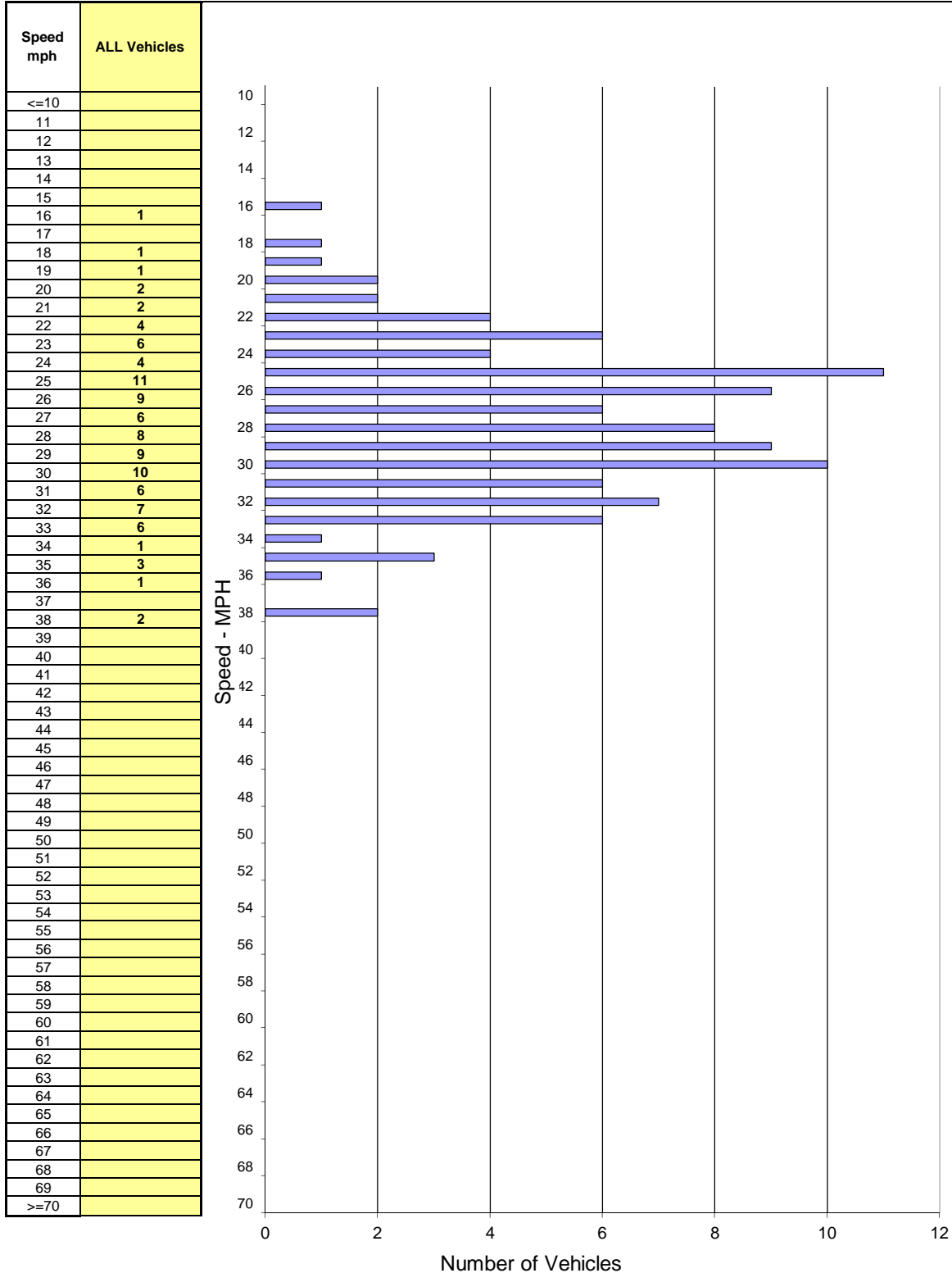
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/9/2015
DAY: Thursday

Location: University St Bet. Lugonia Ave & San Bernardino Ave
Posted Speed: 30 MPH Project#: 15-6046-41.3

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	16 - 38	28 mph	32 mph	23 - 32	76	76%	11% / 11	13% / 13

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Wabash Avenue from Fifth Avenue to Citrus Ave

Date: 4/2/2015 Time: 1:10 PM
 Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	46
10 mph Pace:	36 - 45
Percent in Pace:	70%
Posted Speed Limit:	45 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	2
Annual Collision Rate:	0.7
Collision Rate (Per Million Vehicle Miles):	1.2
Statewide Collision Rate:	1.9

TRAFFIC FACTORS

Average Daily Traffic:	3,798
Width:	46'-64'
Lane Configuration:	2 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Institutional, Residential
Other:	

ROADWAY FACTORS

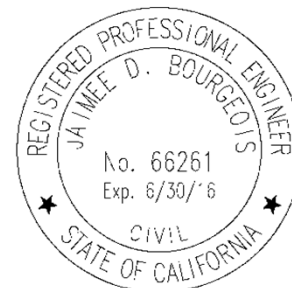
Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides, gap on east side
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	45
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/2/2022



Spot Speed Study

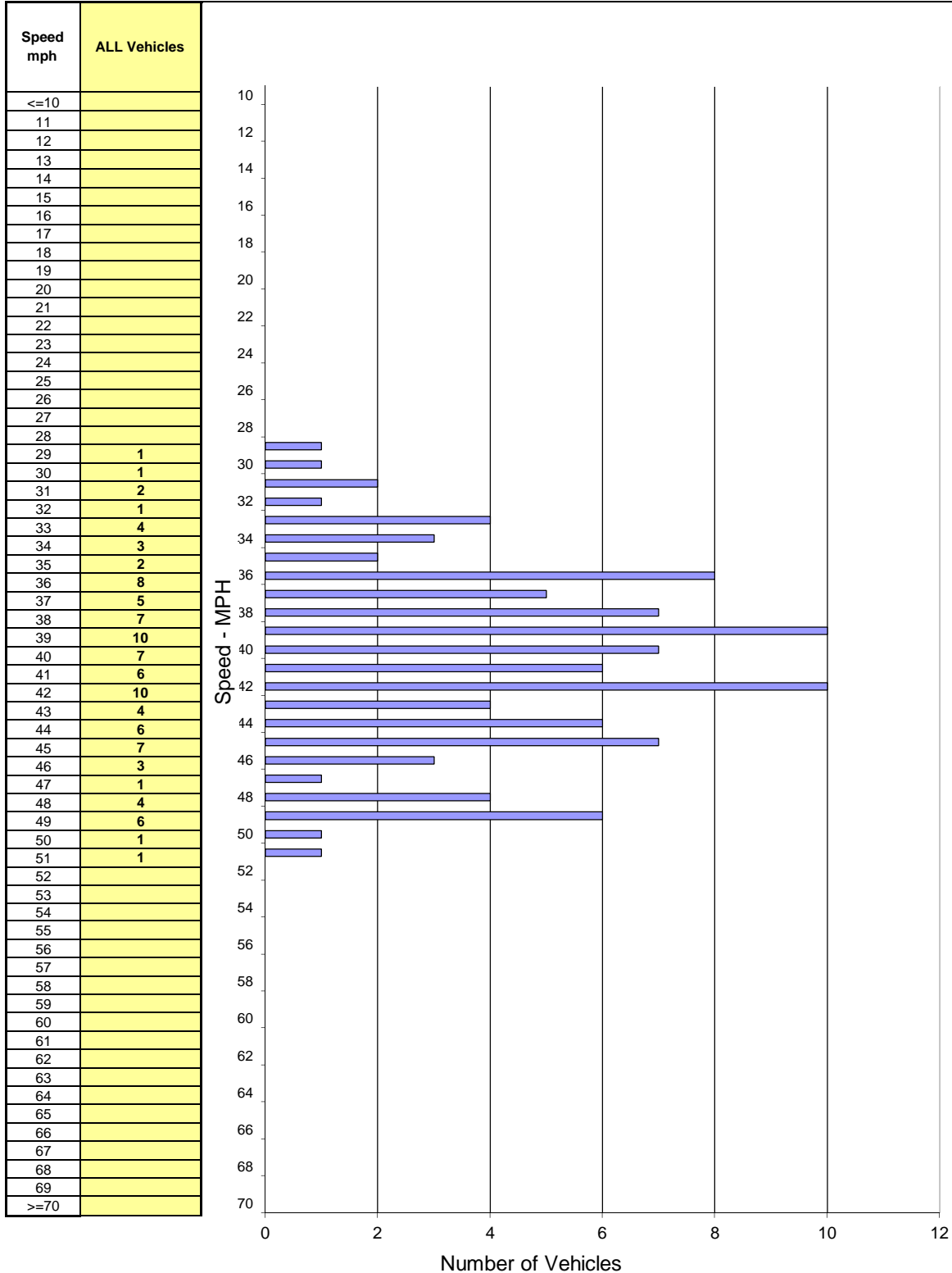
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/2/2015
DAY: Thursday

Location: Wabash Ave bet. Fifth Ave & Citrus Ave
Posted Speed: 45 MPH Project#: 15-6046-42.1

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	29 - 51	40 mph	46 mph	36 - 45	70	70%	14% / 14	16% / 16

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Wabash Avenue from Citrus Avenue to Colton Avenue

Date: 4/3/2015 Time: 9:30 AM

Recorded By: NDS Weather: Clear



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	110
85th Percentile:	43
10 mph Pace:	33 - 42
Percent in Pace:	68%
Posted Speed Limit:	40 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	3
Annual Collision Rate:	1.0
Collision Rate (Per Million Vehicle Miles):	1.1
Statewide Collision Rate:	2.55

TRAFFIC FACTORS

Average Daily Traffic:	5,962
Width:	64'
Lane Configuration:	4 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Yes
Adjacent Land Use:	Institutional, Residential
Other:	

ROADWAY FACTORS

Length of Segment:	0.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Both sides, gap on east side
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Fair

CONCLUSIONS

Recommended Speed Limit:	40
Speed Limit Change:	NO
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/3/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/3/2015

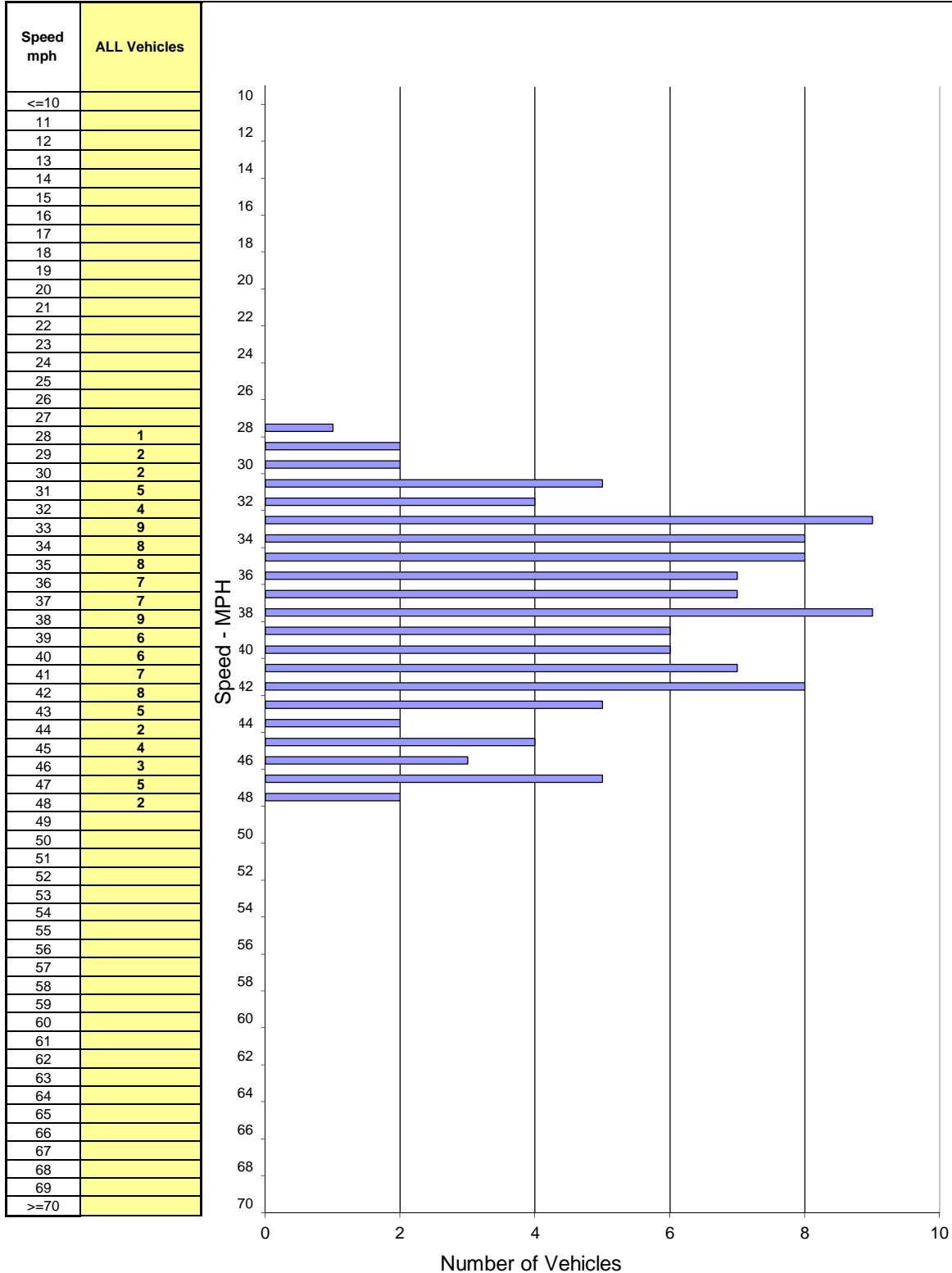
Location: Wabash Ave Bet. Citurs Ave & Colton Ave

DAY: Friday

Posted Speed: 40 MPH

Project#: 15-6046-42.2

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	110	28 - 48	38 mph	43 mph	33 - 42	75	68%	12% / 14	20% / 21

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Wabash Avenue from Colton Ave to Sessums Dr

Date: 4/2/2015 Time: 2:00 PM
 Recorded By: NDS Weather: Clear



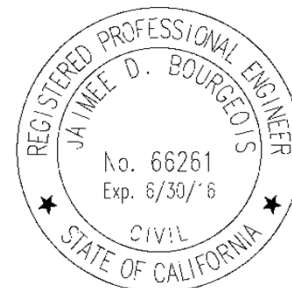
PREVAILING SPEED DATA	
No. of Vehicles Surveyed:	100
85th Percentile:	39
10 mph Pace:	29 - 38
Percent in Pace:	81%
Posted Speed Limit:	35 mph

COLLISION HISTORY	
Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	4
Annual Collision Rate:	1.3
Collision Rate (Per Million Vehicle Miles):	0.7
Statewide Collision Rate:	2.55

TRAFFIC FACTORS	
Average Daily Traffic:	3,860
Width:	64'
Lane Configuration:	2-4 Lanes, TWLTL
Traffic Control:	2 stops, 1 signal
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	Yes
On-Street Parking:	Partial
Adjacent Land Use:	Commerical, Industrial, Residential
Other:	

ROADWAY FACTORS	
Length of Segment:	1.4 Miles
Vertical Curve:	No
Horizontal Curve:	No
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	Yes
Road Condition:	Poor-Fair

CONCLUSIONS	
Recommended Speed Limit:	35
Speed Limit Change:	NO
Justification for 5 mph down:	N/A
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	4/2/2022



Spot Speed Study

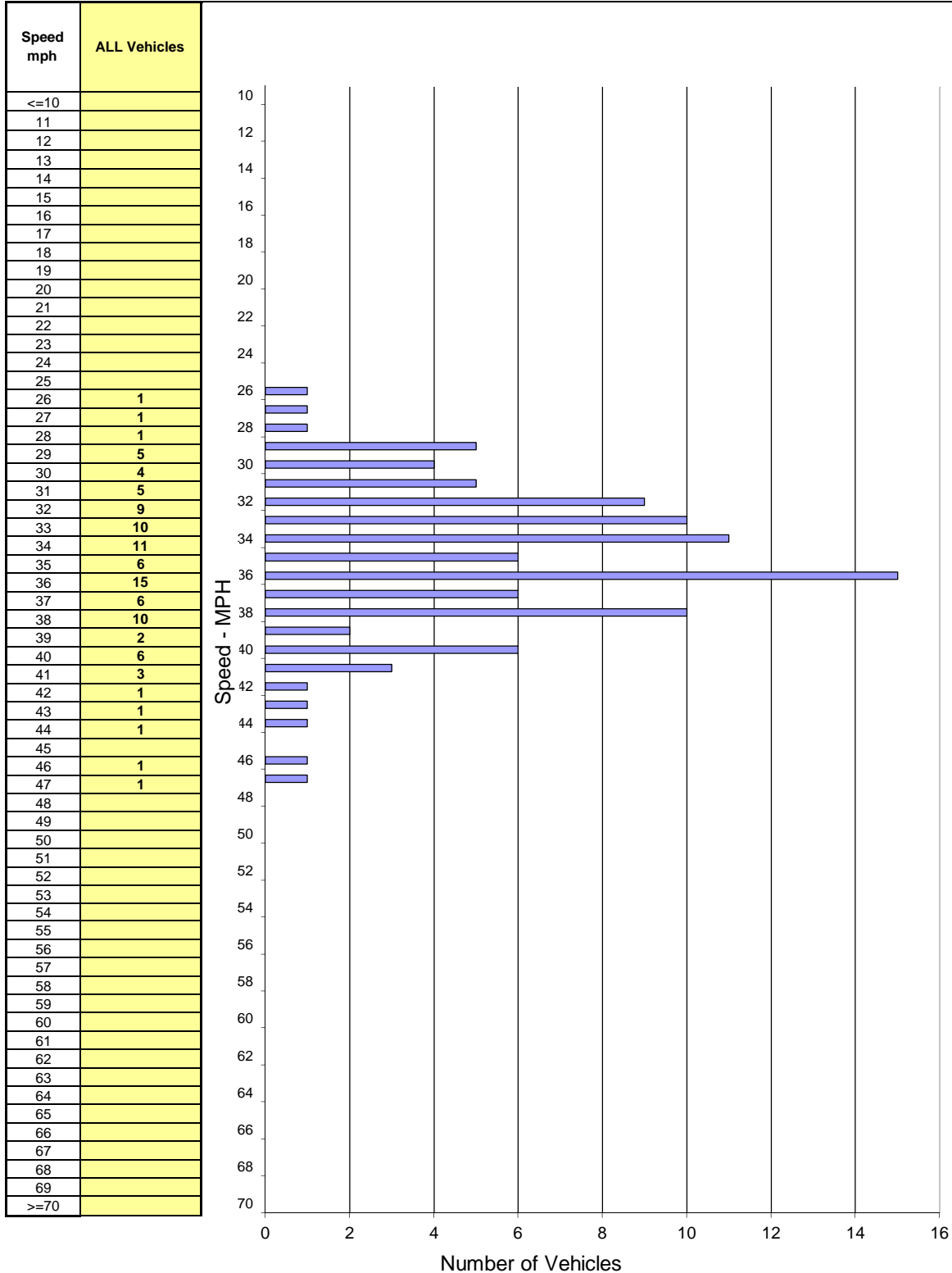
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/2/2015
DAY: Thursday

Location: Wabash Ave bet. Colton Ave & Sessums Dr
Posted Speed: 40 MPH Project#: 15-6046-42.3

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	26 - 47	35 mph	39 mph	29 - 38	81	81%	3% / 3	16% / 16

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Wabash Avenue from Fifth Avenue to Panorama Drive

Date: 4/6/2015

Time: 12:50 PM

Recorded By: NDS

Weather: Partly Cloudy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	75
85th Percentile:	40
10 mph Pace:	29 - 38
Percent in Pace:	52%
Posted Speed Limit:	25 mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	0
Annual Collision Rate:	0.0
Collision Rate (Per Million Vehicle Miles):	0.0
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

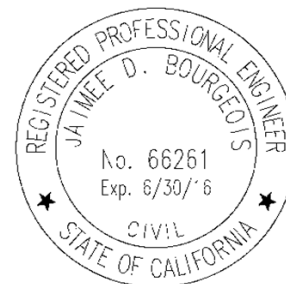
Average Daily Traffic:	761
Width:	38'
Lane Configuration:	2-3 Lanes
Traffic Control:	None
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	0
On-Street Parking:	No
Adjacent Land Use:	Residential, Agricultural
Other:	

ROADWAY FACTORS

Length of Segment:	0.8 Miles
Vertical Curve:	Yes
Horizontal Curve:	Yes
Lateral Visibility:	Limited
Sidewalks:	Partial on east side
Driveways:	Yes
Street Lighting:	No
Road Condition:	Poor

CONCLUSIONS

Recommended Speed Limit:	35
Speed Limit Change:	YES
Justification for 5 mph down:	Limited lateral visibility due to curves and vegetation with residential driveways and no sidewalk
Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.	
Survey Expires:	4/6/2022



Spot Speed Study

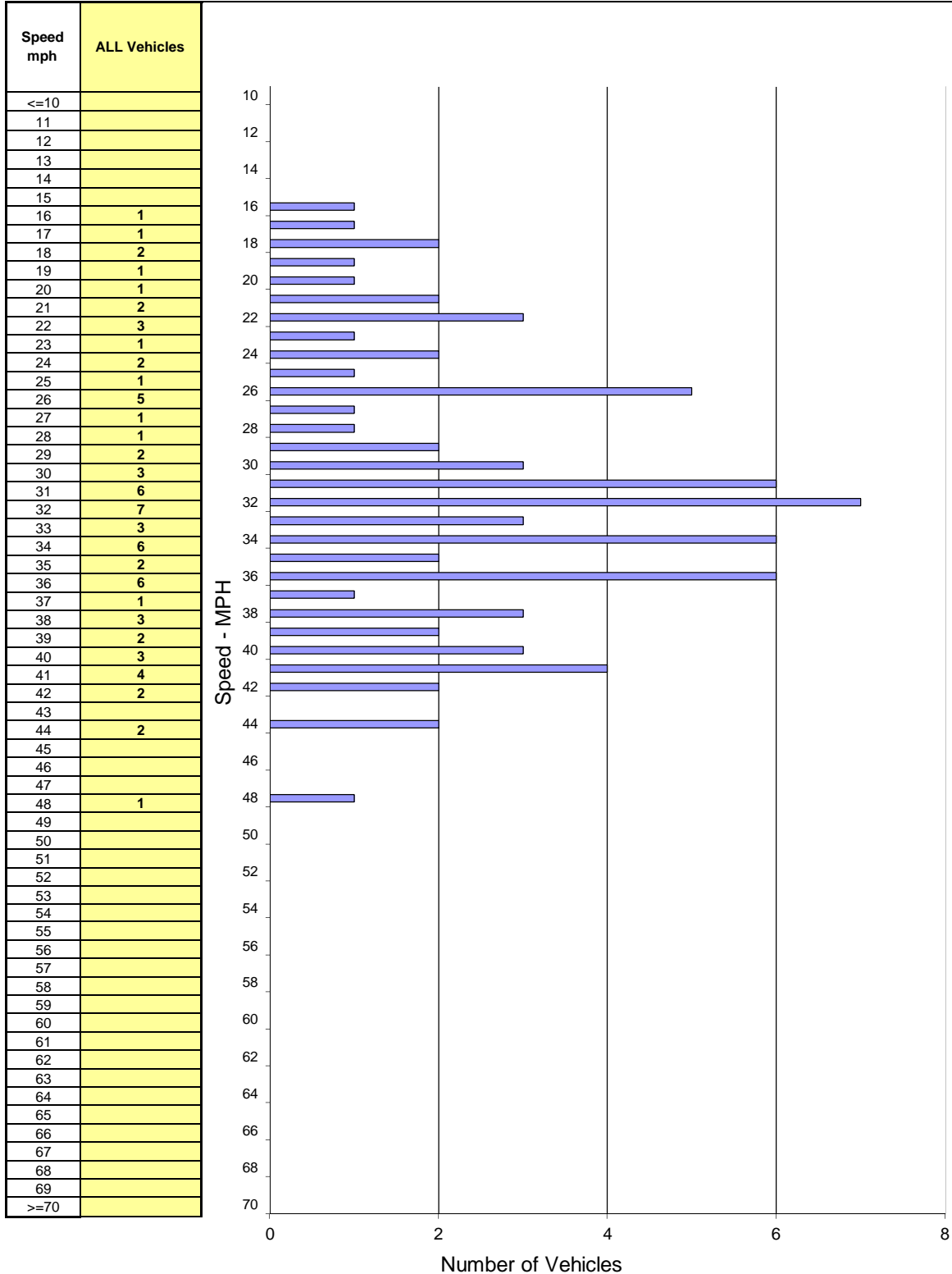
Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/6/2015
DAY: Monday

Location: Wabash Ave Bet. Fifth Ave & Panorama Dr
Posted Speed: None Posted Project#: 15-6046-42.4

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	75	16 - 48	32 mph	40 mph	29 - 38	39	52%	29% / 22	19% / 14

ENGINEERING AND TRAFFIC SURVEY

City of Redlands



Wabash Avenue from Reservoir Rd to Palo Alto

Date: 4/6/2015 Time: 3:10 PM

Recorded By: NDS Weather: Partly Cloudy



PREVAILING SPEED DATA

No. of Vehicles Surveyed:	100
85th Percentile:	34
10 mph Pace:	25 - 34
Percent in Pace:	77%
Posted Speed Limit:	Not Posted mph

COLLISION HISTORY

Dates Observed:	1/1/10-12/31/12
Speed-Related Collisions:	0
Total Collisions:	2
Annual Collision Rate:	0.7
Collision Rate (Per Million Vehicle Miles):	1.5
Statewide Collision Rate:	2.95

TRAFFIC FACTORS

Average Daily Traffic:	1,382
Width:	44'
Lane Configuration:	2 Lanes
Traffic Control:	1 stop
Mid-block Crosswalks:	No
Bike Facilities:	No
Truck Route:	0
On-Street Parking:	Yes
Adjacent Land Use:	Residential, Institutional
Other:	

ROADWAY FACTORS

Length of Segment:	0.9 Miles
Vertical Curve:	Yes
Horizontal Curve:	Yes
Lateral Visibility:	Good
Sidewalks:	Partial
Driveways:	Yes
Street Lighting:	No
Road Condition:	Fair- Excellent

CONCLUSIONS

Recommended Speed Limit:	30
Speed Limit Change:	YES
Justification for 5 mph down:	N/A

Prepared in Compliance with CVC Sections, 627, 22358, and 40802 and 2014 CA MUTCD Section 2B.13.

Survey Expires: 4/6/2022



Spot Speed Study

Prepared by: National Data & Surveying Services

City of Redlands

DATE: 4/6/2015

Location: Wabash Ave between Reservoir Rd & Palo Alto

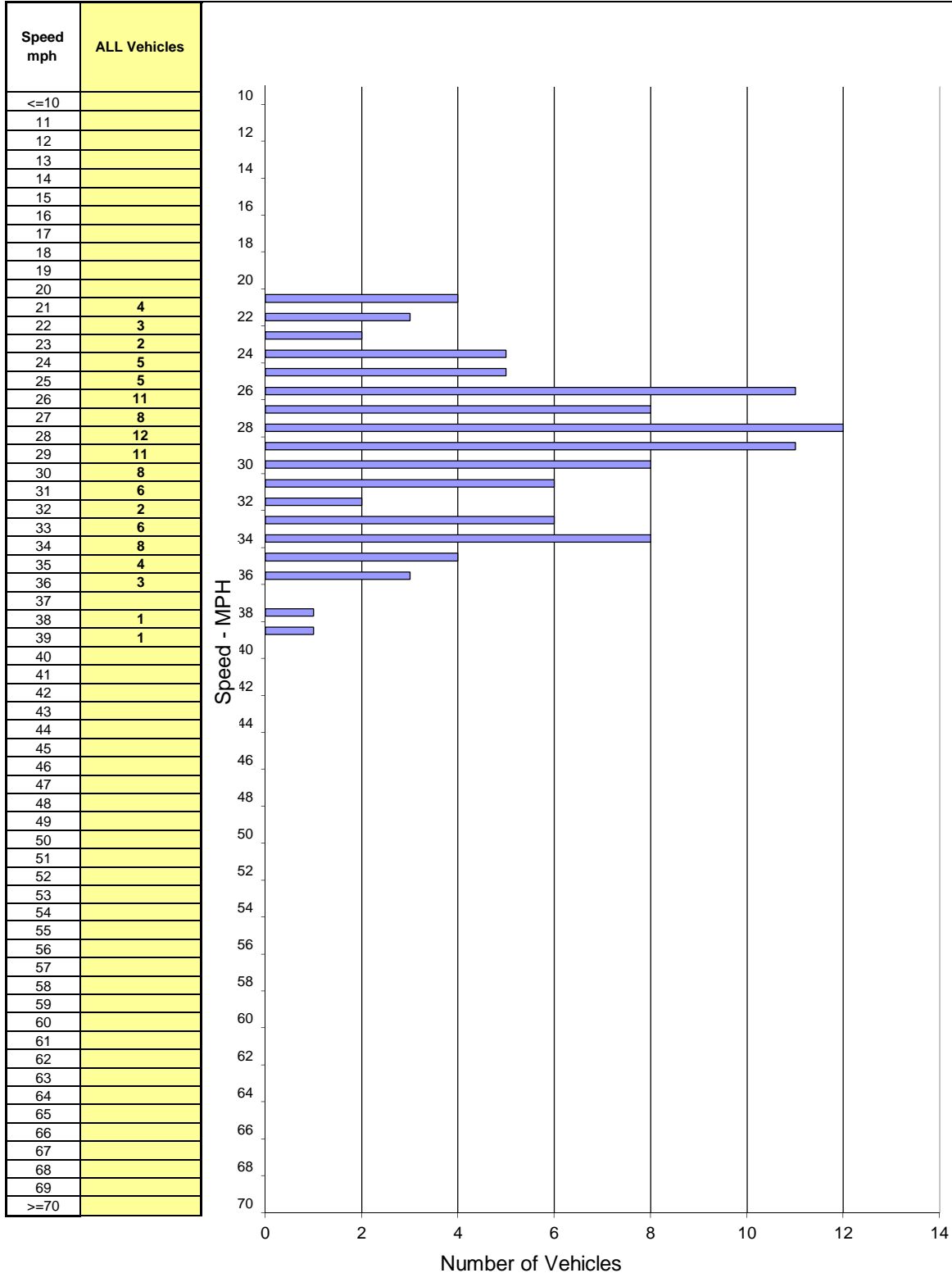
DAY: Monday

Posted Speed:

None Posted

Project#: 15-6046-42.5

Northbound & Southbound Spot Speeds



SPEED PARAMETERS									
Class	Count	Range	50th Percentile	85th Percentile	10 MPH Pace	# in Pace	Percent in Pace	% / # Below Pace	% / # Above Pace
ALL	100	21 - 39	28 mph	34 mph	25 - 34	77	77%	14% / 14	9% / 9

APPENDIX C: SUMMARY COLLISION RECORDS



SWITRS Codebook

Item Name	Variable Name	Description	Label	Possible Values
Collision Year	YEAR_	the year when the collision occurred		
Collision Severity	CRASHSEV	the injury level severity of the collision (highest level of injury in collision)		1 - Fatal 2 - Injury (Severe) 3 - Injury (Other Visible) 4 - Injury (Complaint of Pain) 0 - Property Damage Only (PDO)
PCF Violation Category	VIOLCAT			01 - Driving or Bicycling Under the Influence of Alcohol or Drug 02 - Impeding Traffic 03 - Unsafe Speed 04 - Following Too Closely 05 - Wrong Side of Road 06 - Improper Passing 07 - Unsafe Lane Change 08 - Improper Turning 09 - Automobile Right of Way 10 - Pedestrian Right of Way 11 - Pedestrian Violation 12 - Traffic Signals and Signs 13 - Hazardous Parking 14 - Lights 15 - Brakes 16 - Other Equipment 17 - Other Hazardous Violation 18 - Other Than Driver (or Pedestrian) 21 - Unsafe Starting or Backing 22 - Other Improper Driving 23 - Pedestrian or "Other" Under the Influence of Alcohol or Drug 24 - Fell Asleep 00 - Unknown - - Not Stated
Weather 1	WEATHER1	the weather condition at the time of the collision		A - Clear B - Cloudy C - Raining D - Snowing E - Fog F - Other G - Wind - - Not Stated

Alcohol Involved	ETOH	indicates whether the collision involved a party that had been drinking		Y or blank
Type of Collision	CRASHTYP			A - Head-On B - Sideswipe C - Rear End D - Broadside E - Hit Object F - Overtuned G - Vehicle/Pedestrian H - Other - - Not Stated
Motor Vehicle Involved With	INVOLV			A - Non-Collision B - Pedestrian C - Other Motor Vehicle D - Motor Vehicle on Other Roadway E - Parked Motor Vehicle F - Train G - Bicycle H - Animal I - Fixed Object J - Other Object - - Not Stated
Primary Rd	PRIMARYRD	The road the collision occurred on		
Secondary Rd	SECONDNRD	A secondary reference road that DISTANCE and DIRECT are measured from		
Distance	DISTANCE	Offset distance from secondary road		distance converted to feet
Direction	DIRECT	Direction of offset distance		N - North E - East S - South W - West - or blank - Not Stated, in Intersection
Intersection	INTERSECT_	Indicates where a collision occurred at an intersection		Y - Intersection N - Not Intersection Blank - Not stated
Collision Date	DATE_	the date when the collision occurred		
Collision Time	TIME_	the time when the collision occurred (24 hour time)		Data may appear with no leading zero(s).

ALABAMA ST	Barton Rd. to Park Ave.	CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASH_TYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
		4	12	A		D	C	ALABAMA ST	ORANGE AV	0		Y	6/8/2010	840
		4	9	A		D	C	ALABAMA ST	BARTON RD	250	N	N	11/22/2010	1250
		3	12	A		D	C	BARTON RD	ALABAMA ST	0		Y	11/29/2010	1357
		4	0	A		D	C	PARK AV	ALABAMA ST	0		Y	1/15/2011	1325
		4	1	B		C	C	ALABAMA ST	PARK AV	42	S	N	3/20/2011	1111
		4	0	A		D	G	PARK AV	ALABAMA ST	0		Y	4/22/2011	710
		3	8	A		C	C	BARTON RD	ALABAMA ST	0		Y	6/22/2011	2111
ALABAMA ST	Park Ave. to Lugonia Ave.	3	1	A	Y	A	C	ALABAMA ST	REDLANDS BL	0		Y	3/31/2010	2135
		4	8	A		E	I	ALABAMA ST	PARK AV	338	N	N	5/7/2010	319
		4	4	A		C	C	ALABAMA ST	ORANGE TREE LN	528	S	N	7/22/2010	1651
		4	3	A		C	C	ALABAMA ST	RT 10	93	N	N	6/30/2010	1535
		4	8	A		E	I	ALABAMA ST	LUGONIA AV	0		Y	7/10/2010	24
		4	3	A		C	C	ALABAMA ST	W LUGONIA AV	0		Y	8/6/2010	915
		4	1	C	Y	C	C	ALABAMA ST	REDLANDS BL	198	S	N	10/17/2010	2016
		4	3	A		C	C	ALABAMA ST	REDLANDS BL	0		Y	1/6/2011	1050
		4	10	B		G	B	ALABAMA ST	INDUSTRIAL PARK AV	0		Y	1/30/2011	1133
		3	12	A		D	C	ALABAMA ST	ORANGE TREE LN	0		Y	5/10/2011	2205
		4	3	A		C	C	LUGONIA AV	ALABAMA ST	0		Y	4/29/2011	1301
		4	3	A		C	C	LUGONIA AV	ALABAMA ST	0		Y	4/6/2011	2043
		4	0	B		D	C	LUGONIA AV	ALABAMA ST	0		Y	5/9/2011	707
		3	12	A		D	C	LUGONIA AV	ALABAMA ST	0		Y	7/29/2011	839
		4	3	A		C	C	ALABAMA ST	INDUSTRIAL PARK AV	0		Y	7/15/2011	1625
		4	12	A		D	C	ALABAMA ST	LUGONIA AV	0		Y	6/19/2011	1407
		4	12	A		D	C	ALABAMA ST	INDUSTRIAL PARK AV	0		Y	8/9/2011	1735
		4	0	A		D	D	ALABAMA ST	RT 10	0		Y	10/2/2011	210
		4	3	B		E	I	REDLANDS BL	ALABAMA ST	0		Y	10/25/2011	957
		4	4	A		C	C	ALABAMA ST	INDUSTRIAL PARK AV	0		Y	3/5/2012	1516
		4	0	A		B	C	ALABAMA ST	INDUSTRIAL PARK AV	0		Y	3/13/2012	1212
		4	3	A	Y	C	C	ALABAMA ST	RT 10	25	S	N	1/4/2012	1816
		4	12	A		D	C	ALABAMA ST	RT 10	0		Y	7/14/2012	2240
		3	12	A		D	C	ALABAMA ST	INDUSTRIAL PARK AV	0		Y	7/9/2012	1225
		4	8	A		B	C	ALABAMA ST	REDLANDS BL	0		Y	6/5/2012	1653
		4	0	A		H	C	ALABAMA ST	LUGONIA AV	0		Y	4/22/2012	1951
		4	21	A		C	C	ALABAMA ST	W LUGONIA AV	36	S	N	10/24/2012	1005
		4	1	A	Y	D	C	ALABAMA ST	W REDLANDS BL	0		Y	9/23/2012	754
		4	3	A		C	C	ALABAMA ST	RT 10	0	S	N	12/31/2012	1254

CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASHTYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
3	12	A		D	C	N ALABAMA ST	W LUGONIA AV	0		Y	11/5/2012	1733
4	3	A		C	D	ALABAMA ST	RT 10	72	N	N	11/2/2012	1211
3	8	A		D	G	ALESSANDRO RD	LA HERMOSA	0		Y	11/14/2010	1042
2	3	A		B	C	ALESSANDRO RD	REBECCA CREST	0		Y	9/15/2012	1130
1	-	A		H	G	ALTA VISTA DR	HIGHVIEW AV	528	E	N	7/25/2010	1059
4	12	A		A	C	BARTON RD	TERRACINA BL	0		Y	3/10/2011	1707
3	22	B		E	E	BARTON RD	TERRACINA	270	W	N	5/14/2011	816
3	9	A		D	C	BARTON RD	NEVADA ST	0		Y	5/18/2011	1056
3	3	A		C	C	BARTON RD	SAN TIMOTEO CANYON RD	100	E	N	8/19/2011	1118
4	8	A		D	C	BARTON RD	NEVADA ST	24	W	N	1/17/2012	1410
4	8	A		G	B	BARTON RD	NEVADA ST	188	W	N	7/28/2012	2259
4	4	A		C	C	BARTON RD	TERRACINA BL	0		Y	5/19/2012	1606
3	8	A		H	A	BARTON RD	NEVADA	0		Y	5/17/2012	711
4	8	A		B	C	BARTON RD	NEVADA ST	114	W	N	11/15/2012	1557
4	1	A	Y	C	C	BARTON RD	ALABAMA ST	101	E	N	8/25/2010	743
3	12	A		D	C	BARTON RD	ALABAMA ST	0		Y	11/29/2010	1357
3	8	A		C	C	BARTON RD	ALABAMA ST	0		Y	6/22/2011	2111
4	1	A	Y	C	C	BARTON RD	ALABAMA ST	101	E	N	8/25/2010	743
4	9	A		D	C	BROOKSIDE AV	LAKESIDE AV	0		Y	10/13/2010	1414
4	12	A		D	C	BARTON RD	BELLEVUE AV	0		Y	6/9/2011	1257
4	12	A		D	C	BARTON AV	BELLEVUE AV	0		Y	9/20/2011	1409
4	9	A		D	C	BARTON	LAKESIDE	0		Y	9/2/2011	1545
2	9	A		D	C	BROOKSIDE AV	LAKESIDE AV	0		Y	11/15/2011	2054
3	-	A		A	I	BARTON RD	BARTON RD 1520	0		-	10/20/2011	1204
4	3	A		C	C	BARTON RD	BELLEVUE AV	0		Y	3/16/2012	1443
3	3	A		H	A	BARTON RD	LAKESIDE DR	0		Y	2/25/2012	1102
4	-	A		D	C	BARTON RD	KANSAS ST	0		Y	12/7/2012	1336

Sunset Dr. to
ALESSANDRO RD Creekside Drive

Florida St. to
ALTA VISTA DR Sunset Dr.

West City Limit
to Terracina
Bld

Terracina Blvd
to Alabama

Alabama St to
Lakeside Ave

CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASH TYP	INVOLVE	PRIMARY RD	SECOND RD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
4	9	A		D	C	TEXAS ST	BROCKTON AV	0		Y	4/28/2010	1558
4	9	A		D	G	BROCKTON AV	OXFORD ST	0		Y	4/9/2010	1833
4	9	A		D	C	BROCKTON AV	6TH ST	0		Y	5/17/2010	1634
4	0	C		D	C	BROCKTON AV	ORANGE ST	0		Y	12/16/2010	610
4	9	A		D	C	6TH ST	BROCKTON AV	0		Y	4/14/2011	1825
3	9	A		D	C	CLAY ST	BROCKTON AV	0		Y	7/1/2011	1420
4	12	A		D	C	BROCKTON AV	ORANGE ST	0		Y	7/3/2011	2017
4	9	A		D	C	BROCKTON AV	HERALD ST	0		Y	9/13/2011	1723
4	8	A		A	I	ORANGE ST	BROCKTON AV	0		Y	11/8/2011	2204
4	8	A		B	C	ORANGE ST	BROCKTON AV	0		Y	7/14/2012	1055
4	21	A		D	C	6TH ST	BROCKTON AV	0		Y	8/11/2012	920
3	12	A		D	C	ORANGE ST	BROCKTON AV	0		Y	11/11/2012	729
4	3	A		C	C	BROCKTON AV	GROVE ST	30	E	N	5/14/2010	1621
3	12	A		D	C	BROCKTON AV	UNIVERSITY ST	0		Y	7/29/2010	717
4	12	A		D	C	JUDSON ST	BROCKTON AV	0		Y	8/5/2012	1828
4	3	B		C	C	BROCKTON AV	JUDSON ST	150	W	N	11/30/2012	1106
4	9	A		D	C	WABASH AV	NICE AV	0		Y	6/11/2011	1722
4	12	A		D	C	JUDSON ST	BROCKTON AV	0		Y	8/5/2012	1828
4	9	A		D	C	E BROCKTON AV	ANTHONY ST	0		Y	7/27/2012	2010
4	9	A		D	C	WABASH AV	BROCKTON AV	0		Y	10/16/2012	1517
4	9	B		D	C	BROOKSIDE AV	SAN MATEO ST	0		Y	2/24/2010	1347
4	8	A		D	C	BROOKSIDE AV	BROOKDALE ST	0		Y	7/5/2010	1509
4	3	A		C	C	ASH ST	BROOKSIDE AV	0		Y	6/28/2010	1730
4	5	A		A	I	BROOKSIDE AV	LAKESIDE ST	141	W	N	2/3/2011	1547
3	9	A		A	C	BROOKSIDE AV	CENTER ST	0		Y	6/27/2011	1246
4	8	A		A	C	SAN MATEO ST	BROOKSIDE AV	0		Y	9/22/2011	2201
3	0	A		D	C	SAN MATEO ST	BROOKSIDE AV	0		Y	10/1/2011	1100
3	8	A		D	C	SAN MATEO	BROOKSIDE AV	0		Y	8/23/2011	754
3	8	A		B	E	BROOKSIDE AV	CENTER ST	453	W	N	8/4/2011	1007
3	9	A		D	C	SAN MATEO ST	BROOKSIDE AV	0		Y	11/3/2011	1748

New York St to
BROCKTON AVE Texas St

Texas St to
BROCKTON AVE Church St

Church St to
BROCKTON AVE Judson St

Judson St to
BROCKTON AVE Wabash Ave

Lakeside Ave. to
BROOKSIDE AVE Center St

CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASHTYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
4	21	A		C	C	BROOKSIDE AV	CENTER ST	0		Y	2/13/2012	1322
4	9	A		D	C	BROOKSIDE AV	SAN MATEO ST	0		Y	2/13/2012	1758
4	12	A		D	C	BROOKSIDE AV	CENTER ST	0		Y	2/19/2012	918
4	8	A		E	I	BROOKSIDE AV	ROMA ST	81	E	N	2/12/2012	1314
4	8	A		B	C	BROOKSIDE AV	HASTINGS ST	0		Y	6/7/2012	759
3	1	A	Y	G	B	BROOKSIDE AV	CENTER ST	0		Y	6/18/2012	1837
3	9	A		D	C	N CENTER ST	BROOKSIDE AV	0		Y	11/13/2012	650
Center St to BROOKSIDE AVE Eureka St												
3	8	A		E	I	BROOKSIDE AV	EUREKA ST	24	E	N	1/17/2010	447
3	9	A		D	G	CITRUS AV	EUREKA ST	0		Y	7/22/2010	1750
4	10	A		G	B	CITRUS AV	EUREKA ST	0		Y	3/8/2011	1900
4	5	A		D	G	CITRUS AV	EUREKA ST	0		Y	6/25/2011	1658
3	12	A		D	C	CITRUS AV	EUREKA ST	0		Y	8/18/2011	1645
4	9	A		D	C	BROOKSIDE AV	PARKWOOD DR	0		Y	8/30/2011	1304
4	-	A		E	I	BROOKSIDE AV	EUREKA ST	0		Y	12/9/2011	2106
4	8	A		D	C	CITRUS AV	EUREKA ST	0		Y	1/4/2012	1738
3	9	A		D	C	BROOKSIDE AV	NORTH BUENA VISTA ST	0		Y	7/21/2012	955
Palmetto Ave. CALIFORNIA AVE to Almond Ave												
4	1	B	Y	E	I	CALIFORNIA ST	PIONEER AV	0		Y	4/10/2010	711
3	12	B		D	C	CALIFORNIA ST	ALMOND AV	0		Y	12/5/2010	1428
Almond Ave to CALIFORNIA AVE Redlands Blvd												
4	12	A		D	C	CALIFORNIA ST	ORANGE TREE LN	0		Y	2/8/2010	1555
4	8	-		-	C	CALIFORNIA ST	RT 10	300	S	N	7/8/2010	1840
4	9	A		D	C	CALIFORNIA ST	REDLANDS BL	637	N	N	8/13/2010	1337
3	9	A		D	C	CALIFORNIA ST	LUGONIA AV	0		Y	3/2/2011	1454
4	3	A		C	C	REDLANDS BL	CALIFORNIA ST	0		Y	7/20/2011	1521
3	1	A	Y	E	I	CALIFORNIA ST	REDLANDS BL	5	S	N	5/30/2011	2347
3	12	A		D	C	CALIFORNIA ST	ORANGE TREE LN	0		Y	9/21/2011	1202
4	9	A		A	C	CALIFORNIA ST	RT 10	528	S	N	11/2/2011	1847
4	0	A		B	C	CALIFORNIA ST	RT 10	200	S	N	10/19/2011	1410
4	12	A		B	C	CALIFORNIA ST	ORANGE TREE LN	0		Y	2/22/2012	1650
3	3	A	Y	C	C	CALIFORNIA ST	REDLANDS BL	76	N	N	8/18/2012	2044
3	12	A		D	C	CALIFORNIA ST	ORANGE TREE LN	0		Y	8/14/2012	1533
3	12	B		D	C	CALIFORNIA ST	RT 10	0		Y	10/11/2012	1421
Crescent Ave to CENTER ST Ridge St												

	CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASHTYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_	
CENTER ST	4	10	A		G	B	OLIVE AV	CENTER ST	0		Y	9/28/2011	745	
	3	17	A		D	G	CENTER ST	OLIVE ST	225	N	N	1/16/2012	1251	
	3	1	A	Y	A	I	CENTER ST	LINDA PL	150	N	N	11/10/2012	2104	
Cypress Ave to Crescent Ave	3	9	B		D	G	HIGHLAND AV	CENTER ST	0		Y	7/13/2010	2026	
	3	1	B	Y	C	E	CENTER ST	CHESTNUT AV	90	S	N	12/25/2010	1934	
	4	9	A		D	C	HIGHLAND AV	CENTER ST	0		Y	4/21/2011	1539	
	3	12	A		D	C	CENTER ST	HIGHLAND AV	0		Y	8/8/2011	2221	
	4	9	A		D	C	CENTER ST	HIGHLAND AV	0		Y	10/13/2011	1220	
	4	9	A		D	C	CENTER ST	CYPRESS AV	0		Y	1/31/2012	1531	
	3	10	A		G	B	CYPRESS AV	CENTER ST	0		Y	8/20/2012	557	
	3	9	A		G	B	CENTER ST	CHESTNUT ST	0		Y	10/25/2012	2122	
	CENTRAL AVE	4	9	A		D	C	CENTRAL AV	COOK ST	0		Y	5/25/2012	1710
		4	9	A		D	C	GROVE ST	CENTRAL AV	0		Y	11/10/2012	1540
CHURCH ST	4	1	A	Y	A	C	CHURCH ST	COLLEGE WY	0		Y	1/1/2010	54	
	3	12	A		D	C	COLTON AV	CHURCH ST	0		Y	5/13/2010	1801	
	3	21	A		D	C	CHURCH ST	PENNSYLVANIA AV	240	N	N	5/1/2010	1608	
	4	21	A	Y	D	C	CHURCH ST	CLARK ST	0		Y	5/20/2010	1344	
	4	9	B		D	C	CHURCH ST	CAMPUS AV	75	S	N	10/22/2010	1533	
	4	12	A	Y	D	G	CENTRAL AV	CHURCH ST	0		Y	9/22/2010	741	
	4	9	A		A	C	E COLTON AV	N CHURCH ST	0		Y	3/30/2011	1121	
	4	10	A		G	B	CHURCH ST	CITRUS AV	0		Y	3/9/2011	1853	
	2	12	A		D	C	CITRUS AV	CHURCH ST	0		Y	6/12/2011	1200	
	4	9	A		D	C	E CITRUS AV	N CHURCH ST	0		Y	8/23/2011	1908	
	4	1	A	Y	C	E	CHURCH ST	SAN BERNARDINO AV	105	N	N	10/28/2011	210	
	4	3	A		C	C	CHURCH ST	CITRUS AV	0		Y	12/15/2011	1446	
4	8	A		D	C	CITRUS AV	CHURCH ST	0		Y	2/8/2012	1642		
4	1	A		D	C	CHURCH ST	COLTON AV	0		Y	1/14/2012	1321		
3	8	A		C	G	CHURCH ST	COLTON AV	0		Y	5/18/2012	715		
4	8	C		G	B	CITRUS AV	CHURCH ST	0		Y	5/2/2012	755		
3	9	A		D	C	CITRUS AV	CHURCH ST	0		Y	4/6/2012	1803		
3	12	A		G	B	CHURCH ST	LUGONIA AV	0		Y	11/26/2012	1552		

CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASHTYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
4	-	A		D	C	FORD ST	CRESTVIEW DR	0		Y	3/14/2011	345
Ford St to Buckingham Dr												
4	9	A		D	C	CENTER ST	CYPRESS AV	0		Y	1/31/2012	1531
3	10	A		G	B	CYPRESS AV	CENTER ST	0		Y	8/20/2012	557
Terracina Blvd to Center												
4	0	B		D	C	REDLANDS BL	CYPRESS AV	0		Y	1/21/2010	1808
4	21	A		C	C	CYPRESS AV	REDLANDS BL	0		Y	3/9/2010	1801
4	8	A		D	C	CYPRESS AV	ESTHER WAY	147	E	N	11/13/2010	1106
4	9	A		D	C	CYPRESS AV	ALVARADO ST	0		Y	10/17/2011	800
3	8	A		C	C	CYPRESS AV	HIBISCUS ST	0		Y	8/18/2012	1157
3	12	A		D	G	CAJON ST	CYPRESS AV	0		Y	9/30/2012	1857
Center St to Redlands Blvd												
4	9	A		D	C	CYPRESS AV	UNIVERSITY AV	0		Y	3/16/2010	1737
4	8	A		D	C	CYPRESS AV	UNIVERSITY PL	165	W	N	3/3/2011	1540
4	3	A		D	C	CYPRESS AV	LYTLE ST	0		Y	12/10/2011	903
4	9	A		D	C	CYPRESS AV	UNIVERSITY ST	0		Y	10/27/2011	946
4	3	A		C	C	CYPRESS AV	UNIVERSITY ST	0		Y	2/11/2012	1338
4	12	A		D	C	CYPRESS AV	ROOSEVELT	0		Y	9/14/2012	1551
Redlands Blvd to Citrus Ave												
4	10	A		G	B	COLTON AV	DEARBORN ST	0		Y	1/4/2011	1802
4	8	A		B	C	DEARBORN ST	SILVERTREE LN	43	S	N	3/4/2011	810
4	12	A		D	C	CITRUS AV	DEARBORN ST	0		Y	12/21/2011	2113
3	8	A		D	I	DEARBORN ST	5TH ST	1056	N	N	12/8/2011	1109
3	10	A		G	B	STILLMAN AV	DEARBORN ST	0		Y	4/30/2012	1033
5th Ave to Colton Ave												
3	3	A		C	C	LUGONIA AV	DEARBORN ST	0		Y	8/12/2012	1844
Colton Ave to Lugonia												
3	0	B		D	G	NORTH DEARBORN ST	SAN BERNARDINO AV	0		Y	5/15/2011	1010
Lugonia Ave to San Bern.												
3	8	A		D	C	ELIZABETH ST	ELIZABETH CREST	771	S	N	11/28/2012	756
Garden St to Crescent Ave												

FERN AVE	CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASH TYP	INVOLVE	PRIMARY RD	SECOND RD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_	
Redland Blvd to Cajon St FERN AVE	4	12	A		D	C	CAJON ST	FERN AV	0		Y	7/25/2010	1830	
	4	12	A		D	C	FERN AV	CAJON ST	0		Y	6/29/2011	1430	
	4	-	B		G	B	CAJON ST	W FERN AV	0		Y	10/4/2011	1109	
Canjon St to Center St FERN AVE	3	8	A		D	C	FERN AV	4TH ST	0		Y	3/8/2010	1258	
	4	3	A		C	C	FERN AV	ALVARADO ST	0		Y	3/29/2010	1644	
	3	9	A		D	C	FERN AV	BUENA VISTA ST	0		Y	7/28/2010	1439	
	4	0	A		D	C	CENTER ST	FERN AV	0		Y	6/25/2010	2056	
	4	9	A		D	C	FERN AV	BUENA VISTA ST	0		Y	3/10/2011	736	
	3	9	A		D	C	FERN AV	BUENA VISTA ST	0		Y	8/15/2011	707	
	4	8	A		E	I	FERN AV	BUENA VISTA ST	117	W	N	2/9/2012	1156	
	3	1	A	Y	B	E	BUENA VISTA ST	FERN AV	0		Y	9/15/2012	54	
	Center St to San Mateo St FERN AVE	4	0	A		D	C	CENTER ST	FERN AV	0		Y	6/25/2010	2056
		4	18	A		E	I	FERN AV	SAN MATEO ST	30	E	N	3/29/2011	734
3		8	A		D	E	FERN AV	SAN JACINTO ST	0		Y	6/30/2011	919	
4		12	A		D	C	SAN MATEO ST	FERN AV	0		Y	4/24/2012	1210	
3		3	A		H	I	FERN AV	S SAN MATEO ST	32	E	N	8/16/2012	154	
4		12	A		D	C	FERN AV	SAN MATEO ST	0		Y	10/25/2012	856	
San Mateo to Terracina Blvd FERN AVE		4	9	A		D	C	FERN AV	LAKESIDE AV	0		Y	4/12/2010	1631
	4	1	A	Y	D	C	FERN AV	BELLEVUE AV	0		Y	10/2/2010	1503	
	4	18	A		E	I	FERN AV	SAN MATEO ST	30	E	N	3/29/2011	734	
	4	9	A		D	G	FERN AV	LAKESIDE AV	0		Y	3/15/2011	749	
	4	12	A		D	C	SAN MATEO ST	FERN AV	0		Y	4/24/2012	1210	
	3	3	A		H	I	FERN AV	S SAN MATEO ST	32	E	N	8/16/2012	154	
	4	12	A		D	C	FERN AV	SAN MATEO ST	0		Y	10/25/2012	856	
	Citrus Ave to 5th Ave FORD ST	3	10	A		G	B	FORD ST	HIGHLAND AV	0		Y	3/30/2010	1724
		4	11	A		G	B	FORD ST	CITRUS AV	15	S	N	5/19/2010	1547
		4	12	A		H	G	CITRUS AV	JUDSON ST	0		Y	4/30/2010	845
3		8	A		E	I	FORD ST	HIGHLAND AV	0		Y	6/25/2010	2244	
4		1	A	Y	C	C	CITRUS AV	JUDSON ST	0		Y	8/7/2010	16	
4		9	A		D	C	FORD ST	FERNWOOD DR	0		Y	1/3/2012	746	

	CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASHTYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
FORD ST	3	9	A		D	C	CITRUS AV	FORD ST	0		Y	4/28/2012	1621
5th Ave to Reservoir Rd	4	8	A		B	G	CITRUS AV	JUDSON ST	0		Y	8/22/2012	1044
FORD ST	4	-	A		D	C	FORD ST	CRESTVIEW DR	0		Y	3/14/2011	345
Reservoir Rd to Sunset Dr	3	3	A		C	C	FORD ST	FAIRVIEW LN	138	S	N	4/29/2012	928
FORD ST	4	12	A		D	C	E REDLANDS BL	FORD ST	0		Y	5/3/2010	1347
	3	12	A		D	C	FORD ST	SUNSET DR	0		Y	7/12/2010	1449
	4	3	A		E	I	FORD ST	PARKFORD DR	0		Y	7/15/2012	1026
	4	12	A		D	C	REDLANDS BL	FORD ST	0		Y	7/19/2012	1319
	4	-	A		E	I	FORD ST	REDLANDS BL	0		Y	4/16/2012	1437
	4	12	A		D	C	REDLANDS BL	FORD ST	0		Y	4/8/2012	1813
FORD ST	3	12	A		D	C	FORD ST	SUNSET DR	0		Y	7/12/2010	1449
Sunset Dr to Garden Hill Dr													
GROVE ST	3	9	C		D	C	CITRUS AV	GROVE ST	0		Y	9/13/2011	1504
Highland Ave to Citrus Ave	3	3	F		G	B	CITRUS AV	GROVE ST	0		Y	8/30/2011	704
GROVE ST	3	12	A		D	C	GROVE AV	CITRUS AV	0		Y	8/12/2012	2130
Citrus Ave to Brockton Ave													
GROVE ST	3	12	A		D	G	GROVE ST	SYLVAN BL	0		Y	4/7/2010	747
	3	9	C		D	C	CITRUS AV	GROVE ST	0		Y	9/13/2011	1504
	3	3	F		G	B	CITRUS AV	GROVE ST	0		Y	8/30/2011	704
	3	12	A		D	C	GROVE AV	CITRUS AV	0		Y	8/12/2012	2130
	4	9	A		D	C	GROVE ST	CENTRAL AV	0		Y	11/10/2012	1540
Ford St to Cajon St													
HIGHLAND AVE St	3	8	A		D	C	HIGHLAND AV	REDLANDS BL	407	W	N	11/12/2010	1305
	4	9	A		D	C	REDLANDS BL	HIGHLAND AV	0		Y	10/25/2011	705
	3	3	A		E	I	HIGHLAND AV	CAJON ST	200	W	N	10/24/2011	907
	4	9	A		D	C	CAJON ST	EAST HIGHLAND AV	0		Y	1/25/2012	933
Canjon St to San Mateo													
HIGHLAND AVE	4	5	A		B	C	HIGHLAND AV	RAMONA	0		Y	4/8/2010	1441
	3	21	A		D	C	HIGHLAND AV	PACIFIC ST	0		Y	5/29/2010	1942
	3	9	B		D	G	HIGHLAND AV	CENTER ST	0		Y	7/13/2010	2026
	4	9	A		D	C	HIGHLAND AV	CENTER ST	0		Y	4/21/2011	1539

CRASHSEV	VIOLCAT	WEATHER	ETOH	CRASHTYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
3	12	A		D	C	CENTER ST	HIGHLAND AV	0		Y	8/8/2011	2221
4	9	A		D	C	CENTER ST	HIGHLAND AV	0		Y	10/13/2011	1220
3	3	A		E	I	HIGHLAND AV	CAJON ST	200	W	N	10/24/2011	907
4	9	A		D	C	CAJON ST	EAST HIGHLAND AV	0		Y	1/25/2012	933
3	5	A		A	G	JUDSON ST	LARAMIE ST	0		Y	1/12/2010	1017
4	12	A		H	G	CITRUS AV	JUDSON ST	0		Y	4/30/2010	845
4	1	A	Y	C	C	CITRUS AV	JUDSON ST	0		Y	8/7/2010	16
4	10	A		D	B	E COLTON AV	JUDSON ST	0		Y	8/17/2011	1900
2	10	A	Y	G	B	COLTON AV	JUDSON ST	0		Y	7/1/2012	1729
3	9	A		D	C	CITRUS AV	FORD ST	0		Y	4/28/2012	1621
4	8	A		B	G	CITRUS AV	JUDSON ST	0		Y	8/22/2012	1044
3	-	A		G	B	JUDSON ST	COLTON AV	0		Y	11/28/2012	550
4	10	A		D	B	E COLTON AV	JUDSON ST	0		Y	8/17/2011	1900
2	10	A	Y	G	B	COLTON AV	JUDSON ST	0		Y	7/1/2012	1729
3	9	A		D	C	JUDSON ST	CLOCK AV	0		Y	4/14/2012	1820
4	12	A		D	C	JUDSON ST	BROCKTON AV	0		Y	8/5/2012	1828
3	8	A		D	C	LUGONIA AV	JUDSON ST	0		Y	10/25/2012	1342
3	-	A		G	B	JUDSON ST	COLTON AV	0		Y	11/28/2012	550
3	8	A		D	C	LUGONIA AV	JUDSON ST	0		Y	10/25/2012	1342
4	12	A		D	C	JUDSON ST	E SAN BERNARDINO AV	0		Y	11/6/2012	1327
4	3	A		D	C	LIVE OAK CANYON RD	RT 10	10560	S	N	12/8/2011	1933
3	9	A		D	C	CALIFORNIA ST	LUGONIA AV	0		Y	3/2/2011	1454
4	12	A		D	C	LUGONIA AV	NEVADA ST	0		Y	1/14/2010	1105
4	8	A		E	I	ALABAMA ST	LUGONIA AV	0		Y	7/10/2010	24
3	9	A		D	C	LUGONIA AV	CALIFORNIA ST	1519	E	N	7/23/2010	743

CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASHTYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
4	3	A		C	C	ALABAMA ST	W LUGONIA AV	0		Y	8/6/2010	915
4	3	A		C	C	LUGONIA AV	ALABAMA ST	0		Y	4/29/2011	1301
4	3	A		C	C	LUGONIA AV	ALABAMA ST	0		Y	4/6/2011	2043
3	9	A		D	C	CALIFORNIA ST	LUGONIA AV	0		Y	3/2/2011	1454
4	0	B		D	C	LUGONIA AV	ALABAMA ST	0		Y	5/9/2011	707
3	12	A		D	C	LUGONIA AV	ALABAMA ST	0		Y	7/29/2011	839
4	12	A		D	C	ALABAMA ST	LUGONIA AV	0		Y	6/19/2011	1407
1	-	A	Y	E	I	LUGONIA AV	CALIFORNIA AV	623	E	N	4/1/2012	2207
3	8	A		D	C	LUGONIA AV	ALABAMA ST	475	W	N	5/24/2012	1733
4	0	A		H	C	ALABAMA ST	LUGONIA AV	0		Y	4/22/2012	1951
4	6	A		B	C	LUGONIA AV	ALABAMA ST	40	E	N	9/24/2012	1036
3	12	A		D	C	N ALABAMA ST	W LUGONIA AV	0		Y	11/5/2012	1733

Alabama St to
Tennessee (EB)

LUGONIA AVE

4	8	A		E	I	ALABAMA ST	LUGONIA AV	0		Y	7/10/2010	24
4	3	A		C	C	LUGONIA AV	TENNESSEE ST	175	E	N	8/4/2010	1030
4	3	A		C	C	ALABAMA ST	W LUGONIA AV	0		Y	8/6/2010	915
4	3	A		C	C	LUGONIA AV	ALABAMA ST	0		Y	4/29/2011	1301
4	3	A		C	C	LUGONIA AV	ALABAMA ST	0		Y	4/6/2011	2043
4	0	B		D	C	LUGONIA AV	ALABAMA ST	0		Y	5/9/2011	707
3	12	A		D	C	LUGONIA AV	ALABAMA ST	0		Y	7/29/2011	839
4	12	A		D	C	ALABAMA ST	LUGONIA AV	0		Y	6/19/2011	1407
4	3	A		C	C	TENNESSEE ST	LUGONIA AV	0		Y	8/25/2011	1431
4	0	A		H	C	ALABAMA ST	LUGONIA AV	0		Y	4/22/2012	1951
4	6	A		B	C	LUGONIA AV	ALABAMA ST	40	E	N	9/24/2012	1036
3	12	A		D	C	N ALABAMA ST	W LUGONIA AV	0		Y	11/5/2012	1733
4	21	A		C	C	TENNESSEE ST	LUGONIA AV	0		Y	11/16/2012	1314

Tennessee St to
Texas St

LUGONIA AVE

4	12	A		D	C	LUGONIA AV	TEXAS ST	0		Y	1/16/2010	1145
3	12	A		D	C	LUGONIA AV	TEXAS ST	0		Y	2/10/2010	1253
4	3	A		C	C	LUGONIA AV	TEXAS ST	75	W	N	7/19/2010	1754
4	3	A		C	C	LUGONIA AV	TENNESSEE ST	175	E	N	8/4/2010	1030
4	3	A		C	C	TENNESSEE ST	LUGONIA AV	0		Y	8/25/2011	1431
4	12	A		B	C	LUGONIA AV	TEXAS ST	0		Y	5/7/2012	1511
4	3	A		C	C	LUGONIA AV	KARON ST	0		Y	9/22/2012	1235
4	21	A		C	C	TENNESSEE ST	LUGONIA AV	0		Y	11/16/2012	1314

Texas St to
Orange St

LUGONIA AVE

CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASHTYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
4	12	A		D	C	LUGONIA AV	TEXAS ST	0		Y	1/16/2010	1145
3	12	A		D	C	LUGONIA AV	TEXAS ST	0		Y	2/10/2010	1253
4	1	A	Y	C	C	LUGONIA AV	WASHINGTON ST	0		Y	1/9/2010	1720
4	10	A		G	B	LUGONIA AV	OHIO ST	0		Y	5/6/2010	1936
4	21	A		D	C	LUGONIA AV	OHIO ST	177	W	N	8/7/2010	1339
4	12	B		D	C	LUGONIA AV	ORANGE ST	0		Y	10/17/2010	1416
4	0	A		D	G	N ORANGE ST	LUGONIA AV	0		Y	10/21/2011	1330
4	21	A		B	C	LUGONIA AV	CLAY ST	45	W	N	1/28/2012	1242
4	12	A		B	C	LUGONIA AV	TEXAS ST	0		Y	5/7/2012	1511
I-10 Freeway to Central Ave												
MOUNTAIN VIEW (NB)												
4	9	A		D	C	MOUNTAIN VIEW AV	COULSTON ST	0		Y	12/14/2010	1226
4	9	A		D	C	S MOUNTAIN VIEW AV	COULSTON ST	0		Y	3/8/2012	1549
4	8	A		D	C	MOUNTAIN VIEW AV	COULSTON AV	152	S	N	9/25/2012	738
Colton Ave to Lugonia												
4	12	A		D	C	NEW YORK ST	W COLTON AV	0		Y	2/6/2011	1606
4	3	A		E	I	NEW YORK ST	COLTON AV	412	N	N	12/16/2011	106
4	9	A		D	C	COLTON AV	NEW YORK ST	0		Y	3/29/2012	1737
Citrus Ave to San Mateo St												
3	9	C		D	C	OLIVE ST	MICHIGAN ST	0		Y	1/21/2010	1408
4	12	A		D	C	CAJON ST	OLIVE AV	0		Y	2/3/2010	1607
3	12	C		D	C	SAN MATEO	OLIVE ST	0		Y	1/22/2010	1305
4	9	A		D	C	OLIVE AV	EUREKA ST	0		Y	7/7/2010	939
3	9	A		D	G	OLIVE AV	CITRUS AV	0		Y	10/29/2010	1138
4	10	A		G	B	OLIVE AV	CENTER ST	0		Y	9/28/2011	745
3	17	A		B	G	OLIVE AV	PARKWOOD DR	0		Y	8/31/2011	1805
4	9	A		D	C	E CITRUS AV	8TH ST	0		Y	8/23/2011	1059
3	10	A		G	B	OLIVE ST	EUREKA ST	0		Y	8/8/2011	746
4	9	A		D	C	OLIVE AV	CAJON ST	0		Y	10/6/2011	1531
4	9	A		D	C	OLIVE AV	EUREKA ST	0		Y	6/15/2012	1218
San Mateo St to Terracina Blvd												
3	12	C		D	C	SAN MATEO	OLIVE ST	0		Y	1/22/2010	1305
3	9	A		D	G	TERRACINA BL	OLIVE AV	0		Y	6/18/2011	1040
4	12	A		D	C	LAKESIDE AV	OLIVE AV	0		Y	11/20/2012	1401
Lugonia Ave to Pioneer Ave												
ORANGE ST												

CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASHTYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
4	11	A	Y	G	B	ORANGE ST	SAN BERNARDINO AV	0		Y	4/12/2010	2142
4	12	A		D	C	SAN BERNARDINO AV	ORANGE ST	0		Y	5/20/2010	1856
3	10	A		G	B	ORANGE ST	PIONEER AV	0		Y	12/8/2010	724
4	3	A		C	C	SAN BERNARDINO AV	ORANGE ST	0		Y	10/15/2010	1358
4	0	A		D	C	ORANGE ST	SAN BERNARDINO AV	0		Y	11/5/2010	1936
4	10	B		G	B	ORANGE ST	SAN BERNARDINO AV	0		Y	2/17/2011	706
4	0	A		D	G	N ORANGE ST	LUGONIA AV	0		Y	10/21/2011	1330
4	3	A		B	C	ORANGE ST	DELAWARE	312	N	N	6/14/2012	453
2	8	A		G	B	ORANGE ST	SAN BERNARDINO AV	9	S	N	5/6/2012	1342
3	0	A		D	C	PIONEER AV	ORANGE ST	0		Y	7/14/2012	1300
4	12	A		D	C	N ORANGE ST	SAN BERNARDINO AV	0		Y	12/11/2012	1111
Pioneer Ave to Hubbard Ct												
ORANGE ST						ORANGE ST	PIONEER AV	0		Y	12/8/2010	724
3	10	A		G	B	ORANGE ST	PIONEER AV	0		Y	12/8/2010	724
3	0	A		D	C	PIONEER AV	ORANGE ST	0		Y	7/14/2012	1300
Hubbard Ct to City Limits												
ORANGE ST						ORANGE ST	PIONEER AV	0		Y	12/8/2010	724
4	3	A		A	D	ORANGE ST	PIONEER ST	1584	N	N	1/19/2010	1502
4	3	A		C	C	ORANGE ST	PIONEER AV	2112	N	N	1/3/2012	1015
3	8	A		F	I	ORANGE ST	PIONEER AV	1584	N	N	7/22/2012	18
4	3	A		C	C	ORANGE ST	PIONEER AV	2112	N	N	6/8/2012	1322
California St to Nevada St												
ORANGE TREE LN						ORANGE TREE LN	CALIFORNIA ST	528	E	N	4/25/2011	1226
2	8	A		E	I	ORANGE TREE LN	CALIFORNIA ST	528	E	N	4/25/2011	1226
Nevada St to Alabama St												
ORANGE TREE LN						ALABAMA ST	ORANGE TREE LN	0		Y	5/10/2011	2205
3	12	A		D	C	ALABAMA ST	ORANGE TREE LN	0		Y	5/10/2011	2205
Serpentine Dr to San Mateo St												
PALM AVE						PALM AV	SAN MATEO ST	48	E	N	5/11/2010	705
4	-	A		C	E	PALM AV	SAN MATEO ST	48	E	N	5/11/2010	705
San Mateo St to Ford St												
PALM AVE						PALM AV	REDLANDS BL	80	W	N	2/5/2010	1144
4	3	C		C	C	PALM AV	REDLANDS BL	80	W	N	2/5/2010	1144
3	9	B		D	C	PALM ST	ALVARADO ST	0		Y	3/3/2010	1318
4	12	A		D	C	CAJON ST	PALM AV	0		Y	7/14/2010	2220
3	9	A		H	G	CYPRESS AV	RT 10	0		Y	10/29/2010	1916
3	9	A		-	C	CYPRESS AV	RT 10	0		Y	2/1/2011	1906
4	9	A		D	C	CYPRESS AV	RT 10	0		Y	8/4/2011	1845
4	0	A		E	I	PALM AV	REDLANDS BL	200	W	N	4/4/2012	920
3	9	A		D	C	E CYPRESS AV	RT 10	0		Y	3/23/2012	1805

CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASHTYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
3	8	A		E	I	PALM AV	SAN JACINTO ST	45	W	N	1/24/2012	2353
3	3	A		C	C	CYPRESS AV	RT 10	0		Y	5/12/2012	1023
4	0	A		D	C	E REDLANDS BL	E PALM AV	0		Y	8/14/2012	1838
4	12	A		D	G	REDLANDS BL	PALM AV	0		Y	9/22/2012	1325
3	8	A		E	I	PALMETTO AV	NEVADA ST	1219	W	N	6/20/2011	1350
4	8	A		D	C	PENNSYLVANIA AV	COLUMBIA ST	200	E	N	5/31/2010	1300
4	5	A		D	G	PENNSYLVANIA AV	WASHINGTON ST	0		Y	5/25/2012	828
4	9	A		A	G	PENNSYLVANIA AV	KINGSWOOD DR	5	E	N	5/28/2010	1522
4	9	A		B	C	UNIVERSITY ST	PENNSYLVANIA AV	0		Y	11/10/2010	728
4	9	A		B	C	UNIVERSITY ST	PENNSYLVANIA AV	0		Y	11/10/2010	728
4	9	A		A	C	PENNSYLVANIA AV	VILLAGE ST	0		Y	10/10/2012	1650
3	10	A		G	B	ORANGE ST	PIONEER AV	0		Y	12/8/2010	724
4	9	A		D	C	PIONEER ST	CLAY ST	0		Y	1/19/2012	1703
3	0	A		D	C	PIONEER AV	ORANGE ST	0		Y	7/14/2012	1300
4	3	A		C	C	REDLANDS BL	NEW JERSEY ST	813	W	N	1/12/2010	1340
3	3	A		D	G	REDLANDS BL	CALIFORNIA ST	455	E	N	1/24/2010	1751
3	5	A	Y	A	C	ALABAMA ST	REDLANDS BL	0		Y	3/31/2010	2135
3	1	A		C	C	REDLANDS BL	TEXAS ST	257	N	N	7/6/2010	1322
4	-	A		D	C	TEXAS ST	REDLANDS BL	0		Y	6/9/2010	1631
1	9	A		D	C	REDLANDS BL	NEW YORK ST	0		Y	10/25/2010	1502
3	12	A		C	C	REDLANDS BL	REDLANDS BL 1678	43	W	N	1/6/2011	1308
4	3	A		C	C	REDLANDS BL	NEVADA ST	255	W	N	12/11/2010	1230
4	4	A		C	C	ALABAMA ST	REDLANDS BL	0		Y	1/6/2011	1050
4	3	A		C	C	REDLANDS BL	NEW JERSEY ST	0		Y	4/3/2011	1359
4	3	A		G	B	N REDLANDS BL	NEW JERSEY ST	0		Y	3/6/2011	2044
3	10	B		D	C	REDLANDS BL	TENNESSEE ST	0		Y	5/18/2011	1720
4	12	A		E	I	REDLANDS BL	NEW JERSEY ST	327	W	N	5/1/2011	2013

Nevada St to
California St
PALMETTO AVE (WB)

Texas St to
PENNSYLVANIA A Orange St

Church St to
PENNSYLVANIA A University Ave

University Ave
PENNSYLVANIA A to Judson St

Texas St to
Orange St
PIONEER AVE

California St to
Texas St
REDLANDS BLVD

CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASHTYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
4	8	A		C	C	REDLANDS BL	CALIFORNIA ST	0		Y	7/20/2011	1521
3	3	A		D	C	REDLANDS BL	ALABAMA ST	343	W	N	7/4/2011	1309
4	9	A	Y	A	I	REDLANDS BL	KANSAS ST	0		Y	6/2/2011	855
3	8	A		G	B	REDLANDS BL	IOWA ST	0		Y	9/26/2011	1148
4	8	A		D	C	REDLANDS BL	TENNESSEE ST	300	W	N	8/24/2011	1244
4	8	A		D	C	REDLANDS BL	COLTON AV	0		Y	11/11/2011	1734
3	9	A		D	G	REDLANDS BL	KANSAS ST	210	E	N	10/13/2011	1254
3	9	A		D	G	W REDLANDS BL	NEVADA ST	0		Y	10/17/2011	1446
4	9	B		E	I	REDLANDS BL	ALABAMA ST	0		Y	10/25/2011	957
4	3	B		C	C	REDLANDS BL	ALABAMA ST	24	N	N	10/4/2011	1518
4	3	A	Y	C	C	REDLANDS BL	CALIFORNIA ST	87	E	N	3/28/2012	1224
4	4	A		C	C	REDLANDS BL	TEXAS ST	538	W	N	1/12/2012	1005
1	3	A	Y	G	B	REDLANDS BL	CALIFORNIA ST	607	E	N	7/21/2012	2139
3	11	A	Y	E	I	REDLANDS BL	KANSAS ST	90	W	N	6/8/2012	1107
4	8	A		D	C	REDLANDS BL	TEXAS ST	230	W	N	7/16/2012	1720
3	8	A	Y	D	C	REDLANDS BL	ALABAMA ST	38	W	N	5/27/2012	2321
3	1	A		D	G	REDLANDS BL	ALABAMA ST	120	E	N	6/23/2012	1420
4	5	A		B	C	ALABAMA ST	REDLANDS BL	0		Y	6/5/2012	1653
4	8	A	Y	C	C	REDLANDS BL	TEXAS ST	0		Y	4/13/2012	1932
4	3	A	Y	D	C	ALABAMA ST	W REDLANDS BL	0		Y	9/23/2012	754
4	1	A		G	B	REDLANDS BL	COLTON AV	54	W	N	9/16/2012	1927
3	11	A		D	G	REDLANDS BL	IOWA AV	355	E	N	9/17/2012	2010
3	9	A		D	G	WEST REDLANDS BL	NEW JERSEY ST	0		Y	10/24/2012	1530
3	5	A	Y	D	C	REDLANDS BL	TENNESSEE ST	0		Y	11/17/2012	1928
3	3	A		E	I	REDLANDS BL	1ST ST	18	W	N	1/8/2010	1342
4	12	B		D	C	REDLANDS BL	EUREKA ST	6	E	N	7/14/2011	955
4	8	A		E	I	REDLANDS BL	EUREKA ST	1323	W	N	4/6/2012	1741
3	9	A		D	C	EUREKA	REDLANDS BL	0		Y	12/22/2012	1052
2	3	A		D	C	REDLANDS BL	STATE ST	0		Y	4/23/2010	1429
4	9	A		D	C	REDLANDS BL	STATE ST	0		Y	4/13/2010	1324
3	5	A		D	G	REDLANDS BL	6TH ST	0		Y	5/13/2010	1651
3	9	A		D	G	E REDLANDS BLVD	STATE ST	0		Y	11/27/2010	1300
4	12	A		D	C	REDLANDS BL	6TH ST	0		Y	4/22/2011	1504
4	12	B		D	C	REDLANDS BL	EUREKA ST	6	E	N	7/14/2011	955
4	3	A		C	C	CITRUS AV	REDLANDS BL	0		Y	8/3/2011	1407
4	8	A		D	G	REDLANDS BL	CITRUS AV	0		Y	9/26/2011	1721

Texas St to
REDLANDS BLVD Eureka St

Eureka St to
REDLANDS BLVD Citrus Ave

CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASHTYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
4	4	A		C	C	SAN BERNARDINO AV	TENNESSEE ST	33	W	N	12/2/2011	2050
4	9	B		A	C	SAN BERNARDINO AV	TEXAS ST	0		Y	2/12/2012	1415
4	9	A		D	C	SAN BERNARDINO AV	TEXAS ST	0		Y	2/18/2012	1249
4	12	A		D	C	N ORANGE ST	SAN BERNARDINO AV	0		Y	12/11/2012	1111
4	9	A		D	C	SAN BERNARDINO AV	TENNESSEE ST	0		Y	11/1/2012	1538
4	11	A	Y	G	B	ORANGE ST	SAN BERNARDINO AV	0		Y	4/12/2010	2142
4	12	A		D	C	SAN BERNARDINO AV	ORANGE ST	0		Y	5/20/2010	1856
4	3	A		C	C	SAN BERNARDINO AV	ORANGE ST	0		Y	10/15/2010	1358
4	0	A		D	C	ORANGE ST	SAN BERNARDINO AV	0		Y	11/5/2010	1936
4	10	B		G	B	ORANGE ST	SAN BERNARDINO AV	0		Y	2/17/2011	706
3	9	A		E	I	SAN BERNARDINO AV	JOANNE ST	21	W	N	6/4/2011	1602
3	7	A		B	G	SAN BERNARDINO AV	CHURCH ST	600	W	N	9/28/2011	910
4	8	A		C	C	SAN BERNARDINO AV	CHURCH ST	249	W	N	8/24/2011	1839
4	12	A		D	C	N ORANGE ST	SAN BERNARDINO AV	0		Y	12/11/2012	1111
Orange St to SAN BERNARDINO University St												
University St to SAN BERNARDINO Wabash Ave												
2	1	C	Y	H	A	SAN BERNARDINO AV	WABASH AV	560	W	N	2/20/2010	134
3	0	B		D	G	NORTH DEARBORN ST	SAN BERNARDINO AV	0		Y	5/15/2011	1010
4	12	A		D	C	JUDSON ST	E SAN BERNARDINO AV	0		Y	11/6/2012	1327
Mountain View Ave to SAN BERNARDINO California Ave												
4	3	A		C	E	SAN BERNARDINO AV	CALIFORNIA ST	569	W	N	6/15/2011	748
Fern Ave to SAN TIMOTEO CA Barton Rd												
4	3	A		F	A	SAN TIMOTEO CANYON RD	BARTON RD	1056	S	N	1/1/2010	1853
4	8	A		F	A	SAN TIMOTEO CANYON RD	WEST FERN AV	2112	N	N	5/14/2010	2350
3	1	A	Y	E	I	SAN TIMOTEO CANYON RD	NEVADA ST	450	E	N	7/14/2010	1850
4	9	A		A	C	SAN TIMOTEO CANYON RD	BEAUMONT AV	0		Y	8/28/2010	1612
4	5	A		A	C	SAN TIMOTEO CANYON RD	BARTON RD	3696	S	N	11/18/2010	1435
3	3	A		F	A	SAN TIMOTEO CANYON RD	NEVADA ST	1584	E	N	10/5/2010	2201
4	3	B		E	I	SAN TIMOTEO CANYON RD	NEVADA ST	0		Y	3/21/2011	825
3	3	A		F	I	SAN TIMOTEO CANYON RD	BEAUMONT AV	528	W	N	7/21/2011	2132
Vinton Way to Alta Vista Dr												
4	3	A		E	I	EAST SUNSET DR	PUESTA DEL SOL	48	E	N	7/31/2010	1917

SUNSET DR	CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASH TYP	INVOLVE	PRIMARY RD	SECOND RD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
Serpentine Rd to Vinton Way	4	8	A		H	J	WEST SUNSET DRIVE	FAIRMONT DR	500	W	N	5/6/2010	1037
	2	3	A	Y	H	I	SUNSET DR	CROWN ST	60	E	N	7/24/2010	459
	3	0	A		D	G	WEST SUNSET DR	MARIPOSA DR	60	W	N	8/14/2011	1143
	4	8	A		C	G	W SUNSET DR	CROWN ST	0	E	N	8/14/2012	1931
Panorama Point to Franklin Ave	3	18	A		F	C	SUNSET	WABASH AV	0		Y	6/18/2010	752
	3	12	A		D	C	FORD ST	SUNSET DR	0		Y	7/12/2010	1449
	4	3	A		B	I	E SUNSET DR S	MARGARITA ST	93	E	-	10/14/2010	2115
	4	3	A		B	I	E SUNSET DR S	MARGARITA ST	93	E	N	9/14/2010	2115
	3	3	A	Y	E	J	E SUNSET DR N	MARGARITA DR	125	E	N	9/29/2012	2301
Olive Ave to TERRACINA BLVD Cypress Ave	4	4	B		D	C	TERRACINA BL	OLIVE ST	10	S	N	1/18/2010	1615
	4	5	A		E	I	TERRACINA BL	SMILEY HEIGHTS DR	112	N	N	3/17/2010	834
	4	9	A		D	C	TERRACINA BL	LAUREL ST	0		Y	5/25/2011	1027
	3	8	A		D	C	TERRACINA BL	LAUREL AV	165	N	N	7/22/2011	1004
	3	9	A		D	G	TERRACINA BL	OLIVE AV	0		Y	6/18/2011	1040
Redlands Blvd to Lugonia Ave	4	12	A		D	C	LUGONIA AV	TEXAS ST	0		Y	1/16/2010	1145
	3	12	A		D	C	LUGONIA AV	TEXAS ST	0		Y	2/10/2010	1253
	4	9	A		D	C	TEXAS ST	BROCKTON AV	0		Y	4/28/2010	1558
	3	8	A		B	C	TEXAS ST	COLTON AV	480	S	N	6/10/2010	1551
	4	9	A		D	C	TEXAS ST	STUART AV	0		Y	8/30/2010	1425
	4	9	A		A	C	COLTON AV	TEXAS ST	0		Y	8/8/2010	1641
	4	9	A		D	C	TEXAS ST	REDLANDS BL	0		Y	6/9/2010	1631
	4	1	C	Y	C	C	COLTON AV	TEXAS ST	0		Y	11/27/2010	2116
	4	9	A		D	C	TEXAS ST	ORIENTAL AV	0		Y	9/12/2011	821
	4	8	A		B	C	TEXAS ST	COLTON AV	120	N	N	8/24/2011	1155
	4	8	A		D	C	TEXAS ST	LUGONIA AV	0	S	N	10/29/2011	1418
	4	8	A		D	C	COLTON AV	TEXAS ST	0		Y	3/16/2012	1656
SUNSET DR	4	12	A		B	C	LUGONIA AV	TEXAS ST	0		Y	5/7/2012	1511
	3	12	A		D	C	TEXAS ST	W STUART AV	0		Y	5/22/2012	1430
	4	3	A	Y	C	C	REDLANDS BL	TEXAS ST	0		Y	4/13/2012	1932
	4	9	A		D	C	TEXAS ST	COLTON AV	0		Y	12/15/2012	1145

CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASH_TYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
Lugonia Ave to San Bern. Ave												
TEXAS ST												
4	12	A		D	C	LUGONIA AV	TEXAS ST	0	Y	Y	1/16/2010	1145
3	12	A		D	C	LUGONIA AV	TEXAS ST	0	Y	Y	2/10/2010	1253
3	9	A		D	C	SAN BERNARDINO AV	TEXAS ST	0	Y	Y	3/27/2010	957
3	8	A		C	C	TEXAS ST	LUGONIA AV	419	N	N	12/12/2010	1915
4	8	A		A	C	TEXAS ST	ELISE DR	0	Y	Y	4/11/2011	2017
4	3	A		C	C	SAN BERNARDINO AV	TEXAS ST	0	Y	Y	9/11/2011	1843
4	8	A		D	C	TEXAS ST	LUGONIA AV	0	S	N	10/29/2011	1418
4	9	B		A	C	SAN BERNARDINO AV	TEXAS ST	0	Y	Y	2/12/2012	1415
4	9	A		D	C	SAN BERNARDINO AV	TEXAS ST	0	Y	Y	2/18/2012	1249
4	12	A		B	C	LUGONIA AV	TEXAS ST	0	Y	Y	5/7/2012	1511
San Bern. Ave to Domestic Ave												
TEXAS ST												
3	9	A		D	C	SAN BERNARDINO AV	TEXAS ST	0	Y	Y	3/27/2010	957
4	3	A		C	C	SAN BERNARDINO AV	TEXAS ST	0	Y	Y	9/11/2011	1843
4	9	B		A	C	SAN BERNARDINO AV	TEXAS ST	0	Y	Y	2/12/2012	1415
4	9	A		D	C	SAN BERNARDINO AV	TEXAS ST	0	Y	Y	2/18/2012	1249
Cypress Ave to Colton Ave												
UNIVERSITY ST												
3	-	A	Y	E	I	UNIVERSITY ST	LYTLE ST	0	Y	Y	2/4/2010	632
4	8	A		D	C	CYPRESS AV	UNIVERSITY AV	0	Y	Y	3/16/2010	1737
4	9	A		D	C	UNIVERSITY ST	CITRUS AV	0	Y	Y	3/25/2010	1308
4	9	A		C	C	CITRUS AV	UNIVERSITY ST	0	Y	Y	4/30/2010	1059
3	3	A		D	C	N UNIVERSITY ST	CITRUS AV	186	N	N	5/31/2010	1728
4	8	A		D	C	UNIVERSITY ST	CENTRAL AV	15	W	N	6/22/2010	1805
4	9	A		D	E	UNIVERSITY ST	SYLVAN BL	0	Y	Y	11/5/2010	1455
3	8	A	Y	G	B	UNIVERSITY ST	PARK AV	0	Y	Y	2/3/2011	2042
2	11	B		D	C	CITRUS AV	UNIVERSITY ST	0	Y	Y	1/5/2011	1747
3	9	A		D	C	CITRUS AV	UNIVERSITY ST	0	Y	Y	5/20/2011	1527
4	9	A		C	C	E COLTON AV	UNIVERSITY	0	N	N	5/16/2011	1555
3	5	A	Y	D	G	UNIVERSITY ST	CITRUS AV	450	N	N	6/10/2011	1854
3	11	A		G	B	UNIVERSITY ST	PARK AV	45	S	N	11/21/2011	1734
4	8	A		A	C	CITRUS AV	UNIVERSITY ST	0	Y	Y	10/8/2011	1438
4	9	A		D	C	CYPRESS AV	UNIVERSITY ST	0	Y	Y	10/27/2011	946
3	6	A		B	C	UNIVERSITY ST	SYLVAN BL	0	Y	Y	10/23/2011	1821
4	9	A		D	C	UNIVERSITY ST	CITRUS AV	0	Y	Y	3/10/2012	1345
4	3	A		C	C	CYPRESS AV	UNIVERSITY ST	0	Y	Y	2/11/2012	1338

CRASHSEV	VIOLCAT	WEATHER1	ETOH	CRASHTYP	INVOLVE	PRIMARYRD	SECONDRD	DISTANCE	DIRECT	INTERSECT_	DATE_	TIME_
4	12	A		D	C	UNIVERSITY ST	COLTON AV	0		Y	12/25/2011	125
4	9	A		A	C	UNIVERSITY ST	CITRUS AV	0		Y	4/5/2012	2009
3	12	A		D	C	BROCKTON AV	UNIVERSITY ST	0		Y	7/29/2010	717
3	8	A		-	C	LUGONIA AV	UNIVERSITY ST	0		Y	8/6/2010	1445
4	12	A		D	C	UNIVERSITY ST	COLTON AV	0		Y	12/25/2011	125
4	1	A	Y	G	G	UNIVERSITY ST	LUGONIA AV	0		Y	6/15/2012	1907
3	9	A		D	G	UNIVERSITY ST	CAMPUS AV	0		Y	6/12/2012	1323
3	9	A		A	C	LUGONIA AV	UNIVERSITY ST	0		Y	12/30/2012	1755
3	8	A		-	C	LUGONIA AV	UNIVERSITY ST	0		Y	8/6/2010	1445
4	9	A		B	C	UNIVERSITY ST	PENNSYLVANIA AV	0		Y	11/10/2010	728
4	1	A	Y	G	G	UNIVERSITY ST	LUGONIA AV	0		Y	6/15/2012	1907
3	9	A		A	C	LUGONIA AV	UNIVERSITY ST	0		Y	12/30/2012	1755
4	9	A		D	G	E CITRUS AV	WABASH ST	0		Y	8/27/2010	1844
3	9	A		D	G	CITRUS AV	WABASH AV	0		Y	6/27/2012	1225
4	9	A		D	G	E CITRUS AV	WABASH ST	0		Y	8/27/2010	1844
4	1	A	Y	C	C	WABASH AV	CITRUS AV	300	N	N	9/26/2011	806
3	9	A		D	G	CITRUS AV	WABASH AV	0		Y	6/27/2012	1225
2	9	A		A	C	WABASH AV	NAPLES AV	0		Y	8/22/2010	1914
4	9	A		D	C	WABASH AV	NICE AV	0		Y	6/11/2011	1722
4	9	A		D	C	LUGONIA AV	WABASH AV	0		Y	2/17/2012	1849
4	9	A		D	C	WABASH AV	BROCKTON AV	0		Y	10/16/2012	1517
3	18	A		F	C	SUNSET	WABASH AV	0		Y	6/18/2010	752
4	8	A		E	E	WABASH AV	PALO ALTO DR	192	N	N	9/24/2012	809

Colton Ave to
Lugonia St
UNIVERSITY ST

Lugonia Ave to
San Bern. Ave
UNIVERSITY ST

5th Ave to
Citrus Ave
WABASH AVE

Citrus Ave to
Colton Ave
WABASH AVE

Colton Ave to
Sessums Dr
WABASH AVE

Reservoir Rd to
Palo Alto
WABASH AVE