

LANDAU STREET SPEED STUDY



Landau Street Speed Study Final Report

Albuquerque, New Mexico



Souder, Miller & Associates ♦ 3451 Candelaria Road NE, Suite D
Albuquerque, NM 87107-1948 ♦ (505) 299-0942 ♦ (877) 299-0942 ♦ fax (505) 293-3430



City of Albuquerque

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Table of Contents

1.A. PROJECT PURPOSE	1
1.B. PROJECT DESCRIPTION	1
1.C. BACKGROUND OF SPEED LIMITS	3
1.D. SETTING SPEED LIMITS	3
2. EXISTING CONDITIONS	5
2.A. COUNT LOCATIONS	5
2.B. EXISTING CONDITIONS	5
3. DATA	7
3.A. ADT	7
3.B. PEAK HOUR TRAFFIC VOLUMES	7
3.C. SPEED STUDY RESULTS	8
3.D. CRASH DATA	9
4. U.S. LIMITS SPEED LIMITS PROGRAM	10
5. CONCLUSION	11
6. TRAFFIC CALMING RECOMMENDATIONS	11
Appendices	12



List of Tables

Table 3.A.1.	Landau Street ADT.....	7
Table 3.B.1.	Landau Street Peak Hour Traffic Volumes (vph).....	7
Table 3.C.1.	Landau Street North Speed Study.....	8
Table 3.C.2.	Landau Street South Speed Study.....	8
Table 3.C.4.	Landau Street ADT > 25 mph.....	8
Table 3.D.1.	Landau Street Crash Summary.....	9
Table 5.1.	COA NMTP Traffic Calming Measures.....	11



List of Figures

FIGURE 1.B.1. STUDY LOCATION	1
FIGURE 1.B.2. PROJECT LIMITS.....	2
FIGURE 2.1. COUNT LOCATIONS.....	6
FIGURE 2.2. EXISTING TYPICAL SECTION.....	6



INTRODUCTION

The City of Albuquerque – Department of Municipal Development (Traffic Engineering Design Division) has requested that Souder, Miller & Associates conduct a speed study along Landau Street in northeast Albuquerque.

1.A. PROJECT PURPOSE

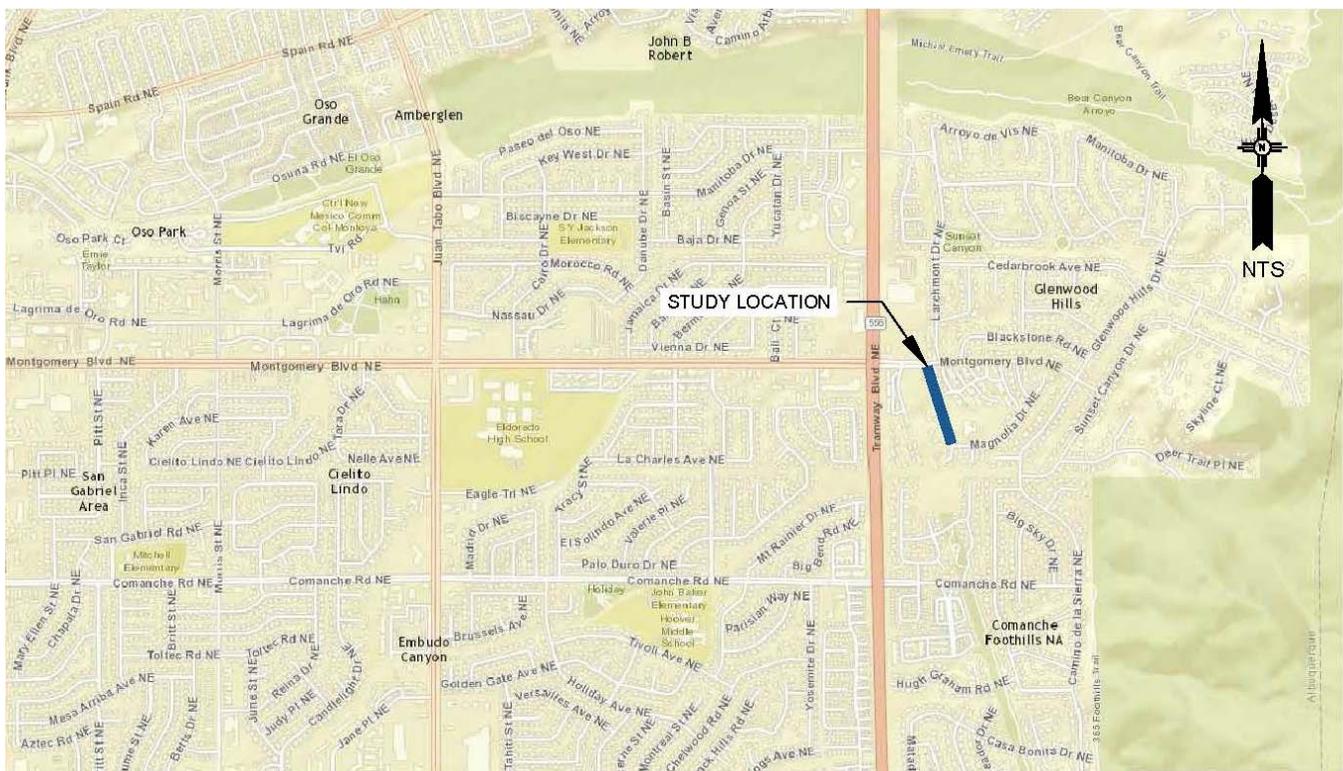
A speed study on Landau Street from Magnolia Drive to Montgomery Boulevard was conducted to determine the following:

- Evaluate the 85th percentile speed along Landau Street at two (2) locations;
- Calculate average and daily peak hour traffic volumes along Landau Street.

As part of this study, an evaluation and cataloging of existing roadway conditions, collection of historical ADT, and crash data will be completed.

1.B. PROJECT DESCRIPTION

The study area will be a 0.19 mile (1003.2 LF) section of Landau Street from Magnolia Drive to Montgomery Boulevard. Figure 1.B.1. on page 2 displays the project limits.



**FIGURE 1.B.1
STUDY LOCATION**



FIGURE 1.B.2.
PROJECT LIMITS



1.C. BACKGROUND OF SPEED LIMITS

Speed limits are established on roadways of virtually all classifications, from interstate freeways to low volume local streets. The primary purpose of speed limits is to give motorists clear instruction as to what is a reasonable speed for them to drive at while traveling on a given roadway.

Among regulatory signage, speed limit signs arguably contain the most critical information that motorists need to be informed of while driving (next to stop signs, which are considered the highest impact regulatory sign). Drivers unfamiliar with a roadway often do not realize what characteristics the roadway has, and properly established speed limit signs give them the information they need to drive the roadway safely.

The NMDOT has guidelines for analyzing and establishing posted speed limits; the following text is based on one such example:

Realistic posted speed limits are of public importance for many reasons:

- They invite public compliance by conforming to the behavior or the driving majority
- They give clear reminders of safe and reasonable speeds to non-conforming violators
- They offer the most effective tool for law enforcement of safe driving
- They will minimize public antagonism toward law enforcement that results from unreasonable regulations

Improperly, or artificially low, posted speed limits can cause problems for state and local agencies for several reasons:

- They do not encourage voluntary compliance, since they do not reflect the behavior of the majority
- They make the behavior of the majority unlawful
- They maximize public antagonism toward law enforcement, since the perception is that the police are enforcing a “speed trap”
- They create a bad image for a community in the eyes of tourists / visitors

1.D. SETTING SPEED LIMITS

In accordance with Section 66-7-303 of the New Mexico Criminal and Traffic Law Manual, the speed limit on state highways shall be set by the Cabinet Secretary of the Department of Transportation, based on an engineering survey and traffic investigation that includes the following parameters.

- Spot speed studies (typically consisting of 100 vehicles)
- Roadway geometry/number of lanes
- Roadside environment and characteristics
- Building setbacks (if within a commercial business district)
- Driveway and intersection spacing/density
- Historical crash data for the roadway study area

Many speed limits are established using the theory of 85th percentile. Out of the (typically) 100 vehicles surveyed, beginning with the fastest vehicle speed recorded the 15th vehicle from that speed is determined to show where the 85th percentile speed is. This is assuming that most drivers (85%) drive within reasonable limits. The posted speed limit can be established and is usually the 5 – mph increment just below the 85th percentile speed. For example, if the 85th percentile speed

has been determined by an engineering survey to be 57 mph, the posted speed would be 55 mph. This method of posting speed limits allows for a reasonable posted speed limit that can be enforced by local agencies, without creating a speed trap.

For surveys with a different amount than 100 vehicles, the 85th percentile speed is determined by the following formula: $100/15 = \# \text{ of vehicles surveyed}/X$ (where $x =$ the vehicle at the 85th percentile). For example, a 50 vehicle survey would result in:

$$\frac{100}{15} = \frac{50}{x}$$

Where $x = 7.5$, or the 8th vehicle in the survey

Other methods are frequently used to further analyze the posting of speed limits – these are the mode, median, and geometric mean:

- Mode is the most frequently clocked vehicle speed in a given survey. For example, in a 100 vehicle survey where 12 vehicles were clocked traveling 55 mph and no other speed was observed as frequently, the mode is 55 mph.
- Median is the numerical midpoint of a given survey. For example, in a survey of 100 vehicles, the speeds of the 50th and 51st vehicles are added and divided by 2 to obtain the median speed. If the 50th vehicle of such a survey was traveling at 56 mph and the 51st vehicle was also traveling at 56 mph, the resulting median would be $(56 + 56) \div 2 = 112 \div 2 = 56$ mph
- Geometric mean is described as follows: “an average of a set of numbers that is calculated by multiplying all the numbers (“n”), and taking the nth root of the total.”

Formula for Geometric Mean:

$$\text{Geometric Mean} = ((X_1)(X_2) \dots \dots (X_n))^{1/N}$$

$X =$ Individual score (speed)
 $N =$ Sample size (number of scores)

Geometric Mean Example:

Sample speeds = 51, 52, 55, 58, and 60 mph

Step 1:

$N = 5$, the total number of values, $\frac{1}{N} = 0.2$

Step 2:

Determine geometric mean using the formula.

$$\text{Geometric Mean} = ((51)(52)(55)(58)(60))^{0.2} = 55.09 \text{ mph}$$

In most cases, the geometric mean of a speed study will be of similar value of the median, often within 1 to 2 mph of either side of the median. In the above example, the median speed would be the third vehicle surveyed (55 mph), and the geometric mean is 55.09 mph.

2. EXISTING CONDITIONS

2.A. COUNT LOCATIONS

The study area included two (2) volume and speed count locations which were at the following locations:

- Landau Street between Vivian Drive and Montgomery Boulevard;
- Landau Street between Magnolia Drive and Vivian Drive.

Figure 2.1. on page 6 displays the approximate traffic count locations.

2.B. EXISTING CONDITIONS

Figure 2.2. on page 6 displays the existing typical section of Landau Street. Within the study limits, there are 2 intersections and approximately 8 driveways that provide access to homes and a sports and wellness center.





FIGURE 2.1.
 COUNT LOCATIONS

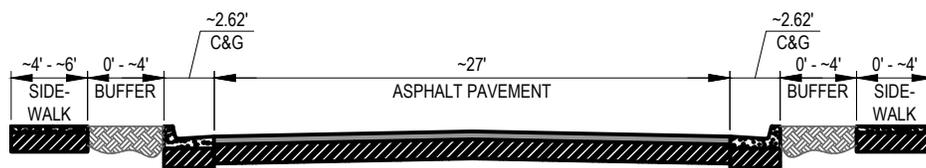


FIGURE 2.2.
 EXISTING TYPICAL SECTION



3. DATA

3.A. ADT

The ADT for the two (2) count locations are listed below in Table 3.A.1.

Table 3.A.1.			
Landau Street ADT			
Count Location	NB	SB	ADT
Landau Street North	840	849	1689
Landau Street South	708	708	1416
Average	774.0	778.5	1552.5

The Landau Street study area ADT ranges from 708 to 849 vehicles per day.

3.B. PEAK HOUR TRAFFIC VOLUMES

The peak hour traffic volumes for the two (2) count locations are shown below in Table 3.B.1.

Table 3.B.1.			
Landau Street Peak Hour Traffic Volumes (vph)			
Count Location	Peak Hour	Northbound (Peak Hour)	Southbound (Peak Hour)
Landau Street North	AM Peak	99 (10:30 AM - 11:30 AM)	107 (8:30 AM - 9:30 AM)
	PM Peak	91 (5:15 PM - 6:15 PM)	103 (5:00 PM - 6:00 PM)
Landau Street South	AM Peak	80 (10:30 AM - 11:30 AM)	88 (8:30 AM - 9:30 AM)
	PM Peak	77 (5:15 PM - 6:15 PM)	89 (5:00 PM - 6:00 PM)

The Landau Street study area peak hour traffic volumes range from 77 to 107 vehicles per hour.

3.C. SPEED STUDY RESULTS

The results of the speed study are displayed below in Tables 3.C.1. and 3.C.2.

Table 3.C.1.			
Landau Street North Speed Study			
Speed	NB	SB	Total
Average	24.9	25.2	25.0
10 mph Pace	20.1 - 30.0 (69.3%)	20.1 - 30.0 (70.2%)	20.1 - 30.0 (69.7%)
50th Percentile	26.2	26.3	26.3
67th Percentile	28.2	28.3	28.3
85th Percentile	31.3	31.3	31.2

Table 3.C.2.			
Landau Street South Speed Study			
Speed	NB	SB	Total
Average	17.7	19.9	18.8
10 mph Pace	19.9 - 29.8 (42.2%)	20.1 - 30.0 (53.5%)	20.1 - 30.0 (47.8%)
50th Percentile	19.4	22.2	21.2
67th Percentile	23.4	25.0	24.2
85th Percentile	27.7	28.6	28.3

When considering whether to establish a new posted speed limit or not, surveying the existing traffic speeds is crucial to determining a reasonable posted speed limit.

Before a posted speed limit can be adjusted, an analysis must be conducted to ascertain whether or not the speed limit can be adjusted without resulting in further increases of motorists' travel speeds. Motorists usually drive at speeds which they perceive as safe, based on the observable roadway conditions. A flat and straight roadway may result in a different travel speed than the posted speed limit due to the driver's observation of the roadway condition.

In relation to Landau Street, roadway conditions are consistent; controlled access, satisfactory pavement conditions, two travel lanes, and on-street parking. Table 3.C.3 displays that 46 percent of the total ADT of the three count locations recorded speeds greater.

Table 3.B.4.							
Landau Street ADT > 25 mph							
Speed (mph)	0 - 19.9 MPH		20 - 24.9 MPH		≥ 25 MPH		Avg. ADT
Landau Street North	199.5	12%	476	28%	1013.5	60%	1689
Landau Street South	629.5	44%	374	26%	412.5	29%	1416
Total	829	27%	850	27%	1426	46%	3105



3.D. CRASH DATA

Crash data was requested from the Mid-Region Council of Governments. The crash data requested showed there was 6 recorded crashes within the study area from 2012 to 2014.

Table 3.D.1.					
Landau Street Crash Summary					
Year	Location	Cause of Crash	Crash Analysis	Crash Severity	Crash Correct with Traffic Calming?
2012	Montgomery Blvd. / Landau St.	Improper Driving	-	Injury Crash	No
2012	Landau St. / Montgomery Blvd.	Avoid Other Vehicle	Proper Park	Property Damage Only Crash	No
2012	4300 Landau St.	Failure to Yield	Angle - Both Straight	Property Damage Only Crash	No
2012	4300 Landau St.	Driver Inattention	Proper Park	Property Damage Only Crash	No
2012	Landau St. / Vivian St.	Too Fast for Conditions	Parked Vehicle	Property Damage Only Crash	Yes
2013	Landau St. / Magnolia Dr.	Defective Tires	Proper Park	Injury Crash	No

4. U.S. LIMITS SPEED LIMITS PROGRAM

U.S. Limits is an FHWA sponsored program used to analyze speed limits. This program calculates a recommended speed limit based on the criteria given, which is listed on the website as follows:

- Density of surrounding development (e.g. high density, low density, or rural);
- Frequency of roadside access (e.g. number of residential driveways, commercial, industrial, shopping, and special activity properties, and the number and type of intersection roads);
- Road function (e.g. traffic movement vs. access to abutting properties);
- Road characteristics (e.g. paved width, divided or undivided, lane width, number and lanes, and sight restrictions);
- Road conditions and important high speed road characteristics (e.g. interchange spacing, AADT, and shoulders);
- Existing vehicle operating speeds;
- Adjoining speed limits: and
- Any special conditions that may exist on the road section (e.g. adverse alignment, pedestrian and roadside activities, high crash rates, etc.)

This analysis was used for Landau Street and based on the data entered into <http://www.uslimits.com> for the above-listed categories. The output sheet is shown in Appendix A – U.S. Limits Output. The U.S. Limits Output recommended a speed limit of 25 mph.



5. CONCLUSION

After evaluating the volume and speed data within the project area, it is concluded that 46% of traffic is exceeding 25 mph and the 85th percentile for both the northbound and southbound at the north count location exceeds the speed limit by 5 mph or more. In order to meet criteria for traffic calming measures as outlined in the City of Albuquerque's Neighborhood Traffic Management Program, at least two (2) of the following threshold criteria must be met:

Figure 5.1. COA NMTP Traffic Calming Measures	
Description	Warranted?
Reported crashes in the past 3 years that could be corrected with traffic calming	Yes
Peak-hour traffic volume greater than 400 vehicles in one direction	No
25% of peak-hour traffic is non-local cut-through traffic	Not Studied
85th percentile speeds exceeds the posted speed limit by 5 mph or more	Yes

Based on the data collected, Landau Street DOES meet two of the four warrants outlined for traffic calming criteria.

6. TRAFFIC CALMING RECOMMENDATIONS

Due to Landau Street meeting the minimum COA NMTP traffic calming measures threshold, below is a list of traffic calming recommendations. Before any traffic calming measures be implemented, a detailed traffic calming study is recommended in order to evaluate the recommendations listed below and any other traffic calming considerations for safety, level of effectiveness, maintenance, and cost measures.

1. New or increased speed limit signage
2. Centerline / edge line / lane line striping
3. Speed hump or speed table

Appendices

- Appendix A – USLIMITS2 Speed Zoning Report
- Appendix B – Volume and Speed Data
- Appendix C – Crash Data



Appendix A



USLIMITS2 Speed Zoning Report

Project Name: Landau Street Speed Study

Analyst: Thaddeus Yazzie

Date: 04-11-2017

Basic Project Information

Project Number: 6254.12
Route Name: Landau Street
From: Montgomery Boulevard
To: Magnolia Drive
State: New Mexico
County: Bernalillo County
City: Albuquerque city
Route Type: Road Section in Developed Area
Route Status: Existing

Roadway Information

Section Length: .19 mile(s)
Statutory Speed Limit: 25 mph
Adverse Alignment: No
One-Way Street: No
Divided/Undivided: Undivided
Number of Through Lanes: 2
Area Type: Residential-Collector
Number of Driveways: 8
Number of Signals: 0

Crash Data Information

Crash Data Years: 3.33
Crash AADT: 1553 veh/day
Total Number of Crashes: 6
Total Number of Injury Crashes: 2
Section Crash Rate: 1671 per 100 MVM
Section Injury Crash Rate: 557 per 100 MVM
Crash Rate Average for Similar Roads: 263
Injury Rate Average for Similar Roads: 67

Traffic Information

85th Percentile Speed: 30 mph
50th Percentile Speed: 24 mph
AADT: 1553 veh/day
On Street Parking and Usage: High
Pedestrian / Bicyclist Activity: High

Project Description: Landau Street from Montgomery Blvd. to Magnolia Dr.

Recommended Speed Limit:



Note: The section crash rate of 1671 per 100 MVM is above the critical rate (1100). The injury crash rate for the section of 557 per 100 MVM is more than 30 percent above the average for similar roads (67) but below the critical rate (559). A comprehensive crash study should be undertaken to identify engineering and traffic control deficiencies and appropriate corrective actions. The speed limit should only be reduced as a last measure after all other treatments have either been tried or ruled out.

Appendix B



Special Speed Study Report: Landau Street North

Station ID : Landau Street North

Info Line 1 : Between vivian and Montgomery
 Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : NO VIV 1NB.DB

Last Connected Device Type : Apollo

Version Number : 1.66

Serial Number :

Number of Lanes : 1

Posted Speed Limit : 0.0 mph

Lane #1 Configuration

#	Dir.	Information	Vehicle Sensors	Sensor Spacing	Loop Length	Comment
1.		Northbound	Ax-Ax	4.0 ft	6.0 ft	

Lane #1 Special Speed Study Data From: 00:00 - 04/04/2017 To: 23:59 - 04/05/2017

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
04/04/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	05:00	3	2	8	2	0	0	0	0	0	0	0	0	0	0	0	0	15
	06:00	3	7	16	7	2	0	0	0	0	0	0	0	0	0	0	0	35
	07:00	8	16	15	4	0	0	0	0	0	0	0	0	0	0	0	0	43
	08:00	5	15	12	6	2	0	0	0	0	0	0	0	0	0	0	0	40
	09:00	8	11	19	9	0	1	0	0	0	0	0	0	0	0	0	0	48
	10:00	6	16	15	7	0	1	0	0	0	0	0	0	0	0	0	0	45
	11:00	4	18	21	6	0	0	0	0	0	0	0	0	0	0	0	0	49
	12:00	6	14	8	6	0	1	0	0	0	0	0	0	0	0	0	0	35
	13:00	13	10	15	5	0	0	0	0	0	0	0	0	0	0	0	0	43
	14:00	6	12	15	6	0	0	0	0	0	0	0	0	0	0	0	0	39
	15:00	8	16	19	4	0	0	0	0	0	0	0	0	0	0	0	0	47
	16:00	9	13	12	16	1	0	0	0	0	0	0	0	0	0	0	0	51
	17:00	5	17	39	15	5	0	0	0	0	0	0	0	0	0	0	0	81
	18:00	5	19	39	10	2	0	0	0	0	0	0	0	0	0	0	0	75
	19:00	5	13	23	9	1	0	0	0	0	0	0	0	0	0	0	0	51
	20:00	3	19	28	5	1	0	0	0	0	0	0	0	0	0	0	0	56
	21:00	1	5	13	1	0	0	0	0	0	0	0	0	0	0	0	0	20
	22:00	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	23:00	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Daily Total :		99	226	322	118	14	3	0	0	0	0	0	0	0	0	0	0	782
Percent :		13%	29%	41%	15%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		13%	42%	83%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		4	9	13	5	1	0	0	0	0	0	0	0	0	0	0	0	32

Average Speed	24.8 mph	50% Speed	: 26.1 mph	67% Speed	: 28.0 mph	85% Speed	: 31.0 mph
				10mph Pace: 20.1 - 30.0 (70.3%)			

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Other	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9			
04/05/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wed	01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	1	4	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	06:00	2	5	22	6	1	0	0	0	0	0	0	0	0	0	0	0	0	36
	07:00	9	13	18	3	4	0	0	0	0	0	0	0	0	0	0	0	0	47
	08:00	6	11	12	9	1	0	0	0	0	0	0	0	0	0	0	0	0	39
	09:00	8	13	22	7	1	0	0	0	0	0	0	0	0	0	0	0	0	51
	10:00	6	24	35	12	2	0	0	0	0	0	0	0	0	0	0	0	0	79
	11:00	11	18	45	18	2	0	0	0	0	0	0	0	0	0	0	0	0	94
	12:00	9	19	20	10	1	1	0	0	0	0	0	0	0	0	0	0	0	60
	13:00	12	14	13	13	1	0	0	0	0	0	0	0	0	0	0	0	0	53
	14:00	4	23	17	6	3	0	0	0	0	0	0	0	0	0	0	0	0	53
	15:00	4	13	13	7	2	0	0	0	0	0	0	0	0	0	0	0	0	39
	16:00	12	10	18	12	0	0	0	0	0	0	0	0	0	0	0	0	0	52
	17:00	3	11	29	17	1	0	0	0	0	0	0	0	0	0	0	0	0	61
	18:00	4	31	12	8	2	0	0	0	0	0	0	0	0	0	0	0	0	57
	19:00	11	11	24	7	0	0	0	0	0	0	0	0	0	0	0	0	0	53
	20:00	6	22	37	8	0	0	0	0	0	0	0	0	0	0	0	0	0	73
	21:00	1	8	11	5	1	0	1	0	0	0	0	0	0	0	0	0	0	27
	22:00	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total :		110	252	357	154	22	1	1	0	0	0	0	0	0	0	0	0	0	897
Percent :		12%	28%	40%	17%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		12%	40%	80%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		5	11	15	6	1	0	0	0	0	0	0	0	0	0	0	0	0	38

Average Speed	25.0 mph	50% Speed :	26.3 mph	67% Speed :	28.3 mph	85% Speed :	31.4 mph
				10mph Pace: 20.1 - 30.0 (68.1%)			

Lane #3 Configuration

#	Dir.	Information	Vehicle Sensors	Sensor Spacing	Loop Length	Comment
3.		Southbound	Ax-Ax	4.0 ft	6.0 ft	

Lane #3 Special Speed Study Data From: 00:00 - 04/04/2017 To: 23:59 - 04/05/2017

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
04/04/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00	0	2	4	3	1	0	0	0	0	0	0	0	0	0	0	0	10
	05:00	1	6	23	14	1	0	0	0	0	0	0	0	0	0	0	0	45
	06:00	1	7	12	1	1	0	0	0	0	0	0	0	0	0	0	0	22
	07:00	3	13	18	9	0	0	0	0	0	0	0	0	0	0	0	0	43
	08:00	5	23	15	5	0	0	0	0	0	0	0	0	0	0	0	0	48
	09:00	9	15	31	8	1	1	0	0	0	0	0	0	0	0	0	0	65
	10:00	2	13	20	5	1	0	0	0	0	0	0	0	0	0	0	0	41
	11:00	9	17	16	1	0	0	0	0	0	0	0	0	0	0	0	0	43
	12:00	6	17	8	2	1	0	0	0	0	0	0	0	0	0	0	0	34
	13:00	8	17	10	2	1	0	0	0	0	0	0	0	0	0	0	0	38
	14:00	8	21	19	6	1	0	0	0	0	0	0	0	0	0	0	0	55
	15:00	11	16	23	6	1	0	0	0	0	0	0	0	0	0	0	0	57
	16:00	6	24	38	11	3	1	0	0	0	0	0	0	0	0	0	1	84
	17:00	4	23	46	25	4	1	0	0	0	0	0	0	0	0	0	0	103
	18:00	7	18	28	7	1	0	0	0	0	0	0	0	0	0	0	0	61
	19:00	1	11	13	4	1	0	0	0	0	0	0	0	0	0	0	0	30
	20:00	0	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	7
	21:00	1	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	10
	22:00	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Daily Total :		83	253	333	111	18	3	0	0	0	0	0	0	0	0	0	1	802
Percent :		10%	32%	42%	14%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cum. Percent :		10%	42%	83%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		3	11	14	5	1	0	0	0	0	0	0	0	0	0	0	0	34

Average Speed 25.0 mph 50% Speed : 26.1 mph 67% Speed : 28.0 mph 85% Speed : 30.7 mph
 10mph Pace: 20.1 - 30.0 (73.3%)

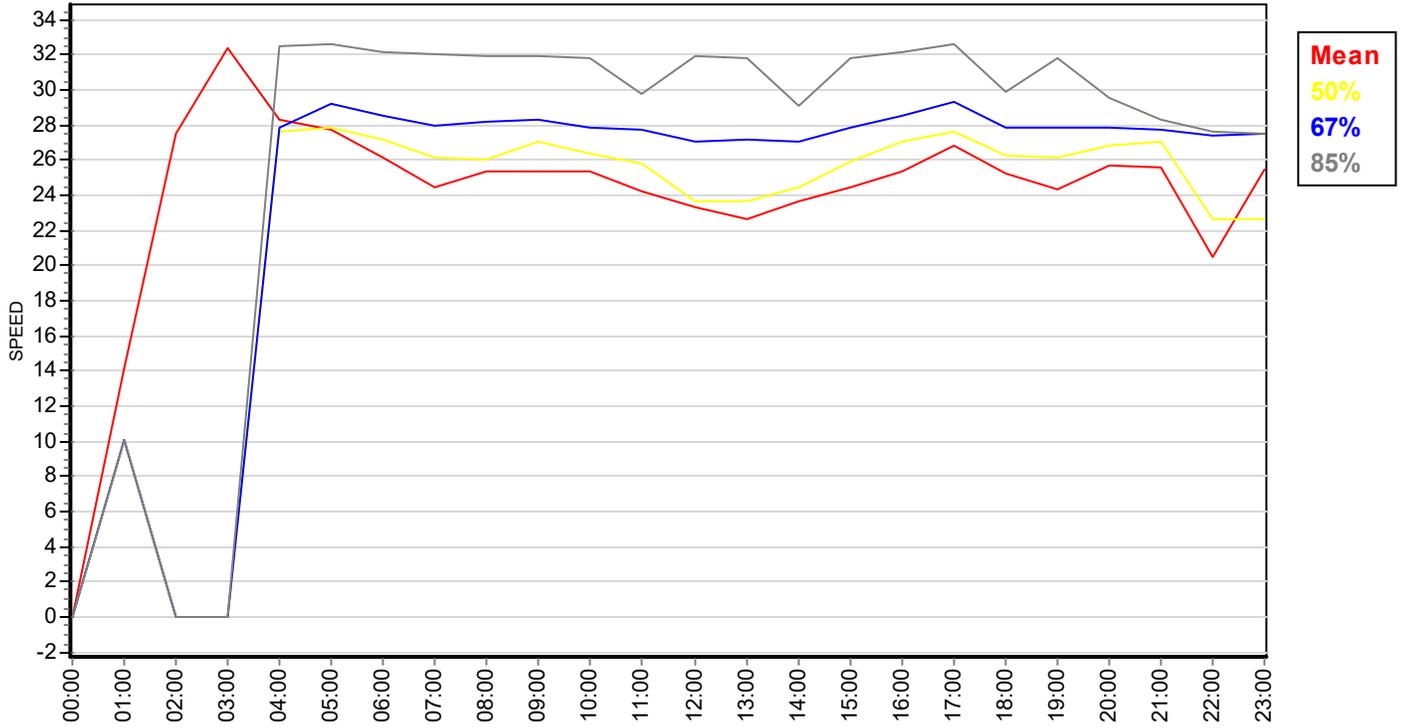
Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Other	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9			
04/05/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wed	01:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	0	1	10	3	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	05:00	0	9	22	15	1	1	0	0	0	0	0	0	0	0	0	0	0	48
	06:00	4	3	22	4	0	0	0	0	0	0	0	0	0	0	0	0	0	33
	07:00	7	6	13	11	0	0	1	0	0	0	0	0	0	0	0	0	0	38
	08:00	2	25	39	19	1	0	0	0	0	0	0	0	0	0	0	0	0	86
	09:00	4	18	40	21	2	0	0	0	0	0	0	0	0	0	0	0	0	85
	10:00	5	16	23	10	1	0	0	0	0	0	0	0	0	0	0	0	0	55
	11:00	10	15	13	6	0	0	0	0	0	0	0	0	0	0	0	0	0	44
	12:00	10	16	7	2	3	0	0	0	0	0	0	0	0	0	0	0	0	38
	13:00	11	16	16	8	0	0	0	0	0	0	0	0	0	0	0	0	0	51
	14:00	10	18	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	41
	15:00	7	13	27	12	1	1	0	0	0	0	0	0	0	0	0	0	0	61
	16:00	6	20	41	20	2	0	0	0	0	0	0	0	0	0	0	0	0	89
	17:00	12	14	41	22	2	0	0	0	0	0	0	0	0	0	0	0	0	91
	18:00	4	14	27	5	0	0	1	0	0	0	0	0	0	0	0	0	0	51
	19:00	8	12	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	33
	20:00	1	2	20	5	0	0	0	0	0	0	0	0	0	0	0	0	0	28
	21:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	22:00	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total :		107	221	379	172	13	2	2	0	0	0	0	0	0	0	0	0	0	896
Percent :		12%	25%	42%	19%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		12%	37%	79%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		4	9	16	7	1	0	0	0	0	0	0	0	0	0	0	0	0	37

Average Speed	25.3 mph	50% Speed :	26.7 mph	67% Speed :	28.5 mph	85% Speed :	31.6 mph
				10mph Pace:	20.6 - 30.5 (67.4%)		

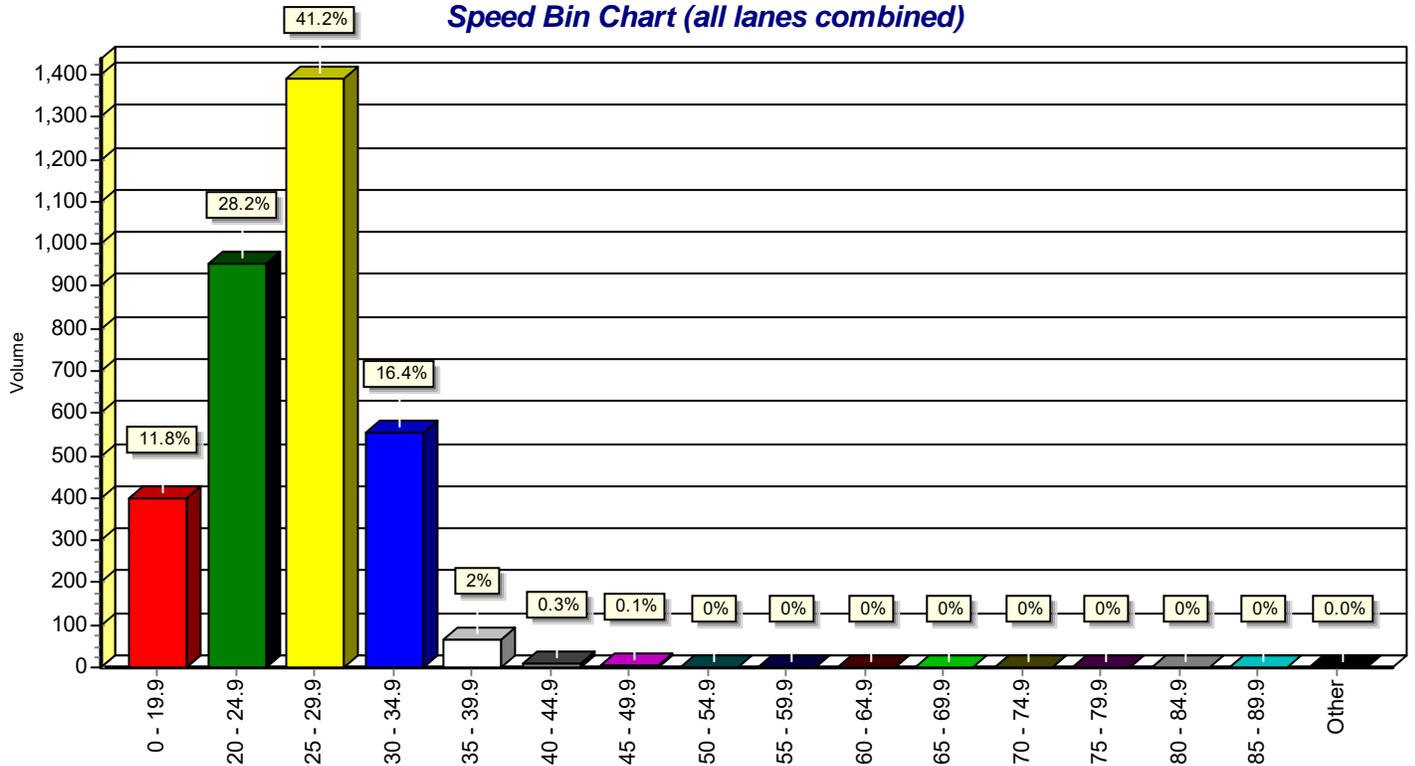
Special Speed Study Summary: Landau Street North

Description	#1 0 - 19.9	#2 20 - 24.9	#3 25 - 29.9	#4 30 - 34.9	#5 35 - 39.9	#6 40 - 44.9	#7 45 - 49.9	#8 50 - 54.9	#9 55 - 59.9	#10 60 - 64.9	#11 65 - 69.9	#12 70 - 74.9	#13 75 - 79.9	#14 80 - 84.9	#15 85 - 89.9	#16 Other	Total
Grand Total #1:	209	478	679	272	36	4	1	0	0	0	0	0	0	0	0	0	1679
Percent :	12%	28%	40%	16%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	12%	41%	81%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	4	10	14	6	1	0	0	0	0	0	0	0	0	0	0	0	35
ADT = 839	Average Speed 24.9 mph		50% Speed : 26.2 mph				67% Speed : 28.2 mph				85% Speed : 31.3 mph						
	10mph Pace: 20.1 - 30.0 (69.3%)																
Grand Total #3:	190	474	712	283	31	5	2	0	0	0	0	0	0	0	0	1	1698
Percent :	11%	28%	42%	17%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	11%	39%	81%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	4	10	15	6	1	0	0	0	0	0	0	0	0	0	0	0	36
ADT = 849	Average Speed 25.2 mph		50% Speed : 26.3 mph				67% Speed : 28.3 mph				85% Speed : 31.3 mph						
	10mph Pace: 20.1 - 30.0 (70.2%)																
Comb. Total :	399	952	1391	555	67	9	3	0	0	0	0	0	0	0	0	1	3377
Percent :	12%	28%	41%	16%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	12%	40%	81%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	8	20	29	12	1	0	0	0	0	0	0	0	0	0	0	0	70
ADT = 1688	Average Speed 25.0 mph		50% Speed : 26.3 mph				67% Speed : 28.3 mph				85% Speed : 31.2 mph						
	10mph Pace: 20.1 - 30.0 (69.7%)																

Speed Percent vs. Time (all lanes)



Speed Bin Chart (all lanes combined)



Special Speed Study Report: Landau Street South

Station ID : Landau Street South
 Info Line 1 : Between Magnolia and Vivian
 Info Line 2 : Albuquerque
 GPS Lat/Lon :
 DB File : SO VIV 1NB.DB

Last Connected Device Type : Apollo
 Version Number : 1.62
 Serial Number :
 Number of Lanes : 1
 Posted Speed Limit : 0.0 mph

Lane #1 Configuration

#	Dir.	Information	Vehicle Sensors	Sensor Spacing	Loop Length	Comment
1.		Northbound	Ax-Ax	4.0 ft	6.0 ft	

Lane #1 Special Speed Study Data From: 00:00 - 04/04/2017 To: 23:59 - 04/05/2017

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
04/04/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	05:00	10	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	14
	06:00	20	5	5	4	1	0	0	0	0	0	0	0	0	0	0	0	35
	07:00	17	11	4	0	0	0	0	0	0	0	0	0	0	0	0	1	33
	08:00	13	11	9	3	1	0	0	0	0	0	0	0	0	0	0	0	37
	09:00	15	9	11	1	1	0	0	0	0	0	0	0	0	0	0	0	37
	10:00	22	9	11	2	0	0	0	0	0	0	0	0	0	0	0	0	44
	11:00	27	15	3	2	0	0	0	0	0	0	0	0	0	0	0	0	47
	12:00	20	6	3	1	0	0	1	0	0	0	0	0	0	0	0	0	31
	13:00	21	4	7	2	0	0	0	0	0	0	0	0	0	0	0	0	34
	14:00	16	5	6	4	0	0	0	0	0	0	0	0	0	0	0	0	31
	15:00	22	9	8	0	0	0	0	0	0	0	0	0	0	0	0	0	39
	16:00	17	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	37
	17:00	35	18	12	5	0	0	0	0	0	0	0	0	0	0	0	0	70
	18:00	25	20	12	2	1	0	0	0	0	0	0	0	0	0	0	0	60
	19:00	26	8	11	1	0	0	0	0	0	0	0	0	0	0	0	0	46
	20:00	27	13	9	3	0	0	0	0	0	0	0	0	0	0	0	0	52
	21:00	12	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	20
	22:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	23:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Daily Total :		347	163	126	31	4	0	1	0	0	0	0	0	0	0	0	1	673
Percent :		52%	24%	19%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		52%	76%	95%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		14	7	5	1	0	0	0	0	0	0	0	0	0	0	0	0	27

Average Speed 17.5 mph 50% Speed : 19.3 mph 67% Speed : 23.1 mph 85% Speed : 27.5 mph
 10mph Pace: 19.9 - 29.8 (43.1%)

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
04/05/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wed	01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	9	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	15
	06:00	17	7	5	4	1	0	0	0	0	0	0	0	0	0	0	0	34
	07:00	11	11	7	6	1	0	0	0	0	0	0	0	0	0	0	0	36
	08:00	14	12	4	0	0	0	0	0	0	0	0	0	0	0	0	0	30
	09:00	23	8	6	3	0	0	0	0	0	0	0	0	0	0	0	0	40
	10:00	38	13	10	1	0	0	0	0	0	0	0	0	0	0	0	0	62
	11:00	33	19	16	5	0	0	0	0	0	0	0	0	0	0	0	0	73
	12:00	25	6	12	3	3	1	0	0	0	0	0	0	0	0	0	0	50
	13:00	16	6	9	4	0	0	0	0	0	0	0	0	0	0	0	0	35
	14:00	24	7	8	4	0	0	0	0	0	0	0	0	0	0	0	0	43
	15:00	15	11	5	2	2	0	0	0	0	0	0	0	0	0	0	0	35
	16:00	19	8	8	4	0	0	0	0	0	0	0	0	0	0	0	0	39
	17:00	34	6	13	3	0	0	0	0	0	0	0	0	0	0	0	0	56
	18:00	32	12	5	3	0	0	0	0	0	0	0	0	0	0	0	0	52
	19:00	22	15	7	2	0	0	0	0	0	0	0	0	0	0	0	0	46
	20:00	31	13	15	3	0	0	0	0	0	0	0	0	0	0	0	0	62
	21:00	15	4	8	0	0	0	1	0	0	0	0	0	0	0	0	0	28
	22:00	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total :		380	165	142	47	7	1	1	0	0	0	0	0	0	0	0	0	743
Percent :		51%	22%	19%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		51%	73%	92%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		16	7	6	2	0	0	0	0	0	0	0	0	0	0	0	0	31

Average Speed	17.8 mph	50% Speed :	19.4 mph	67% Speed :	23.5 mph	85% Speed :	28.0 mph
				10mph Pace: 19.9 - 29.8 (41.5%)			

Lane #3 Configuration

#	Dir.	Information	Vehicle Sensors	Sensor Spacing	Loop Length	Comment
3.		Southbound	Ax-Ax	4.0 ft	6.0 ft	

Lane #3 Special Speed Study Data From: 00:00 - 04/04/2017 To: 23:59 - 04/05/2017

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
04/04/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00	4	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	9
	05:00	16	13	13	4	0	0	0	0	0	0	0	0	0	0	0	0	46
	06:00	5	8	4	2	0	0	0	0	0	0	0	0	0	0	0	0	19
	07:00	12	11	10	3	1	0	0	0	0	0	0	0	0	0	0	0	37
	08:00	18	11	8	2	0	0	0	0	0	0	0	0	0	0	0	0	39
	09:00	22	18	11	4	1	0	0	0	0	0	0	0	0	0	0	0	56
	10:00	17	7	7	8	0	0	0	0	0	0	0	0	0	0	0	0	39
	11:00	17	10	10	0	1	0	0	0	0	0	0	0	0	0	0	0	38
	12:00	10	8	4	1	1	0	0	0	0	0	0	0	0	0	0	0	24
	13:00	10	12	6	3	1	0	0	0	0	0	0	0	0	0	0	0	32
	14:00	16	13	11	4	1	0	0	0	0	0	0	0	0	0	0	0	45
	15:00	12	14	16	2	1	0	0	0	0	0	0	0	0	0	0	0	45
	16:00	18	16	21	11	2	0	0	0	0	0	0	0	0	0	0	0	68
	17:00	29	26	24	8	1	0	0	0	0	0	0	0	0	0	0	1	89
	18:00	22	14	8	3	0	0	0	0	0	0	0	0	0	0	0	0	47
	19:00	8	10	7	2	1	0	0	0	0	0	0	0	0	0	0	0	28
	20:00	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	21:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	22:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Daily Total :		237	200	169	58	11	0	0	0	0	0	0	0	0	0	0	1	676
Percent :		35%	30%	25%	9%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		35%	65%	90%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		10	8	7	2	0	0	0	0	0	0	0	0	0	0	0	0	27

Average Speed 20.4 mph 50% Speed : 22.6 mph 67% Speed : 25.5 mph 85% Speed : 29.0 mph
 10mph Pace: 20.1 - 30.0 (54.6%)

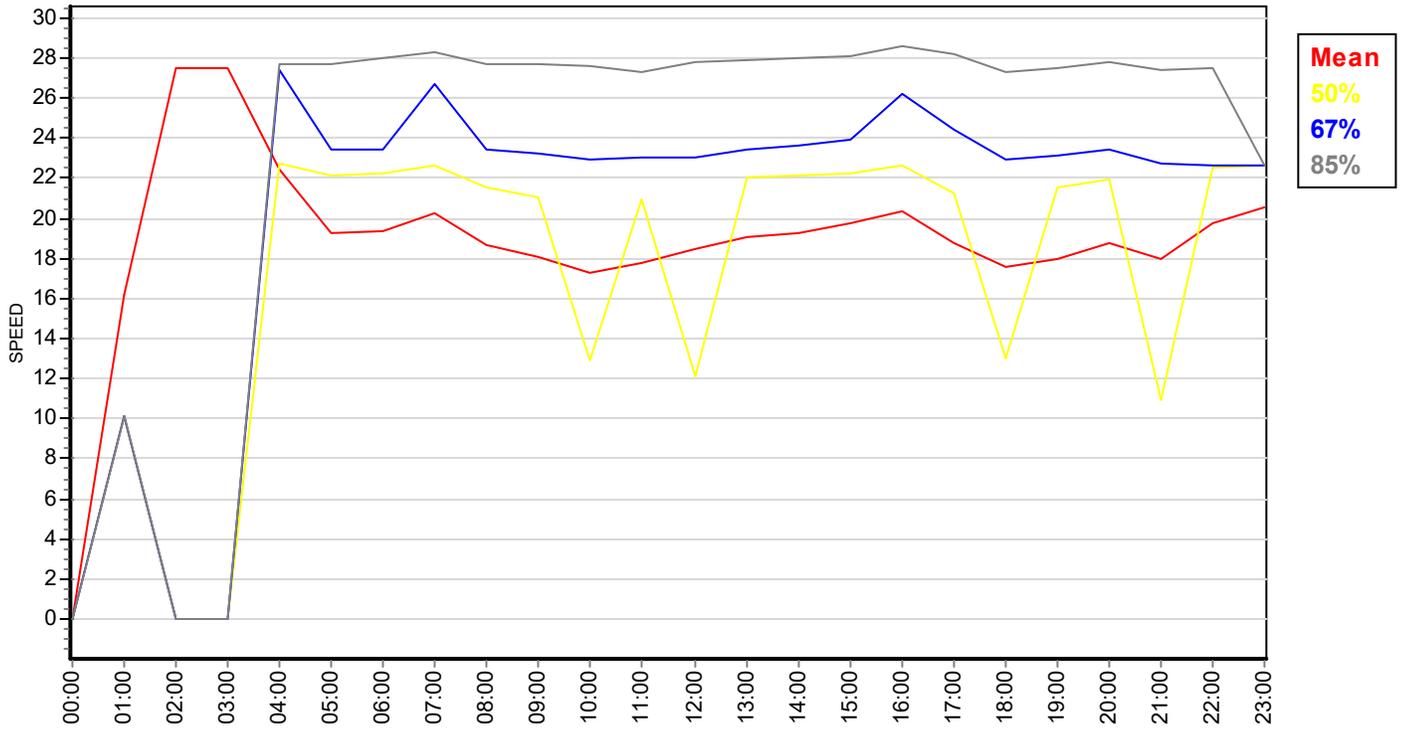
Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Other	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9			
04/05/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wed	01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	1	5	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	05:00	13	17	13	3	0	0	0	0	0	0	0	0	0	0	0	0	0	46
	06:00	8	7	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	28
	07:00	9	7	10	5	1	0	0	0	0	0	0	0	0	0	0	0	0	32
	08:00	32	19	10	7	1	0	0	0	0	0	0	0	0	0	0	0	0	69
	09:00	40	19	10	5	0	0	0	0	0	0	0	0	0	0	0	0	0	74
	10:00	28	13	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	51
	11:00	15	9	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
	12:00	11	7	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	26
	13:00	14	14	9	1	1	0	0	0	0	0	0	0	0	0	0	0	0	39
	14:00	7	12	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	29
	15:00	18	13	13	5	2	0	0	0	0	0	0	0	0	0	0	0	0	51
	16:00	24	26	16	7	0	0	0	0	0	0	0	0	0	0	0	0	0	73
	17:00	33	26	16	6	0	0	0	0	0	0	0	0	0	0	0	0	0	81
	18:00	20	8	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	38
	19:00	15	7	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	28
	20:00	4	9	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	23
	21:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	22:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily Total :		295	220	166	53	6	0	0	0	0	0	0	0	0	0	0	0	0	740
Percent :		40%	30%	22%	7%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		40%	70%	92%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		12	9	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	30

Average Speed	19.4 mph	50% Speed :	21.8 mph	67% Speed :	24.4 mph	85% Speed :	28.3 mph
				10mph Pace:	20.1 - 30.0 (52.2%)		

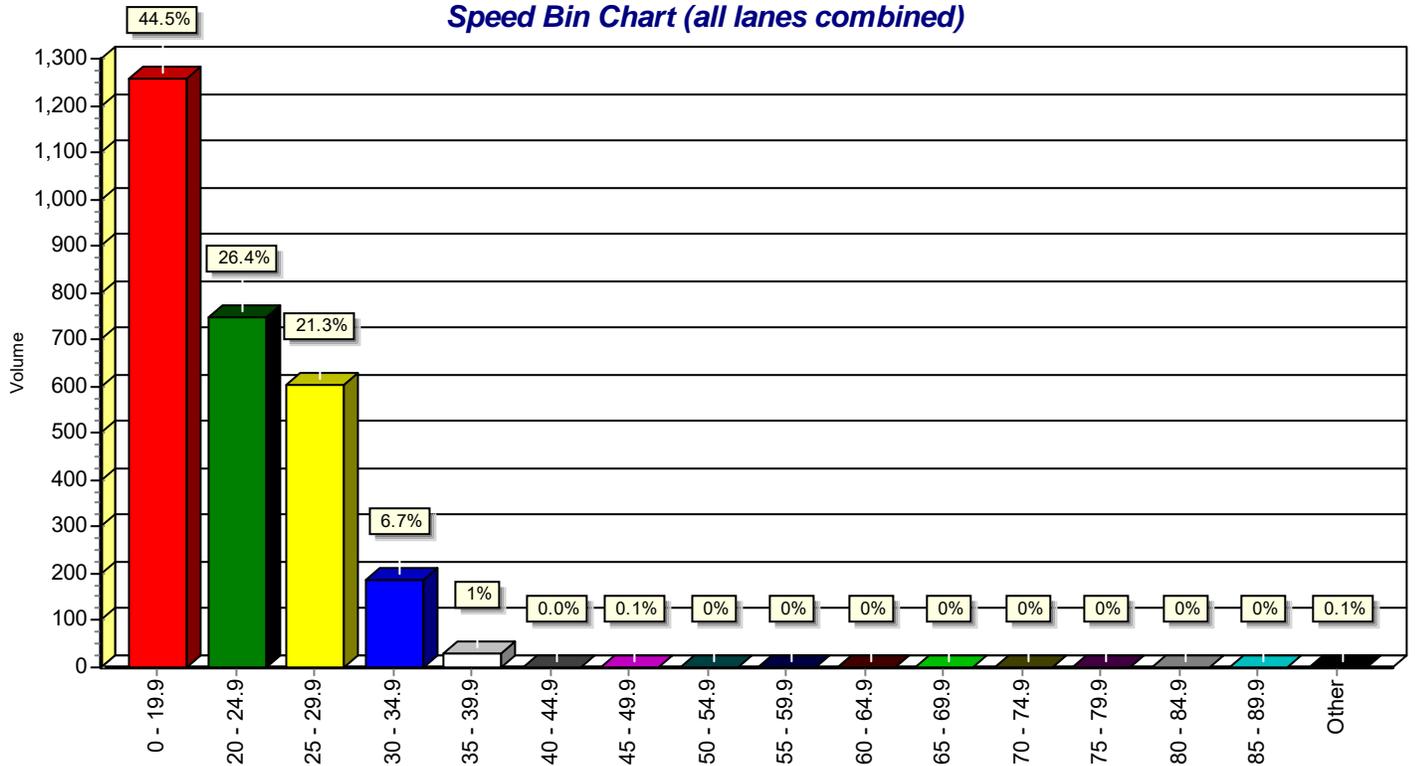
Special Speed Study Summary: Landau Street South

Description	#1 0 - 19.9	#2 20 - 24.9	#3 25 - 29.9	#4 30 - 34.9	#5 35 - 39.9	#6 40 - 44.9	#7 45 - 49.9	#8 50 - 54.9	#9 55 - 59.9	#10 60 - 64.9	#11 65 - 69.9	#12 70 - 74.9	#13 75 - 79.9	#14 80 - 84.9	#15 85 - 89.9	#16 Other	Total
Grand Total #1:	727	328	268	78	11	1	2	0	0	0	0	0	0	0	0	1	1416
Percent :	51%	23%	19%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	51%	75%	93%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	15	7	6	2	0	0	0	0	0	0	0	0	0	0	0	0	30
ADT = 708	Average Speed 17.7 mph		50% Speed : 19.4 mph				67% Speed : 23.4 mph				85% Speed : 27.7 mph						
	10mph Pace: 19.9 - 29.8 (42.2%)																
Grand Total #3:	532	420	335	111	17	0	0	0	0	0	0	0	0	0	0	1	1416
Percent :	38%	30%	24%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	38%	67%	91%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	11	9	7	2	0	0	0	0	0	0	0	0	0	0	0	0	29
ADT = 708	Average Speed 19.9 mph		50% Speed : 22.2 mph				67% Speed : 25.0 mph				85% Speed : 28.6 mph						
	10mph Pace: 20.1 - 30.0 (53.5%)																
Comb. Total :	1259	748	603	189	28	1	2	0	0	0	0	0	0	0	0	2	2832
Percent :	44%	26%	21%	7%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	44%	71%	92%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	26	16	13	4	1	0	0	0	0	0	0	0	0	0	0	0	60
ADT = 1416	Average Speed 18.8 mph		50% Speed : 21.2 mph				67% Speed : 24.2 mph				85% Speed : 28.3 mph						
	10mph Pace: 20.1 - 30.0 (47.8%)																

Speed Percent vs. Time (all lanes)



Speed Bin Chart (all lanes combined)



Basic Volume Report: Landau Street North

Station ID : Landau Street North

Info Line 1 : Between vivian and Montgomery

Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : NO VIV 1NB.DB

Last Connected Device Type : Apollo

Version Number : 1.66

Serial Number :

Number of Lanes : 1

Posted Speed Limit : 0.0 mph

Lane #1 Configuration

#	Dir.	Information	Volume Mode	Volume Sensors	Divide By 2	Comment
1.	Northbound		Normal	Veh.	No	

Lane #1 Basic Volume Data From: 00:00 - 04/04/2017 To: 23:59 - 04/05/2017

Date	Time	:00	:15	:30	:45	Total
04/04/17	00:00	0	0	0	0	0
Tue	01:00	0	0	0	0	0
	02:00	0	0	0	0	0
	03:00	0	0	0	0	0
	04:00	0	0	0	1	1
	05:00	1	1	7	6	15
	06:00	8	8	12	7	35
	07:00	15	12	10	6	43
	08:00	8	8	10	14	40
	09:00	8	19	7	14	48
	10:00	9	13	17	6	45
	11:00	14	7	20	8	49
	12:00	11	8	11	5	35
	13:00	14	5	17	7	43
	14:00	10	10	10	9	39
	15:00	16	7	11	13	47
	16:00	10	11	14	16	51
	17:00	7	15	35	24	81
	18:00	17	14	20	24	75
	19:00	18	14	11	8	51
	20:00	16	20	17	3	56
	21:00	5	8	6	1	20
	22:00	3	0	0	1	4
	23:00	3	0	0	1	4

Day Total : 782

AM Total :	276 (35.3%)	Peak AM Hour : 09:45 =	53 (6.8%)	Peak AM Factor : 0.662	Average Period :	8.1
PM Total :	506 (64.7%)	Peak PM Hour : 17:15 =	91 (11.6%)	Peak PM Factor : 0.650	Average Hour :	32.6

Date	Time	:00	:15	:30	:45	Total
04/05/17	00:00	0	0	0	0	0
Wed	01:00	1	0	0	0	1
	02:00	0	0	0	0	0
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	0	1	6	9	16
	06:00	5	10	12	9	36
	07:00	19	12	11	5	47
	08:00	12	8	13	6	39
	09:00	12	12	13	14	51
	10:00	15	14	18	32	79
	11:00	25	24	17	28	94
	12:00	18	12	14	16	60
	13:00	9	15	17	12	53
	14:00	17	17	15	4	53
	15:00	8	9	11	11	39
	16:00	10	13	16	13	52
	17:00	11	14	19	17	61
	18:00	9	17	16	15	57
	19:00	13	9	16	15	53
	20:00	25	24	13	11	73
	21:00	7	10	3	7	27
	22:00	2	1	3	0	6
	23:00	0	0	0	0	0

Day Total : 897

AM Total :	363 (40.5%)	Peak AM Hour : 10:30 =	99 (11.0%)	Peak AM Factor : 0.773	Average Period :	9.3
PM Total :	534 (59.5%)	Peak PM Hour : 19:30 =	80 (8.9%)	Peak PM Factor : 0.800	Average Hour :	37.4

Lane #3 Configuration

#	Dir. Information	Volume Mode	Volume Sensors	Divide By 2	Comment
3.	Southbound	Normal	Veh.	No	

Lane #3 Basic Volume Data From: 00:00 - 04/04/2017 To: 23:59 - 04/05/2017

Date	Time	:00	:15	:30	:45	Total
04/04/17	00:00	0	0	0	0	0
Tue	01:00	0	0	0	0	0
	02:00	0	0	0	1	1
	03:00	0	0	0	0	0
	04:00	0	1	2	7	10
	05:00	14	13	6	12	45
	06:00	6	1	3	12	22
	07:00	13	9	5	16	43
	08:00	22	11	6	9	48
	09:00	25	12	9	19	65
	10:00	10	16	9	6	41
	11:00	18	9	9	7	43
	12:00	8	8	7	11	34
	13:00	9	11	10	8	38
	14:00	12	14	15	14	55
	15:00	13	15	11	18	57
	16:00	23	28	17	16	84
	17:00	22	28	27	26	103
	18:00	17	12	15	17	61
	19:00	10	8	6	6	30
	20:00	2	3	1	1	7
	21:00	7	2	0	1	10
	22:00	1	2	1	0	4
	23:00	0	0	1	0	1

Day Total : 802

AM Total :	318 (39.7%)	Peak AM Hour : 09:00 =	65 (8.1%)	Peak AM Factor : 0.650	Average Period :	8.4
PM Total :	484 (60.3%)	Peak PM Hour : 17:00 =	103 (12.8%)	Peak PM Factor : 0.920	Average Hour :	33.4

Date	Time	:00	:15	:30	:45	Total
04/05/17	00:00	0	0	0	0	0
Wed	01:00	1	1	0	0	2
	02:00	0	0	0	0	0
	03:00	0	1	0	0	1
	04:00	0	1	3	10	14
	05:00	12	17	8	11	48
	06:00	11	6	3	13	33
	07:00	13	6	7	12	38
	08:00	17	17	19	33	86
	09:00	26	29	12	18	85
	10:00	12	13	16	14	55
	11:00	5	13	13	13	44
	12:00	6	15	10	7	38
	13:00	15	15	9	12	51
	14:00	8	8	9	16	41
	15:00	11	16	18	16	61
	16:00	23	26	19	21	89
	17:00	16	28	23	24	91
	18:00	18	11	9	13	51
	19:00	8	8	9	8	33
	20:00	11	9	4	4	28
	21:00	1	1	1	0	3
	22:00	1	1	1	1	4
	23:00	0	0	0	0	0

Day Total : 896

AM Total :	406 (45.3%)	Peak AM Hour : 08:30 =	107 (11.9%)	Peak AM Factor : 0.811	Average Period :	9.3
PM Total :	490 (54.7%)	Peak PM Hour : 17:15 =	93 (10.4%)	Peak PM Factor : 0.830	Average Hour :	37.3

Basic Volume Summary: Landau Street North

Grand Total For Data From: 00:00 - 04/04/2017 To: 23:59 - 04/05/2017

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	1679 (49.7%)	2.00	840	8.7	35.0	639 (38.1%)	1040 (61.9%)
#3.	1698 (50.3%)	2.00	849	8.8	35.4	724 (42.6%)	974 (57.4%)
ALL	3377	2.00	1689	17.5	70.4	1363 (40.4%)	2014 (59.6%)

Lane	Peak AM Hour	Date	Peak AM Factor	Peak PM Hour	Date	Peak PM Factor
#1.	10:30 = 99	04/05/2017	0.773	17:15 = 91	04/04/2017	0.650
#3.	08:30 = 107	04/05/2017	0.811	17:00 = 103	04/04/2017	0.920

Basic Volume Report: Landau Street South

Station ID : Landau Street South
 Info Line 1 : Between Magnolia and Vivian
 Info Line 2 : Albuquerque
 GPS Lat/Lon :
 DB File : SO VIV 1NB.DB

Last Connected Device Type : Apollo
 Version Number : 1.62
 Serial Number :
 Number of Lanes : 1
 Posted Speed Limit : 0.0 mph

Lane #1 Configuration

#	Dir.	Information	Volume Mode	Volume Sensors	Divide By 2	Comment
1.	Northbound		Normal	Veh.	No	

Lane #1 Basic Volume Data From: 00:00 - 04/04/2017 To: 23:59 - 04/05/2017

Date	Time	:00	:15	:30	:45	Total
04/04/17	00:00	0	0	0	0	0
Tue	01:00	0	0	0	0	0
	02:00	0	0	0	0	0
	03:00	0	0	0	0	0
	04:00	0	0	0	2	2
	05:00	1	1	6	6	14
	06:00	7	8	12	8	35
	07:00	11	11	5	6	33
	08:00	8	7	10	12	37
	09:00	6	13	6	12	37
	10:00	8	13	16	7	44
	11:00	15	5	18	9	47
	12:00	7	8	12	4	31
	13:00	10	5	12	7	34
	14:00	6	7	10	8	31
	15:00	12	8	9	10	39
	16:00	6	10	8	13	37
	17:00	7	15	24	24	70
	18:00	14	10	18	18	60
	19:00	14	14	10	8	46
	20:00	14	20	16	2	52
	21:00	5	6	7	2	20
	22:00	0	0	0	1	1
	23:00	3	0	0	0	3

Day Total : 673

AM Total :	249 (37.0%)	Peak AM Hour : 10:15 =	51 (7.6%)	Peak AM Factor : 0.708	Average Period :	7.0
PM Total :	424 (63.0%)	Peak PM Hour : 17:15 =	77 (11.4%)	Peak PM Factor : 0.802	Average Hour :	28.0

Date	Time	:00	:15	:30	:45	Total
04/05/17	00:00	0	0	0	0	0
Wed	01:00	1	0	0	0	1
	02:00	0	0	0	0	0
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	0	0	6	9	15
	06:00	5	8	12	9	34
	07:00	15	9	9	3	36
	08:00	10	7	9	4	30
	09:00	11	10	11	8	40
	10:00	11	12	14	25	62
	11:00	20	21	11	21	73
	12:00	15	10	12	13	50
	13:00	8	11	9	7	35
	14:00	14	14	12	3	43
	15:00	5	10	11	9	35
	16:00	9	7	13	10	39
	17:00	10	12	17	17	56
	18:00	8	16	16	12	52
	19:00	12	8	12	14	46
	20:00	21	17	13	11	62
	21:00	7	11	3	7	28
	22:00	2	1	3	0	6
	23:00	0	0	0	0	0

Day Total : 743

AM Total :	291 (39.2%)	Peak AM Hour : 10:30 =	80 (10.8%)	Peak AM Factor : 0.800	Average Period :	7.7
PM Total :	452 (60.8%)	Peak PM Hour : 19:45 =	65 (8.7%)	Peak PM Factor : 0.774	Average Hour :	31.0

Lane #3 Configuration

#	Dir. Information	Volume Mode	Volume Sensors	Divide By 2	Comment
3.	Southbound	Normal	Veh.	No	

Lane #3 Basic Volume Data From: 00:00 - 04/04/2017 To: 23:59 - 04/05/2017

Date	Time	:00	:15	:30	:45	Total
04/04/17	00:00	0	0	0	0	0
Tue	01:00	0	0	0	0	0
	02:00	0	0	0	1	1
	03:00	0	0	0	0	0
	04:00	0	1	2	6	9
	05:00	15	13	7	11	46
	06:00	6	1	3	9	19
	07:00	9	8	5	15	37
	08:00	18	10	3	8	39
	09:00	20	9	10	17	56
	10:00	9	15	8	7	39
	11:00	18	7	7	6	38
	12:00	6	7	5	6	24
	13:00	7	9	9	7	32
	14:00	10	12	13	10	45
	15:00	14	9	6	16	45
	16:00	18	23	14	13	68
	17:00	20	18	28	23	89
	18:00	10	11	12	14	47
	19:00	8	7	7	6	28
	20:00	1	4	1	1	7
	21:00	4	0	0	0	4
	22:00	1	0	1	0	2
	23:00	0	0	1	0	1

Day Total : 676

AM Total :	284 (42.0%)	Peak AM Hour : 09:00 =	56 (8.3%)	Peak AM Factor : 0.700	Average Period :	7.0
PM Total :	392 (58.0%)	Peak PM Hour : 17:00 =	89 (13.2%)	Peak PM Factor : 0.795	Average Hour :	28.2

Date	Time	:00	:15	:30	:45	Total
04/05/17	00:00	0	0	0	0	0
Wed	01:00	1	0	0	0	1
	02:00	0	0	0	0	0
	03:00	0	1	0	0	1
	04:00	0	1	3	10	14
	05:00	11	16	9	10	46
	06:00	10	6	2	10	28
	07:00	8	6	6	12	32
	08:00	13	14	15	27	69
	09:00	20	26	11	17	74
	10:00	10	12	17	12	51
	11:00	0	9	11	11	31
	12:00	5	10	5	6	26
	13:00	12	10	8	9	39
	14:00	4	8	7	10	29
	15:00	8	17	16	10	51
	16:00	17	21	18	17	73
	17:00	13	25	21	22	81
	18:00	13	7	8	10	38
	19:00	5	5	9	9	28
	20:00	9	8	3	3	23
	21:00	1	2	0	0	3
	22:00	1	1	0	0	2
	23:00	0	0	0	0	0

Day Total : 740

AM Total :	347 (46.9%)	Peak AM Hour : 08:30 =	88 (11.9%)	Peak AM Factor : 0.815	Average Period :	7.7
PM Total :	393 (53.1%)	Peak PM Hour : 17:00 =	81 (10.9%)	Peak PM Factor : 0.810	Average Hour :	30.8

Basic Volume Summary: Landau Street South

Grand Total For Data From: 00:00 - 04/04/2017 To: 23:59 - 04/05/2017

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	1416 (50.0%)	2.00	708	7.4	29.5	540 (38.1%)	876 (61.9%)
#3.	1416 (50.0%)	2.00	708	7.4	29.5	631 (44.6%)	785 (55.4%)
ALL	2832	2.00	1416	14.8	59.0	1171 (41.3%)	1661 (58.7%)

Lane	Peak AM Hour	Date	Peak AM Factor	Peak PM Hour	Date	Peak PM Factor
#1.	10:30 = 80	04/05/2017	0.800	17:15 = 77	04/04/2017	0.802
#3.	08:30 = 88	04/05/2017	0.815	17:00 = 89	04/04/2017	0.795

Appendix C



OBJECTID	ReportIDSt	Date	CrashDate	Year
300157	12.710114061	10/11/2012	20121011	2012
300158	12.23310221	7/14/2012	20120714	2012
300169	12.710114221	6/27/2012	20120627	2012
300170	12.23310125	7/17/2012	20120717	2012
300171	12.23312066	7/14/2012	20120714	2012
344787	14.710207508	8/7/2014	20140807	2014

OBJECTID	Day	Month	Time24	Hour24
300157	5	10	940	9
300158	7	7	1100	11
300169	4	6	1802	18
300170	3	7	900	9
300171	7	7	1120	11
344787	5	8	1615	16

OBJECTID	Agency	County	City	AStreet
300157	3	1	7825	MONTGOMERY BLVD NE
300158	45	1	7825	LANDAU ST NE
300169	3	1	7825	4300 LANDAU ST NE
300170	45	1	7825	4300 LANDAU ST NE
300171	45	1	7825	LANDAU ST NE
344787	3	1	7825	LANDAU ST NE

OBJECTID	BStreet	Landmark	Route	MilePost
300157	LANDAU ST NE			0
300158	MONTGOMERY BLVD NE			0
300169	LANDAU ST NE			0
300170	LANDAU ST NE			0
300171	VIVIAN DR NE			0
344787	MAGNOLIA DR NE			0

OBJECTID	NumVeh	NumPersons	NumKilled	NumClassA
300157	1	1	0	1
300158	2	2	0	0
300169	2	4	0	0
300170	2	2	0	0
300171	2	2	0	0
344787	2	2	0	0

OBJECTID	NumClassB	NumClassC	NumInjured	NumUnhurt
300157	0	0	1	0
300158	0	0	0	2
300169	0	0	0	4
300170	0	0	0	2
300171	0	0	0	2
344787	0	2	2	0

OBJECTID	Severity	Class	Analysis	TOPCACC
300157	Injury Crash Property Damage Only	Other Object		Improper Driving
300158	Crash Property Damage Only	Parked Vehicle	Proper Park	Avoid Other Vehicle
300169	Crash Property Damage Only	Other Vehicle	Angle-Both Right	Failure to Yield
300170	Crash Property Damage Only	Parked Vehicle	Proper Park	Driver Inattention
300171	Crash	Parked Vehicle	Parked Veh-Unk Vehicle Parked in Proper	Too Fast for Conditions
344787	Injury Crash	Parked Vehicle	Location	Defective Tires

OBJECTID	Weather	Lighting	ALCInv	DRUGInv
300157	1	6	T	T
300158	1	1	T	T
300169	1	1	T	T
300170	1	1	T	T
300171	1	1	T	T
344787	1	1	F	F

OBJECTID	PEInv	MCIInv	PECIInv	TrkInv
300157	F	F	F	F
300158	F	F	F	F
300169	F	F	F	F
300170	F	F	F	F
300171	F	F	F	F
344787	F	F	F	F

OBJECTID	HZInv	HitRun	SHTDProp	System
300157	F	F	0	2
300158	F	F	0	2
300169	F	F	0	2
300170	F	T	0	2
300171	F	F	0	2
344787	F	F	0	2

OBJECTID	MaxDam	RoadRel	Character	Grade
300157	0	T	F	9
300158	0	T	F	8
300169	0	T	F	8
300170	0	T	T	7
300171	0	T	F	8
344787	1	T	F	8

OBJECTID	NonLocal	Measure	MeasureUni	Direction
300157	0			E
300158	0			S
300169	0			
300170	0			
300171	0			
344787	2		99	

OBJECTID	TranDist
300157	3
300158	3
300169	3
300170	3
300171	3
344787	3



Souder, Miller & Associates • 3451 Candalaria Road NE, Suite D
Albuquerque, NM 87107-1948 • (505) 299-0942 • (877) 299-0942 • fax (505) 293-3430
