

Lafayette Drive (Comanche Road to Delamar Avenue) Speed Study FINAL REPORT

March 2015



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03/30/2015

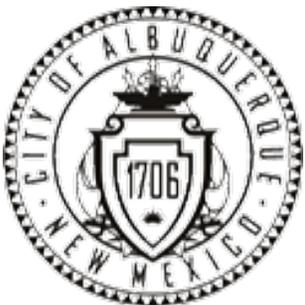




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I. INTRODUCTION

The City of Albuquerque – Department of Municipal Development (Engineering Division and Traffic Engineering Division) was requested to conduct a speed study along Lafayette Drive in northeast Albuquerque.

II. PROJECT PURPOSE

A speed study on Lafayette Drive was conducted between Comanche Road and Delmar Avenue to determine the following:

- Evaluate the 85th percentile speed along Lafayette Drive
- Determine from the speed study if there is a speeding along Lafayette Drive
- If speed humps are warranted based on the City’s Neighborhood Traffic Management Program

As part of this study, an evaluation and cataloging of existing roadway conditions, collection of historical ADT and crash data, field speed surveys at two (2) locations within the study area, and evaluation the survey data will be completed.

III. PROJECT DESCRIPTION

The study area will be a 0.2 mile (1,050’) section of Lafayette Drive between Comanche Road and Delmar Avenue.

Please refer to Figures III.A.1 below showing the project area.



**Figure III.A.1
Project Vicinity Map**



IV. 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 visitors/tourists

IV.A 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

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Many speed limits are established using the theory of the 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 then 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 47 mph, the posted speed would be 45 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 is the vehicle at the 85th percentile). For example, a 50 vehicle survey would result in:

$$100/15 = 50/X$$
$$X = 7.5, \text{ or the } 8^{\text{th}} \text{ vehicle in the survey}$$

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

- The 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.
- The median is the numerical midpoint of a given survey – 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 56 mph and the 51st vehicle was also traveling 56 mph, the resulting median speed would be $(56+56)/2 = 112/2 = 56$ mph.
- The 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:

$$\text{Geometric Mean} = ((X_1)(X_2)(X_3)\dots\dots(X_N))^{1/N}$$

where

X = Individual Score (speed)

N = Sample size (Number of scores)

Geometric Mean Example: To find the Geometric Mean of speeds 51, 52, 55, 58, and 60 mph.

Step 1: N = 5, the total number of values. Find 1/N.

$$1/N = 0.2$$

Step 2: Determine Geometric Mean using the formula.

$$((51)(52)(55)(58)(60))^{0.2} = (507,592,800)^{0.2}$$

$$\text{Geometric Mean} = 55.09 \text{ mph}$$

**LAFAYETTE DRIVE SPEED STUDY (COMANHCE ROAD TO DELMAR AVENUE)
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In most cases, the geometric mean of a speed study will be of similar value of the median, often within 1 to 2 mph on 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.

IV.B STUDY AREA

The study area is along Lafayette Drive between beginning at Comanche Road and ending at Delmar Avenue. The existing speed limit along Lafayette Drive is 25 mph.

Traffic counts and speed data was collected at two (2) locations along Lafayette Drive. Traffic/speed count locations were collected at the following locations:

- South Count Station: Lafayette Drive 500’ north of Comanche Road
- North Count Station: Lafayette Drive 500’ south of Delamar Avenue

The AADT for the three locations listed above are listed below:

	Lane 1 (NB)	Lane 3 (SB)	AADT
South Count Location	490	523	1013
North Count Location	396	435	831
AADT	443	479	922

***Table IV.B.1
AADT Count Data Results***

Lafayette Drive study area ranges from 831 to 1013 vehicles per day with an average AADT of 922 vehicles.

The speed survey segments are described in more detail below, beginning with the southernmost portion of the corridor at Comanche Road. Each study segment will have descriptions of roadside environment, driveway and intersection density and photographs illustrating the study segment. From the south terminus of the study area, each survey segment is described as follows:

Traffic count data is located in Appendix A.



IV.B.1 – SEGMENT 1: LAFAYETTE DRIVE - 500’ NORTH OF COMANCHE ROAD

This segment of the study area is ROW width of 57’ (+/-). A breakdown of the ROW is listed below:

- 40’ asphalt pavement
- 2.5’ curb and gutter
- 4’ landscape buffer (EAST SIDE ONLY)
- 4’ sidewalk

Sidewalk, curb and sidewalk exist on both sides of Lafayette Drive. Below is a photo showing the cross-section listed above.



**Figure IV.B.1
Lafayette Drive north of Comanche Road**

There are ten (10) driveways within this segment of the study area. Eight (8) driveways provide access to residential homes (east side). There are two (2) driveways on the west side that provides access to apartment complexes.

Results of the speed study for Segment 1 is listed below:

	Lane 1 (NB)	Lane 3 (SB)	Comb Total
South Count Location			
Average	19.6	19	19.3
50th Percentile	21.9	21.4	21.6
67th Percentile	24.5	23.8	24.2
85th Percentile	28.5	27.7	28.1

**Table IV.B.2
South Count Location Speed Study Results**



IV.B.2 – SEGMENT 2: LAFAYETTE DRIVE – 500’ SOUTH OF DELAMAR AVENUE

This segment of the study area is ROW width of 57’ (+/-). A breakdown of the ROW is listed below:

- 40’ asphalt pavement
- 2.5’ curb and gutter
- 4’ landscape buffer (EAST SIDE ONLY)
- 4’ sidewalk

Sidewalk, landscape buffer, curb and sidewalk exist on both sides of Lafayette Drive. Below is a photo showing the cross-section listed above.



Figure IV.B.2
Lafayette Drive south of Delamar Avenue

There are 9 driveways within this study area. All driveways provide access to residential homes. There are four (4) driveways on the west side that provides access to apartment complexes.

Results of the speed study for Segment 2 is listed below:

	Lane 1 (NB)	Lane 3 (SB)	Comb Total
North Count Location			
Average	19.1	17.7	18.4
50th Percentile	21.6	20.6	21.1
67th Percentile	23.7	22.9	23.3
85th Percentile	27.6	26.5	27.0

Table IV.B.3
North Count Location Speed Study Results



V. CRASH DATA

Crash data was requested from the Traffic Safety Bureau at New Mexico Department of Transportation. NMDOT stated that there were no reported crashes along Lafayette Drive within the study area.

VI. SPOT SPEED STUDY RESULTS

When considering establish a new posted speed limit, or revising an existing posted speed limit, on a given roadway a survey of traffic speeds is critical to determine a reasonably posted speed limit.

But before a posted speed limit can be modified, 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 that they feel safe, based on the observable roadway conditions; this means that if a roadway is wide, flat and straight, the motorist will drive at a speed they feel comfortable based on what they observe as opposed to what a speed limit sign would say. To elaborate further, a four-lane street that is flat and straight with no unusual conditions that has a posted speed of 30 mph would probably result in most motorists traveling well over that posted speed, because the roadway conditions dictate that they could safely drive much faster.

In the case of Lafayette Drive, the posted speed limit is 25 mph, and roadway conditions throughout the corridor are fairly consistent: controlled access, good pavement condition with wide (11’) travel lanes, and on-street parking. Thus, there are no unusual roadway conditions through the corridor.

Also, over 900 vehicles were surveyed at two (2) locations within the study area. The surveyed vehicles showed that 25% of those surveyed vehicles were traveling higher than the posted speed limit. This percentage indicates that the 25 mph speed limit on the study area of Lafayette Drive is probably a reasonably posted speed limit and that in order to maintain this speed limit, speed humps would be not be warranted. The survey results essentially make lawbreakers of 25% of the motorists who use this roadway.

Results of the speed study for the entire study area is listed below:

	Lane 1 (NB)	Lane 3 (SB)	Comb Total
Entire Study Area			
Average	19.4	18.4	18.9
50th Percentile	21.8	21.0	21.4
67th Percentile	24.1	23.4	23.7
85th Percentile	28.1	18.1	23.1

**Table VI.1
Lafayette Drive Speed Study Results**



VII. U.S. LIMITS SPEED LIMIT 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 intersecting roads);*
- *road function (e.g. traffic movement vs. access to abutting properties);*
- *road characteristics (e.g. paved width, divided or undivided, lane width and number of lanes, sight restrictions);*
- *road conditions and important high speed road characteristics (e.g. interchange spacing, AADT, 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 Lafayette Drive. Based on the data entered for the above-listed categories, the program concluded that a 25 mph posted speed limit was warranted for the corridor. The output sheet is shown in Appendix C – U.S. Limits Output.

This site can be accessed at <http://www.uslimits.com>

VIII. CONCLUSION

After evaluating the traffic and speed study data collected through the project area, it apparent that none of criteria outlined in the City’s Neighborhood Traffic Management Plan has been met to warrant speed humps.

APPENDIX A

TRAFFIC DATA

Basic Volume Report: Lafayette Dr - South Location

Station ID : Lafayette Dr - South Location

Info Line 1 : North of Comanche Rd

Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : SOUTH.DB

Last Connected Device Type : Apollo

Version Number : 1.51

Serial Number :

Number of Lanes : 1

Posted Speed Limit :

Lane #1 Configuration

#	Dir.	Information	Volume Mode	Volume Sensors	Divide By 2	Comment
1.		Northbound				

Lane #1 Basic Volume Data From: 00:00 - 02/25/2015 To: 23:59 - 02/26/2015

Date	Time	:00	:15	:30	:45	Total
02/25/15	00:00	2	0	2	0	4
Wed	01:00	2	0	1	1	4
	02:00	1	0	0	0	1
	03:00	0	1	0	0	1
	04:00	2	0	1	1	4
	05:00	0	1	3	1	5
	06:00	0	6	0	2	8
	07:00	4	5	7	4	20
	08:00	7	6	9	6	28
	09:00	6	6	3	6	21
	10:00	5	6	7	4	22
	11:00	6	9	7	8	30
	12:00	7	6	11	8	32
	13:00	8	6	10	6	30
	14:00	5	14	12	4	35
	15:00	5	8	4	6	23
	16:00	7	11	14	12	44
	17:00	8	10	6	8	32
	18:00	8	10	6	11	35
	19:00	7	9	9	8	33
	20:00	7	6	6	5	24
	21:00	5	6	6	5	22
	22:00	2	3	5	7	17
	23:00	1	2	7	7	17

Day Total : 492

AM Total :	148 (30.1%)	Peak AM Hour : 11:00 =	30 (6.1%)	Peak AM Factor : 0.833	Average Period :	5.1
PM Total :	344 (69.9%)	Peak PM Hour : 16:15 =	45 (9.1%)	Peak PM Factor : 0.804	Average Hour :	20.5

Date	Time	:00	:15	:30	:45	Total
02/26/15	00:00	3	1	3	2	9
Thu	01:00	0	0	4	0	4
	02:00	1	2	0	1	4
	03:00	0	0	0	0	0
	04:00	1	0	0	0	1
	05:00	2	0	1	2	5
	06:00	2	5	0	2	9
	07:00	6	2	3	5	16
	08:00	8	7	3	6	24
	09:00	3	5	3	8	19
	10:00	6	6	4	10	26
	11:00	7	5	7	8	27
	12:00	7	8	6	8	29
	13:00	6	9	9	7	31
	14:00	9	8	6	9	32
	15:00	6	1	9	9	25
	16:00	11	10	8	13	42
	17:00	13	11	12	8	44
	18:00	12	8	7	12	39
	19:00	10	5	10	7	32
	20:00	7	4	5	8	24
	21:00	2	5	5	6	18
	22:00	5	5	2	6	18
	23:00	4	4	1	0	9

Day Total : 487

AM Total :	144 (29.6%)	Peak AM Hour : 10:45 =	29 (6.0%)	Peak AM Factor : 0.725	Average Period :	5.1
PM Total :	343 (70.4%)	Peak PM Hour : 16:45 =	49 (10.1%)	Peak PM Factor : 0.942	Average Hour :	20.3

Lane #3 Configuration

#	Dir.	Information	Volume Mode	Volume Sensors	Divide By 2	Comment
3.		Southbound				

Lane #3 Basic Volume Data From: 00:00 - 02/25/2015 To: 23:59 - 02/26/2015

Date	Time	:00	:15	:30	:45	Total
02/25/15	00:00	0	1	0	0	1
Wed	01:00	1	1	0	2	4
	02:00	0	1	0	1	2
	03:00	0	1	1	1	3
	04:00	0	1	1	3	5
	05:00	0	0	3	2	5
	06:00	3	4	1	8	16
	07:00	6	10	8	14	38
	08:00	11	10	9	6	36
	09:00	3	6	3	7	19
	10:00	8	4	6	8	26
	11:00	6	7	12	14	39
	12:00	4	4	7	10	25
	13:00	9	5	9	4	27
	14:00	8	6	12	2	28
	15:00	10	13	4	15	42
	16:00	7	16	9	8	40
	17:00	7	11	13	2	33
	18:00	6	6	9	5	26
	19:00	9	10	14	4	37
	20:00	7	7	4	4	22
	21:00	3	3	8	5	19
	22:00	6	0	3	2	11
	23:00	5	3	4	2	14

Day Total : 518

AM Total :	194 (37.5%)	Peak AM Hour : 07:45 =	44 (8.5%)	Peak AM Factor : 0.786	Average Period :	5.4
PM Total :	324 (62.5%)	Peak PM Hour : 15:45 =	47 (9.1%)	Peak PM Factor : 0.734	Average Hour :	21.6

Date	Time	:00	:15	:30	:45	Total
02/26/15	00:00	1	2	0	0	3
Thu	01:00	1	0	3	0	4
	02:00	0	1	3	1	5
	03:00	0	0	0	0	0
	04:00	1	1	0	2	4
	05:00	0	2	0	1	3
	06:00	2	3	7	5	17
	07:00	5	4	3	12	24
	08:00	10	3	4	8	25
	09:00	6	8	10	5	29
	10:00	5	6	12	4	27
	11:00	8	5	9	6	28
	12:00	9	5	8	9	31
	13:00	13	7	9	8	37
	14:00	8	8	6	8	30
	15:00	5	1	7	10	23
	16:00	13	16	15	12	56
	17:00	9	20	10	7	46
	18:00	11	10	13	10	44
	19:00	7	6	4	7	24
	20:00	6	10	5	6	27
	21:00	4	4	6	3	17
	22:00	5	3	5	4	17
	23:00	0	4	1	2	7

Day Total : 528

AM Total :	169 (32.0%)	Peak AM Hour : 08:45 =	32 (6.1%)	Peak AM Factor : 0.667	Average Period :	5.5
PM Total :	359 (68.0%)	Peak PM Hour : 16:00 =	56 (10.6%)	Peak PM Factor : 0.700	Average Hour :	22.0

Basic Volume Summary: Lafayette Dr - South Location

Grand Total For Data From: 00:00 - 02/25/2015 To: 23:59 - 02/26/2015

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	979 (48.3%)	2.00	490	5.1	20.4	292 (29.8%)	687 (70.2%)
#3.	1046 (51.7%)	2.00	523	5.4	21.8	363 (34.7%)	683 (65.3%)
ALL	2025	2.00	1013	10.5	42.2	655 (32.3%)	1370 (67.7%)

Lane	Peak AM Hour	Date	Peak AM Factor	Peak PM Hour	Date	Peak PM Factor
#1.	11:00 = 30	02/25/2015	0.833	16:45 = 49	02/26/2015	0.942
#3.	07:45 = 44	02/25/2015	0.786	16:00 = 56	02/26/2015	0.700

Basic Volume Report: Lafayette Dr - North Location

Station ID : Lafayette Dr - North Location

Info Line 1 : North of Comanche Rd

Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : NORTH.DB

Last Connected Device Type : Apollo

Version Number : 1.51

Serial Number : 14404

Number of Lanes : 1

Posted Speed Limit :

Lane #1 Configuration

#	Dir.	Information	Volume Mode	Volume Sensors	Divide By 2	Comment
1.		Northbound				

Lane #1 Basic Volume Data From: 00:00 - 02/25/2015 To: 23:59 - 02/26/2015

Date	Time	:00	:15	:30	:45	Total
02/25/15	00:00	1	0	2	0	3
Wed	01:00	0	0	0	1	1
	02:00	0	0	0	0	0
	03:00	0	1	0	0	1
	04:00	1	0	1	1	3
	05:00	0	0	2	1	3
	06:00	0	3	1	2	6
	07:00	4	6	7	6	23
	08:00	4	7	7	3	21
	09:00	4	4	2	8	18
	10:00	5	6	3	3	17
	11:00	5	7	5	9	26
	12:00	8	1	10	6	25
	13:00	7	7	9	7	30
	14:00	4	9	10	6	29
	15:00	7	9	3	9	28
	16:00	4	11	7	9	31
	17:00	5	9	4	6	24
	18:00	6	8	6	7	27
	19:00	5	5	6	9	25
	20:00	7	2	4	5	18
	21:00	5	5	4	7	21
	22:00	1	1	4	3	9
	23:00	2	0	5	4	11

Day Total : 400

AM Total :	122 (30.5%)	Peak AM Hour : 11:00 =	26 (6.5%)	Peak AM Factor : 0.722	Average Period :	4.2
PM Total :	278 (69.5%)	Peak PM Hour : 14:15 =	32 (8.0%)	Peak PM Factor : 0.727	Average Hour :	16.7

Date	Time	:00	:15	:30	:45	Total
02/26/15	00:00	2	0	0	1	3
Thu	01:00	0	0	1	0	1
	02:00	1	2	0	1	4
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	1	1	1	2	5
	06:00	2	4	1	2	9
	07:00	5	4	2	6	17
	08:00	6	5	3	7	21
	09:00	2	3	2	6	13
	10:00	9	5	4	6	24
	11:00	6	5	5	4	20
	12:00	5	7	4	6	22
	13:00	3	7	10	5	25
	14:00	7	7	5	7	26
	15:00	3	5	5	6	19
	16:00	8	11	6	12	37
	17:00	14	7	8	5	34
	18:00	10	9	4	10	33
	19:00	7	7	5	7	26
	20:00	5	4	5	6	20
	21:00	2	1	4	4	11
	22:00	4	5	1	3	13
	23:00	3	3	1	1	8

Day Total : 391

AM Total :	117 (29.9%)	Peak AM Hour : 09:45 =	24 (6.1%)	Peak AM Factor : 0.667	Average Period :	4.1
PM Total :	274 (70.1%)	Peak PM Hour : 16:15 =	43 (11.0%)	Peak PM Factor : 0.768	Average Hour :	16.3

Lane #3 Configuration

#	Dir. Information	Volume Mode	Volume Sensors	Divide By 2	Comment
3.	Southbound				

Lane #3 Basic Volume Data From: 00:00 - 02/25/2015 To: 23:59 - 02/26/2015

Date	Time	:00	:15	:30	:45	Total
02/25/15	00:00	0	1	0	0	1
Wed	01:00	0	1	0	1	2
	02:00	0	1	0	1	2
	03:00	0	1	1	0	2
	04:00	0	0	1	3	4
	05:00	0	0	1	1	2
	06:00	1	3	0	4	8
	07:00	4	5	3	6	18
	08:00	7	11	5	5	28
	09:00	3	5	2	5	15
	10:00	6	4	5	5	20
	11:00	7	5	5	11	28
	12:00	8	2	6	9	25
	13:00	7	4	10	4	25
	14:00	6	9	9	4	28
	15:00	10	14	4	14	42
	16:00	5	16	8	9	38
	17:00	7	10	11	0	28
	18:00	5	7	8	4	24
	19:00	10	8	6	5	29
	20:00	8	4	4	5	21
	21:00	6	3	6	6	21
	22:00	4	1	4	0	9
	23:00	4	2	5	2	13

Day Total : 433

AM Total :	130 (30.0%)	Peak AM Hour : 07:45 =	29 (6.7%)	Peak AM Factor : 0.659	Average Period : 4.5
PM Total :	303 (70.0%)	Peak PM Hour : 15:45 =	43 (9.9%)	Peak PM Factor : 0.672	Average Hour : 18.0

Date	Time	:00	:15	:30	:45	Total
02/26/15	00:00	2	2	0	0	4
Thu	01:00	0	0	1	1	2
	02:00	1	0	1	1	3
	03:00	0	0	0	0	0
	04:00	0	0	1	2	3
	05:00	0	2	0	1	3
	06:00	1	1	4	3	9
	07:00	2	2	4	7	15
	08:00	6	4	3	7	20
	09:00	3	6	6	2	17
	10:00	6	2	6	5	19
	11:00	6	6	6	5	23
	12:00	4	5	6	8	23
	13:00	10	5	9	7	31
	14:00	7	7	5	7	26
	15:00	7	8	4	11	30
	16:00	12	15	10	7	44
	17:00	7	18	10	5	40
	18:00	9	12	9	10	40
	19:00	10	4	2	5	21
	20:00	6	9	4	11	30
	21:00	2	3	3	3	11
	22:00	6	2	5	4	17
	23:00	2	2	1	1	6

Day Total : 437

AM Total :	118 (27.0%)	Peak AM Hour : 10:30 =	23 (5.3%)	Peak AM Factor : 0.821	Average Period :	4.6
PM Total :	319 (73.0%)	Peak PM Hour : 15:45 =	48 (11.0%)	Peak PM Factor : 0.667	Average Hour :	18.2

Basic Volume Summary: Lafayette Dr - North Location

Grand Total For Data From: 00:00 - 02/25/2015 To: 23:59 - 02/26/2015

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	791 (47.6%)	2.00	396	4.1	16.5	239 (30.2%)	552 (69.8%)
#3.	870 (52.4%)	2.00	435	4.5	18.1	248 (28.5%)	622 (71.5%)
ALL	1661	2.00	831	8.6	34.6	487 (29.3%)	1174 (70.7%)

Lane	Peak AM Hour	Date	Peak AM Factor	Peak PM Hour	Date	Peak PM Factor
#1.	11:00 =	26 02/25/2015	0.722	16:15 =	43 02/26/2015	0.768
#3.	07:45 =	29 02/25/2015	0.659	15:45 =	48 02/26/2015	0.667

APPENDIX B

SPEED DATA

Special Speed Study Report: Lafayette Dr - South Location

Station ID : Lafayette Dr - South Location

Info Line 1 : North of Comanche Rd
 Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : SOUTH.DB

Last Connected Device Type : Apollo

Version Number : 1.51

Serial Number :

Number of Lanes : 1

Posted Speed Limit :

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 - 02/25/2015 To: 23:59 - 02/26/2015

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	
02/25/15	00:00	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
Wed	01:00	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	02:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	05:00	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	06:00	5	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8
	07:00	12	4	1	3	0	0	0	0	0	0	0	0	0	0	0	0	20
	08:00	7	13	5	3	0	0	0	0	0	0	0	0	0	0	0	0	28
	09:00	7	6	6	2	0	0	0	0	0	0	0	0	0	0	0	0	21
	10:00	9	7	3	2	0	1	0	0	0	0	0	0	0	0	0	0	22
	11:00	5	12	10	1	2	0	0	0	0	0	0	0	0	0	0	0	30
	12:00	8	10	11	2	1	0	0	0	0	0	0	0	0	0	0	0	32
	13:00	10	4	10	5	1	0	0	0	0	0	0	0	0	0	0	0	30
	14:00	12	8	11	4	0	0	0	0	0	0	0	0	0	0	0	0	35
	15:00	11	4	7	1	0	0	0	0	0	0	0	0	0	0	0	0	23
	16:00	14	12	15	3	0	0	0	0	0	0	0	0	0	0	0	0	44
	17:00	13	9	6	3	1	0	0	0	0	0	0	0	0	0	0	0	32
	18:00	17	10	8	0	0	0	0	0	0	0	0	0	0	0	0	0	35
	19:00	12	9	8	4	0	0	0	0	0	0	0	0	0	0	0	0	33
	20:00	10	7	3	4	0	0	0	0	0	0	0	0	0	0	0	0	24
	21:00	5	9	7	1	0	0	0	0	0	0	0	0	0	0	0	0	22
	22:00	5	7	4	1	0	0	0	0	0	0	0	0	0	0	0	0	17
	23:00	11	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	17
Daily Total :		179	144	122	41	5	1	0	0	0	0	0	0	0	0	0	0	492
Percent :		36%	29%	25%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		36%	66%	90%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		7	6	5	2	0	0	0	0	0	0	0	0	0	0	0	0	20

Average Speed 20.2 mph 50% Speed : 22.4 mph 67% Speed : 25.4 mph 85% Speed : 28.6 mph
 10mph Pace: 20.1 - 30.0 (54.1%)

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			
02/26/15	00:00	4	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Thu	01:00	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	02:00	1	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	05:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	06:00	6	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	07:00	7	7	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	08:00	13	3	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	24
	09:00	12	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19
	10:00	8	9	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	26
	11:00	13	8	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	27
	12:00	15	6	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	29
	13:00	11	9	4	6	1	0	0	0	0	0	0	0	0	0	0	0	0	31
	14:00	15	6	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
	15:00	11	4	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	25
	16:00	13	13	9	7	0	0	0	0	0	0	0	0	0	0	0	0	0	42
	17:00	20	15	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	44
	18:00	17	13	7	1	1	0	0	0	0	0	0	0	0	0	0	0	0	39
	19:00	10	17	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32
	20:00	11	8	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24
	21:00	5	9	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18
	22:00	3	8	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	18
	23:00	5	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9
Daily Total :		207	148	87	38	7	0	0	0	0	0	0	0	0	0	0	0	0	487
Percent :		43%	30%	18%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		43%	73%	91%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		9	6	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	21

Average Speed	19.0 mph	50% Speed :	21.4 mph	67% Speed :	23.9 mph	85% Speed :	28.1 mph
				10mph Pace:	20.1 - 30.0 (48.3%)		

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 - 02/25/2015 To: 23:59 - 02/26/2015

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	
02/25/15	00:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wed	01:00	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	02:00	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
	03:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	04:00	2	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	5
	05:00	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	06:00	3	5	5	3	0	0	0	0	0	0	0	0	0	0	0	0	16
	07:00	18	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	38
	08:00	13	14	8	1	0	0	0	0	0	0	0	0	0	0	0	0	36
	09:00	5	8	4	1	1	0	0	0	0	0	0	0	0	0	0	0	19
	10:00	9	10	5	2	0	0	0	0	0	0	0	0	0	0	0	0	26
	11:00	16	10	8	4	1	0	0	0	0	0	0	0	0	0	0	0	39
	12:00	6	10	6	3	0	0	0	0	0	0	0	0	0	0	0	0	25
	13:00	11	11	3	1	1	0	0	0	0	0	0	0	0	0	0	0	27
	14:00	11	11	4	2	0	0	0	0	0	0	0	0	0	0	0	0	28
	15:00	18	12	8	3	1	0	0	0	0	0	0	0	0	0	0	0	42
	16:00	16	18	5	0	1	0	0	0	0	0	0	0	0	0	0	0	40
	17:00	9	13	8	2	0	0	0	0	0	0	1	0	0	0	0	0	33
	18:00	12	9	4	0	1	0	0	0	0	0	0	0	0	0	0	0	26
	19:00	22	10	3	1	1	0	0	0	0	0	0	0	0	0	0	0	37
	20:00	10	9	1	1	1	0	0	0	0	0	0	0	0	0	0	0	22
	21:00	4	6	6	2	1	0	0	0	0	0	0	0	0	0	0	0	19
	22:00	3	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	23:00	5	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	14
Daily Total :		197	181	100	28	11	0	0	0	0	0	1	0	0	0	0	0	518
Percent :		38%	35%	19%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cum. Percent :		38%	73%	92%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		8	8	4	1	0	0	0	0	0	0	0	0	0	0	0	0	21

Average Speed 19.6 mph	50% Speed : 21.9 mph	67% Speed : 24.0 mph	85% Speed : 27.9 mph
10mph Pace: 20.1 - 30.0 (54.2%)			

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	
02/26/15	00:00	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3
Thu	01:00	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	02:00	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	05:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	06:00	6	4	5	2	0	0	0	0	0	0	0	0	0	0	0	0	17
	07:00	6	10	8	0	0	0	0	0	0	0	0	0	0	0	0	0	24
	08:00	8	5	9	3	0	0	0	0	0	0	0	0	0	0	0	0	25
	09:00	14	8	4	3	0	0	0	0	0	0	0	0	0	0	0	0	29
	10:00	10	9	7	1	0	0	0	0	0	0	0	0	0	0	0	0	27
	11:00	17	6	4	1	0	0	0	0	0	0	0	0	0	0	0	0	28
	12:00	16	9	4	1	1	0	0	0	0	0	0	0	0	0	0	0	31
	13:00	13	16	5	2	0	0	1	0	0	0	0	0	0	0	0	0	37
	14:00	19	5	5	1	0	0	0	0	0	0	0	0	0	0	0	0	30
	15:00	11	6	4	1	1	0	0	0	0	0	0	0	0	0	0	0	23
	16:00	23	21	12	0	0	0	0	0	0	0	0	0	0	0	0	0	56
	17:00	22	16	6	2	0	0	0	0	0	0	0	0	0	0	0	0	46
	18:00	17	18	8	1	0	0	0	0	0	0	0	0	0	0	0	0	44
	19:00	15	5	1	3	0	0	0	0	0	0	0	0	0	0	0	0	24
	20:00	18	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	27
	21:00	7	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	17
	22:00	7	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	17
	23:00	4	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
Daily Total :		238	163	100	24	2	0	1	0	0	0	0	0	0	0	0	0	528
Percent :		45%	31%	19%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		45%	76%	95%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		10	7	4	1	0	0	0	0	0	0	0	0	0	0	0	0	22

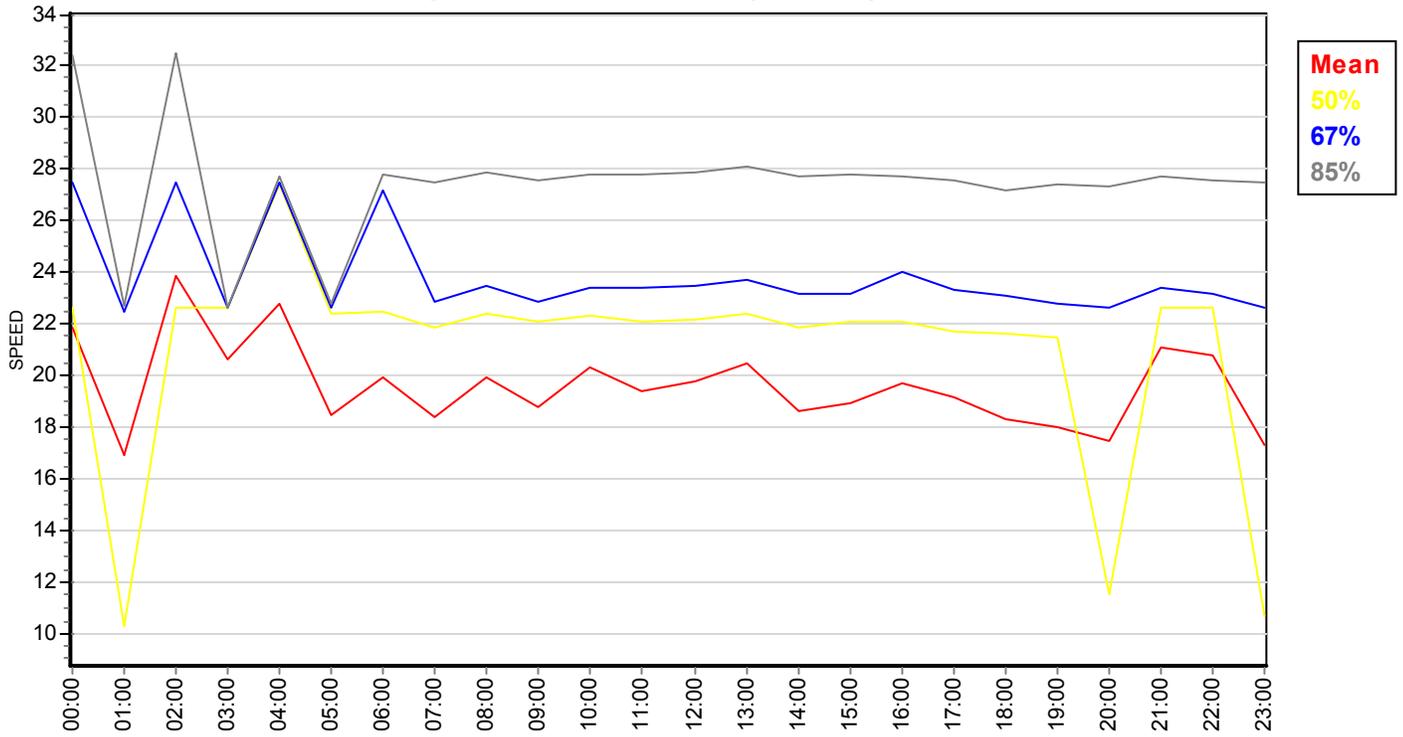
Average Speed	18.3 mph	50% Speed :	20.9 mph	67% Speed :	23.5 mph	85% Speed :	27.4 mph
				10mph Pace:	20.1 - 30.0	(49.8%)	

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16		
	0 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -			
<i>Date</i>	19.9	24.9	29.9	34.9	39.9	44.9	49.9	54.9	59.9	64.9	69.9	74.9	79.9	84.9	89.9	<i>Other</i>	<i>Total</i>	

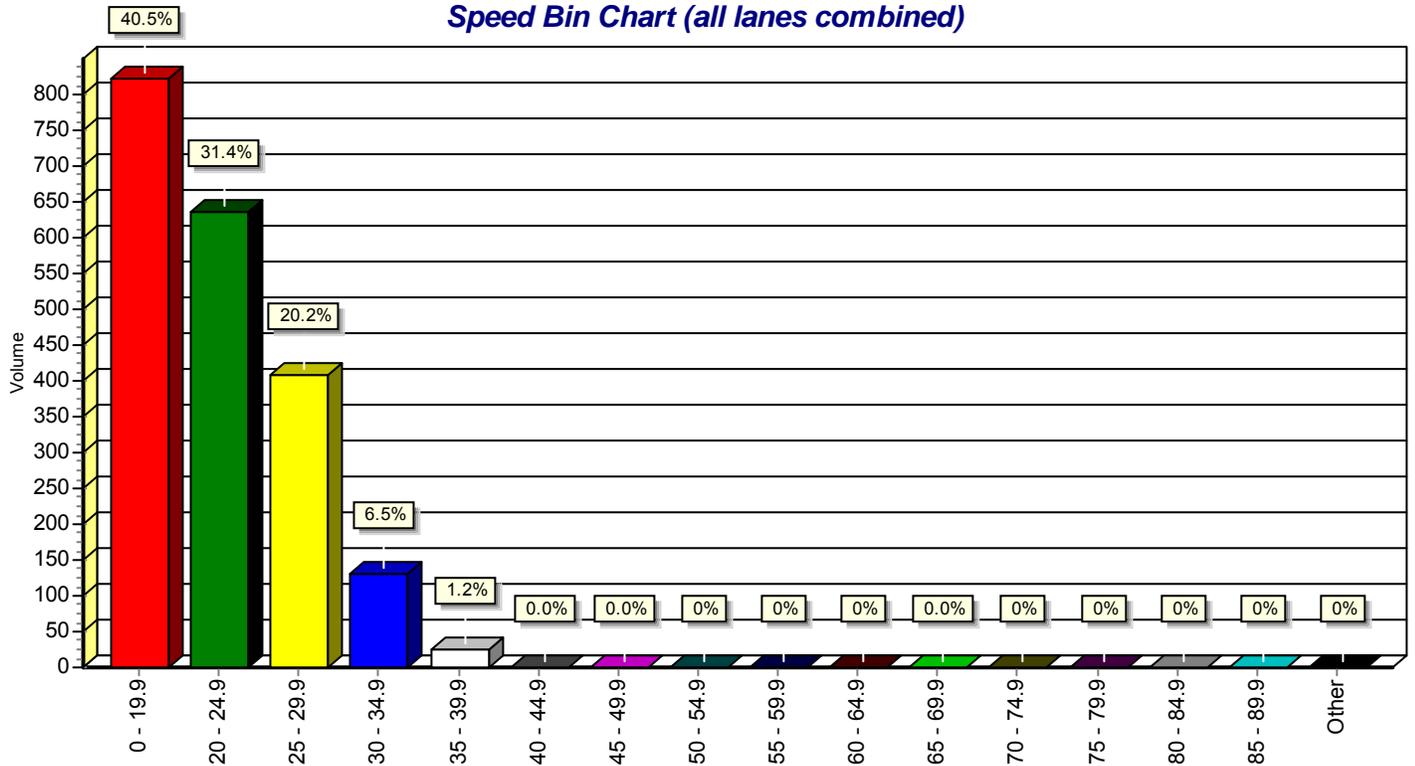
Special Speed Study Summary: Lafayette Dr - South Location

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:	386	292	209	79	12	1	0	0	0	0	0	0	0	0	0	0	979
Percent :	39%	30%	21%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	39%	69%	91%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	8	6	4	2	0	0	0	0	0	0	0	0	0	0	0	0	20
ADT = 489	Average Speed 19.6 mph				50% Speed : 21.9 mph				67% Speed : 24.5 mph				85% Speed : 28.5 mph				
10mph Pace: 20.1 - 30.0 (51.3%)																	
Grand Total #3:	435	344	200	52	13	0	1	0	0	0	1	0	0	0	0	0	1046
Percent :	42%	33%	19%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	42%	74%	94%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	9	7	4	1	0	0	0	0	0	0	0	0	0	0	0	0	21
ADT = 523	Average Speed 19.0 mph				50% Speed : 21.4 mph				67% Speed : 23.8 mph				85% Speed : 27.7 mph				
10mph Pace: 19.9 - 29.8 (52.1%)																	
Comb. Total :	821	636	409	131	25	1	1	0	0	0	1	0	0	0	0	0	2025
Percent :	41%	31%	20%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	41%	72%	92%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	17	13	9	3	1	0	0	0	0	0	0	0	0	0	0	0	43
ADT = 1012	Average Speed 19.3 mph				50% Speed : 21.6 mph				67% Speed : 24.2 mph				85% Speed : 28.1 mph				
10mph Pace: 20.1 - 30.0 (51.7%)																	

Speed Percent vs. Time (all lanes)



Speed Bin Chart (all lanes combined)



Special Speed Study Report: Lafayette Dr - North Location

Station ID : Lafayette Dr - North Location

Info Line 1 : North of Comanche Rd
 Info Line 2 : Albuquerque

GPS Lat/Lon :
 DB File : NORTH.DB

Last Connected Device Type : Apollo
 Version Number : 1.51
 Serial Number : 14404

Number of Lanes : 1
 Posted Speed Limit :

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 - 02/25/2015 To: 23:59 - 02/26/2015

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	
02/25/15	00:00	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Wed	01:00	0	0	0	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	05:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	06:00	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	07:00	11	7	3	2	0	0	0	0	0	0	0	0	0	0	0	0	23
	08:00	10	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	21
	09:00	8	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	18
	10:00	5	7	3	1	1	0	0	0	0	0	0	0	0	0	0	0	17
	11:00	9	9	6	1	1	0	0	0	0	0	0	0	0	0	0	0	26
	12:00	7	12	4	2	0	0	0	0	0	0	0	0	0	0	0	0	25
	13:00	11	9	7	2	1	0	0	0	0	0	0	0	0	0	0	0	30
	14:00	17	6	4	2	0	0	0	0	0	0	0	0	0	0	0	0	29
	15:00	11	11	5	1	0	0	0	0	0	0	0	0	0	0	0	0	28
	16:00	13	12	5	1	0	0	0	0	0	0	0	0	0	0	0	0	31
	17:00	7	10	4	2	1	0	0	0	0	0	0	0	0	0	0	0	24
	18:00	5	11	6	5	0	0	0	0	0	0	0	0	0	0	0	0	27
	19:00	12	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	25
	20:00	5	7	3	3	0	0	0	0	0	0	0	0	0	0	0	0	18
	21:00	7	11	3	0	0	0	0	0	0	0	0	0	0	0	0	0	21
	22:00	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	23:00	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
Daily Total :		156	149	68	23	4	0	0	0	0	0	0	0	0	0	0	0	400
Percent :		39%	37%	17%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		39%	76%	93%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		7	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	17

Average Speed 19.2 mph 50% Speed : 21.6 mph 67% Speed : 23.7 mph 85% Speed : 27.6 mph
 10mph Pace: 20.1 - 30.0 (54.3%)

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	
02/26/15	00:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Thu	01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	02:00	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	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	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	06:00	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	07:00	6	4	6	0	1	0	0	0	0	0	0	0	0	0	0	0	17
	08:00	8	9	2	2	0	0	0	0	0	0	0	0	0	0	0	0	21
	09:00	8	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	10:00	8	8	5	3	0	0	0	0	0	0	0	0	0	0	0	0	24
	11:00	7	4	5	3	1	0	0	0	0	0	0	0	0	0	0	0	20
	12:00	8	11	2	1	0	0	0	0	0	0	0	0	0	0	0	0	22
	13:00	9	9	4	2	1	0	0	0	0	0	0	0	0	0	0	0	25
	14:00	17	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	26
	15:00	6	7	3	3	0	0	0	0	0	0	0	0	0	0	0	0	19
	16:00	17	13	4	2	1	0	0	0	0	0	0	0	0	0	0	0	37
	17:00	16	11	7	0	0	0	0	0	0	0	0	0	0	0	0	0	34
	18:00	10	14	8	1	0	0	0	0	0	0	0	0	0	0	0	0	33
	19:00	8	15	2	1	0	0	0	0	0	0	0	0	0	0	0	0	26
	20:00	5	9	6	0	0	0	0	0	0	0	0	0	0	0	0	0	20
	21:00	3	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	22:00	6	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	13
	23:00	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
Daily Total :		157	138	72	20	4	0	0	0	0	0	0	0	0	0	0	0	391
Percent :		40%	35%	18%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		40%	75%	94%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		7	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	17

Average Speed	19.0 mph	50% Speed :	21.6 mph	67% Speed :	23.6 mph	85% Speed :	27.6 mph
				10mph Pace:	20.1 - 30.0 (53.7%)		

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 - 02/25/2015 To: 23:59 - 02/26/2015

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	
02/25/15	00:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wed	01:00	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	02:00	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2
	03:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	04:00	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	06:00	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	8
	07:00	11	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	18
	08:00	17	5	4	2	0	0	0	0	0	0	0	0	0	0	0	0	28
	09:00	5	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15
	10:00	8	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	20
	11:00	13	8	5	2	0	0	0	0	0	0	0	0	0	0	0	0	28
	12:00	11	9	4	1	0	0	0	0	0	0	0	0	0	0	0	0	25
	13:00	10	11	3	0	1	0	0	0	0	0	0	0	0	0	0	0	25
	14:00	13	12	2	1	0	0	0	0	0	0	0	0	0	0	0	0	28
	15:00	17	18	4	3	0	0	0	0	0	0	0	0	0	0	0	0	42
	16:00	21	12	4	1	0	0	0	0	0	0	0	0	0	0	0	0	38
	17:00	12	9	6	1	0	0	0	0	0	0	0	0	0	0	0	0	28
	18:00	6	12	5	1	0	0	0	0	0	0	0	0	0	0	0	0	24
	19:00	17	8	3	1	0	0	0	0	0	0	0	0	0	0	0	0	29
	20:00	14	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	21
	21:00	10	8	1	1	1	0	0	0	0	0	0	0	0	0	0	0	21
	22:00	3	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	9
	23:00	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
Daily Total :		204	154	54	17	3	0	0	0	0	0	0	0	0	0	0	1	433
Percent :		47%	36%	12%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		47%	83%	95%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		9	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	18

Average Speed 17.6 mph	50% Speed : 20.5 mph	67% Speed : 22.8 mph	85% Speed : 26.5 mph
10mph Pace: 20.1 - 30.0 (48.0%)			

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	
02/26/15	00:00	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Thu	01:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	02:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	05:00	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	06:00	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	07:00	10	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	15
	08:00	9	7	3	0	1	0	0	0	0	0	0	0	0	0	0	0	20
	09:00	7	5	1	4	0	0	0	0	0	0	0	0	0	0	0	0	17
	10:00	7	6	3	3	0	0	0	0	0	0	0	0	0	0	0	0	19
	11:00	10	7	5	1	0	0	0	0	0	0	0	0	0	0	0	0	23
	12:00	16	3	1	0	3	0	0	0	0	0	0	0	0	0	0	0	23
	13:00	16	11	3	0	0	1	0	0	0	0	0	0	0	0	0	0	31
	14:00	11	10	4	1	0	0	0	0	0	0	0	0	0	0	0	0	26
	15:00	13	8	8	1	0	0	0	0	0	0	0	0	0	0	0	0	30
	16:00	20	14	10	0	0	0	0	0	0	0	0	0	0	0	0	0	44
	17:00	20	15	4	1	0	0	0	0	0	0	0	0	0	0	0	0	40
	18:00	15	20	4	1	0	0	0	0	0	0	0	0	0	0	0	0	40
	19:00	9	7	5	0	0	0	0	0	0	0	0	0	0	0	0	0	21
	20:00	14	13	2	1	0	0	0	0	0	0	0	0	0	0	0	0	30
	21:00	4	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	22:00	10	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	17
	23:00	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
Daily Total :		206	147	66	13	4	1	0	0	0	0	0	0	0	0	0	0	437
Percent :		47%	34%	15%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		47%	81%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		9	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	19

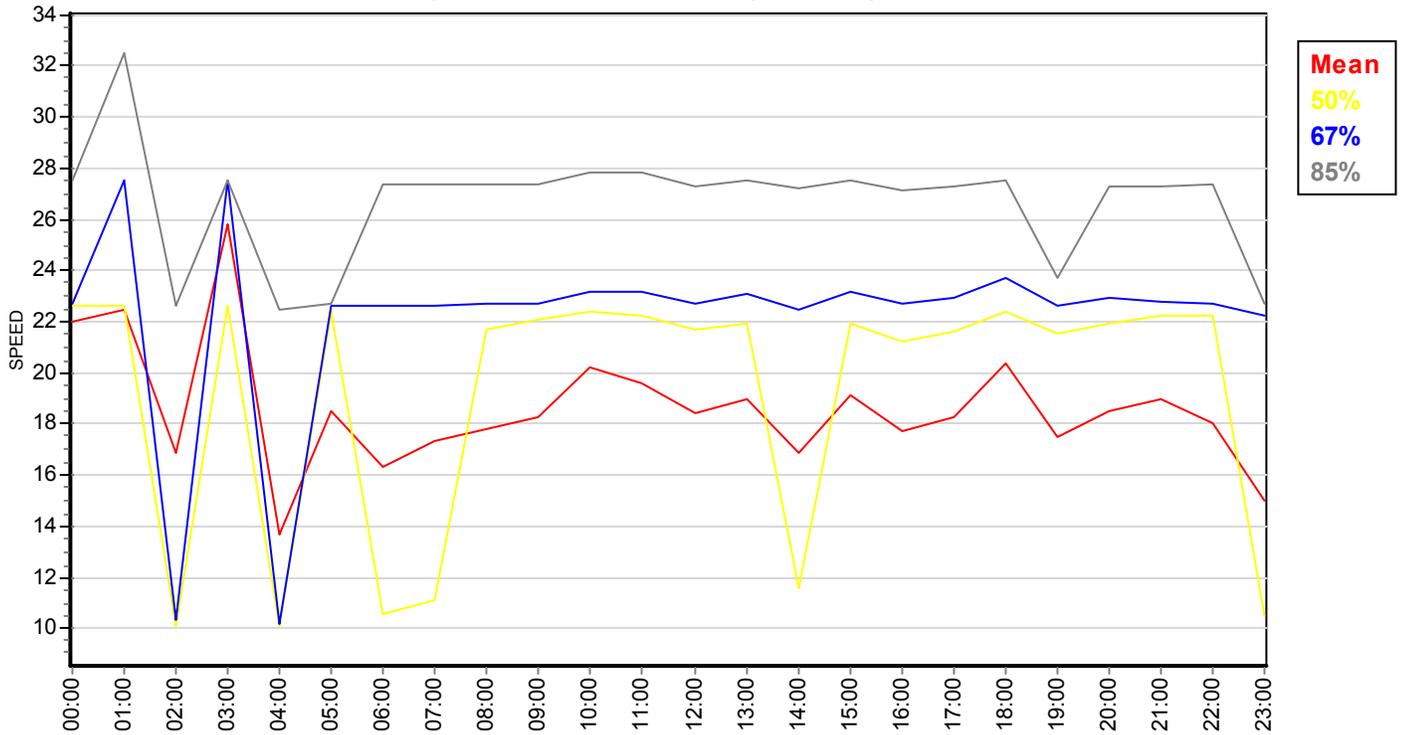
Average Speed	17.8 mph	50% Speed :	20.6 mph	67% Speed :	22.9 mph	85% Speed :	26.6 mph
				10mph Pace:	20.1 - 30.0 (48.7%)		

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16		
	0 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -			
Date	Time	19.9	24.9	29.9	34.9	39.9	44.9	49.9	54.9	59.9	64.9	69.9	74.9	79.9	84.9	89.9	Other	Total

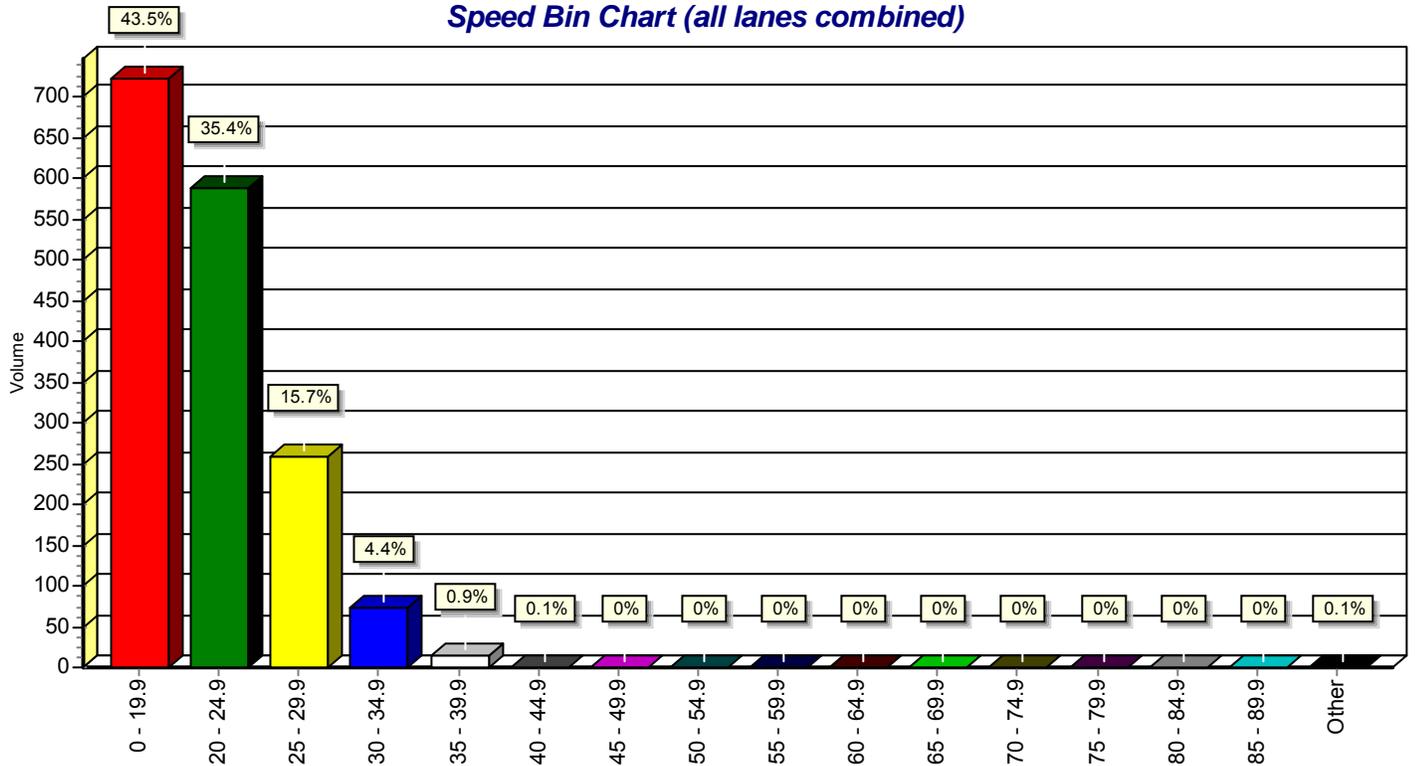
Special Speed Study Summary: Lafayette Dr - North Location

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	
	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	Total
Grand Total #1:	313	287	140	43	8	0	0	0	0	0	0	0	0	0	0	0	791
Percent :	40%	36%	18%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	40%	76%	94%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	7	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	17
ADT = 395	Average Speed 19.1 mph 50% Speed : 21.6 mph 67% Speed : 23.7 mph 85% Speed : 27.6 mph 10mph Pace: 20.1 - 30.0 (54.0%)																
Grand Total #3:	410	301	120	30	7	1	0	0	0	0	0	0	0	0	0	1	870
Percent :	47%	35%	14%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	47%	82%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	9	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	19
ADT = 435	Average Speed 17.7 mph 50% Speed : 20.6 mph 67% Speed : 22.9 mph 85% Speed : 26.5 mph 10mph Pace: 19.9 - 29.8 (48.5%)																
Comb. Total :	723	588	260	73	15	1	0	0	0	0	0	0	0	0	0	1	1661
Percent :	44%	35%	16%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	44%	79%	95%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	15	12	5	2	0	0	0	0	0	0	0	0	0	0	0	0	34
ADT = 830	Average Speed 18.4 mph 50% Speed : 21.1 mph 67% Speed : 23.3 mph 85% Speed : 27.0 mph 10mph Pace: 19.9 - 29.8 (51.2%)																

Speed Percent vs. Time (all lanes)



Speed Bin Chart (all lanes combined)



APPENDIX C

U.S. LIMITS OUTPUT DATA

USLIMITS2 Data Output

Road Section in Developed Area

Basic Project Information

User Name - EHawton
Project Name - Lafayette Drive Speed Study
Project Number - 7852.07
Project Date - 03-27-2015
State - New Mexico
County - Bernalillo County
City - Albuquerque city
Route Type - Road Section in Developed Area
Route Name - Lafayette Drive
Termini From - Comanche Road
Termini To - Delamar Avenue
Route Status - Existing
Description - Speed study of Lafayette Drive from COManche Road to Delamar Avenue

Roadway Information

85th Percentile Speed - 23 mph
50th Percentile Speed - 18 mph
Section Length - 0.2 mile(s)
Statutory Speed Limit - 25 mile(s)
AADT - 900
Adverse Alignment - No
One-Way Street - no
Divided/Undivided - Undivided
Number of Through Lanes - 2
Area Type - Residential-Subdivision
Number of Driveways - 23
Number of Signals - 0
On Street Parking and Usage - High
Pedestrian / Bicyclist Activity - Not High

Recommended Speed Limit: 20

Note: Crash data were not entered for this project. A comprehensive crash study is a critical component of any traffic engineering study. We suggest that you repeat this process when crash data become available.