MARY ELLEN STREET SPEED STUDY

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Mary Ellen Street
Speed Study
Final Report

Albuquerque, New Mexico

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City of Albuquerque

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INTRODUCTION

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

1.A. PROJECT PURPOSE

A speed study on Mary Ellen Street from Claremont Avenue to Los Arboles Road was conducted to determine the following:

- Evaluate the 85th percentile speed along Mary Ellen Street at two (2) locations;
- Calculate average and daily peak hour traffic volumes along Mary Ellen 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 0.18 (950.40 LF) mile section of Mary Ellen Street from Claremont Avenue to Los Arboles Road. Figure 1.B.1. below displays the study location and Figure 1.B.2. on page 2 displays the project limits.

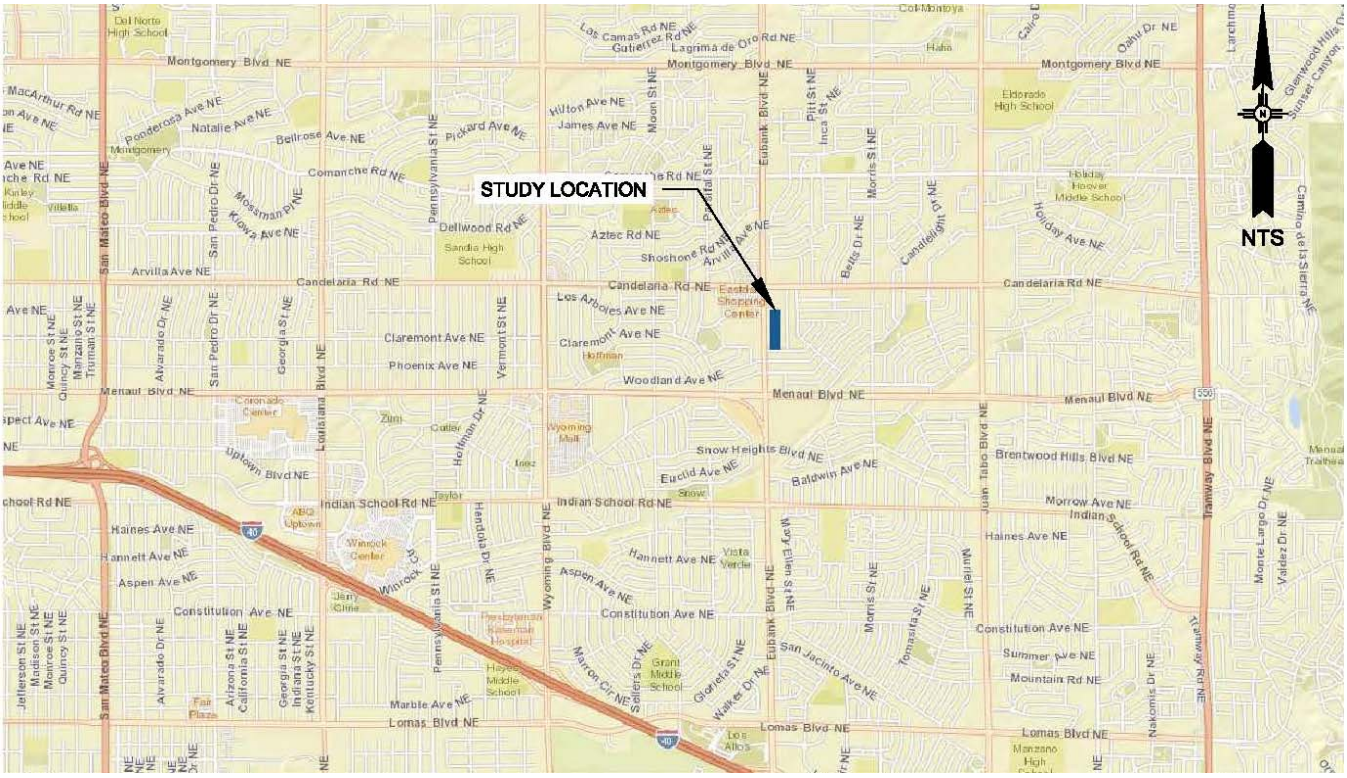


FIGURE 1.B.1.
STUDY LOCATION

FIGURE 1.B.2.
STUDY LIMITS

Date: Feb 08, 2018 - 1:35pm tay Layout: PROJECT LIMITS
Drawing Name: P:\7-COA 2015 On-Call Traffic and NTMP (7424542)\Task #6.8 - Mary Ellen Str. NE (Los Arboles to Claremont)\COA 6254.6.8\Studies\CADD\Mary Ellen Street Exhibits.dwg

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
- The maximize public antagonism toward law enforcement, since the perception is that the police are enforcing a “speed trap”
- The 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 fasted 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 = # 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)÷2 = 112÷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:

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

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.

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

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:

- Mary Ellen Street North - Near Los Arboles Road;
- Mary Ellen Street South - Near Claremont Avenue.

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 Mary Ellen Street. Within the study limits there are approximately 30 driveways that provide access to residential homes and at Los Arboles Road and Mary Ellen Street is a 90-degree horizontal curve. Because there is no posted speed limit sign within the project limits, it is speculated that the current speed limit is 25 mph based on City Ordinance.

FIGURE 2.1.
COUNT LOCATIONS

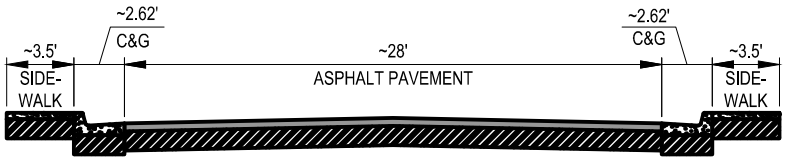


FIGURE 2.2.
EXISTING MARY ELLEN STREET TYPICAL SECTION

Date: Feb 08, 2018 - 1:36pm tay Layout: EXISTING
Drawing Name: P:\7-COA 2015 On-Call Traffic and NTMP (7424542)\Task #6.8 - Mary Ellen Str. NE (Los Arboles to Claremont)\COA 6254.6.8\Studies\CADD\Mary Ellen Street Exhibits.dwg

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.			
Mary Ellen Street ADT			
Count Location	NB	SB	ADT
Mary Ellen Street North	87	142	229
Mary Ellen Street South	87	139	226
Average	87.0	140.5	227.5

The Mary Ellen Street study area directional ADT ranges from 87 to 142 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.			
Mary Ellen Street Peak Hour Traffic Volumes (vph)			
Count Location	Peak Hour	Northbound (Peak Hour)	Southbound (Peak Hour)
Mary Ellen Street North	AM Peak	10 (11:00 AM - 12:00 PM)	11 (10:45 AM - 11:45 AM)
	PM Peak	10 (8:00 PM - 9:00 PM)	23 (5:00 PM - 6:00 PM)
Mary Ellen Street South	AM Peak	7 (10:00 AM - 11:00 AM)	10 (10:45 AM - 11:45 AM)
	PM Peak	12 (3:45 PM - 4:45 PM)	22 (5:00 PM - 6:00 PM)

The Mary Ellen Street study area peak hour traffic volumes range from 7 to 23 vehicles per hour.

3.C. SPEED STUDY RESULTS

The results of the speed study are displayed below in Table 3.C.1. through 3.C.2.

Table 3.C.1.			
Mary Ellen Street North Speed Study			
Speed	NB	SB	Total
Average	18.1	19.0	18.7
10 mph Pace	7.5 - 17.4 (47.1%)	20.1 - 30.0 (53.9%)	20.1 - 30.0 (51.1%)
50th Percentile	21.3	21.7	21.3
67th Percentile	23.1	23.5	23.6
85th Percentile	27.5	27.5	27.5

Table 3.C.2.			
Mary Ellen Street South Speed Study			
Speed	NB	SB	Total
Average	16.0	18.8	17.8
10 mph Pace	7.1 - 17.0 (59.4%)	20.1 - 30.0 (54.7%)	20.1 - 30.0 (48.8%)
50th Percentile	12.1	21.6	20.7
67th Percentile	22.1	23.4	23.1
85th Percentile	27.0	27.3	26.8

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 Mary Ellen Street, the speculated speed limit is 25 mph, roadway conditions are consistent; controlled access, satisfactory pavement conditions, two travel lanes, and on-street parking, but at the north end of the study area, Mary Ellen Street turns 90 degrees into Los Arboles Road. Table 3.C.3. displays that 23 percent of the total ADT of the two count locations recorded speeds greater than 25 mph.

Table 3.C.3.							
Mary Ellen Street ADT ≥ 25 mph							
Speed (mph)	0 - 19.9 MPH		20 - 24.9 MPH		≥ 25 MPH		Avg. ADT
Mary Ellen Street North	99	43%	73	32%	57	25%	229
Mary Ellen Street South	103.5	48%	67	31%	46.5	21%	217
Total	202.5	45%	140	31%	103.5	23%	446

3.D. CRASH DATA

Crash data was requested from the Albuquerque Police Department for the most recent 3 years. The crash data requested showed there were 0 recorded crashes within the study area from 2014 to 2017.

4. CONCLUSION

After evaluating the volume and speed data within the project area, it is concluded that 23% of the traffic is exceeding 25 mph and the 85th percentile speed of traffic is not exceeding 25 mph by 5 mph or more at the count locations. 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:

Table 4.1.	
COA NTMP Traffic Calming Measures	
Description	Warranted?
Reported crashes in the past 3 years that could be corrected with traffic calming	No
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	No

Based on the data collected, Mary Ellen Street DOES NOT meet any of the criteria outlined to warrant traffic calming.

Appendices

- Appendix A – Volume and Speed Data
- Appendix B – Neighborhood Traffic Calming Petition Form

Appendix A

Special Speed Study Report: Mary Ellen (north)

Station ID : Mary Ellen (north)
Info Line 1 : South of Los Arboles
Info Line 2 : Albuquerque
GPS Lat/Lon :
DB File : ME NORTH.DB

Last Connected Device Type : Apollo
Version Number : 1.62
Serial Number : 24087

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 - 06/13/2017 To: 23:59 - 06/14/2017

Date	Time	#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
06/13/17	00:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Tue	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02:00	0	1	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	06:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	07:00	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	08:00	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	09:00	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	10:00	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	11:00	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	12:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	13:00	2	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	14:00	5	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	15:00	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	16:00	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	17:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	18:00	3	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	7
	19:00	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	20:00	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	21:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Daily Total :		44	23	19	5	0	0	0	0	0	0	0	0	0	0	0	0	91
Percent :		48%	25%	21%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		48%	74%	95%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4

Average Speed 18.0 mph 50% Speed : 21.9 mph 67% Speed : 22.8 mph 85% Speed : 27.5 mph
10mph Pace: 8.7 - 18.6 (48.4%)

Date	Time	#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
06/14/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wed	01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	02:00	1	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	06:00	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5
	07:00	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	08:00	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	09:00	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	10:00	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	11:00	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	12:00	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	13:00	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	14:00	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	15:00	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	16:00	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	17:00	2	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	7
	18:00	4	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	19:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	21:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	22:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	23:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Daily Total :		38	26	13	5	1	0	0	0	0	0	0	0	0	0	0	0	83
Percent :		46%	31%	16%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		46%	77%	93%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4

Average Speed 18.3 mph 50% Speed : 21.9 mph 67% Speed : 22.8 mph 85% Speed : 27.5 mph
10mph Pace: 21.7 - 31.6 (47.0%)

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 - 06/13/2017 To: 23:59 - 06/14/2017

Date	Time	#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
06/13/17	00:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Tue	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	03:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	06:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	07:00	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	08:00	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	09:00	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	10:00	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	11:00	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	12:00	5	5	2	0	0	1	0	0	0	0	0	0	0	0	0	0	13
	13:00	7	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	14:00	4	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	15:00	5	4	1	2	0	0	0	0	0	0	0	0	0	0	0	0	12
	16:00	2	5	3	2	0	0	0	0	0	0	0	0	0	0	0	0	12
	17:00	4	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	18:00	4	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7
	19:00	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	20:00	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	21:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	22:00	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Daily Total :		66	51	24	4	1	1	0	0	0	0	0	0	0	0	0	0	147
Percent :		45%	35%	16%	3%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		45%	80%	96%	99%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6

Average Speed 18.2 mph 50% Speed : 21.4 mph 67% Speed : 22.9 mph 85% Speed : 27.2 mph
10mph Pace: 20.9 - 30.8 (51.0%)

Date	Time	#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
06/14/17	00:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wed	01:00	0	0	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	06:00	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	07:00	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	08:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	09:00	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	10:00	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	11:00	4	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	7
	12:00	3	4	1	2	0	0	0	0	0	0	0	0	0	0	0	0	10
	13:00	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	14:00	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	15:00	4	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	16:00	7	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	15
	17:00	7	8	6	1	1	0	0	0	0	0	0	0	0	0	0	0	23
	18:00	2	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	10
	19:00	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	20:00	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	21:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	22:00	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
	23:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Daily Total :		50	46	32	6	3	0	0	0	0	0	0	0	0	0	0	0	137
Percent :		36%	34%	23%	4%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		36%	70%	93%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Average Speed 19.9 mph 50% Speed : 22.2 mph 67% Speed : 23.7 mph 85% Speed : 27.8 mph
10mph Pace: 21.1 - 31.0 (56.9%)

Date	Time	#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

Special Speed Study Summary: Mary Ellen (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:	82	49	32	10	1	0	0	0	0	0	0	0	0	0	0	0	174
Percent :	47%	28%	18%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	47%	75%	94%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4

ADT = 87

Average Speed 18.1 mph 50% Speed : 21.3 mph 67% Speed : 23.1 mph 85% Speed : 27.5 mph
10mph Pace: 7.5 - 17.4 (47.1%)

Grand Total #3:	116	97	56	10	4	1	0	0	0	0	0	0	0	0	0	0	284
Percent :	41%	34%	20%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	41%	75%	95%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5

ADT = 142

Average Speed 19.0 mph 50% Speed : 21.7 mph 67% Speed : 23.5 mph 85% Speed : 27.5 mph
10mph Pace: 20.1 - 30.0 (53.9%)

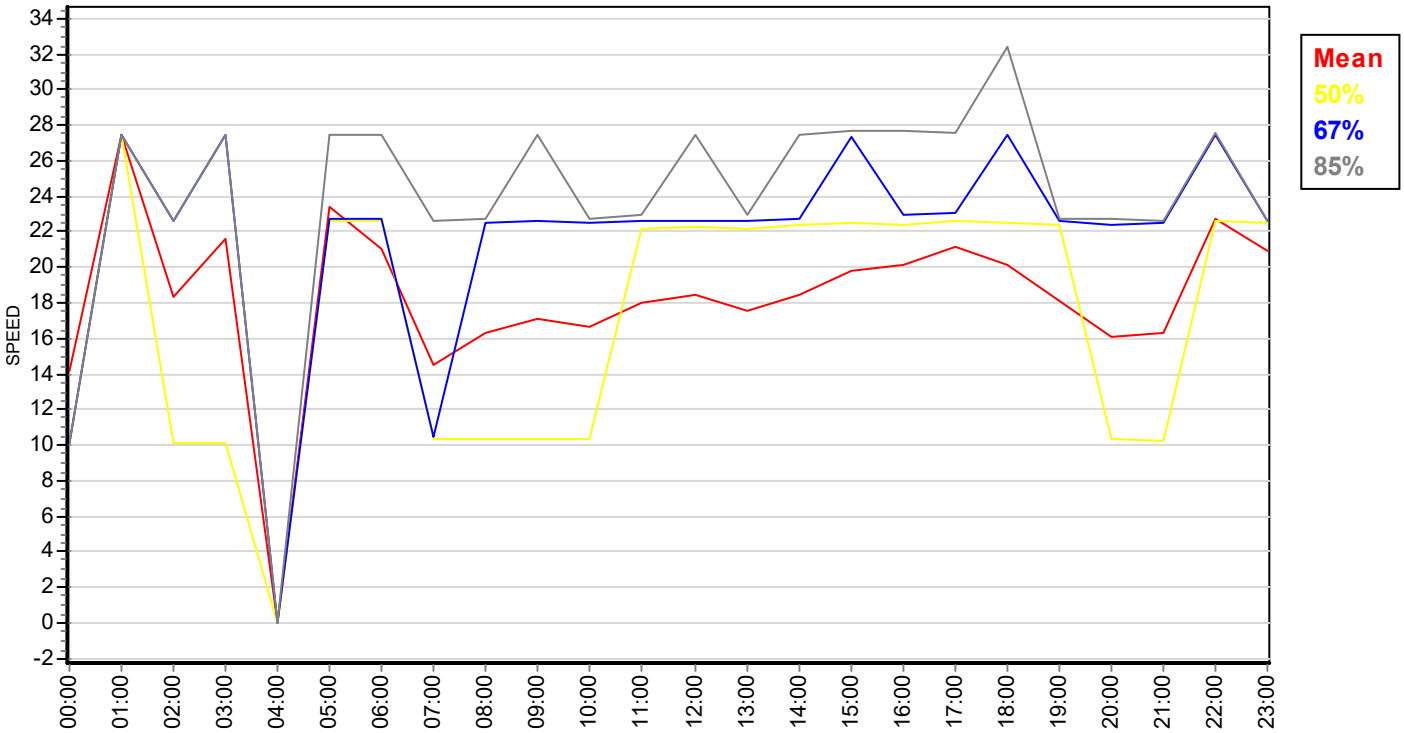
Comb. Total :	198	146	88	20	5	1	0	0	0	0	0	0	0	0	0	0	458
Percent :	43%	32%	19%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	43%	75%	94%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	9

ADT = 229

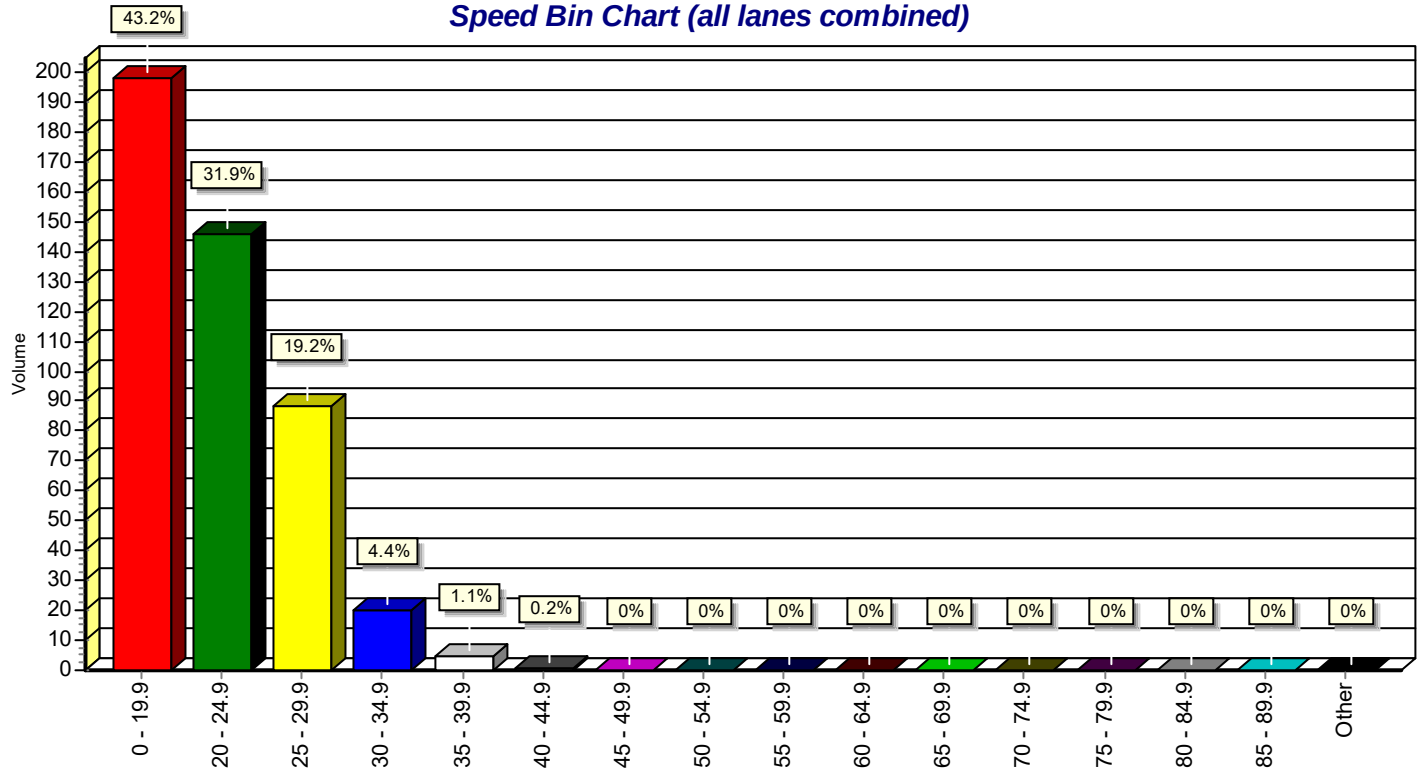
Average Speed 18.7 mph 50% Speed : 21.3 mph 67% Speed : 23.6 mph 85% Speed : 27.5 mph
10mph Pace: 20.1 - 30.0 (51.1%)

Mary Ellen (north) Charts For Data From: 00:00 - 06/13/2017 To: 23:59 - 06/14/2017

Speed Percent vs. Time (all lanes)



Speed Bin Chart (all lanes combined)



Special Speed Study Report: Mary Ellen (south)

Station ID : Mary Ellen (south)
Info Line 1 : North of Claremont
Info Line 2 : Albuquerque
GPS Lat/Lon :
DB File : ME SOOTH.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 - 06/13/2017 To: 23:59 - 06/14/2017

Date	Time	#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
06/13/17	00:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Tue	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02:00	0	1	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	06:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	07:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	08:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	09:00	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	10:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	11:00	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	13:00	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	14:00	8	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	15:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	16:00	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	17:00	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	18:00	4	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	19:00	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	20:00	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	21:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Daily Total :		46	21	13	1	0	0	0	0	0	0	0	0	0	0	0	0	81
Percent :		57%	26%	16%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		57%	83%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4

Average Speed 16.3 mph 50% Speed : 11.1 mph 67% Speed : 22.4 mph 85% Speed : 27.2 mph
10mph Pace: 8.6 - 18.5 (56.8%)

Date	Time	#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
06/14/17	00:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wed	01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	02:00	1	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	06:00	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	07:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	08:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	09:00	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	10:00	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	11:00	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	12:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	13:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	14:00	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	15:00	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	16:00	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	17:00	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	8
	18:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	19:00	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	20:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	21:00	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	22:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Daily Total :		49	17	11	2	0	0	0	0	0	0	0	0	0	0	0	0	79
Percent :		62%	22%	14%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		62%	84%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3

Average Speed 15.7 mph 50% Speed : 10.9 mph 67% Speed : 22.2 mph 85% Speed : 27.2 mph
10mph Pace: 8.5 - 18.4 (62.0%)

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 - 06/13/2017 To: 23:59 - 06/14/2017

Date	Time	#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
06/13/17	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	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	06:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	07:00	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	08:00	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	09:00	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	10:00	5	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	11:00	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	12:00	3	5	1	0	1	0	0	0	0	0	0	0	0	0	0	0	10
	13:00	3	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	14:00	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	15:00	5	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	10
	16:00	1	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	17:00	3	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	15
	18:00	4	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8
	19:00	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	20:00	9	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	21:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	22:00	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	23:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Daily Total :		58	55	24	3	1	0	0	0	0	0	0	0	0	0	0	0	141
Percent :		41%	39%	17%	2%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		41%	80%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Average Speed 18.5 mph 50% Speed : 21.6 mph 67% Speed : 23.1 mph 85% Speed : 27.2 mph
10mph Pace: 20.8 - 30.7 (56.0%)

Date	Time	#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
06/14/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wed	01:00	0	0	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	06:00	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	07:00	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	08:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	09:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	10:00	2	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	11:00	7	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	10
	12:00	4	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	13:00	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	14:00	5	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	15:00	7	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	13
	16:00	2	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	12
	17:00	8	4	8	1	1	0	0	0	0	0	0	0	0	0	0	0	22
	18:00	3	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	9
	19:00	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	20:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	22:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	23:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Daily Total :		54	41	30	6	2	0	0	0	0	0	0	0	0	0	0	0	133
Percent :		41%	31%	23%	5%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		41%	71%	94%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Average Speed 19.2 mph 50% Speed : 22.0 mph 67% Speed : 23.4 mph 85% Speed : 27.7 mph
10mph Pace: 21.3 - 31.2 (53.4%)

		#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
Date	Time																	

Special Speed Study Summary: Mary Ellen (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:	95	38	24	3	0	0	0	0	0	0	0	0	0	0	0	0	160
Percent :	59%	24%	15%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	59%	83%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4

ADT = 80

Average Speed 16.0 mph 50% Speed : 12.1 mph 67% Speed : 22.1 mph 85% Speed : 27.0 mph
10mph Pace: 7.1 - 17.0 (59.4%)

Grand Total #3:	112	96	54	9	3	0	0	0	0	0	0	0	0	0	0	0	274
Percent :	41%	35%	20%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	41%	76%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5

ADT = 137

Average Speed 18.8 mph 50% Speed : 21.6 mph 67% Speed : 23.4 mph 85% Speed : 27.3 mph
10mph Pace: 20.1 - 30.0 (54.7%)

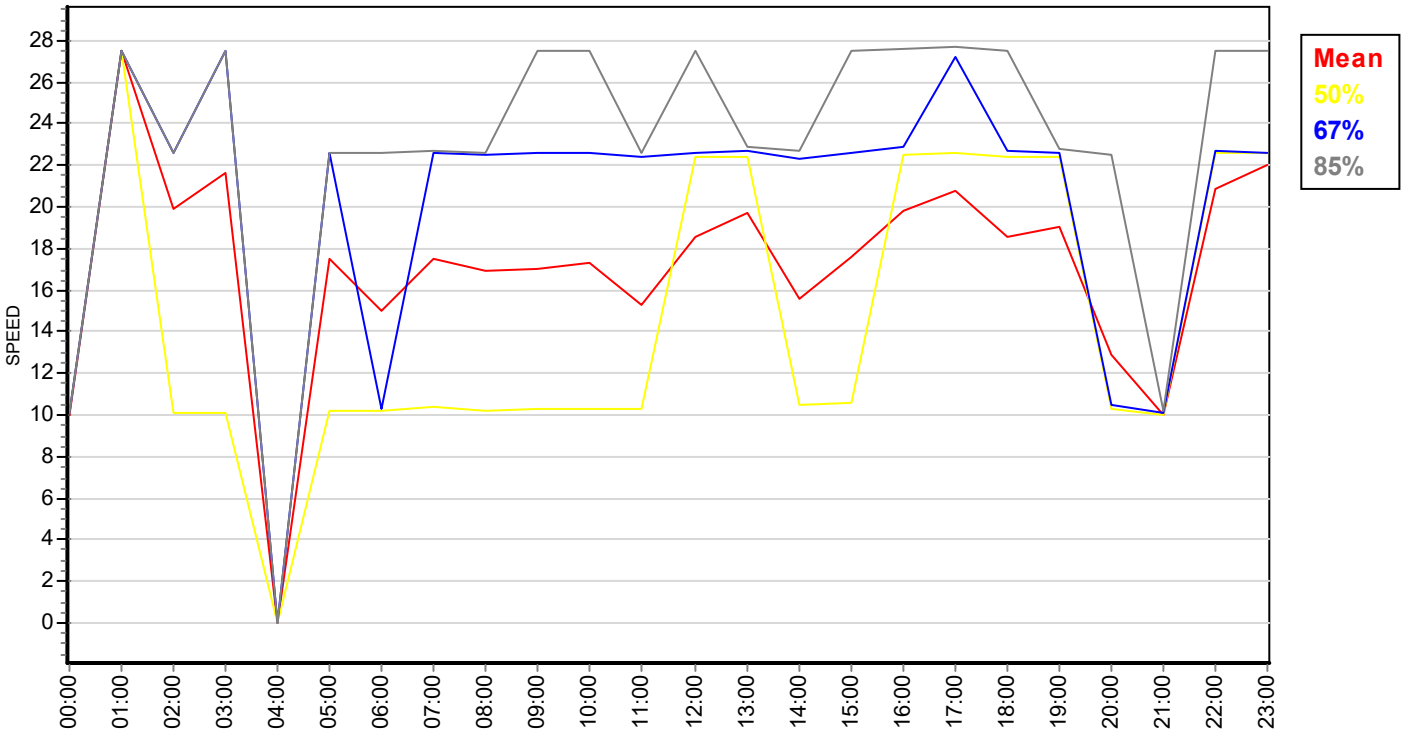
Comb. Total :	207	134	78	12	3	0	0	0	0	0	0	0	0	0	0	0	434
Percent :	48%	31%	18%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	48%	79%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	9

ADT = 217

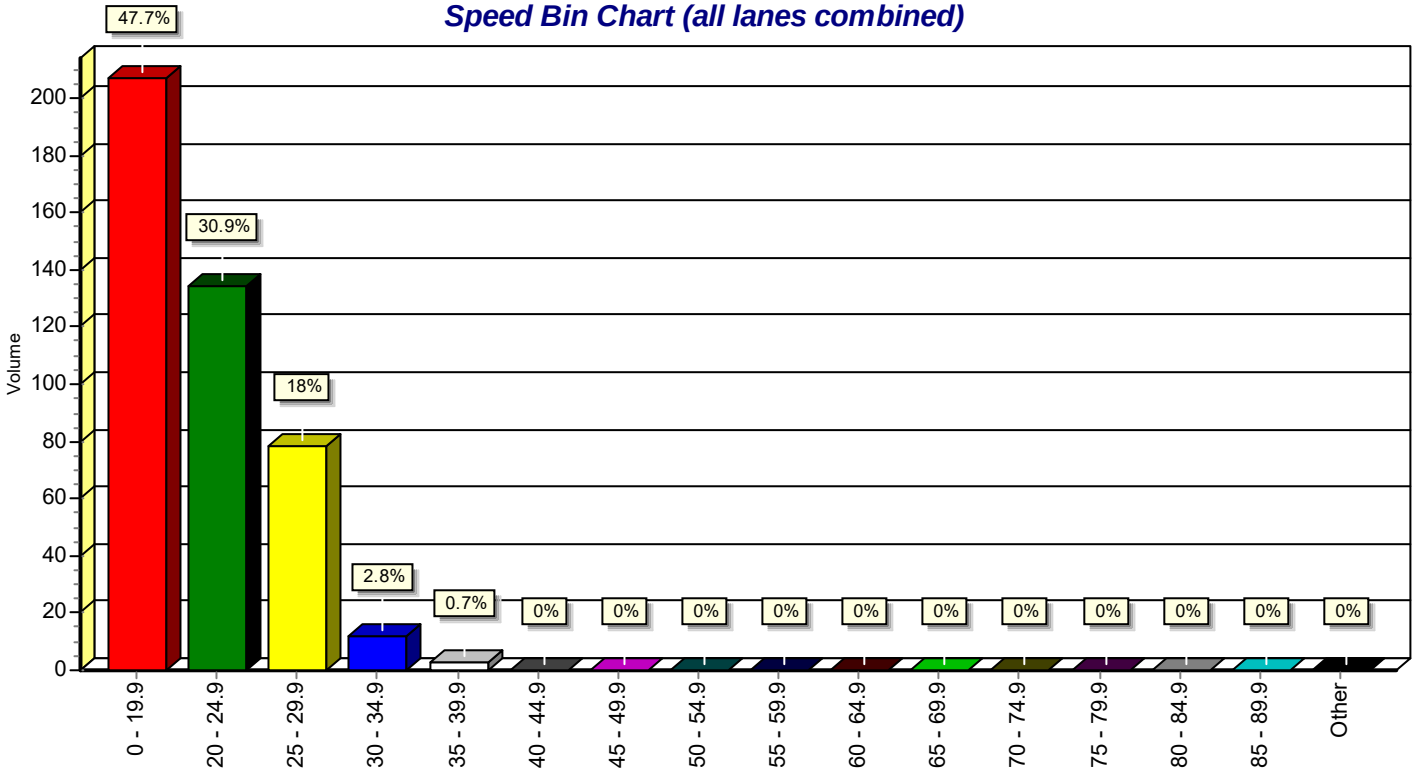
Average Speed 17.8 mph 50% Speed : 20.7 mph 67% Speed : 23.1 mph 85% Speed : 26.8 mph
10mph Pace: 20.1 - 30.0 (48.8%)

Mary Ellen (south) Charts For Data From: 00:00 - 06/13/2017 To: 23:59 - 06/14/2017

Speed Percent vs. Time (all lanes)



Speed Bin Chart (all lanes combined)



Basic Volume Report: Mary Ellen (north)

Station ID : Mary Ellen (north)
Info Line 1 : South of Los Arboles
Info Line 2 : Albuquerque
GPS Lat/Lon :
DB File : ME NORTH.DB

Last Connected Device Type : Apollo
Version Number : 1.62
Serial Number : 24087

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 - 06/13/2017 To: 23:59 - 06/14/2017

Date	Time	:00	:15	:30	:45	Total
06/13/17	00:00	0	0	1	0	1
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	0	0	0	0
	05:00	0	1	1	1	3
	06:00	0	0	0	1	1
	07:00	1	1	2	0	4
	08:00	3	2	1	0	6
	09:00	2	2	0	2	6
	10:00	1	2	0	1	4
	11:00	2	2	1	5	10
	12:00	2	0	1	2	5
	13:00	2	1	1	3	7
	14:00	2	1	1	4	8
	15:00	1	1	1	1	4
	16:00	1	1	1	1	4
	17:00	2	0	0	1	3
	18:00	1	4	1	1	7
	19:00	0	1	2	1	4
	20:00	0	1	5	4	10
	21:00	0	0	0	1	1
	22:00	1	0	0	0	1
	23:00	1	0	0	0	1
Day Total :						91

AM Total :	36 (39.6%)	Peak AM Hour :	11:00 =	10 (11.0%)	Peak AM Factor :	0.500	Average Period : 0.9
PM Total :	55 (60.4%)	Peak PM Hour :	20:00 =	10 (11.0%)	Peak PM Factor :	0.500	Average Hour : 3.8

Date	Time	:00	:15	:30	:45	Total
06/14/17	00:00	0	0	0	0	0
Wed	01:00	0	0	0	1	1
	02:00	0	0	1	0	1
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	0	0	1	0	1
	06:00	1	2	0	2	5
	07:00	0	2	4	1	7
	08:00	2	2	1	1	6
	09:00	2	0	2	0	4
	10:00	3	1	1	0	5
	11:00	1	1	1	1	4
	12:00	3	0	0	1	4
	13:00	1	2	0	2	5
	14:00	2	1	1	0	4
	15:00	2	2	0	2	6
	16:00	2	2	2	2	8
	17:00	2	2	0	3	7
	18:00	1	2	2	1	6
	19:00	1	0	0	2	3
	20:00	0	0	0	0	0
	21:00	1	1	1	0	3
	22:00	1	0	0	1	2
	23:00	0	0	1	0	1
Day Total :						83

AM Total :	34 (41.0%)	Peak AM Hour : 07:15 =	9 (10.8%)	Peak AM Factor : 0.562	Average Period : 0.9
PM Total :	49 (59.0%)	Peak PM Hour : 15:45 =	8 (9.6%)	Peak PM Factor : 0.667	Average Hour : 3.5

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 - 06/13/2017 To: 23:59 - 06/14/2017

Date	Time	:00	:15	:30	:45	Total
06/13/17	00:00	0	1	0	0	1
Tue	01:00	0	0	0	0	0
	02:00	0	0	0	1	1
	03:00	0	0	1	1	2
	04:00	0	0	0	0	0
	05:00	0	1	1	0	2
	06:00	1	1	0	0	2
	07:00	0	4	2	2	8
	08:00	2	0	2	1	5
	09:00	1	4	1	0	6
	10:00	0	0	1	5	6
	11:00	1	0	5	3	9
	12:00	3	2	3	5	13
	13:00	3	4	0	5	12
	14:00	2	3	1	3	9
	15:00	2	3	3	4	12
	16:00	2	6	2	2	12
	17:00	2	8	4	2	16
	18:00	4	1	1	1	7
	19:00	1	1	2	0	4
	20:00	3	0	4	3	10
	21:00	1	2	0	0	3
	22:00	1	3	1	1	6
	23:00	0	0	0	1	1
Day Total :						147

AM Total :	42 (28.6%)	Peak AM Hour :	10:45 =	11 (7.5%)	Peak AM Factor : 0.550	Average Period :	1.5
PM Total :	105 (71.4%)	Peak PM Hour :	17:15 =	18 (12.2%)	Peak PM Factor : 0.562	Average Hour :	6.1

Date	Time	:00	:15	:30	:45	Total
06/14/17	00:00	0	0	0	1	1
Wed	01:00	0	1	0	0	1
	02:00	0	0	0	0	0
	03:00	1	0	0	0	1
	04:00	0	0	0	0	0
	05:00	0	0	1	1	2
	06:00	0	1	0	3	4
	07:00	0	2	1	3	6
	08:00	0	1	0	0	1
	09:00	0	1	1	1	3
	10:00	4	1	0	1	6
	11:00	2	1	2	2	7
	12:00	1	6	1	2	10
	13:00	3	3	1	0	7
	14:00	3	3	2	0	8
	15:00	3	5	4	1	13
	16:00	4	5	3	3	15
	17:00	3	3	12	5	23
	18:00	3	3	3	1	10
	19:00	3	1	3	0	7
	20:00	2	1	2	2	7
	21:00	0	1	0	0	1
	22:00	1	1	0	0	2
	23:00	0	1	0	1	2
Day Total :						137

AM Total :	32 (23.4%)	Peak AM Hour :	09:15 =	7 (5.1%)	Peak AM Factor :	0.438	Average Period : 1.4
PM Total :	105 (76.6%)	Peak PM Hour :	17:00 =	23 (16.8%)	Peak PM Factor :	0.479	Average Hour : 5.7

Basic Volume Summary: Mary Ellen (north)

Grand Total For Data From: 00:00 - 06/13/2017 To: 23:59 - 06/14/2017

Lane	Total Count		# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	174	(38.0%)	2.00	87	0.9	3.6	70 (40.2%)	104 (59.8%)
#3.	284	(62.0%)	2.00	142	1.5	5.9	74 (26.1%)	210 (73.9%)
ALL	458		2.00	229	2.4	9.5	144 (31.4%)	314 (68.6%)

Lane	Peak AM Hour		Date	Peak AM Factor	Peak PM Hour		Date	Peak PM Factor
#1.	11:00 =	10	06/13/2017	0.500	20:00 =	10	06/13/2017	0.500
#3.	10:45 =	11	06/13/2017	0.550	17:00 =	23	06/14/2017	0.479

Basic Volume Report: Mary Ellen (south)

Station ID : Mary Ellen (south)
Info Line 1 : North of Claremont
Info Line 2 : Albuquerque
GPS Lat/Lon :
DB File : ME SOOTH.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 - 06/13/2017 To: 23:59 - 06/14/2017

Date	Time	:00	:15	:30	:45	Total
06/13/17	00:00	0	0	1	0	1
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	0	0	0	0
	05:00	0	1	1	0	2
	06:00	0	0	0	1	1
	07:00	1	0	1	2	4
	08:00	1	0	0	0	1
	09:00	1	3	0	1	5
	10:00	1	3	0	3	7
	11:00	1	0	1	3	5
	12:00	2	0	0	0	2
	13:00	1	2	0	3	6
	14:00	2	1	2	5	10
	15:00	1	0	2	0	3
	16:00	3	2	1	4	10
	17:00	2	1	2	1	6
	18:00	2	4	3	1	10
	19:00	0	1	3	0	4
	20:00	0	0	5	3	8
	21:00	3	0	0	1	4
	22:00	1	0	0	0	1
	23:00	1	0	0	0	1
Day Total :						92

AM Total :	27 (29.3%)	Peak AM Hour :	10:00 =	7 (7.6%)	Peak AM Factor :	0.583	Average Period : 1.0
PM Total :	65 (70.7%)	Peak PM Hour :	20:15 =	11 (12.0%)	Peak PM Factor :	0.550	Average Hour : 3.8

Date	Time	:00	:15	:30	:45	Total
06/14/17	00:00	1	0	0	0	1
Wed	01:00	0	0	0	1	1
	02:00	0	0	1	0	1
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	0	0	1	0	1
	06:00	1	1	0	2	4
	07:00	0	3	1	1	5
	08:00	0	0	0	1	1
	09:00	1	1	2	0	4
	10:00	2	2	1	0	5
	11:00	1	3	1	1	6
	12:00	1	0	1	0	2
	13:00	1	1	0	1	3
	14:00	1	2	2	1	6
	15:00	3	2	1	2	8
	16:00	2	6	2	2	12
	17:00	2	2	0	4	8
	18:00	1	1	0	0	2
	19:00	1	0	0	2	3
	20:00	0	1	0	0	1
	21:00	1	2	1	1	5
	22:00	1	0	0	1	2
	23:00	0	0	1	0	1
Day Total :						82

AM Total :	29 (35.4%)	Peak AM Hour : 06:45 =	6 (7.3%)	Peak AM Factor : 0.500	Average Period : 0.9
PM Total :	53 (64.6%)	Peak PM Hour : 15:45 =	12 (14.6%)	Peak PM Factor : 0.500	Average Hour : 3.4

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 - 06/13/2017 To: 23:59 - 06/14/2017

Date	Time	:00	:15	:30	:45	Total
06/13/17	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	1	1	2
	04:00	0	0	0	0	0
	05:00	1	1	1	0	3
	06:00	0	1	1	0	2
	07:00	0	5	2	1	8
	08:00	1	0	3	1	5
	09:00	1	3	2	0	6
	10:00	1	0	1	6	8
	11:00	2	0	2	2	6
	12:00	3	1	2	4	10
	13:00	3	4	0	5	12
	14:00	3	3	1	3	10
	15:00	2	3	2	3	10
	16:00	2	4	3	1	10
	17:00	2	6	5	2	15
	18:00	4	1	2	1	8
	19:00	1	1	2	1	5
	20:00	3	1	3	5	12
	21:00	3	0	0	1	4
	22:00	1	3	1	1	6
	23:00	0	0	0	1	1
Day Total :						144

AM Total :	41 (28.5%)	Peak AM Hour :	10:45 =	10 (6.9%)	Peak AM Factor : 0.417	Average Period : 1.5
PM Total :	103 (71.5%)	Peak PM Hour :	17:15 =	17 (11.8%)	Peak PM Factor : 0.708	Average Hour : 6.0

Date	Time	:00	:15	:30	:45	Total
06/14/17	00:00	0	0	0	0	0
Wed	01:00	0	1	0	0	1
	02:00	0	0	0	0	0
	03:00	0	1	0	0	1
	04:00	0	0	0	0	0
	05:00	0	1	1	1	3
	06:00	0	1	0	4	5
	07:00	0	2	2	2	6
	08:00	1	0	0	1	2
	09:00	0	3	0	0	3
	10:00	3	2	0	1	6
	11:00	2	2	3	3	10
	12:00	0	5	1	3	9
	13:00	3	1	1	1	6
	14:00	4	4	3	0	11
	15:00	3	3	6	1	13
	16:00	3	4	4	1	12
	17:00	3	3	12	4	22
	18:00	3	2	2	2	9
	19:00	3	0	2	0	5
	20:00	2	1	2	0	5
	21:00	0	0	0	0	0
	22:00	1	1	0	0	2
	23:00	0	1	0	1	2
Day Total :						133

AM Total :	37 (27.8%)	Peak AM Hour :	11:00 =	10 (7.5%)	Peak AM Factor :	0.625	Average Period : 1.4
PM Total :	96 (72.2%)	Peak PM Hour :	17:00 =	22 (16.5%)	Peak PM Factor :	0.458	Average Hour : 5.5

Basic Volume Summary: Mary Ellen (south)

Grand Total For Data From: 00:00 - 06/13/2017 To: 23:59 - 06/14/2017

Lane	Total Count		# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	174	(38.6%)	2.00	87	0.9	3.6	56 (32.2%)	118 (67.8%)
#3.	277	(61.4%)	2.00	139	1.4	5.8	78 (28.2%)	199 (71.8%)
ALL	451		2.00	226	2.3	9.4	134 (29.7%)	317 (70.3%)

Lane	Peak AM Hour		Date	Peak AM Factor	Peak PM Hour		Date	Peak PM Factor
#1.	10:00 =	7	06/13/2017	0.583	15:45 =	12	06/14/2017	0.500
#3.	10:45 =	10	06/13/2017	0.417	17:00 =	22	06/14/2017	0.458

Appendix B

CASE ID 6452

Speed Hump Study Request Petition

city of albuquerque

We the undersigned, representing ten households, request a traffic study on the street noted below. Depending on the outcome of the study, we may want to pursue the installation of speed humps on our street. However, our signatures on this form do not in any way commit us to support the future installation of speed humps.

Contact Name and Date: Charles Valeris	Daytime Phone: ( ) 505-323 5205
Address: 2701 Mary Ellen NE	Zip Code: 87112
Neighborhood Name: Snow Heights Eddition	E-mail Address (Optional): Charlos@q.com

On which segment of roadway should the study be conducted (Example: 1st street between Roma and Lomas)? *(Please note it may not be possible to conduct the study in the exact location requested.)*

Claremont & Los Arboles NE. 87112

Are there any particular days and times when you feel the study should be conducted?

between 2:00 P.M. & 7:00 P.M.

Please note all signatures must be from the same street.

	Signature (One per household)	Address:	Phone: ( )
1	Jeanie L. Hamilton	2709 MARY ELLEN	(505) 310-0073
2		2705 Mary Ellen	505-401-8722
3		2616 Mary Ellen	505-250-3900
4	Melissa Vick	2704 Mary Ellen	505-417-3454
5		2613 Mary Ellen	505-292-9297
6	Judi E. O'Neil	2605 Mary Ellen	505-292-6801
7	Bernadette Boettger	2601 Mary Ellen	505-934-4389
8		2510 Mary Ellen	775-343-8968
9		2511 Mary Ellen	505-239-9698
10	Charles Valeris	2701 MARY ELLEN NE	505 323 5205

Return Address:
Attn: Traffic Engineering
Speed Hump Request
City of Albuquerque
P.O. Box 1293
Albuquerque, New Mexico 87103

Email Address: MTran@cabq.gov or pauljsanchez@cabq.gov

DMD TRAFFIC 2015 NOV 15 AM 11:25

16 NOV 14 AM 10:25 CAPITAL IMPLEMENTATION PROGRAM CITY OF ALBUQUERQUE


SMA
Souder, Miller & Associates
Engineering • Environmental • Surveying