

AZUELO AVENUE SPEED STUDY







Azuelo Avenue Speed Study Final Report

Albuquerque, New Mexico



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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 Azuelo Avenue in northwest Albuquerque.

1.A. PROJECT PURPOSE

A speed study on Azuelo Avenue from Cordoniz Street to Torpedo Place/Starfire Place was conducted to determine the following:

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

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 0.1 (528.00 LF) mile section of Azuelo Avenue from Cordoniz Street to Torpedo Place/Starfire Place. 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







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. a speed trap.

For surveys with a different amount than 100 vehicles, the 85^{th} percentile speed is determined by the following formula: 100/15 = # of vehicles surveyed/X (where x = the vehicle at the 85^{th} 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 =
$$((X_1)(X_2) \dots (X_n))^{1/N}$$

 $X = \text{Individual score (speed)}$
 $N = \text{Sample size (number of scores)}$

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:

- Azuelo Avenue East –Cordoniz Street to Saratoga Place;
- Azuelo Avenue West Saratoga Place to Torpedo Place/Starfire Place.

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 Azuelo Avenue. Within the study limits, there are approximately 13 driveways that provide access to residential homes, and there is a three-legged intersection with Saratoga Place. 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

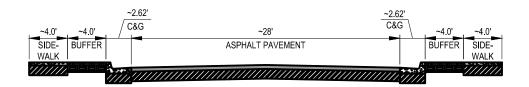


FIGURE 2.2. EXISTING AZUELO AVENUE TYPICAL SECTION



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.				
Azuelo Avenu	ie ADT			
Count Location	EB	WB	ADT	
Azuelo Avenue (East)	80	38	118	
Azuelo Avenue (West)	167	108	275	
Average	124	73	197	

The Azuelo Avenue study area directional ADT ranges from 38 to 167 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.				
Azuelo Avenue Peak Hour Traffic Volumes (vph)				
Count Location	Peak Hour	Eastbound (Peak Hour)	Westbound (Peak Hour)	
Azuelo Avenue (East)	AM Peak	8 (6:30 AM – 7:30 AM)	4 (6:15 AM – 7:15 AM)	
Azueio Averiue (Easi)	PM Peak	9 (3:15 PM – 4:15 PM)	5 (5:45 PM – 6:45 PM)	
Azuelo Avenue (West)	AM Peak	21 (7:00 AM – 8:00 AM)	9 (6:30 AM – 7:30 AM)	
Azuelo Averlue (West)	PM Peak	20 (3:30 PM - 4:30 PM)	16 (4:45 PM – 5:45 PM)	

The Azuelo Avenue study area peak hour traffic volumes range from 4 to 21 vehicles per hour.

3.C. SPEED STUDY RESULTS

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

Table 3.C.1.					
	Azuelo Avenu	e (East) Speed Study			
Speed	EB	WB	Total		
Average	15.8	14.7	15.5		
10 mph Pace	7.3 – 17.2 (56.3%)	8.5 – 18.4 (66.2%)	5.8 – 15.7 (59.5%)		
50th Percentile	12.2	10.8	13.0		
67th Percentile	21.7	11.6	21.2		
85th Percentile	23.5	22.7	23.8		

Table 3.C.2.					
	Azuelo Avenue	(West) Speed Study			
Speed	EB	WB	Total		
Average	17.6	15.3	16.7		
10 mph Pace	20.1 – 30.0 (55.9%)	6.0 – 15.9 (60.2%)	15.0 – 24.9 (51.5%)		
50th Percentile	20.8	12.7	18.5		
67th Percentile	22.6	21.2	22.1		
85th Percentile	24.4	23.6	24.2		

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 Azuelo Avenue, roadway conditions are consistent, controlled access, satisfactory pavement conditions, two travel lanes, on-street parking, and there is a three-legged intersection with Saratoga Place. Table 3.C.3. displays that 9 percent of the total ADT of the two (2) count locations recorded speeds greater than 25 mph.

Table 3.C.3.							
	Azuelo Avenue ADT ≥ 25 mph						
Speed (mph)	0 - 19.9 MPH 20 - 24.9 MPH ≥ 25 MPH Avg.				Avg. ADT		
Azuelo Avenue (East)	69	58%	39	33%	10	8%	118
Azuelo Avenue (West)	138	50%	113	41%	24	9%	275
Average	104	53%	76	39%	17	9%	197

3.D. CRASH DATA

Crash data was requested from the Albuquerque Police Department for the most recent three (3) years. The crash data requested showed there were two (2) recorded crashes within the study area.

	Table 3.D.1.				
		Azuelo Avenue Crash S	Summary		
	Location (Primary Street			Crash Correct with	
Date	/ Intersecting Street)	Cause of Crash	Crash Analysis	Traffic Calming?	
	Unser Boulevard /				
10/27/2016	Azuelo Avenue	Defective Tires	Other	No	
	Unser Boulevard /	Driver Inattention /			
3/15/2017	Azuelo Avenue	Following Too Closely	Same direction	No	

4. CONCLUSION

After evaluating the volume and speed data within the project area, it is concluded that 9 percent 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 (Neighborhood Traffic Management Program) Traffic Calming Measu	ıres		
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 upon the data collected, Azuelo Avenue does not meet the two (2) minimum required criteria of four (4) warrants outlined for traffic calming measures threshold and therefore DOES NOT require traffic calming improvements.



Appendices

- Appendix A Volume and Speed Data
- Appendix B Crash Data
- Appendix C Neighborhood Traffic Calming Petition



Appendix A



Special Speed Study Report: Azuelo East

Station ID: Azuelo East

Info Line 1: Between Saratoga and Cordoniz

Info Line 2 : Albuquerque

GPS Lat/Lon:

DB File: AZ EAST 1WB.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

# Di	ir. Information	Vehicle Sensors	Sensor Spacing	Loop Length	Comment
1	Westbound	Ax-Ax	4 0 ft	6.0 ft	

Lane #1 Special Speed Study Da	Data From: 00:00 - 08/15/2017	To: 23:59 - 08/16/2017
--------------------------------	-------------------------------	------------------------

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			#1 <i>O</i> -	#2 20 -	#3 25 -	#4 30 -	#5 35 -	#6 40 -	#7 45 -	#8 50 -	#9 55 -	#10 60 -	#11 65 -	#12 70 -	#13 75 -	#14 80 -	#15 85 -	#16	
Tue 01:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Date	Time			-				-						-			Other	Total
02:00	08/15/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	Tue	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00		02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00		03:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
06:00		04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00		05:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
08:00		06:00	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
09:00		07:00	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
10:00		08:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
11:00		09:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:00			2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13:00			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14:00			1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15:00				1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16:00				1			0	0	0			0	0	0		0	0		
17:00																			
18:00							0												
19:00																			
20:00												-							
21:00																			
22:00 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																			
23:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0																			
Daily Total: 29 12 0 2 0							-					-					-		•
Percent: 67% 28% 0% 5% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0% 0%		23:00							0										
	_								-									-	43
Cum. Percent: 67% 95% 95% 100% 100% 100% 100% 100% 100% 100% 10			67% 67%	28% 95%	0% 95%	5% 100%	0% 100%	0% 100%	0% 100%	0% 100%	0% 100%	0% 100%	0% 100%	0% 100%	0% 100%	0% 100%	0% 100%	0% 100%	
Average: 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 2																			2

Average Speed 14.5 mph

50% Speed: 10.4 mph

67% Speed: 10.9 mph

85% Speed: 22.6 mph

10mph Pace: 9.1 - 19.0 (67.4%)

		#1 <i>O</i> -	#2 20 -	#3 25 -	#4 30 -	#5 35 -	#6 40 -	#7 45 -	#8 50 -	#9 55 -	#10 60 -	#11 65 -	#12 70 -	#13 75 -	#14 80 -	#15 85 -	#16	
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
08/16/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wed	01:00	0	0	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	1	0	0	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	06:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	07:00	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	08:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	10:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	12:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	13:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	14:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	15:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	16:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	17:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	18:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	19:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	23:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
•	Total :	20 65%	9	1	1	0	0	0	0	0 0%	0	0	0	0 0%	0	0	0	31
	ercent : ercent :	65%	29% 94%	3% 97%	3% 100%	0% 100%	0% 100%	0% 100%	0% 100%	100%	0% 100%	0% 100%	0% 100%	100%	0% 100%	0% 100%	0% 100%	
	erage :	1	94%	91 %	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	ŭ			Speed			5	67%	Speed	: 10.7		8	5% Spe	ed: 22.				

Centurion Special Speed Study Report

Lane #3 Configuration

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

Lane #3 Special Speed Stu	ly Data From: 00:00 - 08/15/2017	To: 23:59 - 08/16/2017

		#1 <i>O</i> -	#2 20 -	#3 25 -	#4 30 -	#5 35 -	#6 40 -	#7 45 -	#8 50 -	#9 55 -	#10 60 -	#11 65 -	#12 70 -	#13 75 -	#14 80 -	#15 85 -	#16	
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
08/15/17	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	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	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	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	08:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	09:00	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	10:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	11:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	12:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	13:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	14:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	15:00	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	16:00	3	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8
	17:00	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	18:00	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	19:00	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	20:00	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	21:00	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	22:00	1	1	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
Daily 1	Γotal :	53	28	3	1	0	0	0	0	0	0	0	0	0	0	0	0	85
	ercent :	62%	33%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Po		62%	95%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0
Ave	erage :	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3

Average Speed 15.0 mph 50% Speed: 11.0 mph 67% Speed: 21.9 mph 85% Speed: 22.9 mph 10mph Pace: 8.4 - 18.3 (62.4%)

Centurion Special Speed Study Report

	_	#1 <i>O</i> -	#2 20 -	#3 25 -	#4 30 -	#5 35 -	#6 40 -	#7 45 -	#8 50 -	#9 55 -	#10 60 -	#11 65 -	#12 70 -	#13 75 -	#14 80 -	#15 85 -	#16	
		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
	00:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	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	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	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	06:00	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	07:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	08:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	09:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	10:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	11:00	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	12:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	13:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	14:00	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	15:00	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	16:00	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	17:00	5	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8
	18:00	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	19:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	20:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	21:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
2	23:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Daily To		36	29	7	1	0	0	0	0	0	0	0	0	0	0	0	0	73
	rcent:	49%	40%	10%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Per Avera		49% 2	89% 1	99% 0	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100% 0	3
Avere	ago .		•	Speed					eed : 1			67%	Speed	: 22.4	mph	8	5% Spee	ed: 23.2 mp

10mph Pace: 21.6 - 31.5 (49.3%)

#3 #7 #9 #10 #11 #12 #13 #14 #15 #2 #4 #5 #6 #8 #16 0 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 55 - 60 - 65 -70 - 75 - 80 - 85 -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 Date Time Total

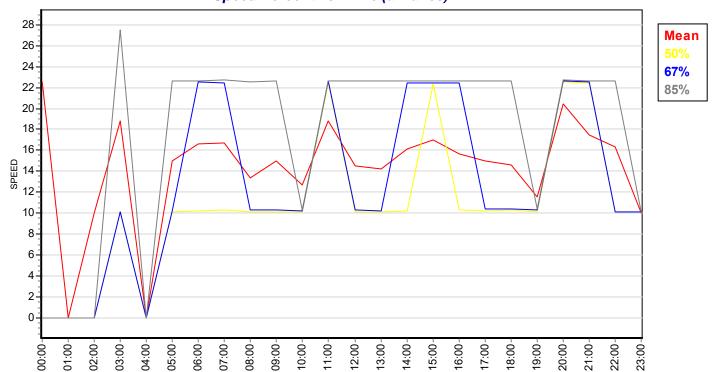
Centurion Special Speed Study Report Printed: 08/17/17 Page 5

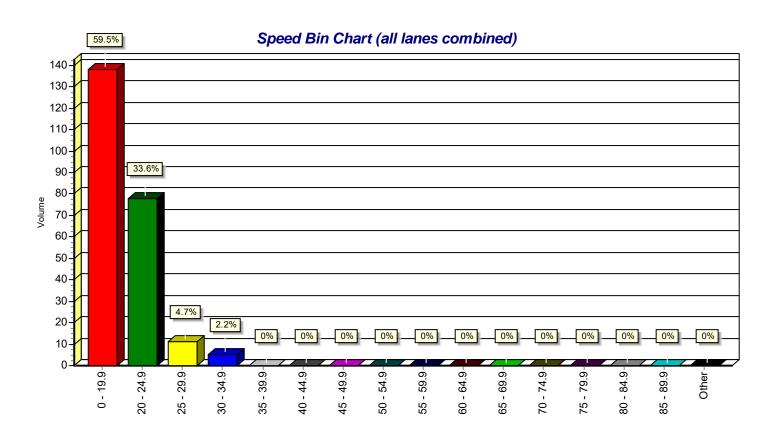
Special Speed Study Summary: Azuelo East

- 30 - 35 - 9 34.9 39.9 1 3 (% 4% 0%	9 44.9 49.9 54.9 59.9 64.9		35 - 9.9 Other Total
•	0 0 0 0 0		
% 4% 0%	0 0 0 0 0	0 0 0 0	0 0 74
07	6 0% 0% 0% 0% 0%	0% 0% 0% 0%	0% 0%
% 100% 100%	6 100% 100% 100% 100% 100%	100% 100% 100% 100% 10	00% 100%
0 0 0	0 0 0 0 0	0 0 0 0	0 0 1
ed 14.7 mph	50% Speed: 10.8 mph	67% Speed: 11.6 mph 10mph Pace: 8.5 - 18.4 (66.	85% Speed: 22.7 mph
		10111p11 Face. 0.5 - 10.4 (00.	.2 /0)
0 2 (0 0 0 0 0	0 0 0 0	0 0 158
% 1% 0%	6 0% 0% 0% 0% 0%	0% 0% 0% 0%	0% 0%
% 100% 100%	6 100% 100% 100% 100% 100%	100% 100% 100% 100% 10	00% 100%
0 0 0	0 0 0 0 0	0 0 0 0	0 0 3
ed 15.8 mph	50% Speed: 12.2 mph	67% Speed : 21.7 mph	85% Speed: 23.5 mph
		10mph Pace: 7.3 - 17.2 (56	.3%)
1 5 (0 0 0 0 0	0 0 0 0	0 0 232
% 2% 0%	6 0% 0% 0% 0% 0%	0% 0% 0% 0%	0% 0%
% 100% 100%	6 100% 100% 100% 100% 100%	100% 100% 100% 100% 10	00% 100%
	0 0 0 0 0	0 0 0 0	0 0 5
0 0 (
(

Azuelo East Charts For Data From: 00:00 - 08/15/2017 To: 23:59 - 08/16/2017

Speed Percent vs. Time (all lanes)





Centurion Special Speed Study Report Printed: 08/17/17 Page 7

Special Speed Study Report: Azuelo West

Station ID: Azuelo West

Info Line 1: Between Torpedo PI & Saratoga

Info Line 2 : Albuquerque

GPS Lat/Lon:

DB File: DBFILE 081717 - 31.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.	Westbound	Ax-Ax	4.0 ft	6.0 ft	

Lane #1 Special 9	Sneed Study Da	ta From: 00:00	- 08/15/2017	To: 23:59	- 08/16/2017

		#1 <i>O</i> -	#2 20 -	#3 25 -	#4 30 -	#5 35 -	#6 40 -	#7 45 -	#8 50 -	#9 55 -	#10 60 -	#11 65 -	#12 70 -	#13 75 -	#14 80 -	#15 85 -	#16	
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
08/15/17	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00	1	0	0	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	06:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	07:00	1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	08:00	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	09:00	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	10:00	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	11:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	12:00	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	13:00	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	14:00	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	15:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	16:00	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	17:00	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	18:00	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	19:00	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	20:00	5	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7
	21:00	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	22:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	23:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Daily [*]	Total :	72	37	6	1	0	0	0	0	0	0	0	0	0	0	0	0	116
	ercent:	62%	32%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. P		62%	94%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	_
Ave	erage :	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5

Average Speed 15.1 mph

50% Speed: 11.4 mph

67% Speed: 21.7 mph 85% Speed: 23.0 mph

10mph Pace: 7.8 - 17.7 (62.1%)

Centurion Special Speed Study Report Printed: 08/17/17

5		#1 <i>0</i> -	#2 20 -	#3 25 -	#4 30 -	#5 35 -	#6 40 -	#7 45 -	#8 50 -	#9 55 -	#10 60 -	#11 65 -	#12 70 -	#13 75 -	#14 80 -	#15 85 -	#16	T
		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
	0:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	1:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	3:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	4:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	5:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	6:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	7:00	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	8:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	9:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	1:00	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	2:00	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	3:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	4:00	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	5:00	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	6:00	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	7:00	6	7	2	0	0	0	0	0	0	0	0	0	0	0	0	0	15
	8:00	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	9:00	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	0:00	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	1:00	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
2:	2:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
2	3:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Daily Tot	tal :	58	34	8	0	0	0	0	0	0	0	0	0	0	0	0	0	100
	cent:	58%	34%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Pero		58%	92%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	•
Avera	ige :	2 A	1 /erage	0 Speed	15.7	0 mph	5	0 0% Spe	0 eed : 1	0 1.4 mp	0 h		Speed					3 ed: 23.2 mpl

10mph Pace: 8.3 - 18.2 (58.0%)

Lane #3 Configuration

# Di	r. Information	Vehicle Sensors	Sensor Spacing	Loop Length	Comment
3	Fastbound	Ax-Ax	4 0 ft	6.0 ft	

		Lan	e #3	Speci	al Sp	eed S	Study	Data	Fron	n: 00 :	00 - 0	8/15/	2017	To:	23:59	- 08/	16/20	17
Date	Time	#1 0 - 19.9	#2 20 - 24.9	#3 25 - 29.9	#4 30 - 34.9	#5 35 - 39.9	#6 40 -	#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
							44.9											Total
08/15/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue	01:00	1	0	0	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	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	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	06:00	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	07:00	6	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19
	08:00	4	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	09:00	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	10:00	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	11:00	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	12:00	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	13:00	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	14:00	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	15:00	5	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	16:00	6	7	3	1	0	0	0	0	0	0	0	0	0	0	0	0	17
	17:00	8	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15
	18:00	2	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	19:00	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	20:00	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	21:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	22:00	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	23:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Daily 1	Total:	72	89	11	1	0	0	0	0	0	0	0	0	0	0	0	0	173
	ercent:	42%	51%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	ercent :	42%	93%	99% 0	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	7
AVE	erage :	3 A	verage	Speed					eed : 2			67%	Speed	1: 22.5	0 mph - 30.0	8		ed: 24.

		#1 <i>0</i> -	#2 20 -	#3 25 -	#4 30 -	#5 35 -	#6 40 -	#7 45 -	#8 50 -	#9 55 -	#10 60 -	#11 65 -	#12 70 -	#13 75 -	#14 80 -	#15 85 -	#16	
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
08/16/17	00:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Wed	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	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	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	07:00	11	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
	08:00	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	09:00	3	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	10:00	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	11:00	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	12:00	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	13:00	5	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	14:00	6	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	15:00	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	16:00	5	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	17:00	4	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	11
	18:00	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	19:00	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	20:00	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	21:00	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	22:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Daily 7	Total:	73	65	21	1	0	0	0	0	0	0	0	0	0	0	0	0	160
	ercent:	46%	41%	13%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	ercent:	46%	86%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Ave	erage :	3 3 1 0 0 0 0 0 0 0 0 0 0 0 Average Speed 17.5 mph 50% Speed: 20.9 mph							0 0 0 0 0 0 0 0 7 67% Speed: 22.6 mph 85% Speed: 24.4 mp 10mph Pace: 20.5 - 30.4 (53.8%)									

Centurion Special Speed Study Report

#3 #7 #9 #10 #11 #12 #13 #14 #15 #2 #4 #5 #6 #8 #16 0 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 55 - 60 - 65 -70 - 75 - 80 - 85 -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 Date Time Total

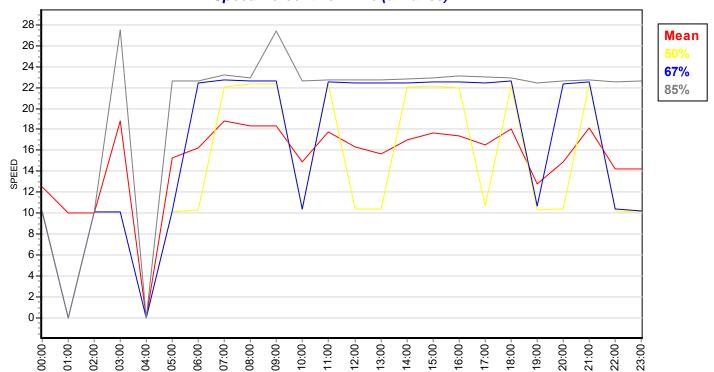
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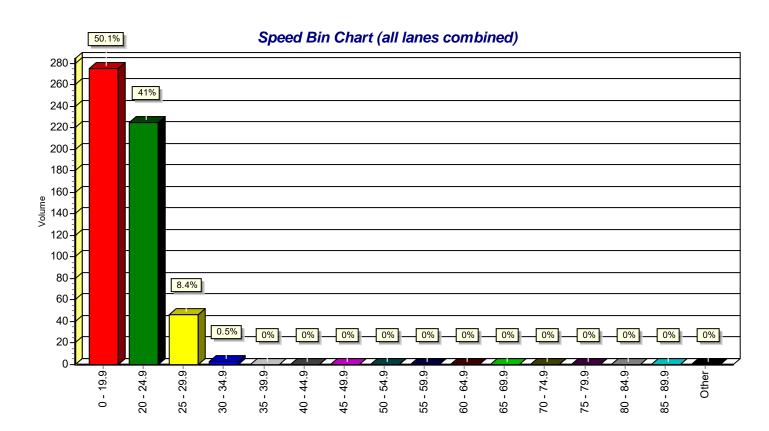
Special Speed Study Summary: Azuelo West

	#1 <i>O</i> -	#2 20 -	#3 25 -	#4 30 -	#5 35 -	#6 40 -	#7 45 -	#8 50 -	#9 55 -	#10 60 -	#11 65 -	#12 70 -	#13 75 -	#14 80 -	#15 85 -	#16	
Description	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
Grand Total #1:	130	71	14	1	0	0	0	0	0	0	0	0	0	0	0	0	216
Percent :	60%	33%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	60%	93%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
ADT = 108	A	verage	Speed	15.3	mph	5	0% Sp	eed: 1	2.7 mp	h		Speed				•	ed: 23.6 m
											10mp	h Pace	9: 0.0	- 15.9 (,60.2%)	
Grand Total #3:	145	154	32	2	0	0	0	0	0	0	0	0	0	0	0	0	333
Percent :	44%	46%	10%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	44%	90%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
ADT = 166	A	verage	Speed	17.6	mph	5	0% Sp	eed: 2	0.8 mp	h	67% Speed: 22.6 mph 85% Speed: 24.4 mph 10mph Pace: 20.1 - 30.0 (55.9%)						
											10mp	h Pace	e: 20.1	- 30.0	(55.9%	5)	
Comb. Total :	275	225	46	3			0	0	0						0		549
Percent :	50%	41%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	50%	91%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	6	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	12
ADT = 274	A	verage	Speed	16.7	mph	5	0% Sp	eed: 1	8.5 mp	h	67%	Speed	: 22.1	mph	8	5% Spe	ed: 24.2 mj
											10mr	h Pace	· 15 0	- 24 9	(51.5%	5)	

Azuelo West Charts For Data From: 00:00 - 08/15/2017 To: 23:59 - 08/16/2017

Speed Percent vs. Time (all lanes)





Centurion Special Speed Study Report Printed: 08/17/17 Page 7

Basic Volume Report: Azuelo East

Station ID: Azuelo East

Info Line 1: Between Saratoga and Cordoniz

Info Line 2 : Albuquerque

GPS Lat/Lon:

DB File: AZ EAST 1WB.DB

Last Connected Device Type: Apollo

Version Number: 1.62

Serial Number :

Number of Lanes: 1

Posted Speed Limit: 0.0 mph

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

Lane #1 Basic Volume Data From: 00:00 - 08/15/2017 To: 23:59 - 08/16/2017

Date	Time	:00	:15	:30	:45	Total
08/15/17	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	1	1
	04:00	0	0	0	0	0
	05:00	0	0	0	1	1
	06:00	0	1	0	1	2
	07:00	2	0	0	2	4
	08:00	0	2	0	1	3
	09:00	0	2	0	0	2
	10:00	0	2	0	0	2
	11:00	0	0	2	0	2
	12:00	1	1	0	0	2
	13:00	0	1	1	1	3
	14:00	1	0	2	0	3
	15:00	0	0	0	0	0
	16:00	2	2	0	0	4
	17:00	1	1	0	0	2
	18:00	1	0	0	1	2
	19:00	1	1	0	2	4
	20:00	1	0	0	1	2
	21:00	1	1	1	0	3
	22:00	0	0	1	0	1
	23:00	0	0	1	0	1
Day Total	:				-	44

AM Total : 17 (38.6%) Peak AM Hour : 06:15 = 4 (9.1%) Peak AM Factor : 0.500 Average Period : 0.5
PM Total : 27 (61.4%) Peak PM Hour : 13:15 = 4 (9.1%) Peak PM Factor : 0.500 Average Hour : 1.8

Date	Time	:00	:15	:30	: 4 5	Total
08/16/17	00:00	0	0	0	0	0
Wed	01:00	0	0	0	0	0
	02:00	0	0	0	0	0
	03:00	0	0	1	0	1
	04:00	0	0	0	0	0
	05:00	0	0	1	0	1
	06:00	0	0	1	0	1
	07:00	2	1	0	1	4
	08:00	1	0	0	1	2
	09:00	0	0	0	0	0
	10:00	1	0	0	0	1
	11:00	0	0	0	0	0
	12:00	1	0	0	1	2
	13:00	0	1	0	1	2
	14:00	0	0	3	0	3
	15:00	0	0	0	2	2
	16:00	1	0	0	0	1
	17:00	0	2	0	0	2
	18:00	1	2	2	0	5
	19:00	0	1	0	1	2
	20:00	0	0	0	0	0
	21:00	0	0	0	0	0
	22:00	0	0	0	0	0
	23:00	0	0	0	2	2
Day Total					_	31

AM Total: 10 (32.3%) Peak AM Hour: 06:30 = 4 (12.9%) Peak AM Factor: 0.500 Average Period: 0.3
PM Total: 21 (67.7%) Peak PM Hour: 17:45 = 5 (16.1%) Peak PM Factor: 0.417 Average Hour: 1.3

Lane #3 Configuration

Dir. Information Volume Mode Volume Sensors Divide By 2 Comment Eastbound Veh. Normal

Lane #3 Basic Volume Data From: 00:00 - 08/15/2017 To: 23:59 - 08/16/2017

Date	Time	:00	:15	:30	:45	Total
08/15/17	00:00	0	0	0	0	0
Tue	01:00	0	0	0	0	0
	02:00	0	0	1	0	1
	03:00	0	0	0	1	1
	04:00	0	0	0	0	0
	05:00	0	0	1	0	1
	06:00	0	1	2	1	4
	07:00	1	4	1	2	8
	08:00	1	1	0	2	4
	09:00	2	1	2	1	6
	10:00	1	3	1	1	6
	11:00	0	1	2	0	3
	12:00	0	1	0	1	2
	13:00	0	0	0	2	2
	14:00	0	0	1	2	3
	15:00	0	3	2	2	7
	16:00	2	3	1	2	8
	17:00	1	2	1	1	5
	18:00	0	2	2	3	7
	19:00	2	1	2	1	6
	20:00	0	0	2	4	6
	21:00	2	1	1	0	4
	22:00	1	1	0	0	2
	23:00	0	0	0	0	0
Day Total	:				_	86

AM Total : 34 (39.5%) Peak AM Hour : 06:30 = 8 (9.3%) Peak AM Factor: 0.500 Average Period : 0.9 52 (60.5%) PM Total: Peak PM Hour : 15:15 = 9 (10.5%) Peak PM Factor: 0.562 Average Hour: 3.6

Printed: 08/17/17 Page 3 Centurion Basic Volume Report

Date	Time	:00	:15	:30	:45	Total
08/16/17	00:00	0	1	0	0	1
Wed	01:00	0	0	0	0	0
	02:00	0	0	0	0	0
	03:00	0	0	1	0	1
	04:00	0	0	0	0	0
	05:00	0	1	1	1	3
	06:00	1	0	3	0	4
	07:00	1	1	0	1	3
	08:00	0	0	0	2	2
	09:00	1	0	0	2	3
	10:00	0	1	0	0	1
	11:00	1	0	1	2	4
	12:00	1	1	0	3	5
	13:00	2	1	0	0	3
	14:00	2	0	0	2	4
	15:00	3	2	1	2	8
	16:00	1	1	2	1	5
	17:00	1	3	0	4	8
	18:00	1	3	1	1	6
	19:00	1	1	0	2	4
	20:00	1	0	1	1	3
	21:00	1	1	1	0	3
	22:00	0	1	0	0	1
	23:00	0	1	0	1	2
Day Total					_	74

AM Total : 22 (29.7%) Peak AM Hour : 05:45 = 5 (6.8%) Peak AM Factor : 0.417 Average Period : 0.8

PM Total : 52 (70.3%) Peak PM Hour : 17:45 = 9 (12.2%) Peak PM Factor : 0.562 Average Hour : 3.1

Basic Volume Summary: Azuelo East

	Grand Total For Data From: 00:00 - 08/15/2017 To: 23:59 - 08/16/2017												
Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour		AM Total & Percent	PM Total & Percent					
#1.	75 (31.9%)	2.00	38	0.4	1.6		27 (36.0%)	48 (64.0%)					
#3.	160 (68.1%)	2.00	80	0.8	3.3		56 (35.0%)	104 (65.0%)					
ALL	235	2.00	118	1.2	4.9	_	83 (35.3%)	152 (64.7%)					
Lane	Peak AM Hour Da	ate Peak	AM Factor	Peak	PM Hour	Date	Peak PM Facto	r					

17:45 =

15:15 =

08/16/2017

08/15/2017

0.417

0.562

#1.

#3.

06:15 =

06:30 =

4 08/15/2017

8 08/15/2017

0.500

0.500

Basic Volume Report: Azuelo West

Station ID: Azuelo West

Info Line 1 : Between Torpedo PI & Saratoga

Info Line 2 : Albuquerque

GPS Lat/Lon:

DB File: DBFILE 081717 - 31.DB

Last Connected Device Type: Apollo

Version Number: 1.62 Serial Number: 24087

Number of Lanes: 1

Posted Speed Limit: 0.0 mph

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

Lane #1 Basic Volume Data From: 00:00 - 08/15/2017 To: 23:59 - 08/16/2017

Date	Time	:00	:15	:30	:45	Total
08/15/17	00:00	1	0	0	0	1
Tue	01:00	0	0	0	0	0
	02:00	0	0	0	0	0
	03:00	0	0	0	1	1
	04:00	0	0	0	0	0
	05:00	1	0	1	0	2
	06:00	0	1	0	1	2
	07:00	3	1	0	3	7
	08:00	1	4	0	1	6
	09:00	1	3	2	1	7
	10:00	0	2	0	2	4
	11:00	0	1	2	0	3
	12:00	2	3	0	1	6
	13:00	1	3	1	3	8
	14:00	1	0	5	1	7
	15:00	0	1	1	0	2
	16:00	3	3	3	5	14
	17:00	2	2	6	0	10
	18:00	3	1	0	0	4
	19:00	4	5	2	0	11
	20:00	4	0	0	3	7
	21:00	3	0	1	3	7
	22:00	0	3	1	1	5
	23:00	0	2	0	0	2
Day Total	:				-	116

AM Total: 33 (28.4%) Peak AM Hour: 07:30 = 8 (6.9%) Peak AM Factor: 0.500 Average Period: 1.2
PM Total: 83 (71.6%) Peak PM Hour: 16:45 = 15 (12.9%) Peak PM Factor: 0.625 Average Hour: 4.8

Date	Time	:00	:15	:30	:45	Total
08/16/17	00:00	0	0	0	1	1
Wed	01:00	0	0	0	0	0
	02:00	0	0	0	1	1
	03:00	0	0	1	0	1
	04:00	0	0	0	0	0
	05:00	0	0	1	0	1
	06:00	0	0	2	1	3
	07:00	5	1	0	1	7
	08:00	2	0	0	0	2
	09:00	0	0	0	0	0
	10:00	0	1	1	0	2
	11:00	0	1	1	3	5
	12:00	0	0	3	1	4
	13:00	2	1	0	1	4
	14:00	1	0	1	4	6
	15:00	1	1	0	2	4
	16:00	0	1	2	3	6
	17:00	3	6	4	2	15
	18:00	2	3	1	4	10
	19:00	1	3	3	3	10
	20:00	3	2	3	2	10
	21:00	2	1	0	0	3
	22:00	0	0	2	1	3
	23:00	0	0	1	1	2
Day Total					_	100

AM Total : 23 (23.0%) Peak AM Hour : 06:30 = 9 (9.0%) Peak AM Factor : 0.450 Average Period : 1.0 PM Total : 77 (77.0%) Peak PM Hour : 16:45 = 16 (16.0%) Peak PM Factor : 0.667 Average Hour : 4.2

Lane #3 Configuration

Dir. Information Volume Mode Volume Sensors Divide By 2 Comment Eastbound Veh. Normal

Lane #3 Basic Volume Data From: 00:00 - 08/15/2017 To: 23:59 - 08/16/2017

Date	Time	:00	:15	:30	:45	Total
08/15/17	00:00	0	0	0	0	0
Tue	01:00	0	0	0	1	1
	02:00	0	0	1	0	1
	03:00	0	0	0	1	1
	04:00	0	0	0	0	0
	05:00	1	1	0	0	2
	06:00	1	0	4	2	7
	07:00	3	6	5	5	19
	08:00	3	3	4	2	12
	09:00	5	0	4	2	11
	10:00	1	4	1	1	7
	11:00	2	1	4	0	7
	12:00	2	1	1	2	6
	13:00	1	0	0	4	5
	14:00	3	0	2	5	10
	15:00	2	3	6	5	16
	16:00	3	6	1	7	17
	17:00	2	6	4	3	15
	18:00	2	1	7	1	11
	19:00	3	3	1	1	8
	20:00	1	1	2	3	7
	21:00	1	2	2	0	5
	22:00	1	1	1	1	4
	23:00	1	0	0	0	1
Day Total	:				_	173

AM Total: 68 (39.3%) Peak AM Hour : 07:00 = 19 (11.0%) Peak AM Factor: 0.792 Average Period : 1.8 105 (60.7%) PM Total: Peak PM Hour : 15:30 = 20 (11.6%) Peak PM Factor: 0.714 Average Hour: 7.2

Printed: 08/17/17 Page 3 Centurion Basic Volume Report

1.7

6.7

Average Period :

Average Hour :

AM Total:

PM Total:

69 (43.1%)

91 (56.9%)

Peak AM Hour : 07:00 =

Peak PM Hour : 16:30 =

Date	Time	:00	:15	:30	:45	Total
08/16/17	00:00	1	1	0	1	3
Wed	01:00	0	0	0	0	0
	02:00	0	0	0	0	0
	03:00	0	0	1	0	1
	04:00	0	0	0	0	0
	05:00	1	1	0	1	3
	06:00	1	1	5	2	9
	07:00	2	9	4	6	21
	08:00	1	2	2	3	8
	09:00	3	2	3	3	11
	10:00	0	2	1	3	6
	11:00	1	2	1	3	7
	12:00	2	1	0	3	6
	13:00	6	2	1	1	10
	14:00	3	2	2	5	12
	15:00	4	1	2	3	10
	16:00	1	1	8	3	13
	17:00	2	4	0	5	11
	18:00	3	4	1	0	8
	19:00	1	1	2	3	7
	20:00	1	0	3	2	6
	21:00	1	1	2	0	4
	22:00	1	1	1	0	3
	23:00	0	1	0	0	1
Day Total						160

21 (13.1%)

17 (10.6%)

Peak AM Factor: 0.583

Peak PM Factor: 0.531

Basic Volume Summary: Azuelo West

	Grand Total For Data From: 00:00 - 08/15/2017 To: 23:59 - 08/16/2017									
Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent			
#1.	216 (39.3%)	2.00	108	1.1	4.5	56 (25.9%)	160 (74.1%)			

π1.	210 (39.370)	2.00	100	1.1	4.5	30 (23.970)	100 (74.170)
#3.	333 (60.7%)	2.00	167	1.7	6.9	137 (41.1%)	196 (58.9%)
ALL	549	2.00	275	2.8	11.4	193 (35.2%)	356 (64.8%)

Lane	Peak AM F	lour	Date	Peak AM Factor	Peak PM H	lour	Date	Peak PM Factor	
#1.	06:30 =	9	08/16/2017	0.450	16:45 =	16	08/16/2017	0.667	
#3.	07:00 =	21	08/16/2017	0.583	15:30 =	20	08/15/2017	0.714	

Appendix B



Crash Date	Agency Case Number	Crash Intersecting Street	Crash Primary Street	Crash Analysis	Contributing Factors
9/1/2016	160081487	UNSER BLVD	UNSER BLVD	01 - BOTH GOING STRAIGHT/ENTERING AT ANGLE	None
9/1/2016	160081487	UNSER BLVD	UNSER BLVD	01 - BOTH GOING STRAIGHT/ENTERING AT ANGLE	Driver inattention
9/14/2016	160086147	UNSER BLVD	UNSER BLVD NW NM 345	20 - MEDIAN RAISED OR CURB	Avoid no contact - other, Driver inattention, Excessive Speed
2/1/2016	160010214	UNSER BLVD	UNSER BLVD	19 - LIGHT STANDARD (LIGHT POLE)	Driver inattention
10/27/2016	160101656	AZUELO NW	UNSER BLVD	47 - OTHER	None
10/27/2016	160101656	AZUELO NW	UNSER BLVD	47 - OTHER	Defective tires
3/15/2017	170025190	AZUELO NW	UNSER BLVD	08 - BOTH GOING STRAIGHT/FROM SAME DIR	None
3/15/2017	170025190	AZUELO NW	UNSER BLVD	08 - BOTH GOING STRAIGHT/FROM SAME DIR	None
3/15/2017	170025190	AZUELO NW	UNSER BLVD	08 - BOTH GOING STRAIGHT/FROM SAME DIR	Driver inattention
3/15/2017	170025190	AZUELO NW	UNSER BLVD	08 - BOTH GOING STRAIGHT/FROM SAME DIR	None
3/15/2017	170025190	AZUELO NW	UNSER BLVD	08 - BOTH GOING STRAIGHT/FROM SAME DIR	Following too closely

Appendix C



NEIGHBORHOOD TRAFFIC CALMING PETITION FORM

GTY OF ALBUQUERQUE — NTMP * * * NEIGHBORHOOD TRAFFIC CALMING PETITION * * *

	* * * NEIGHBOR	HOOD TRAFFIC CALMI	ING PETITION *	* *	
Section I Date: Date: date: date: <a href="</th"><th>SHBORHOOD OTWITACTS</th><th></th><th></th><th></th><th></th>	SHBORHOOD OTWITACTS				
Representatives from the _ initiation of a NTMP Study	Based on available data		ighborhood, on_	ed in the attached Exhibit	ested
considered to be in the affe	ected area. An initial ass	essment of available da	ta has been cond	lucted and to continue are	oomina
ne application neighborho	od support is required.	Iwo-thirds of the showr	households/pro	portios on Exhibit 1 must s	oroo
with the application and sig	gn the petition below. If	ne completed petition s	hould be submitt	ed to the City of Albuquero	aue
raffic Engineering Division	(600 Second NW, Albuq	juerque, NM 87103 or S	TEP@cabq.gov)		
ection II	6108 (ONLYO	NESIGNATURE PER AD	DRESS)	,	
Voma Monte	Azrelo NW	720-493	_	Nu	
NGELD Gallans	5035 Starfine	PINIU 319-90	104 Email	A Sanatura	ne-
ynthia Torra	Address 5031 Stave	felephone	Email P	Sgnature	ST.
ne (print)	Address	Telephone	B- 30 H	Lynn	Mod
DSMVa Miller Methor	5015 Safre P	1. NW 505-620	4837 joshu	. Uz molander Dine. 11	wow It
ealig E Hood	5027 Star Ly	- Physical Carls	30878C	Mon Sgnature	Nano
me (print)	Address	Telephone 5 15 1.	Email	Sgnature 0 A	000 8
me (brint) (SICHS	SOCO STARFIRE	505-897-04	76 THOM.	DRIGHT OGNAIL	COL
MEIGHT SO	005 STORFIRE PLU	W 505-897-047	/-	Sgnature 31.) na 10
Keith Coleman	- 1	respirate	Enail	Sgnature	, io b
me (print)	Address I STARFIRED , NW	505-263-5205 Telephone	Keith AWKKE, US	Sonature Col	_
me (print)	Address 501	9 Stayine PL n	JW	Maria EMO	Land
			unai	Sgnature	
me (print)	Address ()-	Telephone	Email	Sgnature	
mp (print)	ADDRESS OF STORY	telephone TL MCO	Email	Sgnature	
vacant me (print)	5023 5to	ictice PLN	w	og ature	
	7.53.600	reephone	Email	Sgnature	
me (print)	Address	Telephone	Email	Sgnature	-
ame (print)	Address	Telephone	Email		999
ame (print)	Address			Sgnature	
sio (pina)	Address	Telephone	Enail	Sgnature	
ame (print)	Address	Telephone	Email	Sgnature	
ame (print)	Address	Telephone			
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