

# AMHERST DRIVE SPEED STUDY







# Amherst Drive Speed Study Final Report

# Albuquerque, New Mexico



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City of Albuquerque

May 2018

## **Table of Contents**

INTRODUCTION	1
1.A. PROJECT PURPOSE	
1.B. PROJECT DESCRIPTION	1
1.C. BACKGROUND OF SPEED LIMITS	
1.D. SETTING SPEED LIMITS	3
2. EXISTING CONDITIONS	5
2.A. COUNT LOCATIONS	5
2.B. EXISTING CONDITIONS	5
3. DATA	7
3.A. ADT	7
3.B. PEAK HOUR TRAFFIC VOLUMES	
3.C. SPEED STUDY RESULTS	8
3.D. CRASH DATA	ç
4. CONCLUSION	10
Appendices	11

## **List of Tables**

Table 3.A.1.	Amherst Drive ADT	7
Table 3.B.1.	Amherst Drive Peak Hour Traffic Volumes (vph)	7
	Amherst Drive (North) Speed Study	
	Amherst Drive (South) Speed Study	
Table 3.C.3.	Amherst Drive ADT ≥ 25 mph	Ç
	Crash Data	
	COA NTMP (Neighborhood Traffic Management Program) Traffic Calming Measures	

## **List of Figures**

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



## INTRODUCTION

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

## 1.A. PROJECT PURPOSE

A speed study on Amherst Drive from Lead Avenue to Coal Avenue was conducted to determine the following:

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

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 0.12 (633.60 LF) mile section of Amherst Drive from Lead Avenue to Coal Avenue. Figure 1.B.1. below displays the study location and Figure 1.B.2. on page 2 displays the project limits.

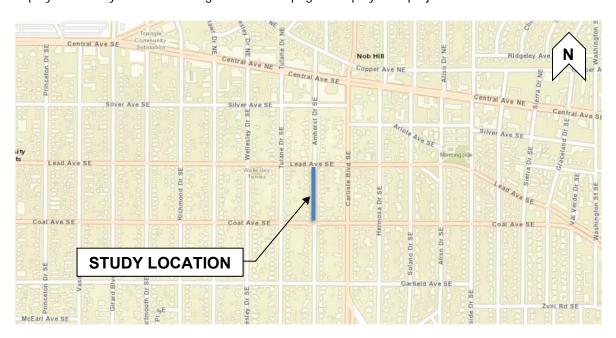


FIGURE 1.B.1.
STUDY LOCATION

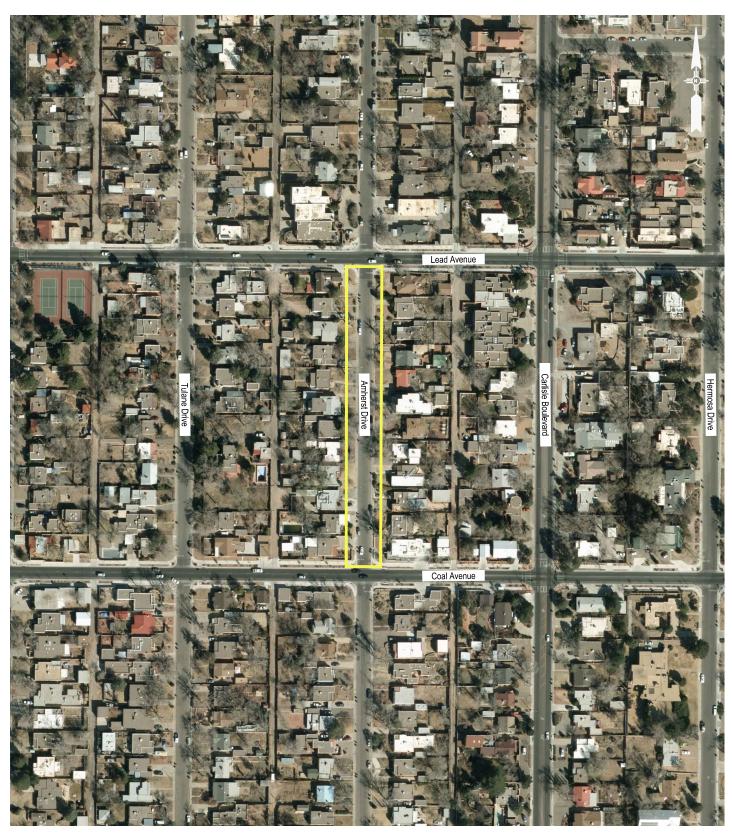




FIGURE 1.B.2. STUDY LIMITS

## 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 85<sup>th</sup> percentile. Out of the (typically) 100 vehicles surveyed, beginning with the fasted vehicle speed recorded the 15<sup>th</sup> vehicle from that speed is determined to show where the 85<sup>th</sup> 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 85<sup>th</sup> percentile speed. For example, if the 85<sup>th</sup> 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 8<sup>th</sup> 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 50<sup>th</sup> and 51<sup>st</sup> vehicles are added and divided by 2 to obtain the median speed. If the 50<sup>th</sup> vehicle of such a survey was traveling at 56 mph and the 51<sup>st</sup> 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:

- Amherst Drive North Lead Avenue to mid-Amherst Drive;
- Amherst Drive South Mid-Amherst Drive to Coal 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 Amherst Drive. Within the study limits, there are approximately 24 driveways that provide access to residential homes. Because there is no posted limit sign within the project limits, it is speculated that the current speed limit is 25 mph base on City Ordinance.



FIGURE 2.1. COUNT LOCATIONS

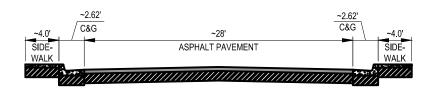


FIGURE 2.2. EXISTING AMHERST DRIVE TYPICAL SECTION



## 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.					
Amherst Driv	Amherst Drive ADT				
Count Location	NB	SB	ADT		
Amherst Drive (North)	449	233	682		
Amherst Drive (South)	438	227	665		
Average	444	230	674		

The Amherst Drive study area directional ADT ranges from 227 to 449 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.			
Amherst Drive Peak Hour Traffic Volumes (vph)					
Count Location	Southbound (Peak Hour)				
Amherst Drive (North)	AM Peak	52 (7:00 AM – 8:00 AM)	28 (8:30 AM – 9:30 AM)		
Ammerst Drive (North)	PM Peak	49 (4:45 PM – 5:45 PM)	31 (4:30 PM – 5:30 PM)		
Amherst Drive (South)	AM Peak	50 (7:00 AM – 8:00 AM)	29 (8:30 AM – 9:30 AM)		
Aminerst Drive (South	PM Peak	49 (4:45 PM – 5:45 PM)	30 (4:30 PM – 5:30 PM)		

The Amherst Drive study area peak hour traffic volumes range from 28 to 52 vehicles per hour.

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

Table 3.C.1.						
	Amherst Drive (North) Speed Study					
Speed	NB	SB	Total			
Average	24.0	23.6	23.9			
10 mph Pace	20.1 – 30.0 (73.3%)	20.1 – 30.0 (73.1%)	20.1 - 30.0 (73.2%)			
50th Percentile	25.5	24.5	25.2			
67th Percentile	27.5	27.0	27.3			
85th Percentile	29.6	29.5	29.6			

Table 3.C.2.						
	Amherst Drive (South) Speed Study					
Speed	NB	SB	Total			
Average	22.1	21.3	21.8			
10 mph Pace	20.1 – 30.0 (77.7%)	20.1 – 30.0 (74.7%)	20.1 - 30.0 (76.7%)			
50th Percentile	23.2	22.9	23.2			
67th Percentile	67th Percentile 25.1		24.9			
85th Percentile	28.0	27.7	28.0			

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 Amherst Drive, roadway conditions are consistent, controlled access, satisfactory pavement conditions, two travel lanes, and on-street parking. Table 3.C.3. displays that 42 percent of the total ADT of the two (2) count locations recorded speeds greater than 25 mph.

Table 3.C.3.							
	Amherst Drive ADT ≥ 25 mph						
Speed (mph)	Speed (mph) 0 - 19.9 MPH 20 - 24.9 MPH				≥ 2	5 MPH	Avg. ADT
Amherst Drive (North)	99 15%		236	35%	347	51%	682
Amherst Drive (South) 133 20%		319	48%	213	32%	665	
Average	116	17%	278	41%	280	42%	674

#### 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 five (5) recorded crashes within the study area.

	Table 3.D.1.						
		Amherst Drive Crash S	Summary				
Date	Location (Primary Street / Intersecting Street)	Cause of Crash	Crash Analysis	Crash Correct with Traffic Calming?			
4/19/2015	Lead Avenue / Amherst Drive	Driver inattention; improper turn	Fire hydrant	No			
7/17/2015	Lead Avenue / Amherst Drive	Driver inattention; Fail to yield right of way	From opposite direction/not stated	No			
11/3/2015	Lead Avenue / Amherst Drive	Excessive speed; Speed too fast for conditions	Both going straight/entering at angle	No			
4/20/2015	Coal Avenue / Amherst Drive	Driver inattention; Speed too fast for conditions	Both going straight/from same direction	No			
12/9/2014	Lead Avenue / Amherst Drive	Other improper driving	Fence	No			

## 4. CONCLUSION

After evaluating the volume and speed data within the project area, it is concluded that 42 percent of the traffic is exceeding 25 mph. 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	ires
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, Amherst Drive meets none of the required criteria 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: Amherst North

Station ID: Amherst North

Info Line 1 : South of Lead Info Line 2 : Albuquerque

GPS Lat/Lon:

DB File: AM NORTH.DB

Last Connected Device Type : Apollo

Version Number: 1.62 Serial Number: 24088

Number of Lanes: 1

Posted Speed Limit: 0.0 mph

## Lane #1 Configuration

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

Lane #1 Special Speed Study	Data From: 00:00 - 08/16/2017	To: 23:59 - 08/17/2017
-----------------------------	-------------------------------	------------------------

		#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	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	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	1
	05:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	06:00	4	5	7	1	0	0	0	0	0	0	0	0	0	0	0	0	17
	07:00	9	18	19	6	0	0	0	0	0	0	0	0	0	0	0	0	52
	08:00	5	9	24	4	0	0	0	0	0	0	0	0	0	0	0	0	42
	09:00	5	9	13	3	0	0	0	0	0	0	0	0	0	0	0	0	30
	10:00	1	5	18	3	1	0	0	0	0	0	0	0	0	0	0	0	28
	11:00	3	9	12	5	0	0	0	0	0	0	0	0	0	0	0	0	29
	12:00	4	8	9	4	0	0	0	0	0	0	0	0	0	0	0	0	25
	13:00	5	7	9	3	0	0	0	0	0	0	0	0	0	0	0	0	24
	14:00	3	11	9	5	0	0	0	0	0	0	0	0	0	0	0	0	28
	15:00	3	22	15	2	0	0	0	0	0	0	0	0	0	0	0	0	42
	16:00	4	10	13	9	0	0	0	0	0	0	0	0	0	0	0	0	36
	17:00	4	14	20	5	1	0	0	0	0	0	0	0	0	0	0	0	44
	18:00	6	13	9	2	1	0	0	0	0	0	0	0	0	0	0	0	31
	19:00	2	8	4	2	0	0	0	0	0	0	0	0	0	0	0	0	16
	20:00	8	8	6	1	0	1	0	0	0	0	0	0	0	0	0	0	24
	21:00	0	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	8
	22:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	23:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Daily <sup>-</sup>	Total:	70	162	191	57	3	1	0	0	0	0	0	0	0	0	0	0	484
	Percent:	14%	33%	39%	12%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Percent:	14%	48%	87%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Ave	erage :	3	7	8	2	0	0	0	0	0	0	0	0	0	0	0	0	20

Average Speed 23.9 mph

50% Speed: 25.4 mph

67% Speed: 27.5 mph 85%

85% Speed: 29.6 mph

10mph Pace: 20.1 - 30.0 (72.9%)

		#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 <b>75</b> -	#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
08/17/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thu	01:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	05:00	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	06:00	2	7	6	2	0	0	0	0	0	0	0	0	0	0	0	0	17
	07:00	4	10	12	4	0	0	0	0	0	0	0	0	0	0	0	0	30
	08:00	5	8	18	5	0	0	0	0	0	0	0	0	0	0	0	0	36
	09:00	1	9	12	5	0	0	1	0	0	0	0	0	0	0	0	0	28
	10:00	3	7	13	1	0	0	0	0	0	0	0	0	0	0	0	0	24
	11:00	1	4	12	1	0	0	0	0	0	0	0	0	0	0	0	0	18
	12:00	4	8	11	4	0	0	0	0	0	0	0	0	0	0	0	0	27
	13:00	8	10	7	6	1	1	0	0	0	0	0	0	0	0	0	0	33
	14:00	4	8	10	3	0	0	0	0	0	0	0	0	0	0	0	0	25
	15:00	2	11	13	5	0	0	0	0	0	0	0	0	0	0	0	0	31
	16:00	4	8	17	5	1	0	0	0	0	0	0	0	0	0	0	0	35
	17:00	6	10	12	2	0	1	0	0	0	0	0	0	0	0	0	0	31
	18:00	2	14	10	1	0	0	0	0	0	0	0	0	0	0	0	0	27
	19:00	8	6	5	0	1	0	0	0	0	0	0	0	0	0	0	0	20
	20:00	1	6	7	1	0	0	0	0	0	0	0	0	0	0	0	0	15
	21:00	0	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	8
	22:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily T		58	133	170	47	3	2	1	0	0	0	0	0	0	0	0	0	414
	ercent :	14%	32%	41%	11%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Pe	ercent : erage :	14% 2	46% 6	87% 7	99% 2	99% 0	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100% 0	17
7,46	iago .			Speed					eed : 2			67%	Speed	: 27.5	mph	8	5% Spe	ed: 29.6 m

10mph Pace: 20.1 - 30.0 (73.2%)

## Lane #3 Configuration

#	Dir.	Information	Vehicle Sensors	Sensor Spacing	Loop Length	Comment
3	S	Southbound	Ax-Ax	4 0 ft	6.0 ft	

		Lan	e #3	Speci	al Sp	eed S	Study	Data	Fron	n: 00:	00 - 0	8/16/	2017	To:	23:59	- 08/	17/20 <sup>-</sup>	17
		#1 <i>O</i> -	#2 20 -	#3 25 -	#4 30 -	#5 <b>35</b> -	#6 40 -	#7 45 -	#8 50 -	#9 55 -	#10 60 -	#11 65 -	#12 70 -	#13 <b>75</b> -	#14 80 -	#15 <b>85</b> -	#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	1	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	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	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	06:00	0	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	7
	07:00	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	08:00	3	8	8	3	0	0	0	0	0	0	0	0	0	0	0	0	22
	09:00	5	5	5	3	0	0	0	0	0	0	0	0	0	0	0	0	18
	10:00	1	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	11:00	3	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	12:00	2	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	13:00	3	6	3	3	0	1	0	0	0	0	0	0	0	0	0	0	16
	14:00	3	7	4	1	0	0	0	0	0	0	0	0	0	0	0	0	15
	15:00	4	6	6	2	0	0	0	0	0	0	0	0	0	0	0	0	18
	16:00	3	9	12	3	0	0	0	0	0	0	0	0	0	0	0	0	27
	17:00	2	10	6	3	1	0	0	0	0	0	0	0	0	0	0	0	22
	18:00	2	9	7	0	1	0	0	0	0	0	0	0	0	0	0	0	19
	19:00	2	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	20:00	0	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	21:00	2	3	5	3	0	0	0	0	0	0	0	0	0	0	0	0	13
	22:00	0	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	7
	23:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Daily 7	Total:	39	99	84	25	2	1	0	0	0	0	0	0	0	0	0	0	250
	ercent :	16%	40%	34%	10%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	ercent:	16%	55%	89%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Ave	erage :	2 A	verage	4 Speed	23.4	0 mph	5	0 0% Sp	0 eed : 2	0 4.2 mp	0 oh		0 Speed oh Pace					11 ed: 29.3

Centurion Special Speed Study Report

		#1 <i>O</i> -	#2 20 -	#3 25 -	#4 30 -	#5 <b>35</b> -	#6 40 -	#7 <b>45</b> -	#8 50 -	#9 <b>55</b> -	#10 60 -	#11 65 -	#12 70 -	#13 <b>75</b> -	#14 80 -	#15 <b>85</b> -	#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
	00:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	07:00	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	6
	08:00	3	9	7	3	1	0	0	0	0	0	0	0	0	0	0	0	23
	09:00	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	10:00	1	3	4	2	0	0	0	0	0	0	0	0	0	0	0	0	10
	11:00	4	6	1	1	0	0	0	0	0	0	0	0	0	0	0	0	12
	12:00	0	6	2	2	0	0	0	0	0	0	0	0	0	0	0	0	10
	13:00	0	8	6	2	1	0	0	0	0	0	0	0	0	0	0	0	17
	14:00	2	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	10
	15:00	3	6	5	2	0	0	0	0	0	0	0	0	0	0	0	0	16
	16:00	3	8	7	3	1	0	0	0	0	0	0	0	0	0	0	0	22
	17:00	3	6	10	1	0	0	0	0	0	0	0	0	0	0	0	0	20
	18:00	2	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	19:00 20:00	4	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	15
				4	1	0	0	0	0	0	0	0	0	0	0	0	0	9
	21:00	1	1	7	0	3	0	0	0	0	0	0	0	0	0		0	12
	22:00 23:00	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4 3
Daily To	otal: ercent:	31 14%	78 36%	79 37%	21 10%	6 3%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	215
Cum. Pe		14%	51%	37% 87%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
	rage :	1470	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	8
	-	A	verage	Speed	23.9	mph	5	0% Sp	eed: 2	4.9 mp	h		Speed					ed: 29.6 n

10mph Pace: 20.1 - 30.0 (73.0%)

#7 #9 #10 #11 #12 #13 #14 #15 #2 #3 #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

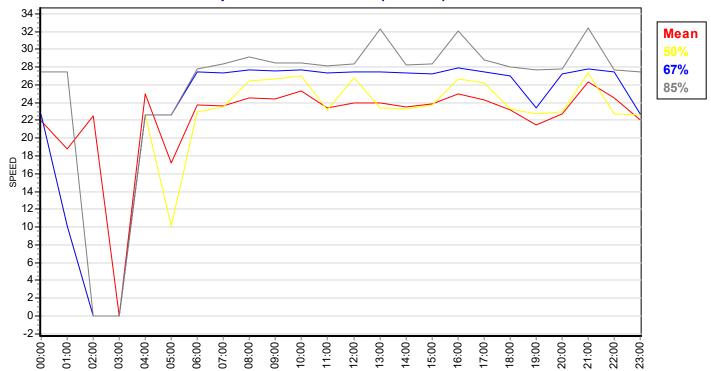
Centurion Special Speed Study Report Printed: 08/18/17 Page 5

# Special Speed Study Summary: Amherst North

	#1 <i>O</i> -	#2 20 -	#3 25 -	#4 30 -	#5 35 -	#6 40 -	#7 45 -	#8 50 -	#9 <b>55</b> -	#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:	128	295	361	104	6	3	1	0	0	0	0	0	0	0	0	0	898
Percent :	14%	33%	40%	12%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	14%	47%	87%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	3	6	8	2	0	0	0	0	0	0	0	0	0	0	0	0	19
ADT = 449	A	verage	Speed	24.0	mph	5	0% Sp	eed: 2	5.5 mp	h		Speed oh Pace					ed: 29.6 mph
											ΙΟΠΙ	on Pace	3. 20.1	- 30.0	(13.37)	D)	
Grand Total #3:	70	177	163	46	8	1	0	0	0	0	0	0	0	0	0	0	465
Percent :	15%	38%	35%	10%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	15%	53%	88%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	1	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	9
ADT = 232	A	verage	Speed	23.6	mph	5	0% Sp	eed: 2	4.5 mp	h	67%	Speed	: 27.0	mph	8	5% Spe	ed: 29.5 mph
											10mp	oh Pace	e: 20.1	- 30.0	(73.1%	(a)	
Comb. Total :	198	472	524	150	14	4		0	0	0		0	0	0	0		1363
Percent :	15%	35%	38%	11%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	15%	49%	88%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	4	10	11	3	0	0	0	0	0	0	0	0	0	0	0	0	28
ADT = 681	A	verage	Speed	23.9	mph	5	0% Sp	eed: 2	5.2 mp	h	67%	Speed	: 27.3	mph	8	5% Spe	ed: 29.6 mph
											10mp	oh Pace	e: 20.1	- 30.0	(73.2%	5)	

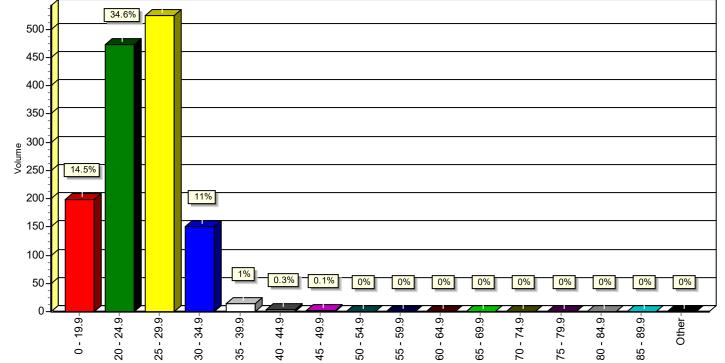
#### Amherst North Charts For Data From: 00:00 - 08/16/2017 To: 23:59 - 08/17/2017

## Speed Percent vs. Time (all lanes)





38.4%



Centurion Special Speed Study Report Printed: 08/18/17 Page 7

# Special Speed Study Report: Amherst South

Station ID: Amherst South

Info Line 1 : North of Coal Ave Info Line 2 : Albuquerque

GPS Lat/Lon:

DB File: AM S.DB

Last Connected Device Type : Apollo

Version Number: 1.62 Serial Number: 97001

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	

Lan	ne #1	Spec	ial Sp	peed	Study	/ Data	Fror	n: 00	:00 -	08/16	/2017	To:	23:5	9 - 08	3/17/2017
#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16
^	~ ~	0.5	~~	0.5	40	45			~~	0.5	70	7-	00	0.5	

		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
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	06:00	2	11	3	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	07:00	16	22	11	0	0	0	0	0	0	0	0	1	0	0	0	0	50
	08:00	12	17	11	0	0	0	0	0	0	0	0	0	0	0	0	0	40
	09:00	8	12	7	2	0	0	0	0	0	0	0	0	0	0	0	0	29
	10:00	2	15	9	1	1	0	0	0	0	0	0	0	0	0	0	0	28
	11:00	3	14	9	2	0	0	0	0	0	0	0	0	0	0	0	0	28
	12:00	5	12	7	0	0	0	0	0	0	0	0	0	0	0	0	0	24
	13:00	8	10	4	2	0	0	0	0	0	0	0	0	0	0	0	0	24
	14:00	3	16	10	0	0	0	0	0	0	0	0	0	0	0	0	0	29
	15:00	5	23	10	2	0	0	0	0	0	0	0	0	0	0	0	0	40
	16:00	5	14	15	1	0	0	0	0	0	0	0	0	0	0	0	0	35
	17:00	7	24	13	2	0	0	0	0	0	0	0	0	0	0	0	0	46
	18:00	5	17	8	0	0	0	0	0	0	0	0	0	0	0	0	0	30
	19:00	6	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	20:00	6	15	2	1	0	0	0	0	0	0	0	0	0	0	0	0	24
	21:00	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	23:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Daily '	Total :	93	238	126	13		0	0	0	0	0	0		0	0	0	0	472
-	ercent:	20%	50%	27%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. P	ercent:	20%	70%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Δν	erane .	1	10	5	- 1	Λ	Λ	Λ	Λ	Λ	Λ	0	Λ	Λ	Λ	Λ	Λ	20

67% Speed: 24.7 mph 85% Speed: 27.7 mph 10mph Pace: 20.1 - 30.0 (77.1%)

		#1 <i>O</i> -	#2 20 -	#3 25 -	#4 30 -	#5 35 -	#6 <b>4</b> 0 -	#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
08/17/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thu	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	05:00	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	06:00	2	9	5	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	07:00	5	16	7	2	0	0	0	0	0	0	0	0	0	0	0	0	30
	08:00	6	9	14	3	0	0	0	0	0	0	0	0	0	0	0	0	32
	09:00	6	13	7	2	1	0	0	0	0	0	0	0	0	0	0	0	29
	10:00	1	15	7	0	0	0	0	0	0	0	0	0	0	0	0	0	23
	11:00	2	8	7	0	0	0	0	0	0	0	0	0	0	0	0	0	17
	12:00	7	11	8	0	0	0	0	0	0	0	0	0	0	0	0	0	26
	13:00	9	9	11	3	0	0	0	0	0	0	0	0	0	0	0	0	32
	14:00	5	13	7	1	0	0	0	0	0	0	0	0	0	0	0	0	26
	15:00	5	13	13	1	0	0	0	0	0	0	0	0	0	0	0	0	32
	16:00	4	14	15	2	0	0	0	0	0	0	0	0	0	0	0	0	35
	17:00	7	11	12	0	1	0	0	0	0	0	0	0	0	0	0	0	31
	18:00	4	16	7	0	0	0	0	0	0	0	0	0	0	0	0	0	27
	19:00	6	9	5	0	0	0	0	0	0	0	0	0	0	0	0	0	20
	20:00	1	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	21:00	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	22:00	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily 1	Total :	71	181	136	14	2	0	0	0	0	0	0	0	0	0	0	0	404
P	ercent:	18%	45%	34%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. P		18%	62%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Ave	erage :	3	8	6	1	0	0	0	0	0	0	0	0	0	0	0	0	18

Average Speed 22.4 mph 50% Speed: 23.4 mph 67% Speed: 26.0 mph 85% Speed: 28.2 mph 10mph Pace: 20.1 - 30.0 (78.5%)

## Lane #3 Configuration

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

		Lan	is πυ	Obeci	ai op	Jou C	Judy	Data	1 101	50.	30 - 0	. J. 10/	_017	10.	20.00	, - 50/	17/20 <sup>-</sup>	• •
		#1 <i>0</i> -	#2 20 -	#3 25 -	#4 30 -	#5 35 -	#6 <b>40</b> -	#7 45 -	#8 50 -	#9 55 -	#10 60 -	#11 65 -	#12 70 -	#13 75 -	#14 80 -	#15 <b>85</b> -	#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
8/16/17	00:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wed	01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	06:00	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	07:00	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	08:00	5	9	9	1	0	0	0	0	0	0	0	0	0	0	0	0	24
	09:00	4	11	1	2	0	0	0	0	0	0	0	0	0	0	0	0	18
	10:00	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	11:00	1	7	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	12:00	3	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	13:00	6	5	4	1	0	0	0	0	0	0	0	0	0	0	0	0	16
	14:00	4	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	15
	15:00	4	5	7	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	16:00	3	12	11	0	0	0	0	0	0	0	0	0	0	0	0	0	26
	17:00	5	12	4	1	0	0	0	0	0	0	0	0	0	0	0	0	22
	18:00	4	10	6	0	0	0	0	0	0	0	0	0	0	0	0	0	20
	19:00	4	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	20:00	2	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	21:00	1	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	11
	22:00	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	23:00	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Daily 1	otal :	54	116	68	6	0	0	0	0	0	0	0	0	0	0	0	0	244
	ercent :	22%	48%	28%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Pe		22%	70%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	4.5
Ave	erage :	2 A	5 verage	Speed	0 21.4	0 mph	5	0 0% Sp	0 eed : 2	0 2.9 mp	0 oh			0 : 24.5 e: 20.1	0 mph - 30.0			10 ed: 27.

Centurion Special Speed Study Report

	_	#1 <i>O</i> -	#2 20 -	#3 25 -	#4 30 -	#5 <b>35</b> -	#6 40 -	#7 45 -	#8 50 -	#9 <b>55</b> -	#10 60 -	#11 65 -	#12 70 -	#13 <b>75</b> -	#14 80 -	#15 <b>85</b> -	#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
08/17/17	00:00	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Thu	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	07:00	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	7
	08:00	7	11	6	0	0	0	0	0	0	0	0	0	0	0	0	0	24
	09:00	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	10:00	3	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	11:00	6	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	12:00	2	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	10
	13:00	1	10	5	1	0	0	0	0	0	0	0	0	0	0	0	0	17
	14:00	5	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	15:00	2	10	3	1	0	0	0	0	0	0	0	0	0	0	0	0	16
	16:00	4	9	6	1	0	0	0	0	0	0	0	0	0	0	0	0	20
	17:00	5	10	5	0	0	0	0	0	0	0	0	0	0	0	0	0	20
	18:00	2	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	19:00	4	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	20:00	1	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	21:00	0	4	3	3	0	0	0	0	0	0	0	0	0	0	0	0	10
	22:00	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	23:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Daily 1		47	102	53	8	0	0	0	0	0	0	0	0	0	0	0	0	210
	ercent :	22%	49%	25%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Po	ercent : erage :	22% 2	71% 4	96% 2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100% 0	8
,	35.			Speed						2.7 mp		67%	Speed	: 24.4	mph	8	5% Spe	ed: 27.7

Centurion Special Speed Study Report

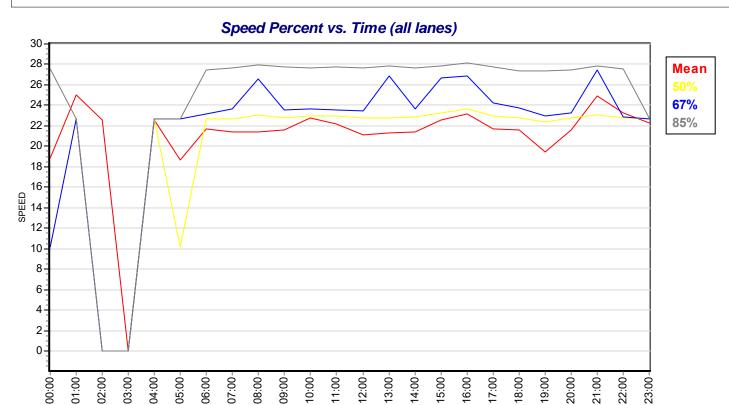
#7 #9 #10 #11 #12 #13 #14 #15 #2 #3 #4 #5 #6 #8 #16 0 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 55 - 60 - 65 -70 - 75 - 80 - 85 -19.9 24.9 29.9 34.9 39.9 44.9 49.9 54.9 59.9 64.9 69.9 74.9 79.9 84.9 89.9 Other Date Time Total

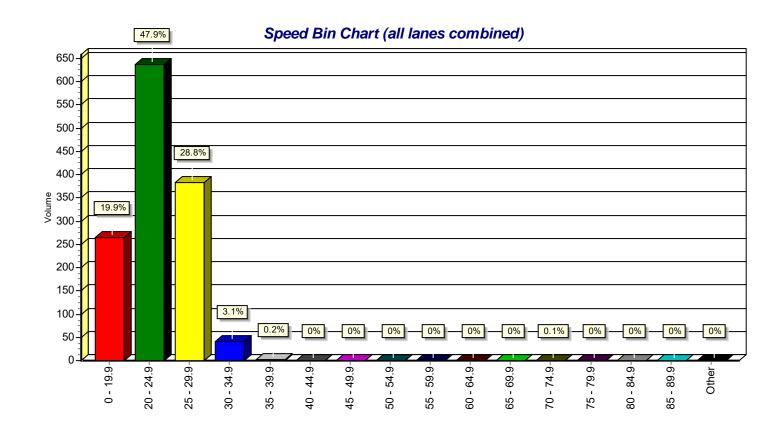
Centurion Special Speed Study Report Printed: 08/18/17 Page 5

# Special Speed Study Summary: Amherst South

	#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 <b>75</b> -	#14 80 -	#15 <b>85</b> -	#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:	164	419	262	27	3	0	0	0	0	0	0	1	0	0	0	0	876	
Percent :	19%	48%	30%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cum. Percent :	19%	67%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Average :	3	9	5	1	0	0	0	0	0	0	0	0	0	0	0	0	18	
ADT = 438	A	verage	Speed	22.1	mph	5	0% Sp	eed: 2	.3.2 mp	h		Speed h Pace				•	ed: 28.0 m	ıph
Grand Total #3:	101	218	121	14	0	0	0	0	0	0	0	0	0	0	0	0	454	
Percent :	22%	48%	27%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cum. Percent :	22%	70%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Average :	2	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
ADT = 227	A	verage	Speed	21.3	mph	5	0% Sp	eed: 2	2.9 mp	h		Speed h Pace		•		•	ed: 27.7 m	ıph
Comb. Total :	265	637	383	41	3	0	0	0	0	0	0	1	0	0	0	0	1330	
Percent :	20%	48%	29%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cum. Percent :	20%	68%	97%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Average :	6	13	8	1	0	0	0	0	0	0	0	0	0	0	0	0	28	
ADT = 665	A	verage	Speed	21.8	mph	5	0% Sp	eed: 2	3.2 mp	h		Speed h Pace		•			ed: 28.0 m	ıph

#### Amherst South Charts For Data From: 00:00 - 08/16/2017 To: 23:59 - 08/17/2017





Centurion Special Speed Study Report Printed: 08/18/17 Page 7

## Basic Volume Report: Amherst North

Station ID: Amherst North

Info Line 1: South of Lead Info Line 2 : Albuquerque

GPS Lat/Lon:

DB File: AM NORTH.DB

Last Connected Device Type: Apollo

Version Number: 1.62 Serial Number: 24088

Number of Lanes: 1

Posted Speed Limit: 0.0 mph

Lane #1 Configura
-------------------

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

## Lane #1 Basic Volume Data From: 00:00 - 08/16/2017 To: 23:59 - 08/17/2017

Date	Time	:00	:15	:30	: <b>4</b> 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	0	0	0
	04:00	0	1	0	0	1
	05:00	0	0	1	0	1
	06:00	3	7	2	5	17
	07:00	11	10	14	17	52
	08:00	8	10	9	15	42
	09:00	8	8	5	9	30
	10:00	6	3	11	8	28
	11:00	10	5	5	9	29
	12:00	4	9	8	4	25
	13:00	8	7	3	6	24
	14:00	4	8	9	7	28
	15:00	3	18	8	13	42
	16:00	3	11	11	11	36
	17:00	10	13	15	6	44
	18:00	10	9	8	4	31
	19:00	5	3	5	3	16
	20:00	7	5	7	5	24
	21:00	1	4	1	2	8
	22:00	1	2	0	0	3
	23:00	0	2	1	0	3
Day Total	:				_	484

Day Total :

AM Total :	200 (41.3%)	Peak AM Hour : 07:00 =	52 (10.7%)	Peak AM Factor: 0.765	Average Period :	5.0
PM Total :	284 (58.7%)	Peak PM Hour : 16:45 =	49 (10.1%)	Peak PM Factor: 0.681	Average Hour :	20.2

Printed: 08/18/17 Centurion Basic Volume Report

Date	Time	:00	:15	:30	: <b>4</b> 5	Total
08/17/17	00:00	0	0	0	0	0
Thu	01:00	2	0	0	0	2
	02:00	0	0	0	0	0
	03:00	0	0	0	0	0
	04:00	0	0	0	1	1
	05:00	0	1	1	1	3
	06:00	5	2	3	7	17
	07:00	6	6	9	9	30
	08:00	9	11	4	12	36
	09:00	8	10	4	6	28
	10:00	9	4	5	6	24
	11:00	8	2	3	5	18
	12:00	7	4	4	12	27
	13:00	11	8	4	10	33
	14:00	8	2	9	6	25
	15:00	5	9	9	8	31
	16:00	6	9	7	13	35
	17:00	5	13	7	6	31
	18:00	3	8	10	6	27
	19:00	4	8	4	4	20
	20:00	4	5	3	3	15
	21:00	2	4	1	1	8
	22:00	2	1	0	0	3
	23:00	0	0	0	0	0
Day Total	:				_	414

AM Total: 159 (38.4%) Peak AM Hour: 07:30 = 38 (9.2%) Peak AM Factor: 0.792 Average Period: 4.3 PM Total: 255 (61.6%) Peak PM Hour: 16:30 = 38 (9.2%) Peak PM Factor: 0.731 Average Hour: 17.3

Centurion Basic Volume Report Printed: 08/18/17 Page 2

## Lane #3 Configuration

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

Lane #3 Basic Volume Data From: 00:00 - 08/16/2017 To: 23:59 - 08/17/2017

Date	Time	:00	:15	:30	:45	Total
08/16/17	00:00	1	0	0	0	1
Wed	01:00	0	0	1	0	1
	02:00	0	0	0	0	0
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	0	0	2	0	2
	06:00	0	3	1	3	7
	07:00	1	2	2	2	7
	08:00	4	2	6	10	22
	09:00	6	6	3	3	18
	10:00	3	1	0	2	6
	11:00	1	5	1	2	9
	12:00	2	3	0	3	8
	13:00	7	4	3	2	16
	14:00	2	4	7	2	15
	15:00	7	3	3	5	18
	16:00	6	3	9	9	27
	17:00	8	5	5	4	22
	18:00	5	6	5	3	19
	19:00	9	3	2	2	16
	20:00	4	1	4	2	11
	21:00	2	2	3	6	13
	22:00	0	3	3	1	7
	23:00	1	1	1	2	5
Day Total	:					250

AM Total: 73 (29.2%) Peak AM Hour : 08:30 = 28 (11.2%) Peak AM Factor: 0.700 Average Period : 2.6 PM Total: 177 (70.8%) Peak PM Hour : 16:30 = 31 (12.4%) Peak PM Factor: 0.861 Average Hour: 10.4

Printed: 08/18/17 Page 3 Centurion Basic Volume Report

Date	Time	:00	:15	:30	:45	Total
08/17/17	00:00	0	1	2	0	3
Thu	01:00	1	0	0	0	1
	02:00	1	0	0	0	1
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	1	0	2	0	3
	06:00	0	0	0	0	0
	07:00	0	2	1	3	6
	08:00	9	2	6	6	23
	09:00	0	0	3	2	5
	10:00	3	1	4	2	10
	11:00	1	2	3	6	12
	12:00	1	2	2	5	10
	13:00	8	2	2	5	17
	14:00	2	0	3	5	10
	15:00	4	3	7	2	16
	16:00	5	4	8	5	22
	17:00	7	6	4	3	20
	18:00	2	6	3	2	13
	19:00	4	5	4	2	15
	20:00	4	2	2	1	9
	21:00	5	3	3	1	12
	22:00	2	1	1	0	4
	23:00	0	1	1	1	3
Day Total					_	215

AM Total : 64 (29.8%) Peak AM Hour : 08:00 = 23 (10.7%) Peak AM Factor : 0.639 Average Period : 2.2 PM Total : 151 (70.2%) Peak PM Hour : 16:30 = 26 (12.1%) Peak PM Factor : 0.812 Average Hour : 9.0

Centurion Basic Volume Report Printed: 08/18/17 Page 4

Centurion Basic Volume Report Printed: 08/18/17 Page 5

# Basic Volume Summary: Amherst North

#### Grand Total For Data From: 00:00 - 08/16/2017 To: 23:59 - 08/17/2017

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	898 (65.9%)	2.00	449	4.7	18.7	359 (40.0%)	539 (60.0%)
#3.	465 (34.1%)	2.00	233	2.4	9.7	137 (29.5%)	328 (70.5%)
ALL	1363	2.00	682	7.1	28.4	496 (36.4%)	867 (63.6%)

Lane	Peak AM H	our	Date	Peak AM Factor	Peak PM H	lour	Date	Peak PM Factor	
#1.	07:00 =	52	08/16/2017	0.765	16:45 =	49	08/16/2017	0.681	
#3.	08:30 =	28	08/16/2017	0.700	16:30 =	31	08/16/2017	0.861	

## Basic Volume Report: Amherst South

Station ID : Amherst South

Info Line 1 : North of Coal Ave Info Line 2 : Albuquerque

GPS Lat/Lon:

DB File: AM S.DB

Last Connected Device Type : Apollo

Version Number: 1.62 Serial Number: 97001

Number of Lanes: 1

Posted Speed Limit: 0.0 mph

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

#### Lane #1 Basic Volume Data From: 00:00 - 08/16/2017 To: 23:59 - 08/17/2017

Date	Time	:00	:15	:30	:45	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	0	0	0
	04:00	0	1	0	0	1
	05:00	0	0	0	0	0
	06:00	4	5	2	5	16
	07:00	10	9	14	17	50
	08:00	7	11	7	15	40
	09:00	9	6	5	9	29
	10:00	6	3	12	7	28
	11:00	9	5	5	9	28
	12:00	3	10	7	4	24
	13:00	9	6	3	6	24
	14:00	4	8	9	8	29
	15:00	3	18	8	11	40
	16:00	4	11	11	9	35
	17:00	10	13	17	6	46
	18:00	9	9	8	4	30
	19:00	6	2	5	3	16
	20:00	7	6	6	5	24
	21:00	1	4	1	2	8
	22:00	1	1	0	0	2
	23:00	0	1	1	0	2
Day Total	:				_	472

192 (40.7%)

280 (59.3%)

Day Total :

AM Total :

PM Total:

Peak AM Hour : 07:00 = Peak PM Hour : 16:45 =

50 (10.6%) 49 (10.4%) Peak AM Factor: 0.735 Peak PM Factor: 0.681 Average Period :
Average Hour :

Centurion Basic Volume Report

Printed: 08/18/17

4.9

19.7

Date	Time	:00	:15	:30	:45	Total
08/17/17	00:00	0	0	0	0	0
Thu	01:00	1	0	0	0	1
	02:00	0	0	0	0	0
	03:00	0	0	0	0	0
	04:00	0	0	0	1	1
	05:00	0	1	0	1	2
	06:00	5	2	3	6	16
	07:00	6	5	9	10	30
	08:00	7	10	3	12	32
	09:00	9	10	4	6	29
	10:00	9	4	4	6	23
	11:00	9	1	3	4	17
	12:00	6	4	4	12	26
	13:00	11	8	4	9	32
	14:00	8	2	10	6	26
	15:00	5	9	9	9	32
	16:00	6	10	7	12	35
	17:00	5	13	6	7	31
	18:00	3	8	10	6	27
	19:00	4	6	4	6	20
	20:00	4	4	3	3	14
	21:00	1	4	1	1	7
	22:00	2	1	0	0	3
	23:00	0	0	0	0	0
Day Total	:				-	404

AM Total: 151 (37.4%) Peak AM Hour: 07:30 = 36 (8.9%) Peak AM Factor: 0.750 Average Period: 4.2 PM Total: 253 (62.6%) Peak PM Hour: 16:30 = 37 (9.2%) Peak PM Factor: 0.712 Average Hour: 16.8

#### 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 - 08/16/2017 To: 23:59 - 08/17/2017

Date	Time	:00	:15	:30	:45	Total
08/16/17	00:00	1	0	0	0	1
Wed	01:00	0	0	1	0	1
	02:00	0	0	0	0	0
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	0	0	2	0	2
	06:00	0	3	1	3	7
	07:00	1	2	2	1	6
	08:00	4	3	5	12	24
	09:00	5	7	3	3	18
	10:00	3	1	1	1	6
	11:00	1	5	1	2	9
	12:00	1	3	0	4	8
	13:00	8	4	2	2	16
	14:00	2	4	6	3	15
	15:00	7	2	3	4	16
	16:00	6	3	9	8	26
	17:00	8	5	5	4	22
	18:00	6	6	5	3	20
	19:00	7	3	1	2	13
	20:00	5	1	4	2	12
	21:00	1	2	2	6	11
	22:00	0	2	3	1	6
	23:00	1	1	1	2	5
Day Total	:					244

AM Total : 74 (30.3%) Peak AM Hour : 08:30 = 29 (11.9%) Peak AM Factor : 0.604 Average Period : 2.5 PM Total : 170 (69.7%) Peak PM Hour : 16:30 = 30 (12.3%) Peak PM Factor : 0.833 Average Hour : 10.2

Date	Time	:00	:15	:30	:45	Total
08/17/17	00:00	0	1	2	0	3
Thu	01:00	0	0	0	0	0
	02:00	1	0	0	0	1
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	1	0	2	0	3
	06:00	0	0	0	0	0
	07:00	0	2	1	4	7
	08:00	8	2	7	7	24
	09:00	0	0	3	2	5
	10:00	3	1	4	2	10
	11:00	2	2	3	5	12
	12:00	1	2	3	4	10
	13:00	8	2	2	5	17
	14:00	2	0	3	5	10
	15:00	5	3	6	2	16
	16:00	4	3	8	5	20
	17:00	8	6	3	3	20
	18:00	3	4	4	2	13
	19:00	3	5	4	1	13
	20:00	4	1	2	1	8
	21:00	3	3	3	1	10
	22:00	2	1	2	0	5
	23:00	0	1	1	1	3
Day Total	:				_	210

AM Total : 65 (31.0%) Peak AM Hour : 08:00 = 24 (11.4%) Peak AM Factor : 0.750 Average Period : 2.2 PM Total : 145 (69.0%) Peak PM Hour : 16:30 = 27 (12.9%) Peak PM Factor : 0.844 Average Hour : 8.8

# Basic Volume Summary: Amherst South

#### Grand Total For Data From: 00:00 - 08/16/2017 To: 23:59 - 08/17/2017

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	876 (65.9%)	2.00	438	4.6	18.3	343 (39.2%)	533 (60.8%)
#3.	454 (34.1%)	2.00	227	2.4	9.5	139 (30.6%)	315 (69.4%)
ALL	1330	2.00	665	7.0	27.8	482 (36.2%)	848 (63.8%)

Lane	Peak AM H	our	Date	Peak AM Factor	•	Peak PM H	our	Date	Peak PM Factor	
#1.	07:00 =	50	08/16/2017	0.735		16:45 =	49	08/16/2017	0.681	
#3.	08:30 =	29	08/16/2017	0.604		16:30 =	30	08/16/2017	0.833	

### Appendix B



Agency Case Number	Crash Analysis	Crash Date	Crash Intersecting Street	Crash Primary Street	Contributing Factors
150034107	13 - FIRE HYDRANT	4/19/2015	AMHERST DR SE	LEAD AVE SE	None
150034107	13 - FIRE HYDRANT	4/19/2015	AMHERST DR SE	LEAD AVE SE	Driver inattention, Made improper turn
150064255	00 - FROM OPPOSITE DIR/NOT STATED	7/17/2015	AMHERST DR SE	LEAD AVE SE	None
150064255	00 - FROM OPPOSITE DIR/NOT STATED	7/17/2015	AMHERST DR SE	LEAD AVE SE	Driver inattention, Failed to yield right of way
150101715	01 - BOTH GOING STRAIGHT/ENTERING AT ANGLE	11/3/2015	AMHERST DR SE	LEAD AVE SE	Excessive Speed, Speed too fast for conditions
150101715	01 - BOTH GOING STRAIGHT/ENTERING AT ANGLE	11/3/2015	AMHERST DR SE	LEAD AVE SE	None
150034572	08 - BOTH GOING STRAIGHT/FROM SAME DIR	4/20/2015	AMHERST DR SE	COAL AVE SE	None
150034572	08 - BOTH GOING STRAIGHT/FROM SAME DIR	4/20/2015	AMHERST DR SE	COAL AVE SE	Avoid no contact vehicle, Driver inattention, Speed too fast for conditions
140112000	12 - FENCE (WOOD BRICK STONE)	12/9/2014	AMHERST DR SE	LEAD AVE	Other improper driving

### Appendix C



30880

### **NEIGHBORHOOD TRAFFIC CALMING PETITION FORM**

(PLEASE COPY THIS PAGE FOR ADDITIONAL SIGNATURE

		F ALBUQUERQUE — NT DOD TRAFFIC CALMING		
Section I Date:				

# NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM NTMP





This document includes the petition that must be completed by at least two-thirds of the affected households for the street segment. The map above is what the COA has determined to be the affected area. This must be filled out and sent back to Traffic Engineering within 2-3 weeks to be considered for traffic calming.

REQUEST DATE: 11/1/16 RETURN DATE: 12/5/16

30850

