

CAROLINA STREET SPEED STUDY







Carolina Street Speed Study Final Report

Albuquerque, New Mexico



Souder, Miller & Associates

Engineering • Environmental • Surveying

5454 Venice Avenue NE, Suite D • Albuquerque, NM 87113

(505) 299-0942 • (877) 299-0942 • fax (505) 293-3430 • www.soudermiller.com



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 Carolina Street in northeast Albuquerque.

1.A. PROJECT PURPOSE

A speed study on Carolina Street from Claremont Avenue to Candelaria Road was conducted to determine the following:

- Evaluate the 85th percentile speed along Carolina Street at three (3) locations;
- Calculate average and daily peak hour traffic volumes along Carolina 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 0.24 (1267.20 LF) mile section of Carolina Street from Claremont Avenue to Candelaria Road. Figure 1.B.1. below displays the study location and Figure 1.B.2. on page 2 displays the project limits.

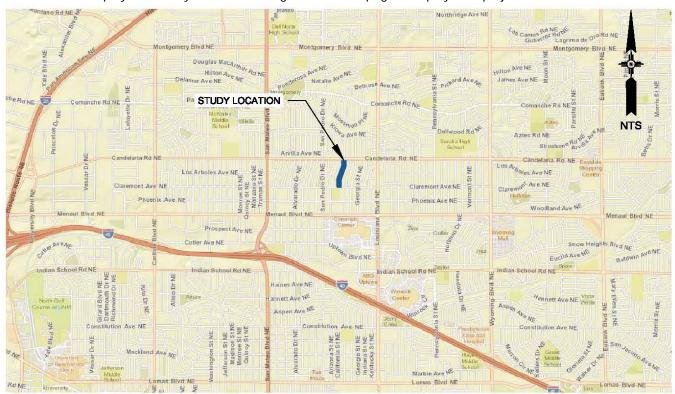


FIGURE 1.B.1. STUDY LOCATION





FIGURE 1.B.2. STUDY LIMITS

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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 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 =
$$((X_1)(X_2) (X_n))^{1/N}$$

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 three (3) volume and speed count locations which were at the following locations:

- Carolina Street North Near Candelaria Road:
- Carolina Street Middle between Claremont Avenue and Candelaria Road;
- Carolina 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 Carolina Street. Within the study limits there are approximately 35 driveways that provide access to residential homes. 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

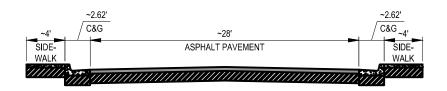


FIGURE 2.2. EXISTING CAROLINA STREET TYPICAL SECTION



3. DATA

3.A. ADT

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

Table 3.A.1.					
Carolina Street	ADT				
Count Location	NB	SB	ADT		
Carolina Street North	103	110	213		
Carolina Street Middle	102	112	214		
Carolina Street South	100	112	212		
Average	101.7	111.3	213.0		

The Carolina Street study area directional ADT ranges from 100 to 112 vehicles per day.

3.B. PEAK HOUR TRAFFIC VOLUMES

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

Table 3.B.1.						
	Carolina Stree	et Peak Hour Traffic Volumes (vph)				
Count Location	Count Location Peak Hour Northbound (Peak Hour) Southbound (Peak Hour)					
Carolina Street North	AM Peak	12 (8:45 AM - 9:45 AM)	10 (8:45 AM - 9:45 AM)			
	PM Peak	15 (4:00 PM - 5:00 PM)	13 (3:30 PM - 4:30 PM)			
Carolina Street Middle	AM Peak	11 (8:45 AM - 9:45 AM)	11 (8:45 AM - 9:45 AM)			
	PM Peak	18 (5:30 PM - 6:30 PM)	15 (5:45 PM - 6:45 PM)			
Canalina Charat Canth	AM Peak	7 (8:45 AM - 9:45 AM)	11 (7:30 AM - 8:30 AM)			
Carolina Street South	PM Peak	22 (5:30 PM - 6:30 PM)	14 (3:30 PM - 4:30 PM)			

The Carolina Street study area peak hour traffic volumes range from 7 to 22 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.3.

Table 3.C.1.					
	Carolina Stree	t North Speed Study			
Speed	NB	SB	Total		
Average	19.1	18.9	19.0		
10 mph Pace	20.8 - 30.7 (51.7%)	20.6 - 30.5 (49.8%)	20.1 - 30.0 (50.7%)		
50th Percentile	21.8	21.4	21.6		
67th Percentile	24.0	23.7	23.9		
85th Percentile	28.0	27.8	27.9		

Table 3.C.2.					
	Carolina Street	Middle Speed Study			
Speed	NB	SB	Total		
Average	20.6	20.3	20.4		
10 mph Pace	21.1 - 30.0 (49.5%)	20.2 - 30.1 (58.3%)	20.1 - 30.0 (54.1%)		
50th Percentile	22.7	22.4	22.6		
67th Percentile	26.7	24.7	25.7		
85th Percentile	29.0	28.1	28.6		

Table 3.C.3.					
	Carolina Street	South Speed Study			
Speed	NB	SB	Total		
Average	21.7				
10 mph Pace	20.3 - 30.2 (68.5%)	20.2 - 30.1 (61.9%)	20.1 - 30.0 (65.0%)		
50th Percentile	23.7	23.2	23.4		
67th Percentile	26.5	26.2	26.3		
85th Percentile	28.7	28.7	28.7		

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 Carolina Street, the speculated speed limit is 25 mph, roadway conditions are consistent; controlled access, satisfactory pavement conditions, two travel lanes, and on-street parking. Table 3.C.4. displays that 35 percent of the

average ADT of the three count locations recorded speeds greater than 25 mph.

Table 3.C.4.							
		Carolina	a Street ADT ≥	25 mph			
Speed (mph)	0 - 19.9	MPH	20 - 24.9	MPH	≥ 25	MPH .	Avg. ADT
Carolina Street North	90	42%	61	29%	61	29%	212
Carolina Street Middle	76	36%	61.5	29%	76	36%	213.5
Carolina Street South	54.5	26%	74	35%	83	39%	211.5
Total	220.5	35%	196.5	31%	220	35%	637

3.D. CRASH DATA

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

	Table 3.D.1.					
		Carolina Street Cras	h Summary			
Year	Location (Primary Street / Intersecting Street)	Cause of Crash	Crash Analysis	Crash Correct with Traffic Calming?		
2015	Carolina Street / Candelaria Road	Made Improper Turn / Failed Yield Right of Way	One Left Turn / From Opposite Direction	No		
2015	Candelaria Road / Carolina Street	Driver Inattention / Failed One Right Turn / En to Yield Right of Way at Angle		No		
2017	Candelaria Road / Candelaria Road	Driver Inattention	Both Going Straight / Entering at Angle	No		

4. CONCLUSION

After evaluating the volume and speed data within the project area, it is concluded that 35% 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, Carolina Street DOES NOT meet any of the criteria outlined to warrant traffic calming.

Appendices

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



Appendix A



Special Speed Study Report: Carolina (north)

Station ID : Carolina (north)

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

GPS Lat/Lon:

DB File: CAR 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.	Northbound	Ax-Ax	4.0 ft	6.0 ft	

Lane #1 Special	Speed Study	Data From:	00.00 - 06	6/13/2017 T	To: 23:59 -	06/14/2017

		#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
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	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	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	07:00	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	08:00	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	09:00	3	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	7
	10:00	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	11:00	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:00	4	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	13:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	14:00	4	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7
	15:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	16:00	6	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	15
	17:00	4	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	10
	18:00	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	19:00	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	20:00	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	22:00	0	0	1	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:	44	21	22	7	0	0	0	0	0	0	0	0	0	0	0	0	94
	ercent:	47%	22%	23%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	ercent:	47%	69%	93%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	4
Ave	erage :	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4

Average Speed 18.5 mph

50% Speed: 22.1 mph

67% Speed : 23.0 mph $\,$ $\,$ 85% Speed : 27.7 mph $\,$

10mph Pace: 8.7 - 18.6 (46.8%)

Dota	Tim -	#1 0 - 19.9	#2 20 - 24.9	#3 25 - 29.9	#4 30 - 34.9	#5 35 -	#6 40 -	#7 45 -	#8 50 -	#9 55 - 59.9	#10 60 -	#11 65 -	#12 70 - 74.9	#13 75 -	#14 80 -	#15 85 -	#16	Total	
Date 06/14/17	Time					39.9	44.9	49.9	54.9		64.9	69.9		79.9	84.9	89.9	Other	Total	
	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	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	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	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
	07:00	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
	08:00	6	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
	09:00	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	9	
	10:00	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
	11:00	4	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
	12:00	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
	13:00	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
	14:00	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
	15:00	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	4	
	16:00	2	1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	9	
	17:00	3	4	3	3	0	0	0	0	0	0	0	0	0	0	0	0	13	
	18:00	3	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	11	
	19:00	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	
	20:00	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	
	21:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	
	22:00 23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1 0	
												0			0				
Daily To		41 37%	37 33%	26 23%	7 6%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	0	0 0%	111	
Per Cum. Per	rcent :	37% 37%	70%	94%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0% 100%	0% 100%		
	rage :	2	2	94%	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
	Ü			Speed					eed: 2			67%	Speed	: 23.4	mph	8	5% Spe	ed: 27.7 r	nph

10mph Pace: 21.4 - 31.3 (56.8%)

Lane #3 Configuration

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

		Lan	e #3	Speci	al Sp	eed S	Study	Data	Fron	n: 00 :	00 - 0	6/13/	2017	To:	23:59	- 06/	14/20°	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	-
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
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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	06:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	07:00	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	08:00	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	09:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	10:00	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	11:00	5	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8
	12:00	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	8
	13:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	14:00	3	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	9
	15:00	2	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	8
	16:00	7	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	17:00	4	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	9
	18:00	1	2	4	1	0	0	1	0	0	0	0	0	0	0	0	0	9
	19:00	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	20:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	21:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	22:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	23:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
-	Total:	47	32	19	6	2	0	1	0	0	0	0	0	0	0	0	0	107
	Percent:	44%	30%	18%	6%	2%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Percent :	44%	74%	92%	97%	99%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100% 0	4
Ave	Average: 2 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					67%	Speed	: 23.1	mph	8	5% Spe	ed: 27.6						

Data	Time a	#1 0 -	#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	Tatal
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	07:00	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	08:00	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	09:00	4	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	10:00	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	11:00	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	12:00	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	13:00	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	14:00	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	15:00	5	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	16:00	7	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	17:00	1	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	8
	18:00	4	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	19:00	1	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	20:00	4	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	22:00	1	1	1	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		48	32	26	5	1	0 0%	0	0 0%	0 0%	0	0 0%	0 0%	0 0%	0 0%	0 0%	0 0%	112
Pe Cum. Pe	ercent :	43% 43%	29% 71%	23% 95%	4% 99%	1% 100%	100%	0% 100%	100%	100%	0% 100%	100%	100%	100%	100%	100%	0% 100%	
	rage :	43%	1 170	95%	99%	0	0	0	0	0	0	0	0	0	0	0	0	4
	Ü		verage	Speed					eed: 2			67%	Speed	: 23.2	mph	8	5% Spe	ed: 27.7 m

10mph Pace: 21.6 - 31.5 (51.8%)

Station: Carolina (north)

#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

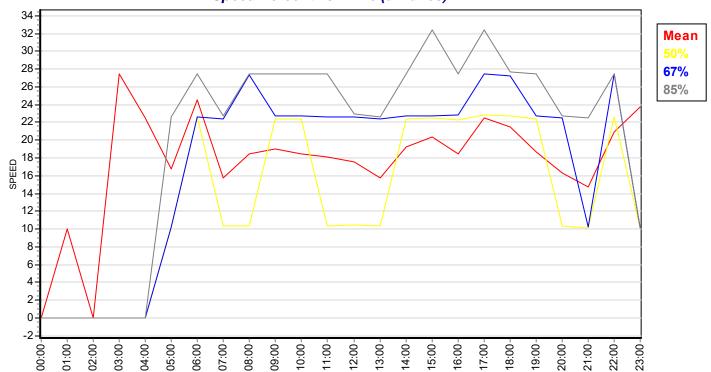
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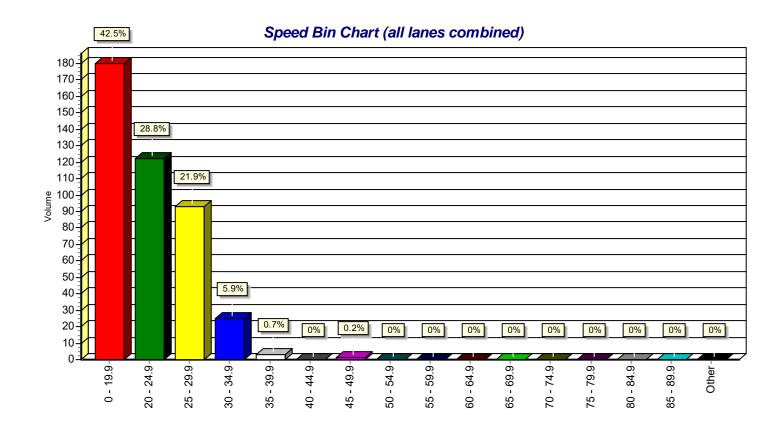
Special Speed Study Summary: Carolina (north)

	#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:	85	58	48	14	0	0	0	0	0	0	0	0	0	0	0	0	205
Percent :	41%	28%	23%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	41%	70%	93%	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 = 102	A	verage	Speed	19.1	mph	5	0% Sp	eed: 2	1.8 mp	h		Speed oh Pace					ed: 28.0 mp
One and Takel #2.	OF	64	45	11	3	0	1	0	0	0	0	0	0	0	0		219
Grand Total #3:	95					-		0	_	_	_	0	0	_	0	0	219
Percent :	43%	29%	21%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	43%	73%	93%	98%	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 = 109	A	verage	Speed	18.9	mph	5	0% Sp	eed: 2	1.4 mp	h		Speed oh Pace		•		•	ed: 27.8 mp
Comb. Total :	180	122	93	25	3	0	1	0	0	0	0	0	0	0	0	0	424
Percent :	42%	29%	22%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	42%	71%	93%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	4	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	10
ADT = 212	A	verage	Speed	19.0	mph	5	0% Sp	eed: 2	1.6 mp	h		Speed oh Pace		•			ed: 27.9 mp

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

Speed Percent vs. Time (all lanes)





Centurion Special Speed Study Report Printed: 06/15/17 Page 7

Special Speed Study Report: Carolina (middle)

Station ID: Carolina (middle)

Info Line 1: Between Claremont & Candelaria

Info Line 2 : Albuquerque

GPS Lat/Lon:

DB File: CAR MID.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: 23:5) - 06/14/2017
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		#1 0 -	#2 20 -	#3 25 -	#4 30 -	#5 35 -	#6 40 -	#1 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
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	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	07:00	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	08:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	09:00	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	10:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	11:00	4	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6
	12:00	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	13:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	14:00	1	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	5
	15:00	2	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	5
	16:00	3	4	5	2	0	0	0	0	0	0	0	0	0	0	0	0	14
	17:00	2	3	4	2	0	0	0	0	0	0	0	0	0	0	0	0	11
	18:00	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	19:00	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	20:00	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	21:00	2	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
	22:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daily '	Total:	30	22	20	15	1	0	0	0	0	0	0	0	0	0	0	0	88
	ercent:	34%	25%	23%	17%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	ercent:	34%	59%	82%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Av	erage :	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4

Average Speed 21.3 mph

50% Speed: 22.7 mph

67% Speed: 27.3 mph

85% Speed: 32.1 mph

10mph Pace: 21.9 - 31.8 (47.7%)

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	00	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	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	2	0	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	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	08:00	3	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	09:00	6	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	10:00	2	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	8
	11:00	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:00	2	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	13:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	14:00	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	7
	15:00	1	0	3	0	1	0	0	0	0	0	0	0	0	0	0	0	5
	16:00	1	0	5	2	0	0	0	0	0	0	0	0	0	0	0	0	8
	17:00	6	3	4	3	1	0	0	0	0	0	0	0	0	0	0	0	17
	18:00	6	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	19:00	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	20:00	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	21:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	22:00	1	0	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 1	Γotal :	46	25	34	9	2	0	0	0	0	0	0	0	0	0	0	0	116
	ercent :	40%	22%	29%	8%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. P		40%	61%	91%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	_
Ave	erage :	2 A	1 verage	Speed	20.0	mph							Speed oh Pace					4 ed: 28.1

Lane #3 Configuration

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

		Lane #3 Special Speed Study Data From: 00:00 - 06/13/												To:	23:59	- 06/	/14/20 ⁻	17
Data	T:	#1 0 -	#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	Tatal
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
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	06:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	07:00 08:00	1 2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	09:00	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	10:00	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	11:00	4	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8
	12:00	2	3	2	0	1	0	0	0	0	0	0	0	0	0	0	0	8
	13:00	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	14:00	1	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	6
	15:00	4	4	1	0	1	0	0	0	0	0	0	0	0	0	0	0	10
	16:00	5	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	17:00	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	18:00	2	5	0	2	0	0	0	1	0	0	0	0	0	0	0	0	10
	19:00	0	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	5
	20:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	21:00	2	0	2	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		33	36	27	6													105
-	Total:	31%	34%	26%	6%	2%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	105
	ercent:	31%	66%	91%	97%	99%	99%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Ave	erage :	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
		Average Speed 20.9 mph 50% Speed: 22.6 mph												l: 26.7 e: 21.4	mph - 31.3			ed : 27.

Data	T '	#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-1-1
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
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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	06:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	07:00	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	08:00 09:00	3	0	2	1 2	0	0	0	0	0	0	0	0	0	0	0	0	6 10
	10:00	4	ა 5	0	0	0	0	0	0		0	0		0	0	0		9
	11:00	1		3	0	0	0		0	0		0	0	0	0	0	0	6
	12:00	1	2 5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	13:00	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	14:00	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	15:00	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	16:00	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	17:00	8	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	12
	18:00	4	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	15
	19:00	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	20:00	5	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	8
	21:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	22:00	0	0	2	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 7	Total :	43	40	27	8	0	0	0	0	0	0	0	0	0	0	0	0	118
•	ercent :	36%	34%	23%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. P		36%	70%	93%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Ave	erage :	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
		A	verage	Speed	19.8	mph	5	0% Sp	eed: 2	2.3 mp	h		Speed oh Pace					ed: 27.

#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

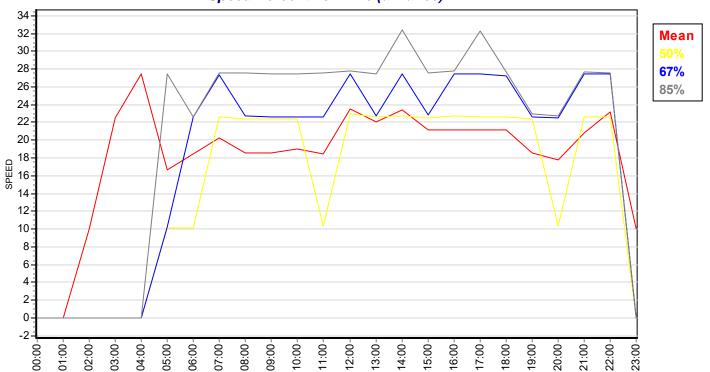
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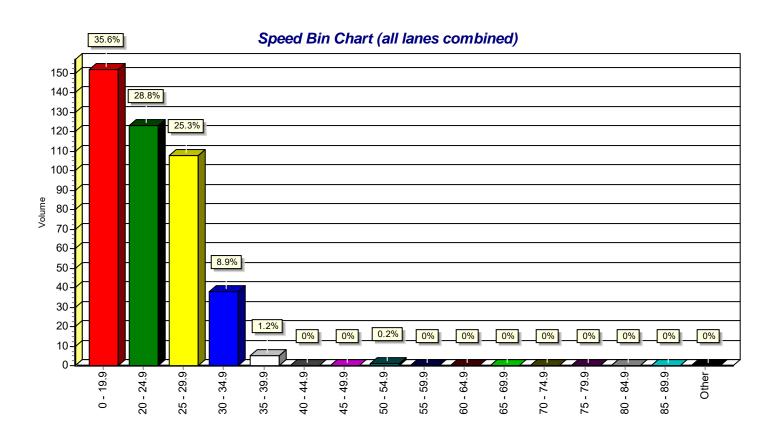
Special Speed Study Summary: Carolina (middle)

	#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:	76	47	54	24	3	0	0	0	0	0	0	0	0	0	0	0	204	
Percent :	37%	23%	26%	12%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cum. Percent :	37%	60%	87%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Average :	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5	
ADT = 102	A	verage	Speed	20.6	mph	5	0% Sp	eed: 2	2.7 mp	h		Speed		•			ed: 29.0 m	nph
											10mp	h Pace	21.1	- 31.0	(49.5%	5)		
Grand Total #3:	76	76	54	14	2	0	0	1	0	0	0	0	0	0	0	0	223	
Percent :	34%	34%	24%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cum. Percent :	34%	68%	92%	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 = 111	A	verage	Speed	20.3	mph	5	0% Sp	eed: 2	2.4 mp	h		Speed oh Pace				•	ed: 28.1 m	nph
															(0000	,		
Comb. Total :	152	123	108	38	5	0	0	1	0	0	0	0	0	0	0	0	427	
Percent :	36%	29%	25%	9%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cum. Percent :	36%	64%	90%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Average :	3	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	9	
ADT = 213	A	verage	Speed	20.4	mph	5	0% Sp	eed: 2	2.6 mp	h		Speed oh Pace		•			ed: 28.6 m	nph

Carolina (middle) Charts For Data From: 00:00 - 06/13/2017 To: 23:59 - 06/14/2017







Centurion Special Speed Study Report Printed: 06/15/17 Page 7

Special Speed Study Report: Carolina (south)

Station ID : Carolina (south)

Info Line 1 : North of Claremont Info Line 2 : Albuquerque

GPS Lat/Lon:

DB File: CAR SOUTH.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	Config	uration
	9011119	a. a.i.o.i.

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

Lane #1 Special Speed Stud	v Data From: 00:00	06/13/2017	To: 23:50 -	06/14/2017

		#1 <i>O</i> -	#2 20 -	#3 25 -	#4 30 -	#5 35 -	#6 40 -	#7 45 -	#8 50 -	#9 55 -	#10 <i>60</i> -	#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
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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	07:00	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	08:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	09:00	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	10:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	11:00	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:00	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	13:00	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	14:00	2	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	5
	15:00	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	5
	16:00	4	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	17:00	2	5	2	3	0	0	0	0	0	0	0	0	0	0	0	0	12
	18:00	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	19:00	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	20:00	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	21:00	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	22:00	1	0	1	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 '	Total:	25	33	22	5	1	0	0	0	0	0	0	0	0	0	0	0	86
	Percent:	29%	38%	26%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Percent:	29%	67%	93%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	0
AV	erage :	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3

Average Speed 20.9 mph

50% Speed: 22.6 mph

67% Speed: 23.5 mph

85% Speed: 27.8 mph

10mph Pace: 21.5 - 31.4 (64.0%)

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	29.9	0	0	0	49.9	0	0	04.9	09.9	0	0	04.9	09.9	0	0
Wed	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
vvea																		
	02:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	07:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	08:00	1	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	09:00	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	10:00	1	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	6
	11:00	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	12:00	4	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	13:00	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	14:00	1	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	9
	15:00	0	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	16:00	1	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	17:00	2	4	7	5	0	0	0	0	0	0	0	0	0	0	0	0	18
	18:00	1	6	6	1	0	0	0	0	0	0	0	0	0	0	0	0	14
	19:00	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	20:00	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	21:00	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	22:00	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
	23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Daily ⁻	Total :	21	39	43	11	0	0	0	0	0	0	0	0	0	0	0	0	114
-	ercent :	18%	34%	38%	10%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	ercent:	18%	53%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Ave	erage :	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
		A	verage	Speed	23.0	mph	5	0% Sp	eed: 2	3.5 mp	h		Speed oh Pace					ed: 28.4

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 - 06/13/20													To:	23:59	- 06/	14/20 ⁻	17
		#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
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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	06:00	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	07:00	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	08:00	1	1	6	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	09:00	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	10:00	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	11:00	4	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	7
	12:00	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	8
	13:00	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	14:00	2	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	7
	15:00	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	16:00	3	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	12
	17:00	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	18:00	1	3	3	1	0	0	1	0	0	0	0	0	0	0	0	0	9
	19:00	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	20:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	21:00	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	22:00	0	2	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
-	Total:	26	37	30	10	0	0	1	0	0	0	0	0	0	0	0	0	104
	ercent :	25%	36%	29%	10%	0%	0%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	ercent :	25% 1	61% 2	89% 1	99% 0	99% 0	99% 0	100%	100%	100%	100%	100%	100%	100%	100%	100%	100% 0	4
Ave	erage :			Speed					eed : 2			67%	Speed	: 27.0	mph	8	5% Spe	ed: 28.1

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	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	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	06:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	07:00	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	08:00	3	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	7
	09:00	3	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	9
	10:00	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	11:00	1	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	12:00	1	5	4	2	0	0	0	0	0	0	0	0	0	0	0	0	12
	13:00	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	14:00	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	15:00	2	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	16:00	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	17:00	5	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	10
	18:00	3	5	5	1	0	0	0	0	0	0	0	0	0	0	0	0	14
	19:00	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	20:00	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	21:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	22:00	0	1	1	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 :	37	39	32	11	0	0	0	0	0	0	0	0	0	0	0	0	119
	ercent :	31%	33%	27%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Po		31%	64%	91%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	-
AVE	erage :	2 A	2 verage	Speed	20.8	mph	5	0 0% Spe	0 eed : 2	0 2.7 mp	0 h		Speed oh Pace					5 ed: 28.1

Station: Carolina (south)

#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

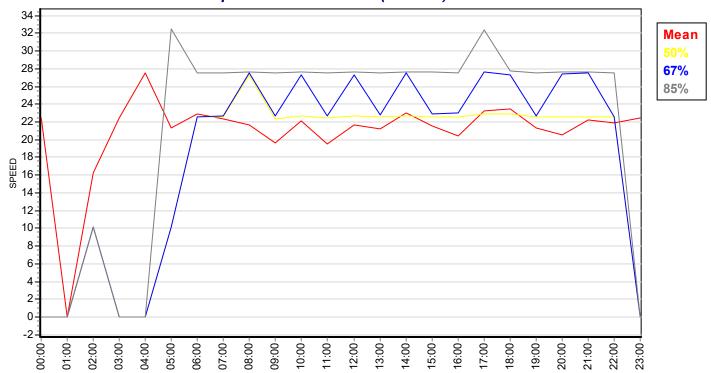
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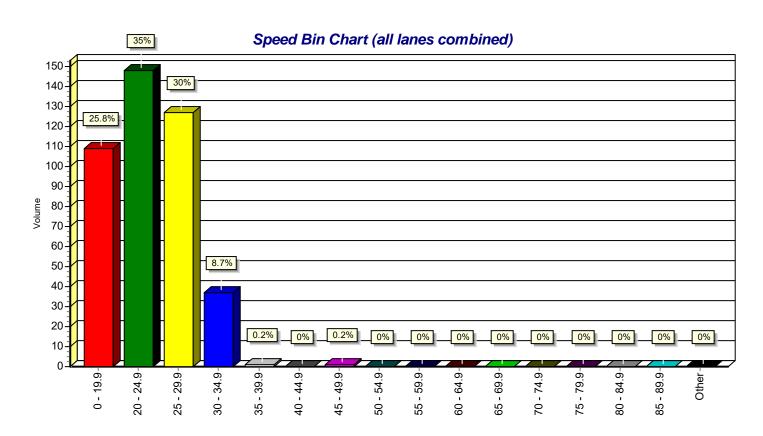
Special Speed Study Summary: Carolina (south)

	#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 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:	46	72	65	16	1	0	0	0	0	0	0	0	0	0	0	0	200	
Percent :	23%	36%	33%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cum. Percent :	23%	59%	92%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Average :	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
ADT = 100	A	verage	Speed	22.1	mph	5	0% Sp	eed: 2	.3.7 mp	h		Speed oh Pace				•	ed: 28.7	mph
Grand Total #3:	63	76	62	21	0	0	1	0	0	0	0	0	0	0	0	0	223	
Percent :	28%	34%	28%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cum. Percent :	28%	62%	90%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Average :	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	
ADT = 111	A	verage	Speed	21.4	mph	5	0% Sp	eed: 2	3.2 mp	h		Speed oh Pace		•		•	ed: 28.7	mph
Comb. Total :	109	148	127	37	1	0	1	0	0	0	0	0	0	0	0	0	423	_
Percent :	26%	35%	30%	9%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cum. Percent :	26%	61%	91%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Average :	2	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	9	
ADT = 211	A	verage	Speed	21.7	mph	5	0% Sp	eed: 2	.3.4 mp	h		Speed oh Pace		•		•	ed: 28.7	mph

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

Speed Percent vs. Time (all lanes)





Centurion Special Speed Study Report Printed: 06/15/17 Page 7

Basic Volume Report: Carolina (north)

Station ID: Carolina (north)

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

GPS Lat/Lon:

DB File: CAR 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	Lane	#1	Confid	ıuration
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# Dir. Information	n Volume Mode	Volume Sensors	Divide By 2	Comment	
1. Northbou	nd 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	: 4 5	Total
06/13/17	00:00	0	0	0	0	0
Tue	01:00	0	0	0	0	0
	02:00	0	0	0	0	0
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	0	0	1	1	2
	06:00	0	0	1	1	2
	07:00	1	2	2	2	7
	08:00	1	2	0	1	4
	09:00	2	3	1	1	7
	10:00	0	0	4	1	5
	11:00	2	1	0	2	5
	12:00	2	2	0	2	6
	13:00	0	1	0	0	1
	14:00	1	1	3	2	7
	15:00	1	0	1	0	2
	16:00	6	4	1	4	15
	17:00	6	4	0	0	10
	18:00	2	2	3	0	7
	19:00	3	1	0	3	7
	20:00	1	1	0	1	3
	21:00	0	0	1	0	1
	22:00	0	0	1	1	2
	23:00	1	0	0	0	1
Day Total	:				_	94

AM Total: 32 (34.0%) Peak AM Hour: 10:30 = 8 (8.5%) Peak AM Factor: 0.500 Average Period: 1.0
PM Total: 62 (66.0%) Peak PM Hour: 16:00 = 15 (16.0%) Peak PM Factor: 0.625 Average Hour: 3.9

Date	Time	:00	:15	:30	:45	Total
06/14/17	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	0	0	0	0
	05:00	0	0	2	1	3
	06:00	0	0	1	1	2
	07:00	2	2	0	1	5
	08:00	3	3	0	4	10
	09:00	1	4	3	1	9
	10:00	1	2	3	1	7
	11:00	1	2	4	0	7
	12:00	1	2	2	0	5
	13:00	1	2	2	0	5
	14:00	1	2	2	2	7
	15:00	1	1	0	2	4
	16:00	2	3	0	4	9
	17:00	3	2	2	6	13
	18:00	2	4	3	2	11
	19:00	3	0	0	1	4
	20:00	4	0	1	2	7
	21:00	0	1	0	1	2
	22:00	0	0	1	0	1
	23:00	0	0	0	0	0
Day Total	:				_	111

 AM Total :
 43 (38.7%)
 Peak AM Hour : 08:45 =
 12 (10.8%)
 Peak AM Factor : 0.750
 Average Period :
 1.2

 PM Total :
 68 (61.3%)
 Peak PM Hour : 17:45 =
 15 (13.5%)
 Peak PM Factor : 0.625
 Average Hour :
 4.6

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	1	1
	02:00	0	0	0	0	0
	03:00	1	0	0	0	1
	04:00	0	0	0	1	1
	05:00	0	1	0	0	1
	06:00	0	0	1	0	1
	07:00	1	0	2	0	3
	08:00	4	0	0	1	5
	09:00	1	2	0	0	3
	10:00	1	3	3	2	9
	11:00	0	3	3	2	8
	12:00	1	2	3	2	8
	13:00	1	0	0	1	2
	14:00	3	1	4	1	9
	15:00	1	1	4	2	8
	16:00	1	6	4	2	13
	17:00	1	4	2	2	9
	18:00	1	3	2	3	9
	19:00	2	2	2	2	8
	20:00	1	0	0	0	1
	21:00	3	1	0	0	4
	22:00	0	0	0	2	2
	23:00	1	0	0	0	1
Day Total	:				_	107

AM Total : 33 (30.8%) Peak AM Hour : 10:00 = 9 (8.4%) Peak AM Factor : 0.562 Average Period : 1.1
PM Total : 74 (69.2%) Peak PM Hour : 15:30 = 13 (12.1%) Peak PM Factor : 0.542 Average Hour : 4.5

Date	Time	:00	:15	:30	:45	Total
06/14/17	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	0	0	0	0
	05:00	0	0	1	0	1
	06:00	0	0	0	0	0
	07:00	1	3	0	0	4
	08:00	1	2	0	1	4
	09:00	3	2	4	1	10
	10:00	1	3	1	3	8
	11:00	0	3	2	2	7
	12:00	3	1	5	1	10
	13:00	0	4	2	0	6
	14:00	3	1	4	1	9
	15:00	2	1	3	0	6
	16:00	1	2	5	3	11
	17:00	3	0	2	3	8
	18:00	2	3	4	4	13
	19:00	0	1	2	2	5
	20:00	0	3	1	2	6
	21:00	1	0	0	0	1
	22:00	1	1	0	1	3
	23:00	0	0	0	0	0
Day Total					_	112

AM Total : 34 (30.4%) Peak AM Hour : 08:45 = 10 (8.9%) Peak AM Factor : 0.625 Average Period : 1.2 PM Total : 78 (69.6%) Peak PM Hour : 16:15 = 13 (11.6%) Peak PM Factor : 0.650 Average Hour : 4.7

Basic Volume Summary: Carolina (north)

					١
Grand Total For Data	From: 00:00	06/13/2017	To: 23:50	06/14/2017	

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	205 (48.3%)	2.00	103	1.1	4.3	75 (36.6%)	130 (63.4%)
#3.	219 (51.7%)	2.00	110	1.1	4.6	67 (30.6%)	152 (69.4%)
ALL	424	2.00	213	2.2	8.9	142 (33.5%)	282 (66.5%)

Lane	Peak AM F	lour	Date	Peak AM Factor	Peak PM H	lour	Date	Peak PM Factor	
#1.	08:45 =	12	06/14/2017	0.750	16:00 =	15	06/13/2017	0.625	
#3.	08:45 =	10	06/14/2017	0.625	15:30 =	13	06/13/2017	0.542	

Basic Volume Report: Carolina (middle)

Station ID: Carolina (middle)

Info Line 1: Between Claremont & Candelaria

Info Line 2 : Albuquerque

GPS Lat/Lon:

DB File: CAR MID.DB

Last Connected Device Type: Apollo

Version Number : 1.66

Serial Number :

Number of Lanes: 1

Posted Speed Limit: 0.0 mph

Lane	#1	Config	uration

# 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	0	0	0
Tue	01:00	0	0	0	0	0
	02:00	0	0	0	0	0
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	0	0	2	0	2
	06:00	0	0	0	1	1
	07:00	0	2	2	0	4
	08:00	1	2	0	1	4
	09:00	2	2	1	1	6
	10:00	0	0	2	1	3
	11:00	1	1	1	3	6
	12:00	2	2	1	1	6
	13:00	0	1	1	0	2
	14:00	2	1	1	1	5
	15:00	1	1	2	1	5
	16:00	5	4	2	3	14
	17:00	5	4	2	0	11
	18:00	2	1	1	0	4
	19:00	2	1	0	4	7
	20:00	1	0	0	1	2
	21:00	2	0	1	2	5
	22:00	0	0	1	0	1
	23:00	0	0	0	0	0
Day Total	:				_	88

AM Total: 26 (29.5%) Peak AM Hour: 08:45 = 6 (6.8%) Peak AM Factor: 0.500 Average Period: 0.9
PM Total: 62 (70.5%) Peak PM Hour: 16:00 = 14 (15.9%) Peak PM Factor: 0.700 Average Hour: 3.7

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

AM Total: 37 (31.9%) Peak AM Hour: 08:45 = 11 (9.5%) Peak AM Factor: 0.688 Average Period: 1.2 PM Total: 79 (68.1%) Peak PM Hour: 17:30 = 18 (15.5%) Peak PM Factor: 0.643 Average Hour: 4.8

Lane #3 Configuration

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

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	0	0
	03:00	1	0	0	0	1
	04:00	0	0	0	1	1
	05:00	0	1	0	0	1
	06:00	0	0	1	1	2
	07:00	1	0	2	1	4
	08:00	5	2	0	1	8
	09:00	0	3	1	1	5
	10:00	2	2	2	2	8
	11:00	2	3	3	0	8
	12:00	1	2	3	2	8
	13:00	1	1	0	2	4
	14:00	3	0	3	0	6
	15:00	3	1	3	3	10
	16:00	1	5	4	1	11
	17:00	0	3	1	1	5
	18:00	1	3	4	2	10
	19:00	1	2	1	1	5
	20:00	1	0	1	0	2
	21:00	3	0	1	0	4
	22:00	0	0	0	2	2
	23:00	0	0	0	0	0
Day Total	:				-	105

Day Total :

AM Total : 38 (36.2%) Peak AM Hour : 07:30 = 10 (9.5%) Peak AM Factor: 0.500 Average Period : 1.1 PM Total: 67 (63.8%) Peak PM Hour : 15:45 = 13 (12.4%) Peak PM Factor: 0.650 Average Hour: 4.4

Printed: 06/15/17 Page 3 Centurion Basic Volume Report

Average Period :

Average Hour :

1.2

4.9

AM Total:

PM Total:

39 (33.1%)

79 (66.9%)

Peak AM Hour : 08:45 =

Peak PM Hour : 17:45 =

Date	Time	:00	:15	:30	:45	Total
06/14/17	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	0	0	0	0
	05:00	0	0	1	0	1
	06:00	0	0	0	1	1
	07:00	1	5	0	0	6
	08:00	3	2	0	1	6
	09:00	4	2	4	0	10
	10:00	2	3	1	3	9
	11:00	0	2	2	2	6
	12:00	3	2	4	2	11
	13:00	0	3	2	0	5
	14:00	3	1	2	0	6
	15:00	2	1	4	0	7
	16:00	1	0	4	1	6
	17:00	4	2	2	4	12
	18:00	3	2	6	4	15
	19:00	1	2	2	1	6
	20:00	1	4	1	2	8
	21:00	0	0	1	0	1
	22:00	1	1	0	0	2
	23:00	0	0	0	0	0
Day Total	:				_	118
,						

11 (9.3%)

15 (12.7%)

Peak AM Factor: 0.550

Peak PM Factor: 0.625

Basic Volume Summary: Carolina (middle)

	Grand Total For	Data Fron	n: 00:00 - 06/13/	2017 To:	23:59 - 06/14/2017	
Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	204 (47.8%)	2.00	102	1.1	4.3	63 (30.9%)	141 (69.1%)
#3.	223 (52.2%)	2.00	112	1.2	4.6	77 (34.5%)	146 (65.5%)
ALL	427	2.00	214	2.3	8.9	140 (32.8%)	287 (67.2%)

Lane	Peak AM Hour		Date	Peak AM Factor		Peak PM H	our	Date	Peak PM Factor	
#1.	08:45 =	11	06/14/2017	0.688		17:30 =	18	06/14/2017	0.643	
#3.	08:45 =	11	06/14/2017	0.550		17:45 =	15	06/14/2017	0.625	

Basic Volume Report: Carolina (south)

Station ID: Carolina (south)

Info Line 1 : North of Claremont Info Line 2 : Albuquerque

GPS Lat/Lon:

DB File: CAR SOUTH.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	Lane	#1	Confid	ıuration
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# 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	0	1	1
Tue	01:00	0	0	0	0	0
	02:00	0	0	0	0	0
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	0	0	1	0	1
	06:00	0	0	0	0	0
	07:00	0	1	1	0	2
	08:00	1	1	0	0	2
	09:00	2	2	1	0	5
	10:00	0	0	2	1	3
	11:00	0	1	1	3	5
	12:00	2	2	1	1	6
	13:00	0	1	1	1	3
	14:00	2	1	1	1	5
	15:00	1	1	2	1	5
	16:00	5	4	2	3	14
	17:00	5	4	3	0	12
	18:00	2	1	3	0	6
	19:00	1	1	1	3	6
	20:00	1	1	0	1	3
	21:00	2	0	1	2	5
	22:00	1	0	1	0	2
	23:00	0	0	0	0	0
Day Total	:				_	86

AM Total: 19 (22.1%) Peak AM Hour: 08:45 = 5 (5.8%) Peak AM Factor: 0.417 Average Period: 0.9
PM Total: 67 (77.9%) Peak PM Hour: 16:45 = 15 (17.4%) Peak PM Factor: 0.750 Average Hour: 3.6

Date	Time	:00	:15	:30	:45	Total
06/14/17	00:00	0	0	0	0	0
Wed	01:00	0	0	0	0	0
	02:00	0	1	0	1	2
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	0	0	1	0	1
	06:00	0	0	0	0	0
	07:00	1	1	0	1	3
	08:00	1	1	0	3	5
	09:00	0	3	1	0	4
	10:00	1	3	0	2	6
	11:00	1	3	1	0	5
	12:00	2	3	5	0	10
	13:00	0	2	3	1	6
	14:00	1	4	2	2	9
	15:00	2	1	0	2	5
	16:00	2	2	1	4	9
	17:00	3	3	4	8	18
	18:00	6	4	1	3	14
	19:00	3	0	1	1	5
	20:00	4	0	1	1	6
	21:00	0	1	1	1	3
	22:00	1	0	1	0	2
	23:00	1	0	0	0	1
Day Total					_	114

AM Total : 26 (22.8%) Peak AM Hour : 08:45 = 7 (6.1%) Peak AM Factor : 0.583 Average Period : 1.2 PM Total : 88 (77.2%) Peak PM Hour : 17:30 = 22 (19.3%) Peak PM Factor : 0.688 Average Hour : 4.8

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 - 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	0	0
	03:00	1	0	0	0	1
	04:00	0	0	0	1	1
	05:00	0	1	0	0	1
	06:00	0	1	1	2	4
	07:00	1	0	3	1	5
	08:00	5	2	0	1	8
	09:00	1	3	2	1	7
	10:00	1	1	3	1	6
	11:00	2	3	2	0	7
	12:00	1	2	3	2	8
	13:00	1	1	0	2	4
	14:00	3	1	3	0	7
	15:00	2	1	4	2	9
	16:00	1	7	4	0	12
	17:00	0	2	1	0	3
	18:00	1	2	4	2	9
	19:00	1	2	0	1	4
	20:00	2	0	1	0	3
	21:00	2	0	1	0	3
	22:00	0	0	0	2	2
	23:00	0	0	0	0	0
Day Total	:					104

40 (38.5%) AM Total: Peak AM Hour : 07:30 = 11 (10.6%) Peak AM Factor: 0.550 Average Period : 1.1 PM Total: 64 (61.5%) Peak PM Hour : 15:30 = 14 (13.5%) Peak PM Factor: 0.500 Average Hour: 4.3

Printed: 06/15/17 Page 3 Centurion Basic Volume Report

Date	Time	:00	:15	:30	:45	Total
06/14/17	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	0	0	0	0
	05:00	0	0	1	0	1
	06:00	0	0	1	1	2
	07:00	1	5	0	0	6
	08:00	3	2	0	2	7
	09:00	4	2	3	0	9
	10:00	2	2	2	1	7
	11:00	0	2	2	2	6
	12:00	3	2	5	2	12
	13:00	2	3	3	2	10
	14:00	3	1	2	0	6
	15:00	1	1	5	0	7
	16:00	3	1	3	1	8
	17:00	3	4	0	3	10
	18:00	2	2	6	4	14
	19:00	1	2	1	1	5
	20:00	1	2	1	2	6
	21:00	0	0	1	0	1
	22:00	1	1	0	0	2
	23:00	0	0	0	0	0
Day Total					_	119

AM Total : 38 (31.9%) Peak AM Hour : 08:45 = 11 (9.2%) Peak AM Factor : 0.550 Average Period : 1.2
PM Total : 81 (68.1%) Peak PM Hour : 18:00 = 14 (11.8%) Peak PM Factor : 0.583 Average Hour : 5.0

Basic Volume Summary: Carolina (south)

Grand Total For Data From: 00:00	- 06/13/2017	To: 23:59 - 06/14/2017
Giailu i Ulai i Ul Dala i IUlii. UU.UU	- 00/13/201/	10. 23.33 - 00/14/201/

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	200 (47.3%)	2.00	100	1.0	4.2	45 (22.5%)	155 (77.5%)
#3.	223 (52.7%)	2.00	112	1.2	4.6	78 (35.0%)	145 (65.0%)
ALL	423	2.00	212	2.2	8.8	123 (29.1%)	300 (70.9%)

Lane	Peak AM Hour		Date	Peak AM Factor	Peak PM Hour		Date	Peak PM Factor	
#1.	08:45 =	7	06/14/2017	0.583	17:30 =	22	06/14/2017	0.688	
#3.	07:30 =	11	06/13/2017	0.550	15:30 =	14	06/13/2017	0.500	

Appendix B



Crash Date	Agency Case Number	Crash Intersecting Street	Crash Primary Street	Crash Analysis	Contributing Factors
2/18/2015	150015204	CANDELARIA RD NE	CAROLINA ST NE	18 - ONE LEFT TURN/FROM OPP DIR	Made improper turn, Failed to yield right of way
2/18/2015	150015204	CANDELARIA RD NE	CAROLINA ST NE	18 - ONE LEFT TURN/FROM OPP DIR	None
11/13/2015	150104821	CAROLINA ST NE	CANDELARIA RD NE	02 - ONE RIGHT TURN/ENTERING AT ANGLE	None
11/13/2015	150104821	CAROLINA ST NE	CANDELARIA RD NE	02 - ONE RIGHT TURN/ENTERING AT ANGLE	Driver inattention, Failed to yield right of way
2/11/2017	170014495	CANDELARIA RD NE	CANDELARIA RD NE	01 - BOTH GOING STRAIGHT/ENTERI NG AT ANGLE	Driver inattention
2/11/2017	170014495	CANDELARIA RD NE	CANDELARIA RD NE	01 - BOTH GOING STRAIGHT/ENTERI NG AT ANGLE	None

Appendix C



I also emailed this in on 11/26/16

NEIGHBORHOOD TRAFFIC CALMING PETITION FORM

1449

CITY OF ALBUQUERQUE -- NTMP NEIGHBORHOOD TRAFFIC CALMING PETITION * * * Section I Date: < INSERT DATE SENT TO NEIGHBORHOOD CONTACT> 11/26/16 VISTA EIXC Representatives from the neighborhood, on INSERT APPLICATION DATE requested initiation of a NTMP Study. Based on available data, the households and properties identified in the attached Exhibit 1 are considered to be in the affected area. An initial assessment of available data has been conducted, and to continue processing the application neighborhood support is required. Two-thirds of the shown households/properties on Exhibit 1 must agree with the application and sign the petition below. The completed petition should be submitted to the City of Albuquerque Traffic Engineering Division (600 Second NW, Albuquerque, NM 87103 or STEP@cabg.gov) Section II (ONLY ONE SIGNATURE PER ADDRESS) -3341 beckysmarshall Damail om Rhu Sille Sgnature -3296 Mathannikto 60 Quailion (PLEASE COPY THIS PAGE FOR ADDITIONAL SIGNATURE Jacob Breax 2919 Cardina 505 9798390

Name (print)

Address

Telephone

Email

Sgrature

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Fund

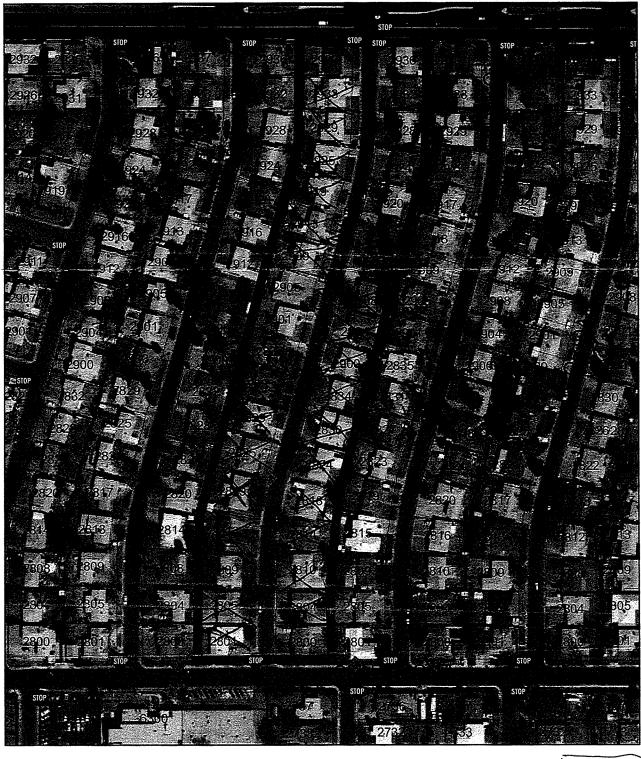
Squark



NEIGHBORHOOD TRAFFIC MANAGEMENT PROGRAM 2908 **NTMP**

2919

2925 2929 2933





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: 10/24/16

RETURN DATE: 12/5/16

6449

