

# GRANDE DRIVE SPEED STUDY



# Grande Drive Speed Study Final Report

Albuquerque, New Mexico



Souder, Miller & Associates ♦ 3451 Candelaria Road NE, Suite D  
Albuquerque, NM 87107-1948 ♦ (505) 299-0942 ♦ (877) 299-0942 ♦ fax (505) 293-3430



City of Albuquerque

April 2017

## Table of Contents

INTRODUCTION .....	1
1.A. PROJECT PURPOSE .....	1
1.B. PROJECT DESCRIPTION .....	1
1.C. BACKGROUND OF SPEED LIMITS .....	3
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 .....	7
3.C. SPEED STUDY RESULTS .....	8
3.D. CRASH DATA .....	9
4. U.S. LIMITS SPEED LIMITS PROGRAM .....	10
5. CONCLUSION .....	11
Appendices .....	12



## List of Tables

Table 3.A.1.	Grande Drive ADT .....	7
Table 3.B.1.	Grande Drive Peak Hour Traffic Volumes.....	7
Table 3.C.1.	Grande Drive South Speed Study .....	8
Table 3.C.2.	Grande Drive Middle Speed Study .....	8
Table 3.C.3.	Grande Drive North Speed Study .....	8
Table 3.C.4.	Grande Drive ADT > 25 mph.....	9
Table 3.D.1.	Grande Drive Crash Summary .....	9
Table 5.1.	COA NMTP Traffic Calming Measures .....	11



## List of Figures

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



## INTRODUCTION

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

### 1.A. PROJECT PURPOSE

A speed study on Grande Drive from Griegos Road to Delamar Avenue was conducted to determine the following:

- Evaluate the 85<sup>th</sup> percentile speed along Grande Drive at three (3) locations;
- Calculate average and daily peak hour traffic volumes along Grande 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 0.22 (1,161.60 LF) mile section of Grande Drive from Griegos Road to Delamar Avenue. Figure 1.B.1. below displays the study location and Figure 1.B.2. on page 2 displays the project limits.

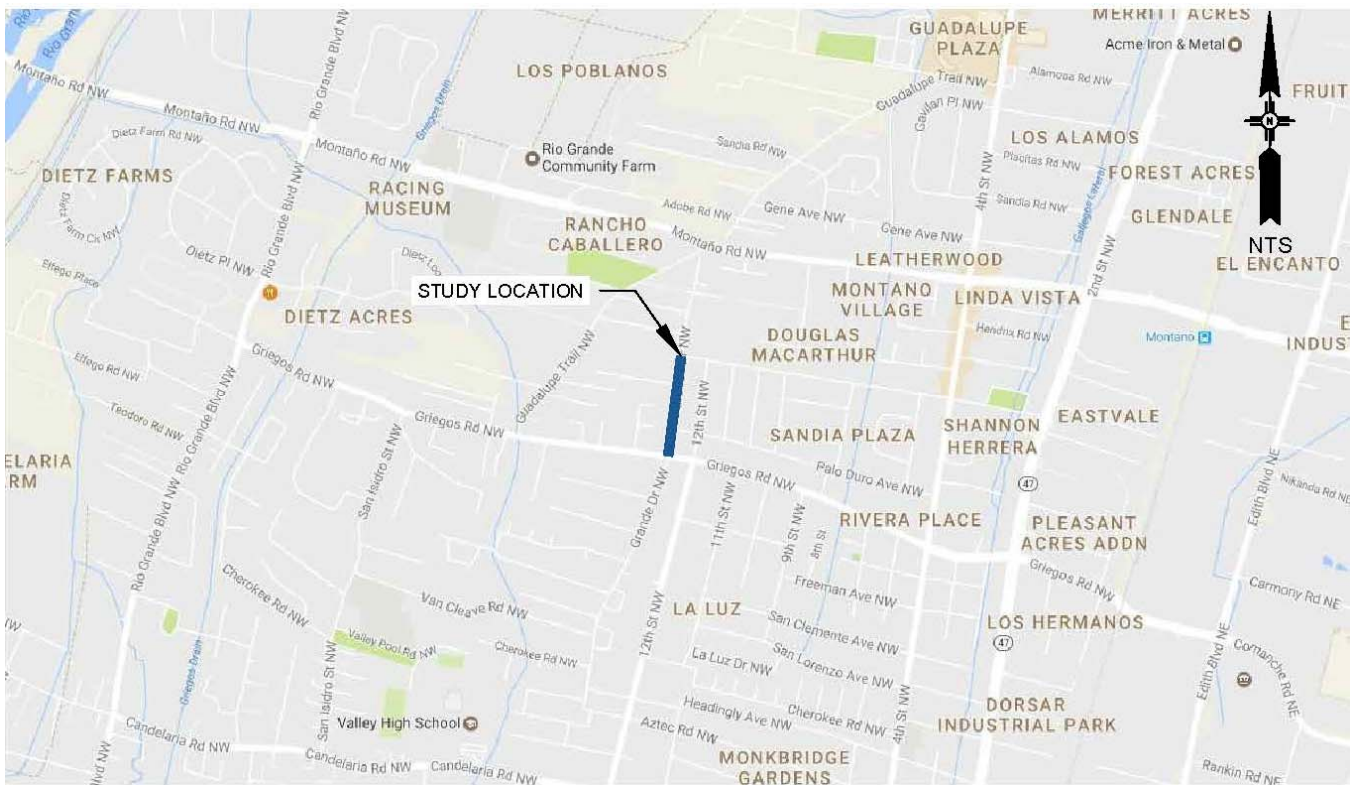


FIGURE 1.B.1.  
STUDY LOCATION



FIGURE 1.B.2.  
PROJECT 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
- They maximize public antagonism toward law enforcement, since the perception is that the police are enforcing a “speed trap”
- They create a bad image for a community in the eyes of 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 fastest 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.

For surveys with a different amount than 100 vehicles, the 85<sup>th</sup> percentile speed is determined by the following formula:  $100/15 = \# \text{ of vehicles surveyed}/X$  (where  $x =$  the vehicle at the 85<sup>th</sup> 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  $(56 + 56) \div 2 = 112 \div 2 = 56$  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:

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

$X =$  Individual score (speed)  
 $N =$  Sample size (number of scores)

Geometric Mean Example:

Sample speeds = 51, 52, 55, 58, and 60 mph

Step 1:

$N = 5$ , the total number of values,  $\frac{1}{N} = 0.2$

Step 2:

Determine geometric mean using the formula.

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

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:

- Grande Drive north of Griegos Road;
- Grande Drive between Palo Duro Avenue and San Andres Avenue;
- Grande Drive between San Andres Avenue and Delamar Avenue.

Figure 2.1. on page 6 displays the traffic count locations.

### 2.B. EXISTING CONDITIONS

Figure 2.2. on page 6 displays the existing typical section of Grande Drive. Within the study limits, there are 2 intersections and approximately 32 driveways that provide access to residential homes. Also to be noted, the speed limit within the study limits is 25 mph.





FIGURE 2.1.  
 COUNT LOCATIONS

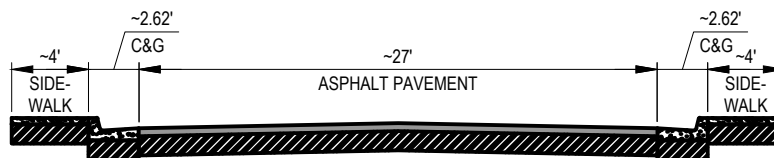


FIGURE 2.2.  
 EXISTING GRANDE DRIVE TYPICAL SECTION



### 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.			
Grande Drive ADT			
Count Location	NB	SB	ADT
Grande Drive South	514	468	982
Grande Drive Middle	565	564	1129
Grand Drive North	435	444	879
Average	504.7	492.0	996.7

The Grande Drive study area ADT ranges from 879 to 1129 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.			
Grande Drive Peak Hour Traffic Volumes (vph)			
Count Location	Peak Hour	Northbound (Peak Hour)	Southbound (Peak Hour)
Grande Drive South	AM Peak	62 (8:15 AM - 9:15 AM)	66 (8:30 AM - 9:30 AM)
	PM Peak	63 (2:15 PM - 3:15 PM)	63 (3:00 PM - 4:00 PM)
Grande Drive Middle	AM Peak	68 (8:15 AM - 9:15 AM)	80 (8:30 AM - 9:30 AM)
	PM Peak	75 (2:30 PM - 3:30 PM)	77 (2:00 PM - 3:00 PM)
Grande Drive North	AM Peak	64 (8:15 AM - 9:15 PM)	74 (8:30 AM - 9:30 AM)
	PM Peak	63 (2:30 PM - 3:30 PM)	71 (2:45 PM - 3:45 PM)

The Grande Drive study area peak hour traffic volumes range from 62 to 80 vehicles per hour.

### 3.C. SPEED STUDY RESULTS

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

Table 3.C.1.			
Grande Drive South Speed Study			
Speed	NB	SB	Total
Average	16.7	17.1	16.8
10 mph Pace	15.0 - 24.9	15.0 - 24.9	15.0 - 24.9
50th Percentile	20.1	20.5	20.3
67th Percentile	22.1	22.3	22.2
85th Percentile	23.9	24.1	24.1

Table 3.C.2.			
Grande Drive Middle Speed Study			
Speed	NB	SB	Total
Average	22.6	22.7	22.6
10 mph Pace	20.1 - 30.0	20.1 - 30.0	20.1 - 30.0
50th Percentile	23.7	24.0	23.9
67th Percentile	26.4	26.8	26.5
85th Percentile	29.1	29.6	29.4

Table 3.C.3.			
Grande Drive North Speed Study			
Speed	NB	SB	Total
Average	21.7	20.8	21.3
10 mph Pace	20.1 - 30.0	20.1 - 30.0	20.1 - 30.0
50th Percentile	23.1	22.6	22.9
67th Percentile	25.7	24.8	25.2
85th Percentile	28.9	28.5	28.8

When considering whether to establish a new posted speed limit or not, surveying the existing traffic speeds is crucial to determining a reasonable posted speed limit.

Before a posted speed limit can be adjusted, an analysis must be conducted to ascertain whether or not the speed limit can be adjusted without resulting in further increases of motorists' travel speeds. Motorists usually drive at speeds which they perceive as safe, based on the observable roadway conditions. A flat and straight roadway may result in a different travel speed than the posted speed limit due to the driver's observation of the roadway condition.

In relation to Grande Drive, the posted 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 28 percent of the total ADT of the three count locations recorded speeds greater than the posted speed limit of 25 mph.



Table 3.C.4.							
Grande Drive ADT > 25 mph							
Speed (mph)	0 - 19.9 MPH		20 - 24.9 MPH		≥ 25 MPH		Avg. ADT
Grande Drive South	472	48%	444.5	45%	65.5	7%	982
Grande Drive Middle	241	21%	416	37%	472	42%	1129
Grande Drive North	242	28%	339	39%	293	34%	874
Total	955	32%	1199.5	40%	830.5	28%	2985

### 3.D. CRASH DATA

Crash data was requested from the Mid-Region Council of Governments. The crash data requested showed there was 5 recorded crashes within the study area from 2012 to 2014.

Table 3.D.1.					
Grande Drive Crash Summary					
Year	Location	Cause of Crash	Crash Analysis	Crash Severity	Crash Correct with Traffic Calming?
2012	4915 Grande Drive	Driver Inattention	Proper Parked	Property Damage Only Crash	No
2013	San Andres NW	Improper Turn	Parked Vehicle	Property Damage Only Crash	No

## 4. U.S. LIMITS SPEED LIMITS PROGRAM

U.S. Limits is an FHWA sponsored program used to analyze speed limits. This program calculates a recommended speed limit based on the criteria given, which is listed on the website as follows:

- Density of surrounding development (e.g. high density, low density, or rural);
- Frequency of roadside access (e.g. number of residential driveways, commercial, industrial, shopping, and special activity properties, and the number and type of intersection roads);
- Road function (e.g. traffic movement vs. access to abutting properties);
- Road characteristics (e.g. paved width, divided or undivided, lane width, number and lanes, and sight restrictions);
- Road conditions and important high speed road characteristics (e.g. interchange spacing, AADT, and shoulders);
- Existing vehicle operating speeds;
- Adjoining speed limits and;
- Any special conditions that may exist on the road section (e.g. adverse alignment, pedestrian and roadside activities, high crash rates, etc.).

This analysis was used for Grande Drive and based on the data entered into <http://www.uslimits.com> for the above-listed categories. The output sheet is shown in Appendix A – U.S. Limits Output. The U.S. Limits Output recommended a speed limit of 20 mph that should only be reduced as a last measure after other treatments have been tried or ruled out.



## 5. CONCLUSION

After evaluating the volume and speed data within the project area, it is concluded that only 28% of the traffic is exceeding 25 mph and the 85<sup>th</sup> percentile speed of traffic is not exceeding the posted speed limit 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:

Figure 5.1. COA NMTP Traffic Calming Measures	
Description	Warranted?
Reported crashes in the past 3 years that could be corrected with traffic calming	Yes
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, Grande Drive DOES NOT meet any of the criteria outlined to warrant traffic calming.



## Appendices

- Appendix A – USLIMITS2 Speed Zoning Report
- Appendix B – Volume and Speed Data
- Appendix C – Crash Data



## Appendix A



# USLIMITS2 Speed Zoning Report

## Project Name: Grande Drive Speed Study

**Analyst:** Thaddeus Yazzie

**Date:** 04-06-2017

### Basic Project Information

Project Number: COA 6254.00  
Route Name: Grande Drive  
From: Griegos Road  
To: Delamar Avenue  
State: New Mexico  
County: Bernalillo County  
City: Albuquerque city  
Route Type: Road Section in Developed Area  
Route Status: Existing

### Roadway Information

Section Length: .22 mile(s)  
Statutory Speed Limit: 25 mph  
Adverse Alignment: No  
One-Way Street: No  
Divided/Undivided: Undivided  
Number of Through Lanes: 2  
Area Type: Residential-Subdivision  
Number of Driveways: 34  
Number of Signals: 0

### Crash Data Information

Crash Data Years: 3.17  
Crash AADT: 997 veh/day  
Total Number of Crashes: 2  
Total Number of Injury Crashes: 0  
Section Crash Rate: 789 per 100 MVM  
Section Injury Crash Rate: 0 per 100 MVM  
Crash Rate Average for Similar Roads: 263  
Injury Rate Average for Similar Roads: 67

### Traffic Information

85th Percentile Speed: 27 mph  
50th Percentile Speed: 22 mph  
AADT: 997 veh/day  
On Street Parking and Usage: Not High  
Pedestrian / Bicyclist Activity: High

**Project Description:** Grande Drive Speed Study from Griegos Road to Delamar Avenue

## Recommended Speed Limit:



**Note:** The section crash rate of 789 per 100 MVM is more than 30 percent above the average for similar roads (263) but below the critical rate (1290). A comprehensive crash study should be undertaken to identify engineering and traffic control deficiencies and appropriate corrective actions. The speed limit should only be reduced as a last measure after all other treatments have either been tried or ruled out.

## Appendix B



# Special Speed Study Report: Grande Dr South

## Station ID : Grande Dr South

Info Line 1 : Between Griegos & Palo Duro  
 Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : GR 1 NB1.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 - 03/28/2017 To: 23:59 - 03/29/2017

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
03/28/17	00:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Tue	01:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	02:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	03:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	06:00	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	07:00	14	14	4	0	0	0	0	0	0	0	0	0	0	0	0	0	32
	08:00	29	21	3	0	0	0	0	0	1	0	0	0	0	0	0	0	54
	09:00	15	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
	10:00	7	8	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16
	11:00	11	15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	28
	12:00	19	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	30
	13:00	18	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	31
	14:00	35	20	2	0	0	0	0	0	0	0	0	0	0	0	0	0	57
	15:00	18	15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	34
	16:00	19	21	1	0	0	0	0	0	0	0	0	0	0	0	0	0	41
	17:00	26	28	3	1	0	0	0	0	0	0	0	0	0	0	0	0	58
	18:00	18	17	3	0	0	0	0	0	0	0	0	0	0	0	0	0	38
	19:00	14	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28
	20:00	17	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
	21:00	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	22:00	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	23:00	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
<b>Daily Total :</b>		274	230	24	1	0	0	0	0	1	0	0	0	0	0	0	0	530
Percent :		52%	43%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		52%	95%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		11	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22

Average Speed 16.3 mph	50% Speed : 18.0 mph	67% Speed : 21.9 mph
		85% Speed : 23.8 mph
10mph Pace: 15.0 - 24.9 (54.3%)		

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Other	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9			
03/29/17	00:00	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Wed	01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	02:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	03:00	0	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	0
	05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	06:00	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	07:00	13	15	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	33
	08:00	30	23	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	58
	09:00	9	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
	10:00	14	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22
	11:00	7	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17
	12:00	9	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	20
	13:00	6	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21
	14:00	22	24	2	0	0	0	0	0	1	0	0	0	0	0	0	0	0	49
	15:00	25	11	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	38
	16:00	22	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42
	17:00	22	30	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	55
	18:00	15	18	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	37
	19:00	16	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	27
	20:00	6	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	18
	21:00	4	9	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15
	22:00	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	23:00	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7
<b>Daily Total :</b>		235	228	31	3	0	0	0	0	1	0	0	0	0	0	0	0	0	498
Percent :		47%	46%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		47%	93%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		10	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	21

Average Speed	17.0 mph	50% Speed :	20.5 mph	67% Speed :	22.2 mph	85% Speed :	24.1 mph
				10mph Pace:	15.0 - 24.9 (53.4%)		

## 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 - 03/28/2017 To: 23:59 - 03/29/2017

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
03/28/17	00:00	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Tue	01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	02:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	04:00	3	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	05:00	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	06:00	8	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19
	07:00	16	16	4	0	0	0	0	0	0	0	0	0	0	0	0	0	36
	08:00	35	22	2	0	0	0	0	0	0	0	0	0	0	0	0	0	59
	09:00	12	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	25
	10:00	8	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	20
	11:00	12	12	4	0	0	0	0	0	0	0	0	0	0	0	0	0	28
	12:00	11	9	0	1	0	0	0	0	0	0	0	0	0	0	0	0	21
	13:00	9	12	2	0	0	0	0	0	0	0	0	0	0	0	0	0	23
	14:00	15	15	2	0	0	0	0	0	0	0	0	0	0	0	0	0	32
	15:00	35	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	51
	16:00	11	16	1	0	0	0	0	0	0	0	0	0	0	0	0	0	28
	17:00	16	16	3	1	0	0	0	0	0	0	0	0	0	0	0	0	36
	18:00	7	11	2	1	0	0	0	0	0	0	0	0	0	0	0	0	21
	19:00	6	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	17
	20:00	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	21:00	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	22:00	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	23:00	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4

<b>Daily Total :</b>	221	205	28	3	0	0	0	0	0	0	0	0	0	0	0	0	0	457
Percent :	48%	45%	6%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	48%	93%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	9	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19

Average Speed 16.8 mph	50% Speed : 20.3 mph	67% Speed : 22.2 mph
85% Speed : 23.9 mph		
10mph Pace: 15.0 - 24.9 (51.6%)		

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
03/29/17	00:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
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	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	04:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	05:00	0	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	06:00	4	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	13
	07:00	21	21	3	0	0	0	0	0	0	0	0	0	0	0	0	0	45
	08:00	30	22	3	1	0	0	0	0	0	0	0	0	0	0	0	0	56
	09:00	12	12	3	0	0	0	0	0	0	0	0	0	0	0	0	0	27
	10:00	9	12	1	0	0	0	0	0	1	0	0	0	0	0	0	0	23
	11:00	9	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25
	12:00	7	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	17
	13:00	9	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	19
	14:00	14	18	1	0	0	0	0	0	0	0	0	0	0	0	0	0	33
	15:00	37	24	2	0	0	0	0	0	0	0	0	0	0	0	0	0	63
	16:00	12	13	2	0	0	0	0	0	0	0	0	0	0	0	0	0	27
	17:00	10	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	31
	18:00	15	17	5	0	0	0	0	0	0	0	0	0	0	0	0	0	37
	19:00	11	12	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24
	20:00	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	21:00	3	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	22:00	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	23:00	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
<b>Daily Total :</b>		214	226	37	1	0	0	0	0	1	0	0	0	0	0	0	0	479
Percent :		45%	47%	8%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		45%	92%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		9	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20

Average Speed	17.4 mph	50% Speed :	20.8 mph	67% Speed :	22.4 mph	85% Speed :	24.2 mph
				10mph Pace:	20.1 - 30.0 (54.9%)		



---

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

---

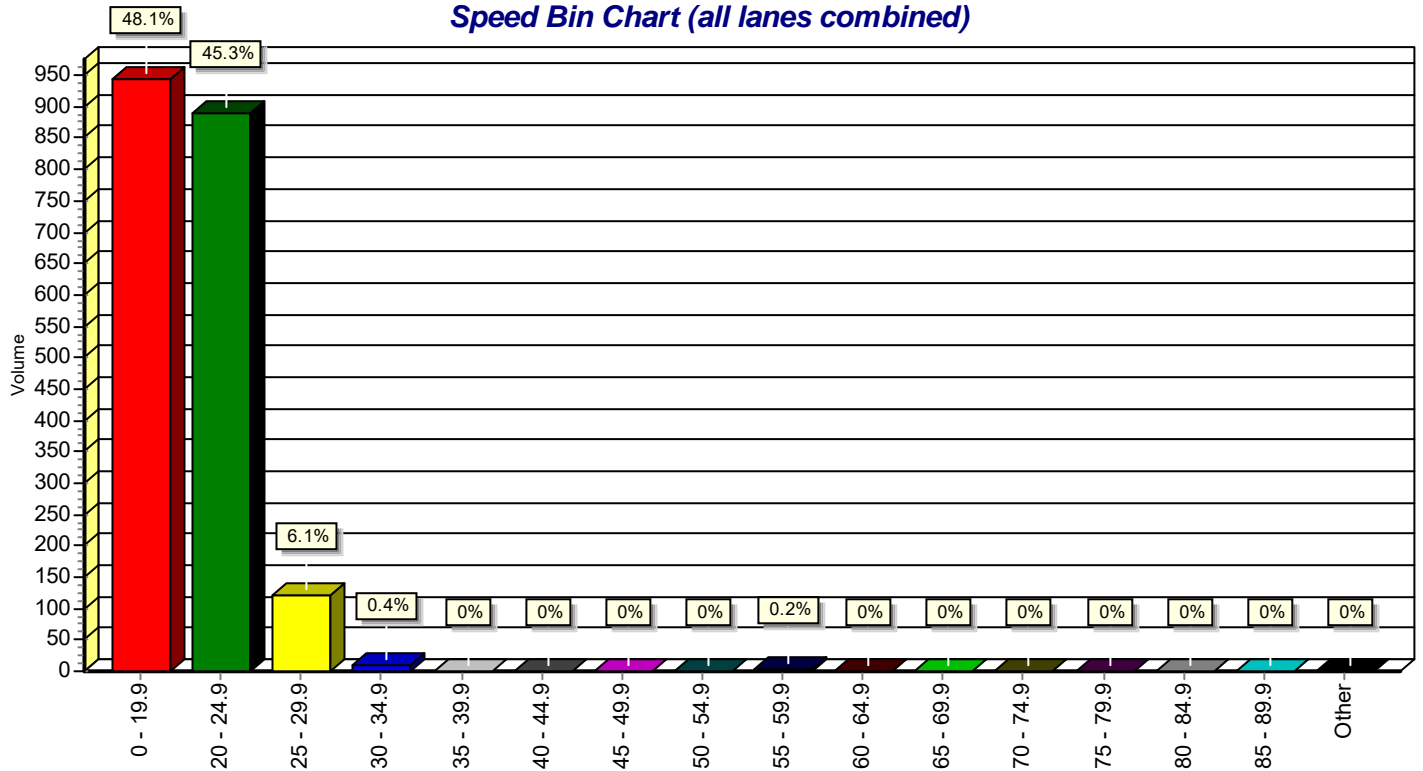
# Special Speed Study Summary: Grande Dr South

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	
	0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	Total
<b>Grand Total #1:</b>	509	458	55	4	0	0	0	0	2	0	0	0	0	0	0	0	1028
Percent :	50%	45%	5%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	50%	94%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	11	10	1	0	0	0	0	0	0	0	0	0	0	0	0	0	22
<b>ADT = 514</b>	Average Speed 16.7 mph      50% Speed : 20.1 mph      67% Speed : 22.1 mph      85% Speed : 23.9 mph 10mph Pace: 15.0 - 24.9 (53.9%)																
<b>Grand Total #3:</b>	435	431	65	4	0	0	0	0	1	0	0	0	0	0	0	0	936
Percent :	46%	46%	7%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	46%	93%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	9	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	19
<b>ADT = 468</b>	Average Speed 17.1 mph      50% Speed : 20.5 mph      67% Speed : 22.3 mph      85% Speed : 24.1 mph 10mph Pace: 15.0 - 24.9 (54.7%)																
<b>Comb. Total :</b>	944	889	120	8	0	0	0	0	3	0	0	0	0	0	0	0	1964
Percent :	48%	45%	6%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	48%	93%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	20	19	3	0	0	0	0	0	0	0	0	0	0	0	0	0	42
<b>ADT = 982</b>	Average Speed 16.8 mph      50% Speed : 20.3 mph      67% Speed : 22.2 mph      85% Speed : 24.1 mph 10mph Pace: 15.0 - 24.9 (57.2%)																

**Speed Percent vs. Time (all lanes)**



**Speed Bin Chart (all lanes combined)**



# Special Speed Study Report: Grande Dr Middle

## Station ID : Grande Dr Middle

Info Line 1 : Between Palo Duro & San Andres  
 Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : GR2 1NB.DB

Last Connected Device Type : Apollo

Version Number : 1.62

Serial Number :

Number of Lanes : 1

Posted Speed Limit : 0.0 mph

### Lane #1 Configuration

#	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 - 03/28/2017 To: 23:59 - 03/29/2017

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
03/28/17	00:00	0	0	1	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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	05:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	06:00	2	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	11
	07:00	10	10	10	2	3	0	0	0	0	0	0	0	0	0	0	0	35
	08:00	14	26	13	5	0	0	0	0	0	0	0	0	0	0	0	0	58
	09:00	3	12	9	2	1	0	0	0	0	0	0	0	0	0	0	0	27
	10:00	2	9	2	3	0	0	0	0	0	0	0	0	0	0	0	0	16
	11:00	4	16	7	5	2	0	0	0	0	0	0	0	0	0	0	0	34
	12:00	11	16	5	5	0	1	0	0	0	0	0	0	0	0	0	0	38
	13:00	9	14	9	4	0	1	0	0	0	0	0	0	0	0	0	0	37
	14:00	17	24	14	3	0	0	0	0	0	0	0	0	0	0	0	0	58
	15:00	13	12	11	4	0	0	0	0	0	0	0	0	0	0	0	0	40
	16:00	7	17	15	1	0	0	0	0	0	0	0	0	0	0	0	0	40
	17:00	11	21	26	4	0	1	0	0	0	0	0	0	0	0	0	0	63
	18:00	8	8	16	5	0	0	0	0	0	0	0	0	0	0	0	0	37
	19:00	3	10	8	1	1	0	0	0	0	0	0	0	0	0	0	0	23
	20:00	10	7	6	1	1	0	0	0	0	0	0	0	0	0	0	0	25
	21:00	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	22:00	0	7	0	1	0	0	0	0	0	0	0	0	0	0	0	0	8
	23:00	0	1	2	0	0	0	0	1	0	0	0	0	0	0	0	0	4
<b>Daily Total :</b>		127	223	161	46	8	3	0	1	0	0	0	0	0	0	0	0	569
Percent :		22%	39%	28%	8%	1%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		22%	62%	90%	98%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		5	9	7	2	0	0	0	0	0	0	0	0	0	0	0	0	23

Average Speed 22.2 mph	50% Speed : 23.5 mph	67% Speed : 26.0 mph	85% Speed : 29.1 mph
10mph Pace: 20.1 - 30.0 (67.5%)			

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
03/29/17	00:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
Wed	01:00	0	0	0	0	0	0	1	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	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
	06:00	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	5
	07:00	3	9	12	5	1	0	0	0	0	0	0	0	0	0	0	0	30
	08:00	11	27	20	5	1	0	0	0	0	0	0	0	0	0	0	0	64
	09:00	2	9	7	1	2	0	0	0	0	0	0	0	0	0	0	0	21
	10:00	9	4	8	3	0	0	0	0	0	0	0	0	0	0	0	0	24
	11:00	5	10	6	1	0	0	0	0	0	0	0	0	0	0	0	0	22
	12:00	6	6	9	3	1	0	0	0	0	0	0	0	0	0	0	0	25
	13:00	6	12	7	3	1	0	0	0	0	0	0	0	0	0	0	0	29
	14:00	19	29	13	2	0	0	0	0	0	0	0	0	0	0	0	0	63
	15:00	12	25	11	3	0	0	0	0	0	0	0	0	0	0	0	0	51
	16:00	7	20	18	2	1	0	0	0	0	0	0	0	0	0	0	0	48
	17:00	7	19	22	6	0	1	0	0	0	0	0	0	0	0	0	0	55
	18:00	9	10	15	4	2	0	0	0	0	0	0	0	0	0	0	0	40
	19:00	5	11	6	2	0	0	0	0	0	0	0	0	0	0	0	0	24
	20:00	5	3	9	3	0	0	0	0	0	0	0	0	0	0	0	0	20
	21:00	4	5	5	1	1	0	0	0	0	0	0	0	0	0	0	0	16
	22:00	1	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	9
	23:00	0	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	7
<b>Daily Total :</b>		111	208	181	47	11	1	1	0	0	0	0	0	0	0	0	0	560
Percent :		20%	37%	32%	8%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		20%	57%	89%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		5	9	8	2	0	0	0	0	0	0	0	0	0	0	0	0	24

Average Speed	22.8 mph	50% Speed :	23.9 mph	67% Speed :	26.8 mph	85% Speed :	29.2 mph
				10mph Pace:	20.1 - 30.0 (69.5%)		

## 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 - 03/28/2017 To: 23:59 - 03/29/2017

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
03/28/17	00:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Tue	01:00	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	03:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	04:00	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	05:00	0	3	3	1	1	0	0	0	0	0	0	0	0	0	0	0	8
	06:00	5	5	5	2	0	0	0	0	0	0	0	0	0	0	0	0	17
	07:00	11	15	15	6	1	0	0	0	0	0	0	0	0	0	0	0	48
	08:00	22	32	15	4	0	0	0	0	0	0	0	0	0	0	0	0	73
	09:00	3	17	6	2	0	0	0	0	0	0	0	0	0	0	0	1	29
	10:00	3	8	8	5	0	0	0	0	0	0	0	0	0	0	0	0	24
	11:00	14	13	9	3	1	0	0	0	0	0	0	0	0	0	0	0	40
	12:00	6	15	10	1	1	0	1	0	0	0	0	0	0	0	0	0	34
	13:00	5	7	8	5	1	1	0	0	0	0	1	0	0	0	0	0	28
	14:00	5	13	8	4	1	0	0	0	0	0	0	0	0	0	0	0	31
	15:00	35	27	13	2	0	0	0	0	0	0	0	0	0	0	0	0	77
	16:00	5	18	10	1	0	0	0	0	0	0	0	0	0	0	0	0	34
	17:00	8	11	13	12	1	0	0	0	0	0	0	0	0	0	0	0	45
	18:00	3	7	12	3	1	0	0	0	0	0	0	0	0	0	0	0	26
	19:00	1	6	4	2	1	0	0	0	0	0	0	0	0	0	0	0	14
	20:00	4	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	14
	21:00	1	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	7
	22:00	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
	23:00	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7
<b>Daily Total :</b>		138	212	150	56	9	1	1	0	0	0	1	0	0	0	0	1	569
Percent :		24%	37%	26%	10%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		24%	62%	88%	98%	99%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		6	9	6	2	0	0	0	0	0	0	0	0	0	0	0	0	23

Average Speed 22.1 mph      50% Speed : 23.4 mph      67% Speed : 26.2 mph      85% Speed : 29.3 mph  
 10mph Pace: 20.1 - 30.0 (63.6%)

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Other	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9			
03/29/17	00:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wed	01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	02:00	0	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	0	1
	04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	05:00	0	4	7	1	0	1	0	0	0	0	0	0	0	0	0	0	0	13
	06:00	3	4	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	15
	07:00	4	15	17	11	2	0	0	0	0	0	0	0	0	0	0	0	0	49
	08:00	9	27	19	4	1	0	0	0	0	0	0	0	0	0	0	0	0	60
	09:00	6	10	12	6	0	0	0	0	0	0	0	0	0	0	0	0	0	34
	10:00	5	6	9	4	2	0	0	0	0	0	0	0	0	0	0	0	0	26
	11:00	8	7	11	5	1	0	0	0	0	0	0	0	0	0	0	0	0	32
	12:00	1	11	7	4	0	0	0	0	0	0	0	0	0	0	0	0	0	23
	13:00	5	5	10	6	1	0	0	0	0	0	0	0	0	0	0	0	0	27
	14:00	10	12	12	4	0	0	0	0	0	0	0	0	0	0	0	0	0	38
	15:00	23	32	18	4	0	0	0	0	0	0	0	0	0	0	0	0	0	77
	16:00	5	12	10	2	2	0	0	0	0	0	0	0	0	0	0	0	0	31
	17:00	8	10	18	1	0	0	0	0	0	0	0	0	0	0	0	0	0	37
	18:00	7	13	15	3	1	0	0	0	0	0	0	0	0	0	0	0	0	39
	19:00	6	9	15	1	0	0	0	0	0	0	0	0	0	0	0	0	0	31
	20:00	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8
	21:00	1	4	1	2	0	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	0	3
	23:00	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
<b>Daily Total :</b>		106	189	190	62	11	1	0	0	0	0	0	0	0	0	0	0	0	559
Percent :		19%	34%	34%	11%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		19%	53%	87%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		4	8	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	23

Average Speed	23.2 mph	50% Speed :	24.5 mph	67% Speed :	27.2 mph	85% Speed :	29.6 mph
				10mph Pace: 20.1 - 30.0 (67.8%)			

---

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

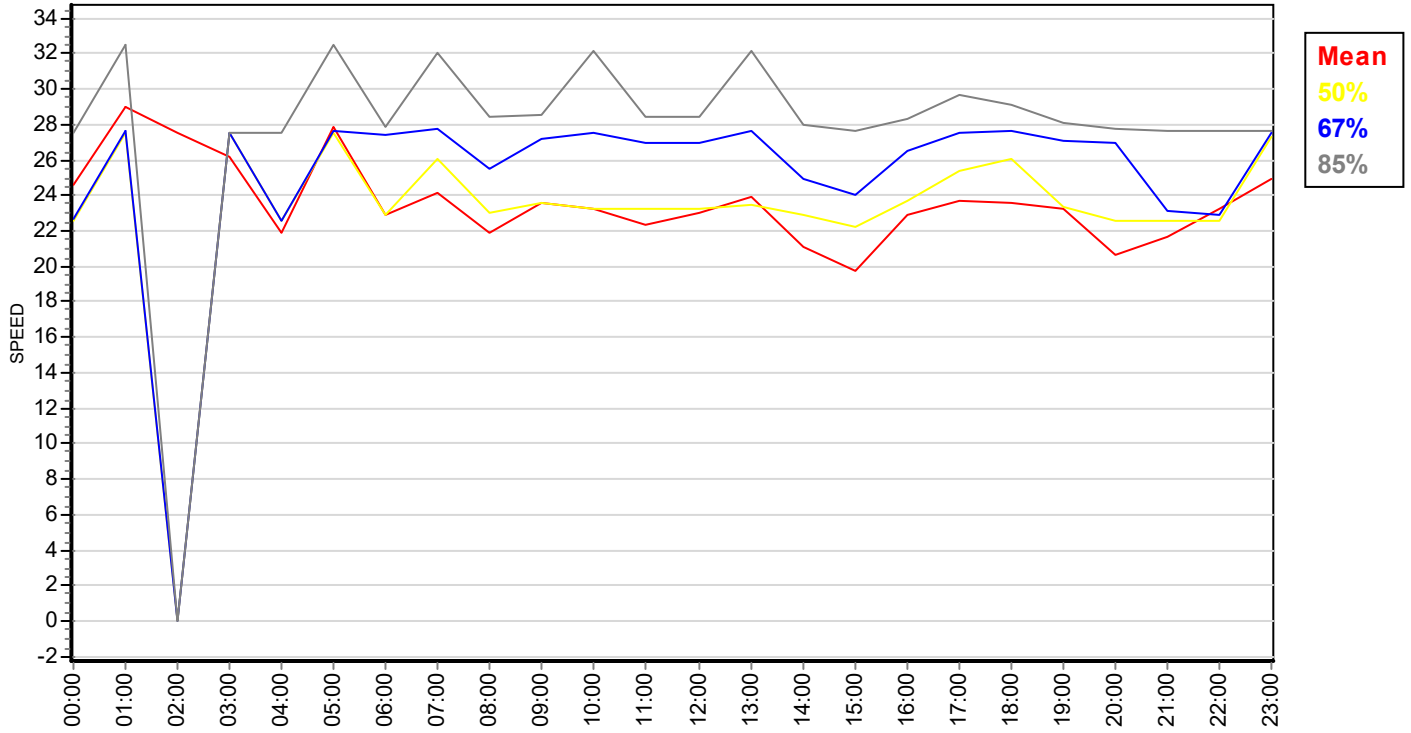
---



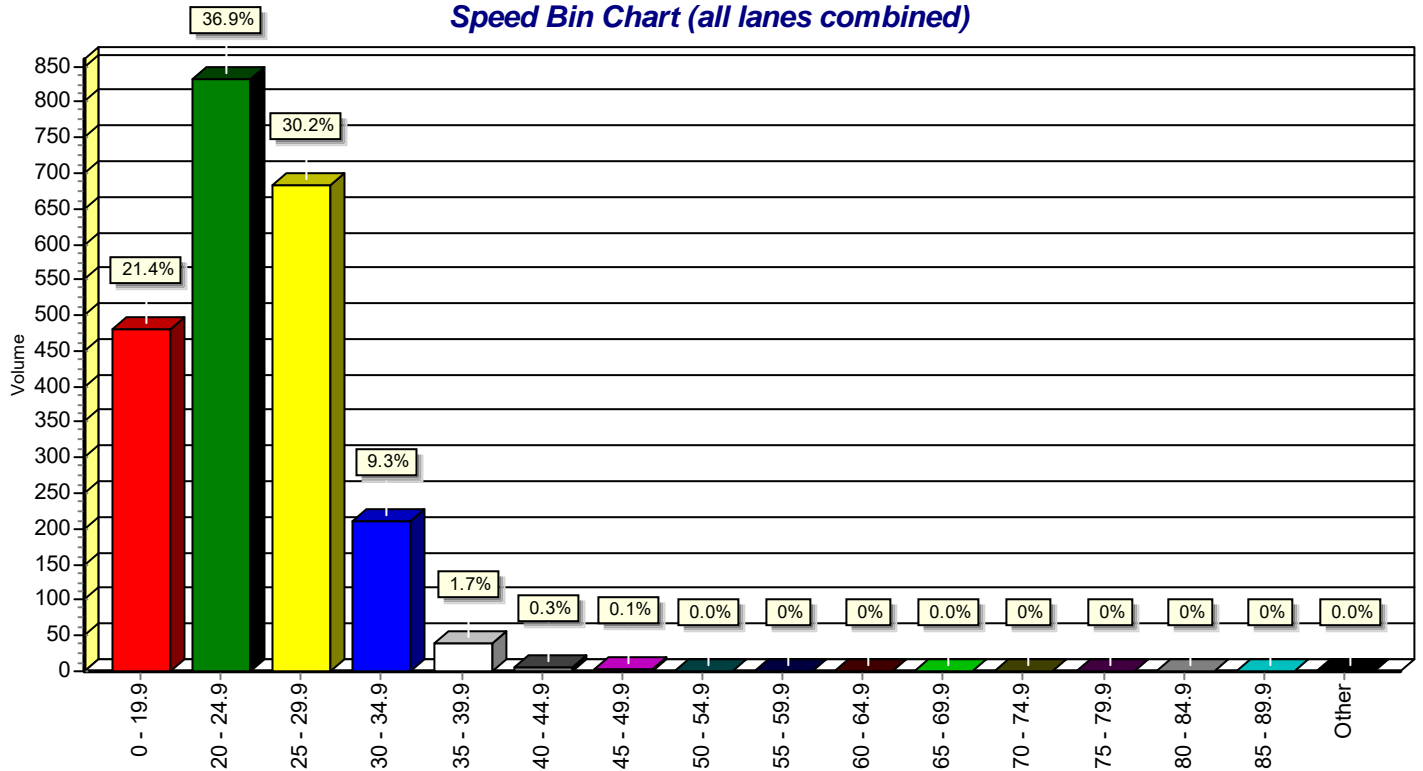
# Special Speed Study Summary: Grande Dr Middle

	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	
	0 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -		
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
<b>Grand Total #1:</b>	238	431	342	93	19	4	1	1	0	0	0	0	0	0	0	0	1129
Percent :	21%	38%	30%	8%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	21%	59%	90%	98%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	5	9	7	2	0	0	0	0	0	0	0	0	0	0	0	0	23
<b>ADT = 564</b>	Average Speed 22.6 mph		50% Speed : 23.7 mph				67% Speed : 26.4 mph				85% Speed : 29.1 mph				10mph Pace: 20.1 - 30.0 (68.6%)		
<b>Grand Total #3:</b>	244	401	340	118	20	2	1	0	0	0	1	0	0	0	0	1	1128
Percent :	22%	36%	30%	10%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	22%	57%	87%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	5	8	7	2	0	0	0	0	0	0	0	0	0	0	0	0	22
<b>ADT = 564</b>	Average Speed 22.7 mph		50% Speed : 24.0 mph				67% Speed : 26.8 mph				85% Speed : 29.6 mph				10mph Pace: 20.1 - 30.0 (65.9%)		
<b>Comb. Total :</b>	482	832	682	211	39	6	2	1	0	0	1	0	0	0	0	1	2257
Percent :	21%	37%	30%	9%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	21%	58%	88%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	10	17	14	4	1	0	0	0	0	0	0	0	0	0	0	0	46
<b>ADT = 1128</b>	Average Speed 22.6 mph		50% Speed : 23.9 mph				67% Speed : 26.5 mph				85% Speed : 29.4 mph				10mph Pace: 20.1 - 30.0 (67.3%)		

**Speed Percent vs. Time (all lanes)**



**Speed Bin Chart (all lanes combined)**



# Special Speed Study Report: Grande Dr North

## Station ID : Grande Dr North

Info Line 1 : Between San Andres & Delamar  
 Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : GB 3 1NB.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 - 03/28/2017 To: 23:59 - 03/29/2017

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
03/28/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tue	01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	02:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	06:00	0	4	3	2	0	0	0	0	0	0	0	0	0	0	0	0	9
	07:00	10	11	9	1	1	0	0	0	0	0	0	0	0	0	0	0	32
	08:00	20	29	3	3	0	0	0	0	0	0	0	0	0	0	0	0	55
	09:00	5	11	4	2	0	0	0	0	0	0	0	0	0	0	0	0	22
	10:00	1	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	10
	11:00	5	9	8	2	3	0	0	0	0	0	0	0	0	0	0	0	27
	12:00	10	13	6	1	1	0	0	0	0	0	0	0	0	0	0	0	31
	13:00	6	11	7	1	0	1	0	0	0	0	0	0	0	0	0	0	26
	14:00	9	32	3	5	0	0	0	0	0	0	0	0	0	0	0	0	49
	15:00	11	10	5	2	0	0	0	0	0	0	0	0	0	0	0	0	28
	16:00	4	9	9	2	0	0	0	0	0	0	0	0	0	0	0	0	24
	17:00	6	15	20	3	0	0	0	0	0	0	0	0	0	0	0	0	44
	18:00	3	5	12	3	0	0	0	0	0	0	0	0	0	0	0	0	23
	19:00	1	8	2	1	0	0	0	0	0	0	0	0	0	0	0	0	12
	20:00	8	4	5	1	1	1	0	0	0	0	0	0	0	0	0	0	20
	21:00	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	22:00	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	23:00	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	2
<b>Daily Total :</b>		99	182	105	29	6	2	0	0	1	0	0	0	0	0	0	0	424
Percent :		23%	43%	25%	7%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		23%	66%	91%	98%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		4	8	4	1	0	0	0	0	0	0	0	0	0	0	0	0	17

Average Speed 21.9 mph	50% Speed : 23.0 mph	67% Speed : 25.2 mph	85% Speed : 28.3 mph
10mph Pace: 20.1 - 30.0 (67.7%)			

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
03/29/17	00:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Wed	01:00	0	0	0	0	1	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	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	06:00	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	07:00	6	10	7	3	1	0	0	0	0	0	0	0	0	0	0	0	27
	08:00	17	22	22	2	0	0	0	0	0	0	0	0	0	0	0	0	63
	09:00	5	5	4	3	0	0	0	0	0	0	0	0	0	0	0	0	17
	10:00	4	7	5	4	1	0	0	0	0	0	0	0	0	0	0	0	21
	11:00	4	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	15
	12:00	6	6	7	2	1	0	0	0	0	0	0	0	0	0	0	0	22
	13:00	8	10	3	2	0	0	0	0	0	0	0	0	0	0	0	0	23
	14:00	14	27	8	1	0	0	0	0	0	0	0	0	0	0	0	0	50
	15:00	10	17	7	2	0	0	0	0	0	0	0	0	0	0	0	0	36
	16:00	10	7	12	5	0	0	0	0	0	0	0	0	0	0	0	0	34
	17:00	5	17	13	3	0	0	0	0	0	0	0	0	0	0	0	0	38
	18:00	9	9	8	6	2	1	0	0	0	0	0	0	0	0	0	0	35
	19:00	8	7	4	1	0	0	0	0	0	0	0	0	0	0	0	0	20
	20:00	2	2	6	1	0	0	0	0	0	0	0	0	0	0	0	0	11
	21:00	3	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	11
	22:00	1	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	23:00	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3
<b>Daily Total :</b>		115	163	117	39	6	1	0	0	0	0	0	0	0	0	0	0	441
Percent :		26%	37%	27%	9%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		26%	63%	90%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		5	7	5	2	0	0	0	0	0	0	0	0	0	0	0	0	19

Average Speed	21.7 mph	50% Speed :	23.2 mph	67% Speed :	26.1 mph	85% Speed :	28.7 mph
				10mph Pace:	20.1 - 30.0 (63.5%)		

## 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 - 03/28/2017 To: 23:59 - 03/29/2017

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
03/28/17	00:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Tue	01:00	1	0	0	1	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	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
	05:00	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5
	06:00	3	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	9
	07:00	5	10	14	6	2	1	0	0	0	0	0	0	0	0	0	0	38
	08:00	39	23	8	1	0	0	0	0	0	0	0	0	0	0	0	0	71
	09:00	5	8	5	1	0	0	0	0	0	0	0	0	0	0	0	0	19
	10:00	5	8	6	1	0	0	0	0	0	0	0	0	0	0	0	0	20
	11:00	8	11	9	2	1	0	0	0	0	0	0	0	0	0	0	0	31
	12:00	5	7	7	2	0	0	1	0	0	0	0	0	0	0	0	0	22
	13:00	3	3	9	4	0	0	0	0	0	0	0	0	0	0	0	0	19
	14:00	10	10	8	0	0	0	0	0	0	0	0	0	0	0	0	0	28
	15:00	31	26	9	4	0	0	0	0	0	0	0	0	0	0	0	0	70
	16:00	4	9	11	1	0	0	0	0	0	0	0	0	0	0	0	0	25
	17:00	5	17	5	5	0	0	0	0	0	0	0	0	0	0	0	0	32
	18:00	2	6	6	2	0	0	0	0	0	0	0	0	0	0	0	0	16
	19:00	1	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	11
	20:00	4	4	2	0	1	0	0	0	0	0	0	0	0	0	0	0	11
	21:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	22:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	23:00	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
<b>Daily Total :</b>		135	160	106	33	4	1	1	0	0	0	0	0	0	0	0	0	440
Percent :		31%	36%	24%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		31%	67%	91%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		6	7	4	1	0	0	0	0	0	0	0	0	0	0	0	0	18

Average Speed 20.8 mph      50% Speed : 22.7 mph      67% Speed : 25.0 mph      85% Speed : 28.3 mph  
 10mph Pace: 20.1 - 30.0 (60.5%)

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Total
		0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	
03/29/17	00:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
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	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	05:00	0	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	9
	06:00	2	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	10
	07:00	6	13	13	5	0	0	0	0	0	0	0	0	0	0	0	0	37
	08:00	18	26	6	6	0	0	0	0	0	0	0	0	0	0	0	0	56
	09:00	7	10	4	1	1	0	0	0	0	0	0	0	0	0	0	0	23
	10:00	6	7	5	4	2	0	0	0	0	0	0	0	0	0	0	0	24
	11:00	7	6	9	4	0	0	0	0	0	0	0	0	0	0	0	0	26
	12:00	5	4	5	2	0	0	0	0	0	0	0	0	0	0	0	0	16
	13:00	8	7	2	3	0	0	0	0	0	0	0	0	0	0	0	0	20
	14:00	8	9	8	0	0	0	0	0	0	0	0	0	0	0	0	0	25
	15:00	30	34	5	1	0	0	0	0	0	0	0	0	0	0	0	0	70
	16:00	6	9	3	2	2	0	0	0	0	0	0	0	0	0	0	0	22
	17:00	12	9	10	0	0	0	0	0	0	0	0	0	0	0	0	0	31
	18:00	9	14	7	3	0	0	0	0	0	0	0	0	0	0	0	0	33
	19:00	7	7	7	2	0	0	0	0	0	0	0	0	0	0	0	0	23
	20:00	4	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	8
	21:00	1	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6
	22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
	23:00	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
<b>Daily Total :</b>		136	173	92	38	5	0	0	0	0	0	0	0	0	0	0	0	444
<b>Percent :</b>		31%	39%	21%	9%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
<b>Cum. Percent :</b>		31%	70%	90%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
<b>Average :</b>		6	7	4	2	0	0	0	0	0	0	0	0	0	0	0	0	19

Average Speed	20.7 mph	50% Speed :	22.6 mph	67% Speed :	24.6 mph	85% Speed :	28.5 mph
				10mph Pace:	20.1 - 30.0 (59.7%)		

---

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

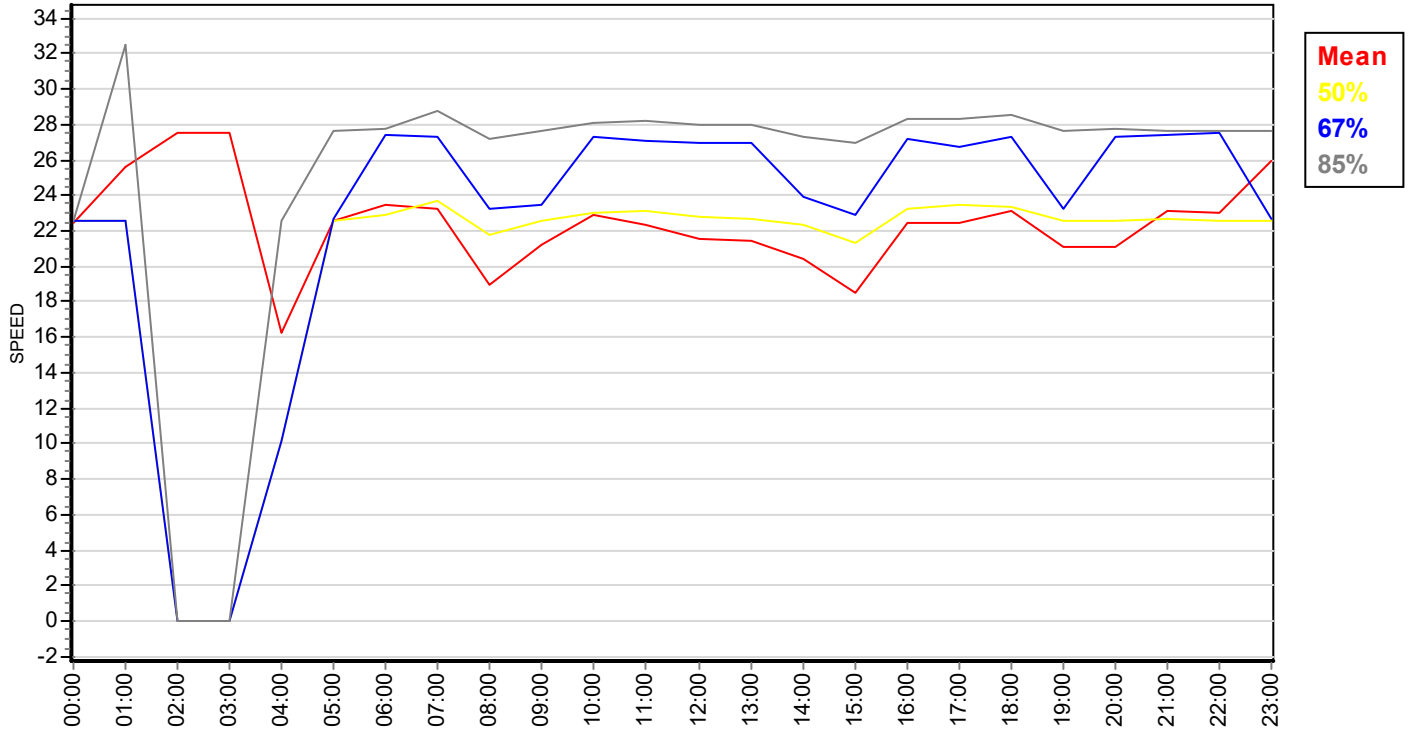
---

# Special Speed Study Summary: Grande Dr North

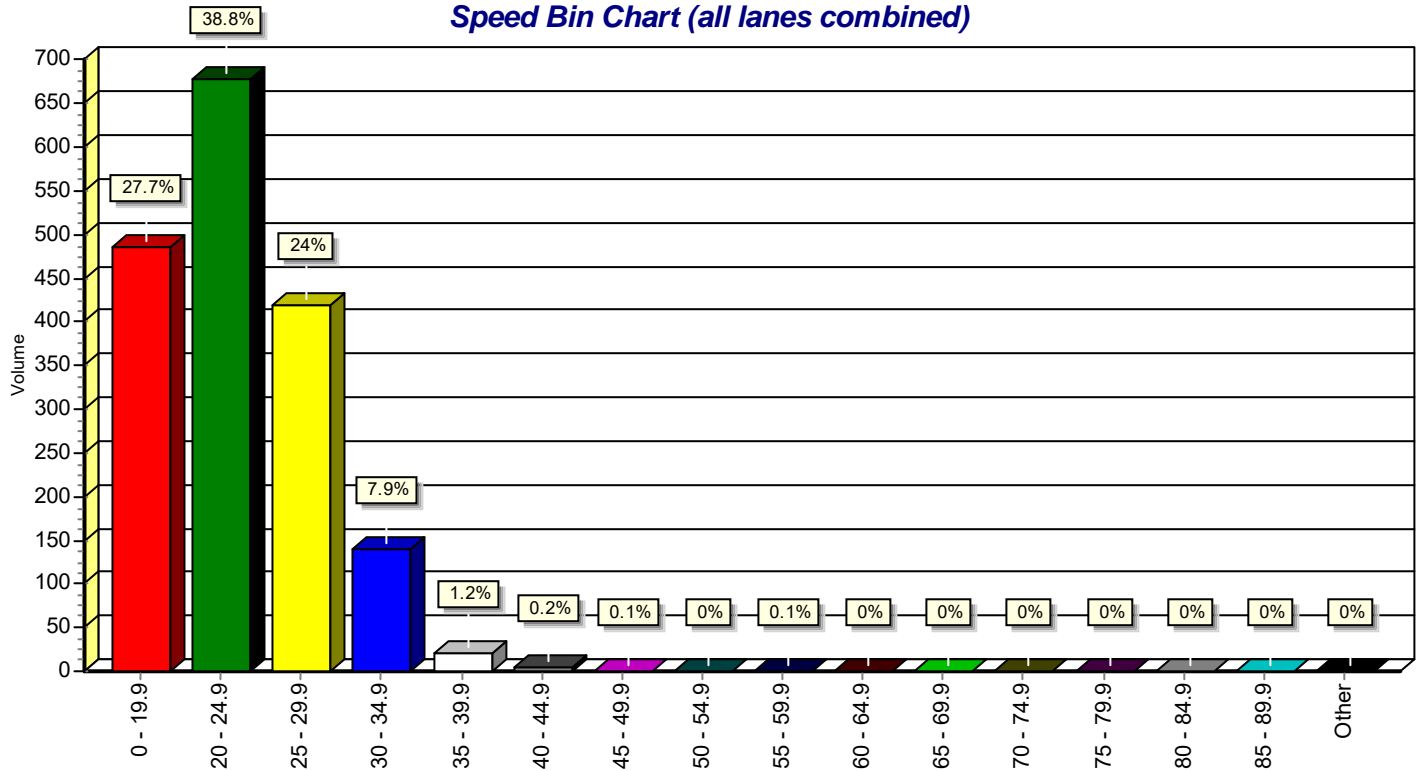
	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16																
	0 - 19.9	20 - 24.9	25 - 29.9	30 - 34.9	35 - 39.9	40 - 44.9	45 - 49.9	50 - 54.9	55 - 59.9	60 - 64.9	65 - 69.9	70 - 74.9	75 - 79.9	80 - 84.9	85 - 89.9	Other	Total															
<b>Grand Total #1:</b>	214	345	222	68	12	3	0	0	1	0	0	0	0	0	0	0	865															
Percent :	25%	40%	26%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%																
Cum. Percent :	25%	65%	90%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%																
Average :	4	7	5	1	0	0	0	0	0	0	0	0	0	0	0	0	17															
<b>ADT = 432</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Average Speed</td> <td>21.7 mph</td> <td style="width: 25%;">50% Speed :</td> <td>23.1 mph</td> <td style="width: 25%;">67% Speed :</td> <td>25.7 mph</td> <td style="width: 25%;">85% Speed :</td> <td>28.9 mph</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="3">10mph Pace: 20.1 - 30.0 (65.5%)</td> </tr> </table>																Average Speed	21.7 mph	50% Speed :	23.1 mph	67% Speed :	25.7 mph	85% Speed :	28.9 mph						10mph Pace: 20.1 - 30.0 (65.5%)		
Average Speed	21.7 mph	50% Speed :	23.1 mph	67% Speed :	25.7 mph	85% Speed :	28.9 mph																									
					10mph Pace: 20.1 - 30.0 (65.5%)																											
<b>Grand Total #3:</b>	271	333	198	71	9	1	1	0	0	0	0	0	0	0	0	0	884															
Percent :	31%	38%	22%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%																
Cum. Percent :	31%	68%	91%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%																
Average :	6	7	4	1	0	0	0	0	0	0	0	0	0	0	0	0	18															
<b>ADT = 442</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Average Speed</td> <td>20.8 mph</td> <td style="width: 25%;">50% Speed :</td> <td>22.6 mph</td> <td style="width: 25%;">67% Speed :</td> <td>24.8 mph</td> <td style="width: 25%;">85% Speed :</td> <td>28.5 mph</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="3">10mph Pace: 20.1 - 30.0 (60.1%)</td> </tr> </table>																Average Speed	20.8 mph	50% Speed :	22.6 mph	67% Speed :	24.8 mph	85% Speed :	28.5 mph						10mph Pace: 20.1 - 30.0 (60.1%)		
Average Speed	20.8 mph	50% Speed :	22.6 mph	67% Speed :	24.8 mph	85% Speed :	28.5 mph																									
					10mph Pace: 20.1 - 30.0 (60.1%)																											
<b>Comb. Total :</b>	485	678	420	139	21	4	1	0	1	0	0	0	0	0	0	0	1749															
Percent :	28%	39%	24%	8%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%																
Cum. Percent :	28%	66%	91%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%																
Average :	10	14	9	3	0	0	0	0	0	0	0	0	0	0	0	0	36															
<b>ADT = 874</b>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Average Speed</td> <td>21.3 mph</td> <td style="width: 25%;">50% Speed :</td> <td>22.9 mph</td> <td style="width: 25%;">67% Speed :</td> <td>25.2 mph</td> <td style="width: 25%;">85% Speed :</td> <td>28.8 mph</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td colspan="3">10mph Pace: 20.1 - 30.0 (62.9%)</td> </tr> </table>																Average Speed	21.3 mph	50% Speed :	22.9 mph	67% Speed :	25.2 mph	85% Speed :	28.8 mph						10mph Pace: 20.1 - 30.0 (62.9%)		
Average Speed	21.3 mph	50% Speed :	22.9 mph	67% Speed :	25.2 mph	85% Speed :	28.8 mph																									
					10mph Pace: 20.1 - 30.0 (62.9%)																											



Speed Percent vs. Time (all lanes)



Speed Bin Chart (all lanes combined)



# Basic Volume Report: Grande Dr South

**Station ID : Grande Dr South**

Info Line 1 : Between Griegos & Palo Duro

Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : GR 1 NB1.DB

Last Connected Device Type : Apollo

Version Number : 1.66

Serial Number :

Number of Lanes : 1

Posted Speed Limit : 0.0 mph

## Lane #1 Configuration

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

## Lane #1 Basic Volume Data From: 00:00 - 03/28/2017 To: 23:59 - 03/29/2017

Date	Time	:00	:15	:30	:45	Total
03/28/17	00:00	0	1	0	0	1
Tue	01:00	0	0	1	0	1
	02:00	0	0	1	0	1
	03:00	0	1	0	0	1
	04:00	0	2	1	0	3
	05:00	0	0	0	0	0
	06:00	1	1	3	4	9
	07:00	4	9	11	8	32
	08:00	4	8	29	13	54
	09:00	12	3	5	5	25
	10:00	3	7	4	2	16
	11:00	2	10	9	7	28
	12:00	10	9	5	6	30
	13:00	8	11	6	6	31
	14:00	6	8	14	29	57
	15:00	12	7	6	9	34
	16:00	14	13	5	9	41
	17:00	19	14	15	10	58
	18:00	10	10	7	11	38
	19:00	3	8	9	8	28
	20:00	6	7	5	7	25
	21:00	1	3	3	1	8
	22:00	1	1	2	2	6
	23:00	2	0	1	0	3

Day Total : 530

AM Total :	171 (32.3%)	Peak AM Hour : 08:15 =	62 (11.7%)	Peak AM Factor : 0.534	Average Period :	5.5
PM Total :	359 (67.7%)	Peak PM Hour : 14:15 =	63 (11.9%)	Peak PM Factor : 0.543	Average Hour :	22.1

Date	Time	:00	:15	:30	:45	Total
03/29/17	00:00	0	1	2	1	4
Wed	01:00	0	0	0	1	1
	02:00	0	1	0	0	1
	03:00	0	0	0	0	0
	04:00	0	0	0	0	0
	05:00	0	1	0	0	1
	06:00	0	2	2	2	6
	07:00	6	9	11	7	33
	08:00	5	11	24	18	58
	09:00	3	8	3	3	17
	10:00	8	7	3	4	22
	11:00	2	5	6	4	17
	12:00	5	8	4	3	20
	13:00	3	5	8	5	21
	14:00	10	5	12	22	49
	15:00	8	12	9	9	38
	16:00	8	15	5	14	42
	17:00	13	18	10	14	55
	18:00	11	5	11	10	37
	19:00	9	6	7	5	27
	20:00	7	4	3	4	18
	21:00	2	4	6	3	15
	22:00	5	1	1	2	9
	23:00	2	4	0	1	7
Day Total :						498

AM Total :	160 (32.1%)	Peak AM Hour : 08:00 =	58 (11.6%)	Peak AM Factor : 0.604	Average Period :	5.2
PM Total :	338 (67.9%)	Peak PM Hour : 16:45 =	55 (11.0%)	Peak PM Factor : 0.625	Average Hour :	20.8

## 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 - 03/28/2017 To: 23:59 - 03/29/2017

Date	Time	:00	:15	:30	:45	Total
03/28/17	00:00	1	0	1	0	2
Tue	01:00	0	0	1	0	1
	02:00	0	0	1	0	1
	03:00	0	0	2	0	2
	04:00	0	1	2	1	4
	05:00	1	0	3	2	6
	06:00	2	2	4	11	19
	07:00	8	10	10	8	36
	08:00	8	4	19	28	59
	09:00	10	9	5	1	25
	10:00	4	6	4	6	20
	11:00	6	3	11	8	28
	12:00	3	6	8	4	21
	13:00	6	4	7	6	23
	14:00	13	3	5	11	32
	15:00	22	9	10	10	51
	16:00	6	11	6	5	28
	17:00	7	14	6	9	36
	18:00	6	6	4	5	21
	19:00	3	4	5	5	17
	20:00	9	1	0	1	11
	21:00	2	3	0	1	6
	22:00	1	1	1	1	4
	23:00	2	1	1	0	4

Day Total : 457

AM Total :	203 (44.4%)	Peak AM Hour : 08:30 =	66 (14.4%)	Peak AM Factor : 0.589	Average Period :	4.8
PM Total :	254 (55.6%)	Peak PM Hour : 14:45 =	52 (11.4%)	Peak PM Factor : 0.591	Average Hour :	19.0

Date	Time	:00	:15	:30	:45	Total
03/29/17	00:00	0	0	1	1	2
Wed	01:00	0	0	1	0	1
	02:00	0	0	0	0	0
	03:00	1	0	1	0	2
	04:00	1	0	0	0	1
	05:00	1	0	5	5	11
	06:00	2	1	2	8	13
	07:00	11	12	13	9	45
	08:00	10	9	13	24	56
	09:00	11	4	5	7	27
	10:00	7	9	4	3	23
	11:00	8	3	9	5	25
	12:00	4	5	3	5	17
	13:00	6	2	5	6	19
	14:00	7	9	6	11	33
	15:00	27	12	8	16	63
	16:00	5	6	12	4	27
	17:00	9	8	7	7	31
	18:00	9	10	6	12	37
	19:00	11	8	2	3	24
	20:00	5	2	0	1	8
	21:00	1	0	3	2	6
	22:00	0	1	0	1	2
	23:00	2	3	0	1	6
Day Total :						479

AM Total :	206 (43.0%)	Peak AM Hour : 08:15 =	57 (11.9%)	Peak AM Factor : 0.594	Average Period :	5.0
PM Total :	273 (57.0%)	Peak PM Hour : 15:00 =	63 (13.2%)	Peak PM Factor : 0.583	Average Hour :	20.0



# Basic Volume Summary: Grande Dr South

**Grand Total For Data From: 00:00 - 03/28/2017 To: 23:59 - 03/29/2017**

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	1028 (52.3%)	2.00	514	5.4	21.4	331 (32.2%)	697 (67.8%)
#3.	936 (47.7%)	2.00	468	4.9	19.5	409 (43.7%)	527 (56.3%)
ALL	1964	2.00	982	10.3	40.9	740 (37.7%)	1224 (62.3%)

Lane	Peak AM Hour	Date	Peak AM Factor	Peak PM Hour	Date	Peak PM Factor
#1.	08:15 = 62	03/28/2017	0.534	14:15 = 63	03/28/2017	0.543
#3.	08:30 = 66	03/28/2017	0.589	15:00 = 63	03/29/2017	0.583

# Basic Volume Report: Grande Dr Middle

**Station ID : Grande Dr Middle**

Info Line 1 : Between Palo Duro & San Andres

Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : GR2 1NB.DB

Last Connected Device Type : Apollo

Version Number : 1.62

Serial Number :

Number of Lanes : 1

Posted Speed Limit : 0.0 mph

## Lane #1 Configuration

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

## Lane #1 Basic Volume Data From: 00:00 - 03/28/2017 To: 23:59 - 03/29/2017

Date	Time	:00	:15	:30	:45	Total
03/28/17	00:00	0	1	0	0	1
Tue	01:00	0	0	0	0	0
	02:00	0	0	1	0	1
	03:00	0	1	0	0	1
	04:00	0	2	1	0	3
	05:00	1	0	0	0	1
	06:00	1	1	3	6	11
	07:00	4	10	11	10	35
	08:00	3	9	29	17	58
	09:00	13	3	5	6	27
	10:00	4	6	3	3	16
	11:00	4	12	9	9	34
	12:00	13	9	8	8	38
	13:00	9	13	7	8	37
	14:00	4	6	17	31	58
	15:00	12	10	10	8	40
	16:00	11	14	6	9	40
	17:00	23	14	17	9	63
	18:00	12	9	7	9	37
	19:00	1	6	8	8	23
	20:00	8	4	6	7	25
	21:00	1	4	3	0	8
	22:00	3	1	2	2	8
	23:00	2	1	1	0	4

Day Total : 569

AM Total :	188 (33.0%)	Peak AM Hour : 08:15 =	68 (12.0%)	Peak AM Factor : 0.586	Average Period :	5.9
PM Total :	381 (67.0%)	Peak PM Hour : 14:30 =	70 (12.3%)	Peak PM Factor : 0.565	Average Hour :	23.7



Date	Time	:00	:15	:30	:45	Total
03/29/17	00:00	0	1	2	1	4
Wed	01:00	0	0	0	1	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	1	1	0	2
	06:00	0	1	2	2	5
	07:00	6	7	10	7	30
	08:00	4	12	26	22	64
	09:00	6	7	4	4	21
	10:00	8	5	8	3	24
	11:00	4	4	8	6	22
	12:00	7	8	6	4	25
	13:00	3	8	9	9	29
	14:00	11	9	15	28	63
	15:00	13	19	10	9	51
	16:00	10	17	6	15	48
	17:00	15	16	11	13	55
	18:00	14	5	14	7	40
	19:00	6	5	8	5	24
	20:00	8	3	6	3	20
	21:00	2	4	8	2	16
	22:00	6	1	1	1	9
	23:00	2	4	0	1	7

Day Total : 560

AM Total :	173 (30.9%)	Peak AM Hour : 08:15 =	66 (11.8%)	Peak AM Factor : 0.635	Average Period :	5.8
PM Total :	387 (69.1%)	Peak PM Hour : 14:30 =	75 (13.4%)	Peak PM Factor : 0.670	Average Hour :	23.3

## 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 - 03/28/2017 To: 23:59 - 03/29/2017

Date	Time	:00	:15	:30	:45	Total
03/28/17	00:00	1	0	0	0	1
Tue	01:00	0	2	1	0	3
	02:00	0	0	0	0	0
	03:00	0	0	2	0	2
	04:00	0	1	2	1	4
	05:00	1	0	3	4	8
	06:00	2	1	6	8	17
	07:00	11	11	12	14	48
	08:00	10	5	20	38	73
	09:00	10	12	6	1	29
	10:00	4	7	5	8	24
	11:00	11	4	15	10	40
	12:00	7	9	12	6	34
	13:00	7	5	9	7	28
	14:00	13	5	5	8	31
	15:00	37	16	10	14	77
	16:00	8	12	9	5	34
	17:00	9	18	9	9	45
	18:00	7	9	7	3	26
	19:00	3	5	4	2	14
	20:00	9	2	1	2	14
	21:00	2	4	0	1	7
	22:00	0	1	1	1	3
	23:00	1	3	3	0	7

Day Total : 569

AM Total :	249 (43.8%)	Peak AM Hour : 08:30 =	80 (14.1%)	Peak AM Factor : 0.526	Average Period :	5.9
PM Total :	320 (56.2%)	Peak PM Hour : 15:00 =	77 (13.5%)	Peak PM Factor : 0.520	Average Hour :	23.7

Date	Time	:00	:15	:30	:45	Total
03/29/17	00:00	0	0	1	0	1
Wed	01:00	0	0	1	0	1
	02:00	0	0	0	0	0
	03:00	0	0	1	0	1
	04:00	1	0	0	0	1
	05:00	1	0	6	6	13
	06:00	2	1	4	8	15
	07:00	13	12	18	6	49
	08:00	11	5	15	29	60
	09:00	13	7	7	7	34
	10:00	8	9	5	4	26
	11:00	11	3	12	6	32
	12:00	5	8	6	4	23
	13:00	8	3	6	10	27
	14:00	13	10	7	8	38
	15:00	35	16	8	18	77
	16:00	7	4	14	6	31
	17:00	11	9	10	7	37
	18:00	11	10	5	13	39
	19:00	10	10	5	6	31
	20:00	4	3	1	0	8
	21:00	1	1	4	2	8
	22:00	0	1	1	1	3
	23:00	1	2	0	1	4

Day Total : 559

AM Total :	233 (41.7%)	Peak AM Hour : 08:30 =	64 (11.4%)	Peak AM Factor : 0.552	Average Period :	5.8
PM Total :	326 (58.3%)	Peak PM Hour : 15:00 =	77 (13.8%)	Peak PM Factor : 0.550	Average Hour :	23.3



# Basic Volume Summary: Grande Dr Middle

**Grand Total For Data From: 00:00 - 03/28/2017 To: 23:59 - 03/29/2017**

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	1129 (50.0%)	2.00	565	5.9	23.5	361 (32.0%)	768 (68.0%)
#3.	1128 (50.0%)	2.00	564	5.9	23.5	482 (42.7%)	646 (57.3%)
ALL	2257	2.00	1129	11.8	47.0	843 (37.4%)	1414 (62.6%)

Lane	Peak AM Hour	Date	Peak AM Factor	Peak PM Hour	Date	Peak PM Factor
#1.	08:15 = 68	03/28/2017	0.586	14:30 = 75	03/29/2017	0.670
#3.	08:30 = 80	03/28/2017	0.526	15:00 = 77	03/28/2017	0.520

# Basic Volume Report: Grande Dr North

**Station ID : Grande Dr North**

Info Line 1 : Between San Andres & Delamar

Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : GB 3 1NB.DB

Last Connected Device Type : Apollo

Version Number : 1.66

Serial Number :

Number of Lanes : 1

Posted Speed Limit : 0.0 mph

## Lane #1 Configuration

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

## Lane #1 Basic Volume Data From: 00:00 - 03/28/2017 To: 23:59 - 03/29/2017

Date	Time	:00	:15	:30	:45	Total
03/28/17	00:00	0	0	0	0	0
Tue	01:00	0	0	0	0	0
	02:00	0	0	1	0	1
	03:00	0	1	0	0	1
	04:00	0	0	0	0	0
	05:00	0	1	0	1	2
	06:00	1	1	3	4	9
	07:00	4	10	10	8	32
	08:00	2	8	25	20	55
	09:00	11	3	4	5	23
	10:00	2	4	3	1	10
	11:00	3	10	7	7	27
	12:00	8	8	7	8	31
	13:00	6	8	8	4	26
	14:00	1	6	12	30	49
	15:00	10	7	5	6	28
	16:00	6	8	3	7	24
	17:00	18	7	11	8	44
	18:00	7	5	5	6	23
	19:00	0	3	3	6	12
	20:00	8	3	4	5	20
	21:00	0	3	1	0	4
	22:00	1	1	0	0	2
	23:00	1	0	1	0	2

Day Total : 425

AM Total :	160 (37.6%)	Peak AM Hour : 08:15 =	64 (15.1%)	Peak AM Factor : 0.640	Average Period :	4.4
PM Total :	265 (62.4%)	Peak PM Hour : 14:30 =	59 (13.9%)	Peak PM Factor : 0.492	Average Hour :	17.7

Date	Time	:00	:15	:30	:45	Total
03/29/17	00:00	0	0	0	1	1
Wed	01:00	0	0	0	1	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	3	0	3
	06:00	0	0	2	2	4
	07:00	6	6	9	6	27
	08:00	5	10	25	23	63
	09:00	6	4	4	3	17
	10:00	7	6	6	3	22
	11:00	2	3	5	5	15
	12:00	4	6	6	6	22
	13:00	4	8	7	4	23
	14:00	8	3	12	28	51
	15:00	9	14	7	6	36
	16:00	5	10	7	12	34
	17:00	13	13	5	7	38
	18:00	11	6	13	5	35
	19:00	8	3	6	3	20
	20:00	3	2	4	3	12
	21:00	2	4	2	3	11
	22:00	5	0	0	1	6
	23:00	1	1	0	1	3

Day Total : 444

AM Total :	153 (34.5%)	Peak AM Hour : 08:15 =	64 (14.4%)	Peak AM Factor : 0.640	Average Period :	4.6
PM Total :	291 (65.5%)	Peak PM Hour : 14:30 =	63 (14.2%)	Peak PM Factor : 0.562	Average Hour :	18.5

## Lane #3 Configuration

#	Dir.	Information	Volume Mode	Volume Sensors	Divide By 2	Comment
3.	Southbound		Normal	Veh.	No	

## Lane #3 Basic Volume Data From: 00:00 - 03/28/2017 To: 23:59 - 03/29/2017

Date	Time	:00	:15	:30	:45	Total
03/28/17	00:00	1	0	0	0	1
Tue	01:00	0	2	0	0	2
	02:00	0	0	0	0	0
	03:00	0	0	0	0	0
	04:00	0	0	2	1	3
	05:00	1	0	1	3	5
	06:00	1	0	3	5	9
	07:00	9	10	10	9	38
	08:00	9	4	20	38	71
	09:00	8	8	4	0	20
	10:00	5	6	4	5	20
	11:00	7	4	11	9	31
	12:00	3	7	8	4	22
	13:00	5	3	7	4	19
	14:00	10	5	2	11	28
	15:00	36	14	10	10	70
	16:00	7	6	7	5	25
	17:00	9	13	5	5	32
	18:00	5	4	4	3	16
	19:00	2	3	2	4	11
	20:00	6	2	2	1	11
	21:00	1	0	0	0	1
	22:00	0	0	0	1	1
	23:00	1	2	2	0	5

Day Total : 441

AM Total :	200 (45.4%)	Peak AM Hour : 08:30 =	74 (16.8%)	Peak AM Factor : 0.487	Average Period :	4.6
PM Total :	241 (54.6%)	Peak PM Hour : 14:45 =	71 (16.1%)	Peak PM Factor : 0.493	Average Hour :	18.4



Date	Time	:00	:15	:30	:45	Total
03/29/17	00:00	0	0	0	0	0
Wed	01:00	0	0	1	0	1
	02:00	0	0	0	0	0
	03:00	0	0	0	0	0
	04:00	1	0	0	0	1
	05:00	1	0	5	3	9
	06:00	1	0	2	7	10
	07:00	8	9	16	4	37
	08:00	9	4	14	29	56
	09:00	9	7	5	2	23
	10:00	8	9	4	3	24
	11:00	7	3	10	6	26
	12:00	5	3	5	3	16
	13:00	7	3	5	6	21
	14:00	8	5	6	6	25
	15:00	32	15	7	16	70
	16:00	4	2	10	6	22
	17:00	9	7	8	7	31
	18:00	11	5	8	11	35
	19:00	9	7	1	6	23
	20:00	4	3	1	0	8
	21:00	1	2	3	0	6
	22:00	0	1	0	0	1
	23:00	0	1	0	1	2

Day Total : 447

AM Total :	187 (41.8%)	Peak AM Hour : 08:30 =	59 (13.2%)	Peak AM Factor : 0.509	Average Period :	4.7
PM Total :	260 (58.2%)	Peak PM Hour : 15:00 =	70 (15.7%)	Peak PM Factor : 0.547	Average Hour :	18.6



# Basic Volume Summary: Grande Dr North

**Grand Total For Data From: 00:00 - 03/28/2017 To: 23:59 - 03/29/2017**

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	869 (49.5%)	2.00	435	4.5	18.1	313 (36.0%)	556 (64.0%)
#3.	888 (50.5%)	2.00	444	4.6	18.5	387 (43.6%)	501 (56.4%)
ALL	1757	2.00	879	9.1	36.6	700 (39.8%)	1057 (60.2%)

Lane	Peak AM Hour	Date	Peak AM Factor	Peak PM Hour	Date	Peak PM Factor
#1.	08:15 = 64	03/28/2017	0.640	14:30 = 63	03/29/2017	0.562
#3.	08:30 = 74	03/28/2017	0.487	14:45 = 71	03/28/2017	0.493

Appendix C



OBJECTID	ReportIDSt	Date	CrashDate	Year
289296	12.710120957	8/21/2012	20120821	2012
289303	12.710122666	11/2/2012	20121102	2012
317699	13.23082134	11/30/2013	20131130	2013
343055	14.710198519	10/30/2014	20141030	2014
344933	14.710208185	10/21/2014	20141021	2014

OBJECTID	Day	Month	Time24	Hour24
289296	3	8	1207	12
289303	6	11	54	0
317699	7	11	2100	21
343055	5	10	850	8
344933	3	10	1801	18

OBJECTID	Agency	County	City	AStreet
289296	3	1	7825	GRIEGOS RD NW
289303	3	1	7825	4915 GRANDE DR NW
317699	3	1	7825	SAN ANDRES NW
343055	3	1	7825	GRANDE DR NW
344933	3	1	7825	4915 GRANDE NW

OBJECTID	BStreet	Landmark	Route	MilePost
289296	GRANDE DR NW			0
289303	GRANDE DR NW			0
317699		GRANDE NW		0
343055	PALO DURO AVE NW	4902 GRANDE DR NW		0
344933	GRIEGOS RD NW			0

OBJECTID	NumVeh	NumPersons	NumKilled	NumClassA
289296	2	2	0	0
289303	3	3	0	0
317699	2	2	0	0
343055	2	3	0	1
344933	3	3	0	0

OBJECTID	NumClassB	NumClassC	NumInjured	NumUnhurt
289296	0	0	0	2
289303	0	0	0	3
317699	0	0	0	2
343055	0	0	1	2
344933	0	0	0	3

OBJECTID	Severity	Class	Analysis	TOPCACC
289296	Property damage only crash	Other Vehicle	Sd-Rear End	Driver Inattention
289303	Property damage only crash	Parked Vehicle	Proper Park	Driver Inattention
317699	Property damage only crash	Parked Vehicle	Parked Vehicle - Unknown/Not Stated	Improper Turn
343055	Non-fatal crash (injury)	Other Vehicle	Intersection - One Left Turn/Entering At Angle	Driver Inattention
344933	Property damage only crash	Other Vehicle	Intersection - From Same Direction/All Others	Excessive Speed

OBJECTID	Weather	Lighting	ALCInv	DRUGInv
289296	Clear	Daylight	T	T
289303	Clear	Dark (not lighted)	T	T
317699	Clear	Dark (lighted)	F	F
343055	Clear	Daylight	F	F
344933	Clear	Dark (not lighted)	F	F

OBJECTID	PEDInv	MCIInv	PECIInv	TrkInv
289296	F	F	F	F
289303	F	F	F	F
317699	F	F	F	F
343055	F	F	F	F
344933	F	F	F	F

OBJECTID	HZInv	HitRun	Direction	TranDist
289296	F	F		3
289303	F	F		3
317699	F	T	W	3
343055	F	F		3
344933	F	F		3

OBJECTID	MaintDist	SPDist	IntID	COGID
289296	3	0	0	0
289303	3	0	0	0
317699	3	5	0	0
343055	3	5	0	0
344933	3	5	0	0



Souder, Miller & Associates • 3451 Candalaria Road NE, Suite D  
Albuquerque, NM 87107-1948 • (505) 299-0942 • (877) 299-0942 • fax (505) 293-3430

---