



HARPER DRIVE SPEED STUDY



Harper Drive Speed Study Final Report

Albuquerque, New Mexico



Souder, Miller & Associates ♦ 5454 Venice Avenue NE, Suite D ♦ Albuquerque, NM 87113
(505) 299-0942 ♦ fax (505) 293-3430



City of Albuquerque

May 2018

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.....	10
4. CONCLUSION.....	10
5. TRAFFIC CALMING RECOMMENDATIONS	10
Appendices.....	11

List of Tables

Table 3.A.1.	Harper Drive ADT	7
Table 3.B.1.	Harper Drive Peak Hour Traffic Volumes (vph)	7
Table 3.C.1.	Harper Drive (1) Speed Study	8
Table 3.C.2.	Harper Drive (2) Speed Study	8
Table 3.C.3.	Harper Drive (3) Speed Study	8
Table 3.C.4.	Harper Drive (4) Speed Study	9
Table 3.C.5.	Harper Drive ADT \geq 30 mph.....	9
Table 3.D.1.	Harper Drive Crash Summary	10
Table 4.1.	COA NTMP Traffic Calming Measures	10

List of Figures

FIGURE 1.B.1. STUDY LOCATION	1
FIGURE 1.B.2. STUDY LIMITS	2
FIGURE 2.1. COUNT LOCATIONS.....	6
FIGURE 2.2. EXISTING HARPER 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 Harper Drive in northeast Albuquerque.

1.A. PROJECT PURPOSE

A speed study on Harper Drive from Harper Place to McKinney Drive was conducted to determine the following:

- Evaluate the 85th percentile speed along Harper Drive at four (4) locations;
- Calculate average and daily peak hour traffic volumes along Harper 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 0.30 (1584.00 LF) mile section of Harper Drive from Harper Place to McKinney Drive. Figure 1.B.1. below displays the study location and Figure 1.B.2. on page 2 displays the project limits. Currently, Harper Drive NE is classified as an urban major collector as identified in the Mid-Region Council of Government's *Functional Classification in the Albuquerque Metropolitan Planning Area* map shown in Appendix A.

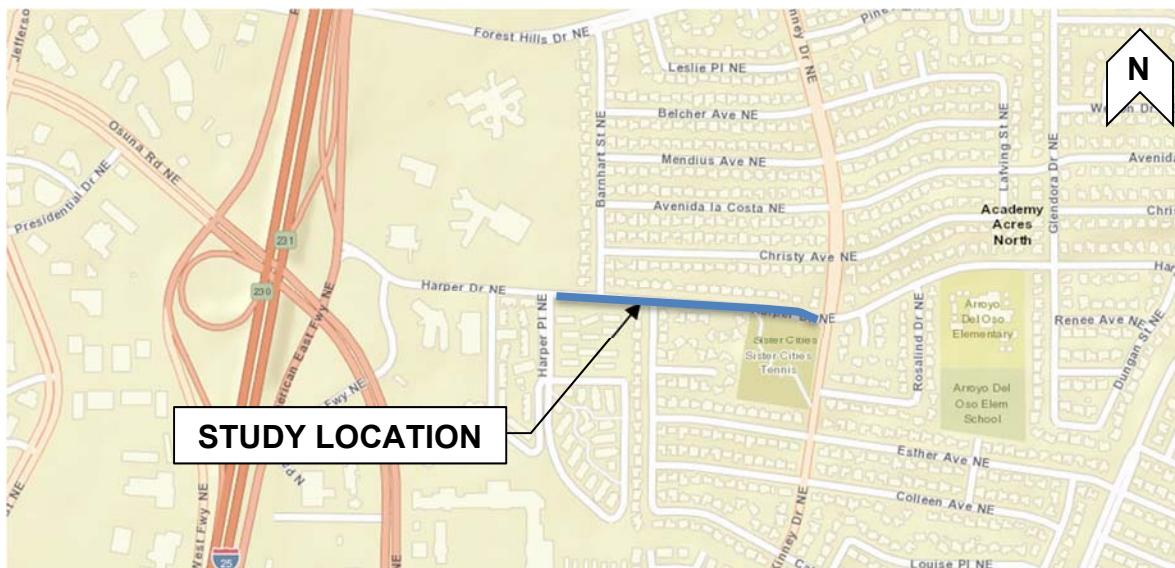


FIGURE 1.B.1.
STUDY LOCATION



FIGURE 1.B.2.
STUDY LIMITS



Engineering ◆ Environmental ◆ Surveying

www.soudermiller.com

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 New Mexico Department of Transportation (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 85th percentile. Out of the (typically) 100 vehicles surveyed, beginning with the fastest vehicle speed recorded the 15th vehicle from that speed is determined to show where the 85th percentile speed is. This is assuming that most drivers (85%) drive within reasonable limits. The posted speed limit can be established and is usually the 5 – mph increment just below the 85th percentile speed. For example, if the 85th percentile speed



has been determined by an engineering survey to be 57 mph, the posted speed would be 55 mph. This method of posting speed limits allows for a reasonable posted speed limit that can be enforced by local agencies, without creating a speed trap.

For surveys with a different amount than 100 vehicles, the 85th percentile speed is determined by the following formula: $100/15 = \# \text{ of vehicles surveyed}/X$ (where x = the vehicle at the 85th percentile). For example, a 50 vehicle survey would result in:

$$\frac{100}{15} = \frac{50}{x}$$

Where $x = 7.5$, or the 8th vehicle in the survey

Other methods are frequently used to further analyze the posting of speed limits – these are the mode, median, and geometric mean:

- Mode is the most frequently clocked vehicle speed in a given survey. For example, in a 100 vehicle survey where 12 vehicles were clocked traveling 55 mph and no other speed was observed as frequently, the mode is 55 mph.
- Median is the numerical midpoint of a given survey. For example, in a survey of 100 vehicles, the speeds of the 50th and 51st vehicles are added and divided by 2 to obtain the median speed. If the 50th vehicle of such a survey was traveling at 56 mph and the 51st vehicle was also traveling at 56 mph, the resulting median would be $(56 + 56)/2 = 112/2 = 56$ mph
- Geometric mean is described as follows: "an average of a set of numbers that is calculated by multiplying all the numbers ("n"), and taking the nth root of the total."

Formula for Geometric Mean:

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

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 four (4) volume and speed count locations which were at the following locations:

- Harper Drive (1) Harper Place to Barnhart Street (North);
- Harper Drive (2) Barnhart Street (North) to Barnhart (South);
- Harper Drive (3) Barnhart (South) to mid-Harper Drive;
- Harper Drive (4) Mid-Harper Drive to McKinney Drive.

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 Harper Drive. Within the study limits, there are 13 driveways, designated travel lanes, bicycle lanes, on-street parking, and three (3) three-legged intersections at Harper Place, at Barnhart Street (North), and at Barnhart Street (South). Harper Drive's posted speed limit within the study limits is 30 mph. Additionally, Mid-Region Council of Governments' most recent *Functional Classification in the Albuquerque Metropolitan Planning Area* map identifies Harper Drive as an urban major collector functional classification.

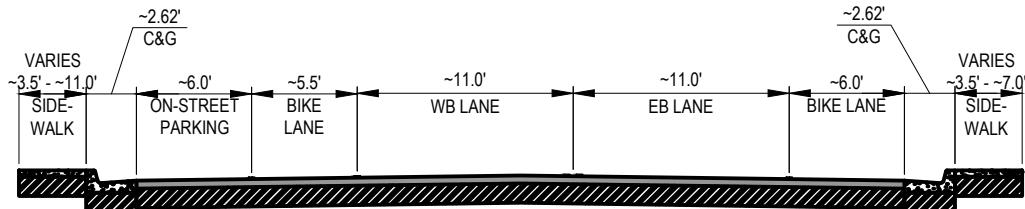
As described in the NMDOT's Functional Classification Guide that is based on the FHWA document, *Highway Functional Classification Concepts, Criteria and Procedures* (2013), a major collector is defined as "longer in length than minor collectors, connects larger traffic generators to the Arterial network; also have lower connecting driveway densities, higher speed limits, higher VMT, more travel lanes, and are spaced at greater intervals (than Minor Collectors); Major Collector mileage is less than Minor Collector mileage."

Major collectors also tend to handle traffic volumes ranging from 1100 to 6300 vehicles per day (vpd) which the average daily traffic volumes on Harper Drive are well within this range at around 5000 vpd.





**FIGURE 2.1.
COUNT LOCATIONS**



**FIGURE 2.2.
EXISTING HARPER DRIVE TYPICAL SECTION**



Engineering ◆ Environmental ◆ Surveying

www.soudermiller.com

3. DATA

3.A. ADT

The ADT for the four (4) count locations are listed below in Table 3.A.1.

Table 3.A.1.			
Harper Drive ADT			
Count Location	EB	WB	ADT
Harper Drive (1)	2800	2932	5732
Harper Drive (2)	2312	2621	4933
Harper Drive (3)	2174	2501	4675
Harper Drive (4)	2189	2503	4692
Average	2369	2639	5008

The Harper Drive study area directional ADT ranges from 2174 to 2932 vehicles per day.

3.B. PEAK HOUR TRAFFIC VOLUMES

The peak hour traffic volumes for the four (4) count locations are shown below in Table 3.B.1.

Table 3.B.1.			
Harper Drive Peak Hour Traffic Volumes (vph)			
Count Location	Peak Hour	Eastbound (Peak Hour)	Westbound (Peak Hour)
Harper Drive (1)	AM Peak	457 (7:30 AM - 8:30 AM)	210 (11:00 AM – 12:00 PM)
	PM Peak	202 (12:30 PM – 1:30 PM)	361 (4:45 PM - 5:45 PM)
Harper Drive (2)	AM Peak	364 (7:30 AM - 8:30 AM)	200 (11:00 AM – 12:00 PM)
	PM Peak	176 (12:30 PM – 1:30 PM)	321 (4:45 PM - 5:45 PM)
Harper Drive (3)	AM Peak	324 (7:30 AM – 8:30 AM)	195 (11:00 AM – 12:00 PM)
	PM Peak	166 (12:30 PM – 1:30 PM)	306 (4:45 PM - 5:45 PM)
Harper Drive (4)	AM Peak	324 (7:30 AM – 8:30 AM)	193 (11:00 AM – 12:00 PM)
	PM Peak	161 (12:30 PM – 1:30 PM)	307 (4:45 PM - 5:45 PM)

The Harper Drive study area peak hour traffic volumes range from 161 to 457 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.4.

Table 3.C.1.			
Harper Drive (1) Speed Study			
Speed	EB	WB	Total
Average	27.6	29.5	28.6
10 mph Pace	25.0 - 34.5 (59.5%)	25.0 – 34.9 (58.2%)	25.0 – 34.9 (58.8%)
50th Percentile	30.0	30.9	30.4
67th Percentile	32.4	33.2	32.9
85th Percentile	35.0	36.7	35.9

Table 3.C.2.			
Harper Drive (2) Speed Study			
Speed	EB	WB	Total
Average	30.9	30.4	30.6
10 mph Pace	30.0 – 39.9 (62.2%)	25.0 – 34.9 (64.3%)	25.0 – 34.9 (62.2%)
50th Percentile	32.1	31.4	31.8
67th Percentile	34.2	33.6	33.9
85th Percentile	37.7	36.8	37.3

Table 3.C.3.			
Harper Drive (3) Speed Study			
Speed	EB	WB	Total
Average	31.6	31.4	31.5
10 mph Pace	25.0 – 34.9 (68.8%)	25.0 – 34.9 (70.9%)	25.0 – 34.9 (69.6%)
50th Percentile	32.0	31.8	31.9
67th Percentile	33.9	33.7	33.8
85th Percentile	37.2	36.9	37.1

Table 3.C.4.			
Harper Drive (4) Speed Study			
Speed	EB	WB	Total
Average	31.6	29.5	30.5
10 mph Pace	25.0 – 34.9 (67.8%)	25.0 – 34.9 (75.0%)	25.0 – 34.9 (71.6%)
50th Percentile	32.1	29.8	30.9
67th Percentile	34.0	32.1	33.1
85th Percentile	37.3	34.5	36.0

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

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

In relation to Harper Drive, the posted speed limit is 30 mph, roadway conditions are consistent; controlled access, satisfactory pavement conditions, two travel lanes, on-street parking, bicycle lanes, a northbound left-turn lane at McKinney Drive, and there are three (3) three-legged intersections at Harper Place, at Barnhart Street (North), and at Barnhart Street (South). Table 3.C.5. displays that 60 percent of the total ADT of the four count locations recorded speeds greater than the posted speed limit of 30 mph.

Table 3.C.5.									
Harper Drive ADT \geq 30 mph									
Speed (mph)	0 - 19.9 MPH		20 - 24.9 MPH		25 – 29.9 MPH		\geq 30 MPH		Avg. ADT
Harper Drive (1)	653	11%	704	12%	1314	23%	3061	53%	5732
Harper Drive (2)	290	6%	414	8%	1048	21%	3181	65%	4933
Harper Drive (3)	80	2%	271	6%	1214	26%	3111	67%	4674
Harper Drive (4)	126	3%	375	8%	1486	30%	2706	58%	4691
Average	287	6%	441	9%	1266	25%	3015	60%	5008



3.D. CRASH DATA

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

Table 3.D.1.					
Harper Drive Crash Summary					
Year	Location	Cause of Crash	Crash Analysis	Crash Severity	Crash Correct with Traffic Calming?
2014	Harper Drive / Barnhart Street	Under Influence of Alcohol	One Left Turn/From Same Direction	N/A	No
2017	Harper Drive / Harper Place	Driver Inattention	Rear End Collision/Same Direction	N/A	No

4. CONCLUSION

After evaluating the volume and speed data within the project area, it is concluded that 60 percent of the traffic is exceeding 30 mph and the 85th percentile speed of traffic is exceeding the posted speed limit by 5 mph or more at all 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	Yes
25% of peak-hour traffic is non-local cut-through traffic	Not Studied
85th percentile speeds exceed the posted speed limit by 5 mph or more	Yes

Based on the data collected, Harper Drive meets the two (2) minimum required criteria of four (4) warrants outlined for traffic calming measures threshold and therefore DOES require traffic calming improvements.

5. TRAFFIC CALMING RECOMMENDATIONS

Although Harper Drive currently meets the minimum COA NTMP traffic calming measures threshold to warrant traffic calming improvements, the recommendation is to install permanent speed radar signs, in each direction. The existing features on the roadway such as designated travel lanes, bicycle lanes, and on-street parking assist in traffic calming. As previously stated, Harper Drive is classified as an urban major collector, is a dedicated emergency route, and ties directly to the interstate frontage road. Because of these parameters, additional traffic calming measures besides permanent speed radar signs are not recommended.



Appendices

- Appendix A – Functional Classification Map
- Appendix B – Volume and Speed Data
- Appendix C – Crash Data
- Appendix D – Neighborhood Traffic Calming Petition

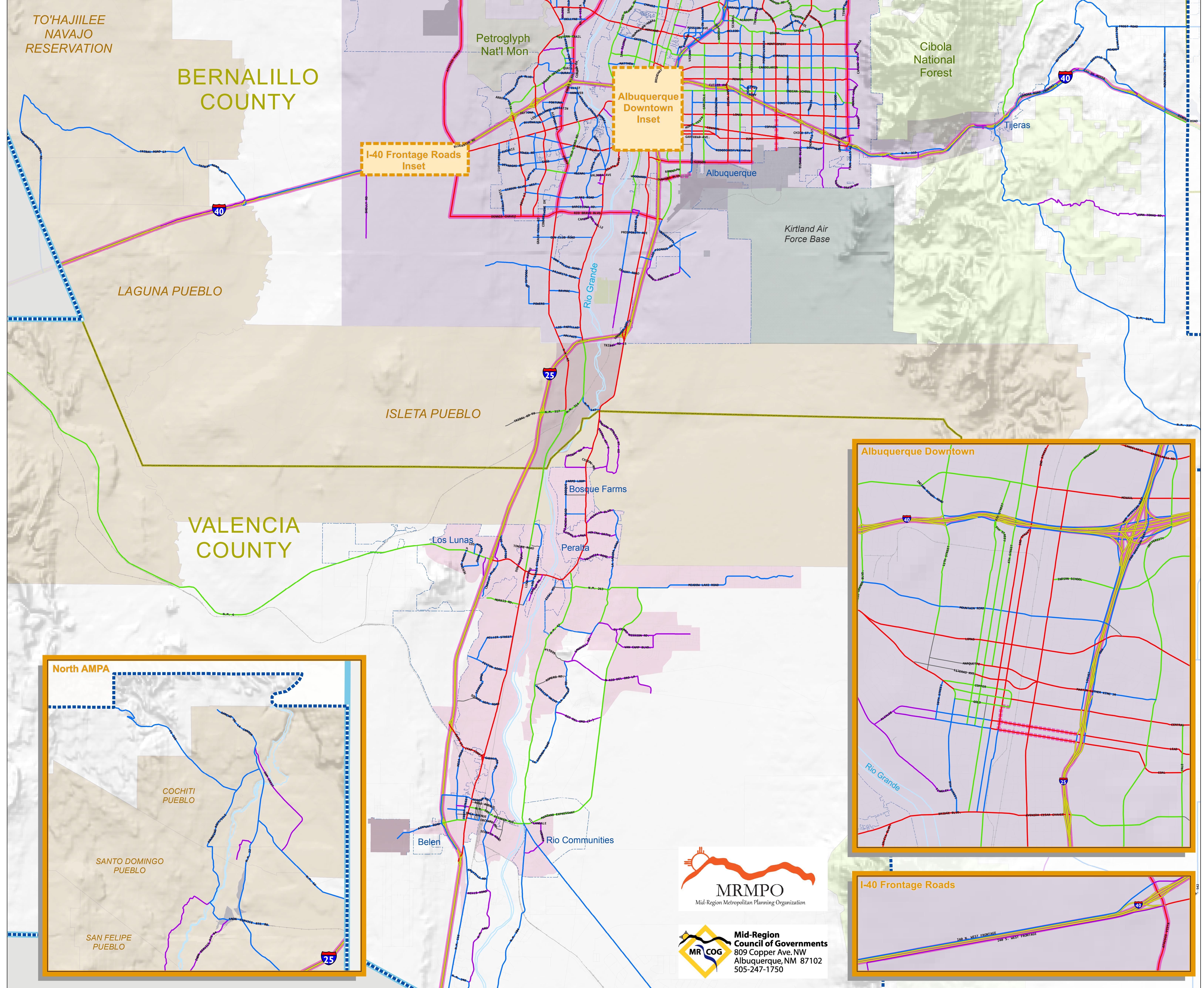
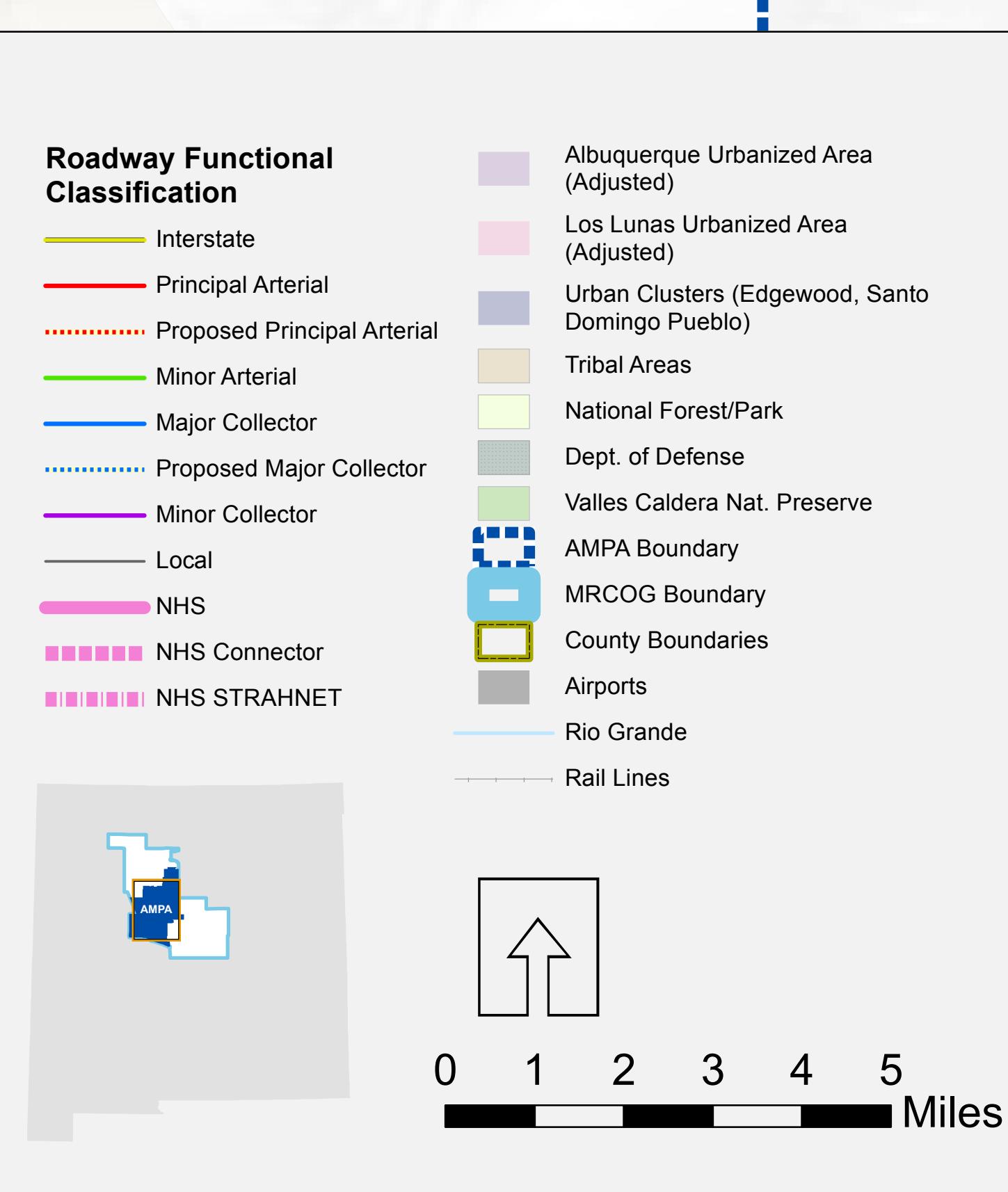


Appendix A



Mid-Region Council of Governments
Functional Classification in the
Albuquerque Metropolitan Planning Area

Approved by Metropolitan Transportation Board on April 25, 2014
 Approved by Federal Highway Administration on February 5, 2015
 Update Approved by Federal Highway Administration on March 15, 2016



Appendix B



Special Speed Study Report: Harper Drive (1)

Station ID : Harper Drive (1)

Info Line 1 : Between Harper PI & Barnhart S
 Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : HARP W1.DB

Last Connected Device Type : Apollo

Version Number : 1.62

Serial Number : 24087

Number of Lanes : 1

Posted Speed Limit : 0.0 mph

Lane #1 Configuration

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

Lane #1 Special Speed Study Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	#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 -	Other
8/22/2017	00:00	2	0	3	1	1	0	0	0	0	0	0	0	0	0	0	7
Tue	01:00	2	1	4	0	0	1	0	0	0	0	0	0	0	0	0	8
	02:00	1	0	2	2	1	0	0	0	0	0	0	0	0	0	0	6
	03:00	1	1	2	0	0	1	0	0	0	0	0	0	0	0	0	5
	04:00	4	0	5	2	4	0	1	0	0	0	0	0	0	0	0	16
	05:00	10	1	10	19	10	4	1	0	0	0	0	0	0	0	0	55
	06:00	24	15	48	60	18	3	0	0	0	0	0	0	0	0	0	168
	07:00	72	46	105	139	29	4	1	0	0	1	0	0	0	0	0	397
	08:00	34	24	52	130	31	7	1	0	0	0	0	0	0	0	0	279
	09:00	22	14	42	63	29	8	0	0	0	0	0	0	0	0	0	178
	10:00	25	9	40	60	21	2	0	0	0	0	0	0	0	0	0	157
	11:00	17	13	23	59	24	5	0	0	1	1	0	0	0	0	0	143
	12:00	28	14	40	71	28	4	0	0	1	0	0	0	0	0	0	186
	13:00	23	22	37	63	28	1	2	0	0	0	0	0	1	0	0	177
	14:00	29	12	47	58	22	3	2	0	0	0	0	0	0	0	0	173
	15:00	19	17	38	61	21	2	0	0	0	0	0	2	0	0	0	160
	16:00	23	16	46	36	22	2	0	0	0	0	0	0	0	0	0	145
	17:00	24	11	21	51	19	2	0	0	0	0	0	0	0	0	0	128
	18:00	18	14	28	43	16	2	0	0	0	0	0	0	0	0	0	121
	19:00	23	15	22	28	4	2	0	0	0	0	0	0	0	0	0	94
	20:00	13	11	13	17	5	2	0	0	0	0	0	0	0	0	0	61
	21:00	9	3	10	22	8	3	0	0	0	0	0	0	0	0	0	55
	22:00	10	5	4	8	2	0	0	0	0	0	0	0	0	0	0	29
	23:00	1	0	7	7	3	0	0	0	0	0	0	0	0	0	0	18
Daily Total :		434	264	649	1000	346	58	8	0	2	2	0	2	1	0	0	2766
Percent :		16%	10%	23%	36%	13%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		16%	25%	49%	85%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		18	11	27	42	14	2	0	0	0	0	0	0	0	0	0	114
		Average Speed 27.7 mph				50% Speed : 30.1 mph				67% Speed : 32.5 mph				85% Speed : 35.1 mph			
		10mph Pace: 25.0 - 34.9 (59.6%)															

Date	Time	#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 89.9	Other	Total
		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			
8/23/201	00:00	1	1	2	3	2	0	0	0	0	0	0	0	0	0	0	0	0	9
Wed	01:00	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	02:00	2	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	03:00	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	5
	04:00	3	1	4	5	5	1	0	0	0	0	0	0	0	0	0	0	0	19
	05:00	10	3	8	25	8	2	2	0	0	0	0	0	0	0	0	0	0	58
	06:00	26	16	34	59	29	2	1	0	0	0	0	0	0	0	0	0	0	167
	07:00	70	41	106	141	42	1	0	0	0	0	1	0	0	0	0	0	0	402
	08:00	49	33	63	138	55	3	0	0	0	0	0	0	0	0	0	0	0	341
	09:00	24	9	25	71	28	2	0	0	0	0	0	0	0	0	0	0	0	159
	10:00	23	18	47	55	21	4	0	0	0	0	0	0	0	0	0	1	0	169
	11:00	29	28	28	62	19	4	0	0	0	0	0	0	0	0	0	0	0	170
	12:00	18	14	44	60	24	5	1	0	0	0	0	0	0	0	0	0	0	166
	13:00	27	15	43	54	17	3	0	1	0	0	0	0	0	0	0	0	0	160
	14:00	29	27	39	67	21	0	0	0	0	0	0	0	0	0	0	0	0	183
	15:00	21	16	43	51	11	4	1	0	0	0	0	0	0	0	0	0	0	147
	16:00	30	17	36	37	14	1	0	0	0	0	0	0	0	0	0	0	1	136
	17:00	16	14	47	41	19	3	2	0	0	0	0	0	0	0	0	0	0	142
	18:00	22	13	39	47	8	2	0	0	0	0	0	0	0	0	0	0	0	131
	19:00	14	11	22	20	8	1	0	0	0	0	0	0	0	0	0	0	0	76
	20:00	15	8	21	22	5	0	0	0	0	0	0	0	0	0	0	0	0	71
	21:00	10	5	13	20	7	0	0	1	0	0	0	0	0	0	0	0	0	56
	22:00	6	8	9	12	3	0	0	0	0	0	0	0	0	0	0	0	0	38
	23:00	4	1	6	6	2	0	0	0	0	0	0	0	0	0	0	0	0	19
Daily Total :		451	300	680	1001	352	38	7	2	0	0	1	0	0	0	1	1	1	2834
Percent :		16%	11%	24%	35%	12%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		16%	26%	50%	86%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Average :		19	13	28	42	15	2	0	0	0	0	0	0	0	0	0	0	119	
Average Speed : 27.4 mph 50% Speed : 29.9 mph 67% Speed : 32.3 mph 85% Speed : 34.9 mph 10mph Pace: 25.0 - 34.9 (59.3%)																			

Lane #3 Configuration

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

Lane #3 Special Speed Study Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	#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	Other	Total
		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			
8/22/2017	00:00	0	1	3	3	2	1	0	0	0	0	0	0	0	0	0	0	0	10
Tue	01:00	0	3	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6
	02:00	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	03:00	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
	04:00	0	1	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	8
	05:00	2	0	4	5	6	0	0	0	0	0	0	0	0	0	0	0	0	17
	06:00	4	10	13	6	4	3	0	0	0	0	0	0	0	0	0	0	0	40
	07:00	16	15	43	56	23	2	4	0	0	0	0	0	0	0	0	0	0	159
	08:00	10	14	19	41	17	5	0	0	0	0	0	0	0	0	0	0	0	106
	09:00	13	28	46	35	22	2	0	0	0	0	0	0	0	0	0	0	0	146
	10:00	17	25	46	74	18	2	0	0	0	0	0	0	0	0	0	0	0	182
	11:00	18	32	53	71	28	6	2	0	0	0	0	0	0	0	0	0	0	210
	12:00	17	28	44	78	35	3	1	0	0	0	0	0	0	0	0	0	0	206
	13:00	14	22	55	83	26	8	0	2	0	0	0	0	0	0	0	0	0	210
	14:00	8	24	29	71	39	9	0	0	0	0	0	0	0	0	0	1	0	181
	15:00	16	30	41	61	53	9	0	0	1	0	0	0	0	0	0	0	0	211
	16:00	14	40	63	109	48	8	2	0	0	0	0	0	0	0	0	0	0	284
	17:00	20	40	60	121	78	8	0	0	0	0	0	0	0	0	0	0	0	327
	18:00	15	31	37	66	28	8	3	0	0	0	0	0	0	0	0	0	0	188
	19:00	10	24	31	53	11	3	2	0	0	0	0	0	0	0	0	0	0	134
	20:00	6	20	26	40	13	0	0	0	0	0	0	0	0	0	0	0	0	105
	21:00	8	16	18	29	10	1	0	0	0	0	0	0	0	0	0	0	0	82
	22:00	7	14	11	5	2	0	0	0	0	0	0	0	0	0	0	0	0	39
	23:00	1	6	3	8	4	2	1	0	0	0	0	0	0	0	0	0	0	25
Daily Total :		216	426	651	1019	471	80	15	2	1	0	0	0	0	0	0	1	0	2882
Percent :		7%	15%	23%	35%	16%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		7%	22%	45%	80%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		9	18	27	42	20	3	1	0	0	0	0	0	0	0	0	0	0	120
		Average Speed 29.3 mph				50% Speed : 30.8 mph				67% Speed : 33.1 mph				85% Speed : 36.5 mph					
		10mph Pace: 25.0 - 34.9 (57.9%)																	

Date	Time	#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
		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
8/23/201	00:00	4	4	3	8	5	2	0	0	0	0	0	0	0	0	0	26
Wed	01:00	0	2	5	1	0	1	0	0	0	0	0	0	0	0	0	9
	02:00	1	0	1	2	1	0	0	0	0	0	0	0	0	0	0	5
	03:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
	04:00	1	1	1	0	2	0	0	0	0	0	0	0	0	0	0	5
	05:00	1	3	9	7	6	0	1	0	0	0	0	0	0	0	0	27
	06:00	6	15	11	10	12	0	0	0	0	0	0	0	0	0	0	54
	07:00	12	29	28	42	17	7	0	0	0	0	0	0	0	0	0	135
	08:00	7	9	18	42	26	8	0	0	0	0	0	0	0	0	0	110
	09:00	13	24	41	61	25	5	0	0	0	0	0	0	0	0	0	169
	10:00	9	22	40	55	31	2	1	0	0	0	0	0	0	0	0	160
	11:00	9	26	44	76	44	4	2	0	0	0	0	0	0	0	0	206
	12:00	11	26	39	80	34	12	4	0	0	0	0	0	0	0	0	206
	13:00	11	31	41	89	47	10	0	1	0	0	0	0	0	0	0	230
	14:00	19	21	44	72	42	5	3	0	0	0	0	0	0	0	0	206
	15:00	15	22	57	72	38	3	2	0	0	0	0	0	0	0	0	209
	16:00	15	32	70	116	56	7	0	0	0	0	1	0	0	0	0	297
	17:00	25	52	73	143	38	9	2	0	0	0	0	0	0	0	0	342
	18:00	11	35	26	71	23	2	1	0	0	1	0	0	0	0	0	170
	19:00	10	26	30	48	17	1	1	0	0	0	0	0	0	0	0	133
	20:00	13	11	25	37	14	5	0	0	0	0	0	0	0	0	0	105
	21:00	6	10	24	34	14	4	0	0	0	0	0	0	0	0	0	92
	22:00	3	14	9	20	8	0	0	0	0	0	0	0	0	0	0	54
	23:00	3	3	8	7	6	2	1	0	0	0	0	0	0	0	0	30
Daily Total :		205	418	647	1094	506	90	18	1	0	1	1	0	0	0	1	2982
Percent :		7%	14%	22%	37%	17%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		7%	21%	43%	79%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		9	17	27	46	21	4	1	0	0	0	0	0	0	0	0	125

Average Speed 29.6 mph	50% Speed : 31.0 mph	67% Speed : 33.3 mph	85% Speed : 36.8 mph
10mph Pace: 25.0 - 34.9 (58.4%)			

	#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 -			
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

Special Speed Study Summary: Harper Drive (1)

Description	#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	
	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:	885	564	1329	2001	698	96	15	2	2	2	1	2	1	0	1	1	5600
Percent :	16%	10%	24%	36%	12%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cum. Percent :	16%	26%	50%	85%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average :	18	12	28	42	15	2	0	0	0	0	0	0	0	0	0	0	117
ADT = 2800	Average Speed 27.6 mph				50% Speed : 30.0 mph				67% Speed : 32.4 mph				85% Speed : 35.0 mph				
	10mph Pace: 25.0 - 34.9 (59.5%)																
Grand Total #3:	421	844	1298	2113	977	170	33	3	1	1	1	0	0	0	1	1	5864
Percent :	7%	14%	22%	36%	17%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cum. Percent :	7%	22%	44%	80%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average :	9	18	27	44	20	4	1	0	0	0	0	0	0	0	0	0	123
ADT = 2932	Average Speed 29.5 mph				50% Speed : 30.9 mph				67% Speed : 33.2 mph				85% Speed : 36.7 mph				
	10mph Pace: 25.0 - 34.9 (58.2%)																
Comb. Total :	1306	1408	2627	4114	1675	266	48	5	3	3	2	2	1	0	2	2	11464
Percent :	11%	12%	23%	36%	15%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cum. Percent :	11%	24%	47%	82%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average :	27	29	55	86	35	6	1	0	0	0	0	0	0	0	0	0	239
ADT = 5732	Average Speed 28.6 mph				50% Speed : 30.4 mph				67% Speed : 32.9 mph				85% Speed : 35.9 mph				
	10mph Pace: 25.0 - 34.9 (58.8%)																

Special Speed Study Report: Harper Drive (2)

Station ID : Harper Drive (2)

Info Line 1 : Btwn Barnhart N & Barnhart S
 Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : HARP MID W.DB

Last Connected Device Type : Apollo

Version Number : 1.62

Serial Number : 24090

Number of Lanes : 1
 Posted Speed Limit : 0.0 mph

Lane #1 Configuration

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

Lane #1 Special Speed Study Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Other	Total
		0 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -			
8/22/2017	00:00	1	0	2	0	2	1	0	0	0	0	0	0	0	0	0	0	6	
Tue	01:00	1	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	7	
	02:00	1	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	5	
	03:00	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	4	
	04:00	1	0	3	1	4	1	1	0	0	0	0	0	0	0	0	0	11	
	05:00	4	1	3	16	14	3	3	0	0	0	0	0	0	0	0	0	44	
	06:00	6	9	37	50	25	8	1	0	0	0	0	0	0	0	0	0	136	
	07:00	18	29	75	130	44	9	0	0	0	0	0	0	0	0	0	0	305	
	08:00	5	11	37	103	45	14	2	0	0	0	0	0	0	0	0	0	217	
	09:00	8	5	18	62	40	11	1	0	0	0	0	0	0	0	0	0	145	
	10:00	9	9	24	64	27	6	1	0	0	0	0	0	0	0	0	0	140	
	11:00	10	4	16	44	35	7	2	1	1	0	0	0	0	0	0	0	120	
	12:00	11	10	19	72	36	8	0	1	0	0	0	0	0	0	0	0	157	
	13:00	9	13	20	72	25	8	1	0	0	0	0	0	0	0	0	0	148	
	14:00	6	10	33	58	33	3	1	0	0	0	0	0	0	0	0	0	144	
	15:00	5	6	20	63	26	8	1	0	0	0	0	0	0	0	0	0	129	
	16:00	13	10	26	38	26	8	0	1	0	0	0	0	0	0	0	0	122	
	17:00	10	7	17	45	21	7	0	0	1	0	0	0	0	0	0	0	108	
	18:00	10	4	22	45	20	4	0	0	0	0	0	0	0	0	0	0	105	
	19:00	12	5	20	25	8	4	0	0	0	0	0	0	0	0	0	0	74	
	20:00	8	8	11	17	7	3	0	0	0	0	0	0	0	0	0	0	54	
	21:00	6	7	8	22	12	2	0	0	0	0	0	0	0	0	0	0	57	
	22:00	5	4	4	6	0	0	0	0	0	0	0	0	0	0	0	0	19	
	23:00	0	2	3	10	1	1	0	0	0	0	0	0	0	0	0	0	17	
Daily Total :		160	154	421	949	454	117	14	3	2	0	0	0	0	0	0	0	2274	
Percent :		7%	7%	19%	42%	20%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cum. Percent :		7%	14%	32%	74%	94%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Average :		7	6	18	40	19	5	1	0	0	0	0	0	0	0	0	0	96	
		Average Speed 30.9 mph				50% Speed : 32.1 mph				67% Speed : 34.1 mph				85% Speed : 37.7 mph					
		10mph Pace: 30.0 - 39.9 (61.7%)																	

Date	Time	#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	Other	Total
		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			
8/23/201	00:00	0	1	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	8
Wed	01:00	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5
	02:00	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	4
	03:00	1	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	3
	04:00	2	0	1	7	3	2	0	0	0	0	0	0	0	0	0	0	0	15
	05:00	2	3	5	15	16	2	2	0	0	0	0	0	0	0	0	0	0	45
	06:00	8	6	20	57	36	9	1	0	0	0	0	0	0	0	0	0	0	137
	07:00	22	31	63	146	56	14	0	0	0	0	0	0	0	0	0	0	0	332
	08:00	9	14	39	119	75	10	1	0	0	0	0	0	0	0	0	0	0	267
	09:00	6	6	16	65	44	4	2	0	0	0	0	0	0	0	0	0	0	143
	10:00	7	15	28	47	27	6	2	0	0	0	0	0	0	0	0	0	0	132
	11:00	5	15	23	49	31	7	0	0	0	0	0	0	0	0	0	0	0	130
	12:00	2	10	27	58	37	9	0	0	0	0	0	0	0	0	0	0	0	143
	13:00	7	8	29	59	31	5	0	0	0	0	0	0	0	0	0	0	0	139
	14:00	12	16	36	66	28	3	0	0	0	0	0	0	0	0	0	0	0	161
	15:00	7	5	29	58	28	4	1	0	0	0	0	0	0	0	0	0	0	132
	16:00	11	8	25	46	22	3	2	0	0	0	0	0	0	0	0	0	0	117
	17:00	10	13	24	36	29	6	1	0	0	0	0	0	0	0	0	0	0	119
	18:00	8	18	23	43	12	0	1	0	0	0	0	0	0	0	0	0	0	105
	19:00	11	7	16	21	9	2	0	0	0	0	0	0	0	0	0	0	0	66
	20:00	3	7	10	20	11	2	0	0	0	0	0	0	0	0	0	0	0	53
	21:00	4	3	10	19	7	2	0	0	1	0	0	0	0	0	0	0	0	46
	22:00	2	1	10	11	7	1	0	0	0	0	0	0	0	0	0	0	0	32
	23:00	1	2	2	5	4	1	1	0	0	0	0	0	0	0	0	0	0	16
Daily Total :		141	190	438	955	517	94	14	0	1	0	0	0	0	0	0	0	0	2350
Percent :		6%	8%	19%	41%	22%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		6%	14%	33%	73%	95%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		6	8	18	40	22	4	1	0	0	0	0	0	0	0	0	0	0	99

Average Speed : 30.9 mph	50% Speed : 32.1 mph	67% Speed : 34.2 mph	85% Speed : 37.7 mph
10mph Pace: 30.0 - 39.9 (62.6%)			

Lane #3 Configuration

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

Lane #3 Special Speed Study Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	#1 0 - 20 - 25 - 30 - 35 - 40 - 45 - 50 - 55 - 60 - 65 - 70 - 75 - 80 - 85 -																Other	Total
		#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16			
8/22/2017	00:00	1	0	1	4	1	1	0	0	0	0	0	0	0	0	0	0	8	
Tue	01:00	0	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	5	
	02:00	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	
	03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
	04:00	3	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	8	
	05:00	1	3	2	5	5	0	0	0	0	0	0	0	0	0	0	0	16	
	06:00	4	5	11	8	3	2	0	0	0	0	0	0	0	0	0	0	33	
	07:00	13	18	36	53	30	3	2	0	0	0	0	0	0	0	0	0	155	
	08:00	1	12	24	43	20	5	0	0	0	0	0	0	0	0	0	0	105	
	09:00	5	18	31	46	18	2	0	1	0	0	0	0	0	0	0	0	121	
	10:00	5	11	38	70	27	3	1	0	0	0	0	0	0	0	0	0	155	
	11:00	9	11	41	68	47	7	1	0	1	0	0	0	0	0	0	0	185	
	12:00	4	21	42	85	31	5	2	0	0	0	0	0	0	0	0	0	193	
	13:00	5	9	43	100	26	8	1	0	0	0	0	0	0	0	0	0	192	
	14:00	7	10	26	72	43	9	0	0	0	0	0	0	1	0	0	0	168	
	15:00	11	16	44	78	47	4	1	0	0	0	0	0	0	0	0	0	201	
	16:00	11	13	68	106	41	8	1	0	0	0	0	0	1	0	0	0	249	
	17:00	10	20	47	131	71	6	0	0	0	0	0	0	0	0	0	0	285	
	18:00	16	29	26	59	28	6	0	0	0	0	0	0	0	0	0	0	164	
	19:00	9	15	35	42	15	4	0	0	0	0	0	0	0	0	0	0	120	
	20:00	7	15	28	34	7	1	0	0	0	0	0	0	0	0	0	0	92	
	21:00	14	6	15	18	8	0	0	0	0	0	0	0	0	0	0	0	61	
	22:00	20	7	1	2	2	0	0	0	0	0	0	0	0	0	0	0	32	
	23:00	0	3	6	4	4	3	0	0	0	0	0	0	0	0	0	0	20	
Daily Total :		157	244	569	1033	477	77	9	1	1	0	0	1	1	0	0	3	2573	
Percent :		6%	9%	22%	40%	19%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cum. Percent :		6%	16%	38%	78%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Average :		7	10	24	43	20	3	0	0	0	0	0	0	0	0	0	0	107	
		Average Speed 30.3 mph				50% Speed : 31.6 mph				67% Speed : 33.6 mph				85% Speed : 37.0 mph					
		10mph Pace: 25.0 - 34.9 (62.3%)																	

Date	Time	#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
		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
8/23/201	00:00	1	1	3	9	4	1	0	0	0	0	0	0	0	0	0	19
Wed	01:00	0	2	1	2	1	0	0	0	0	0	0	0	0	0	0	6
	02:00	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	4
	03:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	2
	04:00	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	4
	05:00	4	2	7	5	5	0	1	0	0	0	0	0	0	0	0	24
	06:00	1	4	14	17	7	0	0	0	0	0	0	0	0	0	0	43
	07:00	9	17	39	53	16	5	0	0	0	1	0	0	0	0	0	140
	08:00	5	5	28	42	19	10	0	0	0	0	0	0	0	0	1	110
	09:00	6	11	33	63	31	5	0	0	0	0	0	0	0	0	0	149
	10:00	5	9	40	71	27	3	0	0	0	0	0	0	0	0	0	155
	11:00	5	18	44	87	40	4	2	0	0	0	0	0	0	0	0	200
	12:00	6	16	50	78	26	11	3	0	0	0	0	0	0	0	0	190
	13:00	6	12	47	82	48	8	0	0	0	0	0	0	0	0	0	203
	14:00	7	14	37	80	29	9	1	0	0	0	0	0	0	0	1	178
	15:00	3	20	57	71	26	5	0	1	0	0	1	0	0	0	0	184
	16:00	8	14	63	131	41	7	0	0	0	0	0	0	0	0	0	264
	17:00	12	33	72	130	47	7	2	0	0	0	0	2	0	0	0	305
	18:00	16	23	39	54	19	1	0	0	0	0	0	0	0	0	1	153
	19:00	9	20	32	38	8	3	0	0	0	0	0	0	0	0	0	110
	20:00	7	6	25	33	14	2	0	0	0	0	0	0	0	0	0	87
	21:00	6	5	19	32	11	1	0	0	0	0	0	0	0	0	0	74
	22:00	3	5	10	13	8	0	0	0	0	0	0	0	0	0	0	39
	23:00	2	2	6	7	5	3	0	1	0	0	0	0	0	0	0	26
Daily Total :		121	240	668	1102	434	86	9	2	0	1	1	2	0	0	3	2669
Percent :		5%	9%	25%	41%	16%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		5%	14%	39%	80%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		5	10	28	46	18	4	0	0	0	0	0	0	0	0	0	111

Average Speed : 30.4 mph	50% Speed : 31.4 mph	67% Speed : 33.4 mph	85% Speed : 36.7 mph
10mph Pace: 25.0 - 34.9 (66.3%)			

	#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 -			
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

Special Speed Study Summary: Harper Drive (2)

Description	#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		
	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:	301	344	859	1904	971	211	28	3	3	0	0	0	0	0	0	0	4624	
Percent :	7%	7%	19%	41%	21%	5%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :	7%	14%	33%	74%	95%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :	6	7	18	40	20	4	1	0	0	0	0	0	0	0	0	0	96	
ADT = 2312	Average Speed 30.9 mph				50% Speed : 32.1 mph				67% Speed : 34.2 mph				85% Speed : 37.7 mph					
	10mph Pace: 30.0 - 39.9 (62.2%)																	
Grand Total #3:	278	484	1237	2135	911	163	18	3	1	1	1	1	3	1	0	0	6	5242
Percent :	5%	9%	24%	41%	17%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cum. Percent :	5%	15%	38%	79%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average :	6	10	26	44	19	3	0	0	0	0	0	0	0	0	0	0	108	
ADT = 2621	Average Speed 30.4 mph				50% Speed : 31.4 mph				67% Speed : 33.6 mph				85% Speed : 36.8 mph					
	10mph Pace: 25.0 - 34.9 (64.3%)																	
Comb. Total :	579	828	2096	4039	1882	374	46	6	4	1	1	1	3	1	0	0	6	9866
Percent :	6%	8%	21%	41%	19%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cum. Percent :	6%	14%	36%	76%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average :	12	17	44	84	39	8	1	0	0	0	0	0	0	0	0	0	205	
ADT = 4933	Average Speed 30.6 mph				50% Speed : 31.8 mph				67% Speed : 33.9 mph				85% Speed : 37.3 mph					
	10mph Pace: 25.0 - 34.9 (62.2%)																	

Special Speed Study Report: Harper Drive (3)

Station ID : Harper Drive (3)

Info Line 1 : East of Barnhart (south leg)
 Info Line 2 : Albquerque

GPS Lat/Lon :

DB File : HARP MID E.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.	Eastbound		Ax-Ax	4.0 ft	6.0 ft	

Lane #1 Special Speed Study Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	#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
		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
8/22/2017	00:00	0	0	1	3	1	1	0	0	0	0	0	0	0	0	0	6
Tue	01:00	0	1	2	0	3	0	0	0	0	0	0	0	0	0	0	6
	02:00	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	4
	03:00	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3
	04:00	0	0	4	2	3	1	1	0	0	0	0	0	0	0	0	11
	05:00	1	0	4	17	12	5	1	0	0	0	0	0	0	0	0	40
	06:00	1	7	36	59	18	4	0	1	0	0	0	0	0	0	0	126
	07:00	1	21	89	124	36	4	0	0	0	0	0	0	0	0	0	276
	08:00	0	5	43	97	43	11	1	0	0	0	0	0	0	0	0	200
	09:00	3	3	23	65	32	8	1	0	0	0	0	0	0	0	0	135
	10:00	2	3	34	63	20	5	0	0	0	0	0	0	0	0	0	127
	11:00	2	7	14	50	35	3	3	1	1	0	0	0	0	0	0	116
	12:00	6	3	33	67	31	6	0	0	0	0	0	0	0	0	0	146
	13:00	3	6	35	66	23	7	1	0	0	0	0	1	0	0	0	142
	14:00	2	10	42	67	23	1	2	0	0	0	0	0	0	0	0	147
	15:00	2	1	34	59	30	5	1	0	0	0	0	0	0	0	0	132
	16:00	4	8	36	39	23	8	0	0	0	0	0	0	0	0	0	119
	17:00	2	5	27	48	19	2	1	0	0	0	0	0	0	0	0	104
	18:00	5	12	21	41	18	2	0	0	0	0	0	0	0	0	0	99
	19:00	4	10	22	26	7	2	0	0	0	0	0	0	0	0	0	71
	20:00	1	2	18	15	7	2	0	0	0	0	0	0	0	0	0	45
	21:00	1	6	10	22	10	2	1	0	0	0	0	0	0	0	0	52
	22:00	5	6	5	7	1	0	0	0	0	0	0	0	0	0	0	24
	23:00	0	0	4	10	2	1	0	0	0	0	0	0	0	0	0	17
Daily Total :		45	116	538	951	398	81	13	2	1	0	1	0	0	0	0	2148
Percent :		2%	5%	25%	44%	19%	4%	1%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		2%	7%	33%	77%	95%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		2	5	22	40	17	3	1	0	0	0	0	0	0	0	0	90
		Average Speed 31.6 mph				50% Speed : 32.0 mph				67% Speed : 33.9 mph				85% Speed : 37.2 mph			
		10mph Pace: 25.0 - 34.9 (69.3%)															

Date	Time	#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
		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
8/23/201	00:00	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0	6
Wed	01:00	1	1	1	1	0	1	0	0	0	0	0	0	0	0	0	5
	02:00	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	4
	03:00	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	2
	04:00	0	0	1	6	5	0	0	0	0	0	0	0	0	0	0	12
	05:00	0	1	4	19	15	4	0	0	0	0	0	0	0	0	0	43
	06:00	2	6	21	58	33	6	0	0	0	0	0	0	0	0	0	126
	07:00	5	17	89	136	37	6	2	0	0	0	0	0	0	0	0	292
	08:00	0	6	40	109	76	7	1	0	0	0	0	0	0	0	0	239
	09:00	0	3	21	64	40	3	3	0	0	0	0	0	0	0	0	134
	10:00	1	8	24	61	25	4	2	0	0	0	0	0	0	0	0	125
	11:00	1	11	30	49	26	2	0	0	0	0	0	0	0	0	0	119
	12:00	3	7	29	73	23	7	1	0	0	0	0	0	0	0	0	143
	13:00	3	6	26	62	27	4	1	0	1	1	0	1	0	0	0	132
	14:00	4	11	51	62	24	1	0	0	0	0	0	0	0	0	0	153
	15:00	1	8	40	55	23	6	0	0	0	0	0	0	0	0	0	133
	16:00	4	5	32	51	16	3	0	0	0	0	0	0	0	0	0	111
	17:00	3	10	23	43	29	3	0	0	0	0	0	0	0	0	0	111
	18:00	2	12	34	46	9	1	0	0	0	0	0	0	0	0	0	104
	19:00	0	6	17	21	11	2	0	0	0	0	0	0	0	0	0	57
	20:00	3	9	16	20	10	0	0	0	0	0	0	0	0	0	0	58
	21:00	1	2	10	21	7	1	0	1	0	0	0	0	0	0	0	43
	22:00	0	2	8	14	5	1	0	0	0	0	0	0	0	0	0	30
	23:00	1	2	4	3	4	3	0	0	0	0	0	0	0	0	0	17
Daily Total :		35	133	521	981	449	66	10	1	1	1	0	1	0	0	0	2199
Percent :		2%	6%	24%	45%	20%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		2%	8%	31%	76%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		1	6	22	41	19	3	0	0	0	0	0	0	0	0	0	92

Average Speed : 31.7 mph	50% Speed : 32.1 mph	67% Speed : 34.0 mph	85% Speed : 37.3 mph
10mph Pace: 25.0 - 34.9 (68.3%)			

Lane #3 Configuration

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

Lane #3 Special Speed Study Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	#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
		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
8/22/2017	00:00	0	1	0	3	1	2	0	0	0	0	0	0	0	0	0	7
Tue	01:00	0	1	0	3	1	0	0	0	0	0	0	0	0	0	0	5
	02:00	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	3
	03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	1	0	2	2	2	0	0	0	0	0	0	0	0	0	0	7
	05:00	0	0	5	6	3	1	0	0	0	0	0	0	0	0	0	15
	06:00	2	5	11	8	6	1	0	0	0	0	0	0	0	0	0	33
	07:00	1	11	56	62	28	4	1	1	0	0	0	0	0	0	0	164
	08:00	0	3	20	48	24	4	0	0	0	0	0	0	0	0	0	100
	09:00	0	7	34	38	24	4	0	0	0	0	0	0	0	0	0	107
	10:00	4	7	31	75	29	3	1	0	0	0	0	0	0	0	0	150
	11:00	1	4	39	76	49	4	2	0	0	0	0	0	0	0	0	175
	12:00	4	5	40	101	27	1	2	0	0	0	0	0	0	0	0	180
	13:00	0	5	43	107	33	5	1	0	0	2	0	0	0	0	0	196
	14:00	3	5	31	68	45	10	0	0	0	0	0	0	0	0	0	162
	15:00	1	15	40	81	42	6	0	0	0	0	0	0	0	0	0	185
	16:00	5	15	86	92	35	5	0	0	0	0	0	0	0	0	0	238
	17:00	2	8	48	136	62	10	1	0	0	0	0	0	0	0	0	267
	18:00	7	13	31	63	24	4	1	1	0	0	0	0	1	0	0	146
	19:00	5	9	44	40	16	1	0	0	0	0	0	0	0	0	0	115
	20:00	1	10	26	35	11	1	0	0	0	0	0	0	0	0	0	84
	21:00	0	7	22	16	5	2	0	0	0	0	0	0	0	0	0	52
	22:00	4	13	11	3	0	0	0	0	0	0	0	0	0	0	0	31
	23:00	0	3	4	3	7	2	0	0	0	0	0	0	0	0	0	19
Daily Total :		41	148	625	1067	475	70	9	2	0	2	0	0	1	0	0	2442
Percent :		2%	6%	26%	44%	19%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		2%	8%	33%	77%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		2	6	26	44	20	3	0	0	0	0	0	0	0	0	0	101
Average Speed		31.5 mph				50% Speed : 31.9 mph				67% Speed : 33.9 mph				85% Speed : 37.1 mph			
		10mph Pace: 25.0 - 34.9 (69.3%)															

Date	Time	#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 89.9	Other	Total
		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			
8/23/201	00:00	1	1	4	7	5	1	0	0	0	0	0	0	0	0	0	0	0	19
Wed	01:00	0	1	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	6
	02:00	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	03:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
	04:00	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	05:00	1	2	7	8	4	1	0	0	0	0	0	0	0	0	0	0	0	23
	06:00	1	2	15	17	4	0	0	0	0	0	0	0	0	1	0	0	0	40
	07:00	2	13	47	58	20	5	1	0	0	0	0	0	0	0	0	0	0	146
	08:00	1	1	32	46	21	9	0	0	0	0	0	1	0	0	0	0	0	111
	09:00	0	2	42	54	41	5	0	0	0	0	0	0	0	0	0	0	0	144
	10:00	0	9	41	65	25	5	0	0	0	0	0	0	0	0	0	0	0	145
	11:00	3	9	47	103	25	6	2	0	0	0	0	0	0	0	0	0	0	195
	12:00	4	7	54	76	23	9	2	0	0	0	0	0	0	0	0	0	0	175
	13:00	2	2	56	85	46	9	0	0	0	0	0	0	0	0	0	0	1	201
	14:00	3	9	47	76	27	7	2	1	0	0	0	0	0	0	0	0	0	172
	15:00	2	16	64	69	30	2	1	0	0	0	0	0	0	0	0	0	0	184
	16:00	3	16	84	127	34	3	0	0	0	0	0	0	1	0	0	0	0	268
	17:00	4	10	71	133	54	6	2	0	0	0	0	0	0	0	0	0	1	281
	18:00	2	19	41	49	19	3	1	1	0	0	0	0	0	0	0	0	0	135
	19:00	2	11	35	39	6	2	0	0	0	0	0	0	0	0	0	0	0	95
	20:00	4	8	20	32	13	3	1	0	0	0	0	0	0	0	0	0	0	81
	21:00	2	3	14	35	13	1	0	0	0	0	0	0	0	0	0	0	0	68
	22:00	1	2	13	12	7	1	0	0	0	0	0	0	1	0	0	0	0	37
	23:00	0	1	5	10	5	1	0	1	0	0	0	0	0	0	0	0	0	23
Daily Total :		38	144	743	1109	424	80	12	3	0	0	1	1	2	0	0	2	2559	
Percent :		1%	6%	29%	43%	17%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		1%	7%	36%	79%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		2	6	31	46	18	3	1	0	0	0	0	0	0	0	0	0	107	
Average Speed : 31.4 mph 50% Speed : 31.6 mph 67% Speed : 33.6 mph 85% Speed : 36.8 mph 10mph Pace: 25.0 - 34.9 (72.4%)																			

	#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 -			
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

Special Speed Study Summary: Harper Drive (3)

Description	#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	
	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:	80	249	1059	1932	847	147	23	3	2	1	1	1	0	0	0	2	4347
Percent :	2%	6%	24%	44%	19%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cum. Percent :	2%	8%	32%	76%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average :	2	5	22	40	18	3	0	0	0	0	0	0	0	0	0	0	90
ADT = 2173	Average Speed 31.6 mph				50% Speed : 32.0 mph				67% Speed : 33.9 mph				85% Speed : 37.2 mph				
	10mph Pace: 25.0 - 34.9 (68.8%)																
Grand Total #3:	79	292	1368	2176	899	150	21	5	0	2	1	1	3	0	0	4	5001
Percent :	2%	6%	27%	44%	18%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cum. Percent :	2%	7%	35%	78%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average :	2	6	29	45	19	3	0	0	0	0	0	0	0	0	0	0	104
ADT = 2500	Average Speed 31.4 mph				50% Speed : 31.8 mph				67% Speed : 33.7 mph				85% Speed : 36.9 mph				
	10mph Pace: 25.0 - 34.9 (70.9%)																
Comb. Total :	159	541	2427	4108	1746	297	44	8	2	3	2	2	3	0	0	6	9348
Percent :	2%	6%	26%	44%	19%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cum. Percent :	2%	7%	33%	77%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average :	3	11	51	86	36	6	1	0	0	0	0	0	0	0	0	0	194
ADT = 4674	Average Speed 31.5 mph				50% Speed : 31.9 mph				67% Speed : 33.8 mph				85% Speed : 37.1 mph				
	10mph Pace: 25.0 - 34.9 (69.9%)																

Special Speed Study Report: Harper Drive (4)

Station ID : Harper Drive (4)

Info Line 1 : West of McKinney
 Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : HARP EAST.DB

Last Connected Device Type : Apollo

Version Number : 1.62
 Serial Number : 21494

Number of Lanes : 1
 Posted Speed Limit : 0.0 mph

Lane #1 Configuration

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

Lane #1 Special Speed Study Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13	#14	#15	#16	Other	Total
		0 -	20 -	25 -	30 -	35 -	40 -	45 -	50 -	55 -	60 -	65 -	70 -	75 -	80 -	85 -			
8/22/2017	00:00	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	6	
Tue	01:00	0	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	7	
	02:00	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4	
	03:00	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3	
	04:00	0	0	4	3	3	0	1	0	0	0	0	0	0	0	0	0	11	
	05:00	0	0	3	16	16	2	2	0	0	0	0	0	0	0	0	0	39	
	06:00	1	7	24	64	22	2	1	0	0	0	0	0	0	0	0	0	121	
	07:00	7	27	94	103	40	8	0	0	0	0	0	0	0	0	0	0	279	
	08:00	1	2	40	104	43	13	2	0	0	0	0	0	0	0	0	0	205	
	09:00	2	2	26	70	32	3	1	0	0	0	0	0	0	0	0	0	136	
	10:00	3	4	26	62	28	1	0	0	0	0	0	0	0	0	0	0	124	
	11:00	2	2	21	56	29	5	1	1	0	1	0	0	0	0	0	0	118	
	12:00	2	5	31	61	41	2	0	0	0	0	0	0	0	0	0	0	142	
	13:00	5	4	41	61	25	6	0	0	0	0	0	0	0	0	0	1	143	
	14:00	2	8	46	59	22	4	0	0	0	0	0	0	0	0	0	0	141	
	15:00	3	1	27	52	36	3	0	0	0	0	0	0	0	0	0	0	122	
	16:00	4	7	46	31	28	6	0	1	1	0	0	0	0	1	0	0	125	
	17:00	3	11	20	50	21	2	1	1	0	0	0	0	0	0	0	0	109	
	18:00	2	14	27	45	13	3	1	0	0	0	0	0	0	0	0	0	105	
	19:00	5	4	26	27	10	2	0	0	0	0	0	0	0	0	0	0	74	
	20:00	2	2	22	19	4	2	0	0	0	0	0	0	0	0	0	0	51	
	21:00	2	5	17	21	10	0	1	0	0	0	0	0	0	0	0	0	56	
	22:00	2	3	2	12	4	0	0	0	0	0	0	0	0	0	0	0	23	
	23:00	0	0	5	10	1	1	0	0	0	0	0	0	0	0	0	0	17	
Daily Total :		48	109	554	935	430	67	11	3	1	1	0	0	0	1	0	1	2161	
Percent :		2%	5%	26%	43%	20%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Cum. Percent :		2%	7%	33%	76%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%		
Average :		2	5	23	39	18	3	0	0	0	0	0	0	0	0	0	0	90	
		Average Speed 31.6 mph				50% Speed : 32.0 mph				67% Speed : 33.9 mph				85% Speed : 37.3 mph					
		10mph Pace: 25.0 - 34.9 (68.9%)																	

Date	Time	#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 89.9	Other	Total
		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			
8/23/201	00:00	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0	0	0	7
Wed	01:00	1	1	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	5
	02:00	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4
	03:00	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2
	04:00	0	0	1	7	4	0	0	0	0	0	0	0	0	0	0	0	0	12
	05:00	0	1	5	18	14	3	0	0	0	0	0	0	0	0	0	0	0	41
	06:00	0	3	20	70	26	5	1	0	0	0	0	0	0	0	0	0	0	125
	07:00	8	36	93	116	29	8	1	0	0	0	0	0	0	0	0	0	0	291
	08:00	0	4	30	118	81	7	1	0	0	0	0	0	0	0	0	0	0	241
	09:00	3	2	26	51	38	7	1	0	0	0	0	0	0	0	0	0	0	128
	10:00	2	5	23	54	25	8	1	0	0	0	0	0	0	0	0	0	0	118
	11:00	1	8	35	48	31	4	1	0	0	0	0	0	0	0	0	0	0	128
	12:00	3	6	32	68	36	4	1	0	0	0	0	0	0	0	0	0	0	150
	13:00	0	9	30	58	31	6	0	0	0	0	0	0	0	0	0	0	0	134
	14:00	4	13	52	67	20	2	0	0	0	0	0	0	0	0	0	0	0	158
	15:00	5	11	34	53	31	3	0	0	1	0	0	0	0	0	0	0	0	138
	16:00	4	6	32	41	27	2	0	0	0	0	0	0	0	0	0	0	0	112
	17:00	1	5	18	43	38	4	1	0	0	0	0	0	0	0	0	0	1	111
	18:00	4	11	33	49	7	1	1	0	0	0	0	0	0	0	0	0	0	106
	19:00	1	3	21	25	7	2	0	0	0	0	0	0	0	0	0	0	0	59
	20:00	1	11	15	23	6	1	0	0	0	0	0	0	0	0	0	0	0	57
	21:00	0	3	7	23	10	0	1	1	0	0	0	0	0	0	0	0	0	45
	22:00	0	1	5	16	4	1	0	0	0	0	0	0	0	0	0	0	0	27
	23:00	1	1	7	2	5	2	0	0	0	0	0	0	0	0	0	0	0	18
Daily Total :		39	140	520	959	474	71	11	1	1	0	0	0	0	0	0	0	1	2217
Percent :		2%	6%	23%	43%	21%	3%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		2%	8%	32%	75%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		2	6	22	40	20	3	0	0	0	0	0	0	0	0	0	0	93	

Average Speed : 31.7 mph	50% Speed : 32.1 mph	67% Speed : 34.1 mph	85% Speed : 37.4 mph
10mph Pace: 26.1 - 36.0 (66.7%)			

Lane #3 Configuration

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

Lane #3 Special Speed Study Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	#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
		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
8/22/2017	00:00	0	0	1	3	1	2	0	0	0	0	0	0	0	0	0	7
Tue	01:00	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	5
	02:00	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
	03:00	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	04:00	1	0	2	3	1	0	0	0	0	0	0	0	0	0	0	7
	05:00	1	0	3	7	4	1	0	0	0	0	0	0	0	0	0	16
	06:00	2	7	12	9	5	0	0	0	0	0	0	0	0	0	0	35
	07:00	16	28	57	39	21	1	1	0	0	0	0	0	0	0	0	163
	08:00	1	4	24	49	17	4	0	0	0	1	0	0	0	0	0	100
	09:00	2	13	48	34	13	0	0	0	0	0	0	0	0	0	0	110
	10:00	4	4	47	71	19	4	0	0	0	0	0	0	0	0	0	149
	11:00	2	13	54	84	25	2	1	0	0	0	0	0	0	0	0	181
	12:00	6	11	67	80	15	1	0	0	0	0	0	0	0	0	0	180
	13:00	5	15	69	90	10	1	0	1	1	0	0	0	0	1	0	193
	14:00	1	8	58	76	21	2	0	0	0	0	0	0	0	0	0	166
	15:00	6	13	69	59	29	2	1	0	0	0	0	0	0	0	0	179
	16:00	10	34	105	77	13	1	0	0	0	0	0	0	0	0	0	240
	17:00	3	22	93	120	25	1	0	0	0	0	0	0	0	0	0	264
	18:00	10	23	55	47	17	2	2	0	0	0	0	0	0	0	0	156
	19:00	10	21	39	31	5	0	0	0	0	0	0	0	0	0	0	106
	20:00	0	8	40	31	5	1	0	0	0	0	0	0	0	0	0	85
	21:00	0	7	22	16	7	0	0	0	0	0	0	0	0	0	0	52
	22:00	3	7	13	8	3	0	0	0	0	0	0	0	0	0	0	34
	23:00	0	4	2	4	7	2	0	0	0	0	0	0	0	0	0	19
Daily Total :		83	242	884	942	264	27	5	1	1	1	0	0	0	1	0	2451
Percent :		3%	10%	36%	38%	11%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		3%	13%	49%	88%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		3	10	37	39	11	1	0	0	0	0	0	0	0	0	0	101
		Average Speed 29.6 mph				50% Speed : 30.1 mph				67% Speed : 32.3 mph				85% Speed : 34.6 mph			
		10mph Pace: 25.0 - 34.9 (74.5%)															

Date	Time	#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 89.9	Other	Total
		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			
8/23/201	00:00	0	2	5	6	4	1	0	0	0	0	0	0	0	0	0	0	0	18
Wed	01:00	0	0	3	2	0	1	0	0	0	0	0	0	0	0	0	0	0	6
	02:00	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	4
	03:00	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
	04:00	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	5
	05:00	1	1	7	8	4	1	0	0	0	0	0	0	0	0	0	0	0	22
	06:00	0	3	22	12	4	0	0	0	0	0	0	0	0	0	0	0	0	41
	07:00	11	30	43	35	16	2	0	0	0	1	1	0	0	0	0	0	0	139
	08:00	3	4	36	53	15	5	0	0	0	0	0	0	0	0	0	0	0	116
	09:00	1	9	52	59	24	1	1	0	0	0	0	0	0	0	0	0	0	147
	10:00	1	14	52	56	21	3	0	0	2	0	0	0	0	0	0	0	0	149
	11:00	5	21	73	76	15	2	1	0	0	0	0	0	0	0	0	0	0	193
	12:00	6	19	72	54	13	3	0	0	0	0	0	0	0	0	0	0	0	167
	13:00	1	9	86	87	26	2	0	0	0	0	0	0	0	0	0	0	0	211
	14:00	12	13	66	52	23	4	1	1	0	0	0	0	0	0	0	0	0	172
	15:00	12	20	73	64	5	1	0	0	0	0	0	0	0	0	0	0	0	175
	16:00	9	33	126	80	7	1	0	0	0	0	0	0	0	0	0	0	0	256
	17:00	6	20	120	114	24	3	0	1	0	0	0	0	0	0	0	0	0	288
	18:00	3	32	59	43	8	0	0	0	0	0	0	0	0	0	0	0	0	145
	19:00	5	17	48	19	5	0	0	0	0	0	0	0	0	0	0	0	0	94
	20:00	3	5	36	26	4	3	0	0	0	0	0	0	0	0	0	0	0	77
	21:00	0	5	17	37	10	0	0	0	0	0	0	0	0	0	0	0	0	69
	22:00	1	0	11	14	7	0	0	0	0	0	0	0	0	1	0	0	0	34
	23:00	0	1	6	10	4	3	0	0	0	0	0	0	0	0	0	0	0	24
Daily Total :		81	258	1013	913	242	37	3	2	2	1	1	0	1	0	0	0	0	2554
Percent :		3%	10%	40%	36%	9%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Cum. Percent :		3%	13%	53%	89%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Average :		3	11	42	38	10	2	0	0	0	0	0	0	0	0	0	0	106	
Average Speed : 29.5 mph 50% Speed : 29.6 mph 67% Speed : 32.0 mph 85% Speed : 34.5 mph 10mph Pace: 25.0 - 34.9 (75.4%)																			

	#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 -			
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

Special Speed Study Summary: Harper Drive (4)

Description	#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	
	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:	87	249	1074	1894	904	138	22	4	2	1	0	0	0	1	0	2	4378
Percent :	2%	6%	25%	43%	21%	3%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cum. Percent :	2%	8%	32%	75%	96%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average :	2	5	22	39	19	3	0	0	0	0	0	0	0	0	0	0	90
ADT = 2189	Average Speed 31.6 mph				50% Speed : 32.1 mph				67% Speed : 34.0 mph				85% Speed : 37.3 mph				
	10mph Pace: 25.0 - 34.9 (67.8%)																
Grand Total #3:	164	500	1897	1855	506	64	8	3	3	2	1	0	1	1	0	0	5005
Percent :	3%	10%	38%	37%	10%	1%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cum. Percent :	3%	13%	51%	88%	98%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average :	3	10	40	39	11	1	0	0	0	0	0	0	0	0	0	0	104
ADT = 2502	Average Speed 29.5 mph				50% Speed : 29.8 mph				67% Speed : 32.1 mph				85% Speed : 34.5 mph				
	10mph Pace: 25.0 - 34.9 (75.0%)																
Comb. Total :	251	749	2971	3749	1410	202	30	7	5	3	1	0	1	2	0	2	9383
Percent :	3%	8%	32%	40%	15%	2%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Cum. Percent :	3%	11%	42%	82%	97%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Average :	5	16	62	78	29	4	1	0	0	0	0	0	0	0	0	0	195
ADT = 4691	Average Speed 30.5 mph				50% Speed : 30.9 mph				67% Speed : 33.1 mph				85% Speed : 36.0 mph				
	10mph Pace: 25.0 - 34.9 (71.6%)																

Basic Volume Report: Harper Drive (1)

Station ID : Harper Drive (1)

Info Line 1 : Between Harper PI & Barnhart S
Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : HARP W1.DB

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

Number of Lanes : 1
Posted Speed Limit : 0.0 mph

Lane #1 Configuration

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

Lane #1 Basic Volume Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	:00	:15	:30	:45	Total
8/22/2017	00:00	6	0	0	1	7
Tue	01:00	2	1	3	2	8
	02:00	1	1	1	3	6
	03:00	1	0	2	2	5
	04:00	3	2	7	4	16
	05:00	3	9	16	27	55
	06:00	25	30	41	72	168
	07:00	63	82	107	145	397
	08:00	83	86	53	57	279
	09:00	63	43	30	42	178
	10:00	35	44	41	37	157
	11:00	34	37	41	31	143
	12:00	45	38	49	54	186
	13:00	57	42	44	34	177
	14:00	33	62	24	54	173
	15:00	32	39	43	46	160
	16:00	41	25	37	42	145
	17:00	32	28	36	32	128
	18:00	32	29	32	28	121
	19:00	27	18	26	23	94
	20:00	23	11	11	16	61
	21:00	14	17	12	12	55
	22:00	9	5	8	7	29
	23:00	5	4	4	5	18

Day Total : 2766

AM Total :	1419 (51.3%)	Peak AM Hour : 07:30 =	421 (15.2%)	Peak AM Factor : 0.726	Average Period : 28.8
PM Total :	1347 (48.7%)	Peak PM Hour : 12:30 =	202 (7.3%)	Peak PM Factor : 0.815	Average Hour : 115.3

Date	Time	:00	:15	:30	:45	Total
8/23/2017	00:00	2	1	4	2	9
Wed	01:00	1	0	3	0	4
	02:00	0	0	2	4	6
	03:00	1	1	2	1	5
	04:00	2	2	3	12	19
	05:00	7	13	14	24	58
	06:00	26	27	42	72	167
	07:00	71	74	103	154	402
	08:00	105	95	67	74	341
	09:00	40	41	48	30	159
	10:00	41	41	43	44	169
	11:00	41	51	40	38	170
	12:00	31	44	48	43	166
	13:00	51	37	35	37	160
	14:00	54	46	46	37	183
	15:00	39	43	30	35	147
	16:00	37	36	34	29	136
	17:00	37	23	35	47	142
	18:00	45	30	34	22	131
	19:00	23	19	21	13	76
	20:00	18	21	17	15	71
	21:00	19	15	17	5	56
	22:00	9	10	6	13	38
	23:00	5	6	3	5	19

Day Total : 2834

AM Total :	1509 (53.2%)	Peak AM Hour : 07:30 =	457 (16.1%)	Peak AM Factor : 0.742	Average Period : 29.5
PM Total :	1325 (46.8%)	Peak PM Hour : 12:15 =	186 (6.6%)	Peak PM Factor : 0.861	Average Hour : 118.1

Lane #3 Configuration

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

Lane #3 Basic Volume Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	:00	:15	:30	:45	Total
8/22/2017	00:00	5	1	3	1	10
Tue	01:00	1	1	1	3	6
	02:00	1	1	2	0	4
	03:00	1	0	1	0	2
	04:00	3	1	0	4	8
	05:00	3	2	7	5	17
	06:00	7	11	8	14	40
	07:00	22	42	67	28	159
	08:00	27	33	23	23	106
	09:00	30	36	41	39	146
	10:00	38	42	44	58	182
	11:00	44	50	56	60	210
	12:00	55	48	48	55	206
	13:00	58	49	50	53	210
	14:00	43	44	43	51	181
	15:00	46	54	64	47	211
	16:00	58	71	77	78	284
	17:00	77	106	94	50	327
	18:00	55	61	32	40	188
	19:00	33	30	41	30	134
	20:00	26	23	30	26	105
	21:00	21	29	18	14	82
	22:00	13	9	10	7	39
	23:00	7	8	7	3	25
Day Total :						2882
AM Total :	890 (30.9%)	Peak AM Hour : 11:00 =	210 (7.3%)	Peak AM Factor : 0.784	Average Period :	30.0
PM Total :	1992 (69.1%)	Peak PM Hour : 16:45 =	355 (12.3%)	Peak PM Factor : 0.837	Average Hour :	120.1

Date	Time	:00	:15	:30	:45	Total
8/23/2017	00:00	4	9	6	7	26
Wed	01:00	2	4	1	2	9
	02:00	0	3	2	0	5
	03:00	1	0	1	0	2
	04:00	1	0	0	4	5
	05:00	1	7	7	12	27
	06:00	7	10	16	21	54
	07:00	23	43	46	23	135
	08:00	21	18	38	33	110
	09:00	49	37	36	47	169
	10:00	40	39	37	44	160
	11:00	40	51	67	48	206
	12:00	65	50	40	51	206
	13:00	51	54	60	65	230
	14:00	44	48	57	57	206
	15:00	51	43	49	66	209
	16:00	73	71	72	81	297
	17:00	94	98	88	62	342
	18:00	46	53	38	33	170
	19:00	36	31	32	34	133
	20:00	32	28	37	8	105
	21:00	30	26	20	16	92
	22:00	16	14	10	14	54
	23:00	7	7	8	8	30

Day Total : 2982

AM Total :	908 (30.4%)	Peak AM Hour : 11:00 =	206 (6.9%)	Peak AM Factor : 0.769	Average Period : 31.1
PM Total :	2074 (69.6%)	Peak PM Hour : 16:45 =	361 (12.1%)	Peak PM Factor : 0.921	Average Hour : 124.3

Basic Volume Summary: Harper Drive (1)

Grand Total For Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	5600 (48.8%)	2.00	2800	29.2	116.7	2928 (52.3%)	2672 (47.7%)
#3.	5864 (51.2%)	2.00	2932	30.5	122.2	1798 (30.7%)	4066 (69.3%)
ALL	11464	2.00	5732	59.7	238.9	4726 (41.2%)	6738 (58.8%)

Lane	Peak AM Hour	Date	Peak AM Factor	Peak PM Hour	Date	Peak PM Factor
#1.	07:30 = 457	08/23/2017	0.742	12:30 = 202	08/22/2017	0.815
#3.	11:00 = 210	08/22/2017	0.784	16:45 = 361	08/23/2017	0.921

Basic Volume Report: Harper Drive (2)

Station ID : Harper Drive (2)

Info Line 1 : Btwn Barnhart N & Barnhart S
 Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : HARP MID W.DB

Last Connected Device Type : Apollo
 Version Number : 1.62
 Serial Number : 24090

Number of Lanes : 1
 Posted Speed Limit : 0.0 mph

Lane #1 Configuration

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

Lane #1 Basic Volume Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	:00	:15	:30	:45	Total
8/22/2017	00:00	5	1	0	0	6
	01:00	1	2	3	1	7
	02:00	0	2	1	2	5
	03:00	1	0	2	1	4
	04:00	3	2	4	2	11
	05:00	4	7	14	19	44
	06:00	24	22	34	56	136
	07:00	44	66	82	113	305
	08:00	62	68	43	44	217
	09:00	58	34	23	30	145
	10:00	27	47	32	34	140
	11:00	27	31	36	26	120
	12:00	32	28	44	53	157
	13:00	48	31	37	32	148
	14:00	27	53	21	43	144
	15:00	25	24	35	45	129
	16:00	32	26	31	33	122
	17:00	28	21	31	28	108
	18:00	27	19	30	29	105
	19:00	19	19	19	17	74
	20:00	16	14	9	15	54
	21:00	11	21	11	14	57
	22:00	8	3	4	4	19
	23:00	4	4	4	5	17

Day Total : 2274

AM Total :	1140 (50.1%)	Peak AM Hour : 07:30 =	325 (14.3%)	Peak AM Factor : 0.719	Average Period : 23.7
PM Total :	1134 (49.9%)	Peak PM Hour : 12:30 =	176 (7.7%)	Peak PM Factor : 0.830	Average Hour : 94.8

Date	Time	:00	:15	:30	:45	Total
8/23/2017	00:00	1	2	3	2	8
Wed	01:00	1	1	3	0	5
	02:00	0	0	2	2	4
	03:00	0	1	1	1	3
	04:00	3	1	3	8	15
	05:00	6	11	11	17	45
	06:00	25	22	33	57	137
	07:00	53	65	89	125	332
	08:00	79	71	59	58	267
	09:00	37	33	39	34	143
	10:00	27	35	35	35	132
	11:00	34	44	24	28	130
	12:00	27	34	45	37	143
	13:00	43	38	28	30	139
	14:00	49	40	40	32	161
	15:00	27	41	24	40	132
	16:00	30	29	32	26	117
	17:00	27	23	31	38	119
	18:00	36	25	27	17	105
	19:00	15	19	17	15	66
	20:00	10	18	15	10	53
	21:00	12	14	15	5	46
	22:00	8	5	8	11	32
	23:00	4	5	4	3	16

Day Total : 2350

AM Total :	1221 (52.0%)	Peak AM Hour : 07:30 =	364 (15.5%)	Peak AM Factor : 0.728	Average Period :	24.5
PM Total :	1129 (48.0%)	Peak PM Hour : 12:30 =	163 (6.9%)	Peak PM Factor : 0.832	Average Hour :	97.9

Lane #3 Configuration

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

Lane #3 Basic Volume Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	:00	:15	:30	:45	Total
8/22/2017	00:00	4	1	2	1	8
Tue	01:00	1	1	1	2	5
	02:00	1	1	2	0	4
	03:00	0	0	1	0	1
	04:00	3	1	0	4	8
	05:00	3	2	7	4	16
	06:00	6	8	6	13	33
	07:00	23	40	62	30	155
	08:00	26	40	21	18	105
	09:00	25	30	35	31	121
	10:00	33	37	35	50	155
	11:00	43	46	44	52	185
	12:00	47	45	50	51	193
	13:00	52	49	43	48	192
	14:00	44	38	39	47	168
	15:00	46	53	52	50	201
	16:00	47	67	69	66	249
	17:00	67	93	78	47	285
	18:00	49	56	25	34	164
	19:00	28	29	33	30	120
	20:00	20	20	28	24	92
	21:00	13	22	16	10	61
	22:00	14	7	4	7	32
	23:00	5	8	5	2	20
Day Total :						2573
AM Total :	796 (30.9%)	Peak AM Hour : 11:00 =	185 (7.2%)	Peak AM Factor : 0.746	Average Period :	26.8
PM Total :	1777 (69.1%)	Peak PM Hour : 16:45 =	304 (11.8%)	Peak PM Factor : 0.817	Average Hour :	107.2

Date	Time	:00	:15	:30	:45	Total
8/23/2017	00:00	4	6	5	4	19
Wed	01:00	0	4	1	1	6
	02:00	0	3	1	0	4
	03:00	1	0	1	0	2
	04:00	1	0	0	3	4
	05:00	1	7	6	10	24
	06:00	7	7	13	16	43
	07:00	20	45	51	24	140
	08:00	23	24	31	32	110
	09:00	45	36	29	39	149
	10:00	39	41	30	45	155
	11:00	41	49	62	48	200
	12:00	63	43	37	47	190
	13:00	39	43	57	64	203
	14:00	43	40	47	48	178
	15:00	44	38	43	59	184
	16:00	66	62	60	76	264
	17:00	75	92	78	60	305
	18:00	41	49	29	34	153
	19:00	29	25	27	29	110
	20:00	27	24	28	8	87
	21:00	27	21	13	13	74
	22:00	10	12	7	10	39
	23:00	7	4	7	8	26

Day Total : 2669

AM Total :	856 (32.1%)	Peak AM Hour : 11:00 =	200 (7.5%)	Peak AM Factor : 0.806	Average Period : 27.8
PM Total :	1813 (67.9%)	Peak PM Hour : 16:45 =	321 (12.0%)	Peak PM Factor : 0.872	Average Hour : 111.2

Basic Volume Summary: Harper Drive (2)

Grand Total For Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	4624 (46.9%)	2.00	2312	24.1	96.3	2361 (51.1%)	2263 (48.9%)
#3.	5242 (53.1%)	2.00	2621	27.3	109.2	1652 (31.5%)	3590 (68.5%)
ALL	9866	2.00	4933	51.4	205.5	4013 (40.7%)	5853 (59.3%)

Lane	Peak AM Hour	Date	Peak AM Factor	Peak PM Hour	Date	Peak PM Factor
#1.	07:30 = 364	08/23/2017	0.728	12:30 = 176	08/22/2017	0.830
#3.	11:00 = 200	08/23/2017	0.806	16:45 = 321	08/23/2017	0.872

Basic Volume Report: Harper Drive (3)

Station ID : Harper Drive (3)

Info Line 1 : East of Barnhart (south leg)
 Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : HARP MID E.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	Volume Mode	Volume Sensors	Divide By 2	Comment
1.	Eastbound		Normal	Veh.	No	

Lane #1 Basic Volume Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	:00	:15	:30	:45	Total
8/22/2017	00:00	4	1	0	1	6
	01:00	1	2	3	0	6
	02:00	0	1	1	2	4
	03:00	1	0	2	0	3
	04:00	3	1	4	3	11
	05:00	3	7	13	17	40
	06:00	21	21	31	53	126
	07:00	38	59	73	106	276
	08:00	59	62	42	37	200
	09:00	49	29	24	33	135
	10:00	26	40	32	29	127
	11:00	29	31	30	26	116
	12:00	32	25	39	50	146
	13:00	48	29	36	29	142
	14:00	34	47	25	41	147
	15:00	25	28	36	43	132
	16:00	30	28	31	30	119
	17:00	29	19	28	28	104
	18:00	26	20	25	28	99
	19:00	19	18	16	18	71
	20:00	17	11	8	9	45
	21:00	15	14	10	13	52
	22:00	11	5	6	2	24
	23:00	5	3	4	5	17
Day Total :						2148

AM Total :	1050 (48.9%)	Peak AM Hour : 07:30 =	300 (14.0%)	Peak AM Factor : 0.708	Average Period :	22.4
PM Total :	1098 (51.1%)	Peak PM Hour : 12:30 =	166 (7.7%)	Peak PM Factor : 0.830	Average Hour :	89.5

Date	Time	:00	:15	:30	:45	Total
8/23/2017	00:00	0	2	2	2	6
Wed	01:00	2	0	3	0	5
	02:00	0	0	2	2	4
	03:00	0	1	0	1	2
	04:00	2	2	1	7	12
	05:00	5	10	11	17	43
	06:00	22	21	34	49	126
	07:00	50	54	68	120	292
	08:00	73	63	53	50	239
	09:00	38	31	33	32	134
	10:00	25	28	32	40	125
	11:00	30	39	26	24	119
	12:00	27	37	47	32	143
	13:00	38	29	33	32	132
	14:00	51	36	36	30	153
	15:00	27	41	23	42	133
	16:00	24	25	34	28	111
	17:00	28	19	28	36	111
	18:00	40	23	25	16	104
	19:00	11	15	19	12	57
	20:00	12	19	15	12	58
	21:00	12	13	14	4	43
	22:00	6	5	9	10	30
	23:00	5	5	4	3	17

Day Total : 2199

AM Total :	1107 (50.3%)	Peak AM Hour : 07:30 =	324 (14.7%)	Peak AM Factor : 0.675	Average Period :	22.9
PM Total :	1092 (49.7%)	Peak PM Hour : 13:45 =	155 (7.0%)	Peak PM Factor : 0.760	Average Hour :	91.6

Lane #3 Configuration

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

Lane #3 Basic Volume Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	:00	:15	:30	:45	Total
8/22/2017	00:00	4	1	1	1	7
Tue	01:00	1	1	1	2	5
	02:00	1	0	2	0	3
	03:00	0	0	1	0	1
	04:00	2	1	0	4	7
	05:00	3	3	5	4	15
	06:00	6	10	5	12	33
	07:00	21	39	74	30	164
	08:00	24	34	24	18	100
	09:00	23	27	27	30	107
	10:00	30	39	34	47	150
	11:00	43	44	40	48	175
	12:00	47	41	45	47	180
	13:00	52	49	46	49	196
	14:00	38	38	39	47	162
	15:00	43	48	49	45	185
	16:00	44	62	67	65	238
	17:00	64	93	70	40	267
	18:00	45	50	23	28	146
	19:00	29	27	28	31	115
	20:00	18	18	27	21	84
	21:00	13	18	13	8	52
	22:00	14	6	3	8	31
	23:00	6	6	5	2	19
Day Total :						2442
AM Total :	767 (31.4%)	Peak AM Hour : 11:00 =	175 (7.2%)	Peak AM Factor : 0.591	Average Period :	25.4
PM Total :	1675 (68.6%)	Peak PM Hour : 16:45 =	292 (12.0%)	Peak PM Factor : 0.785	Average Hour :	101.8

Date	Time	:00	:15	:30	:45	Total
8/23/2017	00:00	4	6	5	4	19
Wed	01:00	0	4	1	1	6
	02:00	0	3	1	0	4
	03:00	1	0	1	0	2
	04:00	1	0	0	3	4
	05:00	1	5	6	11	23
	06:00	7	6	13	14	40
	07:00	22	45	56	23	146
	08:00	22	23	33	33	111
	09:00	44	34	33	33	144
	10:00	35	39	31	40	145
	11:00	42	52	56	45	195
	12:00	59	39	34	43	175
	13:00	44	45	52	60	201
	14:00	43	40	41	48	172
	15:00	42	38	45	59	184
	16:00	63	67	61	77	268
	17:00	74	84	71	52	281
	18:00	34	47	26	28	135
	19:00	28	22	20	25	95
	20:00	23	25	26	7	81
	21:00	24	18	14	12	68
	22:00	7	13	8	9	37
	23:00	6	3	8	6	23

Day Total : 2559

AM Total :	839 (32.8%)	Peak AM Hour : 11:00 =	195 (7.6%)	Peak AM Factor : 0.871	Average Period : 26.7
PM Total :	1720 (67.2%)	Peak PM Hour : 16:45 =	306 (12.0%)	Peak PM Factor : 0.911	Average Hour : 106.6

Basic Volume Summary: Harper Drive (3)

Grand Total For Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	4347 (46.5%)	2.00	2174	22.6	90.6	2157 (49.6%)	2190 (50.4%)
#3.	5001 (53.5%)	2.00	2501	26.0	104.2	1606 (32.1%)	3395 (67.9%)
ALL	9348	2.00	4675	48.6	194.8	3763 (40.3%)	5585 (59.7%)

Lane	Peak AM Hour	Date	Peak AM Factor	Peak PM Hour	Date	Peak PM Factor
#1.	07:30 = 324	08/23/2017	0.675	12:30 = 166	08/22/2017	0.830
#3.	11:00 = 195	08/23/2017	0.871	16:45 = 306	08/23/2017	0.911

Basic Volume Report: Harper Drive (4)

Station ID : Harper Drive (4)

Info Line 1 : West of McKinney

Info Line 2 : Albuquerque

GPS Lat/Lon :

DB File : HARP EAST.DB

Last Connected Device Type : Apollo

Version Number : 1.62

Serial Number : 21494

Number of Lanes : 1

Posted Speed Limit : 0.0 mph

Lane #1 Configuration

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

Lane #1 Basic Volume Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	:00	:15	:30	:45	Total
8/22/2017	00:00	4	1	0	1	6
Tue	01:00	2	2	3	0	7
	02:00	0	1	1	2	4
	03:00	1	0	2	0	3
	04:00	3	1	4	3	11
	05:00	2	7	14	16	39
	06:00	22	21	29	49	121
	07:00	42	61	65	111	279
	08:00	58	66	41	40	205
	09:00	50	33	23	30	136
	10:00	24	39	35	26	124
	11:00	30	28	31	29	118
	12:00	33	25	38	46	142
	13:00	41	36	38	28	143
	14:00	27	52	23	39	141
	15:00	23	25	34	40	122
	16:00	33	31	29	32	125
	17:00	31	22	26	30	109
	18:00	29	20	26	30	105
	19:00	19	19	21	15	74
	20:00	21	10	9	11	51
	21:00	10	19	14	13	56
	22:00	10	4	7	2	23
	23:00	5	4	4	4	17
Day Total :						2161

AM Total :	1053 (48.7%)	Peak AM Hour : 07:30 =	300 (13.9%)	Peak AM Factor : 0.676	Average Period : 22.5
PM Total :	1108 (51.3%)	Peak PM Hour : 12:30 =	161 (7.5%)	Peak PM Factor : 0.774	Average Hour : 90.0

Date	Time	:00	:15	:30	:45	Total
8/23/2017	00:00	1	2	2	2	7
Wed	01:00	2	0	3	0	5
	02:00	0	0	2	2	4
	03:00	0	1	0	1	2
	04:00	2	1	2	7	12
	05:00	5	9	11	16	41
	06:00	22	20	29	54	125
	07:00	49	56	71	115	291
	08:00	77	61	52	51	241
	09:00	35	31	30	32	128
	10:00	29	26	29	34	118
	11:00	31	43	29	25	128
	12:00	30	40	47	33	150
	13:00	41	34	29	30	134
	14:00	51	33	42	32	158
	15:00	27	43	27	41	138
	16:00	32	24	27	29	112
	17:00	26	20	25	40	111
	18:00	40	24	27	15	106
	19:00	10	17	19	13	59
	20:00	11	20	16	10	57
	21:00	14	11	15	5	45
	22:00	7	4	6	10	27
	23:00	6	5	4	3	18

Day Total : 2217

AM Total :	1102 (49.7%)	Peak AM Hour : 07:30 =	324 (14.6%)	Peak AM Factor : 0.704	Average Period :	23.1
PM Total :	1115 (50.3%)	Peak PM Hour : 12:15 =	161 (7.3%)	Peak PM Factor : 0.789	Average Hour :	92.4

Lane #3 Configuration

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

Lane #3 Basic Volume Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Date	Time	:00	:15	:30	:45	Total
8/22/2017	00:00	4	1	1	1	7
Tue	01:00	1	1	1	2	5
	02:00	1	0	2	0	3
	03:00	0	0	1	0	1
	04:00	2	1	0	4	7
	05:00	4	2	6	4	16
	06:00	6	9	6	14	35
	07:00	22	37	73	31	163
	08:00	26	34	22	18	100
	09:00	21	28	29	32	110
	10:00	31	36	36	46	149
	11:00	44	48	43	46	181
	12:00	42	46	47	45	180
	13:00	51	47	46	49	193
	14:00	40	40	37	49	166
	15:00	45	43	50	41	179
	16:00	46	62	63	69	240
	17:00	59	86	77	42	264
	18:00	45	52	28	31	156
	19:00	27	26	25	28	106
	20:00	20	19	26	20	85
	21:00	13	17	13	9	52
	22:00	14	8	3	9	34
	23:00	5	6	6	2	19
Day Total :						2451
AM Total :	777 (31.7%)	Peak AM Hour : 10:45 =	181 (7.4%)	Peak AM Factor : 0.620	Average Period :	25.5
PM Total :	1674 (68.3%)	Peak PM Hour : 16:45 =	291 (11.9%)	Peak PM Factor : 0.846	Average Hour :	102.1

Date	Time	:00	:15	:30	:45	Total
8/23/2017	00:00	4	5	5	4	18
Wed	01:00	0	4	1	1	6
	02:00	0	3	1	0	4
	03:00	1	0	1	0	2
	04:00	1	0	0	4	5
	05:00	1	5	5	11	22
	06:00	7	6	14	14	41
	07:00	20	40	56	23	139
	08:00	22	22	32	40	116
	09:00	42	38	31	36	147
	10:00	37	39	31	42	149
	11:00	41	47	59	46	193
	12:00	57	38	31	41	167
	13:00	44	46	54	67	211
	14:00	43	39	43	47	172
	15:00	41	37	45	52	175
	16:00	59	61	63	73	256
	17:00	75	80	79	54	288
	18:00	38	48	26	33	145
	19:00	25	21	20	28	94
	20:00	22	24	25	6	77
	21:00	24	15	15	15	69
	22:00	7	11	7	9	34
	23:00	5	5	7	7	24

Day Total : 2554

AM Total :	842 (33.0%)	Peak AM Hour : 11:00 =	193 (7.6%)	Peak AM Factor : 0.818	Average Period : 26.6
PM Total :	1712 (67.0%)	Peak PM Hour : 16:45 =	307 (12.0%)	Peak PM Factor : 0.959	Average Hour : 106.4

Basic Volume Summary: Harper Drive (4)

Grand Total For Data From: 00:00 - 08/22/2017 To: 23:59 - 08/23/2017

Lane	Total Count	# Of Days	ADT	Avg. Period	Avg. Hour	AM Total & Percent	PM Total & Percent
#1.	4378 (46.7%)	2.00	2189	22.8	91.2	2155 (49.2%)	2223 (50.8%)
#3.	5005 (53.3%)	2.00	2503	26.1	104.3	1619 (32.3%)	3386 (67.7%)
ALL	9383	2.00	4692	48.9	195.5	3774 (40.2%)	5609 (59.8%)

Lane	Peak AM Hour	Date	Peak AM Factor	Peak PM Hour	Date	Peak PM Factor
#1.	07:30 = 324	08/23/2017	0.704	12:30 = 161	08/22/2017	0.774
#3.	11:00 = 193	08/23/2017	0.818	16:45 = 307	08/23/2017	0.959

Appendix C



Agency Case Number	Crash Analysis	Crash Date	Crash Intersecting Street	Crash Primary Street	Contributing Factors
170030491	23 - REAR END COLL/SAME DIR	3/31/2017	HARPER PL NE	HARPER DR NE	None
170030491	23 - REAR END COLL/SAME DIR	3/31/2017	HARPER PL NE	HARPER DR NE	Driver inattention
140091313	10 - ONE LEFT TURN/FROM SAME DIR	10/5/2014	BARNHART ST NE	HARPER DR NE	Under influence of alcohol, Driver inattention
140091313	10 - ONE LEFT TURN/FROM SAME DIR	10/5/2014	BARNHART ST NE	HARPER DR NE	None

Appendix D



ATTN: Amanda Herrera

81056
Rec 2-2-17

6209 Harper DR NW, McKenna to Barnhart

NEIGHBORHOOD TRAFFIC CALMING PETITION FORM

CITY OF ALBUQUERQUE — NTMP

* * * NEIGHBORHOOD TRAFFIC CALMING PETITION * * *

Section I

Date: 1/25/2017

Representatives from the Bonnie Saiz neighborhood, on 11/21/16, 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 (P.O. Box 1293, Albuquerque, NM 87103 or NTMP@cabq.gov)

Section II

(ONLY ONE SIGNATURE PER ADDRESS)

1	<u>Bonnie Saiz</u>	<u>6209 HARPER DR. 688-2455</u>	<u>Bonnie Saiz</u>
2	<u>Jonathan Ladd</u>	<u>6333 Harper Dr. 385-9266</u>	<u>Jonathan Ladd</u>
3	<u>Nicholas Domine</u>	<u>6304 Harper Dr. 350-6973</u>	<u>Nicholas Domine</u>
4	<u>Molly Wilkinson</u>	<u>6317 Harper Dr. 505-203-8257</u>	<u>Molly Wilkinson</u>
5	<u>Kim Johnston</u>	<u>6308 Harper Dr. 505-514-4765</u>	<u>Kim Johnston</u>
6	<u>Alyssa Wilkerson</u>	<u>6501 Barnhard NE 505-936-5341</u>	<u>Alyssa Wilkerson</u>
7	<u>Sandy GEBLER</u>	<u>6416 BARNHARD NE 264-5423</u>	<u>Sandy GEBLER</u>
8	<u>Annette Encinias Chavez</u>	<u>6217 Harper Dr NE (505) 417-4731</u>	<u>Annette Encinias Chavez</u>
9	<u>Jeff Bachelder</u>	<u>830 Harper Dr. 505-729-5625</u>	<u>Jeff Bachelder</u>
10	<u>Firas Alibazanji</u>	<u>6241 Harper Dr NE 5509065</u>	<u>Firas Alibazanji</u>
11	<u>Wilfred Salazar</u>	<u>6921 Harper Dr NE 362-6333</u>	<u>Wilfred Salazar</u>
12	<u>Barbara Lark</u>	<u>6313 HARPER NE 821-6024</u>	<u>Barbara Lark</u>
13	<u>Stacey Johnson</u>	<u>6305 Harper Dr. 11E. 385-5732</u>	<u>Stacey Johnson</u>
14	<u>6305 Harper unoccupied - Lock Box & FOR SALE sign</u>		
*	<u>6100 low income apt. owned by city of AED - residents</u>		
*	<u>do not want outsiders on property - do not wish</u>		
*	<u>to speak or put name on anything</u>		
*	<u>Charlene Raymond</u>	<u>6213 Harper Dr 10E</u>	<u>Charlene Raymond</u>
*	<u>the remainder of the homes would not answer</u>		
*	<u>their doors - I tried & tried: ...</u>		

(PLEASE COPY THIS PAGE FOR ADDITIONAL SIGNATURE)

ATTN: Amanda Herrera
6209 Harper DR NE, lacking to Banchet.

NEIGHBORHOOD TRAFFIC CALMING PETITION FORM

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

Page 2

Section I

Date: 1/25/2017

Representatives from the Bonnie Saiz neighborhood, on 11/21/16 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 (P.O. Box 1293, Albuquerque, NM 87103 or NTMP@cabq.gov)

Section II

(ONLY ONE SIGNATURE PER ADDRESS)

15	Angel Galindo	6209 Harper NE	505 730 9832	ngalindo@comcast.net	
16	Sharon Winston	6345 Harper NE	505 667 5223	zinston1540@msn.com	
17	Nina Rantanen	6201 Harper Dr NE	505 550 7313	trantanen.abq@gmail.com	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
Name (print)	Address	Telephone	Email	Signature	
(PLEASE COPY THIS PAGE FOR ADDITIONAL SIGNATURE)					



Souder, Miller & Associates
Engineering • Environmental • Surveying

5454 Venice Avenue NE, Suite D
Albuquerque, NM 87113
(505) 299-0942 fax (505) 293-3430
www.soudermiller.com