

City of Roswell, New Mexico
Traffic Engineering
Speed Study
S. Sunset from McGaffey to Brasher

Date: <u>April 27, 2025 – May 2, 2025</u>	Major Roadway Width: <u>41 Feet</u>
Time of Day: <u>24 hour study</u>	Number of Lanes: <u>4</u>
Speed (posted or 85%): .. <u>35 MPH</u>	Minor Roadway Width: <u>Varies</u>
Traffic Controls Present: . <u>Two Way Stop Control On Side Streets</u>	Number of Lanes: <u>2</u>
Intersection Maneuver : .. <u>Left/Right Turn/Through (Straight)</u>	
Weather: <u>Clear</u>	
Horizontal Curve: <u>None</u>	
Vertical Curve: <u>None</u>	
Study Conducted by:..... <u>Clifford Boehms & James MacCornack</u>	

Conclusion: A study was conducted to examine and document vehicle speed on S. Sunset between McGaffey & Brasher. City Special Electronics department placed radar speed detection units to measure speed.

The results of this study showed that the 85th percentile speed was measured to be approximately 46 MPH, approximately 11 MPH over the posted speed limit of 35 MPH.

Traffic count data from NMDOT was also reviewed, this data showed that the Average Daily Traffic (ADT) ranges from approximately 8,755 vehicles per day on Sunset between McGaffey and Hobbs to approximately 4,579 vehicles per day between Jaffa and Brasher.

Traffic Volume Characteristics

The New Mexico Department of Transportation Traffic Count Data System (NMDOT TCDS) was reviewed to determine the approximate daily traffic volume on S. Sunset between McGaffey and Brasher. There were three data records available for this road segment.

The first data set was from a count conducted on S. Sunset near the intersection with Hobbs St. This count indicated an approximately ADT of 8,755 vehicles per day on S. Sunset in this area. This traffic was split roughly equally between northbound and southbound directions of travel (4,565 northbound and 4,190 southbound).

The second data set was from a count conducted on S. Sunset near the intersection with Poe St. This count indicated an approximately ADT of 6,635 vehicles per day on S. Sunset in this area. This traffic was split roughly equally between northbound and southbound directions of travel (3,409 northbound and 3,226 southbound).

The third data set was from a count conducted on S. Sunset near the intersection with Jaffa St. This count indicated an approximately ADT of 5,365 vehicles per day on S. Sunset in this area. This traffic was split roughly equally between northbound and southbound directions of travel (2,690 northbound and 2,675 southbound).

Speed Study Results

A study was conducted to examine and document vehicle speed on S. Sunset between McGaffey & Brasher. City Special Electronics placed radar speed detection units to measure speed from April 27th, 2025 to May 2nd, 2025. There was a total of 40,043 vehicles whose speed was detected during this study period. Of these, 79.74% were exceeding the speed limit of 35 MPH. The average speed was approximately 40 MPH and the 85th percentile speed was determined to be 46 MPH. This indicates that the normal traffic flow speed is approximately 46 MPH, or 11 MPH over the posted speed limit.

Traffic Speed Data S. Sunset

SPECIAL ELECTRONICS**Survey Summary****Survey Description**

Survey Location	NB SUNSET		
Survey GPS Coordinates	+33.37396,-104.54105		
Survey Dates	Start	Stop	
	Sunday, 4/27/2025 3:59 PM	Friday, 5/2/2025 9:22 AM	
Posted Speed Limit	35 mph		
Traffic Zone	Normal		

Survey Result

Total Vehicle Count		40043		
	Traffic Direction	Closing North	Away South	Combined
	Vehicle Count	21654	18389	40043
Posted Speed Limit		35 mph		
	Vehicles Under the Speed Limit Count	4398	3716	8114
	Vehicles Under the Speed Limit Percentage	20.31%	20.21%	20.26%
	Vehicles Over the Speed Limit Count	17256	14673	31929
	Vehicles Over the Speed Limit Percentage	79.69%	79.79%	79.74%
Excessive Speed Threshold		35 mph		
	Vehicles Over the Excessive Speed Count	18360	15648	34008
	Vehicles Over the Excessive Speed Percentage	84.79%	85.09%	84.93%
	Average Violation Speed	42.03 mph	42.15 mph	42.09 mph
Speed Profile				
	Average Speed	40.01 mph	40.01 mph	40.01 mph
	Minimum Speed	10 mph	6 mph	6 mph
	Maximum Speed	79 mph	83 mph	83 mph
	Standard Deviation	6 mph	6 mph	6 mph
	85 % Percentile Speed - Free Flow	45 mph	46 mph	46 mph
	10 mph Pace - Free Flow	35-44 mph	36-45 mph	36-45 mph
	In Pace Count - Free Flow	5722	5369	11091

SPECIAL ELECTRONICS**Survey Description**

Survey Location NB SUNSET
Survey GPS Coordinates +33.37396,-104.54105
Survey Dates **Start** Sunday, 4/27/2025 3:59 PM **Stop** Friday, 5/2/2025 9:22 AM
Posted Speed Limit 35 mph
Traffic Zone Normal

Speed - Volume Matrix

Date Range: 2025-04-27 - 2025-05-02

Direction: Both

Date Span	Total	6-10	11-15	16-20	21-25	26-30	31-35	36-40	41-45	46-50	51-55	56-60	61-65	66-70	71-75	76-80	81-85	86+
00:00 - 00:59	220				1	2	41	107	42	11	7	4	2	1		2		
01:00 - 01:59	155	4			3	2	37	58	29	17	3		1			1		
02:00 - 02:59	128				1	6	22	46	34	11	4	1	1		1	1		
03:00 - 03:59	199				1	2	38	60	58	25	5	6	3	1				
04:00 - 04:59	445	2	1	2	2	4	63	164	115	57	21	9	4			1		
05:00 - 05:59	878			2	6	15	124	361	240	92	24	11	2		1			
06:00 - 06:59	1474			1	4	29	168	506	441	235	63	20	6	1				
07:00 - 07:59	3871		8	13	54	127	472	1194	1221	560	161	48	9	2	1	1		
08:00 - 08:59	2886		2	13	45	109	435	973	815	341	94	47	9	3				
09:00 - 09:59	1785	1	6	12	28	63	329	615	464	189	63	13	2					
10:00 - 10:59	1588		5	9	38	67	257	591	377	180	48	13	3					
11:00 - 11:59	1861	3	6	15	28	79	329	605	508	216	58	12	2					
12:00 - 12:59	2060		1	6	20	54	312	722	591	253	80	17	2	2				
13:00 - 13:59	2134		3	6	22	87	377	741	581	221	75	14	4	2	1			
14:00 - 14:59	2378		3	2	21	66	376	852	648	288	85	25	8	2	1	1		
15:00 - 15:59	2747		7	7	37	100	442	1001	762	291	79	15	5		1			
16:00 - 16:59	3003		2	9	30	99	383	1025	949	363	108	24	6	2	1	1	1	
17:00 - 17:59	3332		2	3	27	68	351	1113	1124	456	139	37	7	4	1			
18:00 - 18:59	2627		4	9	24	65	301	860	854	374	92	33	5	2	3		1	
19:00 - 19:59	2180	2	1	3	26	63	370	817	575	246	55	16	4	2				
20:00 - 20:59	1733			3	18	63	441	685	382	105	26	4	3	2	1			
21:00 - 21:59	1245				6	52	280	539	268	78	14	8						
22:00 - 22:59	696		1	1	9	26	165	273	156	39	20	4	1		1			
23:00 - 23:59	418		1	3	1	18	99	158	97	29	8		1	1		1	1	