



ALL WAY STOP SURVEY

SERRANO PARKWAY

(No. 2344)

At Greenview Drive (West) (Private Gated Road)

Reviewed by the Traffic Advisory Committee on FEB 22 2023

COMMITTEE APPROVED STAFF'S RECOMMENDATION.

COMMITTEE REQUESTED FURTHER ACTION.

Action: APPROVED

**EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION
ENGINEERING AND TRAFFIC SURVEY: ALL WAY STOP**

Location: Serrano Parkway (No. 2344) at Greenview Drive (West) (Private Gated Road)

Subject: All Way Stop

Date: January 2nd, 2023

REQUEST REFERENCE:

This study was initiated in response to a request from the General Manager of the Serrano Homeowners Association. This letter requested that the County study the Serrano Parkway/Greenview Drive (West) intersection to see if an “All Way Stop” at Serrano Parkway and Greenview Drive (West) was justified.

The County began investigation of this intersection and discussed their findings during the December 5th, 2019, West Slope Traffic Advisory Committee Meeting. At that meeting the El Dorado County Department of Transportation’s Traffic Unit was directed to prepare an “All Way Stop” Engineering and Traffic Study. The Serrano Homeowners Board of Directors was also asked to formally affirm their support for an “All Ways Stop”

On March 16th, 2022, the Serrano Homeowners Board of Directors submitted a letter of approval and a resident petition in favor of an “All Way Stop”. As a result of receiving the letter of approval and the petition, the Traffic Unit gathered new Turning Movement data, new pedestrian counts and remeasured sight distances. This data was discussed at the July 13th, 2022, West Slope Traffic Advisory Committee Meeting. This updated Engineering and Traffic Study includes the new data gathered at this intersection.

The scope of this study is limited to determining if an “All Way Stop” is appropriate for the intersection. This study is limited to Serrano Parkway in the immediate vicinity of its intersection with Greenview Drive (West). All subsequent references apply only to this area unless otherwise indicated.

INTRODUCTION:

The 2014 California Manual on Uniform Traffic Control Devices (CAMUTCD), Revision 6, states in part:

Section 2B.07 Multi-Way Stop Applications

Support:

1. Multi-way stop control can be useful as a safety measure at intersections if certain traffic conditions exist. Safety concerns associated with multi-way stops include pedestrians, bicyclists, and all road users expecting other road users to stop. Multi-way stop control is used where the volume of traffic on the intersecting roads is approximately equal.
2. The restrictions on the use of STOP signs described in Section 2B.04 also apply to multi-way stop applications.

Guidance:

3. The decision to install multi-way stop control should be based on an engineering study.
4. The following criteria should be considered in the engineering study for a multi-way STOP sign installation:
 - A. Where traffic control signals are justified, the multi-way stop is an interim measure that can be installed quickly to control traffic while arrangements are being made for the installation of the traffic control signal.
 - B. Five or more reported crashes in a 12-month period that are susceptible to correction by a multi-way stop installation. Such crashes include right-turn and left-turn collisions as well as right-angle collisions.
 - C. Minimum volumes:
 1. The vehicular volume entering the intersection from the major street approaches (total of both approaches) averages at least 300 vehicles per hour for any 8 hours of an average day; and
 2. The combined vehicular, pedestrian, and bicycle volume entering the intersection from the minor street approaches (total of both approaches) averages at least 200 units per hour for the same 8 hours, with an average delay to minor-street vehicular traffic of at least 30 seconds per vehicle during the highest hour; but
 3. If the 85th-percentile approach speed of the major-street traffic exceeds 40 mph, the minimum vehicular volume warrants are 70 percent of the values provided in Items 1 and 2.
 - D. Where no single criterion is satisfied, but where Criteria B, C.1, and C.2 are all satisfied to 80 percent of the minimum values. Criterion C.3 is excluded from this condition.

Option:

5. Other criteria that may be considered in an engineering study include:
 - A. The need to control left turn conflicts.
 - B. The need to control vehicle/pedestrian conflicts near locations that generate high pedestrian volumes.
 - C. Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting cross traffic is also required to stop; and
 - D. An intersection of two residential neighborhood collector (through) streets of similar design and operating characteristics where multi-way stop control would improve traffic operational characteristics of the intersection.

GENERAL PHYSICAL CONDITIONS:

SERRANO PARKWAY

Functional Classification:	Major Collector
Length:	0.10 mile within study area (3.66 miles total length)
Limits:	250 feet east and west of Greenview Drive (West)
Alignment:	Straight
Grade:	Moderate grade, uphill to the east
Lanes	Four (4) lanes plus eastbound left turn lane
Surface:	Asphalt surface
Striping:	White dashed lane lines and edge lines
Median:	Concrete and landscaped median with a left turn pocket for the eastbound Serrano Parkway to northbound Greenview Drive (West) turning movement
Shoulders:	Both sides of Serrano Parkway have concrete curb and gutter with a bike lane.
Speed Limit:	45 miles per hour

GREENVIEW DRIVE

Functional Classification:	Private Gated Road
Length:	230 feet to access gate
Limits:	Serrano Parkway to 230 feet north of Serrano Parkway
Alignment:	Straight
Grade:	Moderate grade, uphill to the north
Surface:	Asphalt surface
Striping:	Crosswalk at Serrano Parkway
Median:	Concrete and landscaped median
Shoulders:	Concrete curb and gutter
Speed Limit:	Private Road

Serrano Parkway is intersected by Greenview Drive (West), Mile Post 2.33, within the study area. Traffic entering from Greenview Drive (West) is required to stop at Serrano Parkway. Greenview Drive (West) is controlled by a “STOP” sign, legend, and crosswalk at its intersection with Serrano Parkway.

No portion of the study section of Serrano Parkway or Greenview Drive (West) currently meets the minimum housing density requirements, or concentration of businesses necessary to qualify for a 25 mile per hour prima facie Residence District or Business District speed limit as defined in the *California Vehicle Code*.

The study section of Serrano Parkway was accepted into the County Maintained Roadway System in 2000. Serrano Parkway is a four (4) lane divided asphalt concrete roadway, in good condition, with a left turn pocket at the intersection for the eastbound Serrano Parkway to northbound Greenview Drive (West) turning movement. The pavement is approximately eighty (80) feet in width with four (4) foot wide asphalt concrete shoulders with sidewalks along both side of Serrano Parkway. A crosswalk with curb ramps crosses Greenview Drive (West) connecting the northwest and northeast

corners of the Serrano Parkway/Greenview Drive (West) intersection. Pavement markings consist of white dashed lane striping, and white edge line striping. A raised landscaped median is present between the eastbound and westbound lanes of Serrano Parkway except for the area within the intersection.

Greenview Drive (West) is a private gated road that accesses the Serrano Country Club and several Serrano residential subdivisions. Greenview Drive is a two-lane divided asphalt concrete roadway, in good condition, with no sidewalks. Greenview Drive has a raised landscaped median.

Serrano Parkway is classified as a Major Collector by the Federal Highway Administration (FHWA), as depicted by the California Road System (CRS) maps. Greenview Drive (West) is classified as a private road.

RECORD DATA:

Traffic Counts:

A review of the average daily traffic volume counts for Serrano Parkway revealed that counts were conducted by the County of El Dorado Transportation Division starting on August 22nd, 2019. The following counts were recorded:

Serrano Parkway:

<i>DATE</i>	<i>MILEPOST</i>	<i>SITE</i>	<i>ADT</i>
<i>August 22nd, 2019</i>	<i>2.28</i>	<i>West of Greenview Drive (West)</i>	<i>11,994</i>
<i>August 22nd, 2019</i>	<i>2.38</i>	<i>East of Greenview Drive (West)</i>	<i>9,526</i>
<i>Average Daily Traffic Counts</i>			<i>10,760</i>

A review of the average daily traffic volume counts for Greenview Drive (West) revealed that a count was conducted by the County of El Dorado Transportation Division starting on August 22nd, 2019. The following count was recorded:

Greenview Drive (West):

<i>DATE</i>	<i>MILEPOST</i>	<i>SITE</i>	<i>ADT</i>
<i>August 22nd, 2019</i>	<i>0.01</i>	<i>North of Serrano Parkway</i>	<i>3,496</i>
<i>Average Daily Traffic Counts</i>			<i>3,496</i>

Collision Data:

There have been three (3) collisions within the study area in the past three (3) years that are susceptible to correction by an “All Ways Stop”. However, two (2) of the collisions occurred in March and June of 2022. March’s collision was a head-on and June’s collision was a broadside.

FIELD REVIEW AND OBSERVATION:

One (1) radar speed survey was conducted by the El Dorado County Department of Transportation on Serrano Parkway on February 24, 2022 (see attached sheet). The following table reflects the result of the survey:

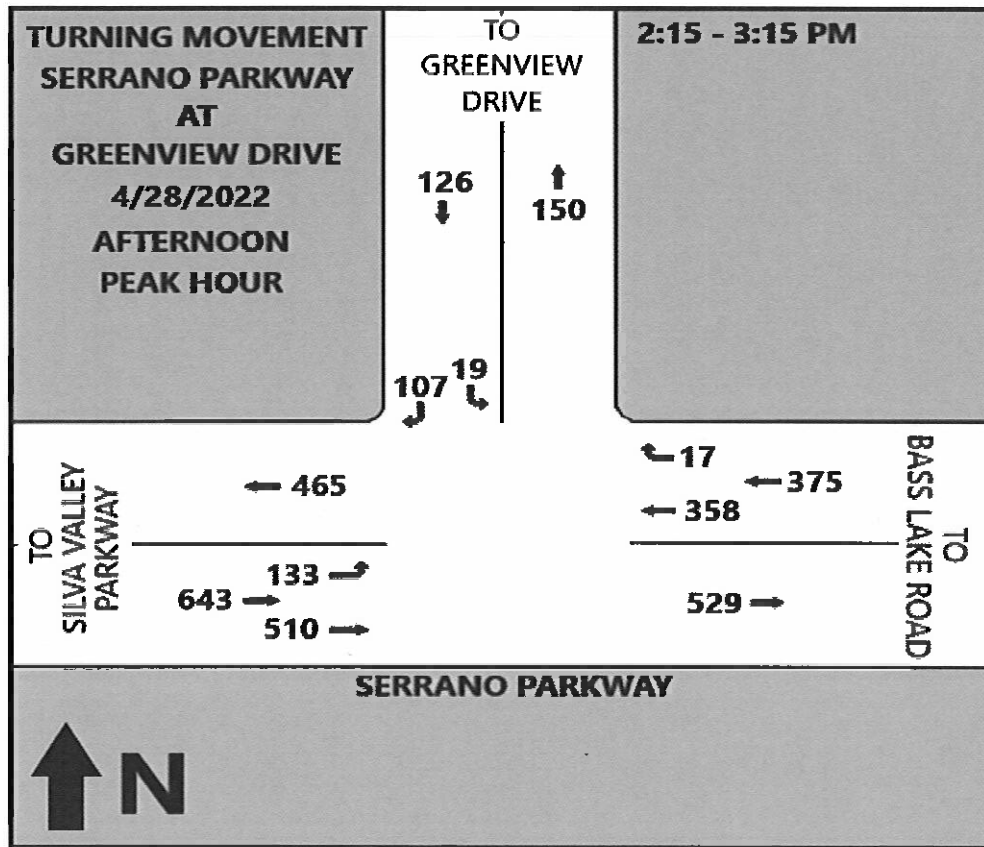
2022 SITE LOCATION	MILE POST	SPEED LIMIT	85% SPEED	10 MPH PACE	% IN PACE SPEED
550 feet west of Greenview Drive (West)	2.22	45 mph	46 mph	38-47 mph	76.2%

During the radar survey that took approximately thirty (30) minutes, two (2) bicyclists and six (6) pedestrians were observed along Serrano Parkway within the study section.

As part of this study, two turning movement counts were taken.

On April 28th, 2022, the following results were recorded for the intersection of Serrano Parkway and Greenview Drive (See attached Turning Movement Sheet).

File Name: Turning Movement: Serrano Parkway at Greenview Drive (West)											
Start Date: 4/28/2022											
Start Time: 7:00 AM											
	GREENVIEW From North			SERRANO From East			SERRANO From West				
Time	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Peds	Bikes
7:00 AM	14		3	4	63			26	11	1	1
7:15 AM	21		7	7	109			24	13	3	
7:30 AM	35		0	3	127			35	15	3	1
7:45 AM	42		5	6	149			93	23	3	2
8:00 AM	19		3	3	174			88	25	1	2
8:15 AM	33		4	8	129			74	23		
8:30 AM	24		4	2	85			71	20	3	
8:45 AM	20		2	4	72			42	19		
2:00 PM	30		3	8	95			82	20	5	
2:15 PM	27		0	4	84			136	33	7	
2:30 PM	21		7	3	87			147	31		
2:45 PM	31		4	6	92			130	35		
3:00 PM	28		8	4	95			97	34	1	
3:15 PM	30		8	7	63			108	27	4	
3:30 PM	23		7	9	79			129	43	2	2
3:45 PM	27		11	8	99			95	38		4
4:00 PM	18		3	6	86			104	33		2



The Caltrans Department of Transportation Highway Design Manual indicates that the minimum stopping sight distance requirement for an eighty-fifth percentile speed of 45 MPH is 350 feet. The corner sight distance out of Greenview Drive (West) is at minimal standards looking both easterly and westerly. The eastbound Serrano Parkway to northbound Greenview Drive (West) turning movement sight distance also meets minimal standards.

The El Dorado County Department of Transportation performed a Synchro Traffic Analysis Model using the traffic count data collected at the study intersection on April 28th, 2022. The Synchro Traffic Analysis Model determines if the intersection meets Traffic Signal Warrants, Multiway Stop Warrants and other pertaining traffic data.

The El Dorado County Department of Transportation also performed a Sensitivity Analysis to determine, if the intersection did not meet Traffic Signal or Multiway Stop Warrants, how much additional traffic would be required to meet Multiway Stop Warrants at this intersection.

The El Dorado County Department of Transportation also reviewed a proposal to add a crosswalk crossing Serrano Parkway on either the east side or the west side of the Serrano Parkway/Greenview Drive (West) intersection. Due to the existing geometrics of the intersection and Serrano Parkway’s moderate uphill grade to the east, adding a crosswalk that meets the “Americans With Disabilities Act” Standards is not cost appropriate for this project.

FINDINGS AND CONCLUSIONS:

The study section of Serrano Parkway for this survey is 500 feet long and runs east/west with Greenview Drive (West) being a north/south roadway, 230 feet in length from Serrano Parkway to the Serrano access gate. Based on the study, Serrano Parkway at Greenview Drive (West) has been found to have the following:

- Serrano Parkway has a posted and radar enforced speed of 45 miles per hour.
- Serrano Parkway within the study area has a recorded 85th percentile speed of 46 miles per hour.
- Serrano Parkway within the study area has a calculated average daily traffic volume of 10,760 vehicles per day.
- Serrano Parkway within the study area is straight with a moderate uphill grade to the east.
- Serrano Parkway is classified as a Major Collector, serving several Serrano subdivisions. In addition, it also serves as an arterial connecting Bass Lake Road with Silva Valley Parkway and El Dorado Hills Boulevard.
- Serrano Parkway does not qualify as a “Residence District” or “Business District”.
- Greenview Drive (West) is a private road.
- Greenview Drive (West) is straight with an uphill grade to the north.
- The calculated average daily traffic volume was 3,496 vehicles per day for Greenview Drive (West).
- There is a left turn pocket for eastbound traffic on Serrano Parkway at Greenview Drive (West).
- There are existing multiway stop-controlled intersections 450 feet to the east (Serrano Parkway at Villaggio Drive) and 1,270 feet to the west. (Serrano Parkway at Terracina Drive)
- Currently the Serrano Parkway/Greenview Drive intersection operates at “Level of Service B” (“LOS B”).

As noted above, in the Record Data Section, the 2014 California Manual on Uniform Traffic Control Devices (CAMUTCD) provides guidance criteria for determining whether multi-way stop control is warranted.

A. Signal Warrants:

- A traffic signal is not warranted at the Serrano Parkway/Greenview Drive (West) intersection. Therefore, the intersection does not currently meet standard “A” for a multiway stop installation.

B. Number of Collisions Warrant:

- There have been two (2) CHP reported collisions so far in 2022. Both collisions are susceptible to correction by a multiway stop. A minimum three (3) CHP reported collisions per year that are susceptible to correction by a multi-way stop installation is the standard for a multiway stop at this intersection. This intersection is showing a growing trend of collisions, in the past year, that could be mitigated by an “All Way Stop” controlled

intersection. Because of this growing trend of collisions, this warrant may be met by March of 2023.

C. Minimum Volume Warrant:

- To meet this standard, both the major street approaches and the minor street approaches must meet the vehicular volume standard for a multiway stop installation.
 1. The combined vehicular, pedestrian, and bicycle volumes entering the intersection from the major street approaches (Serrano Parkway, total of both approaches) must average at least 210 vehicles per hour for any 8 hours of an average day. This major street volume does meet the standard for a multiway stop at this intersection.
 2. The combined vehicular, pedestrian, and bicycle volumes entering the Serrano Parkway/Greenview Drive (West) intersection from the minor street approach (Greenview Drive) must average at least 140 vehicles for the same 8 hours. Currently the volume of entering vehicles is slightly under this threshold. However, traffic is projected to increase to above this threshold soon as the Serrano Subdivisions continue constructing new homes.

The 2014 California Manual on Uniform Traffic Control Devices (CAMUTCD) states that the following criteria may also be considered in an engineering study.

- The need to control left turn conflicts
- Locations where a road user, after stopping, cannot see conflicting traffic and is not able to negotiate the intersection unless conflicting traffic is also required to stop.

The minimum stopping sight distance requirement for an eighty-fifth percentile speed of 45 MPH is 350 feet. The Serrano Parkway/Greenview Drive intersection sight distances are at minimal standards. The El Dorado County Department of Transportation has, in the past, twice recommended that the Serrano Homeowners Association remove, or cut short, the median vegetation and remove the trees to the east of Greenview Drive (West) to increase the intersection site distances. During the July 13th, 2022, Traffic Advisory Committee Meeting these site distances were again discussed. In addition, it was brought to the attention of the Traffic Advisory Committee that two collisions had occurred at the intersection, in March of 2022 and June of 2022. Both collisions were between vehicles turning left from eastbound Serrano Parkway to northbound Greenview Drive (West) and vehicles traveling westbound on Serrano Parkway. The Traffic Advisory Committee during the meeting's discussion period again recommended to the Serrano Homeowners Association that the median and corner vegetation be removed or trimmed to improve site distances. Maintaining the median vegetation and monitoring the size and density of trees near the intersection is a constant task. In the interest of public safety, the possible sight distance limitations justify an "All Way Stop".

El Dorado County Department of Transportation Sensitivity Test Result:

In Serrano and neighboring subdivisions, as residential build out continues, average daily traffic counts, pedestrian counts and bicyclist counts are projected to increase on Serrano Parkway and Greenview Drive (West). In May of 2022, the intersection of Serrano Parkway/Greenview Drive was

analyzed to approximate how many additional dwelling units would trigger the “All Way Stop” minor street approach warrant. Based on traffic volume, an estimated increase of 280 to 300 vehicles per day would need to use Greenview Drive (West) for the peak eight (8) hours. Assuming ten (10) vehicle trips per day per dwelling unit (Industry Standard for subdivisions like Serrano). At a minimum, roughly, twenty-eight (28) to thirty (30) new dwelling units would need to be occupied to meet the minimum minor street approach traffic volume warrant for a multiway stop at the Serrano Parkway/Greenview Drive (West) intersection.

DISCUSSION

Based on the results of the survey and the requirements of the California Manual on Uniform Traffic Control Devices, currently the “All Way Stop” is not warranted at this location. However, due to the following, the County recommends the installation of an “All-Way Stop” at the intersection of Serrano Parkway and Greenview Drive (West).

- Subdivisions accessed by Greenview Drive (West) are still in the building/construction phase and soon are projected to build out to where the “All Way Stop” at the intersection of Serrano Parkway/Greenview Drive (West) will be warranted.
- The Serrano Parkway/Greenview Drive (West) intersection is landscaped with vegetation of varying heights and densities. Although intersection sight distances meet minimal standards, meeting those standards requires constant vegetation maintenance. In the interest of public safety, an “All Way Stop” is recommended.
- Currently the Serrano Parkway/Greenview Drive (West) intersection has had two collisions since March of 2022 that are susceptible to correction by an “All Way Stop”. By March of 2023, the intersection may meet the warrant of three collisions that are susceptible to correction by an “All Way Stop”.

RECOMMENDATION

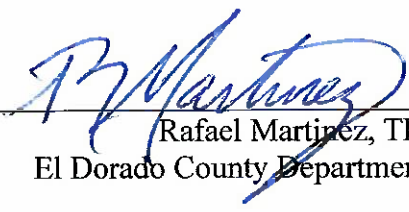
Based on the findings of this survey, it is recommended that:

1. For public safety, the Traffic Advisory Committee approve the installation of “STOP” signs, associated striping and legends stopping eastbound and westbound traffic on Serrano Parkway at its intersection with Greenview Drive (West).

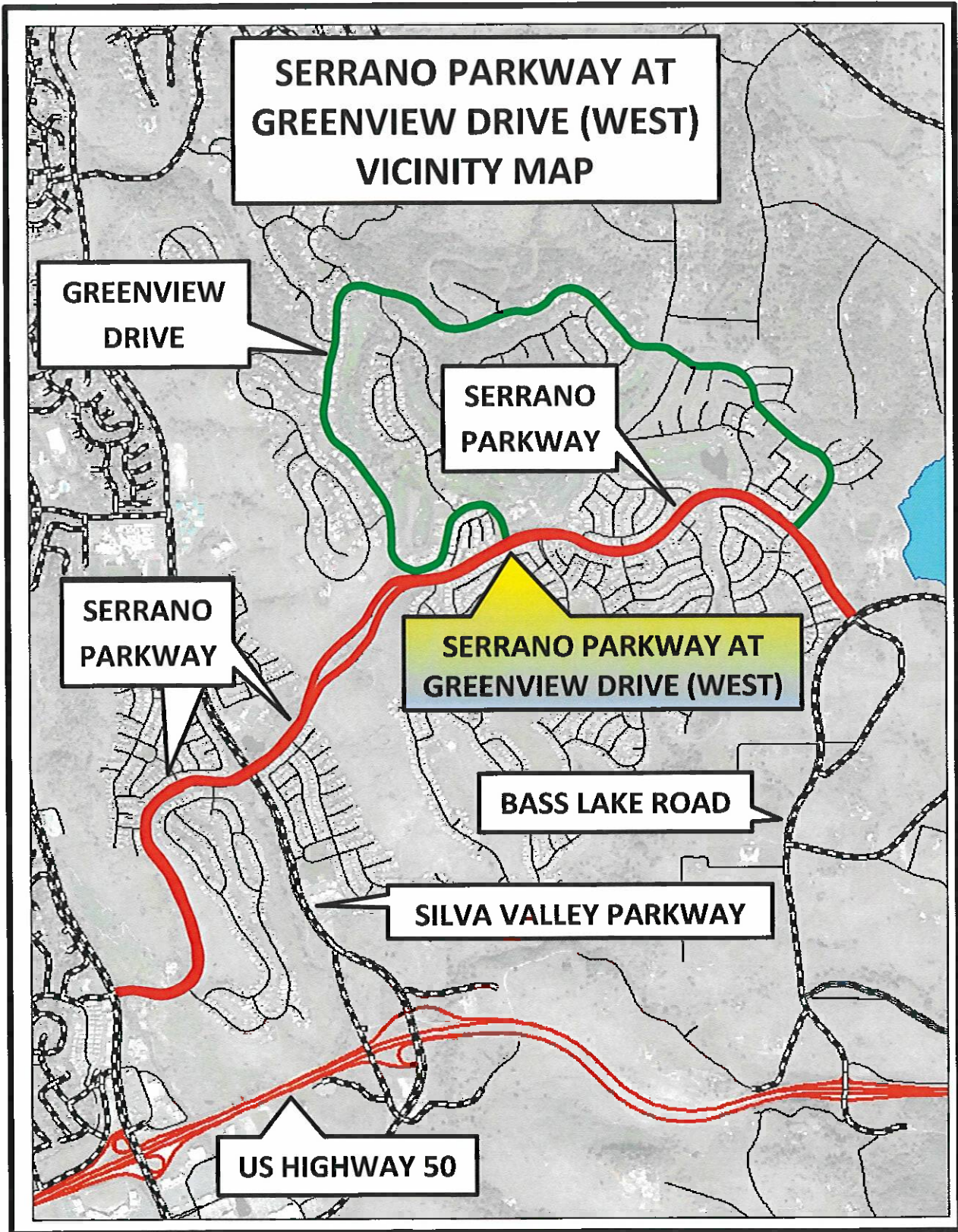
Prepared by:



Michael Bastian
Senior Engineering Technician

Approved by:  on 1/10/23
Rafael Martinez, TE, Director Date
El Dorado County Department of Transportation

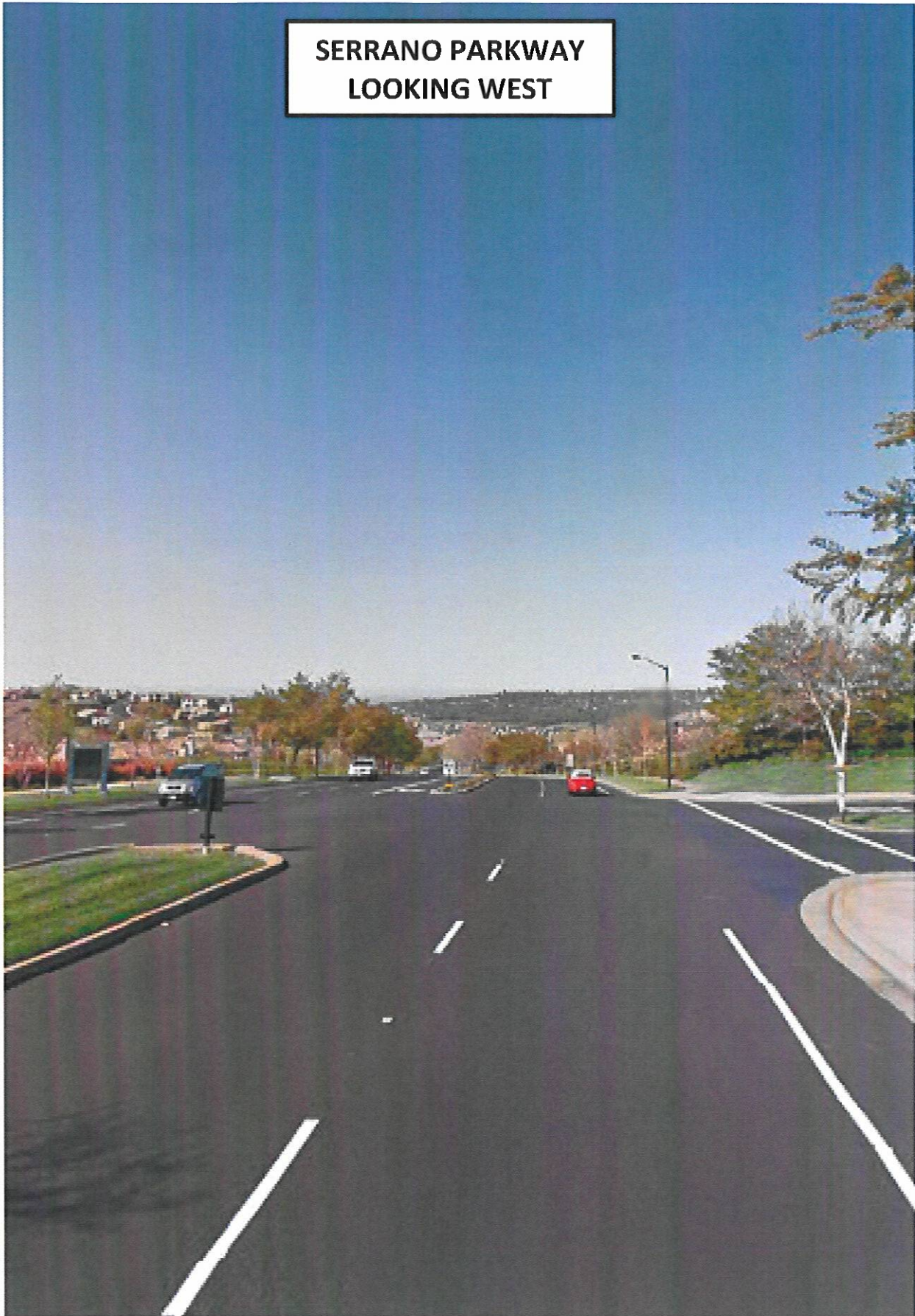
- Attachments: Vicinity Map (1)
Vicinity Photos (3)
Turning Movement (1)
Traffic Counts (6)
Collision Summary (4)
Speed Survey (1)



**SERRANO PARKWAY
LOOKING EAST**



**SERRANO PARKWAY
LOOKING WEST**



**GREENVIEW DRIVE
LOOKING NORTH**



File Name: Turning Movement: Serrano Parkway at Greenview Drive (West)

Start Date: 4/28/2022

Start Time: 7:00 AM

Start	GREENVIEW From North			SERRANO From East			SERRANO From West			Peds	Bikes
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left		
7:00 AM	14		3	4	63			26	11	1	1
7:15 AM	21		7	7	109			24	13	3	
7:30 AM	35		0	3	127			35	15	3	1
7:45 AM	42		5	6	149			93	23	3	2
8:00 AM	19		3	3	174			88	25	1	2
8:15 AM	33		4	8	129			74	23		
8:30 AM	24		4	2	85			71	20	3	
8:45 AM	20		2	4	72			42	19		
2:00 PM	30		3	8	95			82	20	5	
2:15 PM	27		0	4	84			136	33	7	
2:30 PM	21		7	3	87			147	31		
2:45 PM	31		4	6	92			130	35		
3:00 PM	28		8	4	95			97	34	1	
3:15 PM	30		8	7	63			108	27	4	
3:30 PM	23		7	9	79			129	43	2	2
3:45 PM	27		11	8	99			95	38		4
4:00 PM	18		3	6	86			104	33		2

**EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION**

Count Summary Beginning: November 9, 2018

Count Station:	Special	Counter ID:	61
City/Town:	Serrano	Mile Post:	
Road Name:	Serrano Pkwy	Location:	E of Greenview Dr (W)
Lanes:	2	Direction:	EASTBOUND

Date	11	12	13	14	15	9	10	Weekly	Wk Day	
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.	
Time										
100	13	6	5	6	6	7	14	8	6	
200	8	3	2	3	0	4	11	4	2	
300	7	3	4	3	10	5	6	5	5	
400	9	6	5	5	4	4	7	6	5	
500	9	5	11	6	11	5	7	8	8	
600	18	38	50	74	45	60	23	44	53	
700	47	108	238	238	222	252	40	164	212	
800	76	146	256	228	246	252	114	188	226	
900	141	166	168	174	152	196	177	168	171	
1000	210	203	211	196	189	226	232	210	205	
1100	183	273	236	244	233	258	224	236	249	
1200	249	296	248	296	308	326	306	290	295	
1300	295	297	280	400	288	334	298	313	320	
1400	267	298	402	286	409	450	283	342	369	
1500	288	364	458	432	490	477	317	404	444	
1600	288	384	449	431	372	495	311	390	426	
1700	280	432	542	503	474	486	336	436	487	
1800	225	312	394	386	386	356	256	331	367	
1900	199	225	268	264	257	270	159	235	257	
2000	140	170	211	232	198	223	150	189	207	
2100	114	120	134	130	127	202	168	142	143	
2200	66	35	48	49	90	180	138	87	80	
2300	49	19	29	41	29	71	59	42	38	
2400	23	15	24	8	20	46	38	25	23	
Totals	3204	3924	4673	4635	4566	5185	3674	4266	4597	
AM Peak Hr	12:00	12:00	8:00	12:00	12:00	12:00	12:00	12:00	12:00	
AM Count	249	296	256	296	308	326	306	290	295	
PM Peak Hr	1:00	5:00	5:00	5:00	3:00	4:00	5:00	5:00	5:00	
PM Count	295	432	542	503	490	495	336	436	487	

TOTAL ADT: 9,205

**EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION**

Count Summary Beginning: November 9, 2018

Count Station:	Special	Counter ID:	61
City/Town:	Serrano	Mile Post:	
Road Name:	Serrano Pkwy	Location:	E of Greenview Dr (W)
Lanes:	2	Direction:	WESTBOUND

Date	11	12	13	14	15	9	10	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	10	2	4	1	4	3	10	5	3
200	6	6	9	3	6	8	8	7	6
300	10	14	11	7	11	8	6	10	10
400	16	27	40	27	25	24	7	24	29
500	15	58	73	77	76	66	18	55	70
600	51	123	253	236	231	236	72	172	216
700	106	268	676	668	609	682	142	450	581
800	198	350	456	502	456	492	222	382	451
900	233	323	323	290	301	311	312	299	310
1000	294	292	288	276	294	295	344	298	289
1100	262	360	268	291	266	278	316	292	293
1200	244	304	242	326	270	318	284	284	292
1300	240	305	289	259	296	344	309	292	299
1400	214	275	315	312	336	356	276	298	319
1500	239	304	324	313	261	370	260	296	314
1600	276	293	286	270	296	314	250	284	292
1700	211	266	298	276	284	341	258	276	293
1800	161	178	189	218	218	254	188	201	211
1900	118	96	132	116	102	158	114	119	121
2000	101	81	72	100	84	86	82	87	85
2100	74	44	54	47	53	128	110	73	65
2200	56	17	18	24	25	88	64	42	34
2300	24	9	9	14	12	44	38	21	18
2400	14	4	6	7	4	24	16	11	9
Totals	3173	3999	4635	4660	4520	5228	3706	4274	4608
AM Peak Hr	10:00	11:00	7:00	7:00	7:00	7:00	10:00	7:00	7:00
AM Count	294	360	676	668	609	682	344	450	581
PM Peak Hr	4:00	1:00	3:00	3:00	2:00	3:00	1:00	2:00	2:00
PM Count	276	305	324	313	336	370	309	298	319

TOTAL ADT: 9,205

**EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION**

Count Summary Beginning: November 9, 2018

Count Station:	Special	Counter ID:	68
City/Town:	Serrano	Mile Post:	
Road Name:	Serrano Pkwy	Location:	W of Greenview Dr (W)
Lanes:	2	Direction:	EASTBOUND

Date	11	12	13	14	15	9	10	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	8	1	4	1	1	6	5	4	3
200	4	1	1	2	0	2	6	2	1
300	3	2	2	0	3	2	1	2	2
400	3	6	8	7	6	10	8	7	7
500	5	9	14	16	11	17	9	12	13
600	9	42	62	70	47	62	20	45	57
700	23	98	218	218	216	208	52	148	192
800	46	118	233	225	222	228	110	169	205
900	98	132	172	168	170	180	104	146	164
1000	136	167	181	193	174	192	173	174	181
1100	142	224	173	207	211	211	206	196	205
1200	189	234	244	254	266	290	214	242	258
1300	212	235	224	325	236	255	230	245	255
1400	171	230	292	268	306	335	191	256	286
1500	210	274	350	340	340	362	233	301	333
1600	180	251	312	310	277	342	218	270	298
1700	162	286	342	306	358	322	214	284	323
1800	152	188	242	244	260	234	144	209	234
1900	116	135	179	175	168	159	102	148	163
2000	89	111	156	131	125	150	111	125	135
2100	78	63	92	92	85	137	118	95	94
2200	46	32	22	35	47	108	102	56	49
2300	17	11	12	20	21	54	35	24	24
2400	6	14	6	8	15	24	21	13	13
Totals	2105	2864	3541	3615	3565	3890	2627	3172	3495
AM Peak Hr	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00	12:00
AM Count	189	234	244	254	266	290	214	242	258
PM Peak Hr	1:00	5:00	3:00	3:00	5:00	3:00	3:00	3:00	3:00
PM Count	212	286	350	340	358	362	233	301	333

TOTAL ADT: 10,703

**EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION**

Count Summary Beginning: November 9, 2018

Count Station:	Special	Counter ID:	68
City/Town:	Serrano	Mile Post:	
Road Name:	Serrano Pkwy	Location:	W of Greenview Dr (W)
Lanes:	2	Direction:	WESTBOUND

Date	11	12	13	14	15	9	10	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	12	4	5	0	5	4	18	7	4
200	8	8	12	6	9	10	14	10	9
300	14	16	13	16	16	12	10	14	15
400	27	50	66	48	52	44	18	44	52
500	34	98	134	126	135	120	34	97	123
600	81	216	404	375	394	346	108	275	347
700	182	438	1008	1055	980	966	236	695	889
800	306	546	668	785	708	718	332	580	685
900	362	495	513	484	532	447	455	470	494
1000	406	442	484	456	454	450	492	455	457
1100	377	508	428	438	437	443	456	441	451
1200	334	418	378	526	402	469	380	415	439
1300	347	444	462	459	495	473	434	445	467
1400	309	402	509	484	541	535	385	452	494
1500	334	448	504	511	446	558	350	450	493
1600	368	429	497	468	504	487	388	449	477
1700	324	396	495	482	434	508	396	434	463
1800	270	260	301	336	336	374	286	309	321
1900	184	156	214	192	182	239	178	192	197
2000	152	134	120	152	116	154	134	137	135
2100	127	57	82	79	88	164	192	113	94
2200	78	30	26	36	76	141	90	68	62
2300	32	9	14	24	28	58	78	35	27
2400	20	7	10	8	8	36	38	18	14
Totals	4688	6011	7347	7546	7378	7756	5502	6604	7208
AM Peak Hr	10:00	8:00	7:00	7:00	7:00	7:00	10:00	7:00	7:00
AM Count	406	546	1008	1055	980	966	492	695	889
PM Peak Hr	4:00	3:00	2:00	3:00	2:00	3:00	1:00	2:00	2:00
PM Count	368	448	509	511	541	558	434	452	494

TOTAL ADT: 10,703

**EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION**

Count Summary Beginning: August 22, 2019

Count Station:	Special	Counter ID:	61
City/Town:	Serrano	Mile Post:	
Road Name:	Greenview Dr (W)	Location:	N of Serrano Pkwy
Lanes:	2	Direction:	NORTHBOUND

Date	25	26	27	28	22	23	24	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	18	2	5	2	7	4	22	9	4
200	5	3	2	3	2	4	3	3	3
300	5	2	1	1	3	1	8	3	2
400	3	1	1	1	2	4	1	2	2
500	10	5	8	8	6	8	5	7	7
600	6	10	8	14	6	12	7	9	10
700	10	41	39	40	38	32	16	31	38
800	22	66	103	86	96	96	42	73	89
900	30	120	116	144	118	123	45	99	124
1000	60	142	107	87	76	93	62	90	101
1100	100	124	118	86	98	87	94	101	103
1200	93	92	92	111	120	138	128	111	111
1300	132	99	116	132	131	130	121	123	122
1400	120	106	95	138	124	106	106	114	114
1500	90	138	132	134	108	122	110	119	127
1600	103	133	159	165	182	164	115	146	161
1700	86	162	146	176	167	156	106	143	161
1800	65	146	168	160	145	136	141	137	151
1900	84	123	120	132	132	116	104	116	125
2000	68	74	102	118	90	94	78	89	96
2100	57	71	74	70	91	77	85	75	77
2200	54	46	56	48	56	57	66	55	53
2300	22	22	23	20	28	46	36	28	28
2400	6	6	11	6	12	35	19	14	14
Totals	1249	1734	1802	1882	1838	1841	1520	1695	1819
AM Peak Hr	11:00	10:00	11:00	9:00	12:00	12:00	12:00	12:00	9:00
AM Count	100	142	118	144	120	138	128	111	124
PM Peak Hr	1:00	5:00	6:00	5:00	4:00	4:00	6:00	4:00	5:00
PM Count	132	162	168	176	182	164	141	146	161

TOTAL ADT: 3,496

**EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION**

Count Summary Beginning: August 22, 2019

Count Station:	Special	Counter ID:	61
City/Town:	Serrano	Mile Post:	
Road Name:	Greenview Dr (W)	Location:	N of Serrano Pkwy
Lanes:	2	Direction:	SOUTHBOUND

Date	25	26	27	28	22	23	24	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100	35	5	3	5	8	4	14	11	5
200	6	1	1	2	2	2	6	3	2
300	1	0	2	2	3	0	1	1	1
400	1	3	2	1	1	2	0	1	2
500	5	9	13	10	13	10	4	9	11
600	5	21	19	18	17	20	9	16	19
700	11	56	59	66	63	55	24	48	60
800	37	158	160	161	150	138	66	124	153
900	70	122	132	146	114	115	62	109	126
1000	79	120	123	94	118	135	104	110	118
1100	94	102	120	120	108	108	94	107	112
1200	106	112	120	108	126	120	123	116	117
1300	93	106	104	138	110	122	114	112	116
1400	100	111	105	140	119	112	102	113	117
1500	85	130	132	126	130	118	86	115	127
1600	91	99	127	154	113	100	74	108	119
1700	96	126	102	98	108	108	92	104	108
1800	80	124	130	118	111	109	68	106	118
1900	78	78	83	78	101	108	74	86	90
2000	52	98	52	56	48	82	54	63	67
2100	58	36	42	53	49	49	61	50	46
2200	31	10	11	17	27	35	55	27	20
2300	8	9	10	15	13	33	45	19	16
2400	5	2	3	6	13	12	46	12	7
Totals	1227	1638	1655	1732	1665	1697	1378	1570	1677
AM Peak Hr	12:00	8:00	8:00	8:00	8:00	8:00	12:00	8:00	8:00
AM Count	106	158	160	161	150	138	123	124	153
PM Peak Hr	2:00	3:00	3:00	4:00	3:00	1:00	1:00	3:00	3:00
PM Count	100	130	132	154	130	122	114	115	127

TOTAL ADT: 3,496

EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION
ACCIDENT SITE ANALYSIS SUMMARY FOR
SERRANO PW

Report Date: 7/1/2022

For the period beginning January 1, 2012 and ending December 31, 2021

Beginning at Mile Post 2.28		and Ending at Mile Post 2.38		Roadway Section Length = 0.10	
2012	Number of Accidents: 1	Number of Injuries: 0	Number of Fatalities: 0		
2015	Number of Accidents: 2	Number of Injuries: 2	Number of Fatalities: 0		
2020	Number of Accidents: 1	Number of Injuries: 1	Number of Fatalities: 0		
Accident Total = 4		Injury Total = 3		Fatality Total = 0	

**EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION**

2012 C.H.P. ACCIDENT SUMMARY FOR SERRANO PW FROM MP-2.28 TO MP-2.38

Report Date: 7/1/2022

The following accident data is based on the C.H.P. Accident Reports for the one year period from January 1, 2012, through December 31, 2012.

The following code numbers have been used to classify the various major types of accidents:

- | | | |
|------------------------------|-----------------------------------|---------------------|
| 1 = Headon | 2 = Sideswipe | 3 = Rearend |
| 4 = Broadside | 5 = Hit Object | 6 = Overturned |
| 7 = Pedestrian Involved | 8 = Bicycle Involved | 9 = Animal Involved |
| 10 = Parked Vehicle Involved | 11 = Snow Removal Equip. Involved | 12 = Other |
| 13 = Motorcycle Involved | 14 = School Bus Involved | |

Street	Mile Post	Dist.	Dir.	Cross Street	# Veh	Injury	Fatal	Time	Cond.	Imp.	Code	CHP #
SERRANO PW	2.33		AT	of GREENVIEW DR (W)	2	0	0	DAY	DRY	HNBD	4	2012080071

Total Number of Accidents: 1
 Total Number of Injuries: 0
 Total Number of Fatalities: 0

**EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION**

2015 C.H.P. ACCIDENT SUMMARY FOR SERRANO PW FROM MP-2.28 TO MP-2.38

Report Date: 7/1/2022

The following accident data is based on the C.H.P. Accident Reports for the one year period from January 1, 2015, through December 31, 2015.

The following code numbers have been used to classify the various major types of accidents:

- | | | |
|------------------------------|-----------------------------------|---------------------|
| 1 = Headon | 2 = Sideswipe | 3 = Rearend |
| 4 = Broadside | 5 = Hit Object | 6 = Overturned |
| 7 = Pedestrian Involved | 8 = Bicycle Involved | 9 = Animal Involved |
| 10 = Parked Vehicle Involved | 11 = Snow Removal Equip. Involved | 12 = Other |
| 13 = Motorcycle Involved | 14 = School Bus Involved | |

Street	Mile Post	Dist.	Dir.	Cross Street	# Veh	Injury	Fatal	Time	Cond.	Imp.	Code	CHP #
SERRANO PW	2.33		AT	of GREENVIEW DR (W)	2	2	0	DARK	DRY	HNBD	4	2015040022
SERRANO PW	2.36	140	EAST	of GREENVIEW DR (W)	1	0	0	DARK	DRY	HNBD	5	2015020046

Total Number of Accidents: 2
 Total Number of Injuries: 2
 Total Number of Fatalities: 0

**EL DORADO COUNTY
DEPARTMENT OF TRANSPORTATION**

2020 C.H.P. ACCIDENT SUMMARY FOR SERRANO PW FROM MP-2.28 TO MP-2.38

Report Date: 7/1/2022

The following accident data is based on the C.H.P. Accident Reports for the one year period from January 1, 2020, through December 31, 2020.

The following code numbers have been used to classify the various major types of accidents:

- | | | |
|------------------------------|-----------------------------------|---------------------|
| 1 = Headon | 2 = Sideswipe | 3 = Rearend |
| 4 = Broadside | 5 = Hit Object | 6 = Overturned |
| 7 = Pedestrian Involved | 8 = Bicycle Involved | 9 = Animal Involved |
| 10 = Parked Vehicle Involved | 11 = Snow Removal Equip. Involved | 12 = Other |
| 13 = Motorcycle Involved | 14 = School Bus Involved | |

Street	Mile Post	Dist.	Dir.	Cross Street	# Veh	Injury	Fatal	Time	Cond.	Imp.	Code	CHP #
SERRANO PW	2.33		AT	of GREENVIEW DR (W)	2	1	0	DAY	DRY	HNBD	4	2020100106

Total Number of Accidents: 1
 Total Number of Injuries: 1
 Total Number of Fatalities: 0

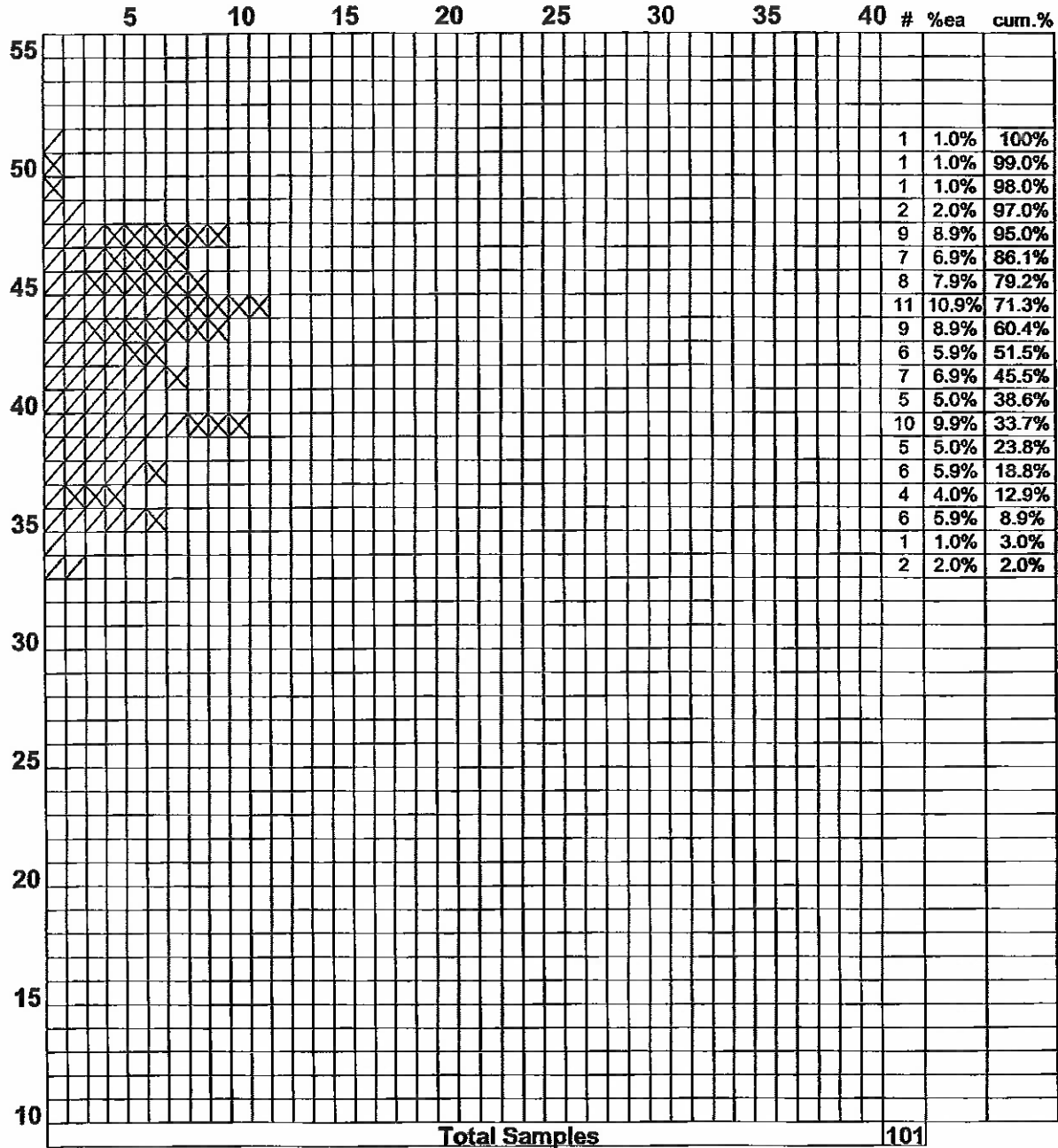
**County of El Dorado
Transportation Division**

Street Name: SERRANO PKWY 2022 2.22

Limits: TERRACINA DR to GREENVIEW DR

Radar Survey Sheet

X=West / =East



85th Percentile Speed: 46
 50th Percentile Speed: 42
 15th Percentile Speed: 37
 10 MPH Pace: 38-47
 Number in Pace: 77
 Percent in Pace: 76.2%

Date of Survey: 2/24/2022

Weather: Clear

Road Condition: Good

Street Class.:

Observer: M. BASTIAN

Conditions not Apparent: MP 2.22, BIKES 2, PEDS 6

Start Time: 12:40

End Time: 13:05

Posted Speed: 45