

#### **SPEED ZONE SURVEY**

#### WHITE ROCK ROAD

(No. 34)

#### FROM THE SACRAMENTO COUNTY LINE TO LATROBE ROAD (No. 18)

	EEE APPROVED STAFF'S RECO	
[ ] COMMITT	EE REQUESTED FURTHER AC	TION.
Action:	APPROVED	

### TRANSPORTATION DIVISION ENGINEERING AND TRAFFIC SURVEY

Location: White Rock Road (No. 34) from the Sacramento County Line to Latrobe Road

(No. 18)

**Subject:** Speed Zone Survey (Update)

**Date:** April 8, 2015

#### **REQUEST REFERENCE:**

It is the intent of this study to provide an update to the speed zone survey approved by the Traffic Advisory Committee in February of 2011. For continued radar enforcement, the *California Vehicle Code*, Section 40802, requires that an "Engineering and Traffic Survey" be completed every five (5) years where enforcement involves the use of radar or other electronic devices that measure the speed of moving objects.

The scope of this study is limited to determining if the speed limits currently posted on White Rock Road between the Sacramento County Line and Latrobe Road are in compliance with current provisions of the *California Vehicle Code* governing the establishment of speed zones.

All subsequent references to White Rock Road apply only to that portion from Sacramento County Line to Latrobe Road.

#### **GENERAL PHYSICAL CONDITIONS:**

White Rock Road exhibits the following characteristics:

Functional Classification: Minor Arterial from County Line to Latrobe Road

Study Length: 1.13 miles

Limits: From Sacramento County Line to Latrobe Road

Alignment: Relatively straight, some mild curves

Grade: Moderate grades
Surface: Asphalt surface

Width Varies, from 2 lane undivided to 4 lane divided Striping: Centerline and bike lane or edge-line striping

Shoulders: Most paved with Bike Lane

Speed Limit: Posted 50 miles per hour from Sacramento County Line to Latrobe Road

White Rock Road is classified as a Minor Arterial by the county road classification system. The adjacent land use is primarily residential subdivisions with some industrial and commercial parcels fronting White Rock Road. Pavement markings on White Rock Road consist of a double yellow

centerline and bike lane striping or edge line striping. Left turn lanes have been provided at all intersections; right turn lanes have been provided at Manchester Drive and the entrance to the Rolling Hills Christian Church. Traffic on White Rock Road is controlled by traffic signals at its intersection with Stonebriar Drive/Four Seasons Drive, Windfield Way/Town Center Boulevard, and Latrobe Road.

White Rock Road consists of two (2) lanes undivided from Sacramento County Line to Manchester Drive. The portion of White Rock Road between Manchester Drive and Latrobe Road consists of four (4) lanes with a median. Sidewalks are present along the south side of White Rock Road from west of Carson Crossing Drive to Stonebriar Drive/Four Seasons Drive and along both sides from Stonebriar Drive/Four Seasons Drive to Latrobe Road.

#### **RECORD DATA:**

The existing speed limits on White Rock Road are sanctioned by Resolution No. 034-2011, which states:

"(fm) White Rock Road (No. 34) fifty (50) miles per hour from the Sacramento County Line to Latrobe Road (No. 18)"

Traffic volume counts on White Rock Road were recorded by the County of El Dorado Community Development Agency Transportation Division in December of 2014, with the following results:

DATE	MILEPOST	SITE	ADT
December 2014	0.00	At Sacramento County Line	7,892
December 2014	1.11	100' w/o Latrobe Road	10,567
Average Daily Traff	ic Counts		9,230

The following count data is presented from the 2009 study for comparison purposes:

DATE	MILEPOST	SITE	ADT	
December 2009	0.00	At Sacramento County Line	7,270	
December 2009	1.11	100' w/o Latrobe Road	9,942	
Average Daily Traff	ic Counts		8,606	

A review of the accident data provided by the California Highway Patrol for a three (3) year period from January 1, 2012, through December 31, 2014, disclosed a total of 10 reported accidents for White Rock Road.

- 5 Reported Accidents in 2012 resulting in two (2) Injuries and no Fatalities
- 3 Reported Accidents in 2013 resulting in four (4) Injuries and no Fatalities
- 2 Reported Accidents in 2014 resulting in one (1) Injury and no Fatalities

The 10 reported accidents may be categorized as follows:

- 5 Rear end
- 4 Broadside
- 1 Hit Object

Summary of Accident Data for White Rock Road from 1/1/12 to 12/31/14						
Accident Rate 0.99 Accidents per Million Vehicles Miles						
Number of Reported Accidents 10						
Average Daily Traffic Volume	9,230 Vehicles					

The accident rate indicated in the above table, 0.99 Accidents per Million Vehicles Miles (Acc. / M.V.M.), is lower the countywide average rate of 1.70 Acc. /M.V.M. normally experienced along similar sections of collector roads. It should be noted that the rate of 0.99 Acc. /M.V.M. is lower than the 2010 study that was recorded at 1.60 Acc./M.V.M. The following table provides a summary of this data:

Summary of accident data for White Rock Road from 1/1/07 to 12/31/09					
Accident Rate	1.60 Accidents per Million Vehicles Miles				
Number of Reported Accidents	17				
Average Daily Traffic Volume	8,606 Vehicles				

As can be seen from the data presented, there has been an improvement in the calculated accident rate since completion of the previous study.

The California Vehicle Code, Section 22358, allows local authorities to establish speed limits based on an "Engineering and Traffic Survey". The Vehicle Code goes on, in Section 40801 to prohibit the use of "speed traps" for the purpose of speed enforcement and, in Section 40802, defines "speed trap". Section 40802 also indicates that an "Engineering and Traffic Survey" is required where speed enforcement involves the use of radar and establishes the frequency with which surveys must be conducted for continued radar enforcement. In order to comply with the provisions of the Vehicle Code, and insure that radar enforced speed zones are based on recent data, El Dorado County has established a practice of conducting engineering and traffic survey updates based on a cycle length of five (5) years or less.

In Section 627 the Vehicle Code provides a definition for "Engineering and Traffic Survey", and states that an "Engineering and Traffic Survey" shall include:

- 1. Prevailing speeds as determined by traffic engineering measurements.
- 2. Accident records.
- 3. Highway, traffic, and roadside conditions not readily apparent to the driver.

In addition, the 2001 edition of the Vehicle Code added that residential density, pedestrian, and bicycle safety may be considered.

While the California Vehicle Code is silent regarding the relationship of the 85th percentile speed to the posted speed, the California Manual on Uniform Traffic Control Devices (CAMUTCD), Section 2B.13, "Speed Limit Sign", "Engineering and Traffic Survey", states in part:

"When a speed limit is to be posted, it shall be established at the nearest 5mph increment of the 85th percentile speed of free-flowing traffic, . . . [except] The posted speed may be reduced by 5 mph from the nearest 5 mph increment of the 85th percentile speed . . ."

Section 2B.13 further states in part:

"If the speed limit to be posted has had the 5 mph reduction applied, then an E&TS shall document in writing the conditions and justification for the lower speed limit and be approved by a registered Civil or Traffic Engineer. The reasons for the lower speed limit shall be in compliance with CVC Sections 627 and 22358.5.

#### Support:

An example of the application of this speed limit criterion is as follows:

- If the 85th percentile speed in a speed survey was 37 mph, then the speed limit would be posted at 35 mph or optionally reduced to 30 mph. However,
- If the 85th percentile speed in a speed survey was 38 mph, then the speed limit would be posted at 40 mph or optionally reduced to 35 mph.

For guidance, when considering an additional reduction in the speed limit, Section 2B.13 provides in part:

"Other factors that may be considered when establishing speed limits are the following:

- A. Road characteristics, shoulder condition, grade, alignment, and sight distance;
- B. The pace speed;
- C. Roadside development and environment;
- D. Parking practices and pedestrian activity; and
- E. Reported crash experience for at least a 12-month period."

The following caution is also provided:

"The establishment of a speed limit of more than 5 mph below the 85th percentile speed should be done with great care as studies have shown that establishing a speed limit at less than the 85th percentile generally results in an increase in collision rates; in addition, this may make violators of a

disproportionate number of the reasonable majority of drivers."

If there is no posted speed limit present on a road, the speed is controlled by Section 22350 "Basic Speed Law" of the California Vehicle Code, which states:

"No person shall drive a vehicle upon a highway at a speed greater than is reasonable or prudent having due regard for weather, visibility, the traffic on, and the surface and width of, the highway, and in no event at a speed which endangers the safety of persons or property."

Section 22352(a)(2)(A), of the California Vehicle Code establishes a prima facie 25 mile per hour speed limit on any highway within a "Residence District".

In defining a "Residence District", Section 515 of the California Vehicle Code states:

"A "Residence District" is that portion of a highway and the property contiguous thereto, other than a business district, (a) upon one side of which highway, within a distance of a quarter of a mile, the contiguous property fronting thereon is occupied by 13 or more separate dwelling houses or business structures, or (b) upon both sides of which highway, collectively, within a distance of a quarter of a mile, the contiguous property fronting thereon is occupied by 16 or more separate dwelling houses or business structures. A residence district may be longer than one-quarter of a mile if the above ratio of separate dwelling houses or business structures to the length of the highway exists."

In defining a "Business District", Section 235 of the California Vehicle Code states:

"A "business district" is that portion of a highway and the property contiguous thereto (a) upon one side of which highway, for a distance of 600 feet, 50 percent or more of the contiguous property fronting thereon is occupied by buildings in use for business, or (b) upon both sides of which highway, collectively, for a distance of 300 feet, 50 percent or more of the contiguous property fronting thereon is so occupied. A business district may be longer than the distances specified in this section if the above ratio of buildings in use for business to the length of the highway exists."

Two (2) Capital Improvement Projects have recently been completed on White Rock Road between the Sacramento County Line and Latrobe Road. One (1) project widened White Rock Road from two (2) lanes to four (4) lanes between the Sacramento County Line and Manchester Drive. The second project added signalization at the intersection of White Rock Road with Windfield Way/Town Center Boulevard.

White Rock Road east of Latrobe Road is posted with a 45 mile per hour radar enforced speed limit from Latrobe Road to Vine Street.

For the type and location of the various signs present along White Rock Road, please see attached "SIGN INVENTORY PRINTOUT" sheet.

#### **FIELD REVIEW AND OBSERVATIONS:**

Four (4) radar speed surveys were conducted by the County of El Dorado Community Development Agency Transportation Division on White Rock Road on April 9, 2015 (see attached sheets). The following table reflects the results of those surveys:

2015 SITE LOCATION	MILE	SPEED	85% SPEED	10 MPH	% IN PACE
	POST	LIMIT	0370 SF EED	PACE	SPEED
At Stonebriar Drive	0.32	55 mph	55 mph	48-57 mph	80.0 %
At Bailey Circle	0.54	55 mph	55 mph	46-55 mph	72.6 %
At Manchester Drive	0.65	55 mph	54 mph	44-53 mph	74.1 %
At Windfield Way	0.89	45 mph	59 mph	47-56 mph	65.8 %

One (1) pedestrian and four (4) bicyclists were observed on White Rock Road during the field review.

The following table from the previous study has been provided for comparison purposes. The comparison clearly shows an increase in speed on White Rock Road, this could be shown as a direct result of the completion of the widening and realignment project.

2010 SITE LOCATION	MILE POST	SPEED LIMIT	85% SPEED	10 MPH PACE	% IN PACE SPEED
At Stonebriar Drive	0.32	45 mph	57 mph	46-55 mph	62.9 %
At Bailey Circle	0.54	45 mph	52 mph	43-52 mph	64.5 %
At Manchester Drive	0.65	55 mph	52 mph	40-49 mph	64.0 %
At Windfield Way	0.89	45 mph	55 mph	45-54 mph	72.3 %

There are seven (7) roads and two (2) driveways intersecting White Rock Road. One (1) of the intersecting roads, Carson Crossing Drive, is County maintained. The remaining roads, Stonebriar Drive, Four Season Drive, Bailey Circle, Manchester Drive, Windfield Way and Town Center Boulevard, are private. The two (2) driveways service the Rolling Hills Christian Church.

No portion of White Rock Road currently meets the minimum housing density requirements, or concentration of businesses necessary to qualify for a 25 mile per hour *prime facie* Residence District or Business District speed limit as defined in the *California Vehicle Code*.

#### **CONTACTS:**

No contacts were made as part of this study.

#### **FINDINGS AND CONCLUSIONS:**

White Rock Road has been found to have the following:

- 85<sup>th</sup> percentile speeds of 54, 55, 55, and 59 miles per hour
- The calculated average daily traffic volume was 9,230 vehicles per day
- There has recently been major changes to the road's physical characteristics
- Roadway is relatively straight, some mild curves
- Roadway width varies from 2 lane undivided to 4 lane divided
- There is one (1) intersection of a county maintained road
- There are six (6) intersecting private roads
- There are two (2) private driveway encroachments
- There were 10 reported accidents on White Rock Road for the three (3) year period from January 1, 2012, through December 31, 2014.
- There was one pedestrian observed during the course of this study
- There were four (4) bicyclists observed.

#### 85th Percentile Speeds:

Section 2B.13 of the *California Manual on Uniform Traffic Control Devices* (CMUTCD) provides criteria for establishing speed limits. The CMUTCD provides that: "Speed limits set at or near the 85<sup>th</sup> percentile speed provide law enforcement officers with a limit to cite drivers who will not conform to what the majority considers reasonable and prudent."

In accordance with those provisions, a radar enforced speed limit of 55 miles per hour is indicated and may be established on White Rock Road from the Sacramento County Line to Latrobe Road, a speed limit of 55 miles per hour is indicated

The CAMUTCD also provides that the speed limit may be reduced by an additional five (5) miles per hour if the "Engineering and Traffic Survey" document in writing, the conditions and justification for the lower speed limit and it is approved by a registered Civil or Traffic Engineer.

#### **DISCUSSION:**

The existing 85<sup>th</sup> percentile speeds recorded in the 2015 study are 54, 55, 55, and 59 miles per hour, which would result in an average speed of 56 miles per hour and would justify a speed limit of 55 miles per hour based on the nearest five (5) mile per hour increment.

The roadway improvements completed have resulted in the delineation of bike lanes on White Rock Road from Latrobe Road to Carson Crossing Road and sidewalks on both sides of the roadway from Latrobe Road to Stonebriar Drive/Four Seasons Drive.

The average accident rate has been lowered for this section of roadway from 1.60 Accidents per Million Vehicle Miles from 2007 through 2009 down to 0.88 Accidents per Million Vehicle Miles from 2012 through 2014.

As the accident rate has lowered considerably and there are no roadway concerns that are not readily apparent for the motorist or bicyclists, staff can not recommend a further five mile per hour reduction in speed.

Based on the results of the speed surveys and the requirements of the *California Vehicle Code* for the establishment of radar enforced speed zones, the lowest speed limit that can be established on White Rock Road for continued radar enforcement is 55 miles per hour.

It is therefore concluded that the lowest applicable radar enforced speed limit that can be recommended for White Rock Road from the County line to Latrobe Road is 55 miles per hour.

#### **RECOMMENDATION**

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

- 1. The Traffic Advisory Committee approves establishing a single 55 mile per hour speed limit along White Rock Road from the Sacramento County Line east to Latrobe Road.
- 2. Following approval by the Traffic Advisory Committee, it is recommended that the following resolution be prepared and referred to the Board of Supervisors with a recommendation for adoption:

**BE IT RESOLVED** that Resolution No. 247-81, which establishes speed restrictions pursuant to Section 10.08.020 of the El Dorado County Ordinance Code, is amended as follows:

#### **DELETE:**

"(fm) White Rock Road (No. 34) fifty (50) miles per hour from the Sacramento County Line to Latrobe Road (No. 18)"

#### ADD:

- "(fm) White Rock Road (No. 34) fifty-five (55) miles per hour from the Sacramento County Line to Latrobe Road (No. 18)"
- 3. Subsequent to and predicated on adoption of above resolution by the Board of Supervisors,

- a. County staff modifies the existing speed zone signing to reflect the above changes to the speed zone.
- b. Advise the California Highway Patrol of the changes and request that they continue providing radar enforcement of the speed zone.

Prepared by:	Palricia Paylor		
	Patricia Gaylord		
	Senior Engineering Technician		
	0 1	,	,

APPROVED BY: Darryl L. Brown, P.E.
Traffic Superintendent

on 6/30/15

Date

APPROVED BY:

Bard R. Lower, Director

on 9 10 15

Date

Transportation Division
Community Development Agency

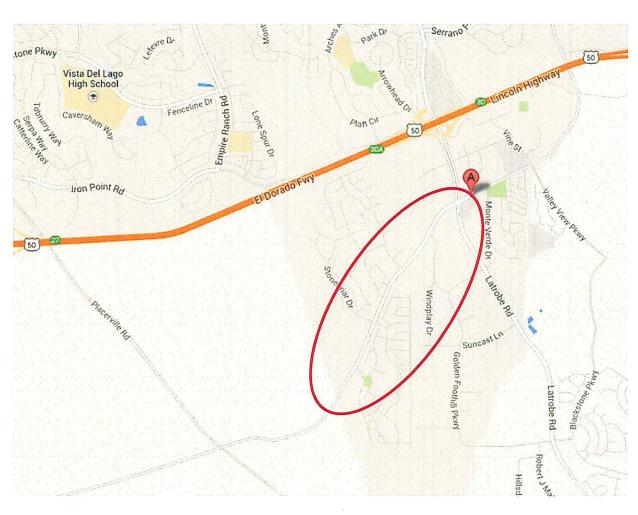
Attachments: Vicinity Map (2)

Vicinity Photos (4 pages)

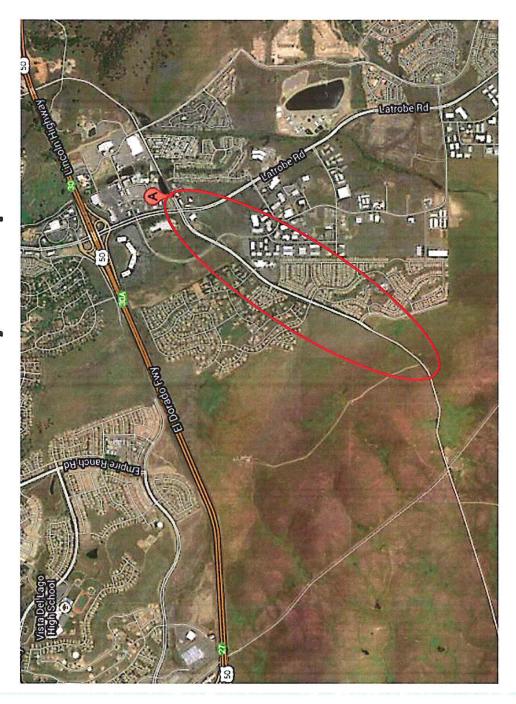
Copy of Resolution No. 034-2011 (2 pages)

Traffic Volume Counts (4 pages)
Accident Summary (4 pages)
Sign Inventory (3 pages)
Speed Survey (4 Pages)

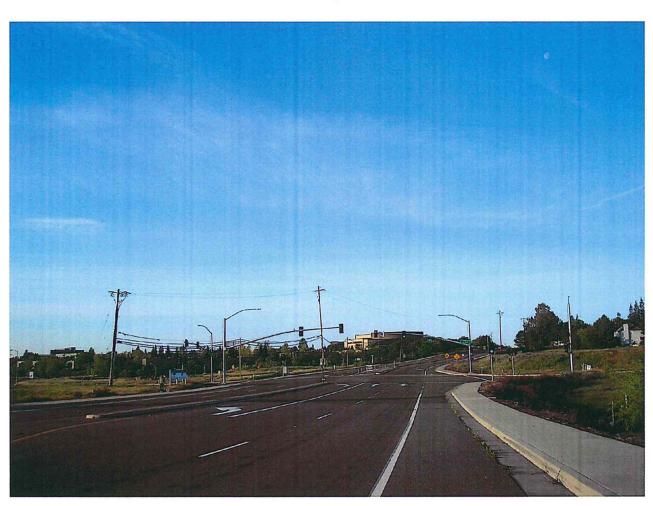
# White Rock Road Vicinity Map



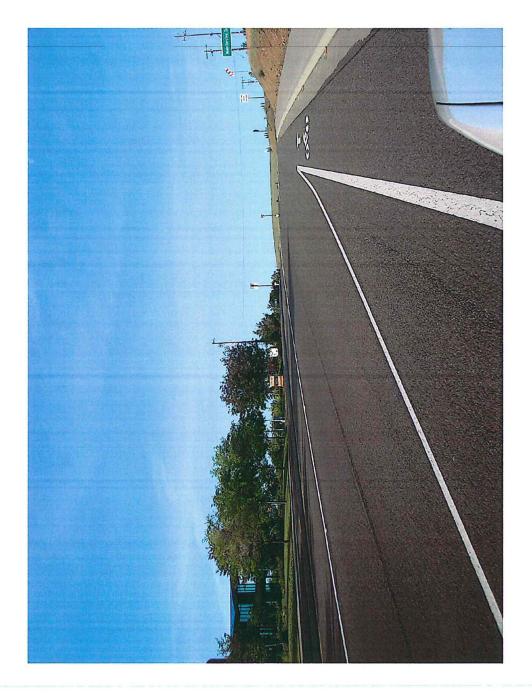
# White Rock Road Vicinity Map



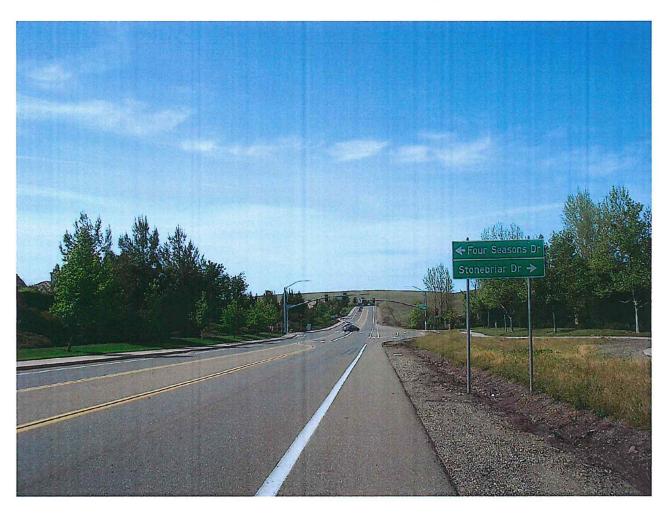
# White Rock Road East of Windfield Wy/Town Center Blvd



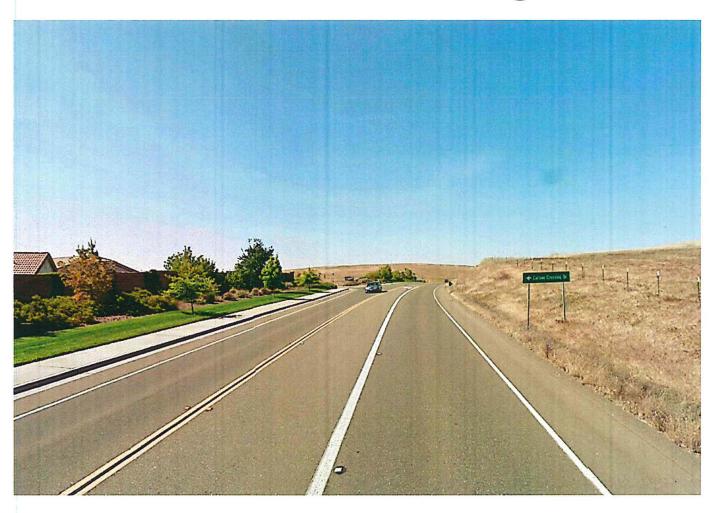
# White Rock Road East of Manchester Drive



# White Rock Road East of Four Seasons Dr/Stonebriar Dr



# White Rock Road East of Carson Crossings Drive





#### RESOLUTION NO. 034-2011

#### OF THE BOARD OF SUPERVISORS OF THE COUNTY OF EL DORADO

#### Resolution to Establish/Amend Speed Restrictions

WHEREAS, El Dorado County Ordinance Code Section 10.08.020 authorizes the Board of Supervisors to establish speed restrictions; and

**WHEREAS**, on February 3, 2011, the West Slope Traffic Advisory Committee recommended adding, amending, and deleteing the speed restrictions;

NOW, THEREFORE, BE IT RESOLVED that Resolution No. 247-81, which established speed restrictions pursuant to Section 10.08.020 of the El Dorado County Ordinance Code, is amended as follows:

#### ADD:

·"(j) Cold Springs Road (No. 20) forty (40) miles per hour between the Placerville City limits and a point five hundred (500) feet north of the northernmost driveway of the Gold Trail Elementary School, a total length of 5.41 miles."

"(gd) Latrobe Road (No.18), fifty (55) miles per hour from a point 500 feet south of Golden Foothill Parkway (No. 1124)/ Clubview Drive (No. 2798) to a point 765 feet south of White Rock Road (No. 34)."

"(ge) Lotus Road (No. 21) twenty-five (25) miles per hour, Playground Speed Limit, adjacent to Henningsen Lotus Park beginning at a point 1,800 feet south of State Route 49 and continuing to a point 3,650 feet south of State Route 49."

"(fq) Pleasant Valley Road (No. 77) twenty-five (25) miles per hour beginning at State Route 49 in Diamond Springs and proceeding easterly for a distance of 0.23 mile, thence thirty-five (35) miles per hour continuing east for a distance of 0.27 mile, thence forty-five (45) miles per hour continuing east for a distance of 4.44 miles to 0.19 of a mile east of Bucks Bar Road (No. 99)."

"(fm) White Rock Road (No. 34) fifty (50) miles per hour from the Sacramento County Line to Latrobe Road (No. 18)"

#### AMEND:

"(eq) Garden Valley Road (No. 53) Thirty five (35) forty (40) miles per hour from Marshall Road (No. 76) to 3,000 feet south."

"(ergf) "Sophia Parkway (No. 2756) forty five (45) fifty (50) miles per hour from Sacramento County Line northerly to its intersection with Green Valley Road (No. 2)."

Resolution No.	034-2011
Resolution 140.	

Page 2 of 2

#### DELETE:

"(j) Cold Springs Road (No. 20) thirty five (35) miles per hour between the Placerville City limits and a point 0.70 mile north of Placerville City limits; thence forty five (45) miles per hour northerly to a point five hundred feet (500') south of Gold Hill Road (No. 70); thence thirty five (35) miles per hour to a point five hundred feet (500') north of the northernmost driveway into the Gold Trail School."

"(fq) Pleasant Valley Road (No. 77) twenty five (25) miles per hour beginning at State Route 49 in Diamond Springs and proceeding easterly for a distance of 0.23 mile, thence thirty five (35) miles per hour beginning at a point 0.23 mile east of State Route 49 in Diamond Springs and proceeding for a distance of 0.27 mile, then forty five (45) miles per hour beginning at a point 0.50 mile east of State Route 49 in diamond Springs to Bucks Bar Road (No. 99) for a distance of 4.25 miles."

"(fm) White Rock Road (No. 34) fifty five (55) miles per hour from the Sacramento County Line to 1,800 feet west of its intersection with Latrobe Road (No. 18) and from that point preceding east forty-five (45) miles per hour to Latrobe Road (No. 18)."

LHOOED	AND ADOLIED by the I	poata of Suber	ivisors of the County of El Dolado at a regular infecting of sai
Board, he	eld the 22nd day of	March	, 20 <u>11</u> by the following vote of said Board:
Attest: Suzanne	Allen de Sanchez		Ayes: Knight, Briggs, Nutting, Sweeney Noes: None Absent: Santiago
By:	arcie MacJan	land	Kuyana T. Phully
(	Deputy Clerk		Chair, Board of Supervisors
			'Raymond J. Nutting
I CERTIF THE FOR		A CORRECT CO	OPY OF THE ORIGINAL ON FILE IN THIS OFFICE.
Attest:	Suzanne Allen de Sanche California.	ez, Clerk of the	e Board of Supervisors of the County of El Dorado, State of
By:			Date:
,	Deputy Clerk		

**Count Summary Beginning:** 

December 2, 2014

Count Station:

1100034

Counter ID:

61

City/Town:

El Dorado Hills

Road Name:

White Rock Rd.

Mile Post:

0.00

Lanes:

Location:

At County Line EASTBOUND

Direction:

Date	7	8	2	3	4	5	6	Weekly	Wk Day
Day Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg
100	23	8	8	7	6	20	20	13	10
200	9	4	6	1	3	4	13	6	10
300	6	5	2	5	1	2	6	4	3
400	3	4	1	0	2	5	1	2	
500	3	8	12	9	5	15	11	9	10
600	14	37	50	40	32	35	10	31	39
700	17	103	124	105	122	103	13	84	111
800	22	302	275	265	273	248	42	204	273
900	82	359	307	315	353	345	76	262	336
1000	128	194	174	184	184	182	88	162	184
1100	164	155	153	150	150	138	160	153	149
1200	215	223	177	178	179	223	205	200	196
1300	225	248	207	210	228	253	243	231	229
1400	219	262	214	210	284	259	256	243	246
1500	212	247	239	231	269	263	264	246	250
1600	212	337	330	262	328	358	292	303	323
1700	211	450	409	371	454	473	273	377	431
1800	191	583	529	464	504	482	210	423	512
1900	117	271	293	267	298	244	138	233	275
2000	100	115	121	127	129	140	108	120	126
2100	53	84	84	53	99	83	89	78	81
2200	40	64	56	36	92	84	100	67	66
2300	33	34	23	25	52	65	66	43	40
2400	21	17	16	11	16	34	30	21	19
Totals	2320	4114	3810	3526	4063	4058	2714	3515	3914
AM Peak Hr	12:00	9:00	9:00	9:00	9:00	9:00	12:00	9:00	9:00
AM Count	215	359	307	315	353	345	205	262	336
PM Peak Hr	1:00	6:00	6:00	6:00	6:00	6:00	4:00	6:00	6:00
PM Count	225	583	529	464	504	482	292	423	512

**TOTAL ADT:** 

**Count Summary Beginning:** 

December 2, 2014

Count Station:

1100034

Counter ID:

61

City/Town:

Mile Post:

0.00

Road Name:

El Dorado Hills White Rock Rd.

Mile Post: Location:

At County Line

Lanes:

0

Direction:

WESTBOUND

ies:			

Date	7	8	2	3	4	5	6	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time	Ouii	WIOII	Tuc	VVCu	THU	,	Oat	Average	Avg.
100	10	5	4	15	6	4	11	8	7
200	11	3	6	3	8	5	13	7	5
300	4	4	0	2	3	3	5	3	2
400	4	8	10	7	7	6	5	7	2 8
500	10	13	15	14	14	10	14	13	13
600	12	50	42	38	47	38	22	36	43
700	29	140	139	142	138	134	38	109	139
800	42	408	626	464	438	382	82	349	464
900	89	361	522	425	376	287	91	307	394
1000	114	205	190	196	188	208	163	181	197
1100	220	208	188	185	183	186	199	196	190
1200	166	209	194	230	237	244	182	209	223
1300	265	206	196	231	232	264	238	233	226
1400	221	155	181	186	193	229	207	196	189
1500	184	206	194	186	200	238	167	196	205
1600	166	301	309	288	351	326	175	274	315
1700	129	505	499	512	570	466	176	408	510
1800	129	554	492	403	484	463	148	382	479
1900	62	173	187	170	189	176	122	154	179
2000	50	72	80	66	82	74	58	69	75
2100	38	50	52	43	47	57	49	48	50
2200	19	32	25	29	33	52	41	33	34
2300	19	12	18	22	23	24	33	22	20
2400	7	8	10	7	10	23	21	12	12
Totals	2000	3888	4179	3864	4059	3899	2260	3450	3978
	44.00	0.00	0.00	0.00	0.00	0.00	44.00	0.00	0.00
AM Peak Hr	11:00	8:00	8:00	8:00	8:00	8:00	11:00	8:00	8:00
AM Count	220	408	626	464	438	382	199	349	464
PM Peak Hr	1:00	6:00	5:00	5:00	5:00	5:00	1:00	5:00	5:00
PM Count	265	554	499	512	570	466	238	408	510

**TOTAL ADT:** 

**Count Summary Beginning:** 

December 2, 2014

Count Station:

1200034

Counter ID:

53

City/Town:

El Dorado Hills

Mile Post:

1.11

Road Name:

White Rock Rd.

Location:

100 ft W. of Latrobe Rd.

Lanes:

2

Direction:

**EASTBOUND** 

Date	7	8	2	3	4	5	6	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg.
Time									
100			6	11	12	19	18		12
200			12	9	11	9	15		10
300			3	10	5	6	8		6
400			4	6	6	4	5		5 13
500			9	12	12	17	12		13
600			40	38	40	31	18		37
700			133	122	127	117	32		125
800			308	303	325	288	78		306
900			342	358	370	392	113		366
1000			254	218	260	247	196		245
1100			248	242	254	290	252		259
1200			278	368	325	323	290		324
1300			296	337	310	374	312		329
1400			329	318	372	371	332		348
1500			356	381	430	428	325		399
1600			470	424	460	492	360		462
1700			579	570	595	606	362		588
1800			654	668	620	573	276		629
1900			393	378	384	318	178		368
2000			170	212	228	195	150		201
2100			126	192	164	120	82		151
2200			91	82	108	135	91		104
2300			37	30	54	74	101		49
2400			22	13	21	35	27		23
Totals			5160	5302	5493	5464	3633		5355
AM Peak Hr			9:00	12:00	9:00	9:00	12:00		9:00
AM Count			342	368	370	392	290		366
PM Peak Hr			6:00	6:00	6:00	5:00	5:00		6:00
PM Count			654	668	620	606	362		629

**TOTAL ADT:** 

**Count Summary Beginning:** December 2, 2014

Count Station:

1200034

City/Town:

El Dorado Hills

Counter ID:

53 1.11

Road Name:

White Rock Rd.

Mile Post:

100 ft W. of Latrobe Rd.

Lanes:

Location: Direction:

WESTBOUND

Date	7	8	2	3	4	5	6	Weekly	Wk Day
Day	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Average	Avg
Time									
100			4	11	4	7	22		
200			4	2	4	6	14		4
300			1	1	1	4	7		2
400			10	9	8	9	6		(
500			17	15	9	12	13		13
600			67	60	54	51	17		58
700			218	164	184	160	26		182
800			724	600	604	512	96		610
900			715	618	543	524	116		600
1000			296	336	307	276	176		304
1100			237	229	240	278	246		246
1200			243	256	295	276	240		268
1300			301	314	319	318	279		313
1400			286	318	282	351	306		309
1500			297	296	326	350	266	_	317
1600			387	382	452	384	298		401
1700			458	467	495	458	234		470
1800			462	444	454	430	192		448
1900			250	298	286	238	141		268
2000			142	142	135	113	94		133
2100			97	132	88	120	76		109
2200			68	68	80	102	20		80
2300			29	31	44	64	22		42
2400			17	5	21	43	15		22
Totals			5330	5198	5235	5086	2922		5212
AM Peak Hr			8:00	9:00	8:00	9:00	11:00		8:00
AM Count			724	618	604	524	246		610
PM Peak Hr			6:00	5:00	5:00	5:00	2:00		5:00
PM Count			462	467	495	458	306		470

**TOTAL ADT:** 

#### ACCIDENT SITE ANALYSIS SUMMARY FOR

#### WHITE ROCK RD

For Use with 2015 Speed Zone Survey from County Line to Latrobe Road

Report Date: 4/20/2015

#### For the period beginning January 1, 2012 and ending December 31, 2014

B	Seginning at Mile Post	0.00	and Ending at Mile Post 1.13	Roady	way Section Length = 1.13	
2012	Number of Accidents:	5	Number of Injuries:	2	Number of Fatalities:	0
2013	Number of Accidents:	3	Number of Injuries:	4	Number of Fatalities:	0
2014	Number of Accidents:	2	Number of Injuries:	1	Number of Fatalities:	0
Thre	ee Year Accident To	tal = 10	Three Year Injury Tota	1= 7	Three Year Fatality Total	= 0

Average Daily Traffic Volume: 9230

Accidents per Million Entering Vehicles: 0.99

#### 2012 C.H.P. ACCIDENT SUMMARY FOR WHITE ROCK RD FROM MP-0.00 TO MP-1.13

Report Date: 4/20/2015

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.	lmp.	Code
WHITE ROCK RD	0.65	0	AT	of	MANCHESTER DR	2	0	0	DARK	DRY	HNBD	4
WHITE ROCK RD	1.11	90	WEST	of	LATROBE RD	2	0	0	DAY	DRY	HNBD	3
WHITE ROCK RD	1.12	60	WEST	of	LATROBE RD	3	0	0	DAY	DRY	HNBD	3
WHITE ROCK RD	1.13	0	AT	of	LATROBE RD	2	0	0	DAY	WET	HNBD	4
WHITE ROCK RD	1.13	0	AT	of	LATROBE RD	2	2	0	DAY	DRY	HNBD	4

Total Number of Accidents: 5

Total Number of Injuries: 2

Total Number of Fatalities: 0

#### 2013 C.H.P. ACCIDENT SUMMARY FOR WHITE ROCK RD FROM MP-0.00 TO MP-1.13

Report Date: 4/20/2015

The following accident data is based on the C.H.P. Accident Reports for the one year period from January 1, 2013, through December 31, 2013.

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.	lmp.	Code
WHITE ROCK RD	0.31	45	WEST	of	FOUR SEASONS DR	2	3	0	DARK	DRY	HNBD	3
WHITE ROCK RD	0.89	0	AT	of	WINDFIELD WY	1	1	0	DAY	DRY	HNBD	5
WHITE ROCK RD	0.90	44	EAST	of	WINDFIELD WY	2	0	0	DARK	DRY	IMP?	3

Total Number of Accidents: 3

Total Number of Injuries: 4

Total Number of Fatalities: 0

#### 2014 C.H.P. ACCIDENT SUMMARY FOR WHITE ROCK RD FROM MP-0.00 TO MP-1.13

Report Date: 4/20/2015

The following accident data is based on the C.H.P. Accident Reports for the one year period from January 1, 2014, through December 31, 2014.

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.	lmp.	Code
WHITE ROCK RD	0.89	0	AT	of	WINDFIELD WY	2	1	0	DAY	DRY	HNBD	4
WHITE ROCK RD	1.11	110	WEST	of	LATROBE RD	2	0	0	DARK	DRY	HNBD	3

Total Number of Accidents: 2
Total Number of Injuries: 1
Total Number of Fatalities: 0

### Sign Inventory for: WHITE ROCK RD

Road # 34

08-Apr-15	Beginning at Mile Post- 0.0					and Ending					
Old Sign Code	2010 CA Sign Code	Location	1	Dir	•	Cross Street	Mile Post	Side	Fac	Sheeting	Date
G10	G10 (CA)	0	ft	E	of	COUNTY LINE	0.000	s	W	R	12/2/2003
R48-1	R48-1 (CA)	153	ft	E	of	COUNTY LINE	0.010	s	w	HP	5/10/2011
G7-1	D3	125	ft	E	of	COUNTY LINE	0.020	s	W	R	5/28/2010
W15	W5-1	200	ft	E	of	COUNTY LINE	0.040	N	E	Н	5/28/2010
R81	R81 (CA)	250	ft	E	of	COUNTY LINE	0.050	N	E	r	3/16/2006
R81B	R81B (CA)	250	ft	E	of	COUNTY LINE	0.050	N	E	r	3/16/2006
R81	R81 (CA)	400	ft	E	of	COUNTY LINE	0.080	s	w	r	3/16/2006
R81A	R81A (CA)	400	ft	E	of	COUNTY LINE	0.080	s	W	R	3/16/2006
G7-1	D3	550	ft	E	of	COUNTY LINE	0.110	N	E	R	5/28/2010
W41	W3-3	1,320	ft	E	of	COUNTY LINE	0.250	s	w	Н	5/28/2010
G7-1	D3	1,370	ft	E	of	COUNTY LINE	0.260	s	w	R	5/28/2010
R81	R81 (CA)	1,825	ft	Е	of	COUNTY LINE	0.350	S	w	r	3/16/2006
G7-1	D3	2,225	ft	E	of	COUNTY LINE	0.420	N	E	R	5/28/2010
W41	W3-3	2,350	ft	Е	of	COUNTY LINE	0.450	N	E	Н	5/28/2010
G7-1	D3	2,650	ft	E	of	COUNTY LINE	0.500	s	w	R	5/28/2010
W44	W6-3	400	ft	W	of	MANCHESTER DR	0.570	N	E	Н	5/28/2010
R26	R26 (CA)	440	ft	W	of	MANCHESTER DR	0.570	S	W	R	)/10/2009

Page 1

#### WHITE ROCK RD

#### Sign Inventory Continued:

Old Sign Code	2010 CA Sign Code	Location	1	Dir		Cross Street	Mile Post	Side	Fac	Sheeting	Date
G7-1	D3	500	ft	w	of	MANCHESTER DR	0.590	N	E	R	5/28/201
W74	W4-7	550	ft	w	of	MANCHESTER DR	0.600	S	w	н	5/28/201
W7A	W2-2	550	ft	w	of	MANCHESTER DR	0.600	N	E	Н	5/28/201
R26	R26 (CA)	225	ft	w	of	MANCHESTER DR	0.610	S	w	R	)/10/200
R26	R26 (CA)	125	ft	W	of	MANCHESTER DR	0.630	s	w	R	)/10/200
R26	R26 (CA)	100	ft	w	of	MANCHESTER DR	0.640	N	E	R	)/10/200
R81	R81 (CA)	50	ft	w	of	MANCHESTER DR	0.650	N	E	r	3/16/200
R26	R26 (CA)	40	ft	E	of	MANCHESTER DR	0.660	s	W	R	1/22/201
R18-2	R18-2 (E)	50	ft	E	of	MANCHESTER DR	0.680	N	E	R	5/28/201
R26	R26 (CA)	140	ft	E	of	MANCHESTER DR	0.680	s	W	R	1/22/201
G7-1	D3	100	ft	E	of	MANCHESTER DR	0.690	N	E	R	5/28/201
R81	R81 (CA)	100	ft	E	of	MANCHESTER DR	0.690	s	w	r	3/16/200
W73A	W73A (CA)	300	ft	E	of	MANCHESTER DR	0.720	N	E	Н	5/28/201
W74	W4-7	500	ft	E	of	MANCHESTER DR	0.760	N	E	Н	5/28/201
R2(55)	R2-1(50)	1,800	ft	w	of	LATROBE RD	0.790	N	E	h	5/10/201
R48-1	R48-1 (CA)	1,800	ft	w	of	LATROBE RD	0.790	s	w	h	5/10/201
G7-1	D3	950	ft	E	of	MANCHESTER DR	0.830	s	w	R	5/28/201
R81	R81 (CA)	50	ft	E	of	WINDFIELD WY	0.910	S	w	R	3/7/201

Page 2

#### WHITE ROCK RD

#### Sign Inventory Continued:

Old Sign Code	2010 CA Sign Code	Location	1	Dir		Cross Street	Mile Post	Side	Fac	Sheeting	Date
G7-1	D3	525	ft	E	of	WINDFIELD WY	0.990	N	E	R	5/28/201
R2(45)	R2-1(50)	750	ft	w	of	LATROBE RD	1.000	N	E	Н	5/10/201
R48-1	R48-1 (CA)	750	ft	w	of	LATROBE RD	1.000	N	E	Н	5/10/201
W41	W3-3	400	ft	w	of	LATROBE RD	1.040	S	W	Н	3/8/201
R7	R4-7	350	ft	w	of	LATROBE RD	1.050	M	E	R	5/28/201

#### **County of El Dorado Transportation Division**

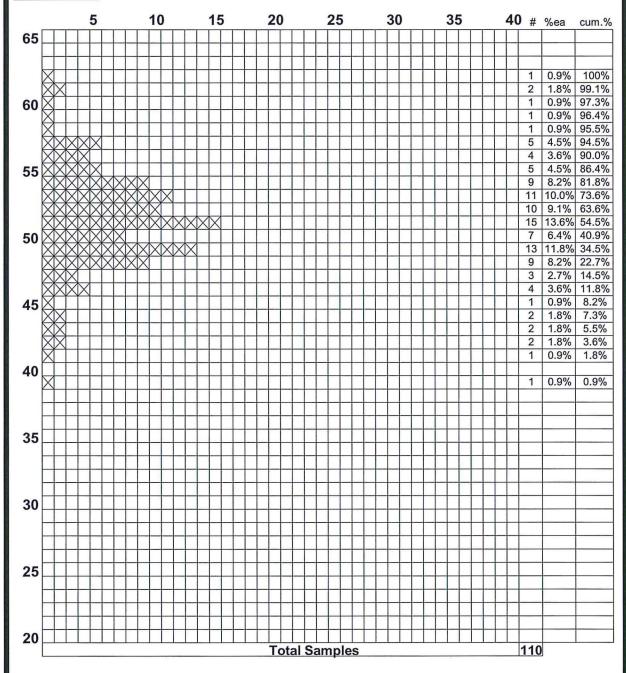
Street Name: WHITE ROCK ROAD

Limits:

**BAILEY CIRCLE to STONEBRIAR DRIVE** 

#### **Radar Survey Sheet**

#### X=North/South



85th Percentile Speed: 55 50th Percentile Speed: 51 15th Percentile Speed: 48

10 MPH Pace:

Number in Pace:

88 Percent in Pace: 80.0%

48- 57

Date of Survey:

Weather:

4/9/2015

Sunny

Start Time: **End Time:** 

9:15 10:00

**Minor Arterial** 

Posted Speed: 50

Observer: P GAYLORD

Road Condition: DRY

**Conditions not** Apparent:

Street Class.:

#### County of El Dorado **Transportation Division**

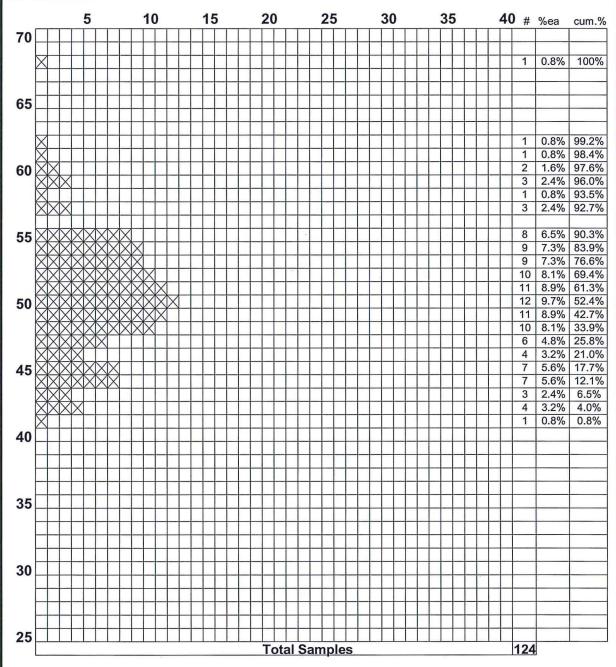
Street Name: WHITE ROCK ROAD

Limits:

MANCHESTER DRIVE to BAILEY CIRCLE

#### Radar Survey Sheet





85th Percentile Speed: <u>55</u> 50th Percentile Speed: <u>50</u> 15th Percentile Speed: <u>45</u> 10 MPH Pace: 46-55

Number in Pace:

90 Percent in Pace: 72.6% Date of Survey: 4/15/2015

Weather:

Sunny

Road Condition: Dry

Street Class.:

Start Time: **End Time:** 

8:30 9:10

Posted Speed: 50

**Minor Arterial** Observer: P GAYLORD

**Conditions not** Apparent:

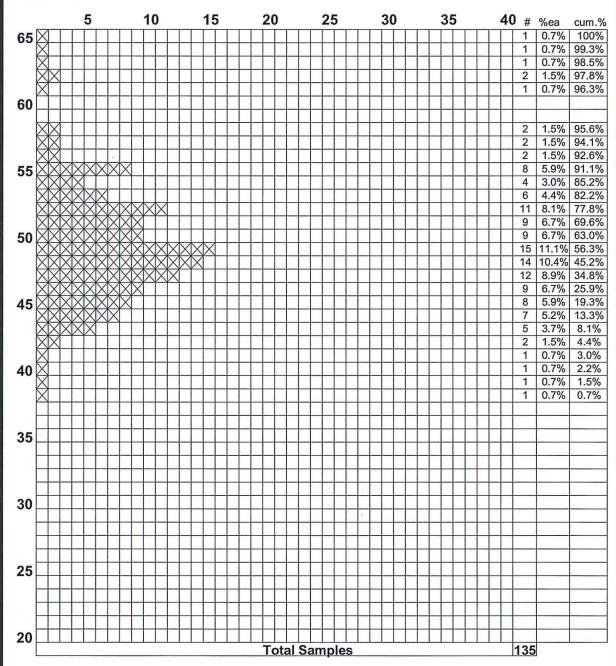
#### County of El Dorado Transportation Division

Street Name: WHITE ROCK ROAD

Limits: WINDFIELD WAY to MANCHESTER DRIVE

#### Radar Survey Sheet

X=North/South



85th Percentile Speed: 54
50th Percentile Speed: 49
15th Percentile Speed: 45
10 MPH Pace: 44-53

10 MPH Pace: Number in Pace:

Number in Pace: 100
Percent in Pace: 74.1%

Date of Survey:

Weather:

4/15/2015 Sunny

End Time:

7:54 8:20

Road Condition: Dry

Minor Arterial

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Start Time:

Posted Speed: 50

Observer: P GAYLORD

Conditions not Apparent:

Street Class.:

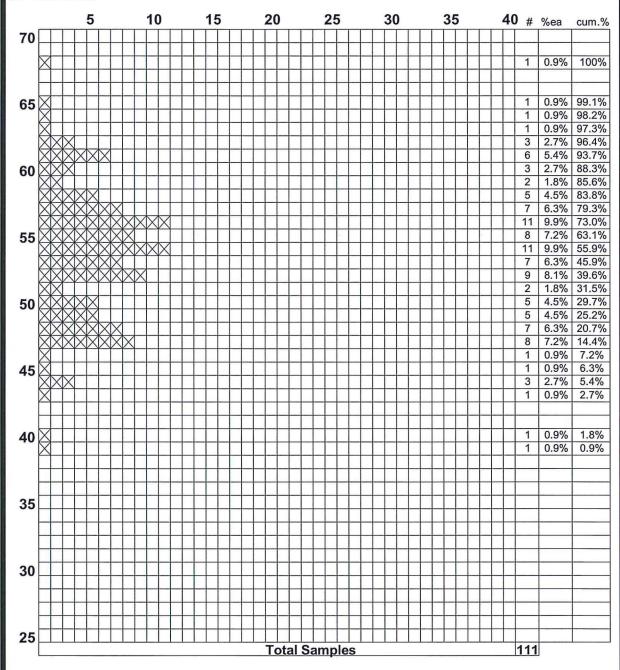
#### County of El Dorado Transportation Division

Street Name: WHITE ROCK ROAD

Limits: LATROBE ROAD to WINDFIELD WAY

#### Radar Survey Sheet

#### X=North/South



 85th Percentile Speed:
 59

 50th Percentile Speed:
 54

 15th Percentile Speed:
 48

10 MPH Pace: 4

Percent in Pace:

47- 56 73

<u>73</u> 65.8% Date of Survey: 4/15/20

4/15/2015 Sunny

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Start Time: End Time:

Posted Speed: 50

7:20 7:50

Road Condition: Dry

<u>ır y</u>

**Minor Arterial** 

Observer: P GAYLORD

Conditions not Apparent:

Street Class.:

Weather: