

SPEED ZONE SURVEY

FORNI ROAD

(No. 132)

COUNTY MAINTAINED PORTION BETWEEN THE PLACERVILLE CITY LIMITS FROM GOLD NUGGET WAY (MP 4.79) EASTERLY TO THE TERMINUS AT THE PLACERVILLE CITY LIMIT

Reviewed by t	the Traffic Advisory Committe	ee on	OCT 17 2013	
	TTEE APPROVED STAFF'S		1	
[] COMMIT	TEE REQUESTED FURTH	ER ACTIO	V.	
Action:	APPROVED	4		
	,	5 - 4 g 1 - 41	· z j teromin	
			¥	

DEPARTMENT OF TRANSPORTATION

ENGINEERING AND TRAFFIC SURVEY

Location: Forni Road (No. 132) from 2,750 feet east of Ray Lawyer Drive to Placerville

City Limits

Subject: Speed Zone Survey

Date: May 6, 2013

REQUEST REFERENCE:

It is the intent of this study to provide an update to the speed zone survey approved by the Traffic Advisory Committee on August 15, 2007. For continued radar enforcement, the California Vehicle Code, Section 40802b, requires that an "Engineering and Traffic Survey" be completed every five (5) to seven (7) 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 twenty-five (25) mile per hour speed limit currently posted on Forni Road from east of Ray Lawyer Drive easterly to the Placerville City limits is in compliance with current provisions of the California Vehicle Code governing the establishment of speed zones. Unless otherwise indicated, all subsequent references to Forni Road apply only to the portion described above.

GENERAL PHYSICAL CONDITIONS:

Forni Road exhibits the following characteristics:

Functional Classification: Majo

Major Collector

Study Length:

0.30 miles (5.48 total miles)

Limits:

From 690 feet east of Ray Lawyer Drive (Placerville City Limit

westerly terminus) to Placerville City Limit (easterly terminus)

Alignment:

Curvilinear Mountainous

Grade: Surface:

Asphalt surface

Surface: Striping:

Double Yellow Centerline Unimproved, varies in width

Shoulders: Speed Limit:

25 MPH

Forni Road is a two lane road located in the Placerville area. It extends east from State Highway 49 in the town of El Dorado to its terminus at Main Street in Placerville. It is classified as a Major Collector roadway within the County's Functional Classification System.

The portion covered by this study is rural in appearance with large oak and pine trees lining the roadway. This section of Forni Road has a newly overlaid asphalt surface with unimproved shoulders. The roadway has a double yellow centerline stripe.

The roadway alignment winds along the mountainous terrain, with numerous horizontal and vertical curves. The elevation is approximately 1,800 feet, which makes the roadway subject to icy conditions during the winter months.

RECORD DATA:

Forni Road is posted with a 25 mile per hour radar enforced speed limit. This speed zone is sanctioned by Resolution No. 234-2007, which states:

"(fg) Forni Road (No. 132A) twenty-five (25) miles per hour from 2,750 east of Ray Lawyer Drive to Placerville city limit."

In reviewing the last survey it is apparent that the study included broader limits including the County maintained section of roadway from approximately 690 feet east of Ray Lawyer Drive (Placerville City Limit westerly terminus/County line – MP 4.79) to the easterly terminus (County line/Placerville City Limit – MP 5.48); however, Resolution No. 234-2007, delineates the limits from MP 5.18 to 5.48. This section of roadway is located at the most easterly section of the study area on Forni Road.

In order to provide a complete speed zone survey that will encompass the whole section of County maintained roadway between Ray Lawyer Drive and Main Street (Placerville City Limits), staff will address the limits between Gold Nugget Way – Placerville City Limit/County line (westerly terminus -MP 4.79) and the County line/Placerville City Limit (easterly terminus -MP 5.48). All subsequent references to Forni Road, unless otherwise noted, apply to the whole County maintained section of roadway mentioned above.

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

An average daily traffic volume count on Forni Road was recorded by El Dorado County Department of Transportation in May of 2013. The following count was recorded:

DATE	MILEPOS	EPOST SITE		
May 2013	5.48	Most easterly terminus to Placerville City limits	1,326	
	AVERAGE DAI	LY TRAFFIC VOLUME	1,326	

A review of the accident data for Forni Road, Milepost 4.79 to 5.48, has been provided for the complete section of county maintained roadway between the City of Placerville limits between Gold Nugget Way and approximately 200 feet west Main Street. This accident data, as provided by the California Highway Patrol for a three (3) year period from January 1, 2010, through December 31, 2012, disclosed one (1) reported accident (see attached sheets):

One (1) Reported Accident resulting in no Injuries and no Fatalities

Summary of accident data for Enterprise	e Drive from 1/1/10 to 12/31/12
Accident Rate	1.00 Accidents per Million Vehicle Miles
Number of Reported Accidents	1
Average daily traffic volume	1,326 Vehicles

The accident rate for this study, 1.00 Accidents per Million Vehicle Miles is lower than the countywide average rate of 1.70 Accidents per Million Vehicle Miles normally experienced on county roads.

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."

FIELD REVIEW AND OBSERVATION:

Two (2) radar speed surveys were conducted by El Dorado County Department of Transportation on Forni Road; one on May 3, 2013, and the other on June 27, 2013 (see attached sheets). The following table reflects the results of those surveys:

2013 SITE	MILE	SPEED LIMIT	85% SPEED	10 MPH	% IN PACE	VEHICLES
LOCATION	POST			PACE	SPEED	OBSERVED
2,600'e/of Ray Lawyer	5.15	25 mph	31 mph	23 - 32 mph	90 %	116
1,200' e/o Gold Nugget Way	5.01	55 mph	32 mph	24 - 33 mph	92 %	52

Within the study area Forni Road has one (1) private driveway encroachment. During the course of this study, seven (7) bicyclists and no (0) pedestrians were observed along Forni Road.

CONTACTS:

Staff reviewed the speed zone limits with Commander Root, of the Placerville California Highway Patrol, to verify that the proposed new limits were supported by the CHP for radar enforcement. Commander Root was in favor of the proposed limits from Gold Nugget Way (MP 4.79) to the most easterly terminus at the Placerville City limit (MP 5.48) for radar enforcement.

FINDINGS AND CONCLUSIONS:

Forni Road from 4.79 to 5.48 has been found to have the following:

- 85th percentile speed of 31 and 32 miles per hour were recorded
- The calculated average daily traffic volume was 1,326 vehicles per day
- There has been a recent asphalt concrete overlay to the roadway with no other appreciable changes to the configuration or physical alignment during the past five (5) years
- Roadway is curvilinear with mountainous grade changes
- There is one (1) driveway encroachment
- There were one (1) accident reported on study portion of Forni Road for the three (3) year period from January, 2010, through December, 2012
- Seven (7) bicyclists and no (0) pedestrians were observed

85th Percentile Speeds:

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

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. In accordance with those provisions the existing 85th percentile speed recorded in the 2013 study are 31 and 32 miles per hour, which would justify a speed zone of 30 miles per hour based on the nearest five (5) miles per hour increment.

Due to curvilinear nature of the roadway with the steep grade located within the study area and numerous bicyclists using Forni Road, engineering judgment indicates the need for a further reduction of five (5) miles per hour to 25 miles per hour.

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 Forni Road for continued radar enforcement is 25 miles per hour.

It is therefore concluded that the lowest applicable radar enforced speed limit that can be recommended for Forni Road is 25 miles per hour.

RECOMMENDATION:

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

- 1. That the Traffic Advisory Committee approves amending speed zone limits for Forni Road from Gold Nugget Way (MP 4.79) easterly to the Placerville City Limit (easterly terminus) to be posted 25 mile per hour with radar enforcement.
- 2. That the California Highway Patrol continues to utilize radar enforcement on this section of Forni Road.
- 3. The Board of Supervisors adopt a Resolution pursuant to Section 10.08.020 of the El Dorado County Ordinance Code, is amended as follows:

DELETE:

This speed zone is sanctioned by Resolution No. 234-2007, which states: "(fg) Forni Road (No. 132A) twenty-five (25) miles per hour from 2,750 east of Ray Lawyer Drive to Placerville city limit."

ADD:

"(fg) Forni Road (No. 132A) twenty-five (25) miles per hour from Gold Nugget Way (MP 4.79) easterly to the Placerville City Limit (easterly terminus)."

- 4. Following the adoption of the sanctioning Resolution by the Board of Supervisors, that the standard speed zone signs be upgraded to current standard sheeting materials.
- 5. The California Highway Patrol provide radar enforcement on the above speed zone.

Prepared by:	Valraa Jaylord	
	Patricia Gaylord	
	Senior Engineering Technician	
		- [

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

On 7 3 13

Date

APPROVED BY: Bard R. Lower, Director on 8/19/13

Date

Transportation Division
Community Development Agency

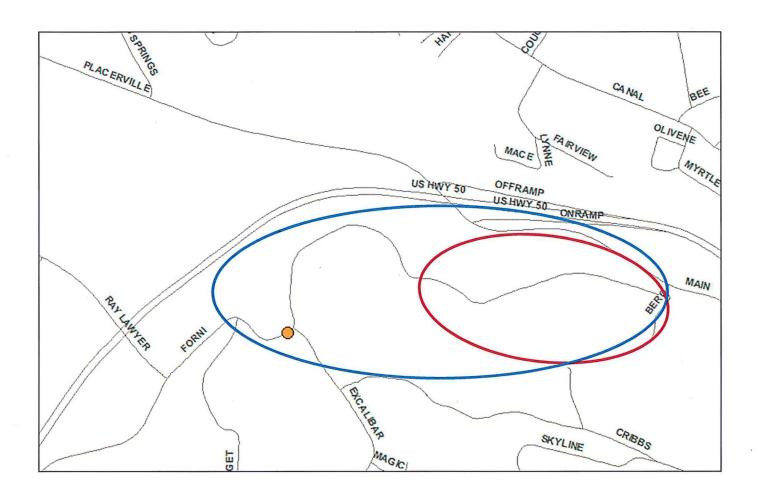
Attachments: Vicinity Map (2)

Vicinity Photos (4)

Resolution (3)

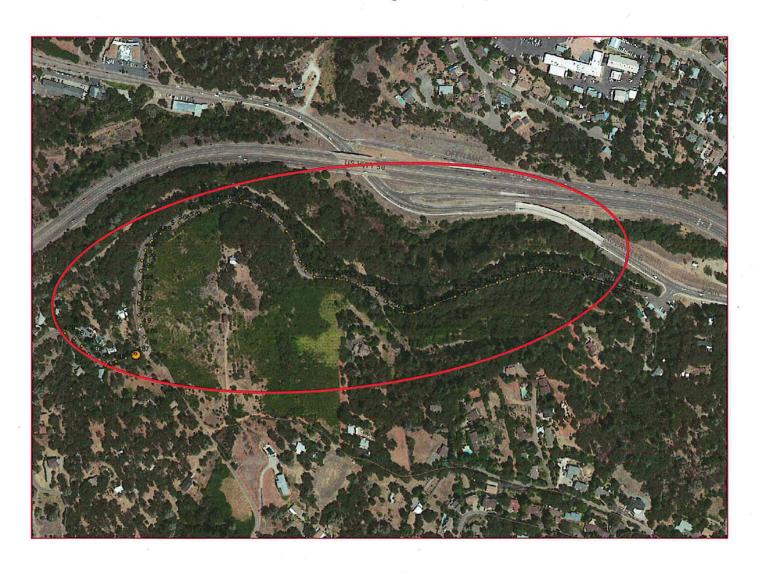
Sign Inventory Sheet (1) Traffic Volume Counts (1) Accident Summary (2) Speed Survey (2)

Forni Road Vicinity Map

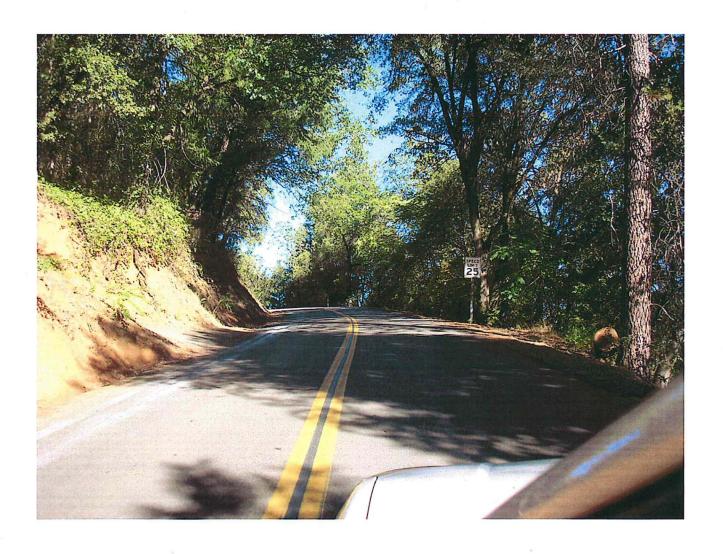


Existing 25 Mile Per Hour Speed Zone Limit Proposed 25 Mile Per Hour Speed Zone Limit

Forni Road Vicinity Map



Forni Road Westbound Inside the County Maintained Limits on the Most Easterly Section (MP 5.4)



June 2013 Forni Road Speed Survey

Forni Road

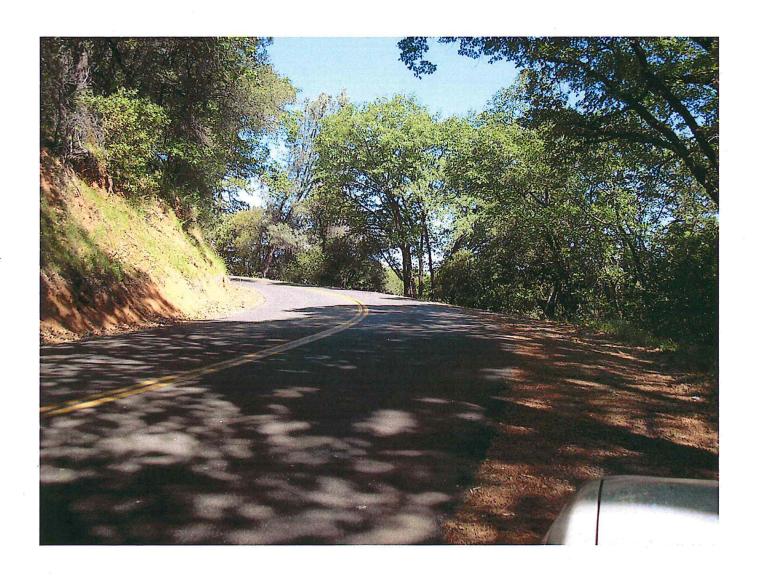
Westbound heading to Ray Lawyer Drive (approx. MP 5.3)



June 2013 Forni Road Speed Survey

Forni Road

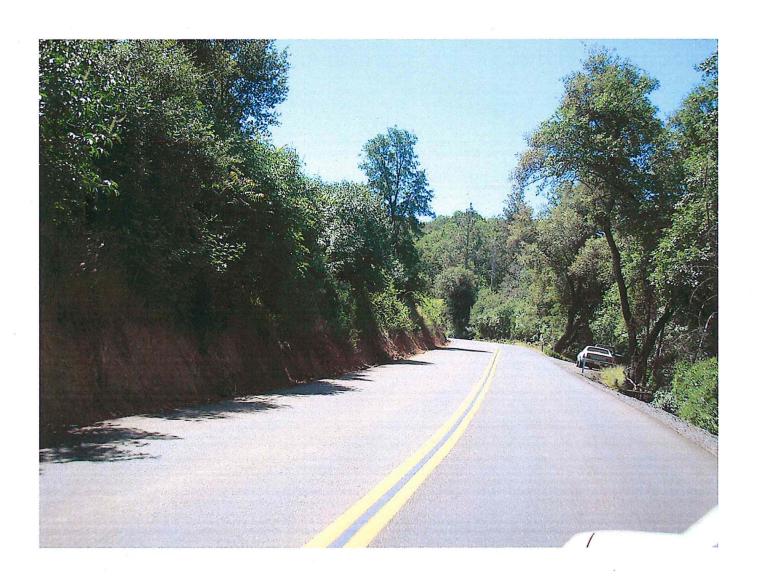
Westbound heading to Ray Lawyer Drive (approx. MP 5.03)



June 2013 Forni Road Speed Survey

Forni Road

Westbound heading to Ray Lawyer Drive (approx. MP 4.9)



June 2013 Forni Road Speed Survey



RESOLUTION NO. 234-2007

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 August 15, 2007 the West Slope Traffic Advisory Committee recommended amending the speed restrictions;

BE IT FURTHER 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:

DELETE:

- "(df) Broadway (No. 127) forty (40) miles per hour from Placerville City Limits easterly to Newtown Road (No. 84)."
- "(ce) Bass Lake Road (No.4) forty (40) forty-five (45) miles per hour from U.S. Highway 50 northerly to Green Valley Road (No. 2)."
- "(dx) Hastings Drive (No. 511) thirty-five (35) miles per hour from Green Valley Road (No. 2) to its terminus at Starbuck Road (No. 67) for a distance of 0.40 mile north."
- "(ac) Mt Aukum Road (No.78) forty (40) miles per hour between a point 300 feet south of Cedar Creek , Road (No.36) to a point 500 feet north of Omo Ranch Road (No. 35) for a distance of 2,957 feet 49."
- "(ad) Newtown Road (No. 84) forty (40) miles per hour from a point two thousand feet (2,000') east of Road No. 145 for a distance of twenty-two feet (2,200'); thence fifty (50) miles per hour to a point four hundred feet (400') northwest of Pioneer Hill Road (No. 69)."
- "(dz) Ponderosa Road (No. 5) thirty -five (35) miles per hour from Jackpine Road (No. 1090) to Green Valley Road (No. 2)."
- "(av) Union Ridge Road (No. 2600) thirty-five (35) miles per hour for its entire length between Carson Road (No. 89) and Mosquito Road (No. 60)."
- "(cj) White Rock Road (No. 34B) forty-five (45) miles per hour from Latrobe Road (No. 18) westerly to a point located 200 feet west of Berkshire Drive."

RESOLUTION NO.234-2007 Page Two

"(ek) Wilson Boulevard (No.255) thirty-five (35) miles per hour from its intersection with El Dorado Hills Boulevard (No.219) westerly to its end."

AMEND:

"(a) Carson Road (No. 89) forty-five (45) miles per hour from Barkley Road (No. 1300) to a point 0.57 mile east the most westerly intersection with US Highway 50 to a point 0.57 miles east of Barkley Road (No. 1300)."

ADD:

- "(fd) Bass Lake Road (No. 4) fifty (50) miles per hour from U.S. Highway 50 northerly to 1,500 feet south of Serrano Parkway (No. 2344)."
- "(fe)Bass Lake Road (No. 4) forty (40) miles per hour from 1,500 feet south of Serrano Parkway (No. 2344) to Green Valley Road (No.2)."
- "(ff) Broadway (No. 127) forty-five (45) miles per hour for the entire length of roadway."
- "(fg) Forni Road (No. 132A) twenty-five (25) miles per hour from 2,750 east of Ray Lawyer Drive to Placerville city limit."
- "(dx) Hastings Drive (No. 511) thirty-five (35) miles per hour for its entire length."
- "(fh) Mt Aukum Road (No.78) forty-five (45) miles per hour from a point 1,320 feet south of Cedar Creek Road (No. 36) to a point 500 feet north of Omo Ranch Road (No. 35)."
- "(fi) Newtown Road (No. 84) forty-five (45) miles per hour from Broadway (No. 127) to mile post 0.81."
- "(fj) Newtown Road (No. 84) fifty (50) miles per hour on from mile post 0.81 to mile post 1.90."
- "(fk) Ponderosa Road (No. 5) forty (40) miles per hour from Jackpine Road (No. 1090) to Green Valley Road (No. 2)."
- "(fl) Union Ridge Road (No. 2600) forty (40) miles per hour from Mosquito Road (No. 60) to Carson Road (No. 89)."
- "(fin) 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 proceeding east forty-five (45) miles per hour to Latrobe Road (No. 18)."
- "(fn) Wilson Boulevard (No. 255) forty (40) miles per hour from its intersection with El Dorado Hills Boulevard (No. 219) to its end."



PASSED AND ADOPTED by the Board of Supervisors of Board, held on the25 day of _September	the County of El Dorado at a regular meeting of said , 2007, by the following vote of said Board:
ATTEST CINDY KECK Clerk of the Board of Supervisors By Deputy Clerk I CERTIFY THAT: THE FOREGOING INSTRUMENT IS A CORRECT COPY OF DATE ATTEST: CINDY KECK, Clerk of the Board of Supervisor	
By Deputy Clerk	
Dopaty oloik	

Sign Inventory for: FORNI RD

Road # 132

2/-Jun-13	Beginning at Mile Post- 4.79					and Ending at Mile Post- 5.84					
Old Sign Code	2010 CA Sign Code	Location	1	Dir		Cross Street	Mile Post	Side	Fac	Sheeting	Date
W7A(L)	W2-2(L)	950	ft	E	of	RAY LAWYER DR	4.840	N	E	Н	1/30/2009
R2(25)	R2-1(25)	950	ft	E	of	RAY LAWYER DR	4.860	S	w	HP	1/16/2013
W43	W43(CA)	1,840	ft	W	of	CITY LIMITS	5.170	s	w	HP	1/16/2013
R2(25)	R2-1(25)	4,012	ft	E	of	RAY LAWYER DR	5.440	s	w	HP	1/16/2013
W43	W43(CA)	90	ft	w	of	CITY LIMITS	5.500	N.	E	HP	1/16/2013

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION

Count Summary Beginning: May 10, 2013 Count Station: Special Counter ID: City/Town: Placerville Mile Post: Road Name: Forni Rd Location: **County Line nearest Placerville** Lanes: Direction: Combined Date Weekly Wk Day Sun Tue Thu Fri Sat Avg. Day Mon Wed Average Time Totals 12:00 12:00 12:00 9:00 11:00 12:00 AM Peak Hr AM Count

PM Peak Hr

PM Count

2:00

6:00

6:00

TOTAL ADT:

4:00

1:00

1,326

6:00

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION

ACCIDENT SITE ANALYSIS SUMMARY FOR

FORNI RD

For Use with 2013 Engineering and Traffic Survey

Report Date: 6/27/2013

For the period beginning January 1, 2010 and ending December 31, 2012

В	eginning at Mile Post	4.79	and Ending at Mile Post 5.48	Road	way Section Length = 0.69	
2010	Number of Accidents:	1	Number of Injuries:	1	Number of Fatalities:	0
Three Year Accident Total = 1			Three Year Injury Total	= 1	Three Year Fatality Total =	= 0

Average Daily Traffic Volume: 1326

Accidents per Million Vehicle Miles is: 1.00

EL DORADO COUNTY DEPARTMENT OF TRANSPORTATION

2010 C.H.P. ACCIDENT SUMMARY FOR FORNI RD FROM MP-4.79 TO MP-5.48

Report Date: 6/27/2013

The following accident data is based on the C.H.P. Accident Reports for the one year period from January 1, 2010, through December 31, 2010.

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
FORNI RD	4.87	30	WEST	of	CRIBBS RD	1	1	0	DARK	DRY	DUI	6

Total Number of Accidents: 1

Total Number of Injuries: 1

Total Number of Fatalities: 0

Bather Belrose Boj STREET FORNI LIMITS MP 5.15 W/	
DIRECTION(S)E/W DATE5/3/13 TIME10:230 TO 11:3 POSTED SPEED LIMIT25	50TH PERCENTILE SPEED
CUM. SPEED NO. PCT. PCT.	RANGE OF SPEEDS
20	**************************************
23 9 7.8 12.9 - 24 5 4.3 17.2 90	** 90 *
26	80 - 70
29	60
32 9 7.8 94.8 C 50 33 3 2.6 97.4 E - * 34 2 1.7 99.1 N 40	50 - 40
35 1 0.9 100.0 T - * S 30 - *	30
20 - ** 10 - *	
0**	0 +++++ 0 40 50 60 70
20 3	20
- - - *	
P 15 * E - * R - *	15 - -
C - ** E - *** N 10 ***	- - 10
T - ***** S - * ***** - * *****	· *
- * ****** 5 * ****** - *******	*** 5 *** -
- ******** - *******	****

Bather Belrose Boje, Inc. SPEEDPLOT Program

STREET		FORNI RO	, Inc. SPEEDPI DAD	LOT Program		
DIRECTION(S) DATE TIME POSTED SPEED LIMIT.	6/2 8:0 55	7/13	50TH PERCENT: 85TH PERCENT: 10 MPH PACE S PERCENT IN PA PERCENT OVER PERCENT UNDER	ILE SPEED SPEED ACE SPEED PACE SPEED. R PACE SPEED	24 through	32 gh 33 92.3 . 5.8 . 1.9
SPEED NO. PCT. PCT			RANGE OF SPEI VEHICLES OBSI AVERAGE SPEEI	ERVED		. 52
23 1 1.9 1. 24 6 11.5 13. 25 4 7.7 21.	9 5 2 100		********		+	+
26 3 5.8 26. 27 9 17.3 44.			*			- 90
28 5 9.6 53.	B C -	*				-
29 6 11.5 65. 30 8 15.4 80.	4 U 80 3 M -					80
31 1 1.9 82.	7 70					70
32 3 5.8 88. 33 3 5.8 94.	5 P - 2 E 60					- 60
34 2 3.8 98.	1 R -	*				-
35 0 0.0 98. 36 1 1.9 100.	1 C 50					50 -
1 113 1001	N 40				7	40
*	T - S 30					30
	-	*				-
* *	20					20 -
	10					10
	•	****				- 0
		20 30	40 +	50	60	70
	20			, -		20
	-					-
, i	-	*				-
	P 15	* *				- 15
	E -	* *				-
	R - C -	* * *				-
	E -	* * **				_
	N 10 T -	* **** * ****				10
	s -	** ***			W n	_
* .	-	** *** ****	* *			-
	5					5
	-	******				-
	-	*****				-
	-	*****				-
		++	+	++-	+	+