



**CITY OF REDDING
ENGINEERING AND TRAFFIC SURVEY
OF
OLD OREGON TRAIL**


JULY 31, 2010

For the determination of safe and reasonable speed zoning as required by Sections 22358 and 40802 of the California Vehicle Code (CVC), as defined by Section 627 of the CVC and in accordance with Section 2B. 13 of the California Manual on Uniform Traffic Control Devices, this Engineering and Traffic Survey (ETS) was initiated to verify or modify speed zones on Old Oregon Trail.

Based on the results of this ETS (attached) and adoption of Ordinance Number 2465 by the City Council of the City of Redding amending Redding Municipal Code Section 11.12.010, the following speed zones on Old Oregon Trail are established;

- **50 MPH from Akrich Street to Midland Drive.**
- **45 MPH from Midland Drive to City Limits.**

In accordance with Redding Municipal Code 11.08.010, appropriate signs giving notice of the above speed zoning shall be placed and the stated speed limit(s) shall be effective upon the placement of such signs.


3/26/2012

Brian Crane, P. E.
Director of Public Works

ATTEST:



PAMELA MIZE, City Clerk

**City of Redding
Old Oregon Trail
Engineering and Traffic Survey (ETS) for Speed Zoning**

	Speed Zone Limits	Speed Zone Limits
	AKRICH STREET TO MIDLAND DRIVE	MIDLAND DRIVE TO CITY LIMITS

ROADSIDE CONDITIONS

LAND USE DISTRICT	RURAL RESIDENTIAL	RURAL RESIDENTIAL
PEDESTRIANS USE	SELDOM	SELDOM
PERCENT SIDEWALKS	NONE	NONE
BIKE LANE or ROUTE	NONE	NONE
DRIVEWAYS PRESENT	FEW	FEW

ROADWAY GEOMETRY

LENGTH OF ROADWAY SEGMENT (FEET)	2,350	9,800
NUMBER OF THRU LANES	2 (1 EB, 1 WB)	2 (1 EB, 1 WB)
WIDTH (FEET)	32	32
MEDIAN TYPE	DBL YELLOW	DBL YELLOW
HORIZONTAL ALIGNMENT	GENTLE CURVES	CURVES
VISIBILITY	FAIR	FAIR
VERTICAL ALIGNMENT	GENTLE SLOPES	FLAT TO GENTLE SLOPE

OBSERVED TRAFFIC CONDITIONS

DATE OF RADAR SURVEY	December 4, 2008	June 1, 2009
AVERAGE DAILY TRAFFIC (ADT)	4,100	4,100
EXISTING POSTED SPEED	50 MPH	40 MPH
CRITICAL SPEED (85th PERCENTILE)	55 MPH	51 MPH
MEDIAN SPEED (50th PERCENTILE)	49 MPH	45 MPH
10 MPH PACE RANGE	44 - 54 MPH	40 - 50 MPH
TOTAL COLLISIONS IN 2 YEARS	4 (1 fatal)	13
COLLISIONS PER MILLION VEHICLE MILES (MVM)	3.01 PER MVM	2.35 PER MVM
ROUNDING APPLIED TO OBSERVED CRITICAL SPEED (85th PERCENTILE) PER GUIDANCE OF MUTCD SECTION 2B.13	55 MPH	50 MPH

RECOMMENDATION

POST SPEED LIMIT	50 MPH	45 MPH
JUSTIFICATION FOR ESTABLISHING SPEED LIMIT 5 MPH BELOW CRITICAL SPEED (85th PERCENTILE)	THE COLLISION RATE AND THE SEVERITY OF COLLISIONS INDICATE THAT THE CONDITIONS OF THE ROADWAY ARE NOT READILY APPARENT TO THE DRIVER. POSTING THE SPEED LIMIT 5 MPH LOWER IS JUSTIFIED.	THE COLLISION RATE AND NUMBER OF COLLISIONS INDICATE THAT THE CONDITIONS OF THE ROADWAY ARE NOT READILY APPARENT TO THE DRIVER. POSTING THE SPEED LIMIT 5 MPH LOWER IS JUSTIFIED.

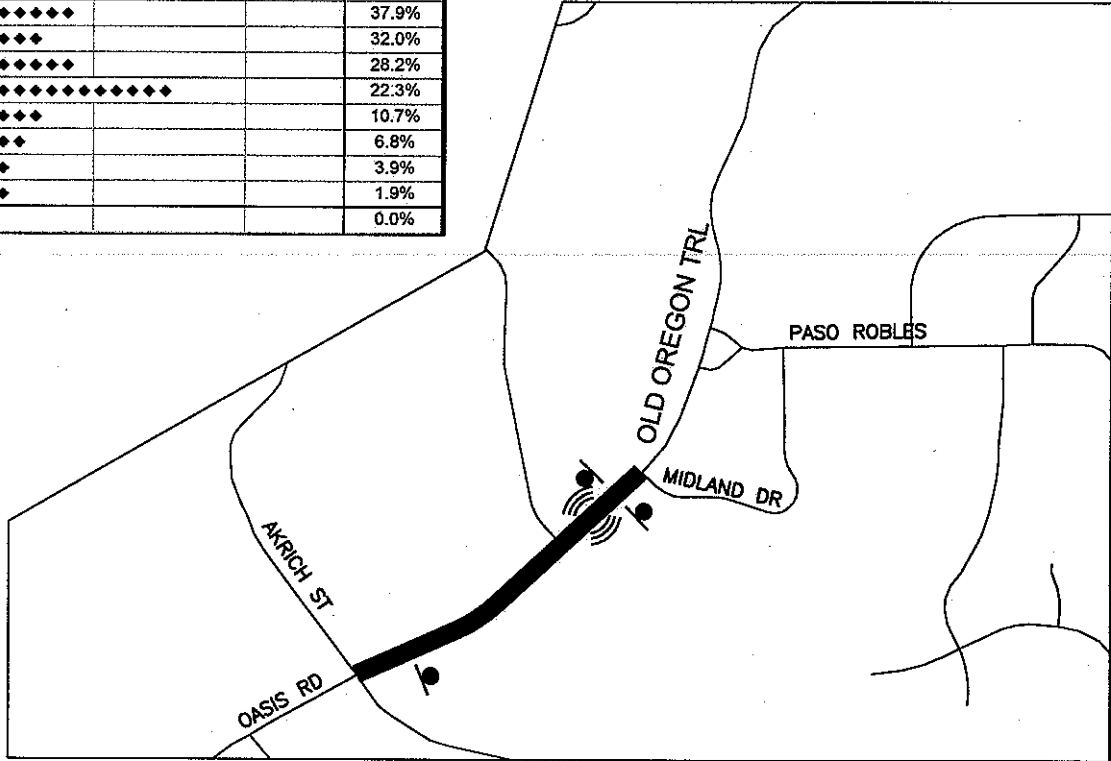
Gary Otranka
REGISTERED CIVIL ENGINEER

7/7/10
DATE



L:\Traffic Operations\Speed Surveys 2009\2009 New Vol 1\Drawings 2009\Drawings With Inserts\Old Oregon - Akrich to Midland.dwg, 09/09/2010 3:25:46 PM

Posted Speed: 50		Day: Thursday		
Weather: Clear & Dry		Date: 12/4/08		
Observer: Lackey		Time: 8:40 - 9:10 AM		
Critical Speed : 55 mph		Calcs: Otremba		
Average Speed : 49.4 mph				
Median Speed : 49 mph				
Standard Deviation: 5.1 mph				
Pace Range : 44 - 54 mph				
Percent in Pace : 68.9%				
Total # Vehicles: 103				
MPH	# of Veh.	Both Directions		%
66				100.0%
65	1	◆		100.0%
64				99.0%
63				99.0%
62	2	◆◆		99.0%
61				97.1%
60	1	◆		97.1%
59				96.1%
58	1	◆		96.1%
57	3	◆◆◆		95.1%
56	3	◆◆◆		92.2%
55	6	◆◆◆◆◆◆		89.3%
54	4	◆◆◆◆		83.5%
53	6	◆◆◆◆◆◆		79.6%
52	7	◆◆◆◆◆◆◆		73.8%
51	6	◆◆◆◆◆◆		67.0%
50	10	◆◆◆◆◆◆◆◆		61.2%
49				
48	6	◆◆◆◆◆◆		43.7%
47	6	◆◆◆◆◆◆		37.9%
46	4	◆◆◆◆		32.0%
45	6	◆◆◆◆◆◆		28.2%
44	12	◆◆◆◆◆◆◆◆◆◆		22.3%
43	4	◆◆◆◆		10.7%
42	3	◆◆◆		6.8%
41	2	◆◆		3.9%
40	2	◆◆		1.9%
39				0.0%



LEGEND

- SPEED LIMIT SIGN
- (()) RADAR LOCATION
- ▬ 50 MPH SPEED ZONE

CITY OF REDDING PUBLIC WORKS DEPARTMENT

MAY 2010

OLD OREGON TRL SPEED STUDY
AKRICH ST TO MIDLAND DR



