

**TO:** James L. App, City Manager  
**FROM:** Dennis J. Cassidy, Chief of Police  
**SUBJ:** Speed Zone Survey Update for Riverglen Drive  
**DATE:** November 7, 2006  
**NEEDS:** For the City Council to review and consider acceptance of a recent Speed Zone Survey completed by Omni-Means for Riverglen Drive between Union Road and Via Camellia.

- FACTS:**
1. The Union Road construction project has caused diversion of traffic to neighboring streets, including Riverglen Drive, Kleck Road, Skyview Drive and Montebello Oaks Drive.
  2. Complaints regarding speed on these roadways have become prominent.
  3. All roadways mentioned above are defined as “residential” by California Vehicle Code definition and, as such, allow for radar speed enforcement per the prima facial speed law.
  4. Riverglen Drive between Union Rd. and Via Camellia is one segment of roadway that does not meet the “residential” roadway definition, and it requires a formal speed survey in order for radar enforcement to be conducted.
  5. OMNI MEANS recently conducted an Engineering and Traffic Speed Survey for this segment of roadway on Riverglen Drive.
  6. This specific previously had no speed designation assigned to it. The Speed Survey results support a posted speed of 35 MPH.
  7. This item was reviewed by the Streets & Utilities Committee on October 27, 2006, and they recommended it be brought before Council for approval.

**ANALYSIS & CONCLUSION:** Omni-Means was recently asked to survey Riverglen Drive from Union Road to Via Camellia due speed complaints in this area, where the 25mph prima fascia speed limit does not apply per the California Vehicle Code. The speed survey was conducted, and it recommends a posted speed of 35 MPH in this area. Signage will be required to post Riverglen at 35 MPH from Union Rd. to Via Camellia, with additional signage for the 25 MPH speed change north of Via Camellia in order for enforcement over the entire stretch of roadway to be enforceable. The Police Department has reviewed the data and concurs with the results of the Omni-Means report. Ratification of this speed zone survey and adjustment of speed limit signs would enhance traffic safety.

**POLICY REFERENCE:** Title 12, Chapter 12.54, Section 12.54.010 of the Municipal Code, Section 22354 of the California Vehicle Code, and the Caltrans Traffic Manual.

**FISCAL IMPACT:** Minor signage & installation costs.

- OPTIONS:**
- a. Adopt Resolution No. 06-xx updating speed limits within the City of Paso Robles.
  - b. Amend, modify or reject the above option.

RESOLUTION NO. 06-

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES  
ACCEPTING THE COMPLETED SPEED ZONE SURVEY FOR UNION ROAD  
FROM KLECK ROAD TO GOLDEN HILLS ROAD AND AUTHORIZING  
THE UPDATE AND ENFORCEMENT OF POSTED SPEEDS ACCORDINGLY

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WHEREAS, the City chooses in the interest of public safety to update speed zone studies in areas where a need for speed survey data is deemed appropriate; and

WHEREAS, the City Council contracted with Omni-Means traffic engineers to complete a speed zone survey of Riverglen Drive from Union Road to Via Camellia consisting of radar and traffic engineering studies; and

WHEREAS; the Streets & Utilities Committee, Police Department and Public Works Department have reviewed the speed study and concur with the speed limit as listed in the attached Exhibit "A"; and

WHEREAS, Municipal Code Section 12.54.010 and 12.54.020 allow for speed limits to be set by resolution of the City Council.

NOW, THEREFORE, BE IT HEREBY RESOLVED that the City Council of the City of El Paso de Robles does hereby adopt this resolution amending the speed limit within the City limits as listed on the attached Exhibit "A," on Riverglen Drive from Union Road to Via Camellia to 35 MPH, superseding the limits as set forth in Chapter 12.54 of the Municipal Code and any / all previous resolutions adopting speed limits for this segment of roadway.

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 7th day of November, 2006 by the following vote:

AYES:  
NOES:  
ABSTAIN:  
ABSENT:

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Frank R. Mecham, Mayor

ATTEST:

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Deborah Robinson, Deputy City Clerk



Septiembre 26, 2006

Ms. Ditas Esperanza, P.E.  
City of Paso Robles  
1000 Spring Street  
Paso Robles, CA 93446

**RE: Riverglen Drive Speed Survey**

Dear Ms. Esperanza:

The following letter report outlines the Engineering and Traffic Speed Survey conducted by OMNI MEANS for the segment of Riverglen Drive between Union Road and Via Camelia.

Radar speed measurements were conducted along Riverglen Drive between Union Road and Via Camelia. This data was considered along with other factors, including roadway characteristics, adjacent land uses, side street traffic, on-street parking, and sight distances. Typically, roadway speed limits are established based upon a combination of these factors along with the measured "critical vehicle speed." This is usually referred to as the 85<sup>th</sup> percentile speed and is defined as the speed at which 85 percent of the motorists are traveling at or below. The following sections describe the data collection efforts and analyses for the traffic speed study.

**BACKGROUND METHODOLOGY**

Speed zoning or the application of designated vehicle speed limits is consistent with the State of California's laws for establishing *prima facie* (on the face of it) speed limits on public streets. Typically, speed zoning is warranted on streets and thoroughfares where there are "appreciable" amounts of traffic volumes and that speed zones would help contribute to the "orderly movement" of traffic by increasing driver awareness of a reasonable speed. Not all streets require *prima facie* speed limits. The basic goal of speed zoning is to prevent motorists from operating at a wide range of speeds along a thoroughfare that could create vehicle conflicts. Speed zoning allows motorists to travel at or near the same speeds.

Speed limits range from absolute to *prima facie*. Absolute speed limits are usually found on freeways where the maximum speed limit (65 mph or 70 mph) cannot be exceeded. *Prima facie* speed limits are usually established through speed zoning studies. In some instances, there are automatic *prima facie* speed limits. These include a 25 mph speed limit on any street other than a state highway, in any business or residence district unless a different speed is determined by local authority under procedures set forth in the California Vehicle Code.

A "residence district" is that portion of a street and the property contiguous thereto, other than a business district, (a) upon one side of which street, within a distance of a quarter 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 street, 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 street exists.

## DATA COLLECTION

**Survey Location:** Based on discussions with City staff, a speed survey was conducted at the following location.

- *Riverglen Drive* b/w Union Road and Via Camelia

For the survey, a "Radar Speed Survey" worksheet was prepared summarizing the measured vehicle speed characteristics, such as the average speed, the critical speed (85<sup>th</sup> percentile speed), the pace speed and the posted speed limit.

**Data Collection Procedures:** Field data was collected on August 23, 2006 at the survey location. The radar speed survey was made from an inconspicuously parked vehicle. An effort was made to ensure that the presence of the vehicle in no way affected the speed of the traffic being surveyed. Field information was recorded on forms and later electronically coded for computer analysis. Along sections of roadways where traffic flows more freely, only the lead vehicle of bunches or vehicles alone were recorded. The calculations derived from this technique accurately demonstrate a balance among the speed, capacity, and general use of a segment.

## FIELD SURVEY RESULTS

**Field Data Reduction:** A copy of the computer analysis of the field data collected at the survey location is attached to this report. The data at the top of the analysis indicates the observed conditions while the data at the bottom represents the calculated conditions. Observed conditions include the location of the spot speed survey, the direction of travel, the date and day of the week, and time of the survey. The existing speed limit, if posted, is noted along with the type of roadway and the general type of adjacent development (business, residential, industrial, etc.). Calculated values include the average speed, the 85<sup>th</sup> percentile (critical) speed, the 10 mph pace speed and the percent of vehicles observed within the 10 mph pace speed, the range of speeds observed and the total number of vehicles observed. A brief explanation of some of these terms follows.

The average speed is the arithmetical mean of the speeds observed and is derived by dividing the sum of all the speeds observed by the total number of observations.

The 85<sup>th</sup> percentile speed is that speed at or below which 85 percent of the observed vehicles are traveling. The 85<sup>th</sup> percentile speed (also called the critical speed) of a spot speed survey is the primary indicator of a speed limit that might be imposed. For City roadways the speed limit normally should be established at the nearest five mile per hour increment to the 85<sup>th</sup> percentile speed. However, in matching existing conditions with the traffic safety needs of the community, engineering judgment may indicate the need for a further reduction of five miles per hour. Factors affecting the decision to further decrease the speed limit may include accident experience, traffic volumes, road features, pedestrian/bicycle safety, or other special situations.

The pace is the 10 miles per hour increment of observed speeds that contains the greatest number of vehicles. In nearly all cases, the 85<sup>th</sup> percentile speed and the recommended speed limit lie somewhere within the pace, frequently in the middle to upper ranges. This is another indicator used to determine appropriate speed limits. The percent of vehicles in the pace speed is an indication of the bunching of

vehicular speeds. The higher the percent of vehicles within the pace speed the better the speed distribution. The percent in the pace is often between 60 and 80.

The results of speed survey for the identified segment are as follows.

**Riverglen Drive**

Posted Speed: None within study segment  
Average (Mean) Speed: 30 mph  
10 MPH Pace Speed: 30 to 39 mph  
Critical (85<sup>th</sup> Percentile) Speed: 38 mph

Besides measuring the 85<sup>th</sup> percentile speed, other physical or demographic factors regarding a roadway segment can be involved in determining the proper vehicle speeds, including type of adjacent land use, presence of on-street parking, roadway grade changes or curvature, and/or proximity to schools.

**RECOMMENDATIONS**

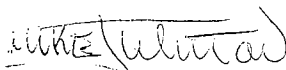
Based on the results of the survey, the following recommendations are made.

**Riverglen Drive b/w Union Road and Via Camelia:** The speed limit based upon the measured 85<sup>th</sup> percentile speed would be 40 mph. Within the limits of the study segment, there are no residential driveways fronting directly onto Riverglen Drive, but there are three residential street connections. Due to the horizontal and vertical alignment of this segment of Riverglen Drive, it is the opinion of the engineer that an additional 5 mph hour reduction is warranted. For this reason, the recommended speed limit for the segment of Riverglen Drive between Union Road and Via Camelia is **35 mph**. Speed limit signs along this segment of Riverglen Drive would need to be placed in accordance with applicable standards, as there is currently no posted speed limit.

It has been a pleasure working with you on this project. Please feel free to give me a call if you have any questions regarding the results of the survey.

Sincerely,

OMNI-MEANS, Ltd.  
Engineers & Planners



Mike J. Winton, P.E.  
Project Manager



Attachments

# VEHICLE SPEED DATA SHEET

LOCATION: Riverglen Drive b/w Union & Via Camelia

DIRECTION: Both

RADAR: Approx. 200 Yards North of Union

TIME: 12:20 p.m

DATE: August 23, 2006

MPH	5					10					15					20					25					30					TOTAL VEH.	TOTAL SPEED
55																									0	0						
54																									0	0						
53																									0	0						
52																									0	0						
51																									0	0						
50																									0	0						
49																									0	0						
48																									0	0						
47																									0	0						
46																									0	0						
45																									0	0						
44																									0	0						
43	X																								1	43						
42	X																								1	42						
41	X	X																							2	82						
40																									0	0						
39	X	X	X	X	X	X	X	X																	7	273						
38	X	X	X	X	X	X																			5	190						
37	X	X	X	X	X	X																			5	185						
36	X	X	X	X																					4	144						
35	X	X	X	X																					4	140						
34	X	X	X	X																					4	136						
33	X	X	X	X																					4	132						
32	X	X	X	X	X	X	X																		7	224						
31	X	X	X	X																					4	124						
30	X	X	X	X																					4	120						
29	X	X	X	X																					4	116						
28	X	X	X	X																					4	112						
27	X	X	X																						3	81						
26	X	X	X	X	X																				5	130						
25	X	X	X																						3	75						
24	X	X	X	X																					4	96						
23	X	X	X	X																					4	92						
22	X	X																							2	44						
21	X	X	X	X																					4	84						
20	X	X																							2	40						
19	X	X	X																						3	57						
18	X	X																							2	36						
17																									0	0						
16	X	X	X																						3	48						
15																									0	0						

TOTAL: 95 2846

**30.0**  
AVG. SPEED

**4%**  
% OVER PACE

**95**  
TOTAL NUMBER OF VEHICLES

**38**  
CRITICAL SPEED (85th PERCENTILE)

**51%**  
% IN PACE

**No Data**  
ADT

**30 MPH to 39 MPH**  
PACE SPEED

**45%**  
% UNDER PACE

**2-Lane Collector**  
ROAD CLASSIFICATION

**None on Study Segment**  
POSTED SPEED

**Robert Lane**  
OBSERVER

**Clear**  
WEATHER

**Riverglen Drive b/w Union Road and Via Camelia**

SPEED (MPH)	EASTBOUND and WESTBOUND			
	# OF VEHICLES	CUMULATIVE VEHICLES	% OF TOTAL	CUMULATIVE %
55	0	0	0.0	100.0
54	0	0	0.0	100.0
53	0	0	0.0	100.0
52	0	0	0.0	100.0
51	0	0	0.0	100.0
50	0	0	0.0	100.0
49	0	0	0.0	100.0
48	0	0	0.0	100.0
47	0	0	0.0	100.0
46	0	0	0.0	100.0
45	0	0	0.0	100.0
44	0	0	0.0	100.0
43	1	1	1.1	98.9
42	1	2	1.1	97.9
41	2	4	2.1	95.8
40	0	4	0.0	95.8
39	7	11	7.4	88.4
38	5	16	5.3	83.2
37	5	21	5.3	77.9
36	4	25	4.2	73.7
35	4	29	4.2	69.5
34	4	33	4.2	65.3
33	4	37	4.2	61.1
32	7	44	7.4	53.7
31	4	48	4.2	49.5
30	4	52	4.2	45.3
29	4	56	4.2	41.1
28	4	60	4.2	36.8
27	3	63	3.2	33.7
26	5	68	5.3	28.4
25	3	71	3.2	25.3
24	4	75	4.2	21.1
23	4	79	4.2	16.8
22	2	81	2.1	14.7
21	4	85	4.2	10.5
20	2	87	2.1	8.4
19	3	90	3.2	5.3
18	2	92	2.1	3.2
17	0	92	0.0	3.2
16	3	95	3.2	0.0
15	0	95	0.0	0.0
TOTAL	95			

Critical Speed: The speed at which 85% of the motorists are traveling at or below during normal free flowing traffic conditions (highlighted cell above).

CITY OF PASO ROBLES

SPEED ZONE ENGINEERING AND TRAFFIC SURVEY - AUGUST 2006

STREET NAME: Riverglen Drive

FROM: Union Road TO: Via Camelia

DATE: August 23, 2006

RECOMMENDED SPEED LIMIT = 35

OBSERVED SPEED - CRITICAL = 38

OBSERVED SPEED - PACE = 30 MPH to 39 MPH

EXISTING SIGNED ZONE = None on Study Segment

AVERAGE DAILY TRAFFIC = No Data



Riverglen Drive between Union Road & Via Camelia  
(Eastbound & Westbound)  
CUMULATIVE SPEED CURVE

