

**2005-2006
RADAR SPEED SURVEY AND STUDY**



**Prepared by:
City of Reedley
Public Works Department
Engineering Division
1733 Ninth Street
Reedley, CA 93654**



**Approved by:
Bruce Webber, City Engineer
April 11, 2006**

A handwritten signature in black ink, appearing to read "Bruce A. Webber", written in a cursive style.

2005-2006 Radar Speed Survey and Study

The California Vehicle Code requires that all jurisdictions that enforce speed limit regulations with radar speed measuring devices perform studies to justify the posted limits. The studies must be conducted every five years. The code allows jurisdictions to enforce speed limits that are obeyed by at least eighty-five percent (85th percentile) of the drivers. The Code does not allow enforcement with radar systems where less than eighty-five percent of the drivers are obeying the limit unless there are conditions present that justify the lower limit.

The Reedley Police Department conducted speed surveys between December 2005 and February 2006 of all posted roadways within the City. The speeds of vehicles were measured using MetroCount™ 5600 Series Roadside Units and manual Radar Speed Surveys. The MetroCount™ Units determine the speed of the vehicles from pneumatic hoses that are placed across the roadway. Two parallel hoses are placed across each lane of the roadway. The units were left to collect data for approximately three hours at each location. In all instances a minimum of 100 vehicles were surveyed. The information that was collected in the field was downloaded into computers for analysis. The manual Radar Speed Surveys were conducted by staff at specified locations for approximately one hour at each location. In all instances a minimum of 50 vehicles were surveyed. The Engineering Division evaluated the results of the radar and roadside unit surveys and recommends that one of the speed limits to be changed.

A copy of the speed survey results summary is attached. For the purpose of this evaluation the 85th percentile speed has been rounded down to the nearest five (5) miles per hour to determine the initial recommended speed. In some cases, however, a lower or higher speed limit may be desirable. In such cases, it is necessary to provide an engineering report or engineering recommendation to justify the different speed limits.

The first category of recommendations are those speed zones where the current posted speed limit and the 85th percentile speed are consistent. These zones, therefore, have no recommended changes. They are as follows:

1. Manning Avenue from Reed Avenue to East Avenue - 35 mph
2. Manning Avenue from "I" Street to Reed Avenue - 35 mph
3. Eleventh Street from Reed Avenue to "I" Street - 30 mph
4. "I" Street from Reed Avenue to Dinuba Avenue - 30 mph
5. Reed Avenue from Manning Avenue to Dinuba Avenue - 30 mph
6. Springfield Avenue from East Avenue to Buttonwillow Avenue - 25 mph
7. North Avenue from Reed Avenue to East Avenue - 25 mph
8. Frankwood Avenue from Manning Avenue to the north City Limit Line - 35 mph
9. Parlier Avenue from Frankwood Avenue to Buttonwillow Avenue - 35 mph
10. Parlier Avenue from Reed Avenue to Frankwood Avenue - 30 mph
11. Dinuba Avenue from Sunset Avenue to Buttonwillow Avenue - 40 mph

12. Dinuba Avenue from Reed Avenue to Sunset Avenue - 30 mph
13. East Avenue from Manning Avenue to Dinuba Avenue - 35 mph
14. Columbia Avenue from Parlier Avenue to Manning Avenue - 30 mph
15. Reed Avenue from Dinuba Avenue to the south City Limit Line - 35 mph
16. Manning Avenue from East Avenue to Buttonwillow Avenue - 35 mph

The following zones are recommended to increase the current posted speed limit. The 85th percentile rules justifies these changes in the recommended zones.

The locations are as follows:

1. Olson Avenue from Kings River Road to Reed Avenue - 35 mph

Engineering recommends that the speed limit be increased from 25 mph to 35 mph within this zone area. This specific zone does not meet residential road requirements and is considered an arterial street according to the City of Reedley general plan map. The 85th percentile rule justifies the speed limit increase.

2. "I" Street from Manning Avenue to Reed Avenue - 35 mph

Engineering recommends that the speed limit be increased from 30 mph to 35 mph within this zone area. "I" Street is a wide road with little to no sight restrictions. Intersection controls will help in governing speed and the 85th percentile rule justifies the speed limit increase.

3. Dinuba Avenue from Buttonwillow to the east City Limit Line - 45 mph

Engineering recommends that the speed limit be increased from 40 mph to 45 mph within this zone area. This section of road is heading out of town where there are no sight restrictions or driveways other than commercial that front onto Dinuba Avenue. New construction in the area has a block wall separating residential development from Dinuba Avenue and the 85th percentile rule justifies the speed limit increase.

The following zones are recommended to maintain the speed limits that are currently posted although the 85th percentile rule would require a posted zone of 5 mph or more than the recommended zone. These locations are as follows:

1. Manning Avenue from the west City Limit Line to the Kings River Bridge - 50 mph

Engineering recommends that the lower speed limit be used within this zone area which leads to the "I" Street. Sight distance is a concern for west bound traffic and traffic entering onto Manning Avenue within this roadway segment. New development within this area add to the congestion of this roadway thereby making the lower speed desirable.

2. Eleventh Street from East Avenue to Manning Avenue - 30 mph

Engineering recommends that the lower speed limit be used within this zone area which leads to the City's Downtown retail zone.

3. Reed Avenue from Aspen Avenue to Manning Avenue - 35 mph

Engineering recommends that the lower speed limit be used because this street is primarily within a residential and community college zone area. There are cars that back into the roadway from residential driveways, and there is also a high pedestrian traffic volume across this section of roadway creating a major hazard.

4. South Avenue from Reed Avenue to the east City Limit Line - 40 mph

Engineering recommends that the lower speed limit be used within this zone area. It is anticipated that future development in this area will add to the congestion of this roadway thereby making the lower speed desirable.

5. Manning Avenue from Buttonwillow Avenue to the east City Limit Line - 40 mph

Engineering recommends that the lower speed limit be used within this zone area. It is anticipated that future development in this area will add to the congestion of this roadway thereby making the lower speed desirable.

6. Buttonwillow Avenue from Manning Avenue to the south City Limit Line - 40 mph

Engineering recommends that the lower speed limit be used within this residential and commercial zone area. It is anticipated that future development within this area will add to the congestion of this roadway thereby making the lower speed desirable.

7. Buttonwillow Avenue from Parlier Avenue to Manning Avenue - 45

Engineering recommends that the lower speed limit be used within this residential and commercial zone area. It is anticipated that future development within this area will add to the congestion of this roadway thereby making the lower speed desirable.

8. Frankwood Avenue from "I" Street to Shoemake Avenue - 35 mph

Engineering recommends that the lower speed limit be used because this street is primarily within a residential zone area. There are cars that back into the roadway from residential driveways and there is also a possibility of children running into the roadway creating a major hazard.

9. Frankwood Avenue from Shoemake Avenue to Herbert Avenue - 40 mph

Engineering recommends that the lower speed limit be used within this residential zone area. It is anticipated that future development within this area will add to the congestion of this roadway thereby making the lower speed desirable.

10. Manning Avenue from "T" Street to Kings River Bridge (E/B)- 40 mph

Engineering recommends that the lower speed limit be used within this zone area. Sight distance is a concern for east bound traffic within this roadway segment. It is anticipated that future development in this area will add to the congestion of this roadway thereby making the lower speed desirable.

11. Manning Avenue from "T" Street to Kings River Bridge (W/B)- 50 mph

Engineering recommends that the lower speed limit be used within this zone area. Sight distance is a concern for west bound traffic within this roadway segment. It is anticipated that future development near this area will add to the congestion of this roadway thereby making the lower speed desirable.

12. Reed Avenue from Aspen Avenue to South Avenue (N/B)- 45 mph

Engineering recommends that the lower speed limit be used because this street is primarily within a industrial zone area. There is a substantial amount of industrial traffic in this area that add to the congestion of this roadway thereby making the lower speed desirable.

2005-2006 RADAR SPEED SURVEY SUMMARY

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Engineering Division

Route	Location	Direction	Hourly Count	Average Speed	85th Percentile	Posted Speed Limit
1	Manning Avenue	EB	319	32	38	35
2	Manning Avenue	WB	262	31	37	35
3	Manning Avenue	EB	454	58	65	50
4	Manning Avenue	WB	459	52	58	50
5	Manning Avenue	EB	492	33	40	35
6	Manning Avenue	WB	327	32	37	35
7	Manning Avenue	EB	426	35	41	35
8	Manning Avenue	WB	333	35	42	35
9	Eleventh Street	WB	313	34	39	30
10	Eleventh Street	EB	210	29	34	30
11	Eleventh Street	EB	62	30	35	30
12	Eleventh Street	WB	59	32	36	30
13	"I" Street	NB	341	31	37	30
14	"I" Street	SB	561	37	43	30
15	"I" Street	NB	328	31	35	30
16	"I" Street	SB	312	33	38	30
17	Reed Avenue	NB	290	39	45	35
18	Reed Avenue	SB	288	38	44	35
19	Reed Avenue	NB	286	28	32	30
20	South Avenue	EB	39	43	54	40
21	South Avenue	WB	33	44	54	40
22	Manning Avenue	EB	190	38	48	40
23	Manning Avenue	WB	241	44	50	40

24	Buttonwillow Avenue	at Parlier Avenue	SB	128	46	56	45
25	Buttonwillow Avenue	at Parlier Avenue	NB	607	46	56	45
26	Buttonwillow Avenue	at El Dorodo	NB	190	45	51	40
27	Buttonwillow Avenue	at El Dorodo	SB	228	48	51	40
28	Buttonwillow Avenue	at Evening Glow	NB	189	42	47	40
29	Buttonwillow Avenue	at Evening Glow	SB	269	46	54	40
30	Buttonwillow Avenue	at Olsen Avenue	NB	181	44	54	40
31	Buttonwillow Avenue	at Olsen Avenue	SB	161	44	51	40
32	Reed Avenue	at Flora Avenue	NB	120	31	36	30
33	Reed Avenue	at Flora Avenue	SB	120	31	36	30
34	Olson Avenue	at Blossom Avenue	EB	118	35	42	25
35	Olson Avenue	at Blossom Avenue	WB	118	32	37	25
36	Springfield Avenue	at Haney	EB	100	25	30	25
37	Springfield Avenue	at Haney	WB	100	23	28	25
38	North Avenue	at "F" Street	WB	112	28	33	25
39	North Avenue	at "F" Street	EB	112	28	33	25
40	Frankwood Avenue	at Curtis Avenue	SB	120	39	46	35
41	Frankwood Avenue	at Curtis Avenue	NB	120	37	44	35
42	Frankwood Avenue	at Parlier Avenue	SB	100	31	36	35
43	Frankwood Avenue	at Parlier Avenue	NB	100	33	38	35
44	Parlier Avenue	at Pecan	EB	42	34	40	35
45	Parlier Avenue	at Pecan	WB	42	33	39	35
46	Parlier Avenue	at Hope Street	EB	50	30	36	30
47	Parlier Avenue	at Hope Street	WB	50	31	36	30
48	Dinuba Avenue	at Carolyn Lane	EB	200	38	45	40
49	Dinuba Avenue	at Carolyn Lane	WB	200	36	43	40
50	Dinuba Avenue	at Hope Avenue	EB	75	26	31	30
51	Dinuba Avenue	at Hope Avenue	WB	75	24	34	30
52	Dinuba Avenue	at Tobu Avenue	WB	133	43	51	40
53	Dinuba Avenue	at Tobu Avenue	EB	133	44	52	45

