



CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Traffic Resolution Amendment - Speed Limit Survey on Ham Lane

MEETING DATE: July 17, 1996

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the City Council adopt a resolution amending the Traffic Resolution #87-163 by approving the speed limit change from 35 to 40 miles per hour on Ham Lane between Lodi Avenue and Vine Street.

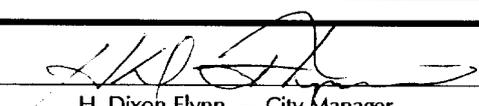
BACKGROUND INFORMATION: The Public Works Department recently performed Engineering and Traffic Surveys on nine City streets. Per Section 40802(b) of the California Vehicle Code, Engineering and Traffic Surveys must be updated within a minimum of every five years on "non-local" streets. Speeds on streets on which surveys exceed five years cannot be enforced using radar. "Non-local" streets are collector and arterial streets on the Federal Aid System.

Attached as **Exhibit A** are the results of the nine surveys performed. As indicated, speed limit modifications are recommended on the portion of Ham Lane between Lodi Avenue and Vine Street. The survey is attached as **Exhibit B**.

The surveys performed, which follow State of California Department of Transportation guidelines, include maps and written narratives for each street. The maps show physical characteristics and field data, such as roadway widths, number of through lanes, traffic controls, traffic volumes, prevailing speeds, and accident rates. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are shown in accidents per million vehicle miles (ACC/MVM). The average citywide accident rate is 4.4 ACC/MVM. The narratives describe the data indicated in the maps and results of the survey.

Three factors should be considered in determining the speed limit most appropriate to facilitate the orderly and reasonably safe movement of traffic. These factors are prevailing speeds, unexpected conditions to drivers, and accident records. Reasonable speed limits conform to the actual behavior of the majority of motorists and, by measuring motorists' speeds, one will be able to select a speed limit both reasonable and effective. Speed limits should normally be established at the first five mile per hour (mph) increment below the 85th 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 mph.

APPROVED: _____


H. Dixon Flynn -- City Manager

SURVEY RESULTS

A speed limit change is recommended on the following portion of Ham Lane:

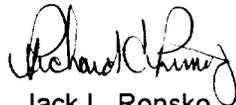
Vine Street to Lodi Avenue - Vehicle speeds recorded in this segment support a 40 mph speed limit. The accident rate of 2.5 is significantly below the citywide average. Based on the increase in prevailing speeds and low accident rate, we recommend increasing the speed limit on this segment from 35 mph to 40 mph.

RECOMMENDATION

Staff recommends the following speed limit change on Ham Lane:

<u>SEGMENT</u>	<u>SPEED LIMIT</u>
Vine Street to Lodi Avenue	35 to 40 mph

FUNDING: Funding to modify speed limit signs and legends from the Street Maintenance Account at an approximate cost of \$450.


for Jack L. Ronsko
Public Works Director

Prepared by Rick S. Kiriou, Senior Engineering Technician

JLR/RSK/Im

Attachments

cc: City Attorney
Police Chief
City Engineer
Street Superintendent
Associate Traffic Engineer

Recommended Speed Limit Changes

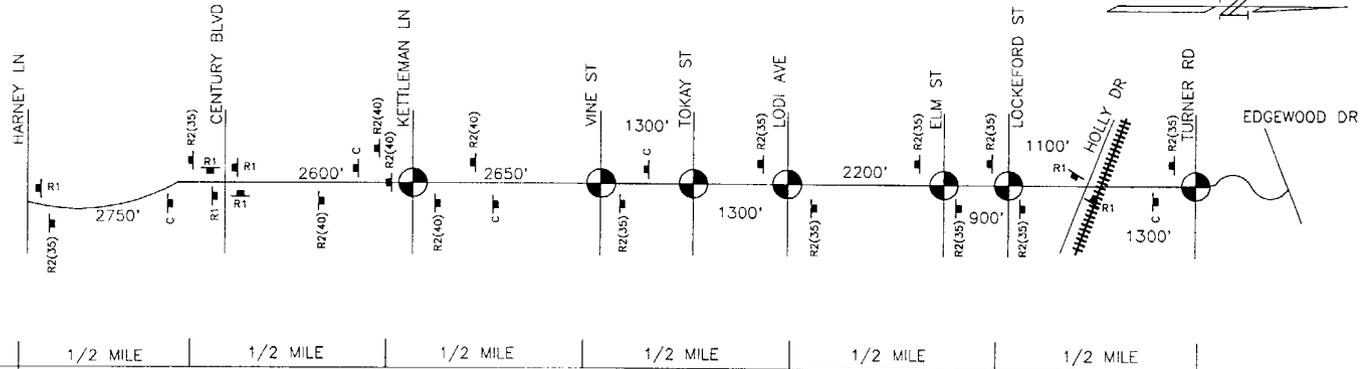
Date: July 8, 1996

The recommended speed limit changes are shown in **bold** and *italics*.

- | | |
|--|--|
| <p>1. <u>Brandywine Drive</u>
Ham to Hutchins 35 mph (no change)</p> <p>2. <u>California Street</u>
Lockeford to Turner 30 mph (no change)</p> <p>3. <u>Eilers Lane</u>
Woodhaven to Lilac 30 mph (no change)
Lilac to Lower Sac 30 mph (no change)</p> <p>4. <u>Ham Lane</u>
Harney to Century 35 mph (no change)
Century to Kettleman 40 mph (no change)
Kettleman to Vine 40 mph (no change)
<i>Vine to Lodi 35 to 40 mph</i>
Lodi to Lockeford 35 mph (no change)
Lockeford to Turner 35 mph (no change)</p> <p>5. <u>Kettleman Lane</u>
Highway 99 to Beckman 35 mph (no change)
Beckman to E. City Limits 40 mph (no change)</p> | <p>6. <u>Lockeford Street</u>
Mills to Ham 35 mph (no change)
Ham to California 35 mph (no change)
California to Church 35 mph (no change)
Church to Stockton 30 mph (no change)
Stockton to Cherokee 35 mph (no change)
Cherokee to E. City Limits 35 mph (no change)</p> <p>7. <u>Loma Drive</u>
Elm to Lockeford 30 mph (no change)
Lockeford to Turner 35 mph (no change)</p> <p>8. <u>Sacramento Street</u>
Lockeford to Turner 35 mph (no change)</p> <p>9. <u>Stockton Street</u>
Harney to Kettleman 45 mph (no change)
Kettleman to Tokay 35 mph (no change)
Tokay to Lockeford 35 mph (no change)
Lockeford to Turner 35 mph (no change)</p> |
|--|--|

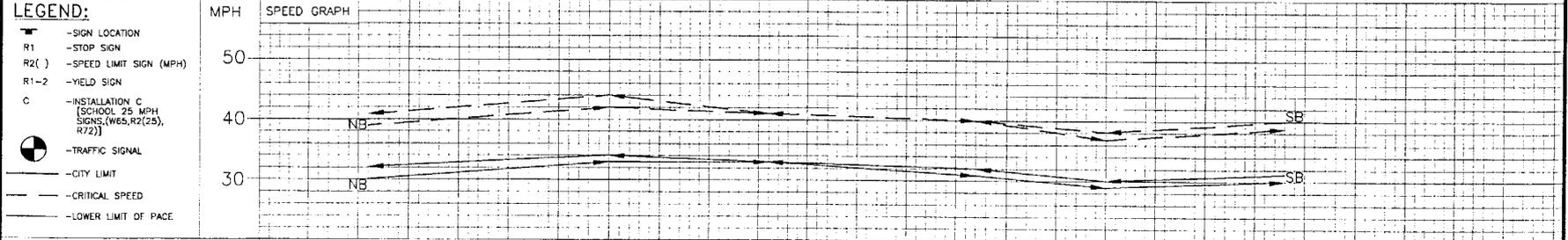
**ENGINEERING
AND TRAFFIC SURVEY**

SEE NARRATIVE FOR
BACKGROUND INFORMATION



	1/2 MILE	1/2 MILE	1/2 MILE	1/2 MILE	1/2 MILE	1/2 MILE
ROADWAY WIDTH	64'-84' VARIES		64'		55' VARIES	
NO. OF LANES	4		2 + LT LANE		4	
MEDIAN (TYPE)	NONE					
TRAFFIC SIGNAL DATA	8@ACT		2@ACT		8@ACT	
AVERAGE DAILY TRAFFIC	6800	8900 (9110) 9320	17500	16400	15800	15220
OBS. SPEED-CRITICAL, 85th% SB	41	44	41	40	38	40
NB	39	42	41	40	37	39
-PACE(%) SB	32-42 (80)	34-44 (82)	33-43 (88)	32-42 (77)	30-40 (81)	31-41 (77)
NB	30-40 (80)	33-43 (84)	33-43 (85)	31-41 (83)	29-39 (88)	30-40 (81)
-MEDIAN, 50th% SB	36	39	37	36	34	35
NB	35	38	37	35	34	35

EXISTING SPEED ZONE	35 MPH	40 MPH	35 MPH
PROPOSED SPEED ZONE	35 MPH	40 MPH	35 MPH



ACCIDENT PLOT	YR: 1994	1 1 1	1 2 2 3	3 1	2 1	2 1	1 2 2	1 1 2 1 1 1	1 3 1 1	2 1 1
	YR: 1995	1 1	1 2 1	1 4 3 1		1 1 1 1	1 1	3 4 1 1	3 1	1 1 1
ACCIDENT RATE-ACC./MILL. VEH.-MI.		1.9	3.7	2.5		2.4	2.5	3.5	6.2	2.1

DR: RR
 No. Date Revision Appr Approved By
 Date
 City Engineer RCE No. 28183

CITY OF LODI
 PUBLIC WORKS DEPARTMENT

HAM LN

SPEED ZONE SURVEY

EXHIBIT B

SPEED ZONE REPORT - Ham Lane

- REFERENCE - Speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802 (b) of the California Vehicle Code. These guidelines are outlined in Chapter 8 of the Caltrans Traffic Manual.
- STUDY

Important factors to consider in determining the speed limit which is most appropriate to facilitate the orderly movement of traffic and that is reasonably safe are prevailing speeds, unexpected conditions to drivers, and accident records.

Prevailing Speeds (85th Percentile Speeds) - Reasonable speed limits conform to the actual behavior of the majority of motorists, and by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first five mile per hour increment below the 85th 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.

Twelve radar surveys were performed and the 85th percentile speeds ranged from 37 to 44 mph as shown below:

<u>Street Segment</u>	<u>Northbound</u>	<u>Southbound</u>
Harney Lane to Century Boulevard	39 mph	41 mph
Century Boulevard to Kettleman Lane	42 mph	44 mph
Kettleman Lane to Vine Street	41 mph	41 mph
Vine Street to Lodi Avenue	40 mph	40 mph
Lodi Avenue to Elm Street	37 mph	38 mph
Elm Street to Turner Road	39 mph	40 mph

Unexpected Conditions

When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, speed limits below the 85th percentile are warranted. The following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

Accidents

Accident records of the two most recent years were considered in determining the speed zones. Accidents on segments of roadways are classified by their accident rate. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment. Accident rates are

shown in accidents per million vehicle miles (ACC/MVM). The accident rate ranged from 1.9 to 6.2 ACC/MVM. The average Citywide accident rate is 4.4 ACC/MVM.

◦ CONCLUSION

Harney Lane to Century Boulevard

The 85th percentile speeds on this segment are 39 and 41 mph. The 50th percentile speeds are 35 and 36 mph. The accident rate of 1.9 in this segment is lower than the Citywide average and has not changed from the 1991 survey. Based on the prevailing speeds and continuing low accident rate, we recommend retaining the 35 mph speed limit in this segment.

Century Boulevard to Kettleman Lane

The 85th percentile speeds on this segment are 42 and 44 mph. The 50th percentile speeds are 38 and 39 mph. The accident rate of 3.7 is lower than the Citywide average and slightly higher than the 2.8 rate from the 1991 survey. Based on prevailing speeds and low accident rate, we recommend retaining the 40 mph speed limit in this segment.

Kettleman Lane to Vine Street

The 85th percentile speed on this segment is 41 mph. The 50th percentile speed is 37 mph. The accident rate of 2.5 is lower than the Citywide average and slightly higher than the 2.0 rate from the 1991 survey. Based on prevailing speeds and low accident rate, we recommend retaining the 40 mph speed limit in this segment.

Vine Street to Lodi Avenue

The 85th percentile speed on this segment is 40 mph. The 50th percentile speeds are 35 and 36 mph. The highest accident rate of 2.5 in this segment is below the Citywide average and lower than the 4.0 rate from the 1991 survey. Based on the increase in prevailing speeds and continuing low accident rate, we recommend increasing the speed limit in this segment from 35 to 40 mph.

Lodi Avenue to Lockeford Street

The 85th percentile speeds on this segment are 37 and 38 mph. The 50th percentile speed is 34 mph. The highest accident rate of 6.2 is above the Citywide average and slightly lower than the 6.3 rate from the 1991 survey. Although the accident rate is above the Citywide average, the amount is not significant. Based on prevailing speeds and reasonable accident rate, we recommend retaining the 35 mph speed limit on this segment.

Lockeford Street to Turner Road

The 85th percentile speeds on this segment are 39 and 40 mph. The 50th percentile speed is 35 mph. The accident rate of 2.1 in this segment is below the Citywide average and lower than the 5.0 rate from the 1991 survey. Based on prevailing speeds and reduced accident rate, we recommend retaining the speed limit 35 mph in this segment.

The recommended speed limits are shown below:

<u>STREET SEGMENT</u>	<u>POSTED SPEED LIMIT</u>
Harney Lane to Century Boulevard	35 mph (no change)
Century Boulevard to Kettleman Lane	40 mph (no change)
Kettleman Lane to Vine Street	40 mph (no change)
Vine Street to Lodi Avenue	35 to 40 mph
Lodi Avenue to Lockeford Street	35 mph (no change)
Lockeford Street to Turner Road	35 mph (no change)

Richard C. Prima, Jr.
City Engineer

RESOLUTION NO. 96-97

A RESOLUTION OF THE LODI CITY COUNCIL
APPROVING SPEED LIMIT CHANGE ON HAM LANE BETWEEN
LODI AVENUE AND VINE STREET, AND THEREBY AMENDING
TRAFFIC RESOLUTION NO. 87-163

WHEREAS, speed zone surveys are performed in the City of Lodi following State of California Department of Transportation (Caltrans) guidelines in accordance with Section 40802(b) of the California Vehicle Code, which are outlined in Chapter 8 of the Caltrans Traffic Manual.

RESOLVED, that the City Council of the City of Lodi does hereby approve the speed limit change on Ham Lane between Lodi Avenue and Vine Street from 35 to 40 miles per hour; and

FURTHER RESOLVED, that City of Lodi Traffic Resolution No. 87-163, Section 7 "Speed Limits" is hereby amended by designating a speed limit change on Ham Lane between Lodi Avenue and Vine Street from 35 to 40 miles per hour.

Dated: July 17, 1996

I hereby certify that Resolution No. 96-97 was passed and adopted by the City Council of the City of Lodi in a regular meeting held July 17, 1996, by the following vote:

AYES: COUNCIL MEMBERS - Davenport, Mann, Pennino, Sieglock
and Warner (Mayor)

NOES: COUNCIL MEMBERS - None

ABSENT: COUNCIL MEMBERS - None

ABSTAIN: COUNCIL MEMBERS - None


JENNIFER M. PERRIN
City Clerk