



CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Adopt Resolution Amending Traffic Resolution 97-148 Approving Speed Limit Reduction on Lodi Avenue between Cherokee Lane and Guild Avenue from 40 to 35 Miles per Hour

MEETING DATE: January 2, 2003

PREPARED BY: Public Works Director

RECOMMENDED ACTION: That the City Council adopt a resolution amending Traffic Resolution 97-148 by approving the speed limit reduction on Lodi Avenue between Cherokee Lane and Guild Avenue from 40 to 35 miles per hour, as shown on the attached Engineering and Traffic Survey (Exhibit A).

BACKGROUND INFORMATION: Per Section 40802(b) of the California Vehicle Code, in order for speed limits to be enforceable using radar, Engineering and Traffic Surveys must be updated a minimum of every five years on all "non-local" streets. "Non-local" streets are collector and arterial streets included in the Federal Aid System. In compliance with this code section, the Public Works Department has reviewed speed limits on the following six streets. The existing speed limits on these streets are shown on Exhibit B.

- Century Boulevard
- Evergreen Drive, Elm Street to Turner Road
- Lodi Avenue
- Lower Sacramento Road
- Victor Road, Cherokee Lane to Highway 99
- Vine Street, Lower Sacramento Road to Hutchins Street

Engineering and Traffic Surveys are performed using State of California Department of Transportation (Caltrans) guidelines. The surveys include a map showing the physical characteristics of the roadway, such as roadway width, number of through lanes, and traffic controls. Traffic volumes, prevailing speeds, and accidents are analyzed and the results are provided in a written narrative for each street. The following three factors are considered when determining speed limits.

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 5 miles per hour (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

APPROVED:


H. Dixon Flynn -- City Manager

Adopt Resolution Amending Traffic Resolution 97-148 Approving Speed Limit Reduction on Lodi Avenue between Cherokee Lane and Guild Avenue from 40 to 35 Miles per Hour

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following factors were considered: roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile condition, intersection spacing and offsets, commercial and residential driveway characteristics, residential density, and pedestrian and bicycle safety.

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 average Citywide accident rate is 4.1 ACC/MVM.

STUDY RESULTS: Of the seven streets surveyed, staff is recommending changing the speed limit on the portion of Lodi Avenue from Cherokee Lane to Guild Avenue. Since the 1997 survey, there has been increasing development in this area including the extension of Guild Avenue south of Lodi Avenue. These changes are reflected in the substantial increase in traffic volumes. The range of 85th percentile speeds has also reduced from 45 to 40 mph to 40 to 34 mph. Based on the reduction in speeds and commercial driveway characteristics, we support reducing the speed limit from 40 to 35 mph on this segment.

Staff recommends that City Council approve reducing the speed limit on the portion of Lodi Avenue described below:

<u>Street Segment</u>	<u>Existing</u>	<u>Proposed</u>
Cherokee Lane to Guild Avenue	40 mph	35 mph

FUNDING: Funding for the modifications to speed limit signs and pavement legends from the Street Maintenance Account at an approximate cost of \$600.

Funding Available:


Finance Director


Richard C. Prima, Jr.
Public Works Director

Prepared by Rick S. Kiriu, Senior Engineering Technician

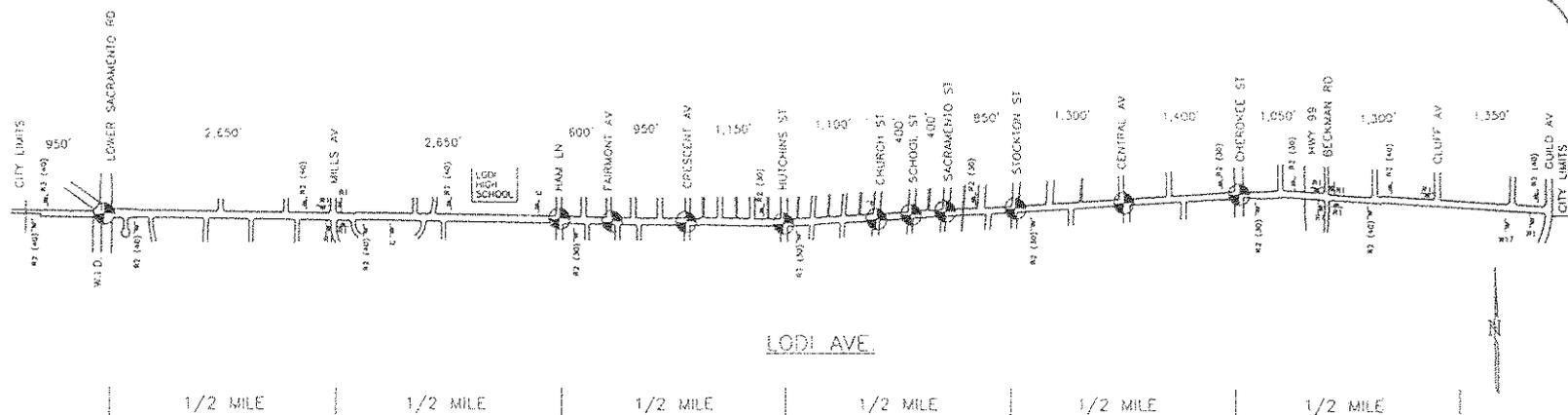
RCP/RSK/pmf

Attachments

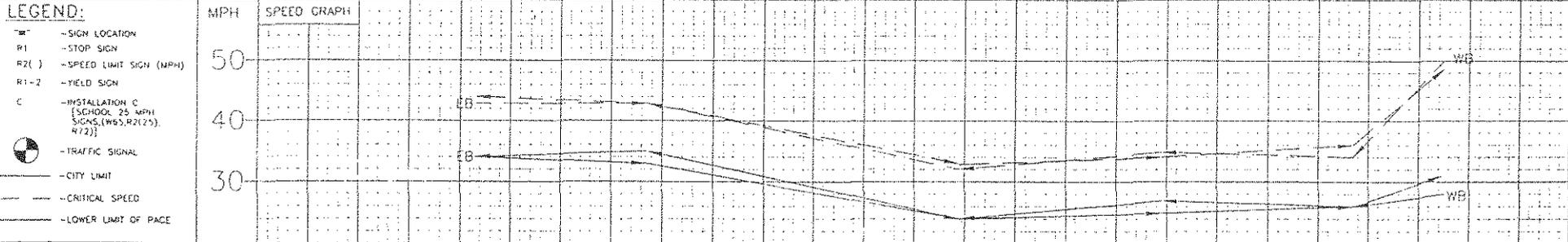
cc: City Attorney
Police Chief
City Engineer
Street Superintendent
Senior Traffic Engineer
Police Lieutenant Grenko

ENGINEERING AND TRAFFIC SURVEY

SEE NARRATIVE FOR BACKGROUND INFORMATION



SPEED TABLE		1/2 MILE		1/2 MILE		1/2 MILE		1/2 MILE		1/2 MILE		1/2 MILE					
ROADWAY WIDTH		50'	82'	64'				60' Varies (56' @ RR Tracks)				72'	48'-64'				
NO. OF LANES		2						4					2				
MEDIAN (TYPE)		NONE															
TRAFFIC SIGNAL DATA		B @ ACT		8@ACT		3@ACT		2@ACT		8@ACT		<3>2@ACT		2@ACT		8@ACT	
AVERAGE DAILY TRAFFIC		3,360	7,810	9,140	(11,550)	13,950	16,320	13,760 (13,880)	3,990	13,470	12,320	5,760	4,210				
OBS. SPEED - CRITICAL, 85th% EB			43	43			33			34		36	39				
WE			44	43			32			35		34	40				
-PACE(%) EB			34-44(75)	33-43(74)			24-34(80)			25-35(80)		26-36(75)	31-41(77)				
WE			34-44(72)	35-45(79)			24-34(86)			27-37(72)		26-36(84)	28-38(62)				
-MEDIAN, 50th% EB			39	38			28			30		30	34				
WE			40	39			29			30		30	35				
EXISTING SPEED ZONE		55	40 mph		30 mph				30 mph		40 mph		40 mph				
PROPOSED SPEED ZONE		55	40 mph		30 mph				30 mph		35 mph		35 mph				



ACCIDENT PLOT	YR: 2000	1	1	11	111	1	1	1	3	2	1113	14	4	11	0	1	1	14	1	3	11	0	1	1
	YR: 2001	1	1	2	11	1	1	1	2	1	11	1	11111	1	11	1	11111	17	1	1	11111	0	1	1
ACCIDENT RATE - ACC./MILL. VEH. - MI.		4.5		3.1		2.1		2.1	5.3		6.3		5.2	2.6	2.6	3.6		5.8		5.5		0.0		2.6

DATE	EB/RSK	No.	Date	Revision	Appr.	Approved By


CITY OF LODI
 PUBLIC WORKS DEPARTMENT

LODI AVE
 West City Limits to Guild

SPEED ZONE SURVEY

EXHIBIT A

SPEED ZONE REPORT - Lodi Avenue, West City Limits to Guild Avenue

- 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 CRITERIA - 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 (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.

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 & residential driveway characteristics, residential density, and pedestrian & bicycle safety.

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 0.0 to 6.3 ACC/MVM. The average Citywide accident rate is 4.1 ACC/MVM.

- STUDY RESULTS
Six radar surveys were performed and the 85th percentile speeds ranged from 34 to 44 mph as shown below. Radar surveys were not performed between signalized intersection that were too close together to record free flowing traffic conditions.

<u>Street Segment</u>	<u>Eastbound</u>	<u>Westbound</u>
West City limits to Mills Avenue	43 mph	44 mph
Mills Avenue to Ham Lane	43 mph	43 mph
Ham Lane to Church Street	33 mph	32 mph
Church Street to Beckman Road	34 mph	35 mph
Beckman Road to Guild Avenue	36 & 39 mph	34 & 40 mph

West City Limits to Mills Avenue

The 85th percentile speeds on this segment are 43 and 44 mph. The 50th percentile speeds are 39 and 40 mph. The highest accident rate of 4.5 on this segment is slightly above the Citywide average and slightly lower than the 4.7 rate from the 1997 survey. Based on 85th percentile speeds, reasonable accident rate,

intersection spacing and offsets, residential driveway characteristics, and residential density, we recommend retaining the 40 mph speed limit along this segment.

Mills Avenue to Ham Lane

The 85th percentile speed on this segment is 43 mph. The 50th percentile speeds are 38 and 39 mph. The accident rate of 2.1 on this segment is below to the Citywide average and slightly higher than the 1.4 rate from the 1997 survey. Based on 85th percentile speeds, continuing low accident rate, residential driveway characteristics, and residential density, we recommend retaining the 40 mph speed limit along this segment.

Ham Lane to Church Street

The 85th percentile speeds on this segments are 32 and 33 mph. The 50th percentile speeds are 28 and 29 mph. The highest accident rate of 6.3 on this segment is above the Citywide average and slightly higher than the 5.1 rate from the 1997 survey. Based on 85th percentile speeds, reasonable accident rate, intersection offset and spacing, we recommend retaining the 30 mph speed limit along this segment.

Church Street to Cherokee Lane

The 85th percentile speeds on this segment are 34 and 35 mph. The 50th percentile speed is 30 mph. The highest accident rate of 5.8 on this segment is above the Citywide average but lower than the 7.6 rate from the 1997 survey. Based on 85th percentile speeds, reasonable accident rate, commercial and residential driveway characteristics, we recommend retaining the 30 mph speed limit along this segment.

Cherokee Lane to Guild Avenue

The 85th percentile speeds on this segment range from 34 to 40 mph. The 50th percentile speeds range from 30 to 35 mph. The accident rate of 2.6 in this segment is below the Citywide average and lower than the 5.5 rate from the 1997 survey. Based on 85th percentile speeds and commercial driveway characteristics we recommend reducing the speed limit from 40 mph to 35 mph along this segment.

◦ CONCLUSION

The recommended speed limits are shown below:

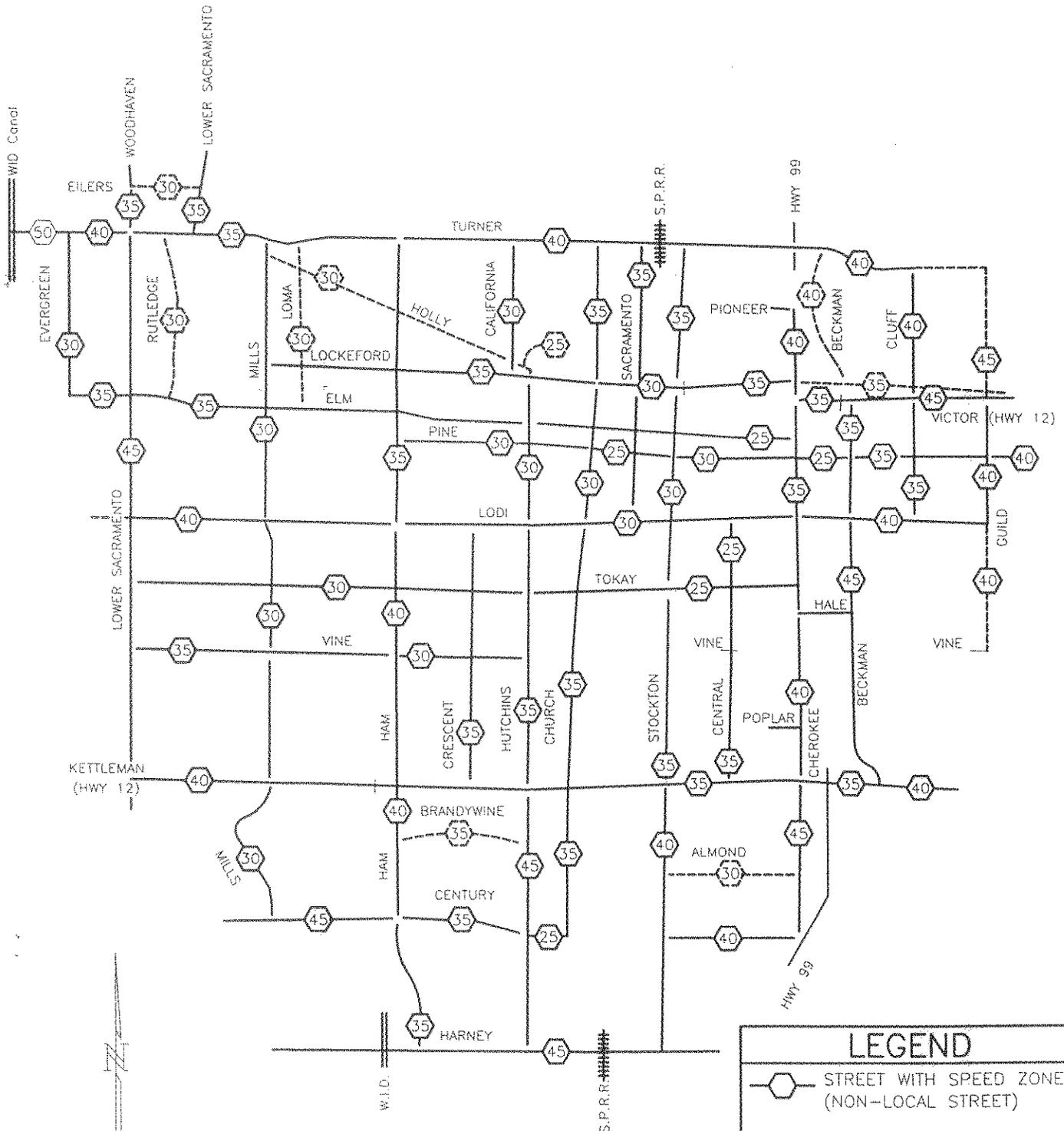
<u>STREET SEGMENT</u>	<u>POSTED SPEED LIMIT</u>
West City Limits to Mills Avenue	40 mph (no change)
Mills Avenue to Ham Lane	40 mph (no change)
Ham Lane to Church Street	30 mph (no change)
Church Street to Cherokee Lane	30 mph (no change)
Cherokee Lane to Guild Avenue	40 to 35 mph

F. Wally Sandelin
City Engineer



CITY OF LODI
PUBLIC WORKS DEPARTMENT

POSTED
SPEED LIMITS



LEGEND

- STREET WITH SPEED ZONE (NON-LOCAL STREET)
- "LOCAL" STREET WITH SPEED ZONE (VC 40802)

PRIMA FACIE LIMITS APPLY TO STREETS NOT SHOWN - ALL "LOCAL" STREETS

REVISED: November 2002

RESOLUTION NO. 2003-06

A RESOLUTION OF THE LODI CITY COUNCIL APPROVING
SPEED LIMIT REDUCTION ON LODI AVENUE BETWEEN
CHEROKEE LANE AND GUILD AVENUE FROM 40 TO 35 MILES
PER HOUR AND THEREBY AMENDING TRAFFIC
RESOLUTION NO. 97-148

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; and

WHEREAS, per §40802(b) of the California Vehicle Code, Engineering and Traffic Surveys, must be updated a minimum of every five years on "non-local" streets. "Non-local" streets are collector and arterial streets included in the Federal Aid System, and speed limits on streets where surveys are older than five years cannot be enforced using radar; and

WHEREAS, the Public Works Department recently performed Engineering and Traffic Surveys on Century Boulevard; Evergreen Drive, Elm Street to Turner Road; Lodi Avenue; Lower Sacramento Road; Victor Road, Cherokee Lane to Highway 99; Vine Street, Lower Sacramento Road to Hutchins Street; and

WHEREAS, staff recommends modifying the speed limit on Lodi Avenue between Cherokee Lane and Guild Avenue from 40 to 35 miles per hour.

NOW, THEREFORE, BE IT RESOLVED, that the City Council of the City of Lodi does hereby approve the speed limit reduction on Lodi Avenue between Cherokee Lane and Guild Avenue from 40 to 35 miles per hour; and

BE IT FURTHER RESOLVED, that the City of Lodi Traffic Resolution No. 97-148, Section 7 "Speed Limits," is hereby amended by reducing the speed limit on Lodi Avenue between Cherokee Lane and Guild Avenue from 40 to 35 miles per hour.

Dated: January 2, 2003

I hereby certify that Resolution No. 2003-06 was passed and adopted by the City Council of the City of Lodi in a regular meeting held January 2, 2003, by the following vote:

AYES: COUNCIL MEMBERS – Beckman, Hansen, Howard, Land, and Mayor Hitchcock

NOES: COUNCIL MEMBERS – None

ABSENT: COUNCIL MEMBERS – None

ABSTAIN: COUNCIL MEMBERS – None



SUSAN J. BLACKSTON
City Clerk