



# CITY OF LODI

## COUNCIL COMMUNICATION

AGENDA TITLE: Traffic Resolution Amendment - Speed Limit Modification on Evergreen Drive

MEETING DATE: December 17, 1997

PREPARED BY: Public Works Director

**RECOMMENDED ACTION:** That the City Council adopt the attached resolution amending the Traffic Resolution, #97-148, by approving a 30-mile-per-hour (mph) speed limit on Evergreen Drive.

**BACKGROUND INFORMATION:** The Public Works Department recently performed Engineering and Traffic Surveys on the nine City streets listed below. Evergreen Drive was one of the nine streets reviewed.

- Beckman Road
- Guild Avenue
- Mills Avenue
- Century Boulevard
- Lodi Avenue
- Victor Road
- Evergreen Drive
- Lower Sacramento Road, (North)
- Vine Street

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. "Non-local" streets are collector and arterial streets included in the Federal Aid System. Speeds on streets on which the surveys exceed five years cannot be enforced using radar. The Engineering and Traffic Survey for Evergreen Drive is attached as **Exhibit A**.

Engineering and Traffic Surveys are performed following State of California Department of Transportation (Caltrans) guidelines. The surveys include a map of the street showing the physical characteristics of the roadway, such as roadway width, number of through lanes, and traffic controls. Traffic volumes, prevailing speeds and accidents rates are analyzed and the results are shown in a written narrative for each street. Accident rates are determined by the number of accidents occurring within a segment of roadway and the traffic volume within that segment and are shown in accidents per million vehicle miles (ACC/MVM). The average Citywide accident rate is 4.4 ACC/MVM.

Three factors should be considered when determining the speed limit most appropriate to facilitate the orderly and reasonably safe movement of traffic: 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 can select a speed limit that is both reasonable and effective. Speed limits should normally be established at the first 5 mph increment below 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 5 mph.

**DISCUSSION:** Of the nine streets surveyed, speed limit modifications are recommended only on Evergreen Drive. This is the first time an Engineering and Traffic Survey has been performed on Evergreen Drive, as it was constructed within the past few years. Since Evergreen Drive is a minor

APPROVED: \_\_\_\_\_

*Janet Keeter for*

H. Dixon Flynn -- City Manager

collector street included in the Federal Aid System, it is considered a "non-local" street. Vehicle speeds on "non-local" streets lacking an approved Engineering and Traffic Survey cannot be enforced using radar.

**STUDY RESULTS/RECOMMENDATION:** The results of the Engineering and Traffic Survey indicate that based on existing vehicle speeds and absence of accidents on Evergreen Drive during the two-year study period of 1995 and 1996, the speed limit could be posted at 35 mph, which is also the design speed of Evergreen Drive and streets of similar classification. Staff was, however, concerned that since development in some of the areas intersecting Evergreen Drive is incomplete and the street is relatively new, the reliability of the accident data is questionable. The fact that there were no accidents during the study period is likely due to the fact that areas intersecting Evergreen Drive have been under development for the past few years. This results in unrealistic traffic volumes, reduced vehicle conflicts, and reduced number of accidents. This concept is supported by the fact that, although no accidents were reported during the study period, two accidents have occurred to date in 1997. One accident involved a parked car and the other involved a pedestrian.

Based on the questionable accuracy of the accident data, large number of minor and major street intersections within its relatively short length, and single-family homes with individual driveways, staff recommends that Council approve a posted speed limit of 30 mph along Evergreen Drive. Since there were no changes to the other eight streets surveyed, no Council action is needed for those streets.

**FUNDING:** Funding for costs to install two speed limit signs and legends from the Street Maintenance Account at an approximate cost of \$450.



Jack L. Ronsko  
Public Works Director

Prepared by Rick S. Kiriu, Senior Engineering Technician

JLR/RSK/lm

Attachments

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



SPEED ZONE REPORT - Evergreen Drive

- 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.

One radar survey was performed and the 85th percentile speeds are 35 and 37 mph, as shown below:

<u>Street Segment</u>	<u>Northbound</u>	<u>Southbound</u>
Evergreen Drive	35 mph	37 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 in this segment is 0.0 ACC/MVM. The average Citywide accident rate is 4.4 ACC/MVM.

- CONCLUSION

The 85th percentile speeds on this segment are 35 and 37 mph. The 50th percentile speed is 31 mph. There have been no accidents in this segment during the two-year study period of 1995/96. Based solely on the prevailing speeds, the speed limit could be set at 35 mph; however, staff is recommending that the speed limit be reduced by five miles per hour based on the following factors. The lack of accidents on Evergreen Drive is likely due to the fact that areas intersecting Evergreen Drive have been under development for the past few years. This results in unrealistic traffic volumes, reduced vehicle conflicts, and reduced number of accidents. This concept is supported by the fact that, although no accidents were reported during the study period, two accidents have occurred to date in 1997. One accident involved a parked car and the other involved a pedestrian. Based on the questionable accuracy of the accident data, large number of minor and major street intersections within its relatively short length, and single-family homes with individual driveways, staff recommends that the speed limit on Evergreen Drive be posted at 30 mph. A test drive of the street segment indicates a 30 mph posted speed limit is appropriate.

The recommended speed limits are shown below:

<u>Street Segment</u>	<u>Posted Speed Limit</u>
Evergreen Drive	30 mph

Richard C. Prima, Jr.  
City Engineer

RESOLUTION NO. 97-202

A RESOLUTION OF THE LODI CITY COUNCIL  
APPROVING SPEED LIMIT MODIFICATION ON  
EVERGREEN DRIVE, AND THEREBY AMENDING  
TRAFFIC RESOLUTION NO. 97-148

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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.

BE IT RESOLVED, that the City Council of the City of Lodi does hereby approve the speed limit modification on Evergreen Drive from a prima facie speed limit of 25 miles per hour to 30 miles per hour; and

FURTHER RESOLVED, that City of Lodi Traffic Resolution No. 97-148, Section 7 "Speed Limits" is hereby amended by designating a speed limit modification on Evergreen Drive from a prima facie speed limit of 25 miles per hour to 30 miles per hour.

Dated: December 17, 1997

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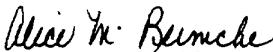
I hereby certify that Resolution No. 97-202 was passed and adopted by the City Council of the City of Lodi in a regular meeting held December 17, 1997, by the following vote:

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

NOES: COUNCIL MEMBERS - None

ABSENT: COUNCIL MEMBERS - None

ABSTAIN: COUNCIL MEMBERS - None

  
ALICE M. REIMCHE  
City Clerk