



# CITY OF SANTA BARBARA

## Transportation & Circulation Committee

### *Staff Report*

**DATE:** September 25, 2008

**TO:** Transportation & Circulation Committee (TCC) Members

**FROM:** Browning Allen, Transportation Manager

**SUBJECT:** SPEED LIMIT SETTING

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**RECOMMENDATION:** That the TCC:

- A) hear a report on the methodology for establishing speed limits;
- B) recommend to Council the initiation of the process of reclassifying appropriate City streets serving business and residence districts as a means of establishing radar-enforceable speed limits.

### **Background**

One common complaint from Santa Barbara residents is excessive speed on streets serving residential and/or commercial land uses. With the exception of School and Park Zones, and local streets (as defined by either the Federal Highway Administration or the California Vehicle Code) California Police departments are unable to enforce speeding using radar on streets unless the speed limit has been established using an Engineering and Traffic Study. In response to public complaints, the Police Department has requested Public Works staff renew expired Engineering and Traffic Surveys on City streets for the purpose of making those streets eligible for traffic enforcement using radar.

### **Determination of Street Types and Speed Limits**

Although most City of Santa Barbara streets feel like "local" streets, each is actually defined by the latest functional usage and federal-aid system maps submitted to the Federal Highway Administration (FHWA). The functional classification of streets is undertaken with consideration of the extent to which each street serves mobility or through vehicle travel as opposed to access to adjacent land uses. The California Road System maps attached as Attachment A display the functional classification of City of Santa Barbara streets, identifying arterial, collector and local roads. (The California Road System map is a proxy for the Federal Classification Map).

The FHWA characterizes arterials as providing a high level of mobility (vehicle level of service and speed), while local streets provide a high level of access to adjacent properties. Collector roadways balance mobility and land access by providing a less highly developed level of service at a lower speed for shorter distances while collecting traffic from local roads and

connecting them with arterials. Although traffic volumes and speeds are not used to define arterials, collectors, and local streets, the design features related to number of lanes, on-street parking, and traffic volumes typically correspond, with arterials carrying higher traffic volumes, and local streets carrying lower volumes.

Local streets, according to federal definition, consist of all roads not defined as arterials or collectors on the federal aid system map. The California Vehicle Code additionally defines a local street as that which is either classified as a local street on the federal system map or meets specific conditions (primarily providing access to abutting residential property; roadway width of 40 feet or less, not more than one-half of a mile of length uninterrupted by traffic signals, and not more than one traffic lane in each direction). Streets that do not meet this definition are considered "non-local."

Importantly, while these methods of identifying local streets for the purpose of funding apportionment and enforcement is useful, it contradicts common perceptions of local streets, which are seen as those serving residential, school and small business land uses. Furthermore, because it focuses exclusively on the movement of automobiles, the movement of pedestrians, transit and bicyclists are not fully considered.

The CVC Section 22352 establishes prima facie speed limits in business and residence districts as 25 miles per hour. The methodology for determining whether a highway is in a business or residence district involves the analysis of the number of driveways utilizing the highway for access to adjacent structures.

CVC Section 40802, defining Speed Traps, however, prohibits the enforcement of excessive speed, utilizing radar, on non-local streets in business and residence districts unless the speed limit is justified by a current Engineering and Traffic Survey. Therefore, roads that are in residence or business districts but are not defined as local streets can not be enforced using radar technology, unless the speed limit is established through an Engineering and Traffic Survey. Speed traps are a viable concern for motorists leaving rural highways and entering residence or business districts, in remote areas, yet they are also prohibited in urban environments.

An Engineering and Traffic Survey must include consideration of: prevailing speeds as determined by traffic engineering measurements; accident records; and highway, traffic and roadside conditions not readily apparent to the driver. The recommended speed limit should be established at the five mile per hour increment closest to the 85<sup>th</sup> percentile speed (which is the speed 85% of the drivers are traveling at or below). However, in matching existing traffic safety needs of the community, engineering judgment may indicate the need for a reduction of five miles per hour due to conditions not foreseen by the driver. Residential density and pedestrian and bicyclist safety may be used to make this reduction. This methodology is based on the premise that a reasonable speed limit is one that conforms to the actual behavior of the majority of motorists, and that by measuring motorists' speeds, one will be able to select a speed limit that is both reasonable and effective. It is staff's belief, based on complaints regarding excessive speed and on spot speed surveys, that because of a variety of reasons, which may include lack of ability to enforce, driver distraction, faster acting brakes and more comfortable vehicles, the 85<sup>th</sup> percentile speed is on the rise.

## Alternative

If a City street is defined as local street in the Federal Classification Map, no Engineering and Traffic Study is required for setting prima facie speed limits that can be enforced using radar technology. The Council may set the speed limit on these streets by resolution or ordinance. The City of Ventura recently reclassified many arterial and collector streets to local streets as part of the General Plan amendment process as a means of specifying enforceable speed limits more consistent with their Circulation and livability goals. The process of reclassifying streets takes approximately one year and requires the approval of the Santa Barbara County Association of Governments, Caltrans, and the FHWA. The process is attached as Attachment B.

Reclassification of arterial and collector streets to local streets presents cost implications to both the County and the City because the Federal Surface Transportation funds are apportioned according to both population and arterial and collector lane mileage on the Federal system. SBCAG currently receives approximately \$4,000,000 in STP funds. These funds can not be used on local streets for the purpose of construction, reconstruction, rehabilitation, resurfacing, restoration, and operational improvements. Santa Barbara County has 2463.67 lane miles in the Federal System with 232.77 being within the City of Santa Barbara. The reduction in funds apportioned would depend upon the number of miles reclassified and therefore is not known at this time. The reclassification would not effect the apportionment of other transportation funds.

## Findings

Staff recently conducted Engineering and Traffic Studies on Anacapa, Anapamu, Haley and De La Vina Streets. The purpose of conducting the studies is to establish radar-enforceable speed limits. The results are outlined in the following table.

Street Name	Segment	Existing Speed Limit	Surveyed Speed Limit	Reduction based on Special Characteristics (-5 mph)	Recommended Posted Speed Limit
Anacapa Street	Constance to Mission	30	30	<input type="checkbox"/>	<b>30</b>
Anacapa Street	Mission to Arrellaga	30	35	<input checked="" type="checkbox"/>	<b>30</b>
Anapamu	Santa Barbara to North Milpas	30	35	<input checked="" type="checkbox"/>	<b>30</b>
Haley Street	Chapala to North Milpas	30	30	<input checked="" type="checkbox"/>	<b>25</b>
De La Vina Street	Micheltorena to Carrillo	25	35	<input checked="" type="checkbox"/>	<b>30</b>
De La Vina Street	Carrillo to Haley	25	35	<input checked="" type="checkbox"/>	<b>30</b>

The table shows a rise in 85<sup>th</sup> percentile speed on several of the roads. Engineering judgment indicated a need for reducing the speed limit due to special characteristics, such as conditions not foreseen by the driver, residential density and bicycle and pedestrian use. Although these recommendations are based on sound engineering judgment, Staff is not convinced that the best response to residents' complaints about speeding is to raise the speed limit so as to enable enforcement.

Public Works Staff is concerned that the California Vehicle Code laws regarding speed traps is not consistent with the Circulation Element goals related to pedestrian and neighborhood livability. Based on spot speed surveys of streets not identified for this report, staff estimates that up to one-third of the 40 streets left to be surveyed will have higher 85<sup>th</sup> percentile speeds and therefore, the speed limits will need to be raised when the speed survey is conducted. Of particular concern are those streets where engineering judgment will not indicate a need for reducing the speed limit due to special characteristics. The risk of serious injury increases with increases in speed.

## **Circulation Element Policy Implications**

Chapter 10 of the Circulation Element identified the challenges of relying on the Federal classification scheme as a way to meet the goals of the Circulation Element:

The limitation of most classification systems is that they focus exclusively on the movement of automobiles. The systems have not included nor measured transit or the movement of pedestrians or bicycles. Further, the design standards which have been used tended to focus on automobile capacity (number of travel lanes, lane width, presence of turn pockets, distance between intersections) and less on other modes (sidewalk and bicycle lane widths, distance between transit stops, design and location of bus stops, etc.). Classification systems also tended to place limitations on roadway design. Another constraint is the fact that all paths of travel cannot accommodate all forms of travel.

Review and reconsideration of street definitions would be consistent with Policy 10.1 of the Circulation Element: The City shall develop and use a mobility classification and service system that will designate mobility corridors throughout the City based on their purpose and function. The purpose of this classification and service system is to ensure consideration of all forms of travel in the design, development, improvement, and maintenance of all mobility corridors.

## **Conclusion**

Therefore it is the recommendation of staff that the TCC:

- A) hear a report on the methodology for establishing speed limits;
- B) recommend to Council the initiation of the process of reclassifying appropriate City streets serving business and residence districts as a means of establishing radar-enforceable speed limits.

BA/DvH/am

Attachment A  
Attachment B