



MEMORANDUM

TO: City Council

FROM: Shannon Sweeney, Interim Public Works Director

BY: Shannon Sweeney, Interim Public Works Director/City Engineer
Dave Culver, Police Commander

SUBJECT: Consideration of a Two-Year Extension of the Five-Year Radar Speed Surveys for Selected City Streets

DATE: November 28, 2023

SUMMARY OF ACTION:

The California Vehicle Code (CVC) requires an Engineering and Traffic Study (E&TS) documenting radar speed surveys to enable radar enforcement of any speed limit set by a local jurisdiction. Certification of this survey allows the City Police Department to enforce these speed limits. The City's previous radar speed survey was certified on November 27, 2018 for five years. The vehicle code allows for a two-year extension if certain conditions are met.

IMPACT ON FINANCIAL AND PERSONNEL RESOURCES:

The City meets conditions to allow for a two-year extension of its previous radar speed surveys. Therefore, there are no negative impacts to financial and personnel resources.

RECOMMENDATION:

1) Adopt a Resolution extending the existing five-year radar speed surveys for selected City streets an additional two years; and 2) Determine that this extension is not a project subject to the California Environmental Quality Act ("CEQA") because it has no potential to result in either a direct, or reasonably foreseeable indirect, physical change in the environment. (State CEQA Guidelines, §§ 15060, subd. (b)(2)-(3), 15378.).

BACKGROUND:

The State of California has a mandated process for the establishment of speed limits on public streets. Speed limits are supported by conducting an Engineering and Traffic Survey (E&TS or speed survey) following the procedures listed in the 2014 California Manual for Setting Speed Limits published by the Division of Traffic Operations, California Department of Transportation. Per the CVC, speed surveys are good for a period of 5, 7, or 14 years depending on roadway conditions and enforcement procedures.

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Radar speed surveys were performed on 70 street segments from 2016 to 2018 to allow for speed limits on these street segments to be set by the City and subsequently for those speed limits to be enforced. The results of these speed surveys were documented in an E&TS (Attachment 2).

On [November 27, 2018](#), City Council approved a Resolution certifying the five-year radar speed surveys for selected City Streets.

Public Works staff met with Police Department staff on October 31, 2023, to discuss the option of extending the existing radar speed surveys an additional two years. Police Department staff confirmed that existing radar speed surveys are adequate and all the conditions necessary for extending the surveys are already met. Police Department staff also indicated that the California Police Officer Standards and Training agency requires any officers who use laser or radar in the course of their duties to meet all of the conditions necessary for the extension. The Police Department met these requirements when the speed survey was originally approved and meet these requirements now. (See CVC Section 40802(c)(1))

ANALYSIS OF ISSUES:

The setting of speed limits requires a rational and defensible procedure to maintain the confidence of the public and legal systems. By following a uniform procedure, agencies can establish speed limits that are uniform throughout the state and avoid influence from political pressure or emotional perceptions.

Speed limit determinations rely on the premise that a reasonable speed limit is one that conforms to the actual behavior of most drivers. For example, measuring drivers' speeds is a reasonable and effective manner to set speed limits. Speed limits set by an E&TS are normally set near the 85th percentile speed. The 85th percentile speed is the speed at or below which 85 percent of the traffic is moving, and statistically represents one standard deviation above the average speed.

In addition, setting the speed limit arbitrarily low often makes violators of a disproportionate number of drivers, does not facilitate the orderly movement of traffic, and requires constant enforcement to maintain compliance. Regardless of the posted speed limit, most drivers will continue to drive at speeds at which they feel comfortable. The question then arises, "Why do we even need to post speed limit signs?" In part, posting speed limit signs:

- Provides feedback to the driver, letting them know that most drivers consider the posted speed to be safe and reasonable.
- Allows for fair enforcement for drivers who are going excessively faster or slower than the speed that most drivers consider safe and reasonable.

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- Determines many other design criteria such as clear recovery zone distance, yellow light timing, taper lengths for any type of lane closure or construction, set-back detectors, size of signs, and other roadway features.

Applicable CVC Sections

Basic Speed Law

The basic speed law is found in CVC Section 22350. It reads: “No person shall drive a vehicle upon a highway at a speed greater than is reasonable or prudent having due regard for weather, visibility, the traffic on, and the surface and width of, the highway, and in no event at a speed which endangers the safety of persons or property.” In other words, a driver violates the basic speed law if he or she is driving at unsafe speeds, even if that speed is lower than the posted regulatory speed limit sign.

Prima Facie Speed Limits by Statute

CVC Section 22352 sets the prima facie speed limits in California. The term “prima facie”, as used in the CVC, is a speed limit that applies when no other specific speed limit is posted. It is a Latin term meaning “at first face” or “at first appearance”. It sets two speed limits covering six classes of location. The first speed limit is 15 mph; and it is applicable to uncontrolled railway crossings; blind, uncontrolled intersections; and alleyways. The second speed limit is 25 mph; and it is applicable to business and residential areas without other posted speed limits; school zones, and areas immediately around senior centers.

Speed Limits Requiring an Engineering and Traffic Survey

When an engineering and traffic survey (E&TS) shows that the statutory or prima facie speed limits are not applicable for the existing conditions, the speed limits can be altered with the posting of a different speed limit, which must be determined according to the findings of the E&TS. CVC Section 22358 addresses decreasing local speed limits.

Speed Traps

The CVC prohibits the use of speed traps (Section 40801) as well as the use of any evidence obtained by use of a speed trap (Section 40803) for the purpose of prosecution. A speed trap as defined in CVC Section 40802 is either:

- A section of highway marked so that an officer can calculate speed based on the time it takes a vehicle to travel the marked distance.
- The use of radar or other electronic devices that measure the speed of a moving object on a section of highway which does not have a current E&TS as required under CVC.

According to CVC Section 40802, an E&TS is valid for five years. However, under specific conditions stated in CVC Section 40802, the E&TS may be valid for seven or fourteen years. Once a speed zone is established at a statutory maximum speed limit (CVC Section 22349) or higher, no further studies are required, as the CVC requires an E&TS

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for speed zone reductions only. The completion date for the E&TS is when the approving authority signs the E&TS or orders. This date does not have to match the date the strip map was stamped or the date of the justification memo accompanying the E&TS.

Frequency of Rechecks

According to CVC Section 40802, "Speed Traps," are sections of highway for which the speed limit has not been justified by an E&TS within five years, and the enforcement of the speed limit involves either timing vehicles between a set distance of roadway or using radar or any other electronic device that measures the speed of moving objects.

The renewal time may be extended to seven years when using radar and all the following criteria are met:

- The citing officer has successfully completed a minimum of 24 hours of certified radar operator course training.
- The radar used to measure the speed meets or exceeds the minimal operational standards of the National Traffic Highway Safety Administration and has been calibrated within three years of the alleged violation.

The renewal time may be extended to seven years when using laser or other electronic devices (other than radar) and all the following criteria are met:

- The citing officer has successfully completed a minimum of 24 hours of certified radar operator course training.
- The citing officer has successfully completed a minimum of 2 hours of additional approved certified training for laser or other electronic devices.
- The device used to measure the speed meets or exceeds the minimal operational standards of the National Traffic Highway Safety Administration and has been calibrated within three years of the alleged violation.

The renewal time provision for an E&TS may be extended to fourteen years if a registered engineer determines that all the above conditions are met and no significant changes in roadway or traffic conditions have occurred, including major changes in adjacent property or land use, roadway width, or traffic volume. This determination has not been made at this time.

ALTERNATIVES:

The following alternatives are provided for the Council's consideration:

1. Adopt a Resolution allowing a two-year extension of the existing radar speed surveys.
2. Modify and adopt the Resolution with changes to speed limits on specific streets. Doing so will make speed limits on those streets unenforceable until new speed surveys are conducted.

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3. Do not extend certification stimulator speed surveys and perform new surveys to date.
4. Provide other direction to staff.

ADVANTAGES:

Extending the existing radar speed surveys will continue to provide a legal basis for the Police Department to enforce speed limits on identified City roadway segments. Establishing appropriate speed limits improves safety. Redoing radar speed surveys will consume numerous hours of staff time and cost tens of thousands of dollars for a new E&TS.

DISADVANTAGES:

No disadvantages have been identified for this action.

ENVIRONMENTAL REVIEW:

This extension is not a project subject to the California Environmental Quality Act (“CEQA”) because it has no potential to result in either a direct, or reasonably foreseeable indirect, physical change in the environment. (State CEQA Guidelines, §§ 15060, subd. (b)(2)-(3), 15378.)

PUBLIC NOTIFICATION AND COMMENTS:

The Agenda was posted at City Hall and on the City’s website in accordance with Government Code Section 54954.2.

Attachments:

1. Proposed Resolution
2. Engineering and Traffic Study