


POLICY DIRECTIVE

TR-0011 (REV 9/2006)

TRAFFIC OPERATIONS POLICY DIRECTIVE	NUMBER: 09-04	PAGE: 1 of 7
ROBERT COPP, DIVISION CHIEF (Signature) 	DATE ISSUED: June 29, 2009	EFFECTIVE DATE: July 1, 2009
SUBJECT: Change in current California Manual on Uniform Traffic Control Devices (California MUTCD) policy and procedure for setting speed limits in California.	DISTRIBUTION <input checked="" type="checkbox"/> All District Directors <input checked="" type="checkbox"/> All Deputy District Directors - Traffic Operations <input checked="" type="checkbox"/> All Deputy District Directors - Maintenance <input checked="" type="checkbox"/> All Deputy District Directors - Construction <input checked="" type="checkbox"/> All Deputy District Directors - Design <input type="checkbox"/> All Deputy District Directors - Transportation Planning <input checked="" type="checkbox"/> Chief, Division of Engineering Services <input checked="" type="checkbox"/> Chief Counsel, Legal Division <input checked="" type="checkbox"/> Publications (California MUTCD Website) www.dot.ca.gov/hq/traffops/signtech/mutcdsupp/ca_mutcd.htm <input type="checkbox"/> Headquarters Division Chiefs for:	
DOES THIS DIRECTIVE AFFECT OR SUPERSEDE ANOTHER DOCUMENT? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	IF YES, DESCRIBE Amends Chapter 2B of the California MUTCD.	
WILL THIS DIRECTIVE BE INCORPORATED IN THE CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	IF YES, DESCRIBE Chapter 2B, Sections 2B.13.	

DIRECTIVE

Pursuant to the authority granted to the California Department of Transportation (Department) in Section 21400 and 21401 of the California Vehicle Code (CVC), the changes included in this directive for setting speed limits in California shall be included in Part 2 of the California MUTCD, dated September 26, 2006.

POLICY DIRECTIVE**IMPLEMENTATION**

In this section, for purposes of clarity, strikethrough text is used to denote text in the California MUTCD that is being deleted and italic text is used to denote text that is being added to the California MUTCD. All other formatting as defined under the Definitions section of this Policy Directive is still applicable.

The following policies shall be included in the California MUTCD:

Section 2B.13 Speed Limit Sign (R2-1)*Support:*

The setting of speed limits can be controversial and requires a rational and defensible determination to maintain public confidence. Speed limits are normally set near the 85th-percentile speed that statistically represents one standard deviation above the average speed and establishes the upper limit of what is considered reasonable and prudent. As with most laws, speed limits need to depend on the voluntary compliance of the greater majority of motorists. Speed limits cannot be set arbitrarily low, as this would create violators of the majority of drivers and would not command the respect of the public.

Standard:

After an engineering and traffic survey (E&TS) study has been made in accordance with established traffic engineering practices, the Speed Limit (R2-1) sign (see Figure 2B-1) shall display the limit established by law, ordinance, regulation, or as adopted by the authorized agency. The speed limits shown shall be in multiples of 10 km/h ~~or~~ (5 mph).

Guidance:

At least once every 5, 7 or 10 years, in compliance with CVC Section 40802, States and local agencies should reevaluate non-statutory speed limits on segments of their roadways that have undergone a significant change in roadway characteristics or surrounding land use since the last review.

No more than three speed limits should be displayed on any one Speed Limit sign or assembly.

When a speed limit is to be posted, it should be established at the nearest 10 km/h or 5 mph increment of the 85th-percentile speed of free-flowing traffic.

Standard:

When a speed limit is to be posted, it shall be established at the nearest 10 km/h (5 mph) increment of the 85th-percentile speed of free-flowing traffic, except as shown in the Option below.

Option:

The posted speed may be reduced by 10 km/h (5 mph) from the nearest 10 km/h ~~or~~ (5 mph) increment of the 85th-percentile speed, *in compliance with CVC Sections 627 and 22358.5, where engineering study indicates the need for a reduction in speed to match existing conditions with the traffic safety needs of the community.*

Standard:

If the speed limit to be posted has had the 10 km/h (5 mph) reduction applied, then an E&TS shall document in writing the conditions and justification for the lower speed limit and be approved by a registered Civil or Traffic Engineer. The reasons for the lower speed limit shall be in compliance with CVC Sections 627 and 22358.5.

POLICY DIRECTIVE**IMPLEMENTATION (Cont'd)****Support:**

An example of the application of this speed limit criteria is as follows:

- If the 85th percentile speed in a speed survey was 60 km/h (37 mph), then the speed limit would be posted at 35 mph or optionally reduced to 30 mph. However,
- If the 85th percentile speed in a speed survey was 61 km/h (38 mph), then the speed limit would be posted at 40 mph or optionally reduced to 35 mph.

~~This method of establishing posted speed limits applies to all engineering and traffic surveys (E&TS) performed after May 20, 2004. This section, as amended for use in California, does not apply to E&TS performed prior to May 20, 2004. Examples:~~

- ~~• An Engineering and Traffic Survey (E&TS) performed on April 6, 1999 due for renewal on April 6, 2004 (5 years) would be performed per Chapter 8 of the 1996 Caltrans Traffic Manual, which was the applicable guidance at the time. This would then be due for renewal on April 6, 2009 using the California MUTCD criteria.~~
- ~~• However, if conditions of the E&TS and the applicable enforcement agency, its personnel and equipment meet provisions of CVC 40802.e.2.B.I, the E&TS could have been extended two additional years (for a total of 7 years). In this case, the posted speed limit(s) remain(s) enforceable for the seven-year period and would then be due for renewal on April 6, 2006 and would be renewed using California MUTCD criteria.~~
- ~~• Further, if at the end of the seven years, a registered engineer evaluates the highway section and determines that no significant changes in roadway or traffic conditions have occurred (see CVC 40802.e.2.B.II), the engineer could extend the E&TS for three additional years (for a total of 10 years). Renewal of the extended E&TS would then be deferred to April 6, 2009 and at that time performed with California MUTCD criteria.~~

This directive does not recommend any other changes for the remainder of this section at this time.

In all applications of this policy, engineering judgment must be exercised. The objective is to provide uniform applications of signs statewide. If there are any questions regarding implementation, districts should consult with the Headquarters Traffic Operations Liaison.

DELEGATION

No new delegations of authority are created under this policy.

POLICY DIRECTIVE**BACKGROUND**

The purpose of this directive is to implement the changes proposed in the Decision Document entitled "Guidelines for Setting Speed Limits" signed on May 15, 2009 by Director Will Kempton.

This Decision Document was the result of many discussions about speed limit concerns held before the California Traffic Control Devices Committee (CTCDC) since June of 2007. During these discussions, many comments were received from local agencies and their officials representing law enforcement, public works, and the court system. A special hearing was held on March 19, 2009 and was attended by the Director and the California Highway Patrol Commissioner. The purpose of this hearing was to bring closure to this discussion before the Director issued his Decision Document.

After reviewing the concerns expressed by various participants involved with setting and enforcing speed limits, Caltrans determined there was a lack of consistency in the analysis and process that documents Engineering and Traffic Surveys to establish rational and enforceable speed limits.

In 2004, the California Supplement to the 2003 Federal MUTCD changed the procedure setting speed limits used previously in the 1996 Caltrans Traffic Manual. These changes were made to bring California into compliance with the Federal MUTCD at that time, but the California Supplement included the option to allow a 5mph reduction from the nearest increment of the 85th percentile speed. The changes are summarized below:

1996 Traffic Manual:

The speed limit normally should 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.

MUTCD 2003 (Federal Guidance, does not allow 5mph reduction):**Guidance:**

When a speed limit is to be posted, it should be within 10 km/h or 5 mph of the 85th percentile speed of free-flowing traffic.

May 2004 CA Supplement:**Guidance:**

When a speed limit is to be posted, it should be established at the nearest 10 km/h or 5 mph increment of the 85th percentile speed of free-flowing traffic.

Option:

The posted speed may be reduced by 10 km/h (5 mph) from the nearest 10 km/h or 5 mph increment of the 85th percentile speed, where engineering study indicates the need for a reduction in speed to match existing conditions with the traffic safety needs of the community.

POLICY DIRECTIVE**SPEED LIMITS SET WITH 2004 CHANGES**

After applying the “nearest 5mph increment of the 85th percentile speed” criteria, many speed limits were being raised after the 2004 change in the California MUTCD speed limit procedures. Some agencies would then simply apply the 5 mph reduction to keep the speed limit at the same level or lower. Also, appropriate justification was not written up in the E&TS for many of these speed zones and speeding tickets were not upheld in court if the presiding official saw a speed limit set below the 85th percentile speed.

PROCEDURE AFTER JULY 1, 2009

This directive clarifies the procedure for setting speed limits to address the issues discussed above. The two new standards for Section 2B.13 of the California MUTCD will be implemented to clarify the process and to help set speed limits that are uniform, rational and enforceable with full support of the judicial system. Requirements of the new standards are shown below:

- The speed limit shall be established at the nearest 5mph increment of the 85th percentile.
- If the 5 mph reduction is applied, the E&TS shall document in writing the conditions and justification for the reduced speed limit and be approved by a registered Civil or Traffic Engineer.

ONE YEAR TRIAL and DATA COLLECTION

In order to evaluate any impacts of the new standards, the following data needs to be collected and evaluated over the next twelve months (from E&TS's completed between July 1, 2009 and July 1, 2010):

- Jurisdiction and Location identification
- Existing posted speed limit
- 85th percentile speed limit
- 50th percentile speed limit
- 10-mph pace (the speed range that includes the most vehicles surveyed)
- List of reasons for applying a 5 mph reduction (if used)
- New posted speed limit

This information should be sent to Caltrans at the following e-mail address:

roberta.mclaughlin@dot.ca.gov

The data will be reviewed for trends in the posting of new speed limits. After July 1, 2010 this information will be presented to the Caltrans Director, CHP Commissioner and the CTCDC for consideration to make additional changes to the policy for setting speed limits in California.

POLICY DIRECTIVE**ENGINEERING AND TRAFFIC SURVEY WORKSHOPS**

The Director's Decision Document also states that Caltrans will develop an E&TS training program for engineers, enforcement personnel, and judiciary officials. Specific workshop topics will include:

- Conducting an Engineering and Traffic Survey
- Selecting locations for speed data collection
- Items to be included in the E&TS written report
- Documenting reasons for applying the 5 mph reduction
- Presenting findings to local government officials
- Using the E&TS to review speeding citations challenged in court

Workshops will be held in each of the 12 Caltrans District Offices and will be scheduled over the next 6 months. Workshop location, contact information and dates will be posted on the Office of Signs, Markings and External Support web site:

<http://www.dot.ca.gov/hq/traffops/signtech/>

SPEED LIMIT IMPACTS ON YELLOW SIGNAL TIMING

In the California MUTCD, Section 4D.10 - Yellow Change and Red Clearance Intervals, the Standard states that the yellow light change interval shall be set using the posted speed limit. When the posted speed limit is set below the 85th percentile speed as a result of a new E&TS, there may be a need to re-evaluate the length of time given to the yellow signal phase. Consideration should be given to use the 85th percentile speed to increase the yellow light change interval, as allowed by the option in the California MUTCD. An increase change of 5 mph or greater in the posted speed limit should result in the relocation of traffic signal vehicle detectors.

The revision of the California MUTCD is a common practice based upon need. The Department, pursuant to CVC Section 21400; must conduct public hearings before it can revise existing traffic control device policies and approve new signs for use on public roadways. The California Traffic Control Devices Committee (CTCDC) is the forum used to satisfy this requirement.

The Federal Highway Administration has reviewed the proposed modifications to the California MUTCD and has determined that they are in substantial compliance with the National MUTCD.

This policy will be retired when it is incorporated in the next revision of the California MUTCD.

ADA Notice

For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 653-3657 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS89, Sacramento, CA 95814.

POLICY DIRECTIVE**DEFINITIONS**

When used in this Traffic Operations Policy Directive, the text shall be defined as follows:

- 1) **Standard** – a statement of required, mandatory or specifically prohibited practice. All standards text appears in **bold** type. The verb **shall** is typically used. Standards are sometimes modified by Options.
- 2) **Guidance** – a statement of recommended, but not mandatory, practice in typical situations, with deviations allowed if engineering judgment or engineering study indicates the deviation to be appropriate. All Guidance statements text appears in underline type. The verb should is typically used. Guidance statements are sometime modified by Options.
- 3) **Option** – a statement of practice that is a permissive condition and carries no requirement or recommendation. Options may contain allowable modifications to a Standard or Guidance. All Option statements text appears in normal type. The verb may is typically used.
- 4) **Support** – an informational statement that does not convey any degree pf mandate, recommendation, authorization, prohibition, or enforceable condition. Support statements text appears in normal type. The verbs shall, should and may are not used in Support statements.

ATTACHMENTS

None