



California Traffic Control Devices Committee Agenda Item Report



Meeting Date: November 03, 2022	From: Gurinderpal (Johnny) Bhullar, PE, TE, Secretary, CTCDC
Item Number: 21-16	
Sponsored By: Yue Wang, PE, Caltrans	Presented By: Gurinderpal (Johnny) Bhullar, PE, TE, Secretary, CTCDC
Description: Revisions to Speed Limit policy to comply with Assembly Bill AB-1938 (effective January 1, 2023), which clarifies AB-43's text and intent by revising specific AB-43 provisions now included in Vehicle Code Sections.	

Recommendation:

Motion by committee to recommend inclusion of the proposed changes to the CA MUTCD Section 2B.13 "Speed Limit Sign (R2-1)", Table 2B-101(CA) and Table 2B-102(CA) and newly proposed Tables 2B-103(CA) through 2B-106(CA), to comply with Assembly Bill AB-1938 (effective January 1, 2023), which clarifies AB-43's text and intent by revising specific AB-43 provisions now included in Vehicle Code Sections.

This proposal also includes other AB-43 provisions that were not revised by AB-1938 as they were clear straightforward interpretations and did not require any clarifications. They were discussed in the August 4, 2022, CTCDC meeting, and recommendation was made to include these provisions in CA MUTCD after making minor revisions based on the comments made in the meeting.

Agency Making Request/Sponsor:

Caltrans / Yue Wang, PE, Caltrans, CTCDC Member.

Background:

AB-43, AB-2363 & CalSTA ZTTF Report:

Assembly Bill AB-43 titled "Traffic Safety" authored by Friedman (D), Chiu (D), Gipson (D), Quirk (D) and Ting (D), et al., was voted upon and passed by California Assembly on September 9, 2021 and approved by Governor and Filed with Secretary of State on October 08, 2021.

AB-43 provided local authorities greater flexibility in setting and reducing speed limits based on recommendations the Zero Traffic Fatality Task Force (Task Force) made in January 2020. In 2018 AB 2363 required the Secretary of the State Transportation Agency to convene a task force to develop policies for reducing traffic fatalities to zero. The task force commissioned research on speed setting from the UC Institute of Transportation Studies (UC ITS) and issued a report on its findings based on that research in January 2020 entitled "CalSTA Report of Findings; AB 2363 Zero Traffic Fatalities Task Force". The report included 27 policy recommendations, and 16 findings

recommendations that were broken into four categories: establishing speed limits, engineering, enforcement, and education. AB-43 included 7 of these 27 policy recommendations on establishing speed limits, as outlined in the report.

AB-43 included the following provisions which have been summarized here for brevity, please refer to the links provided below for more details on these AB-43 provisions:

- **ZTFTF C-S3:** Revise traffic survey procedures to require bicycle/pedestrian safety consideration and develop a survey guidance on this safety topic (new CVC 22358.7(b)(2) & revised CVC 627(c)(2) and 40802(a)(2)).
- **ZTFTF C-S4:** Allow state and local agencies to post speed limits below 25 mph when supported by a traffic survey (new CVC 22358.9 & revised 22354(a) & 22358(a)).
- **ZTFTF C-S5:** Increase reduction allowance for posted speed limits to allow greater deviations from the 85th percentile speed by including criteria for a statewide definition of High Injury Networks (HIN), criteria for areas adjacent to land uses and types of roadways that have high concentrations of vulnerable road users. Define vulnerable populations and develop criteria to identify eligible streets (new CVC 22358.6, 22358.7 & 22358.8 and deleted 21400(b)).
- **ZTFTF C-S6:** Add business activity district as an additional class of location eligible for a prima facie speed limit and include statewide definition to include urban villages, neighborhood downtowns, and other business-oriented locations. (New CVC 22358.9).
- **ZTFTF C-S7:** Revise requirements related to posting prima facie speed limits in school zones to allow speed limit as low as 15 mph without requiring a traffic survey (revised CVC 22354(a) & 22358(a)).
- **ZTFTF C-S9:** Allow for a traffic survey to retain the existing speed limit (or revert to one determined in a prior traffic survey) unless a registered engineer determines that significant design changes have been made to the roadway since completion of the last traffic survey with the specific intent of increasing the safe operating speed (new CVC 22358.8).
- **ZTFTF C-S10:** Consolidate and clarify statutory sections related to speed setting methodology (deleted CVC 21400(b) and new CVC 22358.6 through 22358.9).

AB-43 amends Sections 627, 21400, 22352, 22354, 22358, and 40802, and adds Sections 22358.6, 22358.7, 22358.8, and 22358.9 to, the Vehicle Code, relating to traffic safety effective January 1, 2022.

Refer to the following for more background and information on AB-43:

1. Text of AB-43 Traffic safety:

https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB43

2. AB-43 Bill Analyses:
https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=202120220AB43#
3. AB-43 Today's Law As Amended:
https://leginfo.legislature.ca.gov/faces/billCompareClient.xhtml?bill_id=202120220AB43&showamends=false

CTCDC Sub-Committee on AB-43:

Pursuant to the motion passed by CTCDC during the November 4, 2021, meeting, a subcommittee was formed to review Agenda Item 21-16, which is a Caltrans proposal to revise current CA MUTCD policy for setting speed limits, to comply with the recently approved Assembly Bill (AB-43). This bill (AB-43) revised specific Vehicle Code sections, beginning January 1, 2022. The subcommittee comprised of 16 members affiliated with California Cities, Counties, Caltrans, CHP, automobile club, regional planning organization representatives and private consultants.

The subcommittee members reviewed AB-43's revisions of the Vehicle Code and compared it to CA MUTCD current policy (pre-AB-43, CA MUTCD Revision 6) and the CA MUTCD policy revision proposal in a series of three, 3-hour meetings conducted virtually in December 2021. The subcommittee meeting discussions and outcome with recommendation on the proposal was shared with Caltrans management in January 2022 to ensure compliance with AB-43 and management support. The outcome included key issues identified by the subcommittee that required clarifications from Caltrans Legal Division on AB-43 provisions text and its intent.

Caltrans Management & CalSTA Review:

Caltrans management reviewed the speed limit policy revision proposal, sought Legal Division input, as well as clarification from technical experts using spreadsheet format to understand the various aspects of rounding, nearest, 5 mph speed reductions and new allowances by AB-43 provisions. Caltrans management then engaged California State Transportation Agency (CalSTA) to review Caltrans speed limit policy revision proposal to ensure compliance with AB-43 provisions due to interpretation concerns on AB-43 intent and clarification on specific AB-43 text.

CalSTA reviewed Caltrans proposal and key interpretation concerns and discussed them with AB-43 authors and requested a change in the law to implement AB-43 provisions, as intended. Recently approved Assembly Bill AB-1938 (effective January 1, 2023), which clarifies AB-43's text and intent by revising specific AB-43 provisions, is that change in the law. AB-1938 will allow many agencies that were waiting for clarifications on AB-43 provisions, to move forward with their implementation.



CVC 22358.7 - Definitions for Safety Corridor & Land or Facility Generating High Concentrations of Bicyclists or Pedestrians

Caltrans initial proposal submitted under Agenda Item 21-16 for the November 4, 2021, CTCDC Meeting did not include the new Vehicle Code section 22358.7, that requires developing a definition for “safety corridor” and developing criteria to determine what constitutes land or facilities that generate high concentrations of bicyclists and pedestrians. This effort was initiated earlier this year and a draft proposal was prepared. The draft proposal was reviewed internally by Caltrans and with SHSP contacts and Vision Zero Cities.

The proposal was revised and then shared with CTCDC subcommittee members to solicit review and input. The proposal was then discussed with subcommittee members in three meetings in June (June 9, 2022 & June 23, 2022) and July (July 6, 2022). The proposal for CVC Section 22358.7 was revised based on the input and comments received from subcommittee members and is now included in this CTCDC Agenda item for further review, discussion, and recommendation in the CTCDC meeting.

CTCDC August 4, 2022, Meeting Actions:

In reviewing AB-43 provisions, Caltrans had identified 16 specific revisions of Vehicle Code Sections. Summary of these 16 provisions and intended actions follows.

Caltrans had included the following 9 of 16 AB-43 provisions on the August 4, 2022, CTCDC Meeting’s Agenda since they were clear straightforward interpretations and gained formal recommendation from CTCDC for CA MUTCD incorporation. This was done to alleviate efforts involved in processing the remaining AB-43 provisions and not keep all provisions pending AB1938 legislative action.

1. 627c2 revision: extending the considerations for ped and bike safety to increase consideration for children, seniors, persons with disability, and the unhoused
2. 22352b1 revision: extending prima-facie speed limit to be applicable to state highways also
3. 22354a revision: allowing the lower limit of prima-facie speed limit on the state highway to 20 or 15 (25 was the prior lower limit). Please note there are other unchanged statutes that describe how/when to set those limits.
4. 22358a revision: allowing the lower limit of prima-facie speed limit on the non-state highway to 25, 20 or 15 (25 was the prior lower limit). Please note there are other unchanged statutes that describe how/when to set those limits.
5. 40802a2 revision: adding the new senior zone and business activity districts to the list of prima facie listing within the citation



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6. 40802b3 new: adding definition of senior zone as explicitly defined in the citation
7. 40802b4 new: adding definition of business activity district as explicitly defined in the citation
8. 40802c2Bi(II) revision: extends the maximum length of time an engineering and traffic survey may be used from 10 to 14 years
9. 40802c2Bii revision: add senior zone and business activity district to the list of prima facie listing within the citation

Caltrans had held the following 5 of 16 AB-43 provisions and not included them in the proposal for the August 4, 2022, CTCDC Meeting's agenda, since they were being addressed by AB-1938 legislation and pending further legislative action at that time. The plan was to include them as CTCDC agenda item in a future meeting to gain formal recommendation from CTCDC for CA MUTCD incorporation.

1. 22358.6 Rounding and ETS reductions from the 85th percentile for any speed survey
2. 21400(b) (pre-AB43 before 1/1/22) Deleted text to be replaced by 22358.6
3. 22358.7 Reduction provisions for Safety Corridor & High Concentrations of Ped/Bikes
4. 22358.8 Reduction provisions for retaining current/prior speed limits
5. 22358.9 Reduction provisions for Business Activity Districts

Caltrans did not plan to include the following 2 of 16 AB-43 provisions as the text pertaining to these Vehicle Code sections was not included in current or previous CA MUTCD versions, so there was no text that needed to be changed in CA MUTCD.

1. 22352a1 terminology change from "flagman" to "flagperson"
2. 40802b1 deletion of "California Road System Maps" reference.

AB-1938:

AB-43 authors-initiated AB-1938 to clarify AB-43 text and intent. Assembly Bill AB-1938 titled "Traffic Safety: speed limits" authored by Friedman (D), Quirk (D) and Ting (D), et al., was introduced in California Assembly on February 10, 2022 (2021-2022 legislative cycle) and was voted upon and passed by California Legislature on August 31, 2022 and approved by Governor and Filed with Secretary of State on September 18, 2022.

AB-1938 makes technical, clarifying changes to existing law (AB-43 provisions) on how speed limits are set. It clarifies the circumstances where and how much a local authority may lower the speed limit below that indicated by an ETS.

In interpreting AB-43 provisions, there was some confusion regarding the language created by AB 529 in 2011 (CA MUTCD Section 2B.13 Paragraph #12a under Option 2), as to whether AB-43 eliminated the ability to lower speed limits by 5 mph using an E&TS for reasons other than the prevailing speed as permitted by VC 627. Since AB-43 provisions included the topics of “85th percentile” speeds, “rounding” of speed limits, using “5 mph increment”, and using “nearest” criteria for rounding up or rounding down the speed limit, did AB-43 replace, or was in addition to, the 5-mph reduction option that is allowed in CA MUTCD Section 2B.13 Paragraph #12a under Option 1.

- If replacing, then it would result in agencies being allowed this 5-mph reduction only for “safety corridor” (no more than one-fifth of the roadway network) or “land or facility that generates high concentrations of bicyclists or pedestrians”. This interpretation would result in agencies having to increase speed limits, not lowering them, which wasn’t AB 43’s intent.
- If it is in addition to, then it would result in agencies being allowed additional 5 mph reduction for “safety corridor” (no more than one-fifth of the roadway network) or “land or facility that generates high concentrations of bicyclists or pedestrians”. This interpretation would result in agencies lowering speed limits by as much as 12.4 mph from the 85th percentile speed, making speed limit in many locations below the 50th percentile and potential enforcement concerns due to majority of the motorists’ violators of the posted speed limits, not sure if this was AB 43’s intended.

AB-1938 clarifies the intent of AB 43 is that it is in addition to, and not replacing pre-AB-43 speed limit policies in CA MUTCD (current CA MUTCD Revision 6 and previous versions as well as Caltrans Traffic Manual prior to May 20, 2004) by codifying and including in CVC Section 22358.6(b) the 5-mph reduction option that is allowed in CA MUTCD Section 2B.13 Paragraph #12a under Option 1. AB-1938 also now includes the limitation on the total reduction in the speed limit to not exceed 12.4 mph from the 85th percentile speed.

Following are some excerpts from this bill’s analysis and comments in the Senate Committee on Transportation document:

- DIGEST: This bill would, if the speed limit needs to be rounded down to the nearest 5 miles per hour increment of the 85th-percentile speed, authorize Caltrans or a local authority to lower the speed limit by 5 miles per hour from the nearest 5 miles per hour of the 85th percentile, as specified.
- COMMENTS:
 - 1) Author’s Statement. “Last year the Governor signed my bill AB 43 to give cities more flexibility to lower speed limits. Unfortunately, some have interpreted AB 43 in a manner that removed pre-existing authority to deviate

from the 85th percentile speed, an interpretation that would give cities less, not more flexibility on setting speed limits. AB 1938 simply codifies the pre-existing authority on setting speed limits and clarifies that the additional authority granted by AB 43 was meant to supplement, not supplant, that authority."

- 2) Speed Limit Setting. Last year the Legislature enacted major reforms, in the form of AB 43, to the process for setting speed limits with the intent of giving local governments specified authority to lower speed limits to reduce crashes and accidents. The implementation of those reforms has hit a speed bump with the Administration requesting a change in the law to implement the bill as intended. Without this change local government supporters of AB 43 are concerned that they will be required to increase speed limits rather than decrease them.
- 3) Clarifying amendments. There is some uncertainty about the impact of this bill, particularly if the provisions are challenged in court. Since there is widespread agreement that the purpose of this bill is to implement AB 43 as intended, and the intent of AB 43 was to lower speed limits by not more than 12.4 miles per hour from what would have resulted from an ETS, the author may wish to state this intent in the text of the bill. Also, subdivision (b) of the bill would be clearer if the reference to Sections 22358.3 and 22360 were deleted as they stand alone and are not related to the ETS. Finally, in subdivision (d) the reference to "22358.7 and 22358.8" should be replaced with "22358.7 or 22358.8" so that it's clear their either subdivision can be used to lower the speed limit but that the two sections cannot be combined to lower the speed limit twice.

Refer to the following for more background and information on AB-1938:

1. Text of AB-1938 Traffic safety:
https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=202120220AB1938
2. AB-1938 Bill Analyses:
https://leginfo.legislature.ca.gov/faces/billAnalysisClient.xhtml?bill_id=202120220AB1938
3. AB-43 Today's Law As Amended:
https://leginfo.legislature.ca.gov/faces/billCompareClient.xhtml?bill_id=202120220AB1938&showamends=false

Current Proposal:

This current agenda item proposal includes the following 5 of 16 AB-43 provisions that had been held up previously from inclusion in the August 4, 2022, CTCDC Meeting's agenda item, as AB-1938 has provided the needed clarification on AB-43's text and intent.

1. 22358.6 Rounding and ETS reductions from the 85th percentile for any speed survey
2. 21400(b) (pre-AB43 before 1/1/22) Deleted text to be replaced by 22358.6
3. 22358.7 Reduction provisions for Safety Corridor or High Concentrations of Ped/Bikes
4. 22358.8 Reduction provisions for retaining current/prior speed limits
5. 22358.9 Reduction provisions for Business Activity Districts

SHSP SM/AD Action Item SM.11:

On September 15, 2022, the SHSP Steering Committee and Executive Leadership approved new SM/AD action item SM.11. This action item requires an update the speed limit policies in the California MUTCD to allow greater flexibility by incorporating the seven Zero Traffic Fatalities Task Force (ZTFTF) recommendations that are now permissible with the passing of Assembly Bill (AB) 43.

Attachments:

- Attachment A – Proposed Revisions to CA MUTCD Section 2B.13.
- Attachment B – Proposed Revisions to CA MUTCD Table 2B-101(CA).
- Attachment C – Proposed Revisions to CA MUTCD Table 2B-102(CA).
- Attachment D – Proposed New CA MUTCD Table 2B-103(CA).
- Attachment E – Proposed New CA MUTCD Table 2B-104(CA).
- Attachment F – Proposed New CA MUTCD Table 2B-105(CA).
- Attachment G – Proposed New CA MUTCD Table 2B-106(CA).
- Attachment H – Approved SHSP Action SM.11.



ATTACHMENT A



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Attachment A – Proposed Revisions to CA MUTCD Section 2B.13.

Proposal:

Note:

Black text is unedited National MUTCD text adopted for use in current CA MUTCD.

~~Black strikethrough text~~ is National MUTCD text that is not applicable in California as shown in current CA MUTCD.

Blue text is California text additions adopted for use in current CA MUTCD.

~~Red strikethrough text~~ is text that is proposed to be deleted from the current CA MUTCD by this proposal.

Red text is text that is proposed to be included in the current CA MUTCD by this proposal.

~~Green strikethrough text~~ is text that is proposed to be deleted from the current CA MUTCD based on CTCDC August 4, 2022, meeting's proposal discussion, followed by CTCDC motion and recommendation.

Green text is text that is proposed to be included in the current CA MUTCD based on CTCDC August 4, 2022 meeting's proposal discussion, followed by CTCDC motion and recommendation.

Modify Section 2B.13 as shown:

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

Support:

⁰⁰ 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. ~~Artificially low speed limits can lead to poor compliance as well as large variations in speed within the traffic stream. Increased speed variance can also create more conflicts and passing maneuvers.~~

~~The most effective way to reduce speeds is through a combination of using speed related traffic control devices related to speed, roadway design and engineering solutions, and enforcement efforts. Effectively managing road user speed relies on numerous factors, which include enforcement, roadway characteristics, surrounding environment, adjacent land use, and traffic control devices. Many studies find that engineering changes, such as changing a road's infrastructure, are one of the most important factors in reducing vehicle operating speeds. Engineering changes are also one of the most effective interventions at reducing pedestrian injury and fatality rates. Potential street engineering changes, such as curb extensions, median islands, raised crosswalks, roundabouts, and speed bumps, naturally result in lower speeds. It is realized that these engineering changes can be costly and time-consuming to implement.~~

Standard:

⁰¹ **Speed zones (other than statutory speed limits) shall only be established on the basis of an engineering and traffic survey (E&TS) study that has been performed in accordance with traffic engineering practices. The engineering study shall include an analysis of the current speed distribution of free-flowing vehicles.**

02 The Speed Limit (R2-1) sign (see Figure 2B-3) shall display the limit established by law, ordinance, regulation, or as adopted by the authorized agency based on the engineering study. The speed limits displayed shall be in multiples of 5 mph.

03 Speed Limit (R2-1) signs, indicating speed limits for which posting is required by law, shall be located at the points of change from one speed limit to another.

04 At the downstream end of the section to which a speed limit applies, a Speed Limit sign showing the next speed limit shall be installed. Additional Speed Limit signs shall be installed beyond major intersections and at other locations where it is necessary to remind road users of the speed limit that is applicable.

05 Speed Limit signs indicating the statutory speed limits shall be installed at entrances to the State and, where appropriate, at jurisdictional boundaries in urban areas.

Support:

06 In general, the maximum speed limits applicable to rural and urban roads are established:

- A. Statutorily – a maximum speed limit applicable to a particular class of road, such as freeways or city streets, that is established by State law; or
- B. As altered speed zones – based on engineering studies.

07 State statutory limits might restrict the maximum speed limit that can be established on a particular road, notwithstanding what an engineering study might indicate.

Option:

~~08 If a jurisdiction has a policy of installing Speed Limit signs in accordance with statutory requirements only on the streets that enter a city, neighborhood, or residential area to indicate the speed limit that is applicable to the entire city, neighborhood, or residential area unless otherwise posted, a CITYWIDE (R2-5aP), NEIGHBORHOOD (R2-5bP), or RESIDENTIAL (R2-5cP) plaque may be mounted above the Speed Limit sign and an UNLESS OTHERWISE POSTED (R2-5P) plaque may be mounted below the Speed Limit sign (see Figure 2B-3).~~

Guidance:

09 *A Reduced Speed Limit Ahead (W3-5 or W3-5a) sign (see Section 2C.38) should be used to inform road users of a reduced speed zone where the speed limit is being reduced by more than 10 mph, or where engineering judgment indicates the need for advance notice to comply with the posted speed limit ahead.*

10 *States and local agencies should conduct engineering studies at least once every 5, 7 or 14 years, in compliance with CVC Section 40802 to reevaluate non-statutory speed limits on segments of their roadways that have undergone significant changes since the last review, such as the addition or elimination of parking or driveways, changes in the number of travel lanes, changes in the configuration of bicycle lanes, changes in traffic control signal coordination, or significant changes in traffic volumes.*

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

12 ~~*When a speed limit within a speed zone is posted, it should be within 5 mph of the 85th percentile speed of free-flowing traffic.*~~

CVC Section 22358.6 - 85th Percentile, Rounding, 5 mph Increment, 5 mph speed reduction and Maximum Speed Reduction

Standard:

12a When a speed limit is to be posted, it shall be established at the nearest 5 mph increment of the 85th-percentile speed of free-flowing traffic, except as shown in the two Options below. Refer to CVC Section 22358.6(a).

Option:

1. For cases in which the nearest 5 mph increment of the 85th-percentile speed would require a rounding down, the posted speed may be reduced by 5 mph from the nearest 5 mph increment of the 85th-percentile speed, in compliance with CVC Sections 627 and 22358.5. CVC Sections 22353, 22353.2, 22353.3, 22353.4, and 22353.5, may also be considered, if applicable. See Standard below for documentation requirements. Refer to CVC Section 22358.6(b).
2. For cases in which the nearest 5 mph increment of the 85th-percentile speed would require a rounding up, then the speed limit may be rounded down to the nearest 5 mph increment below the 85th percentile speed, if no further reduction is used. Refer to CVC Section 21400(b). Refer to CVC Section 22358.6(c).

Standard:

^{12b} If the speed limit to be posted has had the 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. Refer to CVC Section 22358.6(b).

The total reduction in the speed limit using the nearest 5 mph increment and rounding (CVC Section 22358.6), 5 mph speed reduction (in compliance with CVC Sections 627 and 22358.5), safety corridor designation (CVC Section 22358.7) or land or facility adjacent to high concentration of pedestrian and bicyclists (CVC Section 22358.7) shall not exceed 12.4 mph from the 85th percentile speed. Refer to CVC Section 22358.6(e).

Support:

Refer to Tables 2B-103(CA) and 2B-104(CA), which provides examples of 85th percentile speed values and the application of the speed limit policies and criteria applicable per CVC 22358.6 and 22358.7.

^{12c} The following examples are provided to explain the application of these speed limit criteria:

Example 1.— Using Option 1 above and first step is to round down: If the 85th percentile speed in a speed survey for a location was 37 mph, then the speed limit would be established at 35 mph since it is the closest 5 mph increment to the 37 mph speed. As indicated by the option, this 35 mph established speed limit could be reduced by 5 mph to 30 mph if the conditions and justification for using this lower speed limit are documented in the E&TS and approved by a registered Civil or Traffic Engineer.

Example 2.— Using Option 1 above and first step is to round up: If the 85th percentile speed in a speed survey for a location was 33 mph, then the speed limit would be established at 35 mph since it is the closest 5 mph increment to the 33 mph speed. As indicated by the option, this 35 mph speed limit could be reduced by 5 mph to 30 mph if the conditions and justification for using this lower speed limit are documented in the E&TS and approved by a registered Civil or Traffic Engineer.

Example 3.— Using Option 2 above and first step is to round up: If the 85th percentile speed in a speed survey for a location was 33 mph, instead of rounding up to 35 mph, the speed limit can be established at 30 mph, but no further reductions can be applied (which is allowed in the two examples above).

Standard:

^{12d} Examples 1 and 2 for establishing posted speed limits shall apply to engineering and traffic surveys (E&TS) performed on or after July 1, 2009 in accordance with Caltrans' Traffic Operations Policy Directive Number 09-04 dated June 29, 2009.

Option:

^{12e} After January 1, 2012, Example 3 may be used to establish speed limits. Refer to CVC 21400(b).



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Support:

^{12f} Any existing E&TS that was performed before ~~July 1, 2009~~ January 1, 2022 in accordance with previous traffic control device standards is not required to ~~comply with the new criteria~~ updated until it is due for reevaluation per the 5, 7 or ~~10~~ 14 year criteria.

CVC Sections 22358.7, 22358.8 and 22358.9 - Applicability on State Highway System & Local Agency

Roadways

Standard:

CVC Sections 22358.7, 22358.8 and 22358.9 and their related policies shall not be applicable to roadways on the State Highway System.

Support:

CVC Sections 22358.7, 22358.8 and 22358.9 and their related policies are applicable on local agency roadways.

CVC Sections 22358.7, 22358.8 and 22358.9 and their related policies are also applicable on and privately owned and maintained roads or commercial establishments, if the private road or private property has been subjected to the CVC application by the private property owner or a particular city or county enacts an ordinance or resolution to this effect. Refer to CVC Sections 21100, 21100.1, 21107, 21107.5, 21107.6, and 21107.7.

Standard:

The additional 5 mph speed reduction allowed by CVC Section 22358.7 on designated safety corridors or on portions of highway adjacent to any land or facility that generates high concentrations of bicyclists or pedestrians, shall not be applicable on any roadway segment that is on the State Highway System.

The option allowed by CVC Section 22358.8 to retain the currently adopted speed limit or restore the immediately prior adopted speed limit, shall not be applicable on any roadway segment that is on the State Highway System.

Declaring prima facie speed limits of 25 mph or 20 mph on a highway contiguous to a business activity district allowed by CVC Section 22358.9 shall not be applicable on any roadway segment that is on the State Highway System.

CVC Section 22358.7 - Safety corridor and Land or Facilities Generating High Concentrations of Bicyclists and Pedestrians

Standard:

Additional lowering of the speed limits from those calculated using rounding (up or down) per CVC Section 22358.6(b) and 22358.6(c) and 5 mph speed reduction using CVC Section 22358.6(b), as included in paragraph 12a, and Options #1 and #2 processes, is prohibited, except for the local agency roadway segments designated as "safety corridor" or "land or facilities that generate high concentrations of bicyclists and pedestrians" in compliance with CVC Section 22358.6(d) and 22358.7.

Option:

Local agencies may additionally lower the speed limits by 5 mph from those calculated using rounding (up or down) per CVC Section 22358.6(b) and 22358.6(c) and 5 mph speed reduction using CVC Section 22358.6(b), if, after completing an E&TS, find that the speed limit is still more than is reasonable or safe, for either of the following reasons:

1. The portion of a highway has been designated as a safety corridor.

2. The portion of highway is adjacent to any land or facility that generates high concentrations of bicyclists or pedestrians, especially those from vulnerable groups such as children, seniors, persons with disabilities, and the unhoused.

CVC Section 22358.7(a)(1) – “Safety Corridor” Definition

Standard:

A safety corridor shall be defined as a roadway segment within an overall roadway network where the highest number of serious injury and fatality crashes occur.

One or more of the requirements listed in the Table 2B-105(CA) shall be used to prioritize the locations of fatal and serious injury crashes in developing the “Safety Corridor” definition.

Option:

Data used to determine a safety corridor may be from the most recent Engineering and Traffic Survey (E&TS) performed. The crash data source may include, but is not limited to, California Highway Patrol’s (CHP) Statewide Integrated Traffic Records System (SWITRS).

Standard:

The prioritized subset of safety corridors shall:

1. Identify specific locations with high crash occurrences.
2. Identify corridor-level segments with a pattern of crash reoccurrence.
3. Be able to be stratified by mode.

Safety corridors shall represent a prioritized subset of the overall roadway network within an authority’s responsibilities and shall not exceed one-fifth of the overall roadway network.

Guidance:

A jurisdiction should use three to five years of the most recent crash data to determine a safety corridor based on Fatal and Serious Injury data.

Option:

For crash coverage, safety corridors may identify the subset of the overall roadway network where a minimum of 25% of the Fatal + Serious Injury (F+SI) crashes occur.

To identify logical termini, the geographic extent of a safety corridor may be determined by non-engineering staff.

Standard:

A licensed professional engineer shall sign off on logical termini identified for a safety corridor using existing E&TS.

Option:

Crash/Volume rate may be used to provide additional locations to be included in the safety corridor. Local agencies may use proactive measures as indicators.

CVC Section 22358.7(a)(2) – “Land or facility that generates high concentrations of bicyclists or pedestrians” definition

Standard:

Except for the Option in first paragraph below, a land or facility that generates high concentrations of bicyclists or pedestrians shall be defined as the portion of the highway where one or more of any of the generators listed in Table 2B-106(CA) are present within a distance of 1320 feet.

Option:

Crash data that demonstrates one or more pedestrian or bicyclist related fatalities or serious injuries have occurred within the last three to five years may be used in lieu of one of the generators listed in Table 2B-106 (CA).

A high concentration of pedestrians and bicyclists may be longer than 1320 feet provided that a minimum of one generator is present for every 1320 feet.

Data used to determine high concentration locations may be obtained from the most recently performed Engineering and Traffic Survey (E&TS).

Standard:

The provisions of CVC Section 22358.7 to additionally lower the speed limit (by designating safety corridor or on portion of highway is adjacent to any land or facility that generates high concentrations of bicyclists or pedestrians), shall not be applicable until actions required per CVC Section 22358.7 by Department of Transportation and Judicial Council are completed or June 30, 2024, whichever is sooner.

CVC Section 22358.8 (Retain currently adopted or restore immediately prior speed limit)

Option:

Local agency may retain the currently adopted speed limit without further reduction, or restore the immediately prior adopted speed limit without further reduction as provided in Section 22358.8.

Standard:

Currently adopted speed limit or immediately prior adopted speed limit shall only be retained, by ordinance, if after completing an E&TS, local agency finds that the speed limit is still more than is reasonable or safe, and that speed limit was established with an E&TS and if a registered engineer has evaluated the section of highway and determined that no additional general purpose lanes have been added to the roadway since completion of the traffic survey that established the prior speed limit.

If local agency decides to use lower speed limit based on CVC Section 22358.8, after completing an E&TS and finding that the speed limit is still more than is reasonable or safe, it shall not be reduced by any more than 5 mph from the currently adopted speed limit nor below the immediately prior speed limit. Refer to CVC Section 22358.8(b).

CVC Section 22358.9 - Business Activity District

Option:

A local authority may, by ordinance, determine and declare a 25 or 20 mph prima facie speed limit on a highway contiguous to a business activity district when posted with a sign that indicates a speed limit of 25 or 20 mph if the highway segment meets all of the following conditions:

1. A maximum of four traffic lanes.
2. A maximum posted 30 mph prima facie speed limit immediately prior to and after the business activity district, if establishing a 25 mph speed limit.
3. A maximum posted 25 mph prima facie speed limit immediately prior to and after the business activity district, if establishing a 20 mph speed limit.

A "business activity district" is that portion of a highway and the property contiguous thereto that includes central or neighborhood downtowns, urban villages, or zoning designations that prioritize commercial land uses at the downtown or neighborhood scale and meets at least three of the following four requirements:

1. No less than 50 percent of the contiguous property fronting the highway consists of retail or dining commercial uses, including outdoor dining, that open directly onto sidewalks adjacent to the highway.
2. Parking, including parallel, diagonal, or perpendicular spaces located alongside the highway.
3. Traffic control signals or stop signs regulating traffic flow on the highway, located at intervals of no more than 600 feet.
4. Marked crosswalks not controlled by a traffic control device.

Standard:

A local authority shall not declare a prima facie speed limit on a portion of a highway where the local authority has already lowered the speed limit as permitted for designated safety corridors (CVC Section 22358.7) or using the land or facility adjacent to high concentration of pedestrians and bicyclists (CVC Section 22358.7), or retained the currently adopted speed limit (CVC Section 22358.8) or have restored the immediately prior adopted speed limit (CVC Section 22358.8). Refer to CVC Section 22358.9(c).

13 Speed studies for signalized intersection approaches should be taken outside the influence area of the traffic control signal, which is generally considered to be approximately 1/2 mile, to avoid obtaining skewed results for the 85th-percentile speed.

Support:

14 Advance warning signs and other traffic control devices to attract the motorist's attention to a signalized intersection are usually more effective than a reduced speed limit zone.

Guidance:

15 An advisory speed plaque (see Section 2C.08) mounted below a warning sign should be used to warn road users of an advisory speed for a roadway condition. A Speed Limit sign should not be used for this situation.

Option:

16 Other factors that may be considered when establishing or reevaluating speed limits are the following:

- A. Road characteristics, shoulder condition, grade, alignment, and sight distance;
- B. The pace;
- C. Roadside development and environment;
- D. Parking practices and pedestrian activity; and
- E. Reported crash experience for at least a 12-month period.

17 Two types of Speed Limit signs may be used: one to designate passenger car speeds, including any nighttime information or minimum speed limit that might apply; and the other to show any special speed limits for trucks and other vehicles.

18 A changeable message sign that changes the speed limit for traffic and ambient conditions may be installed provided that the appropriate speed limit is displayed at the proper times.

19 A changeable message sign that displays to approaching drivers the speed at which they are traveling may be installed in conjunction with a Speed Limit sign.

Guidance:

20 If a changeable message sign displaying approach speeds is installed, the legend YOUR SPEED XX MPH or such similar legend should be displayed. The color of the changeable message legend should be a yellow legend on a black background or the reverse of these colors.

Support:

21 Advisory Speed signs and plaques are discussed in Sections 2C.08 and 2C.14. Temporary Traffic Control Zone Speed signs are discussed in Part 6. The WORK ZONE (G20-5aP) plaque intended for installation above a Speed Limit sign is discussed in Section 6F.12. School Speed Limit signs are discussed in Section 7B.15.

22 Speed limits in California are governed by the California Vehicle Code (CVC), Sections 22348 through 22413; also, pertinent sections are found in Sections 627 and 40802 and others referenced in this section. See Section 1A.11 for information regarding this publication.

23 Refer to Part 6, Section 6C.01 for speed limit signs in temporary traffic control zones. Refer to Part 7 for speed limit signs in school areas.

Engineering and Traffic Survey (E&TS)

Support:

²⁴ CVC Section 627 defines the term “Engineering and traffic survey” and lists its requirements.

Standard:

²⁵ **An engineering and traffic survey (E&TS) shall include, among other requirements deemed necessary by Caltrans, consideration of all of the following:**

- A. Prevailing speeds as determined by traffic engineering measurements.**
- B. Collision records.**
- C. Highway, traffic, and roadside conditions not readily apparent to the driver.**

Guidance:

²⁶ *The E&TS should contain sufficient information to document that the required three items of CVC Section 627 are provided and that other conditions not readily apparent to a driver are properly identified.*

²⁷ *Prevailing speeds are determined by a speed zone survey. A speed zone survey should include:*

- A. The intent of the speed measurements is to determine the actual speed of unimpeded traffic. The speed of traffic should not be altered by concentrated law enforcement, or other means, just prior to, or while taking the speed measurements.*
- B. Only one person is required for the field work. Speeds should be read directly from a radar or other electronic speed measuring devices; or,*
- C. Devices, other than radar, capable of accurately distinguishing and measuring the unimpeded speed of free flowing vehicles may be used.*
- D. A location should be selected where prevailing speeds are representative of the entire speed zone section. If speeds vary on a given route, more than one speed zone section may be required, with separate measurements for each section. Locations for measurements should be chosen so as to minimize the effects of traffic signals or stop signs.*
- E. Speed measurements should be taken during off-peak hours between peak traffic periods on weekdays. If there is difficulty in obtaining the desired quantity, speed measurements may be taken during any period with free flowing traffic.*
- F. The weather should be fair (dry pavement) with no unusual conditions prevailing.*
- G. The surveyor and equipment should not affect the traffic speeds. For this reason, an unmarked car is recommended, and the radar speed meter located as inconspicuously as possible.*
- H. In order for the sample to be representative of the actual traffic flow, the minimum sample should be 100 vehicles in each survey. In no case should the sample contain less than 50 vehicles.*
- I. Short speed zones of less than 0.5 miles should be avoided, except in transition areas.*
- J. Speed zone changes should be coordinated with changes in roadway conditions or roadside development.*
- K. Speed zoning should be in 10 mph increments except in urban areas where 5 mph increments are preferable.*
- L. Speed zoning should be coordinated with adjacent jurisdictions.*

Support:

²⁸ Physical conditions such as width, curvature, grade and surface conditions, or any other condition readily apparent to the driver, in the absence of other factors, would not require special downward speed zoning. Refer to CVC 22358.5.

Option:

²⁹ When qualifying an appropriate speed limit, local authorities may also consider all of the following findings:

- A. Residential density, if any of the following conditions exist on the particular portion of highway and the property contiguous thereto, other than a business district:
1. Upon one side of the highway, within 0.25 miles, the contiguous property fronting thereon is occupied by 13 or more separate dwelling houses or business structures.
 2. Upon both sides of the highway, collectively, within a distance of 0.25 miles the contiguous property fronting thereon is occupied by 16 or more separate dwelling houses or business structures.
 3. The portion of highway is larger than 0.25 miles but has the ratio of separate dwelling houses or business structures to the length of the highway described in either subparagraph 1 or 2 above.
- B. ~~Pedestrian and bicyclist safety.~~ Safety of bicyclists and pedestrians, with increased consideration for vulnerable pedestrian groups including children, seniors, persons with disabilities, users of personal assistive mobility devices, and the unhoused.
- ³⁰ The following two methods of conducting E&TS may be used to establish speed limits:
1. State Highways - The E&TS for State highways is made under the direction of the Caltrans District Traffic Engineer. The data includes:
 - a. One copy of the Example of Speed Zone Survey Sheet (See Figure 2B-101(CA)) showing:
 - A north arrow
 - Engineer's station or post mileage
 - Limits of the proposed zones
 - Appropriate notations showing type of roadside development, such as "scattered business," "solid residential," etc. Schools adjacent to the highway are shown, but other buildings need not be plotted unless they are a factor in the speed recommendation or the point of termination of a speed zone.
 - Collision rates for the zones involved
 - Average daily traffic volume
 - Location of traffic signals, signs and markings
 - If the highway is divided, the limits of zones for each direction of travel
 - Plotted 85th percentile and pace speeds at location taken showing speed profile
 - b. A report to the District Director that includes:
 - The reason for the initiation of speed zone survey.
 - Recommendations and supporting reasons.
 - The enforcement jurisdictions involved and the recommendations and opinions of those officials.
 - The stationing or reference post in mileage at the beginning and ending of each proposed zone and any intermediate equations. Location ties must be given to readily identifiable physical features.
 2. City and County Through Highways, Arterials, Collector Roads and Local Streets.
 - a. The short method of speed zoning 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. Other factors that need to be considered include but are not limited to: the most recent two-year collision record, roadway design speed, safe stopping sight distance, superelevation, shoulder conditions, profile conditions, intersection spacing and offsets, commercial driveway characteristics, and pedestrian traffic in the roadway without sidewalks.

- b. Determination of Existing Speed Limits - Figures 2B-103(CA) & 2B-104(CA) show examples of data sheets which may be used to record speed observations. Specific types of vehicles may be tallied by use of letter symbols in appropriate squares.

³¹ In most situations, the short form for local streets and roads will be adequate; however, the procedure used on State highways may be used at the option of the local agency.

Any agency may lower the speed limit below the prima facie speed limit after performing, and based on the results of an E&TS.

Guidance:

~~³² The factors justifying a reduction below the 85th percentile speed for the posted speed limit are the same factors mentioned above. Whenever such factors are considered to establish the speed limit, they should be documented on the speed zone survey or the accompanying engineering report.~~

³³ The establishment of a speed limit of more than 5 mph below the 85th percentile speed should be done with great care as studies have shown that establishing a speed limit at less than the 85th percentile generally results in an increase in collision rates; in addition, this may make violators of a disproportionate number of the reasonable majority of drivers.

Support:

³⁴ Generally, the most decisive evidence of conditions not readily apparent to the driver surfaces in collision histories.

³⁵ Speed limits are established at or near the 85th percentile speed, which is defined as that speed at or below which 85th percent of the traffic is moving. The 85th percentile speed is often referred to as the critical speed. Pace speed is defined as the 10 mph increment of speed containing the largest number of vehicles (See Figure 2B-102(CA)). The lower limit of the pace is plotted on the Speed Zone Survey Sheets as an aid in determining the proper zone limits. Speed limits higher than the 85th percentile are not generally considered reasonable and prudent. Speed limits below the 85th percentile do not ordinarily facilitate the orderly movement of traffic and require constant enforcement to maintain compliance. Speed limits established on the basis of the 85th percentile conform to the consensus of those who drive highways as to what speed is reasonable and prudent, and are not dependent on the judgment of one or a few individuals.

³⁶ The majority of drivers comply with the basic speed law. Speed limits set at or near the 85th percentile speed provide law enforcement officers with a limit to cite drivers who will not conform to what the majority considers reasonable and prudent. Further studies show that establishing a speed limit at less than the 85th percentile (Critical Speed) generally results in an increase in collision rates.

Option:

³⁷ When roadside development results in traffic conflicts and unusual conditions which are not readily apparent to drivers, as indicated in collision records, speed limits somewhat below the 85th percentile may be justified. Concurrence and support of enforcement officials are necessary for the successful operation of a restricted speed zone.

Guidance:

³⁸ Speed zones of less than 0.5 miles and short transition zones should be avoided.

Signs

Standard:

³⁹ The Speed Limit (R2-1) sign shall be used to give notice of a prima facie or maximum speed limit except as provided under Prima Facie Speed Limits in CVC 22352.

⁴⁰ When used, the TRUCKS, 3 AXLES OR MORE 55 MAXIMUM (R6-3(CA)) sign shall be installed approximately 750 feet following each R2-1 sign.

41 The ALL VEHICLES WHEN TOWING 55 MAXIMUM (R6-4(CA)) sign shall be installed approximately 750 feet following the R6-3(CA) sign.

Guidance:

42 The R6-3(CA) and R6-4(CA) signs should be placed on highway segments where speeds in excess of 55 mph are permitted.

Option:

43 The existing AUTOS WITH TRAILERS, TRUCKS 55 MAXIMUM (R6-1(CA)) sign may remain in place until it is knocked down, damaged, stolen, vandalized, or otherwise reaches the end of its useful life.

44 The local California Highway Patrol office may be consulted to identify highway segments where enforcement is an issue. On these segments early replacement of existing R6-1(CA) signs may be necessary.

Support:

45 Refer to CVC Section 22406 for types of vehicles subject to the 55 mph maximum speed limit.

Option:

46 The Speed Zone Ahead (R2-4(CA)) sign (see Figure 2B-3(CA)) may be used to inform the motorist of a reduced speed zone.

Standard:

47 The R2-4(CA) sign shall always be followed by a Speed Limit (R2-1) sign installed at the beginning of the zone where the reduced speed limit applies.

48 The End Speed Limit (R3(CA)) sign shall only be used to mark the end of a speed zone.

49 The R3(CA) sign shall not be used at a transition into a change in speed limits within a reduced zone.

Option:

50 The R3(CA) sign (see Figure 2B-3(CA)) may be used with the TRUCK (M4-4) plaque to mark the end of truck speed zones on descending grades.

Standard:

51 Speed limit signs shall be placed at the beginning of all restricted speed zones.

Option:

52 Where speed zones are longer than 1 mile, intermediate signs may be placed at approximate 1 mile intervals. For three or more lanes in each direction, dual installation may be used.

Standard:

53 The Speed Limit (R2-1) and End Speed Limit (R3(CA)) signs, as appropriate shall be placed at the end of all restricted speed zones.

54 Freeways with 65 mph and those segments where a speed limit of 70 mph has been approved by Caltrans, with approval by the California Highway Patrol, shall be posted as follows:

- **At the segment entrance, R2-1 signs shall be installed right of traffic off of the right shoulder.**
- **R2-1 signs shall also be installed off of the right shoulder only, throughout the segment, at a maximum of 25 mile intervals.**

Option:

- *The 25 mile interval may be modified to include locations following entrance ramps.*

Standard:

- **The R6-3(CA) sign (see Figure 2B-3(CA)) shall be installed approximately 750 feet following each R2-1 sign, both at the beginning and throughout each 60, 65 or 70 mph segment.**
- **The R6-4(CA) sign (see Figure 2B-3(CA)) shall be installed approximately 750 feet following each R6-3(CA) sign.**

Option:

- The SLOWER TRAFFIC KEEP RIGHT (R4-3) signs may be installed at locations where there is a tendency of the motorists to drive in the left-hand lane(s) below the normal speed of traffic.

Standard:

- Signs shall be placed in protected locations.
 - At the end of the 70/65 mph segment, R2-1 signs shall be installed off of the right shoulder.
- ⁵⁵ Freeway segments where a 55 mph speed limit has been approved by Caltrans, with the approval of the California Highway Patrol, shall be posted as follows:

- The beginning of the segment shall be posted with an R2-1 sign installed on the right shoulder and left shoulder where the median is of sufficient width to permit sign maintenance without lane closures.

Guidance:

- Subsequent signs should then be posted on the right shoulder, on approximate 3 mile intervals, with no more than 3 interchanges between signs.
- At the end of the segment, an R2-1 sign with the appropriate number for the next speed limit should be posted on the right shoulder.

⁵⁶ Conventional highways with 55 mph speed limits should be posted as follows:

Standard:

- The beginning of the segment shall be posted with an R2-1 sign installed on the right shoulder.

Guidance:

- Subsequent signs should then be posted on approximate 5 to 10 mile intervals and immediately after locations where significant volumes of traffic enter the segment.
- At the end of the segment, an R2-1 sign with the appropriate number for the next speed limit should be posted on the right shoulder.

Conventional highways with 65 mph speed limits should be posted as follows:

- The beginning of the segment should be posted with an R2-1 sign installed on the right shoulder.
- Subsequent signs should then be posted at 5 to 10 mile intervals and after locations where significant volumes of traffic enter the segment.
- At the end of the segment, an R2-1 sign with the appropriate number for the next speed limit should be posted on the right shoulder.

Option:

⁵⁷ Pavement markings with appropriate numerals (see Section 3B.21) may be used to supplement speed limit signs.

Standard:

⁵⁸ The R2-1 and R6-3(CA) and R6-4(CA) signs giving maximum statewide speed limits for various types of vehicles shall be installed on all State highways near the points of entrance into California.

Guidance:

⁵⁹ The R2-1 and R6-3(CA) and R6-4(CA) signs should be placed in a location to be most effectively viewed by the approaching motorists.

Standard:

⁶⁰ Speed Limit (R2-1) signs shall be installed throughout segments of freeway with posted speed limits of 65 mph or 70 mph at a maximum of 25 mile intervals.

Option:

⁶¹ The 25 mile interval may be modified to include locations following entrance ramps.

Standard:

⁶² **Speed Limit (R2-1) signs shall be installed throughout segments of conventional highways with a posted speed limit of 65 mph at 5 mile to 10 mile intervals.**

⁶³ **Speed Limit (R2-1) signs shall be installed throughout segments of freeway with a posted speed limit of 55 mph at approximately 3 mile intervals with no more than 3 interchanges between signs.**

⁶⁴ **Speed Limit (R2-1) signs shall be installed throughout segments of conventional highways with a posted speed limit of 55 mph at 5 mile to 10 mile intervals.**

Speed Enforced Signs

Option:

⁶⁵ The SPEED ENFORCED BY RADAR (R48(CA)) sign (see Figure 2B-3(CA)) may be used where the California Highway Patrol has received authority to use radar and requests such signs.

Guidance:

⁶⁶ *One sign should be used in each direction at the beginning of the segment of roadway, and at intervening major route intersections, where radar enforcement is in effect.*

Support:

⁶⁷ The R48(CA) sign is a stand-alone sign intended to alert motorists that speed is enforced by radar on a particular segment of roadway.

Option:

⁶⁸ The RADAR ENFORCED (R48-1(CA)) sign (see Figure 2B-3(CA)) may be used in combination with the Speed Limit (R2-1) sign on any roadway where law enforcement has the authority to use radar.

Guidance:

⁶⁹ *When used, the R48-1(CA) sign should be placed below the R2-1 sign, at the beginning of the segment of roadway and at intervening major intersections, where radar enforcement is in effect.*

Option:

⁷⁰ The SPEED ENFORCED BY AIRCRAFT (R48-2(CA)) sign (see Figure 2B-3(CA)) may be placed, when requested by the California Highway Patrol, on sections of highway regularly patrolled by aircraft.

Standard:

⁷¹ **The R48-2(CA) sign shall be used for both directions of travel.**

Guidance:

⁷² *The R48-2(CA) sign should be placed at the beginning of the section and spaced at 25 mile intervals. See Figure 3B-105(CA).*

Vehicle Speed Feedback Signs

Option:

⁷³ A Vehicle Speed Feedback sign that displays to approaching drivers the speed at which they are traveling may be installed in conjunction with a Speed Limit (R2-1) sign.

Standard:

⁷⁴ **If a Vehicle Speed Feedback sign displaying approach speeds is installed, the legend shall be YOUR SPEED XX. The numerals displaying the speed shall be white, yellow, yellow-green or amber color on black background. When activated, lights shall be steady-burn conforming to the provisions of CVC Sections 21466 and 21466.5. Vehicle Speed Feedback signs shall not alternatively be operated as variable speed limit signs.**



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Guidance:

⁷⁵ To the degree practical, numerals for displaying approach speeds should be similar font and size as numerals on the corresponding Speed Limit (R2-1) sign.

Option:

⁷⁶ When used, the Vehicle Speed Feedback sign may be mounted on either a separate support or on the same support as the Speed Limit (R2-1) sign.

⁷⁷ In lieu of lights, legend may be retroreflective film for flip-disk systems.

⁷⁸ The legend YOUR SPEED may be white on black plaque located above the changeable speed display.

Support:

⁷⁹ Driver comprehension may improve when the Vehicle Speed Feedback Sign is mounted on the same support below the Speed Limit (R2-1) sign.

⁸⁰ Vehicle Speed Feedback Signs are appropriate for use with advisory speed signs and with temporary signs in temporary traffic control zones.

Basic Speed Law and Prima Facie Speed Limits – See CVC 22350 & 22352

Support:

⁸¹ The basic speed law states “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.”

Standard:

⁸² **Prima facie speed limits are specific limits and shall apply unless changed based upon an engineering and traffic survey (E&TS) and signs are posted that display the new speed limit.**

Option:

⁸³ Prima facie speed limits may be preempted by the basic speed law, when roadway, traffic or weather conditions warrant a lower speed.

Use of Metric System Designations – See CVC 21351.3

Option:

⁸⁴ Dual units for speed limits on signs may be placed on local streets and roads in both Metric and English units.

Guidance:

⁸⁵ *If used, dual unit speed limits should be rounded to the nearest 10 km/h for Metric and 5 mph for English units for posting on signs on local streets and roads.*

Support:

⁸⁶ Refer to AASHTO’s Traffic Engineering Metric Conversion Factors. See Section 1A.11 for information regarding this publication.

Standard:

⁸⁷ **Metric speed limits shall not be placed on State highways. For use in this California MUTCD, 70 mph shall be shown as a metric equivalent of 110 km/h, neither of which shall be used on any local street or road.**

Legal Authority for Establishing Speed Limits

Support:

⁸⁸ Delegation of legal authority to set speed limits on State highways is given to Caltrans District Directors. The District Director of each transportation district is authorized to issue orders regulating the speed of traffic, up to 65 mph on State highways. The Director of Caltrans retains the authority to approve variable, minimum, and maximum speeds up to 70 mph on State freeways.

Standard:

⁸⁹ The speed limits shown in Table 2B-101(CA) shall apply, unless changed upon the basis of an engineering and traffic survey (E&TS).

Option:

⁹⁰ The speed limits shown in Table 2B-102(CA) may apply, unless changed upon E&TS.

Variable Speed Limits on Freeways - See CVC 22355

Option:

⁹¹ The following speed limits may apply:

- Whenever Caltrans determines based upon an engineering and traffic survey (E&TS) that the safe and orderly movement of traffic upon any freeway segment will be facilitated by the establishment of variable speed limits.
- Caltrans may erect, regulate, and control signs upon the state highway which is a freeway, or any portion thereof, which, if used, signs shall be designed to permit display of different speeds at various times of the day or night.
- Such signs need not conform to the standards & specifications per CVC 21400, but if used, shall be of sufficient size and clarity to give adequate notice of the applicable speed limit.

Minimum Speed Limits on State Highways - See CVC 22400

Option:

⁹² The following speed limits may apply:

- Whenever Caltrans determines based upon an engineering and traffic survey (E&TS) that slow speeds on any part of a state highway consistently impede the normal and reasonable movement of traffic, Caltrans may determine and declare a minimum speed limit. Appropriate signs giving notice shall then be installed on that segment.
- A motorist can be cited for stopping or impeding the normal and reasonable movement of traffic unless the stop is necessary for safe operation and in compliance with the law.

Speed Traps

Support:

⁹³ Refer to CVC 40802 for Speed Traps.

Standard:

⁹⁴ A speed trap shall not apply to a local street, road, ~~or~~ school zone, senior zone, or business activity district.

Support:

Senior zone is an area approaching or passing a senior center building or other facility primarily used by senior citizens, or the grounds thereof that is contiguous to a highway and on which is posted a standard "SENIOR" warning sign, pursuant to Section 22352.

Business activity district is a section of highway described in CVC Section 22358.9(b) in which a standard 25 mph or 20 mph speed limit sign has been posted pursuant to CVC Section 22358.9(a)(1).

Standard:

⁹⁵ A section of highway shall be defined as a speed trap if the prima facie speed limit is not justified by an engineering and traffic survey (E&TS) within five years, and the enforcement of the speed limit involves the use of radar or any other electronic device that measures the speed of moving objects.

⁹⁶ This time provision shall be extended to seven years when using radar and all of the following criteria are met:

- The arresting 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.

⁹⁷ This time provision shall be extended to seven years when using laser or other electronic device (other than radar) and all of the following criteria are met:

- The arresting officer has successfully completed a minimum of 24 hours of certified radar operator course training.
- The arresting officer has successfully completed a minimum of 2 hours of additional approved certified 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.

Option:

⁹⁸ This time provision for an E&TS may be extended to ~~ten~~ 14 years when all of the above conditions are met and no significant changes in roadway or traffic conditions have occurred, including changes in adjoining property or land use, roadway width, or traffic volume as determined by a registered engineer.

Standard:

The option to extend E&TS to 14 years shall not be used on a local street, road, school zone, senior zone or business activity district, since they do not require an E&TS; and prima facie speed limits are applicable.

Option:

If an agency has lowered the speed limit below the prima facie speed limit based on the results of an E&TS on a local street, road, school zone, senior zone or business activity district, that E&TS may be extended to 14 years when all of the above conditions are met and no significant changes in roadway or traffic conditions have occurred, including changes in adjoining property or land use, roadway width, or traffic volume as determined by a registered engineer.

Truck Speed Zone on Descending Grades

Guidance:

⁹⁹ Highway descending grades, if used for posting TRUCK Speed Limit signs (R2-1 and M4-4) for trucks travelling downhill, should have recorded incident history of runaway commercial vehicles. Descending grades shorter than 1 mile should be avoided for posting signs because deceleration of vehicles due to braking action can generally provide sufficient control on descending grades of less than 1 mile.

Support:

¹⁰⁰ To establish a downhill truck speed limit, a physical profile showing length and gradient and a downhill speed profile for three or more axle commercial vehicles with a gross rating of 10,000 lbs. or more will be provided.

Standard:

¹⁰¹ **Speed profiles for truck speed limits shall be prepared on the same form as other speed surveys. An analysis of collisions involving trucks shall be prepared.**

Guidance:

¹⁰² *Posted speeds should be on the low side of the scale, generally within the pace of loaded commercial vehicles.*

Standard:

¹⁰³ **If warranted, the Caltrans District Director shall issue a standard speed zone order.**

Support:

¹⁰⁴ Posting of the regulation will be by placement of a standard 36 x 45 inch Speed Limit (R2-1) sign with a TRUCK (M4-4) plate above.

Standard:

¹⁰⁵ **A standard End Speed Limit (R3(CA)) sign with TRUCK (M4-4) plate shall be posted at the end of the truck zone when appropriate.**

Speed Zones in Temporary Traffic Control Areas

Support:

¹⁰⁶ For signing and establishing speed zones in temporary traffic control areas, refer to Section 6C.01 in Part 6.

Speed Zones and Traffic Signals

Standard:

¹⁰⁷ **An agency changing the speed limits within its jurisdiction shall report the speed limit change to the agency operating and maintaining traffic signals within the speed zone no later than 30 days before changing the posted speed limit.**

Support:

¹⁰⁸ Changing the signal timing and adjusting the advance detector loops based on the revised speed limits can enhance the operations of the traffic signal.



ATTACHMENT B



**California Traffic Control Devices Committee
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Attachment B – Proposed Revisions to CA MUTCD Table 2B-101(CA).

Proposal:

Note:

Black text is unedited National MUTCD text adopted for use in current CA MUTCD.

~~Black strikethrough text~~ is National MUTCD text that is not applicable in California as shown in current CA MUTCD.

Blue text is California text additions adopted for use in current CA MUTCD.

~~Green strikethrough text~~ is text that is proposed to be deleted from the current CA MUTCD based on CTCDC August 4, 2022 meeting's proposal discussion, followed by CTCDC motion and recommendation.

Modify Table 2B-101(CA) as shown:

Table 2B-101(CA) Standard Application of Speed Limits per California Vehicle Code (Sheet 1 of 2)

Speed	Determined by	Roadway Facility	CVC Section
15 mph	State or local authority	<ul style="list-style-type: none"> ▪ Railroad grade crossing with obstructed view ▪ Uncontrolled highway intersection with obstructed view ▪ An alley 	22352.a.1
15 & 20 mph	State or local authority	Where the prima facie speed of 25 mph is more than is reasonable or safe <ul style="list-style-type: none"> ▪ Narrow street not exceeding 25 feet other than a State Highway in a business or residential area or in a public park ▪ Road near a school or senior center facility 	22358.3 & 22358.4
25 mph	State or local authority	<ul style="list-style-type: none"> ▪ Any highway other than a State highway in any business or residential district ▪ A street contiguous to senior citizen facility other than a State highway ▪ Adjacent to a children's playground in a public park, but only during particular hours or days when children are expected to use facilities 	22352.a.2 & 22357.1



ATTACHMENT C



California Traffic Control Devices Committee Agenda Item Report



Attachment C – Proposed Revisions to CA MUTCD Table 2B-102(CA).

Proposal:

Note:

Black text is unedited National MUTCD text adopted for use in current CA MUTCD.

~~Black strikethrough text~~ is National MUTCD text that is not applicable in California as shown in current CA MUTCD.

Blue text is California text additions adopted for use in current CA MUTCD.

~~Red strikethrough text~~ is text that is proposed to be deleted from the current CA MUTCD by this proposal.

Red text is text that is proposed to be included in the current CA MUTCD by this proposal.

~~Green strikethrough text~~ is text that is proposed to be deleted from the current CA MUTCD based on CTCDC August 4, 2022 meeting's proposal discussion, followed by CTCDC motion and recommendation.

Green text is text that is proposed to be included in the current CA MUTCD based on CTCDC August 4, 2022 meeting's proposal discussion, followed by CTCDC motion and recommendation.

Modify Table 2B-102(CA) as shown:



California Traffic Control Devices Committee Agenda Item Report



Table 2B-102(CA) Optional Application of Speed Limits per California Vehicle Code (Sheet 2 of 2)

Speed	Determined by	Roadway facility	CVC Section
25 to 60 mph 15 to 60 mph	Caltrans	State highway, based on an E&TS where the limit of 65 mph is more than is reasonable or safe	22354
25 to 60 mph 15 to 60 mph	Local city council or county board of supervisors for Caltrans	State highway, local entities may conduct a public hearing on proposed increases or decreases and the State Department of Transportation shall take into consideration the results of the public hearing	22354.5
25 to 65 mph 15 to 60 mph	Local authority	Any street other than a State highway, by ordinance, may post a prima facie speed limit based on an E&TS where a speed > 25 mph would facilitate the orderly movement of vehicular traffic and would be reasonable and safe > or = 15 mph	22357 22358(a)
20 to 50 mph for Trucks	State or local authority	Highways under their respective jurisdiction where 55 mph is more than is reasonable or safe for vehicles mentioned in CVC 22406 (Trucks and other large vehicles)	22407
Maximum Speed 55 mph	State or local authority	<ul style="list-style-type: none"> • Two-lane, undivided highway • Any highway if driving any of the following vehicles: <ol style="list-style-type: none"> a. Motortruck or truck tractor with > 3 axles b. Passenger vehicle or bus towing any other vehicle c. School bus transporting any school pupil d. A farm labor vehicle when transporting passengers e. A vehicle transporting explosives f. A trailer bus 	22349.b & .c and 22406
Maximum Speed Limit of 65 mph	State or local authority	Any highway, posted at 65 mph based upon an E&TS, for vehicles not subject to CVC 22406	22349(a) & 22349
Maximum Freeway Speed Limit 70 mph	Caltrans	Freeways, after consultation with the California Highway Patrol, based upon an E&TS, or upon the basis of appropriate designs standards and projected traffic volumes in the case of newly constructed freeway segments, for vehicles not subject to CVC 22406	22356
15 to 60 mph	Local authority	Any street other than a State highway, by ordinance, may post a prima fade speed limit based on an E&TS where a speed > or = 25 mph would facilitate the orderly movement of vehicular traffic and would be reasonable and safe	22358(a)



ATTACHMENT D

Attachment D – Proposed New CA MUTCD Table 2B-103(CA).

Proposal:

Note:

Red text is text that is proposed to be included in the current CA MUTCD by this proposal.

Add New Table 2B-103(CA) as shown:

Table 2B-103(CA) Examples showing applicability of rounding and additional speed reduction on State Highway System

85 th Percentile Speed (mph)	Rounding to nearest 5 mph increment (CVC 22358.6(a))	If rounding to nearest is up, may round down (CVC 22358.6(c))	If rounding to nearest is down, may additionally lower by 5 mph (CVC 22358.6(b))
47.5-50.0	50	45	No
45.1-47.4	45	No	40
42.5-45.0	45	40	No
40.1-42.4	40	No	35

Note - CVC Section 22358.7, 22358.8 & 22358.9 are applicable to local agency roadways and public properties subjected to CVC, they are not applicable to the State Highway System. Refer to Section 2B.13 for more details.



ATTACHMENT E



**California Traffic Control Devices Committee
Agenda Item Report**



Attachment E – Proposed New CA MUTCD Table 2B-104(CA).

Proposal:

Note:

Red text is text that is proposed to be included in the current CA MUTCD by this proposal.

Add New Table 2B-104(CA) as shown:

Table 2B-104(CA) Examples showing applicability of rounding and additional speed reductions on Local Agency's Roadways & Private Property Subjected to CVC

85 th Percentile Speed (mph)	Rounding to nearest 5 mph increment (CVC 22358.6(a))	If rounding to nearest is up, may round down (CVC 22358.6(c))	If rounding to nearest is down, may additionally lower by 5 mph (CVC 22358.6(b))	If safety corridor or adjacent to high concentration of bicyclists & pedestrians, may additionally lower by 5 mph (CVC 22358.7)*
47.5-50.0	50	45	No	40
45.1-47.4	45	No	40	35
42.5-45.0	45	40	No	35
40.1-42.4	40	No	35	30

* - CVC Section 22358.7, 22358.8 & 22358.9 are applicable to local agency roadways and private properties subjected to CVC, they are not applicable to the State Highway System. Refer to Section 2B.13 for more details.



ATTACHMENT F

Attachment F – Proposed New CA MUTCD Table 2B-105(CA).

Proposal:

Note:

Red text is text that is proposed to be included in the current CA MUTCD by this proposal.

Add New Table 2B-105(CA) as shown:

Table 2B-105(CA) Safety Corridor Definition Requirements

Category	Description
Crash Weighting to Develop One Serious/Fatal Injury Safety Corridor	Crash weighting can be developed using fatal and serious injury crash data and other factors to prioritize safety corridors. Suggested weighting factors are as follows: <ul style="list-style-type: none"> • Crash severity: Fatal Crashes, Serious Injury Crashes • Mode: Pedestrian-bicycle related crashes, vehicle/other • Disadvantaged Community Status: MPO/RTPA or locally defined disadvantaged community status based on most current version of CalEnviroScreen • Vulnerable Populations: Seniors (age 65 and older) and Youth (under age 15) based on the American Community Survey • School proximity (within 0.25 miles) based the on California School Campus Database
Crash Density	Each roadway segment block can be converted into ~0.25 mile overlapping “corridor” segments to create a consistent unit of measurement and assess the concentration of linear patterns of injuries within a defined distance. The highest scoring (i.e. most fatal and serious injury crashes per mile) “corridor” segments within a street needs to be identified and an appropriate threshold set to determine safety corridor eligibility.
Maintenance	The jurisdiction can establish a review and re-evaluation frequency for safety corridors. However, such frequency need not exceed seven years.



ATTACHMENT G

Attachment G – Proposed New CA MUTCD Table 2B-106(CA).

Proposal:

Note:

Red text is text that is proposed to be included in the current CA MUTCD by this proposal.

Add New Table 2B-106(CA) as shown:

Table 2B-106(CA) Requirements to determine Land or Facility that Generates High Concentrations of Bicyclists or Pedestrians

Category	Generator
Land Use	Employment centers
	Presence of retail
	Parks, multi-use trails, and recreational destinations
	Schools/universities
	Senior Centers
	Cultural areas, entertainment space areas, or areas of community significance
	Religious facilities
Transit Factors	Health/medical facilities
	Transit stops
Presence of Pedestrian/Bicyclist Infrastructure	Transit Oriented Developments/Transit Priority Areas
	Sidewalk presence
	Crosswalk presence
	Bikeway presence
	Nearby signalized intersections or four-way intersections
Demographic Factors	Presence of micromobility devices such as bicycles or scooters
	Presence of vulnerable groups including children, seniors, persons with disabilities, users of personal assistive mobility devices, and the unhoused
	MPO/RTPA or locally defined disadvantaged community status
Local Data	Presence of students (all levels)
	Need identified in a safety analysis such as a road safety audit or formalized planning document such as a local road safety plan



ATTACHMENT H

Attachment H – Approved SHSP Action SM.11.

Speed Management 11 (SM.11) - Page 1/6



Challenge Area:	Speed Management / Aggressive Driving
Co-Leads:	Yue Wang, Caltrans; Jose Alatorre, CHP
Action Title: (One sentence or phrase)	SM/AD.11: Update the speed limit policies in the California MUTCD to allow greater flexibility by incorporating the seven Zero Traffic Fatalities Task Force (ZTFF) recommendations that are now permissible with the passing of Assembly Bill (AB) 43.
Action Lead(s):	Johnny Bhullar, Caltrans Safety Programs

Thank you for your participation in the 2020-2024 California Strategic Highway Safety Plan. Complete the fields in this document for each proposed action. Grey boxes indicate areas that should be filled out. **Fill out all fields in this form.** "Not applicable" is an acceptable response if needed.

SHSP actions should be bold, high-impact actions that reduce fatalities and serious injuries related to the 16 challenge areas. Consider why the action should be part of the SHSP, such as:

- Innovative
- Expands or improves existing effective program
- Requires partnerships
- Applies proven countermeasures
- Improves existing data

Each action should be **SMART**, as defined below:

- SPECIFIC** – clear action statement
- MEASURABLE** - identified performance measures
- ACHIEVABLE** – committed resources by responsible organization(s)
- RELEVANT** - statewide significance and data-driven issue and countermeasure
- TIME-CONSTRAINED** - achievable within SHSP timeframe

Additionally, each action must align with the **Four Guiding Principles**. **Each action is required to align with the Integrate Equity Guiding Principle**, as well as align with **at least one of the remaining Guiding Principles**. See further guidance on the Four Guiding Principles at the end of this worksheet.

Required: **Must align with at least 1 of the following 3:**

<input checked="" type="checkbox"/> INTEGRATE EQUITY	<input checked="" type="checkbox"/> IMPLEMENT SAFE SYSTEM APPROACH	<input checked="" type="checkbox"/> DOUBLE DOWN ON WHAT WORKS	<input type="checkbox"/> ACCELERATE ADVANCED TECHNOLOGY
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Indicate which of the 5 E's of traffic safety that this action applies to (Can choose more than one).

<input checked="" type="checkbox"/> EDUCATION	<input type="checkbox"/> EMERGENCY RESPONSE
<input type="checkbox"/> EMERGING TECHNOLOGIES	<input checked="" type="checkbox"/> ENFORCEMENT
<input checked="" type="checkbox"/> ENGINEERING	

Speed Management 11 (SM.11) - Page 2/6



PART I: ACTION DESCRIPTION

SPECIFIC – clear action statement

Please describe your action.

- What fatalities and serious injuries are targeted by the action?
- What will be accomplished by the action?

Caltrans will update the California MUTCD to incorporate the following Zero Traffic Fatalities Task Force (ZTTF) recommendations that are now permissible with the passing of Assembly Bill (AB) 43.

- Revise traffic survey procedures to require bicycle/pedestrian safety consideration and develop a survey guidance on this safety topic (ZTTF C-S3) (new CVC 22358.7(b)(2) & revised CVC 627(c)(2) and 40802(a)(2)).
- Allow state and local agencies to post speed limits below 25 mph when supported by a traffic survey (ZTTF C-S4) (new CVC 22358.9 & revised 22354(a) & 22358(a)).
- Increase reduction allowance for posted speed limits to allow greater deviations from the 85th percentile speed by including criteria for a statewide definition of High Injury Networks (HIN), criteria for areas adjacent to land uses and types of roadways that have high concentrations of vulnerable road users. Define vulnerable populations and develop criteria to identify eligible streets. (ZTTF C-S5) (new CVC 22358.6, 22358.7 & 22358.8 and deleted 21400(b)).
- Add *business activity district* as an additional class of location eligible for a prima facie speed limit and include statewide definition to include urban villages, neighborhood downtowns, and other business-oriented locations. (ZTTF C-S6) [new CVC 22358.9].
- Revise requirements related to posting prima facie speed limits in school zones to allow speed limit as low as 15 mph without requiring a traffic survey. (ZTTF C-S7) [revised CVC 22354(a) & 22358(a)].
- Allow for a traffic survey to retain the existing speed limit (or revert to one determined in a prior traffic survey) unless a registered engineer determines that significant design changes have been made to the roadway since completion of the last traffic survey with the specific intent of increasing the safe operating speed. (ZTTF C-S9) [new CVC 22358.8].
- Consolidate and clarify statutory sections related to speed setting methodology. (ZTTF C-S10) (deleted CVC 21400(b) and new CVC 22358.6 through 22358.9).

This action item targets the elimination of fatalities and serious injuries for all travelers on California's roadways, and, especially, vulnerable transportation users, including bicyclists, pedestrians, transit riders, seniors, and persons with disabilities by allowing more flexibility in setting reduced speed limits. This action fully supports the state's goal of Zero Traffic Deaths and Serious Injuries by 2050.

Speed Management 11 (SM.11) - Page 3/6



This action will consolidate and incorporate seven recommendations from the ZTTF into the California MUTCD, which directly correspond with addressing the recently enacted state legislation of AB 43 (effective on Jan. 1, 2022). AB 43 provides Caltrans and local authorities greater flexibility in setting and reducing speed limits while considering safety for all vulnerable users.

MEASURABLE - identified performance measures

- *What will be measured to indicate the completion of the action (i.e. publication of a manual, completion of training, approval of a manual update?)*
- Incorporation of the seven ZTTF recommendations into a revised speed limit policy. The revised speed limit policy will either be incorporated into a revision of the California MUTCD or will be included in a Traffic Safety Bulletin signed by the Chief, Division of Safety Programs.

PART II: ALIGNMENT WITH GUIDING PRINCIPLES

Guidance on how actions can align with each of the Four Guiding Principles is provided at the end of this worksheet. If the action does not align with a specific Guiding Principle, please indicate "Not Applicable" in the text box.

Describe the action's alignment with the **Integrate Equity** guiding principle (**required**).

The update to the California speed limit policy will consider the needs of vulnerable road users (pedestrians, bicyclists, seniors, persons with disabilities, etc.) and underserved communities. Any stakeholder or public outreach related to this update will include representatives from underserved communities and vulnerable road user groups.

Caltrans is working in partnership with multiple agencies and stakeholders to update their speed limit policy. These include California Traffic Control Device Committee (CTCDC), representation from regional transportation agencies, local agencies, law enforcement, automobile clubs, private consultants, public health, the American Association of Retired Persons and Vision Zero cities statewide.

Caltrans will work to ensure all communication, guidance, and manual are ADA accessible.

Speed Management 11 (SM.11) - Page 4/6



Describe the action's alignment with the **Implement Safe System Approach** guiding principle (if applicable).

The updated speed limit policy will provide more flexibility to lower speed limits on California roads. Lower speeds address the vulnerability of humans and are safer for all modes of travel. Additionally, when implemented, this policy is expected to ultimately address the SSA elements of safe road users and safe speeds. Anything that addresses speed, supports the SSA.

Describe the action's alignment with the **Double Down on What Works** guiding principle (if applicable).

NHTSA's *Countermeasures that Work* includes "any measure that can achieve reductions in average operating speeds, including lower speed limits, enhanced enforcement, and communication campaigns as well as engineering measures, are expected to reduce fatal and injury crashes." This action will work to actively reduce speed limits and average operating speeds by modifying the current speed limit setting methodology.

Describe the action's alignment with the **Accelerate Advanced Technology** guiding principle (if applicable).

N/A

Speed Management 11 (SM.11) - Page 5/6



PART III: ABILITY TO EXECUTE

ACHIEVABLE – committed resources by responsible organization(s)

- *What type of resources are needed to complete this action (e.g. funding, staffing, change in rule, regulation, etc.)? Be specific in identifying agencies, organizations, or advocates that are responsible for assisting in this action.*

To complete this task, Caltrans is committed to providing the resources (funding, staffing, changes in rules, regulations, etc.) to establish an advisory group, including representation from regional and local agencies such as metropolitan planning organizations, the American Association of Retired Persons, Vision Zero cities, and the California Traffic Control Devices Committee and subcommittee. The implementation approach will be developed based on input received from these representative agencies and stakeholders.

- *What partners have agreed to support this action?*

The CTCDC and CTCDC subcommittee, metropolitan planning organizations, the American Association of Retired Persons, and Vision Zero City representatives.

- *What resources needed to complete this action are not in place? What actions are anticipated to be needed to get those resources?*

All resources are in place.

- *Please describe any potential obstacles or risks for completing the action(i.e. dependence on another effort, requires approval for implementation, unidentified resources).*

Potential risks to the schedule may exist related to AB-43 interpretation, whether AB-1938 (clarifying legislation) is enacted by September 30, 2022 and the related proposed CAMUTCD revisions are approved by the CTCDC.

Speed Management 11 (SM.11) - Page 6/6



PART IV: IMPACT

RELEVANT - statewide significance and data-driven issue and countermeasure

- Discuss the potential reduction in fatalities and serious injuries based on the outcomes expected by the action. Use data driven results if possible, specifically the SHSP Data Dashboard.

- Modifying the process to set reduced speed limits is one strategy that is directly related to lowering the operating speed of motorists on roadways.
- The speed at impact contributes to the majority of, if not all, fatalities. Speed increases crash risk in two ways: it increases likelihood of being involved in a crash and it increases the severity of injuries sustained by all road users in a crash. While the relationship between speed and crash involvement is complex, the relationship between speed and injury severity is consistent and direct. Crash severity increases with individual vehicle speed.
 - Reducing speed limits is a component of speed management that is targeted at reducing vehicle speeds and improving safety across most road environments and specifically targets the elimination of fatal and serious injury crashes.
 - A study reported in the *NHTSA Countermeasures that Work* document states that “a reduction of 3 mph in average operating speed on a road with a baseline average operating speed of 30 mph is expected to produce a reduction of 27% in injury crashes and 49% in fatal crashes.”

TIME-CONSTRAINED - achievable within SHSP timeframe

- When is the action planned to be completed (Month & Year)? This should indicate the time when all performance measures for the actions are completed.

June 2023