February 7, 2014

Mr. Hamid Bahadori  
Chairman  
California Traffic Control Devices Committee  
3333 Fairview Road  
Costa Mesa, CA 92626

Dear Mr. Bahadori:

This letter is to inform the California Traffic Control Devices Committee (CTCDC) that the California Department of Transportation (Caltrans) has decided to revise the policy on reduced speed limits in temporary traffic control zones in the California Manual on Traffic Control Devices (CA MUTCD) pursuant to CTCDC’s recommendation to Caltrans at the October 17, 2013 public meeting in Marina del Rey. This policy will be incorporated into the CA MUTCD, in an upcoming scheduled revision of the manual on or before June 13, 2014. The revised policy will also be posted on the CA MUTCD website under New Policies & Directives at: <http://www.dot.ca.gov/hq/traffops/signtech/signdel/policy.htm>.

Please find the attached background summary, copies of the CA MUTCD revised policy and the temporary traffic control portion of the soon to be released California Manual for Setting Speed Limits, for reference.

If you have any questions, please contact Johnny Bhullar at 916-654-7132 or by email at: gurinderpal s bhullar@dot.ca.gov.

Sincerely,

[Signature]

DENNIS T. AGAR, Chief  
Division of Traffic Operations

Enclosure
c: Mark Leja, Chief, Division of Construction, Caltrans
    Tony Tavares, Chief, Division of Maintenance, Caltrans
    Tim Sobelman, Acting Chief, Office of Traffic Engineering, Caltrans
    Johnny Bhullar, Senior TE, Office of Traffic Engineering, Caltrans
    Devinder Singh, Executive Secretary, CTCDC
Revised policy for Reduced Speed Limits in TTC Zones

Background:

The Caltrans Construction Partnering Steering Committee’s Work Zone Safety Task Group and the California Strategic Highway Safety Plan’s Challenge Area 14 (Enhance Work Zone Safety) initiated the proposed change to Temporary Traffic Control (TTC) speed zone signing. Safety in highway work zones is an area of emphasis for Caltrans (California Department of Transportation). As a result, many improvements to work zone safety are being implemented. One of these improvements is the increased use of speed limits to influence vehicle speeds through highway work zones. Proper and uniform application of these speed limits should improve the safety of highway workers and the traveling public.

The current policy found in Part 6 of the California MUTCD contains errors and is covered in multiple sections leading to end user confusion. When reducing speed limits in TTC zones, the distinction between long-term and short-term closures and the resulting difference in signs are not explained nor clarified. Long-term speed reductions are applicable when there is a lane shift, narrow lanes, or other geometric constraints. A short-term speed reduction is appropriate when geometrics are not an issue but there is a concern for workers safety due to the absence of a positive barrier separation. Current policy addresses both TTC speed reductions with separate sign packages primarily due to past practices and sign size issues. This has led to confusion with practitioners who are unaware of the distinction between the two packages and their intended use. The current policy also lacks flexibility when reducing speed limits 10 mph for short duration TTC in work zones (such as Maintenance activities lasting only few hours) without formal justification and documentation.

The FHWA California Division office has voiced concern with the letter height of the “ROAD WORK” and “SPEED LIMIT” portion of the C17(CA) sign. They are of the opinion that the lettering is too small for the conditions and type of roadway classification. The C17(CA) letter heights are as follows: 3 inches on a 24 x 24 inch sign, 4.5 inches on a 36 x 36 inch sign and 6 inches on a 48 x 48 inch sign. Prior to the adoption of the National MUTCD in California on May 20, 2004, the C17(CA) signs were included in the Traffic Manual for use by local agencies on their roadways. The C17(CA) signs were subsequently included in the California MUTCD under the “grandfather” clause. One of the main reasons local agencies preferred the C17(CA) sign is because the 24 x 24 inch size sign met the 1-foot vertical pavement clearance requirement when placed on a 36 inch high Type 1 Barricade. Caltrans’ initial proposal attempted to address this concern by using a R2-1 sign with either an orange border or with an orange colored background on the top half of the sign. However, the FHWA California Division office informed Caltrans that the two proposals would violate the National MUTCD. Adjustments to the proposal have resolved FHWA’s concerns.

This revised policy simplifies the sign package to one type of device for both long-term and short-term speed reductions in TTC zones. Further, it provides additional guidelines for short duration TTC in work zones at the request of Caltrans Maintenance. This revised policy also deletes the current reference to Engineering and Traffic Survey (E&TS) requirement since an E&TS is not required for reducing speeds in TTC zones. TTC speed limits do not fall under the definition of the Speed Trap and can be enforced with radar or lidar without a formal E&TS.

This memorandum will address the aforementioned issues until more detailed documentation procedures are published in the “California Manual for Setting Speed Limits”. The purpose of “California Manual for Setting Speed Limits” manual is to; set forth a uniform procedure for setting speed limits, provide information on how to apply various sections of the California Vehicle Code (CVC), how to determine the need for an Engineering and Traffic Survey (E&TS), describe the elements and data needed for the E&TS, how to determine the appropriate speed limit for any California street or highway, and includes
procedures for documenting the final outcome with the court system and law enforcement agencies. This manual is in “Draft” form while undergoing internal review. Caltrans plans to share it with the CTCDC as an informational item.

California Traffic Control Devices Committee (CTCDC) reviewed and discussed this revised policy at their regularly scheduled public meeting on October 17, 2013 in Marina del Rey. The revised policy, as proposed by Caltrans, was met with support. The CTCDC recommended adoption and requested Caltrans to incorporate it into the next revision of California MUTCD.

Attachments:

1. California MUTCD Revised Policy (Reduced Speed Limits in TTC zones)
2. California Manual for Setting Speed Limits: Section 2.3 (Temporary Traffic Control Advisory and Regulatory Speeds)
Section 6C.01 Temporary Traffic Control Plans

Support:
- A TTC plan describes TTC measures to be used for facilitating road users through a work zone or an incident area. TTC plans play a vital role in providing continuity of effective road user flow when a work zone, incident, or other event temporarily disrupts normal road user flow. Important auxiliary provisions that cannot conveniently be specified on project plans can easily be incorporated into Special Provisions within the TTC plan.
- TTC plans range in scope from being very detailed to simply referencing typical drawings contained in this Manual, standard approved highway agency drawings and manuals, or specific drawings contained in the contract documents. The degree of detail in the TTC plan depends entirely on the nature and complexity of the situation.

Guidance:
- TTC plans should be prepared by persons knowledgeable (for example, trained and/or certified) about the fundamental principles of TTC and work activities to be performed. The design, selection, and placement of TTC devices for a TTC plan should be based on engineering judgment.
- Coordination should be made between adjacent or overlapping projects to check that duplicate signing is not used and to check compatibility of traffic control between adjacent or overlapping projects.
- Traffic control planning should be completed for all highway construction, utility work, maintenance operations, and incident management including minor maintenance and utility projects prior to occupying the TTC zone. Planning for all road users should be included in the process.
- Provisions for effective continuity of accessible circulation paths for pedestrians should be incorporated into the TTC process. Where existing pedestrian routes are blocked or detoured, information should be provided about alternative routes that are usable by pedestrians with disabilities, particularly those who have visual disabilities. Access to temporary bus stops, travel across intersections with accessible pedestrian signals (see Section 4E.09), and other routing issues should be considered where temporary pedestrian routes are channelized. Barriers and channelizing devices that are detectable by people with visual disabilities should be provided.

Option:
- Provisions may be incorporated into the project bid documents that enable contractors to develop an alternate TTC plan.
- Modifications of TTC plans may be necessary because of changed conditions or a determination of better methods of safely and efficiently handling road users.

Standard:
- This alternate or modified plan shall have the approval of the Engineer of the public agency or authority having jurisdiction over the highway prior to implementation.

Guidance:
- Provisions for effective continuity of transit service should be incorporated into the TTC planning process because often public transit buses cannot efficiently be detoured in the same manner as other vehicles (particularly for short-term maintenance projects). Where applicable, the TTC plan should provide for features such as accessible temporary bus stops, pull-outs, and satisfactory waiting areas for transit patrons, including persons with disabilities, if applicable (see Section 8A.08 for additional light rail transit issues to consider for TTC).

Reduced Speed Limits in TTC Zones

- Provisions for effective continuity of railroad service and acceptable access to abutting property owners and businesses should also be incorporated into the TTC planning process.
- Reduced speed limits should be used only in the specific portion of the TTC zone where conditions or restrictive features are present. However, frequent changes in the speed limit should be avoided. A
TTC plan should be designed so that vehicles can travel through the TTC zone with a speed limit reduction of no more than 10 mph.

15 A reduction of more than 10 mph in the speed limit should be used only when required by restrictive features in the TTC zone. Where restrictive features justify a speed reduction of more than 10 mph, additional driver notification should be provided. The speed limit should be stepped down in advance of the location requiring the lowest speed, and additional TTC warning devices should be used.

16 Reduced speed zoning (lowering the regulatory speed limit) should be avoided as much as practical because drivers will reduce their speeds only if they clearly perceive a need to do so.

Standard:

14a The justification for the reduced speed limit shall be documented in writing. Refer to CVC 21367 & 22362.

Option:

25 Reduced speed limits in construction zones may be established by an engineering analysis, which may include a traffic and engineering survey.

Support:

15 Research has demonstrated that large reductions in the speed limit, such as a 30 mph reduction, increase speed variance and the potential for crashes. Smaller reductions in the speed limit of up to 10 mph cause smaller changes in speed variance and lessen the potential for increased crashes. A reduction in the regulatory speed limit of only up to 10 mph from the normal speed limit has been shown to be more effective.

Support:

16 See Section 2B.13 for Regulatory Speed Limit signs and Speed Zones.
17 See Section 6F.12 for WORK ZONE (G20-5aP) plaque and END WORK ZONE SPEED LIMIT (R2-12) sign.
18 CVC section 22362 gives the agency having jurisdiction over a highway the authority to regulate the speed of traffic to provide protection for workers when at work on the roadway or within the right-of-way so close thereto as to be endangered by passing traffic.
19 CVC Section 21367 gives the agency having jurisdiction over a highway the authority to regulate the speed of traffic whenever the traffic would endanger the safety of workers or the work would interfere with or endanger the movement of traffic through the area.

Guidance:

20 The need for a long-term reduced speed limit within a TTC zone should be a decision made during the project development process. The need for a short-term reduced speed limit within a TTC zone, such as a maintenance activity, should be determined in advance of planned maintenance activities.

Option:

21 If lowering speed limits for a short-term, such as a maintenance activity, signs lowering the speed limit by 10 mph may be placed in work zones that are not protected by a positive barrier and involve workers on foot or on equipment.

Guidance:

22 Reducing speed limits in TTC zones should be avoided if traffic speeds can be reduced by other means. Speed restrictions should be imposed on the public only when necessary for worker or public safety.

Standard:

23 Where traffic obstructions exist only during the hours of construction, the speed zone signs shall be covered during non-working hours.

Support:

24 CVC 22362 applies to "When Workers are Present" condition and signs need to be covered or removed when no work is in progress. As per CVC 21367, agency can "...regulate the movement of traffic...whenever the traffic would endanger the safety of workers or the work would interfere with or endanger the movement of traffic through the area." If obstructions would be present throughout the project duration the signs would not need to be covered or removed. This would also apply to situations where the construction work changes the highway configuration, curvature or elevation, making it necessary to post reduced speed limits.
Option:

25 The Advisory Speed (W13-1) plaque may be used in combination with various warning type signs to decrease speed at a particular location.

Guidance:

26 To preserve the effectiveness of the W13-1 plaque, it should not be used unless the condition to which it applies is immediate and will be experienced by all motorists.

Guidance:

27 Construction zone speed limits should be reduced in sequential stages and where overall reduction of 15 mph or more is required. The first stage of the sequence should be a reduction of 10 mph and the final stage reduction should be 10 mph or 5 mph, as necessary.

Standard:

28 The reduced speed limit shall not be less than 25 mph. Refer to CVC 22362.

Option:

29 As an example, if the project falls within an established 55 mph zone, and a 40 mph speed limit is considered necessary, it may be posted only if the approaching speed limits are lowered in two stages (i.e., first to a 45 mph speed limit followed by a reduction to the desired 40 mph).

Support:

30 Documentation for reducing speed limits in TTC zones are ordinarily issued for the entire length of the TTC zones in a project. This avoids the necessity and resulting delay of obtaining new documentation each time the speed restriction signs require relocation to fit the conditions. It is not the intention, however, that the entire length be posted for the duration of the project.

Section 6F.12 Work Zone and Higher Fines Signs and Plaques

Option:

01 A WORK ZONE (G20-5aP) plaque (see Figure 6F-3) may be mounted above a Speed Limit (R2-1X(CA)) sign to emphasize that a reduced speed limit is in effect within a TTC zone. An END WORK ZONE SPEED LIMIT (R2-12) sign (see Figure 6F-3) may be installed at the downstream end of the reduced speed limit zone.

Guidance:

02 A BEGIN DOUBLE FINES ZONE (R2-10) sign (see Figure 6F-3) should be installed at the upstream end of a work zone where increased fines are imposed for traffic violations, and an END DOUBLE FINES ZONE (R2-11) sign (see Figure 6F-3) should be installed at the downstream end of the work zone.

Option:

03 Alternate legends such as BEGIN (or END) DOUBLE FINES ZONE may also be used for the R2-10 and R2-11 signs.

04 A FINES DOUBLE plaque (see Section 2B.17 and Figure 6F-3) may be mounted below the Speed Limit sign if increased fines are imposed for traffic violations within the TTC zone.

05 Individual signs and plaques for work zone speed limits and higher fines may be combined into a single sign or may be displayed as an assembly of signs and plaques.

06 The TRAFFIC FINES DOUBLED IN CONSTRUCTION ZONES (C40(CA)) and TRAFFIC FINES DOUBLED IN WORK ZONES (C40A(CA)) signs may be placed approximately 500 feet in advance of the first required TTC sign(s). The placement of the C40(CA) and C40A(CA) signs is at the discretion of the responsible person(s) in charge of the work zone.

Support:

07 Refer to CVC 42009 for fines for offenses committed in highway construction or maintenance area. In California, as per CVC only doubling of the fines is allowed, not higher fines of other denominations.

Guidance:

08 The C40A(CA) sign is intended to be manufactured as a fabric sign and should be used on a short term (daily) basis only. Longer term situations should use the C40(CA) sign.
Support:

9 CVC 22362 applies to "When Workers are Present" condition and signs need to be covered or removed when no work is in progress. However, per CVC 21367, agency can "...regulate the movement of traffic...whenever the traffic would endanger the safety of workers or the work would interfere with or endanger the movement of traffic through the area." If obstructions would be present throughout the project duration the signs would not need to be covered or removed. This would also apply to situations where the construction work changes the highway configuration, curvature or elevation, making it necessary to post reduced speed limits.

Option:

10 The Speed Limit (R2-1X(CA)) sign with a WORK ZONE (G20-5aP) plaque mounted above it, may be used for the protection of workers during working hours to reduce speed limit within a TTC zone.

Standard:

11 The Speed Limit (R2-1X(CA)) sign with a WORK ZONE (G20-5aP) plaque mounted above it shall only be used in conjunction with appropriate advance warning signs.
12 The Speed Limit (R2-1X(CA)) sign with a WORK ZONE (G20-5aP) plaque mounted above it shall be removed or covered promptly when no longer applicable.

Support:

13 Speed Limit (R2-1X(CA)) sign with a WORK ZONE (G20-5aP) plaque mounted above it is authorized for use by CVC Section 22362. This section provides authority to post a speed limit of not less than 25 mph at locations where employees of any contractor, or of the agency in charge of the job, are engaged in work upon the roadway.
14 Posting unrealistically low speed limits will result in loss of sign credibility and a high violation rate.

Guidance:

15 Before using a Speed Limit (R2-1X(CA)) sign with a WORK ZONE (G20-5aP) plaque mounted above it, work zone conditions should be analyzed to determine what maximum speed limit would be appropriate for that particular location.
16 The Speed Limit (R2-1X(CA)) sign with a WORK ZONE (G20-5aP) plaque mounted above it should be placed within 400 feet of the zone where workers are on the roadway or so nearly adjacent as to be endangered by traffic.

Option:

17 The Speed Limit (R2-1X(CA)) sign with a WORK ZONE (G20-5aP) plaque mounted above it may be provided by the agency having jurisdiction over the street or road.

Guidance:

18 The Speed Limit (R2-1X(CA)) sign with a WORK ZONE (G20-5aP) plaque mounted above it should be posted a maximum distance of 400 feet in advance of where, and when workers are present; and the Speed Reduction (W3-5) sign or Speed Zone Ahead (R2-4(CA)) sign informs road users of the reduced speed limit TTC zone.

Standard:

19 Speed limit signs for reduced speed limits shall be posted only in areas where the traveling public is affected by TTC operations.

Guidance:

20 As the TTC zone activities change, signs should be moved as appropriate.

Standard:

21 Signs shall be used only during working hours and removed, or covered during non-working hours unless the movement of traffic through the TTC zone is affected during non-working hours as well. Refer to CVC 21367.
22 Signs shall be removed immediately following completion of the construction or change in the conditions for which they were installed. When the construction is completed or the speed restriction is no longer necessary, the formal speed zone orders shall be revoked.
Figure 6F-3. Regulatory Signs and Plaques in Temporary Traffic Control Zones
(Sheet 1 of 2)

- **STOP (R1-1)**
- **YIELD (R1-2)**
- **TO ONCOMING TRAFFIC (R1-2mp)**
- **WAIT ON STOP (R1-7)**
- **GO ON SLOW (R1-8)**

- **WORK ZONE (G20-aP)**
- **SPEED LIMIT 50 (R2-8P)**
- **FINES HIGHER (R2-8aP)**
- **BEGIN HIGHER FINES ZONE (R2-8mP)**
- **BEGIN DOUBLE FINES ZONE (R2-10)**
- **END HIGHER FINES ZONE (R2-11)**
- **END DOUBLE FINES ZONE (R2-11a)**

- **END WORK ZONE SPEED LIMIT (R3-12)**
- **NO TURNS (R3-3)**
- **RIGHT TURN ONLY (R3-9)**

- **LEFT LANE MUST TURN LEFT (R2-6)**
- **DO NOT PASS (R4-1)**
- **PASS WITH CARE (R4-2)**

- **STAY IN LANE (R4-7)**
- **ONE WAY (R5-1)**
- **PEDESTRIAN CROSSWALK (R9-6)**

Chapter 6F - Temporary Traffic Control Zone Devices
Part 6 - Temporary Traffic Control
**SPEED LIMIT 50**

---

**R2-1**  
SPEED LIMIT (ENGLISH)

---

*Optically space numerals about centerline

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>J</th>
<th>K</th>
<th>L</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>24</td>
<td>.375</td>
<td>.625</td>
<td>3</td>
<td>3 E</td>
<td>2</td>
<td>8 E</td>
<td>7.188</td>
<td>5.5</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>30</td>
<td>.375</td>
<td>.625</td>
<td>4</td>
<td>4 E</td>
<td>2</td>
<td>10 E</td>
<td>9.563</td>
<td>7.313</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td>48</td>
<td>.625</td>
<td>.875</td>
<td>6</td>
<td>6 E</td>
<td>5</td>
<td>14 E</td>
<td>14.375</td>
<td>11</td>
<td>2.25</td>
<td></td>
</tr>
<tr>
<td>48</td>
<td>60</td>
<td>.75</td>
<td>1.25</td>
<td>8</td>
<td>8 E</td>
<td>6</td>
<td>16 E</td>
<td>19.125</td>
<td>14.625</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**COLORS:**  
LEGEND — BLACK  
BACKGROUND — WHITE (RETROREFLECTIVE)

1-10
2.3 Temporary Traffic Control Advisory and Regulatory Speeds

Temporary Traffic Control (TTC) speed zones are temporary speed zones used in TTC zones while construction, utility work, traffic incident management or highway maintenance operations are underway. They can be regulatory or advisory. Refer to CA MUTCD Part 6 for temporary traffic control elements for use during highway construction or work zones.

TTC zones should be designed to allow traffic to travel at existing prevailing speeds. Reduced speed limits should be used only in the specific portion of a TTC zone where conditions or restrictive features so justify. Frequent changes in the speed limit should be avoided. A TTC plan should be designed so that vehicles can reasonably safely travel through the TTC zone with a speed limit reduction of no more than 10 mph.

A reduction of more than 10 mph in the speed limit may be justified when personnel and/or equipment are not separated from vehicle traffic by a concrete barrier, or when required by restrictive features in the TTC zone. Where separations of personnel or restrictive features justify a speed reduction of more than 10 mph, additional driver notification should be provided.

The speed limit should be stepped down in advance of the location requiring the lowest speed, and additional TTC advance warning devices should be used, such as changeable message signs and advisory radio broadcasting. Advance notification or messages need to be clear. Avoid “REDUCED SPEED AHEAD” or “SLOW DOWN” messages without additional information, such as the value of the speed limit or the reason for the slowing of traffic. CA MUTCD Section 2B.13 contains information regarding the design of portable changeable message signs that are used to display speed limits that change based on operational conditions, or are used to display the drivers’ approaching speed.

2.3.1 Advisory Temporary Traffic Control Speeds

Advisory speed plates (W13-1P) in conjunction with warning signs are preferable to regulatory speed signs. The advisory speed can be altered as needed by conditions, and several different advisory speeds can be used for varying conditions throughout the project. The advisory speed plates are intended to supplement warning signs to decrease speed at a particular location.

To preserve its effectiveness, the W13-1P should not be used unless an immediate condition exists applicable to all motorists. At no time should the W13-1P be used by itself as a general application of a slower speed limit in any part of a TTC zone. A reduced speed limit ahead sign, W3-5a, 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.
2.3.2 **Regulatory Temporary Traffic Control Speeds**

Regulatory temporary traffic control speed zones are established within TTC areas where a reduced speed is necessary. The use of regulatory speed zone signing tends to be more effective when law enforcement is present.

CVC Section 21367 gives the agency having jurisdiction over a highway the authority to regulate the speed of traffic whenever the traffic would endanger the safety of workers or the work would interfere with or endanger the movement of traffic through the area, through warning signs, lights, appropriate control devices, or by a person or persons; CVC Section 22362 states that it is a violation of the basic speed law to exceed such regulations.

The need for a reduced speed limit within a construction TTC zone should be a decision made during the project development process. The details of sign placement, hours of operation, and the recommended posted speed should be included in the Transportation Management Plan (TMP) and traffic handling plans for the project. The need to reduce a construction zone speed limit must be documented in writing and approved by the District Traffic Operations Engineer and put in place as described below. The documented approval takes the place of an E&TS and speed zone orders normally issued for regulatory speed zones.

The need for a reduced speed limit within a maintenance TTC zone should be determined in advance of planned maintenance activities. Regulatory signs lowering the speed limit by up to 10 mph may be placed in work zones not protected by a positive barrier and involve workers on foot or on equipment. Signs shall be placed at a height and in a location so that motorists can clearly see the reduced speed limit. See CA MUTCD for sign location, mounting height, and lateral offset requirements. The need to reduce a maintenance work zone speed limit must be documented in writing, approved by the District Traffic Operations Engineer, and put in place as described below.

TTC zone speed limits should be reduced in stages if a reduction of 15 mph or more is required. When the overall reduction is 15 mph or more, the first stage of the sequence should be a reduction of 10 mph the final stage reduction should be 10 mph or 5 mph, as necessary.
Speed limit signs should be placed at frequent intervals to remind drivers of the temporary change from the regular posted speed limit.

For example, if the project falls within an established 55 mph zone, and a 40 mph speed limit is necessary, it may be posted only if the approaching speed limits are lowered in two stages (first to a 45 mph speed limit followed by a 40 mph speed limit.)

The lowest value allowed for a reduced work zone speed limit is 25 mph. Refer to CVC Section 22362.

When lowering speed limits on freeways that normally have a 65 or 70 mph regulatory speed limit, consider the amount of truck traffic and number of lanes available for use. If only one lane is available, 55 mph may be the appropriate speed limit to reduce the variance in speeds between trucks and other vehicles.

Speed Limit and End Zone signs should be installed at locations jointly agreed upon by the traffic engineering staff and field personnel. Speed restriction signs shall be posted only in areas and at times when the traveling public is affected by operations. As the work progresses, signs shall be covered or moved as appropriate.

Signs shall be used only during working hours and removed or covered during non-working hours, unless the movement of traffic through the TTC zone is affected during non-working hours. If obstructions such as lane shifts or concrete barriers adjacent to traveled way are present throughout the project duration, the signs would not need to be covered or removed. This also applies in situations where the work changes the highway configuration, curvature or elevation, making it necessary to post a reduced speed limit.

Signs shall be removed immediately following completion of the work or change in conditions for which they were installed. When the work is completed or the construction speed restriction is no longer necessary, the TTC speed zone orders shall be revoked.

Additional law enforcement can be used in the area of the reduced work zone speed limit to help improve driver compliance. To enhance a sign’s conspicuity, a flashing beacon can be added to a speed limit sign. See CA MUTCD Section 4L for guidance.
2.3.3 Request for Construction Regulatory TTC Speed Zones

When a project engineer or resident engineer desires construction speed zoning for projects or portions of a project, the project or resident engineer should submit a “Request for Temporary Traffic Control Speed Zone” memo with the plans, specifications, and estimates (PS&E) to the Traffic Operations Division (District Traffic Branch Chief or County or City equivalent) for review and processing. A sample PS&E memo is provided in Appendix Section B.1.

The justification for the reduced speed limit shall be documented in writing, and does not require a detailed E&TS with spot speed surveys. TTC speed limits do not fall under the definition of the Speed Trap and can be enforced with radar or lidar (light radar) without a formal E&TS. Orders for TTC speed zones are ordinarily issued for the entire length of the project. This avoids the necessity and resulting delay of obtaining a new order each time the speed restriction signs require relocation to fit the conditions. However, it is not the intention that the entire project length be posted for the duration of the contract.

The District Traffic Branch Chief shall respond, via memo, to the request for the TTC speed zone. This memo will be placed in the project history file as justification for a reduced regulatory speed for the TTC zone.
2.3.4 Request for Maintenance Regulatory TTC Speed Zones

When a maintenance region manager, superintendent or supervisor desires work zone speed limit reduction of more than 10 mph, the maintenance manager, superintendent or supervisor should submit a “Request for Temporary Traffic Control Speed Zone” memo with the work plans or description to the Traffic Operations Division (District Traffic Branch Chief or County or City equivalent) for review and processing. The request will be approved and documented in the same manner as described for a construction speed limit reduction. A reduction of 10 mph or more must be approved on a case by case basis by the Maintenance Area Superintendent.

2.3.5 Part time Speed Reductions

If the reduced speed limits are not necessary for the safe movement of traffic during certain operations or days and hours when the work is not in progress, the regulatory TTC speed limit signs must be made inoperative by one of the following methods:

- Moving the signs to the edge of the right-of-way, facing them away from the roadway
- Covering the signs when the reduced speed limits are not necessary.

Leaving speed limit signs in place when not needed has adverse effects; for example:

- Drivers ignore the signs, making a disproportionate number of drivers violators of the law
- Respect for all speed limit signs is lessened
- The law abiding driver becomes a traffic hazard by observing the reduced speed

2.3.6 Signs Installed by the Contractor

Even though a contractor may furnish and/or install speed limit signs on a construction project, the resident engineer must ensure the contractor does not erect signs of their own design and/or speed limits of their choosing. Except under the immediate direction of the resident engineer, the contractor has no authority over the design or location of speed limit signs. The resident engineer should consult District Traffic Operations if any questions arise.