Memorandum

To: DISTRICT DIRECTORS
   KARLA SUTLIFF, Deputy Director, Project Delivery
   STEVE TAKIGAWA, Deputy Director, Maintenance and Operations
   TAMIE MCGOWEN, Assistant Deputy Director, Public Affairs

Date: April 19, 2019

File:

From: LAURIE BERMAN
   Director

Subject: TEMPORARY TRAFFIC CONTROL SPEED LIMIT REDUCTION IN WORK ZONE

Effective immediately, the California Department of Transportation (Caltrans) will be reducing speed limits by 10 miles per hour (mph) from the posted speed limit in construction work zones on the State Highway System (SHS). For maintenance and other work zones, reducing the speed limit is optional as these work zones are of shorter durations, usually lasting from an hour to a couple of days. The intent of the 10 mph speed reduction is to enhance traffic safety and provide added protection for workers on the SHS. In conjunction with reducing the speed limit, radar speed feedback signs will be placed in work zones.

The California Vehicle Code Section 21367 gives the agency having jurisdiction over a highway, the authority to regulate the speed of traffic whenever traffic would endanger the safety of workers or the work would interfere with or endanger the movement of traffic through work zones.

Attached are the conditions and guidance for implementing speed limit reductions and the required speed limit reduction signage layout in work zones. Manuals, standards, and guidelines will be revised and updated to reflect the direction outlined in this memo.

To successfully implement this policy, Caltrans will work closely with the California Highway Patrol and inform and educate the public by rolling out a statewide safety campaign.

If you have any questions, please contact me at (916) 654-6130, or by e-mail at <laurie.berman@dot.ca.gov>.

Attachments
1) Conditions and Guidance for Reducing Speed Limit in Work Zone
2) Typical Traffic Control System for Twenty-Four Seven Work Zone Speed Limit Reduction
3) Typical Traffic Control System for Lane and/or Shoulder Closures Work Zone Speed Limit Reduction
4) Nonstandard Special Provision for Portable Radar Speed Feedback Sign

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"
c:  Jasvinderjit S. Bhullar, Chief, Division of Traffic Operations
    Dennis T. Agar, Chief, Division of Maintenance
    Rachel Falsetti, Chief, Division of Construction
    Janice Benton, Chief, Division of Design
    Jennifer Lowden, Chief, Division of Right of Way and Land Surveys

"Provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability"
CONDITIONS AND GUIDANCE FOR REDUCING SPEED LIMIT IN WORK ZONES

Our number one goal, safety, is to provide a safe transportation system for workers and users. One of the ways to support this goal is to reduce the speed limits in our work zones. The intent of 10 miles per hour (mph) reduction in speed limit is to improve the safety of our workers and traffic. The speed limits are to be reduced by 10 mph in work zones where the posted speed limit is 35 mph or higher. Per California Vehicle Code section 22362, the reduced speed limit shall not be less than 25 mph. Speed limit reduction in work zones must be implemented through regulatory signage when conditions warrant.

CONSTRUCTION WORK ZONES

Provided below are the conditions for implementing speed limit reduction in construction work zones.

1. **Twenty-four seven (24/7) work zone speed limit reduction**

When temporary roadway activities that impact traffic around the clock (twenty-four seven) such as, but not limited to, traffic shifts, reduced lane or shoulder width (below preconstruction width), areas with temporary barrier placed adjacent to traffic, uneven pavement or bridge surfaces, and operations where temporary pavement markers ("floppies") are in place, implement 24/7 work zone speed limit reduction (see Attachment 2).

Remove or cover speed limit reduction signage when these temporary roadway activities no longer exist. Speed limit reduction signage is part of Traffic Control System.

2. **Lane and/or shoulder closures work zone speed limit reduction**

When temporary roadway activities that impact traffic during lane and/or shoulder closures such as, but not limited to, installing loop detectors, performing erosion control, drainage improvements, implement speed limit reductions only during lane and/or shoulder closures (see Attachment 3).

Remove speed limit reduction signage when these temporary roadway activities no longer exist. Speed limit reduction signage is part of Traffic Control System.

Place radar speed feedback signs on all projects in construction per attached Typical Traffic Control System details. Radar speed feedback signs are part of the speed limit reduction signage.

Implement speed limit reduction on all, new and on-going, Caltrans projects effective immediately as follows:

- Projects prior to advertisement: Incorporate speed limit reduction in work zones in the project plans, specifications and estimates.
- Projects that have been advertised: Prepare an addendum to implement the speed limit reduction in work zones.
- Projects in construction: Issue a Change Order to implement the speed limit reduction in work zones.

Exceptions to this policy must be approved by Deputy District Directors for Traffic Operations and Construction.
CONDITIONS AND GUIDANCE FOR REDUCING SPEED LIMIT IN WORK ZONES

MAINTENANCE AND OTHER WORK ZONES

For maintenance and other work zones, speed limit reduction is optional. Maintenance and other work zones are of shorter durations, usually lasting from an hour to a couple of days. Evaluate the benefits of reducing the speed limit against the risk of worker exposure to place the speed limit reduction signage. Consider speed limit reduction in work zones where it has been determined to have a beneficial impact, such as areas with a high frequency of close calls or incidents where excessive speed was a factor.

For permit/oversight projects that impact traffic on the State Highway System follow the same practices as construction or maintenance work zones based on the duration of the work zone.

PUBLIC INFORMATION OFFICE (PIO)

Project specific, local and statewide information and education of public will be necessary to implement this effort.

The Construction, Maintenance, and other teams in the district should coordinate with the Public Information Office (PIO) to inform the public regarding the reduced speed limits in work zones. Districts should also coordinate with local agencies as required.

Headquarters PIO should conduct statewide campaigns to inform and educate public on this safety message.

This is a cultural change on how public behaves in work zones and should be a concerted effort.

CALIFORNIA HIGHWAY PATROL (CHP)

Along with information and education, one of the most effective ways to convince public to slow down in work zones is by enforcement. Caltrans should work closely with the California Highway Patrol (CHP) in this effort at the district level and statewide. Initially it may require additional patrolling and enforcement by CHP before public reduces speed in work zones.
NOTE:

1. Additional sign installations are required within the project limits as:
   a) Every 1 mile if the length of the project is less than 2 miles
   b) Every 2 miles if the length of the project is between 2 to 10 miles
   c) Every 5 miles if the project is over 10 miles long

2. Duplicate sign installations on opposite shoulders are required on a divided roadway
   with 3 or more lanes in one direction and with the median width of more than 8 feet.

3. Cover existing R2-1 signs within the project limits when the speed reduction signs are in place.
   Uncover existing R2-1 signs after construction is completed.

4. See Title Plan Sheet for project limits

TYPICAL TRAFFIC CONTROL SYSTEM FOR
TWENTY-FOUR SEVEN (24/7) WORK ZONE
SPEED LIMIT REDUCTION

ATTACHMENT 2
DRAFT FOR DISCUSSION-Version 8
ATTACHMENT 3
DRAFT FOR DISCUSSION-Version 8

NOTES:
1. R2-1 sign from T-sheets is shown as reference.
   For all other signs and spacing, see appropriate T-sheets.
2. Subtractive sign installations are not required on divided highways with less than 65 feet in one direction
   of on opposite shoulder if at least one lane of the available lanes remain open to traffic.
   a) In the median if the width of the median shoulder is less than 8' and the outside
      lanes are to be closed.
   b) In the median if the width of the median shoulder is less than 8' and the outside
5. cover existing R2-1 signs within the project limits when the speed reduction signs are in place.
   Uncover existing R2-1 signs after construction is completed.

TYPICAL TRAFFIC CONTROL SYSTEM FOR
LANE AND/OR SHOULDER CLOSURES
WORK ZONE SPEED LIMIT REDUCTION

500 TO 1000' 
400' MAXIMUM

400' MAXIMUM

END WORK
ZONE
SPEED
LIMIT
R2-1

600 TO 800'

XX
ZONE
AHEAD

WILL
BE
ENFORCED

RADAR SPEED FEEDBACK SIGN

W2-5
020-5uP
WORK
ZONE

R2-1
MAXIMUM

500 TO 1000'
400' MAXIMUM

150'

400' MAXIMUM

END WORK
ZONE
SPEED
LIMIT
R2-1

TYPICAL TRAFFIC CONTROL SYSTEM FOR
LANE AND/OR SHOULDER CLOSURES
WORK ZONE SPEED LIMIT REDUCTION

NO SCALE
Replace section 12-3.37 with:

12-3.37 PORTABLE VEHICLE SPEED FEEDBACK SIGNS
12-3.37A General
12-3.37A(1) Summary
Section 12-3.37 includes specifications for placing portable vehicle speed feedback signs.

12-3.37A(2) Definitions
Not Used

12-3.37A(3) Submittals
Submit a certificate of compliance for each portable vehicle speed feedback sign.

12-3.37A(4) Quality Assurance
Each portable vehicle speed feedback sign must comply with section 87-14.01D(2)

12-3.37B Materials
Each portable vehicle speed feedback sign must comply with section 87-14.02 and be trailer mounted.

The portable vehicle speed feedback sign must be a self-contained unit that can be delivered to the job site and placed into immediate operation. The sign unit must be unaffected by unauthorized mobile-radio transmissions.

The trailer must be equipped so that it can be leveled and plumbed.

A minimum of 3 feet of retroreflective material must be permanently affixed on all 4 sides of the trailer. The retroreflective material need not be continuous but must be visible on the same plane.

12-3.37C Construction
Place sign as far from the traveled way as practicable where it is legible to approaching traffic without encroaching on the traveled way. Where the vertical roadway curvature restricts the sight distance of approaching traffic, place the sign on or before the crest of the curvature where it is most visible to the approaching traffic. Where the horizontal roadway curvature restricts the sight distance of approaching traffic, place the sign at or before the curve where it is most visible to approaching traffic. Where practicable, place the sign behind guardrail or Type K temporary railing.

When placed outside of a lane closure, make a taper consisting of 9 traffic cones placed 25 feet apart to delineate the location of a sign except where the sign is placed behind guardrail or Type K temporary railing.

When placed within a lane closure, place the sign after the buffer zone and in advance of the work area.

Operate the sign under the manufacturer’s instructions.

Install the vehicle speed feedback sign under the manufacturer’s instructions.

Configure the radar speed feedback sign system to detect only traffic in the approach direction of travel.

Perform the radar speed feedback sign system test.

Keep the sign clean to provide maximum visibility.

After initial placement, move the sign from location to location as required.

When a sign is not in use, move the sign to an area at least 15 feet from the edge of the traveled way or remove it from the job site away from traffic.

12-3.37D Payment
Not Used