COLORADO
Department of Transportation
Office of the Chief Engineer
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**MEMORANDUM**

**TO:** RTD'S, REGION PROGRAM ENGINEERS, REGION TRAFFIC ENGINEERS, RESIDENT ENGINEERS AND MAINTENANCE SECTION SUPERINTENDENTS

**FROM:** JOSH LAIPPLY, CHIEF ENGINEER

**DATE:** DECEMBER 12, 2017

**SUBJECT:** WORK ZONE SAFETY GUIDELINES FOR ENGINEERING AND MAINTENANCE

This Memorandum hereby replaces the Work Zone Safety Guidelines Chief Engineer memo dated July 10, 2012. The intent of this interim step is to provide guidance immediately on the items specified below. This Memorandum will be repealed after a replacement Procedural Directive takes effect on or before March 1, 2018. The replacement Procedural Directive will address the entire 2012 Chief Engineer memo contents in addition to the priority items specified below. Reference should be made to Procedural Directive 21.1 and Chief Engineer Memo dated 9.11.17 regarding record retention requirements for CDOT construction/engineering personnel.

This Memorandum reflects changes to 2012 Chief Engineer memo items: 4 (updating the record retention period for traffic control documents); 9 (related to mobile work zone operations), and 11 (regarding the Oversize Overweight Permit Office (OSOW)). The intent of this update is to reflect new technologies, practices, and devices to ensure continued quality improvement in work zone safety. A work zone guidance sub-group will be created as an off-shoot of the Work Zone Task Force to shape the development of the replacement Procedural Directive.

1) Methods of Handling Traffic (MHT) shall adhere to the most current version of the CDOT Standard Plans and Specifications, CDOT M&S Standards, the (add date) Manual on Uniform Traffic Control Devices, and the Colorado Supplement to the MUTCD (add date) that has been formally adopted by the State Highway Transportation Commission.

2) All MHT's shall adhere to the appropriate region lane closure strategy unless a variance is granted through the lane closure strategy process.

3) A traffic control file in a shared drive shall be created for each project and shall include all approved Form 568's (speed limit reductions), Methods of Handling Traffic (MHT's), TCS in charge, flaggers working, and daily traffic control diaries that outline any changes or modifications to the MHT's during the work.

4) All traffic control files specified in the TSM&O and Traffic-Maintenance Record File Plans shall be stored in a secure shared drive. Commencing January 2018, it is recommended that the files be stored in ProjectWise, and by January 2019, the files shall be stored in ProjectWise in conformance with the Chief Engineer Memorandum dated 9.11.17.

- For Information - if an incident or accident occurs the citizen has 180 days to file a claim with the State Office of Risk Management, but it could be up to 3 years before settlement is rendered.
- For Information - CDOT records retention requirements are specified in the Chief Engineer memo, "Guidance Regarding Archiving of Construction /Engineering Records During the 2018 and 2019 Construction Seasons," dated September 11, 2017. These requirements include traffic control documents specified in the Record File Plan located in ProjectWise: ProjectWise Link to: MASTER_TSM&O_File Plan_2017.10.25 At the present time, these requirements do not apply to maintenance projects.

5) When available, work zone operations impacting live lanes of traffic shall include the use of traffic attenuator trucks or attenuator trailers for increased work zone protection. Typical examples of this are indicated in S-630-01 Cases 30 - 35.

6) Speed limits shall not be lowered below 55 MPH on interstate highways or multi-lane freeways without prior approval from the Region Traffic Engineer. On all other roadways speed limits shall not be lowered below 40 MPH unless approved by the Region Traffic Engineer. For maintenance the LTC Ops I or higher, has the authority to lower speed limits as described above for interstates and other roadways.

7) On interstate highways traffic shall not come to a stop condition (flagging) unless it is an emergency situation. Exceptions to this requirement will be considered by the Region Traffic Engineer on a case by case basis. The person applying for an exception shall use the procedure identified in Item 14 to ensure they address all these questions in their request.

8) For maintenance deviations from typical examples given in the MUTCD or the CDOT M&S Standards shall be reviewed and approved by the LTC OPS I. For engineering projects, deviations from typical examples given in the MUTCD or the CDOT M&S Standards, shall be reviewed and approved by the Prime Contractor and CDOT Project Engineer before implementation.

9) A maintenance mobile work zone operation is defined as an operation that moves intermittently, with stops of up to 15 minutes, or is in a continuous movement. CDOT personnel will adhere to all safety standards, including the MUTCD applications TA-4, TA-17 and TA-35. To safely address mobile operations on the roadway, CDOT Maintenance forces have multiple equipment options including impact attenuator trucks, sign trucks and trucks with variable message signs. This definition and practice is strictly for CDOT Maintenance and shall not be used by contractors.
    - Typical examples of a mobile operation are roadway striping, roadway sweeping, delineator cleaning, roadway shoulder mowing, debris removal, pothole repair, and other maintenance activities that take place in the travel roadway.
    - The Region Traffic Engineer and LTC Ops shall be consulted in advance to determine if operations outside of the above definitions can be considered as a mobile operation.

10) Workers crossing live lanes of traffic in the work zone.
    - All MHT's shall consider additional safety measures for workers crossing out of the work zone closure across active lanes of traffic. The MHT shall identify any additional safety measures deemed necessary to reduce this risk on a project by project basis.
    - For maintenance work zones this shall be evaluated using a Job Safety Analysis prior to beginning work.
    - Crossing live lanes of traffic is discouraged and should be avoided.

11) Contact the HQ OSOW permits office for any lane restrictions including oversized vehicles, height, weight, or width restrictions.

12) As a standard practice, local law enforcement or the Colorado State Patrol should be contacted to request their presence within the work zone/project area to increase motorist compliance and safety.

13) All projects shall adhere to the provisions of section 630.13 of the Standard Specifications for Road and Bridge Construction regarding removal of signs when conditions no longer require traffic control devices.
    - When a project ceases work, the temporary signing and sign stands shall be removed if they are no longer necessary during non-working periods.

14) A request for a planned full road closure requires documentation from the LTC Ops I or CDOT Project Engineer to the Region Traffic Engineer for their approval. Documentation shall include at a minimum:
    - Reason for the need to close the entire roadway
    - Location and duration of planned closure
    - Detour route and supporting MHT around closure
    - Impacts to local communities identified and discussed with impacted communities

    Final approval is contingent upon preparation of a complete road closure package with the identified elements addressed in the package. In the event of an emergency road closure, prior approval of the closure is not required.

15) Traffic Control exceptions for narrow two lane roadways shall follow the following guidelines:
    - If a work zone situation does not provide sufficient room to provide full compliance traffic control, the LTC Ops I or Project Engineer shall develop an alternative MHT and justification to be submitted to the Region Traffic Engineer for review and approval before being implemented.
    - If work zone delineation cannot be provided due to the narrow road width, the LTC Ops I or Project Engineer shall document other means to supplement the lack of work zone delineation in the submitted justification.