

# Michigan Department of Transportation

## Work Zone Device Assessment

November 2022

### Roles and Responsibilities

The department may modify this assessment at any time, and at the department's discretion. Exceptions to these procedures and/or requirements must be approved by the department's Engineering Operations Committee (EOC).

Work zone device assessment will be assigned to the Construction Field Services Division, Construction Operations Section, Work Zone Management Unit, and the Statewide Work Zone Business Team. This assessment includes the following work zone devices:

- Longitudinal channelizing barricades
- Mobile attenuators (i.e., truck-mounted attenuators and trailer-mounted mobile attenuators)
- Temporary signs and supports
- All other temporary traffic control devices

This assessment excludes temporary barriers and temporary impact attenuators, which are addressed by the Barrier Advisory Committee.

### Training

Training and staff development will be evaluated and pursued to ensure appropriate competencies and resources are maintained to review and evaluate submittals.

### Assessment Plan

This plan is not retroactive, nor does it impact any work zone device assessment recommendations made prior to this plan. All submittals as noted herein must be made through the department's New Materials and Qualified Products Evaluation Request process, which can be found at [New Materials & Qualified Products Evaluation](#).

All device assessments will be conducted on a case-by-case basis by the department, and all decisions concerning product evaluations will be made at the department's discretion. The department may modify the assessment strategy for work zone devices as deemed appropriate by the department.

### Device Evaluations

The manufacturer must submit work zone devices to the department for review and approval under one of the following sections.

1. FHWA eligibility letter confirming the device is eligible for Federal Aid reimbursement. The FHWA eligibility letter must either specify the device is eligible as a MASH 2016 device, or else one of the following requirements must be satisfied.

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- a. If the FHWA eligibility letter does not explicitly state the version of MASH the product was evaluated under, the device may be considered for approval if a signed professional opinion letter from an ISO 17025 accredited crash testing facility is provided clearly stating the device is MASH 2016 compliant and no further testing is required, or
  - b. If a device was successfully tested or evaluated under MASH 2009 criteria, the department may consider approving the device as MASH 2016 compliant without further testing or evaluation if there is supporting documentation (e.g., research and technical reports, professional opinion letter issued by an accredited testing facility, etc.) indicating that further testing and/or evaluation under MASH 2016 criteria is not necessary. Supporting documentation may also include guidance from AASHTO, FHWA, and/or other sources, including, but not limited to, clarifications on MASH implementation (e.g., frequently asked question publications), memoranda/letters, errata, reference guides, and other publications.
  - c. Department approved NCHRP 350 or MASH 2009 devices, when there is not an adequate number ([see Manual for Assessing Safety Hardware Compliance Guidance for Temporary Traffic Control Devices in Work Zones](#)) of MASH 2016 compliant devices to meet the department's program/operational needs, as determined by the department.
    - i. The department may require a contractor certification documenting the lack of availability of MASH 2016 approved devices.
2. A signed letter by the manufacturer or device owner, certifying that modifications have been made to the device since the device was successfully crash tested and received an FHWA eligibility letter. Submittal of temporary device modifications will require the contractor to submit a signed self-certification document, detailing A or B below. A sample self-certification document can be found at the end of [FHWA policy memorandum WZ-54](#).
- a. Modifications of work zone devices will include, but not be limited to, any previous approvals granted under NCHRP 350 for temporary devices. Details can be reviewed at the FHWA website: [Questions and Answers: About Crash Testing of Work Zone Safety Appurtenances](#).
    - i. Several documented modifications are as follows. Please see the link above for the complete list.
      - Traffic control devices placed below grade.
      - Device category dates agreed between the FHWA and AASHTO.
      - What makes one product similar to another.
  - b. Any modification that allows the temporary traffic control device to communicate utilizing the WZDx specifications, or any enhanced technology providing a net benefit of overall improved roadway safety, may be reviewed and assessed for its net overall effectiveness to determine eligibility.

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- i. The guidance provided in FHWA policy memorandum WZ-54 (link noted above) may be reviewed when determining the effect of devices securely mounted to an existing temporary traffic control device.
3. Other methods may be considered for approval of temporary work zone devices as approved by the department's EOC.

### **Device Approvals**

The department will maintain all relevant documentation related to device approvals.

Approvals will be granted on a case-by-case basis as determined by the department. The department may at any time revoke the approval of any device if it is found to have negative in service performance evaluations, as determined by the department.