



ROAD
WORK
AHEAD



“Work Zone Safety & Mobility”

- Work Zone Policy
- Work Zone Inspection
- Work Zone Training
- Work Zone Technology
- Work Zone Performance

“Work Zone Safety & Mobility”

○ Work Zone **Policy**

Work Zone Safety and Mobility Manual

- Bi-Annual Process Review
- Training (TDOT, TTAP, ATSSA)
- Project Significance
- Transportation Management Plan

“Work Zone Safety & Mobility”

- Work Zone **Inspections**

 - Weekly Inspections - Construction

 - Quarterly Inspections - Region & HQ
Traffic

 - FHWA Inspections - Division Staff

“Work Zone Safety & Mobility”

- **Work Zone Training**
 - TDOT Statewide
 - TDOT Online (Internal)
 - TTAP Flagger
 - ATSSA (Free classes for state employees)

“Work Zone Safety & Mobility”

- Work Zone **Technology**
Worker Safety





“Work Zone Safety & Mobility”

- Work Zone **Technology**
Worker Safety



“Work Zone Safety & Mobility”

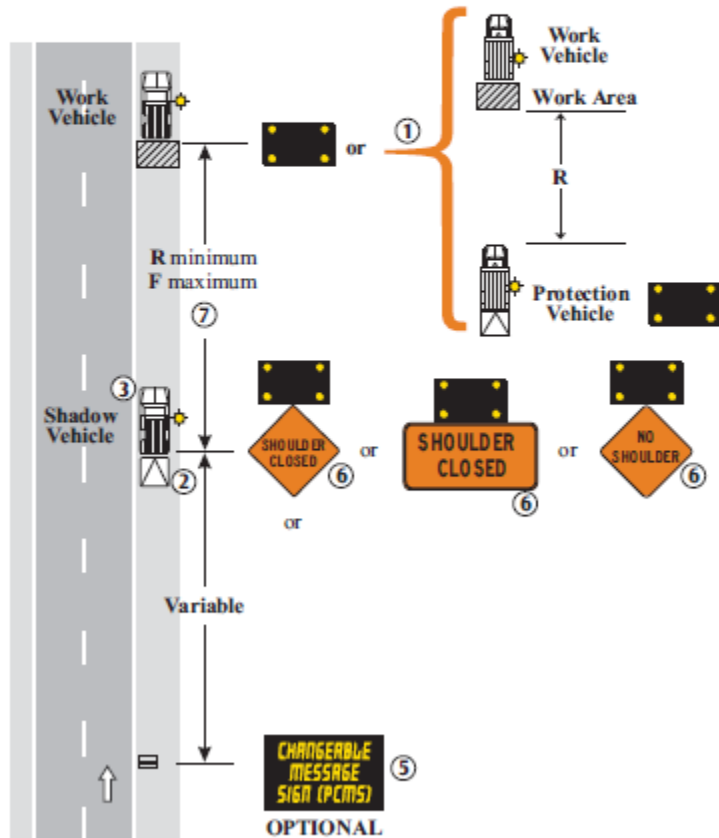
- Work Zone **Technology**
Mobile Instructions



| Menu Icon | | Logo | |
|--|---|------|--|
| TA-1 Work Beyond the Shoulder | TA-3 Work On the Shoulders | | |
| TA-4 Short Duration/Mobile Operation on Shoulder | TA-6 Shoulder Work w/ Minor Encroachment | | |
| TA-8 | TA-9 | | |

NOTES:

1. A work vehicle without a flashing arrow board shall be followed by a protection vehicle at a distance of **R**. The protection vehicle shall be equipped with a flashing arrow panel and should have a truck mounted attenuator.
2. Any shadow vehicle or protection vehicle operating totally or partially in a traffic lane should be equipped with a truck mounted attenuator.
3. The shadow vehicle or protection vehicle may encroach into the traffic lane when the shoulder is too narrow to drive on.
4. Any vehicle not displaying a flashing arrow board shall display high-intensity rotating, flashing, oscillating, or strobe lights.
5. The PCMS shall be used for nighttime operations.
6. When the PCMS is used, the **SHOULDER CLOSED** or **NO SHOULDER** sign becomes optional.
7. The distance between the work area and the shadow vehicle should be adjusted between **R** and **F** based on traffic volume and sight distance.



**SHOULDER CLOSURE
MOBILE AND SHORT DURATION**

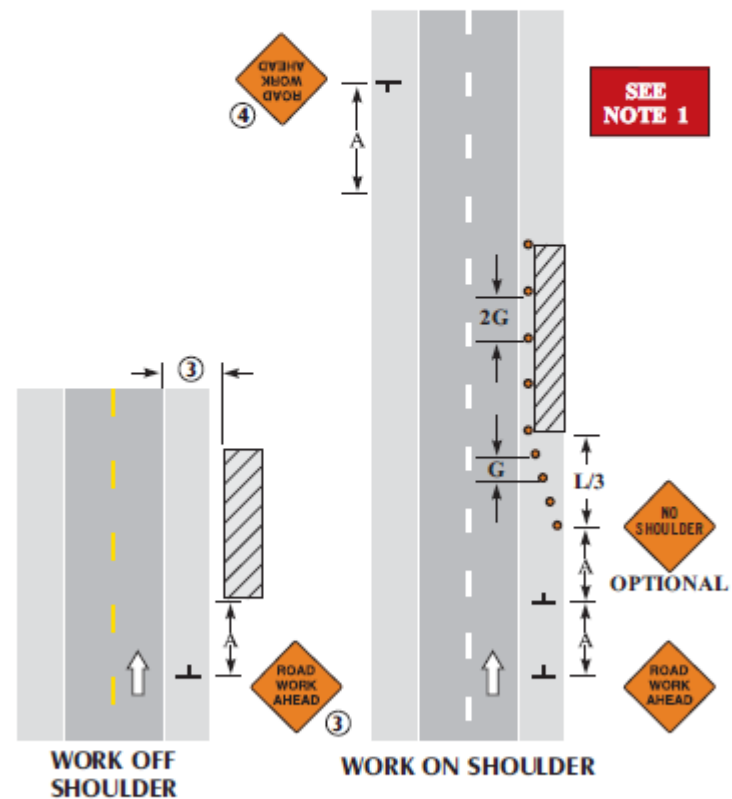
1 HOUR or LESS

6K-1

LAYOUT 1

NOTES:

1. All signs, barricades and channelizing devices may be omitted when the work occupies an isolated shoulder location for less than one hour and it has little or no interference with traffic.
2. An operation which moves between work spaces that are less than the decision sight distance along the shoulder should use a stationary or mobile shoulder closure.
3. The **ROAD WORK AHEAD** sign may be omitted for short term daylight operations if:
 - a. the distance from curb face to the work space is at least 2 feet, or
 - b. the distance from the edge of the roadway to the work space is at least 15 feet
 and a vehicle displaying a 360-degree flashing beacon is operating.
4. This **ROAD WORK AHEAD** sign shall be installed on 2-lane, 2-way roads if traffic control devices are installed for a work space in the opposite shoulder.



**SHOULDER CLOSURE
WORK ON OR NEAR SHOULDER**

3 DAYS or LESS

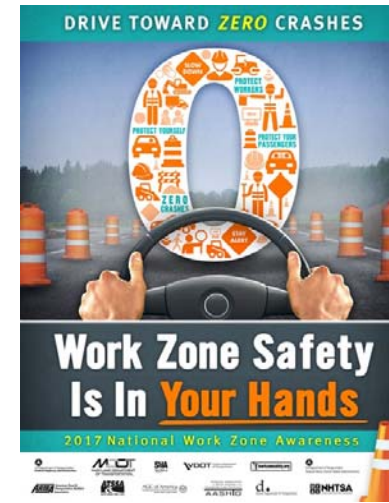
6K-2

LAYOUT 2

“Work Zone Safety & Mobility”

- Work Zone **Performance**
 - WZ Statewide/Regional Avg. Crash Rates
 - Freeway
 - Arterial

TDOT's 2017 Update to the Work Zone Safety and Mobility Manual



TDOT's Update to the Work Zone Safety and Mobility Manual

23 CFR 630 Subpart J

- **Purpose - Subpart J establishes requirements and provides guidance for**
 - addressing the safety and mobility impacts of work zones
 - developing strategies to help manage these impacts.
- **Policy**
 - Each State shall implement a policy for the consideration and management of work zone impacts
- **State Process and Procedures**
 - The Work Zone Safety and Mobility Manual

23 CFR 630 Subpart J

- **Project Level Procedures**
 - Work Zone Training and TMP Development Process
- **Implementation**
 - Each State shall work in partnership with the FHWA in the implementation of its policies and procedures to improve work zone safety and mobility.
- **Compliance Date**
 - October 12th 2007

TDOT WZ Safety and Mobility Manual

- Two primary principles:
 - **Safety** of all road users and workers is top priority
 - **Mobility for all** forms of traffic shall be considered on all projects
 - Inhibit as little as possible
 - Speed reductions
- WZ Speed Guidance

should conform to



TDOT WZ Safety and Mobility Manual

- Original Work Zone Safety and Mobility Manual was published November 29, 2007
- Update began July 2016
 - Undertaken to provide improvement in processes and procedures
- Signed by Commissioner February 2017.



Work Zone Safety and Mobility Manual

February 2017

TDOT WZ Safety and Mobility Manual

- Applies to all Federal-aid funded and State Funded projects (Also applies to projects impacting roadway operations that typically requires issuance of a TDOT permit)
 - Highway construction projects
 - Utility work ie.. “TVA Powerline Crossing I-40”
 - Resurfacing projects (Generic Resurfacing TMP)
 - Right-of-way use permits

What was changed?

- Forms were created to help in the determination of the projects significance.
- Project significance determines the scope of the Transportation Management Plan (TMP) that will be required.
- All divisions that let projects or grant permits were made aware of the new manual and invited to be represented on the Standing Work Zone Committee.

What was changed?

- The layout and required content of the TMP document
- The approval process of the document – **Must** be signed by Traffic Engineer and Project Manager.
- Now document should be reviewed at field reviews.

FORM C

Transportation Management Plan (TMP) Summary Sheet

| | | |
|--------------------------------------|-------------|---|
| Project Description: | | |
| PE No.: | PIN: | County: |
| <input type="checkbox"/> Significant | | <input type="checkbox"/> Non-Significant (From Form A) |

| Typical TMP Strategies | | |
|--|---|---|
| Temporary Traffic Control | Transportation Operations | Public Information Strategies |
| <input type="checkbox"/> Temporary Traffic Control Plans included in Project Plans <input type="checkbox"/> Standard Work Zone Drawings (T-WZ Series) Referenced in Project Plans or Contract Wording <input type="checkbox"/> Contractor-Developed TTC Plan based on the MUTCD <input type="checkbox"/> TDOT General Notes <input type="checkbox"/> | <input type="checkbox"/> Off Peak Work Hours <input type="checkbox"/> Police Cooperation <input type="checkbox"/> Work Zone ITS <input type="checkbox"/> Alternate Route/Detour <input type="checkbox"/> HELP Truck Service <input type="checkbox"/> Turn Restrictions <input type="checkbox"/> Truck Restrictions <input type="checkbox"/> Temporary Traffic Signal <input type="checkbox"/> Contractor Safety Incentives <input type="checkbox"/> Ped./Bicycle access <input type="checkbox"/> Project Task Force <input type="checkbox"/> Construction Safety Inspector <input type="checkbox"/> Incident Management Coordination <input type="checkbox"/> Protect the Queue <input type="checkbox"/> Parking Restrictions <input type="checkbox"/> | <input type="checkbox"/> Digital Message Signs <input type="checkbox"/> Highway Advisory Radio <input type="checkbox"/> 511 Message <input type="checkbox"/> Portable Message Boards <input type="checkbox"/> |
| Sign (Traffic Engineer) | Sign (Project manager) | Sign (Communications Rep.) |

Attach additional sheets to provide details on TTC, TO, and PI strategies.

Prepared By _____ **Date** _____

What is a TMP?

- A TMP lays out a set of coordinated transportation management strategies and describes how they will be used to manage the impacts of the work zone.
- **Transportation Management Strategies Include**
 - Temporary Traffic Control (TTC)
 - Transportation Operations (TO)
 - Public Information (PI)
- **A TMP is based on project significance classification**
 - Exempt
 - Significant
 - Non-significant

Project Significance Determination

- The federal rule sets out criteria to determine if a project is significant.
- TDOT has established additional criteria for non-significant projects that have special challenges that warrant additional guidance in the form of Transportation Operations (TO) and Public Information (PI) strategies.



Training

- The federal rule requires periodic training by individuals involved in any aspects of work zone design, set up, or inspection.
- TDOT Traffic Operations Division will provide training to TDOT staff.
- No changes yet to existing training requirements for private contractors/consultants.



Work Zone Process Review

- An evaluation of work zone policies, procedures, and impacts that is performed every two years
- Evaluation Completed by the Standing Work Zone Committee
- Updated manual provides that the process review shall examine impacts to specific work zones to determine if processes are working.
- Addresses items such as:
 - TMP Process
 - Work zone impacts
 - Work zone policies
 - Work zone procedures





TM

Questions??