

# Safety Director's Bulletin

(One in a series of safety information bulletins from your Joint Insurance Fund)

S2009-2  
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## Establishing Temporary Traffic Controls in Mobile Work Zones

According to the Bureau of Labor Statistics over 1,000 workers are killed in work zones on the nation's roadways each year. New Jersey has its share of fatalities and serious injuries annually and recently a NJ town experienced such a serious injury to a Public Works employee doing hot patching. *This Bulletin will address establishing effective Temporary Traffic Controls (TTC) in a Mobile Work Zone.*

The Manual of Uniform Traffic Control Devices (MUTCD), 2003 Edition, is the law in New Jersey. Supervisors and workers MUST be aware of the requirements in this document. It can be downloaded or viewed for free at <http://mutcd.fhwa.dot.gov>. Note that Part 6 on Temporary Traffic Control is the standard when working on or near roadways.

Part 6 defines a 'Mobile Work Zone' as an operation that "moves intermittently or continuously." Typically, 15 minutes is thought of as the duration of a stop before the operation becomes a 'Short Duration Work Zone'. Hot or cold patching, leaf collection, bulk pick-up, solid waste / recycling collection, and jetter / vacuuming operations are some common municipal functions that may be Mobile Work Zones.

Safety in mobile operations should not be compromised by using fewer warning devices simply because the operation will frequently change its location. According to the MUTCD, devices having greater mobility might be necessary, such as signs mounted on trucks or larger, more imposing and visible signs can be used effectively and economically. Some additional guidance from the MUTCD includes:

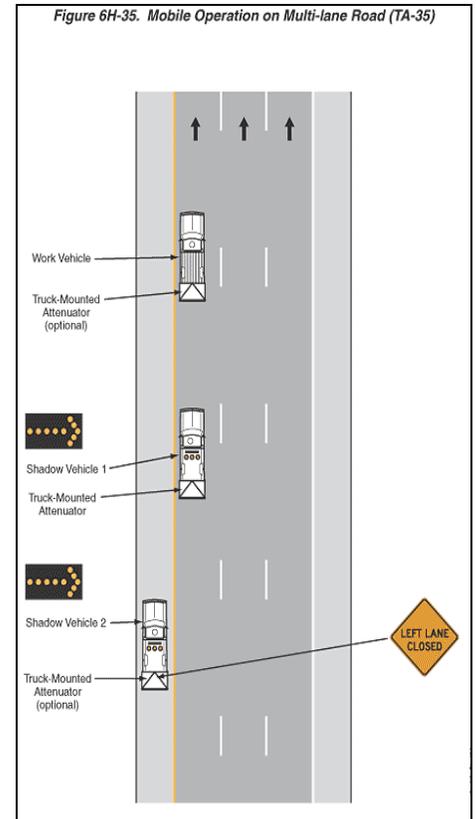
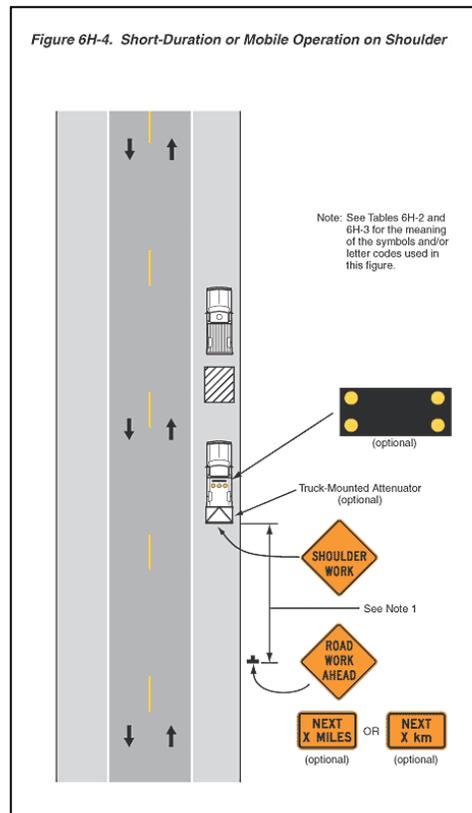
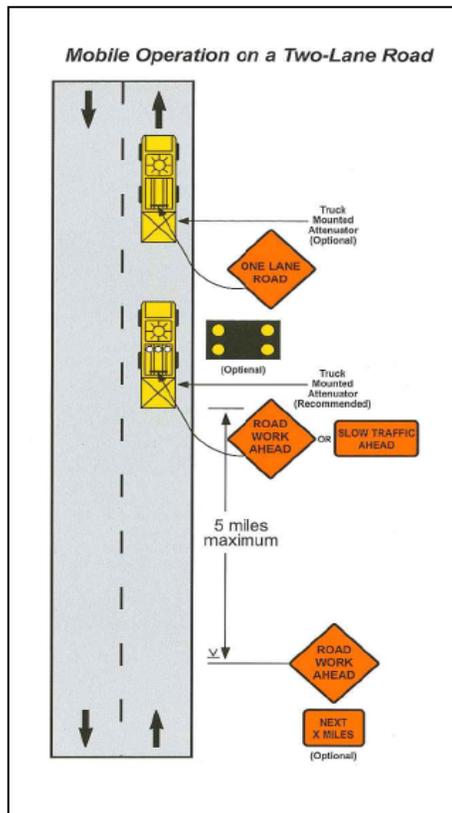
- Warning signs, high-intensity rotating, flashing, oscillating, or strobe lights on a vehicle, flags, and/or channelizing devices should be used and moved periodically to keep them near the mobile work area. **The four-way hazard lights of a vehicle MAY NOT be used in place of high-intensity amber lights.**
- Appropriately marked vehicles with high intensity rotating / strobe lights may be used in place of signs and channelizing devices for mobile operations. These vehicles may be augmented with signs or arrow panels.
- Flaggers may be used for mobile operations that involve frequent short stops.
- When mobile operations are being performed, a shadow vehicle equipped with an arrow panel or a sign should follow the work vehicle, **especially when vehicular traffic speeds or volumes are high.** Where feasible, warning signs should be placed along the roadway and moved periodically.

Some additional considerations:

- The above are **MINIMUM STANDARDS**. Towns must use good judgment and local knowledge when establishing TTC.
- Workers should be wearing ANSI Class 2 high visibility apparel. Class 3 is recommended when there is high speed, high volume, or low visibility (rain, snow, fog, etc).
- Workers and supervisors are required to receive training on setting up TTC in accordance with MUTCD. The MSI offers such a course, Flagger / Work Zone Safety.

*It is suggested that Safety Director's Bulletins are posted on your safety announcement boards. This bulletin is intended for general information purposes only. It should not be construed as legal advice or legal opinion regarding any specific or factual situation. Always follow your organization's policies and procedures as presented to you by your manager or supervisor. For further information regarding the content of this bulletin, please contact Conner Strong Risk Control at 877.861.3220.*

Conner Strong Risk Control  
March 23, 2009



The three figures above were taken from *Section 6H - Typical Applications* of the MUTCD. They should be the minimum standards that should be considered. However, New Jersey is one of the most densely populated states, and our roadways are some of the most heavily traveled. Minimum standards may not be sufficient for many of our operations.

**NOTES:**

1. For low-volume, low-speed conditions, the shadow vehicle may not be practical. For high-volume and/or high-speed conditions, the shadow vehicle should be used.
2. Shadow vehicles are used to warn traffic of the operation ahead. The distance between the work and shadow vehicles may vary according to terrain, speed limit, and other factors. A truck-mounted attenuator (TMA) may be used on the shadow vehicle and work vehicle.
3. Work and shadow vehicles shall display rotating or strobe lights, both forward and to the rear. If a vehicle is equipped with an arrow panel, it shall ONLY be used in the CAUTION mode on two-lane operations.
4. Vehicle-mounted signs shall be mounted with the bottom of the sign at a minimum height of 4 feet above the pavement. Sign shall be covered or turned from view when work is not in progress.
5. Where practical and when needed the work and shadow vehicles should pull over periodically to allow traffic to pass. If this can not be done frequently a "DO NOT PASS" sign may be placed on the rear of the vehicle blocking the lane.
6. If a shadow vehicle is not used then ground-mounted signs should be used to provide advance warning for the mobile operation. Where speed and/or volumes are high, these signs should be considered.

As Safety Directors, we ask that Public Work and Utility Authority managers seek efficient ways to protect their employees operating on or near roadways, beyond the minimum.