Use of Hand-Signaling Devices by Flaggers

**Preferred Method**

**STOP/SLOW Paddle**

**Emergency Situations Only**

**Red Flag**

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>STOP</td>
<td>To stop traffic</td>
</tr>
<tr>
<td>SLOW</td>
<td>To let traffic proceed</td>
</tr>
<tr>
<td>Lane Closure on Two-Lane Road Using Flaggers</td>
<td></td>
</tr>
</tbody>
</table>

**MUTCD, Figure 6H-10**

**Typical Application 10**

Direction of travel

Note: The buffer space should be extended so that the two-way traffic taper is placed before a horizontal (or crest vertical) curve to provide adequate sight distance for the flagger and a queue of stopped vehicles.

**To Alert and Slow Traffic**

Other warning devices may be added to supplement the devices and device spacing may be adjusted to provide additional reaction time or delineation. Fewer devices may be used based on field conditions.

**Work Zone Traffic Safety During Disaster Recovery Efforts**

Inform recovery crews about the special hazards they will face and how to protect themselves when they work in areas with moving equipment and traffic.

Develop and use a traffic control plan for the work zone – provide traffic flow details and train crew members to stay clear of all motorized equipment.

Provide all crew members with high-visibility apparel and headwear that can be seen in daylight and at night, and that are suited to the conditions. Ensure that apparel is used by crew members so that they are conspicuous to motorists and equipment operators.

**Signs** – Protect recovery crews exposed to traffic by giving motorists plenty of advance warning of upcoming work zones. Post warning signs (e.g., REDUCED SPEED AHEAD, WORK ZONE AHEAD, ROAD CLOSED, EVACUATION ROUTE, FLAGGER AHEAD, MERGE AHEAD, etc.) along the roadway to warn drivers of the work in progress.

On urban streets, place the first warning sign ahead of the work zone at a distance (in feet) of 4 to 8 times the speed limit (in mph). The high end of the range should be used when speeds are relatively high. For example, at 35 mph the first warning sign should be 140 feet ahead of the work zone.

**Traffic Control** – Use positive protective barriers (e.g., concrete, sand-filled barriers), highway channeling devices, traffic cones, and flaggers to steer traffic away from work crews.

**Flaggers** – Ensure flaggers use high-visibility apparel and headwear that can be seen in daylight and at night, and are:

- Trained/certified and use authorized signaling methods.
- Clearly visible to the first approaching vehicle at all times and are located to allow the first approaching vehicle plenty of advance notice.
- Stationed far enough ahead of the work zone that they have time to warn road crews if approaching vehicles appear dangerous or out of control (use audible warnings devices such as horns or whistles).
- Standing on the shoulder adjacent to the traffic being controlled or in the closed lane, not in an active lane.
- Standing alone. Never permit other crew members to gather around the flagger station.

**Lighting** – Ensure that the work zone, including the flagger, is well lit, but control glare so that work crews and passing motorists are not blinded.

**Training** – Train crew members not to stand between mechanical equipment and fixed objects, or in blind spots.
Component Parts of a Temporary Traffic Control Zone
MUTCD, Figure 6C-1

- Traffic Space allows traffic to pass through the activity area
- Downstream Taper
- Buffer Space (longitudinal)
- Work Space is set aside for workers, equipment and material storage
- Buffer Space (longitudinal) provides protection for traffic and workers
- Activity Area is where work takes place
- Transition Area moves traffic out of its normal path
- Shoulder Taper
- Advance Warning Area tells traffic what to expect ahead

Mobile Operations on Two-Lane Road
MUTCD, Figure 6H-17
Typical Application 17

- Direction of travel
- Termination Area lets traffic resume normal operations
- Truck-Mounted Attenuator (optional+)
- Shadow Vehicle
- Use sign shape and legend appropriate to the type of work
- Truck-Mounted Attenuator (optional+)

Lane Closure on Two-Lane Road with Low Traffic Volume
MUTCD, Figure 6H-11
Typical Application 11

- Direction of travel
- 30 m (100 ft) MAX.
- Buffer Space (optional+)
- Advance Warning Area

Distance Between Signs**

<table>
<thead>
<tr>
<th>Road Type</th>
<th>A</th>
<th>B</th>
<th>C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban (low speed)*</td>
<td>30 (100)</td>
<td>30 (100)</td>
<td>30 (100)</td>
</tr>
<tr>
<td>Urban (high speed)*</td>
<td>100 (350)</td>
<td>100 (350)</td>
<td>100 (350)</td>
</tr>
<tr>
<td>Rural</td>
<td>150 (500)</td>
<td>150 (500)</td>
<td>150 (500)</td>
</tr>
<tr>
<td>Expressway/Freeway</td>
<td>300 (1,000)</td>
<td>450 (1,500)</td>
<td>800 (2,640)</td>
</tr>
</tbody>
</table>

*Other warning devices may be added to supplement the devices and device spacing may be adjusted to provide additional reaction time or delineation. Fewer devices may be used based on field conditions.

**Distances are shown in meters (feet). The column headings A, B and C are the dimensions shown in figures 6H-1 and 6H-46. The A dimension is the distance from the transition or point of restriction to the first sign. The B dimension is the distance between the first and second signs. The C dimension is the distance between the second and third signs.