Chapter 4  Mobile Operations

Mobile work zones are work activities that typically move along the road either intermittently or continuously and the transition area moves with the operation. Frequent short stops may be used for pothole patching, litter bag pickup, herbicide spraying, lane marker replacement or other similar operations. Channelizing devices, truck mounted signs or Portable Changeable Message Signs (PCMS), warning lights and flaggers may be needed for these operations.

Mobile work zones also include slow moving operations where workers and equipment move along the road without stopping. Operations such as sweeping and paint striping are typical mobile operations. The warning signs move ahead with the work, usually mounted on a shadow vehicle. Truck mounted signs or PCMS, Truck Mounted Attenuator (TMA), and warning lights are some of the devices that may be used for moving operations. Messages for truck mounted PCMSs should conform to standard work messages whenever possible. Contact the Region Traffic Office Staff for assistance with selecting appropriate messages.

Mobile work zones are well suited to maintenance operations and can be an efficient way to accomplish many types of work, but due to the moving nature of these operations it is imperative that the crew is carefully coordinated. Careful consideration of traffic and roadway conditions as they relate to the specific operation must be done prior to starting work.

Many work operations that may have been previously conducted as short-term operations can be significantly improved by converting to a mobile operation. Contact the Region Traffic Office for assistance.

The following TCPs depict typical examples of mobile work zones:

TCP 22  Typical Mobile Left Shoulder Closed (Freeway Application)
(For work operations that can be accomplished on the shoulder without encroachment into the adjacent lanes.)

TCP 23  Typical Mobile Left-Lane Operation (Freeway Application)
(For work operations on the left shoulder or in the lane.)

TCP 24  Typical Mobile Middle-Lane Operation (Freeway Application)
(For multi-lane freeway applications where the work takes place in the middle lanes, this plan depicts a mobile double left-lane closure operation.)

TCP 25  Typical Mobile Lane Closure Operation on a Two-Lane Roadway
(For mobile operations on a rural two-lane, two-way roadway with “in lane” work.)

TCP 26  Typical Mobile Shoulder Closure Operation on a Two-Lane Roadway
(For mobile operations on a rural two-lane, two-way roadway with no encroachment.)
TCP 22 – Typical Mobile Left Shoulder Closed (Freeway Application)
Chapter 4 Mobile Operations

TCP 23 – Typical Mobile Left-Lane Operation (Freeway Application)

(TYPICAL FREEWAY APPLICATION)

(ACTUAL NUMBER OF LANES MAY VARY)

PROTECTIVE VEHICLE ROLL AHEAD DISTANCE = R
ROLL AHEAD DISTANCES VARY AND SHALL BE DETERMINED IN FIELD BASED ON WORK OPERATION AND SITE SPECIFIC CONDITIONS.
USE OF A TRUCK MOUNTED ATTENUATOR REQUIRED

OPERATIONAL NOTES

1. SHADOW VEHICLE #1, MOUNT LANE CLOSURE SIGN ON BACK OF VEHICLE OR USE TRUCK MOUNTED VMS. DO NOT OBSCURE ARROW BOARD, MAINTAIN 1000’ TO 1500’ OF SIGHT DISTANCE TO APPROACHING TRAFFIC (TMA RECOMMENDED).

2. PROTECTIVE VEHICLE #2, POSITION VEHICLE TO PROVIDE PROTECTION OF CREW. MAINTAIN ROLL AHEAD DISTANCE (TMA REQUIRED).

3. 2’ MINIMUM CLEARANCE RECOMMENDED BETWEEN LANE EDGE AND WORK VEHICLE. ADJACENT LANE MUST BE CLOSED IF ADDITIONAL CLEARANCE IS REQUIRED OR IF WORK ACTIVITIES ADVERSELY INFLUENCE TRAFFIC.

4. CONTACT REGION TRAFFIC MANAGEMENT CENTER PRIOR TO WORK BEGINS AND AFTER ENDING.

5. PCMS RECOMMENDED.

TYPICAL MOBILE FREEWAY OPERATION
LEFT LANE CLOSURE
TCP 23

LEGEND

ARROW BOARD TYPE "B" MIN
TRUCK MOUNTED ATTENUATOR (REQUIRED)
WARNING BEACON (REQUIRED)
TCP 24 – Typical Mobile Middle-Lane Operation (Freeway Application)

PROTECTIVE VEHICLE ROLL AHEAD DISTANCE = R

ROLL AHEAD DISTANCES VARY AND SHALL BE DETERMINED IN FIELD BASED ON WORK OPERATION AND SITE SPECIFIC CONDITIONS.

USE OF A TRUCK MOUNTED ATTENUATOR REQUIRED

TYPICAL FREEWAY APPLICATION

(ACTUAL NUMBER OF LANES MAY VARY)

OPERATIONAL NOTES

1. ADVANCE WARNING VEHICLE #1, OR USE TRUCK MOUNTED VMS. MAINTAIN 1000' TO 1500' SIGHT DISTANCE TO APPROACHING VEHICLES. (TMA REQUIRED)

2. SHADOW VEHICLE #2. MOUNT LANE CLOSURE SIGN ON BACK OF VEHICLE. DO NOT OBSCURE ARROW BOARD. MAINTAIN 1000' TO 1500' OF SIGHT DISTANCE TO APPROACHING TRAFFIC (TMA REQUIRED).

3. PROTECTIVE VEHICLE #3. POSITION VEHICLE TO PROVIDE PROTECTION OF CREW. MAINTAIN ROLL AHEAD DISTANCE (TMA REQUIRED).

4. 2 MINIMUM CLEARANCE RECOMMENDED BETWEEN LANE EDGE AND WORK VEHICLE. ADJACENT LANE MUST BE CLOSED IF ADDITIONAL CLEARANCE IS REQUIRED OR IF WORK ACTIVITIES ADVERSELY INFLUENCE TRAFFIC.

5. CONTACT REGION TRAFFIC MANAGEMENT CENTER PRIOR TO WORK BEGIN AND END.

6. PCMS RECOMMENDED.

TYPICAL MOBILE FREEWAY OPERATION

MIDDLE LANE WORK AREA

TCP 24

LEGEND

 önemli mesajlar (SAMPLE MESSAGES)

 PCMS

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEFT 2 LANES CLOSED</td>
<td>SLOW MOVING VEHICLES</td>
</tr>
<tr>
<td>2.0 SEC</td>
<td>2.0 SEC</td>
</tr>
</tbody>
</table>

MOUNT IN VEHICLE #1 & 2

ARROW BOARD TYPE "B" MIN.

TRUCK MOUNTED ATTENUATOR (REQUIRED)

WARNING BEACON - REQUIRED
TCP 25 – Typical Mobile Lane Closure Operation on a Two-Lane Roadway

**OPERATIONAL NOTES**

1. Work vehicle and protective vehicle shall use warning beacons.
2. Protective vehicle shall maintain 500 to 1000 ft of sight distance to approaching traffic.
3. Contact regional traffic office staff for assistance with specific lane operations such as striping, fog seal, etc. that require additional plans and details.
4. "DO NOT PASS" sign can be replaced with "PASS WITH CARE" sign when appropriate.
5. Advance warning vehicle recommended 500 to 1000 ft in advance.

**TYPICAL MOBILE OPERATION**

**TWO LANE ROADWAY**

**LANE CLOSURE**

**TCP 25**
TCP 26 – Typical Mobile Shoulder Closure Operation on a Two-Lane Roadway

OPERATIONAL NOTES

1. WORK VEHICLE AND PROTECTIVE VEHICLE SHALL USE WARNING BEACONS.
2. PROTECTIVE VEHICLE SHALL MAINTAIN 500'-1000' OF SIGHT DISTANCE TO APPROACHING TRAFFIC.
3. CONTACT REGIONAL TRAFFIC OFFICE STAFF FOR ASSISTANCE WITH SPECIFIC IN LANE OPERATIONS SUCH AS STRIPING, FOG SEAL, ETC. THAT REQUIRE ADDITIONAL PLANS AND DETAILS.

TYPICAL MOBILE OPERATION
TWO LANE ROADWAY
SHOULDER CLOSURE
TCP 26