

Safe and Effective Use of Law Enforcement Personnel in Work Zones

Module 3.2

Placement of LEO Vehicles in Work Zones



Module 3.2

Module 3 includes the following:

Lesson 3.1— Typical Work Zone Applications

- Types of work zone applications

Lesson 3.2 — Placement of LEO vehicles in work zones

- Placement of LEO vehicles in stationary and mobile work zones

Lesson 3.3 — Recommended Practices

- Recommended practices and procedures for LEOs in work zones

Objectives of this Lesson

When you complete this lesson, you will be able to:

- Determine appropriate locations for LEO vehicles in stationary work zones
- Discuss placement of LEO vehicles in mobile work zones

Use of LEOs in Work Zones

Let's review what you have learned so far.

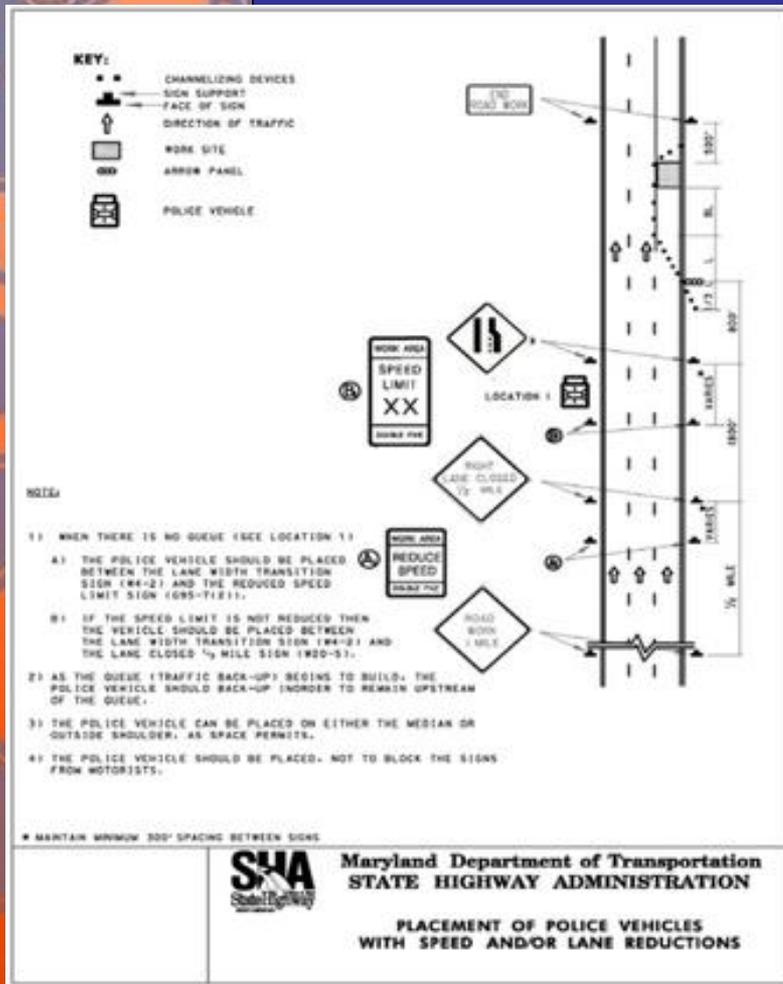
LEO activities related to work zone traffic control include presence/speed management, enforcement and/or traffic control.



- Policies for the use of LEOs are described in the Interagency Agreement.
- The TCP for each work zone should describe the use of LEOs.
- The work zone traffic manager should discuss specific assignments including placement of vehicles when a LEO arrives.

LEOs are not responsible for enforcing TCPs but should discuss concerns with the POC.

Placement of LEO Vehicles



Please turn to this diagram in your workbook.

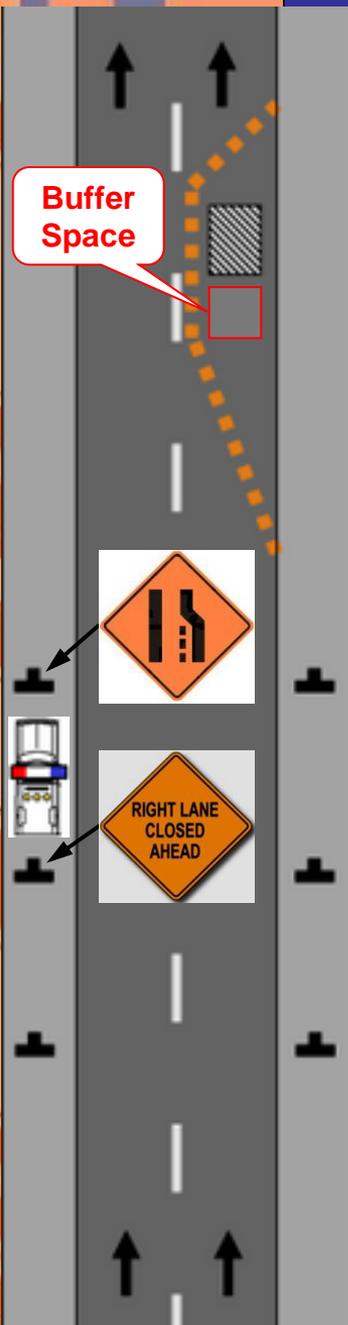


Maryland Department of Transportation
STATE HIGHWAY ADMINISTRATION

PLACEMENT OF POLICE VEHICLES
WITH SPEED AND/OR LANE REDUCTIONS

Placement of LEO Vehicles Stationary Work Zones

The graphic shows a stationary work zone with one of the two lanes closed.

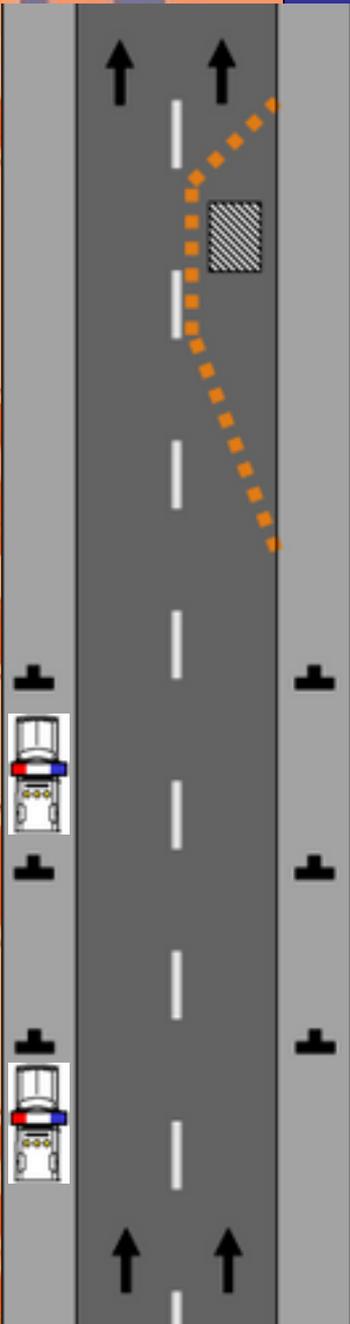


- When traffic is free-flowing (no queues), the LEO vehicle should be placed before the transition, in the advance warning area.
- The LEO vehicle is located on the shoulder or the median between the second and third signs with emergency lights on.
- LEO vehicles must be never parked in buffer zones.

Placement of LEO Vehicles Stationary Work Zones

- The position of the vehicle may be dynamic
- Queuing beyond the advance warning area may result in rear end crashes
- When queues develop, the LEO vehicle should be relocated and positioned prior to the beginning of the queue

Position the LEO vehicle in advance of the queue to be visible to motorists and give them time to stop (approx. ¼ mile)



Positioning LEO Vehicles

The position of the LEO vehicle should be determined on a case-by-case basis.



For stationary work zones, some advantages of positioning the vehicle facing on-coming traffic are:

- Larger field of view for LEO
- This position of the vehicle ensures that the engine, not the gas tank, faces oncoming traffic
- Air bags may provide some protection
- Makes it easier to relocate vehicle to a location in advance of the queue

Placement of LEO Vehicles for Presence

Motorists approaching stationary work zones should be able to see the marked LEO vehicle 3 to 5 seconds in advance of its location.

In Module 2, you learned an easy way to convert MPH to FPS:

$$FPS = \frac{Speed(mph)}{2} + Speed(mph)$$

- In 1 second at 60 MPH, a vehicle travels $(60/2) + 60 =$ roughly 90 feet
- In 3 to 5 seconds, a vehicle would travel between 270 and 450 feet!

Placement of LEOs for Safety and Enforcement

- The marked police car unit should be located in a position that provides maximum safety for the officer, as far from the traveled lane as possible
- The LEO should be capable of starting a pursuit and issuing a speeding ticket at any moment
- Long work zones (e.g., one mile or longer) may require additional LEOs and police car units
- A second police car unit located downstream of the work zone may be occasionally used to ticket speeding motorists as they exit the work zone

Placement of LEO Vehicles

The workbook for this lesson includes diagrams showing the location of LEO vehicles for three different mobile applications.

SCENARIO 1

Lane closures for roadways with 2 lanes in each direction

SCENARIO 2

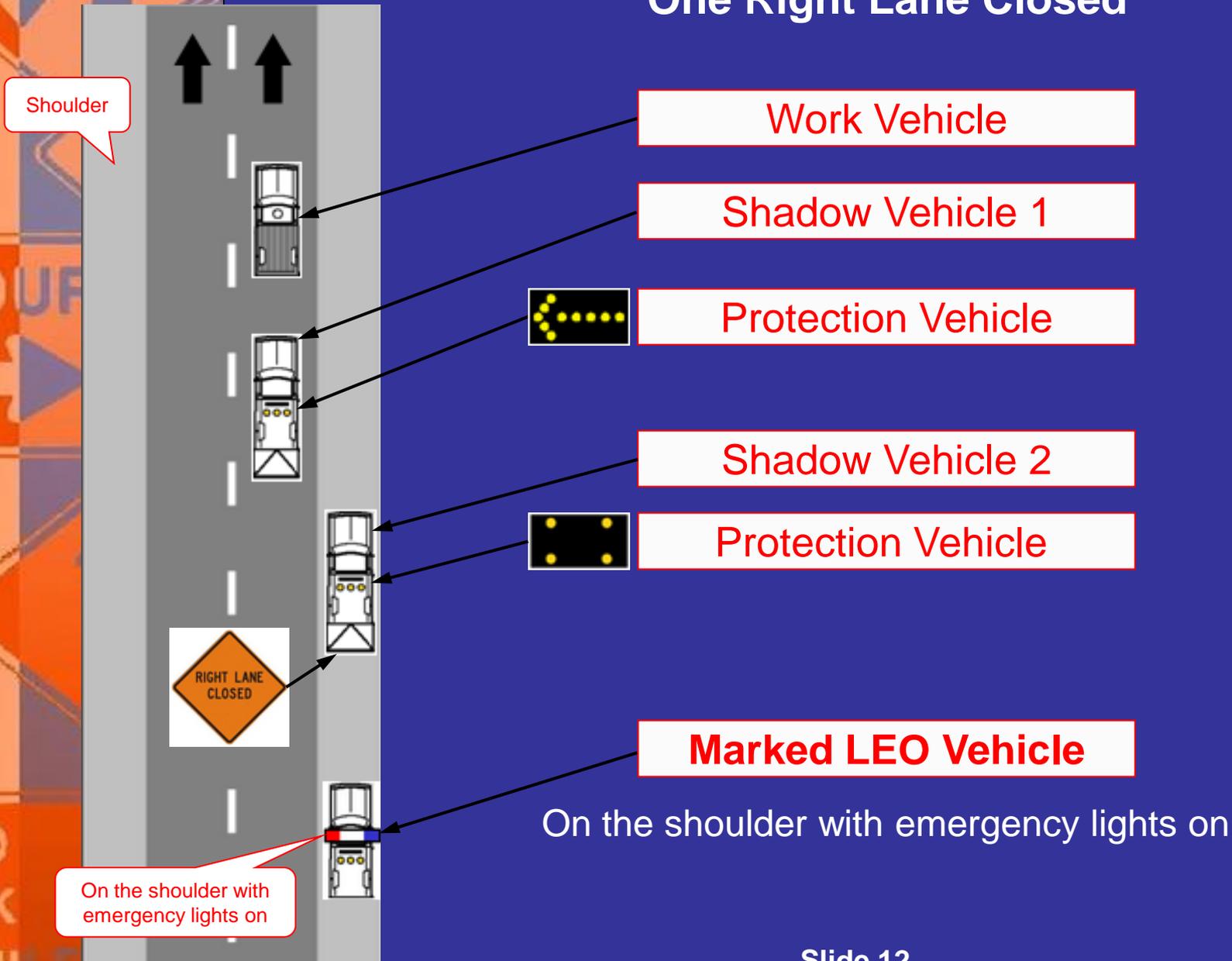
Lane closures for roadways with 3 lanes in each direction

SCENARIO 3

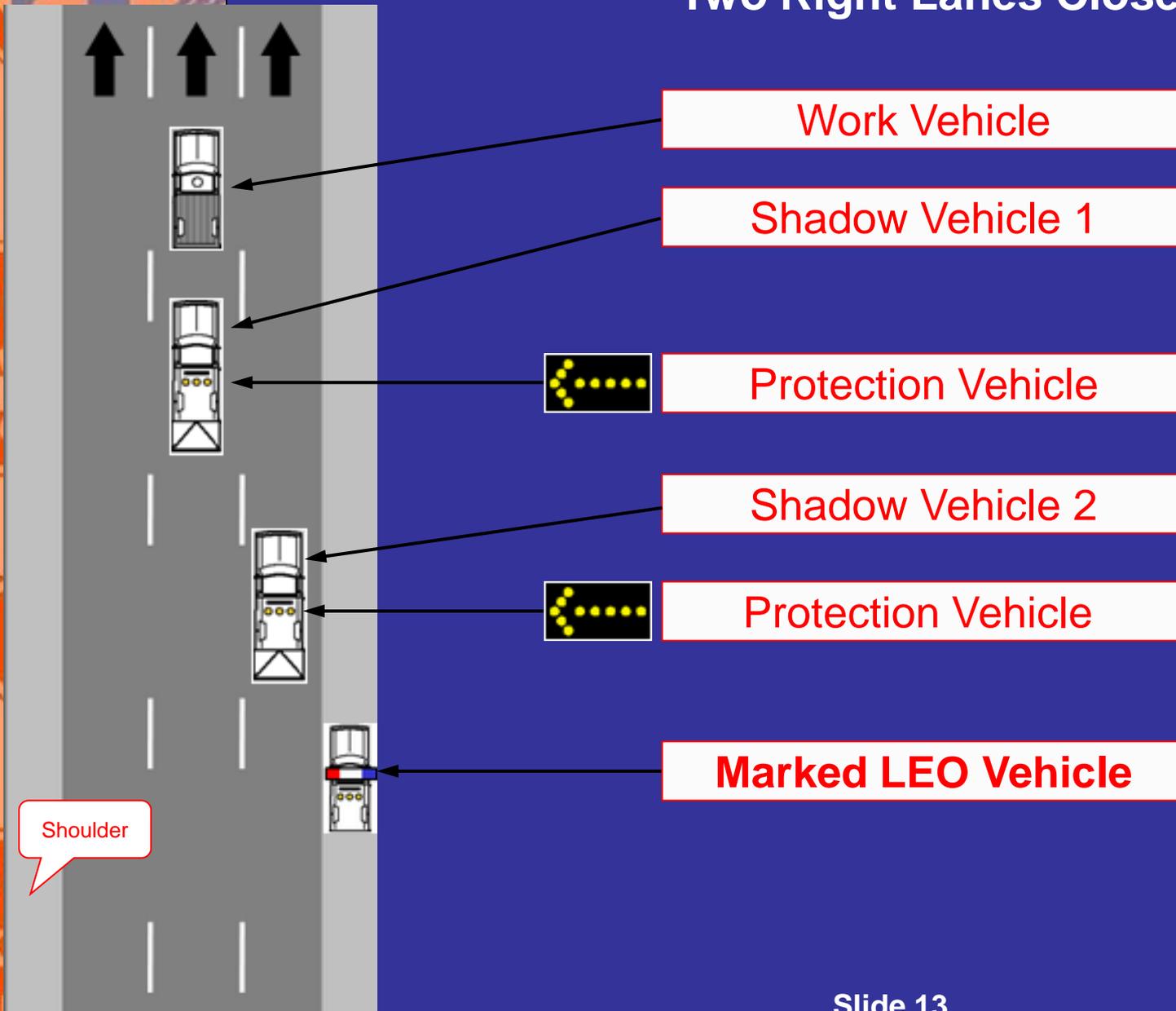
Lane closures for roadways with 4 lanes in each direction

As you have learned, typical applications do not cover every possible situation, so let's review some general concepts and guidance.

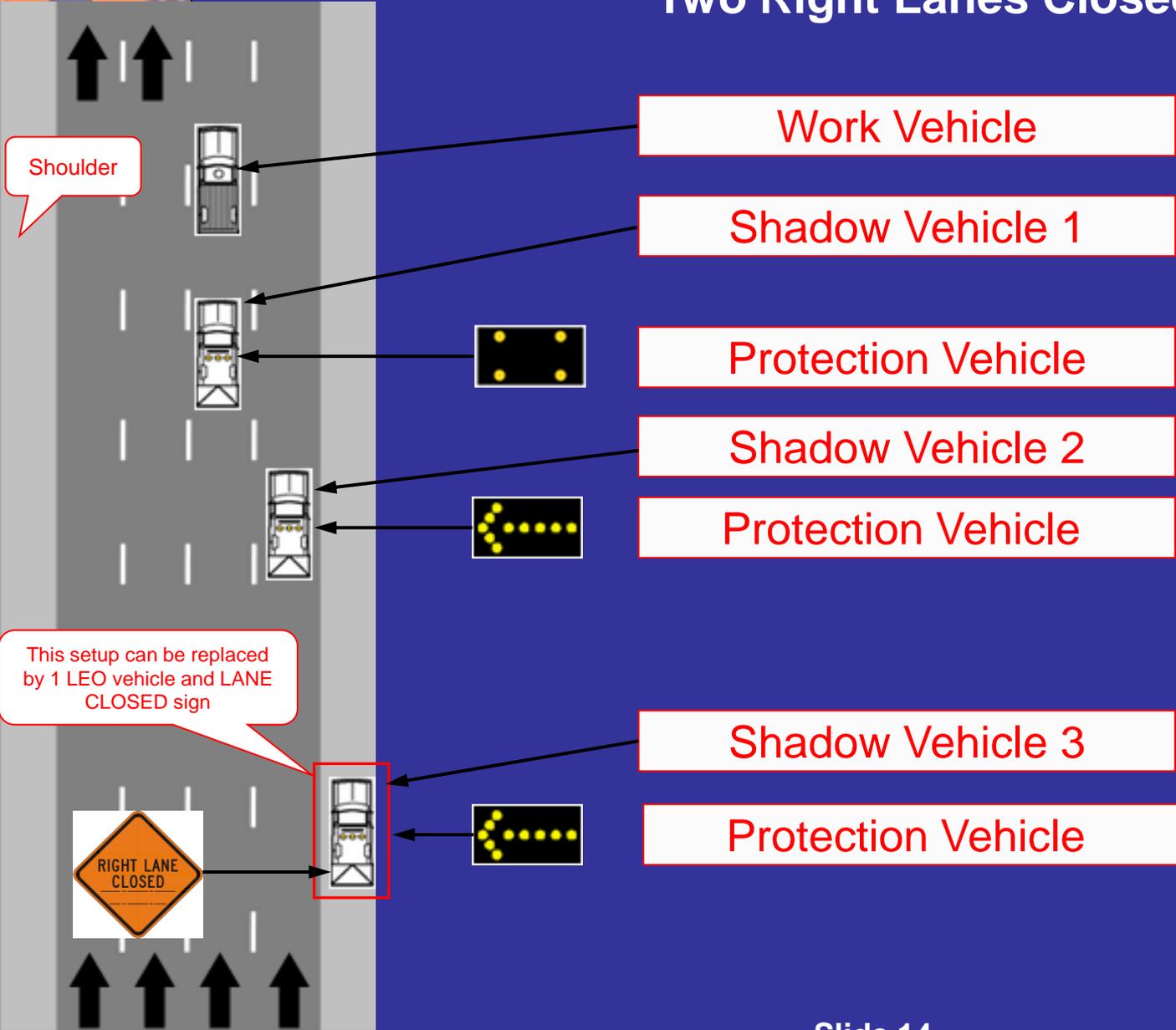
Placement of LEO Vehicle in Mobile Operations One Right Lane Closed



Placement of LEO Vehicle in Mobile Operations Two Right Lanes Closed



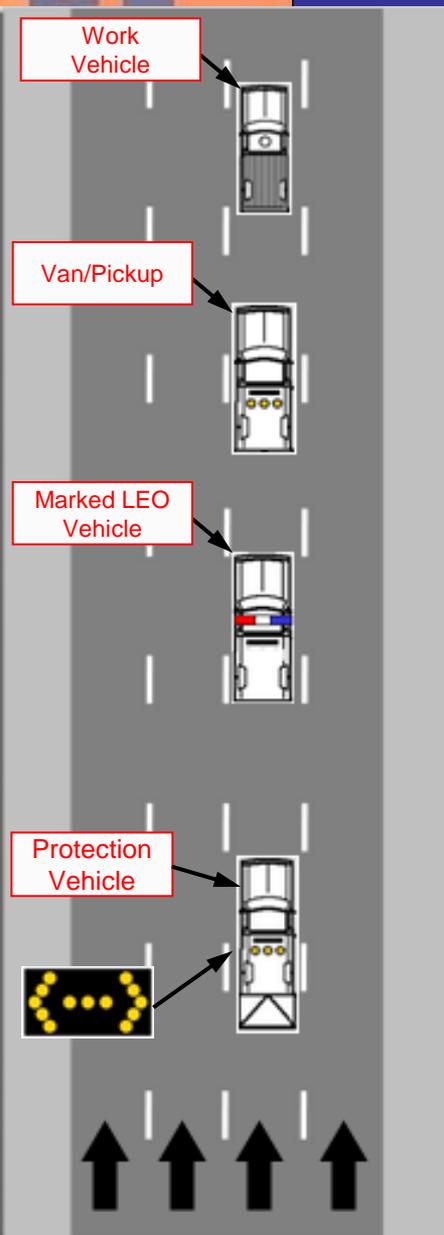
Placement of LEO Vehicle in Mobile Operations Two Right Lanes Closed



Mobile Operations

In this situation, the operation moves in one of three lanes of traffic.

- The marked LEO vehicle should not block an open lane unless a protection vehicle is deployed upstream of the LEO vehicle



600 Feet

The LEO car should be at least 600 feet ahead of the protection vehicle.

- The distance between the vehicles may be increased or decreased depending on the type of work, terrain, local area and other factors

True/False

Question 1

LEO vehicles in stationary work zones are placed in the closed lane behind a protection vehicle.

A.True

B.False

Multiple Choice

Question 2

In mobile operations, the protection vehicle is:

- A. Deployed upstream of the LEO vehicle.
- B. Not required.
- C. Deployed downstream of the LEO vehicle.
- D. Used only at nighttime.

True/False

Question 3

When the right lane is closed to traffic, LEO vehicles may be placed on the median or on the right shoulder.

A.True

B.False

Multiple Choice

Question 4

When queues develop, the LEO vehicle should be relocated to _____.

- A. the beginning of the queue
- B. shoulder
- C. the median
- D. stay in the same place

True/False

Question 5

The LEO vehicle should be positioned facing the oncoming traffic.

A.True

B.False

Answer Key

1. B

2. A

3. A

4. A

5. A

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