

Virginia Department of Education

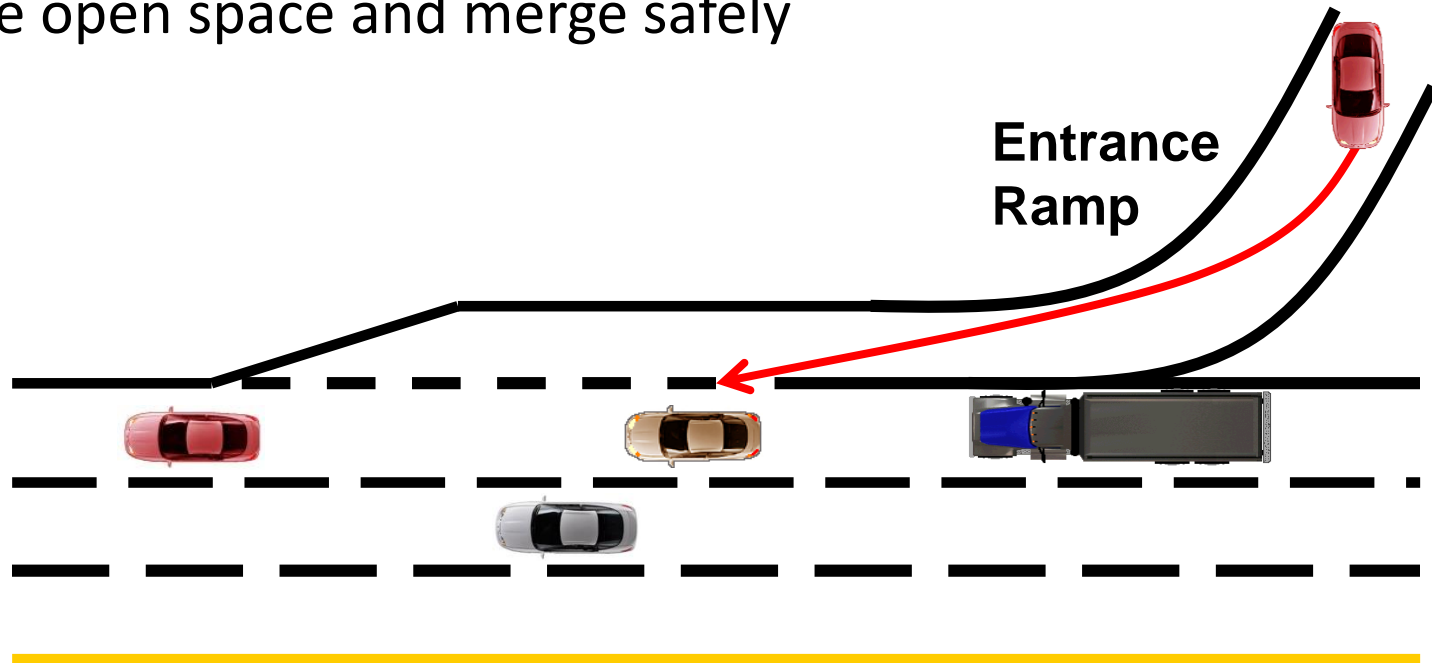
Expressway Note Packet

Entrance Ramp

The entrance ramp allows drivers to enter the ramp and begin searching for a gap/open space

Accelerate to speed of traffic

Determine the open space and merge safely



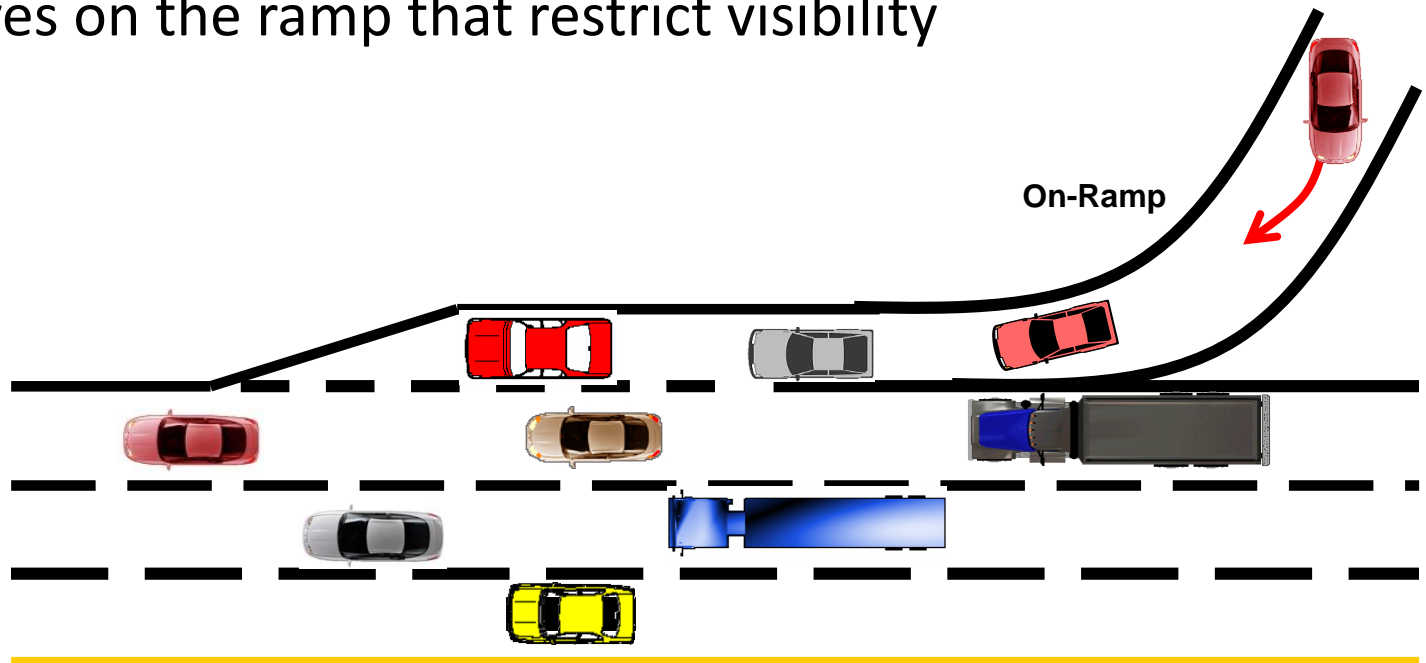
Entrance Ramp Problems

Heavy traffic, short ramps and acceleration lanes

High walls that may block visibility

Traffic ahead on the ramp that slows or stops abruptly

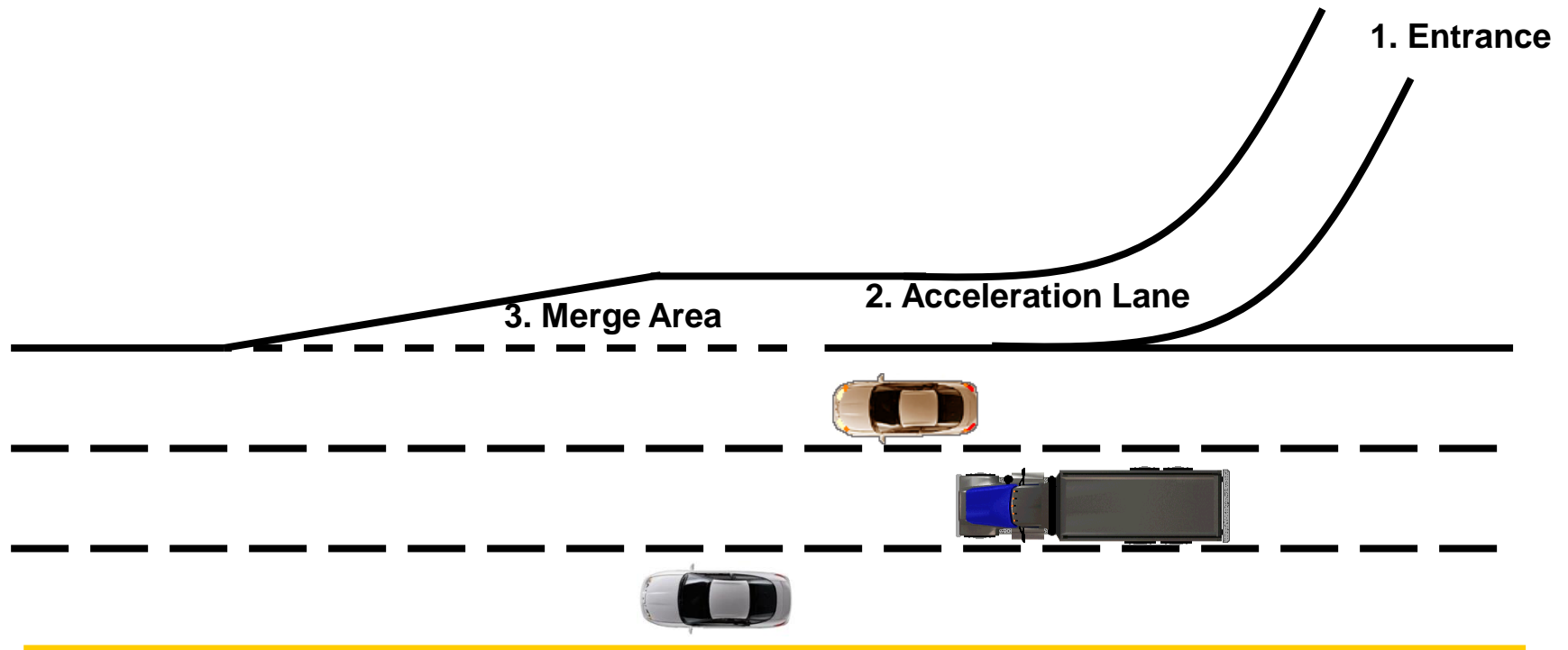
Sharp curves on the ramp that restrict visibility



Entering the Expressway

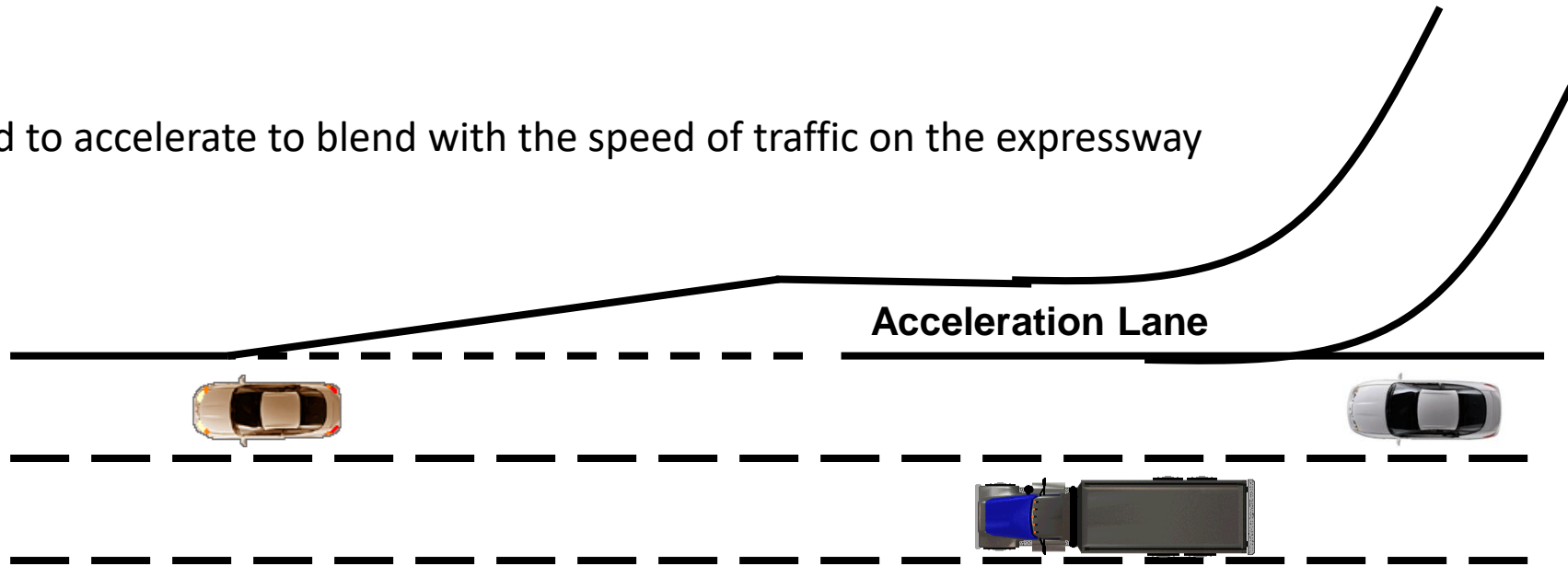
3 Parts of the Entrance Ramp

1. Entrance
2. Acceleration lane
3. Merge area



Acceleration Lane

Used to accelerate to blend with the speed of traffic on the expressway



Good Habits Using the Acceleration Lane

Maintain speed/acceleration

Signal

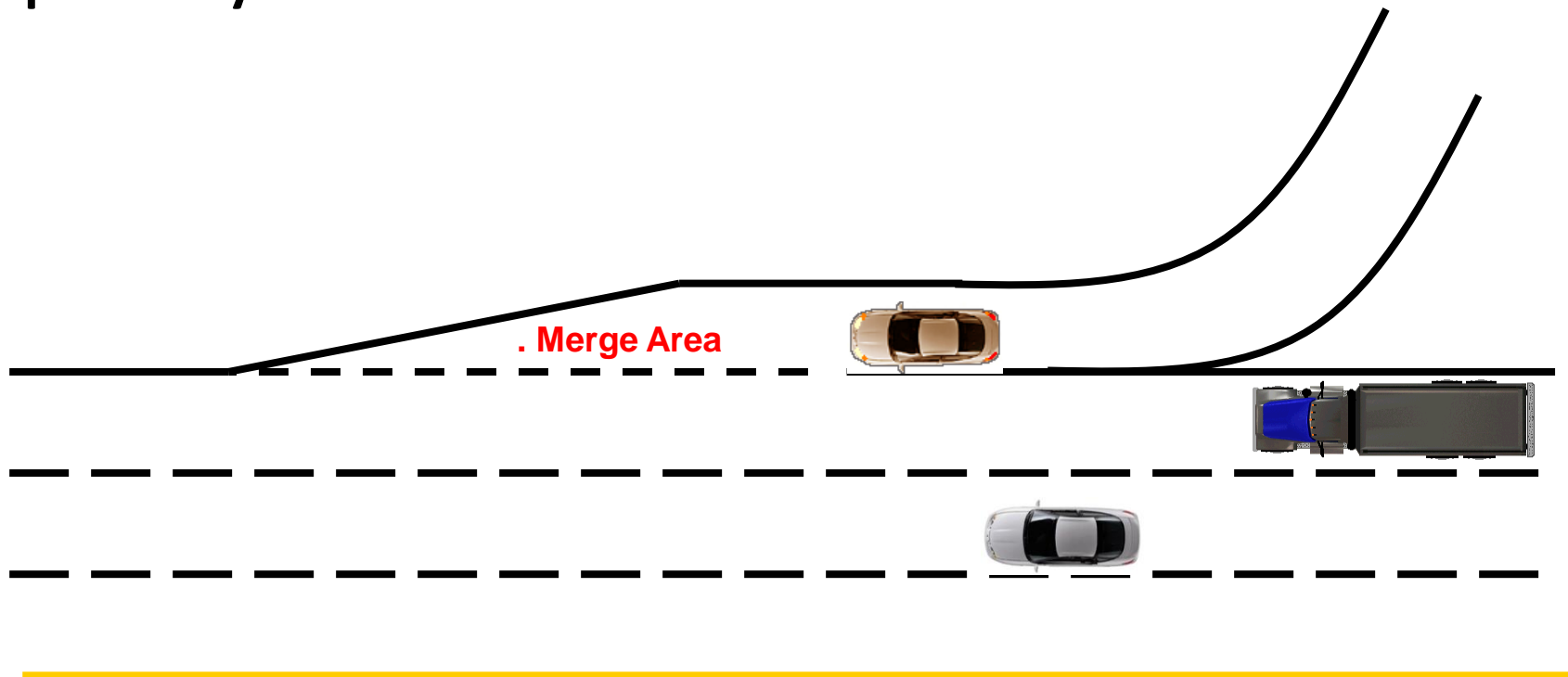
In the acceleration lane accelerate to the speed of vehicles on the limited access road

Continue to check front and rear zones, mirrors and blind spot

Decide when and where to merge

Merge Lane

The merge area provides a designated space to blend into expressway traffic



Merging—Selecting a Gap

Check Front Zone

Check Rear and Left Rear Zones

Select Gap

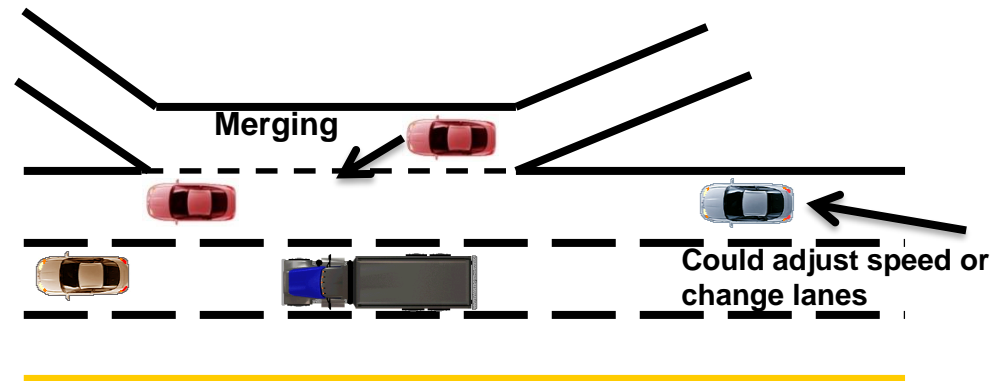
Identify a Target Area in the Open Space and Merge

Merging Problems

Heavy traffic

Lack of a gap

Traffic slowing or stopping ahead



*****When a driver is attempting to merge onto the expressway, help them by adjusting speed or changing lanes if it is safe to do so**

Ramp Meters

Entrance ramp traffic lights are designed to distribute traffic onto the expressway when traffic is heavy

Permits one car at a time to enter the expressway

Entrance Ramp Mistakes

If you ever enter a ramp area and see it marked with “DO NOT ENTER” and/or “WRONG WAY” signs, immediately pull over to the edge of the road, **you are going in the wrong direction**

The possibility of a collision is high

When the way is clear, turn around and get off the ramp

Expressway Numbering

Even numbers go east-west (I-64, I-66)

Odd numbers go north-south (I-77, I-81, I-95)

Odd numbers begin in the west and get larger as they move east

Even numbers begin in the south and get larger as they move north

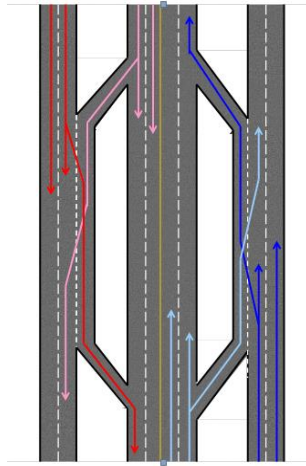
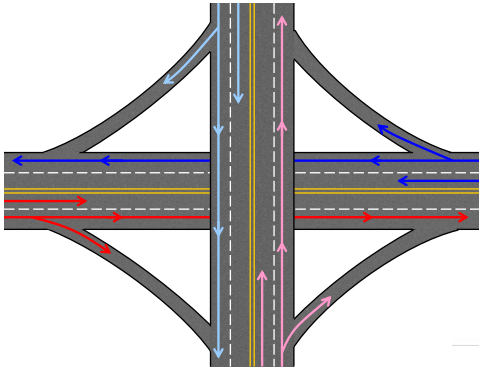
3-digit numbers designate an alternate route

If the first digit is even, the alternate route goes around the city (I-664)

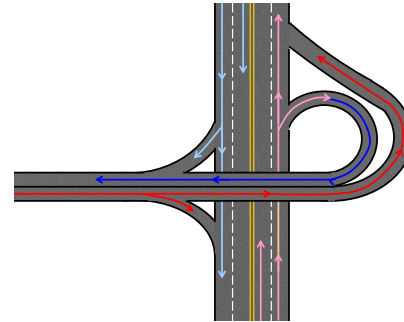
If it is odd, it leads into the city (I-164)

Types of Entrance/Exit Ramps

Cloverleaf Interchange



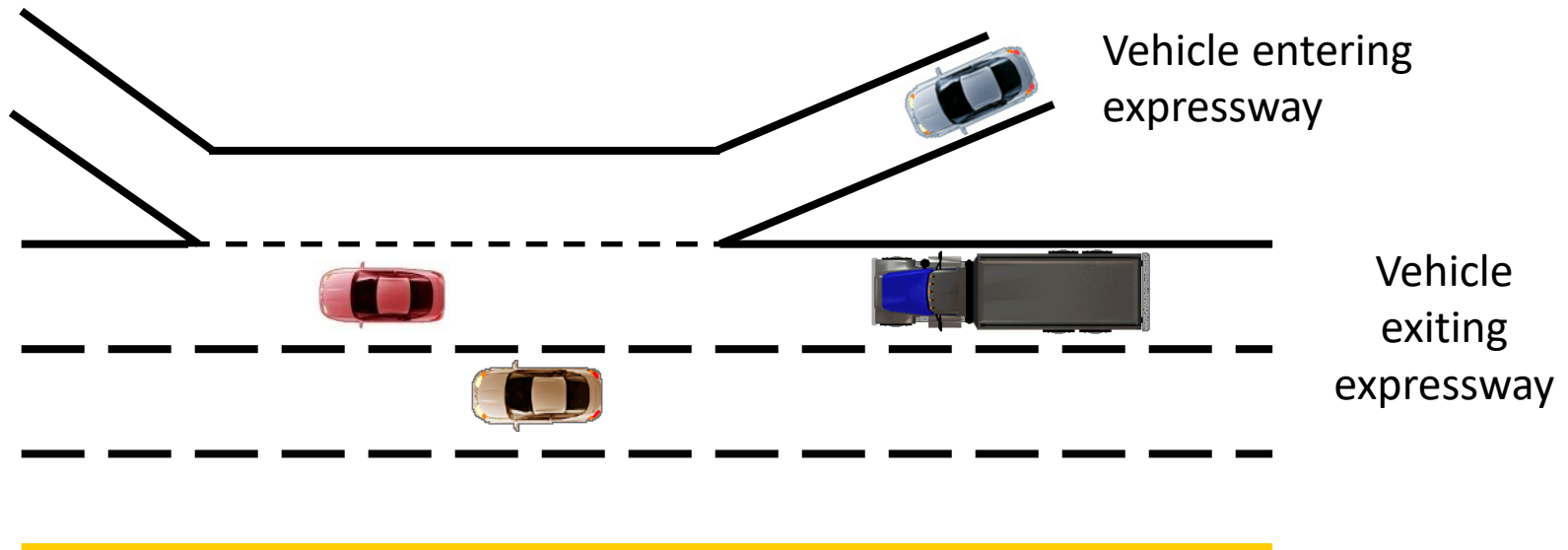
Trumpet Interchange



Frontage Road Interchange

Weave Lane

- A “weave” lane serves as both an entrance and an exit lane
- Traffic entering and exiting must use the same lane
 - Conflicts can occur
 - The driver entering from the entrance ramp should yield to the driver leaving the expressway

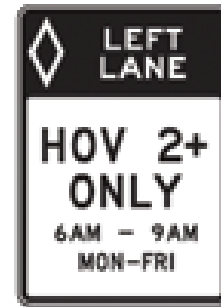


Expressway Signs

Warning signs



Regulatory Signs



High Occupancy Vehicles only

During heavy traffic periods, HOV lanes are reserved for buses, carpools, other high occupancy vehicles

Motorcycles and certain clean special fuel vehicles are also allowed to use the HOV lane

Expressways through cities

Be prepared for sudden “slow down” and congestion

Avoid driving in the right lane when vehicles are merging

Search for signs, signals, and roadway markings

Search for exits early to avoid last minute lane changes

Driving on Expressways

Wolf packs are groups of drivers traveling together at higher speeds

Driving in a “wolf pack” allows you little or no margin of safety

Avoid “wolf packs”

If you see a “wolf pack” approaching from the rear, move over and let them by you

Lane Choice

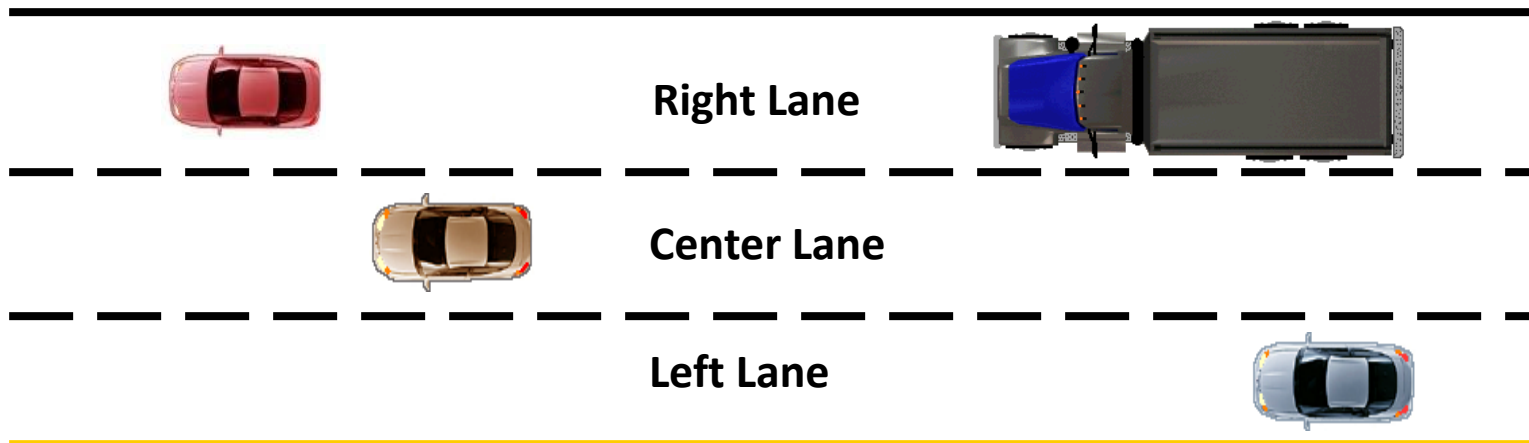
Lane choice is dependent upon several factors

Volume of traffic

Type of traffic

Speed

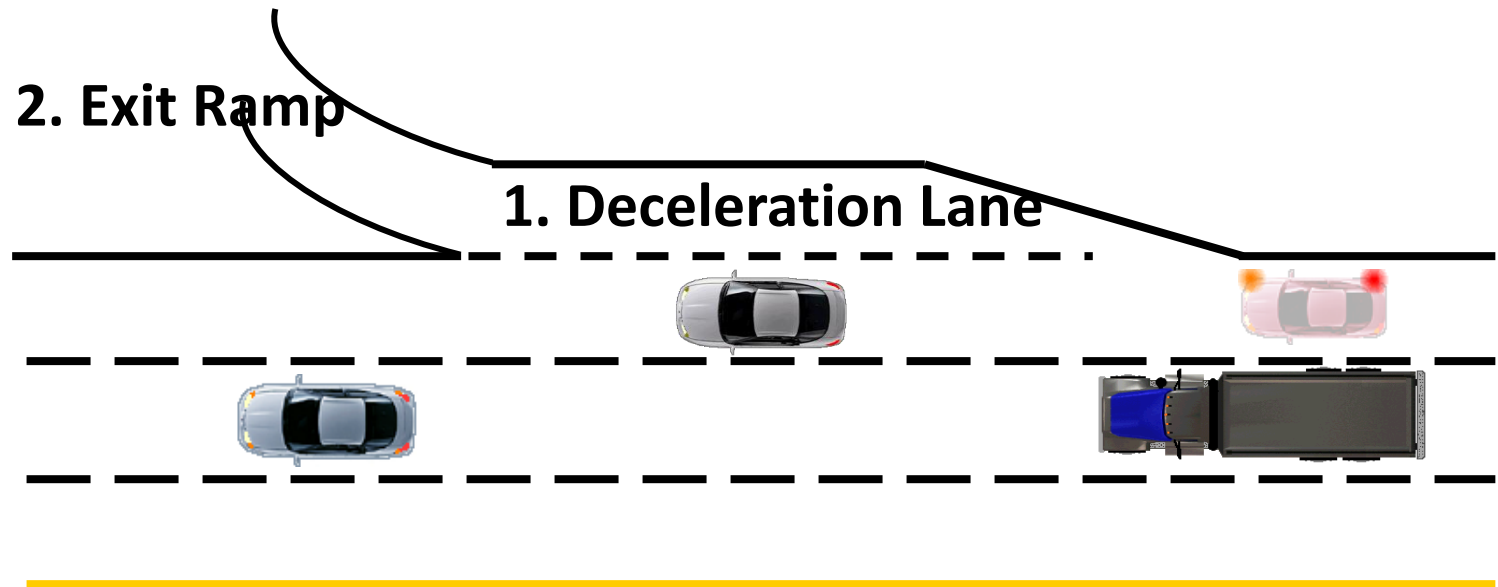
Planned exit



Exiting an Expressway

The exit has two components:

1. Deceleration lane
2. Exit ramp



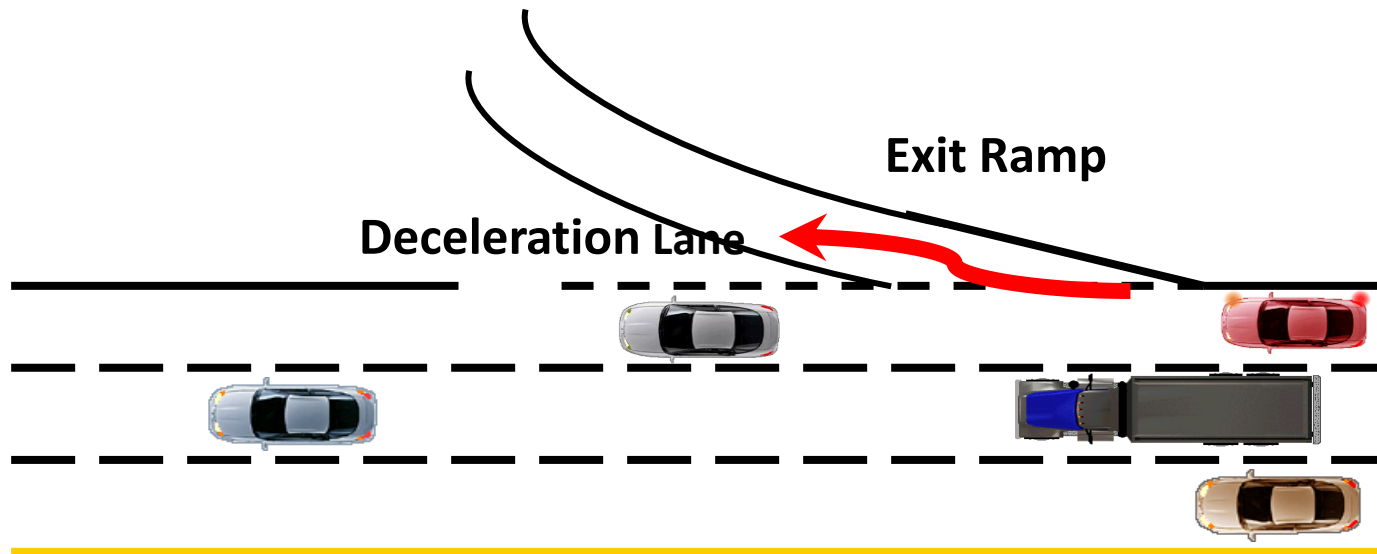
Deceleration Lane

This is the area where speed can be significantly reduced

Deceleration lanes allow drivers to reduce their speed without blocking traffic on the expressway

Look for the advisory speed sign for the deceleration lane

Wait until reaching the deceleration lane before reducing speed



Exit Ramp

THE EXIT RAMP ALLOWS TRAFFIC TO ENTER AN ADJOINING ROADWAY

1. Brake to Warning Sign Speed — Check Behind
2. Scan New Path of Travel to the Front
3. Search for Traffic Control Signs or Signals

Potential Exiting Problems

Short deceleration lane

Sharp curve on ramp

Traffic stopped on the exit ramp

There may be a STOP sign or a traffic light at the end of the exit ramp. The driver must adjust from a fast speed to a STOP in a short distance.

Applying SEET on Expressways

Search for

Signs, signals and markings

Sudden changes in traffic flow

Constant lane changers

Traffic entering and exiting the expressway

Tailgaters

Traffic suddenly slowing

Evaluate – the potential hazards above

Example: Is my exit coming up soon and I need to change lanes?

Execute

Avoid sudden moves

Use minimal steering inputs to change lanes when passing, entering, or exiting

Avoid last minute decisions or indecision

higher speeds demand quicker decisions

Signal for every maneuver

In Time