# **Driver Training**

# Performance Outcome 8.5 8.1

Operate a patrol law enforcement vehicle.

# **Training Objectives Related to 8.5 8.1**

2. 1. Given a practical exercise, demonstrate operation of a patrol law enforcement vehicle.

**1.** 2. Given a written exercise, identify factors to consider related to the operation of a patrol law enforcement vehicle.

**Criteria:** The trainee student shall be tested on the following:

# Given a practical Practical exercise:

8.5.11. Demonstrate a thorough physical and visual inspection of a law enforcement vehicle.

8.5.12. <u>8.1.2.</u> Demonstrate the proper usage of a safety belt in the operation of law enforcement vehicle.

8.5.13. Demonstrate the proper techniques of acceptable steering methods.

8.5.13.1. Hand position on the steering wheel

8.5.13.2. Shuffle steering

8.5.14. Demonstrate the proper techniques in braking (with or without ABS)

8.5.14.1. Heat/cool

8.5.14.2. Threshold

8.5.14.3. Anti-lock braking systems

8.5.15. Demonstrate the proper techniques in for backing a vehicle.

8.5.16. 8.1.3. Demonstrate how to control a law enforcement vehicle using acceptable techniques in the following vehicle movements:

8.5.16.1. 8.1.3.1. Parking

8.1.3.1.1. Angle

8.1.3.1.2. Parallel

8.1.3.1.3. Perpendicular

8.5.16.2. 8.1.3.2. "Y" turn

8.5.16.3. <u>8.1.3.3.</u> Backing

# 8.5.17. Operate a law enforcement vehicle in night conditions.

#### Given a written exercise:

8.5.1. 8.1.4. Identify the three components of defensive driving and their effect on vehicle accidents crashes.

8.5.1.1. Driver

8.5.1.2. Vehicle

8.5.1.3. Environment

8.5.2. 8.1.5. Identify the five steps of defensive driving.

8.5.2.1. Scan

8.5.2.2. Identify

8.5.2.3. Predict

8.5.2.4. Decide

8.5.2.5. Execute

8.5.3. 8.1.6. Identify driving movements, which most frequently contribute to vehicle accidents crashes.

8.5.4. 8.1.7. Identify factors that contribute to the effective use of a police law enforcement radio.

8.5.5. 8.1.8. Identify the importance of seat belts, air bags, and other vehicle safety devices.

8.5.6. 8.1.9. Identify and compare the different characteristics of night nighttime driving to daytime driving, and identify how the human eye is affected.

8.5.7. 8.1.10. Identify factors that influence the overall stopping distance of a vehicle.

8.5.8. 8.1.11. Identify the effect speed has on observation and perception during patrol.

8.5.9. Identify causes and steps to correct skids.

8.5.10. 8.1.12. Identify liability issues related to operating a patrol <u>law</u> enforcement vehicle.

8.1.13. Identify how lighting conditions impact or affect defensive driving skills.

**Lesson Plan Guide:** The lesson plan shall include the following all items listed in the Criteria section and the additional information below:

# 12. Practice: Instructor led demonstration:

a. 1. Demonstration of Demonstrate a thorough physical and visual inspection of a law
enforcement vehicle
a. Check fluid levels and add fluid if necessary
b. Check tire pressure and adjust as necessary
c. Check tread depth and inspect tire for abnormal wear or other deficiencies
d. Check all safety and emergency equipment
e. Check for internal and external damage
f. Check for weapons and contraband
<b>b.</b> Demonstration of the proper usage of a safety belt in the operation of law
enforcement vehicle
c. Demonstration of the proper techniques of acceptable steering methods
1. Hand position on the steering wheel
2. Shuffle steering

e. Demonstration of the proper techniques in braking (with or without ABS)

1. Heat/cool
2. Threshold
3 Anti-lock braking systems
f. Demonstration of the proper techniques in backing a vehicle
g- Demonstration of the control a vehicle using acceptable techniques in the
following vehicle movements:
1. Parking
2. "Y" turn
3. Backing
h. Operation of a law enforcement vehicle in night conditions
2. Demonstrate the Operation operation of a law enforcement vehicle in night nighttime
conditions
1. The components of a physical and visual inspection of a law enforcement vehicle
2. 3. The three components of defensive driving and their effect on vehicle accidents
<u>crashes</u>

a. Driver
b. Vehicle
c. Environment
3. 4. The five steps of defensive driving
a. Scan
b. Identify
c. Predict
d. Decide
e. Execute
4. Driving movements which most frequently contribute to vehicle accidents
5. Factors that contribute to the effective use of a police radio
6. 5. The importance of seat belts, air bags, and other vehicle safety devices
a. Airbags are supplemental safety devices
b. Seatbelts are primary safety devices

7. 6. The different characteristics of night driving to daytime driving and how the human
eye is affected
a. The effects on vision related to light and dark environment adaptation
8-7. Factors that influence the overall stopping distance of a vehicle
a. Driver perception or reaction
(i). Reaction time and overall stopping distance
(ii). Driver distractions inside the vehicle
b. Vehicle and vehicle condition
c. Visibility
d. Road conditions
<u>e. Weather</u>
<u>f. Speed</u>
g. Brake fade
9. The effect speed on observation and perception during patrol
10. Causes and steps to correct skids

11. Liability issues related to operating a patrol vehicle

Instructor Note: Advise trainees that they will need to identify department policy related to use of patrol vehicles as part of department training.

# Performance Outcome 8.6 8.2

Demonstrate physical skills needed to operate a patrol law enforcement vehicle.

# **Training Objective Related to 8.6 8.2**

**1.** Given a physical practical exercise, demonstrate physical skills required to properly operate a patrol law enforcement vehicle.

**Criteria:** The trainee student shall be tested on the following:

8.6.1. 8.2.1. Demonstrate One one and two-hand gripping of steering wheel.

8.6.2. <u>B.2.2. Demonstrate Leg/brake leg</u> coordination for safe <u>operation</u> stopping of <u>a law\_enforcement</u> vehicle at varying speeds.

8.6.3. <u>B.2.3.</u> <u>Demonstrate</u> <u>Hand/eye</u> <u>hand/eye</u> coordination <u>(i.e.</u> to operate radio communication/seatbelt removal/drawing weapon, if needed).

8.6.4. Lift feet interchangeably to use brake and accelerator or shift gears

8.6.5. <u>8.2.4.</u> Hear/speak with clarity for <u>Listen and understand</u> radio communications.

8.2.5. Speak with clarity during radio communication.

8.6.6. <u>8.2.6.</u> Rotate shoulders <u>Manipulate upper body</u> to permit observation to sides and rear as needed.

8.6.7. Bend to get in and out of car

**Lesson Plan Guide:** The lesson plan shall include <u>all items listed in the Criteria section.</u> the following:

- 1. One and two-hand gripping of steering wheel
- 2. Leg/brake coordination for safe stopping of vehicle at varying speeds
- 3. Hand/eye coordination to operate radio communication/seatbelt removal/drawing weapon if needed
- 4. Lifting feet interchangeably to use brake and accelerator or shift gears
- 5. Hearing/speaking with clarity for radio communications
- 6. Rotating shoulders to permit observation to sides and rear as needed
- 7. Bending to get in and out of car

#### Performance Outcome 8.4 8.3 (combined with former 8.2)

Recover from high speed response driving and pursuit driving off road at various speeds

Identify factors to prevent and recover from skids or loss of traction.

#### Training Objectives Related to 8.4 8.3

- 1. Given a practical exercise, demonstrate the techniques for skid recovery both on and off the roadway, which include proper techniques for skid recovery in low traction.
- **2.** Given a written exercise, identify areas of reduced traction, the different types of skids, skid prevention techniques, skid recovery techniques, and off-road recovery techniques.

**Criteria:** The trainee student shall be tested on the following:

#### **Practical exercise:**

- 8.3.1. Demonstrate proper techniques for recovery of two wheels in a low-traction environment.
- 8.3.2. Demonstrate proper techniques for recovery of four wheels in a low-traction environment.
- 8.3.4. Demonstrate skid recovery utilizing a skidpan, tire covers, courses, or vehicles which are designed to induce skidding.

#### Written exercise:

8.3.5. Identify areas of reduced traction and low-traction environments.

- 8.3.6. Identify the different types of skids.
- 8.3.7. Identify skid prevention techniques.
- 8.3.8. Identify how Electronic Stability Control (ESC) works, and the dangers of overreliance on ESC.
- 8.3.9. Identify techniques for recovering from an oversteer skid, with a non-ESC equipped vehicle.
- 8.3.10. Identify techniques for recovering from an oversteer skid, with an ESC equipped vehicle.
- 8.3.11. Identify off road recovery techniques with or without ESC.

Lesson Plan Guide: The lesson plan shall include the following all items listed in the <a href="Criteria section">Criteria section and the additional information below.</a>

- 1. Areas of reduced traction and unstable surfaces
  - a. Wet roadway
  - b. Icy roadway
  - c. Snow covered roadway
  - d. Dirt or Gravel
- 2. Define the different types of skids:
  - a. Front wheel skid (understeer): The characteristic of a vehicle to continue in a straight line, sliding to the outside of the turn and losing traction in the front

tires; a front wheel drive vehicle is more likely to under steer than other vehicles, also known as "plowing"

- b. Rear wheel skid (oversteer): The traction on the rear tires is less than that on the front causing the rear end to slide towards the outside of a curve due to the loss of traction; a rear wheel drive vehicle is more likely to over steer than other vehicles, also known as "fishtailing"
- c. All-wheel skid: The loss of traction of all four wheels simultaneously
- d. Hydroplane: A loss of traction that occurs when a vehicle's tire or tires ride upon the surface of the water rather than the roadway.
- e. Acceleration skid: The loss of traction of a wheel(s) due to excessive power applied when accelerating

# 3. Skid prevention techniques

- a. Reducing speed to properly corner and stop the vehicle
- b. Adjusting speed and driving in areas of reduced traction utilizing proper steering and braking techniques
- c. Scanning ahead
- 4. Techniques for recovering from an oversteer skid, with a non-ESC equipped vehicle
  - a. Off the gas
  - b. Off the brake
  - c. Counter steer

- d. Look where you want to go
- 5. Techniques for recovering from an oversteer skid, with an ESC equipped vehicle
  - a. Off the brake
  - b. Counter steer
  - c. Smooth acceleration
  - d. Look and steer where you want to go
- 6. Techniques for recovering from an understeer skid, with or without an ESC equipped vehicle
  - a. Off the gas
  - b. Off the brake
  - c. Manipulate the steering wheel to regain rolling traction
  - d. Steer back into the turn
  - e. Look and steer where you want to go
- 7. Off road recovery techniques with or without ESC
  - a. Off the gas
  - b. Off the brake
  - c. Smooth steering
  - d. Identify safe path back to roadway

Performance Outcome 8.3 8.4. (formerly 8.7)

Establish a stationary roadblock <u>roadblocks</u> using a patrol vehicle to assist in apprehending a suspect.

Training Objectives Related to 8.3 8.4

**1.** Given a written exercise, identify factors to consider when establishing roadblocks with a patrol law enforcement vehicle.

**Criteria**: The student shall be tested on the following:

8.4.1. Identify the types of roadblocks.

8.4.2. Identify factors to be considered before establishing a roadblock.

8.7.1. Nature/severity of crime

8.7.2. Location

8.7.3. Terrain

8.7.4. Number of officers/vehicles available

**Lesson Plan Guide:** The lesson plan shall include all items <u>listed</u> in the Criteria section and the additional information below.

1. Types of roadblocks

a. Stationary

# b. Moving (Rolling)

2.	Factors '	to cons	sider be	efore	establis	shing a	roadblock

a. Nature/Severity of crime
b. Location
<u>c. Terrain</u>
d. Number of officers/vehicles available
e. Use of force considerations
f. Vehicle Positioning
1. Nature/severity of crime
2. Location (least amount of risk to public)
3. Terrain
4. Number of officers/vehicles available
5. Choose a level surface
6. Do not use curves, hill crests, or blind spots

- 7. As the driver, place the patrol vehicle at a 45 degree angle to the oncoming car.
- 8. If using two patrol vehicles, form a V.

Instructor Note: Advise trainees that they will need to identify department policy related to establishing stationary roadblocks as part of their department training.

Performance Outcome 8.1 8.5. (combined with 8.3)

Identify factors to consider when engaging in <del>pursuit driving or</del> emergency response driving.

**Training Objectives Related to 8.1 8.5** 

- **1.** Given a practical exercise, demonstrate proper techniques used during emergency response driving.
- **1. 2.** Given a written exercise, identify factors to consider when engaging in pursuit driving or emergency vehicle response driving.

**Criteria:** The trainee student shall be tested on the following:

#### **Practical exercise:**

8.3.12. 8.5.1. Demonstrate proper steering techniques.

8.3.13. 8.5.2. Demonstrate braking techniques (with or without ABS).

8.3.14. 8.5.3. Demonstrate cornering techniques.

8.3.15. 8.5.4. Demonstrate emergency equipment usage.

8.5.5. Demonstrate emergency response driving for a minimum of three minutes with simulated traffic or traffic control devices and utilize commentary driving.

#### **Written Exercise:**

8.1.1. Identify five factors to be considered when making a decision to initiate a pursuit.

8.1.2. <u>8.5.6.</u> Identify five common hazards associated with <del>pursuit or</del> emergency response driving, in a congested area or on an open road.

8.1.3. Identify factors that impact terminating a vehicle pursuit.

8.1.4. 8.5.7. Identify legal considerations for emergency response driving. vehicle operations.

8.1.4.1. Code of Virginia

8.1.4.2. Case law

8.3.1. 8.5.8. Identify "due regard for safety."

- 8.3.2. 8.1.6. 8.5.9. Identify the psychological factors that affect the driver in high speed during emergency response driving.
  - 8.3.2.1. Stress involved with lengthy high speed pursuit
  - 8.3.2.2. Managing lengthy high speed chases
- 8.3.3. 8.1.7. 8.5.10 Identify the physiological factors that affect the driver in during high speed emergency response driving of a law enforcement vehicle (effect of speed on observation and perception.
- 8.3.4. The Code of Virginia statutes pertaining to the operation of an emergency vehicle (redundant)
- 8.3.5. The Code of Virginia statutes pertaining to emergency equipment and other permissible lights (redundant)
- 8.3.6. 8.1.8. 8.5.11. Identify the effect of the laws of nature environmental factors have on a vehicle.
- 8.3.7. 8.1.9. 8.5.12 Identify the importance of traction and the effect the tires have on maintaining proper traction.
- 8.3.8. The relevance of converting miles per hour (mph) into feet per second (ft./sec.)

8.3.9. The effect that speed has on the kinetic energy produced by a vehicle.

8.5.13. Identify the effect speed and weight has on the vehicles stability and force of impact.

8.3.10. 8.1.11. 8.5.14. The vehicle dynamics Identify dynamics and changes in weight transfer of a law enforcement vehicle in during high speed emergency response driving.

8.5.15. Identify proper communication and radio techniques.

8.3.11. 8.1.13. the legal aspects (civil liability) and use of force considerations of vehicle operations., especially in emergency operations of a vehicle.

8.5.16. Identify emergency equipment limitations.

Lesson Plan Guide: The lesson plan shall include the following all items listed in the Criteria section and the additional information below.

- 2. 1. Demonstrate proper techniques used during various driving
  - a. Steering techniques
    - (i). Hand placement
    - (ii). Shuffle steering

# (iii). Proper steering wheel manipulation

- b. Braking techniques (with or without ABS)
  - (i). Foot placement and pedal modulation
  - (ii). Threshold braking with or without ABS
  - (iii). Straight line braking, braking while turning, braking then turning
- c. Cornering techniques
  - (i). Proper entry speed
  - (ii). Braking prior to entering the turn
  - (iii). Vehicle placement in relation to the apex(s) of a turn
  - (iv). Acceleration out of a turn
- d. Emergency equipment usage
- 2. Emergency response driving
  - a. Maintain adequate communication and radio usage
  - b. Maintain appropriate use of emergency equipment
  - c. Situational reassessment
  - d. Due regard for safety
  - e. Control the law enforcement vehicle

f. Drive during the emergency response for a minimum of three minutes with simulated traffic or traffic control devices

# (From LPG 8.1)

- 1. Factors to be considered when making a decision to initiate a pursuit: a. Priorities for the seriousness of the violation **b**. Congested area c. Open road d. Environmental conditions e. Speed of other vehicles 2. 3. Common hazards associated with pursuit or emergency response driving in a congested area or on an open road: a. Children Pedestrians b. Walkers School zones and buses
  - (i). Emergency vehicles and their operators are not exempt from stopping for stopped school buses

c. Skateboarders Low speed vehicles (i.e. golf cart, moped, riding lawnmower,
etc.)
d. In-line skaters Construction zones and equipment
e. Bicyclists
<u>e.</u> <del>Cars</del> <u>Vehicles</u>
f. Buses and Commercial equipment/Vehicles
g. Mopeds
f. Trains and railroad crossings
g. Hazards of proceeding through intersections Intersections
3. Factors that impact terminating a vehicle pursuit
4. Legal considerations for emergency response driving
a. Code of Virginia
b. Case law
c. Department policy (department training)
(From LPG 8.3)

1. 5. The techniques of pursuit and for emergency response driving on an open road: a. "Due regard for safety" (i). § 46.2-920 b. The psychological factors that affect the driver in high speed during emergency response driving. 1. (i) Stress involved with lengthy high speed pursuit 2. Managing lengthy high speed chases (ii). Over confidence (iii). Tunnel vision (iv). Personal emotions (v). Distractions c. The physiological factors that affect the driver in during high speed emergency response driving of a law enforcement vehicle (effect of speed on observation and perception) (i). Eyesight

(ii). Hearing (iii). Fatigue (iv). Motor Skills d. The Code of Virginia statutes pertaining to the operation of an emergency vehicle e- The Code of Virginia statutes pertaining to emergency equipment and other permissible lights Note: Emergency vehicles and their operators are not exempt from stopping for stopped school buses. f. d. The effect of the laws of nature environmental factors on a vehicle (i). Weather (ii). Surface conditions (iii). Visibility (iv). Topography g. e. The importance of traction and the effect the tires have on maintaining

proper traction

(i). Tire pressure (Friction/contact patch)
(ii). Tread depth
(iii). Ambient temperature
h. The relevance of converting miles per hour (mph) into feet per second (ft./sec.)
i. The effect that speed has on the kinetic energy produced by a vehicle
j. f. The vehicle dynamics and changes in weight transfer of a vehicle in during high
speed emergency response driving
(i). Longitudinal
(ii). Lateral
k. g. The legal aspects (civil liability) and use of force considerations of emergency
vehicle operations especially in emergency operations of a vehicle
(i). Compensatory
(ii). Punitive
h. Emergency equipment limitations
(i). Conditions that impact the effectiveness of the siren

#### (ii). Conditions that impact the effectiveness of emergency lights

- i. Emergency equipment usage
  - (i). Emergency lights (effective distances)
  - (ii). Siren features and distance
- j. Proper communication and radio techniques
  - (i). Timing of communication
  - (ii). Provide updates

Performance Outcome 8.2 8.6 (NEW- separated from 8.1)

Operate a law enforcement vehicle before, during, and after a pursuit.

# Training Objectives Related to 8.2 8.6

- 1. Given a practical exercise, demonstrate proper driving techniques, while engaged in a vehicle pursuit, during daytime and nighttime conditions, as both primary and secondary.
- 2. Given a written exercise, identify factors to consider when engaging in pursuit driving or emergency response driving.

Criteria: The student shall be tested on the following:

**Practical Exercise:** 

- 8.6.1. Engage in a vehicle pursuit during daytime conditions as the primary vehicle for a minimum of 3 minutes.
- 8.6.2. Engage in a vehicle pursuit during daytime conditions as the secondary vehicle for a minimum of 3 minutes.
- 8.6.3. Engage in a vehicle pursuit during nighttime conditions as the primary vehicle for a minimum of 3 minutes.
- 8.6.4. Engage in a vehicle pursuit during nighttime conditions as the secondary vehicle for a minimum of 3 minutes.

#### Written Exercise:

8.1.1. 8.6.5. Identify factors to be considered when making a decision to initiate or engage in a pursuit.

8.1.2. Identify five common hazards associated with pursuit or emergency response driving in a congested area or on an open road.

8.6.6. Identify factors to consider before, during, and after a vehicle pursuit.

8.1.3. <u>8.6.7.</u> Identify factors <u>to consider</u> that <u>may</u> impact terminating a vehicle pursuit.

8.1.4. Identify legal considerations for emergency response driving.

8.1.4.1. Code of Virginia

#### 8.1.4.2. Case law

Lesson Plan Guide: The lesson plan shall include all items in the Criteria section and the additional information below:

# 1. Engage in a vehicle pursuit

- a. Maintain adequate communication and radio usage
- b. Maintain appropriate following distance
- c. Situational reassessment
- d. Due regard for safety
- e. Control the law enforcement vehicle
- 1. 2. Factors to be considered when making a decision to initiate or engage in a pursuit
  - a. Priorities for the seriousness Seriousness of the violation
  - b. Congested area Vehicle and pedestrian traffic
  - c. Open road Location of pursuit
  - d. Environmental conditions
  - e. Speed of other vehicles
  - f. Departmental policy

2. Common hazards associated with pursuit or emergency response driving in a
congested area or on an open road:
<del>a. Children</del>
<b>b</b> . Walkers
<del>c.</del> Skateboarders
d. In-line skaters
e. Bicyclists
f. Cars
g. Buses
h. Mopeds
<del>i. Trains</del>
j. Hazards of proceeding through intersections
3. Factors to consider before, during, and after a vehicle pursuit
a. Maintain adequate communication
b. Utilization of emergency and pursuit driving techniques

c. Following distance
d. Pursuit reassessment
e. Jurisdictional area (Knowing boundaries)
f. Number and type of law enforcement vehicles involved
4. Legal considerations for emergency response driving
a. Code of Virginia
<b>b.</b> Case law
c. Department policy (department training)
3. 4. Factors to consider that may impact terminating a vehicle pursuit
a. Driver's identity known
b. Weather conditions
c. Speed of violator
d. Driving behavior
e. Change in call status/urgency (emergency response)