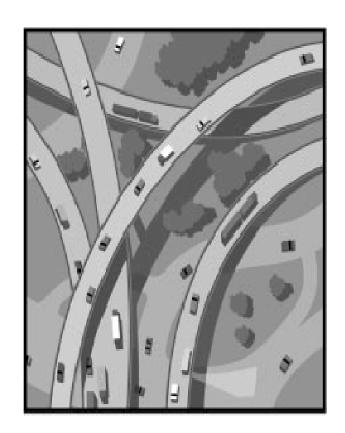
# **BTW Lesson 5**

# Traffic Flow



#### **Introduction to Lesson 5**

Driving situations become more complex in this lesson. This lesson will include rural roadways, passing and being passed, railroad crossings, and curves and hills.

It is important that your student practice lane and speed control when approaching hills, curves, and other situations where hazards need to be identified. Your student should practice passing other cars that are going under the speed limit as well as procedures for being passed. Visual scanning and targeting skills are important on this drive since your student will need to identify open and closed areas and make speed adjustments when needed. Students will need to practice the proper following distance in order to adjust to other vehicles. Other adjustments will be made for weather conditions and traffic control signs.

# **BTW Lesson 5 Checklist**

Following Time Select Fixed Object Count Time From Vehicle Ahead to Own Vehicle Adjust Speed Scanning Skills Target 20-30 Seconds 12-15 Second Minimum Keep Eyes Moving Identify Traffic Controls, Other Users and Roadway Conditions Check Mirrors	Passing Check Ahead 20-30 Sec Check Area 6 (rear) Signal Check Area 4 (left rear) Change Lanes Cancel Signal, Target Accelerate Signal Check Area 6 (rear) Check (headlights) Check Area 5 (right rear) Change Lanes Cancel Signal, Adjust Speed
Speed Adjustments Maintain Constant Speed Adjust to Conditions accelerator use brake use Speedometer Checks Legal Limits  Lane Control Proper Hand Position Visual Target 20-30 Sec Lead Time Scan 12-15 sec Gradual Steering Use of Lane Positions Adjust as Needed	Being Passed Check Ahead (area 1) Check Areas 6 and 4 (rear and left rear) Speed Adjustment Lane Position Awareness of Conflicts

# **NOTES**


#### **BTW LESSON 5**

Title:Traffic Flow

Prerequisites:

- 1. Complete BTW Lesson 4.
- 2. Classroom:

Module 4 includes mixing with traffic on rural roadways, passing and being passed, visual referencing and space management, approaching railroad crossings and curves and hills.

#### 3. Simulation:

"Rural Roadways" and "Space Cushions" simulation program. "The Margin of Safety" 16mm film.

#### Skills to be Practiced:

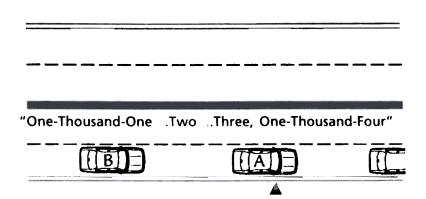
- Proper following time.
- Visual targeting 20-30 seconds.
- Scanning skills.
- Passing vehicles.
- Being passed.
- Speed and lane positioning.
- Roadside emergency stops.

### **BTW 5 Helpful Hints**

- Defensive driving is an important part of what we do. But actively seeking out information is of primary importance. Far too often we scan incorrectly the areas near and around travel paths or we fail to see potential problems.
  - Commentary driving will help the student practice scanning skills while also providing verbal feedback to the parent.
- Remember that mirrors relay only a small area of information to you. You must check blind spot areas by turning your head and looking.
- Quiz your student on the following concepts before the lesson and then demonstrate during the lesson: targeting, visual lead time (distance), scanning, blind spot checks, mirror checks, and intersection checks.
- Continual traffic checks are needed when maneuvering into limited space areas. Monitor the student to ensure the traffic checks are being made.
- Certain reference points can help when aligning your vehicle at intersections in order to get the best sight line. Review these reference points and vehicle positions.

# **NOTES**


# **Following Time**



- SELECT FIXED SPOT ON OR NEAR ROADWAY ▲
- 2. WHEN FRONT VEHICLE (A) PASSES SPOT , COUNT ONE-THOUSAND-ONE, ONE-THOUSAND-TWO, ETC.
- 3. CAR (B) SHOULD NOT REACH THE SAME SPOT BEFORE 4 SECONDS.
- 4. IF TOO CLOSE, GRADUALLY REDUCE SPEED.
- 5. WITH BAD ROAD CONDITIONS, INCREASE TIME TO 5-6 SECONDS.

# **Following Time**

## **Objective**

While driving and with minimal assistance, the student will demonstrate a minimum 4 second following time throughout BTW Lessons 3-9.

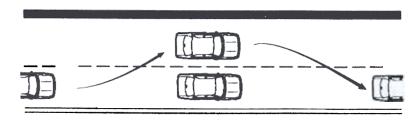
# **Driving Environment**

- Light-to-complex city traffic.
- Multiple lane roadways.
- Rural two-lane highways.
- · Areas with traffic control devices.

- Not targeting correctly the intended travel path (12-15 seconds).
- Counting too fast.
- Not adjusting speed or position to maintain proper following time.
- Confusion over when to begin or to finish counting.

# **Passing**

Is the Pass: SAFE, LEGAL, NECESSARY?



- 1. DETERMINE IF PASSING IS NECESSARY.
- 2. LOOK AHEAD 20-30 SECONDS FOR POSSIBLE CONFLICTS.
- 3. CHECK MIRRORS FOR FOLLOWING VEHICLES (AREA 6).
- 4. SIGNAL FOR LEFT LANE CHANGE AND BEGIN ACCELERATING.
- 5. CHECK LEFT REAR AREA (4) FOR OTHER VEHICLES.
- 6. CHANGE LANES AND REACH "POINT OF DECISION."
- 7. OVERTAKE VEHICLE 10-15 MPH FASTER THAN VEHICLE BEING PASSED.
- 8. SIGNAL AND CHECK RIGHT REAR AREA (4), MAKE RIGHT LANE CHANGE WHEN BOTH HEADLIGHTS ARE VISIBLE IN THE REARVIEW MIRROR.
- 9. CHECK RIGHT REAR AREA (5).
- 10. CANCEL SIGNAL, RESUME SAFE AND LEGAL SPEED.

### **Passing**

### **Objective**

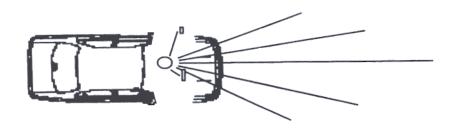
When directed or as the opportunity occurs and with minimal assistance, the student will demonstrate proper procedures while passing another vehicle at least twice.

### **Driving Environment**

- Two-lane rural highway.
- Multiple-lane roads with moderate to high speeds.
- · Freeway roads.

- Not looking 20-30 seconds ahead.
- Speed too slow while passing.
- Forgets to cancel signal after changing lanes.
- Moves back to the right lane before seeing both headlights in the mirror.
- Failure to signal, check mirrors, or make blind spot checks.
- The student does not determine the risk vs. gain.
- The student accelerates too soon before lane changing.
- Infringes upon following time with vehicle being passed.
- Failure to reevaluate passing maneuver at point of decision.
- Failure to return to safe and legal speed.

# **Scanning Skills**



- VISUALLY TARGET 20-30 SECONDS AHEAD ON OPEN HIGHWAY.
- 2. SCAN 12-15 SECONDS AHEAD FOR HAZARDS.
- 3. VISUALLY SEARCH FROM SIDE TO SIDE, LOOKING FOR HAZARDS THAT COULD ENTER INTENDED PATH OF TRAVEL.
- 4. DON'T FIXATE ON OBJECTS FOR MORE THAN 2 SECONDS; MAKE A RETURN GLANCE TO PATH-OF-TRAVEL AFTER EVERY VISUAL CHECK.
- 5. CHECK SPEEDOMETER AND INSTRUMENT PANEL.
- 6. LOOK FOR OTHER HIGHWAY USERS, TRAFFIC CONTROLS, AND ROADWAY CONDITIONS.
- 7. LOOK FOR CHANGES IN YOUR LINE-OF-SIGHT AND PATH-OF-TRAVEL (LOS-POT).
- 8. CHECK MIRRORS BEFORE/AFTER SLOWING, TURNING, AND ENTERING INTERSECTIONS EVERY 5-8 SECONDS AND WHEN A ZONE CHANGE OCCURS.

# **Scanning Skills**

# **Objective**

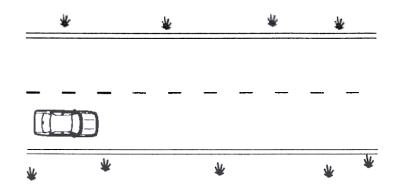
While driving and with minimal assistance, the student will demonstrate proper visual scanning skills throughout each on-street lesson.

### **Driving Environment**

- Residential, low-volume areas to complex city and freeway traffic.
- Rural two-lane traffic.

- Not looking at least one block or 12 seconds ahead.
- Not visually targeting through turns and other basic maneuvers.
- Not checking mirrors when speed or position is to change or has changed.
- Not making occasional checks of the instrument panel.
- Not identifying controls, users, and roadway conditions 12-15 seconds ahead.
- Novice drivers tend to look at items without actually perceiving their importance.
- Fixed stare (tunnel vision).
- Not scanning intersections.

# **Speed Control**



- 1. MAINTAIN CONSTANT SPEED WITH OPEN SPACE AREAS AROUND THE VEHICLE.
- 2. MAKE ACCELERATOR AND BRAKE CHANGES FOR CLOSED OR CHANGING SPACE AREAS.
- 3. ADJUST SPEED TO THE FLOW OF TRAFFIC AND CONDITIONS.
- 4. MAKE OCCASIONAL SPEEDOMETER CHECKS.

# **Speed Control**

# **Objective**

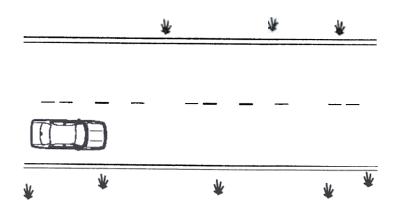
While driving in light volume to complex traffic, the student will maintain a constant and safe speed according to changing traffic conditions.

# **Driving Environment**

- Low-volume residential areas.
- Various road conditions of moderate to heavy traffic.

- Inconsistent speed.
- Speed too fast.
- Speed too slow.
- Improper foot position on accelerator.
- Staring at speedometer vs. quick glances.
- Failing to adjust speed for hills and curves.

#### **Lane Control**



- 1. POSITION BOTH HANDS AT 3/9 OR 8/4.
- 2. VISUALLY TARGET PATH OF TRAVEL 20-30 SECONDS AHEAD (targeting area).
- 3. KEEP EYES MOVING, SCANNING AND SEARCHING 12-15 SECONDS AHEAD.
- 4. MAKE GRADUAL STEERING CORRECTIONS.
- 5. PLACE VEHICLE IN PROPER LANE POSITION BY USING CENTRAL VISION FOR TARGETING AND FRINGE VISION FOR REFERENCE POINTS.

#### **Lane Control**

### **Objective**

The student will maintain the vehicle in proper lane positions (1 through 5) while driving straight and turning at various types of roadways and intersections.

# **Driving Environment**

 Low-volume residential areas to complex traffic and multiple lane roads.

- Improper hand position on the wheel.
- Not targeting 20-30 seconds ahead and searching 12-15 seconds for traffic conditions.
- Abrupt or repeated steering corrections.
- Over- or understeering actions.
- Incorrect lane positions.
- Tendency to drift while scanning off target.

# **NOTES**
