## THE DRIVER LICENSE

### The Risk & Responsibilities

## The Highway Transportation System (HTS):

The primary purpose of the HTS is to move people and goods from one place to another safely and efficiently.

## The three major parts of the HTS:

1. Roadway

**2.** Vehicles

3. People

Traffic laws and regulations are put in place to keep each part running smoothly and protect all people using the HTS. When the HTS breakdown, it results in:

Congestion, collisions, Loss of money, injury, & fatalities.

## **HTS Regulation**

Federal government agencies set minimum standards. State and local governments can create their own laws as long as they don't conflict with federal standards.

## **Regulating Agencies**

**Highway Engineers:** Plan, build and maintain the roadways.

**State Legislature:** Pass laws to make up vehicle code.

**State & Local Police:** Enforce the vehicle code.

**Courts:** Decide whether drivers charged with traffic violations are guilty or

innocent.

**<u>Dept of Licensing:</u>** License and regulate drivers. Register vehicles and vessels. A

license is required to operate a motor vehicle of any kind in this state. The DOL can deny a license to anyone who doesn't meet

the required regulations.

**The Washington Driver Guide:** Guide to state laws and requirements, safe driving practices, and the penalties for non-compliance. When you sign your license, you are agreeing to follow the laws and regulations in the guide. New laws are being made and current laws change. Check for updates and new information every time you renew your license.

## **Driving Risk – How risky is it?**

What are your chances of getting into a car collision in any given year?

**1.** 1 in 5 2. 1 in 9 3. 1 in 50 4. 1 in 100 5. 1 in 1000 6. 1 in 3000

Statistics show that getting behind the wheel of a car is the riskiest activity any of us do on any given day. It is the leading cause of deaths among Americans ages 1 to 34, and is the leading cause of long-term disability for all.

#### **Accident or Collision?**

People tend to call them "accidents," which implies it happened solely by chance.

• However, when you examine the causes of most "accidents", you will find that they are actually the result of predictable and preventable events.

#### **RISK**

A risk factor is something that can, or does, contribute to a crash.

**Brainstorm:** What are examples of risk factors? Contributed by roadways, vehicles, people

- There are ALWAYS multiple factors that contribute to a crash. On average, most collisions involve 9 risk factors.
- Drivers don't always know the risk of the vehicle, roadway or their own behavior.
- These drivers see themselves at minimal risk for becoming involved in a collision.
- When people think they have a lot of control and can prevent collisions, they don't see the need to follow safety precautions.

# According to the NTSHA, 94% of collisions are because of driver behavior.

## **Top Factors in WA Fatal Crashes**

50.1% Driver Impairment

43.7% Running off the Roadway

39.5% Speeding

34.6% Young Drivers (16-25 years old)

30.3% Distracted Driving

24.8% Unrestrained Occupants

20.6% Errors at Intersections

Target Zero: Washington's Strategic Highway Safety Plan

Zero fatalities on Washington's roadways by 2030.

## **TEENS**

### What's the problem?

- 1. Teens drive different: The parts of the brain that handle planning and impulse is not developed until 25. Sometimes make quick decisions without thinking through the consequences.
- **2. Inexperience:** Mile for mile, teens are involved in 3 times as many fatal crashes as all other drivers.
- 3. Peers Present: Teens change their behavior when peers are present!

#### Intermediate Driver License: IDL

Since passed in 2001, the number of teen fatalities and collisions have gone down more than 30%.

## **Steps to your first license (Under 18)**

- 1. Driver Education: Classroom & Behind-the-Wheel
- **2. State Knowledge & Drive Exam:** You must have completed with driver education BEFORE taking tests.
- 3. Possess an instruction permit for 6 months.
  - Practice!! Collision decrease with more practice.
  - Complete at least 50 hours of driving practice (including 10 hours at night) with someone who's been licensed for 5 years or more.
  - To complete 50 hours in 6 months requires practicing at least 15 minutes every day.
  - o A minimum of 6 hours of practice is required during this class.

### **HABITS**

The best time for positive habit development is when you start learning to drive.

#### To create good driving habits:

- Know what behavior you are practicing is done safely and correctly.
- Practice! The behavior must be repeated over and over to become habit.

### Your car is a tamed animal... Ready to obey the driver's every command.

- We are very casual about how we handle our cars it can quickly turn into a monster!
- Negative behaviors do not always have negative consequences and this is how bad habits are born.
- Drivers need to know when to hold back the power of the vehicle to manage the limitations of the vehicle and the roadway.
- Keep the monster caged.

## **IDL Restriction: First year of licensed driving**

#### ✓ First 6 months:

 No passengers under the age of 20 unless they are members of your immediate family.

## ✓ Remaining 6 months:

- You may not carry more than 3 teenage passengers who are not members of your immediate family.
- ✓ Cannot drive between 1 a.m. and 5 a.m. unless you are with a licensed driver age 25 or older.
- ✓ **Until your 18**<sup>th</sup> **birthday:** No talking and sending or receiving text messages even with a hands-free device except to report an emergency.

**Restrictions LIFTED!!** After 1 year of following these rules and driving without a collision or traffic citation, the intermediate licensed driver can drive without limitations on the time of day or the age and number of passengers.

## What if I get a ticket or violate these special rules?

- The passenger and nighttime restrictions are extended until the age of 18.
- If you commit 2 driving violations, you will be sent a letter that suspends your driving privileges for 6 months or until age 18, whichever is shorter.
- If you commit 3 driving violations, your license will be suspended until age 18.
- Your parents will receive a copy of any warning or suspension letter sent to you.

## PREPARATION TO DRIVE

Reducing your risk when you drive starts before you get in your vehicle. A good routine before you drive away ensures that you and the vehicle are prepared for the road ahead.

# **Driver Condition: Driving Dead**

D – Drugged or drunk E – Emotionally A – Aggressive D – Distracted or drowsy Driving under any of these circumstances is DEADLY!! You put yourself and everyone else on the road in danger!

# Walk-around: What are you looking for?

- 1. Around the vehicle for obstacles that prevent movement.
- 2. Damage
- 3. All clear
  - Windows, Lights, License plate
- 4. Windshield wipers
- 5. Fluid Leaks
  - Color will tell you what is leaking.
- 6. Tires are properly inflated.
  - Check when cold.
  - Sticker on driver side door jam gives recommended pressure.
- 7. Check inside the vehicle
- 8. Secure loose objects.
  - They can become flying objects in hard braking situation.
  - Items can roll under pedals and prevent them from working.

# **Entering the vehicle: Your Pre-Drive Routine**

- 1. If approaching your vehicle from the sidewalk, approach from the front of the car.
- 2. Lock the doors
  - ✓ Keeps scary people from getting in your car uninvited.
  - ✓ Ensures the integrity of the passenger compartment.
- 3. Keys in the ignition
- 4. Adjust the seat
  - Sit in upright position
  - Adjust the height of seating position. You want to have the steering wheel at chin level.

- Wrists on either side of wheel.
- · Adjust height of seat. Steering wheel at chin level. Tilt lever

### Adjust to pedals

- The adjustment lever will be under the front of the seat.
- Rest your heel in front of the brake pedal. Slight bend in knee so foot can comfortably pivot between the brake and gas pedal.

#### Distance from the wheel.

- Stick your arms straight out on either side of the steering wheel. Your wrists should be at the steering wheel.
- · Provides distance from airbag.

## Adjust head restraint

• The top of the head restraint should be as high as the top of your head. Protects against whiplash.

#### 5. Adjust mirrors

• Blind spot/ Glare reduction settings.

#### 6. Fasten seatbelt.

Shoulder, chest, hips.

## Get familiar with controls.

Ignition switch, emergency flashers, turn signals, headlight switch, climate controls, windshield wipers and washer, cruise control, parking brake, overdrive, odometer, tachometer, gear selector.

#### **Ignition Switch**

Enables the driver to start and turn off the engine or use the accessories without car running.

Newer vehicles now have ignition buttons.

## Starting the engine

- Car in PARK and the parking brake should be set.
- Your foot should be on the brake when you turn the ignition.

**Turn signals**: Up for right turn, Down for a left turn.

**Headlights:** \* Location of the headlight switch will vary.

- One click: Parking lights. For short stops.
- Two clicks: Headlights.

Windshield Wipers and Washer: Low, High and Intermittent. Do you have wiper fluid?

**Climate Control:** Buttons, knobs, switches. Know which settings to use in case your windows fog up!

### Parking brake:

- 1. Hold the vehicle in place and protect the transmission.
- 2. Emergencies: You can use it to slow or even stop your vehicle. Using the foot brake could cause the wheels to lock up.

#### **Gear Selector**

**P**—Park. Transmission is locked.

**R**—Reverse. Back up lights come on

**N**—Neutral: The transmission in not engaged. The car can roll freely.

**D** – Drive.

**2**—Stronger engine braking

**L**—Maximum engine braking

**Overdrive:** When the car is in overdrive it allows the wheels to roll freely when you take your foot of the gas.

**Cruise Control:** To select and travel at a set speed without having to keep a foot on the accelerator or the brake.

## Instrument panel

Instruments and gauges give you information about the condition and the status of the operation of various parts of the car.

- When you first start the vehicle, the warning lights will illuminate on control panel. Once the cars computer resets, they will start going out.
- If they remain on or come on when driving, it is telling your something is wrong and needs attention.

**Oil pressure gauge:** This light/gauge warns when the oil is not circulating at the proper pressure or there is not enough oil. This light/gauge does not indicate the amount of oil in the engine.

**Brake system warning light:** Serves two purposes.

- 1. Parking brake is set.
- 2. Brake system is not working properly.

Anti-Lock Braking System: This light indicates whether the ABS is functioning properly or not.

**Alternator/ Generator Warning Light:** The vehicle's electrical system is in trouble. Your alternator/ generator is not charging your battery.

**Temperature light or gauge:** This light/gauge warns when the coolant in the engine is too hot.

**Engine Light:** A computer monitors operation of fuel, ignition, and emission control systems. If this light comes on while driving, see a mechanic.

**High beam indicator:** Small blue light icon illuminates to indicate that the high beams are on.

**Fuel gauge:** How much fuel in tank.

• What side is the tank on? There will be an arrow that points to the side it is on.

## VISION 360

The single biggest contributor to collisions is the driver failing to see what is happening.

**Field of Vision:** When looking forward, we have 180° vision to the left and right.

**Central Vision**: 5-10 degrees which is used to identify detail and objects. Use central vision to see our target, read signs, scan for vehicles, pedestrians and other vehicles

• Looking far ahead with our central vision gives drivers much more information about what is up ahead.

**Target:** is a fixed object seen in the center of the path you intend to drive

**Targeting Path**: Is the path the car will travel.

- When the car is on target, you will see the center of the steering wheel aligned to the target.
- Vision leads the car If you look where you want the car to go, correct steering actions are likely to follow.

**Peripheral Vision**: The remaining 175 degrees gives us the "big picture." We see less clearly with our peripheral vision, but it provides important information like our position on the roadway, movements, and other clues.

#### **GET THE BIG PICTURE**

- → When facing forward, we have a 180° view to the left and right.
- → We see what is going on behind us in our mirrors.
- → Blind spots: Areas to the left and right rear corners of our vehicle. Right behind the front seats.
  - ✓ You must turn your head chin to shoulder and look outside window.

## Mirror Usage

Any time speed or position adjustments are necessary, the driver must consider the location, size and speed of vehicles to the sides and/or rear. While a vehicle is in motion, mirror usage is intended to assist in detection, not in gathering detail. Drivers cannot afford to divert attention from the path ahead for more than a second. Mirror checks can answer three important questions: Are there vehicles present? If yes, what is the location? If yes, what is the size and relative speed of detected vehicles?

## When stopping:

- Anytime a driver prepares to slow or stop, the driver's eyes should scan first to the rear view mirror.
- Flash the brake lights to alert any following driver.
- Direct attention to the rear view mirror until two cars have stopped behind the vehicle.
   Use multiple, quick glances, not a long stare.
- Check the mirrors quickly and allow for extra space ahead, increasing the ability to steer out of the lane if a vehicle from the rear appears to be traveling too fast to stop in time.

## When turning:

- When the driver prepares to turn, mirrors should be checked before any change of speed or position is made to enable assessment and control of rear and side space.
- The driver should assess the space to the rear as soon as the turn is completed, and then assess the space to the front.

#### When changing lanes:

When a driver is attempting to change lanes, mirrors should be checked before any
change of speed or position is made to enable assessment and control of rear and side
space. Also it is important to check over the shoulder in the mirror blind spots as well.

### Checking mirror blind areas

- Regular side view mirrors, even when angled out an additional 12 to 16 degrees (enhanced setting), do not provide sufficient information to safely make a movement to the side without first making a mirror blind spot check.
- A mirror blind spot check involves making a quick eye movement over the shoulder to the left or right in the direction of intended vehicle movement.

### **CONTROLLING THE VEHICLE:**

#### Through Vision, the Pedals & the Wheel

## **Maintaining Vehicle Balance.**

### The key to safely controlling the vehicle is through:

- 1. **Vision:** A smooth ride starts with your eyes. Need to know when, where and what to look for.
- 2. **Braking, Accelerating & Steering:** Through smooth adjustments in speed and smooth steering techniques.

## Your visual skills will determine whether you respond or react with the controls.

Rapid weight transfers caused by aggressive steering, acceleration, braking or gear changes can upset the balance of the car, and potentially cause you to lose control.

### **Vehicle Balance Terms**

**Pitch:** Vehicle weight is transferred to the front or the rear tires when braking or accelerating.

**Roll**: Vehicle weight is transferred to the side tires when turning or cornering.

**Yaw:** Traction lost to tires is lost cause vehicle to spin around its center of gravity or "Yaw" axis.

#### **VISION HABITS**

- 1. **Before moving your vehicle:** Always know that path you intend to travel is clear.
- 2. **Eyes up.** When looking well ahead avoids panic adjustments in speed and position.
- 3. **Before slowing or stopping your vehicle,** check the rearview mirror.
- 4. **Turn your head before you turn the wheel.** Vision leads steering. If you look where you want to go, correct steering will likely follow.

## **Manage Vehicle Balance:**

Smooth Braking, Accelerating, & Steering Actions

### Position of feet:

- Left foot on dead pedal
- Right foot in front of brake pedal.
- Pivots between brake and accelerator.
  - ✓ You should not use your left foot on the pedals unless driving a manual transmission.

## **Your Big Toe**

The key to smooth is movement keeping your heel planted on the floor. Use the ball of your foot/ big toe to squeeze the pedals.

✓ Lifting your heel off the ground creates jerky movements.

## **Braking**

**New drivers tend to use the pedals to much!** Easing up on the pedals help keep pitch forces under control.

**Hard braking:** It's a natural reaction to slam on the brakes to avoid hitting something.

✓ BRAKES = LOSS OF STEERING.

**Antilock Braking System (ABS):** ABS designed to brake hard and the car assists by not allowing brakes to lock up.

- ✓ Allows you to maintain some steering control.
- ✓ ABS Rules: Stomp / Stay / Steer

#### Acceleration

The vehicle will move by releasing the brake pedal. Keep your heel on the ground and use your toe/ ball of foot.

## Steering

**Smooth Steering:** Steering smoothly requires that you look far ahead to the path ahead. The "worm" happens when drivers do not look far enough ahead.

## **Hand position**

Two hands on the steering wheel when moving forward.

• Balanced Hand 9 & 3 or 8 & 4: Keep hands out of the way of the airbag.

### DANGER:

- Leaning against the door, putting your elbow out the window, or driving with one hand can keep you from reacting quickly in an emergency.
- Keep hands/ fingers on outside of the wheel.
- No gripping inside of the wheel underhand.

## **Steering Techniques**

**Push/ Pull:** Hand up in direction you are turning. Pull wheel down from top and meet other hand at bottom of wheel to push up.

**Hand over hand:** For quick movements when beginning a maneuver. Use with parking, sharp turns, and correcting a skid.

**Dry Steering:** Turning the wheel while the vehicle is not moving.

- Hard on tires and steering components
- Difficult to anticipate the path of turn.
- Best to be moving while turning the wheel.

## REFERENCE POINTS

## **Vehicle Blind Areas**

## The body of the car blocks the driver's view of the roadway

- One car length to the front
- Two car lengths to the rear
- One car width to the left
- Two car widths to the right

## The optical illusion

- Drivers cannot see the actual position of the vehicle on the roadway.
- Blind Area creates an optical illusion that makes the vehicle seem larger than it really is.

A Reference Point is a place on the vehicle that relates to some part of the roadway.

Lane Position Options: View from driver's seated position

Lane Position 1: Middle of lane.

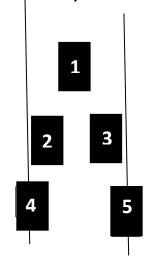
Lane Position 2: Within 12' of center line.

Lane Position 3: Within 12" right line/curb.

Lane Position 4: Straddle middle line

Lane Position 5: Straddle right line

Below are the locations of the standard reference points. You may have to find your personal reference points. May have to be adjusted based on how you sit in the car.



### **STANDARD REFERENCE POINTS**

#### **Standard Reference Points:**

Left Side Limit: 3 feet - Left Turn

• Curb/ line appears to line up in the corner of the driver-side windshield.

Left Side Limit: Within 12" - Parking

• Left side curb/ line appears on windshield driver-side wiper arm pivot.

Right Side Limit: 3 feet - Right Turn

• Curb/ line appears at the end of driver side windshield wiper.

Right Side Limit: Within 12" - Parking

Curb/ line appears to be in the middle of the hood/ middle of windshield wiper.

Front Limit: Stop before line - Parking

Curb appears under the side view mirrors.

### **TRACKING & TURNING**

## **Accurate Tracking**

Is your ability to place the vehicle in LP1, LP2, or LP3 and maintain that position until a change is needed:

- ✓ when driving straight,
- ✓ when approaching and driving through curves & turns, and
- ✓ when searching and evaluating the target area and your path-of-travel.

Accurate tracking requires you know how to look, where to look, and what to look for.



Use your central & peripheral vision correctly to maintain tracking control and see conditions that affect your intended path-of-travel.

### **Turning**

Make all turns from the nearest legal lane in the direction you are traveling into the nearest legal lane in the direction you want to go.

- **1. Signal:** You are required to signal 100 feet before turning.
- 2. **Check mirrors before using the brake:** Adjust speed to traffic to the rear.
- 3. Lane Position:
  - Right turn: Lane position 3. Move as far right as possible without driving in bicycle lane or parking spaces.
    - o Remember: If moving your vehicle a car width or more Check your blind spot.
  - Left turn: Lane position 1

## **Moving Turn**

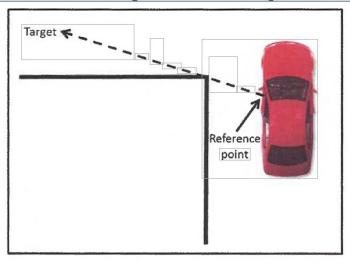
Reduce speed gradually prior to turning. Don't stop unnecessarily.

- The slowest part of the turn should be right after the crosswalk.
- Hold slight brake pressure as you turn to keep the car in balance.
- Turns made at 10-15 mph

#### Look into the turn: Turn your head before the wheel.

- Glance at location of line and back to target.
- Use peripheral vision to monitor lane line as you turn.

Drivers can develop reference points to determine when the front end of your vehicle is a few feet beyond the curb line and where you should begin to turn the steering wheel at intersections. The curb or line should appear to run under the driver side view mirror, and the driver can see where to go without the driver's vision cutting across the curb line. This is the point at which the driver should begin to turn the steering wheel to make the left turn.



### At the apex of the turn

- Release all brake pressure.
- Begin to accelerate through the turn and counter-steer into your lane.

## **Turning from stopped position**

Put the car in motion before turning the wheel. It is difficult to anticipate the vehicles path without moving.

- Right turn: You could end up striking the curb
- Left turn: You could hit the front of a car approaching the intersection

At the apex of the turn, start to increase speed and counter-steer into the new lane.

### **Complete the Turn**

• Once the turn is complete, check the rearview mirror for vehicles to the rear.