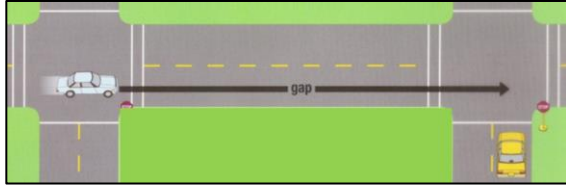


Unit 1

Contents

Unit 1: Class 1	2
<i>The Highway Transportation System</i>	<i>2</i>
HTS Regulation	2
<i>The Driving Task.....</i>	<i>3</i>
Driver Responsibilities.....	4
<i>Risk in the HTS.....</i>	<i>4</i>
Target Zero	5
.....	5
Young Drivers	6
<i>Intermediate License.....</i>	<i>6</i>
Steps to your first license: Under 18	6
Restrictions.....	6
What if I get a ticket or violate these special rules?	7
Unit 1: Class 2	8
<i>Preparation to Drive</i>	<i>8</i>
Driver Condition: Driving Dead	8
The Walk-around	8
Entering the vehicle: Your Pre-Drive Routine	8
Get familiar with controls.	9
<i>Instrument panel.....</i>	<i>9</i>
Warning Lights	10
<i>Vision 360.....</i>	<i>11</i>
<i>Controlling Vehicle Balance</i>	<i>11</i>
Unit 1: Class 3	12
<i>Entering, Crossing and Exiting.....</i>	<i>12</i>
Entering Traffic.....	12
Lateral Maneuvers	12
<i>Crossing Traffic.....</i>	<i>12</i>
Stop Required:	12
.....	13



	13
Tracking	13
Turning	13
Moving Turn	14
Turning from a stopped position	14

Unit 1: Class 1

The Highway Transportation System

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

- Every household depends on the transportation system in some way for access to work, shopping, medical care, travel, church, family and entertainment.

The HTS is made up of three major parts: What are they?

1. **Roadways:** The United States has the world's largest network of highways, including city streets, country roads, and interstates. Each type of roadway and its condition presents different challenges for drivers.
2. **Vehicles:** There are wide range of vehicles using the roadway. Mopeds and motorcycles that are small and have little protection. The other extreme is the tractor semi-trailer, which weigh tons. The in between are cars, vans, small trucks, busses, campers, farm vehicles and construction equipment.
3. **People:** Roadway users are people driving, walking, or riding. Roadway users vary in their ability to use the system.

HTS Regulation

Traffic laws and regulations are put in place to keep each part running smoothly and protect all people using the HTS.

The federal government established the National Highway Safety Act with a set of traffic safety guidelines. State and local governments help enforce these national guidelines. They can also create their own laws if they do not conflict with the national standards.

Regulating Agencies:

- | | |
|---|--|
| • Highway & Traffic Engineers: | Plan, build and maintain the roadways. |
| • Federal/ state legislature: | Pass laws that make up vehicle code. |
| • State & Local Police: | Enforce the vehicle code. |
| • Courts: | Decide whether drivers charged with violating laws |

are guilty or innocent.

- **Motor vehicle departments:** Set rules to assure that drivers and vehicle standards are met.

Washington State Motor Vehicle Department:

The Department of Licensing (DOL) will be the agency you have the most contact with. A license is required to operate a motor vehicle of any kind in this state on public roadways and waterways.

1. Driver Licensing Office: License and regulate drivers.
2. Vehicle Registration Office: Register vehicles and vessels.

The DOL can deny/suspend/restrict/revoke a license to anyone who doesn't meet the required regulations, commits various driving and non-driving offenses or violates laws.

The Washington Driver Guide

A manual for drivers outlining state laws and requirements, safe driving practices, and the penalties for non-compliance. Those who want to drive must demonstrate that they are worthy of a driver's license by passing tests and obeying the law.

- When you sign and accept your driver's license, you agree to follow the laws and regulations set forth in the driver guide.
- Current laws change and new ones are made. Check for updates and new information in the Driver Guide every time you renew your license.



The Driving Task

The driving task includes social, physical and mental skills required to drive.

1. **Physical:** Vehicle handling skills. Knowing how your vehicle will respond in normal, adverse and emergency conditions.
 - ✓ Beginning drivers often need to focus on the physical skills of driving. The physical skills are minor when compared to the decision-making skills. Through practice, you will learn how to control the vehicle and will be able to focus on the social and mental aspects of driving.
2. **Social:** Driving requires you to interact with people on the roadway.
 - ✓ Learn to control your mood and behavior. Ex: Peers, impulse control. Awareness of your innate personality traits, values and beliefs.
3. **Mental:** Involves decision making. Developing traffic and road situation skills. —all of which are the result of attitudes and behaviors.
 - ✓ Although they quickly acquire the skills needed to control a motor vehicle, it takes much longer for young drivers to develop the higher-order mental and perceptual skills necessary to safely interact with the driving environment.

Compared to experienced drivers, young drivers detect hazards less quickly and efficiently and perceived them less holistically. The detection of hazards gives the prerequisite information for risk perception, the process which includes assessing both the level of risk posed by a hazard and one's ability to deal with the hazard effectively.

Driver Responsibilities

Always remember that driving is a privilege, not a right. There is no “constitutional” right to operate a motor vehicle. Driving is a privilege granted to those who meet the state requirements and complete the necessary obligations to do so.

- Your attitude and behavior weigh heavily on your decision making while driving.

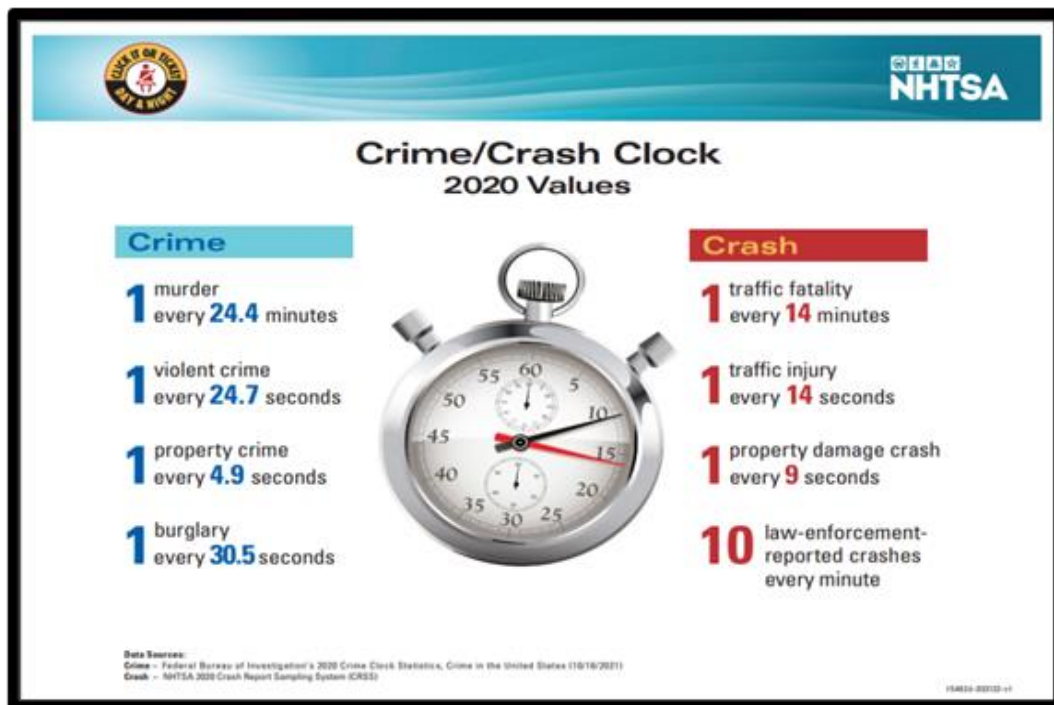
Responsible, low-risk drivers are the most important part of the Highway Transportation System.

- A breakdown in the HTS results in congestion, collisions, monetary losses, injury and death. Your ability to drive responsibly will be the major factor in avoiding being part of these breakdowns.

Risk in the HTS

Collision or Accident

- People tend to call them “accidents,” which implies it happened solely by chance.
- However, when you examine the causes of most “accidents”, you’ll find that they are the result of a predictable and preventable event.



Risk factors come from all three parts of the Highway Transportation System.

- Name some risk factors that contribute to collisions?
- Which part of the HTS contributes to the most collisions?

According to the Washington Traffic Safety Commission, 94% of collisions are the result of Driver Behavior.

How much risk do you assume when driving?

Survey Says:

When asked, 77% of drivers have no idea of their level of risk when driving, 83% believe they have enough control to prevent a collision, and 91% believe if they did become involved in a collision that they would not be at fault.

These drivers see themselves at minimal risk of 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.
- The main risk of driving is the possibility of a conflict that leads to a collision.

Target Zero

Washington States goal of zero fatalities by the year 2030.



The reality is the fatality rates for drivers in Washington State have increased alarmingly in recent years, and top 20 wealthy nations, the United States has consistently performed the poorest for the past two decades.

Top Factors in WA Fatal Crashes

[WDG: Section 2-1](#)

- 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

Overall, at least one of the top three factors was present in 72% of all traffic fatalities, and 17% involved all three.

Young Drivers

There is a disconnect believing that teen driving is an endowed right, and the reality that when they are involved in a fatal collision, young drivers are at fault 75% of the time.

Young drivers are overrepresented in road collisions. Young drivers, ages 16-25, make up 16% of the licensed drivers on the roadways, but are involved in:

- 35% of crash fatalities
- 38% of serious injuries

Intermediate License

There is a disconnect believing that teen driving is an endowed right, and the reality that when they are involved in a fatal collision, young drivers are at fault 75% of the time.

Young drivers are overrepresented in road collisions. Young drivers, ages 16-25, make up 16% of the licensed drivers on the roadways, but are involved in:

- 35% of crash fatalities
- 38% of serious injuries

The top three culprits are speeding, driving while impaired, and distracted driving. Results of attitude and behavior.

Steps to your first license: Under 18

DOL requires the following before being eligible for your license:

1. **You need to possess a permit for 6 months** before being eligible for a license.
2. Complete at least **50 hours** of driving practice (**minimum 10 hours at night**) with someone who's been licensed for 5 years or more.

How do I keep track of my driving hours?

- ✓ Download Road Ready App on your phone.
- ✓ Old fashion pen and paper/ notebook.

3. **Pass a driver's education course with a minimum score of 80%.**

Restrictions

An intermediate license comes with these driving restrictions.

First year of licensed driving:

1. **You cannot drive between 1 a.m. and 5 a.m.** unless you are with a parent, a guardian, or a licensed driver who is at least 25 years old.
2. **First 6 months:** No passengers under the age of 20 unless they are members of your immediate family.
Remaining 6 months:
3. **Remaining 6 months:** You may not carry more than 3 teenage passengers who are not members of your immediate family.
4. **Until your 18th 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?

First Violation: The passenger and nighttime restrictions are extended until the age of 18.

- A warning letter is sent to you and your parent or guardian if you receive a ticket for violating the restrictions or any other traffic law or you are involved in a collision.

Second Violation: 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.

Third Violation: If you commit 3 driving violations, your license will be suspended until age 18.

Unit 1: Class 2

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!

The Walk-around

1. **Around the vehicle for obstacles that prevent movement.**
2. **Damage**
3. **All clear:** Windows, Lights, License plate.
4. **Windshield wipers:** Fit tight against glass.
5. **Fluid Leaks:** Location, color
6. **The tires are properly inflated:** Check when cold. The sticker in the driver side door jamb 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.
9. **If approaching your vehicle from the sidewalk, approach from the front of the car.**

Entering the vehicle: Your Pre-Drive Routine

1. **Lock the doors:**
 - Keeps scary people from getting in your car uninvited.
 - Ensures the integrity of the passenger compartment.
2. **Keys in the ignition.**
3. **Seating Position**
 - Sit in an 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 to pedals.

- The adjustment lever will be under the driver 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 the steering wheel.



Adjust head restraint.

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

4. Adjust mirrors:

- Blind spot/ Glare reduction settings.

5. Fasten seatbelt:

- Over the shoulder, across chest and low on the hips.

Get familiar with controls.

Ignition Switch/ Button: Enables the driver to start and turn off the engine or use the accessories without car running.

Starting the engine.

- The vehicle is in PARK and the PARKING BRAKE should be set. Your foot is on the brake pedal when you turn the ignition.

Turn signals.

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 not engaged. The car can roll freely.

D – Drive.

2—Stronger engine braking

L—Maximum engine braking




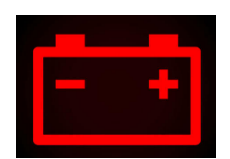


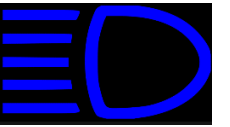

Cruise Control: To select and travel at a set speed without having to keep a foot on the accelerator or the brake.

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 the control panel. Once the car's computer resets, they will start going out.
- If they remain on or come on when driving, it is telling you something is wrong and needs attention.

Warning Lights

	Oil pressure warning light. 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 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: The computer monitors the 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 is in the tank? There will be an arrow that points to the side it is on.

Vision 360

Vision Test

As a new driver, you're going to be required to take an eye exam and pass some vision requirements before you get your driver license. If you don't have perfect eyes with 20/20 vision, you'll need to wear some eyeglasses or corrective lenses. Having visual acuity is so important when you're behind the wheel. **The single biggest contributor to collisions is the driver failing to see what is happening.**

If you wear glasses or corrective lenses the driver licensing department will place a restriction on the back of your license ID. You must wear them when you drive.

Field of Vision

When looking forward, we have 180° degree vision to the left and right.

Central Vision

Your central vision field is where the majority of visual information you receive while driving comes from. Provides sharp vision so you can see objects in more detail. For example, central vision lets you know when cars in front of you have braked, when there's a stoplight, when the speed limit decreases or when you should exit the interstate.

Peripheral Vision

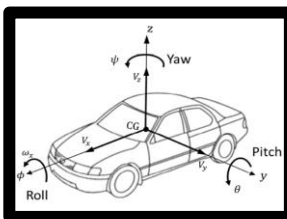
Peripheral Vision is very helpful when driving. For example, while you use your Central Vision to see ahead of you, you may notice the motion of a pedestrian approaching from the side. In this situation, you will react by quickly turning your head to see the pedestrian using your Central Vision and stop to avoid hitting the pedestrian.

Depth Perception

The depth perception is your ability to determine the distances between objects as it relates to your position. Depth perception helps you see the world in three dimensions. Depth perception is used at many aspects of driving such as managing your space between your car and other cars, merging onto freeways, passing other vehicles or allowing space for other vehicles to maneuver around your vehicle.

Controlling Vehicle Balance

Vehicle balance is controlled through vision! What you see determines how you respond with your brake pedal, acceleration pedal and the steering wheel.



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

Unit 1: Class 3

Entering, Crossing and Exiting

Entering Traffic

If approaching your vehicle from the sidewalk, approach from the front of the car, so you are facing oncoming traffic.

1. Pre-Start: Lock doors, keys, seat, headrest, mirrors, seatbelts.
2. Start the engine.
3. Shift to *DRIVE*
4. Release *PARKING BRAKE*
 - By setting and releasing your parking brake in the correct order, you are keeping weight off the pinion in the transmission and the weight of the car on the hand brake.

Ask Yourself: Are you STARTING or STOPPING your drive?

Starting



= Put in gear



= Release Parking Brake

Stopping



= Release Parking Brake



= Put in gear

Lateral Maneuvers

When moving your vehicle one car width to the left or right... **SMOG is required.**

Signal: In the direction you are going to move.

Mirrors: Search the inside mirror and the outside mirror for a gap to enter.

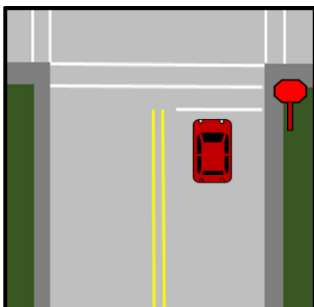
Over-the-Shoulder: Once clear in the mirrors, check the blind spot by looking over your shoulder in the direction you want to move.

Go: Avoid hesitation. Look ahead to your target and accelerate.

Do not disrupt traffic flow. Get up to speed and check for vehicles approaching from the rear.

Crossing Traffic

Stop Required:



Legal stopping positions.

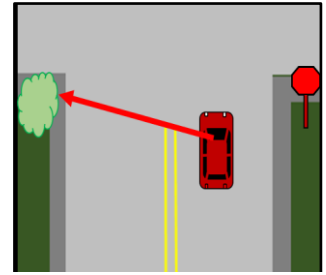
Look for pavement markings and sidewalks to determine where to stop.

1. The stop line
2. Crosswalk
3. Sidewalk
4. Edge of the road

Searching Intersections: Always look to the left, front, to the right and then to the left again before entering any intersection.

You need a 90-degree view in both directions.

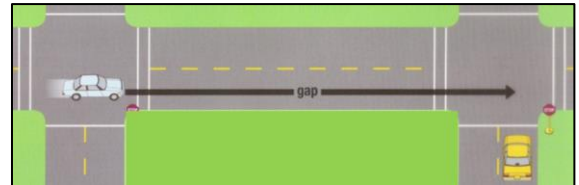
- If you cannot see, make a safety stop! Creep forward until you can and stop again.



Crossing and joining traffic takes time and space. The speed of cross traffic is the biggest determining factor.

It takes:

- 4 seconds to cross an intersection.
- 5 seconds to turn right and join traffic.
- 7 seconds to turn left and join traffic.



Tracking

Accurate Tracking

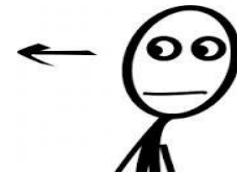
Is your ability to place the vehicle in LP1, LP2, or LP3 and maintain that position until a change is needed:

- ✓ 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 to see the target area. Use your peripheral vision to monitor your position on the roadway.

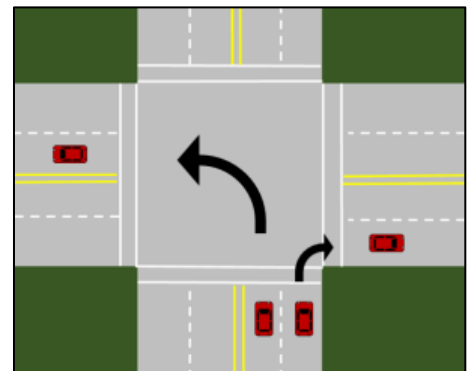
Remember your vehicle is likely to travel where you look!



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.



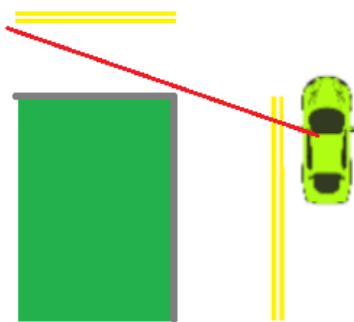
Moving Turn

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 the location of centerline and back to target.
- Use peripheral vision to monitor lane lines and your lane position on the roadway during the turn.



Left Turn Reference Point

When you front end of your vehicle is a few feet beyond the 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 driver can see where to go without the driver's vision cutting across the curb line.

At the apex of the turn.

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

Turning from a 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 and accelerate to the flow of traffic.