

Unit 4 Notes

Class 10

- 4.1 Road Rage
- 4.2 Freeway

Class 11

- 4.3 Driver Responsibilities
- 4.4 Vehicle Maintenance

Class 12

- 5.6 Distractions
- 5.7 Reduced Visibility & Traction

Unit 4 tasks to complete:

Read Washington Driver Guide:
Sections 7.

Unit 4 Homework

Behind-the-Wheel Lesson 4

Home driving practice!!

Self-Reflection Questions

4.1 Road Rage *WDG Section: 5-14*

Aggressive Driving: "The commission of two or more moving violations that is likely to endanger other persons or property, or any single intentional violation that requires a defensive reaction of another driver."

Road Rage: "An assault with a motor vehicle or other dangerous weapon by the operator or passenger(s) of one motor vehicle on the operator or passenger(s) of another motor vehicle caused by an incident that occurred on a roadway."

Engaging in aggressive and risky driving:

- ✓ Following too close.
- ✓ Speeding.
- ✓ Weaving in and out of traffic.
- ✓ Speeding up to beat a traffic light.
- ✓ Cutting between vehicles to change lanes.
- ✓ Using the horn excessively.
- ✓ Flashing headlights excessively at oncoming traffic.
- ✓ Braking to get others to back off your bumper.
- ✓ Passing another driver, then slowing to teach them a lesson.

4.2 Limited Access Highway: Freeway

Freeway vs. City Driving	Other Features
<ol style="list-style-type: none">1. No traffic lights.2. No cross traffic or railroads.3. No stopping or parking.4. No pedestrians5. Limited access	<ol style="list-style-type: none">6. Higher speed limits7. Divided roadways8. Multiple lanes9. Motorized vehicles only10. Wide shoulders for emergencies

Prohibited Behavior:

1. Do not enter or exit the freeway by any other means than an on-ramp.
2. Do not stop on the freeway unless other traffic is stopped.
3. Do not park on the shoulder unless you have an emergency.
4. Do not back up.
5. Do not drive across the median, yellow line, or divided section.
6. Do not attempt to make a U-turn or a left turn.
7. Do not use the left lane except for passing or when entering or exiting on the left is required.
8. Do not change lanes without signaling and checking for an open gap.

Entering the Freeway *WDG Section: 4-21, 4-30*

<p>The entrance ramp: Ramp speed</p> <ul style="list-style-type: none">• Start to increase your speed on the on-ramp.• You may have an entrance ramp speed.• Check the rear zone.• Keep 4 seconds of following distance	<p>Look for a stable gap.</p> <ul style="list-style-type: none">• Steering becomes more sensitive at higher speeds.• If you turn your head, make sure to keep your hands steady.
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<p>If there are signal lights on the entrance ramp, you should:</p> <ul style="list-style-type: none"> A. treat the red light as an advisory control. B. do not have to stop for the red light. C. must stop if any light is on. D. must wait for a green light 	<p>Metered ramps: In high traffic areas during times of peak volume they are designed to:</p> <ol style="list-style-type: none"> 1. Meter or time the spacing of entering vehicles. 2. Keep traffic moving.
<p>Merging Area</p> <ul style="list-style-type: none"> • Merge into gap at freeway speed. • Cancel signal. • Create space. 	<p>The Gore Area:</p> <p>A median that separates the entrance ramp from the lanes of the highway.</p> <ul style="list-style-type: none"> ✓ Indicates to the driver when it is safe or legal to switch lanes and join the other traffic on the road.





Driving on the Freeway: WDG Section: 4-21, 4-25

Fast lane VS. Slow Lane: The speed limit applies to all lanes.

- Right Lane: Slower Moving Traffic
- Center Lane: Thru Traffic
- Left Lane: Passing, HOV



It is Washington State law to stay in the right lane, except to pass.

<p>HOV Lanes:</p> <p>H igh O ccupancy V ehicle</p> <div data-bbox="454 987 714 1134" style="border: 1px solid black; padding: 5px; text-align: center;">  <p>HOV 2+ ONLY 2 OR MORE PERSONS PER VEHICLE</p> </div> <ul style="list-style-type: none"> ✓ Reserved for vehicles with more than one person in it. ✓ Signs tell you how many occupants must be in the car to use it. 	<p>HOT Lanes:</p> <p>H igh O ccupancy T oll</p> <div data-bbox="1144 987 1388 1134" style="border: 1px solid black; padding: 5px; text-align: center;">  </div> <ul style="list-style-type: none"> ✓ Open to solo drivers who choose to pay a toll. ✓ Carpools of two or more, vanpools and buses use the lanes toll-free. ✓ Toll rates adjust to ensure traffic in the HOT lane is free flowing even when the regular lanes are congested.
<p>Reversible Lanes: Some traffic lanes are designed to carry traffic in one direction at certain times and in the opposite direction at other times.</p> <div data-bbox="251 1522 657 1669" style="border: 1px solid black; padding: 5px;">  </div>	<p>Electronic speed-limit: Digital signs post variable speed limits that help warn drivers of backups ahead to evenly distribute the flow of traffic.</p> <div data-bbox="1063 1533 1209 1690" style="border: 1px solid black; padding: 5px; text-align: center;">  <p>regulatory speed</p> </div>

Secure Your Load WDG Section: 2-5

Drivers who fail to properly secure their load may face a costly fine and jail time if they cause a crash.

- A load must be securely fastened and is only considered secure when nothing can slide, shift, fall, or sift onto the roadway, or become airborne.

Milepost Markers

1. If you have a roadside emergency, the party responding will ask you what milepost marker you are at.
2. Modifications can sometimes throw the vehicle's speedometer off.
 - ✓ You can check your speedometer using the milepost markers.
 - ✓ At 60 mph you should reach the next marker in 60 seconds.

Emergency Zones

Adjacent lanes of the roadway 200 feet before and after a stationary emergency vehicle with a siren or flashing lights: tow trucks, emergency assistance vehicles, or police vehicles using emergency lights.

- ✓ The fines for traffic are doubled, and the driver license of a person who recklessly endangers a worker or property in an emergency zone is subject to a 60-day suspension.

Sharing the road with Semi-Trucks. *WDG Section: 4-40*

- Trucks have large blind spots, and if you take too long to pass, they may not know that you are there.
- Always try to pass them on the left, trucks have less visibility on the right.
- If you can't see the driver in his mirrors, the driver cannot see you!

Can't stop on a dime: Because of the size and the weight of the vehicle, it takes much longer for a big rig to stop.

- When passing, look for the front of the truck in your rear-view mirror before pulling into a lane in front of the truck.

Trucks make wide right turns: Trucks may move towards the left before making a right turn.

Stay back and give them room.

Exiting the freeway

Maintain speed until you exit on the off-ramp. Brake in exit lane.

- In wet weather, test your brakes. If they are wet (pulls to one side), slight brake pressure will help dry them.
 - * **Exception:** Adverse conditions. They do not maintain the ramps as well as the road, it may be slick, slushy, or icy.

The Weave Lane:

- Acceleration & Deceleration Lane. Entering traffic yields to exiting traffic

What if the exit ramp is blocked? Continue onto the next exit.

Loop Routes: Business loop routes that connect the primary route at two different locations.

Spur Routes: They connect to the primary route in one location.

Velocitization: Thinking you are traveling slower than you are once getting off a high-speed roadway.

4.3 Vehicle Ownership *WDG Section 7-1*

Under 18

You need your parents or legal guardian to sign your license application, they must also assume financial responsibility for your driving.

- You cannot have a vehicle legally registered or an insurance policy in your name until you're 18.
- Once you turn 18, their liability automatically ends.

Responsibilities associated with owning a vehicle include keeping it:

- Properly registered
- Insured
- Maintained

Vehicle Registration *WDG Section 7-2*

Tags: All vehicles on Washington roadways are required to register the vehicle with the DOL.

- Must renew your tags for your vehicle yearly.

Vehicle Title: Shows proof that you own the vehicle and lists the registered and legal owner(s).

- If you are making payments on a vehicle, the bank holds onto the title until it is paid off.
- Keep it in a safe place, but not in the vehicle.

Transfer of Ownership

- When ownership is transferred, the title must be signed and dated by all the owners and then given to the purchaser.
- Bill of sale.
- The purchaser must transfer ownership within **15 days** to avoid penalty fees.

Selling

- You have **five days** to report the sale.
- This can help protect you from certain civil liabilities if the new owner does not transfer the title.

Financial responsibility

It's proof you have a way to pay for any damage you may cause while driving. You prove financial responsibility by buying an insurance policy and always keeping it in your car when you drive.

Insurance Policy

An agreement between the insurance company and the insured. It involves risk sharing.

- When you buy a policy, the buyer pays a premium to be protected from a potential big loss.
- Policies are difficult to read. If you have questions, talk to your agent.

Penalties for driving without insurance.

- Operating a vehicle without the required coverage is a traffic infraction with a fine that starts at least \$600.
- You can lose your license for 3 years if you are involved in a collision and you are uninsured. Your license can be suspended for 13 or more years if you fail to make restitution.

Premium

- A premium is how much you pay for your policy.
- Insurance companies rely on statistics to determine their rates. The statistics indicate the likelihood that certain groups of people will be involved in a crash.

What factors determine your insurance rates?

Vehicle you drive	Grades	Claim record	Mileage	Where you live
Marital status	Gender	Age	Driving record	

Reducing your premium

- Maintain good grades.
- Successfully pass a traffic safety education class
- No claims or convictions for 3 years
- Multiple cars on the same policy
- Vehicles with safety features like airbags and anti-theft devices

Liability Insurance *WDG Section: 2-2*

Financially covers what you are responsible for if you are found to be at fault in a collision.

State Minimum: 25/50/10

Two parts: Bodily Injury & Property Damage

- \$ 25,000 for injury/death to one person
- \$ 50,000 for injury/death to more than one person
- \$ 10,000 for damage to property

Other coverages

Uninsured motorists

Uninsured/underinsured motorist coverage protects people who were involved in collision with a driver who does not have insurance or doesn't have enough insurance to pay for all the losses caused by the crash.

- Allows you to collect damages that you experience from your insurance company.

Personal Injury Protection: This type of coverage is for medical and funeral expenses resulting from a collision for the people named in the policy, regardless of who is at fault.

- Additionally, offers coverage if you are struck by a car as a pedestrian or cyclist.

Coverage for your car

Deductible: The deductible is the part of a collision that you are responsible for paying.

- Deductibles will vary. Your premium can be lowered by choosing a higher deductible. If you are willing to pay higher out-of-pocket costs, you can lower the total cost of your insurance.

Collision insurance: Pays for damages to your vehicle when you hit a stationary object.

Comprehensive insurance: Pays for your vehicle if it is damaged by anything other than a collision.

- For example, comprehensive insurance covers theft or damage caused by fire, animals, natural disasters, falling objects, or vandalism.

Gap: Covers the difference between what you owe on the car and what the book value of the car is.

Should I let someone else drive my car? Most insurance policies cover:

- Policyholders (mom & dad)
- Named drivers (you, siblings)
- Drivers over 25

4.4 Vehicle Maintenance

Preventative maintenance: Routine maintenance to prevent bigger trouble later.

- Maintenance checklist: You can download a vehicle maintenance checklist for your car from the internet.

Tires

There are four patches the size of the palm of your hand called the tire footprint. It is the only contact between your car and the road. Keep them:

- ✓ Properly Inflated.
- ✓ Rotated regularly.
- ✓ Good Suspension.

Tread: The grooved surface of the tire that grips the road. On wet roads, tread allows water to flow through the grooves and away from the tire.

Tread requirements: It is required that your tires have at least 1/16 inch tread.

Tire pressure: With correct tire pressure, you will get the best control, best gas mileage, and the best tire wear. Check pressure when tires are cold.

- **Under-inflation:** Only outside edges will provide traction and will wear out first.
- **Over-inflation:** Too much pressure and only the center of the tire will grip the roadway.

Tire rotation: Rotate every 8,000 miles. Helps tires wear evenly.

Checking fluids

- **Oil:** Change oil and filters are typically changed after a specific number of miles or months, usually every 3000 miles or 3 months.
 - Your vehicle may call for an oil change at 6,000 or 8,000 miles. Some service stations offer 14,000 synthetic oil changes.
- **Coolant:** Overheating can damage your engine. Check coolant at least once a month.
 - Add a mixture of 50% water and 50% coolant to the tank only to the prescribed level.
- **Brake Fluid:** Keep the brake fluid in the master cylinder at the proper level. Use the brake fluid specified for your vehicle.
- **Power Steering:** When power steering fluid is low, power steering doesn't work.
- **Transmission:** Check transmission fluid regularly. If it is more than a quart low, it should be taken to a service shop.
- **Wiper Fluid:** Important for visibility. Make sure that is filled with an approved wiper solvent.
- **Battery:** When checking the condition of the battery, look for a build-up of acid on the battery terminals. The acid build-up will have a bluish-white cotton-like appearance. Vehicle may not start.

- **Check Lights:** Headlights, side-marker lights, emergency flashers, parking lights, front and rear directional signals, taillights, and brake lights.

4.5 Distracted Driving *WDG Section: 4-4*

Distracted Driving is any activity that takes a person’s attention away from the primary task of driving. “Inattentional Blindness.”

The Three Types of Distracted Driving

1. **Manual Distractions:** Anything that requires you to take your hands off the wheel.
2. **Visual Distractions:** Anything that requires you to remove your eyes from the road.
3. **Mental Distraction:** Anything that takes your focus away from driving.

While some of these aren’t against the law on their own, they may impact your driving and could cause you to violate a traffic law.

Are you a Multitasker?

"People can't multitask very well, and when people say they can, they're deluding themselves. Our brains can't focus on more than one thing at a time, we shift our focus from one thing to the next with astonishing speed. You're not paying attention to one or two things simultaneously. "

Washington Laws

You can be stopped and ticketed if seen holding a phone to your ear or texting while driving. The fine for cell phone use is \$136 and can be more if you cause a crash.

- **Intermediate Licensed Drivers** cannot use any wireless communication device (regardless of if hand-held or hands-free) while driving unless in an emergency.

4.6 Driving in Adverse Conditions

When driving in adverse conditions:

1. SLOW DOWN!
2. Headlights on
3. Increase your following distance.

Reduced Visibility

Conditions include twilight, darkness, rain, snow, fog, smoke, and bright sunshine.

Why is Night Driving so DANGEROUS? While only a quarter of all driving is done at night, more than half of all driving deaths occur then.

Vision:

- **Glare:** Can leave us temporarily blinded and can take several seconds to recover from its effects.
- **Depth perception, ability to distinguish color, and peripheral vision** are all worse in low-light conditions.
- **Overdriving your headlights:** Driving at a speed that makes your stopping distance longer than the distance lighted by your headlights.
 - Low beams illuminate the road from 160 to 250 feet in front of your car.
 - High beams illuminate the road from 350 to 500 feet in front of your car.
 - Even with your high beams on, there's not a lot of room for error.

Alcohol is involved in almost half of all fatal collisions and a majority of these happen at night.

Prepare for Night Driving:

1. Keep headlights, taillights, signal lights and windows (inside and out) clean.
2. Have wipers with good, live rubber and wiper fluid full.
3. Know where your defroster and defogger controls are.
4. Dim your dashboard lights.
 - ✓ If you're driving around with the dash light on max, you could be compromising your forward vision.

Headlights on *WDL Section 4-14*

Use your lights anytime conditions make it difficult to see.

- Use your low beams in town / city and when there are other vehicles around.
- Use high beams in the country and when no other vehicles are around.
- From a half hour after sunset until a half hour before sunrise.

High beams

- ✓ Dim your high beams when within 500 feet of oncoming vehicle.
- ✓ Dim your high beams when following 300 feet behind another vehicle.
- ✓ If a vehicle comes toward you with high beams on, look away from the headlights and toward the right side of the road until the car has passed.

Make your vehicle **VISIBLE!**

If you turn on your windshield wipers, you turn on your headlights too! If visibility is less than perfect, your headlights help other drivers see you.

Fog

- Use your low beam headlights.
- Can reduce your ability to judge distance.
- Slow down
- Turn on hazard flashers when going 20 mph under the posted speed limit or less.
- Try to avoid driving in thick fog.

Reduced Traction

Knowing how to handle poor traction reduces the potential for hydroplaning, skidding, or getting stuck in the mud.

What is traction?

The ability of the tires to grip the roadway surface.

Loss of traction is divided into three groups:

- Roadway conditions
- Condition of the vehicle
- Actions of the driver

To steer, brake or accelerate you need traction.

Roadway conditions

- Surface irregularities
- Loose surface such as gravel
- Snow
- Ice
- Seemingly clear road in cold weather
- Hydroplaning
- Wet road just as it begins to rain.
- Adverse camber of road.

Where would the freezing occur first? On the bridge

Vehicle Condition

- Brakes out of adjustment
- Front wheels being out of alignment.
- Tires: Worn, mismatched or under or over-inflated.

Driver Actions:

- Sudden steering, abrupt changes in speed.
- Excessive speed paired with a sharp turn.
- Abrupt changes on ice, snow, or gravel road conditions.

Traction Loss

Skids are the result of traction loss.

1. **Front wheel skids:** Harder to detect than rear wheel skids. The vehicle tends to slide straight.

Causes:

- Hard braking causing wheel lock up:
- Excessive speed entering a curve or a turn.

2. **Rear wheel skids:** Change in pitch forces increase or decrease weight to the rear tires.

Causes:

- Braking actions
- Too fast into curve
- Decelerating in front wheel drive car.

3. **All wheel skids:**

Causes:

- Going too fast around curves causes change to roll forces. The vehicle then slides.
- A combination of speed and slick surface can cause you to lose traction to all four tires.

You have a better chance of preventing a skid than recovering from one!

It's hard to regain control once it's lost.

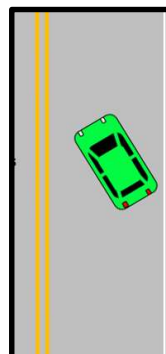
Preventing skids

Stay Alert!!

- Search to target area.
- Solve LOS-POT 15 seconds away.
- Smooth stops, starts & steering.
- Check the mirror before you brake.
- Turn head, before wheel
- Maintain good following distance.
- Respect lower speeds!

I'm skidding!

1. Detect skid: See car off target.
2. Stay off pedals! No brake, No gas!
3. Look and steer the way you want the car to go.
 - ✓ Do not look at where the car is skidding.
4. Stick with it until the car is under control!



Wet weather

Right as it begins to rain. Oil rises to the surface and mixes with water... creates a slippery situation.

- ✓ After 10 minutes or so, it washes off the roadway.

Hydroplaning

Tires lose contact with the road. Tires rise on top of water and result in possible steering loss.

Ingredients: Water, speed & tire condition.

Tire footprint

When driving in water just 1/12th of an inch deep, your tires must displace one gallon of water per second.

- A brand-new tire can lose some traction at as little as 30 mph.
- At 60 mph, water can wedge its way all the way under the tire's footprint losing all contact with the road.

No Cruise Control! To prevent loss of traction, you may need to reduce your speed by lifting off the accelerator.

- This cannot be accomplished when cruise control is engaged.

Drive in wheel paths: Drive in the wheel paths left by other drivers when driving in wet weather.

- Their tires have displaced much of the water.

Moving water exerts force on a car – the deeper the water, the stronger the force.

- Buoyancy can make a car seem half of its weight.
- Water about 2 feet deep can carry away an average car.

If you don't know how deep the water is... *Don't Drive Through It!!*

If you must drive through it..

- ✓ Watch other vehicles go through.
- ✓ Drive slowly.
- ✓ While driving slowly, apply light brake pressure.
- ✓ Check brakes once leaving water. If the vehicle pulls to one side or the brakes do not work, apply light pressure to help dry them.

Winter Driving Preparation

Be prepared!

Winterize your car!

- Check your battery, belts, hoses, radiator, lights, brakes, heater/defroster and wipers.

Basic winter survival kit in your vehicle:

- Flashlight, batteries, blanket, snacks, water, gloves, warm clothes boots and first-aid kit.

Winter Travel Gear:

- Ice scraper/snowbrush, jumper cables, road flares.

Keep your gas tank at least halfway full.

No Cruise Control

- To prevent loss of traction, you may need to reduce your speed by lifting off the accelerator. This cannot be accomplished when cruise control is engaged.

Watch for Glazing: Ice in tire tracks: Cars stopping and starting at intersections spin tires melting snow and it freezes in the tire tracks.

Travel Advisory

<p>Check weather reports. www.dot.wa.gov or call 511 prior to leaving.</p>	<p>Check your tires. Properly inflated with good tread!</p>	<p>Got Chains? Make sure they fit.</p>
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Traction Advisory

**TRACTION
TIRES
ADVISED**

Use of traction tires recommended.

**TRACTION
TIRES
REQUIRED**

Passenger vehicles must use approved traction tires.

**TIRE
CHAINS
REQUIRED**

Chains required. except four wheel/ all-wheel drive.

There is a \$500 penalty for failing to use chains when required.