

# Walking & Rolling Safety

**Day 1**

## **First Lesson: Active Transportation & Personal Safety**

– recommend 3 days of lessons w/ additional “buffer” day if needed

### **Teacher materials:**

- Projector
- Laminated scenario handouts
- Presentation clicker

### **Optional stopping points:**

**Slide 22**

# Today's Topics



Active transportation & public spaces



Different types of safety



Tools for your personal security



- **Active transportation & public spaces:** We'll learn what active transportation is, and how you can travel safely around the city, especially when interacting with other people
- **Different types of safety:** safety means different things to different people – we'll break it down into three types
- **Tools for your personal security:** when you use active transportation or public transit in the public space, you may be confronted with new situations and people. We'll provide some tips for how to communicate when in a potentially unsafe situation.

# What is Active Transportation?

## SECTION 1: Active Transportation & public spaces

### **What is active transportation?**

Active Transportation is using your body to get somewhere. This can include walking, rolling, bicycling, skateboarding, scooting, or accessing transit.  
(go to next slide for photos)



Active Transportation is using your body to get somewhere. This can include walking, rolling, bicycling, skateboarding, scooting, or accessing transit.

**Activity:** Have students raise their hand and share examples of active modes people use around Portland. (2 minutes)





**Walking**



**Walking/Rolling**



**Rolling**

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We use the terms walking & rolling to try and encompass all possible modes

- Sometimes using a mobility device or wheelchair is included in the term walking, sometimes it's included rolling; the terms can be a preference by a person, or designated by an organization or group.

- Rolling includes human-powered things on wheels: bikes, scooters, skateboards, pedicabs, etc. E-bikes & e-scooters can be included in rolling.

# What is public space?

## **What is public space?**

Briefly explore with students what does it mean: Is it just outdoors? Is it inside buildings? On a bus?  
(see next slide for photos)



### What is public space?

Wikipedia definition: A **public space** is a place that is generally open and accessible to people. Roads, public squares, parks and beaches are typically considered public space.

Activity: What other places can you think of? Public libraries, school bus stops, the mall?

# The Principles of Active Transportation



## Aware

having knowledge or perception of a situation or fact



## Assertive

having or showing bold or confident statements & behavior



## Legal

following the law



## Courteous

polite, respectful, or considerate in manner



## Predictable

behaving in a way that is expected



## Able to be seen

(Visible!!)

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To travel safely, especially in traffic, and to interact in public spaces with other people – it's important to follow these essential rules.

Activity: As a class or in small groups brain storm an example of each principle.

### Aware:

Use constant scanning to regularly assess your surroundings. Make eye contact with motorists; be aware of others around you, particularly if you are going faster (i.e. scooting/skating/biking in high pedestrian areas); don't be distracted by your phone when walking and using right-of-way.

### Legal:

Follow the rules of the road that are implemented by Oregon laws and Portland ordinances (ordinance = a piece of legislation enacted by a municipal authority). Traffic laws are "social agreements" designed to tell road users how to move safely around each other. – we'll talk about what laws are important to know throughout these lessons.

**Predictable:**

Act so other people will know what you are going to do. Predictability prevents crashes. Examples: While rolling: maintain a straight line, do not pass motorists or other riders on the right. Use hand signals. Ride on the right hand side of the public way. Follow traffic Laws.

**Assertive:**

Assert yourself. An attitude of confidence goes a long way. Confident eye contact with relaxed but aware body posture, use hand signals, a bell, your voice or lights to get the attention of motorists. Know Right of Way Laws and Know Your Rights

**Courteous:**

Respect other's turn and spaces. Examples:

- Share your seat on the bus, get up for seniors and people with disabilities
- In busy pedestrian areas, roll slowly or walk your bike
- Waving/saying thank you or no thank you can be a useful tool to confirm you have another road users attention

**Able to be seen (visible)** (images with examples in upcoming slides):

Ride and walk places where people are expecting to see you. Never ride against traffic to make sure you are visible for motorists and others (we'll talk more about this on day 3). Use a front white light and a red rear reflector. Wear bright or contrasting clothing to increase your visibility during the day, or reflective materials, such as jackets and ankle bands.



## The Principles of Active Transportation



**And what does that spell?**

**(click) ALPACA!**

ALPACA is a quick way to remember the principles you should follow when traveling in public spaces and traffic.



**Visibility** can include reflective shoes, stripes, arm bands, or lights. The cyclist in the photo is wearing a bright-colored yellow jacket and white helmet. Bright colors work great – you don’t need to wear anything fancy.

**(click)** – making sure others see you – “Able to be seen” is one of our ALPACA Principles!

Photos from TriMet Be Seen. Be Safe. campaign

# Different types of safety

## Traffic laws



Society's code of conduct for using our right-of-way

## Personal security



Person-to-person interactions when navigating public spaces

## Environment



Interacting with vehicles & street infrastructure

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## SECTION 2: Different types of safety

**Safety** can mean different things to different people. Over the course of a few days, we will break the term “safety” down into three categories when talking about active transportation and navigating our city:

- **Traffic Laws** – codes created to provide order for lots of people to navigate public spaces – traffic should run smoothly when people are all following the same laws
- **Personal Security** – human-to-human interactions when navigating public spaces – how are people interacting with one another around the city?
- **Environment** – how to safely use the built infrastructure -- what’s available to you for walking, biking, skating; interacting with vehicles and other road users

A large photograph of a woman with dark hair and sunglasses on her head, sitting in the driver's seat of a car. She is looking out the window at a man wearing a dark cap and jacket. The background is slightly blurred. The text 'Tools for your personal security' is overlaid in white on the left side of the image. Below the main image, there is a decorative orange and purple circular graphic. In the bottom right corner of the main image, there is a small inset photo showing a group of people in a public space.

# Tools for your personal security

## SECTION 3: Tools for your personal security

We're going to start out by talking about the **Personal Security** type of safety. These are person-to-person interactions when navigating public spaces.

(Photo by mark cook)

## How do you communicate (verbally and non-verbally) when confronted with an unsafe situation?

### PASSIVE

Accepting or allowing what happens or what others do, without active response or resistance

### AGGRESSIVE

Ready or likely to attack or confront; pursuing one's interests forcefully

### ASSERTIVE

Having or showing bold or confident statements and behavior



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**ACTIVITY:** Before going over the three types of communication, have students write down their answer on a sheet of paper: How do they communicate verbally and non-verbally when confronted with an unsafe situation?

We want to share three common types of communication:

“There are 3 common ways to communicate that are revealed through how we move and hold our bodies. Some forms of communication are safer and more effective for personal security than others. **All have risks and all have benefits.**”

Keep in mind:

1. Emphasize all 3 are okay and may feel more comfortable for people's individual personality. For example being shy might look like passive. However, we are exploring what is best during a conflict/dangerous situation where students personal **safety** is at risk.
2. Media images of women & girls tend to portray them as being very passive, so often times women and girls are perceived/accused of being aggressive when in reality they are being assertive. This is why it is important to practice assertive communication.
3. Assertive is one of the ALPACA principles of active transportation mentioned in the earlier slides.



# PASSIVE

- What does passive look like?
- What are risks of being passive?
- What are the benefits?

Accepting or allowing what happens or what others do, without active response or resistance



- Click once for question "What does passive look like?"
- Click again for representation of passive response using cat & dog
  - In this situation, the cat is uncomfortable and doesn't want to engage, but the dog might not know it.
  - What types of feelings go along with accepting something you may not like or that doesn't make you feel good?

**ACTIVITY:** Ask students to walk around the room communicating passive behavior: Call out representative passive behavior: i.e. head down, shoulders drooping, quiet voice, and taking little space.

- Click to show questions about risks and benefits
  - Teacher should freeze activity and while on their feet, students are invited to brainstorm what are the Risks and Benefits of Passive communication

**Optional:** Can do call & response or have students write down what they think the risks and benefits could be

*Answers are written on slide 16 – after AGGRESSIVE*

**Risks:**

- Whoever is intruding on a boundary won't know it
- It can show you are an "easy target"
- If you don't respond, they might be irritated and keep it up
- You may isolate yourself from a situation where you need to be paying attention to stay safe

**Benefits:**

- May feel more comfortable or natural to stay quiet
- Might seem less visible
- If you don't respond, they might feel ignored and stop

# AGGRESSIVE

- What does aggressive look like?
- What are risks of being aggressive?
- What are some benefits?

Ready or likely to attack or confront; pursuing one's interests forcefully



- Click once for question “What does aggressive look like?”
- Click again for representation of aggressive response using cat & dog
  - In this situation, the dog approaches the same as the earlier slide, and the cat has a **WAY more aggressive** response – it doesn't seem to match the situation

**ACTIVITY:** ask students to walk around the room showing aggressive communicating. Teacher should call out representative aggressive behavior: i.e. Strong Eye contact, Puffed-up; big and tall, fast breathing, loud voice

- Click to show questions about risks and benefits
- Teacher should freeze activity and on their feet students are invited to brainstorm what are the Risks and Benefits of aggressive communication;
- **Option:** Call & response or have them write it down

*Answers listed on next slide/compared with PASSIVE*

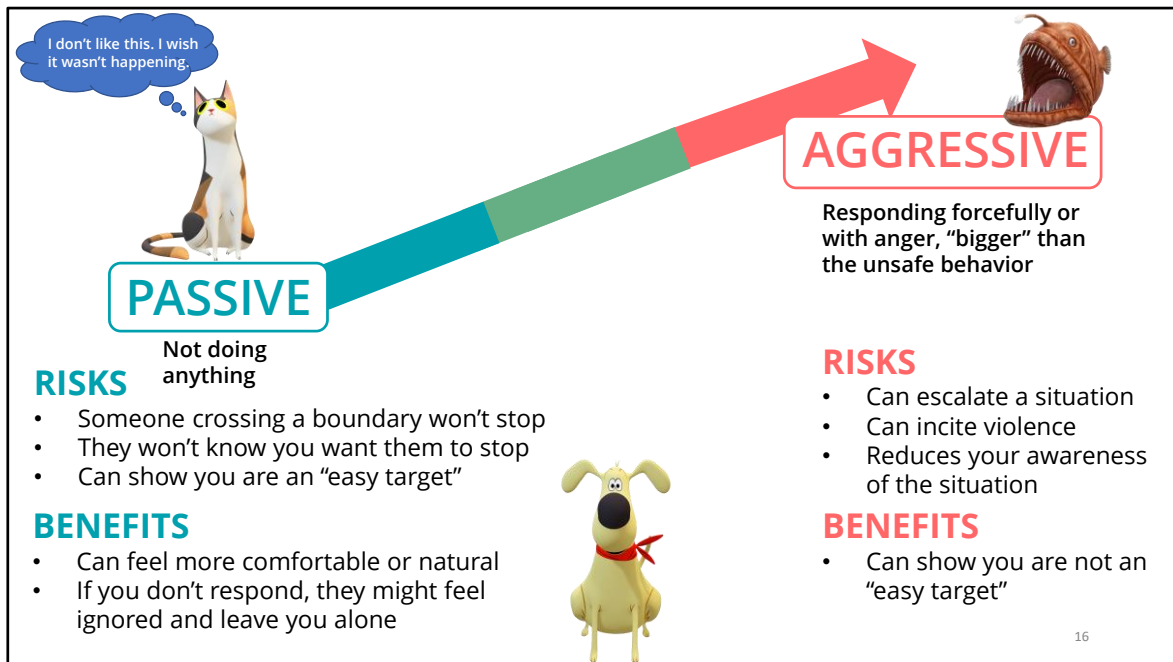
## Risks:

- potential to escalate situation

- incite violence
- cuts down your awareness of the situation

Benefits:

- Shows you are not an easy target



- (click) Passive responses are usually where you do nothing at all; (click) an aggressive response can be forceful or over the top

(click once to add risks and click again for benefits)

Each way of responding has its own risks -- but they also have their own benefits

#### Activity:

- Briefly ask students if there are any other risks or benefits that we missed
- What's a good way to find a middle ground? (Next Slide)



# ASSERTIVE

- What does assertive look like?
- What are risks of being assertive?
- What are some benefits?

Having or showing confident statements and behavior



- Click once for question "What does assertive look like?"
- Click again for representation of assertive response using cat & dog

**Activity:** ask students to walk around the room showing assertive communication. Teacher should call out representative assertive behavior: i.e. Confident, relaxed and open in the torso, aware of surroundings, relaxed eye contact, breathing from center

- Click to show questions about risks and benefits
- Teacher should freeze activity and on their feet students are invited to brainstorm what are the Risks and Benefits of Assertive communication
- Option: Call & response or have them write it down

*Answers on next slide*

## Risks:

-might feel uncomfortable/unnatural

## Benefits:

-Shows you are not an easy target

# ASSERTIVE

## RISKS

- Might feel uncomfortable, unnatural, or not “like you”

## BENEFITS

- You are communicating clearly
- You are maintaining your confidence
- You are self-aware
- You are aware of the situation: People and environment around you
- Show you are not an easy target

I will do something to let them know that this behavior is not okay with me.



### Risks:

-might feel uncomfortable/unnatural

### Benefits:

- You are communicating clearly
- You maintain your confidence, self-awareness and situational awareness
- Shows you are not an easy target

## **What response makes you feel most powerful?**

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**Reflection:** Feeling powerful when aggressive vs. feeling powerful when assertive:  
(more detail/info on the next 2 slides)



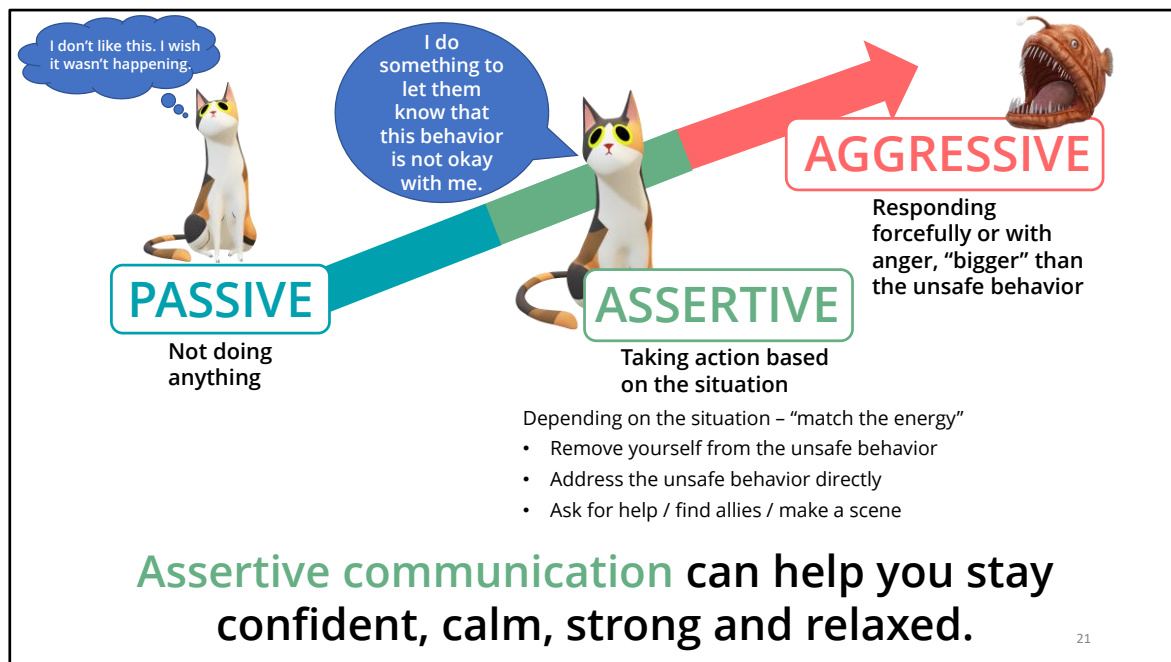
**Reflection:** Feeling powerful when aggressive vs. feeling powerful when assertive:

**Discussion:**

Ask students: Does one way of responding feel more in control? Does passive feel more in control for some people?

Answer:

Aggressiveness often creates blind spots, narrower vision. We cannot assess affectively if we are angry. *When we act assertively, we feel more calm and centered.*



There are risks and benefits to all three types of communication – and all three are okay.

For personal safety on a day-to-day basis, we recommend assertive communication to be relaxed, aware and set boundaries.

- Note on gender: female-perceived people might be considered aggressive when they are only being assertive.
- Gender constraints often expect female-identifying people to be passive – when they speak up or take action it can be considered aggressive in nature

**INSTRUCTOR Note:** This can be a good stopping point for the day if you are running out of time



## 3 steps of **ASSERTIVE** communication

### Step 1: NAME IT

#### **What is the problem?**

Name what behavior you find unsafe

### Step 2: FRAME IT

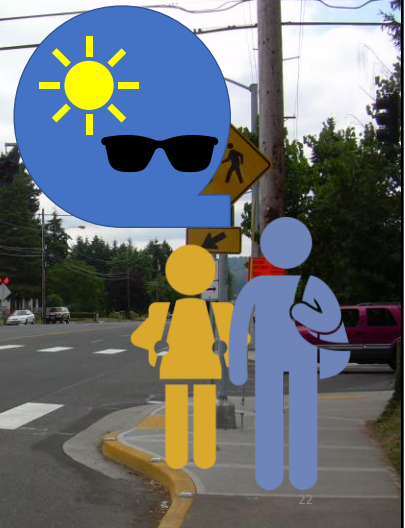
#### **Why is it a problem?**

Use "I" statements to say what you don't like

### Step 3: CHANGE IT!

#### **What do you want them to do differently?**

In clear words, tell the person how you want them to change the behavior



#### **Click three times to bring up Assertive, and to set the scene for this example:**

These three steps are one way you can be assertive in an unsafe situation. We'll talk about some other ways to be assertive, but want to walk through these three steps.

**Read this situational example:** While waiting for the traffic light to cross the street, another pedestrian comments on the weather while standing super close to you. You don't know them and you don't feel comfortable with how close they are – they are in your bubble.

Here are three helpful steps to help you respond to the situation using assertive communication:

(click to bring up each step)

-**Name it** – say what behavior you find unsafe or that makes you uncomfortable: You are standing really close to me

-**Frame it** – use "I" statements to say what you don't like: I need more personal space

-**Change it** – directly tell the person how you want them to change the behavior: You need to take a step back away from me (be direct)

**OPTIONAL ACTIVITY (depending on time):** Break into groups of 2 and practice using

these three steps

# On the Bus!

## Practicing **assertiveness** with strangers in public spaces

### Scenario 1

- Tool: Remove yourself from the situation
- Risks + Benefits

### Scenario 2

- Tool: 3-Step method for assertive communication
- Risks + Benefits

### Scenario 3

- Tool: Make a scene!
- Risks + Benefits



### Activity: On the Bus!

We just used the three steps of assertive verbal communication in a one-on-one setting. Now we are going to practice using our verbal and awareness skills when there are more people around: on a bus. For this activity, we will be acting like creeps, targets, and by-standers. The creeper will be intruding boundaries upon the target by asking inappropriate questions. The targets goal in this role play is to use their *assertive skills* to end the situation and to prevent it from escalating.

**Small group option:** Break students up into small groups (4-7 students each)– pass out scenario handouts to each group – they will each be acting out the scenario.

**Instructor lead option:** Teacher acts as the creeper and calls for 3 volunteers: target, driver and ally. They improvise the scenario in front of the class pausing to de brief as a class each scenario.



### End of day Reflection: Writing/thinking prompt:

Everyone engages with active transportation and public spaces in one way or another. Even if we are driven to school everyday, we are pedestrians at some point, and interact with other road users:

1. How/When do you use Active Transportation in your life?
2. How do you keep yourself safe?

# Walking & Taking Transit

**Day 2**

## **Day 2: Walking & Taking Transit**

Teacher materials needed:

- Projector
- Working Speakers (videos)
- Slide clicker

**This lesson is the longest! Optional stopping points:**

**Slide 39 (after Benefits of Active Transportation & Pedestrian conversation)**

**Slide 65 (After Crosswalk Law/Safety Tips Jeopardy)**

**Slide 75 (After Transit Etiquette & Street Smarts)**



## Today's Topics



Benefits of active transportation



We are all pedestrians!



Crosswalk laws & tips for success



How we roll: Transit

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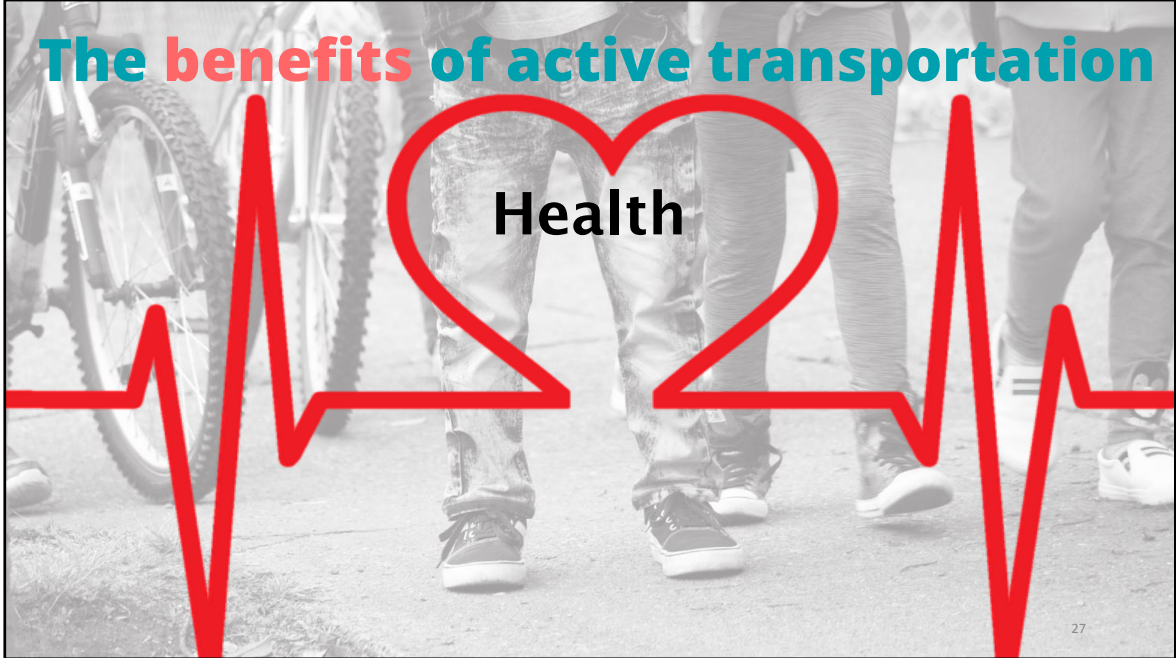
**Benefits of active transportation:** We're going to return to active transportation and talk about why it's beneficial for our bodies, the earth, and our communities.

**We are all pedestrians!:** We are all pedestrians at some point every day – we'll also learn about how some pedestrians interact with Portland

**Crosswalk laws & tips for success:** If we are all pedestrians, it's important to know what our city/state crosswalk laws are.

**How we roll: transit:** Lastly, we'll discuss public transit – it's an important part of connecting our city and everyone should have an idea of how it works, even if you don't use it now.





## SECTION 1 – BENEFITS OF ACTIVE TRANSPORTATION

Remember talking about active transportation? Does anyone remember what it means?

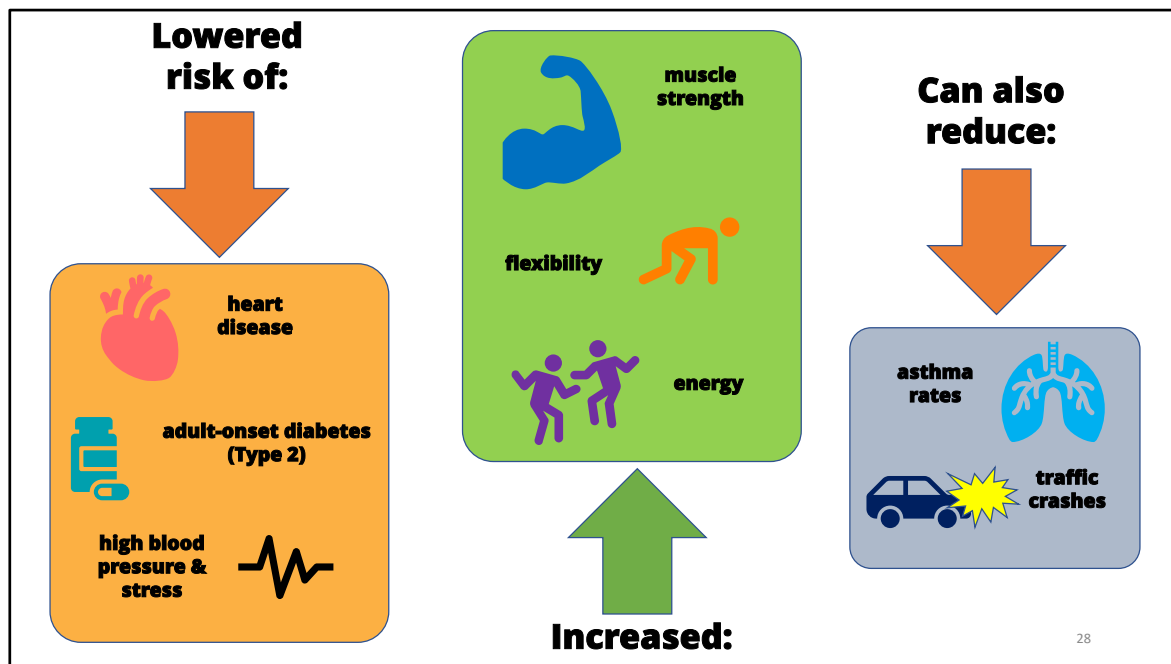
There are benefits! The main benefits can be grouped into five broad categories (click):

### 1) Health

Active transportation allows people to **build physical activity into everyday life**, by enabling them to be active on the way to their destinations. Even a moderate amount of daily exercise has an impressive range of benefits to both physical and mental health. Active transportation is a way to maintain health benefits from youth to old age.

**Go to next slide for examples of benefits**





The benefits of active transportation for your health range from:

(click through for each bullet)

- lowered risk of heart disease, adult-onset diabetes, high-blood pressure and stress
- more energy, flexibility and muscle strength.
- If people have the opportunity to drive less (and therefore pollute less), active transportation can actually reduce the number of traffic collisions (fewer people driving on the roads) and lead to lower asthma rates (less air pollution from vehicles = cleaner air).
- Physical activity can also help combat our much-publicized obesity crisis – **more details on next slide about calories/activity**

## How long does it take to burn calories by different modes of transportation?



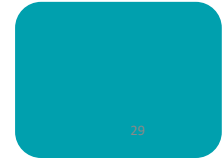
One  
carnitas taco



13 Takis



1 chicken  
Bahn mi



Here's a quick snapshot of how you can burn extra calories by adding just a little extra physical activity into your day.

Walking, skating, or biking somewhere, even just a few times per week, can improve your overall health.

\* We based this information off a 150 lb. person using a moderate walking or biking pace. The car column means just sitting still – like when you're riding in a vehicle.

# The benefits of active transportation



## 2) Mobility

Active transportation gives people who cannot or choose not to drive more options and cheaper options for getting around independently to meet their everyday needs.

(one mouse click)

People who benefit most from improvements to walking and biking include:

- **children** (particularly for going to school);
- many **seniors and people with disabilities**;
- and **people who don't want to or are unable to pay for owning and operating a car.**

(one mouse click to add skeleton meme)

**Also:** active transportation can give younger people more autonomy/independence – you don't need to wait for an adult to give you a ride somewhere if you have other options/know how to get there yourself and feel confident in doing it

Source: [http://www.tularecog.org/wp-content/uploads/2015/07/Tulare-County-RATP\\_benefits-of-active-transportation\\_v1.1web.pdf](http://www.tularecog.org/wp-content/uploads/2015/07/Tulare-County-RATP_benefits-of-active-transportation_v1.1web.pdf)

# The benefits of active transportation

Health  
Mobility  
Neighborhood livability



### 3) Neighborhood livability

Promoting active transportation can lead people to walk, bike, or roll more and to drive less, which can improve the quality of life in our neighborhoods in important ways. When residents are out on foot or wheels, they interact more with their neighbors. Residential streets become calmer and quieter, which, again, encourages interaction. Streets become safer, not only in terms of traffic but can also be safer in terms of crime, since pedestrians and people on wheels “put more eyes on the street.”

Source: [http://www.tularecog.org/wp-content/uploads/2015/07/Tulare-County-RATP\\_benefits-of-active-transportation\\_v1.1web.pdf](http://www.tularecog.org/wp-content/uploads/2015/07/Tulare-County-RATP_benefits-of-active-transportation_v1.1web.pdf)

# The benefits of active transportation

Health  
Mobility  
Neighborhood livability  
Economy



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## 4) Economy

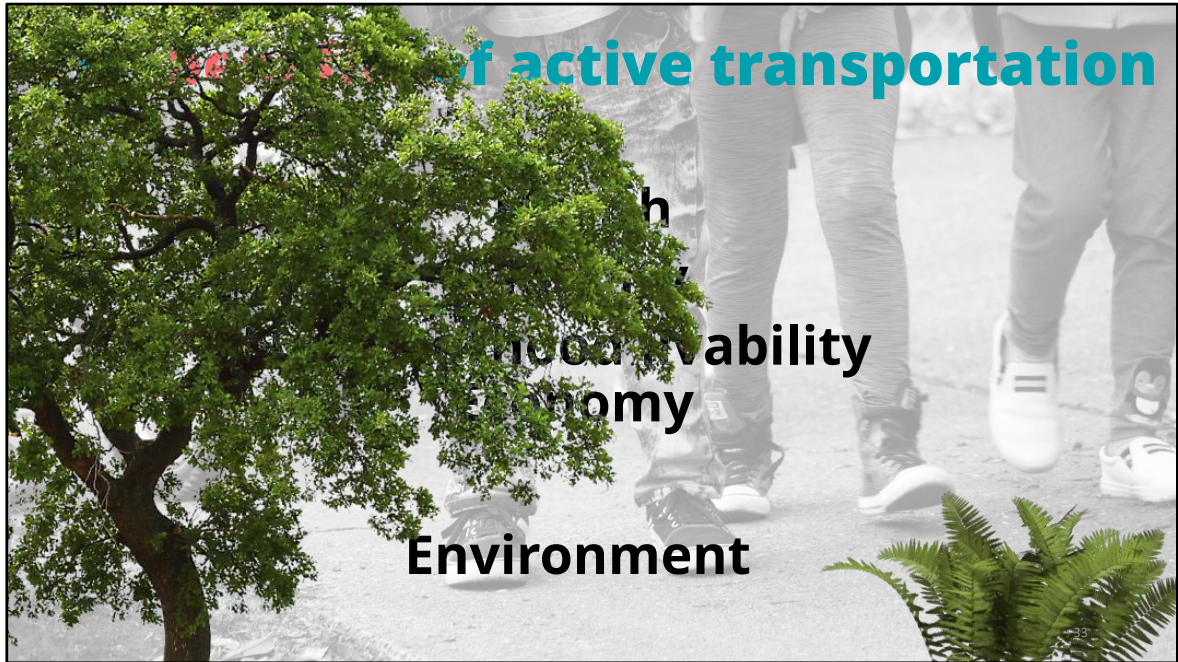
Active transportation can benefit the bottom line of households, businesses and cities.

The economic benefits of walking and rolling can include:

- lower transportation costs for individuals and families;
  - (average price of a new car in 2019 = \$36,843 / of a new bicycle in 2019 = \$500 / of a new skateboard = \$150)
- savings to cities from less wear and tear on streets and less demand for roadway improvements and parking lots;

Source: [http://www.tularecog.org/wp-content/uploads/2015/07/Tulare-County-RATP\\_benefits-of-active-transportation\\_v1.1web.pdf](http://www.tularecog.org/wp-content/uploads/2015/07/Tulare-County-RATP_benefits-of-active-transportation_v1.1web.pdf)





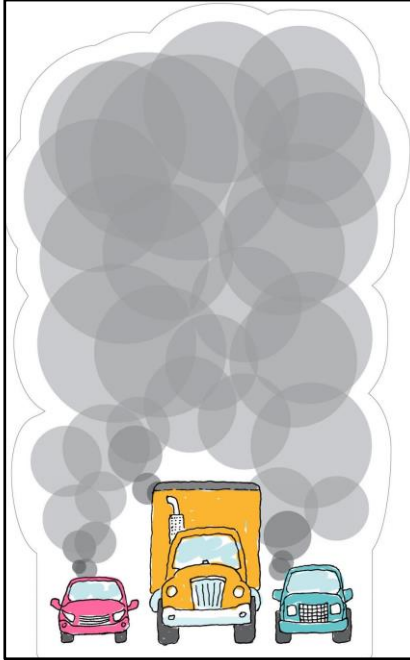
### **5) Environment**

When people are able to make short trips on foot or bike instead of by car, active transportation can help us address a number of environmental challenges.

The most discussed, and perhaps most critical, environmental benefits of active transportation are:

- \* reduced air pollution and emissions of greenhouse gases.

Source: [http://www.tularecog.org/wp-content/uploads/2015/07/Tulare-County-RATP\\_benefits-of-active-transportation\\_v1.1web.pdf](http://www.tularecog.org/wp-content/uploads/2015/07/Tulare-County-RATP_benefits-of-active-transportation_v1.1web.pdf)



**Why is it important to  
reduce air pollution?**

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Answer on next slide



Idling vehicles  
burn gasoline,  
creating smog that causes  
lung damage & asthma.

- Children breathe 50% more air per pound than adults
- Children's asthma symptoms increase as a result of car exhaust
- Asthma is the most common chronic illness in children and the cause of most school absences



Active transportation helps reduce these harmful emissions,  
but not everyone has access to safe walking, biking, or transit routes.

So what can we do?

**ENVIRONMENTAL JUSTICE** means making sure that everyone has a fair chance of living the healthiest life possible. Living a healthy life often depends on the conditions where someone lives, plays, or goes to school, and their ability to thrive there.



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(click through for bulleted information on idling)

- Vehicle idling around schools can be detrimental to the health of young people
  - Youth breathe 50% more air, and their asthma symptoms increase due to car exhaust
  - Asthma commonly keeps students out of school for doctor appointments or illness

(click for leading question to talk about Environmental Justice)

Active transportation is a great way to combat climate change and harmful air emissions, but not everyone has access or the opportunity to walk, bike, or roll.

There is a movement called **Environmental Justice** – people organizing and coming together to bring attention to these inequities.

EJ = The opportunity to have a healthy life often depends on where someone lives, plays, goes to school.

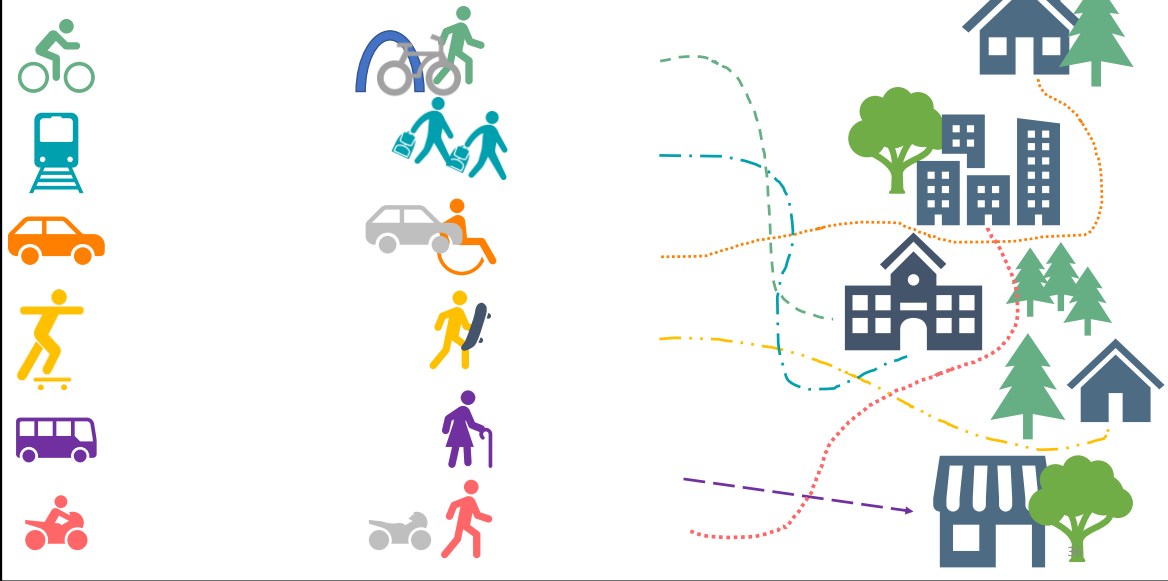
\* If people don't have the ability to move they may be exposed to harmful things for a

long time and can get sick.

- Some people, often racial and ethnic minorities, share an unequal portion of illness because of where they live, work and play.

**Teacher = optional stopping point**

# We all walk at some point every day.



## SECTION 2: WE ARE ALL PEDESTRIANS

We are often pedestrians each day. Every time you walk to bus/car/or walk your skateboard or scooter, you are a pedestrian.

Pedestrian definition: A person walking along a road or in a developed area

Remember to follow the ALPACA Principles of Active transportation: Aware, Legal, Predictable, Assertive, Courteous, Able to be seen



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**Video: PedPDX: Walking with Anjeanette (1:48)**

Some people have different experiences walking in Portland. The Portland Pedestrian Plan (PedPDX) recorded interviews with people who shared their experiences of walking around the city.

Activity: *What resonated with you about Anjeanette's story?*

- "It's difficult being a woman walking while Black"
- The city has changed from when she was younger
- You need confidence and assertiveness to get around
- Important for young people to voice their concerns and have a say to shape their world



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**Video: PedPDX: Rolling with Myra (1:40)**

Activity: *what resonated with you about Myra's story?*

Myra lives in downtown and uses a mobility device to get around.

- She prefers Portland Streetcar over MAX or a bus because of space availability.
- The benefit of living downtown provides her multiple options to choose from for transportation that help extend her walking trip.

# Different types of safety

## Traffic laws



Society's code of conduct for using our right-of-way

## Personal security



Person-to-person interactions when navigating public spaces

## Environment



Interacting with vehicles & street infrastructure

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## SECTION 3: OREGON CROSSWALK LAWS & TIPS – JEOPARDY!

This is a reminder of how safety can be broken down into three categories.

**Traffic Laws** – codes created to provide order for lots of people to navigate public spaces

**Personal** – human to human interactions when navigating public spaces

**Environment** – using the built infrastructure, what's available to you for walking, biking, skating; interacting with vehicles and other road users

# Different types of safety

## Traffic laws



Society's code of conduct for using our right-of-way

## Environment



Interacting with vehicles & street infrastructure

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Today we're going to talk about Traffic Laws & also share tips on how to interact in your Environment when you're a pedestrian.

**Traffic Laws** – codes created to provide order for lots of people to navigate public spaces

**Environment** – using the built infrastructure, what's available to you for walking, biking, skating; interacting with vehicles and other road users

# Oregon Crosswalk Laws & Tips

The Jeopardy! logo is displayed in its characteristic 3D, blocky font. The letters are a light blue or lavender color with a dark blue outline. The logo is set against a dark, rectangular background that has a slight gradient and a subtle glow effect.

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Let's find out what is legal for people walking and using crosswalks in Portland. What are your roles and responsibilities as a pedestrian?



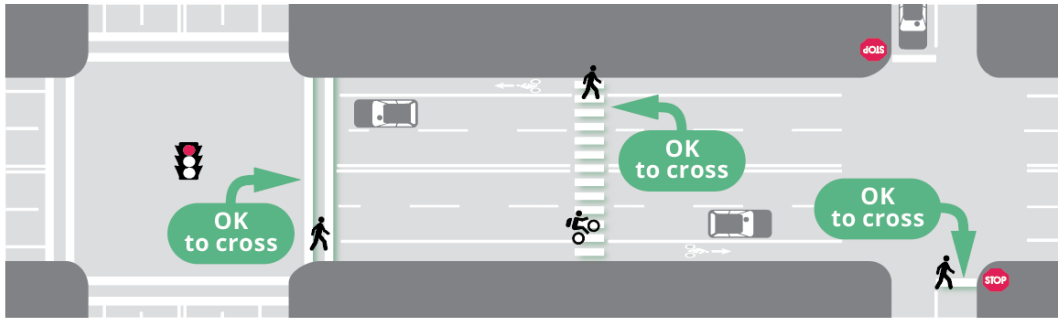
A: Every intersection in Portland is one of these, whether marked with paint or not.



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**Answer** = a crosswalk (next slide will have more details on the answer)

## IN PORTLAND, EVERY INTERSECTION IS A CROSSWALK\*



**Pedestrian = a person walking.** There are multiple ways people can “walk.” Pedestrians can move using their own legs, a wheelchair, or mobility device.

\* ORS 801.220

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Oregon law states that every corner is an intersection. Unless there is a pedestrian traffic light dictating traffic, pedestrians have the right of way at every intersection (whether marked or unmarked). Pedestrians also have the right of way at marked mid-block crossings.

However, it is important to be aware and check before crossing any intersection to account for other road users not paying attention.

**A: Once this begins flashing, pedestrians may not enter a crosswalk.**



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**Answer:** Hand signal or countdown. It is important that pedestrians do not cross during countdown.

It's the Law!: ORS 814.010 = A pedestrian shall not start to cross the roadway in the direction of a signal showing a "wait" or "don't walk" or any other symbol indicating that a pedestrian may not proceed.

A flashing hand and a flashing hand with a countdown are both considered "don't walk" symbols.

Many people think it's okay to start walking when they see a countdown because they know there are that many seconds left before the light changes, but that's not the case.

A: As a pedestrian, you must do \_\_\_\_\_ (by extending a hand, leg, umbrella, or anything that is an extension of your body beyond the curb or the end of the sidewalk into the street) before crossing.



Answer: Show intent to cross.

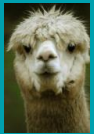
It might be feel vulnerable to extend part of your body into the street, so just be sure to look for potential conflicts, like oncoming vehicles who are close to the curb. Be sure drivers are stopped for you before you fully enter the crosswalk.

ALPACA principle! It's **courteous** to allow other road users time to stop; you are being **predictable** when you wait at a crosswalk, show intent, and then wait to cross

A: When crossing the street you must give drivers \_\_\_\_\_ and \_\_\_\_\_ to stop.



Courteous  
Predictable  
Legal

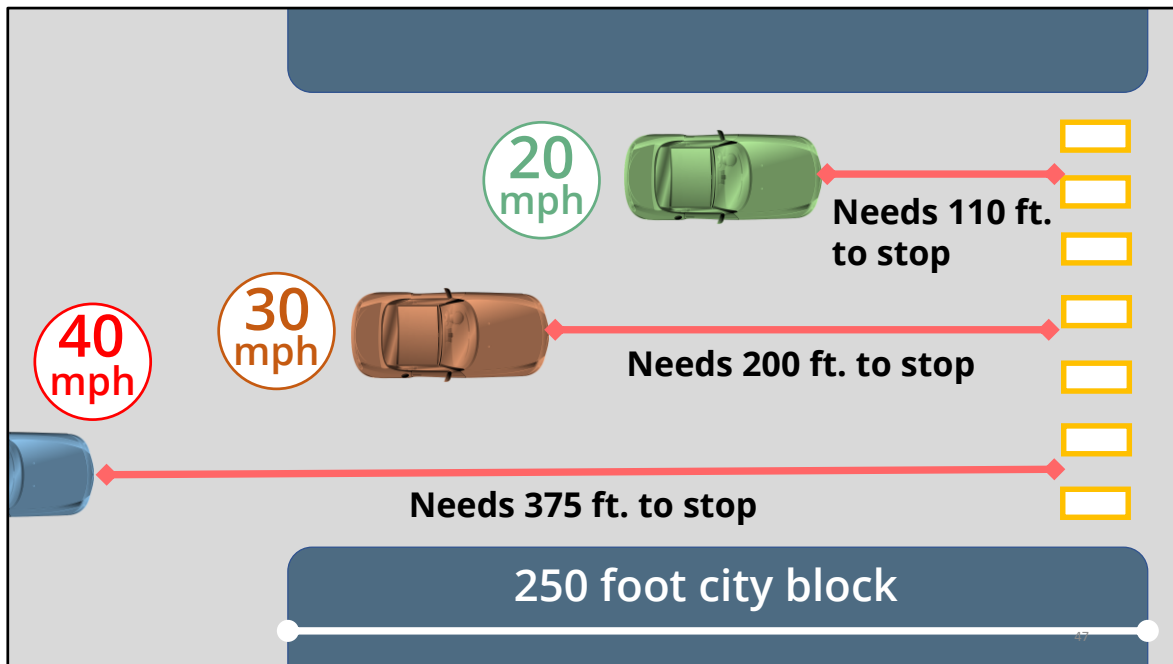


Answer: time and distance.

You must allow drivers time to react, and distance to stop before stepping into the street or starting to cross.

**ALPACA Principles!** - again, how you cross a street should be courteous, predictable, and in this case allowing time for drivers to stop is the law!

**More details about the answer on next slide**



Downtown Portland city blocks are about 200 ft in length – on average in Portland they are about 250

(click through to show how much distance a vehicle needs to stop based on how fast they are going)

- A vehicle traveling 20 MPH needs about 110' to stop (approx.  $\frac{1}{2}$  of a 250' long City block)
- A vehicle traveling 30 MPH needs about 200' to stop (more than  $\frac{3}{4}$  of a 250' City block)
- A vehicle traveling 40 MPH needs about 375' to stop (approx. 1-1/2 of a 250' City block)

### Considerations

Are there streets you travel on where people drive 30 and 40 MPH? MLK, Vancouver?, Lombard? Glisan, 82<sup>nd</sup> Ave?

What about heavier vehicles like big trucks – would they need more time to stop?



**1) Safe speeds lower the risk of crashes**

**2) When crashes occur, safe speeds make it less likely that people are killed or seriously injured**

Unsafe speeds are a factor in about half of deadly crashes in Portland. That's why speed is a focus of the city's Vision Zero Action Plan, which aims to eliminate deaths and serious injuries from Portland streets by 2025 (that's why it's called Vision Zero – zero is the only “acceptable” number of traffic fatalities on our streets).

Though you cannot control the speed that others drive, it is important that you consider someone else's mistake in judgement when crossing the street.

**20**  
**IS PLENTY**  
**VISION ZERO**  
**PORTLAND**

**20 MPH IS PORTLAND'S NEW SPEED LIMIT ON RESIDENTIAL STREETS**

- The new speed limit takes effect April 1, 2018 and PBOT will be installing signs to reflect the change.
- Slower driving speeds help prevent crashes and, when crashes occur, reduce the harm that results.

**SPEED LIMIT 20**

**Why crash and not accident?**

- 1) Safe speeds lower the risk of crashes
- 2) When crashes occur, safe speeds make it less likely that people are killed or seriously injured

49

Why do we say “crash” and not “accident?”





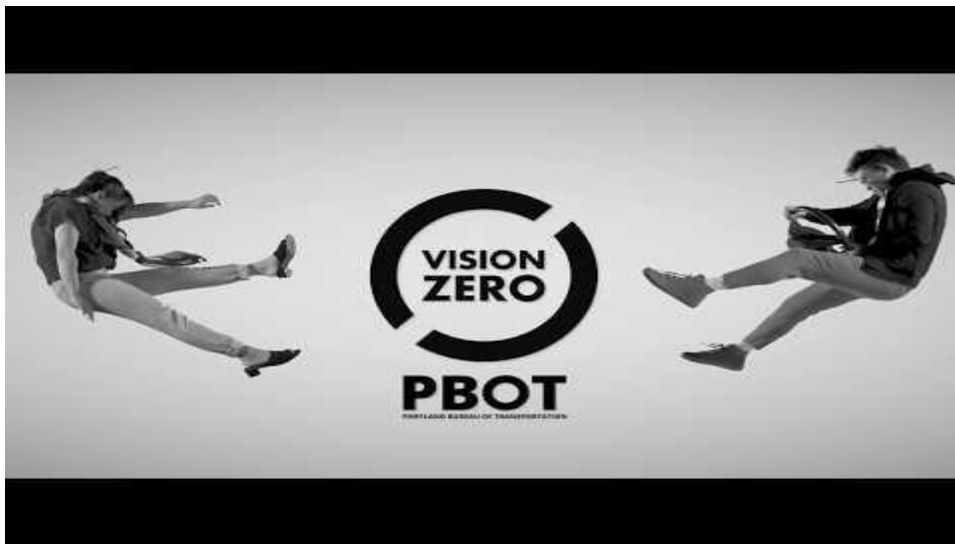
Traffic crashes are fixable problems, caused by **dangerous streets and unsafe drivers**. They are not accidents. They are preventable.

### Why crash and not accident?

50

Why do we say “crash” and not “accident?”

- Before the labor movement, factory owners would say “it was an accident” when American works were injured in unsafe conditions.
- Before the movement to combat drunk driving, intoxicated drivers would say “it was an accident” when they crashed their cars.
- Planes don’t have accidents. They crash. And as a society, we expect answers and solutions as to why.



51

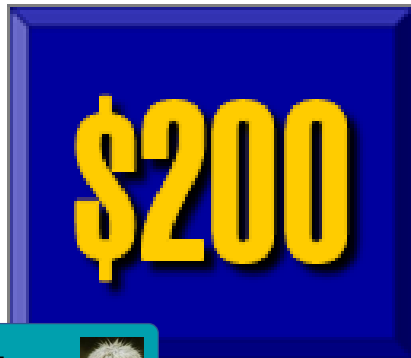
### Optional Video

Speed is a major factor in crashes across the city. Vision Zero is an effort to end traffic fatalities and serious injuries across the City.

This video is from a campaign to remind drivers to slow down in our city.

- The campaign speaks to the impact on the victim, who just lost their life, and to the vehicle driver, who just destroyed the life they knew.
- The idea for the campaign came from a community meeting where a captain from the police bureau explained how drivers' lives are also deeply impacted by a deadly crash. By preventing a deadly crash, a driver would actually save two lives.
- "If we are going to reduce fatalities, we need to change how people think when they get behind the wheel. It used to be socially acceptable to drive without a seat belt or drive when people were not quite sober. But with new laws and education campaigns, we changed people's behavior. We need to do the same thing with speeding." – former Commissioner Dan Saltzman

A: Lights, reflectors, bright or contrasting clothing, and lights will help you be more \_\_\_\_\_ during grey weather.



Able to be seen!



52

This is a safety tip, not a law – there is more information on the next slide that explains more

**Answer:** Visible

**ALPACA principle!** Not a law, but a way to be when you're out traveling our streets and public spaces



**(Click to see the photo)**

- You can clearly see two people in this photo crossing the street during the daytime, but did you easily see the third person? Imagine what it would be like if you were the driver and it was nighttime. Would you see all 3 people in time to stop your vehicle?
- Making yourself visible increases the opportunity for drivers to see you when you cross the street. Portland Police Traffic Officers report the most frequent comment they hear from drivers after a crash with a pedestrian is “I didn’t see them.”
- Nighttime pedestrian crashes are nearly **double** that of nighttime bicycle or car crashes.

To make yourself more visible, consider any of the following:

- ✓ Wear clothing, umbrellas, athletic shoes, etc. that feature sewn-in reflective material
- ✓ Buy reflective strips or stickers that you apply to your clothing, shoes, or bags (bike shops often carry these items)
- ✓ Carry a flash light or flashing strobe when walking
- ✓ Wear bright, white or contrasting clothing



Go to next slide for question

This traffic situation is sometimes called a "Double Threat."



The driver in the orange car may not stop for the pedestrian.

Because their vision is obstructed by the grey car they may not be aware they need to stop.

55

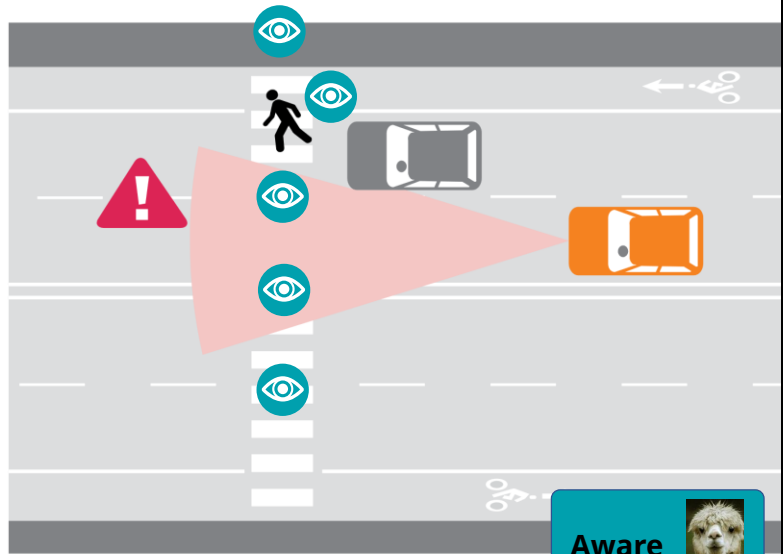
- Click two times for details about the scenario and the question
- The double threat is common on busy streets with multiple lanes of traffic.
- This is an important tip, but not a law



**LOOK** for oncoming vehicles before you begin to cross

**LOOK** for oncoming vehicles as you cross

**LOOK** before you enter each lane of traffic to make sure drivers see you and have stopped for you



**ALPACA principle! This is a great example of being Aware**



A: A pedestrian should usually travel in this direction when walking on a road without a sidewalk.



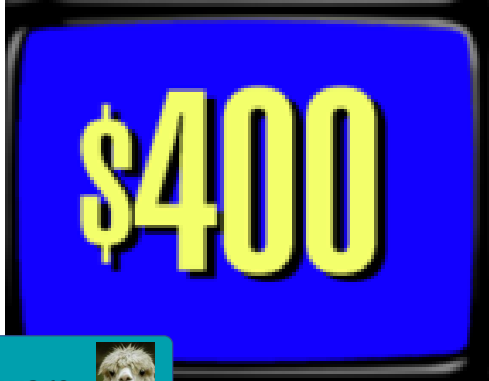
57

This is a tip!

Answer: Against traffic/towards oncoming traffic

- Unlike when riding a bike, skating or scooting, it is best to walk the opposite side of traffic so you can see incoming traffic and are able to react in case of an emergency.
- We'll learn more about this when we talk about biking and rolling in lesson 3.

A: Once drivers have stopped for you, you must \_\_\_\_\_ to make sure they see you and are really waiting for you to cross.



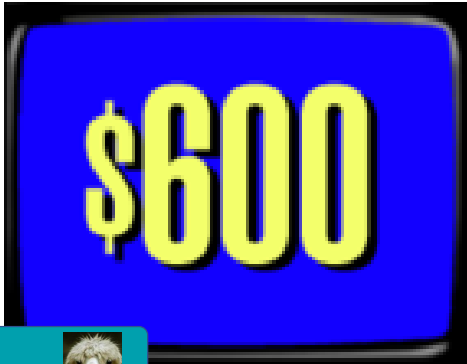
58

Answer: Make eye contact

**Pro Tip:** Sometime drivers might be looking past you down the street – be sure they are really looking at you and know you're there.

**ALPACA principle!** Taking responsibility for when it's safe to cross is a great way to be Aware!

Putting your phone away and turning your headphone volume down are good examples of this.



Aware



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Answer: Being aware and paying attention.

**Another example of the super important ALPACA principle!**



## Video

It only takes a few seconds while typing on your phone or reading a quick LOL to become distracted. It's so important to put your devices down when crossing the street.

**Q: What are the three most common types of crashes involving pedestrians in Portland?**

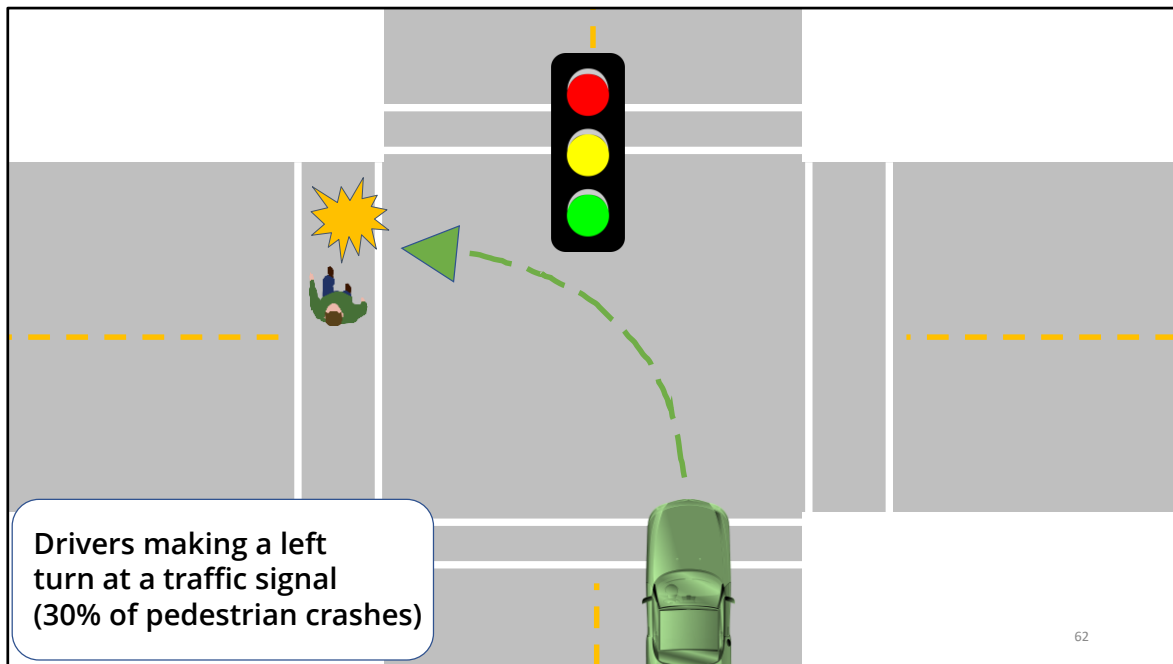


61

Answers:

- 1) when drivers are turning left at a traffic signal
- 2) intersections with traffic signals
- 3) during dark/low-light times of day

See next three slides for more details about these types of crashes



**Potential points of conflict** – many crashes in Portland occur at traffic signals where drivers are turning left–

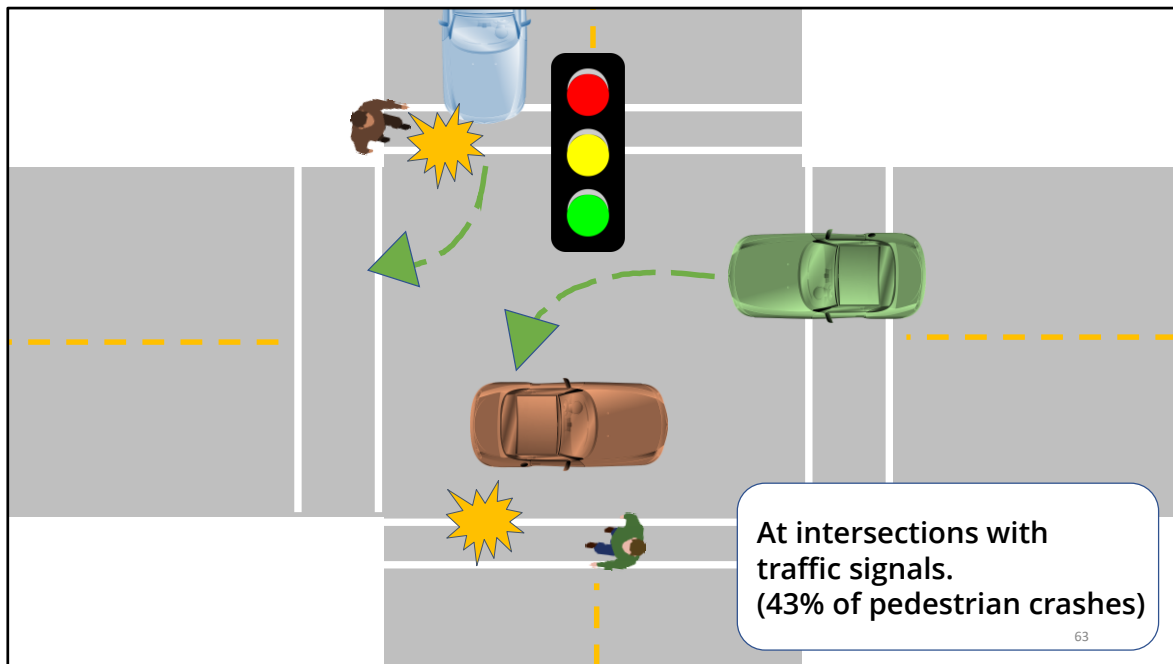
Q: Where should you be looking when crossing at an intersection with traffic signals and left turns? Drivers might just be following the light and not looking for you.

A: Look before you cross to see if drivers have a blinker on to turn left; be sure to keep looking as you're crossing -- drivers may be waiting for other cars to travel through the intersection and may be blocked from seeing you

**Drivers making a left turn at a traffic signal accounts for 30% of pedestrian crashes:** a very common crash type for people hit while walking in Portland occurs when people driving make a left turn at a signal and collide with someone in the crosswalk.

Q: What ALPACA principles would be smart to use in this situation?

A: Aware, Legal (crossing with the ped signal), Predictable (crossing with the ped signal), Able to be seen



**Potential points of conflict** – most crashes in Portland occur at traffic signals –

In this example:

- the blue car may be looking left to see if there are cars coming through the intersection. They see the green car is turning left and decide to turn right. They might not be looking for a person walking.
- The green car is turning left and sees a gap with no cars after the brown car so they plan to turn left. They may not see the pedestrian in the crosswalk because their view is obstructed by the brown car.

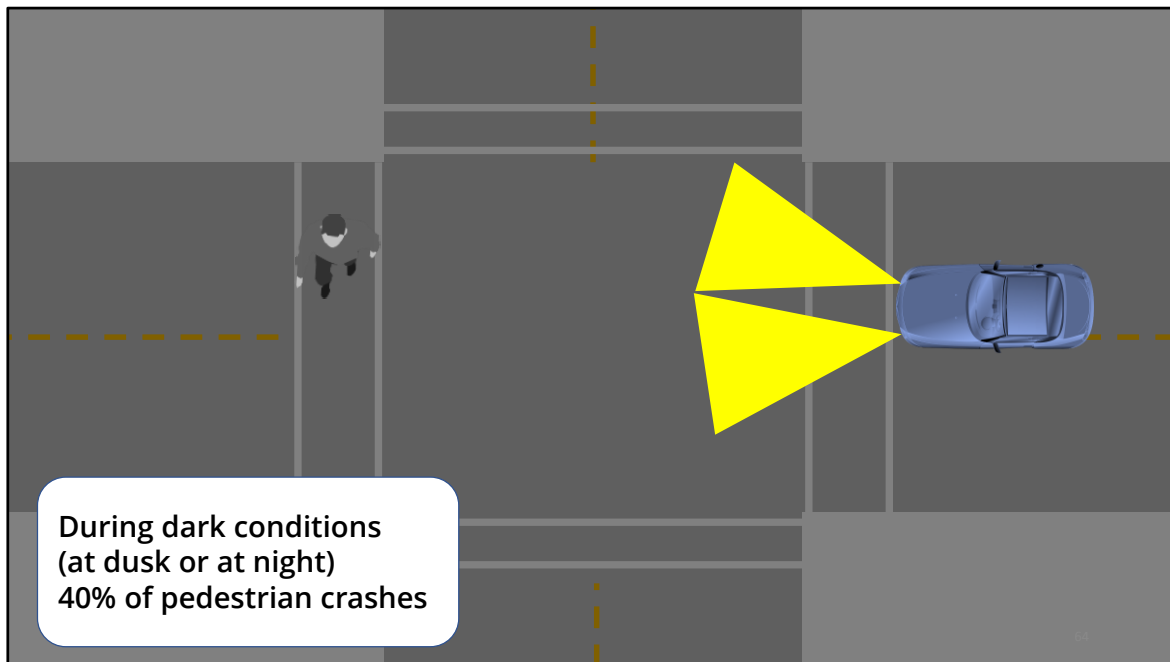
**Q: where should you be looking when crossing at an intersection with traffic signals?**

A: Similar to the previous slide, watch for left-turning drivers and also people looking to turn right. They may be looking for traffic coming from the left and not see a pedestrian in the crosswalk on their right. In general, stay alert when crossing at any intersection with a traffic signal. Try not to just cross when you see the “walk” sign.

**Q: What ALPACA principles would be smart to use in this situation?**

A: Aware, Legal (crossing with the ped signal), Predictable (crossing with the ped signal), Able to be seen

Intersections with traffic signals = **43% of pedestrian crashes**: the most common location people are hit while walking in Portland is at intersections with traffic signals.



During dark conditions  
(at dusk or at night)  
40% of pedestrian crashes

**Instructor: Optional stopping point after this slide**

**Potential points of conflict** – many crashes happen at night or in low-light conditions – what are some precautions you can take when walking at night?

**(40% of pedestrian crashes):** nearly half of crashes that involve people walking in Portland occur in dark conditions (dusk or night).

When crossing the street, make sure you are visible to others, AND pay close attention to the areas where people might be distracted and not pay attention to you.

**What ALPACA principles? Aware, Legal (crossing with the ped signal), Predictable (crossing with the ped signal), Able to be seen**



# Riding transit in Portland



Bus



MAX  
(Metropolitan Area Express)



Portland Streetcar



Aerial Tram



WES



C-TRAN



Columbia Gorge Express

## SECTION 4 – TRANSIT: HOW WE ROLL

What types of transit options are there in Portland?

(two clicks – will show the examples)

→ Things thought of easily: Bus, MAX train, Streetcar,

→ Other things people don't think of as often

**Portland Aerial Tram** (on South Waterfront/connects OHSU campuses – used by lots of medical staff)

**WES Commuter Rail** – connects between Beaverton & Wilsonville along I-5 – commuter train

**C-TRAN** – bus service between Clark County and Multnomah County – commuter services between Vancouver area and Portland,

**Columbia Gorge Express** – Inexpensive trips to the gorge. Leaves from Gateway Transit Center; stops at Rooster Rock State Park, Multnomah Falls, Cascade Locks, and ends in Hood River! Free weekend shuttle service to Multnomah Falls during the summer! – Run by Oregon Dept of Transportation (ODOT)

Wow! That's a lot!

# Riding transit in Portland

Here are 200 people in 177 cars



Public transit adds capacity and space to our streets –

This is an image from Seattle representing some pretty heavy traffic.

The picture shows 200 people sitting in 177 cars, so many people are driving alone in their car by themselves.

\*\* international sustainability institute's commuter toolkit poster,  
seattlebikeblog.com\*\*

# Riding transit in Portland

on 3 buses



on 1 light rail train



These pictures show the same amount of people on three buses or one light rail train.

## Transit Benefits:

- Can carry more people in less space than individual automobiles, which **helps to keep traffic congestion lower** – less congestion reduces air pollution from idling vehicles and also can help riders avoid the stress from daily driving in congestion.
- Transit **allows for our streets to be used more efficiently** & produces significantly less air pollution than a standard car carrying a single driver.
- **Frees up time** – someone else is doing the driving – you can read, work, study, chat, sleep, etc.
- Public transportation **is linked to healthier lifestyles** – people who use public transportation are said to get 3x the amount of physical activity per day than those who don't, just from walking to and from their transit stops & final destination.

## **Optional question (if there is time):**

- What doesn't work about transit right now in Portland? How could it be improved to make people want to use it more?

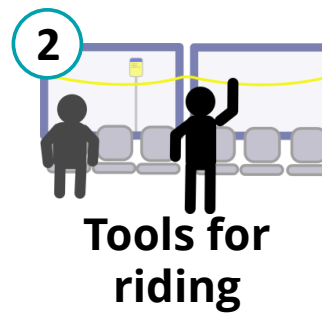
Benefits found on this site:

<https://www.nationalexpressstransit.com/blog/9-benefits-of-public-transportation/>

# Riding transit in Portland



- Getting a lot of people where they need to go in a small space!



- How to ride bus & MAX
- Taking your bike with you/using an access ramp

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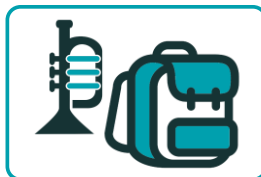
**Teacher tip:** if running late on time, survey your students to get an understanding of what would be more helpful to cover and jump ahead to on of the following topics:

**1. Etiquette & street smarts: Slides 68 - 74**

**2. Tools for riding: Slides 76 - 88**

1

# Etiquette & Street Smarts



Courteous



## Etiquette/Street Smarts Section (Slides 70 – 75)

Transit is all about getting a lot of people where they need to go in a small space. Here are some tips for being kind and respectful so we can all have a better ride.

These etiquette tips represent the Courteous ALPACA principle!

**Can you guess what these icons mean when you're on public transit?**

**(click to reveal answers to each image)**

### First Row

1- Yield the priority seating area – seniors & people with disabilities/ someone with a stroller or groceries? They might appreciate the extra space!

2- Keep your stuff to yourself – place big items like backpacks on your lap or on the floor to allow others to sit

3 – Save your lunch for later – keep food and drinks in closed containers

### Second Row

4- use your inside voice – quiet conversations are okay, but refrain from yelling or talking too loudly in person or on the phone

5 – plug in to turn up the volume – music, videos, etc.

6 – only seats go on the seats – keep your feet on the ground and make room for others to sit next to you.

# 1

## Etiquette & Street Smarts

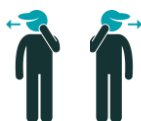


### Waiting for the bus or MAX



In dark or low-light conditions use your phone to signal the bus when you want to board

Stay alert and look around. Limit distractions.



Trust your intuition when someone makes you uncomfortable. Use the buddy system when you can.

### On the bus or MAX

Plan a few "safe havens" where you can go if you have to get off in a hurry.



Don't be afraid to tell the bus driver or press the "help" button if you need assistance.

I'm using the three steps of assertive communication !



Aware



70

### Tips for waiting for and riding on public transit:

#### Waiting (click for each bullet):

- Use your phone to signal the driver
- Keep your head up/be aware of your surroundings
- Trust your intuition – if someone makes you uncomfortable, cross the street or go in the other direction. Buddy up often or always.

#### On the bus/MAX

- What are some good safe havens? A business or a friend's house – think about where your route goes and what businesses, parks, or other places you pass on the way.
- Say something to an adult or older person you trust – don't be afraid to let the drivers know that something is wrong (more tips on the next page in case the help button doesn't work or you need more assistance)
- Use **assertive communication** like we talked about in the previous lesson -- **Name It/Frame It/Change It**

**ALPACA principle!** These are all good examples of being **Aware** of what's happening around you, there are also opportunities to be **Assertive**



# 1

## Etiquette & Street Smarts



Q) What if the emergency intercom button on the MAX or bus doesn't work?

- Find an ally that can help you
- Use your phone to call 9-1-1
- Text TriMet's 24-hour customer service team: (503) 238-7433
- If possible, contact the driver/operator



Be an ACTIVE BYSTANDER

### DO

- Do **ignore the perpetrator**
- Do **support the target**; see if they would like your help
- Do **keep both of you safe**
- Do **recruit others to help** if you are too nervous to speak out or need support

### DON'T

- Don't **do nothing**
- Don't **escalate the situation**
- Don't **encourage negative bystanders**



Q) What if someone is causing a scene, but it's not directed at you? What can you do?

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These are some questions we've heard from other students –

### Teacher Tips:

Answers to Question 1 are based on the extent of the emergency – consider talking about what the level of emergency could be.

- Also, some people may not want you to call the police -- it is best to ask if it's okay to call the police if there is an opportunity to do so

Answer to Question 2 includes information from an Interrupting Hate in Public Spaces training, which included Do's and Don'ts for Bystander Intervention (Adapted with permission from The People's Response Team & As the Spirit Moves Us). This is just a basic introduction – there are many other resources online for being an active bystander in bully situations.

- We hope this can be just one tool on the way towards building strong communities and supporting each other.
- Some of these may be big asks for students in a public space – if they see something but are afraid to do something, they can ask someone near them to act in their place

Active Bystander Definition: A **Bystander** is a person who observes a conflict or

unacceptable behavior. It might be something serious or minor, one-time or repeated, but the **Bystander** knows that the behavior is destructive or likely to make a bad situation worse. An **active bystander** takes steps that can make a difference.

(<http://web.mit.edu/bystanders/definition/index.html>)

## DO

**Ignore the perpetrator:** this is different than when someone is directing their attention at you and you want to be assertive like we discussed in lesson 1. In this case, you want to make sure the person who is being targeted is okay – giving any attention to the person causing the scene only gives them a platform.

**Support the target:** If you feel comfortable, make eye contact or ask the person targeted if they are okay with the situation. It's making you uncomfortable – does it make them feel that way, too? Support them in moving away from the person or telling them they are handling the situation well. *If possible: Ask if recording with your phone is okay before doing it; ask if calling the police is okay before doing it.*

**Keep both of you safe:** Are there others around who can help? Could you and the person being harassed move to a safer place?

Don't put your body in between the perpetrator and the target.

**Recruit others to help:** working in a team is a good idea, if possible. Especially if it is an adult(s) or older student you feel you can trust.

## DON'T

**Do nothing:** Silence is dangerous – it communicates approval. Communicate to the target with your eyes or ask others for help if you need it to provide support.

**Escalate the situation:** the goal is not to incite further violence/hate speech/harassment from the attacker – the goal is to ensure the person being targeted is safe; a hope is that they might recount the experience differently later because of support provided by bystanders

**Encourage negative bystanders:** don't encourage people laughing at what the perpetrator is saying or doing; it can help escalate the situation



1

# Etiquette & Street Smarts



**Have you experienced a hate or bias incident on transit or anywhere else?**

**What is a hate/bias incident?**

Any incident that targets an individual/group based on their age, color, religion, disability (physical or mental), race, ethnicity, national origin, sex, gender, gender identity, sexual orientation and so on.

**Examples:**

- A person is verbally or physically harassed for being presumed to be from another country
- A person shouts an offensive name at you while you're walking down the street
- A poster or graffiti singles out a racial or ethnic group to intimidate, or includes anti-Semitic messaging
- Someone is intentionally ridiculed for the pronouns they use

72

Portland United Against Hate is starting to track hate or bias incidents – their mission is to build a rapid response system that will track, respond to, and prevent acts of hate while providing support that communities need.

PUAH is a community initiated partnership of community based organizations, neighborhood associations, concerned communities, and the City of Portland.

(Click for question and examples of hate/bias incidents)

**Q: What is a hate/bias incident?**

These examples and the description are not all encompassing. If you believe you have experienced or witnessed a hate/bias incident you can report it to them – it doesn't need to be something that fits within any of these lists.

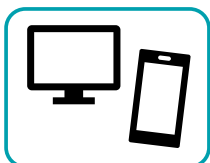
1

# Etiquette & Street Smarts



**ReportHatePdx.com**

Share your  
experiences now



**Online reporting  
tool**



**Counseling, victim  
advocacy, trainings**



**PUAH Resources**

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At [reporthatpdx.com](http://reporthatpdx.com) you can find the following:

**1) Online reporting tool:** “Tell us only what you want to, it’s all confidential”

- Communities who are most likely to be targets of hate violence are also the least likely to report their experiences to law enforcement.
- An undercounting of hate crimes can skew the view of what’s really happening and make it seem that all is well.
- Communities experience hate in a variety of ways and there’s need for a documentation process that enables people to track hate incidents in a trusted manner.
- There are also links on the site of community organizations where you can report any incident face-to-face

**2) Community resources** – the website links you up to community organizations that can either provide or connect you with counseling, advocacy, or trainings. Some of the organizations listed are the Q Center (largest LGBTQ community center in the PacNW), Latino Network, APANO (Asian Pacific American Network of Oregon), and Coalition of Communities of Color (organizing communities to obtain wellness, justice and prosperity).

**3) PUAH resources** – next slide

1

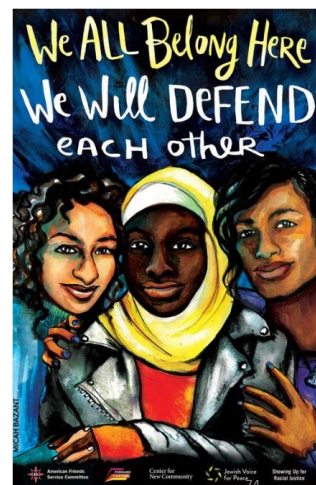
# Etiquette & Street Smarts



## Interrupt Hate Action Card

*See something? Do something.*

- FEEL** Be calm and assertive.
- ASK** Speak to the person being targeted:  
I am uncomfortable with this. Are you ok?
- ACT** Ignore the attacker. Center and support the person targeted.  
Stand by the person targeted, look at them, and engage them in conversation. Invite them to go with you, respect their wishes.



### Optional stopping point if you are running out of time

The PUAH website has resources for posters, the Southern Poverty Law Center's "10 Ways to Fight Hate" guide, and interrupting hate action cards in multiple languages, plus more information about the program and organizations involved.

**Teacher:** <https://www.micahbazant.com/we-all-belong-here>

This links to a page with free coloring page downloads and free K-12 discussion guide for teachers

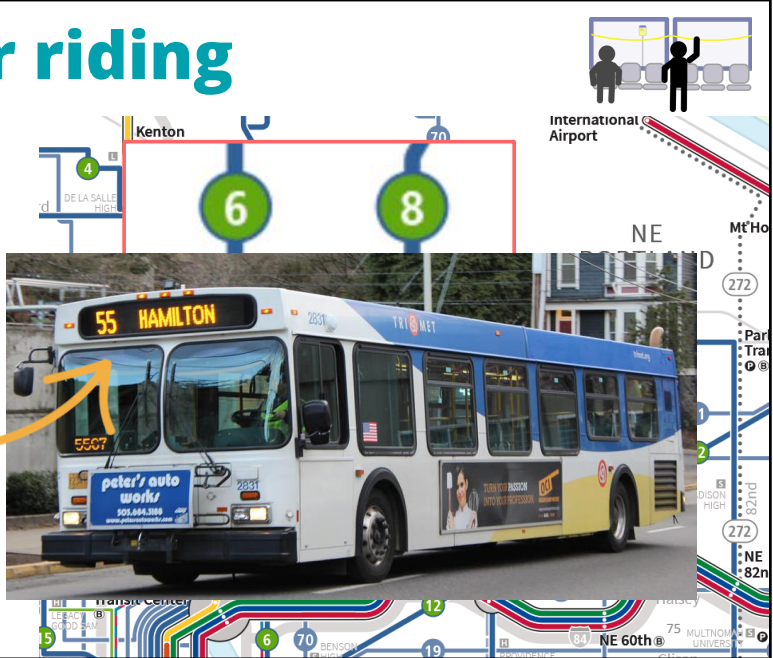
## 2 Tools for riding

Bus lines are designated by number and major streets on their route

Check the top of the bus for the bus number and route name



On the bus

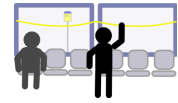


### Section 2: Tools for Riding (Slides 76-88)

- Screenshot of TriMet system map –(click to show close up) all the circles are bus route numbers – green circles are frequent service lines.
- (click for bus photo) Bus lines are designated by number & major streets on their route = picture examples: 24/Fremont or 6/MLK, 8/NE 15<sup>th</sup>
- Check the top of the bus for the bus number and route name.

2

## Tools for riding



**Bus route number!**



**This bus line has Frequent Service**



**That's a Stop ID**



**On the bus**

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Now a few questions to make sure everyone understands some bus info... (2 clicks per question – shows question and then answer)

- 1) What does this number stand for that you see at a bus stop? A: That's the bus route number that you also see on the front of the bus
- 2) What does this number mean? You can usually find it on bus stop kiosks or on the bus stop poles. A: That's a Stop ID – you can plan trips using this number, find arrival times online, and be sure you're in the right spot.
- 3) Bonus question: What does the green half circle mean? A: That this route is frequent service, meaning a bus should arrive every 15 minutes or better. If you just missed the bus, another one will be along soon.

2

## Tools for riding



Paying with cash?

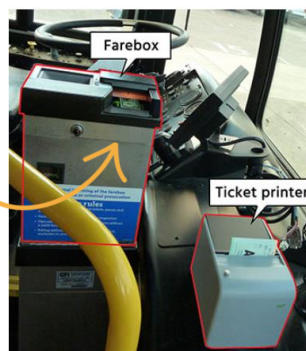


Put **exact change** in the farebox

Always board at the front door & be ready to pay or validate your fare



On the bus

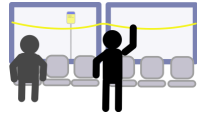


77

Get on the bus through the front door so you can show your fare to the driver, or pay.

- If you are paying with cash, have exact change and pay by putting your money in the farebox. Your ticket will print out for you. When you pay with cash, the machines will print out single use Hop cards.

## 2 Tools for riding



All the ways to pay  
on the bus



Cash



Hop card



Virtual Hop card



On the bus

Youth  
fare

\$1.25 for 2.5 hours  
\$2.50 All Day

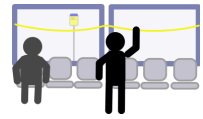
78

- You can pay with cash, tap your hop card, or tap your virtual hop card with your phone (this is new technology – some phones will “tap” faster than others)
- Tap every time you board a bus or train, **including when you transfer**. You won’t necessarily be charged every time you tap, but it validates your fare and serves as your proof of payment,

Pay \$1.25 for 2.5 hours or \$2.50 for the entire day.

## 2 Tools for riding

### Taking your bike with you



All buses have a bike rack that folds down



They can each hold two bikes



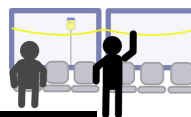
79

- Loading a bike on the bus might be intimidating – trying it a few times can be helpful. -- You can practice loading your bike on a bus rack (without the bus) at the Community Cycling Center at NE 17<sup>th</sup> and Alberta – it is in their back parking lot. **(optional video about loading your bike on a bus on next slide)**
- Things to think about when loading your bike on a bus:
  - Are important things like lights and bags off your bike?
  - Remember to bring all of those important things on the bus with you – if you set them down to load your bike, be sure to pick them up!
  - Be prepared that the two racks might already be in use – if you ride a busy bus route you may have to wait for the next one.
  - It might be a good idea to sit closer to the front if you have a bike on the rack so you can keep an eye on your bike
  - Don't forget that you have your bike! It's actually pretty common for bikes to ride around on the front of buses and end up in the lost and found at the TriMet garage.



2

## Tools for riding



80

Optional: This is a short, 1:15 minute video about some of the steps involved when loading your bike. It walks you through the steps better than photos.

### **Important details not mentioned in the video:**

1) Notify the bus driver that you want to load your bike!

**\*\*Never approach a stopped bus from the street side, as you cannot safely determine when a driver is about to leave a stop.\*\***

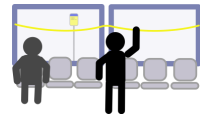
2) When you are exiting the bus, go out the FRONT door near the driver and let them know you are going to grab your bike. This makes sure the bus won't leave with your bike on the rack!

3) After taking your bike off, put the rack back up if there are no other bikes on it. Ask the driver if you need help.

Anyone can practice trying out loading your bike on a bus rack at the Community Cycling Center at NE 17<sup>th</sup> and Alberta! This video was shot there – the rack is in their back parking lot along NE 17<sup>th</sup> Ave.

## 2 Tools for riding

### Requesting the bus ramp or lift



Every bus has a ramp or power lift for anyone who is unable to use the stairs to board.



On the bus



- 1) Wait in view of the operator
- 2) If you need the ramp or lift, just ask
- 3) Sit near the front in priority seating area. The driver will help secure your mobility device if needed
- 4) When the bus stops, the driver will remove any securement straps from your mobility device and deploy the ramp

81

(click twice for all information) Bus ramps and lifts aren't just for people with disabilities or mobility devices – they assist people with strollers, heavy groceries or luggage, or seniors who may need help climbing the stairs.

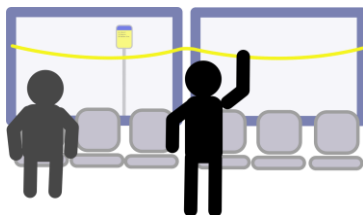
Additional notes for numbers 1 & 2:

- 1) Wait in the middle of the bus stop where the operator can see you. When the bus arrives, the driver will know to deploy the ramp or lift.
- 2) If you need to use the ramp and the driver has not deployed it, just ask. They can also assist if you need help getting on the ramp or lift.

2

## Tools for riding

### Getting off the bus



- Pull the yellow cord
- Pull the cord as soon as the bus passes the stop before yours



**On the bus**



**Exit through  
the back door  
whenever  
possible**

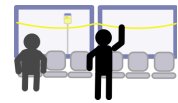
82

Don't wait to pull the yellow cord on the bus –if you can't reach it, ask someone else to pull it for you. Pull the cord as soon as you pass the stop before yours.

- \* Exit through the back door to allow passengers to board at the front door.
- \* It's always nice to say thank you!

2

## Tools for riding

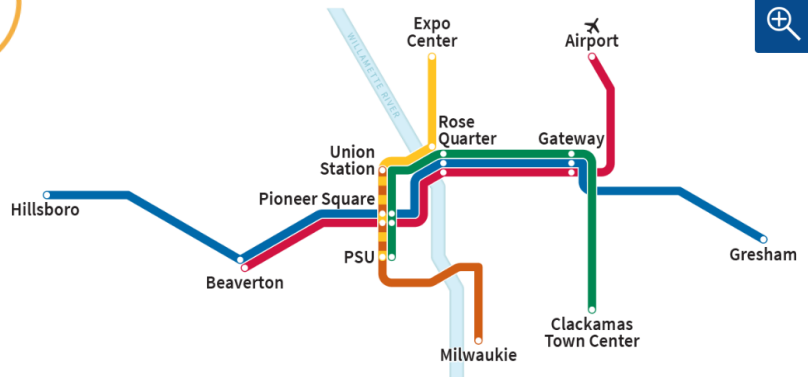


MAX lines are named with colors  
and their end destinations

MAX SYSTEM MAP



On MAX



83

\* MAX lines are named by colors (Yellow Line, Orange Line, etc.) and they have their end destinations written on the front

## 2 Tools for riding

All the ways to pay to ride MAX



**Cash at machines  
(at station, not on  
MAX)**



**On MAX**



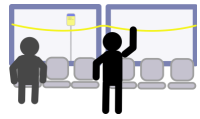
**Hop card**

**Youth  
fare**



**Virtual Hop  
card**

**\$1.25 for 2.5 hours  
\$2.50 All Day**



- You can pay with cash at the machines – but only at MAX stations;
- tap with your Hop fastpass card;
- tap with your hop fastpass on iphone or Android

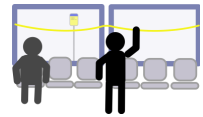
**Validate your fare/tap your card BEFORE getting on MAX**

(click to show fare)

Youth ages 7 – 17 pay \$1.25 for 2.5 hours – you can ride bus, MAX, and Streetcar when you purchase a TriMet ticket (when you buy a Streetcar ticket, it's just for Streetcar)

## 2

# Tools for riding



## Taking your bike with you

You can hang bikes by their front wheels at the end of some MAX cars.



Look for this symbol on the doors of trains that have bike hooks



If the hooks are already taken, you can stand by your bike if the train isn't too crowded.

85

### Taking your bike with you on MAX (3 clicks for all information)

- Not all MAX cars have places to hang your bike – look for the bike symbols on the doors
- Bikes usually hang from their front wheels at the end of the car – you may need to ask for assistance to hang your bike, or stand in the bike spaces if there are already other bikes there or you can't hang it.
- If you are standing with your bike, be sure to not block the doors when people are entering and exiting the train -- be conscious of the space your using

## 2 Tools for riding

### Requesting the MAX ramp

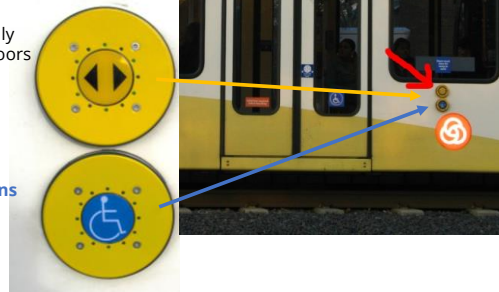
Look for this symbol on the doors of trains that have ramps



- 1) Wait in view of the MAX operator
- 2) Look for the door with the ramp
- 3) If needed, deploy the ramp yourself by pressing the blue button
- 4) Wait behind the white bumpy tiles on the platform while the ramp extends

Yellow buttons only open the doors

Blue buttons open door AND ramp



86

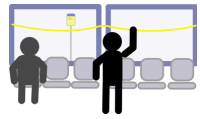
- Not all MAX doors have a ramp -- look for the accessibility symbols on the doors
- Use the priority seating areas located near the ramp doors

Additional info:

- 1) Wait in the middle of the boarding platform so the MAX operator can see you. Be sure to stay behind the white bumpy tiles.
- 3) Only press the blue button to deploy the ramp if you or someone else really needs it

2

## Tools for riding



### Exiting the MAX

Press the blue button to access both door and ramp.  
It should light up once you've made your request.



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Usually the doors will open automatically at a stop. If you need to use the ramp to exit, make a request by pressing the blue button.



# Reflection

- What do we mean by look before you cross? Where/what are you paying attention to?
- Name one thing you could DO to be an active bystander?
- What skills do you need to ride public transportation?

88

## **End of Class 2**

Options for reflection:

- Talk out
- Turn & talk
- Individual response

**Day 3**

**Safety on Wheels**

**Class 3: Safety on Wheels**

Teacher needs:

- Working speakers (video)
- Projector
- Slide clicker

**Possible stopping points:**

**Slide 106 (after discussing helmet benefits)**

**Slide 117 (after All about Portland Streets)**



## Today's Topics



Oregon laws for human-powered vehicles



All about Portland streets



Crash prevention

90

### **Oregon laws for human-powered vehicles:**

There are lots of wheels in Portland. We'll learn about the laws associated with bikes, scooters, and more!

### **All about Portland streets:**

What's the difference between a bike lane and a buffered bike lane? We'll look at different types of bike/wheel infrastructure around the city.

### **Crashes!**

When you're rolling on a bike, skateboard, or scooter – where are the most likely crashes that happen in Portland? We'll share what you need to know to be aware.

# Different types of safety

## Traffic laws



Society's code of conduct for using our right-of-way

## Personal security



Person-to-person interactions when navigating public spaces

## Environment



Interacting with vehicles & street infrastructure

91

Remember that we break safety down into three categories.

Traffic Laws – codes created to provide order for lots of people to navigate public spaces

Personal – human to human interactions when navigating public spaces

Environment – using the built infrastructure, what's available to you for walking, biking, skating; interacting with vehicles and other road users

# Different types of safety

## Traffic laws



Society's code of conduct  
for using our right-of-way

## Environment



Interacting with vehicles  
& street infrastructure

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Today we're going to talk again about Traffic Laws & also share tips on how to interact in your Environment when you're on wheels.

**Traffic Laws** – codes created to provide order for lots of people to navigate public spaces

**Environment** – using the built infrastructure, in this case we'll be talking about biking or skating/scooting on our streets



**Walking**  
**Pedestrian**



**Walking/Rolling**  
**Pedestrian**



**Rolling**

93

**Just as a reminder from our first class session:**

We use the terms walking & rolling to try and encompass all possible modes

- Sometimes using a mobility device or wheelchair is included in the term walking, sometimes it's rolling; the terms can be a preference by a person, or designated by an organization or group. – People walking or using a mobility device or wheelchair are considered pedestrians.

(click) Today we are discussing Rolling, which includes human-powered things on wheels: bikes, scooters, skateboards, pedicabs, etc.! E-bikes & e-scooters can be included in rolling.

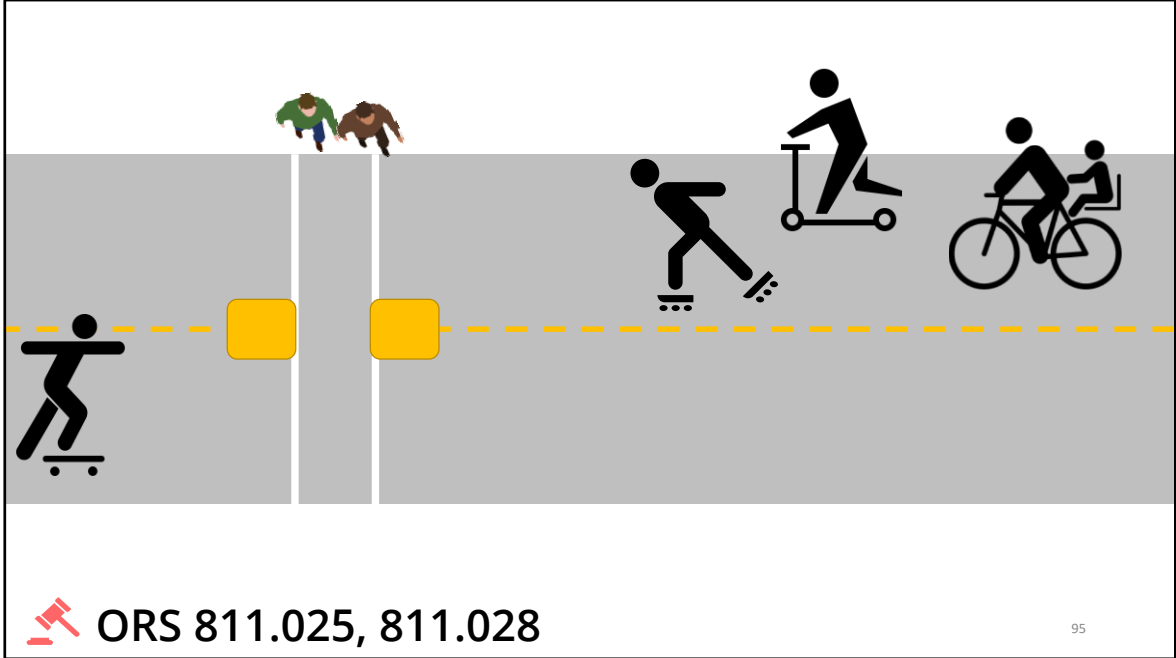
# Oregon laws for human- powered vehicles

94

## Section 1 : Oregon Laws for Human-powered Wheels

What is legal? What is not?

- There are a lot of rules to make sure streets and sidewalks work to move a lot of people



(one click for animations)

One of the most important laws is that, along with motor vehicles, bicyclists, scooters, skateboards and even people on roller blades are required to stop for pedestrians.

811.025 = Failure to yield to pedestrian on sidewalk

811.028 = Failure to stop and remain stopped for pedestrian



Bicycles are  
vehicles



ORS 814.400  
ORS 814.510  
CO 20.12.205



Another important law and rule for human-powered wheels is that “People biking and driving motor vehicles have the same rights to the road, but also must follow similar laws.”

(click to add escooter and skateboard photos)

E-scooters and skateboards also have the same rights and responsibilities as cyclists and drivers.

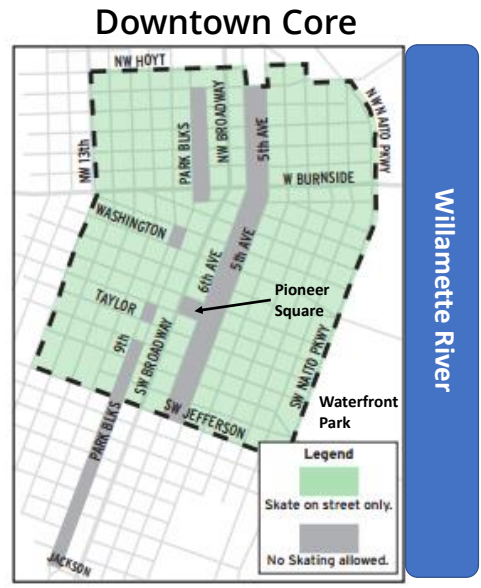
- **814.510, under Motor Assisted Scooters**
- (CO stands for City Ordinance) **Portland City Ordinance 20.12.205** = the rules of the road and rights that apply to bicyclists also apply to skateboarders. They have the right to use Oregon roads and Portland streets, the same as cars and other motorized vehicles.
- **ORS 814:400 = application of vehicle laws to bicycles**  
Every person riding a bicycle upon a public way is subject to the provisions applicable to and has the same rights and duties as the driver of any other vehicle



It is legal to bike, skate, roller skate, scoot, or rollerblade on any street or sidewalk in Portland outside of the downtown core.



Statewide, using an e-scooter on sidewalks and in crosswalks is prohibited.



 **CO: 16.70.320**

There are some limits for bicyclists and skaters/scooters that don't apply to motor vehicles because of the mobility you have when you're on a smaller vehicle – you can go more places than when in a car, like on a sidewalk or in parks. Wanting to keep downtown Portland a pleasant place for pedestrians, this ordinance was created for people on human-powered wheels.

In general, it is legal to bike, skate, roller skate, scoot, or rollerblade on **any street or sidewalk in Portland outside of the downtown core.** (Portland ordinance 16.70.320)

- Outside of the downtown core, skateboarders, bicyclists, rollerbladers/skaters, and human-powered (not electric) scooters are allowed to ride on the sidewalk (at the slow pace of someone walking).
- (click for map) This map shows the part of downtown where all of those modes need to be on the streets, not sidewalks. The gray areas are streets where **NO skating or scooting** (people on bikes are allowed to ride on streets in these areas) is allowed. Mainly the transit mall, park blocks, and Pioneer Courthouse Square.

(click for e-scooter info)

- **E-scooters** -- One major difference about e-scooters from the other modes is – **they are not allowed to ride on the sidewalk at all.** – You may have seen e-scooters on sidewalks and in crosswalks – the City of Portland is working with the companies to figure out how to educate riders.



The group of riders in this photo are at a busy street, planning to use the crosswalk to cross. And that's okay! As long as they respect and yield to pedestrians.

**The law says:** people biking on the sidewalk must ride as slow as a pedestrian, give pedestrians the right of way, and not jump in and out of the street

(click to add) **ALPACA principles:**

**ALPACA Tip – Be Aware:** When riding on the sidewalk be sure to look out for conflict points of driveways, doors to homes and businesses, and other places where people walking or driving may be exiting and not expect to see you. Slow down so you can brake or stop in time if you encounter a person walking or a car pulling out into the street.

**ALPACA Tip - Courteous:** It is important (and lawful) to be courteous when rolling next to pedestrians, and when crossing the street. All of these modes need to be traveling at a pedestrian's pace/walking pace when on the sidewalks. Roll slowly, and let people know when you are approaching them from behind BEFORE you are really close. People can be startled if they don't hear you.

FYI on safe riding when no a sidewalk:

\* Bicyclists on a sidewalk or bicycle path incur greater risk than those on the roadway (on average 1.8 times as great), most likely because of blind conflicts at intersections.

\* Wrong- way **sidewalk** bicyclists are at even greater **risk**, and **sidewalk bicycling** appears to increase the incidence of wrong-way travel.

**The law:**

**Unsafe operation of a bike on a sidewalk: ORS 814.410**

- Suddenly leaving a curb and moving into the path of a vehicle
- Failing to give an audible warning before passing a pedestrian while riding on the sidewalk
- Fails to yield to all pedestrians on the sidewalk
- Rides carelessly or endangers others on the sidewalk
- Rides at a speed greater than an ordinary walk when approaching or entering a crosswalk, driveway, curb cut or pedestrian ramp



 **ORS 815.280**



A front white light & *at least* a rear red reflector are required in dusk or dark conditions.

Bikes and lighting fall under a statewide law.

We recommend a rear red light, but law only requires a reflector

### **ORS 815.280 Violation of bicycle equipment requirements**

At the times described in the following, a bicycle or its rider must be equipped with lighting equipment that meets the described requirements:

- (A)**The lighting equipment must be used during limited visibility conditions.
- (B)**The lighting equipment must show a white light visible from a distance of at least 500 feet to the front of the bicycle.
- (C)**The lighting equipment must have a red reflector or lighting device or material of such size or characteristic and so mounted as to be visible from all distances up to 600 feet to the rear when directly in front of lawful lower beams of headlights on a motor vehicle.


Skateboarders & other human-powered vehicles  
are also required to have front & back lights



**Able to  
be seen**

**Be visible!**



CO 16.70.410 

Skateboarders, scooters, rollerbladers, etc. are also required by Portland City Ordinance to have front white lights and a rear reflector or flashing light on their back when rolling in dusk or dark conditions.

Q: How would you equip yourself with the required front and back lights if you were on a skateboard or scooter?

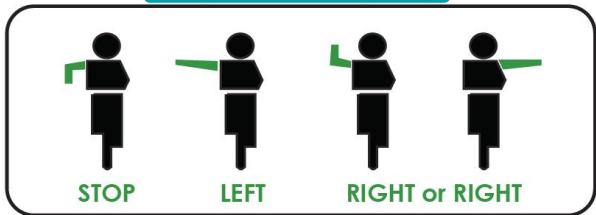
(click for one example – see if students can come up with more)


(click for ALPACA principle: Able to be seen)



People riding bikes  
& e-scooters are  
required to signal  
when they can

Hand signals



 **ORS 814.440**



People riding bicycles are required to signal if they can. However, if they can not signal and stay in control then it is not required (see next slide for examples of when signaling may not be possible)

**ORS 814.440 Failure to signal turn**

**(1)**A person commits the offense of failure to signal for a bicycle turn if the person does any of the following:

**(a)**Stops a bicycle the person is operating without giving the appropriate hand and arm signal continuously for at least 100 feet before executing the stop.

**(b)**Executes a turn on a bicycle the person is operating without giving the appropriate hand and arm signal for the turn for at least 100 feet before executing the turn.


**(c)**Executes a turn on a bicycle the person is operating after having been stopped without giving, while stopped, the appropriate hand and arm signal for the turn.

**(2)**A person is not in violation of the offense under this section if the person is operating a bicycle and does not give the appropriate signal continuously for a stop or turn because circumstances require that both hands be used to safely control or operate the bicycle.



## When might you not be able to signal?



 ORS 814.440

**You might not be able to signal when you need two hands** (click for each example):

- Going down a hill
- Riding on a bumpy road
- If there are slippery leaves
- Something in the road surprises you, causing you to swerve into the lane

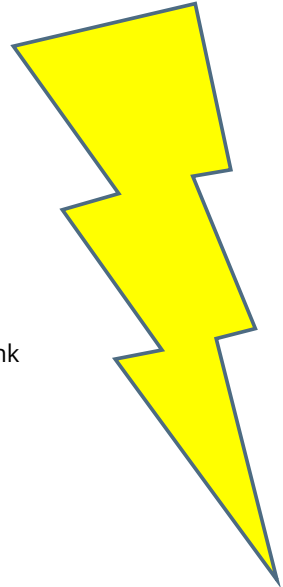
(click) Along with being Legal, signaling is also a good example of the **ALPACA principle** of being Courteous – letting other road users know where you are planning to turn or stop.

# It's ELECTRIC!



## E-SCOOTERS

- NO sidewalk riding
- HELMETS ARE REQUIRED
- **MUST BE 16 OR OLDER (ORS 814.512)**
- MUST yield to pedestrians
- NO riding in Portland Parks  
(This includes Parks-owned paths: Eastbank Esplanade, Springwater Corridor, & Waterfront River Trail)



## E-BIKES



- **MUST BE 16 OR OLDER**
- Are considered bicycles, not motor vehicles
- May not ride on sidewalks or Parks-owned paths (different from other bicycles)

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Just a friendly reminder about electric scooters and bikes:

(click two times for e-scooter info, three for e-bikes)

Electric scooters and bikes go at high speeds – max of 20 miles an hr. This makes them fun, but also dangerous for pedestrians and when interacting with motor vehicles because they are not expecting people to be going those speeds.

- E-scooters may not be operated by anyone under 16, whether renting or owning one
- E-scooters and bikes aren't allowed on Parks-owned properties because they are controlled by Parks & Recreation and are subject to the same rules as more conventional parks like Pioneer Square or Irving Park.



1) Helmets are required on bikes, scooters, skateboards, and rollerblades for any person who is under 16. This means riding on a street, sidewalk, or bridge.

2) Helmets are required for **any person using an electric scooter**, no matter their age.

When your skill and biking techniques fail and you are involved in a crash, you need to be wearing a helmet. They can help you survive a crash.

### Why helmets?

- A helmet ensures that in case of a fall the impact force on the head is absorbed and delayed.. It helps the impact spread over a broader area.
- Helmets prevent serious traumatic head and/or brain injury. These are some statistics specifically about bicycling injuries and helmet use:

1. In a 2014 biomechanical research test where a head-shaped form fell a distance of 5 feet, it was estimated the helmet reduced risk of serious brain injury by almost 100% compared to about 10%

(SWOV (2016). *Bicycle helmets*. SWOV Fact sheet, October 2016. SWOV, The Hague.)

2. Traumatic brain injuries (TBI) are different for adults than children because younger brains are still developing. Symptoms might not be readily apparent because the childhood brain is still in development – symptoms can change and unfold over time. Someone with a TBI can have difficulty learning new things, developing written or spoken language, processing information, or have behavioral and emotional challenges.

(American Speech-Language-Hearing Association (ASHA))

**ORS 814.440:**

**(1)**A person commits the offense of failure of a bicycle operator or rider to wear protective headgear if the person is under 16 years of age, operates or rides on a bicycle on a highway or on premises open to the public and is not wearing protective headgear of a type approved under ORS [815.052 \(Rules establishing standards for protective headgear\)](#).

**(2)**Exemptions from this section are as provided in ORS [814.487 \(Exemptions from protective headgear requirements\)](#).

**(3)**The offense described in this section, failure of a bicycle operator or rider to wear protective headgear, is a specific fine traffic violation. The presumptive fine for failure of a bicycle operator or rider to wear protective headgear is \$25. [1993 c.408 §2; 1995 c.581 §1; 2011 c.597 §103]

# Helmet benefits



## 1) Smooth outer layer:

- Helps prevent minor punctures from sharp objects
- Allows head to glide against pavement (reducing trauma to head/neck)

## 2) Dense polystyrene foam core:

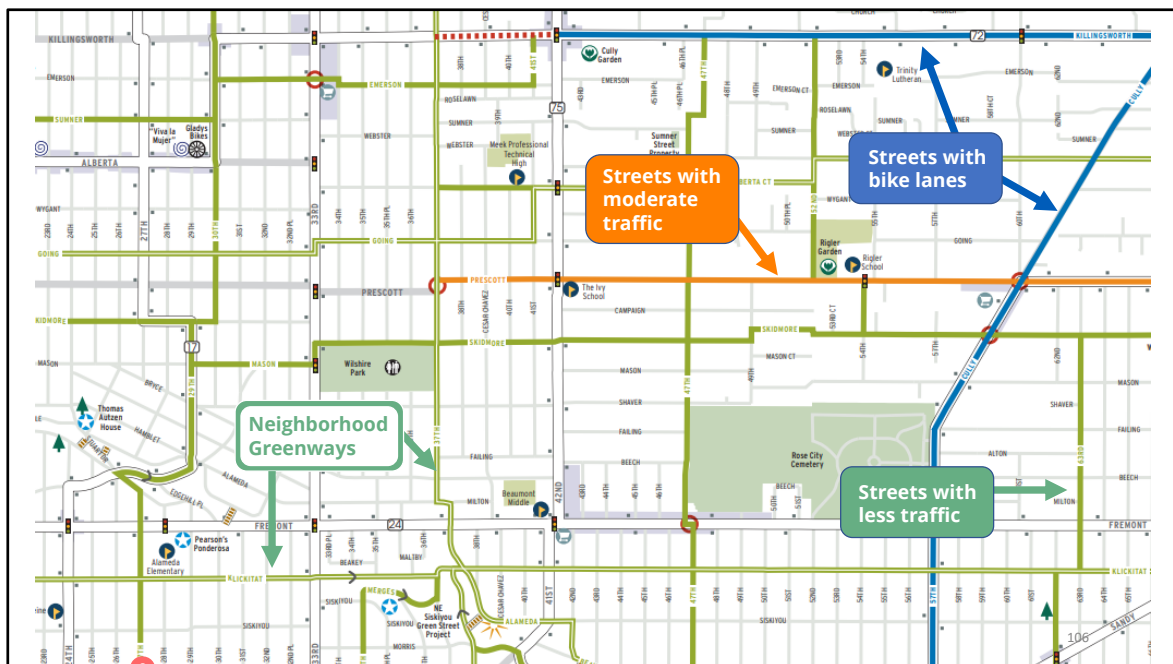
- Compresses or breaks, spreads the force of a crash over a wider area
- Can usually dissipate energy to prevent a skull fracture or damage to a major blood vessel



## Optional stopping point

There are two parts of a helmet that are important (click for each number):

- 1) The smooth, thin outer shell helps prevent minor punctures from sharp objects and allows the head to glide as it moves, which reduces damage to the head and neck.
- 2) The dense expanded polystyrene foam core compresses or breaks, spreading the force over a wider area. That lengthens the time it takes for the head (& dissipates brain movement inside skull) to come to a complete stop, usually dissipating enough energy to prevent a skull fracture or damage to a major blood vessel.



## Section 2: All About Portland Streets

Even though it is legal to bike, skate, scoot, etc. on any street outside of the downtown core, there are some streets that are better to ride on than others.

This is an example of one of the city's bike/walk maps – this is for NE Portland, but there are maps available for the entire city.

- (click) – **blue lines** show which streets have bike lanes (which should also be used by skateboards and scooters) – these streets will usually still have a lot of motor vehicle traffic
- (click) – **orange lines** are streets that have moderate levels of motor vehicle traffic but would be okay to use on a bike or skateboard depending on how comfortable you are
- (click) – **green lines** are streets with less motor vehicle traffic -- these might be more comfortable
- (click) – **Neighborhood Greenways** are shown as two green lines -- these streets have route signs, street markings, and have improvements at bigger streets so crossing them is easier (more details on next two slides)

Our maps also show where traffic signals, stairs, bike shops and grocery stores, plus a lot more stuff to help people find routes to get where they need to be without a car.

**(optional activity:** as a group or individuals, look at [portlandbikemap.com](http://portlandbikemap.com) and see what our city's bike network looks like – can do a quick look as a class)



# Neighborhood Greenways

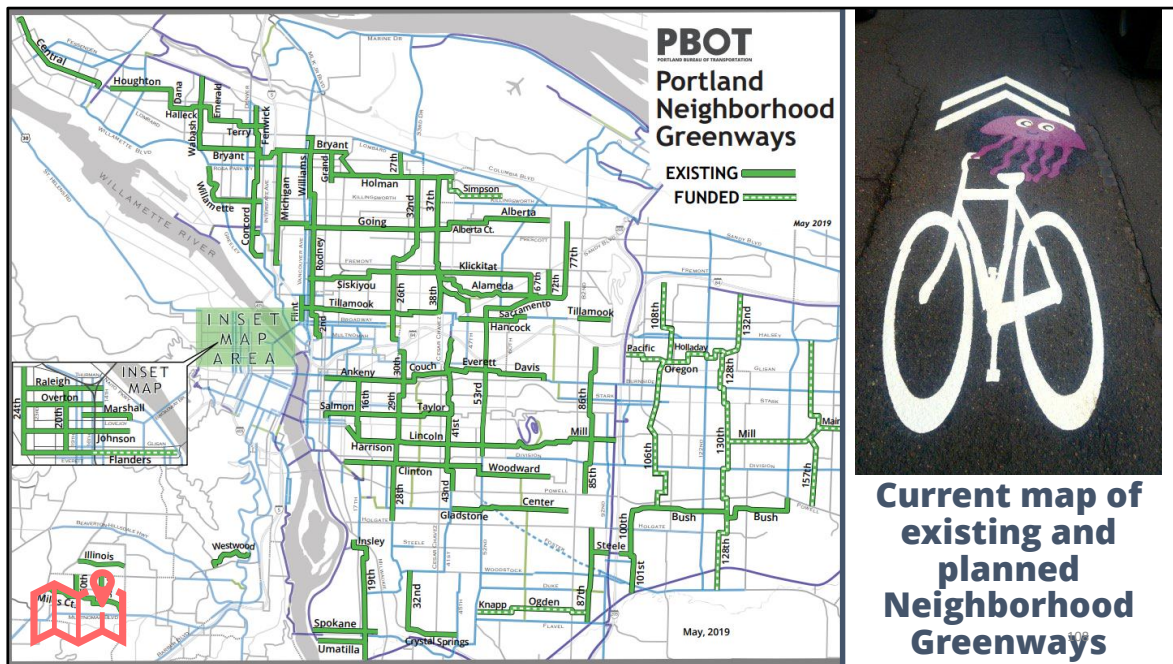


- Provide safer connections
- Reduce auto speeds and cut-through
- Help people cross busy streets
- Help guide people throughout the city

The Neighborhood Greenways we just discussed are streets with low traffic volume and speeds where bicycles, people on wheels, pedestrians and neighbors are given priority.

- Create safe streets where people want to bike, walk, and play
- Use speed bumps for traffic calming, and diverters to reduce cut-through auto traffic
- Sharrows mark the routes – called “Sharrow” because they are a shared roadway marking
- Sharrows are a helpful reminder that unless a faster moving vehicle is behind you, you should ride over the sharrows – riding closer to the middle of the roadway helps other road users see you at intersection crossings





This is the most updated map of Neighborhood Greenways across the city. Most of the new projects are located in East Portland – 100's, 130's, 150's

Portland has more than 70 miles of neighborhood greenways. Upcoming plans are to improve existing greenways to make them safer and more comfortable for people to use.



**Bike Lane**



**Protected Bike Lane**



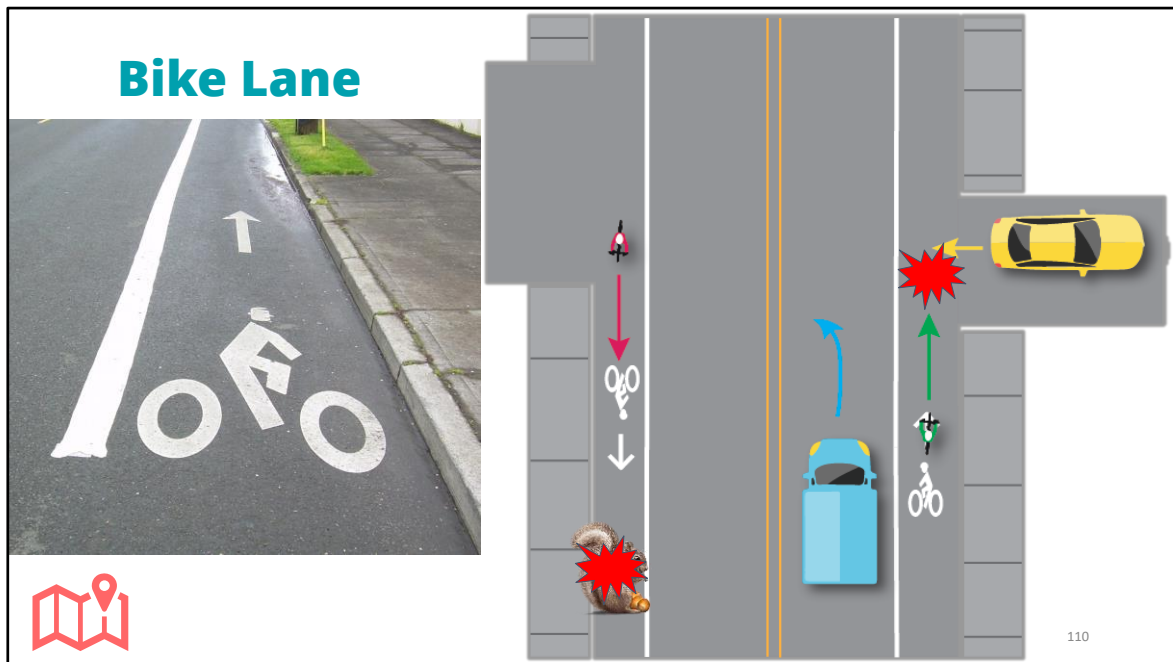
**Buffered Bike Lane**



## So many bike lanes!

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Portland has lots of different types of bike lanes! They all have benefits and different points of conflict with other road users that we want you to know about.



Bike lanes separate slower moving bike and other wheeled traffic from faster moving car traffic.

People riding and rolling are required to stay either in the bike lane or as far to the right as they can. However, they can leave the bike lane if needed. For example (similar to things that can make signaling challenging):

1. Avoid hazards
2. Passing someone else in the bike lane who is moving slower than you
3. Left turn, right turn, going straight (appropriate lane positioning)

(click once)

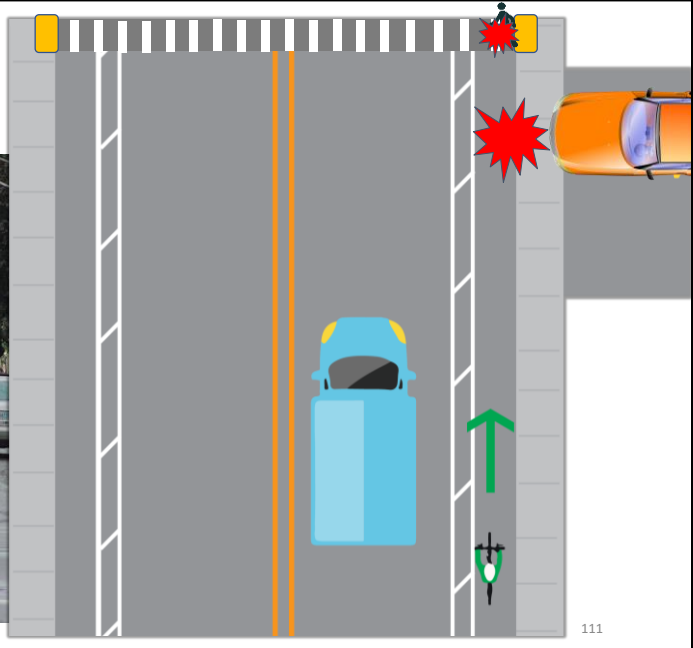
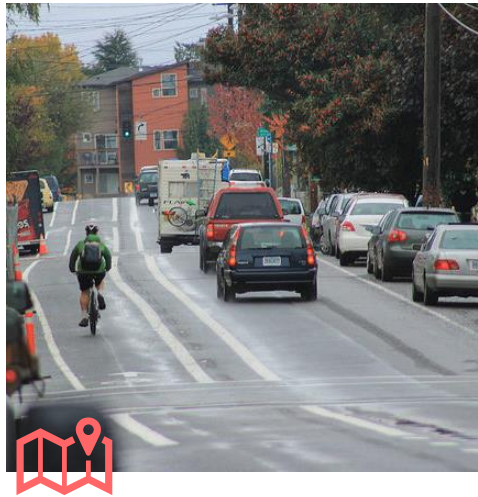
Here are some conflict points for people riding in a bike lane

- vehicles backing out/exiting from a driveway or parking lot;
- hazards in the bike lane you might need to swerve to avoid (potholes, glass, squirrel, parked car, etc.)

ORS 814.430: Improper use of lanes –in general, if there is a bike lane available, people on human-powered wheels should be using it.



## Buffered Bike Lane



Another type of bike lane is the buffered bike lane.  
More separation = everyone is more comfortable

(click once for each conflict point)

- Buffered bike lanes still need to watch for conflict points at driveways/parking lots;
- Buffered bike lanes also need to watch for pedestrians who may wait to cross in the street
- Many hazards in the bike lane are also still the same, but now you have a little more room to avoid them without going into the lane of auto traffic

Bonus: **What's different about the photo?** The bike lane is on the left side of the street – why?

To improve bus access at bus stops – buses don't need to interact with bikes when pulling over to drop off or pick up riders



Protected bike lanes do the most to separate cars from slower moving human-powered traffic, usually with some sort of physical barrier  
 Some have cars parked in between (like in the graphics), others have barriers with plants or paint (like the photo)

(click three times for first two bullets)

- Buffered and protected bike lanes may now have pedestrians standing in them – they may move into the street to get closer to their crossing point – keep an eye out and yield to them!
- When cars are parked in between the bike lane and the other travel lane, watch out for people opening their car doors into the bike lane or crossing the bike lane to get to the curb.
- Driveways are also still a conflict point of which you always need to be aware





**There are many more places bicyclists and people on human-powered/electric wheels can ride and be visible around the city. Here's some information about each of them:**

**Signal Activator** = to activate some traffic lights, there are areas that sense metal on vehicles. Bikes and scooters don't have the same amount of metal, so there are designated areas that are more "sensitive" to detect them. Those are marked on the pavement with the smaller bike symbol. One person at the city calls them "Bike Leprechauns"

**Cross-bikes** = brings awareness to a popular place where bikes cross. Unlike a crosswalk, a cross-bike does not give right-of-way to riders, they are for intended more for visibility and to help auto drivers know there are many bicyclists who cross here

**Bike boxes** = designated area for riders to be seen by other road users – decrease the amount of "right hooks" (discussed later in presentation)

**Dashed bike lane** = Shared travel space. shows where you should ride, but it is a space where other moving vehicle (cars) will cross to make a turn – alerts other vehicles to look for bicycles using that lane of travel. You have the right of way when in this space, but cars may not always yield – make sure they can see you and are yielding before riding past them.

**Separated cycle track** = elevated area where bikes can ride. – similar to a separated/buffered bike lane, but separated with more than paint. Another place to watch for car doors or pedestrians crossing to the curb.





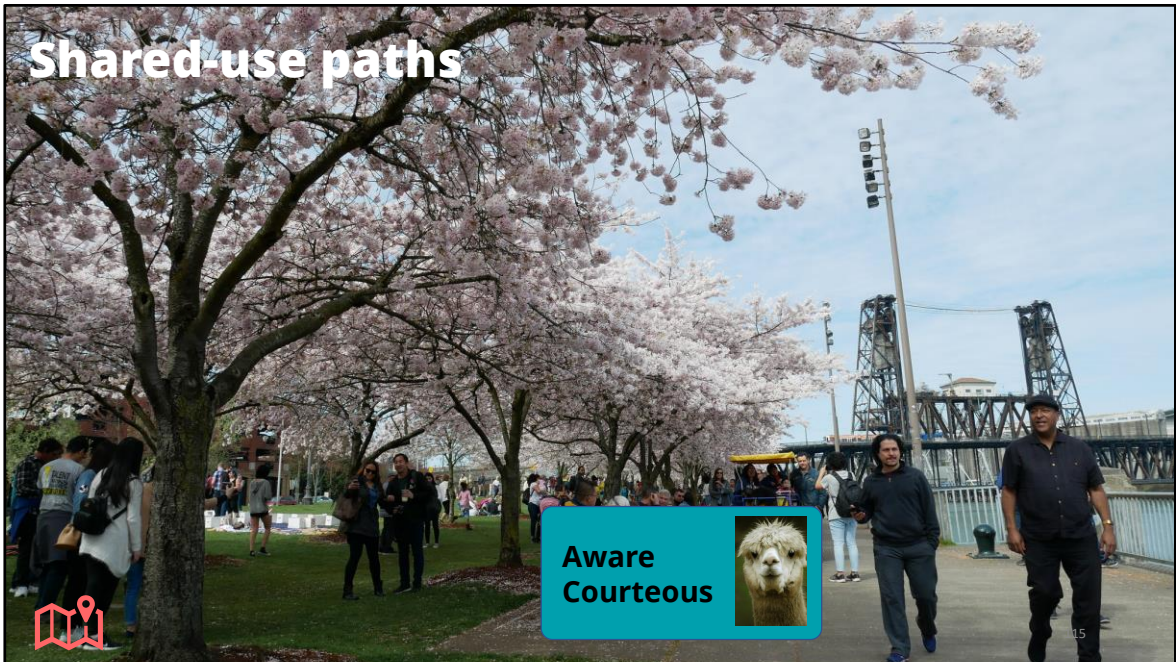
Shared-use paths are paved, off-street travel ways designed to serve nonmotorized travelers. Across the United States, bicyclists are typically the most common users of shared-use paths.

Because many of Portland's shared-use paths are owned and maintained by Portland Parks, e-scooters are not allowed to ride there.

A few of Portland's shared-use paths:

- Springwater Corridor – no e-scooters
- I-205 path (pictured) – can ride e-scooters here
- Marine Drive – can also ride e-scooters here
- Waterfront Park/Eastbank Esplanade – no e-scooters

## Shared-use paths



### Optional stopping point after this slide

In many places, shared-use paths are frequently used by pedestrians, inline skaters, roller skaters, skateboarders, wheelchair users, and users of many other modes.

Q: What would you do if you were riding or skating on this path on a busy Saturday?

Q: This photo is of Waterfront Park along the Willamette River – it is owned by Portland Parks. Can people ride e-scooters here?

\* Passing slower users in the same direction and two-way traffic flow are two primary safety issues, particularly where there is a high volume of pathway users.

- It is courteous to let other people know you are passing – either verbally or with a bell

(click for **ALPACA principles!** – being aware of your surroundings and courteous to other users)

- In the case of this photo, it might even be better to get off and walk – there's a lot of people out and about! In general, slowing down is a good idea.
- One safety issue is visibility of the pathway corridor and other users during nighttime

travel.

- What other hazards might you encounter on a multi-use path?

# Crash Prevention



## Section 3: Crash Prevention

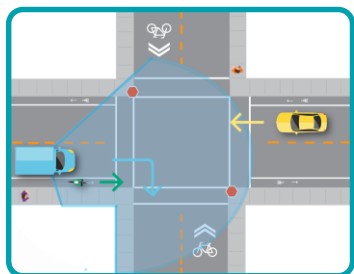
We'll talk about some of the most common crashes for people using human-powered vehicles in Portland.

But first, there are four steps YOU as an individual can take to help prevent a crash when you are riding, skating or scooting:

(click once for each number)

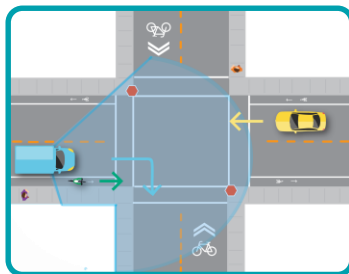
- 1) Be predictable while riding (**ALPACA principle: Predictable!**): no tricks while riding in the street, keep your hands on your handlebars, ride in a straight line, etc. This includes signaling for other people, riding on the right side of the road, etc.
- 2) Follow traffic laws (**ALPACA principle: Legal!**)
- 3) Be aware of your surroundings – look out for conflict areas in intersections and near driveways or busy roads. You may be doing everything right, but you also must be aware for when others could make mistakes. (**ALPACA principles: Aware**)
- 4) Make sure you wear a helmet – although it should be your last resort for safety. We have talked about its importance, but the most important things to rely on are your other skills and awareness first.

# Common crashes on wheels in Portland



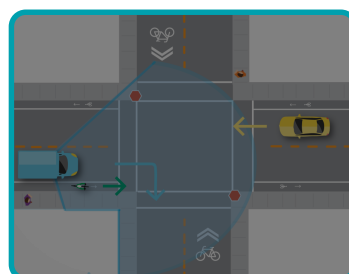
## At intersections

75% of crashes occurred at intersections



## Intersections without signals

- 44% of crashes at intersections w/o signals
- 31% of crashes w/ signals



## At night

18% of crashes occur in dark conditions

Data source: Oregon Department of Transportation, 2006-2015<sup>117</sup>

These are the three most common types of crashes that happened in Portland from 2006-15 for people on wheels.

For this data we considered rolling crashes to include bicycles, skateboards, and scooters (people in wheelchairs or using mobility devices would be included with walking/pedestrian data)

(click once for each number)

**Q: Ask students: are any of these crash types similar to the common pedestrian crashes?**

1) At Intersections: (Similar to pedestrian crashes, although most ped crashes happen at signalized intersections)

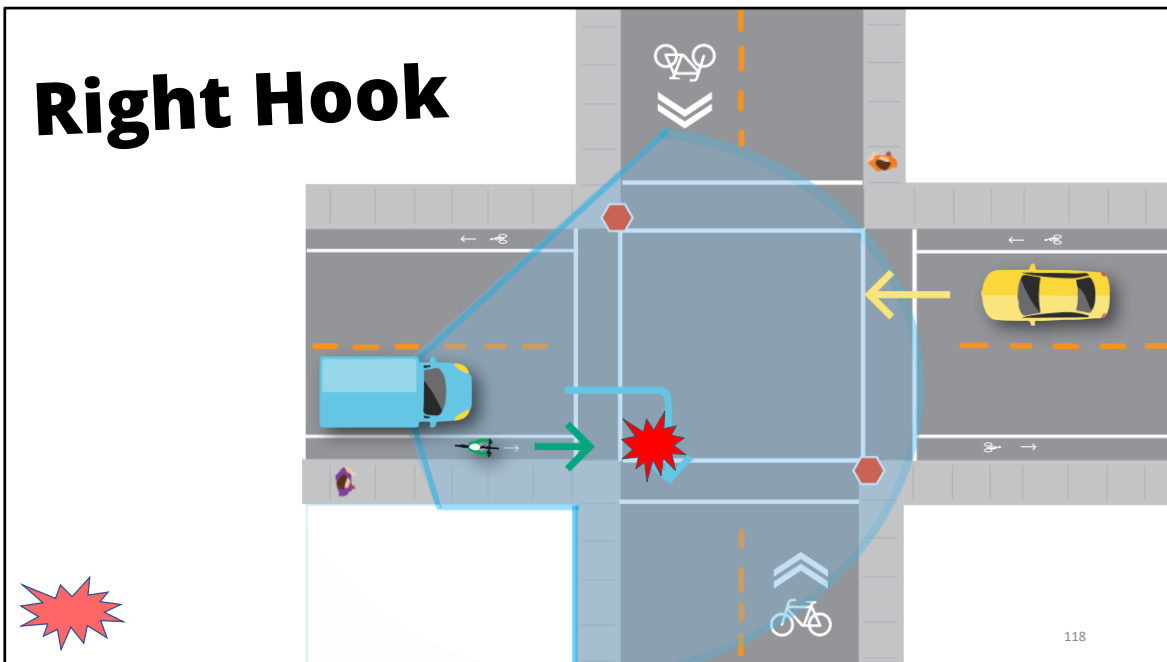
2) Intersections without traffic signals: (**unlike pedestrian crashes**, it is far more common for people rolling to be hit at intersections that do not have traffic signals compared to intersections that have signals.) It might be better to use signalized intersections if you are rolling – but still pay attention to what autos are doing

3) At night/in dark conditions – similar to people walking –

**Q: how can you be prepared for conditions when you might be walking or rolling at**

night?

# Right Hook



**This is something you should watch for when riding or rolling in a bike lane – this is a very typical crash in Portland:** (click for conflict point)

## The Right Hook

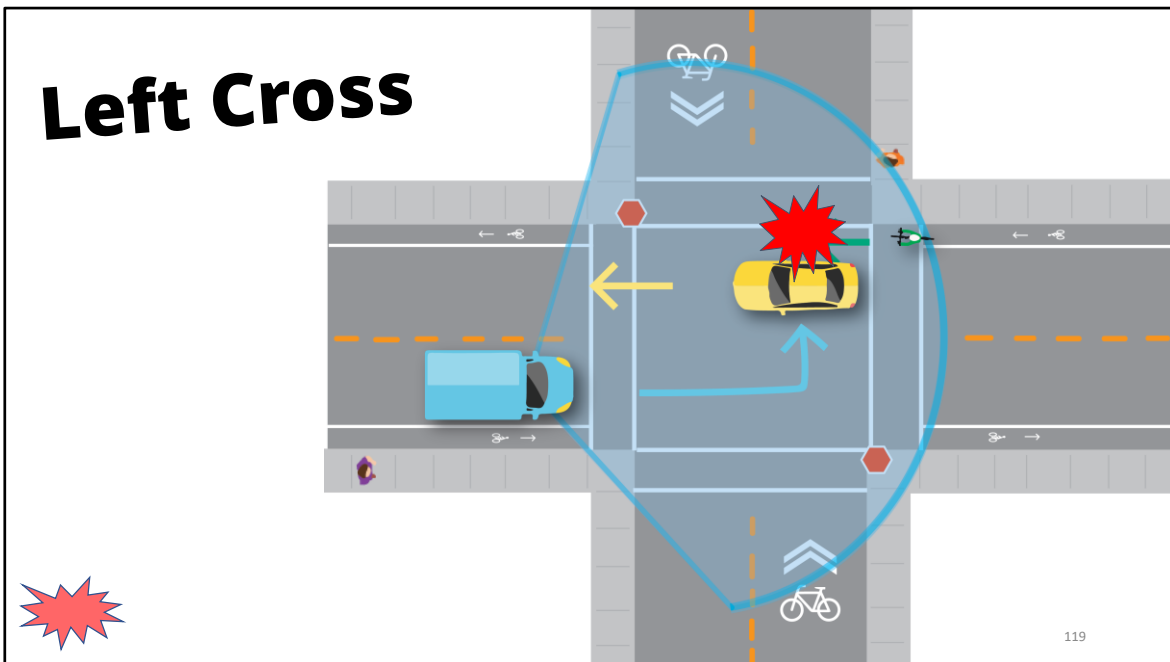
Drivers may not see a biker approaching on their right – when they turn right at an intersection without knowing someone is there, they cut off or collide with the person in the bike lane. Sometimes there may be no indication, like from a blinker, to show they are turning.

## Tips to avoid it:

- Read a vehicle's BODY LANGUAGE – if a vehicle begins to slow, moves into the turn lane quickly, or you see the wheels start to turn
- if you are riding up next to a vehicle and approaching an intersection – be on alert to see if they have forgotten their blinker and are planning to turn, etc.
- In general, any time you are approaching an intersection, be on alert. Be aware of who and what is around you and “ride defensively,” meaning to ride cautiously, ready to brake in case someone does something you aren't expecting.
- If you are on the sidewalk, it's especially important to make sure drivers can see you before crossing in the crosswalk – they may not be expecting a bicycle in the crosswalk



# Left Cross



Another typical crash in Portland intersections is the Left Cross  
(click for conflict point)

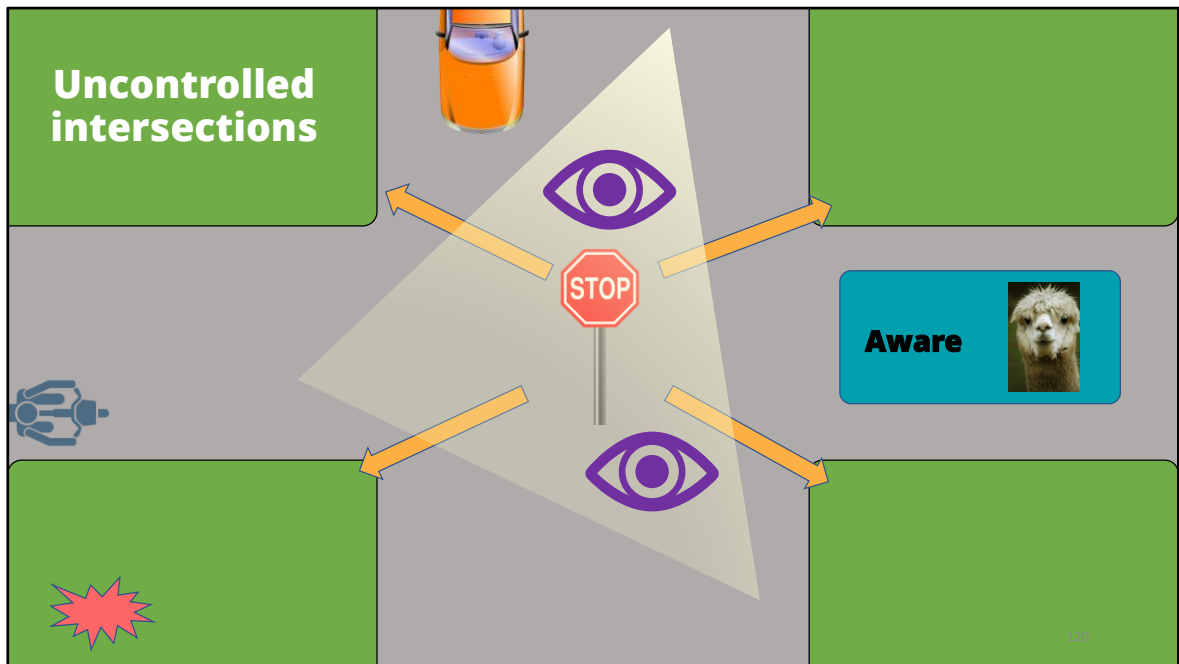
## The Left Cross

Drivers planning to turn left may not see a cyclist approaching the intersection on the right side of the yellow car. The bicyclist will be in the intersection when the blue truck is turning left, especially if they are in a hurry to beat the light or fit into a gap in auto traffic.

## Tips to avoid it:

- In general, any time you are approaching an intersection, be on alert. Be aware of who and what is around you and “ride defensively,” meaning to ride cautiously, ready to brake in case someone does something you aren’t expecting.
- If you are on the sidewalk, it’s especially important to make sure drivers can see you – they may not be expecting a bicycle in the crosswalk
- Be aware of the timing of any lights at the intersection, and look ahead to see whether a vehicle might be preparing to turn.





(click once for stop signs) Uncontrolled intersections are street crossings (usually on neighborhood or residential streets) where nobody has a stop sign.

They are called “uncontrolled” because they don’t have a traffic control device, not because they are chaotic.

(click again for example)

**TIP:**

- 1) Don’t assume that an intersection where YOU don’t have a stop sign means that other people have one and are planning to stop. In this example, the bicyclist makes sure to look before heading into the intersection, even though they don’t have a stop sign.
- 2) Other road users may not be aware that the intersection is uncontrolled and continue driving or rolling through – it’s up to YOU to pay attention and be AWARE that the intersection is clear.
- 3) **ALPACA principle!** Being aware of your surroundings

## Wrong way riding

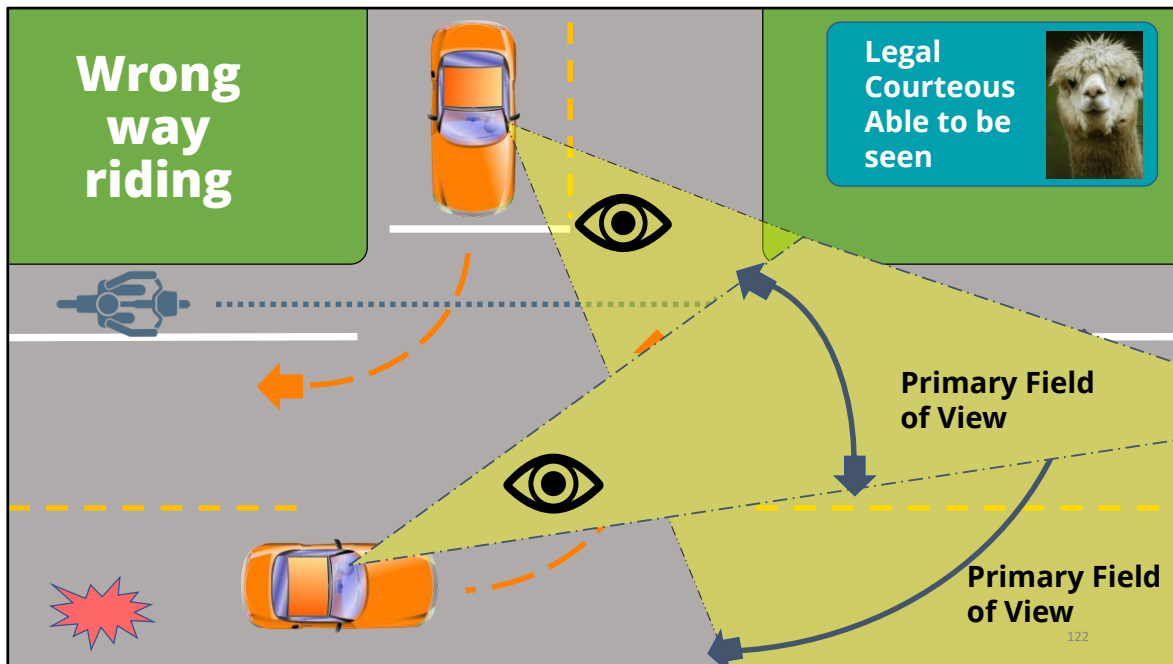


A common pedestrian tip is that people should walk against traffic on roads without sidewalks. Q: Why?

**Answer:** you can see what traffic is coming towards you, be prepared for what is coming your way. You can depend on your own skills and observations and not just depend on what other people are doing around you.

Q: Why is it not a good idea to ride a bike against traffic – shouldn't that be the same as walking?

Answer on next page



1<sup>st</sup> – bicycles, scooters and skateboards are considered vehicles by Oregon law, so they should follow the same laws and motor vehicles

2<sup>nd</sup> - Riding on the opposite side of the road is not what other road users expect. **Riding with traffic is Predictable & Legal, it also makes you more Visible (able to be seen).**

1<sup>st</sup> car (click two times for first vehicle example)

- Drivers do not expect to see you coming from their right side – if they are turning right they are more accustomed to just look left to check if other vehicles or people are coming.
- Person riding the bicycle may not be in the motor vehicle driver's primary field of vision

2<sup>nd</sup> car (click three more times for second example)

- Again, the person riding the bicycle is not in the motor vehicle driver's field of vision
- Drivers should look for crossing pedestrians, but the speed of the biker is faster than a person walking – the driver may look and then turn anyway – not expecting someone at that speed

**Lastly,** The person riding the bicycle is unable to read signs and signals



### Video

- \* It's everyone's responsibility to use our streets safely – we all can help ensure that everyone gets where they need to be –
- \* this video shows a few examples of how not following the rules can affect others and cause unnecessary stress to other road users

#### **Clip 1:** a bicyclist riding the wrong direction:

##### Driver:

- wasn't expecting to see someone coming from the right side of the road.
- Does too quick of a look to the left – might be in a hurry

##### 1<sup>st</sup> bicyclist:

- Isn't able to stop in time if a driver ends up turning right rather than stopping.

#### **Clip 2: Two bicyclists riding against traffic**

- Riding against traffic they can't see traffic signals – if they keep riding through the intersection it's possible cars and people will be crossing in front of them
- Scary for people driving – not easy to predict what the riders are going to do – can be stressful

**Clip 3: bicycle riding against bike/ped traffic**

- The third cyclist may have made other cyclists swerve into traffic, and almost hit a few pedestrians – creating a stressful situation for others

In a world where we have little control over what others do,  
the ALPACA principles can help get you where you need to be  
in a way that respects others and feels good to you.

AWARE

LEGAL

PREDICTABLE

ASSERTIVE

COURTEOUS

ABLE TO BE SEEN  
(Visible!)



There are a lot of things we can't control, but we can control how we move and interact with others around our neighborhoods and city.

# Reflection

- List one of the laws a person on a human-powered vehicle must obey and why.
- When you're on a bike, scooter or skateboard, what should you be looking for when approaching an intersection with a traffic signal?
- Why is wearing a helmet the last resort when it comes to traffic safety?



### Community organizations and resources for your class and students:

Girl Strength: <https://www.portlandoregon.gov/police/index.cfm?&c=49818>

PUAH: <https://www.portlandoregon.gov/civic/72583>

Portland Safe Routes to School:

<https://www.portlandoregon.gov/transportation/68009>

Vision Zero: <https://www.portlandoregon.gov/transportation/40390>

Portland Bike Map: <https://www.portlandoregon.gov/transportation/article/391729>

Community Cycling Center: <https://www.communitycyclingcenter.org/>

The Street Trust: <https://www.thestreettrust.org/>

Youth Environmental Justice Alliance: <https://www.opalpdx.org/yeja/>

OPAL: <http://www.opalpdx.org/>

Oregon Walks: <http://oregonwalks.org/>

These is a brief list of resources and organizations, feel free to contact PBOT's SRTS for more information.