

Supplemental Texas Driver's Education Curriculum on Pedestrians and Bicyclists

Identifying Barriers to Understanding Pedestrian and Bicycle Safety Laws

(2023-TTI-G-1YG-0043)

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May 2023

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Introduction

Proper education to drivers on the laws related to pedestrian and bicycle safety is important to ensure that drivers are aware of the laws and their responsibilities pertaining to those laws. This supplemental curriculum covers content that was either not covered in most of the curriculum reviewed by the Texas A&M Transportation Institute (TTI) project team or where additional explanation was needed on certain laws or issues. For more information on the review process, findings and recommendations please refer to the report, *Review of Driver's Education Curricula: Analysis & Recommendation Report*, which can be found here:

https://www.walkbikesafetexas.org/wp-content/uploads/2023/05/Recommendation-Report_FINAL.pdf

The content of this supplemental curriculum is broken-up into sections by road user and topic area, with pedestrians first and then bicyclists. In addition, the TTI project team will also be producing a video that will cover this missing information. More information on this can be obtained from the primary author.

Pedestrians

- Crosswalks
 - According to the Texas Transportation Code, crosswalks exist:
 - **Where marked** with lines or other markings.
 - At **all 4-way intersections** on all four legs even if it is not marked with lines. When no crosswalk markings exist across a leg of a 4-way intersection, it is referred to as an Unmarked Crosswalk.
 - Examples include:
 - A 4-way intersection marked or unmarked, even when there is stop control only in one direction.
 - A 3-way intersection, where marked across the major leg and marked and unmarked across the minor leg.
 - A mid-block crosswalk (not at an intersection) where marked.
 - May be painted with different colors or styles or using brick or other materials.

- Right-of-way

Who has right-of-way in a given situation can be confusing. Here are some common situations where a driver is required to stop and yield right-of-way to a pedestrian:

- At an **intersection with traffic signals, but no pedestrian signals**, the pedestrian has right-of-way to cross in the same direction as traffic on the green permissive signal phase (see Figure 1).

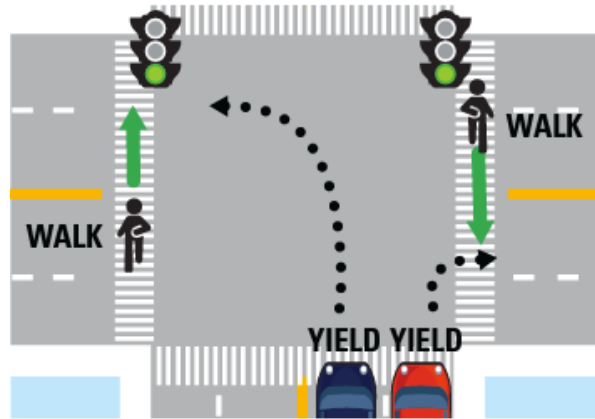


Figure 1. Intersection Right-of-way Rules, without Pedestrian Signals.

- At an intersection or crossing with pedestrian signals, the pedestrian has right-of-way when crossing on a walk signal or finishing their crossing on a flashing “DON’T WALK” signal (see Figure 2).

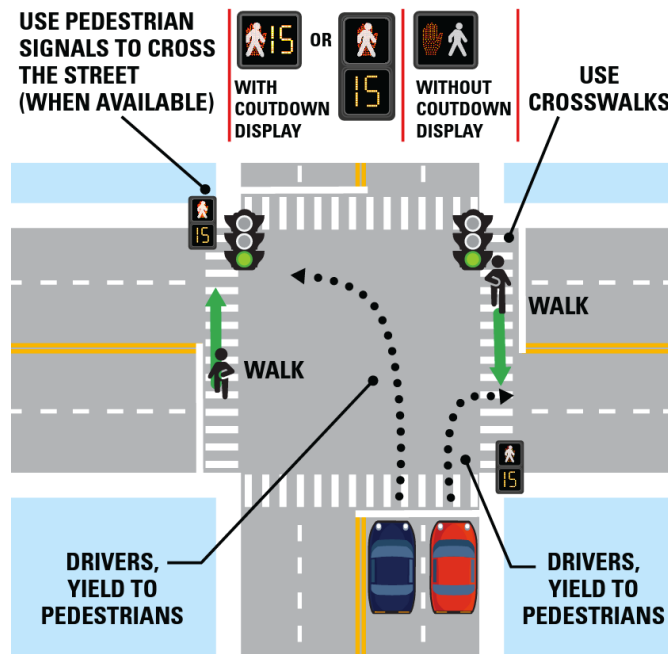


Figure 2. Intersection Right-of-way Rules, with Pedestrian Signals.

- At **4- way intersections with no traffic signal**, the pedestrian has right-of-way, even if there are no painted crosswalks.
- At **3-way intersections with no traffic signal**, the pedestrian has right-of-way at all marked crosswalks and any unmarked crosswalks across the minor leg of the intersection.
- At **non-intersections with a marked crosswalk** (mid-block crosswalks) the pedestrian has right-of-way at all marked crosswalks.

Therefore, drivers are required to stop and yield right-of-way to pedestrians at crosswalks, marked and unmarked.

However, at **non-intersections without a marked crosswalk** (mid-block with no crosswalk) the pedestrian should yield the right-of-way to all vehicles.

- Traffic Control Devices
 - A **pedestrian warning sign** (see Figure 3) warns drivers that pedestrians may be crossing the road ahead. You may see this sign near an intersection or a mid-block crosswalk.
 - If you see a pedestrian warning sign, start watching for the pedestrian crossing sign and crosswalk!
 - There might not be a crosswalk or specified crossing but drivers need to stay alert and ensure the safety of vulnerable road users.



Figure 3. Pedestrian Warning/Crossing Sign

- A **pedestrian crossing sign** consists of the pedestrian warning sign (see Figure 3), plus a downward pointing arrow to indicate the location of the crosswalk (see Figure 4). The pedestrian crossing sign warns drivers that pedestrians may be crossing the road at that location. You may see this sign at an intersection or at a mid-block crosswalk.
 - If you see a pedestrian crossing sign, be alert to pedestrians who may be entering the crosswalk from the right or left side of the roadway. If a pedestrian is already in the crosswalk, STOP and wait for them to finish crossing before you proceed.



Figure 4. Pedestrian Crossing Supplemental Plaque

- A **school crossing sign** (see Figure 5) warns drivers that school children and other pedestrians may be crossing the roadway. You will see this sign close to schools and on roads that approach schools.
 - Just like a pedestrian crossing sign, be alert to children and other pedestrians entering a crosswalk. Drivers are required to come to a complete stop if a pedestrian is anywhere in the crosswalk and wait until they finish crossing to proceed.
 - Watching for pedestrians who are preparing to enter a crosswalk (and stopping and yielding if they already are) is a good practice for sharing the road and for driving defensively.



Figure 5. School Warning/Crossing Sign with Supplemental Plaque

- Active signs and signals may be used for some pedestrian crossing locations to provide more information to drivers about where to watch for pedestrians crossing the road. These active traffic control devices include pedestrian hybrid beacons, rectangular rapid flashing beacons, and LED-embedded pedestrian crossing signs.
 - A **pedestrian hybrid beacon**, or PHB, (see Figure 6) is used to warn and control traffic at locations where pedestrians cross a higher-speed street or highway. Pedestrian hybrid beacons are only installed at mid-block crossings or uncontrolled intersections, not at intersections that already have a traditional traffic signal.



Figure 6. Pedestrian Hybrid Beacon

- The PHB signal will be above a marked crosswalk and may be accompanied by a pedestrian crossing sign.
- If you are approaching a crosswalk with a PHB, the lights on the PHB’s signal head will tell you what to do:
 - If the signal head is dark, there are no pedestrians crossing and you may proceed.
 - If the amber light at the bottom of the signal is flashing, a pedestrian has pushed the button for a “walk” signal but has not gotten the signal to cross yet. You may proceed across the crosswalk, but be extra cautious and be ready to stop if a pedestrian starts to cross early.
 - When the amber light changes from flashing to steady, the pedestrian is about to get a walk signal. Treat this light like a steady amber light at a traditional intersection – slow to a stop before the crosswalk if you can do so safely.
 - When the PHB shows two red steady lights at the top of the signal head, you must stop for pedestrians in the crosswalk, just like you would stop at any other red light.
 - If the PHB’s two red lights are flashing, stop before the crosswalk, then proceed if it is clear, like you would at an intersection with a flashing red light or at a stop sign.
- **Rectangular Rapid Flashing Beacons** or RRFB (see Figure 7) are used for midblock crossings, often on multi-lane roads. They are always accompanied by a pedestrian crossing sign and a marked crosswalk.



Figure 7. Rectangular Rapid Flashing Beacon (RRFB)

- RRFB beacons flash when a pedestrian activates them prior to entering the crosswalk. When you see an RRFB flashing, **STOP** and wait for the pedestrian to finish crossing the roadway before proceeding.
- An **LED-embedded pedestrian crossing sign** (see Figure 8) has small LED lights around its edges. These lights flash when a pedestrian pushes a button to activate it and alert drivers that the pedestrian is about to cross.



Figure 8. LED-embedded Pedestrian Crossing Sign

- When the sign's embedded lights are flashing, **STOP** and wait for the pedestrian to finish crossing the roadway before proceeding.

Bicyclists

- **Dooring Laws**

Dooring laws are very important to bicycle safety, especially since bicyclists are required to ride as far to the right as possible, placing them closer to on-street parking facilities.

- Texas requires that **no person open the door of a motor vehicle on the side available to moving traffic**, unless the door may be opened in reasonable safety without interfering with the movement of other traffic. In addition, **no person shall leave a door open** on the side of a vehicle next to moving traffic for longer than is necessary to load or unload a passenger.
- Safe Passing of a Bicyclist
 - Drivers should not drive too closely to the bicyclist when passing. Cyclists should normally ride in a straight line as near to the right curb or edge of the roadway as practical.
 - Before passing a cyclist in a narrow traffic lane, wait until the traffic is clear in the adjacent or opposite lane, and then change lanes to pass the cyclist. Do not attempt to squeeze past the cyclist.
 - According to the Texas Transportation Code, motorists are required to **pass a bicyclist at a safe distance**. However, the law does not specify what a safe distance is.
 - In general, **3 feet is the minimum** recommended passing distance for motorists driving a passenger vehicle. However, if conditions allow, more space can provide additional safety for the bicyclist.
 - If driving on a road with more than one lane in your direction of travel, you may even consider changing lanes.
 - It is also recommended that larger **commercial vehicles leave at least 6 feet** of room between their vehicle and a bicyclist, but again the more space the better.
 - Be aware of any local ordinances that may apply in your jurisdiction, where the 3 feet and 6 feet recommended distances could be part of the law.
- Hand and Arm Signals
 - As a driver, it is important to understand how a bicyclist will signal their intentions to stop or make turns or lane changes. Here are the **basic hand signals** a bicyclist should be using:
 - When a bicyclist is **turning left** (or making a lane change to the left) – they will fully extend their left arm to the side for 3 seconds.
 - When a bicyclist is **turning right** (or making a lane change to the right) – they can signal a right turn in two different ways:
 1. Extend their right arm to the side, similar to the left-hand signal, only on the opposite side.
 2. Extend the left arm to the side and lifting it up at a 90-degree angle.
 - To **signal a stop** a bicyclist will take their left arm to their side, then bend it down to a 90 degrees angle with their hand open.

- Traffic Control Devices

As a driver, it is important to anticipate and stay vigilant while out on the road. Signs can help you anticipate dangers or changes in your driving that should occur up ahead. For bicycle safety, these include the following:

- **Bicycle warning signs** (see Figure 9). These signs provide a warning that a bicyclist may be using the road ahead. In fact, the sign may use a supplemental sign below that says “AHEAD.” You may see this sign in an area with high bicyclist activity or when approaching trail crossings.
- **Bicycle/trail crossing signs** (see Figure 9). These signs indicate a crossing and are used in conjunction with the downward arrow or “TRAIL X-ING” placard to indicate where the crossing is located.



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Figure 9. Bicycle Warning/Crossing Sign with Supplemental Plaques

Other Important Information

- Drivers **may not pass a vehicle that is already stopped for a pedestrian.**
 - A motorist approaching another vehicle from behind may not pass that vehicle if it is stopped to allow pedestrians to cross the roadway.
- What to do if your **vehicle has a breakdown or flat tire** or if you are driving and **see a vehicle stranded or disabled.**

Unfortunately, hundreds of people in the United States are killed or injured every year while tending to a broken-down vehicle on the side of a busy highway. These people are often referred to as unintended pedestrians.

- Remember that Texas has a “**Move Over or Slow Down**” law.
 - This means that motorists on a highway with two or more lanes in each direction need to **either move over one full lane** from law enforcement,

emergency service vehicles, or TxDOT vehicles that are stopped on the side of the road **or slow down to 20 miles-per-hour under the posted speed limit.**

- Or if there is only one lane in each direction, slow down to 20 miles-per-hour under the posted speed limit.
- You can also do your part by following these same rules for ANY vehicle that may be on the side of the road. Moving over or slowing down is a courtesy that will go a long way to improving the safety and comfort of the people working to get their vehicle moving again.
- If your vehicle is the one that breaks down or has a flat tire here are some important things to remember.
 - Warn other drivers by turning on your **hazard lights**.
 - If possible, **try to get off the road completely** by driving to the nearest gas station, or place of business.
 - If you are not able to do this, **move to the shoulder** and get **as far away from traffic as safely possible**. If on a major highway, try to drive to the next exit and get to the access road.
 - After stopping, use your cell phone to **call for assistance**. This could be an auto club or some other roadside assistance service, or you can call the Department of Public Safety emergency services number on the back of your driver's license.
 - If you decide to repair the vehicle or flat tire yourself, remember it is best to get off the road completely, especially if you are on a high-speed roadway.
 - **Avoid changing a tire next to moving traffic.**
 - In many cases, **staying in your vehicle** and waiting for emergency services or law enforcement to arrive may be the best option. And remember to stay buckled.
 - The presence of a police or emergency vehicle activates the Move Over Slow Down law and will make drivers more aware of your presence and that this is an active emergency situation.
 - If you do exit your vehicle:
 - **Increase your visibility** by putting on a reflective vest that you can keep in your glove compartment.
 - If possible, **exit the vehicle on the side away from moving traffic**.
 - If you cannot do this, **do a safety check** by checking your side mirrors and looking over your shoulder for approaching traffic before exiting the vehicle.
 - Stay as far away from traffic as possible.
 - **DO NOT attempt to cross a highway on foot.**