Street Coaching for Pedestrians and Cyclists

PUTTING LAWS INTO PRACTICE ON THE BAYLOR UNIVERSITY CAMPUS







Introduction

Background

- National Crash Data
- Texas Crash Data
- Baylor University Crash Data
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- Safety Tips for Motorists
- Safety Tips for Bicyclists
- Safety Tips for Pedestrians
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Conclusion

- Resources Available
- Thank you!

Background

- §NATIONAL CRASH DATA
- §TEXAS CRASH DATA
- §BAYLOR UNIVERSITY CRASH DATA
- §WHY ARE PEDESTRIAN- AND BICYCLE-INVOLVED CRASHES INCREASING?

Texas Crash Data (2024)



Pedestrian and Pedalcyclist Injuries and Crashes

2024

Person Type	Fatal Crashes	Fatalities	Suspected Serious Crashes	Suspected Serious Injuries	Suspected Minor Crashes	Suspected Minor Injuries	Possible Injury Crashes	Possible Injuries	Non-Injury Crashes	Non-Injuries	Unknown Severity Crashes	Unknown Injuries	Total Crashes
PEDALCYCLIST	79	78	427	428	1,379	1,388	626	631	234	214	3	49	2,748
PEDESTRIAN	760	768	1,395	1,452	2,338	2,475	1,356	1,474	214	240	14	72	6,077
Total	839	846	1,822	1,880	3,717	3,863	1,982	2,105	448	454	17	121	8,825

DATA
What do bicyclist and/or pedestrian involved crashes look like near Baylor University?

From 2019–2023, crashes in the Baylor University area accounted for



From 2019-2023, more than



of pedestrian and bicyclist crashes in the area resulted in injuries or fatalities.

During this period, there were **nine fatalities**, **21 suspected serious injuries**, **50 suspected minor injuries**, **and 19 possible injuries**.

While most crashes were non-incapacitating, a significant portion involved serious injuries, and fatal crashes, though less frequent, remained a critical concern.





What do pedestrian involved crashes look like near Baylor University?

From 2019 to 2023, there were



pedestrian-involved crashes



within and around Baylor University, resulting in 7 fatalities, 17 suspected serious injuries, and 32 non-incapacitating injuries (KAB).

Males represent
55% of all
pedestrian-involved
crashes within and around
Baylor University's campus.



» Pedestrians aged 18 to 25 years old were the most frequently involved, making up 34% of crashes.

> Among this age group, 32% sustained KAB injuries.



Pedestrian-involved crashes of all severity levels were more frequent in the spring semester

(January-April) compared to other semesters.



Crashes were also more likely to occur between Thursday and Sunday, with Thursday having the highest percentage at 18%.

The most common time for crashes was during the afternoon (12:00–16:59), accounting for 27%, followed by the evening hours (20:00–23:59) at 24%.

Over half of pedestrian crashes happened under dark conditions, with nearly 25% occurring in unlit areas.

Pedestrian-involved crashes were more likely to occur at non-intersection locations where there were no traffic control devices, marked lanes, or signal lights.



The top contributing factors for pedestrian crashes included failure to yield the right-of-way to vehicles and impairment due to drug or alcohol use.





What do bicyclist involved crashes look like near Baylor University?

Between 2019 and 2023, there were



crashes

involving a bicyclist within and around Baylor University.

Of these, 65% resulted in a fatality, suspected serious injury or non-incapacitating injury (KAB).



The majority of bicyclists involved in crashes were male, accounting for

85% of all cases.





Bicyclist-involved crashes were more likely to occur at intersections with stop signs.

The most common contributing factors among bicyclists included failure to yield the right-of-way at a stop sign, failure to stop at a stop sign or traffic light, and riding on the wrong side of the road.



» Among bicyclists involved in crashes,

79% were not wearing helmets.

» Among those who sustained KAB injuries,

82% were not wearing helmets.



Proper helmet use could help prevent severe injuries. Poor compliance with traffic laws and improper use of facilities

Speeding

Inadequate separation

Crossing locations

Inadequate conspicuity

Impairment and distraction

Why are pedestrian- and bicycle-involved crashes increasing?

Person Type	Crash Type	Severity	Top 1 Contributing Factor	Top 2 Contributing Factor	Top 3 Contributing Factor		
Driver	Pedestrian -involved	All Severity	Failed to Yield the Right of Way - To Pedestrian (n=11)	Driver Inattention (n=7)	- Under Influence (alcohol) (n=4) - Failed to Drive in Single Lane (n=5)		
	Crashes	KABC	Failed to Yield the Right of Way - To Pedestrian (n=8)	Driver Inattention (n=6)	- Under Influence (alcohol) (n=4) - Failed to Drive in Single Lane (n=5)		
	Bicyclist- involved	All Severity	Failed to Yield the Right of Way – Stop Sign (n=7)	Driver Inattention (n=4)	 Failed to Yield the Right of Way – Turning Left (n=2) Failed to Control Speed (n=2) 		
	Crashes	KABC	Failed to Yield the Right of Way – Stop Sign (n=5)	Driver Inattention (n=4)	Failed to Control Speed (n=1)		
Pedestrian		All Severity	Pedestrian Failed to Yield the Right of Way to Vehicle (n=31)	Other (Explain in Narrative) (n=16)	Under Influence (Drug or Alcohol) (n=6)		
		KABC	Pedestrian Failed to Yield the Right of Way to Vehicle (n=29)	Other (Explain in Narrative) (n=10)	Under Influence (Drug or Alcohol) (n=6)		
Bicyclist		All Severity	Other (Explain in Narrative) (n=4)	Disregard Stop and Go Signal (n=3)	•Failed to Yield the Right of Way – Stop Sign (n=2) •Failed to Control Speed (n=2)		
		KABC	Other (Explain in Narrative) (n=3)	•Failed to Yield the Right of Way – Stop Sign (n=2) •Wrong Side – Approach or Intersection (n=2)			
E-scooter Rider		KABC	- Failed to Yield the Right of Way to Vehicle (n=1) - Inattention (n=1)	•			

Baylor University
Crash Data:
Contributing
Factors of Drivers,
Bicyclists, and
Pedestrians

Rules of the Road

- TEXAS TRANSPORTATION CODE
- DEFINITIONS
- RIGHT-OF-WAY
 - Laws for Motorists
 - Laws for Bicyclists
 - Laws for Pedestrians
- KNOWLEDGE CHECK

The Texas
Transportation
Code
is in place
to save lives.



Know the Code, Bears!

Texas Transportation Code

Book of Transportation Laws

- Governs travel on waterways, roadways, airways, and railroads
- Covers vehicles, people, animals, and goods

Where to find it?

- The TTC can be found online at: https://statutes.capitol.texas.gov/
- A hard copy of the statutes can be found at the Legislative Reference Library on the second floor of the Capitol in Austin, Texas

Title 7

• Vehicles and Traffic is where most of the laws about pedestrians and bicyclists exist. These statutes are primarily under Subtitle C. Rules of the Road, Chapters 551 and 552.

Definitions







Identifying Crosswalks

Identifying Crosswalks

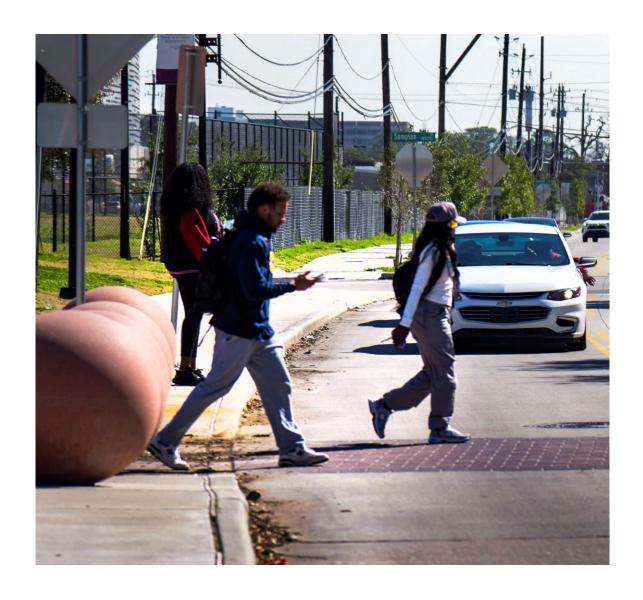




What is right-of-way?

Right-of-way stipulates who has the right to proceed.

- Following the right-of-way laws reduces the probability of conflict between motorists and pedestrians.
- Yielding right-of-way helps reduce confusion which can lead to conflicts and crashes.



LAWS FOR MOTORISTS

RIGHT-OF-WAY

Laws for Motorists

Drivers must stop and yield to pedestrians crossing a roadway in a crosswalk if the pedestrian is on the driver's half of the roadway or approaching so closely from the opposite half as to be in danger (TTC Sec. 552.003(a)).

Drivers must stop and yield to a pedestrian at a traffic control signal who begins crossing when the "Walk" signal is displayed or when the green ball indication is displayed in their direction (TTC Sec. 552.001 and 552.002).

If a vehicle is stopped to allow a pedestrian to cross, any other drivers approaching from behind cannot pass the stopped vehicle (TTC Sec. 552.003(c)).

Laws for Motorists

Drivers exiting or entering a road, driveway or alley must <u>stop and</u> <u>yield</u> to pedestrians walking across that road, driveway, or alley (TTC Sec. 552.006(c)).

When passing a bicyclist, vehicle operators are required to provide a safe distance between their vehicle and the bicyclist and <u>may not</u> move back to the right until safely clear of the passed bicyclist (TTC Sec. 545.053).

A motor vehicle occupant <u>may not</u> open their door on the side of moving traffic unless the door may be opened without interfering with the movement of traffic (including bicyclists) (TTC Sec. 545.418).



Fort Bend County celebrated the passing of a new state law in the name of Lisa Torrey Smith, a county resident who was struck by a vehicle.

Laws for Motorists: Lisa Torry Smith Act (TTC 545.428)

A motor vehicle that strikes a vulnerable road user who is legally using a crosswalk or walking along the roadway is guilty of a Class A Misdemeanor if:

- The pedestrian or person operating a bicycle, motor-assisted scooter, electronic personal assistive mobility device, neighborhood electric vehicle or a golf cart sustains bodily injury.
- The offense is a state jail felony if the vulnerable road user sustains serious bodily injury.

Motorist: Rules of the Road

Motorists must stop and yield to pedestrians ...

- at marked and unmarked crosswalks when a pedestrian is in a crosswalk and no pedestrian signal is present.
- if a pedestrian is crossing on the same half of the roadway as the vehicle.
- when emerging from an alley, driveway, or building.
- when turning at intersections.
- when turning at traffic signals, even if the light is green, unless turning with a green arrow.

Motorists, make note! Pedestrians have the right of way at...

- A signalized intersection when the WALK sign is on, when finishing their crossing on a flashing DON'T WALK or flashing red hand, or crossing on a green signal in their direction of travel if no pedestrian crossing signals are present.
- Mid-block crosswalks.
- 4-way stop-controlled intersections.



LAWS FOR BICYCLISTS

RIGHT-OF-WAY

Laws for Bicyclists

A bicycle is considered a vehicle, so a bicyclist must stop and yield right of way under the same circumstances as a person driving a motor vehicle.

- Drivers, or a bicyclist, must stop and yield to pedestrians crossing a roadway in a crosswalk if the pedestrian is on the driver's half of the roadway or approaching so closely from the opposite half as to be in danger (TTC Sec. 552.003(a).
- Drivers (or bicyclist) must stop and yield to a pedestrian at a traffic control signal who begins crossing when the "Walk" signal is displayed or when the green ball indication is displayed in their direction (TTC Sec. 552.001 and 552.002).
- o If a vehicle is stopped to allow a pedestrian to cross, any other drivers (or bicyclists) approaching from behind cannot pass the stopped vehicle (TTC Sec. 552.003(c)
- Orivers, including bicycles, exiting or entering a road, driveway or alley must stop and yield to pedestrians walking across that road, driveway, or alley (TTC Sec. 552.006(c).

Bicyclist: Rules of the Road



RIDE SINGLE FILE (TTC SEC. 551.103(C))



USE BIKE LANES WHEN AVAILABLE (TTC SEC. 551.103(A)(3))



POSSIBLE (TTC SEC. 551.103(A))

Bicyclist: Rules of the Road



"You may not carry any object that prevents safe operation of the bicycle with at least one hand on the handlebars. (Texas Transportation Code 551.102)



Wise arm signals to signal intent. (Texas Transportation Code 545.107)

"You are not allowed to operate a bicycle at night unless you have a white lamp on the front and a red reflector or light on the rear of your bike. (Texas Transportation Code 551.104)





LAWS FOR PEDESTRIANS

RIGHT-OF-WAY

Laws for Pedestrians

At a traffic signal, a pedestrian is required to begin crossing when they are facing a pedestrian control signal displaying "Walk" or a green signal if there is not a pedestrian signal (TTC Sec. 552.001 and 552.002).

A pedestrian <u>must yield</u> the right-of-way to a vehicle if not crossing at a crosswalk (marked or unmarked) (TTC Sec. 552.005(a)).

A pedestrian <u>may not</u> suddenly leave a curb or other place of safety and proceed into a crosswalk in the path of a vehicle so close that it is impossible for the vehicle operator to yield (TTC Sec. 552.003).



Laws for Pedestrians

A pedestrian <u>must use</u> the sidewalk if it is provided and accessible to the pedestrian. If a sidewalk is not provided, a pedestrian walking on the roadway must walk on the left side of the roadway if possible (TTC Sec. 552.006).

A pedestrian is <u>not allowed</u> to cross the roadway between two adjacent intersections controlled by traffic signals unless they are crossing at a marked crosswalk(TTC Sec. 552.005(b)).

Pedestrian: Rules of the Road

Pedestrians have the right of way...

- when following crossing signals.
- at crosswalks and intersections where there is no traffic signal.
- at mid-block crosswalks.
- at 4-way stop intersections.
- when facing a "walk" signal to start crossing.
- when facing a flashing "DON'T WALK" when finishing crossing.
- when the signal light is green in their direction of travel if there are no pedestrian signals.

Pedestrians DO NOT have the right of way...

- between two intersections controlled by traffic signals unless there is a painted crosswalk.
- if a driver cannot stop in time to yield right of way.
- when the crossing signal shows a solid DON'T WALK or a red hand sign.

Knowledge Check: Right-of-Way Rules

Driving Safety Quiz

- 1. You do not need to stop and yield to pedestrians at unmarked crosswalks. True or False.
- 2. Do motorists have to yield to pedestrians when turning at traffic signals, even with a green light? Yes or No.
- 3. When must motorists yield to pedestrians? Select all the apply.
 - a) A signalized intersection when the WALK sign is on
 - b) When finishing their crossing on a flashing DON'T WALK or flashing red hand
 - c) Crossing on a green signal in their direction of travel if no pedestrian crossing signals are present
 - d) At mid-block crosswalks
 - e) At 4-way stop-controlled intersections

Driving Safety Quiz

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 - a) A signalized intersection when the WALK sign is on
 - b) When finishing their crossing on a flashing DON'T WALK or flashing red hand
 - c) Crossing on a green signal in their direction of travel if no pedestrian crossing signals are present
 - d) At mid-block crosswalks
 - e) At 4-way stop-controlled intersections

Key Takeaways for Motorists

- Stop and yield to pedestrians at all crosswalks, including those that may be unmarked at intersections.
- Stopping and yielding to pedestrians means:
 - Pedestrians in and approaching a crosswalk on your half of the roadway.
 - Pedestrians entering the crosswalk on the other half of roadway approaching your vehicle. It is now a criminal offense for a driver that causes bodily injury to a pedestrian (or other vulnerable road user) that is legally using a crosswalk.
- Give bicyclists at least 3 feet when passing in a private vehicle.

Bicyclist Safety Quiz

- 1. Bicyclists have the same rights and responsibilities as a motorists. True or False.
- 2. Bicyclists do not need to stop at stop signs if there are no vehicles or pedestrians present. True or False.
- 3. What side of the road should bicyclists ride on when practicable given road conditions?
 - a) Right, when possible
 - b) Left, when possible
 - c) Does not matter

Bicyclist Safety Quiz

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 - a) Right, when possible
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 - c) Does not matter

Key Takeaways for Bicyclists

- Bicyclists have the same rights and responsibilities as motor vehicles.
 - Stop at all red lights and stop signs!
- Ride as far to the right as practicable based on road conditions.
- Ride on the roadway, using bike lanes or separated bike facilities when available.
- You can ride next to another bicycle, as long as you do not block traffic.
 However, it is safer to ride single file.

Key Takeaways for Bicyclists

- A bicyclist may take the travel lane in the following situations:
 - If traveling the same speed as other traffic
 - When passing another vehicle moving in the same direction
 - When preparing for a left turn
 - To avoid a hazard
 - When traveling in a lane that is too narrow for a bicycle and motor vehicle to travel safely side by side (share the lane)
- Always look first before taking a lane.
- When you move to the center of the lane, it establishes your position and prevents motorists from passing until there's enough room. Be considerate of others.

Pedestrian Safety Quiz

- 1. Pedestrians have the right-of-way when in all of the following, except...
 - a) When the signal light is green in their direction of travel if there are no pedestrian signals.
 - b) When facing a flashing "DON'T WALK" when finishing crossing
 - Between two intersections controlled by traffic signals (unless there is a painted crosswalk)
 - d) At 4-way stop intersections
- 2. Pedestrians do not need to follow pedestrian crossing signals or use a designated crosswalk if there are no motor vehicles visible. True or False.
- 3. You may cross an intersection diagonally if you have a "WALK" sign. True or False.

Pedestrian Safety Quiz

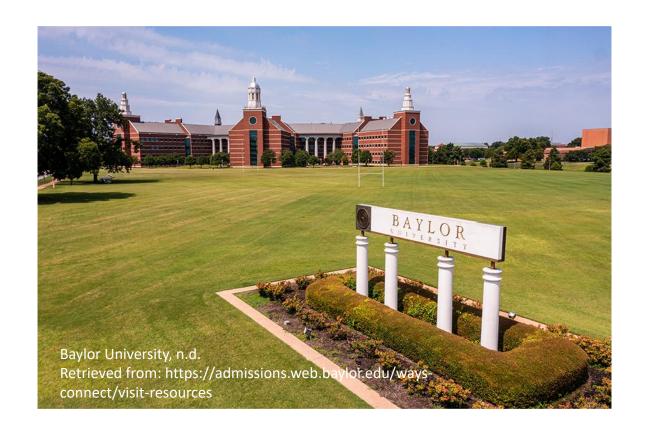
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 - a) When the signal light is green in their direction of travel if there are no pedestrian signals.
 - b) When facing a flashing "DON'T WALK" when finishing crossing
 - c) Between two intersections controlled by traffic signals (unless there is a painted crosswalk)
 - d) At 4-way stop intersections
- 2. Pedestrians do not need to follow pedestrian crossing signals or use a designated crosswalk if there are no motor vehicles visible. True or **False**.
- 3. You may cross an intersection diagonally if you have a "WALK" sign. True or **False**.

Key Takeaways for Pedestrians

- Use crosswalks and follow pedestrian signals when available.
- If a pedestrian signal is not available, cross the street when the light is green in your direction of travel.
- It is illegal to cross in the middle of a block (without a crosswalk) between adjacent intersections at which traffic control signals are in operation.
- Use sidewalks if available. It is illegal to walk in the road if an adjacent sidewalk is available and useable to the pedestrian.
- If a sidewalk is not available, walk on the left side of the road facing traffic, as far away from traffic as possible.

Key Takeaways for Pedestrians

- You may only cross an intersection diagonally if there is a traffic control device authorizing this movement.
- A pedestrian shall yield the right-of-way to a vehicle on the highway if crossing a roadway at a place:
 - Other than in a marked crosswalk or in an unmarked crosswalk at an intersection.
 - Where a pedestrian tunnel or overhead pedestrian crossing has been provided.



Do your part to help keep Bears safe by following pedestrian and bicycle safety laws!



Safety Tips

- SAFETY TIPS FOR MOTORISTS
- SAFETY TIPS FOR BICYCLISTS
- SAFETY TIPS FOR PEDESTRIANS
- VIDEOS

Tips for Motorists



Slow down.
Stop at crosswalks.
Watch for pedestrians.

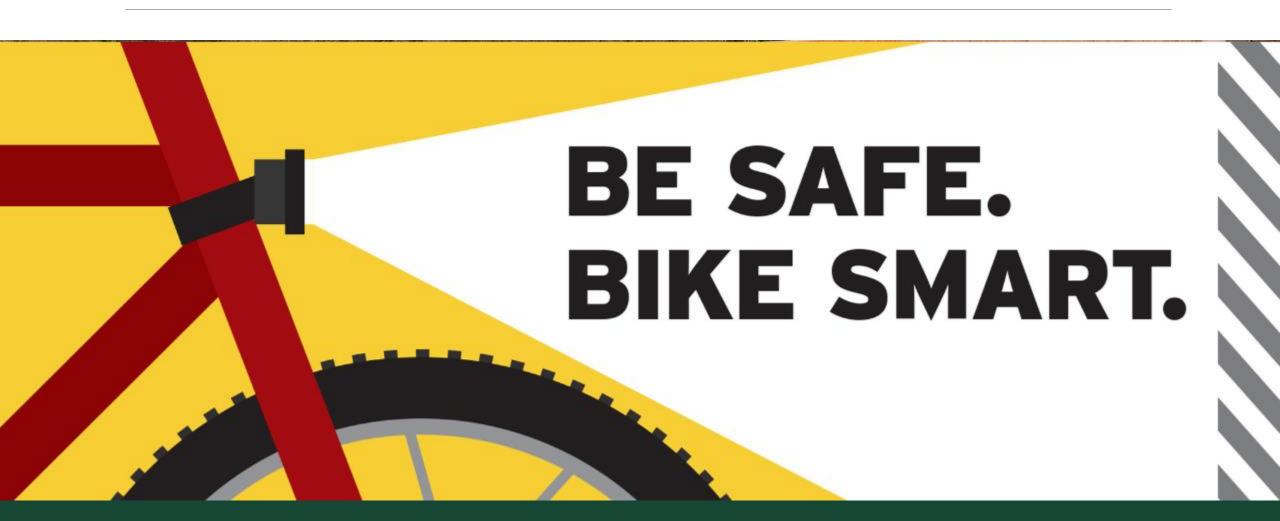
BE SAFE. DRIVE SMART. TXDOT #EndTheStreakTX

Tips for Motorists

- Always stop for pedestrians.
- Yield to pedestrians at crosswalks
- Reduce your speed when approaching crosswalks
- Stop and yield the right of way to pedestrians when turning
- Be careful when passing buses or stopped vehicles
- Stay alert and put your phone away. Pedestrians may enter your path suddenly
- Obey the speed limit and drive to conditions.

Tips for Motorists

- Watch for bicyclists in main traffic lanes.
 - Bicyclists sometimes need to use main traffic lanes, even if there's a bicycle lane.
 - Be on the lookout for cyclists on the highway, especially at intersections.
- If you're passing a cyclist, move to another lane if possible and give them plenty of room.
 - Give bicyclists at least 3 feet when passing in a private vehicle.
 - Give bicyclists at least 6 feet when passing a commercial vehicle.
- Watch for cyclists who may need to maneuver around potholes and debris.

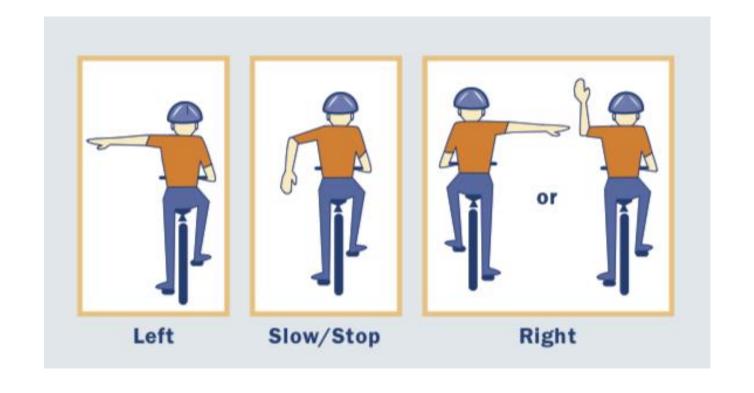


PREPARE FOR YOUR RIDE

- Wear a properly fitted helmet.
- Check brakes and tires.
- •Wear light colors to make it easier for drivers to see you.
- •Use lights when riding at night.
 - White light on the front, red light (or red reflector) on the rear of the bike.

USE PROPER HAND SIGNALS

- For a left turn, stretch your left arm to the left.
- For a right turn, stretch your right arm to the right.
- For a stop, hold your left elbow out, arm downward, with palm facing behind you.



- Stay alert.
- Put away electronic devices.
- Pay attention to lane markers.
- Don't ride between vehicles.
- Cross at intersections.
- Make eye contact with drivers before crossing.
- Never attempt to cross a multi-lane highway.
- Use caution when riding at sunrise and sunset; the bright sunlight can make bicyclists difficult to see.

Bicyclists have the same rights and responsibilities as a motor vehicle on Texas roadways.

- Bicyclists should ride as far to the right-hand side of the street as possible, however, they may move from the right to:
 - Avoid obstructions and uneven surfaces.
 - Make a left turn.
- Stop at red lights and stop signs.
- Ride in a bicycle lane if present, traveling in the same direction as traffic.

Tips for Walking



Tips for Walking

- Always use sidewalks. If there is no sidewalk, walk on the left side of the road facing traffic.
- Always use crosswalks. Look left, then right, then left again before crossing.
- Yield to vehicles.
- Don't assume traffic will stop for you.
- Make eye contact with drivers before crossing.
- Follow crossing signals, when available.
- Stay on the right half of the crosswalk when crossing.
- Do not cross the street diagonally unless authorized by a traffic signal or sign.

Tips for Walking

WHAT IF THERE IS NO CROSSWALK?

- Check for a crosswalk further up or down the street.
- Don't jaywalk. If you're hit while jaywalking, the driver may not be liable, and insurance may not cover your injuries.

Safety Tips Video



Motorist and Pedestrian Safety Tips

Bicyclists – Obey all Traffic Laws

Safe Passing of Bicyclists

Motorist and Bicyclist Safety Tips

Pedestrian Crossing Signals

Looking for more educational videos? Go to <u>Videos - Walk.</u> <u>Bike. Safe. (walkbikesafetexas.org)</u>.



Conclusion

- RESOURCES AVAILABLE
- THANK YOU!

Resources Available

For more pedestrian and bicycle safety resources visit:

- 1. Street Coaching https://cades.tti.tamu.edu/street-coaching-trainings/
- 2. Walk. Bike. Safe. https://www.walkbikesafetexas.org
- 3. NHTSA Pedestrian Safety https://www.nhtsa.gov/road-safety/pedestrian-safety
- 4. NHTSA Bicycle Safety https://www.nhtsa.gov/road-safety/bicycle-safety
- 5. TxDOT Pedestrian Safety https://www.txdot.gov/safety/bicycle-pedestrian-safety.html
- 6. TxDOT Bicycle Safety https://www.txdot.gov/safety/bicycle-pedestrian-safety/bicycle-safety.html

Thank You!



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