Photo credit: National Highway Traffic Safety Administration

TEXAS STRATEGIC HIGHWAY SAFETY PLAN

TEXAS TOGETHER
on the Road to Zero

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Overview

SHSP Vision

Texas envisions a future with zero traffic fatalities and serious injuries.

SHSP Mission

Texans will work together on the road to zero traffic fatalities and serious injuries.

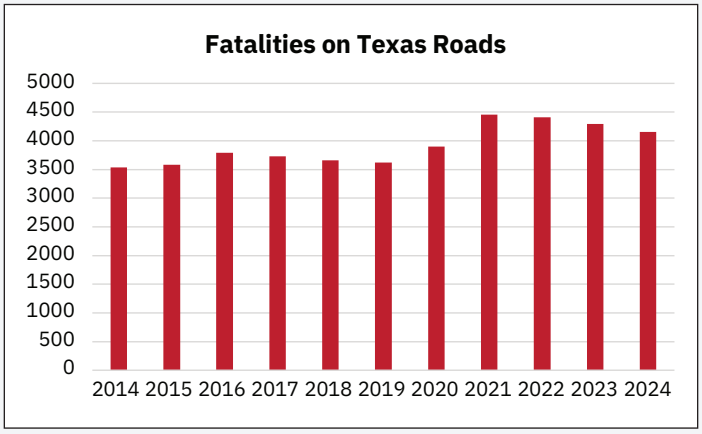
Background of SHSP

- The Texas Strategic Highway Safety Plan (SHSP) is a statewide initiative aimed at reducing traffic fatalities and serious injuries on all public roads. It uses a comprehensive, data-driven approach to identify safety problems, establish goals and priorities and develop effective solutions.
- Aligned with the Safe System Approach, the SHSP recognizes that human errors are inevitable and seeks to ensure that these errors do not result in death or serious injury. This approach emphasizes shared responsibility among all stakeholders and promotes proactive strategies that account for human vulnerability and system design.
- To make this happen, the SHSP brings together a wide range of stakeholders from across Texas, including those from the following disciplines: engineering, construction, operations, maintenance, planning, law enforcement, data analysis, education, prevention, emergency response, safety advocacy, tribal groups, consulting and private industry.
- This multidisciplinary collaboration ensures that both behavioral strategies (like education and enforcement) and infrastructure improvements (like safer road designs and traffic controls) are part of the solution.
- The SHSP is part of a larger federal effort to improve road safety and is supported by major transportation funding laws. Its success depends on continued collaboration and communication among all involved.
- The SHSP is updated every five years. This guide summarizes the emphasis areas and countermeasures for the plan years 2022–2027.

Snapshot of Overall Crash Data and Key Statistics

- There was a national surge in fatal crashes between 2019 and 2021, and Texas roadways were no exception.
- Since 2021, steady progress has been made year-by-year to reduce the number of fatal crashes.
- This gradual reduction in fatal crashes has been seen across most of the SHSP Emphasis Areas.
- However, fatalities and serious injuries on Texas roadways remain high relative to the 2010s.

Texas Fatalities	
Year	**Fatalities**
2014	3538
2015	3585
2016	3794
2017	3727
2018	3657
2019	3622
2020	3898
2021	4456
2022	4410
2023	4291
2024	4150



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Overview

Emphasis Areas

Overview

Texas assessed crash data along with various other factors when selecting emphasis areas, including roadway features that are correlated with crash types, risks associated with certain vehicle and user types, and behavioral factors. To identify and assess these emphasis areas (EAs), the following data according to crash factors were considered:

- % of total fatalities
- % of total suspected serious injuries
- Total fatal & serious injury crashes 2016–2021
- Total fatalities & serious injuries 2016–2021
- Overlapping contributing factors (other emphasis areas and/or individual factors)

Ultimately eight EAs were selected: Distracted Driving, Impaired Driving, Intersection Safety, Occupant Protection, Roadway and Lane Departure, Speed-Related Crashes, Vulnerable Road Users, and Post-Crash Care. Teams of stakeholders and subject matter experts in the identified areas were formed. The EA teams met throughout the process to develop and refine the SHSP approaches within their EA.

STRATEGIES & COUNTERMEASURES

Within each EA, safety stakeholders developed strategies associated with education and training, engineering, enforcement, emergency response (the 4 E's of safety), as well as data evaluation. Members of the EA teams then refined them into more specific countermeasures.

EA team members followed a set of principles while developing the countermeasures:

- To the extent possible, select proven effective countermeasures with a known cost benefit.
- Identify countermeasures with a large impact in terms of reducing the number of fatalities and serious injuries.
- Avoid countermeasures not feasible due to the inability to enact specific laws and policies, resource requirements, lack of expertise or sponsors and unlikely public acceptance.

ACTION PLANS

Action Plans were developed for each countermeasure. For each action plan, team members identified implementation steps and key participants, then characterized each countermeasure's effectiveness, cost to implement, time to implement and barriers that might affect implementation.

Team members used the following criteria for these evaluations:

- **Effectiveness:** Assume each countermeasure will be implemented vigorously, publicized extensively and funded satisfactorily. *Effectiveness* describes whether there are demonstrated reductions in crashes. If crash information is not available, are there changes in behavior or knowledge?
  - *** Demonstrated to be effective by high-quality evaluations with consistent results.
  - ** Likely to be effective based on the balance of evidence from high-quality evaluations and/or other sources.
  - * Limited or no high-quality evaluation evidence.
- **Cost to Implement:** Approximate cost to implement a given countermeasure. This does not include costs of enacting legislation or establishing policies.
  - **$$$** Requires extensive new facilities, staff, equipment or publicity, or makes heavy demands on current resources.
  - **$$** Requires some additional staff time, equipment, facilities and/or publicity.
  - **$** Can be implemented with current staff, perhaps with training; limited costs for equipment, facilities and publicity.
- **Time to Implement:** The SHSP is a 5-year plan, so a countermeasure that takes longer than 5 years to implement is considered long term. This does not include time required to enact legislation or establish policies.
  - Long More than 5 years
  - Medium More than 1 year but less than 5 years
  - Short Less than 1 year
- **Barriers:** Identify any barriers or other issues that may arise and thwart countermeasure implementation. For every barrier identified, determine ways to overcome or address the issue.


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Distracted Driving

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According to NHTSA, distracted driving refers to any activity that diverts a driver's attention from safely operating a vehicle.

Distractions can be visual (eyes off the road), cognitive (mind off driving) or manual (hands off the wheel). Despite being difficult to measure, research shows that distracted driving is a widespread behavior and poses a significant risk on the roads.

OBJECTIVES/GOALS

Reduce fatalities and serious injuries by identifying, implementing and evaluating awareness strategies to reduce distracted driving.

Distraction Fatalities and Serious Injuries (2020–2024)

FATALITIES
2,064

10% of all fatalities were associated with a crash involving distraction

SERIOUS INJURY
13,306

15% of all serious injuries involved distraction

Fatal and Serious Injury Distracted Crashes

37%
Rural

63%
Urban

Percent of Fatal and Serious Injury Crashes with Distracted Drivers that also Involve:

57%
Multi-Vehicle

32%
Speed

38%
Intersection

29%
Roadway/Lane Departures

35%
Multi-Vehicle
were rear-end crashes

27%
Pedestrians or Bicyclists
in an urban setting

28%
Distracted Drivers
were 16- to 25-year-olds

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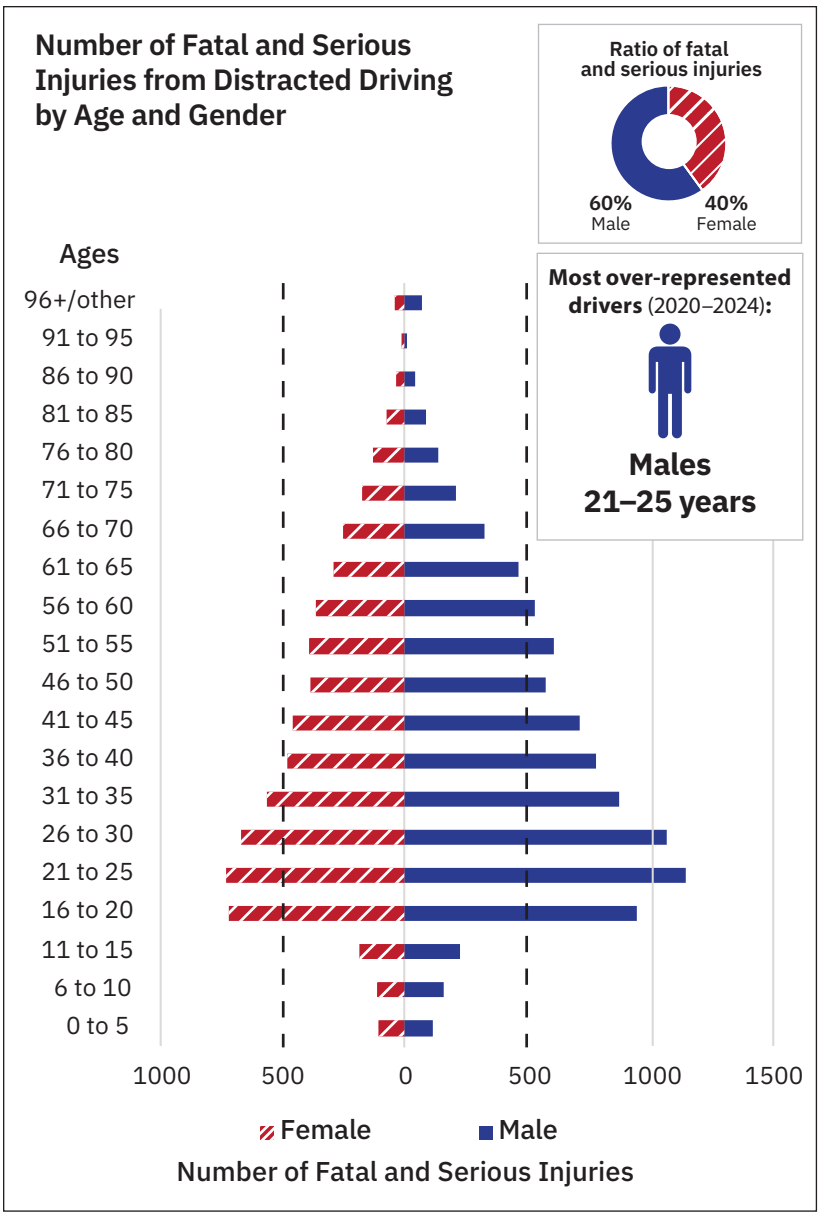
DISTRACTED DRIVING

Distracted Driving		
Year	**Fatalities**	**Serious Injuries**
2020	367	2204
2021	432	2922
2022	482	2805
2023	403	2786
2024	380	2589



Strategies to Help Distracted Driving Users

1. Utilize data and information to communicate the dangers of distracted driving to teens, their parents, employers, public officials, and others.
2. Improve and increase enforcement capabilities for addressing distracted driving.
3. Increase installation of engineering countermeasures known to reduce distracted driving.
4. Use technology to reduce distracted driving crashes, serious injuries, and fatalities.

Find out more about specific countermeasures and action plans for **Distracted Driving** at https://www.texasshsp.com/emphasis-areas/distracted-driving/

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Impaired Driving

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The Impaired Driving emphasis area includes those crashes where at least one driver was identified as having been drinking, having taken medication, been under the influence of alcohol or drugs, a blood alcohol content greater than zero or a positive drug test.

Texas is addressing impaired driving with infrastructure and behavioral strategies along with assessing potential options for technology-based interventions on the system and in vehicles.

OBJECTIVES/GOALS

Reduce the occurrence of fatal and serious injury crashes attributed to impaired driving (alcohol and/or other drugs).

Impaired Driving Fatalities and Serious Injuries (2020–2024)

FATALITIES
7,584

36% of fatalities were associated with an impaired driving crash

SERIOUS INJURY
13,320

15% of serious injuries involved impaired driving

Deadliest Hour

10%
occurred in the 2:00 a.m. hour

53%
occurred from 8:00 p.m. to 4:00 a.m.

Percent of Fatal and Serious Injury Crashes with Impaired Drivers that also Involve:

43%
Multi-Vehicle

43%
Speed

51%
Rural

35%
Unrestrained Vehicle Occupants

FRI SAT SUN

60%
Weekend (Fri-Sun)

70%
Nighttime

52%
Roadway/Lane Departures

Not Just Drivers

1,325
Children Under 18 sustained fatal or serious injuries from drunk driving crashes

30%
of fatal and serious injuries were sustained by passengers or pedestrians

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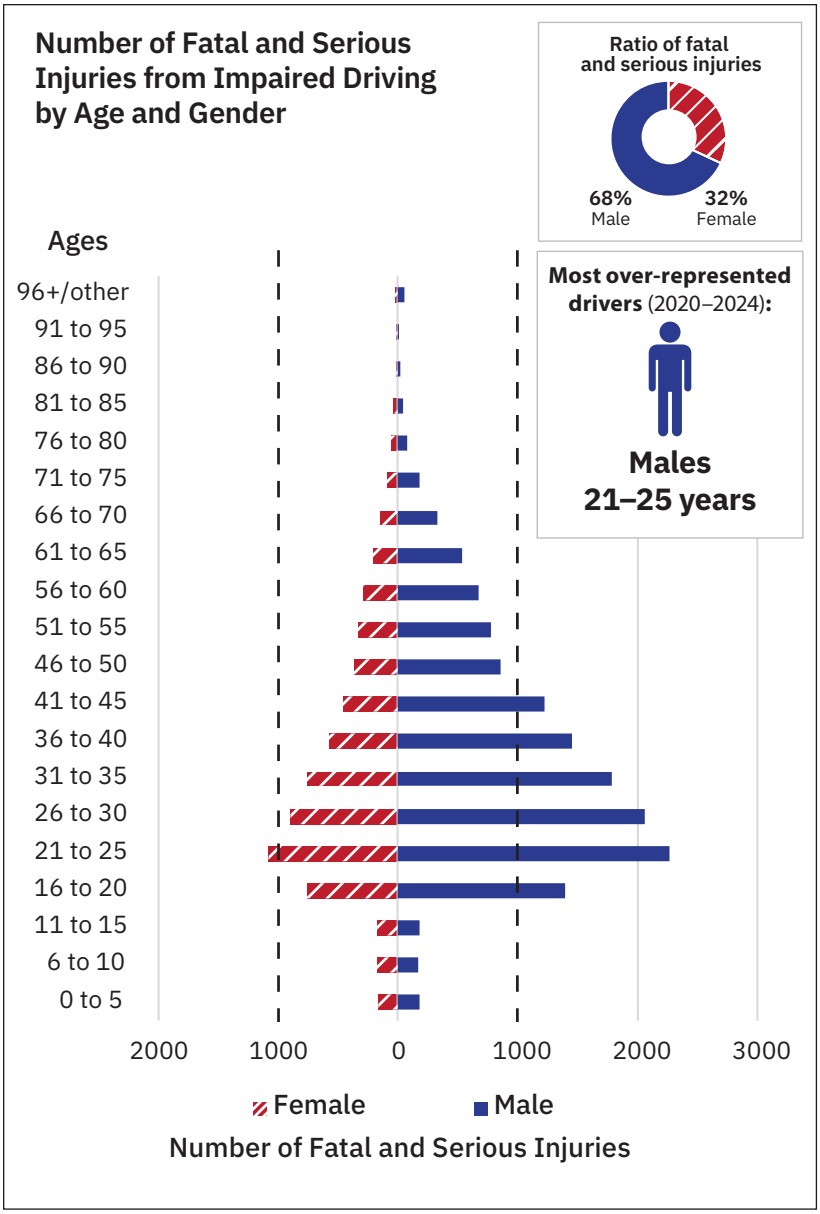
IMPAIRED DRIVING

Impaired Driving		
Year	**Fatalities**	**Serious Injuries**
2020	1367	2448
2021	1562	2956
2022	1666	2842
2023	1543	2600
2024	1446	2474

Number of Fatal and Serious Injuries from Impaired Driving by Age and Gender



Strategies to Reduce Impaired Driving

1. Increase education for all road users on the impact of impaired driving and its prevention.
2. Increase officer contacts with impaired drivers through regular traffic enforcement.
3. Increase data, training, and resources for law enforcement, prosecutors, toxicologists, judges, and community supervision personnel related to alcohol/drugged driving.

Find out more about specific countermeasures and action plans for **Impaired Driving** at https://www.texasshsp.com/emphasis-areas/impaired-driving/

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Intersection Safety

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Intersections are particularly problematic, as they involve both vehicles and vulnerable road users such as pedestrians and bicyclists.

The Safe System approach emphasizes designing intersections with consideration for human behavior, especially potential driver errors. The focus is to reduce risk and, ultimately, prevent death and serious injury related to traffic crashes involving vehicle occupants, pedestrians and bicyclists. Texas is addressing intersection safety through infrastructure improvements and system- and vehicle-level interventions.

OBJECTIVES/GOALS

Reduce the frequency of fatal and serious injury crashes associated with intersections through infrastructure improvements and driver behavior modification.

Intersection Fatalities and Serious Injuries (2020–2024)

FATALITIES
5,093

24% of fatalities involved an intersection

SERIOUS INJURY
32,967

37% of serious injuries involved an intersection

Intersection Crashes

16%
by distracted drivers

50%
higher than Statewide average

Percent of Fatal and Serious Injury Intersection Crashes that also Involve:

76%
Multi-Vehicle

68%
Urban

19%
Motorcyclists

25%
Intersections

15%
Pedestrians or Bicyclists

41%
City Streets

23%
Drivers and occupants
were 16- to 25-year-olds

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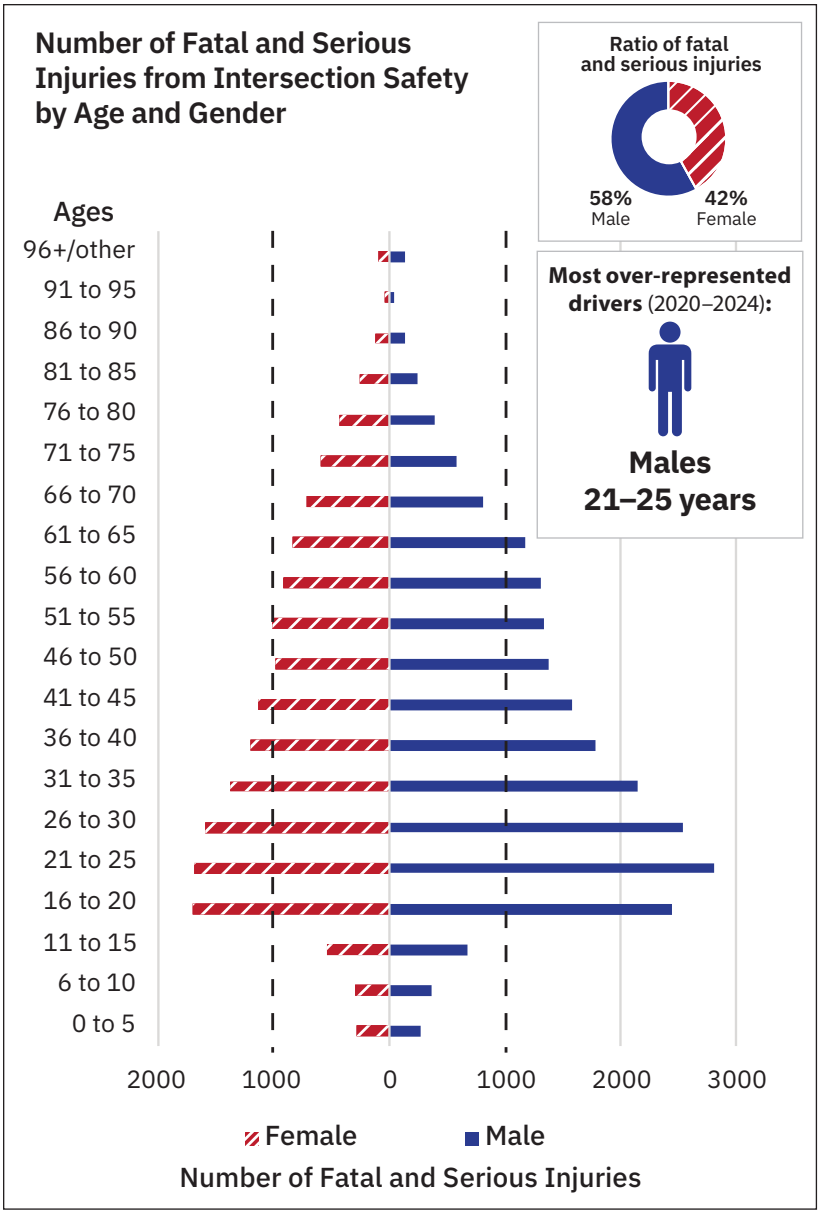
INTERSECTION SAFETY

Intersection Related		
Year	**Fatalities**	**Serious Injuries**
2020	870	4898
2021	1026	6901
2022	1023	6806
2023	1121	7233
2024	1053	7129

Number of Fatal and Serious Injuries from Intersection Safety by Age and Gender



Strategies to Increase Intersection Safety

1. Expand intersection safety practices through planning, design, and implementation.

2. Reduce intersection violations.

Find out more about specific countermeasures and action plans for **Intersection Safety** at https://www.texasshsp.com/emphasis-areas/intersection-safety/

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Occupant Protection

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Photo credit: National Highway Traffic Safety Administration

Research shows that using seat belts or appropriate child restraints is the most effective way to save lives and reduce injuries in crashes.

The challenge is to convince all passenger vehicle occupants to buckle up. Despite high seat belt use rates, many unrestrained individuals still die in crashes. The most effective strategy to maintain high restraint use is well-publicized High Visibility Enforcement (HVE) of strong seat belt laws. The HVE has three components — laws, enforcement and publicity. The effectiveness decreases if any one of the components is weak or missing.

OBJECTIVES/GOALS

Utilize a data driven approach to identify and target audiences for enforcement and education efforts designed to increase correctly installed and applied safety belts and child car seats.

Occupant Fatalities and Serious Injuries (2020–2024)

FATALITIES
6,973

33% of fatalities were sustained by unbelted occupants

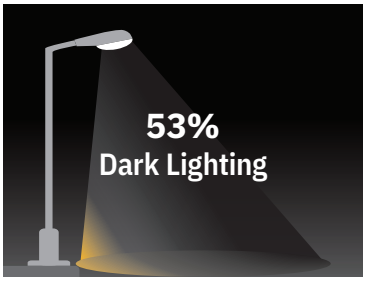
SERIOUS INJURY
16,565

18% of serious injuries were sustained by unbelted occupants

Percent of Fatal and Serious Injury Crashes with Unrestrained Occupants that also Involve:

58%
Single-Vehicle

55%
Rural



68%
State System

MALES account for **two-thirds** (69%) of fatalities and serious injuries

DRIVERS AND OCCUPANTS AGE 16 TO 25 account for **nearly one-third** (32%) of fatalities and serious injuries

~10% OF VEHICLE OCCUPANTS NOT WEARING THEIR SEATBELTS account for **48% of fatalities** sustained by occupants

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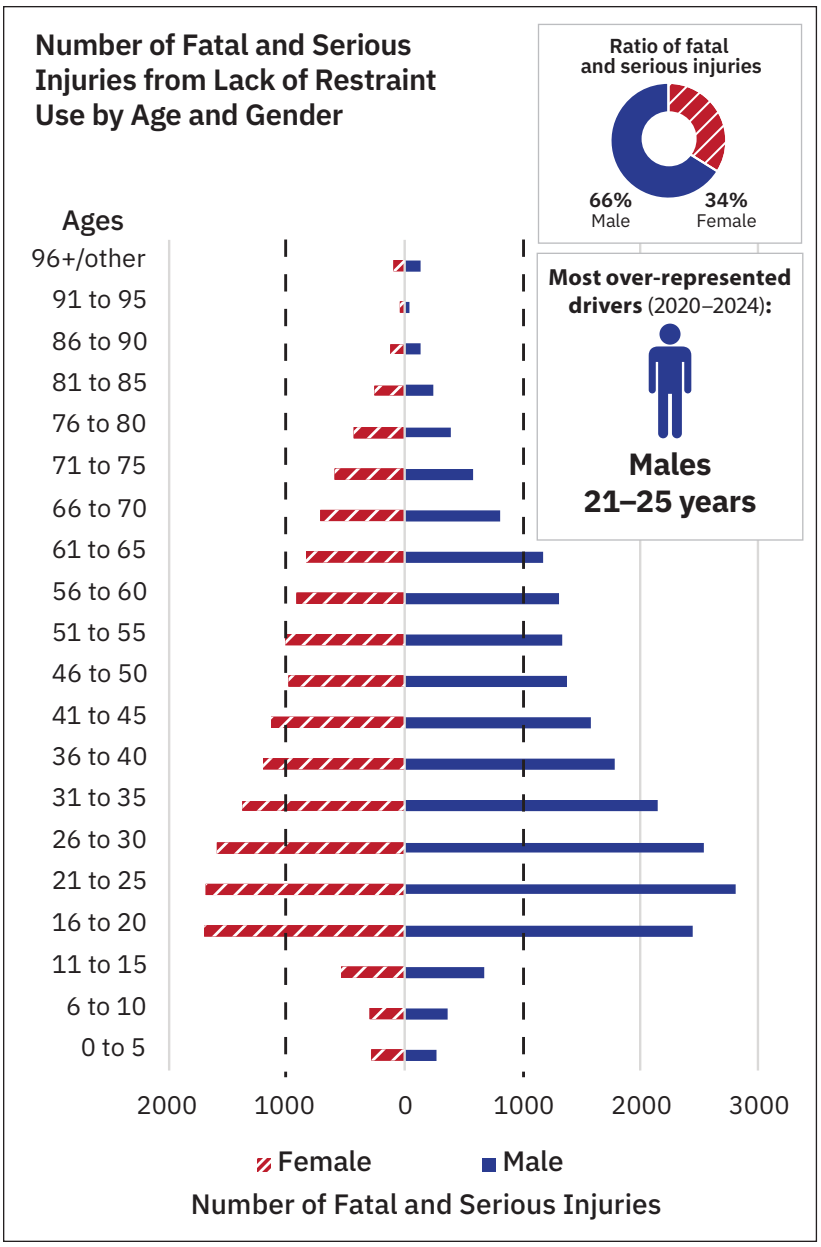
OCCUPANT PROTECTION

Occupant Protection		
Year	**Fatalities**	**Serious Injuries**
2020	1288	2632
2021	1459	3666
2022	1497	3538
2023	1431	3530
2024	1298	3199



Strategies to Increase Occupant Protection Safety

1. Increase occupant restraint use through short-term, high-visibility enforcement.
2. Improve education and outreach efforts.
3. Prioritize efforts geographically and demographically based on lower use rates.

Find out more about specific countermeasures and action plans for **Occupant Protection** at https://www.texasshsp.com/emphasis-areas/occupant-protection/

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Roadway and Lane Departures

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A crash is considered a roadway and lane departure crash if it involves either a single-vehicle crash where the first harmful event occurs in the median, on the shoulder, or off the roadway, or a two-vehicle crash where one vehicle is traveling the wrong way in the lane (not while passing).

The Safe System approach to roadway and lane departure crashes emphasizes road predictability, a forgiving roadway environment and safe driver behavior.

OBJECTIVES/GOALS

Reduce the frequency of fatal and serious injury crashes associated with roadway and lane departures through infrastructure improvements and driver behavior.

Roadway Or Lane Departure Fatalities and Serious Injuries (2020–2024)

FATALITIES
7,723

36% of fatalities were associated with a crash involving a roadway or lane departure

SERIOUS INJURY
28,435

32% of serious injuries involved a roadway or lane departure

Percent of Fatal and Serious Injury Roadway and Departure Crashes that also Involve:

97%
Single-Vehicle

53%
Rural

41%
Speed

27%
Impaired

29%
Unbelted Drivers or Occupants

70% of fatal and serious injuries sustained by males, including 76% of vehicle and motorcycle drivers sustaining such injuries

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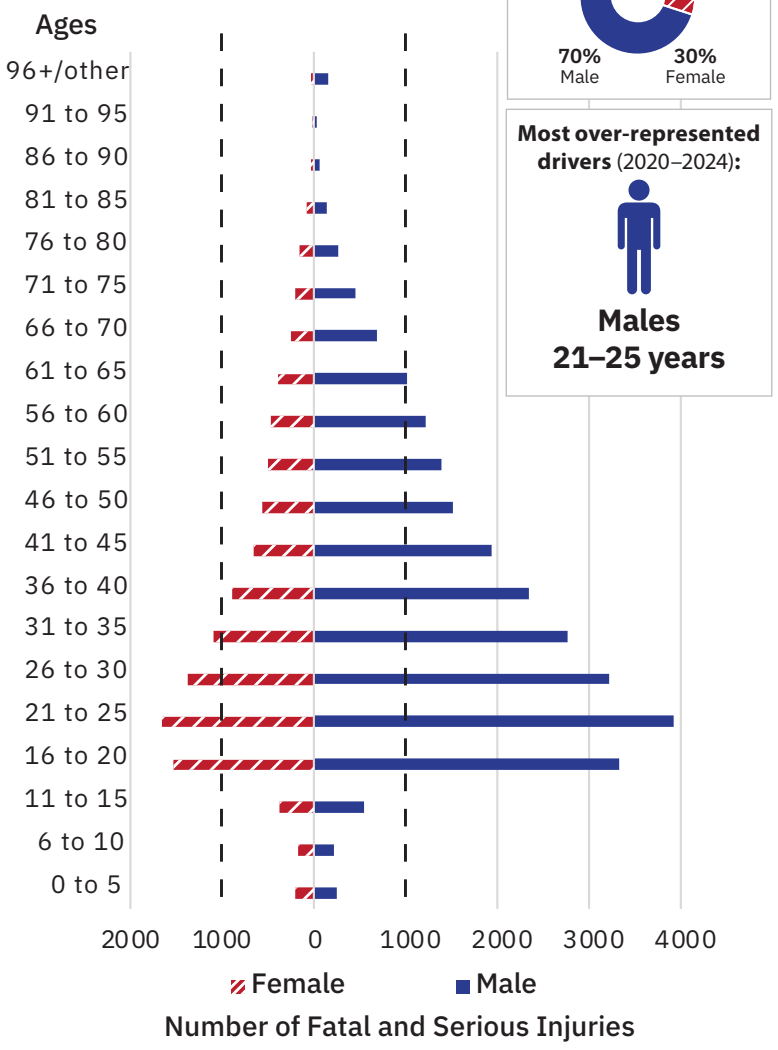
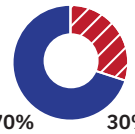
ROADWAY & LANE DEPARTURES

Roadway and Lane Departures		
Year	**Fatalities**	**Serious Injuries**
2020	1465	5029
2021	1651	6288
2022	1566	5963
2023	1538	5769
2024	1503	5386

Number of Fatal and Serious Injuries from Roadway and Lane Departures by Age and Gender



Ratio of fatal and serious injuries



70% Male 30% Female

Most over-represented drivers (2020–2024):

Males 21–25 years

Strategies to Avoid Roadway and Lane Departures

1. Keep vehicles from encroaching on the roadside or opposite lane.

2. Minimize the consequences of vehicles leaving the road.

3. Minimize the likelihood of crashing in adverse conditions.

Find out more about specific countermeasures and action plans for **Roadway and Lane Departures** at https://www.texasshsp.com/emphasis-areas/roadway-and-lane-departures/

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Speed Related

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The Safe System Approach emphasizes the importance of safe travel speeds, with critical thresholds varying by crash type and roadway characteristics.

Driver behavior, including human error and unlawful actions, is a key factor in fatal and serious injury crashes. Speed-related strategies address engineering, enforcement and behavior holistically. During the 2022 SHSP revision, Texas aligned speed-related crash definitions with other statewide plans. The definition was expanded in 2022 to include speeding (over the limit), unsafe speed and failure to control speed (a new factor for the 2022 revision).

OBJECTIVES/GOALS

Reduce the occurrence of fatal and serious injury crashes by establishing travel speeds that suit the function and level of safety of road segments and improve drivers' compliance with speed limits and safe driving based on conditions.

Occupant Fatalities and Serious Injuries (2020–2024)

FATALITIES
7,366

35% of fatalities associated with a crash involving speeding

SERIOUS INJURY
29,656

33% of serious injuries involved speeding

Percent of Fatal and Serious Injury Speed-Related Crashes that also Involve:

19%
Motorcyclists

42%
Lane/Roadway Departures

39%
Impaired

26%
Distracted

64%
State System

32%
Drivers and occupants
were 16- to 25-year-olds

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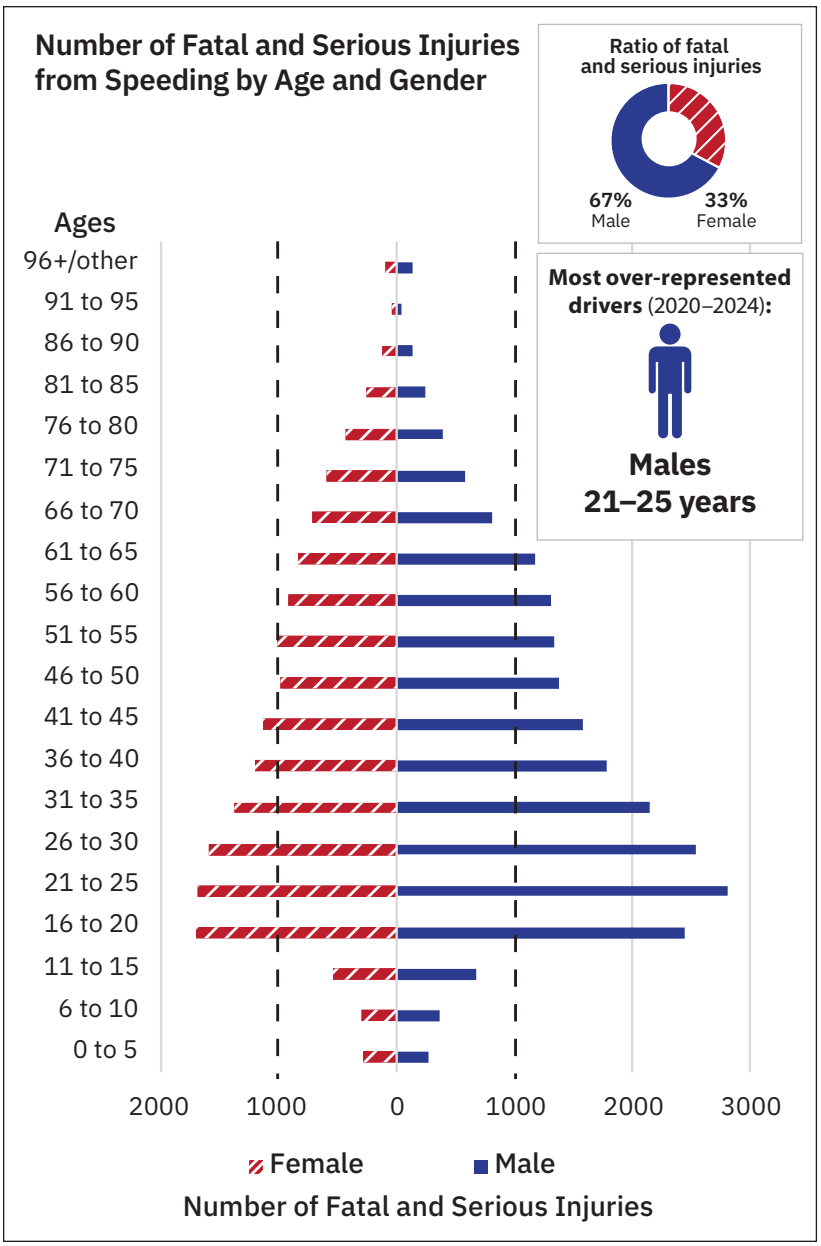
SPEED RELATED

Speed Related		
Year	**Fatalities**	**Serious Injuries**
2020	1414	4956
2021	1536	6487
2022	1481	6324
2023	1471	5980
2024	1464	5909



Strategies to Avoid Speeding

SPEED LIMIT 65

1. Establish target speed limits and road characteristics to reduce speeding on state, county & local roads.

2. Improve quality of crash data related specifically to speed.

3. Leverage data to improve engineering, education, and enforcement.

Find out more about specific countermeasures and action plans for Speeding at https://www.texasshsp.com/emphasis-areas/speed-related/

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Vulnerable Road Users

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A primary tenet of the Safe System Approach is anticipating human error, especially to protect vulnerable road users like pedestrians and bicyclists, who are more susceptible to fatal or serious injuries in crashes with motor vehicles.

To reduce these risks, the system should separate users by time and/or space, accommodating different travel speeds and minimizing conflict. Intersections also pose challenges due to the presence of both vehicles and vulnerable users. Countermeasures such as improved lighting and enhanced visibility can help drivers detect pedestrians, while behavioral and engineering solutions can address conflict points, reduce speed and create safer spaces for all users.

OBJECTIVES/GOALS

Utilize a data-driven approach to reduce fatal and serious injuries among vulnerable road users by identifying target audiences for education efforts that promote proper use of occupant protection including safety belts and child car seats.

Vulnerable Road Users Fatalities and Serious Injuries (2020–2024)

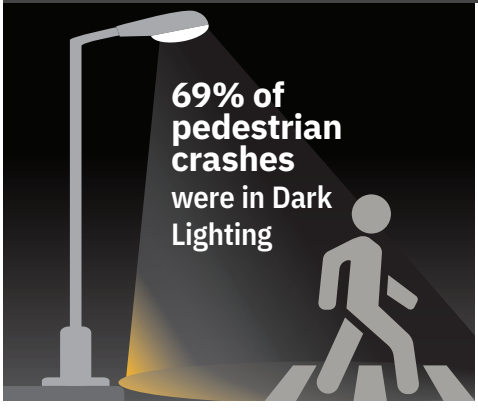
PEDESTRIAN FATALITIES:
3,996
19% of fatalities were pedestrians

BICYCLIST FATALITIES:
453
2% of fatalities were bicyclists

PEDESTRIAN SERIOUS INJURY:
7,191
8% of serious injuries were sustained by pedestrians

BICYCLIST SERIOUS INJURY:
1,771
2% of serious injuries were sustained by bicyclists

Percent of Fatal and Serious Injury Crashes with Vulnerable Road Users that also Involve:



10%
Speed

28% of pedestrian and bicycle crashes
were intersection-related

Impaired driving killed 357 pedestrians or bicyclists
(71 a year).

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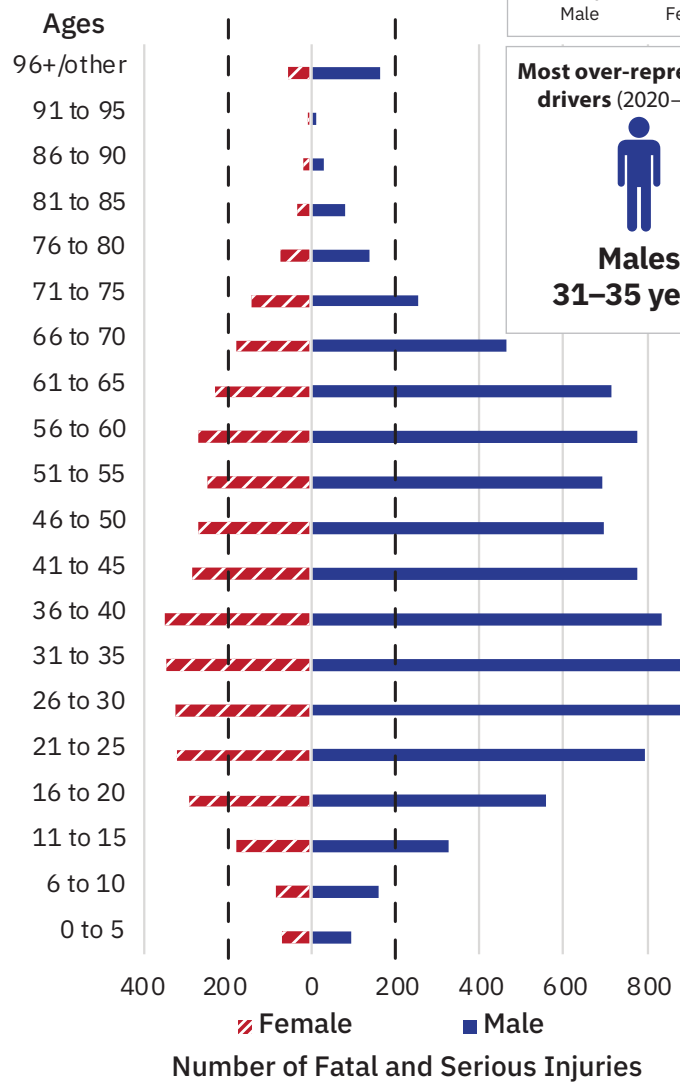
VULNERABLE ROAD USERS

Pedestrian & Bicyclists		
Year	**Fatalities**	**Serious Injuries**
2020	808	1486
2021	926	1787
2022	921	1844
2023	933	1896
2024	860	1944

Number of Fatal and Serious Injuries from Vulnerable Road Users (Pedestrians and Bicyclists) by Age and Gender



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Strategies to Help Vulnerable Road Users

1. Improve driver and vulnerable road user safety awareness and behavior.
2. Reduce vulnerable road user crashes on urban arterials and local roadways.
3. Improve vulnerable road user networks.
4. Develop strategic pedestrian safety plans tailored to local conditions.

Find out more about specific countermeasures and action plans for **Vulnerable Road Users** at https://www.texasshsp.com/emphasis-areas/vulnerable-road-users/

Post-Crash Care

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One of the core principles of the Safe System approach is redundancy; layered protections that prevent death or serious injury even if one element fails.

Post-crash care is a critical layer, aimed at reducing the risk of death and serious injuries through effective emergency response, trauma care and rehabilitation. It also includes sub-elements like first responders, crash investigation, traffic incident management and justice. States should ensure programs are in place for rapid, safe removal of wreckage and debris to reduce the risk of secondary crashes and protect public safety.

OBJECTIVES/GOALS

Enhance crash survivability through quick emergency medical care, ensure safe conditions for first responders and prevent secondary crashes with robust traffic incident management.

Occupant Fatalities and Serious Injuries (2020–2024)

20% of deaths and traumas are preventable with optimal emergency and trauma care

(National Academies of Sciences, Engineering, and Medicine)

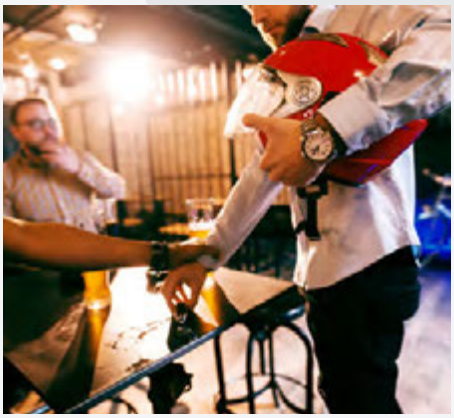
Distance to Nearest Trauma Center in miles			
Crash Severity	**Rural**	**Urban**	**Total**
Fatal Injury	12.38	3.91	8.06
Suspected Serious Injury	11.49	3.76	6.83
Suspected Minor Injury	10.15	3.41	5.16
TOTAL	**10.64**	**3.48**	**5.60**

Strategies to Increase Occupant Protection Safety

1. Improve data collection and analysis techniques.
2. Increase and improve emergency responder training.
3. Facilitate current and future State and Metro TIM team meetings.
4. Utilize technology, policy, and personnel to improve crash investigation and scene clearance.
5. Identify and implement engineering solutions where possible to reduce response times.

Find out more about specific countermeasures and action plans for Post-Crash Care at https://www.texasshsp.com/emphasis-areas/post-crash-care/

Closing



As you reviewed the SHSP strategies and countermeasures, we hope you found ways that you, your family, your organization and your community can be involved.

We invite you to join us On the Road to Zero and we urge you to learn more about specific countermeasures you, your agency or your community can adopt at: www.texasSHSP.com. If you would like to join an emphasis area, please sign up at: https://www.texasshsp.com/contact/

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