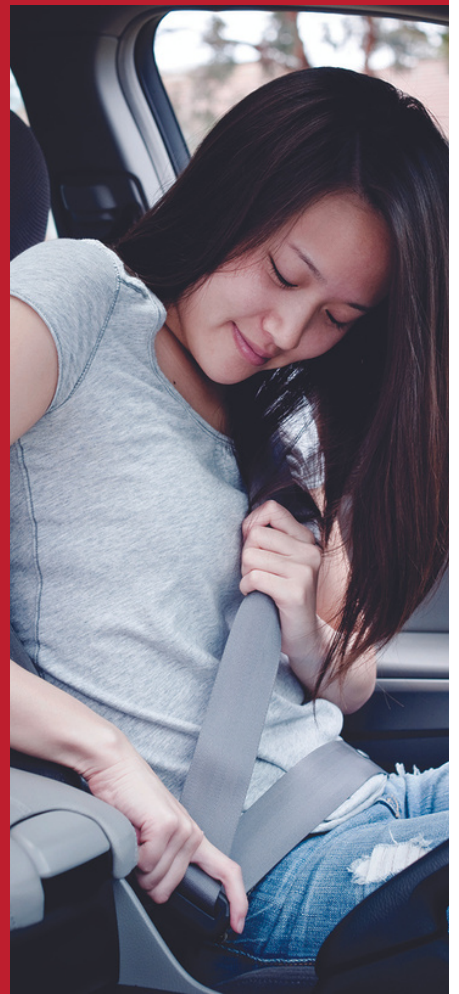


TEXAS SHSP

OCCUPANT PROTECTION EMPHASIS AREA



2022 – 2027

A graphic of the state of Texas. The western and northern parts are red, and the eastern part is blue. A white road with blue and red stripes curves across the eastern side of the map.

TEXAS TOGETHER

on the Road to Zero

The development of the *Texas Strategic Highway Safety Plan* was led by the Traffic Safety Division of the Texas Department of Transportation working in conjunction with the Center for Transportation Safety at the Texas A&M Transportation Institute. Hundreds of safety stakeholders from across the state representing local, regional, and state agencies, law enforcement, industry and advocates, engineers, clinicians, and educators actively participated in the process.



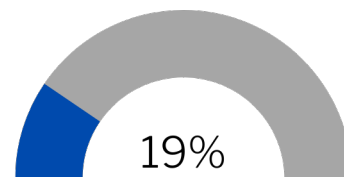
Section 6.5 Occupant Protection

Background

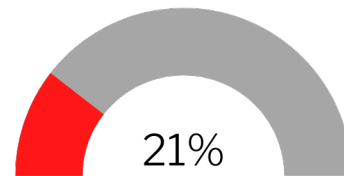
Abundant research has shown correctly using appropriate child restraints or seat belts is the single most effective way to save lives and reduce injuries in crashes. The challenge is to convince all passenger vehicle occupants to buckle up. Despite high observed belt use rates, many unrestrained people die in crashes each year. The most effective strategy for achieving and maintaining restraint use at acceptable levels is well-publicized, High Visibility Enforcement (HVE) of strong occupant restraint use laws. The effectiveness of HVE has been documented repeatedly in the United States and abroad. The strategy's three components – laws, enforcement, and publicity – cannot be separated: effectiveness decreases if any one of the components is weak or missing.

(Venkatraman, V., Richard, C. M., Magee, K., & Johnson, K. (2021, July). Countermeasures that work: A highway safety countermeasures guide for State Highway Safety Offices, 10th edition, 2020 (Report No. DOT HS 813 097). National Highway Traffic Safety Administration, pp. 2-2-4).

Occupant Protection



% of Total Fatal & Serious Injury Crashes



% of Total Fatal & Serious Injuries

Historical & Trend Crash Data Analysis

Despite numerous HVE campaigns and a relatively high seatbelt use rate, the number of people who died in 2020 while not wearing a seat belt increased by 16% over 2019, with

1,073 unrestrained drivers and passengers killed on Texas roadways. ([Click It or Ticket \(txdot.gov\)](https://www.txdot.gov))

In 2021, 27% of the fatally injured drivers and passengers were traveling unrestrained. Of those who suffered a serious injury, 14% were not wearing a seatbelt. Fifty-six percent of unrestrained drivers and passengers were killed or seriously injured in rural areas and about two-thirds crashed on the state road system. Often, traveling unrestrained is coupled with other dangerous driving behaviors. For example, 10% were driving impaired by alcohol or other drugs and 18% were speeding. Overlapping contribution crash factors included 21% of road users killed or seriously injured in intersections and 62% were involved in run off road crashes. Being unrestrained and leaving the roadway is a dangerous combination.

The fatal and suspected serious injury crashes related to lack of restraint use represents 19% of all crashes#. Since 2017, lack of restraint use crash trends increased, therefore it is important to reverse this trend to reach the state goal of zero deaths in 2050. The crashes where at least one occupant was found to be unrestrained are illustrated in Figure 6.5.1 and the fatal and serious injuries resulting from those crashes are summarized in Figure 6.5.2.

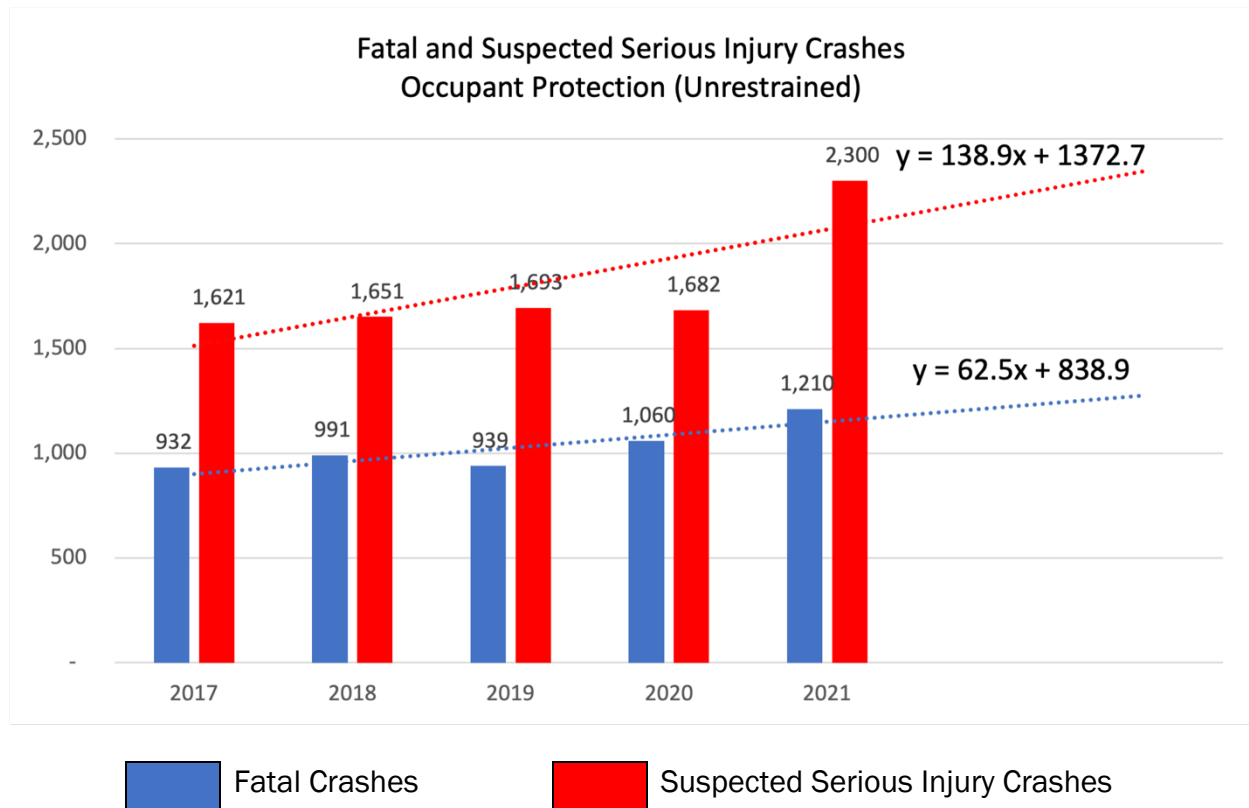


Figure 6.5.1. Occupant Protection (Unrestrained) EA: Fatal and Suspected Serious Injury Crashes (2017-2021)

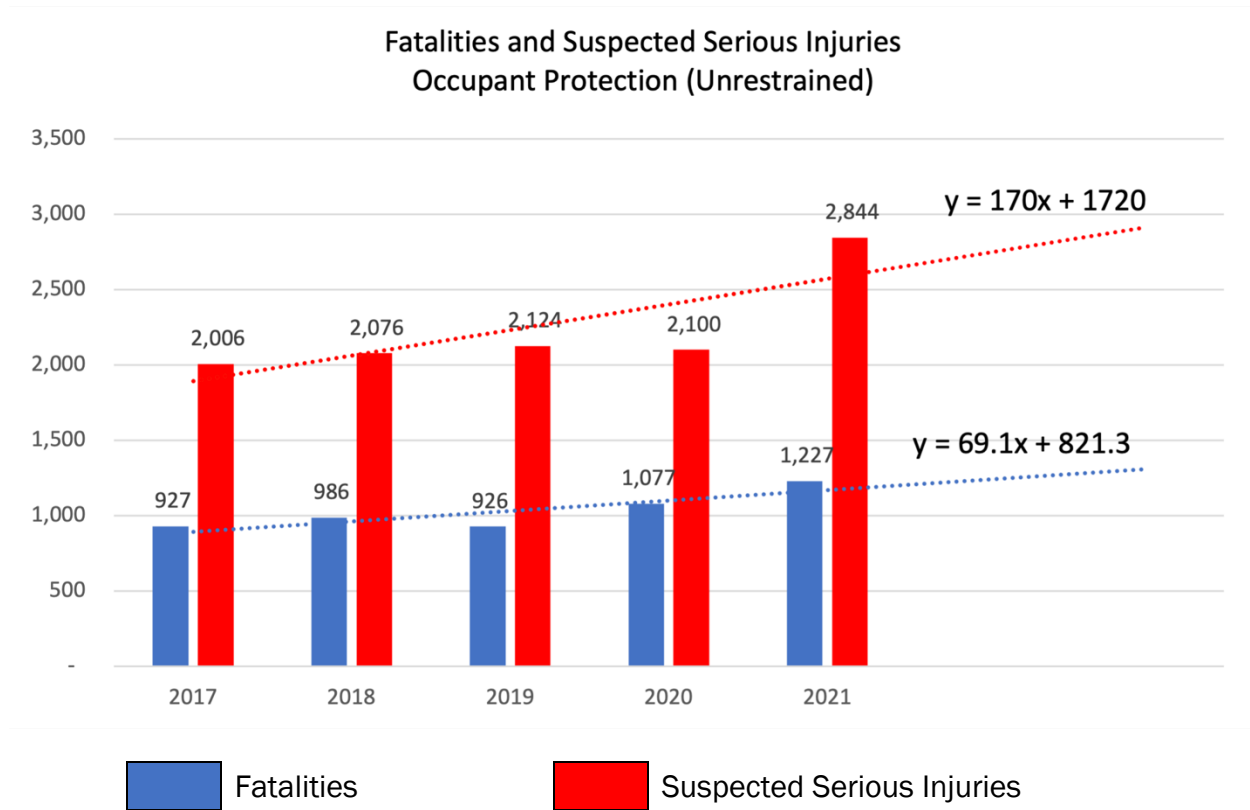
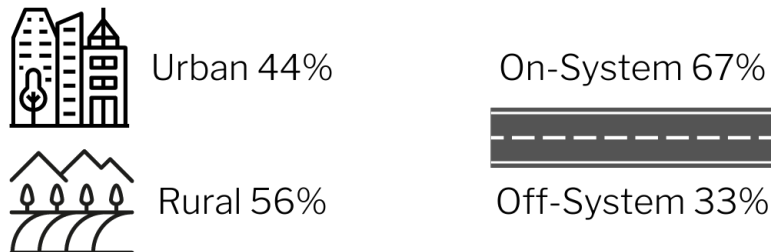


Figure 6.5.2. Occupant Protection (Unrestrained): Fatal and Suspected Serious Injuries (2017-2021)

The EA representatives used this and other data analysis that examined overlapping crash factors, depending on the emphasis area, as they identified strategies and developed implementation plans to address occupant protection related crashes.

Occupant Protection % of Fatal & Serious Injury Crashes



From 2017 through 2021, there were 14,079 crashes where at least one occupant was not restrained. These crashes resulted in 5,143 fatalities and 11,150 additional individuals with suspected serious injuries. Although unrestrained may be only one of multiple factors in a fatal crash, it is present in approximately 30% of the fatal crashes and 27% of the total fatalities. If the state can increase the use of occupant protection, it will positively impact on our ability to reach zero deaths by 2050. When lack of restraint use is combined with other overlapping factors, there are several observations that contributed to the identification of strategies and development of implementation plans within the EA team:

- ⇒ 62% (14,078) were one motor vehicle crashes
- ⇒ 57% of crashes (14,078) with at least one unrestrained occupant were single-vehicle, run-off-the-road
- ⇒ 75% of crashes (14,078) with at least one unrestrained occupant were non-intersection related and only 21% were intersection related
- ⇒ 23% of crashes with at least one unrestrained occupant were single-vehicle, run-off-the-road and classified as impaired driving crashes
- ⇒ 18% of crashes with at least one unrestrained occupant were single-vehicle, run-off-the-road and had speed as a factor
- ⇒ 35% of crashes with at least one unrestrained occupant were intersection related and classified as impaired driving crashes
- ⇒ 21% of crashes with at least one unrestrained occupant were intersection related and had speed as a factor

Objective for Emphasis Area

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.

Strategies & Implementation Plans

Strategy 6.5.1 Increase occupant restraint use through short term, high-visibility enforcement.

Implementation Action Plan	
6.5.1.1	Deploy high visibility enforcement activities at state and local levels in conjunction with National Click It or Ticket (CIOT) campaigns.
6.5.1.2	Deploy targeted media activities at state and local levels in conjunction with National Click It or Ticket (CIOT) campaigns.
Facilitator(s)	TxDOT BTS, DPS, local law enforcement agencies
Participating Organizations	TxDOT BTS, DPS, local law enforcement agencies,
Effectiveness	***
Cost to Implement	6.5.1.1 \$\$, 6.5.1.2 \$\$
Time to Implement	6.5.1.1 Short, 6.5.1.2 Short,
Barriers	Some law enforcement agencies lack resources and/or the desire to engage in campaigns

Strategy 6.5.2 Improve education and outreach efforts.

Implementation Action Plan	
6.5.2.1	Increase intervention efforts by healthcare professionals, teachers, and safety advocates.
6.5.2.2	Increase training /retention of child passenger safety (CPS) technicians and instructors.
6.5.2.3	Develop a consolidated resource tool (website) for advocates to send people for fitting stations, car seats, etc. to assist law enforcement, technicians, health care providers, et al.
6.5.2.4	Educate younger drivers (under 25) to use occupant protection for themselves and other people in the vehicle through formal driver education and targeted outreach through programs such as Teens in the Driver Seat.
Facilitator(s)	TxDOT BTS, Hospitals, AAA
Participating Organizations	TxDOT BTS, Hospitals, AAA, TTI, Agri-Life, First Responders PreK-12 Schools, Driving Schools
Effectiveness	***
Cost to Implement	6.5.2.1 \$, 6.5.2.2 \$, 6.5.2.3 \$, 6.5.2.4 \$
Time to Implement	6.5.2.1 Short, 6.5.2.2 Short, 6.5.2.3 Short, 6.5.2.4 Short (Most Ongoing)
Barriers	Lack of funding

Strategy 6.5.3 **Prioritize efforts geographically and demographically based on lower use rates.**

Implementation Action Plan	
6.5.3.1	Focus on enforcement, education, and encouragement activities in the geographic areas with lower use rates.
6.5.3.2	Focus education and outreach activities on demographic groups based on lower use rates and equity.
6.5.3.3	Identify and evaluate innovative means of reaching target areas and populations.
6.5.3.4	Maintain CPS (child passenger safety distribution) seat distribution programs for low-income families.
Facilitator(s)	TxDOT, TTI, AAA
Participating Organizations	TxDOT, TTI, AAA, AgriLife, DPS, First Responders
Effectiveness	*
Cost to Implement	6.5.3.1 \$, 6.5.3.2 \$, 6.5.3.3 \$, 6.5.3.4 \$\$
Time to Implement	6.5.3.1 Short, 6.5.3.2 Short, 6.5.3.3 Short, 6.5.3.4 Ongoing
Barriers	None currently

Occupant Protection Emphasis Area Team		
First Name	Last Name	Organization
Nicholas (Nick)	Aiello	TxDOT (TRF)
Katie	Alexander	Texas Municipal Police Association (TMPA)
Lance	Anderson	Harris County Precinct 5
Lt. Elizabeth	Carter	DPS
Isabel	Colunga	Women & Infants Specialty Health
Lauren	Grove	City of Houston Planning & Development
Susan	Herbel	SUB Consulting Services, LLC.
Johnny	Humphreys	Texas Heatstroke Task Force
Bev	Kellner	Texas A&M AgriLife
Ruby	Martinez	TxDOT-Campaign Program Manager
Briana	McCulloch	Kailee Mills Foundation
Amy	Moser	Education Service Center, Region VI
Christine	Reeves	Central Texas Regional Advisory Council
Katie	Womack	TTI
Karen	Beard	Driscoll Children's Hospital
Steven	Bockenfeld	Safety City of Abilene
Ed	Burgos-Gomez	FHWA – TX
Randy	Chhabra	Austin-Travis County EMS
Lisa	Delgado	Texas Children's Hospital
Amelia "Millie"	Hayes	FHWA
Wanda	Helgesen	Border Regional Advisory Council
Rubiana	Mares	TTI
Frank	Marrero	NHTSA – Regional Office
Jason	Person	TxDOT
Sgt. Kelvin	Pope	Dallas Police Department
Stephen	Ratke	FHWA – TX
Anna	Red	TxDOT
Michael	Spencer	DSHS
Diana	Suarez Martinez	Texas Children's Hospital
Lydia	Valdez	TxDOT
Letty	von Rossum	TxDOT

EA Team Members current as of September 2022