

# ROAD & BRIDGE SAFETY, & TRAVEL INFORMATION

- Road Safety
- Bridge Safety
- Travel Information & DriveTexas.org



# ROAD SAFETY

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## OVERVIEW

Promoting safety and protecting the lives of the traveling public is the top priority for Texas Department of Transportation (TxDOT) employees and contractors. Our key objectives include lowering the state's traffic fatality rate as well as the total number of traffic fatalities and injuries. TxDOT seeks to accomplish this through the continuous development of a safety culture within TxDOT, the expanded use of safety construction methods, the improvement of work zone safety, the development of an innovative behavioral Traffic Safety Program and the increased coordination with law enforcement. By incorporating safety planning into every aspect of construction and maintenance and working closely with a wide range of transportation safety stakeholders, TxDOT strives to protect the lives of those traveling our roadways and the lives of our hardworking employees and contractors.



To support this goal, the Texas Transportation Commission launched the Texas Traffic Safety Task Force in 2015 to study ways to reduce fatalities, injuries and crashes on Texas roadways. The task force recommendations provide a cost-benefit analysis for proven highway safety engineering, driver behavior and enforcement measures that save lives. Texas potentially could benefit up to \$12 for every \$1 spent on these safety strategies, which can continue preventing crashes and deaths on our roadways for up to 20 years. The report, *Solutions for Saving Lives on Texas Roads*, is available on the TxDOT website.

## HIGHWAY SAFETY

Traffic crashes and fatalities in Texas have increased slightly over the last decade with a slight decrease in 2017. The overall increase coincides with an increase in the Texas

population and an increase in miles driven on state roads and highways. In 2016, Texas had 3,794 traffic-related fatalities. In 2017, this number decreased slightly to 3,722. Certain factors continue to contribute to traffic crashes. In 2017, of the 17,647 fatal and serious injury crashes, 5,690 were intersection-related, representing 32 percent. Drivers running off the road accounted for 5,642 fatal and serious injury crashes, and driving under the influence accounted for 3,011 fatal and serious injury crashes. Of those who lost their lives in 2017, more than 37 percent were not restrained by a safety belt when the crash occurred. Although notable progress has been made in highway transportation safety, even a single traffic death in the state is one too many and represents a preventable tragedy. As part of our efforts to reach a goal of zero traffic fatalities, TxDOT manages various programs that focus principally on improving transportation safety.

## Texas Traffic Safety Program

The Texas Traffic Safety Program, created by Chapter 723, Texas Transportation Code, is a federally funded effort to reduce the number and severity of traffic crashes, injuries and fatalities caused by driver behavior through education, training and enforcement. The program provides grants to state agencies, private non-profit associations and local jurisdictions for projects focusing on areas such as occupant protection, selective traffic enforcement, driving while intoxicated prevention, traffic records and roadway safety. The program's goal is to modify driver and passenger behavior, and the program is a critical component in TxDOT's effort to improve transportation safety. The Traffic Safety Program's extensive public information and enforcement efforts helped increase safety belt usage in Texas to 92 percent in 2017. For fiscal year 2019, the Texas Traffic Safety Program budgeted approximately \$105.9 million for 311 traffic safety projects statewide.

### Public Information Campaigns (Fiscal Year 2019)

TxDOT has a number of traffic safety public information campaigns. The following campaigns are designed to deter drunk driving, to improve motorcycle safety, encourage safety belt use, and to decrease the incidence of distracted driving, including texting while driving.



## Public Information Campaigns By Month

### JANUARY

Statewide Impaired Driving: Holidays

Statewide Impaired Driving: Football

### FEBRUARY

Be Safe. Drive Smart: Energy Sector

Statewide Impaired Driving: Football

Youth Occupant Protection: Teen Click It or Ticket

### MARCH

Be Safe. Drive Smart: Aggressive Driving

Statewide Impaired Driving: College and Young Adult

Statewide Impaired Driving: Spring Holidays

### APRIL

Be Safe. Drive Smart: Work Zone Safety

Be Safe. Drive Smart: I-35

Statewide Impaired Driving: Spring Holidays

Distracted Driving

### MAY

Be Safe. Drive Smart: I-35

Statewide Impaired Driving: Spring Holidays

Motorists' Awareness of Motorcycles

Adult Click It or Ticket

### JUNE

Be Safe. Drive Smart: I-35

Be Safe. Drive Smart: Energy Sector

Statewide Impaired Driving: Faces of Drunk Driving



### JULY

Statewide Impaired Driving: Faces of Drunk Driving

### AUGUST

Be Safe. Drive Smart: Back to School

Be Safe. Drive Smart: Pedestrian Safety

Be Safe. Drive Smart: Drowsy Driving

Statewide Impaired Driving: Labor Day

### SEPTEMBER

Be Safe. Drive Smart: Back to School

Statewide Impaired Driving: Football

Statewide Impaired Driving: Labor Day

Youth Occupant Protection: Child Passenger Safety

### OCTOBER

Statewide Impaired Driving: Football

### NOVEMBER

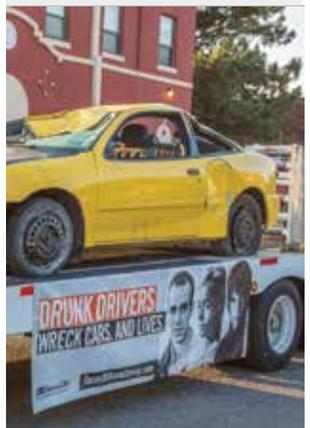
Statewide Impaired Driving: Holidays

Statewide Impaired Driving: Football

### DECEMBER

Statewide Impaired Driving: Holidays

Statewide Impaired Driving: Football





## Highway Safety Improvement Program

The Highway Safety Improvement Program is a federal safety construction program designed to reduce the number and severity of traffic crashes. This program allows states to target funds to their most critical safety needs. TxDOT districts submit projects to be selected for funding through the Highway Safety Improvement Program.

## Strategic Highway Safety Plan

The Texas Strategic Highway Safety Plan is the state's response to the federal safety program and is a requirement to obligate federal safety construction funding. The plan identifies the most critical transportation safety issues facing Texas and recommends countermeasures to improve transportation safety. The Texas plan includes consultation from a variety of stakeholders including the following:

- TxDOT traffic safety personnel who act as the governor's highway safety representative.
- Regional and metropolitan transportation planning organizations.
- Representatives from major modes of travel.
- State officials responsible for administering the federally-funded program to improve safety at railway-highway at-grade crossings.
- State and local law enforcement officials, including the Texas Department of Public Safety and the Texas Department of Motor Vehicles.
- University and research organization representatives.
- Representatives from the state Operation Lifesaver Highway-Rail Crossing Safety Program.
- Officials representing motor carrier safety interests.
- Other state and local safety stakeholders.

The following are among the safety emphasis areas identified for Texas Strategic Highway Safety Plan 2017-2022:

- Decreasing the number of intersection-related crashes.
- Decreasing the number of lane-departure and roadway-departure crashes.
- Improving safety for older drivers and pedestrians.
- Decreasing the incidence of driving under the influence of drugs and alcohol.
- Decreasing the number of speed-related crashes.
- Decreasing the number of crashes related to distracted driving.

## TxDOT Efforts to Improve Highway Safety

Examples of TxDOT's work to improve highway safety in the Strategic Highway Safety Plan emphasis areas include the following:

- Install engineering improvements at intersections such as designated left and right turn lanes, protected left turn signals, additional signal heads and pavement markings.
- Install edgeline, centerline and transverse (placed within a lane to warn drivers of upcoming unexpected changes, such as traffic signals, changes in alignment, or the need to change lanes) rumble strips.
- Cable and concrete median barriers.
- Continue strong driver behavior outreach, education and enforcement campaigns to discourage distracted driving, speeding, and driving under the influence of drugs and alcohol.
- Emphasize driver behavior improvement to increase safety for high-risk transportation users such as pedestrians and older driver.
- Improve pedestrian safety by adding complete sidewalk networks and improved pedestrian crossing signals.

# WORK ZONE SAFETY

At any given time, there are approximately 1,000 projects underway across more than 80,000 miles of TxDOT-maintained highway. In 2017–27,186 crashes occurred and 203 people lost their lives in roadway construction and maintenance work zones in the state. The most common causes of these crashes are failure to control speed and driver inattention.

For these reasons, TxDOT has an extremely active statewide effort to increase public awareness about the need to stay alert and slow down when driving through work zones. Held in conjunction each year with National Work Zone Awareness Week in April, this effort involves a statewide news conference and local events across the state. TxDOT is also undertaking the following initiatives:

- Developing standards for the use of portable rumble strips in work zones on conventional highways and testing the use of these items in work zones on controlled-access freeways.
- Field testing new devices such as automated flagger assistance devices.
- Researching ways to improve handheld communications devices during flagging operations.
- Allowing workers to use wireless headsets that sync with two-way radio equipment inside TxDOT vehicles.

In addition to these actions, TxDOT works closely with the United States Department of Transportation’s Federal Highway Administration to continually review our work zones to ensure that they are designed according to all federal and state standards.



# BRIDGE SAFETY

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## OVERVIEW

The safety of the traveling public is TxDOT's number one priority. This includes ensuring that all 54,180 Texas bridges that are open to public vehicular traffic are safe.

All bridges in Texas are subject to standardized and regularly scheduled inspections. The inspections are conducted according to the TxDOT Bridge Inspection Manual and the National Bridge Inspection Standards. Bridge inspections serve two primary purposes:

1. To ensure the safety of the public.
2. To catalog accurate data reflecting each bridge's physical attributes and current condition. In accordance with National Bridge Inspection Standards, TxDOT annually reports statewide bridge inspection data to the Federal Highway Administration in support of the National Bridge Inventory.



Bridge inventory and condition data are collected through the following inspection types:

- Initial Inspection — Performed on new bridges or when bridge is first recorded in the inventory.
- Routine Inspection — Performed on all bridges according to a regular schedule (also referred to as “routine safety inspections”). These are the most common form of bridge inspections, and occur on a 24 month inspection frequency.
- Underwater Inspection — Performed on elements below water lines on a 60 month inspection frequency.
- Fracture Critical Inspection — Performed on non-redundant tensile elements of steel bridges on a 24 month inspection frequency.
- Event Driven Inspection — Performed in response to an incident that might threaten bridge stability (i.e. collision, fire, flood, significant environmental changes, loss of support, etc.). These inspections are sometimes called “Emergency Inspections” and are performed on an as-needed basis.
- In-Depth Inspection — Performed typically as follow-up inspections to better identify deficiencies found in any of the above three types of inspection.

- Special Inspections — Performed to monitor a particular feature, deficiency or changing condition. Unusual bridge features (such as external, grouted or post-tensioned tendons) may compel TxDOT to pursue a Special Inspection.
- Condition Assessment Surveys and Damage Assessment Surveys — Performed to evaluate, to a heightened level of detail, the features and defects that should be addressed by future work. These inspections are typically conducted in preparation for a bridge repair, rehabilitation, widening or replacement project.

In addition to these inspections, additional maintenance inspections of bridges are performed biennially. Scheduled in between safety inspections, maintenance inspections are used by TxDOT districts to identify and plan routine maintenance or improvement work.

TxDOT evaluates bridges for safe load-carrying capacity and makes a yearly submission of bridge inventory data to the Federal Highway Administration. TxDOT also monitors the qualifications of individuals performing bridge inspections, including contracted and in-house personnel, to ensure they meet the requirements outlined in federal regulations.

A summary of network-level bridge information is published on TxDOT’s website for the public to view. Each report on Texas Bridges contains bridge conditions and funding information on a biennial basis.

After the August 1, 2007, collapse of the I-35 Mississippi River Bridge in Minneapolis, Minnesota, many of the technical terms to describe bridge conditions used by the media were misinterpreted by the public. For example, the media and public would often misinterpret the term “structurally deficient bridge” to mean that the bridge was “unsafe.” It is very important to realize the terms “structurally deficient” and “unsafe” are not synonymous. TxDOT closes any bridge considered to be unsafe to traffic.

A structurally deficient bridge is one with routine maintenance concerns that does not pose a safety risk or one that is frequently flooded. To remain open to traffic, structurally deficient bridges are often posted with reduced weight limits that restrict the gross weight of vehicles using the bridges. A structurally deficient bridge should not be confused with an unsafe bridge. Through regular inspection, TxDOT identifies unsafe conditions and closes unsafe bridges. A structurally deficient bridge typically requires significant maintenance and repair to remain in service and eventual rehabilitation or replacement to address deficiencies.

A bridge is classified as “functionally obsolete” if it fails to meet its design criteria either by its deck geometry, its load-carrying capacity, its vertical or horizontal clearances or the approach roadway alignment to the bridge. TxDOT continues to use the term to identify bridges that are eligible for rehabilitation or replacement through the Highway Bridge Program.

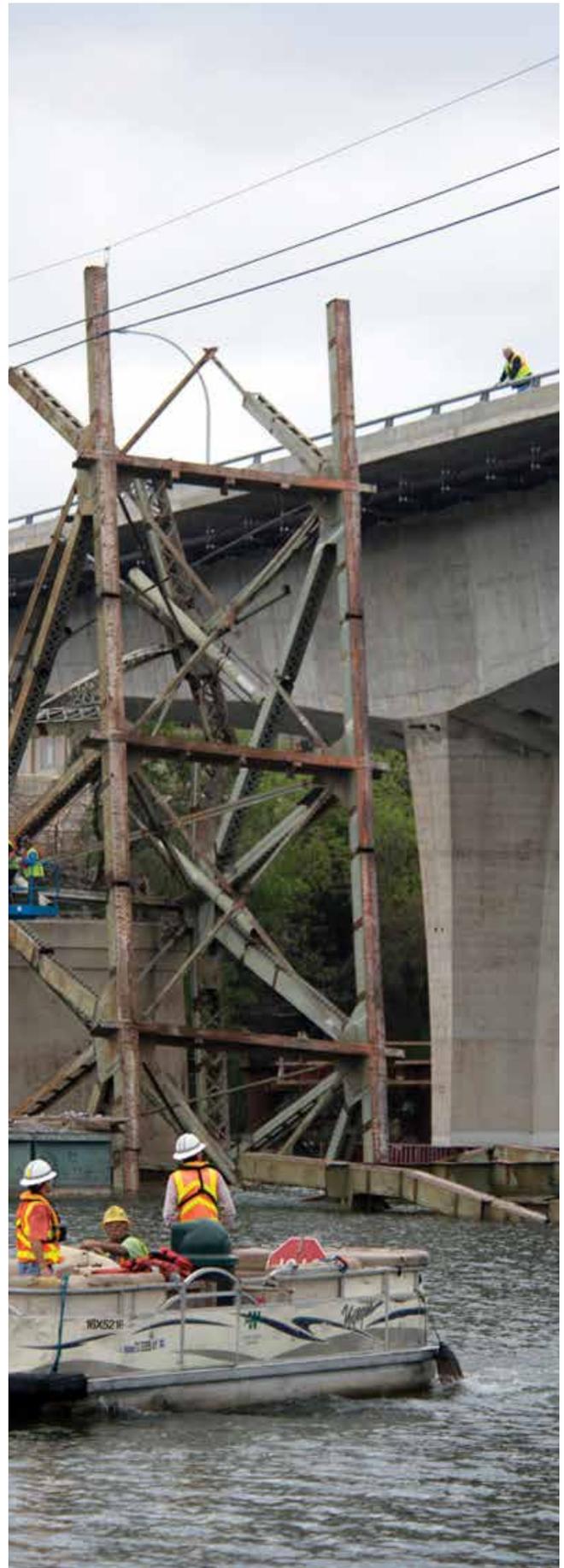
Texas’ bridges are in better condition now than at any other time in our history. The number of structurally deficient bridges continues to decrease.

Structurally Deficient Bridges	2006	2017
On-system	483 (1.5%)	187 (0.1%)
Off-system	1,642 (9.6%)	640 (1.2%)

Also, bridges that are in good or better condition have increased from 70 percent in 2001 to 82.1 percent as of December 2017.

Finally, it is beneficial to see how the condition of Texas’ bridges compares to those in other states. According to a 2017 report by American Road & Transportation Builders Association, Texas has the lowest percentage of structurally deficient bridges of the 50 states and the District of Columbia.

TxDOT accomplishes all of this while keeping costs low. According to the Federal Highway Administration, in 2015 Texas bridge costs were the second lowest in the nation.



# TRAVEL INFORMATION & DRIVETEXAS.ORG

## OVERVIEW

Working together, TxDOT Travel Information Centers and DriveTexas.org (DriveTexas) bring important safety and economic benefits to the State of Texas and the traveling public. DriveTexas provides vital highway conditions information, both online and through an automated phone system, with Travel Information Center travel counselors answering callers' requests for assistance. Travel Information Center travel counselors are experts in answering travelers' questions on travel safety and tourism. A 2017 Visitor Survey by the Governor's Economic Development & Tourism Office showed that TxDOT travel counselors' tourism recommendations generated \$152.3 million in visitor spending, yielding \$9.5 million in state tax revenue and supporting 1,523 Texas Jobs.

University of Texas at San Antonio Safety and Economic Impact Studies in 2014 and 2016 found Travel Information Centers have had a positive effect on highway safety in Texas. Together, TxDOT Travel Information Centers and DriveTexas provide a high level of comprehensive and personalized information service for the State of Texas and the traveling public.







SCAN WITH SMART PHONE

Learn more about TxDOT road conditions at [www.txdot.gov](http://www.txdot.gov) keyword search "DriveTexas".

## DRIVETEXAS.ORG

DriveTexas.org is TxDOT's official public-facing traffic information system for real-time road condition information. The DriveTexas website allows users to customize their views to see current accidents, road closures, construction, damage and other conditions across the state-maintained system.

DriveTexas is capable of handling a large number of users. For example, in 2017 when Hurricane Harvey struck Texas, average daily website usage increased from 1,000 sessions to more than 700,000 sessions. Data from DriveTexas was shared directly with all responding agencies during the storm and its aftermath. Overall, DriveTexas received approximately 5 million visits during and after Harvey.

### Toll-Free Interactive Voice Response 1-(800) 452-9292

Automated travel information is available to the public 24 hours a day with an option to receive personal assistance from a travel counselor during hours the Travel Information Centers are open.

The DriveTexas Interactive Voice Response is capable of handling more than 100,000 calls at one time. Over the

course of Hurricane Harvey and its rain events after, the DriveTexas Interactive Voice Response received over 165,000 calls. Of those calls, more than 38,000 people received further assistance from travel counselors located at the Texas Travel Information Centers statewide. Travel division employees and volunteers from other TxDOT divisions answered nearly 5,300 phone calls during peak days of the Hurricane Harvey emergency.



# TEXAS TRAVEL INFORMATION CENTERS & REST AREAS

Travel Information Centers are in their 82nd year of operation and are primarily located at major points of entry into the state on TxDOT rights-of-way, and travel counselors welcome more than two million visitors each year. Travel Information Centers are located in Amarillo, Anthony, Denison, Gainesville, Harlingen, Langtry, Laredo, Orange, Texarkana, Waskom, Wichita Falls and the Old General Land Office Building in the State Capitol Complex. TxDOT travel counselors staff these centers seven days a week (see *Travel Information Center & Rest Area Map* below).

The objective of the Texas Travel Information Centers is to actively promote travel to and within Texas, increase public safety and assist the traveling public by offering professional information and services while supporting the strategic goals of TxDOT. Travel counselors in the Texas Travel Information

Centers provide highway users with a safe place to rest, facilitate economic development through the dissemination of printed and consultative travel information and provide for the safe movement of people and goods by effectively communicating road conditions.

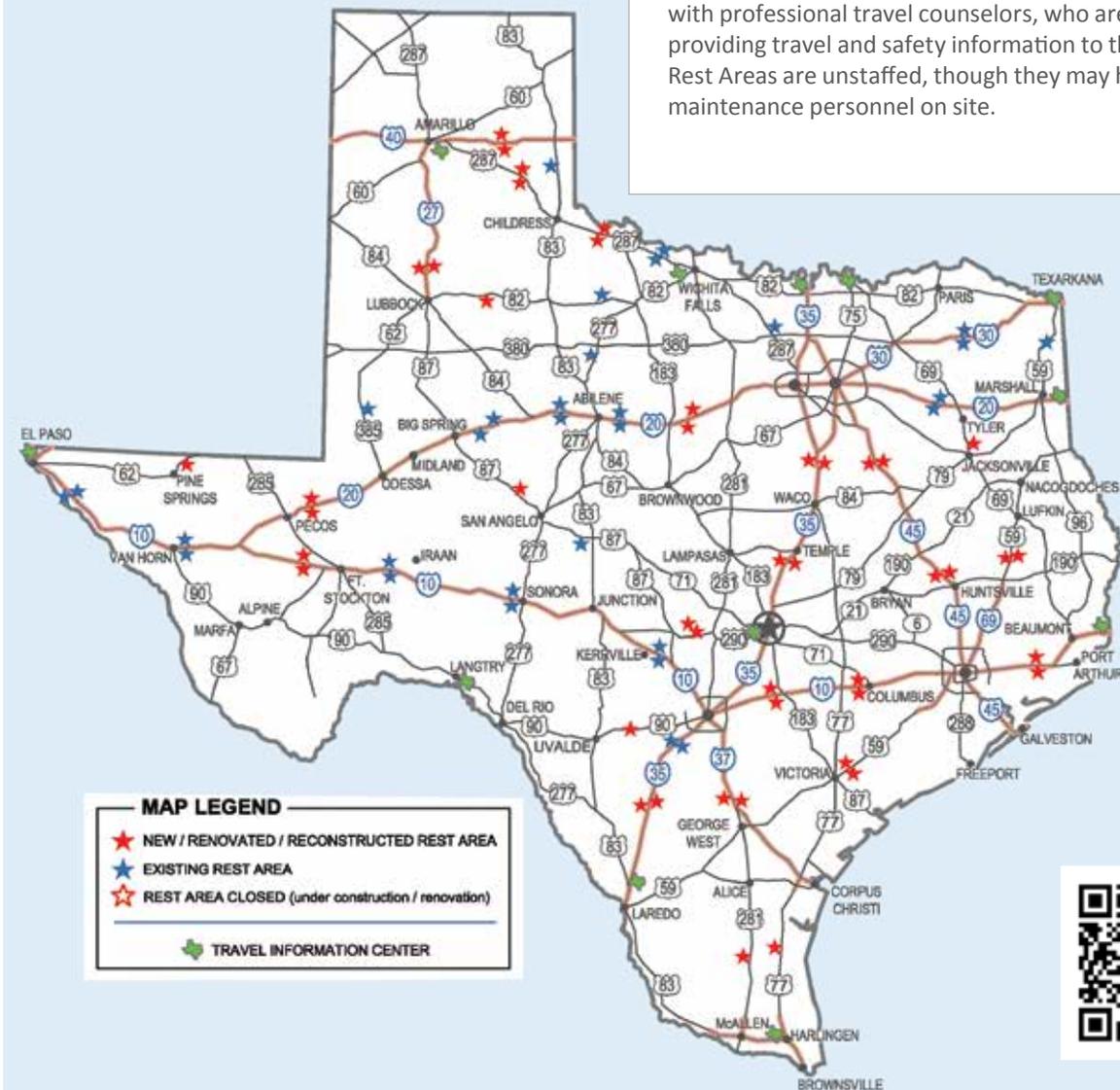
Additionally, Texas Travel Information Center travel counselors hold public awareness events to promote tourism, travel safety, work zone safety, seatbelt, and child safety seat use and also provide information on the dangers of drunk and distracted driving.

In Fiscal Year 2017, Texas Travel Information Centers served more than 7.9 million vehicles. Travel Information Centers also maintain separate customer service records to track travel counseling sessions. During Fiscal Year 2017, approximately 2.4 million highway users had interactions with a TxDOT travel counselors.

## What is the Difference Between Travel Information Centers and Safety Rest Areas?

Travel Information Centers are staffed seven days a week with professional travel counselors, who are experts in providing travel and safety information to the public. Safety Rest Areas are unstaffed, though they may have contract maintenance personnel on site.

**Travel Information Centers & Rest Areas Map**



# TEXAS DEPARTMENT OF TRANSPORTATION



## VALUES:

### People

People are the Department's most important customer, asset, and resource. The well-being, safety, and quality of life for Texans and the traveling public are of the utmost concern to the Department. We focus on relationship building, customer service, and partnerships.

### Accountability

We accept responsibility for our actions and promote open communication and transparency at all times.

### Trust

We strive to earn and maintain confidence through reliable and ethical decision-making.

### Honesty

We conduct ourselves with the highest degree of integrity, respect, and truthfulness.

## VISION:

A forward-thinking leader delivering mobility, enabling economic opportunity, and enhancing quality of life for all Texans.

## MISSION:

Through collaboration and leadership, we deliver a safe, reliable, and integrated transportation system that enables the movement of people and goods.

## GOALS AND OBJECTIVES:

- **Deliver the Right Projects** – Implement effective planning and forecasting processes that deliver the right projects on-time and on-budget.
- **Focus on the Customer** – People are at the center of everything we do.
- **Foster Stewardship** – Ensure efficient use of state resources.
- **Optimize System Performance** – Develop and operate an integrated transportation system that provides reliable and accessible mobility, and enables economic growth.
- **Preserve our Assets** – Deliver preventive maintenance for TxDOT's system and capital assets to protect our investments.
- **Promote Safety** – Champion a culture of safety.
- **Value our Employees** – Respect and care for the well-being and development of our employees.



This document is part of an educational series on transportation issues produced by the Texas Department of Transportation. This document, the full Educational Series and other helpful resources can be found online at [www.txdot.gov](http://www.txdot.gov) keyword search "State Legislative Affairs".