Spring 2021 | TxLTAP.org

BETTER ROADS SAFER ROADS

SAFER WORK ZONES AND SAFER ROADS

- TxLTAP -

Sponsored by the Texas Department of Transportation and the Federal Highway Administration

Powered by Powered by UTA Division for Enterprise Development

Texas Department of Transportation

UNIVERSITY OF TEXAS ARLINGTON

BETTER ROADS
SAFER ROADS

Spring 2021 | TxLTAP.org

- TxLTAP -

The Local Technical Assistance Program (LTAP) is a nationwide effort financed by the Federal Highway Administration and individual state departments of transportation. Its purpose is to translate into understandable terms the best available technology for roadways, bridges, bicycle and pedestrian facilities, and public transportation for city and county roadway and transportation personnel. The TxLTAP, operated by the University of Texas at Arlington, is sponsored by the Texas Department of Transportation (TxDOT) and the Federal Highway Administration. This newsletter is designed to keep you informed about new publications, techniques, and training opportunities that may be helpful to you and your community.

HALF-MILLION EMERGENCY RESPONDERS FINISH FHWA'S 'TRAFFIC INCIDENT MANAGEMENT' TRAINING

Federal Highway Administration (FHWA) officials recently announced that over 500,000 emergency responders have completed the specialized National Traffic Incident Management (TIM) Responder Training. This milestone reflects nearly a decade of efforts to improve safety for those on the scene at roadway crashes and represents the agency's continued progress toward its goal of training one million first responders.

"Enhanced training and preparedness can save lives," said Acting Federal Highway Administrator Stephanie Pollack. "This training is especially critical given that every day responders are at risk of being struck and killed or injured in the line of duty."

One of the leading causes of death and injury for emergency responders is being struck by other vehicles while responding to roadway incidents. Teaching first responders – including highway patrol officers, fire and rescue, ambulance and EMT personnel, and tow-truck operators – how to protect themselves while helping others is a continuing priority because of their high-risk jobs.

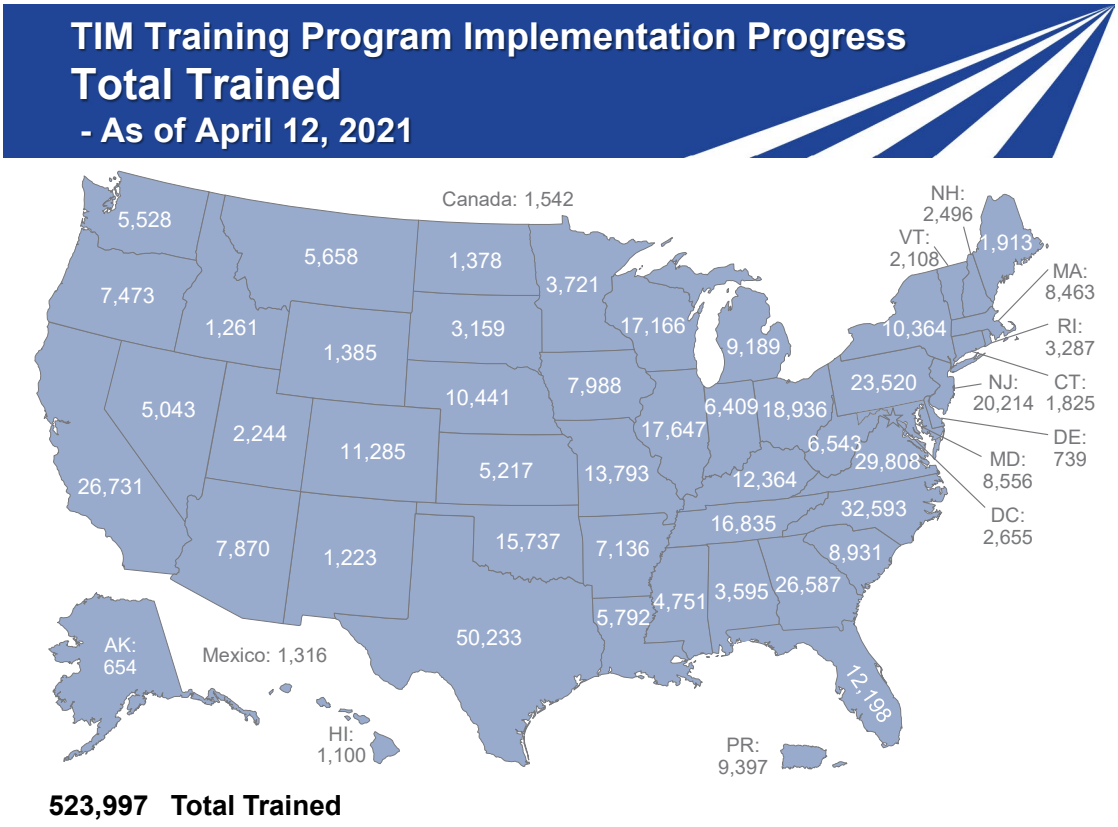
The National TIM Responder Training helps responders reduce their risk while managing and clearing roadway crashes. The free, half-day course addresses roadway incident responses and provides best practices for emergency responders to safely and quickly clear crash scenes.

"Training 500,000 people is an impressive achievement, but our work is not yet done," Pollack added. "America's road system needs another half-million properly trained emergency responders."

The National TIM Responder Training was developed in partnership with law enforcement, fire and rescue, emergency medical service, towing, transportation, public works, and other responder communities across the nation.

TIM training has reaped big rewards. For example, following their training in 2018, Houston Fire Department responders reduced crash scene time by 40 percent, and saw a 25 percent reduction in fire apparatus struck at incident scenes. As of April 2021, Texas has trained 50,233 responders.

The FHWA offers the National TIM Responder Training for free to responders in every state, as well as the District of Columbia and Puerto Rico. For more information, visit the FHWA TIM Responder Training site. TxLTAP also offers the training and can bring it to your jurisdiction. Call the TxLTAP office at 817-272-9678 or email us at txltap@uta.edu to schedule a Traffic Incident Management training near you.



AT-GRADE CROSSING INCIDENTS IN NORTH CENTRAL TEXAS: AN ANALYSIS

by Collin Moffett, North Central Texas Council of Governments, Transportation Department

INTRODUCTION

An at-grade railroad crossing is any intersection of railroad track and roadway that occurs at the same level of elevation. They are a common sight for motorists in areas with substantial railroad infrastructure, and the experience of waiting at a crossing as a train rolls by is a familiar one to most drivers. These intersections create opportunities for collisions between rail and vehicle traffic when safety devices are ignored or fail to activate. Understanding what causes at-grade crossing incidents can help identify steps that could be taken to mitigate the risk. This article examines crossing incident data in the North Central Texas region from 2014 through 2019, to gain insight into the conditions and motorist actions that result in crashes, as well as how best to prevent them. All data was retrieved from the Federal Railroad Administration (FRA).

Source: NCTCOG

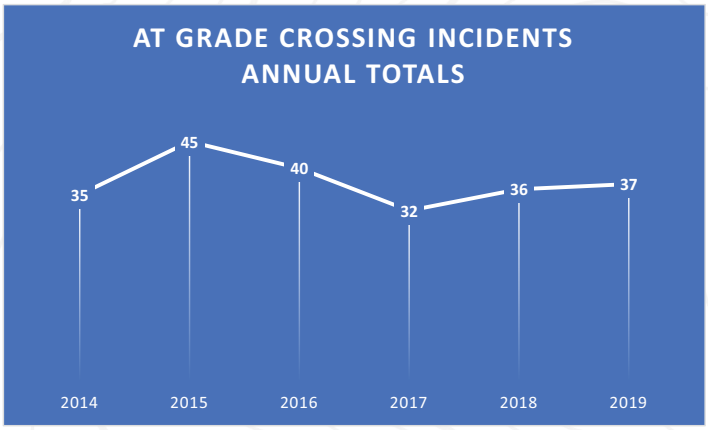
DATA ANALYSIS OVERVIEW

Over the course of the six-year period analyzed, the North Central Texas region had an average of 37.5 at-grade crossing incidents per year, with the highest number of incidents (45) occurring in 2015 and the fewest number of incidents (32) occurring in 2017. The analysis indicated that the most common cause of at-grade crossing incidents is motorists failing to yield the right-of-way to oncoming train traffic or disregarding safety devices. The counties with the highest rates of incidents are Dallas, Tarrant, and Denton, which also have the greatest amount of railroad infrastructure and operations. The average incident occurs during daylight hours, at a non-illuminated crossing, in dry conditions, with no obstruction preventing a clear view of the track and involves a freight train.

VISIBILITY AND WEATHER

Motorists are susceptible to the effects of reduced traction and visibility in rainy weather, and passive warning devices may go unnoticed during low-light conditions. Paying careful attention to one's surroundings when approaching a railroad crossing is one of the most effective ways to stay safe while traversing the crossing. From 2014-2019, 53% of incidents occurred during daylight hours, whereas 35% took place at night. Incidents at dawn and dusk account for the remaining 12%. A majority of incidents (56.4%)

occur at crossings that do not feature special lighting fixtures nor nearby streetlights illuminating the crossing. Of all years in the dataset, the second highest number of incidents occurring at night was recorded in 2019.

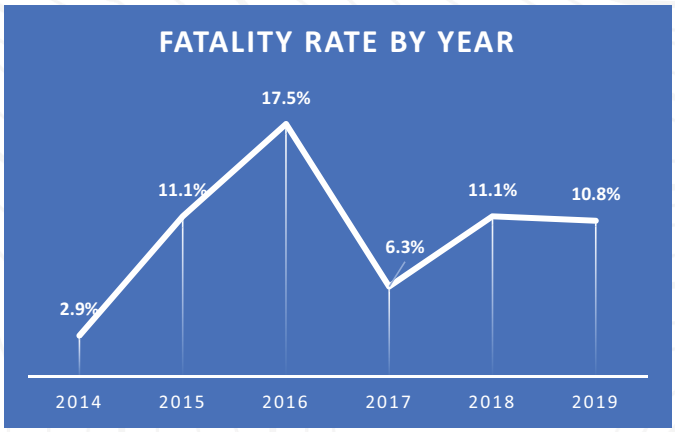


Data Source: Federal Railroad Administration

INJURIES, FATALITIES, AND MOTORIST ACTIONS

On the whole, at-grade collisions do not generally result in fatalities, although injuries are more common. In 2019, there were 4 fatalities as a result of an at-grade crossing incident, the same number as in 2018, and slightly above the yearly average of 3.83 annual fatalities between 2014–2019. The yearly average for injuries due to at-grade crossing incidents was 13.83. In 2018 and 2019, 18 injuries were recorded each year, representing an upward trend.

Fatality rate is expressed as the number of deaths resulting from at-grade crossing incidents as a portion of the total number of incidents each year. The fatality rate across the dataset (2014-2019) was 9.9%, with 2019 recording the highest fatality rate at 10.8%.



Data Source: Federal Railroad Administration

The actions of a motorist when approaching an at-grade crossing largely determine whether or not an incident will occur and contribute to severity as well. A significant portion (27.6%) of incidents within the dataset were coded as "Other" in describing actions of the motorist. Outside of that category, going around the gates (18.9%) and going through the gates (16.2%) were the most prevalent motorist actions. The additional highway user action correlated with the prevalence of such actions in previous years except for the "went through the gate" category, which was up 100% from the previous year.

SUMMARY

As the North Central Texas region continues to grow in economy and infrastructure, additional train traffic for both transit and freight purposes can be expected. This, in combination with increasing vehicle traffic, presents an expansion of opportunities for interactions between railroad and highway users. It is important that concerted planning efforts be made to understand trends in at-grade crossing incidents and procure actionable information that can make crossings safer, and effectively prioritize grade separation efforts within the region. Since grade separation projects are expensive and not always practical, it is more important now than ever for motorists to exercise the key tenants of staying safe while traversing at-grade rail crossings:

- NEVER come to a stop on railroad tracks, even if you do not see a train.
- PAY ATTENTION to signals, crossing gates, and train horns.
- DO NOT try to beat a train through the crossing.
- ALWAYS look out for locomotives coming from either direction on all tracks.
- WHEN IN DOUBT, slow down or stop if it is safe to do so, until you confirm the absence of a train.

In addition to following these guidelines, properly maintaining the mechanical condition of one's vehicle can help prevent engine failure while crossing railroad tracks. Commercial drivers and large vehicle operators should know the dimensions of the vehicle being driven, especially the height and ground clearance, to plan ahead or come to a stop, to avoid stalling out on the tracks.

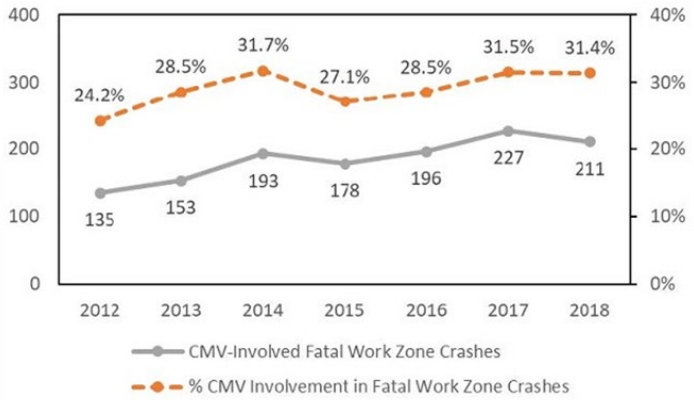
For more information on NCTCOG's activities related to at-grade rail crossings, feel free to contact Collin Moffett at cmoffett@nctcog.org.

EFFORTS TO REDUCE COMMERCIAL MOTOR VEHICLE INVOLVEMENT IN WORK ZONE CRASHES

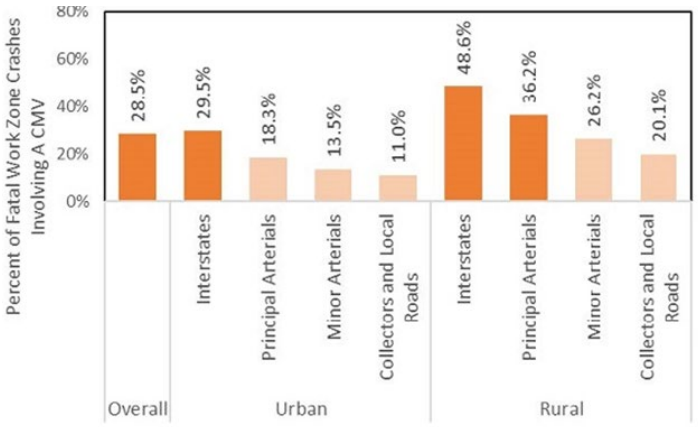
By Martha Kapitanov, FHWA Office of Operations

Each year, commercial motor vehicles (CMV) are involved in a significant number of fatal work zone crashes. CMVs consist of both buses and large trucks with a gross vehicle weight rating of more than 10,000 pounds. As the graphs illustrate:

- CMV-involved fatal work zone crashes are increasing not only year by year, but also as a percentage of all fatal work zone crashes.
- CMV involvement in non-work zone fatal crashes has been consistent at about 12–14 percent of all non-work zone fatal crashes over the same period of time.
- CMVs are involved in almost 30 percent of fatal work zone crashes on urban interstates and nearly 50 percent of fatal work zone crashes on rural interstates.
- CMV involvement in fatal work zone crashes is also higher on other principal arterials in rural areas than the overall trend.



CMV-involved fatal work zone crashes and percent of CMV involvement in all fatal work zone crashes, 2012–2018. (Source: NHTSA Fatality Analysis Reporting System [FARS])



CMV involvement in fatal work zone crashes by facility type, 2012–2018 average. (Source: NHTSA FARS)

In recognition of this ongoing over-representation in work zone crashes, FHWA, in collaboration with Federal partners, State DOTs, and other stakeholders, has been leading efforts to mitigate CMV involvement in work zone crashes.

DEVELOPMENT AND DISSEMINATION OF TECHNICAL RESOURCES AND OUTREACH MATERIALS

FHWA has used funding under the Work Zone Safety Grant program to develop technical resources to help State and local transportation agencies identify, select, and implement strategies

Each year, commercial motor vehicles (CMV) are involved in a significant number of fatal work zone crashes.

to mitigate CMV crashes in work zones. These include:

- The technical advisory document Design and Operation of Work Zone Strategies to Improve Large Truck Safety, which provides general information on various available mitigation strategies.
- Guidelines for Work Zone Access and Egress document, which addresses work space access considerations—an area where CMV involvement in work zone crashes is believed to be a concern.
- Technical fact sheets Designing Work Space Access Points to Better Accommodate Large Trucks and Use of Smart Work Zone Technology to Improve Work Space Access Point Safety, which provide detailed design and implementation information on these specific mitigation strategies.

Continued on Page 7

Continued from Page 6

FHWA and the Federal Motor Carrier Safety Administration (FMCSA) have also developed or sponsored outreach materials (brochures, social media graphics) to remind CMV drivers of the unique challenges of driving through work zones and defensive driving strategies to better accommodate those challenges. Outreach materials have also been developed to remind automobile drivers to drive defensively near CMVs around work zones.

Access to resources that help mitigate CMV crashes in work zones has been simplified by collating the resources on the Improving Large Truck Safety in Work Zones web page within the National Work Zone Safety Information Clearinghouse website. To access this page, visit workzonesafety.org/topics-of-interest/improving-large-truck-safety-in-work-zones

TARGETED TECHNICAL ASSISTANCE TO STAKEHOLDERS

FHWA has begun engaging with stakeholders in several opportunity States to assist their efforts to identify and implement targeted mitigation strategies for reducing CMV involvement in work zone crashes at the State and local level. In 2019, representatives from these States, and other stakeholders (e.g., Federal administrations, tolling agencies, trucking industry entities, transportation safety groups, law enforcement, and academic transportation centers), participated in a virtual roundtable and in-person workshop to:

- Review the characteristics of CMV-involved work zone crashes (fatal and serious injury).
- Review previous and ongoing efforts to improve the safety of CMVs in work zones.
- Discuss what agencies are doing to reduce the over-representation of CMVs in work zone crashes.
- Share experiences with identifying, adopting, and evaluating strategies (successes and challenges).
- Identify other resources needed to help reduce CMV crashes in work zones.

Currently, FHWA is leading a targeted effort to better understand the unique circumstances in each opportunity State that lead to CMV crashes in work zones. FHWA is also providing technical assistance and scheduling workshops in each opportunity State. In coordination with FMCSA and NHTSA, these workshops will include session topics, training materials, and other resources that assist stakeholders with identifying, adopting, and evaluating strategies to improve CMV safety in work zones. The culmination of this effort will be State-specific action plans and recommendations to improve safety and reduce CMV incidents in and around work zones.

For more information, contact Martha Kapitanov at Martha.kapitanov@dot.gov.

Reprinted from the Federal Highway Administration's Winter 2021 issue of Safety Compass.

FHWA AWARDS $18.7 MILLION TO EIGHT PROJECTS TO EXPLORE NEW HIGHWAY FUNDING METHODS

The U.S. Department of Transportation's Federal Highway Administration (FHWA) recently awarded $18.7 million in "Surface Transportation System Funding Alternatives" (STSFA) grants to eight projects, led by six state Departments of Transportation and two transportation coalitions, to test new user-based funding methods for highways and bridges. The program helps states explore innovative new ways to provide long-term support for the Highway Trust Fund.

"The pilot projects under the STSFA program allow states to learn more about potential new user fees structures that can complement traditional funding sources that states rely on to build and improve the nation's highway and bridge infrastructure," said Acting Federal Highway Administrator Stephanie Pollack.

Since its creation in 2016, the STSFA grant program has provided $73.7 million to 37 projects in states across the nation. It funds projects that test the design, implementation and acceptance of user-based systems, such as a mileage-based fee. They also support outreach by transportation officials to help the public understand these new methods.

The "Fixing America's Surface Transportation" (FAST) Act directs the FHWA to establish the STSFA grant program to let states demonstrate new fee-based revenue mechanisms that could supplement the Highway Trust Fund.

Among other things, the STSFA program requires applicants to address equity concerns, such as the fees' impacts on differing income groups and geographic areas. It recognizes that a mileage-based, road-user charge system may potentially redistribute cost burdens among different users.

Recent reports and evaluations of active STSFA grant program demonstrations have outlined key lessons learned and identified several important factors for implementing road-user charge programs including -- data security, interoperability among multiple states, program administrative costs and public acceptance.

Award Recipient	Project Name and Description	Amount
California Department of Transportation (Caltrans)	Road Charge Pilots Program: Caltrans will test the viability of current global positioning system technology to determine which roads are part of a public network and may be subject to a fee.	$2,150,000
Delaware Department of Transportation/ Eastern Corridor Coalition (formerly I-95 CC)	Testing Implementation Paths for Mileage Based User Fees (MBUF): The Coalition will demonstrate and test paths for MBUF in the DC metro area and seven states -- DE, MD, ME, NC, NJ, PA and VA.	$4,670,000
Hawaii Department of Transportation	Digital Mapping Data, Distance-Precision, and Transportation Taxation: Hawaii DOT will investigate the current state and completeness of digital mapping data to determine which roads are part of a public network and may be subject to a fee.	$250,000
Kansas/Minnesota Departments of Transportation	RUC Demonstration Project: Kansas DOT will lead a joint effort working with Minnesota DOT to explore the impacts of RUC implementation in the Midwest, with focus on rural and agricultural populations and intrastate and interstate commercial freight and supply chain operators.	$3,250,000
Ohio Department of Transportation	Alternative User Based Revenue Initiative: Ohio DOT will obtain data for a large-scale outreach program geared towards educating the public about RUC.	$2,000,000
Oregon Department of Transportation/RUC West	Road Usage Charge Summit: RUC West will host a conference that will explore opportunities and barriers to interoperability, expand knowledge about RUC and foster new partnerships.	$134,875
Texas Department of Transportation	Demonstration of Smartphone-Based Alternative to Current Gas Tax Structure: Dallas-Fort Worth will assess the feasibility and technological capability of utilizing smartphone technology to understand travel patterns and the development of an accounting framework.	$5,000,000
Utah Department of Transportation	RUC Customer Service Optimization: Utah DOT will develop and validate RUC-specific customer service improvements designed to enhance public acceptability and attract more voluntary participants.	$1,250,000
	TOTAL	**$18,704,875**

THE ROAD TO ZERO: SHIFTING FROM VISION TO ACTION

No one ever said getting to zero would be easy. That is clear to the 40+ communities across the Nation that have committed to the goal of Vision Zero: eliminating traffic fatalities and severe injuries among all road users.

Whether in cities that are recent adopters, such as Tampa, Florida, and Houston, Texas, or early adopters, such as Fremont, California, and Washington, DC, community leaders recognize that significant safety improvements on our roadways, sidewalks, and bikeways require time, energy, and the willingness to change some long-held practices and policies. And, let's be honest, change is not always easy.

Still, support for evolving our approach to traffic safety is growing across the country. Shifting to the Safe System approach - as detailed in the Fall 2020 edition of TxLTAP's Better Roads Safer Roads Newsletter, and upon which Vision Zero programs are built - is feasible and valuable.

At the nonprofit Vision Zero Network, we've assessed these early years of Vision Zero's growth and evolution in the United States and considered best practices and experiences from other fields and other nations. While the various levels of progress in "zero traffic deaths" initiatives, such as Toward Zero Deaths and Road to Zero, are encouraging, it is clear that much work lies ahead. The following are three areas we consider important to advance Vision Zero and safe mobility for all.

Speed management strategies. (Source: Vision Zero Network)

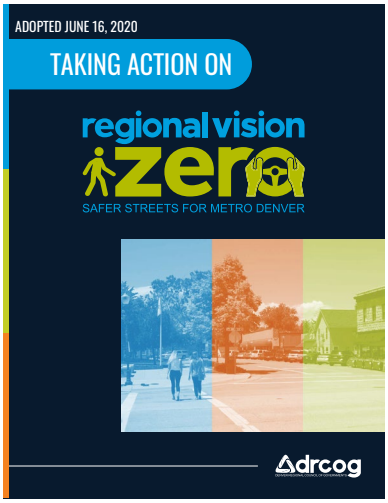
1. SPEEDING UP EFFORTS TO SLOW DOWN

The Safe System approach "involves anticipating human mistakes by designing and managing the road infrastructure to keep the risk of mistakes low, and to ensure that when mistakes lead to a crash, the impact energy on the human body stays at tolerable levels."

A growing number of communities at the local, regional, and State levels are speeding up efforts to slow travel to a safer pace, particularly where motorists share space with those walking and biking. Recent examples include:

- Lowering speed limits, as in Seattle, Washington, and Minneapolis, Minnesota.
- Using automated speed enforcement to encourage safe speeds, as Washington, DC, has done in its recent program expansion, and as Philadelphia, Pennsylvania, has done along a prominent high-injury corridor.
- Redesigning roadways for safer, slower speeds, such as Busch Boulevard in Tampa, Florida, and Rainier Avenue in Seattle, Washington.

You can learn more about effective speed management strategies in the following resources: Institute of Transportation Engineers' (ITE) Speed Management for Safety, FHWA's Speed Management Safety, and the National Association of City Transportation Officials' City Limits.



Cover of Denver Regional Council of Governments Vision Zero Action Plan. (Source: Denver Regional Council of Governments)

2. ELEVATING EQUITY IN SAFE MOBILITY STRATEGIES

Research and experience demonstrate that not all communities have been built or treated the same over time, which leads to different levels of safe mobility choices and inequities in outcomes.

Vision Zero—a data-driven approach that is complemented by meaningful community engagement—is increasing the awareness of and commitment to addressing these traditionally underserved communities. A key strategy is recognizing and building on the intersectionality of traffic safety and issues such as income level; environmental health conditions; and access to jobs, schools, and other basic needs. Many cities are overlaying their high-injury maps of severe traffic injuries and deaths with data that highlight relevant economic and social factors, bringing greater understanding and focus to their efforts.

Open streets in Denver, Colorado. (Source: Denver Streets Partnership)

Examples include the new Vision Zero Plan developed by the Denver Regional Council of Governments in Colorado, and the Minneapolis, Minnesota, Vision Zero Action Plan. Analyses in these communities show a disproportionate number of serious injuries and deaths concentrated in a relatively small percentage of streets that are more likely in low-income neighborhoods and communities of color. Vision Zero plans are also increasingly recognizing the intersectionality of traffic safety and issues of land use and affordable housing, such as the Austin Strategic Mobility Plan.

3. THINK BIG AND SMALL FOR SAFETY

Shifting toward the Safe System approach and making transformative change entail thinking differently about how we gather and use safety data. This new approach requires shifts in our culture, as well as shifts in the attitudes within our own institutions and among policymakers and the public. It also requires prioritizing safety over speed in policy and planning decisions.

Now is the time for action, evidenced most starkly by the disturbing rise in pedestrian deaths in the past decade in the United States, and as outlined in The Road to Zero report that lays out three focus areas:

- Doubling down on what works through proven, evidence-based strategies.
- Advancing life-saving technology in vehicles and infrastructure.
- Prioritizing safety by adopting a Safe System approach and creating a positive safety culture.

At the same time, there is value in working at a smaller scale and more expediently bringing safety changes to our streets. This includes using pilot projects to learn what works and make modifications where needed. This tactical urbanism strategy offers the chance to act nimbly and cost-effectively, while also gauging public input and involvement. Recent examples include the fast-growing movement to create "slow streets" or "open streets," in which traffic volume and speed are reduced so people can walk, bike, and run safely.

Ultimately, the road to zero traffic deaths and severe injuries is not just about working harder or caring more, but also making decisions to prioritize safety. This includes a willingness to change, assess progress, and learn from mistakes. It will take time and a lot of hard work, but communities across the country are showing they are ready to move vision to action.

For more information, contact Vision Zero Network Executive Director Leah Shahum at leah@visionzeronetwork.org.

TRAVELING SAFELY THROUGH WORK ZONES

Traveling safely, slowly, and attentively through work zones is critically important, particularly as a commercial motor vehicle (CMV) driver. Narrow lanes, sudden stops, traffic pattern shifts, and uneven road surfaces present unique challenges in these areas for large trucks and buses. In fact, large trucks are overrepresented in fatal work zone crashes.

Do your part to stay safe with tips from the Federal Motor Carrier Safety Administration's (FMCSA) Our Roads, Our Safety campaign:

RESEARCH YOUR ROUTE

Before setting out on the road, research your route. When possible, avoid work zones and use any detours that are available.

PAY ATTENTION

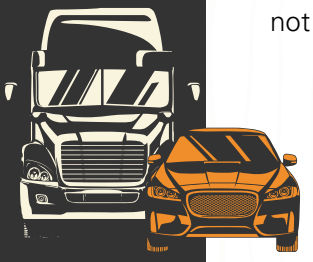
Be aware of all signs throughout work zones that can indicate reduced speeds, lane changes, and other important information. Avoid distractions such as your cellphone, eating, drinking, the radio, GPS, and conversing with other passengers.

SLOW DOWN

Lane closures, traffic pattern shifts, and reduced speeds are common in work zones. Make sure to slow down when entering a work zone and keep an eye out for road workers.

MOVE INTO THE OPEN LANE

When approaching lane closures, move into the open lane as soon as possible. Be sure to pay close attention to vehicles around you that could be in your blind spot, and ensure you're not traveling in someone else's.



KEEP YOUR DISTANCE

Rear-end crashes are extremely common in work zones. Always maintain extra space between your vehicle and the one in front of you.

For more information on driving safely on the roads, visit **www.ShareTheRoadSafely.gov** and for more on work zone safety, **visit www.workzonesafety.org**.

OUR ROADS™ SAFETY
Partnership for Responsible Driving

U.S. Department of Transportation
Federal Motor Carrier Safety Administration

FMCSA-ADO-21-002

TXDOT CALLS FOR SAFER DRIVING AS WORK ZONE TRAFFIC DEATHS RISE DURING PANDEMIC

Even with less traffic during the pandemic, Texas work zone fatalities increased 9% in 2020 compared to 2019. That's why TxDOT is calling on drivers to make safety their number one priority at all times and especially when passing through active construction and maintenance work zones on the roadway.

TxDOT's "Be Safe. Drive Smart." campaign marked National Work Zone Awareness Week, April 26–30, with safety tips to reduce work zone fatalities. Last year, there were more than 22,000 traffic crashes in Texas work zones with 186 people killed, including four road workers.

"We know driving through work zones can be challenging," said TxDOT Executive Director James Bass. "There can be extra congestion, slow-moving heavy equipment, temporary barriers, and vehicles that make sudden stops. We can't stress enough how important it is to give driving your full attention and slow down—for your own safety and that of the people who work alongside the road."

Drivers and their passengers account for the majority of those who have died in work zone crashes. In 2020, 147 motorists and vehicle passengers were killed in Texas work zones, along with 35 pedestrians and bicyclists and four road workers.

The Texas Mutual Insurance Company, which helps employers prevent workplace incidents and their consequences, is partnering with TxDOT to promote safe driving. The "Be Safe. Drive Smart." campaign outlines five key steps drivers can take to safely navigate a work zone:

Texas work zone fatalities increased 9% in 2020 compared to 2019

1. **Slow down.** Follow the posted speed limit and drive to conditions. Unsafe speed is one of the main causes of crashes in work zones.
2. **Pay attention.** Avoid distractions, keep your mind on the road and put your phone away.
3. **Watch out for road crews.** The only protective gear they wear is a vest, a hardhat and safety boots. Remember, they want to get home safe, too.
4. **Don't tailgate.** Give yourself room to stop in a hurry if you need to. Rear-end collisions are the most common kind of work zone crashes.
5. **Allow extra time.** Road construction can slow things down. Count on it, and plan for it.

Traffic fines double in work zones when workers are present and can cost up to $2,000. Failure to heed the Move Over/Slow Down law can also result in a $2,000 fine. State law requires drivers to move over a lane or reduce their speed to 20 mph below the posted speed limit when approaching a TxDOT vehicle, emergency vehicle, law enforcement, tow truck or utility vehicle stopped with flashing lights activated on the roadside.

Continued on Page 13

Continued from Page 12

The Federal Motor Carrier Safety Administration (FMCSA) also supported National Work Zone Awareness Week, in part by launching safety awareness efforts in Texas which experience the some of the highest rates of work zone crashes involving large trucks in the country. FMCSA developed fact sheets, post cards and shareable social media infographics for safety partners to help amplify work zone messaging. For more information and shareable resources on FMCSA's 2021 work zone safety campaign, including Work Zone Safety Social Media Playbook Messaging for Texas, visit https://www.fmcsa.dot.gov/ourroads/work-zone-safety-shareable-material

"Be Safe. Drive Smart." is a key component of #EndTheStreakTX, a broader social media and word-of-mouth effort that encourages drivers to make safer choices while behind the wheel such as wearing a seat belt, driving the speed limit, never texting and driving and never driving under the influence of alcohol or other drugs. Nov. 7, 2000 was the last deathless day on Texas roadways. #EndTheStreakTX asks all Texans to commit to driving safely to help end the streak of daily deaths.

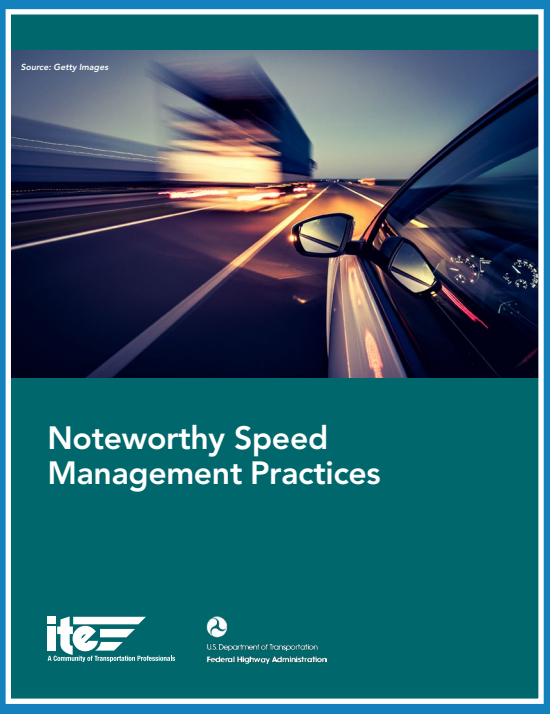
The information contained in this report represents reportable data collected from the Texas Peace Officer's Crash Report (CR-3). This information was received and processed by the department as of March 1, 2021.

SPEED MANAGEMENT NOTEWORTHY PRACTICES REPORT

By Guan Xu, P.E., FHWA Office of Safety Technologies

Speeding is a significant threat to safety and results in about 10,000 deaths each year. Speeding is defined as exceeding the posted speed limit or driving too fast for conditions. It is also a crosscutting safety issue that impacts many safety areas, such as pedestrians, bicyclists, rural road safety, impaired driving, and distracted driving. Speeding is a complex safety problem to solve, as it involves many factors. These factors include public attitudes, vehicle performance, enforcement strategies, judicial decisions, and road user behavior. These are in addition to factors of roadway design and operations and posted speed limits that transportation professionals normally deal with.

Over the past couple decades, the FHWA and USDOT speed management team has collaborated with safety partners, such as ITE, to tackle speeding safety issues. We have also recognized that while speeding is a national problem, effective solutions must be applied locally. In recent years, speed management has received increased attention from State and local agencies, especially those that have embraced a Vision Zero approach to safety. Realizing the situation, and the challenges and needs coupled with it, we have been redirecting our efforts toward providing direct assistance and training to agencies and practitioners.



Cover of Noteworthy Speed Management Practices. (Source: FHWA)

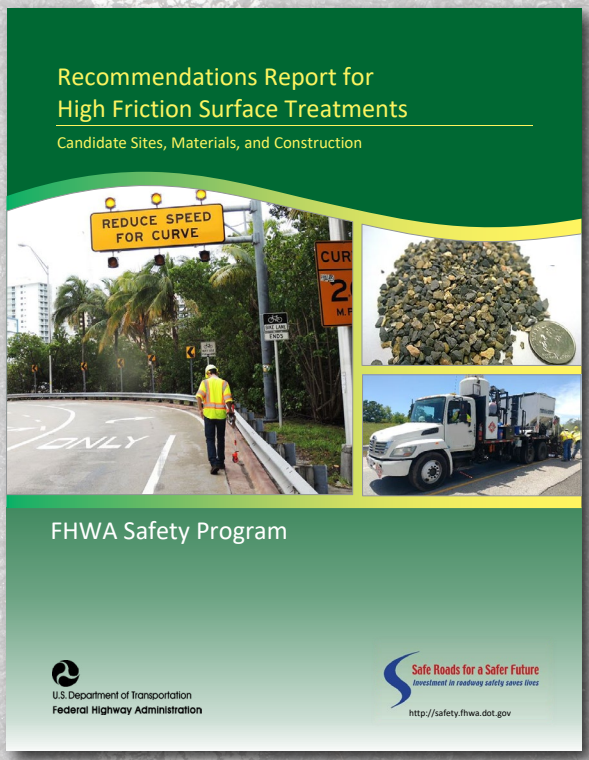
Delivery of eight noteworthy practices is another result of FHWA's leadership efforts toward creating effective resources for practitioners at State and local levels. The newly published Noteworthy Speed Management Practices is the result of extensive outreach with many different agency types across the United States. Outreach efforts have included roundtable workshops, webinars, meetings with relevant associations (e.g., Insurance Institute for Highway Safety's national forum on speeding, Vision Zero), solicitation through committees (e.g., TRB, ITE), and extensive literature reviews. Ultimately, the project's Technical Advisory Committee selected eight practice cases from 93 potential noteworthy practices.

Noteworthy practices cover the most important aspects of speed management, including:

- Developing and implementing a citywide Strategic Speed Management Program with comprehensive speed management activities, key indicators, targeted achievement metrics, and integrated effort such as enforcement.
- Setting safe, consistent, and enforceable speed limits for all roadway users for rural and urban environments.
- Applying engineering and alternative enforcement countermeasures, such as self-enforcing roadways and speed safety cameras, to achieve the set posted speed limits for the safety of all roadway users.
- Improving crash data through targeted reporting of speeding-related crashes, which provides consistency and addresses crashes by identifying contributing factors.
- Enforcing through transparency and educational initiatives rather than a strict enforcement detavil.

Detailed information on the noteworthy speed management practices is provided in the Noteworthy Speed Management Practices report, which summarizes challenges, takeaways, and lessons learned. For more information, contact Guan Xu at Guan.Xu@dot.gov.

RECOMMENDATIONS FOR HIGH FRICTION SURFACE TREATMENT NOW AVAILABLE



Cover of Recommendations Report for High Friction Surface Treatments. (Source: FHWA)

The FHWA Office of Safety recently published Recommendations Report for High Friction Surface Treatments (HFST): Candidate Sites, Materials, and Construction. HFSTs are intended to restore and maintain pavement friction to reduce crashes. They are most effective in reducing run-off-the-road and other wet-weather crashes. HFSTs have proven most effective on rural and urban horizontal curves and tight-radius loop ramps. They have also been applied at high-volume intersections and downhill approaches where stopping sight distance is limited. HFST is a thin layer of high-quality polish-resistant aggregate bonded to the pavement surface with a polymer resin binder. HFST was one of the Every Day Counts 2 (EDC-2) safety initiatives. When applied to targeted locations, it has been proven highly effective in reducing wet-pavement-related crashes.

Highlights of the report include:

- Factors to consider when selecting sites for HFST.
- Suitability of existing pavement conditions to receive HFST.
- Recommendations on when to use or not use HFST as a safety countermeasure.

The report synthesizes the noteworthy practices for HFST based on Federal agency, State agency, and industry experience, including relevant recommendations from the recently completed Long-Term HFST Performance Monitoring Study. By properly identifying candidate sites, selecting the best materials, and implementing high-quality construction practices, agencies will have the best return on investment for their HFST installations. Agencies can see more widespread HFST deployment and a longer-lasting safety countermeasure, resulting in greater crash reductions.

For more information, contact Joseph Cheung at joseph.cheung@dot.gov. Visit the TxLTAP Library to view the High Friction Surface Treatment Quick Reference Guide.

AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION ISSUES RECOMMENDATIONS FOR A VULNERABLE ROAD USERS PROGRAM

The American Traffic Safety Services Association (ATSSA) recently released its recommendations for "Developing an Effective Vulnerable Road User (VRU) Program" to address rising pedestrian fatalities as well as the safety of people not in vehicles but who utilize the roadways.

"This includes bicyclists and others who might not only walk, but roll, and are at a distinct and dangerous disadvantage when crossing a road or being in a road with vehicles and trucks," ATSSA President & CEO Stacy Tetschner said in a letter to the heads of state DOTs across the country.

The document includes 19 recommendations assembled by ATSSA's Traffic Signals Committee that ATSSA believes "will help put VRUs on a more equal footing with vehicle-based travel, not only in terms of safety, but as a means of effective and efficient travel mode."

ATSSA
SAFER ROADS SAVE LIVES

Top 19 Recommendations for an Effective VRU Program include:

1. Develop and maintain a specific program to track, monitor and mitigate pedestrian and bike crashes in their area of responsibility and jurisdiction as issues related to VRU crashes are different from vehicle crashes.
2. Develop and implement a VRU network plan that works to provide effective and efficient crossings that interconnect the entire community with VRU-compatible travel spaces.
3. Adopt a program for existing streets and streets under design or consideration to develop and implement guidelines and standards for effective and efficient VRU crossing treatments that account for desired lines of travel and include consideration of Federal Highway Administration (FHWA) Safe Transportation for Every Pedestrian (STEP) program.
4. Conduct a systemwide condition assessment of VRU infrastructure.
5. Use findings of condition assessments to develop, adopt and fund a long-term sidewalk, path and curb ramp improvement, operations and maintenance program with particular attention given to improvements that connect the network to specific destinations (bus stops, retail, institutions, etc.). Operations and maintenance need to include routine and periodic assessments so sidewalks and pathways are kept clear and in a good state of repair.
6. Develop and implement laws that give VRUs more rights as well as responsibilities. Promote and implement educational programs regarding all road users' rights and responsibilities with a focus on VRUs.
7. Eliminate the red and yellow all-flash control of traffic signals for multi-lane signalized intersections and replace them with semi-actuated or all-red flash so VRUs can gain the right of way to cross streets.
8. Keep VRUs in mind when developing traffic signal coordination plans to keep wait times within reasonable limits.
9. Ensure traffic signals have functioning detection and adequate crossing time for all modes of traffic, not just vehicles. For VRUs, this would include call buttons or passive detection if not running fixed time or automatic recall.
10. Keep VRUs in mind when selecting and providing supplemental traffic signal indications, including those who have visual, hearing, ambulatory or other impairments.
11. Consider specific traffic signal phasing and timing approaches to prioritize VRU crossings.
12. Provide space between vehicles and VRU travel areas to create inviting and convenient paths to organized and controlled crossings.
13. Focus attention on parts of communities that are reliant on or prone to using transit, walking and biking as their primary means of transportation through the adoption of metrics that help investments in transportation be equitable for those communities.
14. Provide street lighting that includes consideration of providing specific light levels on streets and on adjacent sidewalks and paths that enhance nighttime visibility and a sense of security.
15. Develop and implement speed limit and management programs that promote vehicle speeds that are balanced with VRU risk and spaces, including consideration of driver behavior as it relates to going faster than the posted speed limit. Whenever appropriate, consider using physical reinforcements (e.g., raised crossings, speed bumps and other geometric features) to buffer speed.
16. Include VRU as a study subject in traffic impact analysis for developments, including the study of mitigating crossing risks that may be created with new developments.
17. Include VRU needs in temporary traffic control plans in substantive ways that keeps their modes of travel open and useful, including ADA-compliant detours, if needed.
18. Communicate and coordinate with law enforcement and other related community organizations and groups to help advocate for VRU issues with regards to their rights and responsibilities and the role that transportation infrastructure can and should play.
19. Explore and incorporate new technologies into the transportation system, including connected vehicles and infrastructure, which support a safer VRU environment.

NATIONAL TRANSPORTATION SAFETY BOARD UNVEILS ITS 2021 – 2022 MOST WANTED LIST OF TRANSPORTATION SAFETY IMPROVEMENTS

The National Transportation Safety Board finalized its 2021 – 2022 Most Wanted List (MWL) of Transportation Safety Improvements during a board meeting held in early April 2021. The biennial list serves as a guide for action, as well as a reminder to all of what still needs to be done to enable safe mobility for all people.

The biennial list serves as a guide for action, as well as a reminder to all of what still needs to be done to enable safe mobility for all people.

The five-member board voted to include 10 items in the 2021-2022 Most Wanted List of Transportation Safety Improvements:

- Require and Verify the Effectiveness of Safety Management Systems in All Revenue Passenger Carrying Aviation Operations
- Prevent Alcohol and other Drug Impaired Driving
- Require Collision Avoidance and Connected Vehicle Technologies on All Vehicles
- Eliminate Distracted Driving
- Implement a Comprehensive Strategy to Eliminate Speeding-Related Crashes
- Install Crash Resistant Recorders and Establish Flight Data Monitoring Programs
- Protect Vulnerable Road Users through a Safe System Approach
- Improve Pipeline Leak Detection and Mitigation
- Improve Rail Worker Safety (page/content under development)
- Improve Passenger and Fishing Vessel Safety (page/content under development)

Since 1990 the NTSB has used its Most Wanted List as the principal advocacy tool to build support for the implementation of NTSB-issued safety recommendations associated with the list.

"Board members of the NTSB and our advocacy team continuously seek opportunities to communicate about items on our Most Wanted List," said NTSB Chairman Robert Sumwalt. "As we begin advocacy efforts for the 2021 – 2022 MWL, we call upon our advocacy partners to amplify our safety messages and help us bring about the safety improvements that will make transportation safer for us all.

The 2021 – 2022 MWL draws attention to more than 100 safety recommendations associated with the 10 items on the list. These recommendations, if implemented, can save lives, reduce the number and severity of injuries and prevent transportation accidents and crashes. The 2021-2022 MWL features 10 mode-specific safety improvements, unlike previous lists that featured 10 broad, multi-modal safety issues tied to hundreds of recommendations.

For more information on the NTSB's Most Wanted List of Transportation Safety Improvement contact NTSB Media Relations at (202) 314-6100.

NATIONAL SAFETY COUNCIL SURVEY: 90% OF EMPLOYERS SAY 'IMPAIRMENT' AT WORK MEANS MORE THAN JUST SUBSTANCES

With the pandemic forcing a new era in workplace safety, the National Safety Council (NSC) urges employers to take a broader approach to addressing workplace impairment, which can include mental distress.

A NSC survey released in April 2021 shows 90% of employers are concerned about mental health and chronic stress impacting fitness for duty – in addition to persistent concerns around legal and illicit substance misuse. In response, **NSC is becoming the first national organization to call on employers to consider far more than substance misuse when addressing "workplace impairment." NSC urges that employer policies and procedures outline "workplace impairment" as anything that could impede one's ability to function normally or safely as a result of a number of factors – from chemical substances, such as alcohol, opioids or cannabis, to physical factors like fatigue, as well as experiencing mental distress and social factors like stress.**

The survey data underscore how the pandemic has impacted workplace safety. In expanding what it means to be impaired in the workplace, NSC aims to reshape the national narrative and help employers adjust internal policies and programs accordingly.

The Council began a holistic assessment of "workplace impairment" in 2020 as the pandemic raged, and NSC found 93% of employers agreed with a broader description– one that extends beyond substances to include health and wellbeing.

"The National Safety Council has been the nation's safety watchdog for more than 100 years, identifying emerging issues and developing resources to help keep workers safe from the workplace to anyplace," said Lorraine Martin, NSC president and CEO. "We believe the issue of impairment is multifaceted and therefore requires an approach that recognizes all aspects of it. We urge employers to join us in looking at impairment through the new lens that our current moment demands."

Impairment has been a workplace safety issue for decades. The pandemic, however, has forced a new era of workplace safety, one in which employers are grappling with increased substance use and misuse, as well as increased mental health distress, including depression and anxiety – medical conditions that frequently are

interrelated. In particular, the pandemic has worsened the country's opioid crisis, which has been challenging employers for several years. In the 12-month period ending in May 2020, there were 81,000 fatal drug overdoses – the highest number ever recorded.

More than half of employers surveyed by NSC – 52% – said they know impairment is decreasing the safety of their workforce, while 77% of respondents view impairment as an important consideration when determining an employee's fitness for duty. While 70% of employers said they discuss substance impairment during employee onboarding, only 47% discuss other forms of impairment, such as fatigue, mental health and stress. In previous research, NSC found that tired, fatigued employees have negatively impacted 90% of employers.

No matter what's keeping employees from working or driving safely, NSC stands ready to help employers deal with the impacts of impairment in the workplace with a robust offering of free resources and tools to help businesses manage these emerging issues. Offerings include cost calculators to understand the business case around substance misuse and fatigue in the workplace and toolkits to implement strategies to proactively address opioids and fatigue.

Additionally, NSC is tackling mental health in the workplace and providing guidance for employers to effectively address. Employers can visit nsc.org/safer for playbooks, guides and other resources to help address mental health and wellbeing as part of the Council's *SAFER* effort.

DISTRACTED DRIVING CONTINUES TO PLAGUE TEXAS ROADWAYS

Sadly, distracted driving is still near the top of the list when it comes to crashes on Texas roadways, coming in at No. 2 for traffic-related crash causes. In 2020, Texas roadways saw nearly 1 in 5 crashes caused by a distracted driver in which 364 people died and 2,200 were seriously injured.

April was National Distracted Driving Awareness Month, and TxDOT continues to remind all Texans to put their phones down and give driving their full attention whenever they are behind the wheel.

"A serious or fatal crash can happen in an instant," said TxDOT Executive Director James Bass. "If you're distracted by your phone or doing anything else that takes your focus away from driving, you're putting yourself, your passengers and everyone else on the road at risk. Distracted driving crashes are 100 percent preventable. Driving should be your number one priority behind the wheel – everything else can wait."

TxDOT re-launched its web-based augmented reality game "Dart Those Distractions" to reinforce the importance of paying attention behind the wheel. Designed to be played on a smart phone or tablet (but not while driving), the game increases awareness about the dangers of distracted driving in an interactive, engaging way. The game challenges players to throw darts at balloons that symbolize driving distractions, such as eating, grooming, programming music or checking a navigation system.

Dangerous distractions include any activity that diverts the driver's attention away from safely operating a vehicle. Research shows that regardless of whether a driver uses a voice-to-text program, hands-free device or a handheld one, the distraction will affect the driver's ability to drive safely.

Since September 1, 2017, it has been illegal to read, write or send a text while driving in Texas. Violators can face a fine up to $200.

TxDOT offers these tips to prevent distracted driving that can lead to a ticket, or worse, a crash:

- Always give driving your full attention.
- Pull off the road entirely and come to a complete stop before you talk or text.
- Put your phone away, turn it off, or use an app or your phone settings to block texts and calls while driving.
- Tell friends, family and co-workers you won't respond to texts or calls while driving.
- Remember that all distractions are dangerous, so pay full attention when behind the wheel.

TxDOT's distracted driving awareness campaign is a another key component of #EndTheStreakTX, a broader social media and word-of-mouth effort that encourages drivers to make safer choices while behind the wheel, like wearing a seat belt, driving the speed limit, never texting and driving and never driving under the influence of alcohol or other drugs. For media inquiries, contact TxDOT Media Relations at MediaRelations@txDOT.gov or (512) 463-8700.

STEADY RISE IN PEDESTRIAN FATALITIES RINGS ALARM BELLS

As spring is upon us, more and more Texans have taken to the streets, and TxDOT has an important message for both drivers and pedestrians: watch out for each other.

State officials warn that pedestrian deaths are continuing to rise in Texas, and now account for 1 in 5 of all traffic fatalities. In 2019 alone, 5,975 traffic crashes involving pedestrians occurred in Texas, resulting in 669 deaths, a 5% increase in fatalities over the previous year. Another 1,317 people were seriously injured.

"From 2015 to 2019, traffic crashes claimed the lives of 3,150 pedestrians," said TxDOT Executive Director James Bass. "To reach our goal of zero deaths on Texas roadways we need all drivers to obey the rules of the road, stay alert and take responsibility for looking out for pedestrians, and for pedestrians to follow safety tips."

Since 2015, TxDOT has spent $153 million in federal and state funding to upgrade sidewalks, curbs and striping for pedestrian accessibility, safety and mobility. In addition, during that same time, TxDOT awarded $116 million in grant funding to support more than 120 locally sponsored projects that provide safe routes to schools, multiuse pathways, sidewalks and bike paths in rural and small urban areas.

Crash reports from law enforcement indicate the two leading causes for pedestrian fatalities are: 1) pedestrians failing to follow traffic safety laws and being struck when crossing streets and roadways, and 2) motorists failing to yield the right of way, driving distracted or driving too fast. Alcohol also is a factor in pedestrian-related crashes, deaths and injuries.

Pedestrians are among the most vulnerable road users because they aren't equipped with protective equipment, such as airbags, seat belts and bumpers. This month TxDOT is launching a unique, socially distanced outreach campaign near intersections and high traffic areas in the state's major cities to call attention to this reality and deliver messages where people most need to see them—at street level. This "walking billboard" public education effort will use stark, attention-grabbing visuals reminding motorists and pedestrians that "pedestrians don't come with airbags" and "you can't fix a pedestrian at a body shop."

TxDOT offers these safety tips to prevent a deadly encounter:

FOR DRIVERS:

- When turning, yield the right of way to pedestrians.
- Stop for pedestrians at crosswalks.
- Be cautious when passing stopped buses or other vehicles.
- Pay attention and put your phone away—pedestrians may enter your path suddenly.
- Obey the speed limit and drive to conditions.

FOR PEDESTRIANS:

- Cross the street only at intersections and crosswalks. Look left, right, then left again before crossing.
- Make eye contact with drivers before crossing. Don't assume drivers see you.
- Obey all traffic and crosswalks signals.
- Use the sidewalk. If there isn't one, walk on the left side of the road, facing oncoming traffic.
- When walking, put away electronic devices that take your eyes and ears off the road.
- Wear bright clothing during the day, and wear reflective materials or use a flashlight at night

TxDOT's pedestrian safety campaign is another key component of #EndTheStreakTX, a broader social media and word-of-mouth effort that encourages drivers to make safer choices while behind the wheel such as wearing a seat belt, driving the speed limit, never texting and driving and never driving under the influence of alcohol or other drugs.

TEXAS TRANSPORTATION HALL OF HONOR 2021 CALL FOR NOMINATIONS

The Texas Transportation Hall of Honor board is accepting nominations for 2021 inductees until July 31, 2021.

Texas is recognized as having one of the finest multimodal transportation systems in the world. The existence of this system has been a key aspect of the economic development of the state and in providing Texans with a high quality of life. The creation and operation of the Texas transportation system are the result of unusual vision and leadership provided by a relatively small number of exceptional individuals.

Each individual selected for the Hall of Honor is recognized at an induction ceremony and with a plaque on permanent display in the Hall of Honor located at the Texas A&M Transportation Institute Headquarters Building at The Texas A&M University System's RELLIS Campus in Bryan, Texas.

The Hall of Honor, established in 2000, provides the opportunity to recognize the state's true transportation leaders. A five-member board comprised of senior transportation professionals with knowledge of the historical development of the transportation system in Texas oversees the Hall of Honor.

Nominate someone for this honor by visiting https://tti.tamu.edu/about/hall-of-honor

HALL OF HONOR TEXAS TRANSPORTATION

2021 Call for Nominations

Nominate someone today!

Texas A&M Transportation Institute

For more information on upcoming events and workshops, visit txltap.org

Call the TxLTAP office at 817-272-9678 or email us at txltap@uta.edu to schedule an event or workshop near you.

TXLTAP EVENTS & WORKSHOPS

GRAVEL ROADS ACADEMY

Improve upon current knowledge related to gravel road maintenance best practices. Learn how to get more mileage out of your gravel roads budget with the latest tools, techniques, and know-how from road maintenance experts.

HEAVY EQUIPMENT FOR WILDFIRES

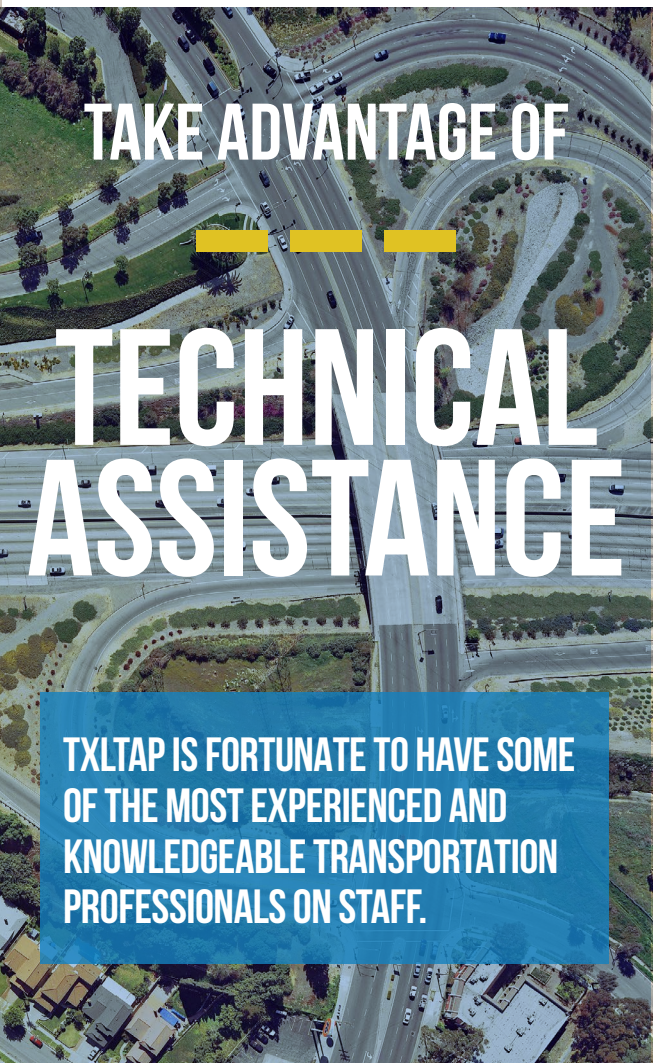
Heavy Equipment Operators are sometimes called out to assist fire fighters in wildland fire situations. Learn methods of attacking a fire, techniques of diminishing a fire with a dozer and grader, and dangerous situations to avoid.

HEAVY EQUIPMENT RODEO

Heavy equipment operators will be given a chance to learn and practice new skills while stressing safety and excellence. Operators will use maintainers, backhoes, dump trucks, loaders, and more to steer through a series of exercises designed to test their abilities.

SNOW AND ICE TECHNIQUES

Snow and ice control is a complex process. This workshop will cover personal and operational safety, plowing techniques, salt and abrasive application, and decision making based on the forecast and actual in storm conditions.



TAKE ADVANTAGE OF TECHNICAL ASSISTANCE

TXLTAP IS FORTUNATE TO HAVE SOME OF THE MOST EXPERIENCED AND KNOWLEDGEABLE TRANSPORTATION PROFESSIONALS ON STAFF.

This staff includes former maintenance managers, heavy equipment operators, road crew chiefs, civil and transportation engineers, inspectors, and the public works directors who all worked on the state's road system and in a nutshell "have been there, done that." Now Texas' local roadway agencies can directly benefit from their street smarts.

While training and information sharing at conferences or through a newsletter can do a lot of good, TxLTAP recognizes sometimes there is just nothing like rolling up your sleeves, experiencing the problem first hand and then offering a meaningful solution. That's why in addition to hosting classes and publishing Better Roads, Safer Roads, our program offers local roadway agencies an opportunity to consult directly with a TxLTAP subject matter expert to specifically address your organization's unique issue. And like all resources TxLTAP offers, there is no charge to receive our help or expertise.

Do you need information on proper method for repairing your lingering road problem? Would it help if someone came out to watch your road crew perform a repair and offer suggestions on how to save time and money in the future? Could you use the help of a traffic engineer who could assess a problematic intersection? Would it be a benefit to you if a subject matter expert came to ride the roads and developed a training presentation specific to your needs?

Take advantage of our technical assistance service!

Call 817-272-9678 or email us at txltap@uta.edu. We're ready to help!

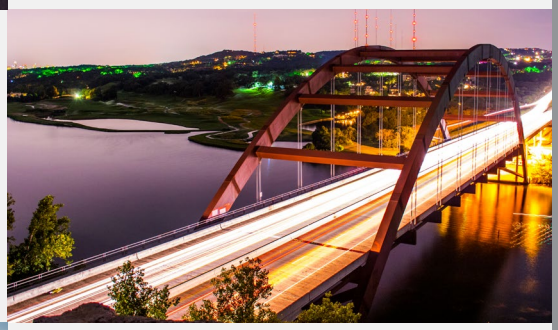
UNIVERSITY OF TEXAS ARLINGTON
140 W. Mitchell Street, Arlington, TX 76019

Texas Department of Transportation

PRSRT STD
U.S. POSTAGE
PAID
DALLAS, TX
PERMIT NO. 881

- TxLTAP -

SAFETY
Making Roads Safer for Workers & Drivers



ORGANIZATIONAL EXCELLENCE
Striving for Overall Quality

WORKFORCE DEVELOPMENT
Training that Makes an Impact

INFRASTRUCTURE MANAGEMENT
Building Smart & Using Resources Effectively

TRAINING.
TECHNICAL ASSISTANCE.
RESOURCES.

TxLTAP serves all local government roadway agencies by providing no charge training, technical assistance and resource access.

Learn more at TxLTAP.org

txltap@uta.edu | 817.272.9678

UNIVERSITY OF TEXAS ARLINGTON