Winter 2021 | TxLTAP.org

BETTER ROADS SAFER ROADS

MAKING ROADS SAFER WITH LOCAL ROAD SAFETY PLANS

TxLTAP

Sponsored by the Texas Department of Transportation and the Federal Highway Administration • Powered by UTA Public Works Institute

Texas Department of Transportation

UNIVERSITY OF TEXAS ARLINGTON

BETTER ROADS
SAFER ROADS

Winter 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.

FEDERAL HIGHWAY ADMINISTRATION CALLS FOR COMMENT ON LATEST UPDATE TO MUTCD

The Federal Highway Administration (FHWA) recently proposed wide-ranging revisions to the "Manual on Uniform Traffic Control Devices for Streets and Highways" (MUTCD) – the first comprehensive update in more than 10 years to advance traffic operations and safety in states and cities nationwide.

The MUTCD is the national standard for traffic signs, signals, and pavement markings that guide us on our nation's streets and highways. The proposed revisions offer many proven advancements while remaining flexible to accommodate newer technologies and operational strategies.

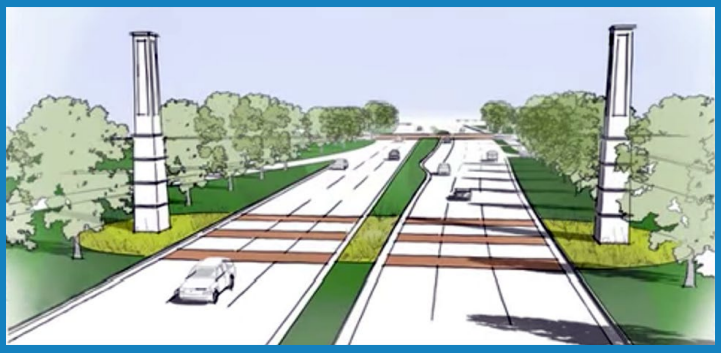
Among other improvements, the proposed updates reflect state-of-the-art traffic research to help transportation agencies prepare for automated vehicles and other cutting-edge technologies.

Features for vulnerable road users include the rectangular rapid-flashing beacon, expanded traffic signal warrants, and an array of roadway treatments for cyclists – many of which have been proven through the experimentation process defined in the MUTCD.

As part of the process of updating the MUTCD, FHWA will gather feedback from state and local traffic engineers and other traffic control device stakeholders, and the public in general. The public comment period is scheduled to close on May 14, 2021. For more information, see the Federal Register.

U.S. Department of Transportation
Federal Highway Administration

U.S. DEPARTMENT OF TRANSPORTATION AWARDS $4 MILLION TO DALLAS FOR S.M. WRIGHT SMART CORRIDOR



Conceptual rendering of the Corridor Gateway of the S.M. Wright Project in South Dallas. [Courtesy rendering, subject to further refinement.]

The U.S. Department of Transportation's Federal Highway Administration (FHWA) recently awarded a $4 million Advanced Transportation and Congestion Management Technologies Deployment (ATCMTD) grant to the City of Dallas for the S.M. Wright Smart Corridor project. In 2020, the ATCMTD program awarded grants valued at $49.6 million to 10 projects that use cutting-edge technologies to improve mobility and safety for America's travelers.

FHWA's ATCMTD program funds early deployments of forward-looking technologies that can serve as national models. In addition to ITS technologies to reduce congestion, the grants will fund projects that support autonomous and connected vehicle technologies.

Dallas will outfit the S.M. Wright Corridor with traffic signal improvements and connectivity, smart transit shelters, air quality sensors and broadband communications. Sidewalk freight delivery technology will be paired with bicycle and pedestrian improvements and work zone management strategies to transform the corridor across multiple transportation modes. The resulting corridor will be optimized for connected vehicles and more efficient freight delivery while the surrounding low-income communities will benefit from improved safety at pedestrian crossings, new economic opportunities, and potential neighborhood revitalization.

The FHWA evaluated 46 applications requesting more than $205 million.

ATCMTD was established under the "Fixing America's Surface Transportation" (FAST) Act. State departments of transportation, local governments, transit agencies, metropolitan planning organizations and other eligible entities were invited to apply under the program. Now in its fifth year, the program has funded more than 45 projects worth $256 million.

The final FY 2021 BUILD Notice of Funding Opportunity (NOFO) will be published at www.transportation.gov/buildgrants/build-nofo and Grants.gov by April 26, 2021, the statutory deadline.

TEXAS LOCAL TECHNICAL ASSISTANCE PROGRAM (TXLTAP) LAUNCHES WORKFORCE DEVELOPMENT PROJECT TO ASSIST TEXAS CITIES AND COUNTIES

by Ray L. Belk, SPHR, SHRM-SCP, PMP®, TxLTAP Consultant

In September 2020, the Texas Local Technical Assistance Program (TxLTAP) submitted a project proposal to the Federal Highway Administration (FHWA) State Transportation Innovation Council (STIC) Incentive Program administered by FHWA's Center for Accelerating Innovation (CAI) to support FHWA's Every Day Counts Round 6 Innovation, Strategic Workforce Development. The proposed project, Texas Transportation Workforce Development for Cities and Counties, was accepted and commenced tasks to produce free resources aimed to support innovative training, development, and retention of employees in Texas city and county transportation departments.

As a result of this project, a guide (Job Descriptions and Recommended Training Guide for Texas County and City Road & Bridge Workers, Foremen and Supervisors) has been created for local officials that catalogs core competency matrices, job descriptions, and recommended zero or low-cost training opportunities for several critical and common job classifications. Nineteen job descriptions (JDs) have been developed through a team effort involving nine county Human Resource (HR) Directors or specialists, the use of Texas State Auditor's Office resources, and American General Contractors Association Texas chapter resources. Equipment Operators (I – IV), Truck Drivers (I-III), Road & Bridge (R&B) Foreman (I-II), R&B Supervisor, R&B Welder, Fleet Mechanics (I-III), Fleet Mechanic Supervisor, Construction/ Maintenance Inspectors (I-II) and Traffic and Signs Worker (I-II). Recommended no-cost training is outlined for each JD in the listed categories. Free training opportunities include instructor led courses from the TxLTAP, AASHTO TC3 web training, and instructor led training from TxDOT.

County commissioners, R&B Administrators, and others may ask: "Why should we have job descriptions for our organization's R&B personnel? Can't their specific job duties just be decided once they are hired?" Although such an approach may be taken, it is not recommended and comes with many operational and legal risks.

The benefits of using standardized JDs in your organization include:

- Setting up new hires for success to be highly contributing employees by providing well written JDs to help them better understand their job and duties. The JD, along with coaching and mentoring from their manager, helps set job performance expectations for the employee to adhere to and achieve.
- Assisting managers with providing feedback to employees on how well they are doing and in what areas they can improve their performance. Without a good JD, it becomes difficult for an employee to know what is expected of them and for a manager to provide an accurate and effective appraisal.
- Helping ensure a safer work environment. All Texas counties adhere to their local on-the-job safety policies. Such policies may relate to motor vehicle or equipment operations, working

on roads, working in confined spaces, and/or working in offices. Including these policies in JDs reinforces any acknowledgement forms the employee is required to sign and is an additional reminder and documentation of what the employee is expected and required to do regarding safety.

- Avoiding potential legal issues. For example, Americans with Disabilities Act (ADA) complaints are common, and their related lawsuits are often lost by public and private employers. In the absence of or with poorly written JDs, your organization is subject to legal and punitive risk if you do not have the physical requirements of the job included in JDs.

If you're still not sure that using JDs would benefit your organization, consider this Myths vs. Reality and Question and Answer provided by industry HR professionals.

Myth: As a manager, I cannot ask or direct an employee to perform tasks not outlined on their JD.

Reality: The last essential job duty on any JD should read, "Performs other job duties as assigned". This allows managers to assign essential miscellaneous or temporary tasks that are not outlined in the JD.

Question: If my organization adopts job descriptions, would we have to promote employees when they meet minimum qualifications of the next level in a job family; for example, from R&M Equipment Operator I to R&M Equipment Operator II?

Answer: No. Promotions are at the discretion of each organization. The simple existence of JDs does not obligate an employer to promote an employee.

In January 2021, all Texas county Human Resources points of contact (HR, County Treasurer, County Auditor, or County Judge offices) were emailed the previously mentioned resource guide, Job Descriptions and Recommended Training Guide for Texas County and City Road & Bridge Workers, Foremen and Supervisors.

In February 2021, hard copies of the guide were distributed at the V. G. Young Institute of County Government School for Commissioners Court conference in Bryan, TX. Hard copies will also be distributed at various Texas Association of Counties conferences and Texas Municipal Conferences throughout 2021.

In addition to direct distribution efforts, the guide and has been made available on the TxLTAP website at www.txltap.org under "Library." All JDs and other resources are available for download in Word, Excel or PDF format; allowing cities and counties to edit or modify JDs and training matrices to meet their unique local needs.

In addition to the free resources described, TxLTAP can provide on-site or remote technical assistance to Texas cities or counties, as requested. No charge comprehensive consultations will include guidance and recommendations for utilizing the resources to meet specific and unique organizational needs. To request and arrange zero cost technical assistance for your organization, contact Ray Belk at 254-289-3443 or Raymond.Belk@uta.edu or Erin Townsend, TxLTAP Program Manager at 817-272-9678 or Erin@uta.edu.

TxLTAP appreciates your service to the citizens of your county and the State of Texas and is eager to partner with you to help improve the performance of your organization. Call today to let us help you develop your workforce program!

TxLTAP

by Jerry Roche, Matthew Enders, Catherine Chestnutt, Jeff Gooch and Frank Gross

CRASH DATA SUMMARY TEMPLATES: A SYSTEMIC TOOL FOR EVERYONE

Washington State Department of Transportation (WSDOT) developed a Crash Data Summary Template as a diagnostic tool to support a systemic approach to safety across WSDOT and its local agency partners. FHWA recognized the value of this tool for other State DOTs and local agencies and added features and functions to the template, including accessibility enhancements for people with visual impairments.

Complementary to the hot-spot approach that addresses high-crash locations, the systemic approach addresses high-risk locations. As shown in the figure below, the systemic approach identifies common contributing factors for a focus crash type, such as fatal and serious injury crashes involving a roadway departure and implements countermeasures on roadways with characteristics similar to those that have experienced the focus crash type. FHWA's systemic safety project selection tool outlines steps to identify focus crash types.

The Crash Data Summary Template can help agencies organize and review their crash data in support of the systemic approach. Specifically, analysts can use the spreadsheet to summarize the distribution of available data and identify factors that contribute to crashes. As shown in the first table, analysts enter crash data by attribute for the study period of interest. The spreadsheet then sums the data, calculates the proportion for each attribute, and highlights attributes that are over-represented. Note the spreadsheet contains many more rows and individual columns for up to 5 years of individual data. Users can insert additional years or rows as needed.

The key to using the spreadsheet is to identify when the proportion of crashes is much higher in one group compared to another, which indicates over-representation. One way to identify over-representation is to compare the proportion of fatal and serious injury crashes to total crashes, as shown in the first table. In the example shown in Table 1, alcohol-related collisions are over-represented on Example County roads—they account for 6.1 percent of fatal and serious injury crashes compared to 1.9 percent of total crashes. Similarly, single-vehicle and head-on crashes are over-represented. These could be areas to focus on for addressing fatal and serious injury crashes in Example County. The Crash Data Summary Template automatically highlights cells if the proportion of fatal and serious injury crashes is either 5 percent higher or at least two times greater than the proportion of total crashes.

Year 1–5 Subject Data	Fatal and Serious Injury Crashes Example County Roads		All Crashes Example County Roads	
	Year 1–5	%	Year 1–5	%
	Overall Numbers			
Total # Collisions	213	N/A	13,628	N/A
# Fatal Collisions	38	17.8	38	0.3
# Serious Injury Collisions	175	82.2	175	1.3
# Alcohol-Related Collisions	13	6.1	254	1.9
Total # Fatalities	41	N/A	41	N/A
Total # Serious Injuries	211	N/A	211	N/A
	Manner of Crash			
Single Vehicle	89	41.8	2,552	18.7
Angle	65	30.5	3,751	27.5
Head On	27	12.7	328	2.4
Rear End	24	11.3	5,301	38.9
Sideswipe – Same Direction	5	2.3	1,225	9.0
Sideswipe – Opposite Direction	3	1.4	450	3.3
(Blank)	0	0.0	21	0.2

Table 1 - Crash Data Input for Example County Roads.

Systemic approach to safety management. (Source: FHWA)

Another way to identify over-representation is to establish one or more groups to compare against. This is shown in Table 2. Over-representation is still indicated by a higher proportion of crashes in one group compared to another, but now the comparison is against similar jurisdictions or the statewide average. In this example, the number of fatal collisions is over-represented on county roads in the Example County compared to county roads in comparison group 1. It also shows that single-vehicle and head-on crashes are over-represented for total crashes, but only head-on crashes in Example County are significantly over-represented for fatal and serious injury crashes compared to county roads in comparison group 1. While Table 2 only shows a comparison to one group, the spreadsheet tool includes three comparison groups, and you can add more as desired.

Crash-Related Statistics	Fatal/Serious Injury Crashes Only				Total Crashes			
	County Roads in Comparison Group 1		Example County Roads		County Roads in Comparison Group 1		Example County Roads	
	Year 1–5	%	Year 1–5	%	Year 1–5	%	Year 1–5	%
	Overall Numbers							
Total # Collisions	70,986	N/A	213	N/A	2,235,038	N/A	13,628	N/A
# Fatal Collisions	7,053	9.9	38	17.8	7,053	0.3	38	0.3
# Serious Injury Collisions	63,933	90.1	175	82.2	63,933	2.9	175	1.3
# Alcohol-Related Collisions	3,764	5.3	13	6.1	45,184	2.0	254	1.9
Total # Fatalities	8,155	N/A	41	N/A	8,155	N/A	41	N/A
Total # Serious Injuries	74,136	N/A	211	N/A	74,136	N/A	211	N/A
	Manner of Crash							
Single-Vehicle	28,315	39.9	89	41.8	346,486	15.5	2,552	18.7
Angle	19,602	27.6	65	30.5	618,408	27.7	3,751	27.5
Head On	5,002	7.0	27	12.7	62,105	2.8	328	2.4
Rear End	14,208	20.0	24	11.3	816,812	36.5	5,301	38.9
Sideswipe – Same Direction	2,623	3.7	5	2.3	243,479	10.9	1,225	9.0
Sideswipe – Opposite Direction	1,028	1.4	3	1.4	51,444	2.3	450	3.3
(Blank)	208	0.3	0	0.0	96,304	4.3	21	0.2

Table 2 - Crash Data Summary for Example County and Roads in Comparison Group 1.

Continued on Page 7

Continued from Page 6

The only requirement for using the spreadsheet is having access to crash data. Most local agencies have access to crash data for their jurisdictions, or they can obtain data from the data steward agency in their State (e.g., DOT, department of public safety, or department of motor vehicles). Agencies can access crash data for free from the Fatality and Injury Reporting System Tool (FIRST) if they don't have ready access. FIRST is maintained by NHTSA and includes data for crashes involving a fatality.

The Crash Data Summary Template is highly editable and customizable. Even if the crash data do not represent the same variables used in the Washington State example, the tool can still meet agencies' needs. Users can simply modify the crash/vehicle attributes in the tool to match their data by leaving a column blank or inserting or deleting rows. Agencies are also not limited by the years of available crash data. Importing more years into the tool provides a larger sample and increases the ability to detect over-representation; however, at the same time, more years of data can create challenges if there are changes in the data set over time.

SUCCESSFUL IMPLEMENTATION

WSDOT has provided the Crash Data Summary Template to all counties as the first step in developing their county road safety plans. WSDOT has begun using the tool to support cities as well. Specifically, Washington compares the data for a given city or county to other cities or counties in the region and State. The goal is to summarize crash data to identify focus areas (i.e., emphasis areas) and priorities for the plan.

Matthew Enders, who works with the local programs division for WSDOT, said, "Sharing this tool with every agency developing a safety plan has been a significant benefit to the local safety program in Washington. Each agency has a better understanding of which crash types and factors to analyze in their plan. This, in turn, has made the plans and projects more effective and has given everyone a good starting point as they begin drafting their safety plans."

The Crash Data Summary Template has also been used by local agencies all over the United States as part of the Every Day Counts Data-Driven Safety Analysis initiative. This initiative provides support for local road safety plans (LRSP) by identifying focus crash types, focus facility types, and potential risk factors. FHWA has worked with local agencies to summarize data, making it easier to digest and communicate issues to colleagues, stakeholders, and in LRSPs. These include agencies in the following States and Tribes: Alabama, California, Colorado, Georgia, New Hampshire, New York, Tohono O'odham Nation, and Washington.

BENEFITS

The Crash Data Summary Template is an accessible, easy-to-use, editable tool that supports systemic analysis for any agency. The tool presents the data in an easily digestible format. With the spreadsheet, agencies can identify focus crash types and focus facility types to inform the risk factor analysis and identify potential risk factors to study further. Agencies can also compare the crashes in their local jurisdictions to other jurisdictions. The tool is fully accessible for people who have visual impairments, and people can toggle the Accessibility switch on and off in each worksheet, using cell A1 or using ctrl+shift+A.

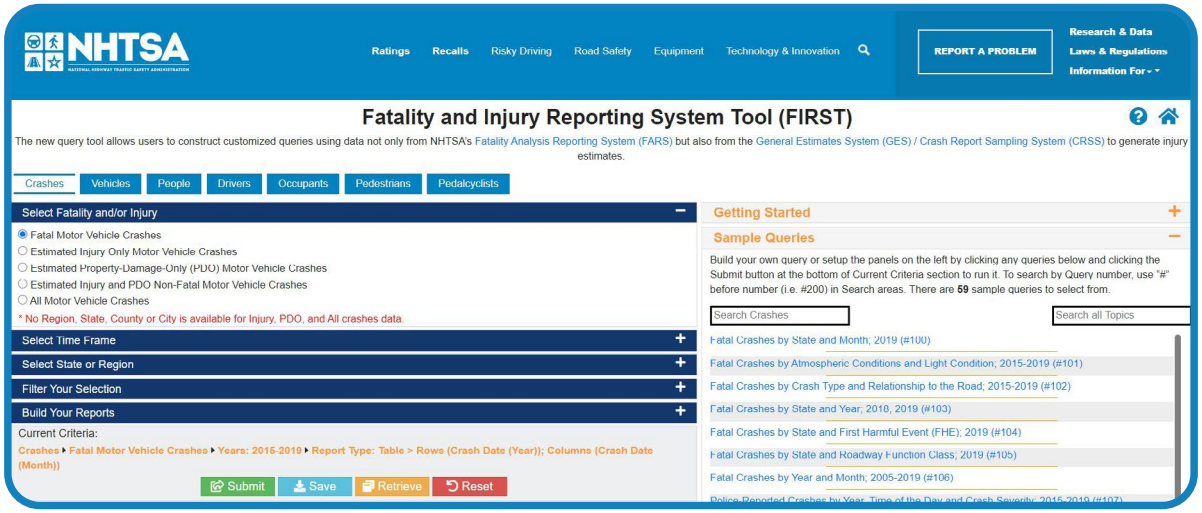
LIMITATIONS

While the Crash Data Summary Template can help identify potential risk factors, there is a need to use other tools to further investigate and confirm risk factors because the Crash Data Summary Template spreadsheet does not include non-crash locations. By integrating roadway and exposure data, there is an opportunity to identify which factors are over-represented at crash locations compared to non-crash locations. FHWA's Crash Tree Maker - available at FHWA's LRSP Do-it-Yourself (DIY) website - is one tool that can assist with this analysis.

AVAILABILITY

The Crash Data Summary Template is available for free from the LRSP DIY website. Contact Jerry Roche at Jerry.Roche@dot.gov for training or technical assistance on the systemic safety analysis process, including the Crash Data Summary Template and Crash Tree Maker.

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



Fatality and Injury Reporting System Tool (FIRST): cdan.dot.gov/query

BIG DATA GOES COUNTRY: INTEGRATING SPEED AND WEATHER MEASURES TO STUDY RURAL ROADWAY SAFETY

The term "big data" is ubiquitous these days in the transportation research world with usage from complex travel demand models to forecasting economic needs. Texas A&M Transportation Institute (TTI) researchers recently conducted a research project that examined the prevailing operating speeds on rural roadways on a large scale and determined how different measures of operating speed interact with roadway characteristics and weather condition to influence the likelihood of crashes. The project was sponsored by the U.S. Department of Transportation's Safety Data Initiative.

"Our sponsor's vision is to integrate newer big data sources with traditional datasets to enhance the general understanding of crash risk and potential to prevent crashes and improve rural roadway safety," explains TTI Assistant Research Scientist and principal investigator Subasish Das. "There is an urgent need for research to explore new data and better understand how to effectively quantify highway safety to overcome the limitations of current methods."

This study developed databases for two states by incorporating several data sources. The databases used in this study included 2015 crash data from the Highway Safety Information System, travel speed data from the National Performance Management Research Data Set, and roadway information from the Highway Performance Monitoring System.

The models combined traffic speed data with roadway geometrics, traffic operations and weather data to generate annual and daily crash predictions on roadway segments for different rural roadway facility types (e.g., rural two-lane roadways). One of the project's products is a decision support tool that shows heatmaps of rural roadways based on the model outcomes.

"There is an urgent need for research to explore new data and better understand how to effectively quantify highway safety to overcome the limitations of current methods."

"Our prototype interactive decision support tool incorporated Washington and Ohio data containing the expected total crashes from the final models to show segment-level high-risk analysis," says Das. "The tool contains a dashboard with various dropdown lists to generate estimated annual crashes on Washington and Ohio roadway segments."

View the project website at https://www.transportation.gov/office-policy/transportation-policy/rural-speed-safety-pilot-project.

The research team found that certain speed measures were beneficial in quantifying safety risk. Annual-level crash prediction models show that increased variability in hourly operating speed within a day and increased monthly operating speeds within a year are both associated with a higher number of crashes. This model also shows that rural roadway segments experiencing significant differences between weekday and weekend operating speeds are associated with a high number of crashes.

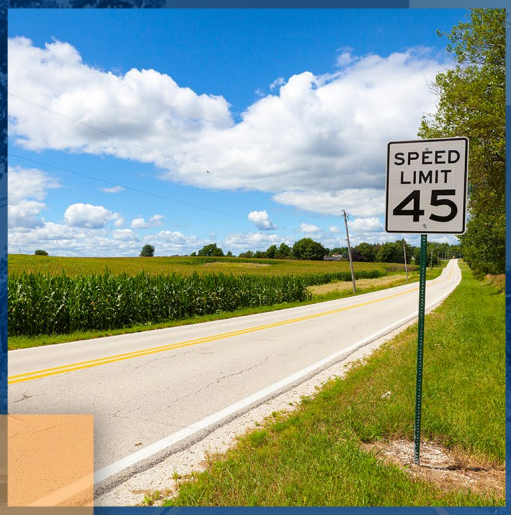
One of the most important research findings was that daily-level crash prediction models show that a segment with high variation in daily average speeds is expected to experience a higher number of crashes than a segment with a lower variation in daily speeds. Examining time segments before and after crashes shows that speed variation increases significantly before a crash compared to a normal traffic-flow condition.

"Overall, this study shows the benefit of incorporating speed data in safety modeling to more effectively identify locations that would benefit from additional safety treatments and countermeasures," notes Das. "Having this information available to state department of transportation officials is vital to achieving an understanding of where the greatest crash risks may occur and where they need to focus their resources toward mitigating these risks."

In addition to this project, Das is also leading research projects to explore the development of short-term crash prediction models to predict the safety performance of rural roadways for specific geometric, operational and exposure characteristics, as well as to develop speed-related crash modification factors for the existing crash prediction models of the American Association of State Highway Transportation Officials' Highway Safety Manual.

For more information, please contact Subasish Das at s-das@tti.tamu.edu.

Reprinted from Texas Transportation Researcher, Volume 56, Number 4.



IMPLEMENTING A LOCAL ROAD SAFETY PLAN

Safe Roads for a Safer Future
Investment in roadway safety saves lives

U.S. Department of Transportation
Federal Highway Administration

July 2020

SAVING LIVES THROUGH LOCAL ROAD SAFETY PLAN (LRSP) IMPLEMENTATION

Don't shelve your LRSP!

Agencies will only see the benefits of the LRSP through implementation. FHWA's Office of Safety has recently released *Implementing a Local Road Safety Plan*, a report that details strategies and actions for State and local agencies to take their LRSPs from development to action. The report includes examples from several State and local agencies to show how they have overcome barriers and challenges and have made a positive impact on traffic-related fatalities and serious injuries.

An LRSP, which is an FHWA proven safety countermeasure, provides a framework for identifying, analyzing, and prioritizing roadway safety improvements on local roads. Although several States and local agencies have adopted this approach to improve safety on their local roads, many are finding it difficult to go from development to implementation. This report provides the "how-to" for taking the next steps toward implementation and improving safety on local roads.

The report is useful for State or local agencies that have developed an LRSP, are currently developing an LRSP, or even those that have not yet started the development process. The report recognizes how considering implementation during the LRSP development process can lead to consensus building and leveraging of resources to move plans to actions. The report discusses differences in LRSPs, including who develops and implements the LRSP, the geographic area, and how projects are selected, to ensure the recommendations apply across the board.

The steps to successful implementation include the following:

Steps for Successful LRSP Implementation

LRSP implementation steps. (Source: FHWA)

- **Maintain buy-in and support from key officials** in the agency and those outside the agency, (e.g., elected officials). This support can be gained in meetings or briefings and presentations at board and agency meetings, and by distributing fact sheets, collecting and sharing important information on a regular basis, and bringing in other offices (such as maintenance) at the local agency that may be able to help. Part of maintaining support is to identify a champion who speaks about and promotes the plan in meetings with State and other officials. The champion can be a local agency representative or someone at the State level. For most plans, the champion is the county or city engineer or the county supervisor.
- **Identify funding mechanisms**, including requirements for State funding through the HSIP, funding through an MPO, Tribal safety funding, specialty bond programs, an Active Transportation Program, or inclusion in the county or city budget. It is also important to look at upcoming projects, such as pavement preservation, and determine if LRSP projects or strategies can be implemented through an existing project.
- **Identify and prioritize projects** based on available resources, (such as funding and staff) and whether they are proven to be effective. The report discusses various ways to identify projects through network screening and systemic safety analysis, and how to prioritize projects once they are selected. This includes data analysis on crash histories or risk factors, regional safety prioritization, and benefit-cost analysis. The ability to piggyback on projects already planned, or for policy or political reasons, is another way to prioritize projects.
- **Determine project delivery methods** once funding is secured. It usually starts with the design of a project, which can be streamlined using a design-build process, if appropriate. Other approaches include project bundling, where multiple projects of the same type are bundled together and implemented by a single agency, or where multiple agencies bundle projects to lessen the financial and management burden. The report also suggests identifying projects from the LRSP that can be implemented through routine maintenance. As such, maintenance staff should be an important stakeholder in LRSP development.
- **Evaluate effectiveness** to determine if implementing the plan had a positive impact on reducing traffic-related fatalities and serious injuries. Other ways to evaluate effectiveness include using benefit-cost analysis, seeing how many projects in the plan were implemented, and looking at the number of applications for funding that was received. Other metrics, such as the number of miles of rumble strips installed, can also be used.
- **Continue communication and coordination** to make sure all partners in the local and relevant State agencies are aware of the LRSP, and that partners, stakeholders, and the public are aware of LRSP benefits. The report discusses various ways to maintain communication and coordination, along with examples of how several local LRSPs keep stakeholders informed.

LRSPs come in many forms and can be implemented at the city, county, Tribal, or regional level. The purpose of this report is to make sure that once developed, LRSP plans make it to the next level: implementation. A plan that gets developed cannot be effective unless it is implemented. It takes hard work, determination, and the knowledge of what works to achieve the greatest benefits.

For more information, contact Rosemarie Anderson at rosemarie.anderson@dot.gov or Karen Scurry at karen.scurry@dot.gov.

Reprinted from the Federal Highway Administration's Fall 2020 issue of Safety Compass.

TEENS IN THE DRIVER SEAT LAUNCHES NEW APP TO ENCOURAGE SAFETY IN YOUNG DRIVERS

As a part of National Teen Driver Safety Week in October 2020, teen advocates of the Texas A&M Transportation Institute's (TTI's) Teens in the Driver Seat® (TDS) program launched its You in the Driver Seat (YDS) smartphone app via TTI and TDS social channels. The app encourages safer driving behaviors in young drivers aged 16 to 25.

Car crashes account for nearly one-third of all teen deaths in America each year. TDS is a peer-to-peer teen driver safety program and part of TTI's Youth Transportation Safety (YTS) Program in the Institute's Center for Transportation Safety. YTS develops and delivers the nation's most comprehensive suite of transportation safety programs and projects dedicated to saving lives and reducing injuries to America's youth. A second safe driving initiative, U in the Driver Seat — which extends TDS's strategies to encourage safer driving among college-aged drivers — is a secondary target market for the app.

The YDS app rewards teens for safe driving (defined as driving without distractions — e.g., using their phones for texting, calls, social media, etc. — or speeding). Drivers earn points for safely driven miles, redeemable for gift cards to popular venues like Amazon, Starbucks and Chick-Fil-A. Drivers also earn safe driving badges and qualify for random reward drawings based on safe driving point benchmarks.

Distracted driving is one of the most common and preventable causes of teen driving crashes. For example, texting and driving causes reaction times to double. Distracted drivers have a harder time staying in their lane and maintaining a consistent speed, often leading to a lack of control and a fatal crash. The YDS app aims to make it cool, fun and rewarding to drive without distractions. A 2018 pilot test of the YDS app demonstrated a nearly 70 percent drop in distracted driving by users.

"We're excited about having this tool in our safety program's toolbox," says TDS Director and YTS Manager Russell Henk. "Our program has embraced the strategy of rewarding positive behavior for the nearly 20 years of its existence."

TDS seeks to raise awareness of the top five driving dangers for teens — driving distracted, speeding/street racing, driving at night, low seat belt use, and driving under the influence — and prevent crashes involving young drivers. The program empowers teens to encourage one another via positive peer pressure to make smarter choices, both behind the wheel and as passengers.

The You in the Driver Seat (YDS) app is available in the Apple App Store and the Google Play Store. For more information about the YDS app and TTI's Youth Transportation Safety Program, contact Russell Henk at r-henk@tti.tamu.edu.

FHWA LAUNCHES LOCAL ROAD SAFETY PLAN (LRSP) DO-IT-YOURSELF WEBSITE

FHWA recently unveiled a unique website to help local agencies reduce serious and fatal crashes on their roadways. The LRSP DIY website includes resources local agencies and their partners need to create these lifesaving plans.

Approximately 40 percent of the Nation's fatalities occur on local roadways—an average of 12,000 deaths a year. LRSP is an FHWA Proven Safety Countermeasure that local agencies can use to effectively identify at-risk locations and deploy safety solutions. Matthew Enders, Technical Services Manager and Washington LTAP director, said developing LRSPs "has been probably the most positive experience I've had in working with safety over a couple of decades. This is something where I've seen growth and benefit for the individual local agencies."

Each page includes a Tools and Resources section with a wealth of information in the form of guides, templates, tools, tutorials, training, examples, and helpful links. Users can view and download pertinent material at the right time and place as they work through the steps of developing their LRSPs.

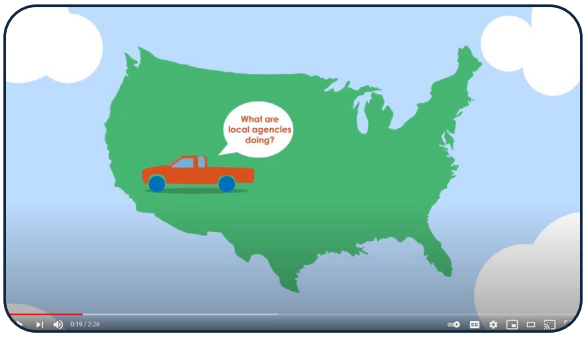
The site was officially launched October 1, 2020, during Rural Road Safety Awareness Week. The website is the first of its kind for the Office of Safety, and it has the potential to draw in new agencies and reach thousands of local agencies that have not yet embarked on this journey of getting people home safely. In just the first month, the site surpassed 17,000 page views.

Landing page of FHWA's LRSP DIY website. (Source: FHWA)

FHWA, in cooperation with the National Association of County Engineers and the National LTAP, has spent the past 5 years helping local agencies create these plans. With more than 23,000 local agencies in the country, it is impossible to deliver in-person training to all of them. In fall 2019, FHWA began developing a one-stop-shop website, with a goal to make it as personable and intuitive as possible to emulate in-person training in a virtual environment.

Each page has an introduction video that explains the primary objectives of that step. Additional videos on the right sidebar, such as Local Agency Insights, feature more than 26 practitioners sharing their experiences in developing LRSPs, which enables users to learn from their peers.

For more information on LRSPs, check out FHWA's 2.5-minute video:



For more information, contact Jerry Roche at jerry.roche@dot.gov or Hillary Isebrands at Hillary.isebrands@dot.gov.

TRAINING SUPERVISORS TO BE SAFETY CONSCIOUS:

HOW TO LEVERAGE SHIFT SUPERVISORS TO ENSURE CONSISTENT SAFETY KNOWLEDGE AMONG FRONTLINE WORKERS?

By Barb Tait, CEO, SafeStart, Belleville, Ontario

Safety departments tend to be run from the top down, especially at sizable companies. The safety director issues an update to the safety program and then, depending on the company, the new safety measure is communicated in one of two ways: It's broadcast directly from the director's office to the entire organization via a memo and a couple of posters, or it trickles down through assistant safety managers and shift supervisors, who disseminate it to workers. In my experience, the latter is far more effective.

"It's not good enough to say that we are making this change because OSHA has mandated it."

Supervisors are in an ideal position to tailor their message to their specific crew of workers and can more readily connect the issue with their specific job functions. They're also more likely to recognize when employees aren't quite getting it and can intervene accordingly. Safety directors are forced to deliver a one-size-fits-all message, while supervisors and team leaders can custom-fit the safety mandate to suit their workers. Practically speaking, employees are more likely to listen to supervisors than safety directors.

I should note that there are many cases in which, for one reason or another, safety executives will want to communicate a companywide safety issue themselves. In these instances, supervisors still have a powerful role to play in discussing the issue with workers in the following days and weeks to make sure everyone heard – and remembers – what was said.

Take the time to provide practical resources to help your supervisors help you by preparing toolbox talks and other material about the update or initiative. Give them specific recommendations on how they can support the program with their crew as part of their regular interactions. Ensure supervisors know why the change is happening, and provide compelling information about the benefits to the organization and individuals. As one of our clients recently said, "It's not good enough to say that we are making this change because OSHA has mandated it."

Organizations that have invested in training safety-conscious supervisors typically see decreased injury rates, strong culture, and positive production and operations metrics.

One important fact that companies with safety-conscious supervisors have in common: They didn't get that way by accident. Supervisory roles are ideally positioned to discuss safety issues with frontline employees, but that doesn't mean all supervisors are equal. And if you want supervisors who can effectively disseminate and reinforce safety knowledge, you'll have to train them to do the job.

There's a lot that goes into turning supervisors into strong safety advocates – way too much to cover here – but the bottom line is that you need to find a way to improve their communication skills

and baseline safety knowledge. Easier said than done. And if that's not enough, you should give them plenty of practice in pairing their new skills and knowledge in the workplace.

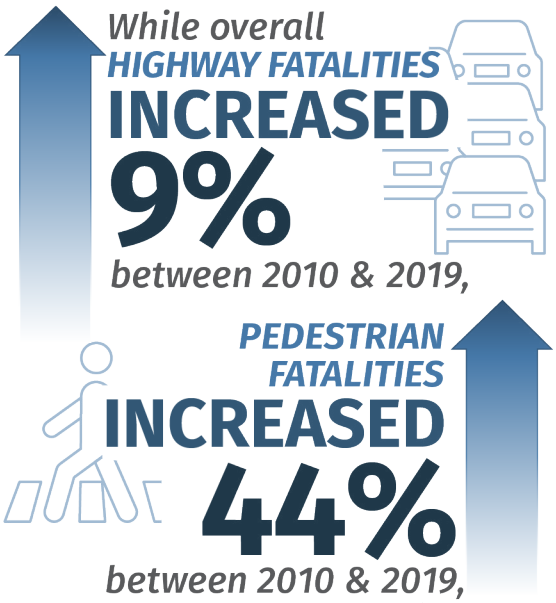
In my experience, the most efficient approach is a mix of classroom learning (e.g., delivering an overview of how to talk about safety or the ins and outs of concepts such as human factors) and on-the-job practice (spotting human factors in real time and then discussing them with workers).

If that sounds like a substantial undertaking, it's because it often is. But organizations that have invested in training safety-conscious supervisors typically see decreased injury rates, strong culture, and positive production and operations metrics – all of which lead to better business results. These companies trust their frontline leaders to be the point person for discussing safety, and their employees end up with a much higher baseline of safety knowledge.

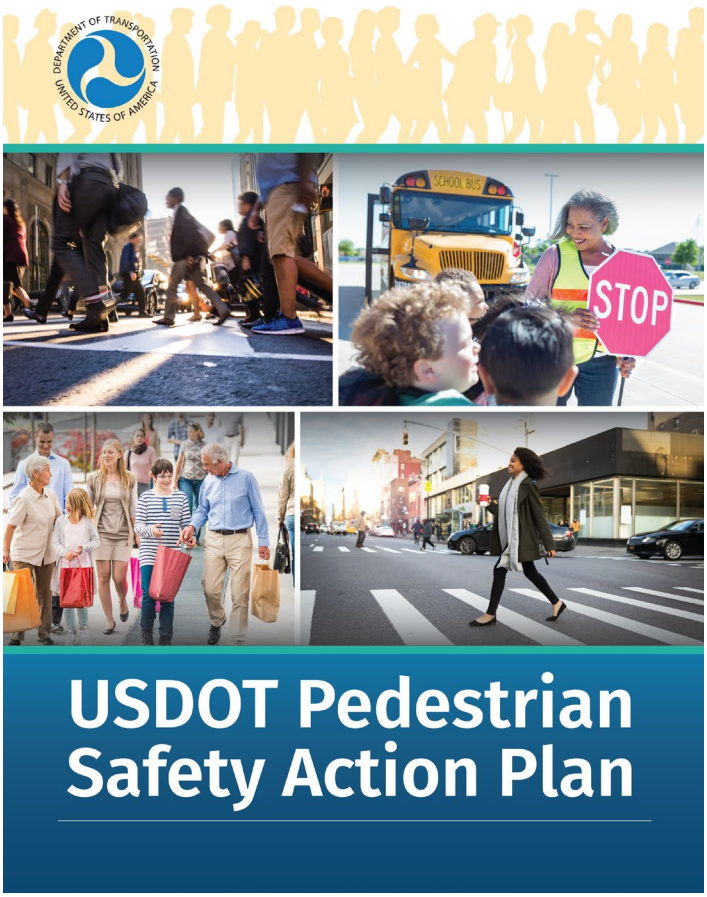
Editor's note: This article represents the independent views of the author and should not be construed as a National Safety Council endorsement.

Reprinted from Safety + Health a National Safety Council Publication.

U.S. DEPARTMENT OF TRANSPORTATION ANNOUNCES FIRST EVER COMPREHENSIVE 'PEDESTRIAN SAFETY ACTION PLAN'



Source: Fatality Analysis Reporting System (FARS) 2010 Final File, NHTSA's Preview of Motor Vehicle Traffic Fatalities in 2019



The U.S. Department of Transportation recently released the first-of-its-kind Pedestrian Safety Action Plan. The goal of the Plan is to reduce pedestrian injuries and fatalities on America's roads. It is the latest in a series of efforts by the Department to improve safety for pedestrians, bicyclists, and other road users.

"This unprecedented comprehensive safety effort is focused solely on protecting pedestrians because crossing a street should not be lethal for thousands of adults and children every year," said former U.S. Transportation Secretary Elaine L. Chao.

According to the National Highway Traffic Safety Administration's (NHTSA) Fatality Analysis Reporting System, 17 percent of all traffic fatalities in 2019 were pedestrians. In 2019—the most recent year for which data are available at the time of this publication—6,205 pedestrians were killed in traffic crashes, 44 percent more than in 2010. Pedestrian fatalities are largely a phenomenon in urban areas during dark conditions, and typically increase in the fall and winter months.

"Reducing pedestrian fatalities is a team effort that requires collaboration between federal, state and local transportation leaders," said former FHWA Administrator Nicole Nason. "We need safer roads, and this plan provides a road map to get us there."

"At some point in the day, we are all pedestrians – especially right now, when everyone wants to get outside for some fresh air," said former NHTSA Deputy Administrator James Owens. "Everyone has a role to play in ensuring pedestrian safety and this Pedestrian Safety Action Plan will help communities, drivers, and pedestrians take steps to save lives."

Former Administrator Nason made pedestrian safety a priority for FHWA and led nationwide efforts to amplify the substantial work that FHWA is doing in this area. In 2020, she started a national series of stakeholder discussions about this topic and launched "STEP UP," a Safe Transportation for Every Pedestrian campaign, to help states make roads safer for everyone.

The Department's new Pedestrian Safety Action Plan will promote the expanded use of countermeasures, technology, and data-driven practices to address pedestrian fatalities and injuries. For more information about the Pedestrian Safety Action Plan, visit the USDOT's Pedestrian Safety Summit website.

STATE OF TAKATA AIR BAG RECALLS

In January 2021, the National Highway Traffic Safety Administration (NHTSA) released the Independent Takata Monitor's fourth report on the state of the Takata air bag recalls.

In 2020, there were nearly 5 million additional repairs of defective air bag inflators, and as of December 2020, thirteen vehicle manufacturers were reporting total completion percentages of at least 70%, seven at least 80%, and one over 90%. As of January 2021, approximately 67 million inflators are under recall for nineteen affected vehicle manufacturers, of which approximately 50 million have been repaired or are otherwise accounted for. Unrepaired air bags can explode when deployed, causing serious injury or even death. Eighteen people in the United States have been killed by defective Takata air bags, and reports suggest that more than 400 have been injured.

HIGHLIGHTS OF THE 2020 UPDATE:

- Efforts continue to demonstrate that recall completion can be improved through the implementation of an enhanced comprehensive outreach strategy, including using frequent multi-channel outreach, an assortment of messages and refreshed owner data.
- Summits and working groups have fostered industry collaboration among affected vehicle manufacturers and third-party stakeholders. In September 2020, the NHTSA Independent Takata Monitor held a summit where representatives from state DMVs and local road authorities discussed future engagements. Working groups continue to promote safety collaboration between the affected vehicle manufacturers in their common areas of focus depending on evolving needs.
- State DMVs have proven to be especially valuable partners in the Takata recalls. DMV letters, with logo or emblem of the state DMV, were sent to vehicle owners identified as having an open Takata recall in 18 target states through October 2020. Incremental Takata recall repairs increased on average by 219% after DMV letter mailings.
- Manufacturers also engaged with other State and local agencies to conduct similar campaigns. A recent letter campaign using the logo of La Puente, California, resulted in incremental repairs that were 166-202% higher than the rest of California, notwithstanding the social distancing orders issued in California in early March.
- As part of a comprehensive recall acceleration strategy, many affected manufacturers have provided franchised dealers with tools such as vehicle owner contact information, outreach templates, and additional dealer incentives, and then shared these best practices for the Takata recalls, which has resulted in historically high completion percentages achieved during the course of the recalls.
- Important considerations for moving forward include the following: developing more sophisticated data-driven strategies to reach affected owners, utilizing targeted communications and overcoming owner obstacles to obtaining repairs, maximizing the potential of franchised dealers, further engaging stakeholders, and identifying and addressing high-risk vehicles.

Seventeen million inflators have yet to be repaired or otherwise accounted for. As underscored by the fact that there were two fatal incidents in 2020, it is paramount that the affected vehicle manufacturers continue to maximize the tools they have developed over the last five years and identify potential new tools and opportunities for increasing repair rates. It is only through continued focused effort that we can accelerate recall completion and work toward repairing all defective Takata air bag inflators. To check for active vehicle recalls, visit www.nhtsa.gov/recalls.

VIRTUAL 2021 LIFESAVERS NATIONAL CONFERENCE ON HIGHWAY SAFETY PRIORITIES

Lifesavers is recognized as the premiere conference to learn about the latest highway safety research, best practices, and cutting-edge initiatives; and to explore innovative technology and strategies used to combat risky driving behaviors and save lives. The Lifesavers Conference is also historically the world's largest gathering of leaders and advocates in traffic safety. Now in its 39th year, the Lifesavers Conference will take place virtually, April 26-28, 2021.

The 2021 Lifesavers National Virtual Conference will provide a global platform with over 70 virtual workshops, plenary sessions, peer exchange discussion groups, and an extensive interactive exhibit hall. The Lifesavers Conference will virtually engage federal, state and local government; law enforcement; public health; injury prevention; advocacy and non-profit agency professionals in an exchange of ideas, strategies, and programs to reduce these preventable injuries and deaths.

WHO IS ATTENDING?

Attendees represent the following groups:

- Local, tribal, state & federal highway safety officials
- Law enforcement, prosecutors & first responders
- Child safety advocates, technicians & instructors
- Private & non-profit program providers
- Victim advocates
- Auto & insurance industry leaders
- Public health professionals
- Safety & injury prevention specialists
- Students, researchers & academics
- Transportation planners & engineers

Don't miss your opportunity to participate in the latest and greatest networking opportunity in traffic safety, highlighting research to practice efforts across the country! To register for the 2021 Lifesavers National Virtual Conference, visit www.blueskyz.com/lifesavers/sgselect.asp.

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

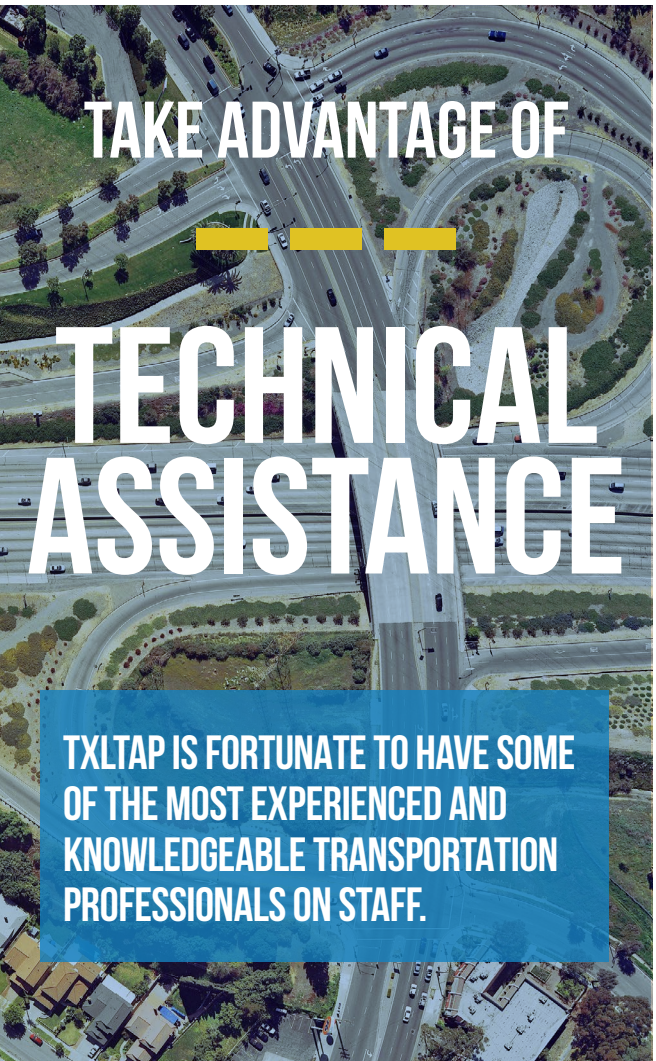
Heavy Equipment Operators are sometimes called out to assist fire fighters in wildland fire situations. Learn methods of attacking a fire, techniques of diminishing a fire with a dozer and grader, and dangerous situations to avoid.

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!

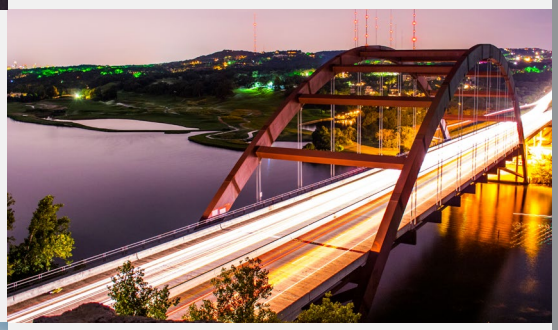
UNIVERSITY OF TEXAS ARLINGTON
140 W. Mitchell Street, Arlington, TX 76019

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