



Technology Exchange

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Heavy Equipment Safety: Get 'Er Done!

Just before Christmas and New Year festivities, LTAP conducted six classes of our "Roads Scholar #6: Heavy Equipment Safety and Maintenance for Local Agencies." Class instructor Dwight Hutchinson imparted best practices and emphasized the importance of a safety walk-around for those who work on and around heavy construction equipment.

The National Safety Council (NSC) relates that, in 2020, 48% of surveyed workers expressed "being exposed to heavy equipment operation," and 30% of them reported that "operating heavy equipment has led to serious injuries." The majority of these accidents are caused by human error, and most of them are preventable.

The class that Hutchinson teaches for LTAP's Roads Scholar Program focuses on all aspects of equipment safety and maintenance—from pre-start to shutdown inspection. It emphasizes the importance of being mentally and physically prepared to work without distractions and highlights the goal of prioritizing safety each day. "Safety is the number one goal each day, and there's no shortcut to be tolerated," he emphasizes. These thoughts set the stage for this 6-hour professional development course.

Safety Walk Around and Pre-trip Inspection Are Necessary

A safety "walk around" is required on all equipment before the shift by ANSI, equipment manufacturers, and in many cases, commercial vehicle manufacturers. However, it is important to consider what will have the most impact on the overall safety and performance of human and mechanical resources beyond the mandates. Your first inspection of the day should be a "pre-trip inspection," designated by equipment manufacturers and governing agencies. It should be designated and supported by your organization. The goal at the end of the day is to be able to go home without injury with a sense of satisfaction for your accomplishments.

As Hutchinson shares in class, "a documented pre-trip will consist of, but is not limited to, a visual inspection looking for leaks, body, glass, and other damage. It also consists of fluid checks, safety equipment, and even cleanliness, especially in the cab area of the equipment. There is no reason to have a mirror if it is not clean; ensure that all lighting and

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*Happy New Year from your
LTAP family!*

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for our current classes,
training requests,
free resources,
and much more.

Training: Value Given, Value Gained

By Steven Strength, PE, PTOE, LTAP Director



Many of us in the 58 LTAP/TTAP centers around the country hear local road supervisors and managers make the complaint, “If I train my employees to learn skills to do their jobs better, they will end up leaving.” To which my counterpart from another state responds, “And what if you don’t train them, and they end up staying?” As stewards of the public trust, supervisors have an obligation to train their employees in both the basics and best practices of their work as well as new and innovative methods to achieve results in the safest and most cost-effective manner. Engineering organizations, in particular, have an ethical obligation to provide continuing education to their employees because of the impact that their work has on the health and safety of the public, not just their own employees. So, in order to set a positive tone for the New Year, here are a few steps you might consider to reinvigorate your employee training:

- 1. Take advantage of LTAP’s low-cost classes.** Our program exists to provide training in relevant technical subjects to local agencies that don’t have the resources to develop or sponsor their own training. Keep an eye on scheduled classes, sign your people up, and make sure they attend. The benefit your people gain will be directly proportional to the investment you make in encouraging them. While you’re at it, consider attending these classes yourself to show your employees that continually furthering their skills and knowledge is actually part of the job!
- 2. Discuss the need and value of training with your elected and appointed leadership.** Remind them that on-the-job training, while also important, will not elevate the skills of your agency above the status quo, and everyone needs the opportunity to “refocus” and re-learn lessons that have become stale or even lost their effectiveness over time by getting back in the classroom. If you have new leadership in your jurisdiction, invite those new elected officials to one of our classes. The Roads Scholar #1 “Basics of a Good Road” class being presented this winter is an ideal opportunity for laypersons to learn about the world of roads and why it is so important to invest in maintaining and operating them efficiently. I have had the opportunity to talk with mayors and other leaders who have taken the time to show up, and invariably they become advocates of getting their employees the training and other support that they need.
- 3. Consider getting your employees involved in some of the more specialized online training opportunities offered through LTAP’s partnerships with FHWA, AASHTO, ITE, and from other state LTAP centers.** These programs are offered free to local agency employees and many are tailored to fit the busy schedules of public works and transportation employees. They are designed to augment the lessons learned from our classroom training and will promote the value of continuing to improve themselves as they grow their responsibilities.

My experience working with LTAP and during decades in transportation taking advantage of LTAP training myself, has convinced me that this is an opportunity to make a difference with your agency and provide our citizens with the best return on their tax dollars. We hope to see you on the road in 2024. Happy New Year, and stay safe out there!

EMERGENCY PREPAREDNESS

Surviving Winter Weather? GOHSEP and NWS Have Tips for You!

In Louisiana, the most impactful type of severe winter situation is an ice storm. Freezing temperatures and heavy precipitation are expected, usually in a form of rain, freezing rain, or sleet. One can say that the Pelican State is far less likely to experience heavy snow and ice compared to most of northern states, but ice storms or winter storms can still be expected to occur at least once every winter.

The National Weather Service (NWS) refers to winter storms as the “deceptive killers” because most deaths are indirectly related to the storm. Instead, people die in traffic accidents on icy roads and from hypothermia due to prolonged exposure to the cold. It is important to be prepared for winter weather before it strikes.

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Equipment safety

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safety equipment is functioning. Fire extinguishers are required. Most fires start small, and a properly used fire extinguisher can prevent the loss of equipment, life, and injury. This may seem as though it will take a lot of time. If this has not been a priority, the first few times may take a little longer than you would like. However, the dividends will come quickly. Proper inspections, minor repairs, and adjustments will result in less down time, higher productivity, and greater efficiency for the team.

It is also necessary to do a “walk around” of the equipment after it is unloaded on the job site. This will ensure nothing was damaged during loading, transportation, and unloading of the equipment.

“No one wants to realize that they resumed operation after their lunch break and a small child was under their excavator retrieving a ball. It would be a life-changing event,” says Hutchinson, who previously worked as Supervisor of the Louisiana DOTD’s Heavy Equipment Shop from 2016 until his retirement in 2021.

Pre-planning of Job Site

Proper pre-planning of a job site should be utilized to ensure the proper equipment and personnel are dispatched to the job site.

You should be able to discuss the steps and identify all safety hazards or obstacles. Upset neighbors or bad dog nearby, perhaps? It could be anything, such as surrounding utilities, traffic situation, and equipment flow. You should be able to identify who is operating what equipment and where the loading and unloading of equipment will take place. You should be able to answer the following questions:

- *What are your goals in today’s work?*
- *What do you need to do? For instance, clean 200 ft. of ditch and replace 30-ft. culvert.*
- *Who is operating what equipment? In other words, who does what?*
- *Where will you load and unload the equipment?*

From Setup to Shutdown

To be safe and efficient at a job site, you have to set up all equipment in a manner that not only reduces blind spots but also avoids hazards. You must ensure that adequate work area protection is available. At a job site, you have to ensure that work zone traffic control is properly set up, based on the type of closure, roadway, speed limit, etc., and in accordance with the *Manual on Uniform Traffic Control Devices (MUTCD)*.

“Blind spots are a killer! You have to be aware that some attachments and tools can create blind spots. There is also a swing radius that can increase the risk of being struck or pinned down. Address those,” Hutchinson emphasizes when discussing job site hazard assessment.

Getting the job done means performing the assigned tasks and following all functions safely and efficiently. It is wise to constantly use your senses: see, hear, smell, and feel. As a safety precaution, be aware of your surroundings. If something goes wrong, do not ignore it. When performing the actual job, it’s best to keep unnecessary noise to a minimum. In other words, do not “horse play.” Everyone involved in the job must constantly monitor the work site and the equipment.

End-of-day shutdown requires you to once again complete a visual walk around the equipment and lubricate the equipment at the proper time. When performing the actual job, it’s best to keep unnecessary noise to a minimum.



Acadiana Planning Commission receives national award for reducing severe crashes at rural “T” intersections

Every year, the Roadway Safety Foundation (RSF), in partnership with FHWA, conducts the National Roadway Safety Awards in Washington DC, and this year, the Acadiana Planning Commission (APC) in Louisiana tips the award-winning scale as one of the awardees.

The APC was awarded for efforts in significantly reducing fatal and serious injury crashes at rural “T” intersections by installing larger stop signs and rumble strips to alert distracted drivers.

Road safety practitioners relate that collisions at rural “T” intersections are often severe because motorists who fail to stop at the top of the “T” end up driving off the road and often into a tree, fence, ditch, or other hazard. In the Acadiana region, local data indicate that many of these crashes involve driver distraction, including cell phone use.

“It’s a huge problem. We’re seeing more and more of it,” said Ashley Moran, a senior planner at APC who traveled to Washington DC to receive the award on the agency’s behalf.

In response to this issue, the Louisiana Department of Transportation and Development (DOTD) installed new rumble strips at 18 intersections that were identified by a commission analysis as being at high risk for these crash types. New flashing beacons, signs warning of “stop ahead,” and larger stop signs on both sides of the roadway also serve to alert potentially distracted drivers as they approach the “T” intersection, thus decreasing their stopping distance.

Before the safety improvements, the 18 intersections had a total 89 crashes involving vehicles that ran the stop sign and went off the road. After the improvements, between 2020 and 2022, that number of crashes plummeted to eight, even as collisions across the state increased during the pandemic. Eleven of the 18 intersections had no collisions of that type.

“These are really easy and effective ways to address the problem,” Moran said.

The APC serves the parishes of Acadia, Evangeline, Iberia, Lafayette, St. Landry, St. Martin, and Vermillion.

Proactive + Data-Driven + Collaborative

First-half 2023 fatalities in Louisiana fell farther: An estimated 375 people died, which is down 12.3 percent from the same time frame in 2022, according to the National Highway Traffic Safety Administration’s (NHTSA) preliminary data.

The continued high fatality numbers demonstrate the value of safety innovations like APC’s “T” intersection improvements and the 11 other projects from across the nation.

“The problem-solving creativity and dedication shown by the Acadiana Planning Commission will save countless lives using a data-driven approach and practices that are proven to reduce crashes,” said Federal Highway Administrator Shailen Bhatt. “It demonstrates a strong commitment to moving Louisiana toward zero deaths and serious injuries on the state’s roadways, and we are proud to applaud their efforts.”

“The stubbornly elevated fatality numbers underscore the urgent need for innovations like the National Roadway Safety Award honorees’ projects,” said RSF Executive Director Bruce Hamilton. “With several initiatives already showing major reductions in fatalities, injuries, and crashes, today’s honorees are shining a bright light on the path to safer travel.”

The National Roadway Safety Awards have been presented biannually since 1999. Projects are evaluated on safety effectiveness, innovation, and efficient use of resources. For a list of winners and details on their projects, visit <https://www.roadwaysafety.org/awards>.



Acadiana Planning Commission's Senior Planner Ashley Moran poses with Federal Highway Administrator Shailen Bhatt

Leadership Spotlight: David Worsham, Safe Routes to Public Places Program Manager

By Rudynah Entera Capone, MPA



Toward the end of 2023, LTAP hosted an informational webinar for the Louisiana DOTD's Safe Routes to Public Places Program's (SRTPPP) Call for Projects. What perfect timing to have David Worsham, the SRTPPP manager, as our featured leader in this edition.

Worsham has been employed by DOTD since 2015. He has worked in Traffic Services and the Highway Safety Section within DOTD. Before joining the Department, David worked for Barriere Construction in their asphalt paving division and served in the U.S. Army for 4 years. He is currently serving in the Louisiana National Guard.

How would you define leadership?

Leadership is organizing, motivating, and managing a group of people to accomplish a common goal.

Share with us some of your professional highlights that helped you develop your leadership skills.

I was previously with the DOTD's Traffic Services where I managed 42 employees responsible for maintenance and operations of traffic signals. Just recently, I transferred to DOTD's Highway Safety Section to manage the Safe Routes to Public Places Program (SRTPPP) and Local Road Safety Program (LRSP). Prior to that, I served in the U.S. Army and am currently in the Louisiana National Guard, where I have held various leadership positions.

If you were to pinpoint three traits that a leader should possess to be effective in leading teams, what would they be?

First, a leader must be compassionate. View your employees as people; show that you truly care about their well-being. A small accommodation for someone can pay dividends in the future. Secondly, a leader must be trustworthy. Be honest with your employees, do the things you say you will, always keep their best interests at heart, and support and protect them through successes and mistakes. As a subordinate, I have performed best

when I trusted the actions and intentions of my supervisors and knew that they had my back no matter what. This allowed me to grow, learn from my mistakes, and ultimately succeed.

Lastly, a leader must be motivating. Understand your employees—what they like, dislike, what they're good at, and areas they could continue to grow in. Put effort into engaging their highest potential and learn how to empower them.

How do your colleagues view your leadership style as?

My leadership style is quieter than some. I'm not a boisterous or loud person, but I have had my best results through leading by example. I don't ask someone to perform a task I'm not willing to do myself. I've also learned to set the example of what I expect from my employees by personally performing and behaving to the same expectations.

In any of your past and present leadership roles, what has been the most challenging task you've had to overcome?

My most difficult leadership challenge has been to reshape an organizational culture to be more productive and efficient. One team I've led had a long history of tasks being performed in certain ways, sometimes outdated, and overall work quality being inconsistent amongst employees. When I took over as manager, I visited and observed as much of the process as I could and got to know my employees. I learned their strengths, weaknesses, and most importantly, their ideas and self-assessments. After about 6 months, I identified areas I thought could be improved and then developed a plan with short-term and long-term goals. The process wasn't quick and took a number of years, but when I eventually left that position, the section was consistently producing higher quality products at a faster rate.

Who do you see as your model leader?

I don't have a specific model leader. I've tried to learn something from every supervisor I've had. From positive experiences, I try to emulate the traits that I found supportive, and in negative experiences, I strive to be the leader I wish I had.

Winter tips

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To get you prepared for winter storms, the NWS and Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP) have these tips for you:

1. Always check the forecast for the latest weather.
2. Have a winter survival kit in your car and home at all times.
 - *Survival kits may include warm clothes, blanket, food, water, medication, flashlight, first aid kit, cellphone, and a charger.*
3. Cold temperatures can cause frostbite or hypothermia, so it's always wise to layer clothing and wear thick jackets, especially if you have to walk from the parking lot to your work station.
4. Before winter approaches, add the following supplies to your **emergency kit**:
 - *Rock salt or more environmentally safe products to melt ice on walkways.*
 - *Sand to improve traction.*
 - *Snow shovels and other snow removal equipment.*
 - *Sufficient heating fuel. You may become isolated in your home, and regular fuel sources may be cut off. Store a good supply of dry, seasoned wood for your fireplace or wood-burning stove.*
 - *Adequate clothing and blankets to keep you warm.*
5. Minimize travel. If travel is necessary, keep a disaster supplies kit in your vehicle.
6. Bring pets/companion animals inside during winter weather. Move other animals or livestock to sheltered areas with non-frozen drinking water.
7. Walk carefully on snowy, icy walkways.
8. Never use a generator, grill, camp stove, or other gasoline, propane, natural gas, or charcoal-burning devices inside a home, garage, basement, crawlspace, or any partially enclosed area. Locate unit away from doors, windows, and vents that could allow carbon monoxide to come indoors.



New Hampshire shares a tool to help track winter storm response

It is wintertime, so this new "Storm Response Tracker Spreadsheet" resource that the University of New Hampshire (UNH) Technology Transfer Center released in beta test mode on December 4, 2023, could not have come at a more perfect time. This resource is designed to help small agencies track product cost and usage, labor costs, and other storm data for winter operations.

The tool comes as an Excel workbook that allows users to easily capture and save winter storm data including precipitation, temperature, material and labor costs, material usage, and more. With minimum setup, you can customize the spreadsheet to your municipality.

If you are interested in accessing this tool, you can complete a form available at <https://t2.unh.edu/stormtracker>. If you have any questions or ideas to further develop the final product, you can email T2.Center@unh.edu.



Down to the Core!

LTAP delivered the last round of the Local Public Agency (LPA) class series of 2023, with a two-day class on Core Qualifications Training and a one-day class on Construction, Engineering, and Inspection (CE&I). The intent of these courses was to ensure that local agency personnel understand the different aspects of project delivery—from grant application phase all the way to project close-out.



Is it Retroreflective? Then, Your Road Has Better Signing

What better way to gauge how compliant and retroreflective road signs are than to examine their sheeting types and examples. The participants of our “Roads Scholar #9: The Road to Better Signing” classes did just that during the last quarter of 2023.



Safety, First and Foremost!

One of LTAP’s core areas is worker safety, so LTAP hit the ground running for our series of six classes entitled “Roads Scholar #6: Heavy Equipment Safety and Maintenance.” Class instructor Dwight Hutchinson conducted a safety walk-around, which is an essential start to each work shift before operating any heavy equipment.



Upcoming LTAP training

Register at louisianaltap.org/training.html

<p>January 30 to April 18, 2024</p>  <p>Roads Scholar #1: Basics of a Good Road</p>	<p>May 14 to June 13, 2024</p>  <p>Roads Scholar #3: Drainage: The Key to Roads That Last</p>	<p>March 2024</p>  <p>Chainsaw Safety</p>
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The purpose of the Local Technical Assistance Program is to provide technical materials, information, and training to help local government agencies in Louisiana maintain and improve their roads and bridges in a cost-effective manner. To accomplish this purpose, we publish a quarterly newsletter; conduct seminars, workshops, and mini-workshops covering various aspects of road and transportation issues; provide a lending library service of audio/visual programs; provide technical assistance through phone and mail-in requests relating to transportation technology; and undertake special projects of interest to municipalities in Louisiana.