



# Technology Exchange

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FALL 2021



## Current Offering of "Roads Scholar #13: Inspection of Local Bridges"

By Chris Melson

There are nearly 13,000 bridges in Louisiana, of which 7,853 are state-owned and 4,772 are locally owned (2019 NBI data). Bridge inspection is critical in maintaining key infrastructure and ensuring safety of the traveling public and is a vital function of any bridge management program. In May 2020, the Louisiana Department of Transportation and Development (DOTD) developed the *Bridge Inspection Manual* specifying the organization, administration, and operational procedures of the state's bridge inspection program. The manual replaces the previous 13 DOTD maintenance directives and the DOTD Off-System Bridge Guidelines. It defines the responsibilities of local bridge owners and the DOTD processes to be followed. This includes the requirement of local bridge owners performing special inspections (as warranted) to monitor known or suspected deficiencies. These inspections do not require a certified inspector, but according to the *AASHTO Manual For Bridge Evaluation*, should be conducted by a "qualified person familiar with the bridge" who has been provided with the "guidelines and procedures on what to observe and measure."

cont. on pg. 6

ABOVE: Kent Hardin demonstrating the proper method for performing a streambed profile (at previous course offering).

RIGHT: Main St. and Martin Luther King Blvd. in Houma (Photo by DOTD)

## FHWA/FEMA Provides Federal Reimbursement for Eligible Routes Damaged by Hurricane Ida



Local public agencies may qualify for funding for any potential reimbursable damages sustained after Hurricane Ida. Agencies are advised to document damages and confirm whether the eligible damaged site qualifies for FHWA or FEMA funding so the appropriate source can be pursued.

If you have any eligible damages based on the "Eligibility Maps" prepared by DOTD and FHWA, you will need to coordinate with the DOTD staff to receive reimbursement. Email [Kevin.Reed@la.gov](mailto:Kevin.Reed@la.gov) or call 225-379-1916 for further assistance or questions.

- Check out DOTD's Emergency Relief Funding Eligibility Maps at [www.sp.dotd.la.gov/Inside\\_LaDOTD/Divisions/Multimodal/Data\\_Collection/Mapping/Pages/Maps\\_Emergency\\_Relief\\_Funding\\_Eligibility\\_Maps.aspx](http://www.sp.dotd.la.gov/Inside_LaDOTD/Divisions/Multimodal/Data_Collection/Mapping/Pages/Maps_Emergency_Relief_Funding_Eligibility_Maps.aspx)
- Apply for FEMA Assistance on <https://gohsep.la.gov/GRANTS-INDEX/DISASTER-RELATED-GRANTS/FEMA-PA>
- Check out LTAP's Recorded Webinar on Disaster Safety Training and Resources on Emergency Preparedness here: <https://www.ltrc.lsu.edu/ltap/emergency-preparedness.html>

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Visit [www.louisianaltap.org](http://www.louisianaltap.org) for our current classes, training requests, free resources, and much more...

## Planning Ahead—Subject to Change

By Steven Strength



Fall is marked by planning at LTAP, including preparation of our Annual Work Plan for approval by FHWA, finalizing a calendar for the year, and performance planning sessions for staff. We are embarking on an ambitious training schedule this month, made more challenging by the postponement of classes and technical assistance in the wake of COVID shutdowns and extreme weather events.

Details on all our upcoming activities can be found elsewhere in this newsletter.

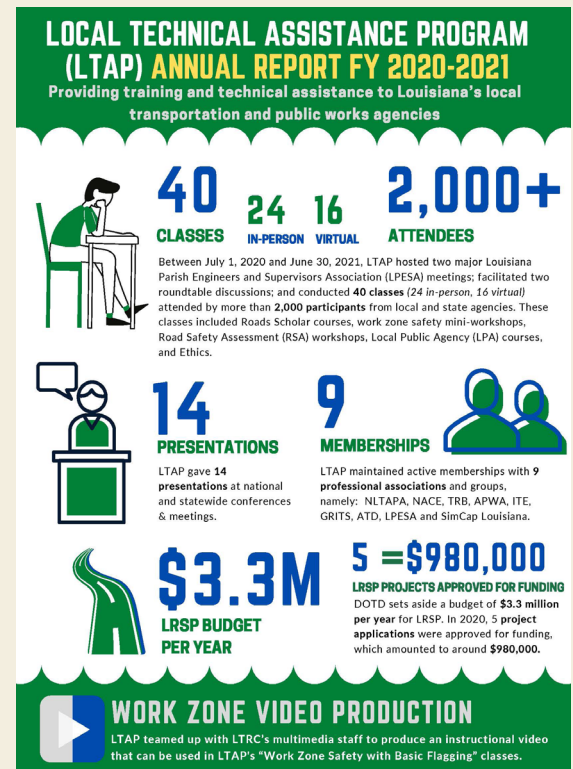
We actually talk a lot about planning throughout the year, and encourage local agencies to create plans of their own. The Strategic Highway Safety Plan process, Local Road Safety Plans, and Pavement Management Plans are examples that can set a course for your agency and help transcend the challenges of budgetary and political cycles. Our LTAP website contains tools and resources on plans for managing your systems to improve productivity and service to your customers.

So what gives with all this planning? Chances are pretty good that you have a written plan or two gathering dust on your shelf. Is the creation of plans an exercise in futility, especially in transportation and public works, where priorities are constantly changing and crisis management seems to be the order of the day? Some of the greatest military minds have cast doubt on the value of fixed plans. Helmuth von Moltke (1800-1891), chief of the Prussian army, famously said, “No plan of operations extends with certainty beyond the first encounter with the enemy’s main strength.” Such sentiments were echoed by Winston Churchill and Dwight D. Eisenhower, architects of the master plan for Operation Overlord during World War II.

Upon closer examination, we find an important difference between creating plans and what careful planning provides for—that is, defining options for adapting one’s strategies to new or unanticipated circumstances as situations develop. While many things went wrong on D-Day, the ability of Allied leaders

# LTAP Annual Report: 2,000 People in 40 Classes During 2020-21

Despite the challenges brought by COVID-19, LTAP has gone above and beyond in order to deliver both virtual and in-person training to local public agencies and partner organizations across Louisiana. From June 30, 2020, to July 31, 2021, LTAP was able to reach approximately 2,000 people in 40 classes conducted. View our LTAP 2020-2021 Annual Report document on [www.louisianaltap.org](http://www.louisianaltap.org).



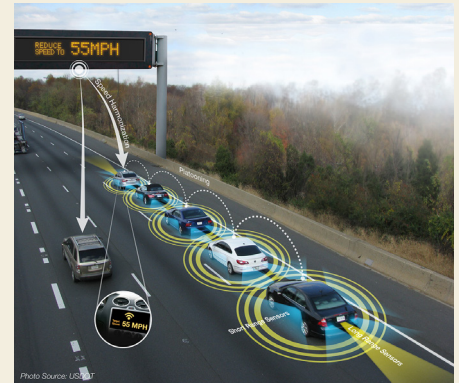
to adapt and execute their options led to ultimate success. The ability to delegate decision-making and maintain effective communication up and down the chain of command as plans became reality were keys to that success. These same talents for flexibility and adaptability are what make local agencies so effective in meeting the needs of their communities during disasters, not to mention day-to-day operations. We here at LTAP salute your commitment to service to your communities, and the innovative ways you have found to adapt your plans to meet the numerous challenges of recent months. We look forward to seeing everyone on the road this fall and to continue learning from each other’s experiences!

## COVID-19 Impacts to Local Transportation Agency Operations: Survey Results

LTAP conducted a study to collect and identify common challenges that local public works and transportation agencies faced during the COVID-19 pandemic and recovery. The effort included: (1) a review of existing literature, (2) dissemination of an electronic survey to local Louisiana agencies, and (3) one-on-one interviews with select Louisiana agencies. LTAP recently completed the study and summarized results in a brief white paper, which can be accessed at [www.louisianaltap.org/pdf/COVID\\_Impacts\\_White\\_Paper.pdf](http://www.louisianaltap.org/pdf/COVID_Impacts_White_Paper.pdf). The paper lists the most common challenges [refer to the table below], results of the survey (identifying the main difficulties faced by the surveyed agencies and their distribution), actions taken by surveyed agencies in response to budget cuts, and 17 key findings. LTAP would like to thank the 42 agencies who completed the survey. Future extensions of this work will include summarizing how these challenges were overcome, the main lessons learned, and recommendations for better preparedness in the future.

ID	Challenge	Main Difficulties
1	STAFFING: maintaining a consistent, sizeable workforce	<ul style="list-style-type: none"> <li>Determining which staff were “essential”</li> <li>Modifying schedules to limit in-person interaction</li> <li>Overcoming periods of staff absences due to quarantines, sickness, or caring for family</li> <li>Inability to hire staff (due to hiring freezes, competition with unemployment benefits, etc.)</li> </ul>
2	PROCEDURAL: implementing new safety (or other) protocols	<ul style="list-style-type: none"> <li>Developing new safety protocols</li> <li>Understanding constantly changing protocols</li> <li>Effectively communicating protocols to staff (and providing appropriate training)</li> <li>Ensuring protocols were followed</li> </ul>
3	ACQUISITION: obtaining personal protective equipment (PPE) or other materials required for operation	<ul style="list-style-type: none"> <li>Understanding what PPE was necessary to protect staff</li> <li>Understanding how to (and the responsible party to) acquire PPE</li> <li>Having available funds to purchase PPE</li> <li>Acquiring other material required for typical operation</li> </ul>
4	BUDGET MODIFICATIONS: eliminating or modifying services due to anticipated (or actual) budget cuts	<ul style="list-style-type: none"> <li>Imposing a hiring freeze</li> <li>Suspending salary increases</li> <li>Eliminating staff positions</li> <li>Deferring routine recurring work</li> <li>Eliminating (or significantly reducing) provided services</li> <li>Suspending services</li> <li>Delaying planned contracts/projects</li> </ul>
5	RELIEF FUNDING: acquiring relief funding	

## Recently Completed Study Supporting Connected and Automated Vehicle (CAV) Efforts in Louisiana



LTAP Program Manager, Chris Melson, served as the principal investigator for a research study that involved several efforts supporting connected and automated vehicle (CAV) preparatory actions in Louisiana. The study primarily (1) conducted a stakeholder survey to inform engagement activities to develop strategic partnerships in CAV deployment, and (2) conducted crash analyses for deployment scenarios of CAV-based queue warning systems (QWSs). The crash analysis was conducted at four proposed locations across Louisiana to determine QWS suitability. The research report was finalized in May 2021 and is now accessible via the following link: <https://bit.ly/3zsedKG>. Please contact Chris ([Christopher.Melson@la.gov](mailto:Christopher.Melson@la.gov)) if you are interested in learning more about the study.

As a reminder, LTAP prepared a curated list of resources to assist local agencies in preparing for CAV technology at the following: [www.louisianaltap.org/cav.html](http://www.louisianaltap.org/cav.html). The collection is not meant to be exhaustive, but to provide key resources to initially inform and assist local agencies in their own preparatory efforts. The list will continually be updated.

## Allen Wainwright: Public Works Director, Calcasieu Parish Police Jury

By Rudynah Entera Capone

In this edition of *Technology Exchange*, LTAP is proud to feature Allen Wainwright, the public works director of Calcasieu Parish Police Jury. He has been in the industry for 30 years, as far back as when he started as an engineer in training for East Baton Rouge City/Parish from 1993 to 1997, right after finishing his bachelor's degree in civil engineering at LSU.

Wainwright relates how he's been blessed to work with teams who have all inspired and shaped him as a leader. "Leading is not a single event that starts and ends quickly. Rather, it is a characteristic of a person who latches onto something and has the will to get to the finish line along with team efforts," he shares.

In his career, he has earned the National Animals Services of the Year Award and accomplished a few milestones such as: (1) creating two new Solid Waste Center that serves the entire Calcasieu Parish; (2) moving drainage infrastructure, master planning and flood prevention at the forefront of parish priorities; (3) creating one of Louisiana's most robust rain and stage gauging alert systems for drainage laterals; and (4) serving as a leader in the recovery efforts for hurricanes Rita, Ike, Laura and Delta.

### What is your definition of leadership?

Leadership is an all-encompassing role. Leaders provide the vision, motivation, and path forward while performing with passion and commitment to get projects done. Great leadership does not come with rank; rank should be the result of proven leadership.

### What must a leader possess to be effective in leading teams?

I would say leaders should have humility, passion, and knowledge. With humility, a leader naturally builds the team's morale, commitment, and confidence. You must be able to show vulnerability and oneness with the team without fear of losing the leadership role. With passion, we always have our radar up seeking ways to improve the team's strengths and leverage capabilities toward the same goal. Passionate leaders focus on bridging the gaps in morale, commitment, and confidence when lost. With knowledge, leaders are much more effective in carrying upon any initiatives compared to those who only have cursory understanding of the subject matter. Knowledgeable leaders lead with sheer authenticity and they are not easily swayed by false data.

### What is your leadership style?

I believe in treating my team as an extension of my family. I

want the best for them and the best out of them. I am quick to praise and quick to correct. I enjoy their highs, and I hurt when they are low. I maintain a very open and frank dialogue with all members of the team anywhere and anytime. I don't wait; I like to address things on the spot. You will always know where I stand on any issue.

### Engineering is a technical field. Do you think technical knowledge is key to being a great leader?

I am a civil engineer, and the technical knowledge has helped me tremendously as it has made a difference in my success in so many occasions. However, technical knowledge alone is almost always a recipe for failure. Leaders must have all the other skills to be successful in any leadership roles.

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

The worst days are when accidents happen and people get hurt. When one of our employees was lost due to a vehicle running into a work zone, it was the worst day of my career. It was very hard on our department and the overall morale. All you can do after that type of loss is to hurt and heal—like a family. We committed to learning, improving, and staying passionate about avoiding any more days like that.

### Who is your model leader?

Beyond my dad and mom, I would say my bosses have been my model leaders. All three of them have shaped me and have had the most influence on me.

First, Fred Raiford, transportation and drainage director for EBR, inspired me to become a public works director. He had great passion and confidence in his role.

Second, Bryan Harmon, the chief engineer for EBR, who used to be the drainage engineer while I was there. He had an unbelievable work ethic, and he truly instilled in me some passion and knowledge for all things drainage. Up to this day, he



## Want To Apply for Local Road Safety Project Funding? A New Pre-App Step is in Place

By Leo Marretta

A new pre-application form is now available for local road owners seeking funding through the Local Road Safety Program (LRSP - [www.louisianaltap.org/local-road-safety.html](http://www.louisianaltap.org/local-road-safety.html)).

While not an LRSP application, the pre-application stage is the new starting point in the LRSP project application process. Parishes, municipalities, or tribal agencies can request LRSP staff to conduct a preliminary safety review of problematic roadways or intersections within their jurisdiction with these simple pre-application forms.

This safety review examines crash data and physical features of the roadway. It is a starting point for conversations between the road owner and LRSP staff. As correctible safety issues are explored, low-cost, highly effective countermeasures will be considered.

The pre-application process allows for the applicant to understand the LRSP requirements, process, and timeframe before investing time and effort in filing a more detailed, formal LRSP project application. The pre-app form, one for intersections and one for roadways, can be found here:

- [www.louisianaltap.org/pdf/LRSPPre-ApplicationForm-Intersections.pdf](http://www.louisianaltap.org/pdf/LRSPPre-ApplicationForm-Intersections.pdf)
- [www.louisianaltap.org/pdf/LRSPPre-ApplicationForm-Roadways.pdf](http://www.louisianaltap.org/pdf/LRSPPre-ApplicationForm-Roadways.pdf)

There is no formal application cycle as the LRSP selection team accepts the pre-app at any time to begin the process. The annual statewide LRSP project budget is \$3-5 million annually. Projects that cost over \$500,000 require an additional benefit-cost analysis along with the formal application.

## LTAP Congratulates DOTD's Dan Magri on His Retirement!



Magri has been a big supporter of LTAP's implementation of the Local Road Safety Program, Road Safety Assessments, Local Road Safety Plans, and other highway safety initiatives in collaboration with local public agencies and the nine regional safety coalitions established to implement the state's Strategic Highway Safety Plan and the goal of Destination Zero Deaths.

He has 37 years of state service, with 28 years served at DOTD where he held prior positions as the assistant public hearings and environmental impact engineer, highway safety engineer, highway safety administrator, and lastly as deputy assistant secretary for the Office of Planning. Dan is a member of the Institute of Transportation Engineers (ITE), American Society of Civil Engineers and served as the past president of the Association of Transportation Safety Information Professionals (ATSIP). He is a past recipient of the Charles E. Dunbar Award, the highest honor a classified Louisiana state employee can receive for their service; the ATSIP Distinguished Achievement Award; and the Deep South ITE President's Award.

### Leadership Spotlight *cont. from page 4*

is the most knowledgeable engineer I've known.

Lastly, I give credit to Claude Smart, retired parish engineer for Calcasieu. He's the one who really paved me the path towards becoming a public works director. He's good at gauging people's strengths and weaknesses. Somehow, he knew what I wanted to be and where I could help the most. Claude played college football on great teams; hence, he served as a great team-builder. He treated everyone like family, and I have followed the same approach throughout my career.

## Go LTAP, Stars On The Map!



At every conference where LTAP exhibits, the usual drill is to have booth visitors locate their town on the Louisiana map, mark it with a star, and speak with the LTAP team. At this year's Louisiana

Municipal Association (LMA) Convention, LTAP engaged with local stakeholders from 63 municipalities or towns (based on the number of stars on the map, of course!).

## Back On the Road with LTAP!

LTAP continues offering more in-person classes! The left photo shows the most recent Work Zone Safety with Basic Flagging mini-workshops held in Florida Parishes Arena in Amite City, with a total of 48 participants. The right photo shows the first of the series of "Roads Scholar 5B: Creating a Safe Work Environment" classes in Bossier City taught by Retired Brigadier General Roger Shields.



## Partner in Action Arbor Master's Disaster Response Team Helps with Cleanup Efforts in Hammond

In the aftermath of Hurricane Ida, one of LTAP's partners, Arbor Master, sent their Oregon Disaster Response Team all the way to Hammond to help with recovery efforts.

Arbor Master is the company that our chainsaw safety class instructor Rip Tompkins is affiliated with. The team's primary goal is to help the areas that have experienced widespread tree damage from weather-related events such as Ida. Stationed off of US 51 at 1000 Roma Avenue, the mobile team members were out providing services for chainsaws: from sharpening, to replacing the chain, to addressing other issues with guide bar and sprocket, they got it covered! The trailer was stocked with chains, bars, sprockets, and maintenance tools.

LTAP's chainsaw safety classes are offered this October! Visit [www.ltrc.lsu.edu/ltap/training.html](http://www.ltrc.lsu.edu/ltap/training.html) to learn more.



Photo by Paul Hendricks

## Current Offering of "Roads Scholar #13" *cont. from page 1*

LTAP is currently offering our Roads Scholar #13: Inspection of Local Bridges course – which provides the basic training for local agency personnel to perform these special inspections and document findings in accordance with the *DOTD Bridge Inspection Manual*. LTAP has worked closely with the DOTD Bridge and Facilities Maintenance Section to ensure the class reflects the requirements of DOTD's compliance program. The course instructor is Kent Hardin, a certified bridge inspection team leader that brings decades of DOTD bridge inspection experience—both as a DOTD bridge inspector and statewide DOTD bridge inspection QA/QC staff member. The course comprises two parts: Part 1—a virtual class over the fundamentals of the National Bridge Inspection Standards (NBIS), bridge components and elements, mechanics and materials, and inspection procedures; Part 2—an in-person class with a field visit to a locally owned bridge for a guided, hands-on inspection. Participants must complete both parts to receive full Roads Scholar and/or DOTD Structured Training Program credit. For more details, visit the "Training" section of our website, [www.louisianaltap.org](http://www.louisianaltap.org).

It takes everyone (intergovernmental agencies, the bridge engineering community, and bridge owners) to produce a successful and consistent bridge management program. If you have taken Part 1—don't hesitate to sign up for Part 2 today!

## LTAP Classes

### Chainsaw Safety, Precision Felling and Maintenance: 10/5-14

All attendees must bring their hard hats, as well as eye and ear protection to the program. The class will be offered at eight locations. \*Baker Class on 10/11 is now at maximum capacity. Email [Courtney.Dupre@la.gov](mailto:Courtney.Dupre@la.gov) to be put on the waitlist.



### Roads Scholar #13: Inspection of Local Bridges (Part 2): 10/26-12/16

You must have completed *Part 1 Virtual Class* (either on June 22-24, 2021, or September 28-30, 2021) to be eligible to attend the *Part 2 In-Person Class*.

To view a full list of classes, visit the “Training” section of our website, [www.louisianaltap.org](http://www.louisianaltap.org).

## Conferences and PDH Opportunities



**REGISTER NOW**

NOVEMBER 3-4, 2021  
NATCHITOCHES EVENTS CENTER

**LPESA FALL 2021 CONFERENCE**



### Louisiana Parish Engineers and Supervisors Association (LPESA) Fall Conference: November 3-4 in Natchitoches

This two-day event is an opportunity for local engineers and supervisors to learn best practices that relate to day-to-day work in engineering, maintenance, construction, and public works.

### LPESA Monthly Virtual Showcase

LPESA also holds its monthly virtual showcase where members exchange best practices and earn 1 PDH.

For more info on the conference and showcase, visit [www.ltrc.lsu.edu/ltap/lpesa-conferences.html](http://www.ltrc.lsu.edu/ltap/lpesa-conferences.html)

**ZERO IN ON SAFETY**  
2021 Louisiana Highway Safety Summit



**SAVE THE DATES**  
November 16-18, 2021  
(all virtual)



### Louisiana Highway Safety Summit (All Virtual)

Louisiana DOTD is inviting all local, state, and federal agencies to attend the Virtual Louisiana Highway Safety Summit on November 16-18, 2021. For more information, visit [www.destinationzerodeaths.com](http://www.destinationzerodeaths.com).



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### ***Publication Statement***

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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.