



## Holiday transportation trivia!



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# Connected and Automated Vehicles: Resources to Assist Local Agency Preparation

## by Chris Melson

Connected and automated vehicles (CAVs) offer potentially transformative and farreaching impacts to the transportation system and other associated reliant fields. This may include impacts to safety, congestion, personal mobility, land use, socio-economic characteristics, and the economy. However, realized benefits will be directly tied to how well public agencies prepare for these emerging technologies. Ideally, agencies interested in implementing CAV technology should consider the following:

*Gaining Knowledge of the Technology and Infrastructure Requirements:* This includes basic understanding of the physical CAV hardware, operational limitations, adoption timeline, and infrastructure required to support field deployment. Infrastructure needs may range from CAV-based equipment to less obvious requirements for safe AV operation. For example, proposed changes to the Manual on Uniform Traffic Control Devices (MUTCD) include a new section for CAV considerations.

Assessing Potential of CAV Deployment: Although significant uncertainties exist, it is important for agencies to assess whether CAV implementations are practical and address their unique needs. There are many possible applications of CAV technology in both urban and rural settings. Enhanced monitoring of corridors in the Wyoming DOT CAV Pilot and DriveOhio 33 Smart Mobility Corridor are prominent examples of rural *cont. on pg.* 3



Examples of mobility-based CAV applications: (a) truck platooning, (b) cooperative merging, (c) signalized intersection approach and departure, and (d) cooperative adaptive cruise control.

# Leadership During Challenging Times

By Steven Strength, P.E., PTOE



Among the zillion or so webinars I have viewed since March, a session called "Remote Management: Keeping Teams Connected Through Crisis," conducted by the National Transit Institute at Rutgers University and shared with us by the New Jersey LTAP center, struck me as particularly appropriate for our experience in Louisiana in 2020.

Often in a crisis we say, "We are all in the same boat." In fact, the presenter stated unequivocally, that although we do find ourselves in the same storm, we are all in different boats. It is easy to equate the challenges of 2020 to a storm tossing boats at anchor in a coastal harbor, and no doubt many of you have witnessed this scene first hand in recent months. What is not so easy to understand is the different effects that the storm will have on each boat. As leaders in the public works and transportation field, our people have experienced many different effects from the recent crises, many of them life changing and nearly all of them negative.

For a leader in a local agency, the obligation to see and understand what is going on inside each boat is important to your team's ability to survive the storm, whatever the challenge may be. The role of the public works agency does not stop for a pandemic, and for a hurricane the work intensifies. So staying in touch with each person and his or her personal challenges is crucial. We know the commitment you have made to your employees to keep them safe while getting the job done, and we are thankful that our local agency public works leaders have been on the ground throughout these challenging times, keeping our roads and bridges safe and well-maintained for the public and speeding the process of recovery.

We here at LTAP are proud to support you in getting the job done for the people of Louisiana, and we have some exciting leadership initiatives coming in 2021. We hope to see you all again soon in the New Year. Please don't hesitate to give us a call if we can be of service, or if you'd just like to chat.

Merry Christmas and Happy Holidays! Steve

### SAFETY

# Local Road Safety Plan: There's a DIY Site for That!

A Local Road Safety Plan (LRSP) serves as a map to safer roadways. Developing one is a proven countermeasure that provides local governments a data-driven framework to identify, analyze, and prioritize road safety improvements on local and rural roads.

To assist local agencies in developing LRSPs, the Federal Highway Administration (FHWA) developed the LRSP Do-It-Yourself (DIY) website. This unique site has resources that any municipality or parish can use to create an LRSP that correspond to particular road safety issues a local community faces. The plan's ultimate vision is getting motorists home safely. The goal is to reach zero deaths on all public roads.

Some resources you can find are LRSP examples from various counties, training tutorials, infographics, and stepby-step videos. Each of these videos appear on each page that explains what to do in each particular step. Find the DIY site here: *https://safety.fhwa.dot.gov/LRSPDIY/* 



**SAFETY FACT** In Louisiana, did you know that...



Data courtesy of CARTS (formerly HSRG): http://datareports.lsu.edu/shsps.aspx View the SHSP Summary and Overview by LTAP: https://issuu.com/ltrc/docs/lashsp brochurebyltapv4

# Louisiana Interacts with Five Other States in Virtual LPA Peer Exchange

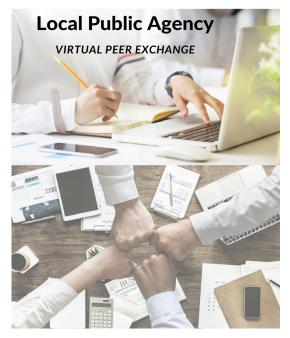
### By Rudynah Entera Capone, MPA

Louisiana's Local Public Agency (LPA) team interacted with peers from five other states during the Virtual LPA Peer Exchange that was put together by FHWA in October this year.

Louisiana's team comprised: Department of Transportation and Development (DOTD) Local Public Assistance (LPA) Programs Director Tanya Moore; FHWA Project Delivery Team Leader Mary Stringfellow; and LTAP Director Steve Strength. They were joined by staff members from respective FHWA divisions and Department of Transportation (DOT) offices in Georgia, Oregon, Nevada, New Mexico and Washington. Each state DOT administers the LPA program to ensure systematic planning and delivery of highway projects that receive federal FHWA and state DOT funding.

The two-day virtual exchange allowed the LPA peers to learn from each other's experiences in managing the LPA program, which included insights into training challenges, project successes, program opportunities, and future plans. All six states had one thing in common—a proven success in FHWA-DOTD-LTAP collaboration. Like others, Louisiana takes a great deal of pride in it because LTAP works closely with DOTD and FHWA in providing technical assistance and training to the municipalities, cities, and parishes that receive federal and state highway funds.

It was shared among the peers that there have been a few hurdles in terms of risk assessment processes, program evaluations, and project closeouts, but they also looked into future opportunities. These included regular updating of the LPA



manuals, implementing of electronic contract signing, providing virtual courses, implementing certification and recertification programs, producing step-by-step videos, and leveraging training resources.

Learn more about Louisiana's LPA training program on *www.ltrc.lsu.edu/ltap/lpa-training.html* 

Louisiana DOTD's LPA Program Director, Tanya Moore, is featured in this edition's "Leadership Spotlight" on page 6.

# **CAV**, continued from page 1

CAV deployments addressing specific, local transportation issues.

**Planning for CAVs and Integrating into Agency Operation:** Supporting local CAV deployment can take many forms: updating internal planning documents, policies, and procedures; updating legislation and financial investment; updating communication infrastructure; and engaging potential partners, etc. The main CAV efforts in Louisiana stem from two legislative bills: one allowing operation of V2V-based platooning and the other operation of autonomous commercial motor vehicles on Louisiana roadways. If possible, being involved in existing initiatives (such as DOTD's CAV planning efforts) is also suggested.

It is clear that preparing for CAVs is a challenging task. LTAP has prepared a curated list of resources to assist local agencies in preparing for CAV technology at the following: *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 is currently in draft form, but will continually be updated.

# EDC-6 Virtual Summit Echoes People As the True Engine Behind Transportation

### By Rudynah Entera Capone, MPA

The EDC-6 (Every Day Counts) Virtual Summit held this month reaffirmed how innovation has been at the heart of the transportation industry.

FHWA's Acting Chief Innovation Officer Amy Lucero reiterated this in her welcome message. "For 10 years now, EDC has also been at the heart of FHWA's efforts to save lives, save time, and save money. The seven innovations rolled out in EDC-6 continue that legacy. I invite you to engage with our deployment teams and with each other," she encouraged.

The summit brought together transportation professionals and community leaders who are involved in the planning and implementation of highway projects across the nation. Representatives from Louisiana state and local agencies, including LTAP staff members, participated in this three-day information exchange.

The summit kicked off with FHWA Deputy Administrator Mala Parker emphasizing people as the true engine behind transportation. "It makes perfect sense. All of us are users of the system. We're builders, operators and stewards of the system. If you're joining us today, you are an innovation champion," she added.

The EDC-6 cycle has identified strategies that increase public involvement, introduced new applications for infrastructure preservation and repair, and enhanced systems to save time in delivering projects and managing incidents. **The first three innovations listed here revolve around people.** 

## Virtual Public Involvement (VPI)

As Parker mentioned, people have a voice to express during private planning. "This voice is better understood if we engage the public and help facilitate their input early on," she enthused.

With innovative VPI techniques, agencies are able to create multiple channels to remotely disseminate information to the public while increasing efficiencies in the way public feedback is gathered and considered. These VPI strategies include mobile applications, design visualization tools, telephone town halls, online meetings, all-in-one public involvement platforms online meetings, pop-up outreach, real-time polling tools, social media following, do-it-yourself videos, and meeting-in-a-box kits.

### Strategic Workforce Development

Strategic workforce development is an essential area for Louisiana's LTAP center as it serves to provide training and workforce development opportunities to local municipalities, parishes and regional planning organizations.

As Parker shared in her message, "The demand for highway construction, maintenance and operation workers is growing. At the same time, emerging technologies are requiring workers to have new skills."

New resources and innovative strategies for workforce development have been developed to help in identifying, training, and placing workers in jobs where they can be efficient. Some of these resources include the development playbook "Identify, Train, Place" and a comprehensive outreach campaign "Roads to Your Future." State and local agencies can use these

to help recruit the next generation of transportation workers.

# Crowdsourcing for Advancing Operations

"Wherever people travel, crowdsourced data can be collected," Parker further shared. Crowdsourcing is advancing *cont. on pg. 5* 

Strategic workforce development is one of LTAP's focus areas. "People as the true engine behind transportation" is evident in one of LTAP's chainsaw safety classes.



# Virtual Summit, cont. from pg. 4

the way public agencies collect highway and operations data. The crowdsourced data from multiple channels are used and integrated in real time for improved traffic operations. Traffic Management Center (TMC) operators are equipped with tools to proactively manage incidents as they occur rather than react to them after traffic jams worsen. In Louisiana, DOTD operates five TMCs and provides Motorist Assistance Patrol (MAP) services in Baton Rouge, New Orleans, Lake Charles, and Shreveport areas, as well as MAP services for construction projects statewide.

The next four innovations relate to how products and processes affect the efficiencies and life span of infrastructure projects.

### **Targeted Overlay Pavement Solutions (TOPS)**

The nation's highway system is now on the brink of having too many pavements approaching the end of their design life. With TOPS, construction companies and public agencies are now able to extend pavement life while reducing traffic impacts, therefore, maximizing infrastructure investments and ensuring safety for the traveling public. Whether it be concrete or asphalt overlays, TOPS intend to reduce maintenance needs, thus having much fewer work zones and relatively improved safety for all road users.

#### e-Ticketing and Digital As-Builts

The e-construction journey toward going paperless continues on in EDC-6 cycle, reaching out and capturing the last barrier in paper material tickets. It's obviously quicker and more streamlined to provide an electronic means of producing, transmitting, and sharing materials using the cloud and mobile devices. In addition, the EDC-6 digital as-builts initiative opens doors for integrating data that is already available and accessible as well as capturing missing data like utility locations.

Innovation is at the heart of the transportation industry, and for 10 years now, EDC has been at the heart of FHWA's efforts to save lives, save time, and save money. The seven innovations rolled out in EDC-6 continue that legacy. I invite you to engage with our deployment teams and with each other.

Amy Lucero, FHWA Chief Innovation Officer EDC-6 Virtual Summit Welcome Message

# Next Generation (NextGen) Traffic Incident Management (TIM): Integrating Technology, Data and Training

NextGen TIM isn't just about increasing traveler and responder safety. It is also about advancing how transportation agencies can improve incident management using strategies like back-of-queue warning, notification-based incident detection using crowdsourced data, and more.

# Ultra High Performance Concrete (UHPC) for Bridge Preservation and Repair

UHPC is the next generation of concrete, and in this EDC-6 cycle, the ultimate goal is to build better bridges. By using UHPC, engineers are able to build bridges that aren't just more constructible but also more durable and resilient. Compared to the conventional concrete, UHPC is a steel-fiber reinforced, Portland-cement material that is castable and consolidating with superior mechanical and durability properties. These characteristics make it possible for bridges to get as much as 75 years oflife span and performance rather than the traditional 15 to 20 years (or even shorter). Learn more about EDC-6 innovations on *www.fhwa.dot.gov/innovation/everydaycounts/edc\_6/* 



Crowdsourced data from multiple streams can be integrated and used in real time for improved operations. (Source: FHWA)

# Leadership Spotlight: Tanya Moore, DOTD's Director of LPA Programs

### By Rudynah Entera Capone

LTAP just wrapped up a couple of virtual courses on Local Public Agency (LPA) training this past quarter, so it is rather timely for us to feature Ms. Tanya Moore in this section.

Moore is DOTD's director of Local Public Assistance (LPA) Programs and the statewide coordinator of Louisiana's Every Day Counts (EDC) initiative. For approximately 22 years, she has worked in various sections of DOTD—Road Design, Planning, Traffic and Intelligent Transportation Systems (ITS). She used to be one of the Urban System Project managers before becoming the LPA director. She holds a Bachelor of Science degree in Civil Engineering from LSU. She also earned her certification as a Professional Traffic Operations Engineer (PTOE) in 2012.

# Tell us some highlights of your professional career and how your job roles helped you develop your leadership skills.

Throughout my career, I've experienced many leadership styles that have shaped me into the leader I am today. Early on, I learned to work with numerous people with different personalities; sometimes, this was even a challenge. Keeping a positive attitude and remembering that "every person is different" is an important quality of a good leader. Also, I continue to grow as a leader always striving to do better than I did the day before.

### What is your definition of leadership?

Leadership is about being able to take the initiative to effectively lead and guide others towards achieving a common goal.

# If you were to pick three competencies or traits that a leader should possess to be effective in leading teams, what would they be? Briefly explain why.

As a leader, it's important to not only have great communication skills but also accountability and positivity within you. Being a great communicator as well as a good listener is crucial. A leader also needs to take responsibility for the team's actions, both good and bad, while giving credit when it's due. You'll gain the respect and trust of your team by being accountable and leading by example. Optimism at work is very important in promoting a healthy work environment. By having a positive attitude, a leader can inspire their team. How do you think your colleagues view your leadership style as?



### I have

always believed in having an "open door policy," which is a positive and productive way of communicating with colleagues. I've been told that I am a good listener. They feel comfortable coming to me with personal as well as work issues. By having an "open door policy," I am encouraging open communication and feedback.

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

I believe technical knowledge supplements your leadership skills. A leader should always seek ways to improve their technical knowledge as they are a resource for their team. However, a good leader must recognize to reach out for help from a technical expert when needed.

# In any of your past and present leadership roles, what has been the most challenging task you've had to overcome? What techniques, approaches, or strategies did you utilize to handle such a challenging task?

I had to speak with a team member about an issue I had with work-related abilities. It was a challenging task. I remember thinking how I could approach it and whether or not the team member would be angry. In this situation, being honest and having an open conversation played a vital role. I took action by counseling and encouraging the team member to make the needed improvements. Once again, having great communication skills is an important leadership trait. Today, this same team member is now a successful leader.

# Who is your model leader? Why?

My father, Alvin T. Richardson, is my model leader. He taught me how to have a great work ethic. He encouraged me even when I doubted myself. He inspired me to never give up and strive to do better every day. I feel very blessed to have him as my model leader. He continues to inspire me today.

# Roads Scholar #15: Safety for Public Works First Responders

### Happening in January 2021!

This course provides employees with the skills to understand, identify, and analyze these hazards to help ensure their own safety, the safety of their coworkers, and the public in these chaotic situations. Visit *www.ltrc.lsu.edu/ltap/roads-scholar.html* for more info.

# Roads Scholar #3: Drainage-The Key to Roads That Last

### Coming up in February and March 2021!

This course is a review of problems caused by improper drainage and some of the ways to solve those problems. Dates and locations are to be determined. Visit *www.ltrc.lsu.edu/ltap/roads-scholar.html* for more info.

# **LPESA Virtual Showcase**

### Happening Monthly

Beginning this month, the Louisiana Parish Engineers and Supervisors Association (LPESA) is holding the LPESA Virtual Showcase, a monthly series of eLearning opportunity hosted by the Louisiana LTAP center. After cancelling both spring and fall 2020 LPESA conferences, LTAP designed this showcase as an alternative avenue to continue sharing best practices and providing opportunities for professional development.

#### January 8, 2021 at 10:00 -11:00 A.M.

Culvert Slip-Line Rehabilitation & The InfraSteel System (1 PDH) Presenter: Alex Sherrod from Precision Pipes & Products

#### February 5, 2021 at 10:00 -11:00 A.M.

Bringing Rail Safety Education to Your Community (1 PDH) Presenter: Claude Maher from the Louisiana Operation Lifesaver

# **LTAP Class Roundups**

### Roads Scholar 3: Drainage

Our virtual class on Roads Scholar (RS) #3 "Drainage: The Key to Roads That Last" was a success, with a total of 70 participants. The three-day, six-module course was taught by Jim Ferguson, chief engineer of CEG Assessments. Each day, the participants engaged in poll questions and chat interactions that reinforced their knowledge about drainage elements and systems, the importance of proper drainage maintenance, and considerations for cleaning and repair of drainage facilities.

Learn more about Roads Scholar #3 here: www.ltrc.lsu.edu/ltap/RS3.html



Please log into your LTRC training profile in order to register: *https://registration.ltrc.lsu.edu/login* 

Once signed in, find "LTAP-LPESA Virtual Showcase 2021" and register. You will then receive a Zoom link to the meeting room in your registration confirmation email.

# LPA: Core Qualification and CE&I

LTAP offered two sets of virtual Local Public Agency (LPA) courses this last quarter. The first one was on Construction, Engineering and Inspection (CE&I) modules in November, wherein 29 participants attended. The second one was the Core Qualification this month, which was attended by 36 participants. Both courses are part of the LPA Training Program that all project sponsors and their consultants are required to take in order to be qualified to participate in any state and federal highway funding programs.

Learn more about the LPA Training Program here: www.ltrc.lsu.edu/ltap/lpa-training.html

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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.