



Technology Exchange

VOLUME 31, ISSUE 2



Aggregate chips are dropped onto the binder and then rolled to form a chip seal.

IN THIS ISSUE

- 2 Director's Corner
- 2 New Training Coordinator
- 3 LPESA Spring Conference
- 4 Local Bridge Rating Compliance
- 4 Local Innovations Recognized
- 5 MS4 Conference
- 6 LRSP News
- 7 Acadiana Planning Commission Receives NADO Award
- 7 TC3 Resources
- 8 Leadership Spotlight: Tommy Durrett
- 9 LTAP in Action
- 11 Upcoming Campaigns

Visit www.louisianaltap.org for our current classes, training requests, free resources, and much more...

Pavement Preservation Podium



When? Where? How?

Part 4: Sealcoats and Slurry Seals

by Steven C. Strength, P.E., P.T.O.E.

What is the difference between a tornado and a hurricane? Unfortunately, we know from experience that both represent the most violent weather events on earth, causing significant impacts to lives and property. While tornadoes can strike with little warning, with wind speeds sometimes exceeding 300 miles per hour, they only affect a particular area for a matter of minutes, and their path of destruction, while severe, is limited in area to usually a few square miles. On the other hand, hurricanes have maximum wind speeds perhaps half that of a tornado, but their effects are felt over hundreds of square miles. The difference between the two relates to the severity (the tornado with total devastation over a narrow path) and extent (the hurricane track with damage over a wide area). No one is suggesting that either is a great choice, and lives are at risk in both, but the response by rescue and recovery personnel to each type of event is different, primarily because the severity and extent of the damage from each is different.

So what does this difference have to do with pavement preservation? Severity and extent of distress in asphalt pavements will dictate the response in how we maintain and preserve the pavement. In the "How" portion of FHWA's Pavement Preservation initiative, one of the Every Day Counts (EDC) innovations, numerous preventive treatments are explored in detail and promoted for adoption by road agencies. All are designed to extend the life of the pavement by treating the symptoms of distress and preventing further damage. In crack sealing, for instance, the size and depth of single, isolated cracks will dictate a repair based on the severity while numerous smaller cracks over a wide area may call for a different approach due to the extent of the cracks. It simply wouldn't be efficient to attempt to seal dozens or hundreds of small cracks extended over entire segments of roadway. That is where sealcoats and slurry seals come into play.

Just as there are numerous techniques for sealing cracks, sealcoats and slurry seals come in many forms, with some treatments more suited to specific types of pavement distress. LTAP's recently updated Roads Scholar #7 course, "Pavement Preservation and Surface Treatments," deals with three of the more com-

continued on page 10

On the Road Again



By Marie B. Walsh, Ph.D.

Did you know that May 24 was National Road Trip Day? I didn't until I heard it on the morning news. Sharing our best family road trip memories became a last minute addition to the agenda of LTAP's planning meeting that we had fortuitously scheduled for that day. Our stories

ranged from near forgotten childhood trips to the recent one our newest team member Olivia Phelps shared, which included her drive to Louisiana from her home state of California! Good times. Olivia replaces Courtney Dupre who was promoted to LTAP Business Manager. Olivia's first week at LTAP consisted of assisting with four classes followed by her first LTAP road trip for a class to Lafayette the next. Way to jump into it, Olivia!

Speaking of road trips, LTAP is planning to roll out more classes around the state later this summer, and we are in the planning stages for 2020 as well. We plan to offer: a supervisory class, Roads Scholar #4, Temporary Traffic Control; and, Roads Scholar #6, Safe Operations of Heavy Equipment later this year. We are also planning the LPA series in Alexandria in November. Be on the look-out for notices of all of these classes. For 2020, we are organizing: Roads Scholar #1, Basics of a Good Road; Roads Scholar #13, Inspection of Local Bridges; Roads Scholar #15, Operational Safety for Public Works Employees; the LPA series; and, the ever popular Chain Saw Safety class with Rip Tompkins of Arbor Master. What an exciting line up for the next 18 months!

You can also catch LTAP later in 2019 at the LPESA meeting scheduled for October 2-3, the LMA conference on August 1-3, and the DOTD Safety Summit on November 19-20. LTAP will also be at the Louisiana Transportation Summit in February of 2020.

If you are in Baton Rouge between now and the end of July, stop by the LTAP offices and say hello/goodbye. I will be retiring from LTAP on July 30 after 16 years. I'm looking forward to new and exciting road trips with my home family, instead of my work family, but it will be bittersweet to leave this job that I have loved

Marie B. Walsh

LTAP Welcomes New Training Coordinator

The Louisiana LTAP Center is pleased to welcome our new training coordinator, Olivia Phelps.

Prior to joining LTRC, Olivia spent 17 years in retail management with a focus on training and development. Following her graduation from Arizona State University (ASU), she began the hunt for the position that allowed her to utilize her degree in organizational leadership and sustainability coupled with her love of people, training, and development.

"The role of training coordinator allows me to merge all the things I love and provide valuable educational programs for our community," she says.

When not juggling things in the office, Olivia manages a circus that consists of her husband of 13 years (Matt) and three kiddos (Elliot, 10, Ethan, 8, and Leila, 2). They spend their free time swimming, barbequing, chilling at the soccer field, and exploring their new home state of Louisiana. In the little free time left just for her, Olivia loves all things Disney, crafting, history, reading, and bargain hunting.



Parish Engineers' Spring Conference Tackles Local Road Issues, Bridge Program Updates and More

By Rudynah Entera Capone, M.S.

Around 100 attendees—mostly parish engineers and road managers—convened at the Louisiana Parish Engineers and Supervisors Association (LPESA) Spring Conference held on April 24-25, 2019 at the L'Auberge Casino and Hotel in Baton Rouge.

The conference commenced with a warm welcome by the LPESA President and Claiborne Parish Road Superintendent Tommy Durrett. Session speakers from various local and state agencies presented on a wide array of topics, including legislative updates by the Police Jury Association of Louisiana (PJAL) Executive Director Guy Cormier. Police juries and local businesses have been concerned about the changes happening with the Industrial Tax Exemption Program (ITEP).

DOTD's Deputy Assistant Secretary for Public Works, Patrick Landry, presented on recent updates happening around the Louisiana Watershed Initiative (LWI) whose mission is to reduce flood risk and improve floodplain management. "The watershed approach aims to provide state and local leaders with a fuller and more holistic understanding of the impacts of their projects, programs, and policies," he shared.

The SJB Group's Survey Department Manager, Bradley Holleman, showcased some Louisiana case studies that took advantage of using Mobile and Terrestrial Light Detection and Ranging (LiDAR) scanning devices to collect data for implementing highway and bridge-related projects.

LTAP Director Marie Walsh moderated a panel discussion that delved into how Bossier and East Baton Rouge Parishes have used the Local Road Safety Plan development process to identify and prioritize locations for road safety improvements. Both parishes are among the top 20 parishes based on the number of roadway departure and intersection crashes, as analyzed by LTAP's Local Road Safety Program (LRSP) team (read more on page 6). Steve Strength, LTAP Program Manager, gave his "advice on advisories," which provided the parish engineers guidance on signing their roads the Manual on Uniform Traffic Control Devices (MUTCD) Way.

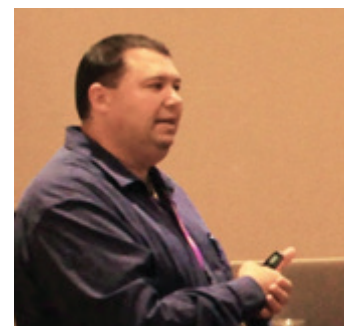
Day 2 started with LTAP announcements about the Roads Scholar #7 classes on pavement preservation happening from April to June 2019 and a 15-minute disaster preparedness video put together by PublicWorksTraining.com in partnership with Louisiana LTAP.

This was followed by an awards ceremony for the Build a Better Mousetrap competition that recognized local innovations. Ouachita Public Works Department's Catch Basin Lid Assist Tool was chosen by a panel of judges as the Major Winner and Louisiana's representative at the national BABM competition. Terrebonne Parish Consolidated Government's "In a Pinch" Salt Spreader won the People's Choice Award for earning the highest number of LIKE clicks on Facebook (read more on page 4).

Louisiana Department of Environmental Quality's Municipal Permits Manager Kimberly Corts got everyone up-to-speed with the different requirements involved in the



It was another great learning experience at the LPESA Spring Conference for the unsung road warriors in Louisiana.



(top to bottom) DOTD Deputy Assistant Secretary for Public Works Patrick Landry presenting on LA Watershed Initiative; DOTD Bridge Design Administrator Zhengzheng Fu clarifying steps to conduct off-system bridge load rating; and LTRC Associate Director for Research Dr. Tyson Rupnow giving research project highlights of interest to local agencies.

continued on page 11

Local Bridge Rating Compliance Due in December 2020

As part of the National Bridge Inspection Program (NBIP) administered by DOTD according to 23 CFR, Part 650, Subpart 6, the state must meet a series of 23 performance metrics. Of these, Metric 13 addresses Inspection Procedures and Load Ratings, which applies to and includes locally owned, off-system bridges.

The Louisiana Parish Engineers and Supervisors Association (LPESA) has been in regular communication with DOTD for the past several years in an attempt to ensure that all local bridges are properly load rated and documented. With the compliance deadline of December 2020 rapidly approaching, DOTD has issued all Off-System bridge owners details on the next steps to bring the final group of bridges into compliance.

Off-system bridges constructed by DOTD under the Off-System Bridge Program were rated by DOTD at no cost to the parish. Parishes were given May 10 as their deadline to confirm the list. All bridges not constructed under DOTD's Off-System Bridge Program that the parish has not rated and has no plan to rate by June 30, 2020 will be rated by DOTD. The cost of the engineering rating is estimated at \$5,000 per bridge. These costs will be deducted from the parish's Off-system Highway Bridge Program funds.

Additional guidance regarding other action items and responsibilities of local bridge owners is available on LTAP's website at www.louisianaltap.org/local-bridges.html including a presentation from the recent LPESA Spring Conference. Bridge Design Administrator Jenny Fu may also be contacted at (225) 379-1321 for more information.



INNOVATION

Ouachita, Terrebonne Recognized for Local Innovations



Catch Basin Lid Assist Tool (Ouachita)

In-a-Pinch Salt Spreader (Terrebonne)

BABM is an effort initiated by the Federal Highway Administration (FHWA) and coordinated through LTAP centers across the nation. The goal is to encourage local government agencies to create innovative solutions that respond to everyday problems local transportation workers encounter.

For more information on Louisiana entries, visit www.louisianaltap.org and click on the "Innovations" tab.

Two transportation innovations had the locals talking at the recent Louisiana Parish Engineers and Supervisors Association (LPESA) Spring Conference where the winners of the 2019 Build a Better Mousetrap (BABM) Competition were announced.

Ouachita Parish Public Works Department's Catch Basin Lid Assist Tool was selected as this year's Louisiana Winner. Jeremy Clack, Assistant Public Works Director of Ouachita Police Jury, shared how this tool was a lightweight, efficient, and inexpensive way of lifting and lowering catch basin lids for inspection purposes. It cost less than \$100, including labor. Truly innovative, indeed.

The Terrebonne Parish Consolidated Government's (TPCG) Salt Spreader, on the other hand, won the "People's Choice Award" for having earned a higher number of likes on social media. TPCG Public Works Director, David Rome, shared how this innovation saved them during the freeze of 2016, as they had numerous bridges and roads being iced over. They modified the seed spreader into a salt spreader, then used it as a deicing agent dispensing large amounts of pellets. It cost \$250 for modified casters plus four hours of labor.

The entries were evaluated by a panel of judges based on four criteria: cost savings (30%), effectiveness (30%), ease of transfer (20%), and ingenuity (20%). Both entries were under the same category—Maintenance Tools and Methods. The other categories include: Asset Management Techniques; Facilities Improvements; and Inspection and Data Collection. Ouachita's Catch Basin Lid Assist Tool will be entered as Louisiana's entry at the national level with winners to be announce during the NLTAPA conference in Stowe, Vermont, this August.

Louisiana DEQ to Host Its First MS4 Conference This Fall

This fall, the Louisiana Department of Environmental Quality (LDEQ) will be hosting its first Municipal Storm Sewer System (MS4) Conference on October 23-24, 2019, at the LDEQ Conference Center in the Galvez Building near the State Capitol in Baton Rouge. Registration is free, so everyone is welcome to attend.

The two-day event will cover topics, including updates on regulatory and permitting requirements, compliance issues, Total Maximum Daily Loads (TMDL) overview and modeling, presentations on notable MS4 programs in Louisiana, and other related topics. This conference will be an opportunity to learn and improve the MS4 program and network with other permittees, consultants, and regulatory staff. Registration and additional information regarding the conference will be posted later on the LDEQ website <https://deq.louisiana.gov/>.

What is an MS4?

The term “MS4” is commonly used to describe the infrastructure used to convey storm water runoff within a city, town, borough, county, parish, or other public body. The infrastructure used to control and convey storm water can be linear or complex, including, but not limited to, open ditches, manmade canals, subsurface storm drainage systems, and storm water pumping stations. MS4s do not include combined sewers and are not part of a publicly owned treatment works (POTW). An MS4 system must be owned or operated by a public entity, such as the US government, state government, city, or parish. A public works department, environmental department, or similar agency usually operates traditional MS4s, which are owned by a city or parish government. Non-traditional storm water utilities, such as those operated by a transportation agency, are responsible for maintaining right of ways and managing storm water during public construction projects.

Technical Assistance Bulletin Information on General Permit Requirements

Most regulated MS4s in Louisiana have obtained or are required to obtain coverage under the General Permit for Discharges from Small Municipal Storm Sewer Systems (LAR040000). Only four Phase I MS4s are specifically named in the state and federal regulations; all have been issued individual LPDES permits. Other entities must meet the requirements of the general permit. LDEQ recently released a Technical Assistance Bulletin to provide guidance on the general permit requirements. Check here: https://deq.louisiana.gov/assets/docs/Water/Stormwater/MS4_Technical_Assistance_Bulletin.pdf

Save the Date!
LDEQ MS4 Conference



October 23-24, 2019
LDEQ Conference Center
602 North 5th Street, Baton Rouge, LA

It will be FREE to attend!

Agenda Under Development!

Other Resources:

EPA MS4 Page:

<https://www.epa.gov/npdes/storm-water-discharges-municipal-sources>

SWPPP for Construction Activities:

<https://www.epa.gov/npdes/developing-stormwater-pollution-prevention-plan-swppp>

Model Ordinances:

<https://www.epa.gov/nps/urban-runoff-model-ordinances-prevent-and-control-non-point-source-pollution>

EPA Storm Water Program:

<https://www.epa.gov/npdes/npdes-stormwater-program>

LDEQ website:

<https://deq.louisiana.gov/>

LTAP Gathers Local Safety Champions in Panel Discussion

At the spring conference for the Louisiana Parish Engineers and Supervisors Association (LPESA), LTAP Director, Marie Walsh, moderated a panel discussion that delved into how Bossier Parish and East Baton Rouge Parish used the Local Road Safety Plan development process in identifying and prioritizing locations for road safety improvements. Both parishes are two of the top 20 parishes based on the number of roadway departure and intersection crashes as analyzed by the LTAP's Local Road Safety Program (LRSP) team.

Panelists were Bossier Parish Engineer Butch Ford and NWLA Safety Coalition Coordinator Shelly Barrett who both spoke on behalf of Bossier Parish's efforts. A trio of engineering experts from the City/Parish of Baton Rouge—Chief Design Engineer, Thomas Stephens; Traffic Engineer, Cyndi Pennington; and Traffic Operations Engineer, Sarah Paul-Edel also shared how they utilized local crash data in prioritizing road safety improvements on rural curves, at intersections, and those involving bicyclists and pedestrians.

Local Road Safety Plan

A "Local Road Safety Plan" provides a framework for local jurisdictions, parishes and municipalities, and tribes, to identify, analyze, and prioritize roadway safety improvements on the roads they own and are responsible for maintaining. The process of developing a Local Road Safety Plan is tailored to a local jurisdiction's protocols, needs, and issues. However, safety projects stemming from the plan need to be consistent with federal and state project funding requirements if those funds are used for project implementation. Also, the plan should be viewed as a living document that can be continually reviewed and updated to reflect changing local needs and priorities.

Local Road Safety Plans are intended to assist local governments in the well-ordered development of safety improvements on the local road network, allowing for prioritizing and properly timed project delivery. The plans also afford the potential grouping of projects, coordination of similar projects for an economy of scale benefit, and should encourage piggybacking on regular maintenance and consider the land use planning process. To be most effective, the Parish Council should adopt the plan and update as an annual exercise when the next year of local crash data becomes available.



EBR panelists shared how they used local crash data to identify locations for sign and pavement marking projects as well as in deploying system-wide improvements to signals and addressing safety issues in some of the MoveEBR projects.

The intent was to provide other parish engineers some ideas on how they can work with their regional safety coalitions and the Metropolitan Planning Organization (MPO) to identify and prioritize projects as part of their Local Road Safety Plan initiatives. There are opportunities for parish engineers to collaborate with local law enforcement, planners, educators, and elected officials in an effort to help Louisiana reach its vision of Destination Zero Deaths www.destinationzerodeaths.com.

Local Road Safety Program now accepting project applications for Quarter 3 of 2019



For Quarter 3 of 2019, project applications to the Local Road Safety Program (LRSP) are accepted until our next cutoff date of September 30, 2019. The LRSP Selection team accommodates submissions year-round; however, priority is given to those submitted prior to our quarterly cutoff dates.

Projects eligible for funding include: curve delineation, rumble strips, high friction surface treatments, pavement markings, signage, flashing beacons, intersection improvements, mini-roundabouts, and other proven countermeasures. For more information and technical assistance, email LRSP Manager [Leo Marretta at leo.marretta@la.gov](mailto:leo.marretta@la.gov).

Acadiana Planning Commission Receives NADO Excellence in Transportation Award



APC's Planner II Ashley Moran gives a presentation on LRSP development at a conference.

For their data-driven and collaborative work in developing Local Road Safety Plans, the Acadiana Planning Commission (APC) in Lafayette, Louisiana, has been selected as one of the 18 recipients of the nationwide Excellence in Regional Transportation Award, a program of National Association of Development Organizations' (NADO) Rural Planning Organizations (RPO) America and

the NADO Research Foundation's Center for Transportation Advancement and Regional Development.

"The Acadiana Planning Commission is pleased to be among this year's recipients to receive NADO's Excellence in Regional Transportation Award," said Monique Boulet, APC CEO. "We are highly committed to the efforts we put into developing local road safety plans. It's because, for us, the greatest reward is knowing that through our transportation projects, we are contributing to more motorists getting to their destination safely."

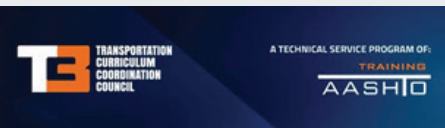
The APC coordinates the Lafayette region's behavioral and infrastructure safety efforts through the Acadiana Regional Transportation Safety Coalition, one of the nine coalitions set up across the state to help implement the Strategic Highway Safety Plan (SHSP) at the local level. The goal is to reach Destination Zero Deaths.

APC took a proactive and data-driven approach in developing Local Road Safety Plans to help the Lafayette region drive down rural roadway departure and intersection fatalities on high-crash locations identified through an in-depth crash data analysis led by APC and the assistance of the Louisiana LTAP Center.

NADO's Excellence in Regional Transportation Award recognizes noteworthy projects and practices in rural, small metropolitan and larger areas that help meet regional needs through various program areas related to transportation, mobility, goods movement, planning and analysis, and more.

In 2013, the South Central Planning and Development Commission (SCPDC) in Houma, Louisiana received the same distinction for their local efforts to address road safety through the South Central Safe Community Partnership, which was later renamed to South Central Regional Safety Coalition.

For a full list of this year's awardees and information about next year's award selection process, visit <http://ruraltransportation.org/>. For more information on APC's Local Road Safety Plans, contact amoran@planacadiana.org.



TC3 offers video resources for locals through its YouTube channel

The LTAP community is excited to share this exciting news from the Transportation Curriculum Coordination Council (TC3), a technical service program of AASHTO's Training section. Through their Just-in-time (JIT) video library, local public agencies can have access to 60 videos—completely free—anytime through TC3's YouTube channel. These videos are categorized in four broad categories: construction, maintenance, materials, and traffic and safety.

With the intent of providing helpful information on test procedures, field inspection, and maintenance best practices, videos were provided by various agencies. While they may include some state-specific verbiage, the content has been thoroughly reviewed and proven to be beneficial to all technical staff involved in highway operations regardless of geographic location.

TC3 will continue adding training videos to their channel. Agencies interested in taking advantage of these resources are encouraged to subscribe to them on YouTube. For more info, visit www.louisianaltap.org, and visit the TC3 section under the "Resources" tab.

Leadership Spotlight: Tommy Durrett

President of LPESA

Road Superintendent, Claiborne Parish

This edition of *Technology Exchange* features Tommy Durrett, who is the Road Superintendent of Claiborne Parish and currently serves as the President of the Louisiana Parish Engineers and Supervisors Association (LPESA).

Durrett also serves on the executive board of the Police Jury Association of Louisiana (PJAL). In his home parish, he serves on the PEMAC committee and is an auxiliary officer for Claiborne Parish Sheriff's Department. Early in his career, Tommy worked side by side with his father building wastewater treatment plants. It was there he developed his passion for construction and all things related. Tommy enjoys spoiling his grandchildren, hunting, fishing, and golfing. He is married to his high school sweetheart, Heather. They have two sons and three grandchildren.



How do you define leadership?

Leadership is having the ability to inspire and motivate people through your actions and reactions. The most powerful leadership tool you have is leading by example. If I'm not being the leader I would follow, then I'm doing something wrong.

As a Road Superintendent of Claiborne Parish, what has been the most challenging task you've had to overcome as a leader?

It's definitely stretching a limited yearly chip seal budget. How did we tackle it? We eliminated the standard manned tailgate spreader and purchased an automated chip spreader. In doing so, we reduced our liability exposure, and we were able to lay more miles of product for less money. Further cost savings include utilizing parish inmates during the summer bush-hogging season. These two measures alone have saved our parish \$100,000 to \$150,000 per year.

What essential qualities should an effective leader possess, and why?

Confidence, respect, and integrity are my top three. If you are lacking in these qualities, it's going to be difficult to get your employees to follow you.

As the current president of the LPESA, what is that one thing you'd like for the association to accomplish?

I hope to see increased parish membership participation. To achieve this, I plan to attend all regional meetings of the Police Jury Association, addressing the group directly on the importance of parish participation. My hope is that by giving them specific examples of how networking within the association has given me additional resources that have specifically helped our parish, we can help all of our parishes to succeed.

How do you foster a team spirit among your staff members?

I am a leader-by-example kind of manager. My guys know that I won't hesitate to hop on a piece of equipment or jump in a mud hole quickly to help them get the job done.

LTAP in Action



Roads Scholar in NOLA. The Roads Scholar #7 classes on Pavement Preservation and Road Surface Management are underway until June 2019. In this photo, class instructor, Nick Verrett, the City of Natchitoches Engineer, presented to 26 participants in the New Orleans class held on May 1, 2019.



LTAP vaults in for LPESA. Twice a year, the Louisiana LTAP Center helps put together board meetings and two major conferences for the Louisiana Parish Engineers and Supervisors Association (LPESA). The Spring Conference was held on April 24-25, 2019, at the L'Auberge Hotel in Baton Rouge.



Go Orange Day in Rayville. As a way to celebrate Work Zone Awareness Week (April 8-12), LTAP Program Manager Steve Strength (far right) and 25 participants in the Basics of Work Zone Safety mini-workshop in the Town of Rayville (Richland Parish) put on their safety gear to commemorate April 10 as "Go Orange Day."

Innovation Exchange Webinars

Please follow this link <https://collaboration.fhwa.dot.gov/dot/fhwa/WC/default.aspx> to access the main web conferencing page and register for your event from the calendar.

Safe Transportation for Every Pedestrian

July 11, 2019

12:00 p.m. - 1:30 p.m. Central Daylight Time

For a full list of webinars, visit

https://www.fhwa.dot.gov/clas/training_tools/webinars.aspx

Upcoming Training

Roads Scholar #4: Temporary Traffic Control for Local Agencies

This course is intended for engineers, technicians, inspectors, and maintenance personnel whose duties require an intermediate understanding of traffic control in work zones, including design, setup, and management of traffic controls.

- July 17, 2019 – Bossier City
- July 18, 2019 – West Monroe
- August 8, 2019 – Alexandria
- August 28, 2019 – Baton Rouge
- August 29, 2019 – New Orleans
- September 4, 2019 – Lafayette
- September 5, 2019 – Northshore

Registration is accepted online only at <https://registration.ltrc.lsu.edu/login>

Registration is required one week in advance of class. Failure to cancel at least 72 hours prior will result in a forfeit of registration fee. Participant substitution is available.

Fees:

\$25 for Public Agencies

\$50 for Private Agencies and Others

If you need to register multiple people on behalf of your agency, create yourself a profile and email your username to courtney.dupre@la.gov. Once inside your profile, click on "LTAP — Roads Scholar #4: Temporary Traffic Control for Local Agencies (July - Sept. 2019)" to register.

Pavement Preservation Podium, Part 4 cont. from page 1

mon sealing techniques: chip seals, slurry seals, and microsurfacing. According to LTAP instructor, Nick Verret, Jr., P.E., these treatments are designed to extend the useful life of the pavement and prevent water intrusion that can cause further damage; can correct surface conditions such as oxidation and raveling; and even improve skid resistance. Pavements with no structural distress and minimal rutting are the best candidates. According to Verret, “As part of a pavement preservation program, the key is applying the right treatment, to the right road, at the right time.”

Chip seals consist of an asphalt binder applied to an existing pavement or base followed by a layer of aggregate chips. The treatment is then rolled with pneumatic tire rollers to embed the aggregate into the binder. The binder may be an emulsion consisting of minute asphalt droplets suspended in water or asphalt cement, hot applied asphalt binder typically modified with polymer or recycled tire rubber to improve its qualities of performance. The aggregate used is crushed limestone, $\frac{1}{4}$ to $\frac{1}{2}$ inch in size, or other material of uniform size that will embed properly and cover all of the binder layer. Once the binder cures, after rolling, excess aggregate is swept away using a power broom which leaves a durable surface that can preserve a good road for five to ten years. In some states, chip seals placed in two or even three layers are common. However, a chip seal does not add structural strength to the roadway and cannot correct base failure issues or surface irregularities such as rutting or shoving.

Slurry seal, as the name implies, consists of a designed mixture, or slurry, of well-graded fine aggregate, mineral filler, emulsified asphalt, and water. When applied, the consistency can be compared to that of a chocolate milk shake. It is applied in one pass using a single mixer truck with a spreader box designed to ensure a smooth, uniform layer, sealing minor cracks and renewing the



Slurry seal gives the appearance of a completely new surface. Note filling of large cracks prior to sealing.

riding surface. Since it is not designed to correct structural problems, it should be applied to pavement still in good condition.

Microsurfacing, sometimes considered a type of slurry seal, is a designed mixture of polymer-modified emulsified asphalt, combined with aggregate, mineral filler, water, and other additives according to a controlled specification. Microsurfacing can be placed in thicker lifts than slurry seal and some correction of ruts in the wheelpath up to $\frac{1}{2}$ inch deep can be achieved with a scratch course of microsurfacing prior to placement of the main layer. However, no gain in structural capacity is achieved by microsurfacing, thus, the basic roadway structure must be sound and repairs to isolated defective areas must be made prior to the treatment. Research studies by FHWA and the International Slurry Surfacing Association (ISSA) have shown extremely positive results in extending the life of pavements that are treated in a timely manner, prior to the onset of structural failure.

More information on these and other treatments can be obtained from ISSA (<https://slurry.org>) or from FHWA's Pavement Preservation website under “EDC Innovations” at: <https://www.fhwa.dot.gov/pavement/preservation/pubs/how.pdf>. Handy checklists on a variety of pavement preservation treatments are available for download from LTAP's website at www.louisianaltap.org.



LPESA Highlights

PJAL Executive Director Guy Cormier sharing some important legislative updates (left)

DOTD Chief Engineer Chris Knotts giving a post-conference Ethics Training (right)

LPESA President Tommy Durrett and LTAP Program Manager Steve Strength officiating a raffle draw (opposite, page 11)

LPESA Conference cont. from page 3

Municipal Separate Storm Sewer Systems (MS4). “Storm water permit compliance is a national priority, and MS4 compliance reviews were added to LDEQ’s grant commitments in 2019,” she emphasized. Read full article on page 5.

DOTD Maintenance Management Administrator, Kevin Reed, shared what’s coming down the road in regards to the entry-level training requirements for Commercial Driver’s License (CDL) applicants. DOTD Project Manager, Jeff Reed, jumped right in to share how the state is putting the best ideas forward through their Annual Innovation Showcase. Tanya Moore, who is the new director for DOTD Local Public Assistance (LPA) Programs, gave a brief talk about the different funding and training opportunities available for the locals.

Louisiana Transportation Research Center’s (LTRC) Associate Director for Research, Dr. Tyson Rupnow, presented on some research projects that local engineers could potentially apply in their respective work. DOTD’s Bridge Design Administrator, Zhengzheng “Jenny” Fu, followed with a presentation on the steps and protocols involved in off-system bridge rating and “DOTD’s Plan Moving Forward.” Barbara Ostuno, the Off-system Bridge Program Manager, shared in her program updates that there are about 4,819 off-system bridges in Louisiana, 786 of which are eligible for replacement but only 100 have been so far scheduled for actual replacement.

Immediately after the conference, DOTD Chief Engineer, Chris Knotts, gave an opportunity for some attendees to earn a PDH credit for an hour of Ethics Training.

On behalf of the LPESA membership, LTAP would like to thank all the speakers, attendees, and sponsors who were instrumental to the success of the spring conference. Thank you to The Railroad Yard (gold sponsor); Ergon Asphalt & Emulsion, Material Resources, and Brudd Construction Company (social event sponsors); Arcadis, Huval & Associates, and Half Associates (silver sponsors); and Covington Sales & Service, Louisiana One Call, and Acrow Bridge (bronze sponsors).

To download the conference presentations and photos, please visit www.lpesa.org.



Upcoming Campaigns

July 31 is National Heatstroke Prevention Day

Heatstroke is preventable. Motorists should look before they lock their vehicle so they don’t leave their child in a hot car. Employers should also provide training to workers so they understand what heat stress is, how it affects their health and safety, and how it can be prevented. OSHA recommends using the Heat Safety Tool App as a way to plan ahead for outdoor work activities. This app provides a visual indicator of current heat index and associated risk levels specific to your current location. Download the app at <https://www.cdc.gov/niosh/topics/heatstress/heatapp.html>



SAVE THE DATE: October 2-3, 2019 LPESA Fall Conference Cypress Bayou Casino Hotel, Charenton

Watch your email for more information regarding the agenda, sponsorship opportunities, and hotel reservations.

SAVE THE DATE: October 4, 2019 APWA Annual Golf Classic Baton Rouge Golf Tournament

The 30th Annual APWA Baton Rouge Branch Golf Tournament is scheduled on October 4, 2019, at the Copper Mill Golf Club located at 2100 Copper Mill Drive in Zachary, LA. Sign-in begins at 7:30 AM. Lunch and Awards Ceremony immediately follows the tournament. The format will be four-person scramble, 120-player max field. Sponsorship opportunities will be available soon. For more info, contact Tournament Chairman TJ Truxillo at tj@qualitysitework.com



LOUISIANA LOCAL TECHNICAL ASSISTANCE PROGRAM

4099 Gourrier Avenue
Baton Rouge, LA 70808

ADDRESS SERVICE REQUESTED

Pre-Sort Standard
U.S. Postage
PAID
Permit No. 55
Baton Rouge, LA

www.louisianaltap.org

Need Technical Help? **Contact LTAP**

(225) 767-9117
(225) 767-9156 (fax)
www.louisianaltap.org

Marie B. Walsh, Ph.D.
Director

Rudynah "Dynah" Capone
Safety Initiatives Manager

Courtney Dupre
LTAP Business Manager

Leonard P. Marretta
LRSP and LPA Program Manager

Olivia Phelps
LTAP Training Program Coordinator

Steve Strength, P.E., P.T.O.E.
LTAP Program Manager

Publication Statement

Technology Exchange is published quarterly by the Louisiana Transportation Research Center. It is the newsletter of the Louisiana Local Technical Assistance Program. Any findings, conclusions, or recommendations presented in this newsletter are those of the authors and do not necessarily reflect those of LSU, DOTD, or FHWA.

LTRC Publications Staff

Jenny Speights, Public Information Director
Jenny Gilbert, Editor
Emily Wolfe, Multi-Media Specialist
Chris Melton, Photographer

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.