2020 Louisiana Transportation Conference Highlights Innovation

Over 1,800 transportation professionals, industry partners, and academics from across the nation gathered for the 2020 Louisiana Transportation Conference. This year’s theme was "Transportation Innovation: The Foundation of our Future" and took place March 1-4, 2020, at the Raising Cane’s River Center.

The conference’s general session included key speeches by Governor John Bel Edwards, AASHTO Executive Director Jim Tymon, DOTD Secretary Shawn Wilson, Ph.D., and LTRC Director Sam Cooper, Jr., Ph.D., P.E. This year’s featured speaker was David Woessner, who serves as Executive Vice President of Corporate Development & Regulatory Affairs for LM Industries. Passionate about self-driving technology, Woessner focuses on global market approach, public policy and regulation of self-driving vehicles, and other innovative technologies significant to LM Industries.

This year also debuted a new format for the opening session by including the transportation awards ceremony at the start of the conference as part of the ongoing recognition of special achievement in engineering and construction projects by DOTD and their transportation partners. Special achievements and best projects were honored, demonstrating the dedication in providing the highest
I learned lots of new innovative design methods and became caught up with the progress of several big design projects in the area.

Great variety of speakers and topics. Excellent networking opportunity.

The highest-attended session was “1-10 Baton Rouge Corridor Improvements.” Presented by DOTD Project Management Director Brian Kendrick and DOTD Environmental Impact Manager Carey Coxe, attendees were able to witness project improvements such as the I-10 Baton Rouge Corridor updates, including a current overview, feasibility study, funding, and early decisions made. Kendrick also gave an in-depth status update on the on-going environmental assessment. Coxe closed the session by discussing historic projects affected by the 1-10 project (such as structures within Old South Baton Rouge and Hundred Oaks Historic Districts), showing images of historic buildings under consideration of relocation. Coxe used an example from Galveston, TX to show how historic home relocations can be successful, while allowing historic buildings to continue being viable and a useful part of their community.

The next session that gained a lot of interest was “Partnering Between DOTD and the Consultant Community.” Presented by Deputy Chief Engineer Edward R. Wedge, III, P.E., and Geoffrey Rodriguez, director of Quality and Continuous Improvement Program (QCIP), this session discussed the structured process that DOTD has established for partnering with the consultant community and covered major changes to policies and processes related to consultant contracts that have come about since the inception of this process in August 2018. Following the presentations, a roundtable-style Q&A was conducted by a panel comprised of DOTD staff from the consultant outreach group and the president of ACEC-L.

Other highly attended sessions included “Dispatches from the Front Line of Alternative Delivery and the Future of Transportation Funding,” “Sunshine Bridge Emergency Repair,” and “Swamp Tank: Up to Our Ears in Alligators.”

LTRC would like to thank our sponsors, speakers, moderators, exhibitors, and attendees for making the 2020 Louisiana Transportation Conference the most successful event to date.

Save the Date
The next LTC is already in the works and scheduled for March 13-16, 2022.

LTC Gallery
Please visit https://ltrc.smugmug.com/2020Louisiana-Transportation-Conference.
Transportation Awards and Recipients

**Louisiana Work Zone Excellence Awards**

Less than a 0.2 deficiency average on jobs in (2018-2019)
- District 03, Michael Moran and Gang 243
- District 03, Jeff Faust and Gang 203
- District 02, Michael Duplantis and Gang 242
- District 02, Benny Herrington and Gang 212
- District 02, Kevin Rizzo and Gang 232
- District 07, Tyson Thevis and Gang 207
- District 08, Randall Duffey and Gang 248
- District 58, Bridget Ellerbe and Gang 221

Less than a 1 deficiency average on jobs in (2018-2019)
- District 05 | District 07 | District 08

Honorable mention for less than a 0.5 deficiency average on jobs in (2018-2019)
- District 07, Beau Istre and Gang 247
- District 07, Vicki Ponthieux and Gang 217
- District 05, David Wing and Gang 205

The Work Zone Excellence Award is given to the project that had ZERO crashes at the Queue on a major interstate route
- H.012823.6 C.E.C. and Tyson Thevis/Gang 207

**DOTD Transportation Excellence Awards**

Roadway/Bridge Construction Project Under $10 Million
- I-10: Interchange Modification at Terrace
  Mark Bucci, Mary Jean McAdams, and Anna Hanks, DOTD Bridge Design

Roadway/Bridge Construction Project Over $10 Million
- I-49 North Segment K
  Elba Hamilton and Matt Wallace, AFJM

Other Infrastructure Construction Project Under $10 Million
- Runway 15-33 Rehabilitation
  Kevin Melton and Andrea LaFleur, Chennault International Airport

Other Infrastructure Construction Project Over $10 Million
- US 90 (I-49 South) at LA 318 Interchange
  Cindy Hall and J.J. Hickey, Stantec

**Bridge Design Project Development**

- Sunshine Bridge Emergency Repair
  Zolan Prucz and Jason Miles, Modjeski & Masters

**Road Design Project Development**

- I-12 (US 190 to LA 59)
  Jacob Fuselier and Dennis Hymel, T. Baker Smith, LLC

**Intermodal/Public Works Project Development**

- Port Fouchon—Northern Expansion Phase II, Slip C, Phase III
  Chett Chaisson, Greater LaFourche Port Commission

**Context Sensitive Solution/Public Involvement**

- I-10: I-210 West to I-210 East
  Noel Ardoin and Lynn Maloney-Mujica, DOTD Environmental

**Use of Innovative Product or Technology**

- Sunshine Bridge Emergency Repair
  Joey Coco and Brent Campbell, Forte & Tablada

**Special Achievement in Customer Service**

- New Orleans Airport Connector Road
  Doug Olson and David Lebreton, Barriere Construction

**SASHTO Scholarship Awards**

- LSU: Nathan Baylot, Meredith Guidry, Lucas LeCoq, Matthew Loker, Nicolas Smith, Paige Bates, and Joshua Cook

*continued on page 6*
Mike Boudreaux, P.E., has been with LTRC since September 2001, and while many know him to provide assistance on various levels, his eye for detail and thorough technical knowledge make him a valuable asset to researchers and transportation professionals alike.

**Sit-down Spotlight: Mike Boudreaux, Technology Transfer**

Mike is very good at finding technical errors and conformance between graphical data and text. And I am always amazed that he can do this with reports/publications from widely varying fields that LTRC research is involved with. I always asked for his input and incorporated his suggestions before submitting NCHRP quarterly progress reports. In my opinion, his effort provides QC/QA to the publication process and ensures that the published reports are of a high quality.

—Amar Raghavendra

**What is your position and what do you do on a daily basis?**

Defining what technology transfer or what implementation is varies across all 50 states. There’s no common definition. But at LTRC, once a research project is complete, an implementation plan is developed and approved by the research project review committee. My role varies for each project depending on its implementation plan. I also often serve on interview panels for engineering graduates seeking employment with DOTD as well as work with committees charged with planning and executing transportation conferences for DOTD. I spend a lot of my time reviewing research reports for technical inaccuracies. I also review training material for technical errors and spend the same amount of time and attention on those as the research reports.

**Why do you think you have such an eye for catching technical errors?**

I guess that’s just the type of person I am. It’s just an eye for detail—that’s why I’m an engineer. I think it’s just how I’m wired. Growing up, my dad was an office manager, and I would help him at work when I was little. They used to have big boxes of stacks of numbered receipts, and I would put them in order. I was excited to do it, and he would always be impressed at how quickly I managed to complete it.

**What do you enjoy most about your job?**

I enjoy working with many exceptional individuals at DOTD and LTRC. But I do get a sense of fulfillment helping PIs create a better report, whether it’s going to be used in Louisiana or used by another state DOT. Nothing would detract from LTRC’s credibility or reputation than publication of a report that contained technical discrepancies. There are so many PIs that will contact me to say how much they appreciate what I do. I don’t feel like I spend a lot of time, but they are always so appreciative that I was able to catch so many things on a report that they have been working on for months. When you’re the author of a report, you just stop seeing things, so I’m happy to be that outside technical eye before they submit it for publication.

**What do you wish others knew about your position?**

I hope people know that you can’t look at the number of comments I make as any indication of the health of the report. In fact, just one comment or error found could scrap an entire report. I think it’s
important that we make sure our reports are technically correct before we try to implement them. So part of my review process, I reveal perceived discrepancies and then leave it to the PI to address those factual comments.

**What is a challenging aspect of your job?**

I would say that leading a group with diverse interests in an effort to produce a comprehensive program for a transportation conference is both challenging and rewarding.

**If you weren’t in your current position, what would you be doing instead?**

I would be an accountant. Everything has to balance, and when your numbers don’t come out right, you have to be able to catch it. I enjoy finding where the error is and making it all balance.

---

**RESEARCH**

**Dr. Mohammad Receives High Honor as Member Emeritus**

Irma Louise Rush Stewart Distinguished Professor Louay Mohammad, Ph.D., P.E. (WY), F. ASCE, was recently honored with the highest level of peer recognition upon his selection as a Member Emeritus of the Transportation Research Board (TRB) Committee on Surface Requirements of Asphalt Mixtures (AFK40). Dr. Mohammad was appointed thanks to his continued leadership and dedication to TRB standing committees as well as being an effective ambassador in the subject highway construction materials, pavement design and analysis, and infrastructure sustainability.

“TRB established the emeritus membership category to recognize the significant and long-term contributions of individuals who have provided outstanding service through participation in our standing committees,” said Executive Director at Transportation Research Board Neil Pedersen. Dr. Mohammad has been in TRB’s asphalt materials section for over 18 years, which includes being the chair of committee AFK40 from 2007 to 2013. The TRB emeritus honor is the first designation for an active faculty staff member at LTRC and second for LSU faculty.
LATECH: Tanner Borskey, Sydney Bratton, Anna Opel, Benjamin Robins, and Mark Veasey
UL: Katelyn Keller, Blade Leger, Anna Paddock, Nicholas Scalfano, and Alexander Williams
UNO: Michael Ceraso and Jamaal Dejean
McNeese: Jessica Theresia

Senior Design Project Presentation Award Recipients
First Place—Louisiana Tech
Second Place—University of Louisiana at Lafayette
Third Place—Louisiana State University

DOTD Innovation Showcase Winners
2019 Tools and Work Processes Category
1st Place—Philip Macaluso, Section 45 for the “Contraflow Signs”
2nd Place—Philip Macaluso, Section 45 for the “Contraflow Gates”
3rd Place—David Tregre, Joseph Loupe, and Martin Narcisse, District 62 for the “Truck Mounted Magnet”

2019 Software and Technical Aids Category
1st Place—David Corley, Jeff Brunet, and Kalyn Partin, District 07 for the “Superelevated Curves Electronic Workbook Design”
2nd Place—Jesse Dubois, District 08 for the “Traffic Operations Database”
3rd Place—Jay Smallwood, District 04 for the “Electronic Fieldbook Generator”

The 2019 People’s Choice Award
Jonathan Merritt, District 61 for the “Asphalt Patch Leveler”

The Secretary’s Safety Award
Josh Lefranc, Kade Thevis, and Eric Marquart, District 07 for the “Mobile Emergency Traffic Signal”

STAFF NEWS

Staff Updates and Accomplishments

LTAP Program Manager Chris Melson was selected as the first place winner of Southern District ITE’s “Young Member Technical Paper Award” for his paper on the “Perception, Awareness, and Importance of Preparing for Connected and Automated Vehicle (CAV) Technologies: A Survey of Louisiana Organizations.”

Vijaya (VJ) Gopu, Ph.D., P.E., Associate Director for External Programs, was an invited speaker at the 2020 Alabama Transportation Conference held in Montgomery, Alabama in February 2020.

Congratulations to LTRC researchers Moinul Mahdi, Ph.D., Zhong Wu, Ph.D., Xiaoduan Sun, Ph.D., P.E., and Tyson Rupnow, Ph.D., P.E., for winning a 2019 Best Poster Session Paper Award at this year’s TRB meeting. Their paper was titled “Performance Evaluation and In-Situ Bond Strength Characterization of BCOA Pavements Under Accelerated Loading.”

LTRC welcomes Sonda Brown to the LTRC Geotechnical Group as an Engineering Technician 4 and Qiming Chen, Ph.D., P.E., as the Senior Pavements Research Engineer.

**Publications**

**Recently Published**

**Project Capsule 19-2B**
*Development of a Moisture Sensitivity Test for Asphalt Mixtures*
Louay Mohammad, Ph.D., P.E. (WY), F. ASCE

**Project Capsule 19-4B**
*Implementation of Semi-circular Bend (SCB) Test for QC/QA of Asphalt Mixtures*
Louay Mohammad, Ph.D., P.E. (WY), F. ASCE

**Project Capsule 19-4SA**
*Impact of Centerline Rumble Strips and Shoulder Rumble Strips on all Roadway Departure Crashes in Louisiana Two-Lane Highways*
Xiaoduan Sun, Ph.D., P.E.

**Project Capsule 20-1GT**
*Literature Search on Use of Plastic Pipes in Highway Engineering for DOTD’s Needs*
Navid Jafari, Ph.D.

**Project Capsule 20-2GT**
*Instrumentation and Modeling of Geosynthetic Load Transfer Platform Performance*
Murad Abu-Farsakh, Ph.D., P.E.

**Technical Assistance Report 19-03TA-P**
*Structural Assessment of Inundated Roads in Livingston Parish, Louisiana with the Falling Weight Deflectometer*
Kevin Gaspard, P.E., Zhongjie Zhang, Ph.D., P.E., and Mark Martinez, P.E.

**Final Report and Technical Summary 609 (13-2ST)**
*Live Load Monitoring of the I-10 Twin Span Bridge*
Steve C.S. Cai, Ph.D., P.E. (MD), and Yang Yu

**Final Report and Technical Summary 611 (17-1SA)**
*Evaluating the Effectiveness of Regulatory and Warning Signs on Driver Behavior near Highway/Rail Crossings*
Julius Codjoe, Ph.D., P.E., William Saunders, E.I., Joseph Cotton, Saleh Mousa, and Grace Ashley

**Final Report and Technical Summary 613 (12-11P)**
*Field Validation of Equivalent Modulus for Stabilized Subgrade Layer*
Mark Martinez, P.E.

**Final Report and Technical Summary 615 (18-3P)**
*Best Practice for Assessing Roadway Damages Caused by Flooding*
Mingjiang Tao and Rajib B. Mallick

**Final Report and Technical Summary 618 (17-6SS)**
*Evaluation of HeadLight: An E-Construction Inspection Technology*
Tyson Rupnow, Ph.D., P.E., Mary Leah Coco, Ph.D., George White, and Julian Yamaura, Ph.D.

**Final Report and Technical Summary 619 (18-5ST)**
*Investigating Available State-of-the-art Technology for Determining Needed Information for Bridge Rating Strategies*
Afshin Karshenas, Ph.D. FDH, and Babak Naghavi, Ph.D., P.E., PH

**Final Report and Technical Summary 621 (12-2P)**
*Assessment of Environmental, Seasonal, and Regional Variations in Pavement Base and Subgrade Properties*
Kevin Gaspard, P.E., Zhongjie Zhang, Ph.D., P.E., Gavin Gautreau, P.E., Murad Abufarsakh, Ph.D., P.E., and Mark Martinez, P.E.

**View Online**

To download a complete list of LTRC publications, visit www.ltrc.lsu.edu.
Technology Today
Publication Statement

Technology Today is a quarterly publication of the Louisiana Transportation Research Center, administered jointly by the Louisiana Department of Transportation and Development and Louisiana State University.

For additional information on material included in this newsletter, contact the public information director at 225-767-9183.

FOLLOW US  
Facebook  Twitter  YouTube

Keep up with our latest updates and information at www.twitter.com/LTRC_Updates, and search for us on Facebook and YouTube.

LTRC Administration and Publications Staff

Sam Cooper, Jr., Ph.D., P.E., Director
Tyson Rupnow, Ph.D., P.E., Associate Director, Research
Vijaya (VJ) Gopu, Ph.D., P.E., Associate Director, External Programs
Mary Leah Coco, Ph.D., Associate Director, Technology Transfer & Training

Jenny Kirkland, Public Information Director
Emily Wolfe, Multi-Media Specialist
Chris Melton, Multi-Media Producer
Jenny Gilbert, Editor/Technical Writer
Laura Williams, Editorial Assistant

This public document is published at a total cost of $890.00. Eight hundred and fifty copies of the public document were published in this first printing at a cost of $890.00. The total cost of all printings of this document, including reprints, is $890.00. This document was published by Mele Printing, 11930 South Harrell's Ferry Road, Baton Rouge, to report on the research and training of the Louisiana Transportation Research Center, as required in R.S. 48:105. This material was duplicated in accordance with standards for printing by state agencies, established pursuant to R.S. 45:31. Printing of this material was purchased in accordance with the provisions of Title 43 of the Louisiana Revised Statutes.