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LTRC Hosts Fly Ash Seminar

On Tuesday, April 14, the Concrete and Aggregates Association of Louisiana (CAAL) and LTRC sponsored an all-day fly ash seminar at the Transportation Training and Education Center (TTEC), which was also broadcasted to the



Department of Transportation and Development (DOTD) Shreveport district office by using videoconferencing across the network.

The purpose of the seminar was to educate Louisiana engineers about fly ash and to disseminate recent research results from previous field projects.

Seminar speaker and coordinator Tyson Rupnow, Ph.D., LTRC concrete research engineer, explained, "There is a misconception about what fly ash is and how it generally performs within the concrete matrix be it in the hardened state or fresh state." Transportation professionals from all over the state were presented with an overview of fly ash, where it comes from, and what it does to the fresh and hardened properties of concrete. The program also discussed fly ash's use in soil stabilization. Researchers, private industry professionals, and DOTD employees in attendance were able to earn up to four PDHs.

Ramon Carrasquillo, Ph.D., P.E., with Carrasquillo Associates spent the morning covering topics on general ash information, sulfate durability, Alkali Silica Reaction (ASR), permeability, and misperceptions of fly ash. Dr. Rupnow concluded the seminar in the afternoon by presenting on the history of geotechnical projects using ash and hydrated ash materials, subgrade uniformity, ternary mix designs, and ongoing research at LTRC.

While feedback from the seminar has been positive, Dr. Rupnow hopes that those in attendance gained an appreciation for fly ash and what it can do for the construction industry in Louisiana. Dr. Rupnow also plans to host a similar seminar in each district over the course of the next fiscal year.



2009 RAC Meeting Rates Final Problem Statements

The Research Advisory Committee (RAC) convened at LTRC on May 6 bringing many department heads together for the purpose of rating research problem statements. Over 80 problem statements were submitted to LTRC from universities, FHWA, local government, and DOTD, which were narrowed to 29 potential statements by the Research Problem Identification Committees (RPICs) in February.

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RPICs are responsible for reviewing the statements submitted and developing additional problem statements. During these subcommittee meetings, problems were thoroughly discussed and then rated on a scale from 0 to 3 in terms of implementation potential and need. Committees were also responsible for disposing of problem statements that could be solved through other avenues. From there, the top-rated problem statements were forwarded for the RAC final review and prioritization. The problems identified in these biennial meetings serve as the foundation for much of the research program during the next two-year cycle beginning July 2009.

The RAC meeting was well-attended by 28 RAC members from FHWA and DOTD. The process revealed several potential areas of research. Using implementation potential and need as criteria, the top three statements were in the safety category with other topics in concrete materials, structures, and pavement preservation. All of the RAC statements will appear in LTRC's work program with the prioritization assigned by RAC serving as the order with which each will be initiated over the next two-year period, pending funding.

LTAP Participates in 2009 Seatbelt Coalition



Every year during the last two weeks in May, law enforcement and state agencies across the United States join forces for an enforcement and education blitz that delivers the message of *Click It or Ticket*. Louisiana statistics show that in 2007 only 75 percent of Louisiana drivers wore their seatbelts despite the fact that Louisiana law requires all drivers and front seat occupants to buckle up. Also in 2007, 65 percent of the 993 people killed in traffic crashes were known to have not been wearing their seatbelts. In an effort to address these startling statistics, representatives from the Louisiana Highway Safety Commission (LHSC), Louisiana State Police (LSP),

United States Department of Transportation (US DOT), Department of Transportation and Development (DOTD), and Local Technical Assistance Program (LTAP) partnered to form a seat belt coalition in an unprecedented collaborative effort to promote the 2009 *Click It or Ticket* campaign and increase occupant protection by Louisiana drivers.

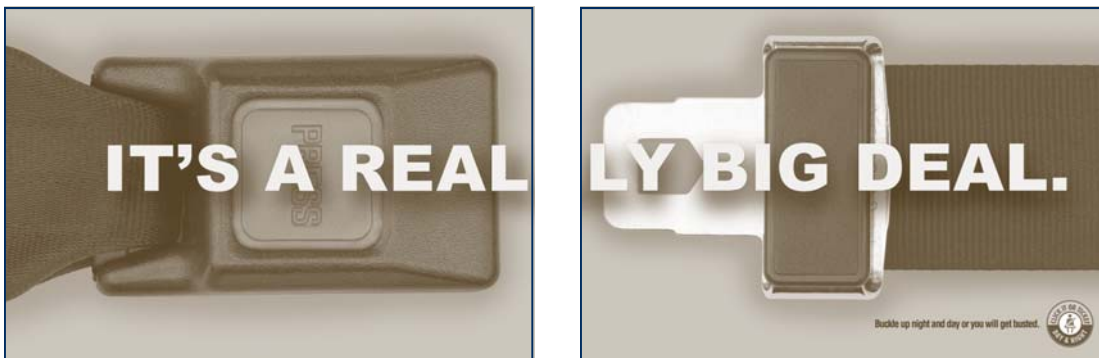
The campaign, a high-visibility law enforcement and public education campaign, took place May 18-31, 2009. LTAP played a lead role in this year's expanded campaign by organizing the state's primary road safety partners in an effort to engage different groups at the local level that had not been involved in a safety effort like this in the past. Monthly meetings were held, a target market was determined based on research and statistics, and meetings as well as press conferences with targeted parishes' law enforcement and government leaders were scheduled to discuss local involvement and awareness. In addition, creative materials were distributed across the state and a comprehensive media plan was executed.

LTAP Director Marie Walsh was a key influence in the coalition by including the local transportation community that LTAP serves. Walsh explained, "The willingness of local entities to help once they understood the issue and what was being asked of them was heartening." Walsh's goal behind LTAP's involvement was to highlight the need for local involvement to address this and all road safety issues in the state as well as to raise awareness of this seat belt issue facing Louisiana.

Occupant protection is one of the focus areas in the Louisiana Strategic Highway Safety Plan designed to reduce traffic-related injuries and fatalities. This effort pointed out the need for a multi-disciplinary approach and for leadership at both the state and local levels. It was also clear that the coalition will need to expand their reach and enhance the ability of safety advocates to help in their local communities.

LTAP hopes to expand their participation in this annual occupant protection effort and to incorporate a more multi-disciplinary approach to local road safety as LTAP continues to implement the Local Road Safety Program and work with their partners to implement the Louisiana Strategic Highway Safety Plan at the local level.

To learn more about LTAP and the Louisiana Local Road Safety Program, please visit www.ltrc.lsu.edu/ltap.



An example of the 2009 campaign posters that were placed throughout targeted cities in Louisiana.

Secretary's Retreat a Success

LTRC hosted this year's DOTD Executive Leadership Retreat at TTEC on March 24-25. With a limit of 25 seats, the DOTD Executive Leadership Staff and nominated managers gathered to meet in a casual environment to learn how to face certain issues and make critical decisions that affect the Department as well as the citizens of Louisiana.

One of the many goals behind the retreat was to allow DOTD leaders to work together toward common goals and to create an organizational workplace culture shift by understanding, guiding, and igniting frontline management and the executive leadership team. By creating a common language and a renewed sense of personal accountability, DOTD hopes to build a cohesive leadership team and shape the components of a healthy workplace.

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The leadership team was able to spend time in a setting devoted to leadership without focusing on issues of the day and discuss topics such as "Workplace Culture," "Personal Accountability and Credibility," "Leadership and Courage," and "Relationship Trust and Competency Trust," among others.

I am experiencing a change in relationships. I have people who rarely interacted with me that have begun to reach out.

The retreat's facilitator, Wendy Samson, President of FutureSYNC International, also added to the discussion by leading topics on "Using a Common Language," "Own it, Solve it,"



Wendy Samson,
President of FutureSYNC
International

"Accountability and Triangulation," and "Ensuring Right People are in the Right Roles—then Training Them to Lead," among others. Samson's forward-thinking and cutting-edge strategies encouraged all those in attendance. One participant explained, "It exposed me, challenged me, and I personally grew." Another said, "Personal accountability is now high on my radar."

Overall, attendees have already experienced a positive impact from what they learned during the two-day retreat. One attendee explained, "I am experiencing a change in relationships. I have people who rarely interacted with me that have begun to reach out."

While attendees expressed that the retreat was some of the best training they have ever attended, DOTD hopes that leaders will be able to guide staff to succeed in attaining excellence in all aspects of people management and team building by fostering an environment where employees are comfortable taking risks, openly sharing ideas, and using problem-solving skills.

LTRC Project Management and Tracking System's Progress Steady

Pallavi Bhandari, LTRC Computer Analyst II, has reached the coding phase for the LTRC Project Management and Tracking System. In this phase, Bhandari is in the process of writing, testing, debugging, and troubleshooting the source code of the computer program.

When all phases are complete, the web-based application will smooth the process of managing and tracking LTRC research projects. It is also predicted to improve inter-organizational coordination and communication as well as impact both the overall business process and the end users of the application. Bhandari explained, “The goal is to make sure that apart from storing and maintaining the data in electronic format, the application will play a role in streamlining the tracking of various elements involved in the lifecycle of a project beginning from the problem statements through to the final reports and implementation.”



Bhandari works to meet all potential problems and incorporate new requests or revisions.

Last October, Bhandari held an interactive demonstration with LTRC and DOTD employees by taking the group step-by-step through every Web page and answering many questions regarding the specifics of the application. “The major functions will include ratings and tracking of approvals of proposals, reports, and the status of ongoing projects,” said Bhandari. However, as Bhandari also demonstrated, the use of all these functions and access to data will vary depending on users’ job titles.

While progress has been steady, Bhandari explained that it was difficult getting to know the processes which currently exist and designing the web application so that it reflects these processes and meets the end users’ needs. However, regardless of the challenges, Bhandari said that the response has been positive from everyone who has seen the system, and she is looking forward to seeing the project through to completion.

LTRC Coordinates TRB Visit

In its annual effort to stay in touch with all of its host states, The Transportation Research Board (TRB) sent staff member Frank Lisle, P.E., to DOTD May 4-5 to listen to individuals within the Department, multiple working groups, and the administration. Lisle is responsible for 17 TRB committees and serves as TRB's engineer of maintenance.

The main focus of Lisle's visit was pavement and bridge preservation. LTRC coordinated seven separate meetings with a casual interview format where all of the positive efforts and foreseen challenges discussed by DOTD were made familiar to Lisle. Lisle shared his wisdom with each group based on his experience of over 20 years at TRB. He observed that DOTD has a solid handle on the preservation needs and is in position to make effective use of available funds. The need to increase the use of engineering economics techniques such as cost-benefit analysis in the project selection process was mentioned at several meetings.

Chris Abadie, LTRC associate director of research, explains, "This experience reinforced my belief that the DOTD has already begun to practice the engineering required to enable cost-effective preservation techniques, and in a perfect world with more funding, DOTD could put what we already know into action. Each individual and each group is very aware of the challenges ahead as they are now being asked to choose when to implement 'new' preservation ideas while given less funding."

TRB hosts its annual meeting in January. This meeting is attended by over 10,000 transportation professionals and supported by the state DOTs through the National Academy of Sciences. TRB will publish more than 750 of the peer-reviewed papers in the Transportation Research Record series providing a structured, yet independent clearing house of research ideas and solutions drawing from universities, state DOTs, the FHWA, consulting engineers, industry engineers, and construction companies. All of these individuals work to improve Louisiana's transportation infrastructure. TRB also provides an outstanding service to everyone in the transportation community by providing this permanent record.



Thank you to the groups that participated in the various TRB meetings:

- Materials
- Research
- Training
- System Preservation
- Bridge Maintenance
- Pavement Management
- District 03 Administration
- Safety
- Construction
- DOTD Administration

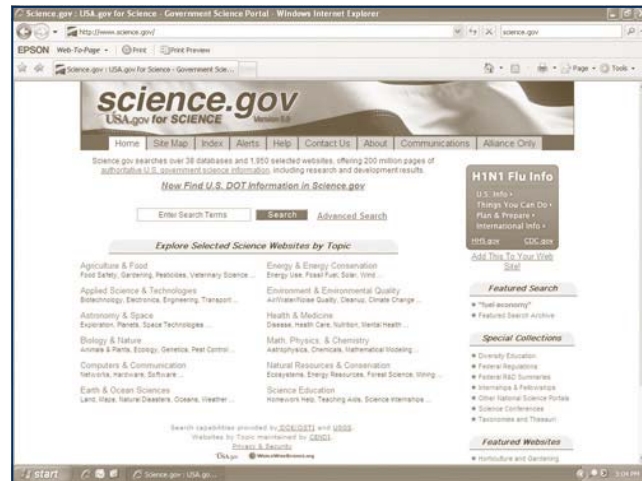
DOT Joins Science.gov

The US DOT National Transportation Library (NTL) has recently joined Science.gov, a science gateway that allows researchers or interested individuals to find information relative to their work.

Since the inclusion of the DOT NTL, users will be able to launch a search on Science.gov and have access to science information from 14 government agencies and over 30 DOT Web sites. The DOT NTL Integrated Search has been added to both the basic search and the advanced search in Science.gov. The major subject areas of this source are highway and transportation engineering, statistics, planning, policies, and research. With more access than ever, Louisiana lawmakers, department heads, researchers, and the general population will be able to retrieve pertinent transportation information on a variety of topics.

With the addition of DOT to the system, approximately 680,000 records and full-text documents are added to the database.

Science.gov provides 200 million pages of science information and research results; a single query searches across 38 databases and portals and more than 1,900 Web sites. The information is free and no registration is required.



Recently Published

Final Reports

- 406** Development of Models to Estimate the Subgrade and Subbase Layers' Resilient Modulus from In situ Devices Test Results for Construction Control
- 428** Development of a Statewide Transportation Data Warehousing and Mining System under the Louisiana Transportation Information System (LATIS) Program
- 418** Monitoring System to Determine the Impact of Sugarcane Truckloads on Non-Interstate Bridges
- 429** Effect of Drainage in Unbound Aggregate Bases on Flexible Pavement Performance

Technical Summaries

- 428** Development of a Statewide Transportation Data Warehousing and Mining System under the Louisiana Transportation Information System (LATIS) Program
- 430** Development of Uniform Sections for Pavement Management System Inventory and Application

Technical Assistance Report

- 08-3TA** Bottom Ash Test Section Evaluation - Erwinville, LA

To view a complete list of LTRC publications, visit <http://www.ltrc.lsu.edu/publications.html>.

Staff Updates and Accomplishments

LTRC Director, **Harold “Skip” Paul, P.E.**, has been appointed to the AASHTO Standing Committee on Research (SCOR).

Director of Engineering Materials Characterization Research Facility (EMCRF) and Civil Engineering Professor **Dr. Louay N. Mohammad** chaired the technical session titled “Moisture Susceptibility Measurements in Hot Mix Asphalt Mixtures” at the 88th Annual Meeting of the Transportation Research Board held in January 2009 in Washington, D.C.

Dr. Mohammad also chaired the technical session titled “Flexible Pavement and HMA Design Issues at the 4th International Gulf Conference on Roads” held in November 2008 in Doha, Qatar.

LTRC Senior Geotechnical Research Engineer **Gavin Gautreau, P.E.**, has been selected to serve on the TRB Committee on Transportation Earthworks, AFS10.

Glynn Cavin, technology transfer and training administrator, has completed all requirements for award of a Doctorate in Human Resource Education and Workforce Development from LSU. His dissertation, titled “The Leadership and Problem Solving Styles of Louisiana Emergency Operations Centers,” was recently featured at a FEMA conference in Maryland.

On behalf of the LTRC Publications and Communications Department, we would like to correct an error that was made in the previous issue of *Technology Today*. We regret the following error:

Front Street in Natchitoches – Road Design Project Development Award
Val Horton, Project Manager
Paul Rossini, NTB Associates

Front Street in Natchitoches – Context Sensitive Solutions/Public Involvement Award
Val Horton, Project Manager
Jonathan Lachney, Environmental
Elizabeth Davoli – DNR
Paul Rossini – NTB Associates
Thurston Hahn, Archeology – CEI

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