Technology



Vol 20

LTRC

2006

A publication of the Louisiana Transportation Research Center

Baker Retires with 34 Years of Service to DOTD



DOTD Chief Engineer Bill Temple presents Baker with retirement certificate

Joe Baker retired from LTRC January 3, 2006. He has served as Director of the Louisiana Transportation Research Center since August 1993. He received a B.S. degree in civil engineering from LSU in 1971 and has been a registered Professional Engineer in Louisiana since 1975.

After beginning his professional career as an engineering designer with Barnard and Burke Consulting Engineers, Inc., Baker joined the Louisiana Department of Transportation and Development in 1971. For 12 years, he worked in the Materials Section where he was involved in the management of testing, evaluation, and quality assurance programs for transportation materials.

Cont. on

LTRC Represented at 85th Annual TRB Meeting

LTRC was represented at the Transportation Research Board's 85th Annual Meeting in Washington, D.C., January 22-26, 2006. The TRB Annual Meeting program covers all transportation modes, with more than 2,600 presentations in 800 sessions addressing topics of interest to all attendees—policy makers, administrators, practitioners, researchers, and representatives of government, industry, and academic institutions. This year's spotlight theme was "Transportation 2025: Getting There from Here." Also highlighted was "The Interstate Highway Systems 50th Anniversary—What Have We Learned?", and "SAFETEA-LU: What it Means for Research and the Transportation Community."

Capping Systems for High Strength Concrete

Sadi Torres and John Eggers, LTRC

 Characterization of Cohesive Soil-Geosynthetics Interactions from Large Direct Shear Tests

Murad Yusuf Abu-Farsakh, LTRC Julian Coronel, LSU

 Comparison between Field and Laboratory Pullout Tests on Geosynthetics in Marginal Soils

Murad Yusuf Abu-Farsakh, LTRC
Izzaldin Almoh'd, BBC&M Engineering, Inc.
Khalid A. Farrag, Gas Technology
Institute

Visit our Web site: www.ltrc.lsu.edu

Cavin Named TTEC Administrator

LTRC welcomed Glynn Cavin as the Transportation Training and Education Center (TTEC) Administrator in November 2005. Previously the Deputy Director of the East Baton Rouge Parish Department of Public Works, he has also been the Director of Public Works for the City of Baker and Director of Transportation for Associated Grocers.

Cavin received a B.S. in Management from the University of Louisiana at Lafayette and an M.B.A. in Transportation and Marketing from the University of Tennessee. He then began a 24-

year career with the United States Air Force (USAF), which included positions in Ramstein, Germany, and in the Joint Chiefs of Staff office at the Pentagon. He was the only USAF transportation officer selected to attend a one-year course in national security and transportation / logistics at the National Defense University in Washington, D.C.

In his new role, Cavin will be responsible for developing and administering TTEC's activities and directing its business operations. He will develop



Glynn Cavin, TTEC Administrator

and manage the TTEC training and education budget utilizing state university sources, FHWA National Highway Institute, and private vendor contracts. TTEC will provide continuing education to state and local governments, consultants, contractors and other transportation industry personnel. Workshops, seminars, leadership, safety and specialty training will be available for both DOTD employees and the wider transportation community.

"Joe Baker has built one of the most talented teams I have ever seen, including my years in the Pentagon," Cavin said after his first weeks of work at LTRC. "I feel extremely honored to join this staff and look forward to helping this team achieve national prominence as one of the best technology transfer centers in the nation."

You can contact Cavin at (225) 767-9112 or GlynnCavin @dotd.louisiana.gov.





TRB Presentations (cont. from page 1)

- Coupled Water Content Method for Shrink and Swell Predictions Xiong Zhang, LTRC
- Durability of Cement-Stabilized Low-Plastic Soils
 Zhonjie Zhang and Mingjiang Tao, LTRC
- Fatigue Crack Growth Analysis of Hot-Mix Asphalt Employing Semicircular Notched Beam Specimen

Mary Ann Mull-Aglan, Technology Resources, Inc. Ayman Othman, South Valley University Louay Mohammad, LTRC

- Hurricanes Katrina and Rita and Louisiana Highways: A Status Report Skip Paul, LTRC
- Laboratory Evaluation of Untreated and Treated Pavement Base Materials for Repeated-Load Permanent Deformation Tests
 Louay Mohammad, Ananda Herath, Masood Rasoulian, and Zhongjie Zhang, LTRC
- A Look at the Bailey Method and Locking Point Concept in Superpave Mixture Design (Invited Presentation)

 Louay Mohammad, LTRC
- Louisiana DOTD Experience with CPT for Driven Pile Design Mark Morvant, LTRC
- One-Dimensional Consolidation Calculation of Collapsible Soil Xiong Zhang, LTRC
- Permanent Deformation Analysis of Hot-Mix Asphalt Mixtures Using Simple Performance Tests and 2002 Mechanistic-Empirical Pavement Design Software Louay Mohammad, Zhong Wu, Codrin Dranda, Zhongjie Zhang, and Chris Abadie, LTRC

DOTD Awards Scholarships to

Civil Engineering Students

The Louisiana Department of Transportation and Development (DOTD) recently awarded ten \$1,000 scholarships to civil engineering students from Louisiana universities. LTRC administered the scholarship awards.

The recipients include Ryan Christopher Hedlund, Sarah Moss, and Dan Seedah (Louisiana State University); Jasmine Galjour (University of Louisiana at Lafayette); David Minton (McNeese State University); Lance Garth Tyson, Kyle Stephens, Jerry Daniel Thompson, Jason Hoyt, and Grover Allen (Louisiana Tech University).

Applicants were required to be at the junior or senior level with a declared major in civil engineering and an interest in pursuing a vocation in the transportation field. They were evaluated on academic success and a one-page description relating their academic choices to their career goals in the transportation industry.

"We're optimistic that, in this small way, we may influence some of these young students to pursue a career in the transportation field and, in doing so, strongly consider DOTD as a career choice," said DOTD Secretary, Johnny Bradberry.

The Southeastern Association of State Highway Transportation Officials (SASHTO) provided the funds for these scholarships. Louisiana's leadership was instrumental in the decision by the SASHTO board of directors, of which Bradberry is a member, to utilize SASHTO technical conference funds in this manner. During SASHTO's 2000 meeting in New Orleans, which was hosted by DOTD, scholarships were first awarded to participating states.

The association made an allocation to each of the states that make up SASHTO: Louisiana, Alabama, Arkansas, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia, and the Commonwealth of Puerto Rico.

LTRC's Policy Committee evaluated the applicants. The Policy Committee is composed of three appointees of the secretary of DOTD, one appointee of the chancellor of LSU, six appointees from other state universities, the director of LTRC, and an observer from the Federal Highway Administration.

Scholarships will also be awarded for the fall semester of 2006, based on projected funding from SASHTO. Civil engineering students from the following universities are eligible for the scholarships: Louisiana State University, Louisiana Tech University, McNeese State University, Southern University, Tulane University, the University of Louisiana at Lafayette, and the University of New Orleans.

For further information, students may contact the civil engineering department of their respective universities.

Structured Training

We continue our "Meet the Staff" articles this month with the Structured Training Program group.

Structured Training is just what the title implies—systematically developing a curriculum of work-related training to prepare DOTD employees for career advancement. This group has developed a step-by-step approach to training employees for professional development, as well as technical training for DOTD field employees.

Depending on an employee's individual needs, training can take the form of continuing education, hands-on training, or on-the-job training within an organized program for job proficiency and advancement.

Reta "Tinka"
McFarland is the
Director of the

Structured Training Program. She is a professional educator with 35 years of service to DOTD. She started in the training office as an illustrator and designed several of the earlier DOTD logos. McFarland has been at LTRC since 1970 and was one of the first occupants of the building. She describes her job as "making sure the training is appropriate to the job, solving problems, and helping people." An example of this would be taking the different procedures used in the separate districts and developing the Maintenance Superintendents Resource Manual, which is a compendium of "best practices" now used statewide.

Cindy Twiner, the Construction and Materials
Program Manager, has been with DOTD for 21
years. With an educational background in
archaeology and anthropology, she began in the
Environmental section monitoring the impact of
roadway construction on historical sites. Twiner
now coordinates the training of the District
Training Specialists and engineering technicians.
She also develops testing and training methods
and the design and implementation of the certification process for department and non-depart-

ment inspectors and technicians.

Mike Elliot has been a DOTD employee for 23 years and now serves as District Training Liaison and Implementation Specialist. In this position, he observes the best practices and implements them statewide. He is

Pictured (I to r): Tinka McFarland, Cindy Twiner, Mike Elliot, Karen Cordell, Gordon Smith, Kelvin Stone

also involved in writing training modules for Superpave and other programs. Elliot spent 17 years in the Materials Testing Lab testing hot mix and asphalt.

Karen Cordell manages the Headquarters
Training Program. In this capacity, she acts as
liaison between the training and headquarters
sections to assist section heads and training
coordinators in providing employees with necessary training and training-related documentation
for personnel actions. Cordell has been with the
department for 15 years, all spent at LTRC. She

Review and Revision of PPM No. 59 Underway

October 1, 2004, marked the end of the twoyear implementation phase-in period of the new and revised structured training programs (STPs) for LADOTD engineering technicians, which are governed by Policy and Procedure Memorandum (PPM) No. 59. A landmark accomplishment, PPM No. 59 created the department's first official statement of its organizational philosophy regarding workforce development and defined the expectations of its supervisors and employees.

The Engineering Technician Task Force team, whose work was instrumental in developing the PPM, was recognized as the LADOTD Team of the Year in 2002. The department's efforts to establish the Leadership Institute and redesign engineering technician STPs received the 2002-2003 Louisiana Chapter Achievement Award from the International Personnel Management Association.

The PPM represents LADOTD's belief that structured training, professional development, continuing education, and on-the-job training are essential to maximize employee potential and provide qualified personnel crucial to the effective management of the transportation system. Because they are dynamic, these training programs must be reviewed periodically for any necessary changes to ensure that they are meeting employees' professional development needs.

To address such issues, LTRC representatives have begun a series of 14 meetings with department administrators, division heads, and district administrators. Before these meetings began, Dr. Sharon Naquin and her staff from the LSU School of Human Resource Education and Workforce Development facilitated two focus groups comprised of various STP partici-

pants. The summary report produced by these focus groups provided the following topics for discussion in the PPM review meetings:

- □ DOTD's philosophy regarding training and continual learning
- Parity of training requirements for structured training programs under different jurisdictions
- Replacement of existing courses with more appropriate materials
- Grandfathering
- ☐ Exceptions, substitutions, assessments and/or testing out

After the meetings, LTRC will compile the comments into a draft report on possible revisions and then submit a modified version of PPM No. 59 and training requirements to the Secretary, Executive Committee, and district administrative officials for approval.

The benefits of PPM No. 59 are already visible, and steps to improve it are currently in progress. LTRC has three notable training initiatives that will assist engineering technicians with their STP requirements. Placement testing will allow personnel to demonstrate their knowledge in specific areas and substitute prior coursework or experience for STP course requirements. More on-line training offerings and distance learning opportunities will help decrease the burden of self-study courses.

Baker Retires (cont. from page 1)



Baker and Verdi Adam, President of G.E.C., Inc.

During his career, he has been the Transportation Research Board State Representative for Louisiana as well as a member of the following organizations: AASHTO Research Advisory Committee, ASTM Committee D.04 (Road and Paving Materials), American Society for Nondestructive Testing, American Society for Metals, American Concrete Institute, ITS America, and the Louisiana Society for Professional Engineers.

A retirement reception was held January 4, 2006, at the Transportation Training and Education Center. LTRC wishes Joe well in his retirement!

Baker was named Director of Technology Transfer at LTRC in 1987. He managed programs for the training of 5,600 DOTD employees, implementation of research, coordination of the DOTD Strategic Planning Program, and the provision of technical assistance to local government agencies through LTRC's Local Technical Assistance Program.



Ken Naquin, Executive Director - Occupational Division, Associated General Contractors



Dennis Babin, former LTRC Associate Director, Tech Transfer (left), and Gordon Nelson, DOTD Assistant Secretary (right)

Staff Accomplishments

Gavin Gautreau, P.E., Geotechnical Research Engineer Manager, has received the Louisiana Engineering Society's 2006 F. Hugh Coughlin Young Engineer Award. This award is given to an engineer age 35 or younger who has demonstrated to a high degree capabilities in his chosen field of engineering, thereby indicating potential for further advancement and leadership as a professional engineer. The award is named to honor F. Hugh Coughlin, P.E., for the prestige and esteem that he has brought to the engineering profession and his initiative in establishing this award.

Structured Training Staff (cont. from page 5)

says the most important part of her job is helping people fulfill their training needs for job performance and advancement.

G. Gordon Smith is a Training and Development Program Manager. This position is responsible for the Management Development Program that supplies training to DOTD middle and upper management. This includes the Comprehensive Public Training Program (CPTP), which the governor's office requires of all state employee managers. Smith says his job is "heavy on coordination," as he facilitates 10 to 20 separate classes each month. He has worked for DOTD since 1991, all of that time at LTRC.

Kelvin Stone is the newest member of the team, having joined DOTD just 3 years ago. He was previously a training specialist at the state hospital at Jackson, Louisiana. Stone helps develop the performance evaluations for DOTD employees and other personnel. These evaluations measure an individual's proficiency in testing various materials. He is also updating the Standard Specifications manual for 2006. Stone says one of the most rewarding aspects of his job is knowing that his work in the Structured Training group has an impact statewide.

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 editor, (225) 767-9145, Louisiana Transportation Research Center, 4101 Gourrier Ave., Baton Rouge, LA 70808-4443.

Skip Paul, P.E.

Assoc. Director, Research Mark Morvant. P.E.

Assoc. Director, Technology Transfer

Sher Creel Executive Editor Emily Wolfe Editor **Nick Champion** Photographer **Jenny Speights** Webmaster

This public document is published at a total cost of \$1192.00. Seventeen hundred copies of the public document were published in this first printing at a cost of \$920.00. The total cost of all printings of this document including reprints is \$1192.00 This document was published by Louisiana State University, Graphic Services, 3555 River 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. 43:31. Printing of this material was purchased in accordance with the provisions of Title 43 of the Louisiana Revised Statutes.