

2007  
Louisiana  
Transportation  
Engineering  
Conference

February 11-14, 2007

Baton Rouge River Center  
Baton Rouge, Louisiana



2007 TRANSPORTATION ENGINEERING CONFERENCE  
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**Parking Procedures**  
**IMPORTANT!!!!**

**General:**

- Park in either East or West garage.
- Garage entrances are on St. Louis Street, just north of St. Louis/Government St. intersection.
- You may enter/exit garage as often as necessary by following the procedures below.

**Procedures for Driver:**

1. Take ticket from machine each time you enter garage.
2. Report to Parking Validation (adjacent to Registration Booth in River Center Lobby) to turn in ticket and receive a garage exit pass anytime before departure from conference.
  - a) A pass is only good for that day.
  - b) Each time you exit the garage and return the same day, you must repeat the procedure.

***The Following Step Is Very Important***

- c) You ***must*** inform Parking Validation if this is second (or subsequent) time to get a pass that day - no penalty, just need to know for proper payment to East Baton Rouge Parish (EBR) authorities.
3. Same procedures are to be followed each day/each entry.
  4. Different colored passes for each day.
  5. If you fail to exchange parking ticket for pass, you will be responsible for paying fee – ***no reimbursement after the fact.***

2007 TRANSPORTATION ENGINEERING CONFERENCE  
CONFERENCE INFORMATION

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**Shuttle Information**

*Monday, 2/12/07      7am — 9am  
                                 8pm — 10pm*

*Tuesday, 2/13/07    7am — 9am  
                                 4pm — 6pm*

***Pickup/Dropoff***

*Pickup on Lafayette Street, Hilton Hotel  
Drop off at River Center*

*Pickup at Sheraton Hotel  
Drop off at River Center*

***Return shuttle provided***

**Badge/Name Tag**

Please remember to wear your 2007 Louisiana Transportation Engineering Conference badge/name tag at all times as this is your admission to all events.

**Conference Headquarters**

The 2007 Louisiana Transportation Engineering Conference Headquarters is located in the Business Office on Ground Level, next to the Exhibition Hall. The conference headquarters will be open Monday and Tuesday, from 7:00 a.m. – 5:00 p.m. and Wednesday, 7:00 a.m. – 2:00 p.m.

### **Display Tables**

The following exhibits will be on display in the lobby area outside the Exhibition Hall on Ground Level, Tuesday, beginning at the first coffee break at 9:45 a.m. through 4 p.m.

***LA DOTD Bridge Design:*** This display showcases many of the large bridge projects that have been completed in the past year or are in the final stages of completion. Included are the I-10 twin span repairs, the new I-10 twin span bridge, LA 1, the John James Audubon Bridge, the Florida Avenue Bridge, and movable bridge projects completed in the last year. This has been a record-setting year with bridge projects due to hurricane issues, special toll projects, TIMED projects, in addition to the regular bridge replacement program.

***LA DOTD Change Management Team:*** The intent of this display is to educate people on the Change Management Program. Available at the display are the latest Change Management books; the most current newsletter; giveaways; information on the Change Management session; a brochure on the Change Management Program; and a fishbowl for a drawing. A smaller version of the Jeopardy Board backdrop, like the one for the Change Management session, provides the backdrop for the display.

***LA DOTD Electronic Bidding, Electronic Plans, and Electronic Proposals:*** During the past year, LA DOTD implemented Electronic Bidding and began providing electronic copies of Plans and Proposals via the Internet.

- Information is provided on each system, and attendees are shown how to:
  - access the Electronic Plans and Proposals, and
  - provide information on how to sign-up for Electronic Bidding.
- Staff is available to answer questions.

***LA DOTD Environmental Section:***

DOTD's Environmental Section prepares and oversees environmental studies and documentation for all road and bridge projects that receive federal funds and permits or that are state-funded. These studies and documents are prepared in fulfillment of the National Environmental Policy Act of 1969. Types of studies include wetland analyses, archaeological studies, endangered species surveys, identification of hazardous or contaminated waste sites, and noise analyses. The types of environmental decision documents prepared include Categorical Exclusions, Environmental Assessments, and Environmental Impact Statements. The display's slide show presents ways different types of data are collected for the different types of studies as well as how the results of these studies are incorporated into the environmental decision documents.



***LA DOTD Materials and Testing Section:***

After 30 years of dedicated service, DOTD's Data Reporting System, the MATT System, is retiring in September, 2007. So that his many friends and colleagues may say goodbye and wish him well, a reception is being held at the Materials and Testing Section display at the 2007 Transportation Engineering Conference. Also come by and meet Materials Manager, which will become the new DOTD Materials Sampling and Testing System in October, 2007.

***LA DOTD Human Resources Section:***

Handouts and materials highlight career opportunities with LA DOTD and focus on experience, job stability, competitive pay with excellent benefits, challenging opportunities working with experienced professionals, professional development through continuing education, and a chance to make a difference in the transportation world.

***LA DOTD Office of Planning and***

***Programming:*** A PowerPoint slide show presents map products the unit produces and shows how those products affect transportation decisions. Some of the actual printed map products are displayed and show the progress DOTD is making in GIS applications. The latest Louisiana Official Highway Map and Louisiana Bicycle Map are available at the display location, as are items from ESRI, the provider of the GIS software used by the Section. The purpose for

choosing this approach is to emphasize that Transportation Planning and Programming is the backbone of the transportation network, and to show how the influx of data from all sources affects the outcome of transportation decisions.

***LA DOTD Road Design:*** The Road Design Section not only performs in-house design and oversees consultants performing design on Louisiana roadways, but the section also administers several programs such as Off-System Bridges, Transportation Enhancement and Urban Systems. Stop by and check out manuals and other informational materials available at the section's display. Personnel is on hand to answer questions you might have.

***FHWA Louisiana Division:*** The FHWA exhibits focuses on several target areas of the FHWA, including the 50th Anniversary of the Interstate, Safety, Access Management and Market Ready Technology Implementation. Pictures, brochures, DVDs, and other information are available to those who wish more information.

***LA DOTD Section 21 Data Collection and Management Systems:*** The traffic count section is displaying maps showing a sample of the traffic count locations and some of the equipment used to gather the information. The Bridge and Pavement Management sections are demonstrating the Pontis, dTIMS, Visidata, and Surveyor software. Also being shown is the New Intranet Report query tool, with its graphical interface for querying the PMS data, and the New HO Digital Images collected from the ARAN in part of the new data collection survey which will be completed and delivered in June of 2007.



**Professional Development Hours (PDHs)  
for Engineers**

The program provides abstract information and a schedule of 72 sessions, including four workshops and eight personal development courses, all of which qualify for professional development hours. The last pages of the program contain a register to help keep track of the sessions that are attended and number of PHDs that are accumulated. There is a total of 17 Professional Development Hours (PDHs) available through this conference, including the biennially required hour in professional ethics.

### Featured Speakers

**James H. Gill, Jr.** *An ethics presentation will be given by James H. Gill, Jr., President/CEO of Iron Mount Corporation of Birmingham, Alabama, a company serving the iron, steel and foundry industries with patent-pending technology offering environmental reclamation, recycling and remediation services. Gil has a Jurist Doctorate degree from Loyola University, New Orleans, and a Business Administration degree from LSU. Before joining Iron Mount Corporation, he held the Contractors Educational Trust Fund (CETF) Endowed Chair, Principal in Residence and CETF Endowed Professor of Applied Professional Ethics positions at LSU. Over the past 45 years, Gill wore many hats — ranging from construction trade association executive; founder, CEO and Officer of maintenance and construction firm; attorney specializing in international engineering, procurement/construction contracts; President of an internationally owned bank holding company and executive in an LA bank regulated by the FDIC.*

**Thomas F. Teepell** *Thomas F. Teepell, Chief Marketing Officer for Lamar Advertising, one of the nation's largest publicly held outdoor, will speak on "How to Set Your Compass." An LSU accounting graduate, Teepell spent several years with the CPA firm KPMG and was recognized as a national sales leader for both IBM and XEROX; "Marketer of the Year" by Sales & Marketing Executive International, and "Who's Who in Marketing." He received outdoor's highest marketing recognition when he was awarded the L. Ray Vahue Award and named to the OAAA HALL OF FAME. Teepell also spent several years on Madison Avenue in New York directing the national marketing for the Outdoor Advertising Association of America. Teepell has conducted sales and marketing seminars around the world for the television, radio, magazine and outdoor industry, addressing the advertising associations of Japan, Mexico and more than 170 Advertising Federations in over 46 states. Author of the audio and video tape series, "Disciplined Selling," he now lives in Baton Rouge, Louisiana.*

## **Industry Exhibits**

### **Exhibition Hall, Ground Level**

Exhibits on transportation technologies/  
products will be displayed during the follow-  
ing times:

#### **Monday**

- **Industry Reception**  
5:00 p.m. to 9:00 p.m.  
Exhibition Hall on Ground Level

#### **Tuesday**

- 9:45 a.m. Morning coffee break
- 12 noon until 1 p.m. (Lunch provided in  
Exhibition Hall)
- 3:15 p.m. Afternoon coffee break

### **Speaker Preparation Room**

Speaker preparation equipment is located in  
the Show Manager Office on Plaza Level,  
around the corner from Meeting Room 1.  
(Follow the signs with directional arrows.)  
This room contains audiovisual equipment  
for speakers to use in preparing for presen-  
tations. Hours are:

Monday, Tuesday     7:00 a.m. – 5:00 p.m.  
Wednesday            7:00 a.m. – 12:00 p.m.

### **Wednesday's Conference Luncheon**

Seating for the Conference Luncheon starts at 11:45 a.m. in the Ballroom of the River Center. Lunch will begin at 12 noon and will include awards presentations and featured speaker Thomas F. Teepell, with "How to Set Your Compass." Lunch will conclude at approximately 2:15 p.m.

### **Conference Evaluation**

A conference evaluation survey will be sent to you electronically after the conference. Please take a few minutes to respond to the survey so that we can gain your valuable input as we plan the next Louisiana Transportation Engineering Conference.

### **Conference Presentations**

After the conference, the conference presentations will be made available to all registered delegates, upon the completion of the conference evaluation.

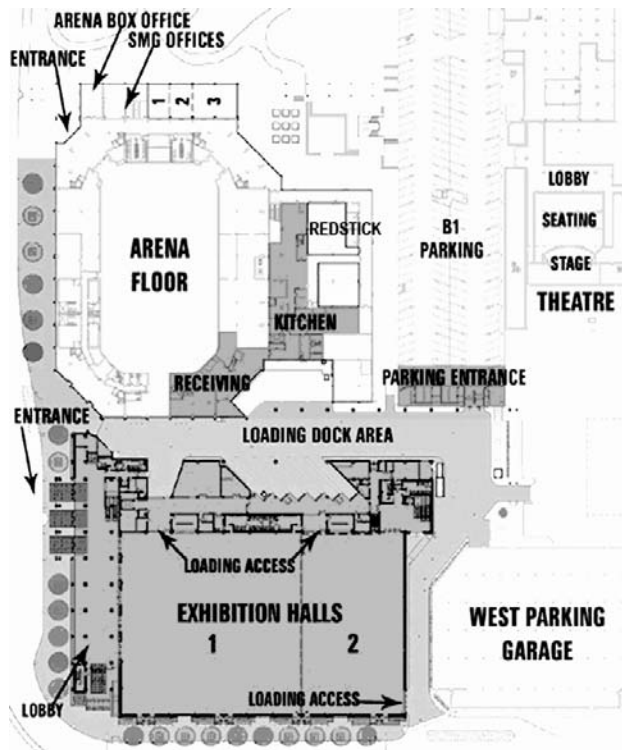
### **Special Needs**

If you have special needs during the conference, visit the Conference Headquarters (in the Business Office on Ground Level, next to the Exhibition Hall), and every effort will be made to accommodate your request.

**Notes**

## River Center Map

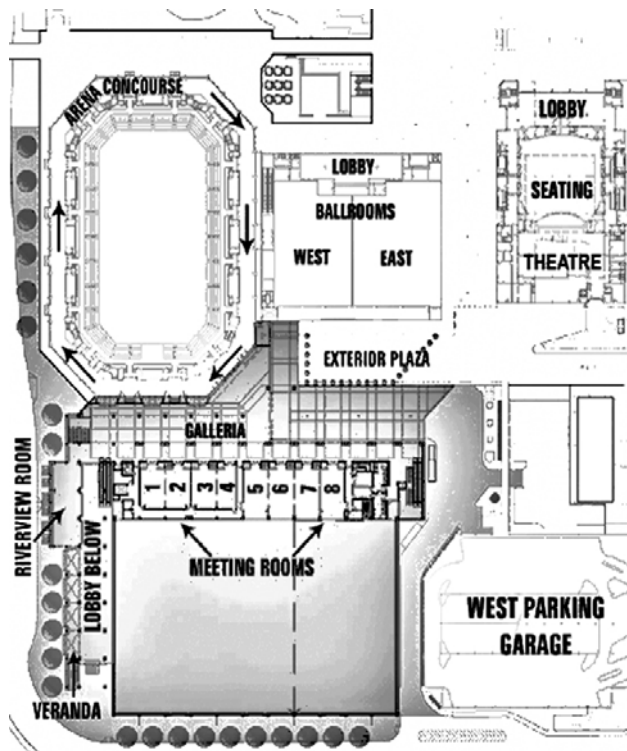
### River Center Ground Level





River Center Map

River Center Plaza Level



**Notes**

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***Sunday, February 11, 2007***

**2:00 p.m. - 5:00 p.m.** Conference  
Registration/Hospitality  
(*Iberville Room – Sheraton Hotel*)

***Monday, February 12, 2007***

**7:00 a.m. - 9:15 a.m.** Breakfast (*Galleria*)

**7:00 a.m. - 5:00 p.m.** Conference  
Registration (*Riverview Room – Plaza Level*)

**8:00 a.m. – 9:00 a.m.**  
Pre-Conference Ethics Presentation  
(*Ballroom*)

**9:30 a.m. - 12:00 noon** General Session  
(*Theater*)

To include address and welcome by

- Louisiana Executives/Legislative Officials
- DOTD Administrators
- National Transportation Officials
- FHWA Administrators
- Industry Representatives

**12:00 noon - 1:00 p.m.** Lunch  
(*on your own*)

**1:00 p.m. - 2:45 p.m.** Concurrent Sessions

- **Session 10:** Managing Technological Change (*Redstick Room*)
- **Session 11:** Internet/Intranet Workshop (*Meeting Room 1*)
- **Session 12:** Planning (*Meeting Room 2*)
- **Session 13:** How Traffic Records Affect Tort Litigation (*Meeting Room 3/4*)
- **Session 15:** Pavement Preservation (*Meeting Room 5*)
- **Session 16:** Recent Development in Pavement and Geotechnical Research, Part 1 (*Meeting Room 6*)
- **Session 17:** AASHTO's National Transportation Products Evaluation Program (NTPEP) (*Meeting Room 7*)
- **Session 18:** NEPA: Overview, Application, and Procedure (*Meeting Room 8*)
- **Session 19:** Design-Build (*Ballroom*)

**2:45 p.m. - 3:00 p.m.** Coffee Break  
(*Galleria – Plaza Level*)

**3:00 p.m. - 4:45 p.m.** Concurrent Sessions

- **Session 20:** Leading in a Culture of Change (*Redstick Room*)
- **Session 21:** Using the DOTD Video Conferencing System (*Meeting Room 1*)
- **Session 22:** Change Management - The Change Game, Part 1 (*Meeting Room 2*)
- **Session 23:** Highway Safety in Louisiana, Part 1 (*Meeting Room 3/4*)
- **Session 25:** Chip Seals: Quality and Performance (*Meeting Room 5*)

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**3:00 p.m. - 4:45 p.m.** Concurrent Sessions

- **Session 26:** Implementation Progress of AASHTO M-E Design Procedures in Louisiana (*Meeting Room 6*)
- **Session 27:** Use of Contractor Test Results in the Acceptance Decision (*Meeting Room 7*)
- **Session 28:** Concrete, Part 1 (*Meeting Room 8*)
- **Session 29:** Major Bridge Design (*Ballroom*)

**5:00 p.m. – 9:00 p.m.** Industry Exhibits/  
Reception (*Exhibition Hall-Ground Level*)

***Tuesday, February 13, 2007***

**7:00 a.m. - 8:30 a.m.** Breakfast  
(*Galleria – Plaza Level*)

**7:00 a.m. - 5:00 p.m.** Conference  
Registration (*Riverview Room – Plaza Level*)

**8:00 a.m. - 9:45 a.m.** Concurrent Sessions

- **Session 30:** Self-Motivation in the Workplace (*Redstick Room*)
- **Session 31:** Plans Management (*Meeting Room 1*)
- **Session 32:** Change Management – The Change Game, Part 2 (*Meeting Room 2*)
- **Session 33:** Access Management (*Meeting Room 3/4*)
- **Session 35:** Performance of Asphalt Mixtures (*Meeting Room 5*)

**8:00 a.m. - 9:45 a.m.** Concurrent Sessions

- **Session 36:** Recent Developments in Pavement and Geotechnical Research, Part 2 (*Meeting Room 6*)
- **Session 37:** Hurricane Flood Protection (*Meeting Room 7*)
- **Session 38:** Concrete, Part 2 (*Meeting Room 8*)
- **Session 39:** Megaprojects, Part 1 (*Ballroom*)

**9:45 a.m. - 4:00 p.m.** Tabletop Displays  
(*Exhibition Hall Lobby – Ground Level*)

**9:45 a.m. - 10:15 a.m.** Coffee Break in  
Exhibition Hall – *Ground Level (Industry Exhibits)*

**10:15 a.m. - 12:00 noon** Concurrent  
Sessions

- **Session 40:** Managing Across Generations (*Redstick Room*)
- **Session 41:** Data Warehouse: Business Intelligence at DOTD (*Meeting Room 1*)
- **Session 42:** Project Delivery Process (*Meeting Room 2*)
- **Session 43:** Traffic Improvements and Safety (*Meeting Room 3/4*)
- **Session 45:** Compaction of Asphalt Mixtures (*Meeting Room 5*)
- **Session 46:** Pavement-Related Issues and Factors (*Meeting Room 6*)

**10:15 a.m. - 12:00 noon** Concurrent Sessions

- **Session 47:** Trenchless Technology  
*(Meeting Room 7)*
- **Session 48:** Environmental Construction Permits *(Meeting Room 8)*  
**Session 49:** Megaprojects, Part 2  
*(Ballroom)*

**12:00 noon - 1:00 p.m.** Lunch *(provided in Exhibition Hall – Ground Level) - Industry Exhibits*

**1:00 p.m. - 2:45 p.m.** Concurrent Sessions

- **Session 50:** Managing Work Time Effectively *(Redstick Room)*
- **Session 51:** Use of Visualization for Design Applications *(Meeting Room 1)*
- **Session 52:** Estimating and Bidding Construction Projects *(Meeting Room 2)*
- **Session 53:** Work Zone Safety *(Meeting Room 3/4)*
- **Session 55:** Innovative Pavement Designs *(Meeting Room 5)*
- **Session 56:** Asset Maintenance *(Meeting Room 6)*
- **Session 57:** Hydraulics Design and Erosion Control for Highway Projects *(Meeting Room 7)*
- **Session 58:** Concrete, Part 3  
*(Meeting Room 8)*
- **Session 59:** I-10 Twin Span Repairs and Replacement *(Ballroom)*

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**2:45 p.m. - 3:15 p.m.** Coffee Break in  
Exhibition Hall – *Ground Level (Industry  
Exhibits)*

**3:15 p.m. - 5:00 p.m.** Concurrent Sessions

- **Session 60:** Delegating Effectively  
*(Redstick Room)*
- **Session 61:** Use of Visualization for  
Design Applications Workshop  
*(Meeting Room 1)*
- **Session 62:** Preparation of Title Reports  
for Right-of-Way Maps and Real Estate  
Acquisition *(Meeting Room 2)*
- **Session 63:** Highway Safety in  
Louisiana, Part 2 *(Meeting Room 3/4)*
- **Session 65:** Innovative Tools for Asphalt  
Mix Design *(Meeting Room 5)*
- **Session 66:** Preservation of Bridge  
Approach Rideability *(Meeting Room 6)*
- **Session 67:** Dam Safety  
*(Meeting Room 7)*
- **Session 68:** National Historic  
Preservation Act and Section 4(f) of the  
DOT Act of 1966 *(Meeting Room 8)*
- **Session 69:** Changes to DOTD Standard  
Specifications *(Ballroom)*

***Wednesday, February 14, 2007***

**7:00 a.m. - 8:30 a.m.** Breakfast  
*(Galleria – Plaza Level)*



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**8:00 a.m. - 9:45 a.m.** Concurrent Sessions

- Session 70: Managing Technological Change (*Redstick Room*)
- Session 71: Using the DOTD Video Conferencing System (*Meeting Room 1*)
- Session 72: Asset Management (*Meeting Room 2*)
- Session 73: NDE Methods for Condition Assessment of Existing Bridge Structures (*Meeting Room 3*)
- Session 74: Testifying as a Witness at a Deposition and/or in Court (*Meeting Room 4*)
- Session 75: Modification of Performance Graded Asphalts (*Meeting Room 5*)
- Session 76: Operations and ITS: Customer Service Hits the Road, Part 1 (*Meeting Room 6*)
- Session 77: 2005 Hurricanes: DOTD Acts (*Meeting Room 7*)
- Session 78: Storm Surge, Bridge Scour, and Marine Vessel Collision (*Meeting Room 8*)

**9:45 a.m. - 10:00 a.m.** Coffee Break  
(*Galleria – Plaza Level*)

**10:00 a.m. - 11:45 a.m.** Concurrent Sessions

- Session 80: Leading in a Culture of Change (*Redstick Room*)
- Session 81: Accurate Digital Terrain Models (*Meeting Room 1*)

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**10:00 a.m. - 11:45 a.m.** Concurrent Sessions

- Session 82: Public-Private Partnerships  
*(Meeting Room 2)*
- Session 83: Geotechnical Services  
*(Meeting Room 3)*
- Session 84: DBE Hot Topics  
*(Meeting Room 4)*
- Session 85: Recycled Asphalt Pavement  
*(Meeting Room 5)*
- Session 86: Operations and ITS:  
Customer Service Hits the Road, Part 2  
*(Meeting Room 6)*
- Session 87: Intersection Design  
*(Meeting Room 7)*
- Session 88: Bridge Inspection and  
Operations *(Meeting Room 8)*

**12:00 noon - 2:15 p.m.** Conference Luncheon *(Ballroom – Plaza Level)*

- DOTD "Transportation in Excellence" Awards
- FHWA Awards
- Tommy Teepell, "How to Set Your Compass"

**Notes**

## Concurrent Sessions

*The following pages contain concurrent session titles, titles of presentations, names of presenters, and brief abstracts. A copy of the presentations will be available on the LTRC Web site after the conference.*

**Monday 1:00—2:45 p.m.**

### **Session 10: Managing Technological Change**

#### ***Redstick Room***

- LSU Division of Workforce Development  
This session examines how to implement strategies in order to aid in the adaptation to various technology changes in work situations. Participants will learn how to identify areas of resistance and negative mental models, manage their personal reactions to change, apply techniques that will foster creativity and innovation during the technology implementation process, and identify ways to be proactive when changes are being implemented.

### **Session 11: Internet/Intranet Workshop**

#### ***Meeting Room 1***

Instructors: David Orr and Mark Smith,  
DOTD

This session will be a “how-to” session demonstrating helpful information available on the DOTD Internet and intranet.

**Session 12: Planning**

***Meeting Room 2***

Moderator: Scott Choate

- *Development of the Highway Program*  
*Robin Romeo, DOTD*

This presentation covers the development of the highway program and includes a brief presentation on the funding, the project selection process, and the legislative approval process.

- *Forecasting Bridge Needs*  
*Jason Chapman, DOTD*

Forecasting bridge needs has been a difficult task to accomplish due to a lack of detailed bridge element information. DOTD's Bridge Management Section has devised a way to use the state's NBI data within Pontis, an AASHTO-sponsored bridge management analysis software package.

- *Forecast of Pavement Preservation Needs and the New PMS Web-Based System*  
*Said Ismail, DOTD*

The system developed by Deighton possesses graphical interface capabilities and is designed to facilitate data access with ease and efficiency. It is anticipated that the system will be accessed through the Department's Web site. By emphasizing the development of a better and more efficient database, DOTD personnel will be more inclined to use it, thus providing additional efficiency to the organization.

**Session 13: How Traffic Records Affect  
Tort Litigation**

***Meeting Room 3/4***

Moderator: Dan Magri

- *An Overview and Discussion of 23  
USC 409*

*Dan Magri, DOTD, and William Crawford, LA  
Attorney General's Office*

To facilitate candid evaluation and planning of highway safety improvement programs, Congress implemented measures to protect states from having safety data used against them in tort suits. This presentation will provide an overview of 23 USC 409.

- *Data Sharing and Liability*  
*Susan Pikrallidas, AAA International*  
Since the early 1960s, Federal programs have encouraged states to collect and use crash data to develop methods for identifying safety problems and prioritizing funding for safety improvements. This presentation identifies liability issues and provides a synthesis of best practice for mitigating and managing the risk of sharing safety data.

**Session 15: Pavement Preservation**  
**Meeting Room 5**

Moderator: Simone Ardoin

- *Selection and Use of Crack Sealer/Filler for Pavements*

*Sam Rapczak, Crafc0, Inc.*

The key to pavement preservation is keeping your good pavement in good condition. Crack sealing and filling can be the most cost-effective method to achieve this goal. The presentation will cover both the "why" and "how" regarding filling or sealing cracks in asphalt pavements to extend the life cycle of the pavement.

- *Selection and Use of Thin Surface Treatments*

*Steve Mueller, FHWA Resource Center*

The key to pavement preservation projects is to select the "right road," use the "right treatment," and place it at the "right time." This presentation will discuss how to ensure that Thin Surface Treatment projects meet all three criteria and what managers can do to help make these projects successful.

- *Building North Carolina's Pavement Preservation Program*

*Scott Capps, North Carolina DOT*

This presentation focuses on North Carolina's five-year effort to establish a Pavement Preservation Program. Specifically, areas such as training, research, and dedicated funding will be addressed.

**Session 16: Recent Developments in  
Pavement and Geotechnical Research,  
Part 1**

***Meeting Room 6***

Moderator: Zhong Wu

- *Geosynthetic Reinforced Foundation*  
*Murad Abu-Farsakh, LTRC*

Geosynthetic reinforcement of geomaterials has been used for years in many geotechnical engineering applications. This presentation investigates the behavior of foundations on geosynthetic reinforced soils using both laboratory model tests and finite element analyses.

- *The Dynamic Cone Penetrometer*  
*Gavin Gautreau, LTRC*

The presentation will provide an overview of the DCP device, which is a simple, cost-effective tool that will prove useful in pavement evaluation. It consists of a movable, 18-pound weight centered on a stainless steel rod that is lifted and dropped on a fixed anvil located lower on the rod. The repeatedly dropped weight causes the rod to penetrate the subsurface soils. The number of blows required to penetrate is recorded and plotted against depth.



- *LRFD Application in Driven Pile Design*  
*Sungmin "Sean" Yoon, LTRC*

To introduce the LRFD in bridge-substructure design, proper resistance factors must be established and calibrated. In this study, the resistance factors of driven piles were investigated based on the pile-load-test database of Louisiana. The reliability-based analyses were conducted using load carrying capacities estimated by CPT methods, dynamic methods, and static design methods.

- *Network Analysis of Flooding Damage of Pavement Structures Caused by Hurricane Katrina*  
*Kevin Gaspard, LTRC*

Hurricane Katrina caused sustained flooding in the New Orleans area. Limited pre- and post-flooding tests indicated that the pavement structures tested had been adversely impacted by the flood waters. A comprehensive network analysis was conducted and the results indicated the pavement structure was damaged by the flood waters.

**Session 17: AASHTO's National  
Transportation Products Evaluation  
Program (NTPEP)**

***Meeting Room 7***

Moderator: Henry Lacinak

*A Win-Win for Government and Industry  
Michael McGough, AASHTO*

NTPEP provides a wealth of information through pooled resources and expertise of member states. Data that may not otherwise be generated within the State is available with no extra effort by the Department. Evaluations provide data for product approval and insight into how various materials perform in different conditions and compare to materials of the same or competing classes (i.e., thermoplastic vs. traffic tape). Both the state and industry participants benefit by using the resources offered by NTPEP.

- *State Advantages of NTPEP Participation  
Jason Davis, DOTD*

The presenter will discuss the benefits, both economic and academic, to a state agency through participation in the NTPEP.

- *Industry Advantages of NTPEP Participation*

*James Goddard, Advanced Drainage Systems, Inc.*

This presentation provides an industry perspective on the advantages of participating in the AASHTO NTPEP. Items addressed include the development of a specific program, the costs involved, and the benefits derived from it. Included is a discussion of what is required to make the program successful for the user community and the industry involved.

**Session 18: NEPA: Overview,  
Application, and Procedure  
Meeting Room 8**

Moderator: Noel Ardoin

- *NEPA: A Framework for Better Project Decision-making*

*Noel Ardoin, DOTD*

NEPA directs all Federal agencies to provide a detailed statement of the environmental impacts of their actions. These actions are taken by DOTD on behalf of Federal agencies, requiring DOTD to prepare environmental studies before implementing any such action. A summary of NEPA and the transportation decision-making process will be presented.

- *GIS Application on I-69 Section of Independent Utility No. 14*  
*Kent Dussom, URS Corporation*  
Interstate-69 is a corridor of national significance, with three sections of independent utility (SIU) traversing Louisiana. SIU 14 included a study area from Haughton, Louisiana, to El Dorado, Arkansas, a distance of roughly 70 miles. The challenge with such a large study area was to organize and analyze multiple environmental and physical data sets to narrow the study to a single alignment (roughly 300 feet wide). An innovative GIS application allowed engineers, planners, and environmentalists to view the same data simultaneously.
- *Stage 1 Planning/Environmental Manual of Standard Practice*  
*Christopher Gesing, Michael Baker Jr., Inc.*  
The Stage 1 Manual of Standard Practice is a guidance document for advancing DOTD projects through the NEPA process. The Manual's content, how Stage 1 fits into the Department's Project Development Process, and why effective project management is essential to meeting the Department's goals for project delivery are discussed.

**Session 19: Design-Build**

***Ballroom***

Moderator: Bill Grice

- *Design-Build: A National Perspective*  
*Douglas Gransberg, University of Oklahoma*  
FHWA commissioned a report on the effectiveness of design-build contracting on transportation projects approved under SEP-14 based on the outcomes of over 300 projects in 32 states. This presentation will cover an analysis of the report that draws conclusions regarding the state-of-the-practice at the national level.
- *Design-Build in Florida: Lessons Learned*  
*Brian Blanchard, Florida DOT*  
Information on trends and lessons learned about design-build in Florida will be presented. The discussion will cover risk transfer and how design-build is being used to manage recent cost increases.
- *Louisiana's First Design-Build Project: The John James Audubon Bridge*  
*Chuck Duggar, Louisiana TIMED Managers*  
The presentation will examine Louisiana's enabling legislation for design-build procurement. It will describe how the parameters of this legislation were implemented to successfully procure the State's first design-build project—the \$347.8 million John James Audubon Bridge. The project consists of 12 miles of new roadway and 8 bridge structures, including the cable-stayed bridge over the Mississippi River.

Monday 3:00—4:45 p.m.

**Session 20: Leading in a Culture of Change**

***Redstick Room***

- LSU Division of Workforce Development  
This session offers new and seasoned leaders insights into the dynamics of change and presents a unique and imaginative approach for navigating the intricacies of the change process. By integrating the five core competencies—attending to a broader moral purpose, keeping on top of the change process, cultivating relationships, sharing knowledge, and setting a vision and context for creating coherence in organizations—leaders will be empowered to deal with complex change. They will be transformed into exceptional leaders who consistently mobilize their compatriots to do important and difficult work under conditions of constant change.

**Session 21: Using the DOTD Video Conferencing System**

***Meeting Room 1***

Instructor: Paul Hsu, DOTD  
This workshop will provide training on use of DOTD Video Conferencing System and multimedia equipment for meetings and classes.

**Session 22: Change Management – The  
Change Game, Part 1**  
***Meeting Room 2***

Moderator: Kirt Clement

A game show format will be used for the first half of the session to inspire audience participation in a fun learning experience. The second half of the meeting will include more in-depth presentations by members of the Change Management Team on the changes that affect the district processes.

**Session 23: Highway Safety in Louisiana,  
Part 1**  
***Meeting Room 3/4***

Moderator: Dan Magri

- *Louisiana's Strategic Highway Safety Plan*  
*Susan Herbel, Cambridge Systematics*  
In 2004, Louisiana began to develop a Strategic Highway Safety Plan (SHSP), which is now a Federal requirement. The purpose is to reduce deaths and injuries on the roadways. The SHSP establishes goals, objectives, strategies, and performance measures. This presentation outlines the opportunities for involvement.

- *Louisiana's Traffic Safety Study*  
*Chester Wilmot, LTRC/LSU*  
This study set out to identify and quantify the factors that contribute to highway crashes in Louisiana. By comparing crash statistics from Louisiana with those of peer states, and the nation as a whole, an indication of the roadway, vehicle, and human factors responsible for this condition has been identified.

- *Highway Safety Analysis Tools for Engineers*  
*Xiaoduan Sun, University of Louisiana at Lafayette*

This presentation will introduce the features that have been included in the Louisiana Accident Data Analysis Program.

**Session 25: Chip Seals: Quality and Performance**  
**Meeting Room 5**

Moderator: Ken Mason

- *Chip Seal Program Excellence in the United States*

*Douglas Gransberg, University of Oklahoma*

Nine of 42 states in the NCHRP chip seal synthesis reported "excellent" results from their chip seal programs. Those responses were grouped and analyzed using the case study method to identify trends that led to consistently excellent chip seal results. This presentation will report the results of that analysis.

- *Chip Seals on Higher Volume Roads*  
*Zane Webb, Texas DOT*

An overview and examples of chip seals used on higher volume roadways will be presented. Discussion will include materials and construction techniques.

- *The Art of Quality Chip Seals*  
*Kevin King, Texas Industries, Inc.*

This experience-based presentation will address chip seal construction techniques. Discussion will focus on the primary points needed for success in the field as well as the most common mistakes made in the field. Equipment, materials, design, roadway selection and inspection will also be discussed.



**Session 26: Implementation Progress of  
AASHTO M-E Design Procedures in Louisiana  
Meeting Room 6**

Moderator: Doc Zhang

- *Design Guide: Current Status and National Implementation Activities*

*Chris Wagner, FHWA*

Participants will be exposed to the implementation efforts of several different State DOTs. A brief discussion of the FHWA and AASHTO activities related to the MEPDG will be presented.

- *Status of Implementing M-E design in Louisiana*

*Kevin Gaspard, LTRC*

The 2002 M-E design guide is in its final approval stage. In order to fully benefit from this guide, DOTD is conducting an in-depth evaluation to determine the implementation requirements, the associated costs, the time line required to fully use the new design procedure, and a sensitivity analysis.

- *Overlay Design Using NDT Methods*

*Zhong Wu, LTRC*

The current DOTD overlay design method uses estimated values for existing pavement strength. Non-destructive deflection tests (NDTs), such as the Falling Weight Deflectometer and Dynaflect, have gained popularity due to their ability to assess in situ pavement structural integrity. NDTs would allow overlay designs to be based on in-place conditions of a pavement structure. This presentation discusses a suite of different NDT based overlay design procedures/software used by other states and agencies as well as the current DOTD overlay design method.

- *Reliability of Material Input Parameters for the Implementation of the Mechanistic-Empirical Pavement Design Guide*

*Munir Nazzal, LTRC*

A comprehensive analysis was conducted to assess the sensitivity of the distress parameters predicted using the new Mechanistic-Empirical Pavement Design Guide (MEPDG) software. The analysis utilized three distress parameters for evaluation, namely rutting, longitudinal cracking, and alligator cracking. The results of these analyses showed that, in general, the three predicted distress parameters were sensitive to the input level of the different pavement layers. Calibration of the default values provided in the MEPDG software should be conducted for local materials.

**Session 27: Use of Contractor Test Results in the Acceptance Decision**

***Meeting Room 7***

Moderator: Bert Wintz

- *Technical Advisory T6120.3, Use of Contractor's Test Results in the Acceptance Decision*

*Matthew Corrigan, FHWA*

FHWA Technical Advisory T6120.3 was developed to give national guidance and recommendations on the use of contractors' test results for acceptance and the percent within limits (PWL) quality measure. The use of contractors' test results for acceptance was included with the 1995 revision of the Code of Federal Regulations Part 637 (CFR 637), provided independent validation of test results and a proper set of checks and balances. FHWA guidance and recommendations contained within T6120.3 are discussed.

- *Use of Contractor QC Testing for Acceptance*  
*Gary Doyle, Louisiana TIMED Managers*  
Expanding contractor QC requirements and making adjustments to QA testing frequencies when appropriate is an innovative concept used on certain TIMED projects by Louisiana TIMED Managers (LTM). Contractor QC tests are used for acceptance, subject to a verification process. This presentation shares the experiences over the three years in which this procedure has been used.
- *Inspection of Contractor's QC Processes*  
*Bert Wintz, DOTD*  
DOTD specifications require contractors to have a Quality Control process that they are allowed to establish and adjust depending on their ability to consistently produce and construct items that will meet DOTD specifications. How much inspection and control does DOTD have over the Contractor's QC program? Is it enough? Is it too much?
- *Fraud Prevention*  
*Mark Peters, US DOT, Office of Inspector General*  
This presentation will discuss ways to reduce fraud in highway construction. Actual court cases will be presented to illustrate how fraudulent actions could have been prevented or detected earlier using fraud indicators. Ways of responding to fraud and protecting against future fraud will conclude the presentation.

**Session 28: Concrete, Part 1**  
**Meeting Room 8**

Moderator: John Eggers

- *Self Consolidating Concrete in Louisiana*  
*B. J. Eckholdt, Lafarge North America*  
The ready-mixed concrete industry has developed a high performance, user-friendly product that doesn't require traditional vibration. It is truly self-consolidating and flows great distances without segregation. Come learn about the product and see Louisiana's own success stories.
- *Concrete Mixtures and Optimum Performance: Avoiding Incompatibility of Components*  
*Tim Cost, Holcim (US) Inc.*  
"Incompatibility" of concrete materials can result in erratic and problematic set time, strength, and other field issues when high temperatures, Class C fly ash, certain admixtures, and/or insufficient cement sulfates may be involved. Testing has reproduced these phenomena, and methods for predicting performance and for avoiding related issues are presented.

- *Developments in Materials and Their Effect on Fresh and Hardened Concrete Performance*  
Ramon L. Carrasquillo, Carrasquillo Associates, LTD

This presentation discusses the effect of new developments in materials and their effects on fresh and hardened concrete, including workability, setting times, strength, and durability. The dwindling supply of good quality materials often results in the concrete producer having to use materials from different sources, including aggregates, cements, and fly ash, in order to meet the demand for concrete for a given job. This often results in new demands for the design of the concrete mix to ensure adequate setting times, workability, strength, and durability for the concrete in service.

### **Session 29: Major Bridge Design**

Ballroom

Moderator: Paul Fossier

- *LA 1 Bridge: An Update*  
Bill Huffstetler, Wilbur Smith Associates

The first few phases of this large and important bridge project are under construction. Although Katrina greatly impacted the department's program, the state is determined to keep this important bridge on track. This session will provide an update on the project's status, early construction issues, value engineering, and related events. Also covered will be the near future development phases of the bridge.

- *Rehabilitation of the Huey P. Long Bridge in New Orleans*

*Bruce Peterson, Modjeski and Masters, Inc.*

The Huey P. Long Bridge was designed and built in the 1930s and carries both rail and highway traffic. The construction work for the widening of the existing main span substructure and railroad modifications necessary for the construction of the approaches is currently underway. The presentation will review the overall proposed project as well as construction performed to date.

- *The John James Audubon Bridge Design-Build Project Update*

*Paul Fossier (DOTD) and Chuck Duggar, Louisiana TIMED Managers*

The presentation will provide an overview of design methodologies and current status of the John James Audubon Bridge Design-Build Project. The project will provide a new crossing of the Mississippi River between Pointe Coupee and West Feliciana Parishes and consists of over 12 miles of roadway and 8 bridge structures. Once completed, the 1,583-foot-long, cable-stayed mainspan will be the longest in the Americas.

Tuesday 8:00—9:45 a.m.

**Session 30: Self-Motivation in the Workplace**  
***Redstick Room***

- LSU Division of Workforce Development  
This course will help participants examine how to be more motivated in the workplace. Participants will use this course as an opportunity to identify ways to build a sense of meaningfulness into their working environment. Participants will also learn how to anticipate the implications of words and actions within work group settings. They will be able to understand how a motivated employee's work performance positively impacts productivity within the organization.

**Session 31: Plans Management**  
***Meeting Room 1***

Moderator: Hollis Ward

- *Plans Distribution over the Internet*  
*Sarah Collins, DOTD*  
In January 2006, DOTD began making plans available over the internet. This presentation will provide attendees with an overview of the DOTD Electronic Plan Room and a few tips and tricks on getting the most from the Plan Room.
- *ProjectWise at DOTD*  
*David Ringuette, DOTD*  
This session will provide an overview of Bentley's "ProjectWise Web" Application and the "ProjectWise Explorer" Plans Management System. This background information will clarify the need for and use of a document management system at DOTD. Included are before and after "ProjectWise Implementation" comparisons and a brief look at DOTD's ProjectWise Datasource.

- *System Overview and Electronic Standards*  
*Hollis Ward, DOTD*

This presentation will address the history and current status of the Plans Management effort at DOTD. The role of electronic standards in the plan production process will also be discussed, including an overview of electronic standards, workflows, and digital submission processes. The presentation will also cover integration of plan standards, management, and publishing.

**Session 32: Change Management – The Change Game, Part 2**

***Meeting Room 2***

Moderator: Kirt Clement

A game show format will be used for the first half of the session to inspire audience participation in a fun learning experience. The second half of the meeting will include more in-depth presentations by members of the Change Management Team on the changes that affect the pre-construction processes.

**Session 33: Access Management**

***Meeting Room 3/4***

Moderator: Bill Temple

- *Basics of Access Management*  
*John Broemmelsiek, FHWA*

This presentation will provide an overview of Access Management. Topics include a definition of Access Management, why it is important, and the safety, economic and operational impacts it has on communities and the transportation network. The basic steps to implement an Access Management program and activities in other states will be addressed.



- *Applying Access Management to Roadways*  
*Philip Demosthenes, Parametrix Consulting*  
A range of examples of applied access management will be presented. Discussion will include the technical, operational, and safety aspects of the application of access design standards, as well as programs and policies for state and local governments.
- *Status of Access Management in Louisiana*  
*Cedric Grant, DOTD*  
This presentation will review the Louisiana Access Management Program and policies. It will also review access management rulemaking and related issues.

**Session 35: Performance of Asphalt Mixtures**  
**Meeting Room 5**

Moderator: Bobby Hennigan

- *Evaluation of Hydrated Lime in Superpave HMA Mixtures*  
*Shadi Saadeh, LTRC/LSU*  
The objective of this study was to compare the fundamental engineering properties of HMA mixtures containing hydrated lime to a conventional mixture designed to meet the current Louisiana Superpave specifications. Four 19.0 mm Level 2 HMA mixtures were designed and examined. The results indicated that the addition of hydrated lime as mineral filler improved the permanent deformation characteristics and fatigue endurance of the asphaltic concrete mixtures.

- *Fracture Resistance Characterization of Superpave Mixtures Using the Semi-Circular Bending Test*

*Louay Mohammad, LTRC/LSU*

This presentation reports the investigation of a newly-developed semi-circular bending (SCB) test for the fracture resistance characterization of asphalt mixtures. Thirteen Superpave mixtures were evaluated. The fracture resistance was analyzed based on critical strain energy release rate. Preliminary results indicated that the SCB test could be a valuable correlative tool in the evaluation of fracture resistance of asphalt mixtures.

- *Predicting HMA Performance Using the Hamburg Wheel Test and Overlay Tester*

*Dale Rand, Texas DOT*

This presentation will describe how TXDOT has used the Hamburg Wheel test to eliminate HMA mixes that are susceptible to rutting or stripping. TXDOT use of the Overlay tester will also be described. The Overlay tester is believed to be a good predictor of fatigue properties.

**Session 36: Recent Developments in  
Pavement and Geotechnical Research,  
Part 2**

**Meeting Room 6**

Moderator: Kevin Gaspard

- *Effects of Various Lime Products for  
Drying and Modifying Subgrade Soil*  
*Larry Cole, Carmeuse Lime Company*  
For many years, Louisiana has used hydrated lime and quicklime for soil drying. Other lime products, specifically lime kiln dust, are also effective for soil drying. This presentation summarizes laboratory work to compare the soil-drying effects of these various lime products.
- *Durability of Cement Stabilized Low  
Plasticity Soils*  
*Zhongjie "Doc" Zhang, LTRC*  
This study investigated the equivalence of three testing methods for the durability of cement-stabilized low plasticity soil encountered often in Louisiana. The test results indicate that water-cement ratio has a dominant influence on the maximum dielectric value, 7-day UCS, and durability of stabilized samples, although the dry unit weight of cement-stabilized soils may influence the results.

- *Geosynthetic Reinforced Pavement*  
*Murad Abu-Farsakh, LTRC*

Finite element analyses were conducted to assess the benefits of reinforcing base course with geogrids, and to evaluate the effects of subgrade strength, base course thickness layer, and stiffness and location of the geogrid on these benefits. The surface permanent deformations of the first 100 load cycles were obtained from the finite element analyses and used to develop regression models that relate the permanent deformation with load cycles for the different pavement sections. The permanent deformation at two million load cycles was then determined and selected as a criterion for evaluating the influence of the different variables on the performance of geogrid reinforced pavement sections.

- *Optimizing Unbound Aggregate Bases through Laboratory Tests*  
*Mingjiang Tao, LTRC*

Unbound aggregates that have been used in Louisiana pavement base courses are characterized through extensive laboratory testing. The goal of laboratory tests is to seek unbound aggregate with optimum gradation that will meet both drainage and structural stability requirements. The results from this study will be presented.

**Session 37: Hurricane Flood Protection**  
***Meeting Room 7***

Moderator: Bo Bolourchi

- *DOTD's Responsibilities*

*Edmond J. Preau, DOTD*

Hurricanes Katrina and Rita completely changed the role of the State and DOTD's Office of Public Works and Intermodal Transportation in hurricane protection activities. The presentation will chronicle how and why the changes occurred, detail the new responsibilities and their impacts, and outline the path forward.

- *Hurricane Flood Protection Mega Projects*

*Clyde P. Martin, Jr., DOTD*

The presentation will discuss the present method for large hurricane protection projects to be authorized by congress and financed by the state. Each of the following projects will be discussed so that the audience will get an understanding of how the project was developed: Comite River diversion project, Morganza to the Gulf, Donaldsonville to the Gulf, Westbank hurricane protection, Larose to Golden Meadow, Lake Pontchartrain and vicinity, and MRGO.

- *New Orleans Hurricane Protection System Repair and Restoration*  
*Daniel H. Hitchings, U.S. Army Corps of Engineers*

This presentation will cover the repair, restoration, and correction of levees and floodwalls, including acceleration of uncompleted portions of the HPS, improvements to existing HPS to 100-year levels, and studies of higher levels of protection.

- *Protecting Louisiana's Coast from Hurricanes – Louisiana's Master Plan for Hurricane Protection and Coastal Restoration*

*Larry Ardoin, DOTD*

The Legislature established the Coastal Protection and Restoration Authority to develop a comprehensive coastal protection master plan. The Master Plan will portray the state's desires and needs relative to hurricane protection and coastal restoration, integrating these efforts in order to achieve long-term and comprehensive coastal protection.

**Session 38: Concrete, Part 2**

***Meeting Room 8***

Moderator: John Eggers

- *Concrete Overlays for Intersections*

*Scott Haislip, American Concrete Pavement Association*

This presentation will demonstrate solutions to many obstacles that face pavement engineers. Concrete provides the best solution for intersection pavements because of its ability to withstand slow moving and maneuvering vehicles, especially where heavy trucks are involved. The three primary overlay types for intersection construction are unbonded, whitetopping, and UTW concrete overlays. Each of these types will be discussed along with some practical examples.

- *Design & Performance of Whitetopping*

*Neal West, DOTD*

Ultra-thin whitetopping was used on a portion of the LA 15/US 65 reconstruction project. Project specifications required the use of flexure strength for the design and acceptance of the concrete. This presentation will review the design, placement, inspection, and acceptance of the whitetopping on this project.

- *Non-Destructive Testing: Current State of the Art and Limitations*

*Mark Cheek, Beta Testing and Inspection*

This brief overview will discuss the proper use and limitations of Non-Destructive Tests and Methods. Pulse velocity, impact-echo, maturity, and integrity methods will be covered.

**Session 39: Megaprojects, Part 1**

***Ballroom***

Moderator: Dan Broussard

- *Orleans and Jefferson Parish East-West Corridor Post-Katrina Update*

*Thomas Hunter, URS Corporation*

This discussion will focus on current status and challenges facing proposed multi-modal improvements between the Louis Armstrong New Orleans International Airport and the New Orleans Central Business District in the post-Katrina environment.

- *I-49 Connector: The Challenging Start of I-49 South*

*Bob Schmidt, HNTB Corporation*

Planning for the extension of I-49 from Lafayette to New Orleans is currently underway. The I-49 Connector urban freeway, a six-mile section passing through the heart of old Lafayette, represents the first piece of the southerly extension. This exciting and challenging project has a little bit of everything, from the commitments made in the ROD to the Context Sensitive Design features to the way in which the project may be financed.

- *Status of I-69 in Louisiana*

*Noel Ardoin, DOTD*

*Christopher Gesing, Michael Baker, Jr., Inc.*

*Kent Dussom, URS Corporation*

I-69 is a corridor of National Significance, with sections crossing northwest Louisiana. I-69 Section of Independent Utility No. 16 is being processed environmentally by the State of Texas. Ongoing studies, milestones, and the schedule for completing the Stage 1 environmental process will be discussed.



- *I-10 Lake Charles Urban Freeway:  
Challenges and Opportunities for  
Modernization*

*Bob Schmidt, HNTB Corporation*

I-10 in Lake Charles utilizes a high level bridge over the Calcasieu River that pre-dates the birth of the interstate system. It is critical that this bridge, in the heart of urban Lake Charles and Westlake, be reconstructed to meet modern standards and to increase the number of lanes in accordance with DOTD's plans for I-10 across south Louisiana. Touching the bridge means touching the urban freeway sections on either side of the bridge. Numerous environmental, engineering, and funding challenges are present in bringing these improvements to completion.

**Tuesday 10:15 a.m.—12:00 p.m.**

**Session 40: Managing Across Generations  
*Redstick Room***

- LSU Division of Workforce Development  
This session provides practical tips and ideas for those who supervise and work with employees in different age groups. There are common backgrounds and experiences among members of the same age group. By being aware of the different needs and expectations often present among different age groups, supervisors and employees can understand each other and, therefore, work together more productively.

**Session 41: Data Warehouse: Business  
Intelligence at DOTD**

***Meeting Room 1***

Moderator: Dom Cali

- *DOTD Enterprise Data Warehouse – Business Intelligence at DOTD*

*Dom Cali, DOTD*

This session is an overview of the Data Warehouse and a live demonstration on how to retrieve, report on, export, and perform analysis on enterprise data that is stored in many formats in DOTD computer systems. The presentation will cover the data sources, reports, gauges, queries, future plans, and summary.

**Session 42: Project Delivery Process**

***Meeting Room 2***

Moderator: Fred Borne

DOTD's mission is to serve the state and its population by enhancing quality of life, fostering economic growth by managing resources, planning, improving safety, preserving and operating infrastructure in an efficient manner, and advancing mobility and access, all in an environmentally-sensitive manner. To accomplish the objectives of this mission, the department has re-engineered the program and project development system to implement new processes, concepts, and authorities while divesting itself of traditional organizational structures, methods, and bureaucracies, thus eliminating the deficiencies that have resulted from the traditional system. This session will give an overview of the new processes implemented by the department. The main components of these new processes will be seven stages covering feasibility assessment through delivery and maintenance of the completed project.

**Session 43: Traffic Improvements and Safety**

***Meeting Room 3/4***

Moderator: Mary Stringfellow

- *Explanation of NCHRP 350*

*Roger Melancon, Gulf Industries*

This presentation will explain the NCHRP 350 test matrix for highway safety products. This will include mandatory as well as optional tests for the different classes of products.

- *Traffic Incident Management*

*Ralph Mitchell, LA State Police*

Louisiana's Traffic Incident Management (TIM) program, a joint venture between DOTD and the State Police, has made significant progress in recent years. A statewide TIM summit was convened, at which best practices and training materials were developed. Training is currently being conducted in the LSP troops and DOTD districts.

- *Statewide Incident Management Program*

*Glen Graham, GEC, Inc.*

The status of Incident Management Programs in the urbanized areas of Louisiana will be presented. The current technologies being utilized and planned future developments will be identified. The use of Incident Management Teams to facilitate necessary coordination of response efforts by emergency responders will also be discussed.

- *Incremental Strategies to Non-Motorized Safety*

*Karen Parsons, New Orleans Regional Planning Commission*

The Regional Planning Commission has created an innovative strategy to improve the safety of bicyclists and pedestrians in the region. We use specific techniques in a three-year program which includes replicable crash data analysis, design training for planners and engineers, identification of target audience, target message development and branding, and education of law enforcement and civil court judges.

- *Impact of Pavement Edge Line on Vehicular Lateral Position on Narrow Rural Two-Lane Roadways in LA*  
*Xiaoduan Sun, University of Louisiana at Lafayette*

The results of a study on whether the implementation of edge lines will have any negative effect on narrow rural two-lane highways will be discussed in this presentation, which shows that with edge lines, vehicles tended to move away from the pavement edge, leading to a reduction in running-off-roadway crashes.

**Session 45: Compaction of Asphalt Mixtures**  
***Meeting Room 5***

Moderator: Luanna Cambas

- *New Technology in Compaction of HMA*  
*Charles Deahl, Bomag Americas, Inc.*

This presentation covers new technology in rollers applied on hot mix asphalt. The new technology includes intelligent compaction systems, new types of pneumatic tired rollers, and the latest in control systems for vibratory rollers.

- *Dealing with Tender Mixes*  
*Gary Fitts, Asphalt Institute*

"Tender" mixes can present major problems in achieving in-place density and ride quality requirements. This presentation will discuss the potential causes of tender mixes and suggest some remedies.

**Session 46: Pavement Related Issues and Factors**

***Meeting Room 6***

Moderator: Bill King

- *Effects of Hauling Timber and Sugar Cane on Louisiana Highways*

*Freddy Roberts, Louisiana Tech University*  
A methodology was developed to assess the economic impact of overweight permitted vehicles hauling timber and sugar cane on Louisiana highways. The difference in overlay costs when these vehicles are present represents the magnitude of the permit fees. Timber truck permit fees should increase to \$346/year, and fees for sugar cane truckloads should increase to \$1,791/year for equally loaded axles.

- *Louisiana's First Attempts and Insights Associated with the Concept of Warrantied Pavements*

*Mark Martinez, LTRC*

As required by Louisiana House Bill 1698, the State Legislature directed the DOTD to promulgate rules and regulations to effectuate the purpose of warranties so that constructed items would be free from defects in material and workmanship for a period of at least three years post initial acceptance. This presentation will show what the department has learned to date as a result of its efforts.

- *Pavement Evaluation – Remaining Life of Concrete Pavements*

*Michael Darter, Applied Research Associates, Inc.*

Remaining life of a concrete pavement depends on both its structural capacity and its functional condition. Structural capacity is a function of fatigue cracking of the concrete slab and is often measured as percent slabs cracked or punchouts per mile. Functional condition is often measured in terms of smoothness (IRI) and distress types that will affect smoothness (joint faulting) such as serious durability problems (ASR, D-cracking). Procedures and examples of estimating remaining life will be illustrated using the new AASHTO ME Pavement Design Guide.

- *Evaluating Structural Performance of Base/Subbase Materials at the Louisiana Pavement Research Facility*

*Zhong Wu, LTRC*

Three full-scale flexible pavements constructed with different base and subbase layers were tested at the Louisiana Pavement Research Facility. Non-destructive test data measured during the entire period of accelerated loading, as well as in-situ instrumentation results (e.g., pressures and in-depth deflections), were used to evaluate the structural performance of the pavements.

#### **Session 47: Trenchless Technology**

##### ***Meeting Room 7***

Moderator: Ray Sterling

- *Introduction and Overview*  
*Raymond Sterling, Louisiana Tech University*

*Culvert and Sewer Rehabilitation In-Place*  
*Neal Shearer, Insituform Technologies*

This presentation will discuss cured-in-place repairs to existing DOTD culverts and sanitary sewers in lieu of conventional excavation, removal, and replacement.

- *Applications of Trenchless Technology to Transportation Projects*  
*L. Grant Whittle, Ultraliner, Inc.*

This overview of culvert rehabilitation projects around the United States using thermoformed and grout-in-place pipeliners will cover design, environmental, long-term asset management, and constructability considerations.

- *Panel Discussion*

*Marlin Gonzales, Boh Brothers Construction Company*

*Charles Curtis, PolyPipe, Inc.*

*Gerhard Lang, Amiantit Meyer Polycrete, Ltd.*

*Victor Weston, Tri-State Road Boring*

Members of a distinguished panel representing a range of trenchless technology manufacturing and construction companies in Louisiana will provide their insight into how to plan, design, and specify for the most cost-effective use of trenchless technology.

**Session 48: Environmental Construction Permits**

***Meeting Room 8***

Moderator: Traci Johnson

- *Department of the Army Permit Program: What Happens If You Don't Have a Permit*  
*Pete Serio, John Bruza and Furcy Zeringue, U.S. Army Corps of Engineers*

This presentation will provide an overview of the Corp's enforcement program. It will provide information on when a permit is needed and on the various obligations a permit entails. The intent is that the permitting process be better understood by all throughout the transportation industry. Understanding the process will result in better coordination, timelier permit applications, and a reduction in project delays and costs due to noncompliance.



- *NEPA and Permitting Trends*

*Marcus Redford, U.S. Coast Guard*

The requirements under NEPA are well understood by most applicants, and the Coast Guard as a Federal Agency upholds its responsibilities to ensure that the environment is protected. The underlying principle for permitting bridges over navigable waters of the United States is the protection of the rights and needs of navigation. The agencies and organizations owning and operating bridges have been moving toward design-build contracting methods. Advantages and disadvantages to this approach will be presented.

- *Coastal Use Permitting*

*Rocky Hinds, LA Department of Natural Resources*

The Coastal Management Division (CMD) of the LA Department of Natural Resources is charged with implementing the Louisiana Coastal Resources Program (LCRP) under authority of the State and Local Coastal Resources Management Act. A Coastal Use Permit (CUP) Program has been established by the Act as part of the LCRP to help ensure the management and reasonable use of the state's coastal wetlands. The CUP is the basic regulatory tool of CMD and is required for certain projects in the Coastal Zone, including, but not limited to, dredge and fill work, bulkhead construction, shoreline maintenance, and other development projects.

**Session 49: Megaprojects, Part 2**

***Ballroom***

Moderator: James Lee

- *I-49 North, I-220 to the Arkansas State Line*

*Chad Winchester, DOTD*

This presentation will provide the history and the status of the 36 mile mega-project to extend I-49 from Shreveport to Arkansas. With \$200 million provided by SAFETEA-LU, DOTD is planning to construct useable roadway within the next four years, but more funding is needed.

- *Future I-49 South*

*Mike Aghayan, DOTD and Louis Costa, DMJM Harris*

DOTD, in cooperation with FHWA, is conducting an Environmental Impact Statement (EIS) to upgrade U.S. 90 (Raceland Westbank Expressway) to a full "Control of Access" highway meeting interstate standards. The approximate distance of the project is 43 miles.

- *Simulation of I-10 in Baton Rouge*

*Michael Bruce, ABMB Engineers, Inc.*

Increased capacity is badly needed along eastbound I-10 in Baton Rouge beginning at the Mississippi River Bridge. Modeling was performed to determine the type and limits of improvements that would be most beneficial.

Tuesday 1:00—2:45 p.m.

**Session 50: Managing Work Time  
Effectively**

***Redstick Room***

- LSU Division of Workforce Development  
This course examines the habits we have in managing our time and how the concepts of importance and urgency affect our productivity. Participants will identify the activities that determine their use of time and will learn and practice an effective method for prioritizing and sequencing work tasks. Participants will also examine how large projects and long-term expectations impact daily and weekly planning.

**Session 51: Use of Visualization for  
Design Applications**

***Meeting Room 1***

Moderator: Pat Landry

- *Current State of the Practice*  
*Charles Hixon, Bergmann Associates*  
In 2005, Mr. Hixon conducted a Synthesis Study for the Transportation Research Board (TRB) on "Visualization for Project Development." This Synthesis focused on the best practices and experiences to date of leading transportation agencies that are developing and incorporating visualization into the pre-construction component of the project development process.

- *A Transportation Agency's Perspective*  
*Steve Braun, Florida DOT*

Florida DOT's use of Design Visualization, from project development and public involvement to ideas for design applications, will be presented. This presentation will provide discussion on the benefits realized from the technology, how and when FDOT uses Design Visualization, the types of Design Visualization used, the benefits, and management's buy-in on its use.

- *Using Visualization as a Bridge Design Tool*  
*Brad Henry, URS Creative Solutions*

While visualization is a recognized public involvement tool, it has rarely been used as a design tool. Recently, URS engineers teamed with Hennepin County, MN, to use visualization to help design a signature \$4M pedestrian bridge. The team used visualization to select the best design and to optimize how the bridge fit the project site.

**Session 52: Estimating and Bidding  
Construction Projects**

***Meeting Room 2***

Moderator: Judy Versaw

- *Engineering Estimating*  
*Richard Creamer, Louisiana TIMED Managers*  
Louisiana TIMED Managers will share the estimating process that they utilize to generate estimates for the TIMED Program. The presentation will include parametric methods used on preliminary estimates and unit pricing methods for final estimates. The process of modifying historical average unit rates of previous lettings for a number of significant considerations will be a major focus of the presentation.

- *Contractor Estimating*

*James Richard, James Construction Group*

*Stephen Spohrer, Louisiana TIMED Managers*

Presenters will explain the contractor process of estimating construction work.

The process will include site visit, quantity takeoff, pricing, scheduling, bid preparation, and bid submittal.

- *Implementation of Electronic Bidding*

*John Oglesby, DOTD*

After evaluating the electronic bidding system for a period of six months, DOTD began accepting construction bids via the Internet in January 2006. A pilot group of contractors submitted test bids for a variety of project types through the Internet. DOTD currently allows the receipt of either paper or internet bids and may require internet bid submission in the future. Bid irregularities are rare with internet bids, which reduces costly contractor errors and saves DOTD money.

**Session 53: Work Zone Safety**

***Meeting Room 3/4***

Moderator: Terri Monaghan

- *FHWA's New Work Zone Regulations*

*Mary Stringfellow, FHWA*

FHWA's new Work Zone regulations go into effect on Oct. 1, 2007. A summary of the new regulations and requirements will be presented.

- *Utilization of Law Enforcement in Work Zones*

*Paul VanKerkhove, LA State Police*

In addition to slowing on-coming traffic, law enforcement working in and around a work zone can provide numerous benefits.

- *Louisiana Work Zone Improvements*  
*Barry Lacy, DOTD*

This presentation will discuss the status of the work zone task force milestones from 2001, work zone training of DOTD, contractor, & police personnel, and modifications to the Traffic Control Details and Traffic Control Management.

- *Night Work*

*Tom Ervin, Traffic Solutions, Inc*

This presentation will discuss the challenges and hazards of night time road work; the new DOTD Night Lighting Specifications, solutions and enhancements for night work.

**Session 55: Innovative Pavement Designs**

***Meeting Room 5***

Moderator: Sam Cooper

- *Perpetual Pavements*

*Gary Fitts, Asphalt Institute*

This presentation will review the design approach for perpetual or long-life asphalt pavements and discuss how this has been applied in Louisiana and neighboring states.

- *Warm Mix Asphalt: State of the Practice*  
*Brian Prowell, National Center for Asphalt Technology*

The concept of Warm Mix Asphalt (WMA) was introduced to the U.S. in 2001. WMA processes reduce viscosity at mixing and compaction temperatures, allowing better coating and compaction at lower temperatures. Data from laboratory studies and field projects demonstrating various uses for WMA will be presented.

- *Quiet Pavements*  
*Gary Fitts, Asphalt Institute*

Traffic noise has emerged as an important quality of life issue in urban areas. This presentation will discuss how this issue and other functional performance qualities can be successfully addressed using permeable/open-graded asphalt wearing courses.

**Session 56: Asset Maintenance**  
**Meeting Room 6**

Moderator: John Collins

- *Florida's Asset Maintenance Program*  
*Tim Lattner and Jose Garcia, Florida DOT*  
*David Novakoski, Infrastructure Corporation of America*

This presentation will provide an overview and definition of Asset Maintenance (AM) and review Florida's history with AM Contracts, including emergency repair of a bridge over Tampa Bay that was damaged by a barge impact.

**Session 57: Hydraulics Design and  
Erosion Control for Highway Projects  
*Meeting Room 7***

Moderator: JoAnn Kurts

- *I-10 Bridge Replacement Storm Surge,  
Waves and Hydrodynamic Load Analyses*  
*Jeff Sheldon, Moffatt & Nichol*

The combination of Hurricane Katrina's high surge and large waves resulted in numerous failures of both the east and westbound lanes of the Interstate 10 Bridge over Lake Pontchartrain. For the design of the replacement structures, an analysis of storm surge and wave heights was required, as was an estimation of the design loading conditions.

- *Alabama DOT Construction Stormwater:  
Worst to First*  
*Barry Fagan, Alabama DOT*

An overview of ALDOT's past, present, and future construction storm water program will be presented. Included will be information regarding how ALDOT got into and out of regulatory enforcement actions with lessons learned along the way. Specific examples of implemented changes will also be discussed.



**Session 58: Concrete, Part 3**

***Meeting Room 8***

Moderator: Craig Duos

- *High Performance Concrete – Permeability Testing*

*John Eggers, LTRC*

This presentation will discuss corrosion and how it is initiated in reinforcing steel in concrete structures over time. The following topics will also be addressed: the effects of corrosion on concrete structures and how it decreases service life; how HPC is designed to counteract and delay the processes that initiate corrosion in the reinforcing steel; the various testing procedures used to measure resistance to corrosion in concrete and their benefits and deficiencies; and why DOTD uses the "Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration" (AASHTO T 277/ASTM C 1202) for its HPC requirements.

- *PCC Aggregates in Louisiana*

*Sadi Torres, LTRC*

This presentation will cover the aggregates available for the manufacture of Portland cement concrete in Louisiana. The LA natural sand gradations will be discussed along with the availability of other natural aggregates. The new DOTD PCCP gradation specification will be discussed, including past experiences and benefits of the new requirements.

- *PCCP IRI Specifications*

*Chris Abadie, LTRC*

FHWA uses International Roughness Index (IRI) as a basis for its ranking of the quality of the NHS highway system. Smoothness has always been a high priority of the motoring public when ranking quality of highway systems. Concrete pavements are built to last with structural capacity given the highest regard. Unfortunately, the way in which concrete pavements are built with only one opportunity, i.e. "one layer", to provide a smooth finish, is indeed a challenge. In order to attain a goal of less than 175 IRI for 90% of the NHS system in Louisiana, smoother concrete pavements are required. This presentation will provide a summary of the proposed specifications for smoothness along with a history of the performance of concrete paving as it relates to smoothness.

**Session 59: I-10 Twin Span Repairs and Replacement**

***Ballroom***

Moderator: Hossein Ghara

- *Repairs to I-10 Twin Span after Katrina*

*Gill Gautreau, DOTD*

Hurricane Katrina destroyed 4,160 linear feet (64 spans) of the I-10 Twin Spans, shoved another 474 spans out of alignment and did significant other damage. This presentation describes how DOTD reopened one bridge in 29 days and the other in 112 days.

- *I-10 Twin Span Replacement:  
Opportunities and Challenges*  
*Artur D'Andrea, DOTD*

This presentation covers temporary and permanent plans for the replacement of the I-10 crossing over Lake Pontchartrain. Emphasis is on the engineering improvements made by lessons learned.

**Tuesday 3:15—5:00 p.m.**

**Session 60: Delegating Effectively**  
***Redstick Room***

- LSU Division of Workforce Development  
The purpose of this course is to allow participants to make decisions in regards to carrying out specific activities that require the assistance of others. Delegation is more than just asking for assistance from a co-worker. Delegation requires the ability to see the expertise in others in relation to the projects being delegated and then letting go of the projects once they have been delegated.

**Session 61: Use of Visualization for  
Design Applications (Workshop)**  
***Meeting Room 1***

Instructor: Michael Manore, TRB Committee on Visualization  
This session provides a discussion forum for interested parties concerning implementation and application of visualization technology.

**Session 62: Preparation of Title Reports for  
Right-of-Way Maps and Real Estate  
Acquisition**

***Meeting Room 2***

Moderator: Eric Lanier

- *Preparation of Title Reports for Right-of-Way  
Maps and Real Estate Acquisition*  
*Eric Lanier, DOTD*

This presentation will be an overview of the process in which a right-of-way map consultant will obtain the necessary title information for completion of the base right-of-way maps.

- *Title Research and the Title Research Report*  
*Paul Charron, DOTD*

This presentation will explain DOTD's requirements for title research and the preparation of title research reports. Also covered will be the procedures a title abstractor should follow in researching the public conveyance records in the local courthouse, and how they need to be presented to DOTD Real Estate Section to be used in all phases of the acquisition process, ensuring DOTD acquires full and complete clear title to the required properties

**Session 63: Highway Safety in Louisiana,  
Part 2**

***Meeting Room 3/4***

Moderator: Karla Schiro

- *Highway Safety in Louisiana*  
*Jim Champagne, LA Highway Safety  
Commission*

This presentation will discuss the highway safety initiatives proposed by the Louisiana Highway Safety Commission. The overall goals and objectives of the commission will be covered.

- *State Police TrafficStat Program*

*Darrin Naquin, LA State Police*

The Louisiana State Police has initiated a comprehensive traffic safety program aimed at reducing the number of traffic crashes. The program, called TrafficStat, is used as a tool to implement the Es of Traffic Safety at locations throughout each Troop area that are identified as crash prone. The success of the TrafficStat program is comprised of four components: 1) timely and accurate statistical data; 2) rapid, synchronized, focused response; 3) effective tactics; and 4) supervisor accountability.

- *Louisiana Operation Lifesaver*

*Betsey Tramonte, LA Operation Lifesaver*

This presentation will cover the LA Operation Lifesaver organization and how it educates the public on driver and pedestrian safety at railroad crossings and railroad rights-of-way using an integrated 3 E (education, engineering, and enforcement) approach.

**Session 65: Innovative Tools for Asphalt Mix Design**

***Meeting Room 5***

Moderator: Robert Mays

- *A Look at the Bailey Method Concept in Superpave Mixture Design*

*Louay Mohammad, LTRC*

This study presents the physical and performance characteristics of asphalt concrete mixtures with aggregate structures designed using the Bailey method of aggregate gradation evaluation. The data indicated that the designed mixtures considered were impermeable and presented excellent performance.

- *The Locking Point as an Alternative to Ndesign*

*Brian Prowell, National Center for Asphalt Technology*

Several concerns have arisen over the Superave Ndesign levels. The locking point concept was developed as an alternative by Bill Pine at Illinois DOT. During its development, the locking point was related to field compaction effort. The method is currently used by AL and GA DOT. Recent studies show the locking point is related to aggregate type.

- *SMA and OGFC, Louisiana Experience*

*Bill King, LTRC*

This presentation will include a laboratory evaluation of Stone Matrix Asphalt (SMA) and Coarse Matrix High Binder (CMHB). In addition, Louisiana's typical SMA usage and special projects will be discussed. Louisiana's past and present experience with Open Graded Friction Courses (OGFC) will be presented.

### **Session 66: Preservation of Bridge Approach Rideability**

#### ***Meeting Room 6***

Moderator: Gavin Gautreau

- *Rideability of a Deflected Bridge Approach Slab*

*Mark Martinez, LTRC*

This presentation serves to summarize research development and to clarify the implications it suggests. Current pavement roughness indices, like IRI, are not able to effectively rate vehicle response to impulsive forces commonly produced when a vehicle encounters a bridge bump. This difficulty led to the development of a hybrid index specifically designed for such phenomena.

- *Interaction of Approach Slab and Embankment: Effect on Design*

*Steve Cai, LSU*

Soil embankment settlement causes concrete approach slabs of bridges to lose their contact and support from the soil, and eventually, the rideability deteriorates. A 3-D finite element analysis was conducted in the present study. The predicted internal moments of the approach slab provide design engineers with a scientific basis to properly design the approach slab considering different levels of embankment settlements.

- *Field Study of Bridge Concrete Approach Slab*

*Jenny Fu, DOTD*

This presentation will discuss the field study of bridge concrete approach slabs. The objective of this study is to field-test the findings from two previous research projects: Rideability of a Deflected Bridge Approach Slab (LTRC # 02-2GT) and Determination of Interaction between Bridge Concrete Slab and Embankment Settlement (LTRC # 03-4GT).

### **Session 67: Dam Safety**

Meeting Room 7

Moderator: Bo Bolourchi

- *Louisiana Dam Safety Program*

*Elnur Musa, DOTD*

The Louisiana Dam Safety Program ensures that dams/reservoirs are designed, constructed, and maintained to prevent and correct potential hazards to downstream life and property (R.S. 38:21-28). The goal was to inspect all dams (high and significant hazard dams annually, and low hazard dams once every five years), prepare technical inspection reports, and mail them to dam owners. This ensures that Louisiana Dam Safety is certified by the Federal Emergency Management Agency (FEMA).

- *Dam Rehabilitation for Dunn Lake Dam  
(East Feliciana Retreat Center)*  
*Roy Waggenpack, Owen and White, Inc.*  
This discussion will include a PowerPoint presentation on erosion at Dunn Lake Dam and correction of the erosion problem by increasing the size of the primary spillway to handle the required design storm.
- *Dam Breach Analysis*  
*Randy Denmon, Denmon Engineering, Inc.*  
This presentation will discuss the methodology, software, scope, costs, and technical issues put forth by the DOTD's current Dam Breach Analysis Program. Issues to be covered include: 1) scope of program, 2) methods and cost of gathering topographic data for analysis, 3) USACE's HEC-RAS and Bentley software and their applications for breach analysis, 4) technical issues with HEC-RAS as applied to breach analysis, and 5) a summary of the current findings and results of the program.
- *Louisiana's NIKE® Approach to  
Emergency Action Plans: Just Do It!*  
*Daniel Aucutt, Aquaterra Engineering*  
The Challenge: Update the State inventory of private dams and prepare EAPs for 20 State-maintained dams. The Results: Over 291 new reservoirs were identified. EAPs were prepared for each State-maintained dam and updated as breach analyses became available.



**Session 68: National Historic  
Preservation Act and Section 4(f) of the  
DOT Act of 1966**

***Meeting Room 8***

Moderator: Jan Grenfell

- *106? What Is That?*

*Elizabeth Davoli, DOTD*

The National Historic Preservation Act, passed by Congress in 1966, provides protection to properties important to United States history. Section 106 of the Act outlines the process by which impacts to properties are evaluated. This presentation will provide an overview of Section 106 and its compatibility with transportation planning and construction.

- *Section 106 Review and Unmarked  
Human Burial Sites Permits*

*Duke Rivet, LA State Historic Preservation  
Office*

Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties. The Louisiana Unmarked Human Burial Sites Act provides for the protection of unmarked burial sites from desecration and archaeological investigation of such sites when disturbance is necessary.

- *Archaeological Data Recovery at the Troyville Site*  
*Jill-Karen Yakubik, Earth Search, Inc.*  
Earth Search performed archaeological data recovery at the Troyville site in Catahoula Parish under contract to the Louisiana Department of Transportation and Development. Remains included features associated with three structures dating to the initial occupation of the site ca. 300-500 AD. Data obtained will elucidate development of this important mound site.
- *Section 4(f) – Why don't we build the road through this green space over here?*  
*Noel Ardoin, DOTD*  
Section 4(f) recently celebrated its 40th anniversary. Section 4(f) of the Department of Transportation Act came into being in 1966. A brief overview of Section 4(f) will be presented. The presentation will answer basic questions about Section 4(f). What is Section 4(f)? When does it apply? What is required? Who makes the decisions?

**Session 69: Changes to DOTD Standard Specifications**

***Ballroom***

Moderator: Brian Buckel

- *Changes to General Provisions*  
*Cheryl Duvieilh, DOTD*  
This discussion will cover the changes to the Standards Specifications appearing in Part I. Areas to be addressed include calculation of time, differing site conditions, act of God, coordination of contract documents, assembly periods, and forced account.

- *Geotechnical Specification Changes*  
*Kim Garlington, DOTD*

This presentation will cover the changes made to Sections 804 and 814 regarding geotechnical issues encountered when pile driving or constructing drilled shaft foundations.

- *Materials Specification Changes*  
*Luanna Cambas, DOTD*

This presentation summarizes and highlights changes in the Asphalt, Concrete, and Materials Sections of the new book.

Wednesday 8:00—9:45 p.m.

**Session 70: Managing Technological Change**

***Redstick Room***

- LSU Division of Workforce Development  
Managing Technological Change will examine how to implement strategies in order to aid in the adaptation to various technology changes in work situations. Participants will learn how to identify areas of resistance and negative mental models, manage their personal reactions to change, apply techniques that will foster creativity and innovation during the technology implementation process, and identify ways to be proactive when changes are being implemented.

**Session 71: Using the DOTD Video**

*Conferencing System*

**Meeting Room 1**

Instructor: Paul Hsu, DOTD

This workshop will provide training on use of DOTD Video Conferencing System and multimedia equipment for meetings and classes.

**Session 72: Asset Management**

**Meeting Room 2**

Moderator: Michael Bridges

- *Overview and Discussion*

*Lacy Love, North Carolina DOT and Sue McNeil, University of Delaware*

Aging infrastructure, constrained budgets, and increasing demands on our physical assets impact transportation investment decisions. Asset Management is evolving as a tool for systematically maintaining, upgrading, and operating the physical assets cost effectively. The 7<sup>th</sup> National Conference on Transportation Asset Management will be held in New Orleans in November 2007.

**Session 73: NDE Methods for Condition Assessment of Existing Bridge Structures**

**Meeting Room 3**

Moderator: Steven Sibley

- *Overview and Discussion of Non-Destructive Evaluation Methods*

*Larry D. Olson, Olson Engineering and Scott H. Slaughter, Southern Earth Sciences*

Most of our infrastructure is aging, and engineers need methods to determine its condition. This session includes an overview of the various nondestructive techniques available for evaluation of the structural condition of bridge superstructures and substructures.

**Session 74: Testifying as a Witness at a  
Deposition and/or in Court**

***Meeting Room 4***

Moderator: Larry Durant

Engineers provide technical support to the DOTD Legal Section and the Office of Risk Management. The objective of this session is to provide an introduction to the experience of testifying at a deposition (or in court) and techniques that can be used.

**Session 75: Modification of Performance  
Graded Asphalts**

Meeting Room 5

Moderator: Chris Abadie

- *Asphalt Specification Review*

*Jason Davis, DOTD*

This presentation will briefly discuss the development of the current Louisiana DOTD asphalt binder specification and the significance of the PG+ tests.

- *Evaluation of Asphalt Binder Oxidation*

*William Daly, LSU*

A PG 76-22 (PMAC) was aged for long terms using a Rotating Cylinder Aging Test machine and a Pressure Aging Vessel in dry and wet air atmospheres. The resultant chemical changes have been studied using an array of characterization techniques (FTIR and gel permeation chromatography), and the data is correlated with data obtained on field aged samples.

- *Performance of Polymer Modified Asphalt*  
*Gary Fitts, Asphalt Institute*

Polymer-modified asphalt (PMA) has been widely used in HMA since the early 1990s, and Louisiana has been one of the leading states. This presentation will summarize a report recently published by the Asphalt Institute and Association of Modified Asphalt Producers that details the improvements in performance that can be expected as a result of using PMA.

**Session 76: Operations and ITS: Customer Service Hits the Road, Part 1**  
***Meeting Room 6***

Moderator: Mary Stringfellow

- *USDOT Congestion Initiative*  
*Grant Zammit, FHWA*

The Secretary of Transportation announced in 2006 the National Strategy to Reduce Congestion on America's Transportation Network. A number of initiatives supporting this strategy will be presented, including initiatives that may be leveraged to support Louisiana's Transportation Requirements.

- *Linking Planning and Operations: Initiatives of the New Orleans Regional Planning Commission*

*Johnny Bordelon, New Orleans Regional Planning Commission*

This presentation will take a look at initiatives taken by the New Orleans RPC to integrate traffic operations issues into the near-term and long-term transportation planning processes. Actual case studies will be provided demonstrating how this approach can make the transportation system safer and more efficient.

- *The Highway as a Public Forum: Effects on Safety and Operations*

*Steven Strength, DOTD*

Engineers compete with advertisers, developers, political entities, and other special interest groups for the attention of motorists who should be paying attention to driving. We examine the tactics these competing interests use to gain an audience and how engineers can deal effectively with the resulting highway safety and operational challenges.

**Session 77: 2005 Hurricanes: DOTD Acts**  
***Meeting Room 7***

Moderator: Fred Wetekamm

- *2005 Hurricanes: DOTD Acts*  
*Robert Wegener, Bill Fontenot, Bobby Hennigan, Connie Standige, DOTD Districts Gill Gautreau, Vince Latino, Jim Mitchell, DOTD HQ Sections*

This session describes the selfless efforts of DOTD employees in the face of two of the most powerful hurricanes to ever hit Louisiana. The audience will gain an appreciation for the efforts that DOTD employees put into restoring the highway system in south Louisiana following Hurricanes Katrina and Rita.

***Session 78: Storm Surge, Bridge Scour,  
and Vessel Collision  
Meeting Room 8***

Moderator: Ray Mumphrey

- *AASHTO-FHWA Wave Task Force Plan of Action*

*Joe Krolak, FHWA*

In the wake of bridge damages from Hurricanes Ivan (2004) and Katrina (2005), FHWA and AASHTO joined to develop a plan that maps out a proposed set of studies and tech transfer activities to achieve a rational approach that addresses scour, wave force, and storm surge vulnerabilities in existing and new structures (Plan of Action). This Plan of Action has an orientation toward coastal bridges and structures susceptible to storm damage.

- *Comite River Bridge Structural Repairs and Scour Protection*

*Kelly Kemp, DOTD*

This project rehabilitated six bents and placed scour protection in the form of a rock pile dike in the channel. Channel redirection and new stone revetment at each bridge end were also performed. The bent work involved low-headroom drilled shaft placement. All work was performed with no interruption to traffic.

- *Bridge Design for Marine Vessel Collision*  
*Zolan Prucz, Modjeski and Masters, Inc.*

This presentation provides an overview of the application of the present vessel collision bridge design guidelines. It uses examples and actual vessel collision accident data to discuss the factors that influence development of criteria for vessel collision design and to identify potential improvements in current specs.



Wednesday 10:00—11:45 a.m.

**Session 80: Leading in a Culture of Change**  
***Redstick Room***

- LSU Division of Workforce Development  
This session offers new and seasoned leaders insights into the dynamics of change and presents a unique and imaginative approach for navigating the intricacies of the change process. By integrating the five core competencies—attending to a broader moral purpose, keeping on top of the change process, cultivating relationships, sharing knowledge, and setting a vision and context for creating coherence in organizations—leaders will be empowered to deal with complex change. They will be transformed into exceptional leaders who consistently mobilize their compatriots to do important and difficult work under conditions of constant change.

**Session 81: Accurate Digital Terrain**  
**Models**

***Meeting Room 1***

Moderator: Eric Lanier

- *Accurate Digital Terrain Models*  
*Huntington Hodges, DOTD*  
This presentation will provide a detailed comprehensive explanation of the processes and complexities involved in the data collection and construction of digital terrain models and their uses.

**Session 82: Public-Private Partnerships**  
***Meeting Room 2***

Moderator: Michael Bridges

- *Overview and Discussion*

*Jim Hatter, FHWA, and Robert Prieto, Fluor*

Public-private partnerships can potentially play a significant role in bridging the funding gaps for transportation improvements. A panel of experts will provide an overview of public-private partnerships, with examples of their use in other states. This session will also include a recent case study showing actual use of the public-private partnership concept.

**Session 83: Geotechnical Services**  
***Meeting Room 3***

Moderator: Kim Garlington

- *LRFD Implementation in Louisiana*

*Ching Tsai, DOTD*

In order to meet the LRFD implementation schedule, a concerted effort is needed to calibrate resistance factors for both piles and shafts. The first step is to assemble a pile load test database. Pile capacities will be calculated based on the published methods and statistical analyses will be made to determine the resistance factors. The database, progress of the implementation, and the preliminary statistical analyses will be presented.

- *Test Pile Program: Rigolets Pass Bridge*  
*Chris Nickel, DOTD*

Discussion will be on the test pile program, including installation, static, and dynamic testing. The test pile program involves a 30-inch square pile and 66-inch spun-cast post-tension piles. Pile set-up in soft soils will be addressed as findings are presented.

- *An Update on the LADOTD Pavement & Geotechnical Section's Procedures*  
*Steve Meunier, DOTD*

This presentation serves as an update on the Pavement and Geotechnical Section's Procedures, describing our requirements for drilling and sampling, laboratory testing, and engineering. A discussion of LADOTD's requirements using the AASHTO LRFD Code will also be presented, along with our experiences with this new Code to date.

#### **Session 84: DBE Hot Topics**

##### ***Meeting Room 4***

Moderator: Carolyn Bell

- *Overview and Panel Discussion*  
*Carolyn Bell, Cathy Rando, Staci Messina, Ed Wedge, Marshall Hill, DOTD*  
*Marva Jacques, FHWA*

This session will provide information on the latest practices and policies of the DBE program.

**Session 85: Recycled Asphalt Pavement**  
***Meeting Room 5***

Moderator: Don Weathers

- *Fractionating Plant for RAP*  
*Ronald Collins, Pavement Technology, Inc.*  
This presentation will discuss the equipment and processes available to fractionate RAP and maximize value for the state highway agency and contractor. Also discussed will be the impact fractionation has on quality control and economics of Hot Mix Asphalt.

- *Evaluation of Stone and RAP Interlayers Under Accelerated Loading*  
*Louay Mohammad, LTRC*  
The objective of this study was to determine the effectiveness of using untreated RAP as a base material in place of crushed stone in a soil cement asphalt pavement structure. Three test lanes were constructed at the Louisiana Pavement Research Facility. Results indicated that untreated RAP material in the base course was as effective as crushed stone.

**Session 86: Operations and ITS: Customer Service Hits the Road, Part 2**

***Meeting Room 6***

Moderator: Steve Glascock

- *Louisiana's 511 Traveler Information System*  
*Carryn Zeagler, DOTD*  
This presentation will provide an overview of 511 Traveler Information Systems, including a brief history of 511, an update on 511 from a national level, and an update of Louisiana's own 511 Traveler Information System. Current system capabilities will be presented, as will DOTD's plans for future enhancements to the system.

- *Motorist Assistance Patrols*  
*Craig Melancon, Jack Harper Contractors*  
This presentation will provide an overview of services and areas for the MAP program. Incident management and emergency patrols (hurricane evacuation) will be discussed.

- *Special Event on Steroids: Hurricane Evacuation from the District and Troop Perspective*  
*Chris Morvant, DOTD, and Chris Bodet, LA State Police*  
This session will show why New Orleans is susceptible to flooding and the importance of evacuating New Orleans. It will provide a history of past evacuations. The contraflow plan that was developed after Hurricane Ivan and was used to evacuate New Orleans for Hurricane Katrina will be presented in detail.

**Session 87: Intersection Design**  
***Meeting Room 7***

Moderator: Chad Winchester

- *Two Creative Junction Treatments*  
*Joe Bared, FHWA*  
Two creative junction treatments will be explored. The diverging diamond interchange can lower delays, lessen the number of stops, reduce congestion due to left turn movements, and lower costs of construction and land acquisition. The "superstreet" intersection treatment can increase capacity and safety considerably when the major road volumes are very dominant relative to the cross road.

- *Continuous Flow Intersections*

*Michael Bruce, ABMB Engineers, Inc.*

CFI is an innovative at-grade intersection concept that improves capacity by eliminating signal phases. In March, one of the first CFIs in the U.S. opened to traffic.

- *Installation of Louisiana's First Modern Roundabout*

*Tony Tramel, Lafayette Consolidated Government*

Transportation engineers must recognize non-traditional ways of solving transportation, congestion, and vehicular delays in urban areas. The installation of modern roundabouts in the United States is moving at a geometric pace. This important geometric design should be recognized as an urban highway design and traffic operations tool. This traffic control device is the only device/tool which improves safety, efficiency, and convenience in the movement of persons and goods.

**Session 88: Bridge Inspection and Operations**

***Meeting Room 8***

Moderator: Gill Gautreau

- *Pontis Bridge Inspection in Louisiana*

*Jason Chapman, DOTD, and Jeff Rowe, Collins Engineers*

Several years ago, DOTD began transitioning from the current method of bridge inspection to a new method of bridge inspection called PONTIS. PONTIS is an element based bridge inspection system that provides useful inspection data and more advanced tools that assist in planning for future maintenance and replacements.

- *Luling Cable Stay Bridge Inspection and Proposed Repairs*

*Armin Mehrabi, CTL Group, Inc.*

The Luling Bridge Stay Cable Array has recently undergone a structural evaluation using non-destructive testing methods. Damages and defects in stay cables—mostly related to compromise in the corrosion barrier system—have been identified and classified according to their severity. Repair concepts have been developed.

- *Methods for Determining Unknown Foundations*

*Steven Sibley, DOTD*

There are various methods for determining, to some degree of accuracy, the depth of an unknown foundation. Choosing the right method for the application is crucial.

NOTES



2007 TRANSPORTATION ENGINEERING CONFERENCE  
COMMITTEES

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