

# **TxDOT**

## **1917–2017**

A CENTURY OF  
CONNECTING TEXANS



### **90th ANNUAL TRANSPORTATION SHORT COURSE**

**October 10–12, 2016**  
TEXAS A&M UNIVERSITY

**TUESDAY**

OCTOBER 11

**RUDDER AUDITORIUM**  
**8:30 A.M. – NOON**

### Posting of the Colors

**Texas A&M University  
Corps of Cadets Color Guard**

## Invocation

**Corps Chaplain**

### Video Presentation

**Texas Department of  
Transportation Video**

## Campus Welcome

**Michael K. Young, J.D.**  
President  
Texas A&M University

### Remarks on Behalf of the Texas A&M Transportation Institute

**Dennis L. Christiansen, P.E., Ph.D.**  
Agency Director  
Texas A&M Transportation  
Institute

### Presentation of Awards

**Dennis L. Christiansen, P.E., Ph.D.**

- *Dewitt C. Greer Award*
- *Gibb Gilchrist Award*
- *Luther DeBerry Award*
- *Russell H. Perry Award*
- *Raymond E. Stotzer, Jr., Award*

## BREAK

**Remarks on Behalf  
of the Texas Department  
of Transportation**

**James Bass**  
Executive Director  
Texas Department of Transportation

### Remarks from the Texas Transportation Commission

**Laura Ryan**  
Commissioner  
Texas Transportation Commission

### Extra Mile Awards

*Texas Department of Transportation*

*In Memoriam*

**Farland Bundy**  
Retired 1984

*Retired 1984*  
*Internal Review and Audit Division Director*

Internal Review and Audit Division Director

**William C. "Bill" Garbade**  
Retired, 2003

Retired 2003  
Austin District Engineer

*Austin District Engineer*

**Tommie Howell**  
Retired 1993

Retired 1993  
Automation Division Director

Automation Division Director

**Bill Lancaster**  
 Editor, 1999

Retired 1993  
 Deputy Division Director

*Design Division Director*

**Zane Webb**  
Retired 2000

*Retired 2009*  
*Maintenance Division Director*

*Maintenance Division Director*

# ETHICS FOR TRANSPORTATION PROFESSIONALS

ROOM: BRAZOS COUNTY EXPO COMPLEX  
TEXAS BALLROOMS

3:30 – 4:30 p.m.

## SESSION 1: TxDOT Only

*Ethics for the Practicing Engineer—  
Second-Order Responsibilities for Designers  
of Tomorrow's Engineered Systems\**

**Ray W. James, P.E., Ph.D.,**  
Texas A&M University

5:00 – 6:00 p.m.

## SESSION 2: Open to All

*Ethics for the Practicing Engineer—  
Second-Order Responsibilities for Designers  
of Tomorrow's Engineered Systems\**

**Ray W. James, P.E., Ph.D.,**  
Texas A&M University

*\*This course was designed to satisfy the  
Texas SBPE requirements.*

# ALTERNATIVE PROJECT DELIVERY

ROOM: RUDDER THEATRE

## Program and Session Co-Chairs:

**Kristi Flagg, P.E.,**  
Project Finance,  
Debt and Strategic Contracts Division, TxDOT  
**Jason Crawford, P.E., TTI**

## Moderator:

**Randall Grones, P.E.,**  
Project Finance, Debt and Strategic  
Contracts Division, TxDOT

## Harbor Bridge Sustainability

**Carol Luschen, P.E.,**  
Project Finance, Debt and Strategic Contracts  
Division, TxDOT

**Linda Figg,**  
FIGG Bridge Group

## Houston: The Past, Present and Future

**Eliza Paul, P.E.,**  
Houston District, TxDOT

## What Are They Doing in Florida?

**Larry Ritchie, P.E.,**  
Strategic Initiatives, Florida Department of  
Transportation

**Phil Schwab, P.E.,**  
P3 Initiatives, RS&H

**Mike Spain,**  
The Lane Construction Corporation

## BREAK

## Moderator:

**Matt McCarter,**  
Project Finance, Debt and Strategic Contracts  
Division, TxDOT

## Successful Solutions for Project Implementation: Submittal Reviews in SharePoint

**Jeannie Arellano,**  
Project Finance, Debt and Strategic Contracts  
Division, TxDOT

## Capital Maintenance Agreements: The Good, the Bad and the Ugly

**Beau Buchanan, P.E.,**  
Project Finance, Debt and Strategic Contracts  
Division, TxDOT

**Mike Midkiff, P.E.,**  
Project Finance, Debt and Strategic Contracts  
Division, TxDOT

**Mark Taylor, P.E.,**  
Ramos Consulting, LLC

## What You Didn't Know to Ask About Project Financing

**Jennifer Wright,**  
Project Finance, Debt and Strategic Contracts  
Division, TxDOT

## CONSTRUCTION I

**ROOM: MSC 2300 C**

**Program and Session Co-Chairs:**

**Gina Gallegos, P.E.,**  
San Antonio District, TxDOT

**Stephen Sebesta, TTI**

**Jon Epps, P.E., Ph.D., TTI**

**Moderator:**

**Stephen Sebesta, TTI**

1:30 – 2:00 p.m.

***Use of Pre-cast Concrete Panels for Rural Intersections***

**Greg Biediger, P.E.,**  
San Antonio District, TxDOT

2:00 – 2:30 p.m.

***New Binder Specification for Seal Coats***

**Amy Epps Martin, P.E., Ph.D., TTI**

2:30 – 3:00 p.m.

***Arc of Innovation Documentary Creating the West 7th Street Bridge in Fort Worth***

**Jodi Hodges,**  
Fort Worth District, TxDOT

3:00 – 3:30 p.m.

**BREAK**

3:30 – 4:00 p.m.

***Full-Depth Recycling***

**Richard Izzo, P.E.,**  
Construction Division, TxDOT

**Tom Scullion, P.E., TTI**

4:00 – 4:30 p.m.

***Inspection with Thermal Imaging Camera***

**Gisel Carrasco, P.E.,**  
Construction Division, TxDOT

**Ryan Barborak, P.E.,**  
Construction Division, TxDOT

4:30 – 5:00 p.m.

***Jacking Reinforced Concrete Pipe***

**Art Daniel,**  
AR Daniel Construction Services, Inc.

## DESIGN

**ROOM: RUDDER AUDITORIUM**

**Program and Session Co-Chairs:**

**Bill Brudnick, P.E.,**  
Houston District, TxDOT

**Marcus Brewer, P.E., TTI**

**USE OF TECHNOLOGY IN DESIGN**

**Moderator:**

**Max Proctor, Jr., P.E., CFM,**  
Design Division, TxDOT

1:30 – 1:50 p.m.

***TxDOT's ProjectWise Implementation***

**Peter Sissons,**  
Information Management Division, TxDOT

1:50 – 2:20 p.m.

***Drone Activities at TxDOT***

**Jonathan Martin, CP,**  
Design Division, TxDOT

2:20 – 3:00 p.m.

***Exploring Efficiencies with 3D Design in Construction: Panel Discussion***

**Eduardo "Eddie" Acosta, Jr., P.E.,**  
Design Division, TxDOT

**Brent Hillebrenner, P.E.,**  
Design Division, TxDOT

**Robert Nava,**  
Williams Brothers Construction Co., Inc.

3:00 – 3:30 p.m.

**BREAK**

**PAST, PRESENT AND FUTURE**

**Moderator:**

**Andy Mao, P.E.,**  
Houston District, TxDOT

3:30 – 4:00 p.m.

***History of Texas Highway Design***

**Roger Polson, TxDOT (Retiree)**

4:00 – 4:30 p.m.

***Findings from Research on Access Management Related to Raised Medians***

**Bill Frawley, TTI**

4:30 – 5:00 p.m.

***Current Trends in Automated Vehicles and Potential Effects on Future Design***

**Jason Wagner, TTI**

## ENVIRONMENTAL

### ROOM: RUDDER FORUM

#### Program and Session Co-Chairs:

**Dan Perge, P.E.,**  
Dallas District, TxDOT

**Joe Zietsman, P.E., Ph.D.,** TTI

#### Moderator:

**Carlos Swonke, P.G.,**  
Environmental Affairs Division, TxDOT

1:30 – 2:00 p.m.

**Harbor Bridge Project and Civil Rights Lessons Learned**  
**Rich O'Connell,**  
General Counsel Division, TxDOT

**Christopher Amy,**  
Corpus Christi District, TxDOT

2:00 – 2:30 p.m.

**Early Environmental Clearance for ROW Acquisition/Changes in Environmental Rules**  
**Patrick Lee,**  
Environmental Affairs Division, TxDOT

**Sue Theiss,**  
Environmental Affairs Division, TxDOT

2:30 – 3:00 p.m.

**NEPA Assignment Update**  
**Carlos Swonke,**  
Environmental Affairs Division, TxDOT

**Sue Theiss,**  
Environmental Affairs Division, TxDOT

3:00 – 3:30 p.m.

#### BREAK

3:30 – 4:00 p.m.

**Noise Walls and HB 790: Assessing Noise Mitigation**  
**Ray Umscheid,**  
Environmental Affairs Division, TxDOT

**Jason Crawford, P.E.,** TTI

4:00 – 4:30 p.m.

**Migratory Birds and Construction/Bats and Bridges**  
**Stirling Robertson, Ph.D.,**  
Environmental Affairs Division, TxDOT

**John Young, Jr.,**  
Environmental Affairs Division, TxDOT

4:30 – 5:00 p.m.

**History of Transportation and the Environment at TxDOT**  
**Bruce Jensen,**  
Environmental Affairs Division, TxDOT

**Laura Cruzada,**  
Environmental Affairs Division, TxDOT

## MAINTENANCE & PAVEMENT MANAGEMENT

### ROOM: MSC 2406 A&B

#### Program and Session Co-Chairs:

**Miguel Arellano, P.E.,**  
Austin District, TxDOT

**Tom Freeman,** TTI

**Jon Epps, P.E., Ph.D.,** TTI

#### Moderator:

**Michael Lee,** Maintenance Division, TxDOT

1:30 – 2:15 p.m.

**Panel: Best Practices for Preparation and Resurfacing for Preventative Maintenance**  
**David Morren, P.E.,**  
Dallas District, TxDOT

**Tomas Trevino, P.E.,**  
Corpus Christi District, TxDOT

**Carl Johnson, P.E.,**  
Brownwood District, TxDOT

2:15 – 2:30 p.m.

**Predicting & Managing Energy-Sector Development for Maintenance Purposes**  
**Miguel Arellano, P.E.,**  
Austin District, TxDOT

2:30 – 3:00 p.m.

**Updates with Developments in Pavement Management**  
**Magdy Mikhail, P.E.,**  
Maintenance Division, TxDOT

3:00 – 3:30 p.m.

#### BREAK

3:30 – 4:00 p.m.

**Moderator:**  
**Ricardo Gonzales, P.E.,**  
Maintenance Division, TxDOT

**Best Practices for Permit Management**  
**Jeff Parker,**  
Wichita Falls District, TxDOT

**Henry "Jay" Fojtik, P.E.,**  
San Antonio District, TxDOT

**Rex Costley, P.E.,**  
Pharr District, TxDOT

4:00 – 4:15 p.m.

**Emerging Technologies and Techniques for Routine and Preventative Maintenance**  
**Tom Scullion, P.E.,** TTI

4:15 – 5:00 p.m.

**Lessons Learned from 2016 Emergency Events – Ice, Snow and Floods**  
**Blair Johnson, P.E.,**  
Amarillo District, TxDOT

**Chad Windham, P.E.,**  
Odessa District, TxDOT

**Mark Shafer, P.E.,**  
Bryan District, TxDOT

**Mark Wooldridge, P.E.,**  
Houston District, TxDOT

**Walter Hambrick,**  
Houston District, TxDOT

## MATERIALS I

**ROOM: MSC 2300 A&B**

**Program and Session Co-Chairs:**

**Mike Bostic, P.E.**, Fort Worth District, TxDOT

**David Newcomb, P.E., Ph.D.**, TTI

**Andrew Wimsatt, P.E., Ph.D.**, TTI

**Edith Arambula, P.E.**, TTI

**Moderator:**

**Greg Cedillo, P.E.**,  
Fort Worth District, TxDOT

1:30 – 2:00 p.m.

***Historical Perspectives of TxDOT Materials***

**David Bass, P.E.**,  
TxDOT (Retiree)

**Darren Hazlett, P.E.**,  
Construction Division, TxDOT

2:00 – 2:30 p.m.

***Historical Industry Perspectives***

**Harold Mullen**,  
Texas Asphalt Pavement Association

**Lisa Lukefahr, P.E.**,  
Executive Director,  
Texas Concrete Pavement Association

2:30 – 3:00 p.m.

***The Use of Rejuvenators in Asphalt Mixtures  
with High Recycled Materials Content***

**Amy Epps Martin, P.E., Ph.D.**, TTI

3:00 – 3:30 p.m.

**BREAK**

3:30 – 4:00 p.m.

***Seal Coat Binder Specification***

**Jerry Peterson, P.E.**,  
Construction Division, TxDOT

**Darren Hazlett, P.E.**,  
Construction Division, TxDOT

4:00 – 4:30 p.m.

***Prediction of Clay Swelling and PVR Using  
Centrifuge Testing***

**Jorge Zornberg, P.E., Ph.D.**,  
University of Texas

4:30 – 5:00 p.m.

***Changing Asphalt Supply***

**Bob McGennis**,  
Holly Asphalt

## TRAFFIC OPERATIONS I

**ROOM: MSC 2300 D&E**

**Program and Session Co-Chairs:**

**Rebecca Wells, P.E.**,  
Atlanta District, TxDOT

**Scott Cooner, P.E.**, TTI

**Ed Seymour, P.E., Ph.D.**, TTI

**Moderator:**

**Ugonna Ughanze, P.E.**,  
Houston District, TxDOT

1:30 – 2:00 p.m.

***Pavement Markings – Past, Present and Future***

**Paul Carlson, P.E., Ph.D.**, TTI

2:00 – 2:30 p.m.

***Structure Pavement Markings***

**Herbert Bickley, P.E.**,  
Stripe-A-Zone

2:30 – 3:00 p.m.

***Work Zone End of Queue Warning, Waco District***

**Robert Brydia**, TTI

**Jacob Chau, P.E.**, TxDOT

3:00 – 3:30 p.m.

**BREAK**

3:30 – 4:00 p.m.

***Kyle Field Transportation Plan***

**Tim Lomax, P.E., Ph.D.**, TTI

4:00 – 4:30 p.m.

***Texas Connected Automated Vehicle Activities***

**Jianming Ma, P.E.**, TxDOT

4:30 – 5:00 p.m.

***Truck Platooning in Texas***

**Beverly Kuhn, P.E., Ph.D.**, TTI

**ROOM: MSC 2300 C**

**Program and Session Co-Chairs:**

**Gina Gallegos, P.E.,**  
San Antonio District, TxDOT

**Stephen Sebesta, TTI**

**Jon Epps, P.E., Ph.D., TTI**

**Moderator:**

**Gina Gallegos, P.E.,**  
San Antonio District, TxDOT

**8:30 – 9:00 a.m.**

***Accelerated Construction***

**Randy Hopmann,**  
Administration, TxDOT

**9:00 – 10:00 a.m.**

***Blending Consultants, Contractors and  
TxDOT Workforce for Efficient/Timely Inspection  
and Response***

**Mike Coward, P.E.,**  
San Antonio District, TxDOT

**John Wagner, PE.,**  
Lochner

**Paul Kieke,**  
Lochner

**Abel Ortiz-Monasterio,**  
Sundt Construction

**10:00 – 10:30 a.m.**

**BREAK**

**10:30 – 11:00 a.m.**

***Overweight/Oversize Corridors in the Pharr District***

**Daniel Garcia, P.E.,**  
Pharr District, TxDOT

**11:00 – 11:30 a.m.**

***Use of Geospatial Tools (LIDAR, Photogrammetry  
and Laser Profile) in Construction Operations***

**Arturo Perez,**  
Construction Division, TxDOT

**Paul Carlson, P.E., Ph.D., TTI**

**11:30 a.m. – Noon**

***Keeping Projects Moving***

**Juan Bosquez, P.E.,**  
Pharr District, TxDOT



## MATERIALS II

ROOM: MSC 2300 A&B

**Program and Session Co-Chairs:**

**Michael Bostic, P.E.,**  
Fort Worth District, TxDOT

**David Newcomb, P.E., Ph.D.,** TTI

**Andrew Wimsatt, P.E., Ph.D.,** TTI

**Edith Arambula, P.E.,** TTI

**Moderator:**

**Edrean Cheng, P.E.,**  
Fort Worth District, TxDOT

8:30 – 9:00 a.m.

***Next-Generation Concrete Pavement Surface***  
**Shane Cossey,**  
Houston District, TxDOT

9:00 – 9:30 a.m.

***Concrete Overlays***  
**Moon Won, Ph.D.,**  
Texas Tech University

9:30 – 10:00 a.m.

***Forensic Investigation***  
**Tom Scullion, P.E.,** TTI

10:00 – 10:30 a.m.

**BREAK**

10:30 – 11:00 a.m.

***American Association of State Highway and Transportation Officials – National Transportation Product Evaluation Program***  
**Jerry Peterson, P.E.,**  
Construction Division, TxDOT

11:00 – 11:30 a.m.

***Overview of Cracking Tests***  
**Robert Lee, P.E.,**  
Construction Division, TxDOT

11:30 a.m. – Noon

***Energy-Sector Materials Topics***  
**Brett Haggarty,**  
San Antonio District, TxDOT  
  
**Jessica Castiglione, P.E.,**  
San Antonio District, TxDOT

## PLANNING

ROOM: RUDDER THEATRE

**Program and Session Co-Chairs:**

**James W. Koch, P.E.,**  
Transportation Planning and Programming Division, TxDOT

**Katie Turnbull, Ph.D.,** TTI

**Ed Hard,** TTI

**Moderator:**

**Jessica Butler,**  
Transportation Planning and Programming Division, TxDOT

8:30 – 9:00 a.m.

***Planning to Achieve Our Goals – The Strategic Plan***  
**Stacey Strittmatter,**  
Strategic Planning, TxDOT

9:00 – 9:30 a.m.

**Tonia Norman,**  
Government Affairs Division, TxDOT

***Planning for Our Future – The Long-Range Plan***  
**Michelle Conkle,**  
Transportation Planning and Programming Division, TxDOT

9:30 – 10:00 a.m.

***Planning for Our Economic Growth – Freight and Border Plans***  
**Caroline Mays,**  
Transportation Planning and Programming Division, TxDOT

10:00 – 10:30 a.m.

**BREAK**

10:30 – 11:00 a.m.

***Planning for Our Statewide System – Corridor Planning***  
**Susan Chavez,**  
Transportation Planning and Programming Division, TxDOT

11:00 – 11:30 a.m.

***Aligning Our Resources to Develop an Effective Program – Unified Transportation Program***  
**Robert Ramirez,**  
Transportation Planning and Programming Division, TxDOT

11:30 a.m. – Noon

***Planning with Our Partners – Statewide Transportation Improvement Program***  
**Lori Morel,**  
Transportation Planning and Programming Division, TxDOT



## PROJECT MANAGEMENT

### ROOM: RUDDER AUDITORIUM

#### Program and Session Co-Chairs:

**Christopher D. Caron, P.E.,**  
Corpus Christi District, TxDOT

**Curtis Beaty, P.E.,** TTI

**John A. Habermann, P.E.,** TTI

#### Moderator:

**Rodney Svec, P.E.,**  
Yoakum District, TxDOT

8:30 – 9:15 a.m.

#### *Managing Corridor Project Development*

**Roger Beall, P.E.,**  
Transportation Planning and Programming  
Division, TxDOT

9:15 – 10:00 a.m.

#### *Design-Build/Design-Bid-Build Project Selection Tool*

**Nabeel Khwaja, P.E.,**  
Center for Transportation Research

**Kristi Flagg, P.E.,**  
Project Finance, Debt and Strategic  
Contracts Division

10:00 – 10:30 a.m.

#### **BREAK**

#### Moderator:

**Kenneth Wiemers, P.E.,**  
Beaumont District, TxDOT

10:30 – 11:00 a.m.

#### *Design-Build Project Management*

**Duane Milligan, P.E.,**  
Dallas District, TxDOT

11:00 – Noon

#### *Successfully Prioritizing, Developing and Delivering the TxDOT Project Portfolio*

**Colt Amberg, P.E.,**  
Transportation Planning and Programming  
Division, TxDOT

#### *District Development and Execution*

**Lynn Isaak, P.E., PMP,**  
Transportation Planning and Programming  
Division, TxDOT

**Jonathan Bean, P.E.,**  
San Antonio District, TxDOT

**John DeWitt, P.E.,**  
San Angelo District, TxDOT

## RIGHT OF WAY

### ROOM: RUDDER FORUM

#### Program and Session Co-Chairs:

**Kyle Madsen, J.D.,**  
Right of Way Division, TxDOT

**John Overman, AICP, P.G.,** TTI

**Cesar Quiroga, P.E., Ph.D.,** TTI

#### Moderator:

**Kyle Madsen, J.D.,**  
Right of Way Division, TxDOT

8:30 – 8:40 a.m.

#### *Introduction*

**Gus Cannon, CTCM,**  
Right of Way Division, TxDOT

**Kyle Madsen, J.D.,**  
Right of Way Division, TxDOT

8:40 – 9:15 a.m.

#### *Strategies for Getting Right of Way Started Early: How Is the New Normal Being implemented?*

**Bill Buckner, Esq.,**  
Right of Way Division, TxDOT

**David Harrah, SRWA,**  
Austin District, TxDOT

**Albrina Coleman,**  
San Antonio District, TxDOT

9:15 – 9:50 a.m.

#### *Legal Pitfalls of Right of Way — How to Keep Your Project from Being Delayed*

**Darby Venza,**  
Right of Way Division, TxDOT

**Melinda Skillern,**  
Right of Way Division, TxDOT

**Ashlea Hewlett,**  
Right of Way Division, TxDOT

9:50 – 10:00 a.m.

#### *Introduction of New Utility Portfolio Director — The Path Moving Forward*

**Charon Williams, E.I.T., CTCM,**  
Right of Way Division, TxDOT

10:00 – 10:30 a.m.

#### **BREAK**

10:30 – 11:05 a.m.

#### *Local Government Roles in Right of Way*

**James Kirk,**  
General Council Division, TxDOT

**Stephen Lund,**  
Right of Way Division, TxDOT

11:05 – 11:40 a.m.

#### *Utilities and Design — Design Transportation Projects with Utilities in Mind*

**Lora Gunter, J.D., SRWA,**  
Fort Worth District, TxDOT

**Paul Fierro,**  
Right of Way Division, TxDOT

11:40 a.m. – Noon

#### *UCM Training and 3D Mapping*

**Cesar Quiroga, P.E., Ph.D.,** TTI

**Harsh Doshi, P.E.,**  
Austin District, TxDOT

## STRUCTURES AND HYDRAULICS

**ROOM: GATES BALLROOM–MSC 2400**

**Program and Session Co-Chairs:**

**Bonnie Longley, P.E.,**  
San Antonio District, TxDOT

**Mary Beth Hueste, P.E., Ph.D.,**  
Texas A&M University and TTI

**Moderator:**

**Maurice Ferguson,**  
Amarillo District, TxDOT

8:30 – 9:00 a.m.

**History of Concrete Bridges in Texas**

**Gregg Freeby, P.E.,**  
Bridge Division, TxDOT

9:00 – 9:20 a.m.

**Flood Forecasting and Emergency Response**

**David Maidment, P.E., NAE, Ph.D.,**  
University of Texas

9:20 – 9:40 a.m.

**Extending the Life of Our Bridges**

**Christen Longoria, P.E.,**  
San Antonio District, TxDOT

**Gabriel Villarreal, P.E.,**  
HDR, Inc.

9:40 – 10:00 a.m.

**Deep Foundations for Transportation Facilities:  
A Historic Perspective**

**John Delphia, P.E.,**  
Bridge Division, TxDOT

10:00 – 10:30 a.m.

**BREAK**

**Moderator:**

**Nancy Smith, P.E.,**  
Lufkin District, TxDOT

10:30 – 10:50 a.m.

**Pre-Cast Deck Overhangs**

**Kevin Moyer, P.E.,**  
Bridge Division, TxDOT

10:50 – 11:10 a.m.

**Slope Failures: Repair Options**

**Sean Yoon, P.E.,**  
Bridge Division, TxDOT

11:10 – 11:40 a.m.

**Hydraulic Design Manual Updates**

**Stan Hopfe, P.E., CFM,**  
Design Division, TxDOT

11:40 a.m. – Noon

**Framework for Historic Bridge Preservation**

**Mary Beth Hueste, P.E., Ph.D.,**  
Texas A&M University and TTI

## TRAFFIC OPERATIONS II

**ROOM: MSC 2300 D&E**

**Program and Session Co-Chairs:**

**Rebecca Wells, P.E.,**  
Atlanta District, TxDOT

**Scott Cooner, P.E., TTI**

**Ed Seymour, P.E., Ph.D., TTI**

**Moderator:**

**America Garza, P.E.,**  
Corpus Christi District, TxDOT

8:30 – 9:00 a.m.

**Effectiveness of Raised Median Projects**

**Bill Frawley, TTI**

9:00 – 9:30 a.m.

**Conversion of Two-Way Frontage Roads to  
One Way**

**Deanne Simmons, P.E.,**  
Atlanta District, TxDOT

**Jason Dupree, P.E.,**  
Atlanta District, TxDOT

9:30 – 10:00 a.m.

**SH 161 Peak Period Bottleneck Project**

**Jason Crawford, P.E., TTI**

**Jory Dille,**  
North Central Texas Council of Governments

10:00 – 10:30 a.m.

**BREAK**

10:30 – 11:00 a.m.

**El Paso Metropia Data Collection Program**

**Thelma Ramirez,**  
El Paso District, TxDOT

11:00 – 11:30 a.m.

**Video Analytics for Incident Detection  
in Houston**

**Mike Pietrzyk, P.E.,**  
Houston District, TxDOT

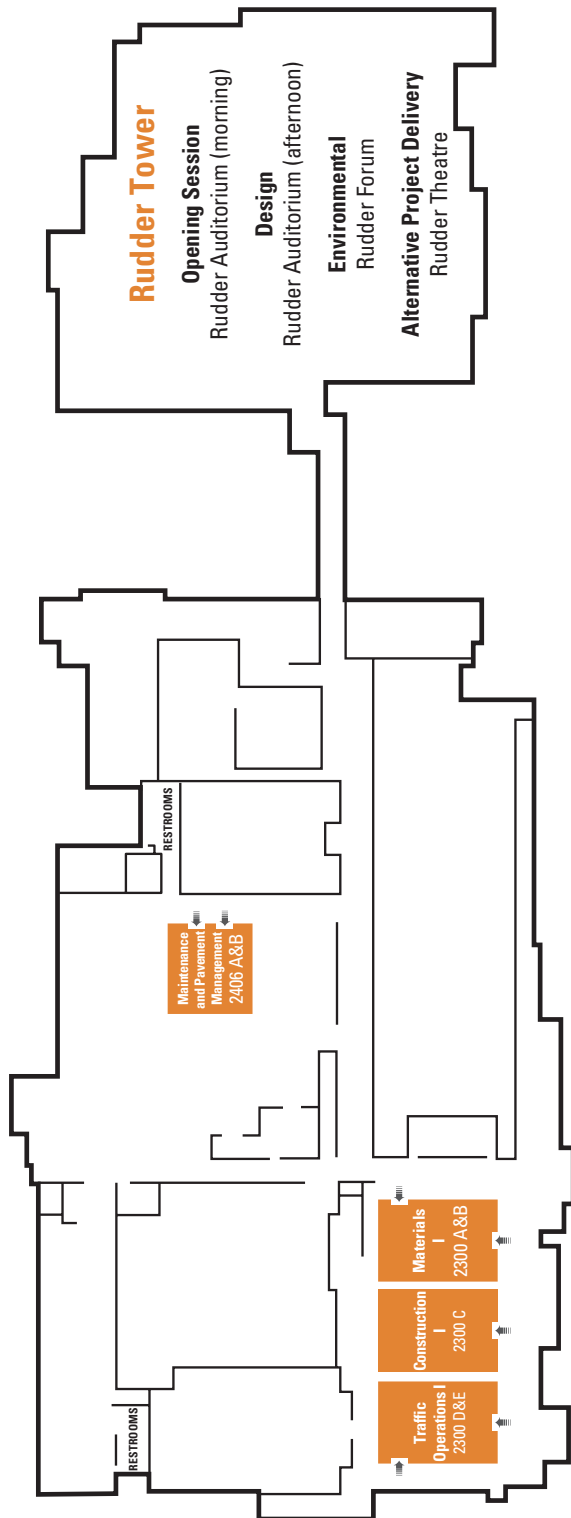
11:30 a.m. – Noon

**Railroad Preemption Forms**

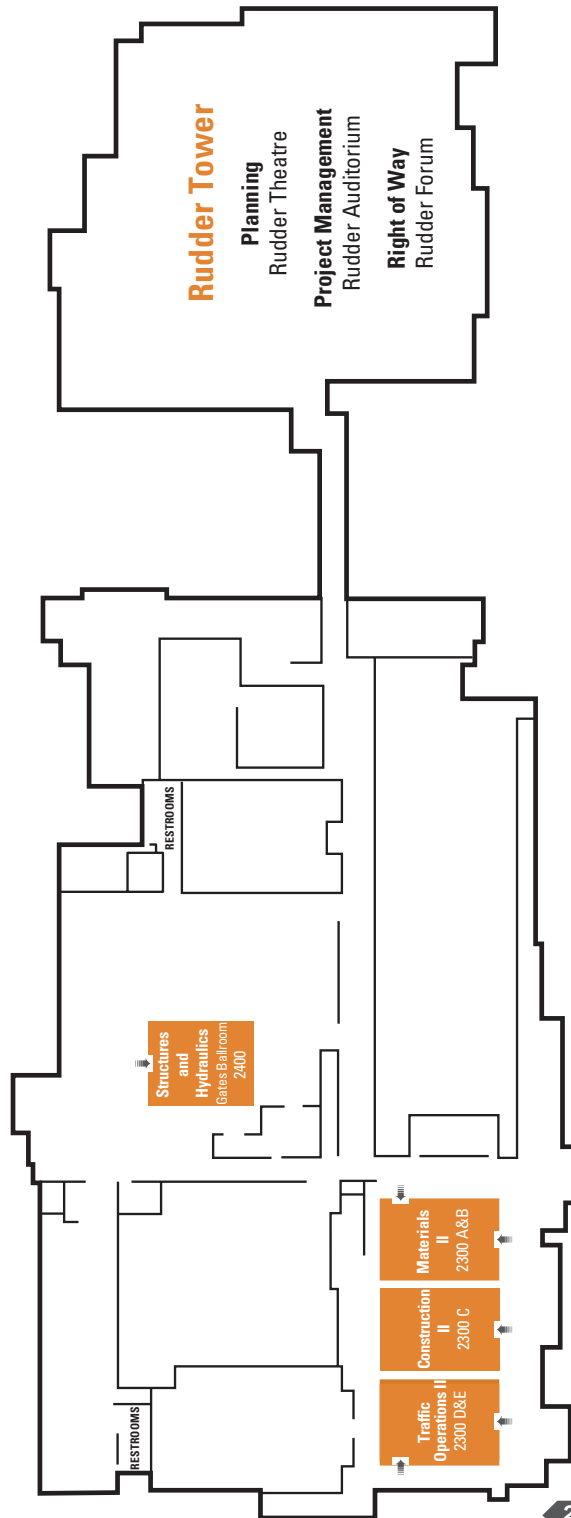
**Mark Johnson, P.E.,**  
Traffic Operations Division, TxDOT



All MSC Sessions Are on the Second Floor



All MSC Sessions Are on the Second Floor



According to the Texas Board of Professional Engineers (TBPE), 15 professional development hours (PDHs) are required each year for license renewal. A PDH is defined as a contact/clock hour on any qualifying course or activity with a clear purpose and objective to maintain, improve, or expand the skills and knowledge relevant to the license holder’s engineering field. Courses, presentations, or activities related to engineering in a technical, managerial, or ethical manner count toward PDHs.

There are two basic criteria for an activity to count:

- 1. Is the specific activity on the list of activities in the rule? (See the TBPE website for an excerpt from the rule.)
- 2. Is the activity relevant to the practice of a technical profession, and does it include technical, ethical or managerial content?

The board wants the reporting process to be as simple as possible, and, as such, there are only two things that a license holder needs to do:

- 1. Certify on the renewal statement that you have completed the Continuing Education Program (CEP) requirement and return it with your renewal payment. This is the main document that the board reviews and keeps as a record of completing the CEP requirement.
- 2. Keep some sort of paper proof of your activity. We recommend that you retain a copy of the program.

**For additional information:**

**TxDOT Employees** should contact Chris Young at (512) 486-5475.

**Non-TxDOT Employees** should access the TBPE website: [http://engineers.texas.gov/cep\\_faqs.htm](http://engineers.texas.gov/cep_faqs.htm).

October 10–12, 2016 ★ Texas A&M University ★ College Station, TX

Name

Employee ID

Division/District/Company Name

Mailing Address

MONDAY, OCTOBER 10	
INITIAL	SESSION TOPIC
	Ethics for Transportation Professionals

TUESDAY, OCTOBER 11	
INITIAL	SESSION TOPIC
	Alternative Project Delivery
	Construction I
	Design
	Environmental
	Maintenance and Pavement Management
	Materials I
	Traffic Operations I

WEDNESDAY, OCTOBER 12	
INITIAL	SESSION TOPIC
	Construction II
	Materials II
	Planning
	Project Management
	Right of Way
	Structures and Hydraulics
	Traffic Operations II

Signature (Your signature certifies your attendance at the sessions indicated.)

# 2016 SHORT COURSE AT A GLANCE

## MONDAY, OCTOBER 10

3:30 p.m. – 4:30 p.m. or  
5:00 p.m. – 6:00 p.m.

### Ethics for the Practicing Engineer – Second-Order Responsibilities for Designers of Tomorrow's Engineered Systems

Location: Brazos County Expo Complex Texas Ballrooms

*(This course satisfies the TBPE requirement for 1.0 hour  
of continuing education in ethics.)*

## TUESDAY, OCTOBER 11

8:30 a.m. – Noon		1:30 p.m. – 5:00 p.m.	
OPENING SESSION Rudder Auditorium	Lunch on your own	SESSION	LOCATION
		Alternative Project Delivery	Rudder Theatre
		Construction I	MSC 2300 C
		Design	Rudder Auditorium
		Environmental	Rudder Forum
		Maintenance and Pavement Management	MSC 2406 A&B
		Materials I	MSC 2300 A&B
		Traffic Operations I	MSC 2300 D&E

## WEDNESDAY, OCTOBER 12

8:30 a.m. – Noon

SESSION	LOCATION
Construction II	MSC 2300 C
Materials II	MSC 2300 A&B
Planning	Rudder Theatre
Project Management	Rudder Auditorium
Right of Way	Rudder Forum
Structures and Hydraulics	Gates Ballroom-MS C 2400
Traffic Operations II	MSC 2300 D&E

Do NOT write on this page.



91st ANNUAL

**TRANSPORTATION SHORT COURSE**

**October 9–11, 2017**

TEXAS A&M UNIVERSITY | College Station, TX