About the Conference
Auburn’s Civil Engineering Department and the Program Committee have designed the Sixty-First Annual Transportation Conference for federal and state highway personnel, road building contractors, general contractors, heavy construction contractors, utility contractors, county engineers, consulting engineers, construction material vendors, researchers, professional society representatives, and University faculty members. It provides an opportunity for these individuals to share innovative advances in transportation planning, engineering design, and construction.

The conference presents technical presentations to provide a forum for the exchange of ideas within the highway engineering and construction professions. The sponsorship of the annual conference is indicative of the broad cross section of interest in the programs of this one and a half day continuing education event.

Location and Schedule
The conference will be held at the Renaissance Montgomery Hotel & Spa at The Convention Center, located at 201 Tallapoosa Street, Montgomery, Alabama. Final registration and check-in will be held from 8:30 a.m. to 10:30 a.m. in the Main Lobby on Monday, February 12, 2018. The Opening General Session begins at 10:30 a.m. in the Performing Arts Center on the second floor. The conference will adjourn Tuesday afternoon, February 13, 2018.

Registration and Fee
All persons attending the conference must register. The registration fee of $200 includes all sessions, program materials, refreshment breaks, and luncheons. Additional luncheon tickets are available at the registration desk. Student and ALDOT retiree registration is $50. To register, please complete the attached registration form and return it by mail to the address indicated, by FAX 334-844-5715, or by calling Engineering Continuing Education at 800-446-0382 or 334-844-4370. On-line registration is available at www.engce.auburn.edu.

Accommodations
Participants are responsible for making their own lodging arrangements. A block of rooms has been reserved at the conference hotel. The room block is listed under “Sixty-First Transportation and Engineering Conference”. Rate: $139 plus taxes. Call 877-545-0311.
Cancellation Policy
Due to commitments to our speakers and facilities, the registration fee is non-refundable if a registrant withdraws less than five business days before the program starts. Substitutions may be made at any time, please notify us in advance if possible. No-shows will be liable for the entire conference fee. Auburn University reserves the right to cancel any program due to insufficient registrations. This decision is usually made no later than five business days prior to the event. If a program is canceled for any reason, all fees will be refunded. Auburn University will not be responsible for travel expenses incurred by a registrant as the result of a canceled program.

Continuing Education
Participants in this conference will be able to attend up to eight (8) hours of technical programs. Auburn University makes every effort to ensure that its technical programs conform to the requirements of the State of Alabama Board of Licensure for Professional Engineers and Land Surveyors for the award of Professional Development Hours to support the annual renewal of professional licensure.

Participants with Disabilities
It is the policy of Auburn University to provide accessibility to its programs and reasonable accommodations for persons defined as having disabilities under the Americans with Disabilities Act of 1990. Please contact us at least two weeks prior to the program so that proper consideration can be given to any special needs.

Program Handouts
Handouts of the material presented at each session will be available for download approximately two weeks after the conference. Presentations can be downloaded by visiting the following website: http://www.alabamat2.org

Program Committee

Alabama Department of Transportation
John R. Cooper
George Conner
William Adams
Ed Austin
Tim Colquett
Ed Phillips
Tim Barnett
Scott George
Phillip Shamburgar
Terry Robinson
Maxine Wheeler
DeJarvis Leonard
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Larry Sellers
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Hugo Zhou

Federal Highway Administration
Mark Bartlett and Lewis Harden
Montgomery, Alabama

Alabama Road Builders Association
Tom Layfield, Montgomery, Alabama

Alabama Asphalt Pavement Association
Mel Monk, Montgomery, Alabama

Alabama Concrete Industries Association
John Sorrell, Montgomery, Alabama

Alabama Section, ASCE
Kendall Kilpatrick, Mobile, Alabama

Association of County Engineers of Alabama
Josh Harvill, Lafayette, Alabama

Institute of Transportation Engineers, Alabama Section
Cody Long, Birmingham, Alabama

American Council of Engineering Companies of Alabama
Renée Casillas, Montgomery, Alabama

Alabama Bridge Contractors Association
Clay McInnis, Montgomery, Alabama

Precast/Pre-stressed Concrete Institute, Gulf South Region
Dan Eckenrode, Gulfport, Mississippi

2018 Conference Outline

Monday, February 12, 2018
8:30 a.m. Registration Opens
10:30 a.m. Opening General Session – Performing Arts Center
Presiding: Dr. Rod Turochy, Professor and Director of the Alabama Technology Transfer Center, Department of Civil Engineering, Auburn University, Auburn, AL

Opening Remarks
FEMA Preparations and Response to 2017 Hurricanes in the Gulf Coast Region
Jeff Byard, Associate Administrator for the Office of Response and Recovery at the Federal Emergency Management Agency (FEMA), Washington, D.C.

Engineering and Construction Challenges of the Burj Khalifa – the World’s Tallest Structure
Lawrence C. Novak
Senior Director of Structural Engineering and Codes
Portland Cement Association, Skokie, IL

Governor’s Luncheon – Exhibit Hall C
Presiding: Dr. Steve Taylor, Associate Dean for Research
Samuel Ginn College of Engineering
Auburn University, Auburn, AL

The Honorable Kay Ivey, Governor (Invited)
State of Alabama

Adjourn

Tuesday, February 13, 2018
8:30 a.m. Concurrent Technical Sessions
10:00 a.m. Break
10:30 a.m. Concurrent Technical Sessions
12:10 p.m. Transportation Director’s Luncheon – Exhibit Hall C
Presiding: Dr. Andy Nowak, Chair and Professor
Department of Civil Engineering
Auburn University, Auburn, AL

John R. Cooper, Transportation Director
Alabama Department of Transportation

AAASHTO 25-Year Awards of Meritorious Service

Adjourn
Technical Sessions – Monday, February 12, 2018

1:30 p.m. to 3:00 p.m.

Traffic Operations and Roadway Design
Meeting Room: Alabama A

Presiding: Cody Long, President
Alabama Section ITE

1:30 p.m. Performance-Based Practical Design
George Merritt
FHWA, Atlanta, GA

2:00 p.m. Emerging Approaches and Technology Tools for Improving Signal Timing Practices
Zong Tian, Ph.D., Department of Civil and Environmental Engineering, University of Nevada, Reno, NV

2:30 p.m. Characterizing Congestion in the Birmingham Region
Andy Sullivan, Ph.D.
University of Alabama at Birmingham, Birmingham, AL

Paving Quality Advances and Preservation
Meeting Room: Alabama B

Presiding: Lyndi Davis Blackburn, Assistant State Materials & Tests Engineer, ALDOT, Montgomery, AL

1:30 p.m. Quality Control Behind the Paver Using IR Technology
Ray Doss
Midsouth Paving, Oxford, AL

2:00 p.m. Rapid GPR Technology to Measure Asphalt Density
Kyle Hoegh, Ph.D.
MNDOT, Minneapolis, MN

2:30 p.m. NCAT Pavement Preservation Studies Update
Adriana Vargas, Ph.D., National Center for Asphalt Technology, Auburn University, Auburn, AL

Construction
Meeting Room: Performing Arts Center

Presiding: Skip Powe, State Construction Engineer
ALDOT, Montgomery, AL

1:30 p.m. Reconstruction of I-85 Bridges in Atlanta
Bill Duvall and Michael Garner
Georgia Department of Transportation, Atlanta, GA

2:00 p.m. Work Zone Safety - Lane Intrusion Technology
Curtis Davison
Oldcastle Materials Inc., Orlando, FL

2:30 p.m. E-Construction: Efficiency Through Innovation
Hunter Golson
ALDOT, Construction Bureau, Montgomery, AL

3:30 p.m. to 5:00 p.m.

Highway Safety
Meeting Room: Alabama A

Presiding: Tim Barnett, State Safety Operations Engineer
ALDOT, Montgomery, AL

3:30 p.m. Creating a Vision Zero Action Plan
Gena Torres
Hillsborough County MPO, Tampa, FL

4:00 p.m. Digital Advertising Billboards and Traffic Safety
Virginia Sissipouki, Ph.D.
University of Alabama at Birmingham, Birmingham, AL

4:30 p.m. Interchange Deceleration Lane Design Based on Naturalistic Driving Speed and Deceleration Rates
Hugo Zhou, Ph.D.
Department of Civil Engineering, Auburn University, AL

Bridges
Meeting Room: Alabama B

Presiding: Tim Colquett, State Bridge Engineer
ALDOT, Montgomery, AL

3:30 p.m. Investigation on Cross-Frame Behavior in Steel Girder Bridges
Wei Song, Ph.D., Department of Civil, Construction, and Environmental Engineering
University of Alabama, Tuscaloosa, AL

4:00 p.m. P3 Development of the I-10 Mobile River Bridge
Patrick Hickox
HDR, Mobile, AL

4:30 p.m. NEXT Beam Bridge Applications
David A. Tomley
Thompson Engineering, Mobile, AL

Environmental and Sustainability Solutions
Meeting Room: Alabama CDE

Presiding: Wade Henry, Assistant State Design Engineer
ALDOT, Montgomery, AL

3:30 p.m. Birmingham's Railroad Park: Reuse of Urban Properties and Associated Economic Benefits
Lea Ann Macknally
Macknally Land Design, Birmingham, AL

4:00 p.m. Strategies to Minimize the Impact of Roadway Culverts on the Mobility of Aquatic Species
Jose Vasconcelos, Ph.D.
Department of Civil Engineering, Auburn University, AL

4:30 p.m. The Infiltration Swale: An ALDOT LID Practice
Scott Rogers, Ph.D.,
ALDOT, Design Bureau, Montgomery, AL
Wayne Stephens, ALDOT, Guntersville Area

Technical Sessions – Tuesday, February 13, 2018

8:30 a.m. to 10:00 a.m.

Geotechnical Construction Challenges
Meeting Room: Alabama A

Presiding: Kaye Chancellor Davis, State Geotechnical Engineer
ALDOT, Montgomery, AL

8:30 a.m. Construction of Alabama’s First GRS Bridge in Marshall County
J. Brian Anderson, Ph.D., Auburn University, AL
Robert Pirando, County Engineer, Marshall County, AL

9:00 a.m. Kelly Creek Foundation Problems
Stephen M. Revell
ALDOT, Bureau of Materials & Tests, Montgomery, AL

9:30 a.m. Ground Improvement Support for an MSE Wall
William H. Wright, Hayward Baker, Inc., Houston, TX
Matt Hammett, Hayward Baker Inc., Knoxville, TN

Growing Demand for Alternative Modes
Meeting Room: Alabama B

Presiding: Kendall Kilpatrick, President
Alabama ASCE Section

8:30 a.m. Promoting Cycling, Pedestrian and Bus Rapid Transit in Huntsville
James Vandiver and Paige Colburn
Huntsville Area Metropolitan Planning Organization, Huntsville, AL

9:00 a.m. Cycling in the South
John Pucher, Ph.D.
Rutgers University, Raleigh, North Carolina

9:30 a.m. The Atlanta Beltline
Henry Ikewu-Ukwa
Atlanta Beltline Inc., Atlanta, GA

Applying New Technologies
Meeting Room: Performing Arts Center

Presiding: Steve Walker, State Design Engineer
ALDOT, Montgomery, AL

8:30 a.m. Iowa’s Automated Corridor
Will Sharp
HDR, Omaha, NE

9:00 a.m. Introducing ALDOT’s UAS Section
JD D’Arville
ALDOT, Maintenance Bureau, Montgomery, AL

9:30 a.m. Using Ground Penetrating Radar for Utilities in Birmingham, AL
Robert Lee
ALDOT, Right of Way Bureau, Montgomery, AL
February 13, 2018
10:30 a.m. to 12:00 p.m.

Innovative Concrete Technology
Meeting Room: Alabama A
Presiding: Dan Eckenerode
Executive Director PCI Gulf South, Gulfport, MS

10:30 a.m. Ultra-High Performance Concrete and its Use for Accelerated Bridge Construction
Benjamin A. Graybeal, Ph.D., FHWA, Turner-Fairbank Highway Research Center, McLean, Virginia

11:00 a.m. Nondestructive Testing to Assess the In-Place Condition of Bridge Decks
Larry D. Olson
Olson Engineering, Inc., Rockville, MD

11:30 a.m. 1st ALDOT Precast Pavement Installation: I-165 SB Service Road at US 90 Ramp
Mike Quaid, Fort Miller Co. Inc., Greenwich, NY
Lyndi Davis Blackburn, ALDOT, Montgomery, AL

Safety and Evaluation
Meeting Room: Alabama B
Presiding: Stacey Glass, State Maintenance Engineer
ALDOT, Montgomery, AL

10:30 a.m. Use of an Autonomous Impact Attenuator in Colorado
Kyle Lester
Colorado Department of Transportation, Denver, CO

11:00 a.m. Scour Inspection of Bridges in Houston after Hurricane Harvey
Graham Bettis
Texas Department of Transportation, Austin, TX

11:30 a.m. Work Zone Safety Using Emerging Technologies
Eric Marks, Ph.D., School of Civil and Environmental Engineering, Georgia Institute of Technology
Atlanta, GA

Alternative Contracting
Meeting Room: Performing Arts Center
Presiding: William Adams, Assistant Chief Engineer,
Pre-Construction, ALDOT, Montgomery, AL

10:30 a.m. Alternative Technical Concepts for the CBD Project
Lance Taylor
Assistant Region Engineer, ALDOT, Birmingham, AL

11:00 a.m. Introduction to P3 Project Finance
Tim Wilschetz
U.S. Managing Director, KPMG, Austin, TX

11:30 a.m. Examples of How Other States Implement P3
Greg Schiess
Strategic Initiatives Office, FDOT, Tallahassee, FL

Parking

1. Hotel: Renaissance Montgomery Hotel and Spa Parking Deck
   The Renaissance Montgomery Hotel and Spa at the Convention Center occupies the entire block bordered by Tallapoosa Street (front), Commerce Street, Moulton Street and Bibb Street. Parking deck entrance is from the Bibb Street side of the hotel. There are 600 parking places (including valet). Parking deck entrances are into the hotel second floor and the Convention Center first and second floor. The elevators are different and marked.
   Rates:
   Self Park: 0-30 min. Free; Up to 2 hrs. - $3.00; 2 to 6 hours $6.00; 6 to 10 hours $10.00; Overnight $10.00
   Valet Parking: 0 to 10 hours $10.00; Overnight $16.00

2. MATS Parking Deck
   Located at the corner of Moulton and Bell Street. Hours & Rates:
   Monday-Friday 6:30 a.m. to 6:00 p.m. - $1.00 per hour.
   Monday-Friday 6:30 p.m. to 6:00 a.m. - no charge
   Friday 6:00 p.m. to Monday 6:30 p.m. (Weekends) – no charge.
   MATS (Montgomery Area Transportation System) 334-241-2203

3. Biscuits / Riverwalk Stadium Parking
   Open daily with no attendant and no charge
   Game Days: $4.00
   Operated by the Montgomery Kiwanis Club (334-834-7929)

4. Park-ette Parking Area 334-265-7215
   Located across Bibb Street between Lee and Commerce.
   Private Parking during the week
   Free Parking after 6:00 pm Friday through 6:00 pm Sunday
   Please note: the permit only lot behind/ southeast of this lot is not available without a permit 24 hours per day, seven days a week.

5. Embassy Suites Hotel
   Located across Tallapoosa Street from the Renaissance Hotel.
   Rates: $15.00 per day. Parking charges apply based on demand.

6. Montgomery Chamber of Commerce Visitors Bureau
   Located off Water Street under the train station.
   No charge to park evenings and weekends.

7. Commerce Street / Tallapoosa Street Lot
   Located across from the front entrance to the hotel at the Northwest corner of Tallapoosa and Commerce Streets.
   Rates: Monday – Friday 6:00 a.m. to 5:00 p.m. parking with a permit only. No charge to park evenings and weekends.

8. Street Parking:
   Metered Parking Spaces:
   Meters apply Monday through Friday from 8:00 a.m. to 6:00 p.m.
   No charge for Evenings, Weekends and Holidays.
   Non-Metered Parking Spaces:
   Non-metered diagonal spaces and median spaces (on Commerce Street between Tallapoosa and Montgomery Streets)
   No restrictions or charges for parking at this time.

Please Note:
Due to the rapidly developing renovation projects throughout downtown Montgomery, there may be changes to this information that are beyond our control.