Non-Profit Org. U.S. Postage PAID Montgomery, AL Permit No. 530

Stamp Required to Return Mail to Auburn

Alabama Transportation Assisistance Program 1301 Shelby Center 1161 W. Samford Avenue, Building 8 Auburn, AL 36849-0001



February 11-12, 2025

# AUBURN UNIVERSITY SAMUEL GINN COLLEGE OF ENGINEERING

Auburn University Transportation Research Institute Highway Research Center Alabama Transportation Assistance Program



# **Program Developed By:**

Alabama Department of Transportation
Federal Highway Administration
Auburn University
Alabama Road Builders Association
Alabama Asphalt Pavement Association
Alabama Concrete Industries Association
American Society of Civil Engineers, Alabama
Section

Association of County Engineers of Alabama Institute of Transportation Engineers, Alabama Section

American Council of Engineering Companies of Alabama

Alabama Bridge Contractors Association Precast / Pre-stressed Concrete Institute, Gulf South Region

# **ABOUT THE CONFERENCE**

The Auburn University Transportation Research Institute and the Program Committee have designed the 68th Annual Alabama Transportation Conference for federal and state highway personnel, road building contractors, utility contractors, city and 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, design, construction, operations and maintenance.

Technical sessions, sit-down luncheons, welcome reception, and breaks will be provided to create a forum for the exchange of ideas between transportation engineering and construction professionals. The conference will also include an Exhibit Hall with many exhibitors that will enhance learning and provide additional networking opportunities for all participants.

# **LOCATION & SCHEDULE**

The conference will be held at the BJCC, located at 2100 Richard Arrington Jr. Blvd. N., Birmingham, Alabama. Final registration and check-in will be held from 8:30 AM to 10:30 AM on the Main Level Lobby on Tuesday, February 11, 2025. The Opening General Session begins at 10:30 am in Ballroom A/B. The conference will adjourn Wednesday February 12, 2025 at 1:30 pm.

# **REGISTRATION & FEES**

The registration fee includes all sessions, program materials, refreshment breaks, Exhibits, Welcome Reception, and luncheons. Please register online at http://aub.ie/ATC2025.

### FEES:

Early Bird Registration \$300.00 (ends December 31,2024) Regular Registration \$350.00 Walk-In Registration \$400.00 Retired ALDOT and Retired County Engineers \$50.00

# **ACCOMMODATIONS**

Participants are responsible for making their own lodging arrangements. A block of rooms has been reserved at the Sheraton Birmingham Hotel at a rate of \$173 plus tax. Reservations can be made through January 13, 2025 at http://aub.ie/ATC2025HOTEL.

# **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 a result of a canceled program.

# PROFESSIONAL DEVELOPMENT HOURS

Participants in this conference will be able to attend 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.

# **CONFERENCE PRESENTATIONS**

Presentations shared throughout the course of the conference will be made available for download approximately two weeks after the conclusion of the conference. Materials will be shared upon availability and contingent upon prior approval from the presenter. These will be available for download on the conference website: https://aub.ie/atap.

# **PROGRAM COMMITTEE**

# Alabama Department of Transportation

John R. Cooper Joe Lister **Edward Austin** Kidada Dixon George Conner **Brad Lindsey** Willie Bradley Philip Shamburger Bill Patty Eric Christie Scott George Matt Leverette Clay McBrien Stacey Glass Stan Biddick Iohn-Michael Walker Tim Colquett Craig Guthridge Frank Farmer

# **Federal Highway Administration**

Mark Bartlett and Kristy Harris Montgomery, Alabama

### Alabama Section, ASCE

Craig Williams, Tuscaloosa, Alabama

# **Association of County Engineers of Alabama**

Luke McGinty, Wetumpka, Alabama

# **Institute of Transportation Engineers** Alabama Section

Veronica Ramirez Ayala, Auburn, Alabama

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

### Alabama Road Builders Association

Skip Powe, Montgomery, Alabama

### **Alabama Asphalt Pavement Association**

Mel Monk, Montgomery, Alabama

# **Alabama Concrete Industries Association**

John Sorrell, Montgomery, Alabama

# **Alabama Bridge Contractors Association**

Clay McInnis, Montgomery, Alabama

# Precast / Pre-stressed Concrete Institute. **Gulf South Region**

Dan Eckenrode, Gulfport, Mississippi

### **Auburn University**

**Brian Anderson** Cameron Farr Hollis Marshall Mike Perez Tyler Mitchell Anton Schindler Larry Rilett Scott Tison Carla Story Matt Yarnold Nam Tran Huaguo Zhou Rod Turochy

# **2025 Conference Program**

# **Tuesday, February 11, 2025**

8:30 am Registration and Exhibit Hall Opens

10:30 am Opening General Session - BALLROOM A/B

Presiding: Dr. Anton Schindler, Professor and HRC Director, Auburn University, Auburn, AL

### Opening Remarks

### Transportation Challenges and Successes in the State of Florida

by Jared W. Perdue, P.E. Secretary of Transportation

Florida Department of Transportation, Tallahassee, FL

### Importance of Infrastructure for Alabama Economic Growth

by Helena Duncan President and CEO

Business Council of Alabama, Montgomery, AL

### Governor's Luncheon - EAST EXHIBIT HALL 3 12:10 pm

Presiding: Dr. Larry Rilett, Professor and AUTRI Director, Auburn University, Auburn, AL

# The Honorable Kay Ivey, Governor (Invited)

State of Alabama

### 1:30 pm Concurrent Technical Sessions

3:00 pm Break - EAST EXHIBIT HALL 2

3:30 pm Concurrent Technical Sessions

5:00 pm Welcome Reception - EAST EXHIBIT HALL 2

6:30 pm Adjourn and Exhibit Hall Close

# Wednesday, February 12, 2025

8:00 am Exhibit Hall Opens

8:30 am Concurrent Technical Sessions

10:00 am Break - EAST EXHIBIT HALL 2

10:30 am Concurrent Technical Sessions

### 12:10 pm Transportation Director's Luncheon - EAST **EXHIBIT HALL 3**

Presiding: Dr. David Timm, Professor and Chair of the Department of Civil and Environmental Engineering, Auburn University, Auburn, AL

John R. Cooper, Transportation Director **Alabama Department of Transportation** 

AASHTO 25-Year Awards of Meritorious Service

1:30 pm Adjourn and Exhibit Hall Closes

# Tuesday, February 11 1:30 to 3:00 PM

# Construction

Meeting Room: Ballroom A/B Presiding: Stacey Glass, State Construction Engineer ALDOT, Montgomery, AL

# The SR 161 Connector from SR 180 to Foley Beach Express

by Fred Brown Volkert, Inc., Daphne, AL

# West Alabama Highway Update

by Kevin White Brasfield and Gorrie, Birmingham, AL

# Critical-Path Method (CPM) Schedules as a Management Tool

by Matt McMillan and Asia Kessinger Kiewit Corporation, Omaha, NE

# **Traffic Operations and Roadway Design**

Meeting Room: East Rooms D-M Presiding: Veronica Ramirez Ayala President, Alabama Section ITE, Auburn, AL

### An International Scan of Turbo Roundabouts

by Jeff Shaw Federal Highway Administration, Washington, DC

# ALDOT's Adoption Process for the New MUTCD (11th Edition)

by Jason Daniels ALDOT, Montgomery, AL

# Signalized Intersection Technology Advancements

by Alex Hainen, Ph.D. The University of Alabama, Tuscaloosa, AL

# **Asphalt that Strengthens Alabama Roads**

Meeting Room: East Rooms N-O Presiding: Scott George, State Materials and Tests Engineer ALDOT, Montgomery, AL

# **Asphalt Sustainability: Building for Tomorrow**

by Heather Dylla, Ph.D. Construction Partners, Inc., Dothan, AL

### Road-Tested: Lessons from ALDOT's Test Sections

by Randy West, Ph.D. NCAT, Auburn University, Auburn, AL

# Rebuilding Excellence: The 2024 NCAT Test Track

by Nathan Moore NCAT, Auburn University, Auburn, AL

# Tuesday, February 11

# **Bridges**

Meeting Room: Ballroom A/B
Presiding: Tim Colquett
State Bridge Engineer, ALDOT, Montgomery, AL

# A Plan for Reprofiling a Cable-Stayed Bridge to Provide Increased Navigation Clearance

by Steven Hague HNTB Corporation, Houston, TX

# Impact of Vessel Collision on Bridges

by Andy Nowak, Ph.D. Auburn University, Auburn, AL

# Cathodic Protection of Prestressed Girders on Dauphin Island Bridge

by Natallia Shanahan, Ph.D. VCS Engineering, Inc., Tampa, FL

# **Road Safety**

Meeting Room: East Rooms D-M Presiding: John-Michael Walker, State Traffic & Safety Operations Engineer, ALDOT, Montgomery, AL

# A Safe System Approach to Appropriate Speed Limits

by Tim Taylor Federal Highway Administration, Atlanta, GA

# Reduced Conflict Intersections for Safety in the Alexander City

by John Emery ALDOT, Alexander City, AL

### Compatibility of Roadside Hardware with Electric Vehicles

by Bob Bielenberg University of Nebraska, Lincoln, NE

# **Environmental Policy, Training & Tech**

Meeting Room: East Rooms N-O Presiding: Scott Rogers, Ph.D., Environmental Coordination Engineer, ALDOT, Montgomery, AL

### **NEPA Policy Impacts for State DOTs**

by Mike Ruth, Ph.D. Federal Highway Administration, Annapolis, MD

### **Construction Stormwater Training Efforts**

by Wes Donald, Ph.D. Auburn University, Auburn, AL

### Advancing UAS Technology at ALDOT

by JD D'Arville ALDOT, Montgomery, AL

# **PARKING**

There are several parking options for parking at the BJCC. All Parking Decks are \$20.00 per day. No cash, card only.

- Sheraton Birmingham Hotel Red Garage 917 22nd Street N
- Silver Garage
   1080 22nd Street N
- Purple Lot
   930 19th Street N
- Orange Lot
   1000 19th Street N
- Gold Lot
   2130 11th Avenue N

# **IMPORTANT INFORMATION**

For security reasons, Conference Lanyards MUST be worn for entrance into all conference luncheons, sessions and exhibit hall. Security personnel will be positioned at all doors.

# SPONSORSHIPS/EXHIBITORS

Exhibitors from a wide range of transportation-related fields are expected to attend. The exhibit will open on Monday, February 10. from 4:00 to 6:00 PM CST and Tuesday, February 11th from 7:00 to 8:30 am for set up.

Exhibitors will be located in East Exhibition Hall 2 where all refreshment breaks and the Welcome Reception will be served.

Prospective exhibitors must register for an exhibit booth before January 24, 2025 at http://aub.ie/ATC2025EXHIBITOR.

Sponsorship opportunities are available as well. Items are available for sponsor until Friday, January 10, 2025.

Folding Phone Stand - \$3,000

Conference Notebook - \$3,000

Multifunction Tape Measure - \$3,000

Shopper Tote - \$3,000

To register for a sponsorship, please register at http://aub.ie/ATC2025SPONSOR.

For additional information, please visit our website at https://aub.ie/atap.

# **Wednesday, February 12** 8:30 to 10:00 AM

# **Innovations in Maintenance**

Meeting Room: Ballroom A/B

Presiding: Eric Christie

State Maintenance Engineer, ALDOT, Montgomery, AL

# Tuscaloosa-area Hydrodemolition Project on I-20/59

by Terence Williamson ALDOT, Tuscaloosa, AL

### Rehabilitation of the Duncan Bridge in Winston County

by Ben Snipes ALDOT, Fayette, AL

### Use of Titanium Bars as External Reinforcement to Strengthen **Bridge Girders**

by Kadir Sener, Ph.D. Auburn University, Auburn, AL

# **Geo-Assessment, Performance & Repair**

Meeting Room: East Rooms N-O

Presiding: Kaye Chancellor Davis, Deputy State Materials and Tests Engineer, ALDOT, Montgomery, AL

### Towards a Warning System for Rainfall-Induced Landslides Along Alabama Highways

by Jack Montgomery, Ph.D. Auburn University, Auburn, AL

### Can you DIGG it and Measure While Drilling

by Desirae Carlton and Stephanie Abbett ALDOT, Montgomery, AL

### Tying Up a Slippery Slope - Using an Anchored Sheet Pile Wall for **Slide Repair**

by Robert Thompson

Dan Brown and Associates, LLC, Birmingham, AL

# **Investing in Transportation Infrastructure**

Meeting Room: East Rooms D-M

Presidina: Mark Bartlett, Division Administrator Alabama FHWA, Montgomery, AL

# Federal Infrastructure Funding Update & Outlook for Surface Transportation Reauthorization

by Matt Reiffer

American Council of Engineering Companies, Washington, DC

### U.S. Highway and Bridge Construction Update

by Alison Premo Black, Ph.D.

American Road and Transportation Builders Association, Washington, DC

# **Discretionary Grant Programs**

by Shaun Capps

Federal Highway Administration, Montgomery, AL

# **Wednesday, February 12** 10:30 to 12:00 PM

# **City and County Engineering**

Meeting Room: Ballroom A/B Presiding: Luke McGinty President, Association of County Engineers of Alabama, Wetumpka, AL

# Enhancing Safety and Efficiency: The Role of Roundabouts on County-Maintained Roads in Jefferson County

by Chris Nicholson Jefferson County, Birmingham, AL

# Design and Construction of Roundabout at CR13 and CR44

by Mark Acreman

Baldwin County, Robertsdale, AL

# Recycling and Reclamation: Will It Work Here?

by Ben Bowers, Ph.D. Auburn University, Auburn, AL

# **Concrete Solutions**

Meeting Room: East Rooms N-O Presidina: Iohn Sorrell President, Alabama Concrete Industries Association, Montgomery,

### Innovations in Concrete and Cementitious Materials for Sustainable Infrastructure

by Larry Rowland Heidelberg Materials, Irvine, TX

### Reconstruction of I-59 with Concrete Solutions

by Will Gray

A.G. Peltz Group, Birmingham, AL

### Long-term Creep and Shrinkage of the I-59/I-20 Segmental Bridge in Birmingham

by Anton Schindler, Ph.D. Auburn University, Auburn, AL

# **Multimodal Transportation**

Meeting Room: East Rooms D-M Presiding: Craig Williams President, ASCE Alabama Section, Tuscaloosa, AL

### Intermodal Container Transfer Facility (ICTF) in Montgomery, AL by Doug Otto

Alabama Port Authority, Mobile, AL

# Florida Motorcycle Injury Prevention Program

by Chanyoung Lee, Ph.D. University of South Florida, Tampa, FL

# Improving Pedestrian Facilities in 11 Black Belt Towns through the Step-Up Alabama RAISE Grant

by Kathy Gregory, The Fifty Fund, Auburn, AL, and Rod Turochy, Ph.D., Auburn University, Auburn, AL

# Transportation Conference **68th Annual Alabama**

BJCC, 2100 Richard Arrington Jr. Blvd. N, Birmingham, AL 35203 February 11-12 2025

ONLINE REGISTRATION AT: http://aub.ie/2025atc

person per form; photocopy if more forms are needed.

one

Please print or type; register

Name .

DOT Division/Bureau

Employer:

ALDOT Employee

 $\Box$ 

City, State, Zip+4:

Address:

Phone:

Email:

Director's Lunch 2nd

Day.

MAIL REGISTRATION FORM AND CHECK TO: ATAP

1301 Shelby Center Auburn, AL 36849-5375

Early Bird Registration Fee: \$300.00 (ends December 31, 2024)
Regular Registration Fee: \$350.00 (beginning Jan. 1, 2025)
Walk-In Registration Fee: \$400.00
ALDOT Retiree Registration Fee: \$50.00
ALDOT Retiree Registration Fee: \$50.00
PLEASE MAKE CHECKS PAYABLE TO AUBURN UNIVERSITY. IF PAYING BY CREDIT CARD, PLEASE CALL 334-844-4370
Auburn University is an Equal Opportunity Educational Institutional / Employer