64th Annual Alabama Transportation Conference
February 9-11, 2021

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 64th Annual Alabama Transportation Conference will be held virtually February 9-11, 2021. The Alabama Transportation Conference is developed by the Department of Civil and Environmental Engineering at Auburn University and the Alabama Department of Transportation. This event provides an opportunity to share innovative advances in transportation planning, design, construction, operations, and maintenance. Technical sessions create a forum for the exchange of ideas among transportation professionals.

PROGRAM COMMITTEE

Alabama Department of Transportation
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George Conner  Maxine Wheeler
William Adams  Willie Bradley
Tim Colquett  John Eagerton
Scott George  Stacey Glass
Robert Lee  Brad Lindsey
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Alabama Bridge Contractors Association
Clay McInnis, Montgomery, AL

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

REGISTRATION FEES

Conference registration is required for all attendees. Registration includes access to all technical sessions as well as virtual vendor booths.

Regular  $40
ALDOT  $40
Student  $10
ALDOT Retiree  $10

Please register for the conference online at aub.ie/registerATC2021

PROFESSIONAL DEVELOPMENT HOURS

Participants at this virtual conference will be able to attend up to seventeen (17) hours of Professional Development Hours (PDHs). 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 PDHs to support the annual renewal of professional licensure.

SPONSORSHIP OPPORTUNITIES

Premium Sponsorship - $1000
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Standard Sponsorship - $500
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For registration and additional information, please visit aub.ie/sponsorregisterATC2021
64th Annual Alabama Transportation Conference
Agenda
Tuesday, February 9, 2021

8:30am – 10:00am
Opening General Session
Presiding: Dr. Rod Turochy, Professor and ATAP Director
Department of Civil and Environmental Engineering, Auburn University, AL

Opening Remarks

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

John R. Cooper, Transportation Director
ALDOT, Montgomery, AL

10:30am – 12:00pm
Spotlight Session
Accelerated Bridge Construction (ABC) for Alabama
Presiding: Paul Froede, Miscellaneous Structures & Bridge Design, ALDOT, Montgomery, AL

Design of PennDot’s First Self-propelled Modular Transporter Bridge Move: Shaler Street Bridge
Lou Ruzzi, WSP, Pittsburgh, PA
Matt Cochran, H.W. Lochner, Pittsburgh, PA

Construction of PennDot’s First Self-propelled Modular Transporter Bridge Move: Shaler Street Bridge
Shane Szalankiewicz, Pennsylvania DOT, Bridgeville, PA
Patrick Heer, Mammoet Northern USA, Inc., Swedesboro, NJ

Use of Accelerated Bridge Construction for the University Boulevard Bridge over US-82 in Tuscaloosa, Alabama
Kevin McAlister, Barge Design Solutions, Inc., Nashville, TN
Jack Kimbrough, Barge Design Solutions, Inc., Huntsville, AL

1:00pm – 2:30pm
Highway Safety
Presiding: Steve Walker, State Design Engineer, ALDOT, Montgomery, AL

TDOT’s Story on Improving Worker Safety in Work Zones
James C. Norris, Tennessee DOT, Nashville, TN

MASH Update and Potential Impact on Current Practices
Chiara Silvestri Dobrovolny, Ph.D., Texas A&M Transportation Institute, College Station, TX

Wrong-Way Driving Mitigation: Case Studies in Alabama
Hugo Zhou, Ph.D., Department of Civil and Environmental Engineering, Auburn University, AL

3:00pm – 4:30pm
Construction
Presiding: Matt Leverette, State Construction Engineer, ALDOT, Montgomery, AL

Construction of a Diverging Diamond Interchange in Baldwin County
Jennifer Eubanks, ALDOT, Southwest Region, Mobile, AL

Construction of ALDOT’s First Precast Culvert
Wesley Fulmer, ALDOT, Southeast Region, Montgomery, AL

Do The Right Thing #buildsafetogether
Scott Overby, McInnis Construction, Summerdale, AL
Wednesday, February 10, 2021

8:30am – 10:00am  
Roadway Design  
Presiding: Maggie Weems, President, American Society of Civil Engineers, Alabama Section

ALDOT’s New Performance-Based Practical Design Guide  
Steve Walker, ALDOT, Design Bureau, Montgomery, AL

Lessons Learned from Alabama’s First DDI: I-10 at SR 181  
Liz Johnson, Kimley-Horn Associates, Birmingham, AL

Southern Boulevard: From Conceptualization to Implementation  
Aaron White, ALDOT, Southeast Region, Troy, AL  
Justin Palmer, ALDOT, Southeast Region, Montgomery, AL

10:30am – 12:00pm  
Geotechnical Engineering  
Presiding: Kaye Chancellor Davis, Deputy Materials and Tests Engineer, ALDOT, Montgomery, AL

Geotechnical and Geophysical Investigations of the US-231 Landslide  
Jack Montgomery, Ph.D., Department of Civil and Environmental Engineering, Auburn University, AL  
Brannon MacDonald, ALDOT, Materials and Tests Bureau, Montgomery, AL

Using a Drilled Shaft Supported Bridge for Emergency Slide Repair, US 231  
Robert Thompson, Dan Brown and Associates, Montgomery, AL

Advanced Geotechnical Methods for Exploration  
Ben Rivers, Federal Highway Administration, Atlanta, GA

1:00pm – 2:30pm  
Emerging Technologies  
Presiding: Chris Hilyer, State TSM&O Administrator, ALDOT, Montgomery, AL

Focus in a Blissful Environment: Systems and Standards Which Reduce Distracted AV Operation  

Electric Vehicle Infrastructure for the Future Demand  
Cedric Daniels, Alabama Power Company, Birmingham, AL

West Central Region Connected Vehicle Pilot Deployment Update  
Alex Hainen, Ph.D., Department of Civil, Construction, and Environmental Engineering, The University of Alabama, Tuscaloosa, AL

3:00pm – 4:30pm  
Asphalt: Balanced and Recyclable  
Presiding: Scott George, State Materials and Tests Engineer, ALDOT, Montgomery, AL

Balanced Mix Design: The County Experience  
Buzz Powell, Ph.D., National Center for Asphalt Technology, Auburn University, AL

Virginia’s Road to BMD Implementation  
Stacey Diefenderfer, Ph.D., Virginia Transportation Research Council, Charlottesville, VA

Cold Recycling: Can We Use It Here?  
Stephen Cross, Ph.D., S. Cross & Associates, LLC, Stillwater, OK
Thursday, February 11, 2021

8:30am – 10:00am  
**City and County Engineering**  
Presiding: Greg Bodley, President, Association of County Engineers of Alabama  

*New LPA Design Policies for City and County Projects*  
Adam Sanford, ALDOT, Local Transportation Bureau, Montgomery, AL  

*Local Government Transportation Project Funding Guide*  
James Boyer, ALDOT, Local Transportation Bureau, Montgomery, AL  

*Upcoming Changes to Survey Measurements and Coordinates*  
Bill Hazelton, Ph.D., Department of Geospatial Informatics, Troy University, Troy, AL  

10:30am – 12:00pm  
**Bridges**  
Presiding: Tim Colquet, State Bridge Engineer, ALDOT, Montgomery, AL  

*Design of the New Mentone Arch Bridge*  
Nick Walker, ALDOT, Bridge Bureau, Montgomery, AL  

*Rapid Replacement of CSX's Bayou Sara Bridge Swing Span*  
Kevin Kane, Brasfield & Gorrie, LLC, Birmingham, AL  
David Knickerbocker, Ph.D., HDR, Inc., Charlotte, NC  

*Experimental Determination of Horizontal Braking Force Distribution in Pile Bent Bridges*  
Justin Marshall, Ph.D., Department of Civil and Environmental Engineering, Auburn University, AL  

1:00pm – 2:30pm  
**Maintenance**  
Presiding: Stacey Glass, State Maintenance Engineer, ALDOT, Montgomery, AL  

*ALDOT’s Response to the Sodium Hydrosulfide Spill on I-59*  
Roddy Mitchell, ALDOT, East Central Region, Birmingham, AL  
Adam Anderson, ALDOT, Materials and Tests Bureau, Montgomery, AL  

*Cleanup After Hurricane Sally*  
Don Powell, ALDOT, Southwest Region, Mobile, AL  
Corey Thomas, Thompson Engineering, Mobile, AL  

*Data Collection for ALDOT’s Maintenance Quality Assurance Program with ArcGIS 123*  
Jeremy Barnes, ALDOT, Maintenance Bureau, Montgomery, AL  
Morgan Musick, ALDOT, Maintenance Bureau, Montgomery, AL  

3:00pm – 4:30pm  
**Natural and Cultural Resources**  
Presiding: Wade Henry, Assistant State Design Engineer, ALDOT, Montgomery, AL  

*Georgia’s Section 106 Programmatic Agreement: A Partnership of Agencies & Tribes*  
Sandy Lawrence, Georgia DOT, Atlanta, GA  

*Integrated Project Delivery at NCDOT – Improving Delivery from Concept to Construction*  
Christopher M. Werner, North Carolina DOT, Raleigh, NC  

*ALDOT’s Public Response to COVID*  
Natasha Clay, ALDOT, Design Bureau, Montgomery, AL
VIRTUAL EVENT

Alabama Transportation Conference
64th Annual

Alaska Transportation Assistance Program
Department of Civil and Environmental Engineering
202 Ramsay Hall
1161 W. Samford Ave., Bldg. 8
Auburn University, AL 36849-5375