The National Conference on Work Zone Safety

Sponsored by the National Work Zone Safety Information Clearinghouse

workzonesafety.org

In partnership with U.S. Federal Highway Administration and American Road and Transportation Builders Association–Transportation Development Foundation
Welcome to Springfield!

Over thirty years ago, the American Road & Transportation Builders Association Transportation Development Foundation (ARTBA-TDF) brought together construction executives and public agency officials for the landmark “National Conference on Highway Work Zone Safety.” It was the first of 15 national and international conferences, and educational workshops to share “best practices” and provide perspectives from “both sides of the barrel” in an effort to help reduce motorist and worker fatalities and injuries in these road construction sites.

The Clearinghouse offers a wide variety of services including training materials, webinars, conferences, and workshops. Most notably the Clearinghouse website (workzonesafety.org) fulfills nearly 200,000 information requests annually and is operated in partnership with the U.S. Federal Highway Administration and the Texas A&M Transportation Institute.

We hope you will attend as many sessions as possible so you can benefit from the experience and knowledge of our nationally-recognized presenters who have volunteered to share their best practices and insights with you!

For more information on the Clearinghouse and its services, contact Brad Sant (bsant@artba.org) or Úna Connolly (uconnolly@artba.org) or visit our website, workzonesafety.org.
Workshops for the National Work Zone Safety Conference

Day One: Tuesday, September 20

8:00 a.m.
**Safety Certification for Transportation Project Professionals Pilot Exam (optional) (Mt. Vernon Room)**
Preregistration required. Exam for SCTPP Certification.

8:00 a.m. **(4-Hour Training Course)**
**Preventing Runovers and Backovers in Work Zones (optional) (Gunston Room)**
The “Preventing Runovers and Backovers” course examines concerns for employees working within the work space or “Orange Zones” of the Temporary Traffic Control Plan. Like a traffic control plan, workers use an Internal Traffic Control Plan to improve the efficiency of the work zone. The plan reduces conflicts between the equipment and the employee by improving the communication of those involved and ensuring that everyone understands their co-workers’ responsibilities. This program provides tools and methods attendees can use to develop Internal Traffic Control Plans.

Presenters: Bruce Drewes, ARTBA

12:00 p.m.
**Opening Luncheon (Woodlawn/Fairfax Room)**

12:15 p.m.
**Welcome (Woodlawn/Fairfax Room)**
Pete Ruane, ARTBA; Raymond Khoury, Virginia State Traffic Engineer

12:30 p.m.
**Panel Presentation – Autonomous and Connected Vehicles in Work Zones (Woodlawn/Fairfax Room)**
Presenters: Jerry Ullman, TTI; Chris Brooks, MIDOT; Cathy McGhee, Associate Director VTRC.

Autonomous vehicles are not part of a futuristic vision; they are on the roads now. What does this mean for work zones where pavement markings and roadway conditions can vary greatly from “normal” conditions? This panel session will review the challenges and impacts of autonomous vehicles as they attempt to maneuver in roadway work zones.
1:30 p.m. **Variable Speed Limits in Work Zones (Mt. Vernon Room)**
Utah has been using trailer mounted variable speed limit signs to significantly reduce the regulatory speed limit within active work zones. This session will focus on the details and results of this practice, and explain why it has been such a success.
Presenter: Josh Van Jura, UTDOT

1:30 p.m. **(Two hour session)**
**Online Learning: The Future of Safety Training (Gunston Room)**
This presentation explains the utility of online learning while highlighting various courses in the FHWA-funded online learning site of the ARTBA Work Zone Safety Consortium. The presentation also debuts the new ARTBA Online Academy and Spotter Certification Instructor Course.
Presenters: Beth Stinson, ARTBA; Jerry Ullman, TTI; Una Connolly, ARTBA; Rod Wolford; and Beth Larson, FOF

2:30 Break

3:00 p.m.
**Regional & Citywide Work Zone Management: Transportation Management Planning Tools (Mt. Vernon Room)**
This session presents various approaches to coordinate work zone management, including a case study from Hampton Roads, Virginia, which necessitated a more advanced method of managing work and balancing work with the needs of the motoring public. A combination method, which consisted of an automated management advisory program and a dedicated approach of stakeholders meeting weekly to de-conflict issues, was developed and has been successful.
Presenters: Ken Coody, VADOT; William Haynes, RK&K; Scott Crumley, RK&K

3:55 Transition
4:05 p.m.

**Real Time Monitoring/ ITS and Work Zones/ Developing Partnerships with Tech Companies (Mt. Vernon Room)**

The use of Intelligent Transportation Systems (ITS) in work zones can be an effective method to manage traffic during construction. Smart Work Zone technologies utilize innovative strategies to minimize work zone safety and mobility impacts. The session will provide a quick overview of the various applications of Smart Work Zones that can be incorporated into a construction or maintenance project and help agencies to minimize travel delays, ensure motorist and worker safety and mitigate work zone-related congestion. Project case studies will be covered to show how use of that real-time data can help agencies dynamically manage traffic operations and plan for future project development. The session will conclude with insight into why it is good for agencies to develop a working relationship with the Smart Work Zone vendors to leverage their knowledge to better prepare for a work zone ITS application under development. Discussion will center on how the same work zone ITS equipment can also support the Connected and Autonomous Vehicle movement.

Presenter: Neal Boudreau, MADOT

4:05 p.m.

**Highway Work Zone Incident Management (Gunston Room)**

Dealing with a motor vehicle crash or similar incident in a highway construction zone requires the combined skills of many people including police, fire, emergency medical services (EMS), highway agency, and contractor personnel. Work Zone Traffic Incident Management (WZ-TIM) is more complicated than ordinary TIM because access to the incident site is often difficult, there is limited space for response operations, and there are more organizations to coordinate. Response can also be hampered by the combined effect of incident traffic backups and construction closures. This presentation will discuss the ways first responders, highway agencies and contractors can work together to help prevent work zone traffic incidents and respond quickly and effectively when incidents occur.

Presenter: John Shaw, Wisconsin TOPS Lab
Day Two: Wednesday, September 21

8:00 a.m.

**Narrow and No Shoulder Sign Placement (Mt. Vernon Room)**

This open-forum, panel-type session will provide an overview of three states’ approaches to sign placement on narrow (and no shoulder) median locations. Each state representative will provide details on current practices, procedures, and challenges faced while installing signs and devices along the left side of the roadway. Attendee interaction and feedback is encouraged.

Presenters: Matt Briggs, PADOT; Neil Boudreau, MADOT; David Rush, VADOT

8:00 a.m.

**Nighttime Lighting in Work Zones/Smart Work Zone Lighting (Gunston Room)**

This presentation will focus on the use of “anti-glare” lighting systems to assist in providing uniform speeds throughout the full length of the lane closure as well as improving the visibility of workers.

Presenter: Steve Kite, NCDOT

8:55 **Transition**

9:05 a.m.

**Predicting Safety Effects of Work Zone Designs: Lessons Learned from NCHRP 17-61 (Mt. Vernon Room)**

Crash Modification Factors (CMFs) are tools to help practitioners quantify the expected safety impacts of different policy, design, and traffic control alternatives. CMFs essentially act as multipliers to predict the change in expected number of crashes if a given countermeasure is implemented or if the road environment is modified in some way. This presentation will preview findings from research that rates the relative importance or value of having a CMF to predict the safety impacts of different decisions made during work zone planning, design, and operations.

Presenters: Mike Fontaine, VTRC; Jerry Ullman, TTI
9:05 a.m. 

**Quality of Work Zone Signs, Markings, and Channeling Devices**

*(Gunston Room)*

This multi-part session will provide: 1) a briefing on the Updated ATSSA Quality Guidelines for Temporary Traffic Control Devices and Features; 2) practical application of the ATSSA Quality Guidelines for construction projects managed by Michigan DOT, and 3) instructions for properly maintaining and evaluating a variety of work zone technologies, focusing on products such as arrow boards, PCMS, speed limit trailers, portable signs, and ITS devices. Topics will include general and preventative maintenance for solar/battery powered devices, software solutions for managing batteries and hardware failures, using the right ITS device for the right situation, and managing cellular communications.

Presenters: Chris Brookes, MIDOT; Becky Golden, ATSSA; Mike Granger, Street Smart Rental

10:00 a.m. **Transition**

10:10 a.m. Break

10:10 a.m. **ADA, Pedestrian and Bicycle Guidance & Accommodation in Work Zones**

*(Mt. Vernon Room)*

The presentation contains guidance and basic guidelines on work zone traffic control for pedestrians and bicyclists from the perspective of two state DOTs. The Virginia Department of Transportation Work Zone Pedestrian and Bicycle Guidance is a supplement to the current edition of the 2011 Virginia Work Area Protection Manual. The recommendations and examples in the Virginia Department of Transportation Work Zone Pedestrian and Bicycle Guidance apply to temporary traffic control zones, as found in construction, maintenance, permit, and utility work areas. This information is intended to illustrate the principles of proper work zone traffic control for pedestrians and bicyclists. Accommodating bicyclists and pedestrians in work zones is a priority for the Oregon Department of Transportation, and this presentation highlights the successes and challenges in developing strategies, devices, and specifications for Oregon’s statewide design teams and construction offices.

Presenters: Paul Kelly, VDOT; Matt Wilson, ODOT
10:10 a.m. **(Two-hour session)**

**New Technologies to Improve Work Zone Safety (Gunston Room)**

This presentation will introduce new products that have promising applications for roadway work zones. They include a system that will change the way a two lane two-way roadway maintains traffic. Another featured technology is a driveway assistance device developed to improve traffic flow and safety in work zones that have residential driveways. Another technology uses sophisticated analytical tools to recognize drivers who are likely to intrude into the work space and warns workers when an intrusion is likely. Driverless vehicles have work zone applications as well, with one technology that controls attenuator trucks.

Presenters: Matt Briggs, PADOT; Chris Brookes, MA-DOT; Scott Heydt, Horizon Signal Technologies; Andrew Roberts, Royal Truck; Lee Cole, Oldcastle Materials

11:10 a.m.

**Flagger Safety and Assistance Devices (Mt. Vernon Room)**

With Work Zone Traffic Control, fatalities primarily occur due to crashes in the work area and the lacking knowledge of traveling populations into the work zone. Flaggers comprise a number of the employees that are injured by both of these types of crashes. A general question remains: "Who is the flagger?" Are they the seasoned employee that knows the dangers that they are exposed or are they the newest employee? The primary goal of a flagger is to provide guidance to the traveling population and protect the other employees. How do we protect this employee? This hour-long program will provide some of the tools that can be used to protect or replace the flagger, along with an open discussion of these tools as well other methods used to improve this valued position.

Presenter: Bruce Drewes, 3T
12:15 p.m. – 1:30 p.m.  
**Working Lunch (Woodlawn/Fairfax Room)**

**Update on MASH Standards**  
This session will start with an overview of crash testing of work zone traffic control devices under NCHRP Report 350, including the four categories of devices established by FHWA. The session will continue with an overview outlining the changes between Report 350 and MASH guidelines. Discussion will follow on completed and current research on testing of work zone devices to MASH, leading to the numerous questions on work zone crash testing protocol that AASHTO will need to discuss and settle before significant advances in testing of WZ devices under MASH can move forward.

Presenter: Nick Artimovich, FHWA

**Crashworthiness Technical Advice**  
Under contract from FHWA, the American Road and Transportation Builders Association (ARTBA) is developing a new technical advice document that provides recommendations and information related to the crashworthiness of a number of temporary traffic control devices. This presentation shares insight into the information contained in this forthcoming document.

Presenter: Jerry Ullman, TTI

**State Laws that Support Work Zone Safety: Open Discussion**  
For a number of years, states have introduced legislation designed to improve work zone safety. From public awareness campaigns, to increased fines, to automated enforcement, these states are seeking to find effective regulations. During this interactive session, Neil Boudreau will lead a discussion with the conference participants as they share their successes—and failures—in legislating safer work zones.

Moderator: Neil Boudreau

1:30 p.m.  
**Product Demonstration (Hotel Parking Lot)**  
Attendees are invited outside for product and equipment demonstrations showing the newest ideas to help workers and roadway users remain safe during construction and maintenance operations.

2:30 p.m.  
**Networking Reception (Foyer)**

3:30 p.m.  
**End of Day Two**
Day Three: Thursday, September 22

8:00 a.m.
**Performance Measures in Work Zones (Mt. Vernon Room)**
This session will cover the use of crash data and exposure data to produce safety performance measures for work zones. This presentation will demonstrate web-based, real-time analytics tools that make it easier for work zone managers and operations personnel to better understand work zone performance, safety issues, and the economic impacts of various operations strategies, while also making it easier for public information officers to quickly answer questions about work zones from the public or elected officials.

Presenters: David Rush, VDOT; Young-Jun Kweon, VTRC; Michael Pack; and Michael VanDaniker, University of Maryland

8:00 a.m.
**Design/Build Work Zone Best Practices (Gunston Room)**
Performance-based contracting procedures have been used for many years to allow for more innovation in transportation construction projects. But how do these fare when applied to roadway work zones? This session will discuss best practice ideas when design/build contracting intersects with roadway work zone.


8:55 Transition

9:05 a.m.
**Zipper Merge Best Practices (Mt. Vernon Room)**
What is the Zipper Merge? Why do we need to promote it? This presentation will discuss how the typical Zipper Merge layout has evolved, as well as its opportunities to combine with other Intelligent Work Zone strategies. Discussion of the public’s acceptance and comments will follow. This presentation will also give information on the “pilot” work zone project NC-DOT is currently studying. It will focus on the device on locations as well as the sign designs and placement.

Presenters: Ted Ulven, MN-DOT; Steve Kite, NC-DOT
9:05 a.m.  
**Electrical Safety/ Avoiding Utility Strikes (Gunston Room)**
This safety presentation will provide an overview of the principles and hazards of electricity to increase the participants’ ability to recognize, correct, and avoid electrical hazards in the work zone. Information on underground and overhead power lines will be discussed with a demonstration simulating a crane coming in contact with an overhead power line.
Presenter: Dennis Burks, HNTB

10:05 a.m.  
**Transition**

10:15 a.m.  
**FHWA Stakeholder Meeting (Invitation Only) (Mt. Vernon Room)**
This is a closed session for discussion between FHWA and the representatives from state departments of transportation.

10:15 a.m.  
**Preventing Falls in Road and Bridge Construction (Gunston Room)**
While it may seem counterintuitive, falls are the second leading cause of death and injury on roadway construction sites. These include falls from heights (bridges and overpasses); falls from equipment (large earthmoving and paving); and slips, trips, and falls on the same level. ARTBA recently developed a series of fact sheets and training tools to educate workers in an effort to prevent falls.
Presenter: Emmett Russell

12:15 p.m.  
**End of Conference – Lunch on your own.**

1:00 p.m.  
**Work Zones and Large Trucks Stakeholder Meeting (1:00 – 4:00 PM) (optional) (Mt. Vernon Room)**
The Federal Highway Administration (FHWA) is offering a free “Work Zones and Large Trucks” Stakeholder Meeting. It serves as the intersection of work zones and large trucks, addressing the challenges facing large truck operators and highway agencies during the daily execution of their professions. Your participation will assist FHWA in developing a communications and outreach plan to support high value actions to further improve large truck safety in and around work zones.
Transportation Information

Metro:
Metro service is available from the Franconia-Springfield Metro station (Blue Line) into Washington/Regan National Airport, Washington DC and northern Virginia.

Hotel Shuttle:
Complimentary shuttle service is available for hotel guests every 30 minutes, stopping at the Springfield Mall and the Franconia-Springfield Metro Station.

Contact Us

Workzonesafety.org
(888)447-5556
Workzonesafety.org/contact-us

American Road & Transportation Builders Association
1219 28th St NW, Washington, DC 20007

Texas A&M Transportation Institute
2929 Research Parkway
TAMU 3135, College Station, TX 77843-3135
Speaker Biographies

Nick Artimovich, FHWA
Nick Artimovich has been a career FHWA engineer since 1975. He worked as both Safety Coordinator and Area Engineer in FHWA’s Maryland Division during the 1980s. He has handled the review of crash tested roadside safety hardware in FHWA Headquarters since 1988. Mr. Artimovich established FHWA policy on Crash Testing of Work Zone Traffic Control Devices under NCHRP Report 350 in 1993. He served as the secretary for Task Force 13 on the Standardization of Roadway and Bridge Hardware since 1999 and as secretary for the AASHTO Subcommittee on Design’s Technical Committee on Roadside Safety since 2007.

Neal Boudreau, MADOT
Neil Boudreau serves as the Director of Traffic and Safety and State Traffic Engineer for the Massachusetts Department of Transportation, Highway Division, and has been with MassDOT since 1995, serving in many roles within the Traffic Operations and Safety Management groups. In his current position, Neil serves on the AASHTO Sub-committees on Safety Management and Traffic Engineering and is currently serving as the Chair of the Work Zone Technical Team. In addition, Neil serves as a member of the National Committee on Uniform Traffic Control Devices and is Vice-Chair of the Temporary Traffic Control technical committee.

Neil has been a member of Institute of Transportation Engineers (ITE) for twenty-two years and is a member of the American Traffic Safety Services Association (ATSSA). Neil is currently serving as a member of FHWA’s Every Day Counts Smarter Work Zone Implementation Team.

Matt Briggs, PADOT
Matthew graduated from the Pennsylvania College of Technology in 1995, where he received an Associate Degree in Architectural Engineering Technology. He has been with the Pennsylvania DOT since 1999, his first five years were in PennDOT’s District 8-0’s Construction Unit, followed by two years in the Traffic Unit specializing in Work Zone Traffic Control. In 2006, he went to work in the Department’s Bureau of Maintenance and Operations in Central Office, as a Senior Traffic Control Specialist working in the Pavement Marking unit, and is currently the Traffic Control Specialist Manager for the Temporary Traffic Control (TTC) unit. In January of this year, he became a formal member on the National Committee on Uniform Traffic Control Devices TTC Technical Committee.

Chris Brookes, MIDOT
Chris Brookes is Michigan Department of Transportation’s (MDOT) Work Zone Delivery Engineer. He’s been with the department for eight years. Chris is an active member of ATSSA, he holds positions on the Temporary Traffic Control Committee, the Innovations Council, and is the Michigan Chapter Secretary. Chris was also a member of the FHWA EDC-3 team for smarter work zones. Chris has a bachelor’s degree in Civil Engineering from Michigan State University, Go Green!
**Dennis Burks, HNTB**
Dennis Burks, CSP, PE, is the Safety Director of HNTB Corporation, an employee-owned infrastructure solutions firm serving public and private owners and contractors. He also teaches electrical safety as an adjunct instructor at the OSHA Training Institute in Kansas City, Missouri. Mr. Burks has a Master of Science degree in Industrial Safety and Education Specialist degree in Human Services - Public Services. Dennis is a past local chapter President of the American Society of Safety Engineers (ASSE) and the recipient of the ASSE Regional Safety Professional of the Year award. He has written several safety articles that have been printed in various publications.

**Lee Cole, Oldcastle Materials**
Lee is presently the Vice President, Environment, Health & Safety for Oldcastle Materials Group in the United States. His responsibility includes the oversight of the health and safety for approximately 23,000 employees operating throughout North America. Lee Cole has been in the safety, health, and environmental field for over 39 years. He is a graduate of Mississippi State University. Serves on various safety and environmental committees for Industry trade associations (National Asphalt Paving Assoc., National Stone, Sand, and Gravel Assoc., ARTBA, etc.). Mr. Cole is married and the father of 3 great sons and 5 grandchildren.

**Una Connolly, ARTBA**
Ms. Connolly has more than 20 years of experience in the environment, health and safety fields. Previously, she managed environmental and safety programs at the National Stone, Sand and Gravel Association, and the National Asphalt Pavement Association. She has a bachelor’s from Radford University in biology and master’s from the University of Maryland in international management. Ms. Connolly manages the activities of the National Work Zone Safety Information Clearinghouse and develops safety and environmental compliance and training products for the association.

**Ken Coody, VADOT**
Ken Coody has ten years’ experience in VDOT and over 15 in Transportation Operations. Mr. Coody is currently responsible for Transportation Operations in the Eastern Region of Virginia. The Eastern Region is unique in that in addition to a Transportation Operations Center, it includes five tunnels, five moveable bridges and a ferry system, all of which operate 24/7.

**Scott Crumley, RK&K**
Mr. Crumley has over 23 years of experience in the industry, with a B.S in Civil Engineering from the University of Connecticut and a M.S in Information & Telecommunication Systems from John Hopkins University. He is registered as a professional engineer in the District of Columbia and other states, and has earned his professional traffic operation engineer certification.
**Bruce Drewes, 3T**  
Bruce Drewes has been involved in the Transportation Industry for the past 35 years, working as a laborer for an underground utility company. He worked for the Idaho Transportation Department (ITD) in the Maintenance/Construction groups until 1996 when he moved back to Boise, Idaho as a Training Technician. In 2001, he resigned from ITD as a Training Specialist, taking a position at the Idaho Local Technical Assist Program at the University of Idaho as the Training and Research Manager. From 2001 to 2006, Mr. Drewes worked with FHWA and the other National LTAP/TTAP Representatives in regions Nine and Ten. In 2005/2006, Bruce was the president of the National LTAP/TTAP Association. Mr. Drewes was a master instructor for the American Traffic Safety Service Association (ATSSA) from 1998 until 2013. In 2013, Mr. Drewes retired from the Idaho LTAP, starting his consultant company and teaching for the ARTBA Safety Foundation.

**Mike Fontaine, VTRC**  
Mike Fontaine is a researcher at the Virginia Transportation Research Council, where he conducts research in the areas of traffic operations, ITS, and safety. He is a member of several TRB committees, including Work Zone Traffic Control, Highway Traffic Monitoring, and Urban Transportation Data and Information Systems. He also serves as adjunct faculty in the University of Virginia Civil Engineering Department.

**Becky Golden, ATSSA**  
Becky is a 1981 graduate of Virginia Polytechnic Institute with a BS in Civil Engineering. She is President of the Virginia Society of Professional Engineers Board of Directors and has served as VSPE's Virginia State and Regional Mathcounts Coordinator for over 15 years. Obtaining a Master of Public Administration from Virginia Commonwealth University while serving as Henrico County Virginia's Chief Design Engineer, and as Director of Public Works for Hanover County in the 1990’s, she also served on several Committees at the State and Local levels involved with stormwater, transportation, solid waste and biosolids regulations and best practices. In spring of 2016 Becky accepted a newly created position of Senior Technical Advisor for the American Traffic Safety Services Association (ATSSA). In this current role, she analyzes and conducts research on products, regulations and innovations to Advance Roadway Safety, serving their membership, partner organizations and agencies.

**Mike Granger, Street Smart Rental**  
Mike Granger has been in the traffic safety industry for over10 years. He has previous experience working for both a general contractor and an equipment manufacturer. He is currently the Vice President of Technology at Street Smart Rental. Mike is an active member of the American Traffic Safety Service Association (ATSSA), and currently sits on 2 of their committees, as well as the Board of Directors for ATSSA Northland. Mike is also very active in several Intelligent Transportation Systems (ITS) associations across the country. Mike is passionate about using technology and innovations to improve the safety and mobility thru our construction work zones Mike currently lives in St. Paul, MN.

**William Haynes, RK&K**  
Mr. Haynes has over 20 years of combined experience in the construction industry, with his most recent years spent at RK&K. He holds a BS in Civil Engineering from Old Dominion University, and is a registered professional engineer in the state of Virginia. Mr. Haynes has also earned his professional traffic operations engineer certification.
Scott Heydt, Horizon Signal Technologies
Scott Heydt is the Director of Marketing and Technical Training for Horizon Signal Technologies, a Pennsylvania-based company specializing in Portable Traffic Signal Systems and traffic control solutions. Scott is involved with several industry associations, and also serves as Chair of NEMA’s Portable Traffic Signal technical committee, which works to develop standards for the traffic control industry.

Paul Kelley, VDOT
Paul Kelley is currently a Work Zone Safety Coordinator with the Virginia Department of Transportation. His primary responsibility in this position is to develop and implement the guidance on work safety and mobility to meet the requirements of the new Federal rule. Since the publication of the 2009 Manual of Uniform Traffic Control Devices, Paul has assisted the Work Zone Safety staff in the development of the 2011 Virginia Work Zone Protection Manual and the companion 2012 Guidelines for Traffic Control. Prior to his current position with the Department, Paul spent 11 years in the Engineering Services Section of the Location & Design Division managing the Standards/Special Design and the Policy & Procedures Work Groups

Steve Kite, NCDOT
Steve is currently the State Work Zone Traffic Control Engineer for the North Carolina DOT. He has been with the Department for 24 years and has served in various roles within the Work Zone Traffic Control Section. He now oversees TMP development for North Carolina’s Eastern Region as well as manages the statewide training and certification programs and product services for the Work Zone Traffic Control Section. Steve currently serves as an ATTSA member on the local and national Traffic Control Committees as well as the Innovation Council. He has served as either a TRB committee member or “friend” of TRB’s Work Zone Traffic Control committee for the past 15 years. He also regularly participates in the Federal Highway Administrations “Peer to Peer” programs that promote “best practices” among state DOT agencies. Steve is a 1991 BSCE graduate of NC State University, a registered professional engineer in North Carolina and is a Certified Public Manager.

Young-Jun Kweon, VTRC
Young-Jun Kweon is a senior research scientist for the Virginia Department of Transportation and has been with VDOT for 11 years. He has 15 years of experience on research and data analysis in traffic safety and operations, performance measurement, and behavior and policy issues. In the past, he worked as a database administrator, a statistician, and a data analytics consultant. He is a registered professional engineer and holds master’s degrees in city planning and statistics, and Ph.D. in civil engineering.
Cathy McGhee, Associate Director VTRC
Ms. McGhee has been with VTRC since 1993. Her research focus is traffic engineering and system operations, data archiving and management, simulation, and advanced technologies for improved mobility and safety. She leads VDOT’s research program on connected vehicles and works with VDOT staff and University partners to develop, test, and deploy equipment and applications within the Virginia Connected Corridors to advance VDOT’s mission of delivering safe and efficient mobility. She currently serves as the secretary for the Transportation Research Board Committee on Regional Transportation Systems Management and Operations (AHB10). Additionally, Ms. McGhee is a stakeholder for the National Surface Transportation Safety Center for Excellence at the Virginia Tech Transportation Institute (VTTI) and a member of the Advisory Council for the Institute for Transportation Research and Education at NC State.

Michael Pack, RITIS
Michael Pack is the Director of the University of Maryland CATT Laboratory—the largest traffic information analytics laboratory in the world. He has previously worked at the Oak Ridge National Laboratory and the University of Virginia. He was honored at the White House as a Champion of Change in the Transportation Industry for his work encouraging the thoughtful use of open data for better decision making.


Andrew Roberts, Royal Truck
Andrew Roberts has been with Royal for 3 years and has overseen the development of Royal’s technological improvements and coordination of nationwide efforts to educate the industry on “Best Practices”. Royal is frequently approached by DOTs and industry experts to provide advice on the construction and proper usage of TMAs throughout the US. Royal is part of a national taskforce within ATSSA to work toward one common standard for the construction and proper usage for TMAs across the country.

David Rush, VDOT
Mr. Rush has 37 years with VDOT, with his last 23 as VDOT’s Work Zone Safety Program Manager in the Traffic Engineering division. He serves as secretary of the Virginia ATSSA Chapter and is an active member of the TRB Work Zone Traffic Control committee, as well as a member of the ATSSA Safety and Public Awareness committee. In 1999, Mr. Rush was awarded ATSSA’s Public Official National Safety Award.

Emmett Russell, ARTBA
Mr. Russell is a 40-year veteran of the construction industry and member of the International Union of Operating Engineers. In the field he has served as a heavy equipment apprentice, mechanic, welder and operator, then lead tunnel mechanic and finally master mechanic. Beginning in 1981, Mr. Russell worked for the International Union of Operating Engineers in various staff capacities, in 2002 he was appointed director of the IUOE Health & Safety Department, the position he held until his retirement in January of 2012. His duties included a broad spectrum of safety and health subjects, including regulatory affairs, legislation, training, and consultation services to over one hundred IUOE Local unions. He also served on numerous government/construction industry committees. He is currently providing consulting services to ARTBA.
John Shaw, Wisconsin TOPS Lab
John Shaw is an engineer, planner, and researcher currently based at the Traffic Operations & Safety Laboratory at the University of Wisconsin - Madison. He previously served for 18 years at the Wisconsin Department of Transportation, where he administered highway improvement programs, oversaw the collection and utilization of traffic data, and developed guidelines and training for work zone management. He is currently developing a series of work zone design guidelines for the Federal Highway Administration. His presentation today will focus on the challenges of managing traffic incidents that occur in work zones and practical solutions to these issues.

Beth Stinson, ARTBA
Beth Stinson is the Director of Education and Online Learning at ARTBA. She joined ARTBA in December of 2015 to build a curriculum of online training courses in support of the new Safety Certified Transportation Project Professional program. Beth has spent her entire career in education and training. She spent 18 years in higher education training teachers and students how to use technology to enhance teaching and learning. She moved to the private sector to work for software companies building online platforms for education and training. Before coming to ARTBA, Beth worked for Blackboard for 9 years and then as a contractor for the NSA building cyber warfare training for the military.

Jerry Ullman, TTI
Dr. Ullman has been a principal investigator or key researcher on over 70 different research studies pertaining to work zone safety and operations, dynamic message sign message design and applications, transportation management analysis of major freeway reconstruction projects, transportation management for incidents and major emergencies, and freeway operations and management. This research has been sponsored by several state departments of transportation, local transportation agencies, FHWA, NCHRP, and the private sector. He has published well over 170 refereed journal articles and technical reports, and has made over 90 presentations to audiences in the U.S., Canada, Qatar, and China. Dr. Ullman is a member of the National Committee on Uniform Traffic Control Devices (NCUTCD) and is past chair of the TRB technical committee on work zone traffic control. He is also a member of ITE.

Ted Ulven, MNDOT
Ted has been with the Minnesota DOT for 27 years working in construction inspection, design and implementation of Temporary Traffic Control plans, Work Zone Standards, and Work Zone safety.
Michael VanDaniker, University of Maryland
Michael VanDaniker is the Visualization Systems Manager for the Center for Advanced Transportation Technology Laboratory (CATT Lab) at the University of Maryland. Mr. VanDaniker is a subject matter expert on data visualization and information visualization. This involves working with customers, project managers, UX and UI designers, and developers to make sure the outputs of visualization projects maximize for usefulness and communicability of core metrics while working within the confines of schedule and technical feasibility. Mr. VanDaniker bridges the gap between the data visualization community and the transportation sector, bringing his expertise from the former to aid the latter in producing meaningful visualizations. Mr. VanDaniker has been involved in every major visualization project the CATT Lab has undertaken within the last 10 years, including incident management systems, after-action review tools, dashboards, and analytics packages that visualize data from feeds containing hundreds of millions of records per day.

Josh Van Jura, UDOT
Josh graduated from Penn State University in 2001 and after numerous ski trips to Utah decided that is where he ultimately wanted to live. He started with the Utah Department of Transportation directly out of school and spent the first 12 years of his career as the construction manager on over $500 million worth of infrastructure projects. He is currently the Project Controls Engineer for the state of Utah supporting construction crews with cost and budget control as well as the helping implement the cloud based construction software the Department is implementing as well as the Portable Variable Speed Limit system.

Matt Wilson, ODOT
Matt Wilson graduated from Sacramento State University in 2003 with a BS in civil engineering and worked for Sacramento County as designer on intersection and ADA access improvement projects. After a period of consulting and construction experience, he returned to graduate school and earned an MSE in civil, environmental, and sustainable engineering from Arizona State University in 2015. He now works for the Oregon Department of Transportation as a standards engineer where he is part of the effort to provide safe access through work zones for all road users.

Rod Wolford and Beth Larson, FOF
Rod and Beth have more than 30 years of experience in research, web-based, DVD, video, and print programs on a wide variety of topics for government, corporate, and non-profit clients. FOF created online courses for the ARTBA Work Zone Safety Consortium and for the ARTBA Online Academy – as well as for other national organizations. Rod and Beth also shared the 1989 American College of Environmental Medicine’s Merit in Authorship Award for their published research funded by the National Cancer Institute. Other FOF products include award-winning Medicare videos for the U.S. Administration on Aging, THE HANDBOOK OF SKIN PROTECTION for The Aberdeen Group, the employee orientation video for the U.S. Internal Revenue Service, several videos on high-tech issues with the Congressional Institute for the Future, the Smart Mark Safety & Health Training Program of the BCTD, the Egyptian construction trades school curriculum project for U.S.AID, products for numerous OSHA Harwood and NIEHS WETP grantees, and dozens of nationally/internationally used books, DVDs, and websites. The partners have won many national awards for their high-end videos. Mr. Wolford has a B.A. in philosophy and completed graduate studies in computer-based training design/programming at American University. Ms. Larson has a B.A. in communications and completed graduate studies in industrial hygiene at the Harvard School of Public Health.