Lectern Session 3089

Highway Worker Safety: Research, Solutions, and Evaluations Related to Maintenance Equipment

Tuesday, January 09, 10:15 AM- 12:00 PM ET
Convention Center 2024, 103B
Lectern | PDH

Lisa Kunzman, L Kunzman Consulting

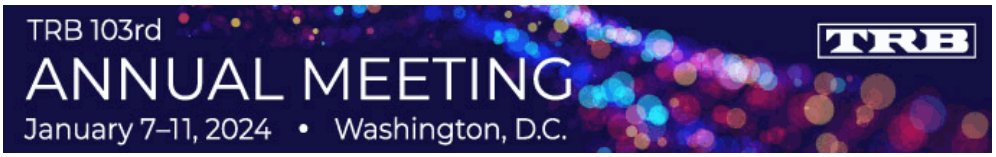
Sponsored by:
Standing Committee on Maintenance Fleet and Equipment (AKR30)

Highway worker safety is of the utmost importance to highway agencies and is in the forefront of the research, solutions, and evaluations presented in this session. The session begins with applicable research on warning lights and vehicle markings, key safety features of maintenance equipment and vehicles. Next, challenges and solutions using autonomous vehicle technology in truck mounted attenuator vehicles (critical safety highway maintenance vehicles) are presented. Lastly, an evaluation of pertinent applications of a mobile work zone protection system (Caltrans Balsi Beam) that protects highway workers with “shields of steel” in the work zone is shared.

No agenda available

Title	Presentation Number
Warning Lights and Vehicle Markings: AIMing for Improved Safety John Bullough, Icahn School of Medicine at Mount Sinai Show Abstract Flashing warning lights and vehicle colors and markings are important contributors to roadway maintenance worker safety. These elements should not only alert (A) drivers about the presence of the vehicle and nearby workers, but also inform (I) drivers about the type of situation they are approaching, and help manage (M) driver behavior so they can adjust their speed and lane position appropriately for the safety of workers. This presentation will describe this AIM (Alert/Inform/Manage) framework and share research results on the use of warning lights and vehicle colors/markings to maximize safety by addressing each element in the AIM framework.	P24-20364
Challenges and Solutions for the Use of Autonomous Truck Mounted Attenuators in Highway Applications Shima Nazari, University of California, Davis Show Abstract	P24-20365
Evaluating Applications of Mobile Work Zone Protection System (California Department of Transportation Balsi Beam) for Worker Protection in Highway Work Zones Bahram Ravani, University of California, Davis Show Abstract	P24-20367

Sessions and Events



Spotlight Sessions

TRB has spotlighted a number of sessions that are being presented by our sponsors or cover timely issues and topics.

Poster Sessions

Convention Center, Lower Level, Hall A

Poster Sessions provide an opportunity to interact with authors in a more personal setting than the conventional lecture. The papers presented in these sessions meet the same review criteria as lectern session presentations. For a complete list of poster sessions, see the "Sessions, Events, and Meetings" section in the printed program. The full description for each poster session—including the titles and locations of individual posters—is available via the mobile app. A floor plan of the posters also on the mobile app.

Continuing Education Credits

CM APA AICP
Certification Maintenance

Professional Development Hours (PDHs) may be claimed for attending the TRB Annual Meeting. Each hour of participation earns one PDH. Attendees must maintain their own record of attendance and can do so using the form in the printed program. At the request of a licensing or certifying agency, TRB will confirm an individual's meeting registration; however, TRB is not able to confirm attendance at specific sessions. Please note that, at this time, neither TRB nor the Annual Meeting is certified with the state licensing boards of Florida and New York.

Certification Maintenance (CM) credits—approved by the American Planning Association (APA) for retaining American Institute of Certified Planners (AICP) certification—are offered for some sessions at the TRB Annual Meeting. Persons seeking AICP CM credits must record their credits directly with APA. In the Annual Meeting mobile app, tap the "Program" icon on the home screen and then tap "CM Sessions" for a list of sessions approved for CM credits. Also, on the Annual Meeting Interactive Program, you can click the "Features" drop-down menu in the left column, then check only the box for "AICP Certification" to filter just for sessions with approved CM credits.

Alternative Approaches for Rapid Evaluation of Frictional Resistance of Aggregates (TRBAM-24-04819)
G. Sandeep Reddy/University of Texas, El Paso, Miguel Montoya/University of Texas, El Paso, Imad Abdallah/University of Texas, El Paso, Soheil Nazarian/University of Texas, El Paso, Richard Izzo/University of Texas, El Paso
Freeze-Thaw Performance Trends of Short-Term Cured Cement Stabilized Aggregate Quarry By-Product Materials (TRBAM-24-04563)
Taeyun Kong/University of Illinois, Urbana-Champaign, Chirayu Kothari/University of Illinois, Urbana-Champaign, Issam Qamhia/University of Illinois, Urbana-Champaign, Erol Tutumluer/University of Illinois, Urbana-Champaign, Nishant Garg/University of Illinois, Urbana-Champaign, Tim Peters/University of Illinois, Urbana-Champaign, Andrew Stolba/University of Illinois, Urbana-Champaign

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Tuesday, 10:15 a.m. - 12:00 p.m., Convention Center, 103B
Highway Worker Safety: Research, Solutions, and Evaluations Related to Maintenance Equipment
Lisa Kunzman, L Kunzman Consulting, presiding
Sponsored By Standing Committee on Maintenance Fleet and Equipment

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Warning Lights and Vehicle Markings: AIMing for Improved Safety (P24-20364)
John Bullough/Icahn School of Medicine at Mount Sinai
Challenges and Solutions for the Use of Autonomous Truck Mounted Attenuators in Highway Applications (P24-20365)
Shima Nazari/University of California, Davis
Evaluating Applications of Mobile Work Zone Protection System (California Department of Transportation Balsi Beam) for Worker Protection in Highway Work Zones (P24-20367)
Bahram Ravani/University of California, Davis

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Tuesday, 10:15 a.m. - 12:00 p.m., Convention Center, 206
Where the Weather Meets the Road: Time to Refresh?
Paul Pisano, Paul Pisano LLC, presiding
Sponsored By Standing Committee on Road Weather, Standing Committee on Winter Maintenance

In 2004, the National Academies via the Board on Atmospheric Science and Climate published a seminal report entitled Where the Weather Meets the Road. A panel of experts across the transportation and meteorological communities worked together to examine the research opportunities and required services needed to support improved weather-related information for the nation’s roadways. The resulting report provided a framework and recommendations to guide road weather research across the two communities, serving as an influential foundation for research conducted over subsequent years. Twenty years later, it is time to revisit the report and consider how best to refresh it and help guide future road weather research.

History and Context of Where the Weather Meets the Road (P24-20092)
Paul Pisano/Paul Pisano LLC
The Future of Road Weather: Meteorological Policy Perspective (P24-20094)
Paul Higgins/American Meteorological Society
The Future of Road Weather: Transportation Perspective (P24-20093)
Richard Nelson/American Association of State Highway and Transportation Officials
The Future of Road Weather: Meteorological Research Perspective (P24-20095)
Gina Eosco/National Oceanic and Atmospheric Administration (NOAA)