
Maintenance, Engineering, and Roadway Operations Workshop
Detroit, MI | July 26-29, 2025

www.ibtta.org/detroit

Submission Period: March 17th - April 14th, 2025

GENERAL SESSIONS

ENGINEERING MARVELS: MAJOR CONSTRUCTION AND MAINTENANCE PROJECTS ON SIGNATURE BRIDGES

This session is focused on iconic bridges—symbols of progress, innovation, and engineering excellence. We want to explore global landmark bridge construction and maintenance, highlighting the challenges faced and groundbreaking solutions that have shaped their development. Share your expertise, case studies, or innovative ideas to inspire discussion on the future of bridge engineering.

ADVANCING VISION ZERO—ELIMINATING TRAFFIC DEATHS AND SEVERE INJURIES

Join us to discuss Vision Zero, a commitment to eliminating traffic deaths and severe injuries through safe, equitable mobility. Share strategies, interventions, and research on how to achieve zero fatalities through road design, maintenance, policy, and community engagement. Emphasis will be on insights on workforce safety during roadway operations and incident management.

CHALLENGES SURROUNDING ELECTRIC VEHICLES (EVS)

As EVs grow in popularity, transportation agencies face challenges in incident and infrastructure management. This session will explore strategies for handling EV-related incidents, including breakdowns and fires, and developing charging infrastructure, including future in-lane options. Share best practices and solutions to ensure all of our agencies are EV-ready.

TRANSFORMING TOLLING: INTEGRATING TECHNOLOGY AND AI FOR ENHANCED EFFICIENCY AND DECISION-MAKING

Submit proposals for a session on how new technologies, including AI, are transforming tolling. Explore advancements in drones, optical devices, augmented reality, and AI integration to improve efficiency and decision-making. Share your experiences in adopting these technologies and their impact on tolling operations.

ROADS TO SUCCESS: STRATEGIES FOR MANAGING MAJOR EVENTS

This session focuses on managing major events—from local fairs to global spectacles like the Olympics. Explore strategies for effective traffic management and communication to ensure smooth traffic flow and safety during large-scale events. Share innovative technologies and approaches for efficient event execution.

BREAKOUT TRACKS

TRACK #1: INFRASTRUCTURE RESILIENCE AND MAINTENANCE

Session 1: Weathering Extreme Events

Submit proposals on planning for and responding to extreme weather events. As climate change increases weather unpredictability, share best practices, strategies, and lessons learned in road management to enhance resilience and safety during extreme weather.

Session 2: Future-Proofing Toll Facilities: Cutting-Edge Technologies and Strategies in Asset Management and Maintenance

This session will explore innovative asset management technologies and strategies to improve the resilience and longevity of toll facilities. Share case studies, best practices, and technologies that minimize operational disruptions during maintenance.

TRACK #2: TECHNOLOGY AND INNOVATION

Session 1: Innovating Transportation and Infrastructure: Cutting-Edge Technologies and Practices for Efficiency and Excellence

Submit your ideas on how emerging technologies are reshaping transportation and infrastructure management. Explore innovations in toll systems, data analytics, automation, and new technology integrations that improve efficiency and reduce costs.

Session 2: Slowing Down for Safety: Protecting Lives on Toll Roads, Bridges, and Work Zones

Address the critical issue of excessive speeding, which contributes to nearly 30% of U.S. traffic fatalities. Share strategies, technologies, and design innovations for speed reduction and improving safety, particularly in toll roads, bridges, and work zones.

Session 3: Transforming Roadways: Leveraging Digital Technologies from Inception to Maintenance

Explore how digital transformation is improving roadways from design to maintenance. Topics include 3D modeling, LiDAR, IoT, augmented reality, and AI-driven tools that enhance project delivery, sustainability, and safety.

TRACK #3: TRAFFIC MANAGEMENT AND OPERATIONS

Session 1: Transforming Tolling Infrastructure—Repurposing and Demolishing Toll Plazas

Discuss the challenges of repurposing and removing outdated toll plazas as agencies upgrade toll systems. Share lessons learned, successful strategies, and innovative approaches in transforming toll infrastructure.

Session 2: Fast Lane to Efficiency: Dynamic Speed Limits & Speed Harmonization in Action

This session explores Active Traffic Management strategies like Variable Speed Limits (VSL) and Queue Warning Systems. Share case studies of how these strategies reduce congestion, improve safety, and optimize traffic flow in toll road environments.

Session 3: Tunnel Vision: Innovations in Traffic Tunnel Construction and Maintenance for Safer, Smarter Infrastructure

Focus on the latest advancements in traffic tunnel construction and maintenance. Present case studies, best practices, and strategies to tackle tunnel infrastructure challenges and ensure safer, smarter tunnel operations.

Have an idea for a presentation that doesn't fit within these sessions? Submit it for consideration by selecting "None of these apply but I would like to submit my presentation idea" on the call for presentations form.