



NEW JERSEY STATE TRANSPORTATION INNOVATION COUNCIL

www.NJDOTtechtransfer.net/NJ-STIC

4TH Quarterly Meeting
December 14, 2022



WELCOME

Michael Russo

Assistant Commissioner

NJDOT Planning, Multimodal & Grant Administration





CIA TEAM

**Organizational
Support &
Improvement**

NJDOT – Kristal Walker

FHWA- Christopher Paige



For over 10 years the Federal Highway Administration's Every Day Counts program has rapidly deployed proven technologies and processes. EDC round 7 (2023-2024) highlights innovations to improve safety for all users, build a sustainable infrastructure for the future and grow an inclusive workforce.

NIGHTTIME VISIBILITY FOR SAFETY

The nighttime crash fatality rate is three times the daytime rate. Enhancing visibility along corridors, intersections, and pedestrian crossings can help reduce fatalities. This initiative promotes traffic control devices and properly designed lighting to improve safety for all users.

NEXT-GENERATION TIM: TECHNOLOGY FOR SAVING LIVES

Over six million crashes a year in the U.S. put responders and other vulnerable road users at risk. Next-Generation Traffic Incident Management programs promote emerging technologies such as emergency vehicle lighting and queue warning solutions. These and other tools can advance safety and operations to mitigate incident impacts.

INTEGRATING GHG ASSESSMENT AND REDUCTION TARGETS IN TRANSPORTATION PLANNING

Transportation is the largest emitter of greenhouse gases in the U.S. This initiative provides resources to help agencies quantify greenhouse gases and set goals to decrease motor vehicle, construction, and life-cycle emissions through planning and project development.

ENHANCING PERFORMANCE WITH INTERNALLY CURED CONCRETE (EPIC²)

Cracking in concrete is a limiting factor in achieving long-term concrete performance. Internal curing mitigates shrinkage cracking and has the potential to substantially extend the service life of concrete bridge decks and enhance the performance of pavements and repairs.

EPDs FOR SUSTAINABLE PROJECT DELIVERY

Construction materials such as concrete and asphalt have environmental impacts during their life cycle. Environmental product declarations, or EPDs, document those impacts. This tool helps States support procurement decisions and quantify embodied carbon reductions using life cycle assessments for sustainable pavements.

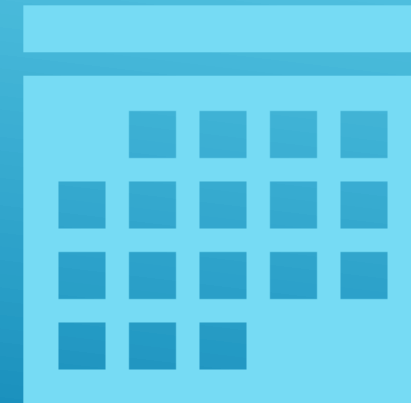
RETHINKING DBE IN DESIGN-BUILD

Many design-build contracts do not adequately provide opportunities for disadvantaged businesses. New practices are available to support the effective integration of program requirements to help small, disadvantaged businesses compete for design-build contracts.

STRATEGIC WORKFORCE DEVELOPMENT

The demand for highway workers is growing, and emerging technologies require new skills. This innovation helps stakeholders improve their ability to identify, train, and place highway construction workers. The focus will expand to rural and Tribal communities to increase career opportunities.

February 14-16, 2022 EDC-7 Virtual Summit



February 22, 2023 NJ EDC-7 Caucus



WELCOME ATTENDEES & SPECIAL GUESTS

Feature Presentation:

NJDOT Structural Value Solutions Unit
“UHPC for Bridge Preservation”

Jess Mendenhall, Project Engineer
Samer Rabie, Principal Engineer

