



## Your Local Technology Transfer Newsletter

### Message from the Director

Hello readers! As we approach the midway point of 2023, we are beginning to think about activities for next year. Our annual stakeholder needs assessment is in development and will be distributed later this summer. The needs assessment provides us with valuable information about workshop topics you are interested in and your preferences about workshop delivery format and location- it is important that you share your thoughts with us so that we can best serve you. The needs assessment will be announced in multiple places, including the next E-newsletter.

We have been offering a mix of both in-person and online opportunities to accommodate the preferences of our attendees. We are making our schedule for the rest of the year and will continue to offer both options. The team is also at work planning educational sessions for the New Jersey State Association of County Engineers Fall Forum in October and the New Jersey State League of Municipalities Conference in November. Please also mark October 25, 2023 on your calendar for the 25th Annual NJDOT Research Showcase!

New Jersey local public agencies are encouraged to check out funding opportunities currently available through both state and federal programs. The [New Jersey Department of Transportation](#) has a comprehensive list of programs, including many that have July 1 deadlines. Please also note the [Safe Roads and Streets for All](#) funding closes July 10.



# Issue Highlights

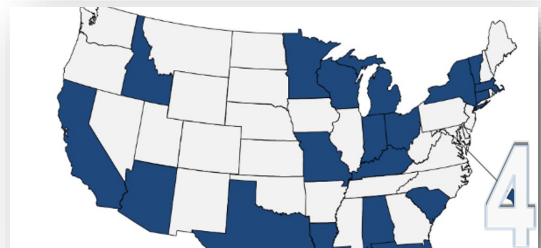
## NJDOT Announces Funding for State MPO's

NJDOT recently announced funding for all three MPO's across the state. Find out what's going on in your region!



## Safety Data and Analysis Case Studies: How Do States Turn Data into Results?

States around the country are utilizing Safety Data and new innovative ways. Learn about some of the best practices and new methods developed from across the country.



## Traffic Incident Management and the Safe System Approach

Find out about how Traffic Incident Management is being incorporated into the Safe System Approach around the world.



## USDOT Equity Action Plan Update

USDOT's Equity Action Plan is underway, and they are inviting you to come and participate in helping this program become more effective. Read more to give feedback and engage with USDOT on this important initiative.



The Local Technical Assistance Program (LTAP) and Tribal Technical Assistance Program (TTAP) are composed of a network of 58 Centers – one in every state, Puerto Rico and regional Centers serving tribal governments. The LTAP/TTAP Centers enable local counties, parishes, townships, cities and towns to improve their roads and bridges by supplying them with a variety of training programs, an information clearinghouse, new and existing technology updates, personalized technical assistance and newsletters.

## NJDOT Announces Funding for All Three State MPO's

The New Jersey Department of Transportation (NJDOT) in partnership with the three state MPO's has announced tens of millions of dollars in funding under the Transportation Alternatives Set-Aside (TA Set-Aside) program. This includes \$11.2 million for the Delaware Valley Regional Planning Commission, \$5.2 Million for the South Jersey Transportation Planning Organization, and \$35.8 million for the North Jersey Transportation Planning Authority.

The competitive [TA Set-Asides program](#) provides funds to build pedestrian and bicycle facilities, improve access to transportation, create safe routes to school, preserve historic transportation structures, provide environmental mitigation, and create trail projects that serve a transportation purpose while promoting safety and mobility. It is administered by the NJDOT in partnership with NJTPA, the Delaware Valley Regional Planning Commission (DVRPC), and the South Jersey Transportation Planning Organization (SJTPO) with grants being awarded every two years.

"As part of NJDOT's Commitment to Communities, we work with the three regional planning authorities to provide federal funding to counties and municipalities for local transportation projects that improve safety and strengthen the cultural, aesthetic, and environmental aspects of our transportation system," NJDOT Commissioner Diane Gutierrez-Scaccetti said. "The grants announced today will fund projects to improve safety for pedestrians and cyclists all across the state."

The solicitation round for applications began May 24, 2022 and ran through November 3, 2022. A total of 68 applications requesting approximately \$82 million were received from municipalities in the NJTPA region. Total available grant funding is nearly \$18 million for each of the two years. The NJTPA is a 13- county region in northern New Jersey, which includes Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren counties.

As of 2021, the program now includes an equity component. Projects in eligible communities received additional technical assistance with the grant application, as well as additional points during the scoring process. Eligible communities were determined by U.S. Census data identifying low-income residents, racial and ethnic minorities, those with limited English proficiency, persons with disabilities, children, and older adults. Each individual municipality is responsible for implementing their Transportation Alternative Set-Aside projects. For further details on a specific project, we recommend reaching out to the municipality.



# Safety Data and Analysis: How Do States Turn Data into Results?

The FHWA Office of Safety recently developed more than 20 case studies (see map) that describe noteworthy practices for data governance, management, and analysis of the State DOTs and their partner agencies. FHWA completed these case studies in partnership with the Highway Safety Manual Implementation Pooled Fund Study and Transportation Research Board's (TRB) ACS20 Safety Performance and Analysis User Liaison Subcommittee. Two efforts demonstrated a need for noteworthy safety data and analysis practices:

- The results of the 2nd Roadway Safety Data Capabilities Assessment noted States' desire to improve data governance and data management practices.
- A workshop at the 2020 TRB Annual Meeting, Use of Safety Performance in Day-to-Day Transportation Decision Making, noted a desire for agencies to share challenges and solutions to applying the HSM in practice.

## Meeting the MIRE Fundamental Data Elements (FDE) Requirements

Federal regulations require State DOTs to collect MIRE FDEs—a subset of roadway, intersection, and interchange data elements that supports robust safety management—by September 2026 (23 CFR § 924.11). Florida's recent advancements in meeting MIRE FDE requirements have required collaboration across several agencies. A gap analysis revealed MIRE-related data stored across several offices within the DOT, and partnerships among those offices and State universities will help Florida DOT achieve its MIRE FDE goals.

After completing a gap analysis to determine their intersection data needs, Vermont and Ohio developed statewide intersection inventories representing each State's entire public road network. Linear referencing serves as the foundation for the intersection inventory and will allow these States to maintain data quality for all location-based information. Connecticut created the Transportation Enterprise Data (TED) warehouse to meet the need for enterprise data. A data governance framework that supports TED helps the State maintain robust safety data management, support advanced safety analysis, and meet other critical department data and analysis needs agencywide.

## Using HSM in the Real World

Several case studies have demonstrated that analysis methods can support a broad suite of planning and project development applications, techniques can be tailored to the data and tools available, and projects do not have to be safety-specific to benefit from safety screening and improvements.

To make data-driven decisions for the proposed I-94 and US 31 interchange, Michigan used an iterative approach to project development. Michigan DOT used the Interactive Highway Safety Design Model (IHSDM) software to identify a preferred design alternative based on a suite of traffic, safety, and cost considerations. Likewise, Indiana applied State-specific SPF and crash modification factors using the HSM to predict crashes under "build" or "no build" scenarios along a corridor. Indiana DOT tailored the analysis to reflect local conditions and project-specific challenges, and to document the safety benefits under the build scenario.

Alabama also used IHSDM to assess the safety performance of high-volume, high-speed suburban arterials with respect to pedestrian safety. South Carolina highlights an application of the HSM to support a rural road corridor analysis. Its DOT successfully navigated historical context and local stakeholder preferences, presenting the HSM analysis clearly and concisely to garner public support for the proposed alternatives.

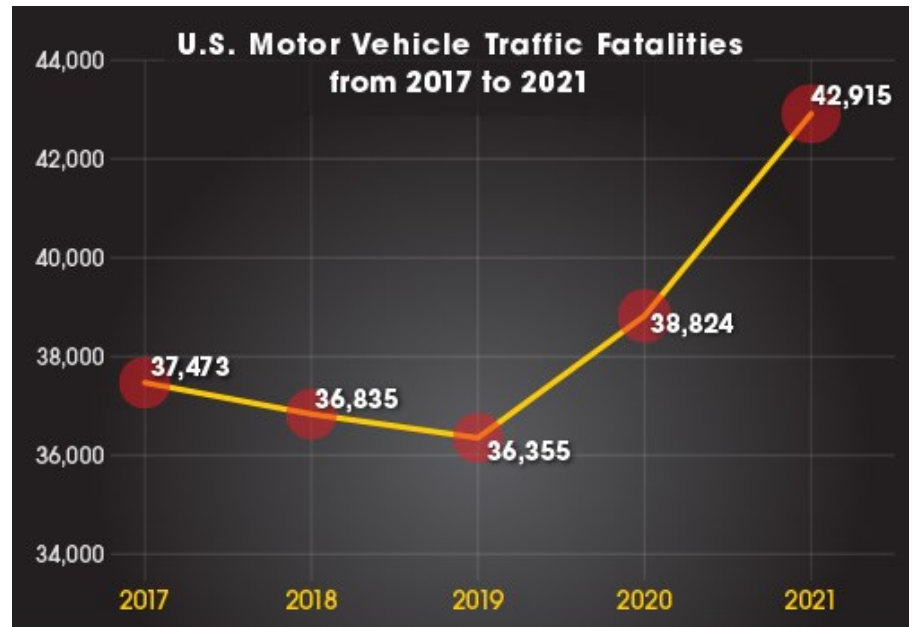
Read about what more states have done at [FHWA's Safety Compass!](#)



## Traffic Incident Management and the Safe System Approach

Hundreds of times each day around the Nation, a law enforcement officer will arrive at a traffic crash scene. The officer will work to secure the scene, aid the victims, collect information, and document the crash facts on traffic crash forms. Police assistance is generally required by State traffic crash reporting laws. Often fire department and/or emergency medical services (EMS) personnel will also be present to assist with the injured, extricate victims from vehicles, and mitigate fires and chemical spills. Transportation agency and towing and recovery company personnel may also be present, lending necessary support to protect and clear the scene. Public safety dispatchers and traffic management center operators work remotely to coordinate resources. Collectively, this group of responders works together to perform traffic incident management (TIM) with a goal to shorten the duration of incidents, restore traffic back to normal, and improve safety for everyone on the scene, as well as approaching motorists.

Although the United States has enjoyed many years of downward-trending traffic crash fatality statistics, those numbers are now ratcheting back upward. While total vehicle miles traveled decreased by 11 percent in the United States from 2019 to 2020, roadway deaths increased by 6.8 percent to 38,824 in 2020. In 2021, an estimated 42,915 people died in traffic crashes, a 10.5 percent increase over the previous year. Traffic incident responder line-of-duty deaths have seen similar increases from 2019 through 2021, culminating with over 60 responders struck and killed by vehicles while working at roadway incidents in 2021.



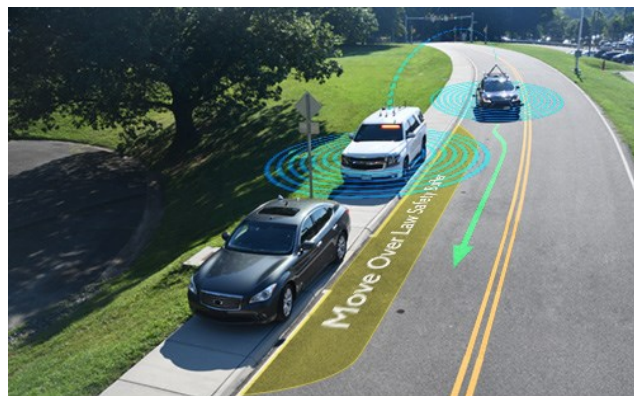
Source: FHWA.

In response to the crisis on America's roads, the U.S. Department of Transportation released the National Roadway Safety Strategy (NRSS), which adopts the Safe System Approach as a model to bolster roadway safety. Unlike traditional safety countermeasures that apply treatments to a problem behavior or location, the Safe System Approach applies multiple layers of protection and uses redundancy to mitigate failures of any part of the system. The principles of the Safe System Approach prioritize the elimination of crashes that result in death and injury. People make mistakes and humans are vulnerable, so a system of shared responsibility and proactive tools are needed to address safety issues.

The Safe System Approach focuses on five key elements: safer people, safer roads, safer vehicles, safer speeds, and post-crash care. TIM is specifically called out to be a part of the actions for post-crash care. One of the key departmental actions needed, as noted on the USDOT website (<https://www.transportation.gov/NRSS/PostCrashCare>), is to advance TIM training and technologies targeted at improved responder and motorist safety. The following sections describe TIM and how it is an integral part of the Safe System Approach, particularly post-crash care.

## What is TIM, and how does it relate to the Safe System Approach?

TIM has likely been around since the early years of the automobile but has certainly been formalized over the past five decades. The concepts of quicker detection, response, and clearance evolved in the 1970s and 1980s. By the 1990s, transportation management centers and intelligent transportation systems gained traction, helping to bolster the overall TIM effort. Laws requiring motorists to move over for responders stopped on the roadway and to remove drivable cars out of travel lanes after minor crashes worked to codify TIM principles. In the past two decades, the Federal Highway Administration has led national TIM efforts that have engaged State and local stakeholders in workshops, training, and self assessment. Because of these efforts, State and local agencies have not only embraced TIM but, in many cases, institutionalized it.



Source: FHWA.

The nexus between TIM and the Safe System Approach lies with the stated action to improve responder and motorist safety through training and technology. Fortunately, the FHWA Every Day Counts Program was on the forefront of leveraging advancements in training, data collection, and technology with the Next-Generation TIM innovation. FHWA and responder organizations have made a significant and long-term investment in training. TIM training focuses on responder and motorist safety.

The National TIM Responder Training Program has trained more than 600,000 responders over the past decade. Optimized through in-person interaction, but also available as a self-paced online course, the program will soon be available as a virtual, instructor-led course. These platforms mean that responders can take the course without significant time away from their primary responsibilities. The national TIM program training products are currently undergoing a second refresh to ensure that the material stays current, relevant, and credible.

TIM data is instrumental in defining safety performance targets and contributing key performance indicators for performance management dashboards. The essence of TIM data is performance measures for secondary crashes, roadway clearance time, incident clearance time, and responder struck by incidents. Agencies like the Arizona Department of Public Safety found that introducing and training officers about TIM performance measures reduced their time at crash scenes. In the coming years, new funding will allow States to rebuild roads, bridges, and railways across the country, creating new opportunities for TIM to improve responder and motorist safety. Traffic management plans are typically part of work zone planning, and a greater focus on TIM in the planning and operation of work zones presents a tremendous opportunity for advancing safety.

TIM programs have and will continue to offer proven strategies that embrace a “systematic, planned, and coordinated use of human, institutional, mechanical, and technical resources to reduce the duration and effects of incidents and improve the safety of motorists, crash victims, and emergency responders” (United States Government Accountability Office. 2020. Emergency Responder Safety: States and DOT Are Implementing Actions to Reduce Roadside Crashes. Report No. GAO-21-166. Washington, DC: GAO). Thus, agencies should continue to focus on traditional and Next-Generation TIM policies, tools, technologies, and training as part of their Safe System Approach.

## Jacobs' Junction

As an instructor for the New Jersey Local Technical Assistance Program (NJLTAP) at CAIT, Lloyd Jacobs draws on four decades of experience when he teaches professional development courses and trainings. Here we ask him for some advice.



**Question: What kinds of things could justify a time extension request for a project?**

*"Some project delays are outside the control of the contractor—such as extraordinary weather events, additional work, labor strikes, or agency-ordered suspensions of work. If the delay affects a controlling item of work, a time extension is justifiable. Agencies are however are entitled to deny time extensions for unacceptable delays resulting from events within the contractor's control— such as lack of attention to the project, unscheduled maintenance, insufficient labor, or delayed shipment of materials or supplies."*

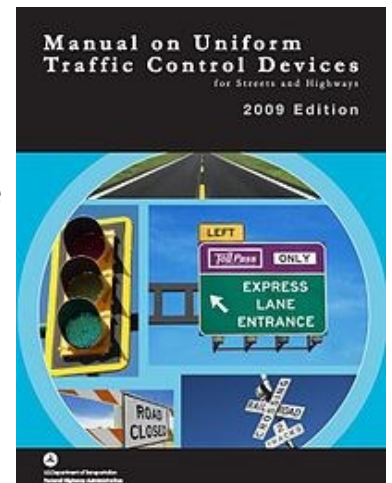
**Question: Can a person in "responsible charge" of a project have multiple projects under their purview? Can a project have multiple people providing oversight?**

*"The regulations do not preclude sharing of these duties and functions among a number of public agency employees. The regulations also do not preclude one employee from having responsible charge of several projects and directing project managers assigned to specific projects, as long as the prescribed duties are carried out."*

## Consistently Improving Nighttime Visibility of Pavement Markings

Have you ever had a difficult time seeing where your lane is while driving at night? If so, you aren't alone. Markings are usually easy to see at night when they are first installed. However, over time, the elements embedded in the markings that make them redirect light from your headlights back to your eyes get dirty or dislodged. Inadequate pavement marking retroreflectivity is one reason that traffic fatalities are three times more likely to occur at nighttime compared to daytime.

By refreshing pavement markings before they become inadequate for nighttime driving, transportation officials can assist drivers in safely navigating. The [Manual on Uniform Traffic Control Devices](#) now includes minimum maintained levels of retroreflectivity for longitudinal markings such as center lines, edge lines, and lane lines. The new provisions provide flexibility for agencies in how they achieve these maintained levels of retroreflectivity, with five different methods that have been described in the supplemental guidance document, *Methods for Maintaining Pavement Marking Retroreflectivity*. The methods include options to measure, visually inspect, or use service life information.



For additional information, please visit FHWA's [nighttime visibility website](#) or contact Cate Satterfield at [cathy.satterfield@dot.gov](mailto:cathy.satterfield@dot.gov).

## USDOT Equity Action Plan Update

The U.S. Department of Transportation (DOT) invites public comment to inform their annual update to the [DOT Equity Action Plan](#) which aims to expand access and economic opportunity to all communities. DOT specifically seeks input regarding how their work to advance equity has impacted organizations and communities, as well as input on performance metrics, data sets, tools, and research to measure and advance transportation equity. The



responses to this RFI will help the Department understand the impact of their equity activities to date and inform what efforts we prioritize as we update DOT's Equity Action Plan. During the summer DOT will also hold the virtual engagements to help better familiarize people with aspects of the program and the suggestions that have been received.

The Department published their initial DOT Equity Action Plan in April 2022 in response to Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. The Equity Action Plan highlights key actions that the Department will undertake to expand access and opportunity to all communities while focusing on underserved, overburdened, and disadvantaged communities. The actions fall under four focus areas – Wealth Creation; Power of Community; Proactive Intervention, Planning, and Capacity Building; and Expanding Access. The DOT Equity Action Plan brings focus and accountability to the Department's Equity goal, one of six strategic goals outlined in the DOT Strategic Plan.

This RFI and the associated virtual events are an opportunity to engage directly with DOT staff and leaders driving the Department's equity work and key programs. They will include opening remarks and Q&A with key DOT officials, including Christopher Coes, Assistant Secretary for Transportation Policy; Irene Marion, Director of the Departmental Office of Civil Rights; and Shailen Bhatt, Administrator of the Federal Highway Administration. Participants will also receive an informational overview of the DOT Equity Action Plan, the update process, and opportunities to ask questions of DOT staff involved in equity-related work.

From its release, DOT acknowledged that the Equity Action Plan was one step in the Department's journey to advance equity. Since its publication, DOT has completed several actions to advance transportation equity, including: Launching the DOT Justice40 Initiative, publishing a toolkit for planning and funding rural and Tribal electric mobility, and promoting and providing technical assistance to small/disadvantaged businesses.

Please refer to the [DOT Equity Events](#) page for updates and additional registration information, including accommodations for individuals with disabilities and limited English proficiency, and the DOT Equity Updates page for highlights of completed DOT equity actions and accomplishments.



## U.S. Department of Transportation Announces Technical Assistance Grants

The [Notice of Funding Opportunity](#) for a new pilot program for technical assistance was recently opened by the United States Department of Transportation. The Rural and Tribal Assistance Pilot Program offers technical assistance grants to rural and tribal communities. The NOFO combines two years of funding (Fiscal Years 2022 and 2023), \$3.4 million in total, to eligible applicants on a first-come, first-served basis. Individual awards will range in value up to the statutory limit of \$360,000. There is no local funding match required to participate in this program. The grants may be used to hire staff or advisors to assist with early development-phase activities including, but not limited to, feasibility studies; preliminary engineering and design; environmental review; revenue forecasting; financial feasibility analysis; statutory and regulatory analysis and drafting and negotiation of agreements.

Eligible applicants include local governments or political subdivisions with projects located outside of an urbanized area with a population of more than 150,000 residents as determined by the Census; state governments applying on behalf of a project in an area outside an urbanized area of more than 150,000 residents; federally recognized Indian Tribes; and the Department of Hawaiian Home Lands. As part of the Administration's commitment to advancing equity and opportunity for all American Indians and Alaska Natives, the Rural and Tribal Assistance Pilot Program will set aside up to \$800,000 for each fiscal year for Tribal applicants.

The Build America Bureau has created a simple, four-page funding application, available [here](#), and will begin accepting submissions at 2 PM ET on August 14, 2023. The Department of Transportation hosted a free informational webinar to provide more information for interested applicants and a recording of the webinar and a copy of the presentation will be made available [here](#). While participation in the webinar is not mandatory to receive funding, it is encouraged and provides an opportunity for potential applicants to learn about the application process and what activities can be funded through this pilot program.

The [Rural and Tribal Assistance Pilot Program](#) joins the Thriving Communities Program, the Regional Infrastructure Accelerators, and other new technical assistance opportunities at DOT to ensure communities have the needed tools to access federal funding and financing for transformative infrastructure projects. Additional DOT technical assistance resources can be found on the [DOT Navigator](#).



# Every Day Counts 7 Innovation Spotlight—Strategic Workforce Development

Strategic Workforce Development, an FHWA Every Day Counts (EDC) Round 7 innovative initiative, anticipates collaboration between government agencies, trade organizations, private agencies and communities to prepare individuals for the construction workforce. We have spoken with several experts in New Jersey who are implementing funding and training programs to build pathways to careers in the construction sector and increase the representation of women, minorities, and other disadvantaged populations in the construction and operations workforce. Check out the interviews below!

- Jill Schiff, Executive Director, Operations, and Darlene Regina, Chief Operating Officer, Associated Construction Contractors of New Jersey (ACCNJ). See: [Exploring Strategic Workforce Development in NJ: An Interview with the Associated Construction Contractors of New Jersey](#)
- Lori Margolin, Associate Vice President for Continuing Education and Workforce Development at Hudson County Community College (HCCC). See: [Exploring Strategic Workforce Development in NJ: An Interview with Hudson County Community College](#)
- Nicholas Toth, Director, New Jersey Office of Apprenticeship, NJ Department of Labor and Workforce Development (NJDOLE). See: [Exploring Strategic Workforce Development: An Interview with the Office of Apprenticeship, NJ Department of Labor and Workforce Development \(NJDOLE\)](#)



## New Jersey's Build a Better Mousetrap Competition Open for Entries!

People involved in the transportation industry often find better ways to do their jobs. Whether it's a new gadget that improves the quality and safety of a project, or an innovative process that reduces costs and improves efficiency, it is typically the people on the front lines that often realize the latest and best practices.

Now is the time to share those new ideas with others in New Jersey's **Build a Better Mousetrap Competition**. We are looking for submissions from any employee of a local or state public agency (municipalities, counties, parks commissions, NJ Department of Transportation, NJ Transit) that has create an alternate or better way of doing something in a transportation project. We will gather the best ideas from around the state and judge them using a 5 point rating system. As a reminder, this competition is open to any local, county, or state transportation agency, including New Jersey Department of Transportation and New Jersey Transit employees. Two winners will be selected; one for the best local agency and another for the NJDOT/NJT Submission.



**"Build a better mouse trap,  
and the world will beat a path  
towards your door."**

- Ralph Waldo Emerson

Visit <https://cait.rutgers.edu/mousetrap/> for more information and to download the entry form today!

### Publication Statement

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### Upcoming Events

*This summer we would like to remind you of some available courses in the LTAP catalogue. Whether you're a seasoned veteran or new to the job, LTAP's courses will provide you with the best instruction on what you need to know. Register today!*

#### **NJLTAP – Federal-aid Responsible Charge (In-Person) - July 25 2023 8:30 a.m. - 4:30 p.m.**

Are you or your agency in charge of a federal-aid project? Recipients of federal funds are responsible for managing, overseeing construction, supervising and inspecting project activities to ensure conformance with contract plans and specifications.

This Federal-Aid Responsible Charge Training is geared towards those who Local Public Agency staff or Contractors who are expected to be the person in Responsible Charge of Federally Funded Local Aid projects. This course will provide information for the first time Federal-aid recipient, but can also serve as a refresher of the conditions and expectations attached to the position. [Register here!](#)

#### **NJLTAP – Traffic Incident Management Training for Emergency Responders (Webinar) - September 13, 2023 8:00 a.m. – 12:30 p.m.**

This training is designed to ensure that pedestrian facilities and access routes, in particular curb ramps, along our roadways are properly design and constructed for all individuals, including those with disabilities. This training was developed to provide information and good practices for those involved in the design and maintenance of curb ramps and pedestrian facilities, and for those individuals that ensure the compliance to applicable accessibility laws and guidelines. [Register here!](#)

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