



Your Local Technology Transfer Newsletter

Message from the Director

Hello readers! As we approach the midway point of 2022, we are beginning to think about activities for next year. Our annual stakeholder needs assessment is in

development and will be distributed this summer. We are also working with the New Jersey Department of Transportation (NJDOT) to collect some information from Local Public Agencies, Metropolitan Planning Organizations (MPOs), Industry and Trade Associations and other stakeholders to identify noteworthy examples of implementation of Every Day Counts (EDC) initiatives and other innovative practices in New Jersey.



The survey seeks your insights and experience related to the needs for innovation and the challenges of implementing innovative practices in transportation. Your participation in this survey is completely voluntary; however, your opinions are highly valued. This online survey will take approximately 10-15 minutes to complete. Please submit your answers by **July 15, 2022** (please only respond if you are in New Jersey). To learn more about the survey and participate, please click on the following link: [New Jersey STIC Innovative Initiatives](#)

NJLTAP has been busy delivering workshops. While a few offerings are being held in-person, we are continuing to provide most trainings through webinars. The feedback from participants is still trending toward a preference for online training delivery.

Please be sure to monitor funding opportunities being made available to local public agencies through both the [United States Department of Transportation \(USDOT\)](#) and [NJDOT](#). There are many programs available for improvements to your communities. We are in development of a Grant Writing workshop that is expected to be held in August 2022. We will also continue to announce grant-related funding webinars, notices of funding opportunities, and other related information through our email list and on Facebook.

Issue Highlights

Learn more about the Pavement Preservation program at NJDOT and the tools in the pavement preservation toolbox.



The MATCH program can assist with your local or Tribal roadway safety challenges. All local and Tribal agencies are eligible to apply for this FREE technical assistance from a mentor through the MATCH program. Check it out here!



Come read about what the latest funding opportunities are from around the state and learn how you can apply!



This is a pivotal moment—now is the time for action, and now more than ever we need everyone to do their part to get closer to zero. Read about USDOT’s latest initiative here!



The Local Technical Assistance Program (LTAP) and Tribal Technical Assistance Program (TTAP) are composed of a network of 51 Centers – one in every state, and another serving Puerto Rico. 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.

Pavement Preservation Treatments at NJDOT

NJDOT's Pavement and Drainage Management and Technology Unit is advancing the use of Pavement Preservation treatments on the state's roads to increase safety, enhance durability, improve customer experience and minimize costs. Pavement rehabilitation is needed for deficient roadways, but pavement preservation can extend pavement life for state highways in good and fair condition.

Pavement preservation is a critical component of many agencies' asset management plan to achieve and sustain a desired state of good repair and a safe roadway condition over the lifecycle of roadway assets. Pavement preservation reduces the amount of pavements requiring corrective or emergency maintenance, resurfacing, major rehabilitation, and reconstruction, but it does not completely eliminate the need for these other strategies. Typical pavement preservation treatments take less time to construct, reducing impacts to the motoring public. Incorporating and increasing the amount of pavement preservation is a more responsible, environmentally sustainable, and prudent way to maintain the NJDOT roadway network. The goal is a balanced cost effective approach of preservation, resurfacing, rehabilitation and reconstruction that best optimizes allocated funding to produce the best possible roadway network condition. Pavement preservation is an integral part of that approach. It is completing the right treatment on the right road at the right time for the right cost

Watch [this educational video](#) to learn more about the Pavement Preservation program at NJDOT and the tools in the pavement preservation toolbox. The video explains the rationale for maintaining roads in a state of good repair and establishing a dedicated program for pavement preservation. The video highlights several pavement preservation treatments in the NJDOT toolbox and how, when and why the treatments are used.



MATCHing Needs With Expertise to Solve Local Road Safety Concerns

Local and Tribal agencies often face unique and location-specific safety challenges on their roads regarding issues such as roadway departure, intersection safety, speed management, and pedestrian and bicyclist safety. Local and tribal roads are the backbone of the Nation’s transportation system, yet they are diverse in terms of location, infrastructure, operations, and safety concerns. The diversity of local and tribal roads leads to many ways that highway safety problems are evaluated and addressed. There is no one-size-fits-all solution, safety countermeasures will not always be successful in all situations.



FHWA LOCAL AND TRIBAL ROAD SAFETY
MATCH
PROGRAM

Since its launch in March 2021, FHWA’s Mentoring, Assistance, Training, and Communication Help (MATCH) Program has connected several local agencies with expert peers who have assisted with safety issues on their roadways. The MATCH program provides free, broad-based technical assistance to local and tribal agencies facing roadway safety challenges. The program connects agencies requesting assistance (mentees) with volunteer mentors who have specific expertise to help successfully address the identified challenges. The MATCH Program leverages the solutions that mentors have already identified and successfully implemented to address similar problems on the mentees’ roadways, enabling more agencies to benefit from these successes and eliminating the need to “reinvent the wheel.”

The MATCH program can assist with your local or Tribal roadway safety challenges. All local and Tribal agencies are eligible to apply for this FREE technical assistance from a mentor through the MATCH program. For assistance, prospective mentee agencies must fill out and submit a short online application. Response is quick and, depending on the issue, technical assistance may be provided immediately. Requests must be directly submitted by a public official. When necessary, FHWA may coordinate with the mentee's respective State DOT or FHWA division office to support the mentoring request. Upon approval for the program, the applicant will be matched with a mentor.

You can also participate in the MATCH Program as a mentor. Public agency transportation safety professionals who have specific expertise related to local and/or Tribal road safety may serve as mentors. Mentors must be actively employed by or retired from a public transportation agency with a minimum of 5 years of continuous transportation safety experience. Mentors’ schedules will be accommodated; however, they will be asked to make a commitment to assist the mentees. Both mentors and mentees will be required to produce a short report once the activity is completed in an effort to document and share noteworthy practices.

Technical assistance through MATCH is always free. Mentoring can be provided in the form of phone calls, email exchanges, web–conferences, or site visits (on a limited basis). The level of mentoring varies depending on the Mentee’s needs. Requesting agencies may specify how they would like to receive assistance when making the request (e.g., phone call from a Mentor, structured web-conference) or the MATCH Coordinator can suggest the best type of assistance.

Learn more about the MATCH program or contact Rosemarie Anderson at rosemarie.anderson@dot.gov.

Jacob's 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.

Question: What is the difference between a mathematically unbalanced bid and a materially unbalanced bid? Are either of them acceptable?

Lloyd Jacobs: Let's start by defining the two of them. A mathematically unbalanced bid contains sums which do not reflect the actual costs plus a proportionate share of bidder's anticipated profit, overhead costs, etc. A materially unbalanced bid occurs when there is doubt that awarding the bidder will result in the lowest cost to the government. Where obvious unbalanced bid items exist, the State DOT's decision to award or reject a bid shall be supported by written justification. A bid found to be mathematically unbalanced, but not found to be materially unbalanced, may be awarded. To determine whether a bid is unbalanced, it needs to be evaluated for reasonable conformance with the engineer's estimate. There are no specific parameters, such as amount or percent of variance from the engineer's estimate, that constitute an unbalanced bid. However, any evaluation process should undertake to determine why the bid is unbalanced, what effect the unbalancing will have on the contract, and if there is an effect, will it be to the detriment of the SHA and/or FHWA.

Question: Do ADA requirements apply to new construction projects only?

LJ: Accessible design requirements not only apply to new construction or reconstruction projects, but also apply if your project is considered an alteration. Types of projects that may be considered alterations include resurfacing, road widening, or even traffic signal improvements. A project that impacts curb cuts, median strips, ramps, sidewalks, pedestrian crosswalks, or parking spaces also may be considered an alteration.

Drones are the fastest growing segment of aviation in the United States. As of January 2022, over 860,000 drones have been registered with the FAA, and over 260,000 Remote Pilots have been certified by the FAA. These numbers are projected to continue to grow.

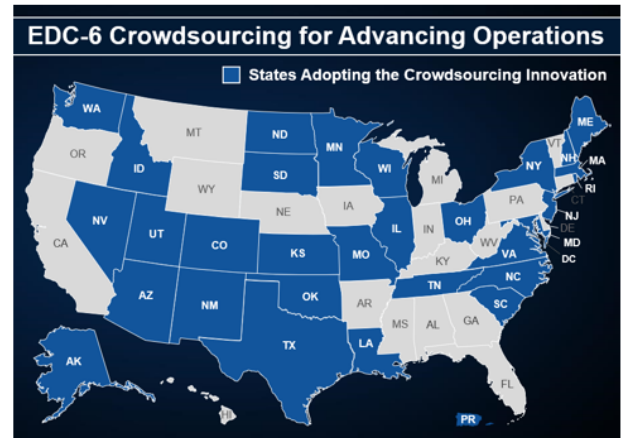
Is your agency interested in using drones in your municipality? The FAA is accepting applications (due June 10, 2022) for Aviation Workforce Development Grants for [Aircraft Pilots](#) and [Aviation Maintenance Technical Workers](#). You may [view a recording](#) of the technical assistance webinar or [download the presentation](#) to learn more about this funding opportunity. [Click here](#) to learn more.

DRONE
SAFETY DAY
— JUNE 18, 2022 —

Crowdsourcing for Safer Transportation Systems

Most public agencies and nearly all private entities use some form of crowdsourcing, which is the practice of addressing a need or a problem by enlisting the services of large numbers of people through technology. Organizations crowdsource product reviews, idea generation, feature detection, funding, and much more. With the proliferation of location-based technologies, an unprecedented wave of crowdsourced data is now also available to transportation agencies. Moreover, analytics tools and services make processing and using crowdsourced data a true game-changer.

Since 2018, the FHWA Every Day Counts (EDC) Program, Crowdsourcing for Advancing Operations, has been supporting the adoption and use of crowdsourced data across 30+ States and their local agencies to improve operational practices related to traffic incidents, road weather, work zones, traffic signals, and emergency management along with a host of other functions often referred to as transportation systems management and operations (TSMO). The program more recently began discovering greater uses of crowdsourced data for transportation safety applications and, specifically, multiple elements of the Safe System Approach, which accounts for human error when designing and operating transportation systems to mitigate deaths.



Crowdsourced data is collected passively or actively from individuals when they use travel-related mobile applications such as multimodal, navigation, 311 non-emergency, and agency-developed tools as well as a host of non-travel-related apps. Connected cars and scooters, GPS-enabled fleet vehicles, and social media platforms also generate crowdsourced data that benefits transportation agencies. Crowdsourced data offers more geographic coverage across roadway types not typically captured through traditional roadway monitoring equipment, more representative sample sizes, more types of data, and more complete data.

A vital aspect of the safe roads element of the Safe System Approach is alerting users to hazards and other road users to reduce the frequency and severity of crashes. Knowing where these dangerous locations are can help traffic management center (TMC) operators better deploy resources to alert travelers to these dangerous slowdowns by quickly detecting the ends of queues. For example, the Indiana DOT deploys more than 20 queue-warning trucks statewide based on the locations of queues. Indiana DOT and many other States also use back-of-queue information to post information on their dynamic message signs and, in some instances, through vehicle-embedded systems and mobile-based navigation applications. For example, the New Jersey and North Carolina DOTs offer traffic congestion and slowdown alerts to commercial vehicle drivers directly through an in-cab system. Many State and local agencies also share work zone, flood, and other road-closure data through crowdsourced navigation applications to alert travelers of atypical road conditions.

Collectively, crowdsourced data support proactive and more holistic approaches to improve safety and operations for road users who walk, bike, drive, and travel by other modes. Crowdsourcing benefits transportation agencies by expanding and improving real-time monitoring. Applying crowdsourced data to transportation systems also helps garner public acceptance of transportation decisions, improves the transparency and efficiency of public expenditures, and promotes a sense of community and greater citizen satisfaction.

To learn more about how crowdsourced data can help your agency's safety goals, reach out to the FHWA EDC-6 Crowdsourcing co-leads, James Colyar at James.Colyar@dot.gov or Greg Jones at Greg.Jones@dot.gov

NJDOT Announces Funding Opportunities for Safe Routes to School and Local Bridges

The New Jersey Department of Transportation (NJDOT) announced 32 Local Bridges Fund grants totaling \$47.3 million to help counties maintain local bridges in a state of good repair. “The state of good repair of New Jersey’s transportation infrastructure is a priority of the Murphy Administration. The Local Bridges Fund grant program offers our local governments the ability to use grant funds to invest in bridge projects in their communities,” NJDOT Commissioner Diane Gutierrez-Scaccetti said. “This grant program, along with others, continues to demonstrate NJDOT’s commitment to communities throughout New Jersey.”

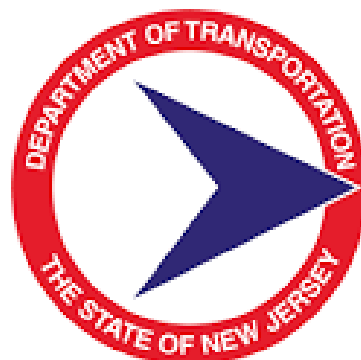
The Local Bridges Fund is a \$47.3 million program funded through the Transportation Trust Fund (TTF). The program provides funding for each of New Jersey’s 21 counties for the improvement of county bridges. The grants focus on the repair, reconstruction, and replacement of bridges with the greatest structural deficiencies. [Click here for a full list of county allotments and project awards.](#)

NJDOT officials also announced \$19.6 million for 31 grants under the Safe Routes to School (SRTS) program. This represents the largest amount ever awarded for the program.

“The Safe Routes to School program is a great example of how NJDOT, working with the state’s three regional planning authorities, helps our communities access federal funding for local transportation projects,” NJDOT Commissioner Diane Gutierrez-Scaccetti said. “These grants will provide resources to improve sidewalks and bike paths to encourage children to stay active by walking and biking to school.” The SRTS is a federally-funded program to increase pedestrian safety among motorists and schoolchildren.

The program is administered by the NJDOT in partnership with the North Jersey Transportation Planning Authority (NJTPA), Delaware Valley Regional Planning Commission (DVRPC) and the South Jersey Transportation Planning Organization (SJTPO). The program was created to encourage children, including those with disabilities, to walk and bike to school. The goal is to make bicycling and walking to school a safer and more appealing transportation alternative, encouraging a healthy and active lifestyle from an early age. Projects are designed to improve safety, as well as reduce traffic, fuel consumption and air pollution near schools.

Of the [31 grants being awarded](#) to local governments to make pedestrian safety improvements near K-8 schools, 22 grants totaling \$13.8 million are within the NJTPA region, which includes Bergen, Essex, Hudson, Hunterdon, Middlesex, Monmouth, Morris, Ocean, Passaic, Somerset, Sussex, Union, and Warren counties. Seven grants totaling \$4 million are within the DVRPC region, which includes Burlington, Camden, Gloucester, and Mercer counties in New Jersey and five counties in Pennsylvania. The final two grants totaling \$1.7 million are within the SJTPO region, which includes Atlantic, Cape May, Cumberland, and Salem counties.



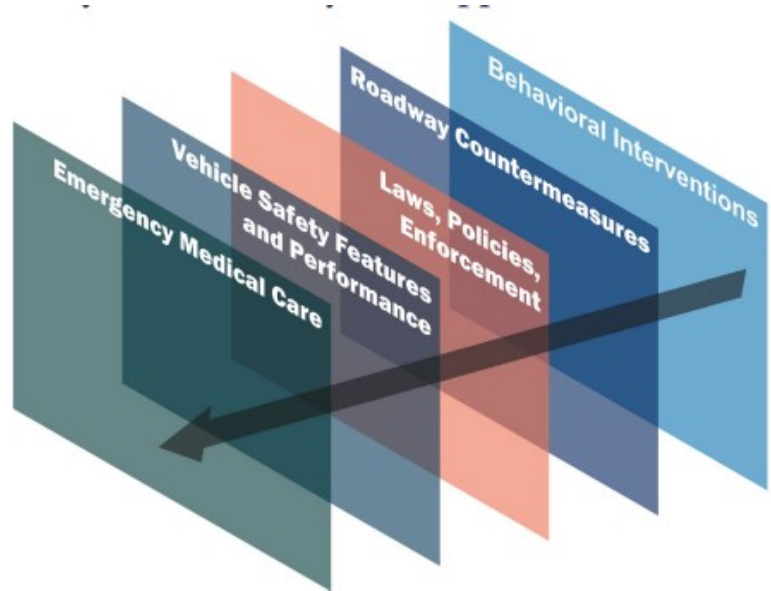
USDOT Announces Comprehensive National Roadway Safety Strategy

This year USDOT announced the new, comprehensive National Roadway Safety Strategy (NRSS), a roadmap for addressing the crisis in fatalities and serious injuries on the Nation's roadways. While the number of annual roadway fatalities had declined for many years, progress plateaued over the past decade. However, fatalities rose dramatically during the pandemic.

The NRSS outlines USDOT's comprehensive approach to significantly reducing deaths and serious injuries on our Nation's highways, roads, and streets. It provides concrete steps USDOT will take to address this crisis systemically and prevent these tragic and avoidable losses. Specifically, the NRSS:

- Sets a department-wide vision and goal: reaching zero roadway fatalities
- Identifies new priority actions and notable changes to existing practices.
- Leverages a once-in-a-generation investment in infrastructure, through the Bipartisan Infrastructure Law, to bring this strategy to life.
- Advances equity and climate goals.

With adoption of the Safe System Approach, the NRSS acknowledges that humans make mistakes and are vulnerable. The NRSS emphasizes the importance of designing a redundant system to protect everyone by preventing crashes and ensuring that if crashes do occur they do not result in serious injury or death. USDOT will use a five-pronged model that corresponds to the Safe System elements: safe road users, safe roads, safe vehicles, safe speeds, and post-crash care.



The NRSS also recognizes that reducing traffic fatalities is a shared responsibility—another key principle of the Safe System Approach. This will take sustained and concerted action from all sectors and levels of government, the public and private sector, and advocacy and research communities. It will take an urgent yet lasting commitment from all involved to support actions that protect people and prevent harm. To that end, in conjunction with the NRSS, USDOT is starting a Call to Action campaign for stakeholders to commit to specific and tangible actions that would significantly advance safety.

This is a pivotal moment—now is the time for action, and now more than ever we need everyone to do their part to get closer to zero.

Rural Road Safety Awareness Week 2022

This July the National Center for Rural Road Safety is sponsoring Rural Road Safety Awareness Week, with a new focus. This year's theme will be "Taking Action, Saving Lives." Each weekday of the campaign will have a separate, but related, topic.

"Our main job at this center is to equip rural road practitioners with information and training specific to their needs," said Jaime Sullivan, director of the center. "We are using Rural Road Safety Awareness Week this year to introduce several crucial safety topics and customize them for our rural audiences."

These topics will range from discovering what is unique about Rural Road Safety, to proven safety countermeasures on rural roads, and investigating the intersection of Rural Road Safety and Public Health. "Each of these daily topics roll up into a holistic approach to saving lives on rural roads," Sullivan said. "We're excited to promote it and are working on some amazing campaign assets we will give to everyone to use."

Campaign assets will include social media graphics, posters, articles, fact sheets, and short videos. "We know rural practitioners don't have a lot of extra time or money," Sullivan said. "The least we can do is give them some encouragement, education, and freebies to help them raise awareness of the safety issues on their roads. In addition to supporting leadership priorities, these themes will also be a major focus of future content, trainings, and communication. Using these themes for RRS AW 2022 will tee up that focus going forward and match our other offerings.

For more information on the campaign, and to see how you can get involved, please visit the center's [RRSAW campaign page](#).



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 - Traffic Incident Management Training for Emergency Responders (Webinar)

June 21 8:00 am–12:00 pm

The training covers topics including TIM guidelines, fundamentals, and terminology; notifications and scene size up; scene safety and risk management; traffic management; special circumstances; clearance; and termination.

NJLTAP - Federal-aid Requirements and LPA Stewardship (Webinar)

July 7–July 8 9:00 am–12:00 pm

This program will review the cradle to grave process of federal-aid programs, from planning and project concept, plans, specifications, estimates and bidding, and construction. The intent of this course is to assist local agencies with proper federal-aid compliance.

NJLTAP - Implementing a TZD Strategy at the Local Level (Webinar)

July 13 8:30 am–12:30 pm

This workshop will introduce the Toward Zero Deaths (TZD) road safety strategy, and teach Participants will learn the implementation steps for TZD on local roads and understand the proactive steps to take to start a zero deaths program in their municipality or county, as well as where to find additional resources for TZD.

Our full online catalogue of courses can be found at our website, <https://cait.rutgers.edu/cait/events> or email Shane Mott at caitregistrar@soe.rutgers.edu for more information!

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