



# FHWA's Fostering Multimodal Connectivity Newsletter

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## Introduction

The Federal Highway Administration's (FHWA's) *Fostering Multimodal Connectivity Newsletter* provides transportation professionals with real-world examples of how multimodal transportation investments use accelerated project delivery, technology and design innovation, and public/private partnerships to promote economic revitalization, provide access to jobs, and achieve safer communities. The newsletter also showcases how FHWA and its partners are supporting the U.S. Department of Transportation Strategic Plan by improving connectivity, accessibility, safety, and convenience for all transportation users.

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## Automated Shuttle Service Improves Mobility and Accessibility for Persons with Disabilities in Michigan

Jean Ruestman, Administrator; Janet Geissler, Mobility Innovations Specialist, both with the Office of Passenger Transportation, Michigan Department of Transportation

In the coming years, automated vehicles (AVs) are poised to dramatically change transportation networks around the world. The Michigan Department of Transportation (MDOT) is prioritizing building and sustaining diverse partnerships to support the integration of AVs. In May 2018, the State launched the [\\$8 Million Michigan Mobility Challenge](#) to address core mobility gaps for residents, including older adults, people with disabilities, and veterans, through technology-based solutions. Coordinated by several State departments including



Figure 1: The automated shuttle designed by Pratt Miller Mobility for the Michigan Mobility Challenge navigates along a pathway at the Western Michigan University campus. (Image courtesy of Michigan Department of Transportation)

MDOT, the Challenge held a kick-off event prior to issuing the call for projects in June 2018. The event helped facilitate partnerships between technology firms, transit providers, academics, and other stakeholders. The thirteen projects selected for funding leveraged strong public/private partnerships to enhance mobility. MDOT's Office of Passenger Transportation served as project manager for all projects, providing technical assistance and oversight of the State grant program.

One project, the [New Autonomous Mobility Vision for Michigan](#), a partnership among Pratt Miller Mobility (PMM), three technology firms, two universities, and a disability-rights advocacy organization, received \$2.2 million in grant funding. The project aimed to convert an automated pod into a fully accessible, shared-use vehicle that could fill mobility gaps and provide complete trips for all, including people with disabilities.

The project used the Complete Trip concept in its implementation. As outlined in the [U.S. Department of Transportation's \(U.S. DOT\) ITS4US Deployment Program](#), a Complete Trip refers to the ability to travel from an origin to a destination, including pre-planning and negotiating in-route detours, without gaps in the transportation network. Such trips may include multiple segments that use different modes and/or transportation services. Strong public/private partnerships brought the New Autonomous Mobility Vision for Michigan to fruition, and they are essential for realizing Complete Trip goals. In related efforts, [U.S. DOT awarded five teams](#) in January 2021 [with over \\$38 million](#) in grant funding to implement Complete



Trip pilot programs. The projects demonstrate innovative business partnerships, technologies, and practices that promote independent mobility for all.

Project planning began with designing, testing, and deploying inclusive design options to address mobility gaps and support Complete Trip goals. The team faced several design challenges including problems with ingress and egress when the vehicle lined up with a curb or ground level, wheelchair-turning space, floor space in the vehicle’s cabin for wheelchair use, ramp height and length, and seamless/quick securement of a wheelchair while on board. In addition to getting input from the [University of Michigan Inclusive Mobility Lab](#), users with disabilities tested the shuttle to identify design issues and provide recommendations. Addressing design challenges during project planning highlighted another key to success—adaptability—which resulted in many benefits.

PMM partnered with Western Michigan University (WMU) to conduct a [pilot on their main campus](#). The project team included students with disabilities, giving them hands-on experience with the technology and an opportunity to provide feedback about how the pods could be best designed and deployed to meet the needs of people with disabilities. The project team learned that early user engagement is critical to accessible and inclusive design, and helps promote user understanding and trust of AVs.

After designing and building the device, the project team organized a two-week demonstration at the WMU campus. The team noted several key takeaways including how costly retrofitting a vehicle for accessibility is, which may inhibit usability and integration of desired elements without funding partners. A vehicle that integrates accessibility considerations into the original design may be preferable. Industry standardization would facilitate integration of automated driving systems on various vehicle platforms, increasing the potential for innovation. Study participants reacted positively to the pilot, despite the pod’s constraints on weight and space. Finally, the pilot generated increased interest in AVs and produced rider and pedestrian data that can be used in future projects.

This pilot laid the groundwork for potential follow-on activities to enhance the vehicle’s design, including the ability to remain functional during inclement weather, ramp improvements featuring automation and increased load capacity, increased payload, and emitting sound to improve pedestrian awareness. Future research could examine lower emissions from using a fully electric AV, increased accessibility for people with disabilities, and integration with public transit to improve connectivity.

The project outcomes provide critical findings on access barriers for people with disabilities, aligning with related U.S. DOT initiatives. For example, in January 2021, U.S. DOT awarded \$3 million to 10 semifinalists through its [Inclusive Design Challenge](#) which supports innovative design solutions that enable people with physical, sensory, and cognitive disabilities to use AVs. The Department developed an [Accessibility Strategic Plan Framing Document](#) and a draft [Strategic Plan on Accessible Transportation, which present U.S. DOT’s accessibility goals](#) across four overarching guiding principles: stakeholder collaboration, innovation, Complete Trip, and geographic equity.

As part of next steps, the Federal Transit Administration is providing funding (\$300,000 with a \$75,000 State match) for an independent evaluation of Michigan Mobility Challenge projects, including the New Autonomous Mobility Vision for Michigan, to identify successes and lessons learned. Projects will be complete by August 2021 and the evaluation findings will be available in summer 2022, which will provide valuable recommendations for other agencies considering similar projects aimed at improving accessibility, promoting Complete Trips, and enhancing overall quality of life through innovative technologies.





## Virginia Develops a Statewide Pedestrian and Bicycle Count Program

Peter Ohlms, Research Scientist, Virginia Transportation Research Council; Lance Dougald, Senior Research Scientist, Virginia Transportation Research Council; John Bolecek, Statewide Bicycle and Pedestrian Planner, Virginia Department of Transportation

The collection of data is an important factor in supporting decisions related to pedestrian and bicycle planning and project prioritization. These decisions, in turn, help promote multimodal connectivity and improve quality of life. In 2017, the Virginia Department of Transportation (VDOT) initiated a study through its research division, the Virginia Transportation Research Council (VTRC), to identify ways to plan and implement a nonmotorized count program throughout the State. The study used Federal funding from the [State Planning and Research \(SP&R\) program](#), and the FHWA Virginia Division Office participated on the study's technical review panel.

When the study began, relatively few VDOT-managed pedestrian and bicycle counters existed in Virginia outside of the Washington, District of Columbia suburbs. In 2015, VDOT installed seven counters on the Virginia Capital Trail between Jamestown and Richmond following the installation of counters in VDOT's Hampton Roads District a few years prior. VDOT also experimented with adding bicycle counting capabilities to an existing traffic count site in Roanoke. Researchers contacted Virginia localities and other organizations to determine the status of their efforts to count pedestrians and bicyclists. Many localities were interested in some level of pedestrian and bicycle volume data collection, although few had processes in place. The [final research report](#) recommended that VTRC assist VDOT's Transportation and Mobility Planning Division (TMPD) with piloting a nonmotorized count program and documenting lessons learned. In 2018, VTRC began an implementation study to launch a Statewide program.

VTRC purchased and installed both permanent and portable counting equipment, led coordination efforts with local partners for site selection and installation roles, including hands-on installation training, and advised TMPD regarding other program elements. Using approximately \$100,000 in SP&R funds, TMPD bought portable counting equipment and made it available for loan to VDOT districts and Virginia localities. Since 2018, TMPD's short-duration count program is responsible for counts in more than 100 locations. TMPD provided training and integrated pedestrian and bicycle data into a [Statewide map](#).

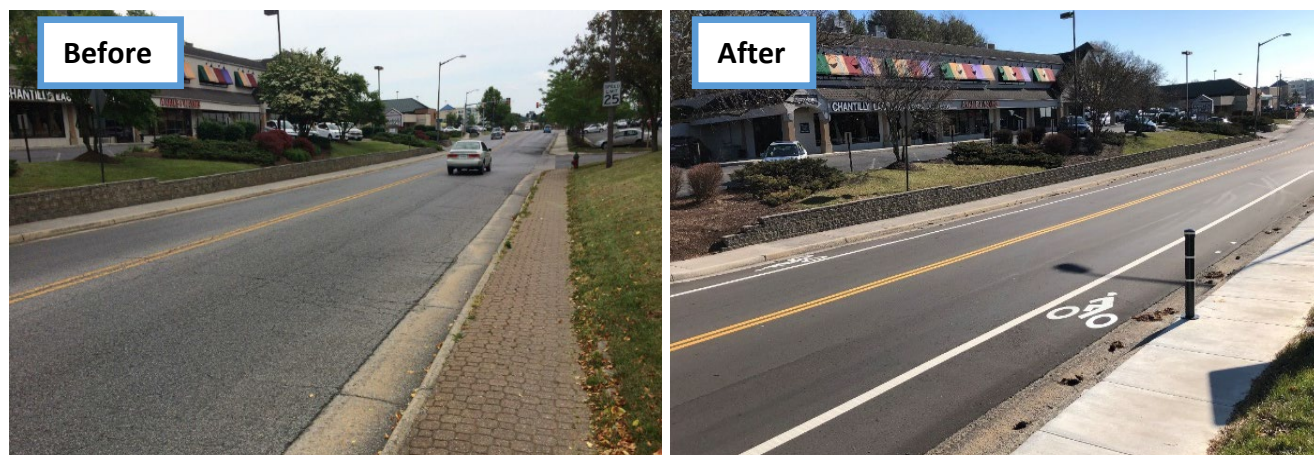


Figure 2: Site conditions before (left) and after (right) installation of permanent pedestrian and bicycle counting equipment using preformed inductive loops at University City Boulevard in Blacksburg, Virginia. (Images courtesy of Virginia Department of Transportation)



The Town of Blacksburg partnered with VTRC to install permanent counting equipment on two roadways between the Virginia Tech campus and residential destinations. Each site now includes an infrared sensor to count pedestrians on one sidewalk and inductive loops to count bicyclists in designated bicycle lanes. At one site, crews took advantage of planned repaving and reconstruction of a sidewalk to include conduits and preformed inductive loops while crews cut the pavement at the other site to install wire loops. Researchers deployed portable counting equipment in Blacksburg, Martinsville, and other locations on streets, sidewalks, and shared-use paths.

Researchers documented lessons learned and drew several conclusions:

- Extrapolating average daily count estimates from short-duration counting sites requires additional permanent counting sites. Other research has shown it is best to collect long-term data across multiple geographic regions, on a variety of facility types, with different volume levels and patterns.
- Given the time and level of effort involved in retrofitting a site with permanent counting equipment, it may be more cost-effective to include permanent counters as part of roadway and/or shared-use path construction or reconstruction projects. Some VDOT projects, such as upcoming multimodal improvements to Interstate 66, have done this, but the practice has not been institutionalized. Such counters are an eligible expense under [several Federal-aid transportation funding programs](#).
- Safety concerns are a major consideration in deploying portable nonmotorized counting equipment in the right-of-way. In order to ensure counts are conducted in a safe and efficient manner, staff follow certain safety procedures. For example, there is a tendency to avoid in-street sites; however, a lack of such sites may affect data quality if analysts try to estimate volumes at in-street sites using data from only off-street sites.
- Partnerships with localities are critical. The nature of pedestrian and bicycle travel patterns means that local involvement is essential, even for States such as Virginia with extensive State-maintained road networks.
- Exploring alternatives to formal agreements may be worthwhile. Agencies should balance the speed and flexibility of a less formal collaborative structure with the certainty imparted by formal interagency agreements.



Figure 3: Completed installation using cut-in inductive loops at Tom's Creek Road in Blacksburg, Virginia. (Image courtesy of Virginia Department of Transportation)

VDOT aims to improve the data that feeds Statewide planning efforts and project prioritization approaches such as [Smart Scale](#), which is an outcome-based project scoring and prioritization process. The nonmotorized count program supports this vision through installation of counters in select locations, coordination with localities, engagement with consultants to establish data analysis and management tools, as well as research into other State practices and shared mobility data tools, such as StreetLight™ and Strava Metro. TMPD will continue applying lessons learned through research and implementation as it expands its efforts to establish a Statewide pedestrian and bicycle counting network to provide better data for State and local decision making in Virginia.





## Maine's Heads Up! Pedestrian Safety Project Elevates Local Partnerships to Address Pedestrian Fatalities

Patrick Adams, Active Transportation Planner, Maine Department of Transportation

In response to the increased number of pedestrian fatalities Maine experienced starting in 2015, the Maine Department of Transportation (MaineDOT) began working on a pedestrian safety project that would eventually get its name from a simple command: Heads Up! By 2017, the Heads Up! Pedestrian Safety Project evolved into a multiagency safety campaign with education, enforcement, and engineering components. The project is focused on reducing the total number of pedestrian crashes by raising awareness of pedestrian safety issues through a data-driven strategy addressing concerns on existing and proposed infrastructure. Heads Up! is part of a larger [MaineDOT Pedestrian and Bicycle Safety Education Program](#), which receives approximately \$156,000 on an annual basis through State highway program funds. The Pedestrian and Bicycle Safety Education Program also supports Safe Routes to School programming and Statewide adult education and encouragement efforts. The project focused efforts in 21 communities that represented approximately 29 percent of the State's population, but accounted for nearly 65 percent of Maine's pedestrian crashes and more than 62 percent of the incapacitating pedestrian injuries from 2011-2015.



Figure 4: Maine's Heads Up! Pedestrian Safety Project logo and data findings on pedestrian crashes in the State. (Image courtesy of Maine Department of Transportation)

Thoughtful infrastructure design, public education, and community engagement are the bedrock of safe transportation systems. MaineDOT works with municipal partners and pedestrian advocates to raise awareness on local issues in [community forums](#). MaineDOT engages residents and municipal staff to identify the most problematic locations for pedestrians and to brainstorm and prioritize potential safety improvements. Community forums focus on improving pedestrian infrastructure and promoting behavioral changes for drivers and pedestrians through education and enforcement activities.

MaineDOT and Federal Highway Administration (FHWA) Division Office staff collaborate to develop community-specific pedestrian safety action plans (PSAPs) aimed at reducing the number of pedestrian crashes. The recommendations are categorized based upon the Safe Routes to School Five Es framework: engineering, education, encouragement, enforcement, and evaluation. MaineDOT planners, engineers, and municipal leaders review draft PSAPs before they are finalized and formally released to the community.

MaineDOT, as an ardent supporter of FHWA's [Safe Transportation for Every Pedestrian \(STEP\) UP Campaign](#), was an early adopter of the [Every Day Counts Program](#). The project team incorporates STEP enhancements into the recommendations identified in each municipality's PSAP. These reports help stimulate additional pedestrian safety conversations among the media, residents, and local officials. Working closely with each community, MaineDOT is refining the scopes of their prioritized recommendations and advancing projects for funding under the State's [Highway Safety and Bicycle and Pedestrian funding programs](#). Once the PSAPs are completed at the end of 2021, MaineDOT will work with the communities to assist with the prioritization and implementation of PSAP recommendations.



Information from public forums and road safety audits informs pedestrian safety engineering decisions, and often lead to Federally-funded [Highway Safety Improvement Program \(HSIP\)](#) and [Transportation Alternative Set-Aside](#) projects. Local feedback enables MaineDOT to strategically program capital and infrastructure improvements that directly improve pedestrian safety through sidewalk and crosswalk improvements—including addressing elements of [MaineDOT’s Americans with Disabilities Act Transition Plan](#), enhancing visibility, and improving lighting and signage. MaineDOT also purchases rapid rectangular flashing beacons, dynamic speed feedback signs, and flashing school zone signage in bulk, and distributes them to communities for their installation in pre-identified and pre-approved locations. These HSIP projects have effectively allowed Maine to substantially increase the deployment of pedestrian safety countermeasures while reducing overall costs.



**THE PLAN** - Assemble a diverse group of safety stakeholders to help develop strategies to reduce the number of pedestrian crashes and fatalities. The group helps MaineDOT shape its plan — one that is data driven, focused, and multidimensional. This holistic plan includes Engineering/Infrastructure, Law Enforcement, and Safety Education/Outreach.

MaineDOT’s BikePed and Safety Programs developed the **Heads Up! Pedestrian Safety Project** to evoke behavioral changes in both drivers and pedestrians and to acknowledge the importance that infrastructure designs have on pedestrian safety.

**THE STRATEGY** - Implement pedestrian safety forums, complete community safety reviews, analyze culture, develop mitigation plans, incorporate proactive law enforcement programs, and create targeted outreach strategies for vulnerable populations.

**Heads Up!** is energizing MaineDOT’s pedestrian safety efforts.



**- THE FOCUS -**

**21** Focus Communities representing —

**29%** of the state’s population that accumulated —

**65%** of the state’s pedestrian crashes

**HEADS UP!**  
- Pedestrian Safety Project Stats -  
May 2017-Sept. 2019

**16** Pedestrian Safety Forums

**635** Participants (average of 40 per forum)

**12** Safer Walking Forums

**180** Participants (average of 15 per forum)

**14** Priority Location Site Safety Reviews

**11** Mitigation Reports Completed

Figure 5: Maine’s Heads Up! Pedestrian Safety Project infographic describing the project and data findings on pedestrian crashes in the State. (Image courtesy of Maine Department of Transportation)

As a part of the annual HSIP safety target setting process, Maine identifies a reduction goal for the number of nonmotorized fatalities and serious injuries. MaineDOT made significant progress toward achieving their target, reducing the five-year rolling average of nonmotorized fatalities and serious injuries from 92.0 in 2016 to 90.6 in 2018.

As a result of the project, the Bicycle Coalition of Maine developed a [“Slow ME down” speed management campaign](#) and five-year strategic plan to improve roadway safety. MaineDOT has taken a systemic approach by providing communities with dynamic speed feedback signs to help address vehicle speeds. MaineDOT provides communities with training and portable signs under the condition that they move the signs around the community and share collected data with local law enforcement. MaineDOT has also worked closely with the State Bureau of Highway Safety to sponsor local law enforcement grants utilizing National Highway Traffic Safety Administration funding, which improves safety for vulnerable users by addressing speeding, distracted driving, and enforcement of pedestrian and bicycle laws.



## Coordinating Targeted Public Involvement Activities to Minimize Highway Project Impacts on Underserved Populations in Indiana

Allie Thompson, Clean Transportation Researcher, ICF; Les Brown, Senior Managing Consultant, ICF; Kristina Heggedal, Transportation Analyst, ICF; Alex Wilkerson, Policy Analyst, U.S. Department of Transportation Volpe Center

Through targeted public involvement efforts, the Indiana Department of Transportation (INDOT) determined project alternatives for a [\\$1.5 billion highway expansion project](#) that reduced direct impacts to a low-income, rural population in Martinsville, Indiana. As part of developing the [final Environmental Impact Statement](#) (EIS) under the National Environmental Policy Act, INDOT initiated public involvement efforts to minimize relocations of low-income populations along Interstate 69 (I-69) in Martinsville. The I-69, Section 6, highway expansion project aimed to strengthen the transportation network between Evansville and Indianapolis, supporting economic development in southwest Indiana and improving regional connectivity providing access to jobs, education, and healthcare. INDOT upgraded the existing State Road 37 facility to interstate standards, eliminated at-grade crossings by constructing overpasses and underpasses, rehabilitated and built new bridges, and added interstate access points throughout the corridor.

The I-69 project had potential to impact nearby environmental justice (EJ) communities, specifically Sun Valley, Spring Valley, and Greenwood Mobile Home Parks, whose residents are predominately low-income individuals. Initial plans would have required the acquisition or relocation of residential homes, Martinsville Baptist Tabernacle Church, Tabernacle Christian School, and a variety of local businesses.

INDOT worked with the Federal Highway Administration (FHWA) to establish an EJ subcommittee to identify where EJ populations were located, develop communication approaches for project updates, and hear residents' concerns about the project. INDOT surveyed residents within the affected communities to better understand their sentiments toward the I-69 project and perceived effects of the project on the community. INDOT distributed the survey to community members by mail in English, Spanish, and Burmese, providing options for responses via mail, phone, email, or online. In addition to the residential survey, INDOT sent a survey to 164 community organizations and stakeholders representing or serving local residents to understand the perspectives of the EJ population concerning potential project impacts. INDOT coordinated five neighborhood gatherings providing EJ communities with opportunities to provide feedback and engage with INDOT and representatives from the FHWA Indiana Division Office. The project team selected meeting locations with accessibility for EJ populations in mind, which were held at smaller venues to encourage participation from residents in a more intimate setting rather than traditional, large-scale public meetings.

In 2016, INDOT held over 100 meetings that were attended by 4,500+ people and distributed 10,080 surveys, which collectively influenced the development and selection of the Refined Preferred Alternative (RPA). In response to concerns expressed by community members regarding relocation of residences and businesses, changes in travel patterns, community cohesion, noise impacts, and air quality impacts, the RPA was developed from Alternative C4 (see Figure 7). The RPA estimated 187 total residential relocations and 82 in areas with elevated EJ populations. Ultimately, the project resulted in only 30 relocations in EJ communities due to INDOT's further design refinements minimizing impacts.

INDOT redesigned local service road plans near the Greenwood Mobile Home Park eliminating the Stones Crossing Road Bridge over I-69. The redesign reduced impacts to the existing environment—both to the natural environment as well as the mobile home park itself, avoiding four relocations.





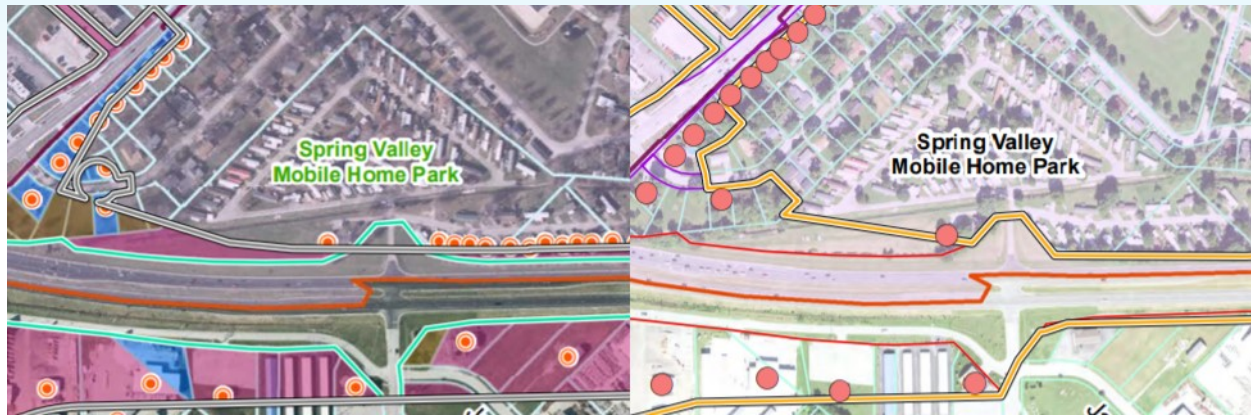


Figure 6: The Refined Preferred Alternative (right) resulted in fewer relocations in the low-income community of Spring Valley Mobile Home Park relative to Alternative C4 (left). Red circles indicate potential relocations. (Images courtesy of Indiana Department of Transportation)



Figure 7: The Refined Preferred Alternative (right) includes a service road south of the highway that was not included in Alternative C4 (left), enhancing local accessibility and connectivity. (Images courtesy of Indiana Department of Transportation)

INDOT made [other adjustments](#) to enhance connectivity and safety, as well as improve EJ communities’ access to public schools, shopping, and medical facilities. The local road improvements included mill and overlay work, road reconstruction, railroad crossing repair, new signal installation, signal timing improvements, intersection upgrades, wayfinding signs, sidewalks, drainage improvements, and pavement markings. The project includes [accommodations](#), including sidewalks, bicycle lanes, multi-use paths, shared lanes, and paved shoulders at 31 locations enhancing safety and access for vulnerable road users. INDOT published the EIS in 2018 and anticipates construction will be complete by 2024.

INDOT committed to creating a public involvement process to meaningfully engage EJ populations by incorporating residential input into the project decision-making process. The approach ensured that the improvements reflected community needs and avoided delays that could have otherwise affected INDOT’s accelerated project delivery timeline. As part of its public engagement approach, INDOT established an Aesthetics Task Force in partnership with the City of Martinsville made up of local residents to develop preliminary design concepts for bridge and corridor features; INDOT intends to use a similar process for other counties along the corridor.



## Announcements/New Resources

- The U.S. Department of Transportation (U.S. DOT) [awarded more than \\$38 million to five teams](#) through the [Complete Trip - ITS4US Deployment Program](#). The program supports projects that address mobility challenges of all travelers, regardless of location, income, or disability, in accessing jobs, education, healthcare, and other activities. Awarded funds will enable communities to showcase innovative business partnerships, technologies, and practices that can be replicated and scaled to increase mobility options across transportation modes.
- The U.S. DOT released a [draft Strategic Plan on Accessible Transportation](#), outlining ongoing and future initiatives across the Department to enhance accessibility and remove barriers in transportation for people with disabilities. Building upon the [Strategic Plan Framing Document](#), the draft establishes the Department's accessibility goals and objectives for fiscal years 2021-2025.
- The U.S. DOT released a [Pedestrian Safety Action Plan](#) to address pedestrian fatalities and injuries through the expanded use of countermeasures, technology, and data-driven practices. The plan explains U.S. DOT's comprehensive approach that encompasses improvements to the roadway and surrounding environment, increased education on the shared responsibility of both pedestrians and motorists, along with enforcement and adjudication of pedestrian safety laws. It identifies actions the Department intends to accomplish in the next two years, focusing on the development or update of resources, tools, and plans; new and revised campaigns, programs, and initiatives; the creation or revision of curriculum; and new research to improve pedestrian safety.
- The U.S. DOT released a [summary report](#) of the Pedestrian Safety Summit held in July 2020. The three-part webinar series covered the current state of pedestrian safety, risk factors that impact pedestrian safety, and the Department's planned efforts to improve pedestrian safety. Additional [videos](#), [presentations](#), and [materials](#) from the event are also available.
- The U.S. DOT approved [49 designations](#) as part of [the National Scenic Byways Program](#). The designations include 15 All-American Roads and 34 National Scenic Byways in 28 States and increase the number of America's Byways® to 184 in 48 States.
- The Federal Highway Administration (FHWA) [awarded \\$49.6 million](#) in Advanced Transportation and Congestion Management Technologies Deployment grants. The 10 winning projects, selected from 46 applications, utilize intelligent transportation systems technologies to support mobility, safety, and vehicle connectivity. Projects include smart intersections, an integrated safety technology corridor, and emergency vehicle preemption with connected vehicles.
- FHWA released a [micromobility fact sheet](#) providing an overview of the evolution of shared micromobility devices such as bicycles, scooters, electric-assist bicycles, and electric scooters. It outlines micromobility planning considerations across six topic areas: (1) safety and infrastructure; (2) access and mobility; (3) equity; (4) data; (5) regulation; and (6) funding. It features related resources as well as brief success stories that highlight improved access, mobility, and data sharing practices. In addition to the fact sheet, FHWA also published two activity sheets, describing micromobility research and coordination efforts across [FHWA](#) and throughout [U.S. DOT](#).





## Announcements/New Resources

- FHWA published the [Pedestrian and Bicyclist Road Safety Audit Guide and Prompt List](#), which serves as an update to the [Pedestrian Road Safety Audit Guidelines and Prompt Lists](#) (2007) and [Bicycle Road Safety Audit Guidelines and Prompt Lists](#) (2012). The updated resource combines content into a single document, outlining information on how to conduct road safety audits (RSA) and effectively assess the safety of pedestrians and bicyclists. It discusses the RSA process, basic safety principles, and potential hazards affecting users.
- FHWA published a resource on [Traffic Analysis and Intersection Considerations to Inform Bikeway Selection](#), which supports trade-off decisions associated with bikeway selection at intersections. The resource discusses common performance metrics, spatial needs of bikeways at intersections, safety and equity focused design principles, and operational traffic analysis trade-offs and assumptions. It supplements the [FHWA Bikeway Selection Guide](#).
- FHWA published a resource about [On-Street Motor Vehicle Parking and the Bikeway Selection Process](#) to inform decisions related to on-street parking and bikeway selection. The resource includes a discussion of on-street parking and bikeway types with associated dimensional requirements and trade-off considerations. It presents strategies addressing the overlap between general purpose on-street parking and passenger or commercial loading activities, design details, and bikeway selection. It also supplements the [FHWA Bikeway Selection Guide](#).
- FHWA published a [case study](#) discussing community engagement approaches with traditionally underserved populations, including Hispanic and Tribal communities, in Cortez, Colorado during an update to the town's Access Control Plan. The plan is intended to improve traffic, bicycle and pedestrian safety, and preserve traffic flow capacity of two highways in the city. The outreach process gave residents the opportunity to express concerns about street design and high-speed vehicles in the central business district, and as a result, the city incorporated traffic calming measures into the design. Cortez's holistic public engagement efforts enhanced project delivery and established long-term strategy for ongoing engagement.
- The Pedestrian and Bicycle Information Center (PBIC) released an [information brief](#) discussing strategies for broad deployment of automated driving systems (ADS) around school zones. The brief notes the importance of coordination between ADS developers and school officials to address technology, design, and regulatory challenges and ensure safe operations. It provides ten approaches to help build understanding and collaboration between ADS developers and local stakeholders. The recommendations in the brief are based on PBIC's report, [Considerations for Deploying Automated Driving Systems Around Schools](#).
- PBIC released an [information brief](#) on school street change options, including shared spaces and streets, time-restricted closures, and full road closures. The brief explains the benefits of school street changes, including improved safety and air quality, as well as increased recreational space, flexibility, and numbers of students walking and biking to and from school. The brief also provides five case studies demonstrating best practices for street changes near schools.

