

Human Environment Digest

January 14, 2021

Welcome to the Federal Highway Administration (FHWA) Office of Human Environment monthly email digest. This digest shares the latest information from a range of Federal and non-Federal sources, addressing transportation and its relationship to the human environment. Through this information exchange, FHWA hopes to foster dialogue at all levels and continue to further the state of the practice on these important topics in support of safety; infrastructure, including accelerated project delivery, access to jobs, and community revitalization; technology and design innovation; and accountability, including, data-driven decisions and performance-based planning.

For more information on any of these topics, see the FHWA Related Links on the sidebar.

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*The information provided in this mailing does not necessarily reflect the view of the Federal Highway Administration or the U.S. Department of Transportation.



Safety

FHWA Awards Advanced Transportation and Congestion Management Technologies Deployment Grants

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.

NHTSA Seeks Public Comment on Automated Driving System Safety Principles

The *National Highway Traffic Safety Administration* (NHTSA) is [seeking comment on the development of a framework of principles](#) to govern the behavior of automated driving systems (ADS). NHTSA and others identified necessary elements for objectively defining, assessing, and managing ADS competence while maintaining flexibility for future innovation. See [the Advance Notice of Proposed Rulemaking](#) to provide comments.

Safety Focused Research Program Releases Annual Report

The 2020 [Annual Report](#) for the *Transportation Research Board Behavioral Traffic Safety Cooperative Research Program* is now available. The report provides an overview of current and pending projects with information about project sponsors. Listed projects include studies on behavioral traffic safety and regulation, electric scooter safety issues and solutions, and communication methods for vulnerable road users.

Brief Discusses Impacts of School Street Changes

The *Pedestrian and Bicycle Information Center* released an [information brief](#) on school street changes. School street change options include 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.

Research Analyzes History of Speed Limits

The *Transportation Research Record: Journal of the Transportation Research Board* published [a study](#) analyzing the history of speed limits set using measured driver speeds and their enduring impacts on current speed limits. The research explains the origin of the "85th Percentile Rule," a common rule of thumb used to set speed limits nationwide, and examines the role that safety plays in setting speed limits. It adds that traditional approaches previously centered on maximum vehicle throughput and the safety of vehicle passengers. Researchers compare this history to current planning contexts which include an enhanced focus on safety for vulnerable road users such as pedestrians and bicyclists. Prioritizing roadway use also entails ensuring efficient transit vehicle movements and curbside management for pick-ups and drop-offs of goods and people.



Infrastructure

FHWA Calls for Comment on Proposed Revisions to MUTCD

The *Federal Highway Administration* proposed changes to the Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD) and is seeking public [comment on the updates](#). Among the most significant of the proposed changes to the MUTCD are expanded treatment options for pedestrians and bicyclists. Maintaining the same emphasis on vulnerable road users, the proposed revisions also address planning considerations for automated vehicles and other innovative technologies. The [public comment period](#) is open until March 15.

Study Evaluates Travel Impacts of a Complete Streets Project

Mobility21, the University Transportation Center at *Carnegie Mellon University*, [released a study](#) on resulting travel impacts from a complete street redesign project on an urban corridor in Pittsburgh, Pennsylvania. Comprehensive data collection was done both before and after reducing vehicle lanes, introducing bicycle lanes in each direction, installing new traffic and pedestrian signals, and upgrading transit infrastructure in order to quantify the impacts of the complete streets changes. Data collection included traffic counts, bicycle counts, crash data, transit ridership, and air quality assessment.

National Health Emergency Drives Surge in Pop-Up Mobility Paths and Open Streets

During 2020, the national health emergency increased the implementation of pop-up infrastructure to support an increase in active transportation. The *Shared Use Mobility Center* published [a compilation of case studies](#) on cities utilizing temporary bicycle lanes and open streets to create more usable outdoor space for residents. While funding strategies vary, low-cost improvements include cones, tape, and mobile signage. The study notes that the combination of new infrastructure and the national health emergency may have lasting mode shift implications, creating a sustained increase in the use of active transportation modes.

Playbook Discusses Opportunities for Street and Sidewalk Management

Two national organizations partnered to release [a playbook](#) describing opportunities for street and sidewalk management in local communities. The playbook provides recommendations to support mobility and policy goals and address shifting demands for curb and sidewalk space in cities. It outlines strategies for permitting, enforcement, and parking management while also considering the impacts of micromobility, increased delivery, and ridehailing.



Innovation

December 2020/January 2021 FHWA Multimodal Connectivity Newsletter Available

The December 2020/January 2021 edition of the *Federal Highway Administration* [Multimodal Connectivity Newsletter](#) is now available. The newsletter provides transportation professionals with real-world examples of ways in which multimodal transportation investments promote livability and achieve safer communities through the support of accelerated project delivery, technology, and design innovation. This edition includes articles on regional Vision Zero efforts, an adaptive electric scooter pilot, Tribal pedestrian and bicycle network planning, multimodal connections created as part of a highway project, and a virtual stakeholder engagement program.

Centralized Database Developed for Bicycle and Pedestrian Counts

The *Transportation Research and Education Center* developed a [non-motorized count data archive](#) to serve as a centralized resource for public agencies, educators, researchers, and the public. With over 85 million total records, [the dashboard](#) enables users to break down counts by facility type, functional roadway classification, year (2010-present), and provides top locations by volume each week. Developers encourage anyone managing count data and interested in archiving bicycle and pedestrian counts for their community to reach out via [their website](#).

Data Mobilization Campaign Launched to Combat Invasive Species

Western Governors' Association (WGA) launched [a campaign](#) aimed at collecting and consolidating data on invasive species. Land and trail managers, land owners, and non-governmental organizations are encouraged to enter relevant data in order to increase the quality and accuracy of information available on both new and existing invasive species. This campaign works to reduce the negative environmental impacts caused by invasive species, including the reduction of biodiversity and altering of natural habitats. In coordination with the launch of the campaign, the *North American Invasive Species Management Association* delivered [a webinar that provides an overview of the program](#). WGA will also release podcasts and case studies in the coming months to demonstrate the impact of shared, consolidated data on invasive species.

Report Summarizes Placemaking Workshop Focused on the Future of Public Spaces

The *Urbanism Next Center* at the *University of Oregon* released a [report](#) summarizing an event on public spaces and placemaking, conducted in partnership with local stakeholders. The event included sessions on technology, new mobility, and healthy and equitable public spaces, in addition to a workshop that asked attendees to redesign four distinct spaces in Oregon. Workshops and conversations generated several core themes, including an emphasis on streets as places that need to be invested in, the increasing value of human connection, the need for collaboration and public-private partnerships, and a consideration of internet commerce effects on both transportation and the economy.



Accountability

U.S. DOT Requests Information for Planned Reference Hub on Automated Vehicle Accessibility

The *U.S. Department of Transportation* released a [Request for Information](#) for public comment on a proposed initiative to create a library of resources on making automated vehicles accessible to people with disabilities. The planned Inclusive Design Reference Hub would compile resources, including technical specifications and best practices for automated vehicles accessible to persons with physical, sensory, and cognitive disabilities. A public forum series on accessibility and automated vehicles will be held throughout March and April. Event attendance is free, and more information can be found at the [U.S. Access Board's Automated Vehicles webpage](#).

U.S. DOT Announces Complete Trip ITS4US Deployment Awardees

The *U.S. Department of Transportation* will [award 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.

Research Identifies Mismeasurement of Mobility for Walkable Neighborhoods

The *Mineta Transportation Institute* at *San Jose University* released [a study](#) that identifies a gap in mobility data collection for walkable neighborhoods. Utilizing data from three travel and time use surveys, all of which categorize trips into distinct travel purposes, researchers evaluated varying travel pattern assumptions applied to collected data. Researchers noted that traditional surveys model auto-centered communities, failing to consider varied travel patterns in more walkable neighborhoods, resulting in miscategorized trips and data that is not useful.

Equity Summit to be Held in January

A national transportation advocacy group will hold a three-day [virtual summit](#) from January 26-28 to discuss planning and policymaking through the lens of improving racial equity. Topics include restorative justice for past transportation decisions, equity in housing and land use, and the impact of minority businesses on neighborhood vitality. Registration for the event is free.

Webinar Panelists Discuss Inclusive Planning and Engagement in Tribal Communities

America Walks hosted [a webinar](#) on inclusive planning in Tribal communities, with a focus on strategies to engage persons with disabilities in designing safe and accessible transportation systems. The session provided an overview of a new [white paper](#) focused on inclusive engagement of disabled Native Americans, and featured a panel discussion with representatives from disability advocacy organizations, Native American Tribes, and active transportation planners.

Study Provides Insights into the Use of Wayfinding Apps by Deafblind Travelers

Frontiers in Education published [a report](#) summarizing feedback from Deafblind travelers who rely at least partially on wayfinding mobile applications to navigate urban areas. Deafblindness is a combination of sight and hearing loss that impacts a person's ability to get around, communicate, and access information. The study recognized a lack of existing research on assistive travel technologies and aimed to elevate the perspectives of Deafblind persons as a unique disability community. Results from the study revealed that Deafblind travelers frequently rely on, and benefit from, wayfinding applications in urban areas, but require greater consistency of access and functionality. Specific requests included enhanced visual features, access to touch and feel based information, recognition from application developers and other disability groups, and add-ins that can assist in asking for help when lost or signal an altered bus route.