

Human Environment Digest

March 19, 2020

Welcome to the Federal Highway Administration (FHWA) Office of Human Environment biweekly 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

Research Analyzes Google Street View as a Pedestrian Safety Audit Tool

A [recent study](#) published in *Epidemiology* analyzes the use of Google Street View as a pedestrian safety audit tool. Researchers developed a virtual audit instrument to examine pedestrian injury risk at intersections near schools in New York City by integrating Computer Assisted Neighborhood Visual Assessment System with Google Street View imagery. The research explains that pedestrian safety assessments are critical to the development of injury prevention strategies for many communities.

Fremont, California Receives National Award for Leadership in Youth Road Safety

The city of *Fremont, California* received the [2020 Vision Zero for Youth USA Leadership Award](#). Between 2013 and 2018, major crashes in Fremont decreased by more than 50 percent. Major crashes among youth under 16 years of age reduced by more than 90 percent. Among its achievements are the completion of safety assessments for all city schools (funded jointly by the city and school district) and 300 subsequent, completed "quick-build" safety improvements with another 100 planned for this year. The award was presented by the [National Center for Safe Routes to School](#) to Mayor Lily Mei at the city's March 3 City Council Meeting.



Infrastructure

FHWA Develops CMAQ Emissions Calculation Toolkit

The *Federal Highway Administration* has developed the [Congestion Mitigation and Air Quality Improvement \(CMAQ\) Emissions Calculator Toolkit](#), which is a spreadsheet tool for transportation agencies to use in determining the emissions benefits of their projects. There are 10 tools currently available to help facilitate the calculation of representative air quality benefit data. The tools cover a wide range of CMAQ-eligible project types, including Bicycle-Pedestrian Improvements, Transit Service and Fleet Expansion, Alternative Fuels and Vehicles, Diesel Retrofit/Repower, and Traffic Flow Improvements.

AASHTO Launches Public Outreach Campaign on Benefits of Transportation Infrastructure Investments

The *American Association of State Highway and Transportation Officials* recently launched a [national campaign and interactive map](#) to increase public awareness around transportation infrastructure investments. The map highlights transportation projects that help reduce travel times, increase safety conditions, protect the environment, and boost the economy. Users can click on each State to learn more about the economic and quality of life benefits the projects provide, including local economic revitalization, environmental justice, community health, and active transportation.

Report Examines Active Transportation Connections to Healthy Food Access

A [recent report](#) from a national transportation advocacy group reviewed the transportation challenges associated with healthy food access. The report explains that lack of safe and convenient transportation options combined with lack of access to affordable, nutritious foods often place significant burdens on individuals and families. Issues such as

inadequate infrastructure conditions can obstruct safe and convenient walking or bicycling, especially for families without access to vehicles or public transit service. The report also discusses the importance of planning [Safe Routes to Healthy Foods](#), highlighting the need to build and strengthen connections between multimodal transportation and local food sources.



Innovation

Research Examines Accessibility Impacts of Micromobility and Motor Vehicle Parking

A [recent study](#) published in *Transportation Research Interdisciplinary Perspectives* examined the parking behaviors of bicycles, scooters, and cars to assess whether they impact traveler accessibility. Researchers observed over 3,600 parked bicycles, scooters, cars, and sidewalk furniture such as stairs and advertisement boards across five cities. The study also discusses the concept of scooter clutter, a common public perception that dockless electric bikes and scooters litter streets and sidewalks, thereby impeding accessibility. Researchers found that the vast majority of parked bicycles and scooters did not block sidewalk access per Americans with Disabilities Act guidelines, while roughly 25 percent of parked motor vehicles impeded access for other travelers. The study also offers insights for communities to address these issues through comprehensive parking management across all modes, including micromobility, private cars, ridehailing vehicles, and freight delivery.

Survey Highlights Consumer Hesitation Towards Automated Vehicle Technology

A [recent survey](#) conducted by AAA on automated vehicle (AV) technology found that most consumers feel uncertain about self-driving cars. The survey found that 12 percent would feel safe riding in an AV. Additionally, 28 percent indicated they are unsure about self-driving cars, highlighting the need for more public information on AV technology. More than half of the survey respondents expressed interest in learning more about the safety issues associated with AVs, particularly liability issues in the event of a crash with a self-driving car. The survey highlights an opportunity to shift attitudes towards AV technology based on enhanced public information and educational outreach.



Accountability

Report Analyzes Effectiveness of Existing Congestion Management Strategies

A [recent report](#) from a national transportation advocacy group analyzed common congestion management strategies. The report explains that congestion remains a key issue for many communities due to development sprawl and road network expansion, contributing to increased motor vehicle travel. It also discusses providing and improving access as a congestion mitigation strategy that helps reduce the need to drive and the length of travel. The report provides a set of policy recommendations to improve congestion management including enhanced connections between housing, employment, healthcare, and other services.

Research Paper Explores Data-Driven Approach to Local Regulation of New Mobility Providers

A [recent research paper](#) published by the *Harvard Kennedy School of Government* at *Harvard University* discusses what municipalities can do to regulate new mobility providers in the quickly evolving mobility landscape. The paper explains that many communities face challenges with effectively managing an infrastructure system that integrates innovative mobility options such as scooters, electric bicycles, shared vehicles, transit, and other modes. It highlights the need for local investment in both physical and digital infrastructure, and outlines a framework for data-driven regulation by using real-time data analytics from mobility providers and other existing tools to inform planning processes.

Research Paper Evaluates Economic Savings and Benefits of Linking Land Use and Transportation

A [recent paper](#) from an independent research organization evaluates the economic savings and benefits of compact, multimodal development. The paper outlines how to decrease public infrastructure costs, improve accessibility, and reduce motor vehicle travel, which collectively provide economic, social, and environmental benefits for communities.