## Human Environment Digest

### June 27, 2019

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.



#### Preliminary Estimate of 2018 Traffic Fatality Data Indicates Increase in Pedestrian and Bicycle Fatalities

A <u>preliminary estimate of 2018 traffic fatality data</u> from the *National Highway Traffic Safety Administration (NHTSA)* demonstrates that pedestrian and bicyclist fatalities are projected to increase 4% and 10% from 2017 to 2018. Fatalities of drivers over the age of 65 also increased slightly in 2018, which contrasts with decreases in driver, passenger, and motorcycle deaths. NHTSA will publish the final 2018 data in fall 2019.

#### Report Covers Age and Race Data for Pedestrian Deaths in Each State

In collaboration with the AARP, Smart Growth America (SGA) released <u>State-specific reports</u> that highlight how pedestrian fatalities have changed over time and who is most vulnerable. These reports include age and race data for pedestrian deaths in each State and take a closer look at smaller metropolitan areas. Reports for each of the 50 States and the District of Columbia can be found under the "State reports" tab on the <u>webpage</u>.

#### Study Demonstrates Interstate Speed Limits in Rural Areas Correlated with Fatal Crashes

The *Transportation Research Board (TRB)* <u>published a study</u> revealing that increasing the mileage of rural interstates with speed limits of 70, 75, or 80 miles per hour by 1% is associated with fatality increases of 0.2%, 0.5%, and 0.6% respectively. The study noted that driver distraction, such as mobile phone use, correlated with an even greater increase in fatal crash rates at these speeds. 25 States have increased their maximum speed limit since 2001. This study provides data to help inform speed limit policy.

#### **Report Examines How Better Data Collection and Integration Can Support Safety Outcomes**

The *International Transit Forum* released a report outlining how data can be utilized to solve road safety problems across modes. The report explores emerging solutions to better assess and analyze crash data, identifies strategies to address infrastructure safety challenges, and proposes ways to utilize driver assistance and other connected technologies. The report also recommends strategies to better equip safety professionals, including sharing and integrating safety data, and updating legal systems to support safety outcomes.



#### Department of Transportation Announces Availability of Infrastructure Grant Funds

The U.S. Department of Transportation (DOT) <u>published a Notice of Funding Opportunity</u> to apply for \$900 million in discretionary grant funding through the Better Utilizing Investments to Leverage Development (BUILD) Transportation Discretionary Grants program. The deadline is July 15, 2019. BUILD Transportation grants are for investments in surface transportation infrastructure and are to be awarded on a competitive basis for projects that will have a significant local or regional impact. Selection criteria include safety, economic competitiveness, quality of life, state of good repair, innovation, and partnerships with a broad range of stakeholders.

#### Study Investigates Vehicle Parking and Curb Use

The Transportation Research Board (TRB) published a study examining commercial vehicle parking and curb usage in downtown Seattle, Washington. The study found high levels of unauthorized parking in commercial vehicle loading zones, by both commercial and personal vehicles. This driving behavior contributes to congestion and safety issues, as delivery vehicles idle or park in unsuitable locations. Practitioners can use this research to inform curb management and parking policies.

#### Study Examines Neighborhood Walkability and Residential Preferences

Researchers at the *University of British Columbia* <u>studied the relationship</u> between residential preferences and neighborhood walkability in the region of Waterloo, Ontario. The study found an unmet demand for walkable neighborhoods, and that walkable neighborhoods are associated with a decrease in vehicle use. The findings from this study may be particularly useful for mid-sized cities and suburban areas considering the implications of neighborhood design on travel behavior and health outcomes.

#### Report Illustrates Connections Between Walkability, Land Use, and Economic Performance

"<u>Foot Traffic Ahead 2019</u>" ranks the 30 largest metro areas in the United States based on the share of office, retail, and multi-family space in walkable urban areas. This serves to demonstrate how walkability supports economic performance by driving investment and development. The report also includes an analysis of social equity based on metro areas' housing and transportation costs and the mix between rental and for-sale housing. The report offers recommendations of increasing housing density to promote affordability and supporting more walkable urban development.

#### New Report Shows Advantages of Increasing Accessibility to Transit Systems

Researchers at the *University of Sydney* recently published <u>a report</u> that explores how adding additional entrance and exit gates at stations affects transit use. These entrances fill gaps and missing links to jobs and other key destinations, while shortening walking distances and improving connections to street networks. The report found that increasing accessibility to transit platforms at 44 stations contributed to an average of 5% more morning boardings on average, with one station increasing boardings by 35%. Transit professionals can use this information to consider how they might prioritize resources to best promote access to stations and surrounding communities, while promoting ridership and transit-oriented development.



#### **APA Article Highlights Challenges of Curb Management**

The American Planning Association (APA) published a Planning Magazine article focusing on the challenges of curb management amidst competing demands of existing traffic as well as emerging technologies such as rideshare services, electric vehicle charging areas, and micromobility options. The article suggests that transportation planners consider curb use on a minute-by-minute scale in this rapidly changing landscape. The article offers examples of tools that use real-time information to support curbside management, and to consider land use and design challenges beyond the curb in order to balance priorities of safety, efficiency, and social and economic implications.

#### **TRB Releases New Women and Gender in Transportation Newsletter**

The *Transportation Research Board (TRB)* recently released a new edition of TR News focusing on <u>Women and Gender in</u> <u>Transportation</u>. This issue explores topics such as the equity impacts of women's travel constraints, challenges faced by low-income female bicyclists and pedestrians, and the importance of considering gender implications of emerging mobility technologies and associated data collection.

#### Study Examines Implications of Mixed Traffic of Autonomous and Human Driven Vehicles

The *Transportation Research Board (TRB)* released a study that explores the differences in driving characteristics between human-driven and connected and autonomous vehicles (CAVs), primarily focusing on acceleration/deceleration, speed, and response time. The study found that these differences allow for a platoon formation with adequate space to allow for vehicles to cut in; however, in heavier traffic these differences can undermine traffic throughput. Practitioners can use this study to better understand how to safely incorporate CAVs into their transportation network to support the safety of all users.

# Report Offers Information on Transportation Infrastructure and Technologies for Connected and Automated Vehicles

The *Minnesota Department of Transportation* <u>released a report</u> on preparing local agencies for the future of connected and autonomous vehicles. The report offers descriptions and implementation timelines for autonomous and connected vehicle technology, as well as descriptions and recommendations for infrastructure needs such as signing, pavement markets, traffic signals, and data information sharing. This report supports transportation agencies to prepare for implementation in the next five to ten years, and identifies potential benefits of increased mobility, reduced vehicle emissions, reduced congestion, and improved safety.



#### Article Considers How Regulation Can Support Adoption of Micromobility

An article from *Forbes* assesses the benefits and challenges of regulation of micromobility devices. The author posits that effective regulation, rather than serving as a hindrance, can support widespread adoption by ensuring safety and allowing pilot projects to assess impacts and opportunities. Active engagement of this emerging mobility can also allow governments to more robustly include it in their planning approaches and frameworks. The author recommends strong partnership between micromobility operators and local governments and regulators in order to best promote this new technology.