

September 2019

TRAC e-News: Delivering Research Results!

The Washington State Transportation Center (*TRAC*), conducts transportation research through collaborative partnerships among WSDOT, the University of Washington (UW), and Washington State University (WSU).

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New University Transportation Center focused on failing infrastructure will open at WSU



The U.S. Department of Transportation has awarded Washington State University a \$7.5 million grant to lead a national university transportation center. Helmed by Xianming Shi, associate professor in the Department of Civil and Environmental Engineering, the center will focus on improving the durability and extending the lifespan of the nation's infrastructure. More in these articles:

From Washington State University From U.S. Department of Transportation

Freight

Determining the costs and benefits of a freight and transit (FAT) lane

Research team: Anne V. Goodchild (UW) | Christopher Eaves (Seattle DOT) Sponsor: Seattle DOT

Ongoing: To improve freight and transit access to commercial and industrial areas after closure of the Alaskan Way Viaduct in January 2019, the city of Seattle and WSDOT installed two blocks of a temporary freight and transit (FAT) lane on Alaskan Way. This project is evaluating the benefits of the FAT lane for freight, as well as what happens when the lane is removed. Read more...



Maintenance

Guidebook developed for maintenance material application methodologies



Research team: Xianming Shi (WSU) Sponsors: Clear Roads Research for Winter Highway Maintenance | Minnesota DOT Access the Guidebook

Completed: Because of advances in the science and technologies related to materials, equipment, and weather forecasting, winter road maintenance materials and application methods have significantly improved in the last 10 to 20 years. This goal of this research was to create

updated guidelines on the most recent best management practices for deicing application rates and material application technologies. Read more...

Pavements

Monitoring and documenting the application of SMA on I-90

Research team: Balasingham Muhunthan | Haifang Wen (WSU) | Kim Willoughby | Jon Peterson (WSDOT) Sponsor: WSDOT

Ongoing: Stone mastic (or matrix) asphalt (SMA) provides a deformation-resistant, durable surfacing material suitable for heavily trafficked roads. This project is documenting WSDOT's application of SMA on I-90 in Eastern Washington to help WSDOT in carrying out similar SMA pavement projects in the future. Read more...



Webinar Wednesdays

WSDOT's Research & Library Services Office hosts *Webinar Wednesdays*, a series of bimonthly, one-hour webinars. Each webinar showcases a research project whose results could eventually be implemented statewide.

Below is information about upcoming and recent webinars:

Title VI environmental justice and community engagement - October 2, 2019

To register (free): https://attendee.gotowebinar.com/register/4272394722178968587



How does WSDOT work to ensure equity in projects and programs? This presentation will help you understand how Title VI and Environmental Justice shape agency work and also improve connections with communities. Attendees will gain a better understanding of both of the historical context of these policies and the practical applications at WSDOT.

Ground penetrating radar for hot mix asphalt in-place density (July)

Access the recording

Presenters: Jeff Uhlmeyer, Washington State Pavement Engineer | Jim Weston, WSDOT Roadway Operations Manager

Newer technology for ground penetrating radar (GPR) has shown the ability to measure the density of new asphalt pavements quickly and with better coverage than the nuclear density gauge. To evaluate the feasibility of using GPR for assuring the quality of hot mix asphalt



density, the WSDOT Pavement Office obtained funds to purchase a GPR unit, and comparisons were made with a nuclear density gauge on asphalt paving projects during the 2017 and 2018 construction season. This webinar introduces you to this technology and the initial findings of this research.

Sugar Access: the ability to connect to goods and services across modes, abilities, and socioeconomic groups (May)

Access the recording



Presenters: Kyle Miller, WSDOT Transportation Planning Specialist | Chris McCahill, PhD, Deputy Director of the State Smart Transportation Initiative

Measuring accessibility allows WSDOT to better evaluate what people care about when they travel—connecting multimodal mobility to economic and social opportunities. It also helps us understand who has access to those opportunities, which helps in applying an equity lens to transportation decisions. WSDOT and Smart Growth America's State Smart Transportation Initiative (SSTI) have teamed up on a project to better understand accessibility by developing methodologies and standards to implement accessibility metrics. TRAC e-News will be delivered about three times a year. For more information about TRAC and the groundbreaking work we are doing, please visit our Current Projects and Research News pages. A downloadable, pdf version of this newsletter is also available.

For contact information, follow these links:

- WSDOT Contacts
- UW Contacts
- WSU Contacts

The Washington State Transportation Center (TRAC) is a cooperative, interdisciplinary transportation research agency. Its members, the Washington State Department of Transportation (WSDOT), Washington State University (WSU), and the University of Washington (UW), formed TRAC in 1983 to coordinate transportation research efforts—both state and commercial, public and private—and to develop research opportunities both nationally and locally. TRAC acts as a link among government agencies, university researchers, and the private sector.

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