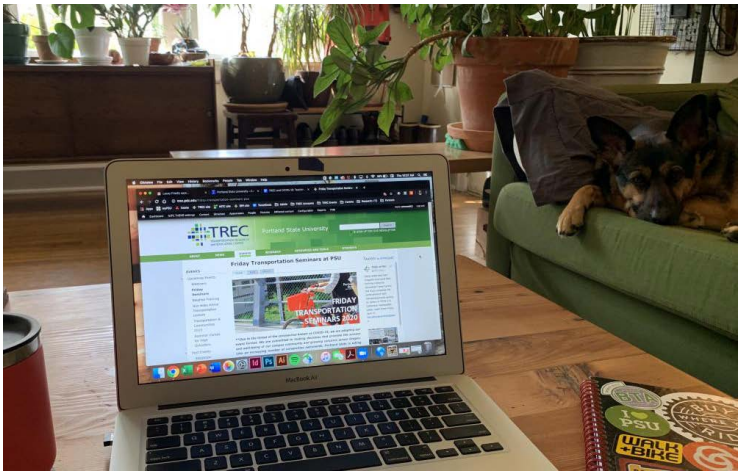
NITC NATIONAL INSTITUTE for TRANSPORTATION and COMMUNITIES

Research and Events April 2020



Teaching Remotely, Events, and COVID-19 Resources for the Transportation Community

Transportation professionals and educators are navigating new territory as they move their work online. With that in mind, TREC at Portland State University has started a resource page to support transportation faculty in adapting coursework and our community in navigating transportation impacts of the pandemic. We've curated a selection of our recorded seminars and webinars for online learning in engineering and planning; stories from transportation professors who are also navigating the sudden shift to remote learning; and more to come like K-12 STEM! We'll keep adding to this page, so please check back throughout the month.

SEE REMOTE LEARNING RESOURCES

Shortening the Age of Information: Connecting Vehicles to Infrastructure in Real Time

Now that we are decades into the Age of Information (AoI), it's increasingly important to minimize the ***age*** of information: that is, to make sure the information we have is the very latest. In the world of connected vehicle technology, AoI is a concept that was introduced in 2012 to quantify the "freshness" of knowledge about the status of remote systems. The latest NITC report from the University of Utah offers an innovative way of developing a comprehensive traffic signal control system for connected vehicles that optimizes AoI and reduces communication delay. The system stands to improve safety and operational efficiency.

READ THE RESEARCH

REGISTER FOR THE MAY 12 WEBINAR

Webinar: Visual Exploration of Trajectory Data

Tuesday, April 7, 2020 at 10:00 AM, PDT

How can you use GPS trajectory data in understanding

statewide travel patterns and measuring performance? Dr. Markovic of University of Utah will share a visual exploration of GPS trajectories, as well as the problem of scaling GPS trajectories to the population. How can we use scaled trajectories in computing origin-destination matrices, vehicle-hours delays, VMT, and trip-based performance measures? Dr. Franz of University of Maryland's CATT Lab will demonstrate a suite of visual analytics that enables transportation agencies to easily explore terabytes of GPS trajectory data. He will demonstrate different tools and share the experience of 5 state DOTs that are currently using CATT Lab's trajectory data suite.

REGISTER FOR THE APRIL 7 WEBINAR

Webinar: Findings From 15 Years Of Travel Surveys At Portland Area Transit-oriented Developments (TODs)

Tuesday, June 2, 2020 at 11:00 AM, PDT

Since 2005, Portland State University has periodically surveyed occupants of recently developed higher-density and mixed-use projects near transit, often referred to as Transit-Oriented Developments (TODs). The general objectives of the surveys were to better understand actual transit use, among other factors, of residents in these buildings. Between 2005 and 2018, the research team surveyed residents of nearly 50 TODs. With funding from Metro and NITC, the research team carried out a two-pronged study drawing on this wealth of data.

REGISTER FOR THE JUNE 2 WEBINAR

NITC Research and Partner Updates

- **U.S. DOT Opens Funding Opportunity for University Transportation Centers:** The U.S. DOT has announced a new grant solicitation that makes nearly $5 million available as part of its UTC program. Applications due **May 29, 2020.**
- **Portland State University Awarded $250,000 NCHRP Grant:** PSU and Toole Design Group will develop an "Active Transportation Research Roadmap" on the nation's research priorities for AASHTO's Council on Active Transportation.
- **Guidelines for a Polycentric Region to Reduce Vehicle Use and Increase Walking and Transit Use:** New article by Keunhyun Park, Reid Ewing, Sadegh Sabouri, Dong-ah Choi, Shima Hamidi & Guang Tian published in *Journal of the American Planning Association*, March 2020.
- **PSU Continues Friday Seminars Online:** Next up is "Bus-Bike Designs for the Division Transit Project," presented tomorrow Fri, April 3rd in partnership with APBP Oregon, by Derek Abe (Alta Planning + Design) and Jesse Stemmler (TriMet).
- **University of Utah Logs the Most Trips in Clear the Air Challenge:** The University of Utah logged more trips than any other team participating in this year's Clear the Air Challenge, a month-long competition between organizations in Utah.

NITC University Partners

UPCOMING EVENTS

NITC RESEARCH DATABASE

The **National Institute for Transportation and Communities (NITC)**, is a program of the Transportation Research and Education Center (TREC) at Portland State University. NITC is one of seven U.S. Department of Transportation national university transportation centers. The NITC program is a Portland State-led partnership with the Oregon Institute of Technology, University of Arizona, University of Oregon, University of Texas at Arlington and University of Utah. We pursue our theme—improving mobility of people and goods to build strong communities—through research, education and technology transfer.