

UNIVERSITY TRANSPORTATION CENTER RESEARCH BRIEF

Development of PacTrans Workforce Development Institute - Phase V

Yinhai Wang, PhD, Wei Sun, PhD, Shane Brown, PhD, Kevin Chang, PhD, Billy Connor, Eric Jessup, PhD

Background



With support from WSDOT, other transportation agencies, and the former form of the Region 10 University Transportation Center (UTC), the Civil and Environmental Engineering (CEE) Department at the University of Washington (UW) had operated a very

popular continuing education program called TRANSPEED, which brought transportation engineering's professional training and continuing education to governmental agencies and private firms. It generated huge national influence by conducting 50 workshops annually that serve over 1,400 students. Although the TRANSPEED program was popular and far-reaching, it was badly hit by the most recent financial crisis.

However, with the recent technology development and applications in transportation practice, such as Connected and Autonomous Vehicles (CAVs), smart cities technologies, the demand for continuing education and workforce development is getting even stronger. In order to fulfill the gap, in 2016, a new dialog started between transportation agencies and PacTrans to re-establish a new workforce development program to address the critical workforce development needs of transportation agencies and companies in the Pacific Northwest.

Research Project

Based on the efforts of previous years' projects, the research team has gained thorough understanding of the existing training or professional development needs within Region 10 (i.e., Idaho, Alaska, Oregon, and Washington) through outreach activities including qualitative, structured interviews, online surveys, etc. The research team has successfully launched the PacTrans workforce development institute (WDI) and delivered training courses to transportation practitioners. Specifically, the research team will focus on the following tasks:

Enhancing the online platform for e-learning courses, promotion and outreach activities. The research team will enhance the PacTrans WDI online training platform. The

online platform will serve as a comprehensive learning platform to support the promotion, registration, and e-learning activities.

Developing and delivering new training courses. The research team will continue developing new training courses and certificate programs that cover more topics with critical training needs. Specifically, the PacTrans WDI has delivered/ scheduled to deliver the following training courses:

- Understanding and Applying the Manual on Uniform Traffic Control Devices
- Incorporating Human Factors into Roadway Design and Crash Diagnostics
- Transportation Engineering Project Management
- An Introduction to School Zone Safety
- Geospatial Analysis for Transportation Planners and Practitioners

Developing the assessment and evaluation guidebook for training courses and the overall program. The research team will develop a guidebook including course development processes with carefully designed learningoutcomes and associated learning activities, active learning strategies, reliable assessment and evaluation processes of learning, and overall program and course evaluation.

ABOUT THE AUTHORS

The research team consists of one member from each of our five consortium research partner institutions.

ABOUT THE FUNDERS

This research was funded by the Pacific Northwest Transportation Consortium, with additional support from the University of Washington, Oregon State University, the University of Idaho, the University of Alaska Fairbanks, and Washington State University.

EXPECTED DATE OF COMPLETION March 2022

FOR MORE INFORMATION

https://depts.washington.edu/pactrans/research/projects/ development-of-pactrans-workforce-development-institutephase-v/