

PacTrans Regional Transportation Seminar

<u>Speaker: Dr. Lily Elefteriadou</u> Date: Thursday, May 24 2018 Time: 10:30 - 11:30am, PST Location: UW Seattle Campus Husky Union Building (HUB) Rm 332

Webinar URL https://youtu.be/YYpYDWV7fiE



Organized by

The Pacific Northwest Transportation Consortium (PacTrans) Region 10 University Transportation Center

Seminar Title

Traffic Signal Control with Connected and Autonomous Vehicles in the Traffic Stream

Abstract

The presentation will discuss an on-going work to develop optimization algorithms, simulation tools, and sensor capabilities for enhancing traffic signal control operations when the traffic stream consists of connected vehicles, autonomous vehicles, and conventional vehicles. Early versions of the optimization were deployed and tested at the Traffic Engineering and Research Laboratory (TERL), an FDOT closed-course facility. The results from the field test confirmed the feasibility of the concept and are now used to enhance it for future testing and ultimately for field deployment. The research, led by UF, is funded by NSF and FDOT, and involves two industry partners: ISS and Econolite.

Speaker



Dr. Ageliki Elefteriadou is the Director of the UF Transportation Institute (UFTI) and the Kisinger Campo Professor of Civil and Coastal Engineering at the University of Florida. She is also the Interim Chair of the Department of Industrial and Systems Engineering (ISE) at University of Florida since August 2016. Her research focus is traffic operations, traffic flow theory and simulation. She is the principal investigator of the US DOT-funded Regional University Transportation Center for Region 4 (Southeast Transportation Research Innovation Development and Education, or STRIDE). STRIDE involves seven other universities in the southeast and is funded with \$6.8 Million from the US DOT plus an equal amount of cost sharing from non-federal sources (period of performance is January

2012 to January 2016). STRIDE focuses on issues of livability, safety and economic competitiveness. She has served as the principal investigator for several other federal and state projects, funded by the National Cooperative Highway Research Program (NCHRP), the National Science Foundation (NSF), the Federal Highway Administration, PennDOT and FDOT. She has authored or co-authored more than one hundred publications and reports related to traffic operational quality and highway design, as well as a textbook titled "Introduction to Traffic Flow Theory". Dr. Elefteriadou serves on the Editorial Board of the Transportation Research: Part B, and is the Chair of the Transportation Research Board's Highway Capacity and Quality of Service Committee. She is also on the Executive Board of the Council of University Transportation Centers and was the 2014-2015 President of the ARTBA Research and Education Council.

For questions, please contact Cole Kopca, Assistant Director for PacTrans, at pactrans@uw.edu | 206.685.6648 | www.pactrans.org More Hall 112, Dept. of Civil & Environmental Engineering | University of Washington, Seattle, WA 98195-2700