



PacTrans Regional Transportation Seminar

Speaker: Konstantinos P. Triantis

Date: Thursday, April 6, 2017

Time: 3:30 - 4:30pm, PST

Location: UW Seattle Campus

Electrical Engineering Bldg (EEB) 125



Webinar URL

<https://youtu.be/s4xTA-Y0qFI>

Organized by

PacTrans and the University of Washington Civil and Environmental Engineering Department

Abstract

The objective of this presentation is to highlight research themes and opportunities when considering the efficiency measurement paradigm as a way to pro-actively inform our thinking on the design and operation of engineered systems. Initial formulations and conceptualizations that address three key issues are covered first. These include: disaggregate performance assessment (network performance approaches); characterizing the dynamic nature of systems (the dynamic productive efficiency model (DPEM)); messy data, influential and contextual variables in efficiency measurement (multivariate methods and fuzzy clustering).

Next, ongoing research is discussed that covers the following topic: efficiency measurement and the design of resilient critical infrastructure systems. Within this topic we will expand on one example: the evaluation of evacuation performance from three disciplinary perspectives transportation engineering, disaster management, and efficiency measurement.

Speaker



Konstantinos (Kostas) Triantis is currently the John Lawrence Professor of Industrial Engineering and Operations Research in the Grado Department of Industrial and Systems Engineering (ISE) at Virginia Tech's Northern Virginia Center. Among other positions, Dr. Triantis served as the program director for the Civil Infrastructure Systems at the National Science Foundation. In addition to research and education responsibilities, Dr. Triantis has held administrative responsibilities as the program director of the Systems Engineering program across the Commonwealth of Virginia, the director of the ISE Ph.D. program in Northern Virginia, and is a member of the College of Engineering's Executive committee for the Northern Virginia programs.

He also co-directs the System Performance Laboratory (SPL) at Virginia Tech's Northern Virginia campus. Dr. Triantis research has focused on performance measurement and evaluation, fuzzy methods for data envelopment analysis, dynamic efficiency analysis, and affordability engineering, and has included research on the performance evaluation of civil infrastructure systems, as well as social service and manufacturing enterprises. He has been funded by the National Science Foundation, Federal Highway Administration, Office of Naval Research, NASA, U.S. Navy, American Red Cross, U.S. DOT&E, McClatchy Tribune Wire Information Service, and U.S. Postal Office, among others. He has been a consultant for organizations such as the American Red Cross and the South Florida Water Management District.

For questions, please contact Cole Kopca, Assistant Director for PacTrans, at pactrans@uw.edu | 206.685.6648 | www.pactrans.org
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