



# PacTrans Regional Transportation Seminar

**Speaker: Prof. Ram Pendyala**

**Date: Thursday, November 1, 2018**

**Time: 4:15 - 5:15pm, PST**

**Location: UW Seattle Campus**

**Allen Library Auditorium**

**Ground Floor, North Wing, Room G81L**



## Webinar URL

<https://youtu.be/VYil-4Lolak>

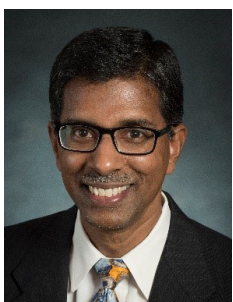
## Title

**It's All About the Size of the Effects: The Case of the Millennials Difference and the Influence of the Built Environment**

## Abstract

Travel behavior analysis is characterized by the estimation of statistical and econometric models to identify, understand, and quantify the significance of various explanatory factors in explaining the behavioral phenomenon under study. When a variable is found to be statistically significant, it is generally inferred that the variable plays a significant role in shaping the behavioral choice being modeled. However, test statistics of significance do not necessarily tell the whole story. Not only is it of value to determine the significance of a variable, but it is also of value to determine the size of the impact of the variable in question. This will provide a more robust basis to formulate policy, forecast travel demand, and plan for the future. While it is easy to estimate size effects for individual explanatory variables in simple linear regression models, the estimation of size effects is more complex in discrete choice models and simultaneous equations models with mixtures of dependent variable types. This presentation offers a methodological approach to estimate size effects of different factors that influence a phenomenon under investigation, and demonstrates the application of the approach in two contexts. First, the method is applied to determine the degree to which millennials are truly different in their activity-travel behaviors and second, the method is applied to estimate the size of the built environment effect in shaping household vehicle miles of travel (VMT).

## Speaker



Ram Pendyala is a Professor of Transportation in and the Interim Director of the School of Sustainable Engineering and the Built Environment at Arizona State University. He is also Director of TOMNET, a Tier 1 University Transportation Center of which the University of Washington is a consortium member. Between 2014 and 2016, he served as the Frederick R. Dickerson Chair of Transportation at Georgia Tech. Prior to joining ASU in 2006, he served on the faculty at the University of South Florida for 12 years. He has served as the Chair of the TRB Traveler Behavior and Values Committee, Travel Analysis Methods Section, and Planning and Environment Group. He has also served as Chair, Vice-Chair, and Secretary/Treasurer of the International Association for Travel Behaviour Research. He is currently an Associate Editor of Transportation Research Part D. He has published extensively, with more than 120 papers in journals and 250 publications in all. He has conducted more than \$8 million in research for federal, state, local, and international agencies. Like Professor Cynthia Chen, he has his PhD from the University of California at Davis and was advised by the late Professor Ryuichi Kitamura.

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