

# Seminar Guest Speaker

**Patricia L.  
Mokhtarian**



**September 9<sup>th</sup> 9:45am – 11:00am**

***HAMP 2117***

## **The Insidious Problem of Selection Biases: How to Recognize Them, and What to Do about Them**

In the (frequently-occurring) context of estimating the impact of a "treatment" (an intervention, or experiment) on an outcome of interest, using only cross-sectional data, selection biases are a common problem. Selection biases occur when the treatment is not randomly distributed, but rather, "treated" individuals (even before treatment) differ from "untreated" ones in unobserved ways that are relevant to the outcome. If such a bias is not properly accounted for, conventional methods will, in turn, yield biased estimates of the treatment effect. This talk explains the selection bias phenomenon in intuitive and partly technical terms, sketches a technical solution to it (the endogenous switching regression approach), and presents an empirical application to estimating the effect of teleworking on vehicle miles traveled.

### **About Dr. Mokhtarian:**

*Patricia Mokhtarian is a Regents Professor and the Clifford and William Greene, Jr. Professor in the School of Civil and Environmental Engineering at the Georgia Institute of Technology. She joined Georgia Tech in 2013, after 23 years on the faculty of the University of California, Davis. Dr. Mokhtarian has specialized in the study of travel behavior for more than 40 years and has authored or co-authored nearly 200 peer-reviewed journal articles, as well as numerous book chapters and research reports. She is a past Chair of the International Association for Travel Behaviour Research, and received a Lifetime Achievement Award from that society in 2021. Dr. Mokhtarian was elected to the US National Academy of Engineering in 2024, and serves on the editorial boards of nine transportation journals.*