## Academic Seminar Series



NUTC

Northwestern University Transportation Center presents:

# Research, Practice & Future Directions of Dynamic Ridesharing

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#### ABSTRACT:

Although ridesharing can provide a wealth of benefits, such as reduced travel-costs, congestion, and consequently less pollution, there are a number of challenges that have restricted its widespread adoption. In fact, even at a time when improving communication systems provide real-time detailed information that could be used to facilitate ridesharing, the share of work trips that use ridesharing has decreased by almost 10% in the past 30 years. In this seminar, Dr. Dessouky presents a classification and taxonomy to understand the key aspects of ridesharing systems. The objective is to present a framework that can help identify key challenges in the widespread use of ridesharing and thus foster the development of effective formal ridesharing mechanisms that would overcome these challenges and promote its wide spread use.

#### SPEAKER BIO:

Maged M. Dessouky is a Professor in the Daniel J. Epstein Department of Industrial and Systems Engineering and Director of the Epstein Institute at USC. Dr. Dessouky has an in-depth theoretical and practical understanding of models and heuristic methods for transportation system optimization. He was the Principal Investigator of an FHWA-funded project to develop Transportation Market, a distributed system for negotiating routes and prices between consumers and providers of transportation. He is Area/Associate Editor of Transportation Research Part B: Methodological, Computers and Industrial Engineering, and IIE Transactions and serves on the Editorial Board of Transportation Research Part E. He is the recipient of the 2007 Transportation Science and Logistics Best Paper Prize for his paper, "Optimal Slack Time for Schedule-Based Transit Operations", and is a Fellow of IIE. He received his Ph.D. in Industrial Engineering from the University of California, Berkeley, and M.S. and B.S. degrees from Purdue University.