

Transportation Center Seminar Series presents.....

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Dynamic Transit and Traffic Assignment: Preliminary Thoughts on Matchmaking

Thursday – Oct. 29, 2009
4:00 - 5:00 pm

Refreshments available at 3:30 pm

Location:
Transportation Center –Lower level
Northwestern University
Chambers Hall - 600 Foster
Evanston, IL

Abstract: In this research, we consider the development of a dynamic transportation assignment system, including both transit and traffic assignment. One advantage of such a system is that it can be used to analyze multi-modal planning and operations strategies, in which the transportation system as a whole can be managed in an integrated manner. Most existing dynamic traffic assignment (DTA) models lack some fidelity in their representation of transit, either in the operational characteristics or in the assignment logic for transit services. We describe a dynamic transit assignment model which can work directly within a DTA model, with individual persons as agents in the transit assignment. The assignment model is described and illustrated with a small a case study. Some of the remaining challenges in model calibration and validation are also discussed.

Bio: Mark Hickman is the Director of the Advanced Transportation and Logistics Algorithms and Systems (ATLAS) Center at the University of Arizona. He is also an associate professor in transportation engineering within the Department of Civil Engineering and Engineering Mechanics at the University of Arizona. Dr. Hickman's research expertise and teaching portfolio includes public transit planning and operations, urban transportation planning and modeling, and the application of remote sensing technology in transportation. He holds a PhD in Transportation Systems from MIT.