

**THE CONCORDIA INSTITUTE FOR INFORMATION SYSTEMS  
ENGINEERING  
IS PLEASED TO PRESENT THE FOLLOWING GUEST LECTURE IN  
OUR CIISE DISTINGUISHED SEMINAR SERIES**

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**Dr. Ahmed M. El-Geneidy, Assistant Professor**  
School of Urban Planning, McGill University

**The use of AVL and APC technologies in public transit planning and operations**

In recent years, the use of performance measures for transit planning and operations has gained a great deal of attention, particularly as transit agencies are required to provide service with increasing demand and diminishing resources. The widespread of intelligent transportation systems (ITS) technologies in transit systems has opened the window for automating the generation of comprehensive performance measures. In the last decade several transit agencies have extensively used archived data obtained from automatic vehicle location (AVL) and automatic passenger counters (APC) to generate performance indicators through monthly, quarterly, and annual reporting. In this talk I will demonstrate the power of using visualization tools to understand the abundance of AVL and APC data. In addition, I will show several applications on how to use such data transit planning and operations. It is envisioned that systematic use of these data can assist transit agencies in improving the quality and reliability of its service, leading to improvements to customers and operators.

**Biography:** He received B.S. and M.S. degrees from the Department of Architectural Engineering at the University of Alexandria, Egypt, and continued his academic work at Portland State University, where he received a Graduate GIS Certificate and earned a Ph.D. in Urban Studies for his dissertation titled "The use of advanced information technology in urban public transportation systems: An evaluation of bus stop consolidation policy." After finishing his PhD in 2005 he moved to the Twin Cities to work as a post-doctoral research fellow at the University of Minnesota with David Levinson and Kevin Krizek. In August 2007 Ahmed moved to Montreal, Canada to start his current position as an assistant professor at the School of Urban Planning, McGill University. He is currently leading the transportation research at McGill (TRAM) research group. Ahmed's research interests include land use and transportation planning, transit operations and planning, travel behavior analysis including using motorized and non-motorized modes of transportation, and measurements of accessibility and mobility in urban contexts. Ahmed has a special interest in transportation needs of the disadvantaged populations. He is a Member of the Centre Interuniversitaire de Recherche sur les Réseaux d'Entreprise, la Logistique et le Transport pour le Québec, le Canada et le monde (CIRRELT).

**Thursday, Oct 14, 2010**

**16:00**

**EV003.309**

