



# Séminaire du CIRRELT Seminar

## Khandker M. Nurul Habib

Professor, University of Toronto

Professeur invité Trottier /  
IET Visiting Senior Professor  
Polytechnique Montréal



### AN ECONOMETRIC INVESTIGATION OF THE INFLUENCE OF TRANSIT PASSES ON TRANSIT USERS' BEHAVIOUR IN TORONTO

**Abstract:** The paper presents the results of an empirical investigation of the influence of transit pass ownership on daily transit service usage behaviour under a flat fare system. The transit system of the City of Toronto (TTC) is investigated to evaluate the factors that influence the choice of owning a transit pass and at the same time whether or not a pass ownership influences different transit ridership behaviour. Data from a household travel survey are used to estimate a joint econometric model of the choice of owning a transit pass as a function of benefits drawn from daily transit usage (trip rate and distance travel) along with different socio-economic and land use variables. Results clearly show that a transit pass has a profound and segmenting influence on ridership behaviour in terms of the daily frequency of transit trips and the total distance travelled by transit. Non-pass owners seem to draw higher benefit from daily transit usage than the pass owners. Pass owners seem to have benefits of owning a pass over and above the benefit drawn from daily use of the transit service. Results clearly indicate that a transit pass is more than just unlimited access to transit services for riders and hence should be treated as a mobility tool. Empirical results show the influence of different variables can be exploited to cater to various policies that may encourage higher pass ownership rate and thereby reduce demand for private automobiles.

**Note:** Dr. Khandker Nurul Habib is an Associate Professor of Transportation Engineering in the Department of Civil Engineering at the University of Toronto. He is a licensed professional engineer of Ontario (P.Eng.) and specializes in transportation planning, travel demand modelling, transportation data and survey methods, transport economics and transportation policy analysis. He has been a leader in developing innovative methodology for transportation planning and policy developments. He has extensive research experiences in the application of transportation planning/engineering theories for strategic planning for sustainable development, resource management, infrastructure project evaluations, forecasting demand for infrastructure usage, valuation studies, and development of policy initiatives. He received several international and national awards for his pioneering work in transportation. Currently, he is the Trottier visiting senior professor of Institut de l'énergie Trottier - Polytechnique Montréal. For further information, please visit his website: <http://www.ecf.utoronto.ca/~khandker/>

JEUDI / THURSDAY

3 novembre 2016 /  
November 3rd, 2016  
10h30

Salle / Room 5441  
Pavillon André-Aisenstadt  
Université de Montréal

Ouvert à tous / Open to all

Organisateur / Organizer  
Martin Trépanier



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