Abstract

This research presents the design, implementation and results of a survey of Car and House Ownership in the face of Increasing Commuting Expenses (CHOICE). The CHOICE survey is a web-based survey designed to collect information of commuting mode choices, housing and neighbourhood preferences along with vehicle ownership choices of households with cross-regional commuters in the Greater Toronto Area (GTA). It uses a set of stated preference experiments that are pivoted on the retrospective revealed preference information of commuting trips, car and home ownership of the participating households. The survey uses actual commuting costs and individual specific information of alternative modes (travel time by car and transit based on each trip origin and destination), neighbourhood characteristics and home type as well as pricing to track the medium and long-term modifications of households in the face of increasing transportation costs. The survey was conducted among a sample of households in the GTA that have at least one member making cross-regional trips.

Investigations of the survey data revealed that in the face of increasing commuting expenses people are willing to change their usual travel behavior. This was expressed by choosing more efficient cars, but not so much by switching to transit. As the commuting costs reached higher levels a small percentage of the participants revealed signs of willingness to move their home location in order to commute shorter distances. However, the detailed investigations showed that commuting expenses explain only a small fraction of the reasons that drive people’s residential decisions.

The study targeted cross-regional commuters, most of whom live in the regions surrounding the City of Toronto (Peel, Halton, Durham, York) and work in the downtown core of Toronto. The
spatial analysis of the results indicated that households that currently live in those regions prefer moving to another suburban region, instead of moving to the City of Toronto.

This study provides evidence that vehicle ownership and especially residential location decisions are a complex process and are interrelated. The models developed present some finding about the possible reactions of households in the GTA in the face of extreme increases in transportation costs.