Shopping trip frequency and duration in Canada: An analysis of personal trends based on the General Social Surveys of 1998 and 2005

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Extended Abstract

Travel for shopping activities has been one of the aspects of travel behavior to garner substantial attention in recent years (Bhat, 1996). Shopping is an essential aspect of our day to day lives as it is necessary in order to fulfill numerous biological (i.e. food) and other needs (e.g. clothing, etc.) in addition to being, for many, a leisure or social activity. Despite the rise of online shopping (Mokhtarian, 2004; Farag et al, 2006), shopping continues for the most part to be carried out away from home. As a result, shopping activities induce travel. The study of shopping travel behaviour is growing in transportation research since there is evidence that the proportion of travel for retail and service activities is increasing such that traffic congestion can no longer simply be attributed to work related travel (Bhat and Steed, 2002; Zhang, 2005). Bhat and Steed (Bhat and Steed, 2002) for instance argue that the flexibility of shopping travel is likely to be influenced by such factors as socio-demographic characteristics and transportation control measures.

In a Canadian context, shopping travel behaviour is believed to be different for small urban or rural residents and residents of large urban areas. Historically, it has been assumed that residents who live in rural areas spend more time travelling in order to engage in different activities compared to residents who reside within urban areas (Pucher and Renne, 2005). However, this statement has not been thoroughly researched. Rural areas have experienced a continual increase in automobile ownership and improvements to the transportation network (in particular arterial highways and the expressway system), allowing residents to travel longer distances in less time. Similar improvements to transportation technology and infrastructure have facilitated the decentralization of activities and sprawl, which in turn, has increased the need for travel. Encouraged by some of these developments, the commercial sector has evolved in a highly dynamic fashion, in response to changes in urban form, the transportation system, socio-demographic characteristics, and economic competition between firms (Jones, 2000; Hernandez and Simmons, 2006). As the commercial sector has restructured, large format retailers and power centres commonly associated with large metropolitan areas are increasing their presence in smaller markets (Gomez-Insauti, 2006)(Gomez-Insauti 2006). This restructuring has resulted in fewer, but larger retail outlets in decentralized areas (Bromley and Thomas, 1993; Gomez-Insauti, 2006). The result of the new commercial environment is increased competition between outlets, such that stores are no longer simply competing against other stores within the same neighbourhood, but often against stores across the entire community or even across an entire region (Vias, 2004; Hernandez and Simmons, 2006). Although the current system has been mostly problematic for smaller (independent) retailers, it can be argued that it has provided benefits for consumers (Vias, 2004). These include increased quantities of products available, as the creation of superstores means consumers can do much of their shopping at one location, reducing the number of trips to obtain lower prices for goods and services (Vias, 2004). However the trade-off is that most consumers must travel longer distances to access shopping opportunities. As such, the benefits are generally only available for individuals who own an automobile (Bromley and Thomas, 1993). Individuals with poor mobility, such as those without access to an automobile, are at a disadvantage since they cannot easily travel longer distances. Thus they are dependent upon stores that are
easily accessible by foot or public transit (Bromley and Thomas, 1993). Furthermore, Bromley and Thomas (Bromley and Thomas, 1993) suggest that the greatest disadvantage is suffered for convenience goods.

The objective of this study is to analyze the shopping frequency and travel duration of Canadians for 1998 and 2005 using the General Social Survey. Analysis of shopping behaviour will describe the one day attributes for residents of non-Census Metropolitan Areas (non-CMA) and those living in Census Metropolitan Areas (CMA) and investigate a number of hypothesis that have not been the focus of research in a Canadian context, including the claim that consumers in rural areas tend to travel longer durations to satisfy their shopping needs, and the effect of mobility tool ownership on activity participation and distance traveled. From a technical perspective, joint discrete/continuous models will be used to analyze the propensity to perform shopping tours and the total duration spent travelling for shopping, while controlling for the potential correlations between these two processes. The models will compare individuals for two different periods, 1998 and 2005, to examine whether, and if so how, shopping travel behaviour has changed over time. While data to investigate in depth the effect of the changing retail landscape on travel behavior is not available, the research presented here will provide circumstantial evidence of the evolution of travel for shopping over the period covered by the General Social Survey.

References


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