New **E**ngland
University
Transportation
Center

NE University Transportation Center
77 Massachusetts Avenue, E40-279
Cambridge, MA 02139
Phone: 617-253-0753
Fax: 617-258-7570
web.mit.edu/utc

Principal Investigator:	Chris Zegras	**Co-Principal Investigator:**	Eran Ben-Joseph
Title:	Assoc. Prof.	**Title:**	Assoc. Prof.
University:	MIT	**University:**	MIT
Email:	czegras@mit.edu	**Email:**	Ebj@mit.edu
Phone:	2-2433	**Phone:**	3-7305

Final Report

Project Title:

Travel Behavior of the Aging Boomers: Evidence from Age-Restricted Communities (Phase III)

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Background

This project explored the relationship between age-restricted neighborhoods and baby boomers' local travel habits. Ostensibly designed for older adult lifestyle preferences, age-restricted neighborhoods might influence physical and/or social activity among residents, leading to healthier lifestyles. We examine this possibility, focusing on recreational walk/bike and local social trip-making among "leading edge" baby boomers (age 55–64 during data collection in 2008): comparing age-restricted neighborhoods in suburban Boston with nearby non-age-restricted neighborhoods; and assessing the effects of neighborhoods' physical characteristics. That is, we test two potential sources of behavioral effects: those arising from social (and other unobserved) characteristics of age-restricted neighborhoods and those resulting from particular physical attributes.

The great majority (71%) of age-restricted neighborhoods in the USA are suburban, even more suburban than overall locations of older adult households. This implies limited connectivity to other neighborhoods, limited local retail, dispersed employment and other services, and limited or no public transportation. In this suburban context, we focus locally, where physical and community differences and, thus, potential behavioral effects may arise. We answer the following question: do neighborhood-related characteristics influence local-level recreational walk/bike and social activity trip-making? Drawing from social ecological theory and utility-based travel behavior theory, our analysis aims to discern community (e.g., social network) versus physical (e.g., street network) influences. Unlike most previous research in this field we use full structural equations models, incorporating attitudes and residential choice, to control for self-selection and account for direct and indirect effects among exogenous and endogenous variables.

Approach

We use a quasi-experimental, cross-sectional research design comparing suburban age-restricted and un-restricted neighborhoods in Greater Boston, utilizing a mail-back survey instrument, which included a $5 non-contingent cash incentive, a travel survey for retrospective trip counts over the past week; attitudinal questions, such as preferences for walking and cycling; and household/individual questions. We received 1,650 household responses, 1,422 after excluding problematic responses (effective response rate of 20%): 349 from age-restricted neighborhoods (28% response rate) and 1,073 from un-restricted neighborhoods (19% response rate). Neighborhood characteristics were measured using a Geographic Information System (GIS) and public and private data sources.

We applied Zero-inflated Negative Binomial (ZINB) models to recreational NMT and social trips, using structural equations models that simultaneously incorporate attitudes possibly affecting residential choice/travel behavior *and* a residential choice model. The models aim to control for residential self-selection and account for the direct and indirect effects among exogenous and endogenous variables, examining three types of relationships: residential choice, residential preference, and travel behavior.

Findings

The age-restricted neighborhoods attract older, higher income baby boomers who prefer age-segregation. These communities increase the likelihood of boomers being active – i.e., making at

least one local recreational NMT trip – but not the number of NMT trips among the active. Physical characteristics have only an indirect effect, by influencing the decision to live in age-restricted settings. Those with a "pro-Walkable" mindset are more likely to be active (make at least one recreational NMT trip); the community and, indirectly, design aspects of age-restricted neighborhoods increase residents' likelihood of being active, after controlling for self-selection. This provides some support for the social ecological model of health promotion – the social-physical setting of the age-restricted neighborhoods apparently provides a medium for active living. Among the active, however, the neighborhood has no effect on increased recreational NMT trip-making. The age-restricted effect may come from social settings (i.e., community) or other unobserved (or non-comparable) physical characteristics distinguishing age-restricted from un-restricted suburbs. For example, the age-restricted neighborhoods studied have more activity destinations (e.g., clubhouses) and slightly higher inter-connectivity (proxied by intersection density) than typical suburbs.

In contrast, age-restriction has no effect on being social (i.e., the likelihood of ever visiting neighbors); among the social, however, age-restriction increases social trip-making, although perhaps due to self-selection. As in the recreational NMT case, some age-restricted physical characteristics (intersection density, neighborhood facilities, and destinations) indirectly influence social trip-making among the social. In this case, however, residents may be purposefully choosing age-restricted settings and their related design attributes: these places may simply attract those inclined to make more social trips. Age-restricted settings will not "make" people social, but may attract those with higher social trip-making tendencies.

The findings indicate the importance of distinguishing between trip types, including when attempting to control for self-selection. The results confirm intuition: an individual may choose a neighborhood to satisfy desired local social activity; this residential choice to satisfy one activity preference might then induce changes in another activity (e.g., recreational NMT).

Conclusions

Overall, living in age-restricted, as opposed to un-restricted, suburban neighborhoods in the USA might modestly increase the likelihood of residents being active (i.e., making at least one local recreational NMT trip) and the number of local social trips. This may stem from a sense of community fostered in age-restricted neighborhoods and/or unobserved or inter-mingling physical characteristics of place. The analysis faces a number of limitations, including generalizability, unknown relative magnitude of effects, and inability to assess possible impacts over time. While this research offers some insight into the influence of age-restricted neighborhoods on baby boomers' local travel behaviors, it says nothing about the regional travel patterns of this highly suburbanized, automobile-dependent generation.

An article resulting from this research has been accepted (2011) for publication in *Urban Studies*. We are currently examining similar questions among urban-dwelling baby boomers with the ultimate goal of comparing effects across urban and suburban locations.