

Data from: “Developing Strategies to Enhance Mobility and Accessibility for Community-Dwelling Older Adults”

Dataset available at: https://doi.org/10.15760/TREC_datasets.17

(This dataset supports report **Developing Strategies to Enhance Mobility and Accessibility for Community-Dwelling Older Adults**, <https://dx.doi.org/10.15760/trec.267>)

This U.S. Department of Transportation-funded dataset is preserved by Transportation Research and Education Center (TREC) in their data repository PDX Scholar (<https://pdxscholar.library.pdx.edu/>), and is available at https://doi.org/10.15760/TREC_datasets.17

The related final report **Developing Strategies to Enhance Mobility and Accessibility for Community-Dwelling Older Adults**, is available from the National Transportation Library’s Digital Repository at <https://rosap.ntl.bts.gov/view/dot/60562>.

Metadata from the PDX Scholar Repository record:

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Document Type: Dataset

Publication Data: 11-2021

Abstract: This study administered a survey to 146 lower-income adults in Dallas, TX, aged 55 and older, between February and June 2020. As affordable public transportation options target senior citizens age 65 and older, this study focused on older adults as aged 65 and over. However, we also recruited adults aged 55 to 64 to distinguish how emerging seniors differently perceive or perform transportation activities compared to current older adults. In a partnership with a local organization providing resources and information for older adults and family caregivers located in Dallas, we used snowball sampling by recruiting participants from Foster Grandparent Program and Senior Companion Program of the AmeriCorps Seniors. In order to become volunteers in these two volunteer programs, volunteers have to be age 55 and older and not exceeding 200% of the federal poverty guidelines (AmeriCorps, 2020). The research team visited two volunteer trainings and invited potential participants. We also conducted a phone survey for those who were unable to participate in the survey during the in-person training. A total of 146 older adults participated in the survey, with 45.5% over the phone. All of the participants received a \$5 Walmart gift card as an incentive. This study was approved by the University of Texas at Arlington Institutional Review Board (#2020-0034). The survey questionnaire asked about overall transportation behaviors, options, and information regarding their mobility, health and well-being, as well as demographics, based on performance metrics identified from literature (Molin et al., 2016; Lee et al., 2019; Kroesen et al., 2017). Transportation behaviors included daily transportation activity (i.e., performed and missed trips for daily activities) and perceived barriers and concerns about existing mobility options, including personal vehicle, public transit, paratransit, ride from family/friends, and walk/bike. Trip frequencies on each mode recorded the average number of weekly trips, and were

categorized into four groups – more than 10 times, 6 to 10 times, 1 to 5 times, and never. The survey also asked for the likelihood that the participant would adopt a service in the future, and these responses were categorized into four groups - highly likely, likely, neutral, and unlikely. The survey also collected overall attitudes towards different mobility options by asking for participants' perceptions of each option to support their independent living, levels of familiarity, and awareness. We asked whether they obtained transportation information from local (in-person) or web-based resources. The data collected from the travel behavior survey was used to develop an empirically informed Agent-Based Model. In this model, each agent represents an individual community-dwelling older adult resident of the city of Dallas. The purpose of the model is to simulate the transportation-related decisions and behaviors of these heterogeneous older adults, subject to their schedules, desired travel destinations, and the availability of different transportation options. By experimentally varying these factors and assessing their impacts on the agents' satisfaction/quality of life over time, we can achieve a better understanding of which mobility-enhancing strategies are most promising, as well as determining the relative impact on older adults with different characteristics and preferences.

Description: These data support a final report published on NITC's website "Developing Strategies To Enhance Mobility And Accessibility For Community-Dwelling Older Adults". (2021).

List of Files:

- NITC1304 Questionnaire: Survey used for data collection. PDF Download
- NITC1304 Data: csv file containing data from 167 survey responses. Dataset download.
- The final report can be found at: <https://dx.doi.org/10.15760/trec.267>.

DOI: [10.15760/TREC_datasets.17](https://doi.org/10.15760/TREC_datasets.17)

Persistent Identifier: <https://archives.pdx.edu/ds/psu/36754>

Recommended citation:

Hyun, Kate, Lee, Kathy, Caroline, Krejci, Oran Gibson, Nilufer and Saha, Troyee, Data from: Developing Strategies to Enhance Mobility and Accessibility for Community-Dwelling Older Adults. NITC 1304. Portland, OR: Transportation Research and Education Center (TREC), 2021. https://doi.org/10.15760/TREC_datasets.17

Dataset description:

This dataset contains 1 file described below.

NITC1304data.csv:

- The .csv, Comma Separated Value, file is a simple format that is designed for a database table and supported by many applications. The .csv file is often used for moving tabular data between two different computer programs, due to its open format. The most common software used to open .csv files are Microsoft Excel and RecordEditor, (for more information on .csv files and software, please visit <https://www.file-extensions.org/csv-file-extension>).

National Transportation Library (NTL) Curation Note:

As this dataset is preserved in a repository outside U.S. DOT control, as allowed by the U.S. DOT's Public Access Plan (<https://ntl.bts.gov/public-access>) Section 7.4.2 Data, the NTL staff has performed NO additional curation actions on this dataset. NTL staff last accessed this dataset at https://doi.org/10.15760/TREC_datasets.17 on 2022-05-17. If, in the future, you have trouble

accessing this dataset at the host repository, please email NTLDataCurator@dot.gov describing your problem. NTL staff will do its best to assist you at that time.