

## **Replication Data for: Examining Spatial Mismatch Through a New Geography of Opportunity Index Dataset**

Dataset available at: <https://doi.org/10.7910/DVN/HCAMST>

(This dataset supports report **Examining the Geography of Opportunity through a New Public Transit Opportunity Index**)

This U.S. Department of Transportation-funded dataset is preserved by the Pacific Southwest Region University Transportation Center in the Harvard Dataverse Repository (<https://dataverse.harvard.edu/>), and is available at <https://doi.org/10.7910/DVN/HCAMST>

The related final report **Examining the Geography of Opportunity through a New Public Transit Opportunity Index**, is available from the National Transportation Library's Digital Repository at <https://rosap.ntl.bts.gov/view/dot/56235>

### **Metadata from the Harvard Dataverse Repository record:**

Description: The project introduces a new index of geographic opportunity that improves upon existing measures to analyze the spatial mismatch between job growth and populations in urban settings. Past measures of job accessibility have relied on measures of linear distance between populations and job, actual commute times for those working, or much simpler regional approaches. These past measures suffer from combinations of measurement error and endogeneity due to the fact that linear distance is most relevant if someone has a car and commute times derived from a working population subsumes a set of job market and residential choices for this population. Past measures are most problematic for the most disadvantaged populations that are unlikely to have a car. The new gravity model focus on travel time in public transportation using Generalized Transit Feed Specification (GTFS) data. We compare this measure of job accessibility to measures of auto and walking accessibility in 9 large metropolitan areas to determine the association between job accessibility and employment outcomes at the Census tract level. We find that labor force participation is consistently higher in places with greater transit accessibility between 15-45 minutes away. In contrast, accessibility by automobiles is most consistently associated with jobs that can be reached within 15 minutes. (2020-03-31)

Subject: Social Sciences

### **Recommended citation:**

Painter, Gary, 2020, "Replication Data for: Examining Spatial Mismatch Through a New Geography of Opportunity Index", <https://doi.org/10.7910/DVN/HCAMST>, Harvard Dataverse, V1

### **Dataset description:**

This dataset contains 1 file described below, that can be downloaded in the file formats .tab, .csv, or RData.

- **SMH\_datacodebook\_FOR\_Pub.tab**
- **SMH\_export\_data\_FOR\_Pub.tab**

The tab file extension is also related to a specially formatted text format - tab separated value format. Tab separated file is a very simple textual data format which allows tabular data to be exchanged between applications that use different internal data formats. (for more information on .tab files and software, please visit <https://www.file-extensions.org/tab-file-extension-tab-separated-value>).

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/10.7910/DVN/HCAMST> on 2020-07-07. If, in the future, you have trouble accessing this dataset at the host repository, please email [NTLDataCurator@dot.gov](mailto:NTLDataCurator@dot.gov) describing your problem. NTL staff will do its best to assist you at that time.