

Analyzing the Effects of COVID-19 on Human Mobility and Transit Ridership in the Pacific Northwest Dataset

Dataset available at: <https://doi.org/10.7910/DVN/KCW2SQ>

(This dataset supports report **Analyzing the Effects of COVID-19 on Human Mobility and Transit Ridership in the Pacific Northwest Region**)

This U.S. Department of Transportation-funded dataset is preserved by the Pacific Northwest Transportation Consortium (PacTrans) in the digital repository Harvard Dataverse (<https://dataverse.harvard.edu>), and is available at <https://doi.org/10.7910/DVN/KCW2SQ>

The related final report **Analyzing the Effects of COVID-19 on Human Mobility and Transit Ridership in the Pacific Northwest Region**, is available from the National Transportation Library's Digital Repository at <https://rosap.ntl.bts.gov/view/dot/60065>.

Metadata from the Harvard Dataverse Repository record:

Dataset Persistent ID: doi:10.7910/DVN/KCW2SQ

Publication Date: 2021-05-24

Title: Analyzing the Effects of COVID-19 on Human Mobility and Transit Ridership in the Pacific Northwest

Author:

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Description: This study investigated the effects of COVID-19 on trip reductions and decreases in transit ridership in the Pacific Northwest region of the United States, encompassing Washington, Oregon, Idaho, and Alaska. By utilizing multiple data sources, we found that work-related trips in the region declined by more than 30 percent since March of 2020. In contrast, after the summer of 2020, there was an evident recovery of non-work-related trips (e.g., trips to parks and grocery stores). Our results also indicated that public transit ridership diminished by 40 to 90 percent by May of 2020, and its recovery remained extremely slow even after reopening of the economy. The results of panel regression analysis further suggested that social vulnerability and health insurance coverage were significant predictors of changes in human mobility. In addition, public-transit ridership was more likely to rebound in areas with relatively high COVID-19 infection rates. We concluded the report by arguing that supporting socially vulnerable communities and the public transit workforce will be critical for combating the detrimental social impacts of COVID-19, especially under the phasing out of travel restrictions and stay-at-home orders.

Subject: Engineering; Medicine, Health and Life Sciences; Social Sciences

Keyword: Mobility, Transit Ridership, Sociodemographic Dynamics, COVID-19, Vulnerability

Notes: <http://hdl.handle.net/1773/46941>

Depositor: Yarbrough, Christina

Deposit Date: 2021-05-21

Recommended citation:

Liao, Haifeng, 2021, "ANALYZING THE EFFECTS OF COVID-19 ON HUMAN MOBILITY AND TRANSIT RIDERSHIP IN THE PACIFIC NORTHWEST", <https://doi.org/10.7910/DVN/KCW2SQ>, Harvard Dataverse, V1

Dataset description:

This dataset contains 1 file collection, described below.

Analyzing the Effects of COVID-19 on Human Mobility and Transit Ridership_Data.zip

- UZA_regressionstata.csv
- PNW_county_mobility_google_0505.xlsx
- Google_Regression.csv
- FTA_2020Sep0502.xlsx

File Type Descriptions:

- The .xlsx and .xls file types are Microsoft Excel files, which can be opened with Excel, and other free available software, such as OpenRefine.
- 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://doi.org/10.21949/1503647>) 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/KCW2SQ> on 2022-05-14. 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.