# covid19.commuting Dataset

Dataset available at: <a href="https://github.com/e-mcbride/covid19.commuting">https://github.com/e-mcbride/covid19.commuting</a>

(This dataset supports report A Before-After Intervention Experiment and Survey)

This U.S. Department of Transportation-funded dataset is preserved in the GitHub Repository (<a href="https://github.com/e-mcbride/covid19.commuting">https://github.com/e-mcbride/covid19.commuting</a>

The related final report **A Before-After Intervention Experiment and Survey**, is available from the National Transportation Library's Digital Repository at <a href="https://rosap.ntl.bts.gov/view/dot/58962">https://rosap.ntl.bts.gov/view/dot/58962</a>

#### **Metadata from the GitHub Repository record:**

About: Investigating the effect of Coronavirus pandemic on daily travel (Research Compendium)

Below is the attached README, that can be found in the GitHub Repository:

# covid19.commuting

# **Contents**

The **analysis** directory contains:

- paper: R Markdown source document for manuscript. Includes code to reproduce the figures and tables generated by the analysis. It also has a rendered version, paper.docx, suitable for reading (the code is replaced by figures and tables in this file)
- data: Data used in the analysis. This folder will not be publicly available for the time being.
- figures: Plots and other illustrations
- supplementary-materials: Supplementary materials including notes and other documents prepared and collected during the analysis.

# How to run in your browser or download and run locally

This research compendium has been developed using the statistical programming language R. To work with the compendium, you will need installed on your computer the R software itself and optionally RStudio Desktop.

You can download the compendium as a zip from from this URL: master.zip. After unzipping: - open the .Rproj file in RStudio - run devtools::install() to ensure you have the packages this analysis depends on (also listed in the DESCRIPTION file). - finally, open analysis/paper/paper.Rmd and knit to produce the paper.docx, or run rmarkdown::render("analysis/paper/paper.Rmd") in the R console

# For Lab Members: After cloning this repository, how to modify the project folder to work on this project

This compendium was created with the package (template) rrtools There are some files and folders that are not currently being pushed to GitHub, so there are a few steps if you want to .

- 1. Clone the repository as usual
- 2. Install rrtools by following the instructions here
- 3. Run rrtools::use analysis()
- 4. Add the raw data from Box to /analysis/data/raw\_data
- 5. Run the MAKEFILE

## Licenses

**Text and figures :** CC-BY-4.0

**Code:** See the DESCRIPTION file

**Data :** CC-0 attribution requested in reuse

### **Contributions**

We welcome contributions from everyone. Before you get started, please see our contributor guidelines. Please note that this project is released with a Contributor Code of Conduct. By participating in this project you agree to abide by its terms.

#### **Personal To Do List**

#### Checklist

- Fix Excel import issue, replace raw data files

• Make the cleanup into a function (so it can be applied to different raw data downloads)

#### Legend

- complete
- Incomplete

### **Personal Notes**

- If I get to do another round of this survey, then I might make some changes to the format
  - I would put the question 'Please mark any means of transportation you use to get to work, school, shopping, or any other places you need to visit...' before any other mode questions and have it eliminate the other modes from future questions about modes for the respondents so they don't have to do it repeatedly

#### **Recommended citation:**

McBride, Elizabeth C; Goulias, Kostadinos G, 2021, "covid19.commuting data", https://github.com/e-mcbride/covid19.commuting

#### **Dataset description:**

This dataset contains 1 .zip file collection described below.

#### covid19.commuting-master.zip:

covid19.commuting-master Folder

- R Folder
  - o write\_mplus\_data.R
  - o model\_to\_mplusObj.R
  - o LLreplication.R
- man Folder
  - o write\_mplus\_data.Rd
  - o model\_to\_mplusObjList.Rd
  - o model\_to\_mplusObj.Rd
  - o LLreplication.Rd
  - o LLrep\_to\_table.Rd
- analysis Folder
  - o README.Rmd
  - o README.md
  - o make\_like.R

- o 06\_02\_crossclassify.R
- o 06\_01\_ipps.R
- o 05\_03\_modebinary\_runmodels.R
- o 05\_02\_dataprep\_mode\_binary.R
- o 05\_01\_more-elim.R
- o 04\_03\_analyze-models\_att.R
- o 04\_02\_run\_LPA\_att.R
- o 04\_01\_data-prep\_attitude\_lpa.R
- o 02\_01\_data-prep-for-analysis.R
- o 01\_02\_remove-bad-cases.R
- o 01\_01\_data-cleanup.R
- o .gitignore
- o unused-scripts Folder
  - troubleshooting-mplusautomator.R
  - timeb\_models\_without\_extreme\_cases.R
  - graveyard\_unused\_scripts.R
  - 91\_01\_notes-testing-MplusAutomation.R
  - 05\_03\_analyze-models\_ttds.R
  - 05\_02\_run\_LPA\_ttds.R
  - 05\_02\_data-prep-cleaner.R
  - 05\_01\_data-prep\_ttds\_lpa.R
  - 03\_04\_tt\_model\_updates.R
  - 03\_03\_analyze-models\_travbeh-time.R
  - 03 02 time-models WS-only.R
  - 03\_02\_run\_LPA\_travbeh-time.R
  - 03 01 time-models WS-only prep.R
  - 03\_01\_mplus\_data\_travbeh-time.R
  - 02\_03\_data-prep\_trav-beh\_lpa.R
  - 02\_02\_data-prep\_attitudes\_lpa.R
  - 01\_94\_explor\_analysis\_vars.R
  - 01\_93\_NOTNEEDED\_write-raw-data-to-rds.R
  - 01\_92\_exploratory-for-data-cleaning.R
  - 01\_91\_data-dictionary.R
  - Mplus Folder
    - lpa\_travbeh\_time\_c3\_save.txt
    - lpa\_travbeh\_c6\_save.txt
    - lpa\_travbeh\_c5\_save.txt
    - lpa\_travbeh\_c4\_save.txt
    - lpa\_travbeh\_c3\_save.txt
    - LCA\_attitudes.inp
    - lca-attit\_c5\_save.txt
    - EFA\_dist.inp
    - Basic-analysis\_attitudes.inp
    - 03\_03\_LPA-trav-beh\_time.inp
    - 03 03 LPA-trav-beh.inp
    - 03 02 LCA-attitudes-cont.inp

#### • 03\_01\_firstregression.inp

- templates Folder
  - template.Rmd
  - template.docx
  - scholarly-metadata.lua
  - pagebreak.lua
  - journal-of-archaeological-science.csl
  - author-info-blocks.lua
  - apa.csl
- o paper Folder
  - references.bib
  - paper.Rmd
  - .gitignore
- o 03\_Mplus Folder
  - trav-beh Folder
    - timeWS Folder
      - o timeWS\_lpa-template.txt
        - o 6-class\_LPA\_timeWS.inp
      - o 5-class\_LPA\_timeWS.inp
      - o 4-class\_LPA\_timeWS.inp
      - o 3-class\_LPA\_timeWS.inp
      - o 2-class\_LPA\_timeWS.inp
      - o 1-class\_LPA\_timeWS.inp
    - time\_dist Folder
      - o lpa\_ttds\_template.txt
      - o 6-class\_LPA\_ttds.inp
      - o 5-class\_LPA\_ttds.inp
      - o 4-class\_LPA\_ttds.inp
      - o 3-class\_LPA\_ttds.inp
      - o 2-class\_LPA\_ttds.inp
      - o 1-class\_LPA\_ttds.inp
    - time2 Folder
      - o timeb\_lpa-template.txt
      - o fort.16
      - o 6-class\_LPA\_timeb.inp
      - o 5-class\_LPA\_timeb.inp
      - o 4-class\_LPA\_timeb.inp
      - o 3-class\_LPA\_timeb.inp
      - o 2-class\_LPA\_timeb.inp
      - o 1-class\_LPA\_timeb.inp
    - time Folder
      - o LPA-time-template.txt
      - o 6-class\_LPA\_time.inp
      - o 5-class LPA time.inp
      - o 4-class LPA time.inp
      - o 3-class\_LPA\_time.inp

- o 2-class\_LPA\_time.inp
- o 1-class\_LPA\_time.inp
- o .gitignore
- Ipa\_modeUsed\_template.txt
- o 6-class\_LCA\_modeused\_elim.inp
- o 5-class\_LCA\_modeused\_elim.inp
- o 4-class\_LCA\_modeused\_elim.inp
- o 3-class\_LCA\_modeused\_elim.inp
- o 2-class LCA modeused elim.inp
- o 1-class\_LCA\_modeused\_elim.inp

#### attitudes Folder

- lap\_attitudes\_template.txt
- 8-class\_LPA\_att.inp
- 7-class\_LPA\_att.inp
- 6-class LPA att.inp
- 5-class\_LPA\_att.inp
- 4-class\_LPA\_att.inp
- 3-class\_LPA\_att.inp
- 2-class\_LPA\_att.inp
- 1-class\_LPA\_att.inp
- .gitignore
- runtime.txt
- README.Rmd
- README.md
- NAMESPACE
- LICENSE.md
- Dockerfile
- DESCRIPTION
- Covid19.commuting.Rproj
- CONTRIBUTING.md
- CONDUCT.md
- Rbuildignore
- .gitignore

#### File Type Descriptions:

- The .txt file type is a common text file, which can be opened with a basic text editor. The most common software used to open .txt files are Microsoft Windows Notepad, Sublime Text, Atom, and TextEdit (for more information on .txt files and software, please visit <a href="https://www.file-extensions.org/txt-file-extension">https://www.file-extensions.org/txt-file-extension</a>).
- The .docx file is a Microsoft Word file, which can be opened with Word and other free word processor programs, such as Kingsoft Writer, OpenOffice Writer, and ONLYOFFICE.
- The .r file type is related to R programming language. R is a language and environment for statistical computing and graphics (for more information on .r files and software, please visit https://www.file-extensions.org/r-file-extension).

- The .rd file type is associated with the R, a comprehensive statistical and graphical programming language used to develop developing statistical and data analysis software. The .rd file stores documentation for source code (for more information on .rd files and software, please visit <a href="https://www.file-extensions.org/rd-file-extension-r-document-file">https://www.file-extensions.org/rd-file-extension-r-document-file</a>).
- The .rmd file extension is associated with the RStudio, an integrated development tool for Windows, macOS (OS X) and Linux operating systems, which allows users to create apps with R programming language. The rmd file stores R markdown data (for more information on .rmd files and software, please visit <a href="https://www.file-extensions.org/rmd-file-extension-r-markdown-data">https://www.file-extensions.org/rmd-file-extension-r-markdown-data</a>).
- The .rproj file extension is associated with the RStudio, an integrated development tool for Microsoft Windows, Apple Mac OS X (macOS) and Linux operating systems used to crate software in R programming language. The rproj file stores programming project (for more information on .rproj files and software, please visit <a href="https://www.file-extensions.org/rproj-file-extension">https://www.file-extensions.org/rproj-file-extension</a>).
- File extension md is among others related to texts and source codes in Markdown markup language. Markdown is a lightweight markup language, to write using an easy-to-read, easy-to-write plain text format, then convert it to structurally valid XHTML (or HTML) (for more information on .md files and software, please visit <a href="https://www.file-extensions.org/md-file-extension">https://www.file-extensions.org/md-file-extension</a>).
- The .inp file extension is associated with a source code format used by Oracle (for more information on .inp files and software, please visit <a href="https://www.file-extensions.org/inp-file-extension-oracle-source-code">https://www.file-extensions.org/inp-file-extension-oracle-source-code</a>).
- The .bib file extension is associated with BibTex, a reference management software that allows users to create a bibliography (for more information on .bib files and software, please visit <a href="https://www.file-extensions.org/bib-file-extension-bibtex-document">https://www.file-extensions.org/bib-file-extension-bibtex-document</a>).
- The .csl file extension is associated with CorelDRAW, a vector graphics editor developed and sold by Corel Corporation (for more information on .csl files and software, please visit <a href="https://www.file-extensions.org/csl-file-extension">https://www.file-extensions.org/csl-file-extension</a>).
- The .lua file extension is commonly associated with so called lua scripts. Lua is a powerful, fast, light-weight, embeddable scripting language. Lua combines simple procedural syntax with powerful data description constructs based on associative arrays and extensible semantics (for more information on .lua files and software, please visit <a href="https://www.file-extensions.org/lua-file-extension">https://www.file-extensions.org/lua-file-extension</a>).

#### **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 (<a href="https://ntl.bts.gov/public-access">https://ntl.bts.gov/public-access</a>) Section 7.4.2 Data, the NTL staff has performed *NO* additional curation actions on this dataset. NTL staff last accessed this dataset at <a href="https://github.com/e-mcbride/covid19.commuting">https://github.com/e-mcbride/covid19.commuting</a> on 2022-02-07. 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.