

A General Equilibrium Model for Integrated CAV Ridesourcing and Transit Services for the Morning Commute Dataset

Dataset available at: <https://doi.org/10.5281/zenodo.6377177>

(This dataset supports report **Highway Statistics Series: State Statistical Abstracts 2012 – Iowa and A General Equilibrium Model for Integrated CAV Ridesourcing and Transit Services for the Morning Commute**)

This U.S. Department of Transportation-funded dataset is preserved in the Zenodo Repository (<https://zenodo.org/>), and is available at <https://doi.org/10.5281/zenodo.6377177>

The related final report **Highway Statistics Series: State Statistical Abstracts 2012 – Iowa**, is available from the National Transportation Library's Digital Repository at <https://rosap.ntl.bts.gov/view/dot/61340>.

The related final report **A General Equilibrium Model for Integrated CAV Ridesourcing and Transit Services for the Morning Commute**, is available from the National Transportation Library's Digital Repository at <https://rosap.ntl.bts.gov/view/dot/61341>.

Metadata from the Zenodo Repository record:

Title: A General Equilibrium Model for Integrated CAV Ridesourcing and Transit Services for the Morning Commute

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Description: There are two datasets. The dataset for the small network includes the link properties, origin-destination pairs and their demand, and path data of a small network. The dataset for the Seattle network includes the link properties, origin-destination pairs and their demand, and path data of the Seattle network. The programming language we use for this model is GAMS. All of the data files are in the format of .gms, and can be imported by the model to generate results.

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Keywords: Integrated Transit, Ridesourcing, Connected and Automated Vehicles, General Equilibrium Model

Communities: C2SMART Connected Cities with Smart Transportation

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Dataset description:

This dataset contains 1 file collection described below.

Integrated_transit.zip:

- C2smart_submission Folder

- Small_network Folder
 - RStesteddata-Small_4m.gms
 - RSrsset-Small_4m.gms
 - RSodset-Small_4m.gms
 - RSnetwork-Small_4m.gms
 - RSmain_Small_network.gms
 - ReadMe.md
 - Matlab_interface.m
 - Integrated_CAV_small_network.gpr
- Seattle_network Folder
 - RStesteddata-Seattle_4m.gms
 - RSrsset-Seattle_4m.gms
 - RSodset-Seattle_4m.gms
 - RSnetwork-Seattle_4m.gms
 - RSmain_Seattle_network.gms
 - ReadMe.md
 - Path.opt
 - Integrated_CAV_Seattle_network.gpr

File Type Descriptions:

- The .gms format is a low-level, binary, minimal but generic format for organizing and storing Gesture and Motion Signals in a flexible and optimized way. The GMS format takes into account the minimal features a format carrying movement/gesture data needs: flexible dimensionality, versatile structuration, flexible types of the encoded variables, and spatial and temporal properties of gesture and motion signals (for more information on .gms files and software, please visit <https://www.file-extensions.org/gms-file-extension>).
- The file extension .m is associated with the Objective-C, a general-purpose, object-oriented programming language based on Smalltalk language developed by Apple, Inc (for more information on the .m file type and associated software, please visit <https://www.file-extensions.org/m-file-extension>).
- The 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 <https://www.file-extensions.org/md-file-extension>).
- The gpr file extension is associated with the Babylon Glossary Builder a free application that enables users to create own glossaries using databases stored in Excel or xml files (for more information on .gpr files and software, please visit <https://www.file-extensions.org/gpr-file-extension-babylon-glossary-builder-project-file>).
- The file extension .opt is associated with MySQL database. MySQL is very popular open source database software, used on many internet servers. .opt files contains database data (for more information on .opt files and software, please visit <https://www.file-extensions.org/opt-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/10.5281/zenodo.6377177> on 2022-04-07. 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.