# Fighting for curb space: Micro-simulation

Dataset available at: https://doi.org/10.25338/B81W61

(This dataset supports report Fighting for Curb Space Parking, Ride-Hailing, Urban Freight Deliveries, and Other Users)

This U.S. Department of Transportation-funded dataset is preserved by the Dryad digital repository (<a href="https://datadryad.org/stash/">https://datadryad.org/stash/</a>) and is available at <a href="https://doi.org/10.25338/B81W61">https://doi.org/10.25338/B81W61</a>.

The related final report **Fighting for Curb Space Parking**, **Ride-Hailing**, **Urban Freight Deliveries**, **and Other Users**, is available from the National Transportation Library's Digital Repository at <a href="https://rosap.ntl.bts.gov/view/dot/56903">https://rosap.ntl.bts.gov/view/dot/56903</a>.

# Metadata from the Dryad repository record:

# Description:

This study conducted a comprehensive literature review on several topics related to curb space management, discussing various users (e.g., pedestrians, bicycles, transit, taxis, and commercial freight vehicles), summarizing different experiences, and focusing the discussion on Complete Street strategies. Moreover, the authors reviewed the academic literature on curbside and parking data collection, and simulation and optimization techniques. Considering a case study around the downtown area in San Francisco, the authors evaluated the performance of the system with respect to a number of parking behavior scenarios. The authors developed a parking simulation in SUMO following a set of parking behaviors (e.g., parking search, parking with off-street parking information availability, double-parking). These scenarios were tested in three different (land use-based) sub-study areas representing residential, commercial and mixed-use. The data contains the GIS information of the three study areas, and the SUMO scripts.

## Keywords:

Sustainable Transportation

#### **Recommended citation:**

Jaller, Miguel et al. (2021), Fighting for curb space: Micro-simulation, Dryad, Dataset, <a href="https://doi.org/10.25338/B81W61">https://doi.org/10.25338/B81W61</a>

## **Dataset description:**

This dataset contains 1 .zip file collection described below.

# Fighting for Curb Space Parking, Ride-Hailing, Urban Freight Deliveries, and Other Users.zip

This collection contains 11 files and 3 file types, described below.

- Readme.txt
- Script run simulation.py

- SF Commercial GIS.rar
- SF Commercial Scenarios.rar
- SF Commercial Setup Data.rar
- SF\_Mised\_Use\_Setup\_Data.rar
- SF Mixed Use Scenarios.rar
- SF Residential GIS.rar
- SF Residential Scenarios.rar
- SF Residential Setup Data.rar

## File Type Descriptions:

- The txt file extension is traditionally used for simple text files. Many MS-DOS, Unix, Windows applications and text editors used this file extension for common text file. Only character encoding charset may vary from simple ASCII to UTF etc. which depends on author language or operating system native charset. (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 py file extension is commonly used for files containing source code written in Python programming language, developed by Guido van Rossum. Python is a dynamic object-oriented programming language that can be used for many kinds of software development. It offers strong support for integration with other languages and tools, comes with extensive standard libraries, and can be learned in a few days. Many Python programmers report substantial productivity gains and feel the language encourages the development of higher quality, more maintainable code. (for more information on .py files and software, please visit <a href="https://www.file-extensions.org/py-file-extension">https://www.file-extensions.org/py-file-extension</a>)
- File extension rar is most likely best known for its use for a compressed archive format created by RAR as well as it's successor WinRAR file archiver. The original program was available for MS-DOS only, but the never versions are available for every version of Windows and even for some other platforms, such as Linux or Mac. Similar to other compressed file archive formats, .rar files are data containers, that store one or several files and folders in compressed form. Compressed data can be in one single file or multiple splitted files (eg. archive.rar, archvie.r01,archive.r02 etc.). In WinRAR you can split a huge archive to a few smaller files, which are called volumes. If you need to unpack rar multi-volumes, place all them to the same folder and start extraction from the first volume. RAR archives can be also password protected. (for more information on .rar files and software, please visit https://www.file-extensions.org/rar-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 (<a href="https://doi.org/10.21949/1503647">https://doi.org/10.21949/1503647</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://doi.org/10.25338/B81W61">https://doi.org/10.25338/B81W61</a> on 2021-08-12

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.