

# Exploring Crowdsourced Monitoring Data for Safety - Travel Patterns using GPS Waypoint Data Dataset

Dataset available at: <https://doi.org/10.15787/VTT1/81SKJW>

(This dataset supports report **Exploring Crowdsourced Monitoring Data for Safety**, [https://www.vtti.vt.edu/utc/safe-d/wp-content/uploads/2020/04/TTI-Student-05\\_Final-Research-Report\\_Final.pdf](https://www.vtti.vt.edu/utc/safe-d/wp-content/uploads/2020/04/TTI-Student-05_Final-Research-Report_Final.pdf))

This U.S. Department of Transportation-funded dataset is preserved by the Safety through Disruption (Safe-D) University Transportation Center (UTC) in the digital repository Virginia Tech Transportation Institute (VTTI) Dataverse (<https://dataverse.vtti.vt.edu/>), and is available at <https://doi.org/10.15787/VTT1/81SKJW>

The related final report **Exploring Crowdsourced Monitoring Data for Safety**, is available from the National Transportation Library's Digital Repository at <https://rosap.ntl.bts.gov/view/dot/50717>

## Metadata from the VTTI Dataverse record:

### Description:

- **Project Description:** The third effort (Travel Patterns using GPS Waypoint Data) of this project explored the use of INRIX trip trace data to determine the patterns of origin-destination distributions and developed forty decision rules to define the origin-destination patterns. The research team used three separate databases to perform the analysis:
  - Maryland INRIX waypoint trip data
  - Census block group level American Community Survey (ACS) 2013-2017 data
  - Census block level Longitudinal Employer-Household Dynamics (LEHD) 2015 data
- **Data Scope:** Monthly sample dataset includes U.S. Census Block group specific monthly origin-destination data with other demographic variables. The month was randomly selected from the four months of data collected for this project.
- **Data Specification:** See Table 1 for description of each variable included in the dataset.

Subject: Engineering

Keyword: vehicle operating speed, crowdsourced speed

### Recommended citation:

Das, Subasish; Wang, Ruihong, 2019, "Exploring Crowdsourced Monitoring Data for Safety - Travel Patterns using GPS Waypoint Data (TTI-Student-05)", <https://doi.org/10.15787/VTT1/81SKJW>, VTTI, V1, UNF:6:zIQzXA76eZdQAA/hGrhV0A== [fileUNF]

### Dataset description:

This dataset contains 1 .zip file collection described below.

### **Exploring Crowdsourced Monitoring Data for Safety\_Travel Patterns.zip:**

This collection contains one .xlsx file and one .pdf file, listed below.

- GPS\_Waypoint\_Data\_SampleDataset.xlsx. The .xlsx file type can be opened with Excel, and other free available software, such as OpenRefine.
- Table 1\_GPS\_Waypoint\_Data Specification.pdf. The .pdf file format is an Adobe Acrobat Portable Document Format (PDF) file and can be opened with the Adobe Acrobat software.

### **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/10.15787/VTT1/81SKJW> on 2020-10-01. 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.