Evaluation of Work Zone Mobility by Utilizing Naturalistic Driving Study Data [supporting dataset]

Dataset available at: http://doi.org/10.5281/zenodo.3747771

(This dataset supports research report: **Evaluation of Work Zone Mobility by Utilizing Naturalistic Driving Study Data.**)

This U.S. Department of Transportation-funded dataset is preserved by Southeastern Transportation Research, Innovation, Development and Education Center (STRIDE) in the Zenodo, and is available at: http://doi.org/10.5281/zenodo.3747771

The related final report **Freeway Management for Optimal Reliability,** will be available from the National Transportation Library's digital repository, the Repository & Open Science Access Portal (ROSA P https://doi.org/10.21949/1398953).

Metadata from the repository record:

> **Description:** The purpose of this research is to evaluate work zone mobility using SHRP2 NDS naturalistic driving data. In this study, forward, rear-view video, and time series traces for traversed work zones are collected at 0.1 second intervals. Using the forward and rear-ward videos work zone configurations such as traffic control devices, area types, presence of dynamic message signs (DMS), intelligent transportation systems technologies (ITS), as well as the presence of workers and equipment are identified. These videos are also used for estimating traffic density by observing the number of vehicles surrounding the participant, and average traffic flow by observed speed and traffic density. The capacities of different work zone sections and configurations are estimated based on developed speed-flow relationships and this capacity is used to verify and calibrate the work zone capacity method defined by the newest addition of Highway Capacity Manual (HCM). The probability of breakdown is then estimated for each level of flow rates and volume to capacity ratios can be used to verify the results of HCM.
>
> STRIDE Project ID: STRIDE B2. Project Title: Evaluation of Work Zone Mobility by Utilizing Naturalistic Driving Study Data. Project Grant Period: August 16, 2018 – August 15, 2019. The original SHRP 2 data that was utilized in this study cannot be uploaded to the repository The SHRP 2 data is only available through a Data Use License, and can only be accessed by those listed on the DUL. The link to the Dataverse entry for the dataset is https://dataverse.vtti.vt.edu/dataset.xhtml?persistentId=doi:10.15787/VTT1/HRCECD.

Data files: There is 1 .docx file.

Download file size: 13.1 kB

File name: STRIDE Project B2.docx

Other notes:
   Data documentation: There is no data dictionary or other documentation available as of 2021-01-18.

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.

This dataset record has *NO* documentation provided by the researchers. NTL is *NOT* responsible for the lack of data or software documentation. NTL assumes *NO* liability for data and software provided by researchers, or for any future re-use.

NTL staff last accessed this dataset at http://doi.org/10.5281/zenodo.3747771 on 2021-01-19.

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.