

Rural Speed Safety Project for USDOT Safety Data Initiative: [Supporting Dataset]

Dataset metadata at: <https://doi.org/10.21949/1519283>

Large dataset direct download link: <https://doi.org/10.21949/1523083>

This dataset supports research report: **Rural Speed Safety Project for USDOT Safety Data Initiative: Summary Report**, available at this link: <https://rosap.ntl.bts.gov/view/dot/48840>

Dataset Metadata

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Corporate Creator: Texas A & M Transportation Institute

Report Description: The objective of this project was to examine prevailing operating speeds on a large scale to determine how speed and speed differentials interact with roadway characteristics to influence the likelihood of crashes. The project team conducted three major tasks: (a) developed conflated databases for Ohio and Washington by incorporating the Highway Safety Information System (HSIS) and the National Performance Management Research Data Set; (b) developed static and interactive data visualization tools to show the association between operating speed measures and safety outcomes; and (c) developed best-fit models at annual and daily levels to address the impact of operating speed on safety. The overall finding was that speed-related operational information is an area of opportunity to better understand safety outcomes. This pilot project established the framework of data conflation and an analytical pipeline that will help to address the effect of operation speed measures on safety. The replicability procedure developed in this study can be applied to other HSIS States. The project team developed a weblink that includes descriptive statistics and data visualization tools (both static and interactive). The links provide a more detailed view of the speed measures and descriptive statistics, as well as visualization of the association between speed measures and crashes at a granular level. The team members also developed an interactive decision support tool (https://ruralspeedsafety.shinyapps.io/rss_sdi/) to show annual risk scoring using Washington and Ohio data that contain expected total crashes from the developed models.

About the data: The compressed data files in this zip file are still quite large: over 2 GB. The zip file can be unzipped using any zip compression/decompression software. Data files in the zip folder include: .R files, accessible via R programming tools; .csv, .xml, and .txt files, accessible via any text editor; GIS shapefiles, accessible using GIS software; .docx files, accessible via Microsoft Word or open document programs; .xlsx spreadsheets, accessible via Microsoft Excel or other open spreadsheet programs; and .PDF files, accessible Adobe PDF readers or other PDF reading programs. Because this is a large dataset, it is not attached to this ROSA P record. Please use this link to download the data zip file directly: <https://doi.org/10.21949/1523083>

National Transportation Library (NTL) Curation Note:

This data is presented "As-Is". NTL staff have taken no further curation steps. If, in the future, you have trouble accessing this dataset, please email NTLDataCurator@dot.gov describing your problem. NTL staff will do its best to assist you at that time.