

Exploring Crowdsourced Monitoring Data for Safety - Evaluation of Miovision Pedestrian Count Data Dataset

Dataset available at: <https://doi.org/10.15787/VTTI/351GZJ>

(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)

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/VTTI/351GZJ>

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 data represent one week of selected hourly weekday and weekend pedestrian counts at two intersections in Austin, Texas. The pedestrian counts were produced from manually reducing video files from Miovision's TrafficLink Multimodal Detection and Counts system. Eighty hours of video were gathered at each intersection between June 18 and July 14, 2019. However, only 40 hours at each intersection were reduced and evaluated. The manual counts were compared to Miovision's count data across different combinations of lighting conditions and pedestrian volumes. Overall, Miovision system performed fairly well with accuracy results of 15% error for daytime and 24% for nighttime for the combined intersection legs.
- **Data Scope:**
 - Selected hourly weekday and weekend pedestrian counts.
 - 2 unique count locations.
 - 240 hourly observations from 2 student workers and the Miovision system.
- **Data Specification:**
 - Intersection - text; Cameron & Cross, MLK at Guadalupe; no missing values
 - Leg - text; North, South, West, East; no missing values
 - Hour – numeric; 1-40; no missing values
 - Date – date stamp; no missing values
 - Time - Timestamp; no missing values
 - Student 1 - numeric; 0-99; missing values
 - Student 2 - numeric; 0-90; missing values
 - Benchmark - numeric; 0-95; missing values
 - Miovision - numeric; 0-134; no missing values

Subject: Engineering

Keyword: pedestrian count, machine vision, Miovision Data

Recommended citation:

Le, Minh, 2019, "Exploring Crowdsourced Monitoring Data for Safety - Evaluation of Miovision Pedestrian Count Data (TTI-Student-05)", <https://doi.org/10.15787/VTT1/351GZJ>, VTTI, V1

Dataset description:

This dataset contains 1 .xlsm file described below.

Miovision Ped Count Eval Austin final Dataverse.xlsm:

The .xlsm file type is a Microsoft Excel Open XML macro-enabled workbook, which can be opened with Excel, and other free available software, such as OpenRefine.

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/VTT1/351GZJ> on 2020-10-01. 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.