

Monessen Mobility Matters

Data Collection

What data will you collect or create?

Cameras will be deployed along the targeted area and computer vision algorithms will be developed to analyze the collected visual data. Results of the analyses will be aggregated and tabulated to identify mobility trends and problems, then used to inform urban planning recommendations. Any novel algorithms developed will be published along with experimental results. Algorithms will be thoroughly tested and analyzed with real data collected at the installation site. Datasets will be collected throughout the year in a variety of weather and lighting conditions. This unique dataset will be published on-line for use by researchers to advance the fields of computer vision, artificial intelligence, mobility and urban design and planning.

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Documentation and Metadata

What documentation and metadata will accompany the data?

Data will be collected in a standard compression video format such as H.264. Still frames will be captured and compressed in the JPG format. Data will stored according to capture data and accompanying documentation will record the circumstances of the collection. Standard software (usually default viewers for major operating systems) with the proper codecs will be capable of viewing the data.

Ethics and Legal Compliance

How will you manage any ethical issues?

If applicable, Municipal and Service Provider Interviews will follow a set of interview and summary standards. All summary reporting will be anonymized.

How will you manage copyright and Intellectual Property Rights (IP/IPR) issues?

All findings will be Open Source Data.

While industry partners may utilize proprietary approaches to data collection and analysis, which may inform the study, all findings will be open source. Any agreement re industry participation will identify their proprietary restrictions and agreement to open source findings.

Storage and Backup

How will the data be stored and backed up during the research?

RCI and The Robotics Institute will follow cloud, server, and secure drive storage and back up procedures.

How will you manage access and security?

Project team will share access to cloud-based platform.

Selection and Preservation

Which data are of long-term value and should be retained, shared, and/or preserved?

Data will be open source.

What is the long-term preservation plan for the dataset?

Data will follow cloud, server, and drive storage and back up procedure. Protocol will be developed with SoA and the Robotics Institute for long-term preservation.

Data Sharing

How will you share the data?

Open Source Data.

Are any restrictions on data sharing required?

NA

Responsibilities and Resources

Who will be responsible for data management?

Ray Gastil, PI, and Robert Tamburo, Co-PI, will share responsibility.

What resources will you require to deliver your plan?

NA