Local Mobility Improvements for Communities in the Region

A Data Management Plan created using DMPTool

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Template: Digital Curation Centre

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Project abstract:

Local Mobility Improvements for Communities in the Region researches better local mobility. Remaking Cities Institute will partner with Quaker Valley Coalition of Governments (QVCOG) and 2-4 COG members. LMICR adds a synergistic approach to ongoing commuter-focused last-mile work, including critical intra-community trips, ranging from getting seniors to medical services, to connecting diverse age/income groups to jobs and recreation. Key research includes income-targeted ride share, non-urban core micro mobility, and last-mile urban design.

Last modified: 03-16-2020

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Data Collection

What data will you collect or create?

Data to identify need, capacity (organizational and physical), and related household, employment, and mobility materials. To inform decision-making and policy for improved local mobility in terms of ride share, autonomous vehicle/technology, and micromobility.

Planned Data subjects and sources:

Mobility 1 - Existing Conditions

- Mobility/Transportation-- Existing data from PennDOT, SPC, and Port Authority of Allegheny County, as well as industry (e.g. Waze).
- Autonomous Vehicle data -- Industry Partners
- Existing Service and Future Demand - Interviews with Municipal and Service Providers.

Mobility 2 - Physical and Organizational

- sidewalk condition, topography, bus stops and other pick-up locations, parking
- existing or planned bikeway
- key existing streets/routes

Sources include data developed in Phase 1 - Regional Highway Corridor Research Study - Proof of Concept, GIS Data, Municipal and Service Provider Interrviews.

Community and Community Development

- Demographics, Income, Density -- U.S. Census
- Workplace, Retail, Service, Amenity and Recreation locations -- GIS Data, Municipal and Service Provider Interviews.
- Local and Regional Community/Economic Development Plans -- Municipal and Service Provider Interviews.

How will the data be collected or created?

The Research Team will harness existing mobility data from Planned Data subjects aPennDOT, SPC, and Port Authority of Allegheny County, as well as industry.

The data collection approach of the Regional Highway Corridor Benefit Research Study use of GIS and related physical data will be applied for LMICR.

Municipal and Service Provider Interviews will be follow a standard set of parameters for interview and summary findings. All findings will be anonymized.

Documentation and Metadata

What documentation and metadata will accompany the data?

Metadata Standards not applicable to this research.

Ethics and Legal Compliance

How will you manage any ethical issues?

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 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 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, will be responsible. Steve Quick, Co-PI, will have back up responsibility.

What resources will you require to deliver your plan?

NA

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