# Regional Highway Benefit Research Study: Proof of Concept

## Introduction

Many DMPs include an introduction. If your DMP includes an introduction, add it here.

This research proposal seeks to answer how the integration of multimodal policies onto regional corridors will impact small towns and boroughs differently from urban and suburban corridors, and whether there are political options for strengthening their effect. As a case study, PA Route 65 is an ideal model from three perspectives: first, from analyzing existing conditions, exploring options, testing alternatives, and developing prototypical conditions and recommendations; second, from the strong commitment of the local communities to this research and toward seeking new, cooperative decision-making and asset-sharing strategies; and, third, the suitability of PA Route 65 as a test environment for autonomous vehicles. The research will focus on four areas of inquiry: transportation corridor typologies and emerging technologies; economic impact; multi-municipality decision-making; and community design. The Remaking Cities Institute will partner with community partner, Quaker Valley Council of Governments, and industry partner, Aurora Innovation, Inc., a leader in hardware and software for autonomous vehicles.

## Types of data produced

Types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project. Click on box size (small | medium | full) for detailed guidance.

General planning data for regional highway corridor functioning and design recommendations for safety and autonomous vehicles, recommendations for decision-making across multiple municipalities, and economic benefits of cooperation agreements for transportation planning

- Typologies and observations of streets and roads
- Civic engagement feedback
- Autonomous vehicle data from industry partner, Aurora
- Economic development impacts
- Existing data from PennDOT, SPC, and Port Authority of Allegheny County

## Data and metadata standards

Standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies). Click on box size (small | medium | full) for detailed guidance.

Standards not applicable.

## Policies for access and sharing

Policies for access and sharing; Provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements. Click on box size (small | medium | full) for detailed guidance.

Open source data.

## Policies for re-use, redistribution

Policies and provisions for re-use, re-distribution, and the production of derivatives. Click on box size (small | medium | full) for detailed guidance.

Not applicable

## Plans for archiving & preservation

Plans for archiving data, samples, and other research products, and for preservation of access to them. Click on box size (small | medium | full) for detailed guidance.

Data to be archived on Department of Architecture server, Carnegie Mellon University, at time of research completion/initial publication.

## Software Sharing Plan

Some NSF solicitations require software sharing plans in the DMP. Please check with your specific solicitation for this requirement.

Not applicable.