

Exhibit A

Statement of Work (SOW) with the City of Cambridge

SOW Title: *Cambridge Cycling Safety Ordinance Economic Impact Analysis Study*

Overview

In 2019, Cambridge City Council passed the Cycling Safety Ordinance, which requires the construction of separated bicycle (“bike”) lanes when streets are being reconstructed as a part of the City’s Five-Year Plan for Sidewalk and Street Reconstruction. These have been designated for greater separation in the City’s Bicycle Network Vision.

In 2020, the Council passed amendments to the Cycling Safety Ordinance, which set forth requirements for the installation of approximately 25 miles of separated bike lanes on the City’s public ways within the next five to seven years. The location of these separated bike lanes will be informed by both the City’s Bicycle Network Vision and specific requirements in the Ordinance. In 2021-2022, City departments began the implementation of work required by the ordinance, including installation of separated bike lanes along Massachusetts Ave.

During the implementation of work required by the Cycling Safety Ordinance, some residents and small business owners have expressed concern about potential negative economic impacts during and post-implementation on major commercial corridors, particularly in instances where the addition of bike lanes results in the loss of on street parking spaces and loading zones. While research from other communities has shown a variety of correlations between creating pedestrian and bicycle friendly spaces and retail and small business activity, the City is interested in conducting an economic impact analysis to evaluate and assess these concerns in the Cambridge context.

The Volpe National Transportation Systems Center (Volpe) will support the City of Cambridge Community Development Department (CDD) to conduct this economic impact study through the provision of the Work to be performed under this Agreement.

For more information on the Cycling Safety Ordinance, please visit:
<https://www.cambridgema.gov/streetsandtransportation/policiesordinancesandplans/cyclingsafetyordinance>

For more information on the Cambridge Bike Plan, please visit:
<https://www.cambridgema.gov/Departments/communitydevelopment/2020bikeplanupdate/2020bicyclenetworkvision>

Tasks

Task 1 – Develop Study Methodology and Finalize Economic Data Sets

Working with City departments, the Volpe Center will determine the methodology for the economic impact study. The methodology shall include the set of economic data points that will be considered for the final report, with information on where and how to gather that data, and reasons for the data points chosen. The Volpe Center shall also consider in its methodology other factors that may be impacting businesses/commercial corridors, including, but not limited to, shopping trends and impacts of

the COVID-19 pandemic. The methodology may be summarized in a single table or matrix showing chosen data and reasons chosen. Data points not chosen shall also be described with detailed reasons stating why they were not chosen.

The Volpe Center will consider data that is easy to acquire, updated quarterly or annually, objective, and quantitative. Another factor is the level of spatial aggregation, as much of the analysis requires data at the street or block level, rather than the City or state level. Pre-installation and post-installation data for consideration include, but are not limited to the following:

- LEHD (longitudinal employer-household dynamics) employment data
- QCEW (Quarterly Census of Employment and Wages) employment and wages data
- NETS (National Establishment Time Series) employment and sales data
- Massachusetts Department of Revenue meals and sales tax data
- Pedestrian and Bike Counts
- Business establishments opened/closed and by type of establishment
- Sidewalk and in-person customer intercept surveys

Deliverables:

- Study Methodology
- Data chosen for study and reasoning
- Data not chosen for the study and reasoning
- Comments on a survey tool that CDD or another entity can implement

Target Dates

- 1 month from project initiation

Task 2 – Collect Data

The Volpe Center will work with City staff to finalize the list of current and future separated bike lane corridors for this study and start collecting data based on the determined study methodology. Evaluation will include previous separated bike lane installations in Cambridge (prior to March 2022) and will begin capturing data from commercial corridors where separated bike lanes have yet to be installed to enable before and after comparisons (please see the Cambridge Bicycle Network Plan for a full list of corridors). City staff will work with the Volpe Center if any assistance is needed to capture data, especially reaching out and talking to businesses, mapping, and business use types in each corridor.

Deliverables:

- Data collection of currently installed bike lanes, with as much historical data that can be provided pre-installation. Installed bike lane corridors include parts of Massachusetts Ave., Brattle St., and Cambridge St.
- Data collection of corridors listed in the Cambridge Bike Plan that are without bike lane installation (as of March 2022), which includes parts of Massachusetts Ave., Cambridge St., Broadway, and Hampshire St.

Target Dates

- 2 months from project initiation

Task 3 –Summarize Economic Data

The Volpe Center shall clean the economic data captured (to ensure that no one business’s data is recognizable) and develop a summary of the data for all the corridors. Summary of the data shall include:

- Name of corridor
- Map of corridor
- Date(s) data was captured
- Data based on business type (for example, food businesses vs. traditional retailer)
- Pre and post installation data (when available) with analysis
- Any trends by use or qualitative information not captured in quantitative data.

Deliverables:

- Summary of data by corridor
- Raw data sets in spreadsheet format by corridor
- Summary of any qualitative data gathered during data collection period

Target dates:

- 3 months from project initiation

Task 4 – Finalize Report and Data Summary Template

Volpe shall provide City staff with a full report that includes, but is not limited to the following:

- Executive Summary with general findings
- Explanation of the study methodology
- Explanation of how and where data was captured
- Corridor Summaries with:
 - Name of corridor
 - Findings for each corridor
 - Map of corridor
 - Date(s) data was captured
 - List of data based on different business uses in corridor
 - Pre and post installation data (if available)
 - Any trends by use or qualitative information not captured in quantitative data

Deliverables:

- Final Separated Bike Lane Economic Analysis Report
- Corridor Economic Analysis Template
- Presentation to Council’s Economic Development and University Relations Committee

Target dates:

- Draft report: 6 months from initiation
- Final report: 7 months from initiation, within the stated period of performance
- Presentations/briefings: to be scheduled

Task 5 – Project Management

This task consists of the project management activities to support the technical work in Tasks 1-4. The Volpe Center team will prepare monthly status reports, with a financial summary and information on recent accomplishments and outlook. The Volpe Center staff will also attend periodic meetings with City staff to address project management issues.

SOW Cost Estimates and Spend Plan

The following is a breakdown of tasks and associated costs

| Task No. | Task Description | Cost |
|-----------------|-------------------------------|------------------|
| 1 | Study Methodology | \$15,000 |
| 2 | Data gathering and analysis | \$20,000 |
| 3 | Data summary | \$15,000 |
| 4 | Final report and presentation | \$45,000 |
| 5 | Project management | \$5,000 |
| | Total cost | \$100,000 |

Volpe Cost Resource Plan

| Resource Category | Estimated Cost |
|--------------------------|-----------------------|
| Direct Federal Labor | \$100,000 |
| Contract Support | \$0 |
| Travel | \$0 |
| Total | \$100,000 |

Period of Performance:

From date of execution of agreement to September 30, 2023.

SOW Deliverables:

The following table presents the major deliverables and milestones for this project:

| Deliverable or Milestone | Target dates (assuming 2/17/23 start) | Related SOW Task |
|-----------------------------------|--|-------------------------|
| Develop methodology and data sets | 3/17/23 | 1 |

| | | |
|--|-----------------|---|
| Gather data | 4/17/23 | 2 |
| Provide raw data and summary by district | 5/17/23 | 3 |
| Draft recommendations | 8/17/2023 | 4 |
| Final Report | 9/17/2023 | 4 |
| Council presentation | To be scheduled | 4 |
| Project status reports | Monthly | 5 |

Assumptions and Constraints:

- Tasks 2 and 3 are based on the City being the primary point of contact with other state and local agencies for purposes of acquiring data, and the Volpe Center team will assist with these efforts and provide technical support.
- Task 3 is intended as an overall data summary using descriptive statistics to supplement the raw data collected. Additional time will be needed for more in-depth analysis using econometric techniques. Results of the econometric analysis will be included in the Task 4 report.
- The analysis will be constrained by the availability of data and the willingness of other entities (e.g., Massachusetts Department of Revenue) to provide data in a timely way. In addition, the structure and metadata of datasets received will affect the ability to merge data across different sources and make valid inferences.
- Statistical techniques will be used to isolate the impacts of the City’s bike lane projects to the greatest extent possible, but there are inherent limitations to the approach due to non-random assignment and highly influential exogenous factors (notably pandemic-related changes in travel demand).
- The cost estimate assumes that no data will be purchased; however, this could be re-evaluated by mutual agreement in an amendment to this Agreement signed by all Parties if there is a cost-effective source of data that would improve the analysis.