

# Analysis of the Potential for Micromobility to Replace Short Car Trips in Urban Areas, And Impacts on Congestion

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## Data Collection

### What data will you collect or create?

For this project we plan to utilize several publicly available datasets such as 2017 Puget Sound Regional Council Household Travel Survey, Darsky hourly weather data, Healthy Ride bike share data, Scoobie scooter share data, and the "Make My Trip Count Survey" from the Green Building Alliance. The data will be stored as excel and csv formats and will not exceed 2 GB of memory. The chose formats should enable sharing and long-term access to the data for reuse by other researchers.

### How will the data be collected or created?

The data will be collected by downloading files from online and through application programming interfaces (API). Files will be stored on my hard drive as well as cloud storage service such as Box. All data files will be stored in the same folder for ease of access. In order to ensure quality of data I'll have other members of the project team, including myself review the validity of the data.

## Documentation and Metadata

### What documentation and metadata will accompany the data?

A documentation file will be created outlining how the methodology for accessing each data source. The documentation will include who created or contributed to the data, its title, date of creation and under what conditions it can be accessed.

## Ethics and Legal Compliance

### How will you manage any ethical issues?

The data planning to be collected for the project is publicly available and will be used for research purposes only. The data will be shared amongst the research team for the duration of the project. This research does not involve human participants or the collection of any personally identifiable information.

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

The data is publicly available and can be used by third-parties for research purposes. The data can be shared once the project is completed.

## Storage and Backup

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

Files will be stored on my hard drive as well as cloud storage service such as Box for backup. If extra space is needed an external hard drive will be used to create additional storage space. In the event of an incident, the data can be re-downloaded from online.

### **How will you manage access and security?**

Only those given permission will be able to access data.

## **Selection and Preservation**

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

The data is publicly available, so can be stored and reused by other researchers as long as its still valuable.

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

The data will be stored on a cloud storage service, which is a free service offered by the institution. This will ensure the data can be used effectively beyond the lifetime of the grant,

## **Data Sharing**

### **How will you share the data?**

The data will be shared with other researchers and through a public box folder so that the data can be downloaded and accessed by others.

### **Are any restrictions on data sharing required?**

There are no restrictions to sharing the data.

## **Responsibilities and Resources**

### **Who will be responsible for data management?**

- Data Capture- Students
- Metadata production- Students
- Data quality- Corey Harper and Sean Qian
- Storage and backup-Corey Harper

The principal investigator will be responsible for implementing the DMP, and ensuring its reviewed and revised.

### **What resources will you require to deliver your plan?**

No additional resources required to deliver plan.