



UNIVERSITY TRANSPORTATION CENTER RESEARCH BRIEF

PROJECT TITLE: The Impact of Shared Mobility Options on Travel Demand

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INSTITUTION: MULTI-INSTITUTION PROJECT
ESTIMATED COMPLETION DATE: AUGUST 2020

SPONSORS: THE PACIFIC NORTHWEST TRANSPORTATION CONSORTIUM, WSDOT, PSRC, UW, UI



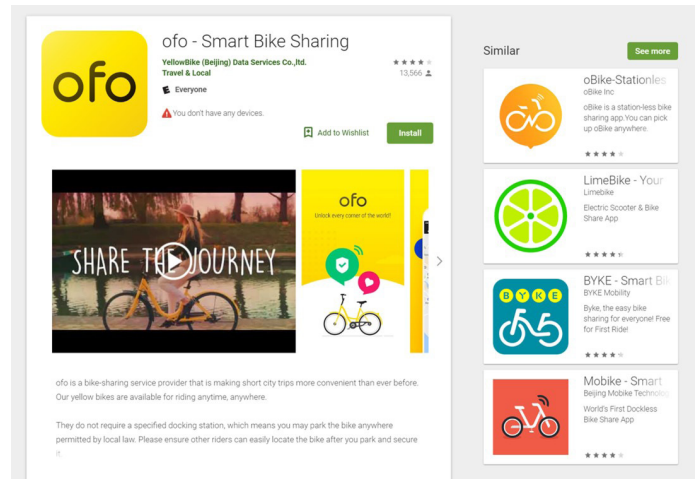
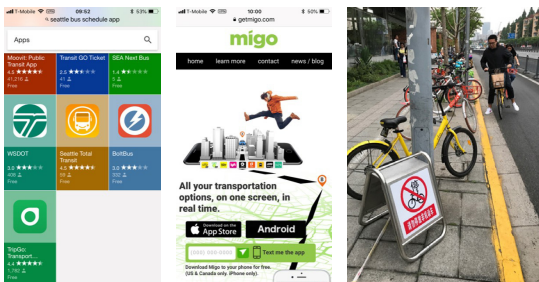
Background

The increasing availability of shared mobility options is having a profound impact on travel demand. Smartphone based technology has permitted the rapid spread of bike-, car-, ride-sharing, and ride-hailing options, which has impacted how people use traditional

travel modes, especially private cars and public transit. Transportation policies urgently need to consider these changes. However, lack of data impedes the objective assessment of both the positive and negative aspects of shared travel options, and prevents shaping policies to effectively guide future transportation investments.

Research Project

The project goal is to use existing travel behavior datasets to identify patterns in the emerging use of shared mobility options. A partnership between the UW and UI, the project will analyze data from several large datasets in Washington and Idaho states, to include data on household travel available from MPOs; employers' data from Commute Trips Reduction program (CTR); longitudinal (2008-2018) data from National Institute of Health sponsored projects in King County; and data from dockless bike share programs. Associated GPS data may also be used to facilitate the analyses (e.g., to identify detailed travel patterns).



The project will produce basic statistics on current household travel patterns by all modes. Travel demand will be analyzed as related to age, gender, and socioeconomic status; to location (i.e. urban, suburban, and rural); to main activity (i.e. commute trip, shopping, social events and recreation). Changes in these patterns will be identified from available longitudinal data. CTR data will provide information on mode and mode changes for commute trips, as well as on employers' policies that affect travel mode choice. Data from bike share programs will yield information on the location, frequency, and duration of bike trips.

The UW-UI partnership will also seek to establish connections with local Transportation Network Companies (TNCs) and Mobility Service Providers (MSPs) to probe new and emerging trends. The project promises to help better understand the impacts of the new travel options in different settings of the Pacific Northwest Region. It will provide useful insights to agencies that are developing policies with respect to the new mobility services to further promote non-single-occupancy-vehicle (SOV) travel in the Region.