



## Shared Mobility Options for the Commute Trip: Opportunities for Employers and Employees

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### Background

Commuting is a major topic area of urban transportation research because (1) it is the most essential component of travel demand and (2) it generates disproportionately large “loadings” on the transportation infrastructure through peak-hour traffic and long-duration parking. Mobile ICT-enabled new mobility services, such as ride-hailing, App-based carpooling, and dockless bike sharing, present potential mode-shift opportunities for commuters who currently travel by SOV, which consequently would relieve traffic congestion and reduce carbon emissions. Therefore, it is important and timely to understand how employers and employees can make concerted efforts to create and promote shared mobility options for commuting. Built upon the concept of Mobility as a Service (MaaS), the research team will explore innovative approaches for making shared mobility appealing to both employees and employers, such that it significantly reduces commuting cost and stress while improving workforce productivity and retention.

The Covid-19 situation, which was unexpected at the time that the proposal was being written, has forced us to focus the empirical research on a subsample of commuters, namely the essential workers. Due to the pandemic, many employees have been working from home, but the essential workers must still regularly commute. We realize that focusing on essential workers may bring interesting information and insights about income-based differences in commuters, their behaviors, and attitudes toward and use of shared mobility.

### Research Project

This project uniquely addresses the question of how shared mobility options can resolve some of the problems associated with commuting. Our research has three key components. First, we will work with the University of Washington (UW), which is one of the largest employers in the Seattle region, to systematically and closely examine the commute-related challenges and opportunities for essential workers. Collaborating with UW Transportation Services, we

will collect and analyze travel survey data to address questions regarding the distinct transportation needs of essential workers and the actual and potential roles that employers can play in providing shared mobility solutions for essential workers, especially those who do not have a car. Secondly, continuing our collaboration with the WSDOT Commute Trip Reduction program and Puget Sound Regional Council, we will recruit about a dozen employers for focus groups to gain a deeper understanding of what organizational constraints currently limit wider adoption of shared mobility for commuting and what technological and policy/management innovations may help create desirable shared mobility alternatives. As part of this research effort, we will invite researchers from Microsoft, who are developing a calendar-based App for carpooling among coworkers, to participate in our focus groups for mutually informative and inspiring dialogs. Thirdly, the University of Idaho team members will lead a study to explore how employers in small cities and rural communities can facilitate shared mobility options for commuting. We will work with the University of Idaho to design and implement a policy experiment to use student parking fee exemption as an incentive to encourage students to come to the University by carpooling/vanpooling.

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### ABOUT THE AUTHORS

The research team consisted of Qing Shen, Xuegang Ban and Anne Moudon of the University of Washington, and Mike Lowry of the University of Idaho.

### ABOUT THE FUNDERS

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### EXPECTED DATE OF COMPLETION

August 2022

### FOR MORE INFORMATION

<http://depts.washington.edu/pactrans/research/projects/shared-mobility-options-for-the-commute-trip-opportunities-for-employers-and-employees/>