

UTC Project Information	
Project Title	Micro-Mobility Promises and Challenges in the Pacific Northwest
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Funding Source(s) and Amounts Provided (by each agency or organization)	University of Washington PacTrans \$180,000 Oregon State University \$ 145,000 University of Alaska \$ 35,000
Total Project Cost	\$360,000
Agency ID or Contract Number	69A3551747110
Start and End Dates	September 16, 2019-September 15, 2021
Brief Description of Research Project	<p>The research objective of this project is to identify the promises, opportunities, and associated challenges of the rapid adoption of micro-mobility services (shared e-scooters and bicycles) in cities and college campuses in the Pacific Northwest, specifically to a diverse population. A focus on younger demographics, people of color, and low-income families as well as a consideration of living environments (urban vs. rural) will be taken.</p> <p>The project should develop a deep understanding the e-scooter users' characteristics (i.e., who are the users) and behaviors (perception and preferences). Critical factors affecting their choice behaviors (i.e., for what purposes, such as transportation or recreation) and market potential for these "light-weight" personal transportation modes should also be understood.</p> <p>As a result of these objectives, the knowledge gap of the ways in which these factors might impact and contribute to the emergence of a new ecosystem of shared e-micro-mobility will be filled. These types of questions can be explored by using existing behavior survey data (from service providers), e-scooter pilot testing data, and supplemental revealed-preference (RP) and stated-preference (SP) survey data. Information gained from this project about the likely demographics and purposes for using these new technologies will help to better understand what the maximum shift to these new mobility services might be.</p>

<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	<p>While this nature of this exploratory study cannot provide a physical implementation, the outcomes of this study provide scientific evidence of the challenges, opportunities of micromobility, and what factors, i.e. socioeconomics and demographics, impact on people’s choice of micromobility. Those result can be implemented in decision making on transportation planning, policy making, safety and mobility project at local, state, and regional level. The questionnaire survey were also be used as an educational platform to inform publics.</p>
<p>Impacts/Benefits of Implementation (actual, or anticipated)</p>	<p>Those result can benefit decision making process at local, state, and regional level. For example, this study identified three reasons for not using micromobility: lacking access, lacking ability or skills, and worrying about safety. However, also it was also found that there is the potential for a large mode shift towards micromobility if those issues are resolved. Authorities can target on those specific batteries to promote sustainable modes, especially for the upcoming goal of reducing emission from the current administration and infrastructure bill.</p> <p>To help decision makers understand the why people choose or not choose to use micromobility, we found that people use micromobility more for commuting and recreational purposes, and using micromobility is positively associated with the possession of a higher education degree, being employed, living in urban area, the perception that using micromobility can benefit environmental and social issues, but negatively associated with increasing age, self-identifying as female, and being a person with a disability.</p> <p>Besides, the finding of the impact of COVID-19 on micromobility can be used to inform future emergency response policy making. For example, we found a significant decrease in usage frequency when the Stay-at-home order was implemented in terms of all four ride purpose categories (commuting, recreational, shopping, and social). Those results can help decision makers to create strategies during repertory pandemic.</p> <p>By implementing the questionnaire survey on online social media, this study also provide an educational opportunity for public learning the safety, usage, and sustainability of micromobility</p>
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project Website 	<p>https://www.facebook.com/Pactrans.MicroMobility</p>

