

UTC Project Information	
Project Title	Managing Increasing Demand for Curb Space in the City of the Future
University	University of Idaho
Principal Investigator	Kevin Chang
PI Contact Information	kchang@uidaho.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	University of Washington PacTrans \$180,000 University of Idaho \$ 60,000 University of Washington \$ 120,000
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>This research directly addresses the PacTrans topics of System-wide Efficiency by supporting systems integration and optimization and Improved Reliability across Modes by developing innovative methods for managing curb lane function and curb access.</p> <p>The rapid rise of autonomous vehicles (AV), on-demand transportation, and e-commerce goods deliveries as well as increased cycling rates and transit use is increasing demand for curb space resulting in competition between modes, failed good deliveries, roadway and curbside congestion, and illegal parking. The research findings will improve mobility by increasing our understanding of existing curb usage and provide new solutions to city officials, planners, and engineers responsible for managing this scarce resource in the future.</p> <p>We will work closely with several cities in the PacTrans region to ensure the study's relevance to their needs, and that the results will be broadly applicable for other cities. This research will allow for the development of innovative curb space designs and ensure that our urban street system may operate more efficiently, safely, and reliably for both goods and people.</p>

<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	<p>Managing increasing demand for curb space in the city of the future, and doing it effectively, will be dependent on agencies recognizing the changing travel dynamics of its citizens and users, policy-makers who will need to develop and regularly review rules that balance the limited availability of curb space with a constantly changing user demographic, and planners and engineers who will rely on increasing amount of data and new methods of collecting this data to make informed decisions as to how this curb space should be allocated. The policy recommendations from this study, along with the approaches taken to develop the simulation models, reflect the ever-changing landscape with regard to curb space management. The researchers from this project hope that this study will help cities and companies to identify areas of mutual interest, and to explore opportunities to collaborate on efficient curb management solutions moving forward.</p>
<p>Impacts/Benefits of Implementation (actual, or anticipated)</p>	<p>This research increased the understanding of existing curb usage and provided new solutions to officials, planners, and engineers responsible for managing this scarce resource in the future. The research team worked with local agencies to ensure the study's relevance to their needs, and that the results would be broadly applicable for other cities. This research allowed for the development of innovative curb space designs and ensured that our urban streets would operate more efficiently, safely, and reliably for both goods and people.</p>
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project Website 	<p>http://depts.washington.edu/pactrans/research/projects/managing-increased-demand-for-curb-space-in-the-city-of-the-future/</p>