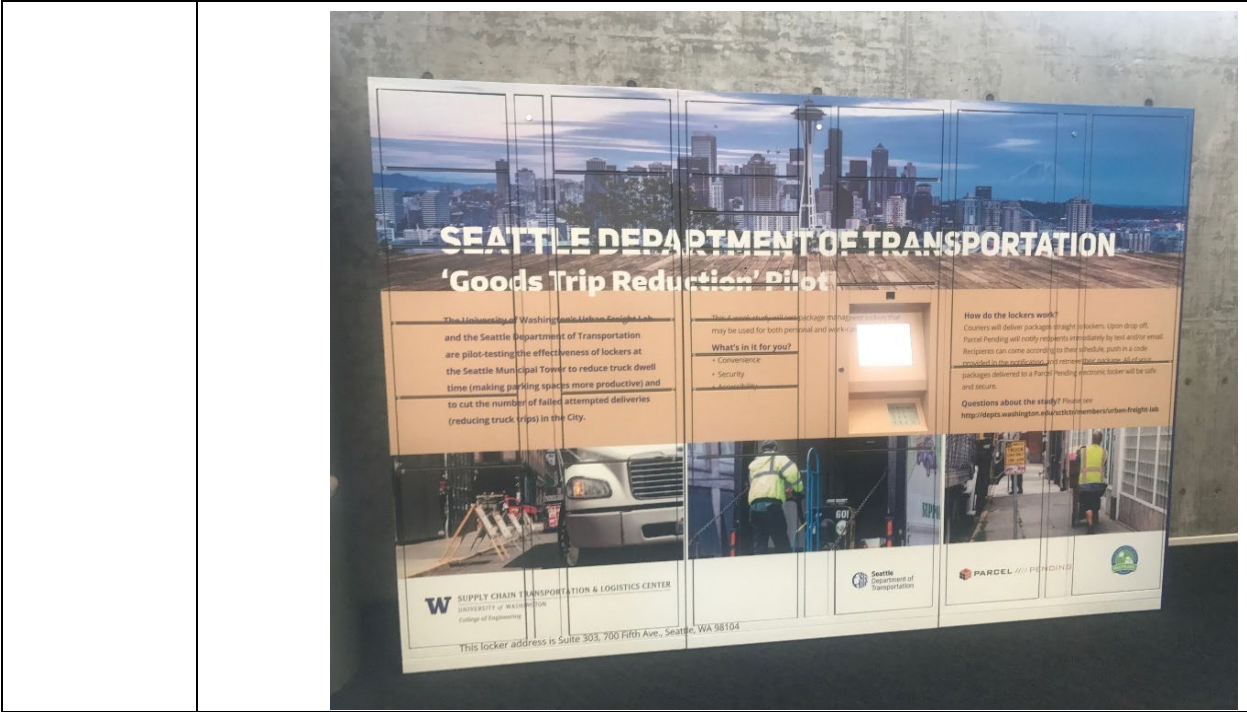


<b>UTC Project Information</b>	
Project Title	Final 50 Feet of the Urban Goods Delivery System: Pilot Test of an Innovative Improvement Strategy
University	University of Washington
Principal Investigator	Anne Goodchild
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Funding Source(s) and Amounts Provided (by each agency or organization)	University of Washington PacTrans \$40,000 Seattle Department of Transportation \$35,000 Supply Chain Transportation and Logistics Center University of Washington \$5,000
Total Project Cost	\$80,000
Agency ID or Contract Number	69A3551747110
Start and End Dates	August 16, 2017 – August 15, 2019
Brief Description of Research Project	<p>The “Final 50 Feet of the Urban Goods Delivery System: Pilot Testing Innovative Improvement Strategies” project will provide new data-based knowledge and insights about the effects of truck parking strategies proposed in the City of Seattle, before they are broadly implemented.</p> <p>Reduce dwell time, the time a truck is parked in a load/unload space. There are both public and private benefits to reaching this goal.</p> <p>Reduce failed first deliveries. Several Urban Freight Lab members told the research team that 8-10% of first delivery attempts in urban areas across the country fail. A study conducted in the UK reported that the cost of failed first deliveries was 771 billion euros in 2014.</p>

<p>Describe Implementation of Research Outcomes (or why not implemented )</p> <p>Place Any Photos Here</p>	<p>The Common Carrier Locker System Pilot Test in the Seattle Municipal Tower was uniquely designed for multiple retailers’ and delivery firms’ use in a public space. In spring 2018, a common carrier locker system was placed in the 62-floor Seattle Municipal Tower for ten days as part of a joint research project of the Urban Freight Lab (UFL) at the University of Washington’s Supply Chain Transportation &amp; Logistics Center and the Seattle Department of Transportation (SDOT), with additional funding from the Pacific Northwest Transportation Consortium (PacTrans). This report demonstrates common carrier lockers’ potential to reach both public and private goals by reducing dwell time (the time a truck is parked in a load/unload space in the city) and the number of failed first delivery attempts to dense urban areas. This research provides evidence that delivering multiple packages to a single location such as a locker, rather than delivering packages one-by-one to individual tenants in an urban tower increases the productivity of public and private truck load/unload spaces.</p> <p>The pilot test found that a delivery to the common carrier locker system reduced total delivery time in the Seattle Municipal Tower by 78% when compared to traditional floor-to-floor, door-to-door delivery in the building. This result shows what is possible. The pilot compares a single locker delivery of one package to eight door-to-door deliveries in the building. But this best case, real-world example powerfully demonstrates a proof of concept. Strip away what prior UFL research has identified as the time-consuming process of delivery drivers navigating multiple floors and addresses inside buildings, replace it with a one-stop dense delivery node, and time savings will accrue. Of course, myriad factors can slow the delivery process; consistent across-the-board 78% reductions in time would not be expected for all deliveries to common carrier smart lockers. But UFL researchers anticipate that well-sited lockers will afford substantial time savings when compared with door-to-door delivery in urban towers.</p> <p>The pilot test also found that seven parcels failed to be delivered in traditional door-to-door delivery; there were zero failed deliveries to the locker.</p> <p>In other words, this pilot demonstrates that parcel locker systems substantially reduced both delivery time and the number of failed deliveries in dense urban settings.</p>
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Impacts/Benefits of Implementation (actual, or anticipated)

The Municipal Tower pilot tested the use of common carrier lockers in a public space that all retailers and carriers may use without risking revealing their information to rivals. Building managers and public agencies are also interested in common carrier locker systems as they reduce the total footprint needed for lockers in a building or a transit station. They do this by providing one set of lockers for all retailers and all carriers to use, instead of placing many company-branded lockers in a much larger space.

In Seattle and other growing cities, a common carrier locker system can provide convenient access for both delivery workers and office building tenants. The locker system can eliminate the need for tenants to rush out of a meeting to intercept a delivery person at their office. By creating a delivery density node, delivery drivers can avoid wasted time in freight elevators and looking for the right office suite to deliver the parcel. As this pilot test's key findings show, a locker can reduce both the number of failed delivery attempts and truck dwell time.

While common carrier locker systems offer cities many potential benefits, little publicly accessible data exists on how to measure the performance and effectiveness of these locker operations. This pilot test in the Seattle Municipal Tower in the city's urban core helps fill the void.

Web Links

- Reports
- Project Website

- [https://depts.washington.edu/sctlctr/sites/default/files/SCTL\\_Muni\\_Tower\\_Test\\_Report\\_V4.pdf](https://depts.washington.edu/sctlctr/sites/default/files/SCTL_Muni_Tower_Test_Report_V4.pdf)
- <https://depts.washington.edu/sctlctr/research-project-highlights/urban-goods-delivery-0>