

<b>UTC Project Information</b>	
Project Title	Using Computer Vision Data to Evaluate Bicycle and Pedestrian Improvements: A Before and After Case Study of Separated Bike Lane Conversion
University	University of Washington
Principal Investigator	Don MacKenzie
PI Contact Information	dwhm@uw.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	University of Washington PacTrans \$180,000 University of Idaho \$33,000 University of Washington \$147,000
Total Project Cost	\$360,000
Agency ID or Contract Number	69A3551747110
Start and End Dates	Feb 1, 2022- June 30, 2023
Brief Description of Research Project	<p>The City of Boise, Idaho is about to embark on an ambitious effort to improve safety and mobility for bicyclists with a \$180,000 investment along four arterials. The City's project will convert traditional bike lanes into separated bike lanes by introducing candlestick bollards to physically separate vehicles and bicyclists. This safety improvement is motivated by the City's recent adoption of Vision Zero goals.</p> <p>This project will test whether introducing candlestick bollards on bike lanes along four arterials close to grocery stores will increase bicycle trip making for shopping because the bollards will slow auto travel and increase cyclists' perception of safety. The city selected bike lanes near grocery stores because there is a clear origin-destination pair between neighboring homes and the store and the decision to choose a bicycle doesn't require a dispersed network to connect the origin and destination. The team will use computer vision devices to measure the number of bicycles and automobiles, speeds, and separation distance before and after the introduction of the bollards. The computer vision devices will be installed at the improvement locations and at locations that will not be improved for "control group" comparison.</p> <p>This PacTrans project will develop a repeatable process that cities, state DOTs, and other agencies throughout the Pacific Northwest can use to analyze the large amounts of data generated by modern computer vision devices. The results from this project will demonstrate how the data from this emerging technology can support decision making for other street improvements related to pedestrians and cyclists.</p>

<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	
<p>Impacts/Benefits of Implementation (actual, or anticipated)</p>	
<p>Web Links</p> <ul style="list-style-type: none"><li>• Reports</li><li>• Project Website</li></ul>	