UTC Project Information	
Project Title	Automated Localization and ADA Functional Condition Assessment of Curb Ramps using Mobile Lidar
University	Oregon State University
Principal Investigator	Yelda Turkan
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Funding Source(s) and Amounts Provided (by each agency or organization)	University of Washington PacTrans $40,00 Oregon State University $ 40,000
Total Project Cost	$80,000
Agency ID or Contract Number	69A3551747110
Start and End Dates	August 16, 2020-August 15, 2022
Brief Description of Research Project	The overarching goal to develop an efficient method to detect and assess the ADA compliance of curb ramps from mobile lidar data will be accomplished through the following tasks: Task 1 – Establish a novel framework and algorithm: Review recent publications on various techniques for curb ramp extraction from lidar data. Create a novel framework for curb ramp ADA compliance assessment using 3D point cloud data by extending our existing approach to extract curb ramps and sidewalks in addition to the road surface. Task 2 – Build training and validation datasets: Extract curb ramps from at least 100 intersections from mobile lidar datasets available from Oregon DOT Geometronics to produce both training and validation dataset identifying their key geometric characteristics. Task 3 – Generate a geodatabase in GIS: The curb ramp detection and assessment results obtained in the previous task will be added to a geodatabase in GIS for easier access to the results and improved data management. Task 4 – Validate and demonstrate the framework

Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	
Impacts/Benefits of Implementation (actual, or anticipated)	
Web Links • Reports • Project Website	