

UTC Project Information	
Project Title	Transportation Corridor Resiliency in the Face of a Changing Climate
University	University of Alaska
Principal Investigator	Keith Cunningham
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Funding Source(s) and Amounts Provided (by each agency or organization)	University of Washington PacTrans \$180,000 Alaska Aviation Proving Ground Inc. \$60,000 Oregon Department of Transportation \$60,000 University of Washington Department of Civil Engineering \$60,000
Total Project Cost	\$360,000
Agency ID or Contract Number	DTRT13-G-UTC40
Start and End Dates	December 16, 2016 – January 31, 2018
Brief Description of Research Project	<p>Since 2012, we have been acquiring high-resolution lidar surveys of close to 20 rock-slopes in Alaska in support of Pactrans-supported studies of roadway safety. In this project, we will capitalize on this treasure trove of unique data to quantify how rock fall activity (magnitude-frequency of rock fall events) varies with changes in annual storm intensity from 2012 to 2016.</p> <p>We will then use this information to in conjunction with a landslide activity forecasting procedure we developed to investigate how the resiliency of transportation corridor may change in the future.</p>

<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	<p>We successfully modeled and correlated rockfall activity with historic climatic data at the two study sites. Using this correlation, the model was further developed to forecast how anticipated climate factors over the next century will impact rock fall activity at the study sites.</p>
<p>Impacts/Benefits of Implementation (actual, or anticipated)</p>	<p>The model correlations and model forecasting enables a better understanding of how increased rock fall will effect the two critical transportation corridors that link Anchorage to Fairbanks, Alaska.</p>
<p>Web Links</p> <ul style="list-style-type: none"> • Reports 	<p>Final Report at: https://snap.uaf.edu/sites/default/files/UAS%20Assessments%20of%20Landslide%20Safety%20for%20Transporation%20Cooridors%20%281%29.pdf</p>

<ul style="list-style-type: none">• Project Website	
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