

UTC Project Information	
Project Title	Fault Tree Analysis for Accident Prevention in Transportation Infrastructure Projects
University	Oregon State University
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PI Contact Information	hw.chris.lee@oregonstate.edu
Funding Source(s) and Amounts Provided (by each agency or organization)	University of Washington PacTrans \$30,000 Oregon State University \$30,000
Total Project Cost	\$60,000
Agency ID or Contract Number	DTRT13-G-UTC40
Start and End Dates	January 15, 2015– September 16, 2016
Brief Description of Research Project	<p>The study will combine literature review and content analysis to develop a list of risk factors that lead to contribute to major accident types in transportation infrastructure projects. OSHA’s Fatality and Catastrophe Investigation Summaries will be the main source of data for the content analysis.</p> <p>OSHA requires construction companies to report any type of work-related accidents resulting in the hospitalization of three or more workers.</p> <p>Thus, this summary database contains valuable information regarding safety-related performance, which can be used as a basis for identification of accident types and risk factors.</p> <p>The data collection in this study will target: (1) accident related to the Highway, Street, and Bridge Construction Sector (NAICS 237300); and (2) projects performed in the Northwest Region of the US (Region 10 according to the OSHA categorization).</p>

<p>Describe Implementation of Research Outcomes (or why not implemented)</p> <p>Place Any Photos Here</p>	<p>So far, there has been no formal implementation of the research outcomes. I think that while the research results have significant theoretical implications to researchers, the developed model may have practical limitations in terms of ease of use and applicability.</p>
<p>Impacts/Benefits of Implementation (actual, or anticipated)</p>	<p>I anticipate that once implemented, the developed model has significant potential to categorize the root causes of major accidents scientifically and effectively, and hence support accident prevention. To improve the applicability of the model, a future study is needed to revise the model structure and devise a workflow for its implementation.</p>
<p>Web Links</p> <ul style="list-style-type: none"> • Reports • Project Website 	<p>https://rosap.ntl.bts.gov/view/dot/37134</p>