

UTC Project Information	
Project Title	New Strategies for Maintaining Post -Seismic Operations of Lifeline Corridors
University	Oregon State University
Principal Investigator	David Trejo
PI Contact Information	E-mail: david.trejo@oregonstate.edu; Phone: (541) 737-9304
Funding Source(s) and Amounts Provided (by each agency or organization)	\$180000.00
Total Project Cost	\$180000.00
Agency ID or Contract Number	DTRT12-G-UTC10
Start and End Dates	09/01/2012~10/13/2014
Brief Description of Research Project	<p>The Pacific Northwest (PNW) faces unique combinations of environmental hazards, including the strong potential for seismic events from the Cascadia Subduction Zone (CSZ). The last known significant earthquake on the CSZ is believed to be in 1700. Evidence indicates that major earthquakes on the CSZ likely occur at a return period of approximately 300 years, and the next subduction event is anticipated to cause widespread damage throughout the PNW (The Cascadia Region Earthquake Workgroup 2005). In addition to being susceptible to earthquake damage, many infrastructure systems in the region are exposed to coastal zones or de-icing and/or anti-icing chemicals. Exposure to these conditions result in premature deterioration (corrosion, alkali silica reactions (ASR), cracking, etc.) and often results in reduced structure capacity. Keeping critical corridors operational during and after a seismic event on the CSZ is essential to minimizing loss of life and minimizing economic impact after the quake in the State. Critical to keeping these corridors open is the continued operation of the bridges on these corridors. This research proposes to perform inspections of bridges on critical corridors. In addition, the research will identify methods to assess the health of bridge structure and will identify innovative methods for repairing, rehabilitating, or replacing bridges on critical corridors. The outcome of the research will provide SHAs with efficient methods to inspect, assess, repair, rehabilitate, or replace these critical structures.</p>
Describe Implementation of Research Outcomes (or why not implemented)	
Place Any Photos Here	
Impacts/Benefits of Implementation (actual, not anticipated)	

<p>Web Links</p> <ul style="list-style-type: none">• Reports• Project website	<p>New Strategies for Maintaining Post -Seismic Operations of Lifeline Corridors</p> <p>http://depts.washington.edu/pactrans/wp-content/uploads/2012/12/PacTrans-1-739437-Trejo-David-Multi-Project.pdf</p>
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