

Transportation Pooled Fund Program

Project Title: <i>Climate Change Impact Assessment for Surface Transportation in the Pacific Northwest and Alaska</i>		
Project Manager and Phone Number: Kathy Lindquist (360) 705-7976	Project No: TPF-5(191)	Project is: <input type="checkbox"/> PLANNING <input checked="" type="checkbox"/> R&D
Reporting Period: January 2011 – March 2011	Multi Year Project Yes	
Description of Work Performed and Progress:		
<p>Write up for TPF-5(191) Northwest Transportation Consortium http://www.pooledfund.org/projectdetails.asp?id=414&status=4</p> <p>The TPF-5(191) “Climate Change Impact Assessment for Surface Transportation in the Pacific Northwest and Alaska” Research project is underway. The Oregon Transportation Research and Education Consortium (OTREC) and Alaska University Transportation Center (AUTC) are conducting the research project. The project team is a multi-disciplinary group of researchers from Oregon and Alaska consisting of John MacArthur, Oregon Transportation Research and Education Center; Dr. Philip Mote, Director Oregon Climate Change Research, Institute, Oregon State University; Dr. Jason Ideker, Assistant Professor, Oregon State University; Dr. Miguel Figliozzi, Assistant Professor, Portland State University; Dr. Ming Lee, Assistant Professor, Department of Civil and Environmental Engineering, University of Alaska Fairbanks. The team brings unprecedented expertise in climate change, transportation operations, and infrastructure from Oregon State University, Portland State University, and the University of Alaska - Fairbanks.</p> <p>Update on the Region X Transportation Consortium: Climate Change Impact Assessment for Surface Transportation in the Pacific Northwest and Alaska project</p> <ul style="list-style-type: none"> • Contract signed January 2010 • Project Team had kick-off meeting to discuss scope of work and roles. • Technical Advisory Committee kick-off conference call was held on March 10, 2010. • Technical Advisory Committee conference call was held on December 13, 2010. • PSU faculty and graduate student have conducted a literature review • PSU faculty and graduate student have developed a preliminary survey (http://its.pdx.edu/climatechange/index.php). The survey was sent to DOT, city, county and other contacts in the four states. This survey records the current state of adaptation activities. • PSU faculty and graduate student have outlined a transferrable method to assess climate change vulnerability on their multi-modal surface transportation systems with geographic information systems, using the City of Portland, Oregon as an illustrative case. This method allows for preliminary vulnerability identification, prioritization and impact assessment, and can be used as a base for more advanced analysis and scenario testing. • Phil Mote (OCCRI - OSU) is developing climate projections to characterize past and future trends in climate variables using best available data. New climate model scenarios are being made available in 2010, regional modeling results for North America from the North American Regional Climate Change Assessment Program (NARCCAP). OCCRI is obtaining and analyzing the NARCCAP simulations with the “Reanalysis (Global Model).” The NARCCAP domain does not fully cover Alaska for most models. The Team will augment these results for Alaska with the global model scenarios. The model criteria are being defined with the project team and results will be completed in January 2011. • Jason Ideker (OSU) has completed literature review for determining vulnerability of critical infrastructure, with particular focus on design and maintenance of infrastructure. Dr. Ideker has completed a draft of his task. • Ming Lee (UAF) is working on a GIS database of the Pacific Northwest and Alaska highway networks. He is working to identify critical infrastructure on the network that are subject to climate change impacts. Dr. Lee is waiting to incorporate data from the models run from Dr. Mote. Dr. Lee is also requesting GIS data from state agencies. 		

STATUS AND COMPLETION DATE:

Contract signed and work is underway.

Percentage of work completed to date for total project

Project is: 80 %

 on schedule X behind schedule, explain:

The no-cost extension was requested on 2/17/2011 to extend the deadline of the project to July 31, 2011. PIs needed additional time to write up sections to deliver to the project manager. The project manager is currently developing the template for the final report and adding sections that have been completed. It is anticipated that a draft will be completed by April 2011. The draft will then be sent to the TAC for review.

Expected Completion Date: July 31, 2011

Project Manager: Kathy Lindquist