Report submitted for July – December 2012 reporting period

UTC Project Information	
Project Title	Use of Recycled Concrete as Aggregates for Portland Cement Concrete Pavements
University	Washington State University
Principal Investigator	Dr. Haifang Wen
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Funding Source(s) and Amounts Provided (by each agency or organization)	PacTrans: $60,000. Matching funds from WSDOT: $150,000.
Total Project Cost	Total costs from all funding sources = $210,000.
Agency ID or Contract Number	UW 73-9428 WSU 04-148-5301
Start and End Dates	May 16, 2012 to November 1, 2013 (PacTrans portion)
Brief Description of Research Project	The Washington State Department of Transportation (WSDOT) has initiated a research project to investigate the use of recycled concrete as aggregates (RCA) in Portland (hydraulic) cement concrete pavements (PCCP). The planned source for the RCA in the project will be from demolished pavements in western Washington, which generally contain very high-quality aggregates. Aggregate quality varies across the state, and concrete made with RCA sourced elsewhere will likely have different properties. This PacTrans proposal is to expand the scope of the WSDOT project to include additional sources of RCA as well as evaluations of the RCA properties for the purpose of establishing performance criteria necessary for successful application in PCCP. The goal of the combined projects is to evaluate the use of RCA for widespread application in concrete pavements in Washington State and beyond

Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	Utilization of RCA as a substitute for virgin aggregates in PCCP has the potential to reduce project costs and contribute to more sustainable construction. Results from this project will provide guidance on mix design requirements, performance criteria for the RCA, and an improved understanding of the properties of concrete incorporating RCA. A technical report documenting the procedures and results from this study will be submitted to PacTrans. Recommendations will be made to the WSDOT and other regional transportation agencies on the use of RCA in concrete. Results from the project will also be submitted for publication and presentation at an upcoming Transportation Research Board meeting.
Impacts/Benefits of Implementation (actual, not anticipated)	Project is underway. Information on actual implementation will be added prior to the end of the project.
Web Links · Reports · Project website	Laboratory Evaluation Of Recycled Concrete As Aggregate In New Concrete Pavements http://depts.washington.edu/pactrans/wp-content/uploads/2012/12/PacTrans-22-739428-Wen-Haifang-Small-Project.pdf