UTC Project Information	
Project Title	MPC-539 – Ultra-accelerated Method to Evaluate Recycled Concrete Aggregate in New Construction
University	University of Wyoming
Principal Investigator	Jennifer Tanner
PI Contact Information	Associate Professor University of Wyoming Phone: (307) 766-2073 Email: tannerj@uwyo.edu ORCID: 0000-0002-8279-6289
Funding Source(s) and Amounts Provided (by each agency or organization)	USDOT, Research and Innovative Technology Administration $52,834 Wyoming Department of Transportation $129,881
Total Project Cost	$182,715
Agency ID or Contract Number	69A3551747108
Start and End Dates	November 2, 2017 to July 31, 2022
Brief Description of Research Project	The Rocky Mountain Region has experienced considerable difficulty due to the presence of alkali-silica reaction (ASR) in concrete construction. Several sources of aggregate that have produced poorly performing concrete have been removed from service. As an example, DIA runways were damaged by ASR and the repair cost exceeded 30 million. On a positive note, Wyoming Department of Transportation (WYDOT) was successful in using RCA on Interstate 1-80 and with limited ASR damage. In this portion of the road, WYDOT observed a 30 year service life. This performance, coupled with data from a previous study help confirm that using RCA combined with natural aggregates produces durable long-term concrete that will benefit the transportation network in this region. This study intends to provide experimental data that permits RCA to be used in applications beyond base fill for roads.
Describe Implementation of Research Outcomes (or why not implemented) Place Any Photos Here	The research outcomes were met.
Impacts/Benefits of Implementation (actual, not anticipated)	This research was intended to promote the use of recycled-concrete aggregate (RCA). The limited variability of results should alleviate alkali-silica reaction concerns for those who wish to use RCA.
Web Links • Reports • Project Website	• MPC Research Report