Project Name:	DTFH61-06-04-00025 - Alkali-Silica Reactivity (ASR) Development and Deployment Program
Investigator:	Prime Contractor is Construction Technology Laboratories, Inc. MTU PI: L.L. Sutter with T.J. Van Dam and K.R. Peterson
Dates of Project:	September 18, 2006 (Duration based on task order awards)
Funding:	(Award based on task order awards)
Sponsor:	Federal Highway Administration

Description of Project and Resulting Impact:

Alkali-silica reactivity (ASR) is a major cause of deterioration of highway structures and pavements in the United States. Significant progress was made to understand the ASR related issues under SHRP (early 1990's) and directions for screening concrete materials and ASR mitigation methods were established. Over the last 15 years since SHRP, additional research and development effort has been devoted to understanding the mechanism of ASR and mitigating the impact of ASR. However, a number of issues still exist that prevent the construction industry from eliminating the detrimental impact of ASR in new construction and from effectively mitigating ASR in existing structures. Recent SAFETEA-LU legislation has designated funding from 2006 through 2009 for furthering development and deployment techniques to prevent and mitigate ASR. This program is intended to provide definitive engineering solutions to this important concrete durability problem.

Application to Practice of the Research Results

Deliverables for this project will include tests to identify ASR reactive mixtures and protocols for treating ASR affected structures.