

**Quarterly Progress Report – September 2009  
For the period July 1, 2009 to September 30, 2009**

**Project Dates:** March 6, 2008 – March 5, 2010

**Project Title:** Development of Performance Properties of Ternary Mixtures:  
Laboratory Study on Concrete & Field Study

**ISU Principal Investigator:** Peter Taylor, 515-294-8103, email: ptaylor@iastate.edu

**Uof U Principal Investigator:** Paul Tikalsky, 801-581-6931 email: tikalsky@civil.utah.edu

**Progress Report:**

Project is on schedule	Yes
Project is within budget	Yes
Significant changes in project description	No

**Problems** (current or anticipated): None

**Products and tangible results this quarter** (reports/articles written, oral reports/interviews given):

- Presentations were made to the National Concrete Consortium and Mid Continent Conference summarizing the project and some of the findings

**Interaction with Technical Monitor and/or Project Advisory Committee:**

**Brief summary of this quarter's research and activities pertaining to the project:**

- All of the temperature mixtures have been prepared and are in testing
- Some repeat mixtures have been prepared from the standard temperature matrix
- Work is continuing on data analysis and reporting
- A site visit was conducted at a location in Utah
- Plans were developed for visiting sites in PA and NH
- Discussions continued about visits to KS and IA

**Main emphasis for next quarter:**

- Work will continue on reporting and planning for Phase 3
- Data collection will continue for the mixtures prepared based on the ages of the samples
- Work will continue in developing sites to visit in the coming season

No.	Task Description	Completion Date Expected	% completed
1	Determine matrix of concrete mixtures	July 2008	100
2	Concrete performance properties	September 2009	90
3	Temperature effects	May 2009	75
4	Investigate existing ternary concrete	September 2009	0
5	Analysis of data	December 2009	60
6	Trial mixture designs for field studies	December 2009	0
7	Summary report	March 2010	20