

CP RESEARCH MAP It's your move!	State	Concrete Pavement Research Project Title	Project Description	RESEARCH PROJECT CONTACT			Date started (or planned start)	Date completed (or planned completion)	Research sponsor(s)	Database(s) where project is listed (TRIS, etc.)	DB number	Track	Link
				First	Last	Email							
Project 8	IA	Self-Consolidating Concrete - Applications for Slip Form Paving, Phase 2	The objective of this research is to develop a new type of concrete that can self-consolidate (without vibration) and hold its shape right after slip-form paving. Different from the conventional self-consolidating concrete, which has very high flowability and requires formwork for construction, this new type of self-consolidating concrete for slip-form paving will have sufficient flowability (a slump of approximately eight inches) for self consolidation but be stiff enough to hold its shape right after paving, thus not requiring formwork for construction.	Kejin	Wang	kejinw@iastate.edu	12/7/2006	12/6/2008	Federal Highway Administration	UTC	12894	1	http://rip.trb.org/browse/dproject.asp?n=12894
Project 10	ID	Materials Acceptance Risk Analysis	This project will develop a database for pavement projects in the State of Idaho constructed over the last 20 years to include all the information available for the projects including their current condition. Conduct a comparative risk analysis for Superpave projects and Portland Cement Concrete pavements using the available data used in projects for Idaho and other states with similar problems.	Mike	Santi	mike.santi@id.idaho.gov	8/23/2007	7/31/2008	Idaho Department of Transportation	RiP	15097	1	http://rip.trb.org/browse/dproject.asp?n=15097
Project 13	KY	Evaluation of Maintaining Adequate Air Void System for PCC	The objectives of this study are to: (1) review available technologies to determine air content of both plastic and hardened concrete; (2) evaluate air content, bubble size and spacing for existing portland cement concrete (PCC) mixtures; (3) develop guidelines for utilization of new techniques for air content determination of plastic concrete; and (4) establish trial projects to evaluate new technologies and procedures.	Jamie	Byrd	jamie.bewley@ky.gov	7/1/2007	6/30/2009	Kentucky Transportation Cabinet	RiP	14962	1	http://rip.trb.org/browse/dproject.asp?n=14962
Project 15	MI	Evaluation of Concrete Pavements with Material-Related Distress	To identify, to the extent possible, the cause of MRD on the selected pavement sections. Design and conduct a laboratory study to investigate the observed distress(es) with the purpose of selecting mixture properties to prevent the occurrence of such distress(es) in future concrete pavement construction. Make recommendations for the treatment of the existing pavement sections and prevention of deterioration in future pavement construction, including recommendations for materials selection, mix design and construction practices	Dave	Smiley	SmileyD@michigan.gov	12/5/2005	12/5/2008	Michigan Department of Transportation	RiP	13796	1	http://rip.trb.org/browse/dproject.asp?n=13796
Project 17	MI	Impact of Hydrated Cement Paste Quality and Entrained Air-Void System	This project thoroughly reviewed the current accepted relationship between the quality of hydrated cement paste (HCP) and the air-void system and how it affects the F-T durability of concrete. Design and conduct a phased laboratory study to evaluate how recent changes in concrete mixtures impact the quality of HCP and air-void system and how this influences the F-T durability of concrete.	John	Staton	statonj@michigan.gov	7/31/2007	7/31/2010	Michigan Department of Transportation	RiP	14312	1	http://rip.trb.org/browse/dproject.asp?n=14312
Project 19	MI	Portland Cement Concrete Pavement Data Analysis	The objective of this research project is to analyze the collected data on the performance of 130 of Michigan's jointed Portland Cement Concrete (PCC) pavements constructed between 1980 and 2000 using valid statistical procedures.	Alan	Robards	robardsa@michigan.gov	3/8/2006	3/7/2009	Michigan Department of Transportation	RiP	13794	1	http://rip.trb.org/browse/dproject.asp?n=13794
Project 38	VA	Concrete Volume Change and the Reduction of Associated Cracking	The objective of the proposed study is to examine the early age, as well as, later age volume change of various concrete mixtures that are currently used by the Virginia Department of Transportation (VDOT). The study will investigate not only the volume changes over time, but also the cracking associated with these volume changes. For mixtures that exhibit excessive volume change and cracking, a new mixture will be developed that reduces the shrinkage induced cracking. VDOT's interest is in the cracking resulting from the magnitude of stresses induced by the separate entities of chemical, autogenous, thermal, and drying processes. It is the cracking that results in premature deterioration through the rapid ingress of aggressive agents such as chlorides, resulting in the commitment of maintenance funds for subsequent repair and rehabilitation activities. In addition to agency costs, the traveling public must also be considered through user costs including delays and accidents.				6/1/2007	6/30/2009	Virginia Department of Transportation	RiP	13517	1	http://rip.trb.org/browse/dproject.asp?n=13517

CP Road Map

Executive Committee Support System

Operation Support – CP Tech Center

Pooled Fund
Participants (TAC)

Research

Tech Transfer

Implementation

TRACKS

1. Mix Track

Indiana Durability

MDA (TTCC)

PCA/ACPA Book

2. Design

3. NDT / ICS

4. Surface
Characteristics

Tire Pavement
Noise

NCC
Meetings

Technical
Workshops

Manuals

Webinars

Testing Manuals

Specification
Changes

Equipment
Innovations

Design
Guidelines

OPERATIONS SUPPORT GROUP

- Pooled Fund #1179
- Champion the CP Road Map
- Develop and Maintain the Research Database
- Facilitate Collaboration for Funding Research
- Support Communications through Website; Targeted Publications; Newsletters, etc.

OPERATIONS SUPPORT GROUP (cont.)

- Organize and Support Priority Track Leadership Groups
- Develop Track Framework Documents
Identifying Priority Research Projects
- Identify Potential Funding agencies for Priority Projects
- Plan and Facilitate Track Leadership meetings for the Priority Tracks

OPERATIONS SUPPORT GROUP (cont.)

- Pooled Fund Cost
 - 4-Years
 - \$25,000 per year recommended
 - \$5,000 per year minimum
- Benefits
 - Support the Road Map
 - Involvement with the TAC
 - Eligible for Road Map Executive Committee (2 representatives) with full funding
 - Provide recommendations on Track Management Tasks

TASK ORDER CONTRACT #3 PROPOSAL

- Executive Committee Support
- Develop Project Scopes on Priority Projects for each Track
- Work with Funders to address Priority Research
- Develop Technology Transfer pieces
- Initiate Environmental/Sustainability Track
- Update Website and Research Database

Pooled Fund Projects

