

# National CP Road Map Program (CP Road Map) Operations Handbook

The Executive Committee guides the overall accomplishment of the Long-Term Plan for Concrete Pavement Research and Technology (National CP Road Map Program, or CP Road Map). [Attach CPTP Tech Brief about the Road Map as appendix? Add URL to executive summary and volumes I and II?] This handbook outlines operating principles and procedures adopted by the Executive Committee to fulfill its responsibilities and to conduct its meetings and other general business. These principles and procedures follow the spirit of the Road Map Management Plan, which emphasizes collaboration and innovation.

## I. CP ROAD MAP GUIDING PRINCIPLES

The CP Road Map is a long-term research plan with a clear vision and goals and is based on a philosophy of collaboration and partnership among stakeholders.

### Goals/Objectives

The CP Road Map was developed to fulfill the following vision: By 2015, the highway community will have a comprehensive, integrated, and fully functional system of concrete pavement technologies that provides innovative solutions for customer-driven performance requirements. Toward this end, the CP Road Map prioritizes research that will

- Maximize public convenience.
- Improve the driving experience.
- Integrate design, mixtures and materials, and construction with pavement performance predictions.
- Improve pavement reliability.
- Identify new and innovative business relationships to focus on performance requirements.
- Constrain costs while improving pavement performance.
- Protect and improve the environment.
- Expand opportunities to use concrete pavement.

### Philosophy of Collaboration and Partnership

The CP Road Map was developed through a collaborative process that actively collected input from all stakeholders: the Federal Highway Administration (FHWA), state and local departments of transportation, all sectors of the concrete pavement industry, and the transportation research community. The CP Road Map therefore reflects the needs and priorities of all stakeholders.

Likewise, funding long-term administrative support services for the CP Road Map and, whenever possible, funding and conducting research under the CP Road Map will be collaborative efforts among appropriate stakeholders.

Such collaboration reflects and promotes the joint ownership of the CP Road Map and joint responsibility for ensuring its success. It also facilitates jointly adjusting priorities, leveraging investments, sharing findings regionally and nationally, and accelerating implementation.

## II. CP ROAD MAP MANAGEMENT

The CP Road Map will be collaboratively guided by the Executive Committee with participation and input from Sustaining Organizations and input from Research Track Leaders and professional support services of the Administrative Support Group (figure 1).



**Figure 1. Management Structure**

### Executive Committee

The role of the Executive Committee is to provide overall guidance and coordination of the National CP Road Map Program. Responsibilities generally include the following:

- Obtaining executive-level buy-in of stakeholders to the Road Map.
- Fostering collaborative sponsorships, conduct, and technology transfer of research.
- Fostering research integration within and between the CP Road Map's 12 tracks.
- Suggesting/promoting innovative technology transfer activities and training activities.
- Globally reviewing research and identifying new or developing research areas.
- Prioritizing tracks, determining track leaders, and advising track leaders.
- Fostering research integration within and between the CP Road Map's 12 tracks.
- Leading conduct of Track 11 (Business Systems).
- Regularly evaluating progress of CP Road Map.

Add appropriate section nos. to bulleted lists

### Track Leadership Teams

The role of each track leadership team is to guide and coordinate the conduct of a specific research track in the CP Road Map. Responsibilities generally include the following:

- Validating and updating the track.
- Facilitating partnerships to get the research funded and accomplished.
- Establishing working groups as needed.
- Ensuring integration within and among tracks.
- Facilitating technology transfer and training.

Each track is unique, and so each leadership team will organize and administer the work in a unique way.

### **Sustaining Organizations**

Sustaining organizations include all concrete pavement stakeholder organizations, public and private, that participate in and support the National CP Road Map Program at some level at some time, especially those that participate in sustainable funding of administrative support services. Responsibilities generally include the following:

- Participating in the Executive Committee as appropriate (see Committee Membership in section IV).
- Participating in the Track Leadership Teams as appropriate.
- Collaboratively funding administrative support services.
- Using the Road Map to guide internal organizational research priorities.
- Funding Road Map research (individually or pooled).
- Demonstrating commitment to the concept of collaboration for the good of the industry.
- Conducting Road Map research as appropriate.

### **Administrative Support Group**

The Administrative Support Group is the hands of the Executive Committee and, to some extent, of the Track Team Leaders. It conducts day-to-day operations that support the Executive Committee in fulfilling its responsibilities. Responsibilities generally include the following:

- Providing technical and administrative support to the Executive Committee (e.g., research track and project management, communications activities, mechanisms for collaborative partnerships, general meeting support, etc.).
- Conducting background research and providing suggestions to the Executive Committee regarding the committee's work.
- Implementing the Executive Committee's decisions and policies.
- Generating CP Road Map progress and financial reports for the Executive Committee and FHWA.
- Generating progress and financial reports for the Executive Committee and FHWA regarding the pooled fund supporting the Administrative Support Group's activities.
- Developing and operating a framework for collaboration, the "Collaboration Center" (see section IV).

## **III. SUSTAINABLE FUNDING FOR SUPPORT ACTIVITIES**

**NEW  
Section**

The CP Road Map is a long-term (10-year or more) program requiring a significant level of professional support services. Beginning September 2006, Iowa State University's National Concrete Pavement Technology Center is under a five-year contract with FHWA as the Administrative Support Group to provide these services. Through one-year task orders, the FHWA is funding critical initial support tasks.

One such initial task is development of a Collaboration Center program to facilitate collaborative partnerships, build and implement a Road Map project management system, and develop and

implement a communications and marketing system. Other initial tasks include organizing Track Leadership Teams for priority tracks, supporting initial meetings of the Executive Committee and Track Leadership Teams, initiating the conduct of track 11 (Business Systems) for which the Executive Committee is the track leadership team, etc. Sections \_\_\_\_, \_\_\_\_, and \_\_\_\_ discuss these tasks in general. Specific details regarding these tasks are or will be outlined in task orders.

The FHWA contract is funding approximately 40 percent of the annual effort required to fully organize and implement at least five tracks of the Road Map. A sustainable funding mechanism is needed to cover the other 60 percent of effort required, to ensure a consistent and adequate level of investment over the life of the CP Road Map, and to cover other Executive Committee–related expenses.

One such mechanism will be an FHWA pooled fund. Specific task orders issued through the pooled fund will outline funded support activities, which will move beyond initial start-up activities to sustaining and evaluating activities.

Another mechanism will be industry contributions that cover specific expenses generally not allowable under pooled funds.

[Should we outline the estimated general \$750,000/year budget? Specify amounts for FHWA and States, and for industry’s expense-specific contributions? Address travel costs specifically? Attach the pooled fund contract as an appendix that includes all these details?]

Note: These funding mechanisms address only costs related to Administrative Support Services and other expenses related to the Executive Committee. Separate funding mechanisms will be required by and for track-level and project-level support of research.

#### **IV. COLLABORATION CENTER**

To facilitate Executive Committee communications and the development of funding partnerships and other collaborative relationships, the Administrative Support Group will develop and operate a “Collaboration Center.” The Collaboration Center will provide a framework for collaboration that combines web-based and human resources. The Collaboration Center will perform three general tasks:

- Connecting people and organizations.
- Managing data.
- Communications and marketing.

##### **Mechanisms and Processes for “Connecting”**

Conduct of the Road Map requires that various stakeholders connect, cooperate, and collaborate on different tasks. For example, potential funders/sponsors of research need to connect with each other to develop funding partnerships; potential sponsors need to connect with potential researchers to conduct the work; researchers need to connect with potential organizations for demonstration projects and other technology transfer activities resulting from research; organizations with unsolved problems need to connect with potential research sponsors; etc.

The Administrative Support Group will develop mechanisms and processes to facilitate these connections. The mechanisms and processes will be flexible enough to accommodate stakeholders' varying involvement in the CP Road Map.

Possible mechanisms for facilitating collaborative and/or partnering arrangements may include the following:

- Executive Committee Pooled Fund ..... Joint funding of administrative support group
- Collaboration Agreements ..... Agreement to support CP Road Map
- Action Plans ..... Plan for obtaining organizational support  
for Road Map and outlining how such support  
will affect the organization's research activities

### **Managing Data**

The Administrative Support Group will develop a project management system supported by back-end database(s) of track and problem statement information and accessed via a web-based interface. This will be a flexible, expandable system. It will allow the Administrative Support Group, Executive Committee, Track Team Leaders, and others (all with various accessibility rights) to access coordinated information about schedules, budgets, tasks, sponsors, researchers, products of research, current research needs and priorities, etc.

The primary purpose of the project management system is to demonstrate, as the Road Map proceeds, which gaps in research are being filled, which gaps remain, and how the remaining gaps are prioritized. It will also be a tool for technology transfer of research products, for financial reporting, and for helping potential participants discover how they can participate in and/or contribute to conduct of the Road Map.

### **Communications and Marketing**

The Administrative Support Group will develop and implement a communications and marketing plan to serve a variety of audiences with varying informational needs. It will include, but will not be limited to, the following elements:

1. Website
2. Directories, listservs
3. Calendar of events
4. Project management system to track conduct, budgets, sponsors, etc., of projects under the CP Road Map Program (content specialists will provide research project information and technical content)
5. Help desk
6. Identity and marketing; calls to action
7. Newsletter
8. Executive Committee updates between biannual meetings
9. Project reports, summaries, technical briefs, manuals, and other technology transfer publications
10. Articles and news releases
11. Support for workshops as needed by Track Team Leaders or project managers
12. Program reporting

## V. WORKING WITH TRACKS AND TRACK TEAM LEADERS

The Executive Committee will prioritize research tracks and adjust priorities as appropriate.

Working through the Administrative Support Group, the Executive Committee will organize Track Team Leaders, then work with and advise them to achieve the following goals:

- Facilitate the organization and launch of priority tracks.
- Ensure cross-track integration of research and technology transfer and cross-track compatibility of products like software.
- Identify new research areas or revised priorities as appropriate within each track.
- Suggest and promote technology transfer and training activities.

Using early activities in track 1 (mix design and analysis) and collaborative activities to enhance concrete pavement surface characteristics (likely to morph into track 4), the Executive Committee will advise (but not require) Track Team Leaders to address the following six items as soon as possible:

1. Track framework
2. Funding collaborative
3. Focus on innovations
4. “Low-hanging fruit”
5. Research plan
6. Implementation / technology transfer within 3 to 5 years from track initiation

## VI. MANAGEMENT OF TRACK 11

As indicated in section II, CP Road Map Management, the Executive Committee is responsible for leading track 11, Business Systems. Subtracks outline the following responsibilities:

1. Plan and fund Administrative Support Group’s support services for the Executive Committee and Track Team Leaders (this activity is being handled through initial FHWA support contract and succeeding FHWA pooled fund; see section \_\_\_\_).
2. Advance concrete pavement economics and life-cycle costs.
3. Advance innovative contracting procedures and incentive programs for concrete pavements.
4. Provide **technology transfer** and publication support services to Track Team Leaders (this activity is covered through the communications and marketing effort, as part of the Collaboration Center; see section \_\_\_\_).
5. Investigate specific (identified in the Road Map) decisions with environmental impacts.  
**??**

Following the general approach outlined in section \_\_, the Executive Committee/Track 11 Leadership Team will conduct the following activities with the support of the Administrative Support Group:

1. Draft the framework for track 11, to be approved at the spring 2008 biannual meeting.

2. Identify existing but little-known, innovative practices in contracting, incentive programs, and life-cycle cost analyses and conduct early technology transfer activities related to these practices.
3. Develop and implement plan for additional research into innovative contracting practices, incentive programs, and life-cycle cost analyses.
4. Conduct technology transfer related to completed research.

## VII. CP ROAD MAP PROGRAM EVALUATION

The Administrative Support Group will be responsible for submitting progress reports to the Executive Committee and other stakeholders funding support services through the FHWA pooled fund. The reports will cover financial issues, research gaps being filled, progress-to-date on each track, impacts of progress to date . . . .

[Does the Exec Committee need a system with performance measures for evaluating the program, and the ASG, each of the tracks, etc., independently of the ASG's reporting requirements? Outside of the organizations represented on the Exec Committee who collaboratively fund ASG's services, FOR whom is the Exec Committee evaluating the CP Road Map, and what kind of performance measures are needed?]

## VIII. EXECUTIVE COMMITTEE BUSINESS MEETING PROCEDURES

This section outlines issues related to committee membership, officers, and meeting procedures.

### Committee Membership

Sustaining Organizations that participate in the pooled fund will be represented on the Executive Committee and will therefore participate in decisions and activities guiding the conduct of the Road Map. [Differentiate between State and industry participation in pooled fund and membership on E.C.?)

Need to balance industry/State membership.

Membership on the Executive Committee will include management staff who [represent the following organizations?????]:

No. of Reps	Organization	Initial Term of Service (yrs)			
3	Federal Highway Administration [specific offices?]	1	2		
1	research university	3			
4	state departments of transportation [members of NCC?]	1	2	3	1
1	American Concrete Pavement Association	2			
1	Portland Cement Association	3			
1	RMC Research Foundation	1			
3	contractors	2	3	1	
[?]	materials suppliers	2			

[?]	[fly ash association]	3
[?]	[slag association]	1
[?]	[aggregate/rock associations]	2

One of the three FHWA representatives will be the technical monitor of the CP Road Map Program. The TRB will always be a standing invited guest (non-voting).

Initial representatives on the Executive Committee (organized in 2007) are listed here:

- **Randy Battey**, Mississippi DOT, randyb@mdot.state.ms.us, 601-359-7650
- **Claude Bedard**, Euclid Admixture Canada
- **Rick Collins**, Texas DOT
- **Jim Duit**, Duit Construction
- **Martin Fallon**, St. Marys Cement Inc.
- **Gary Frederick**, New York DOT
- **Julie Garbini**, RMC Research Foundation
- **King Gee**, FHWA
- **Ron Guntert**, Guntert & Zimmerman Const. Div, Inc.
- **Gary Henderson**, FHWA
- **Randy Iwasaki**, California DOT
- **Malcolm Kerley**, Virginia DOT
- **Steve Kosmatka**, Portland Cement Association
- **David Lippert**, Illinois DOT
- **Randy Riley**, ACPA-Illinois Chapter
- **Rick Sniegowski**, K-Five Construction
- **Peter Stephanos**, FHWA
- **Kirk Steudle**, Michigan DOT
- **Jerry Voigt**, ACPA
- \_\_\_\_\_, [university]

**Identify  
1-, 2-,  
and 3-  
year  
terms?**

Peter Kopac, FHWA, is the FHWA technical contact/committee member. Neal Hawks, Transportation Research Board, is a standing invited guest.

### **Terms of Membership**

After the initial one-, two-, and three-year terms listed above, representatives on the Executive Committee will serve three-year terms. Every year one-third of the committee will be replaced by other representatives from their organization or represented group of organizations (e.g., state DOTs, National Concrete Consortium, etc.). Representatives may serve consecutive terms.

Each member organization will select its representative to the Executive Committee.

The Executive Committee conducted its organizational meetings in 2007. The first one-third term of service begins with the fall (September 11) 2007 meeting.

### **Member Duties and Responsibilities**

All member organization representatives on the Executive Committee will attend or send a substitute to act on their behalf at biannual meetings.

All representatives (this does not include the standing invited TRB representative) or their substitutes will have a vote on any issues coming up for a vote.

Representatives will conscientiously participate in the conduct of all Executive Committee responsibilities listed in section II.

### **Officers, Elections, and Responsibilities**

The Executive Committee will have two officers, a chair and a vice chair. Either the chair or vice chair will represent industry; the other will represent agencies.

The initial chair will be elected for a one-year term at the fall 2007 meeting. The chair must be elected by at least a two-thirds majority of those present. The chair will work with the Administrative Support Group to develop the agenda for the biannual meetings and will conduct the meetings so that they proceed in a timely and productive manner.

A vice chair will be elected for a one-year term at every fall meeting beginning with fall 2007. The vice chair must be elected by at least a two-thirds majority of those present. The vice chair will substitute for the chair when necessary and will succeed the chair after one year.

The chair and vice chair will be spokespeople for the committee outside of meetings. The chair and vice chair will also act as a nominating committee and solicit volunteers/nominees in advance of the fall meeting election of vice chair.

Except for the first-elected chair and vice chair, nominees for vice chair must have served on the Executive Committee for at least a year.

### **Conduct of Meetings**

A quorum for purposes of voting will be \_\_ members.

The Executive Committee will meet twice a year, preferably in the spring and fall, on dates and at locations to be decided at the previous meeting. One-day meetings at central locations conveniently accessible to committee members will be preferred.

The chair will preside over committee meetings, following informal rules of procedure and in the spirit of collaboration as outlined in section I, Guide Principles. Motions deemed significantly consequential by the chair and vice chair will be voted on. All motions will allow adequate time for discussion. Approval (except for election of officers as indicated in the previous section) will be by simple majority of a quorum of members.

### **OTHER?**