



**CP Road Map
Executive Committee Meeting
March 28, 2007
Kansas City, Missouri**

absent Randy	Iwasaki	California DOT	randell_iwasaki@dot.ca.gov
David	Lippert	Illinois DOT	david.lippert@illinois.gov
Kirk	Steudle	Michigan DOT	steudlek@michigan.gov
Randy	Batthey	Mississippi DOT	randyb@mdot.state.ms.us
Gary	Frederick	New York DOT	gfrederick@dot.state.ny.us
Rick	Collins	Texas DOT	rcollins@dot.state.tx.us
Malcolm	Kerley	Virginia DOT	mal.kerley@vdot.virginia.gov
absent Julie	Luther	RMC Research Foundation	jluther@rmc-foundation.org
absent Jerry	Voigt	ACPA	gvoigt@pavement.com
Randy	Riley	ACPA-Illinois Chapter	pccman@insightbb.com
Jim	Duit	Duit Construction	jimduit@duitconstruction.com
absent Claude	Bedard	Euclid Admixture Canada	c.bedard@euclidcanada.com
Ron	Guntert	Guntert & Zimmerman Const Div, Inc.	gz@guntert.com
Rick	Sniegowski	K-Five Construction	ricks@k-five.net
Steve	Kosmatka	Portland Cement Association	skosmatka@cement.org
Martin	Fallon	St. Marys Cement Inc.	mffallon@vcsmc.com
Gary	Henderson	FHWA	gary.henderson@fhwa.dot.gov
Peter	Stephanos	FHWA	peter.stephanos@fhwa.dot.gov

Road Map Contract Technical Representative

Peter	Kopac	FHWA	peter.kopac@fhwa.dot.gov
-------	-------	------	--------------------------

Additional Participants March 28, 2007

Neil	Hawks	TRB	nhawks@nas.edu
Caroline	Talbot	Euclid Admixture;North American Div (substitute for Claude Bedard)	ctalbot@euclidchemical.com
Suneel	Vanikar	FHWA	suneel.vanikar@fhwa.dot.gov

Administrative Group Attending March 28, 2007

Tom	Cackler	CP Tech Center	tcackler@iastate.edu
Sharon	Prochnow	CP Tech Center	prochnow@iastate.edu
Marcia	Brink	CP Tech Center	mbrink@iastate.edu
Dale	Harrington	Snyder & Assoc	dharrington@snyder-associates.com
Ted	Ferragut	TDC Partners	tferragut@tdcpartners.com
David	Merrit	Transtec	

Action Items from the Executive Committee (EC) Meeting

1. Designate a University Transportation Center representative; ask CUTC to identify a member.
2. Develop Clearinghouse concept in advance of and support for collaboration
3. Develop a marketing plan as the first order of business under the clearinghouse.
4. Complete and share the database of just completed and ongoing projects.
5. Select a chair and vice-chair from the EC members to help coordinate with the Road Map Admin Group. Steve Kosmatka and Gary Frederick will serve as the nominating panel and get back to the CP Road Map Admin Group.
6. Industry members will discuss with ACPA a mechanism to fund their travel.
7. Form the track leadership in accordance with the priorities set out by the Admin Group.
8. Organize the environmental projects within the Road Map for consideration as a focused track in this area.
9. Schedule the next meeting, fall 2007 in Chicago.

DETAILED MINUTES

Introduction

The meeting began with self-introductions. The only committee members absent were Julie Luther, RMC Foundation; Jerry Voigt, ACPA; and Randy Iwaskai, Caltrans. Question was raised as to why universities, and specifically the UTCs (University Transportation Centers), were not represented. They were excluded in part due to a possible conflict of interest if universities wanted to propose on work being considered.

How does the CP Road Map fit into FHWA's CPTP (Concrete Pavement Technology Program)?

The CP Road Map is a product of FHWA's CPTP (CPTP Task 15). Most of the CPTP research has now been completed. The technology transfer, deployment, and delivery of several CPTP products is being done under the final CPTP task (CPTP Task 65), which is scheduled for completion in mid-2008. As the CPTP winds down, the CP Road Map program is there to replace it. However, unlike the CPTP, the CP Road Map is not being run by FHWA; FHWA will be but one of the CP Road Map research sponsors. The CP Road Map fits well in FHWA's ongoing Strategic Pavement Technology Roadmap, which involves both asphalt and concrete research but is not as broad in scope as the CP Road Map. As mixture design and pavement surface characteristics are important elements of FHWA's Strategic Pavement Technology Roadmap, FHWA is very interested in becoming a leader or co-leader for CP Road Map Tracks 1 and 4.

Management of the CP Road Map Program

The CP Road Map is a national plan developed to guide the investment of research dollars for the next 10 years. In order to significantly advance the level of solutions, collaboration needs to move to implementation. This effort is forcing us to look at a different business model for how research is funded and completed. Idea of the Road Map is to look strategically at the research needed and how we can align critical elements of opportunity for advancement of that research.

- Executive Committee's (EC) role is to provide overall guidance and coordination for advancing a collaborative sponsorship of research under the CP Road Map.
 - Obtain executive buy-in to the Road Map
 - Prioritize tracks and determine track leaders
 - Foster collaborative sponsorship of research
 - Have a global view of research and identify new or developing research areas
 - Foster research integration within and between tracks
 - Suggest/promote tech transfer activities and training activities
 - Evaluate progress of Road Map regularly
 - Lead Track 11 – Business Systems
- Administration of the Road Map will involve keeping track of research going on around the country. Coordinating the efforts, not changing any of the current mechanisms for sponsoring research.
- Presently the CP Tech Center has a 5 year IDIQ contract to provide administrative support to the CP Road Map program. Current task order is for \$280K. A mechanism to sustain the funding of the administrative group for the Road Map may be a future discussion for the EC.
- Tech transfer will be a component (10-15%) of each track.
- Track leaders will be responsible for working within the present system to get reports, and outcomes to the attention of the TRB/AASHTO subcommittees.

Summary and Update of Research Tracks

The CP Road Map is a comprehensive, collaborative, strategic plan for research and technology; +250 problem statements divided into 12 tracks. Integration across track lines has not been developed.

- The Administrative Support Group (ASG) is currently identifying recent and ongoing research efforts that are relevant to the CP Road Map tracks. (Effort approximately 60% complete).

- Mix Design is the only track where some collaboration has begun.

Major Sustaining Organizations' Programs

The CP Road Map is not trying to change how organizations facilitate or fund research, but rather to encourage collaboration and communication.

- FHWA Summary
 - Major effort is delivery of CPTP Tech Transfer of products through Task 65
 - Mobile Concrete Laboratory is tool to demonstrate testing technology to states
 - Earmark for Safetea-Lu for mitigation and prevention of ASR
 - Earmark for cooperative agreement with ISU, CP Tech Center, and others
 - Final adoption of AASHTO Guide is pending
 - FHWA DGIT to help states implement and calibrate the Guide
 - Updating Pavements Notebook to match current state-of-the-art.
 - Implementation of Long Life Scanning Tour.
 - Accelerated construction using precast prestressed concrete pavements
 - Environmental stewardship efforts – sustainability.
 - Technologies for better surface characteristics – smoothness, noise, texture.
 - Need to get a handle on how to prioritize research.
- FHWA – TFHRC Summary
 - Cement-based materials research
 - Pavement design and performance prediction
 - LTPP
 - Recycled materials
 - ASR issues
 - Exploratory Advanced Research Program (Safetea-Lu earmark, \$8M per year) – soliciting pre-proposals for advanced groundbreaking research.
- DOT Summary
 - Many states have in-house research efforts that aren't widely known. We need some way of communicating between states about these efforts.
 - Most applied research comes from the industry.
 - Every state has some system for prioritizing research efforts based on their needs.
 - It should be possible to get an estimate from every state on how much they spend on concrete pavement research.
 - Not every state supports the RiP database
 - States are facing more competition for SP&R dollars
- AASHTO Summary
 - AASHTO SCOR – each state contributes to the money NCHRP uses, and each state has the opportunity to submit research statements.
 - SCOR and RAC are looking at research much more strategically – task force has been established.
 - Subcommittees pull out all project statements related to the subcommittee activities and rank them by priority
 - TRB/AASHTO structure is built around addressing state needs.
 - There is a product evaluation program in AASHTO (APAL – see website) that does provide some form of collaboration – vendors can post products and states can post their evaluation of those projects
- TRB/NCHRP Summary
 - NCHRP research need to be reasonably national in scope, not just addressing one state's needs – more general application projects, maybe not quite as applied, but something states can put to work quickly.
 - Most common statements submittal is from state DOTs

- Certain TRB committees can submit statements, but is rare.
- NCHRP Idea Program – looks at proof of concept research; research to turn concepts into actual products
- SHRP II Program – number of projects related to CP research already identified. Mostly projects which have fallen through the cracks in the past, e.g.,
 - Composite pavements
 - Modular pavements
 - Pavement preservation is another key area – looking at techniques for very high volume roadways.
 - Reuse of existing pavements – in-place or on-site recycling
 - Performance specifications
 - High-speed NDE
- There were other areas in the original SHRP II Program that were dropped due to funding – could be picked up
- TRB Standing Technical Committees – function is to be an information exchange resource; many related to CP Road Map; another function is to develop research project statements that are frequently picked up by state DOTs and submitted to NCHRP; also think about how to promote implementation of research in states.
- ACRP – airport equivalent of NCHRP; relatively new.
- A lot of connections between TRB and UTCs
- PCA Summary
 - PCA research program supports efforts of ACPA, CAC
 - Durability issues (ASR, de-icer, etc.)
 - Sustainability issues (recycling, manufacturing issues, etc.)
 - Typically 50 core research projects ongoing each year – does not include education projects
 - Aimed at addressing pressing issues – like to see implementation within a year or two
 - Develop guidelines or modify standards
 - Typically get 100 research suggestions per year; 15-20 are funded each year.
 - Education Research Foundation: 5-6 projects each year (approx. 50 proposals) to fund students’ specific research ideas (US and Canadian students only)
 - ~\$7M in active research projects, but collaborative efforts can increase that amount.
- Industry Summary
 - Pervious concrete is receiving tremendous interest nationwide
 - Slag Cement Assn – addresses gaps in research regarding slag-cement
 - Ternary mixtures study; Shrinkage study;
 - Don’t see SCA funding much research, but would collaborate with other groups.
 - Coal-Ash Assn. – focus is utilizing as much coal ash as possible.

Collaboration

- One of the stated roles of this committee is to ensure that money is not wasted.
- Each group mentioned their concern with duplication of their research efforts. ASG should meet with all of these groups (NCHRP, AASHTO, TRB, etc.) to understand the mechanics of the funding sources.
- States, agencies, industry all want to see efforts maximized; find shared interests. Need to develop a mechanism to link funding needs.
- Buy-in also reflected in technology transfer; “inventors” = users = promoters
- Discussion: Comment was made by a member that we need to rethink the flow of money – putting the money in the same place would force communication and collaboration. The Road Map was a collaborative plan that took a lot of time and effort to produce; now have the money follow the plan, not the plan following the money.

- Discussion on roadblocks to collaboration
 - Self-interests are difficult to overcome - hesitation as to whether the fundamental work will benefit each entities specific needs sufficiently.
 - One of biggest barriers to collaboration is trust.
 - States have wide range of funding available and may not all be able to contribute at the same level – is this an issue?
 - Contractual issues for many agencies, companies, universities: proprietary issues, intellectual property issues, tenure issues, etc.
- Purpose of CP Road Map is not to restructure how the funding works – it is to identify research areas that are needed and promote collaboration in getting the job done.
 - The Midwest Concrete Consortium (MC2) is a good example of successful collaboration that has resulted in pooled fund projects.
 - UTCs needing a 50/50 match have collaborated with their state DOTs and industry on research projects
- The pooled fund process is already in place, and the easiest way for state DOTs to collaborate on research. Is a CP Road Map pooled fund process feasible?
- Discussion on clearinghouse concept:
- There is a need to capture a snapshot of what is being done; a status of ongoing work. A voluntary information exchange “location” both to avoid duplication (perhaps join in on existing work) or to find funding for a specific problem
- Create an incentive tied to the Road Map to encourage people to contribute rather than pushing.
- If clearinghouse works, collaboration will follow.
- What would states like to see from the clearinghouse?
 - Avoid duplication of research. Sell it to RAC and others by showing the benefit of avoiding duplication of efforts.
 - Knowing what else is being done would help states decide what projects to fund individually, and where to collaborate.
 - Prioritizing the tracks, rather than having them all going at once.
 - A place for peer review of results
- Are individual companies treated the same as industry associations in the clearinghouse?
 - Companies are also interested in getting more for their money so would be interested in collaboration.
 - Bigger companies would be more inclined to fund research on their specific products, have proprietary interests
- Marketing:
- Clearinghouse depends on the credibility that the Road Map has in the community. Until you establish the credibility, collaboration will be difficult.
- More outreach is needed to show what is in the Road Map and what the priorities are
- We need to keep people informed – i.e., included as an agenda item on TRB, AASHTO, etc. meetings. Too much crossover to limit involvement to only a few committees. The buy-in from these committees is critical to success of Road Map Clearinghouse. Consider a workshop with these committee chairs and committee representatives.
- Three main issues
 - Need to develop the knowledgebase about what is going on (1 page summary)
 - Develop the model for Clearinghouse collaboration
 - Marketing plan for DOTs, industry, committees
- RAC meets the first week of August – we need to have something ready for them

Track Priorities/Leaders

- Formation of Mix Design Track (through collaboration at Washington and Dayton meetings) provided an example of how tracks and track leadership should be formed.

- As a group (no single person or group in charge), a mix design system was developed.
- Mix Track seemed to be self-forming – is that expected for the rest of the tracks? How do you determine if the leadership is appropriate?
 - All tracks may not follow how the Mix Track formed. May be up to the EC to determine the track leadership.
- What are the functions of the Leadership Teams?
 - Validation of the goals of the track, evaluation of progress, encouragement of research related to the track.
- Innovative Joints is already popping up in the surface characteristics area – may not be able to defer this track until later.
- Environmental Track seems to be of high interest right now.
 - ASG will identify environmental issues in the Road Map and send them to EC.
 - If EC thinks environmental should be a track, EC needs to officially make it a track.
 - ACPA and PCA may be interested in taking the lead on the Environmental Track – the track would monitor activities in other tracks to see what environmental benefits are provided.
- Equipment Track: There are so many proprietary issues with equipment; unlikely manufacturers will tip their hands as to what they're developing.

CP Road Map Operations

- How do we ensure some sense of continuity over this 10 year effort, particularly as people on the EC change? How should the EC operate?
- EC agreed to add a seat for a representative from CUTC (Consortium of UTCs)
- Agreed that members should have terms, perhaps 3 year terms with 1/3 rotating off per year. The first rotation would begin in 3 years. ASG will determine good rotation schedule to ensure the proper balance of DOT, industry, etc. In order to have good balance of viewpoints, members unable to attend should be encouraged to send a substitute.
- Should there be a chair or co-chairs for the EC?
 - Want to be sure that we are addressing all of the needs and issues at the meetings.
 - Chair lends authority as spokesperson for the committee
 - Steve Kosmatka and Gary Frederick will act as nominating committee
- Meetings will be open to all, including Friends of the Committee
- Funding issues:
 - Some mechanism for travel is needed for good attendance.
 - Travel funding for everyone?
 - MC2 is already considering a pooled fund for travel for the Mix Track.
 - ASG will develop budget and structure for pooled fund
 - * FHWA could contribute to cover agencies and academia
 - * Industry members will contact ACPA re funding for their members
- Frequency of meetings?
 - 2 physical meetings per year - plan on Chicago next September
 - Emails
 - Periodic conference calls

Summary

- Maintain credibility with broad dispersing of information – everyone needs to feel involved