

WELCOME!

Sustainability Track Leadership

- 1st Meeting of the Sustainability Track Leadership
- Will provide the leadership on Concrete Pavement Sustainability that will guide the research and technology transfer on Concrete Pavement Sustainability as described by the CP Road Map Executive Committee.
- Full day of activities plan (Packet)



Sustainability Track Leadership Committee Members

1. Dominique Lueckenhoff, Environmental Protection Agency
2. David Gross, American Coal Ash Association
3. Kevin Gardner, University of New Hampshire
4. Al Innis, Holcim, Inc.
5. Leif Wathne, ACPA
6. Jim Duit, Duit Construction
7. Kevin McMullen, Wisconsin Concrete Pavement Association
8. David Weber, Slag Cement Association
9. Erin Ashley, National Ready Mix Concrete Association
10. Kevin Cail, Lafarge
11. George Crombie, State of Vermont –Natural Resources
12. Gina Ahlstrom, FHWA
13. Steve Kosmatka, PCA
14. Jennifer Distlehorst, Kansas DOT
15. Joep Meijer, The Right Environment
16. Tom Pyle, CALTRANS
17. Doug Schwartz, MN DOT
18. Tim Smith, Cement Association of Canada
19. Michael Sprinkel, VA Transportation Research Council
20. Ken Kobetsky, AASHTO



Sustainability Track Leadership

AGENDA

Introduction

- Committee members
- Brief background - CP Road Map
 - Purpose of sustainability track
 - Explanation of the track structure
- What do we want to accomplish today
- What the sustainability track is not



Purpose of Sustainability Track

The environmental advancement category was identified in the CP Road Map as one of three critical areas not designated as a track.



Purpose of Sustainability Track

On September 11, 2007 the CP Road Map Executive committee designated the environmental advancement category (sustainability) as a full track for the purpose of:

“examining in a holistic fashion how design, materials manufacturing, construction, maintenance, and restoring of concrete pavements can be made to be more economically, environmentally, and socially sound”



What is the CP Road Map?

- A new, comprehensive, strategic plan for concrete pavement research and technology
- Completed in 2005 after 4 years of development



Why the CP Road Map?

- To meet the paving challenges of the future
- To guide the investment of research dollars for the next seven to ten years
- To promote cooperation among fund managers and all stakeholders



Executive Advisory Committee

Potential Sustaining Organizations

- FHWA
- NCHRP
- AASHTO
- NRMCA
- ACPA
- NSSGA
- TRB
- PCA
- Individual DOTs
- MC²
- Others

Administrative Support Group

Research Track Team Leaders

Track 1 Mix Design

Track 2 Design Guide

Track 3 Nondestructive Testing

Track 4 Surface Characteristics

Track 5 Equipment Advancements

Track 6 Innovative Joints

Track 7 Rehabilitation & Construction

Track 8 Long-Life

Track 9 Data Collection

Track 10 Pavement Performance

Track 11 Business Systems & Economics

Track 12 Advanced Materials

CP Road Map Research Management Structure

(also provide
research track

Administrative Support Group

(Primarily provides support for Executive Steering Committee)

Provide lists of potential track leaders

Suggest and facilitate partnering arrangements

Help integrate research across tracks

Update and maintain the research database

Obtain information from State and Federal agencies on current research

Develop recommendations for improving, adjusting, or adding new research

Solicit new and innovative ideas and concepts

Organize continuous expert review and advice on conduct of research

Recommend strategies to ensure software compatibility

Address intellectual property rights issues

Identify and recommend technology transfer activities

Identify and facilitate the development of specific, track-related training efforts

Develop and implement a communications effort

Track Team Leaders

- Volunteer organizations will also guide the work.
- The general purpose of the Track Team Leaders is to ensure coordination of CP Road Map activities within a track and integration of research across tracks.
- The Track Teams will provide technical advice and recommendations to the Executive Advisory Committee and will provide guidance for how to advance a particular track in a coordinated manner.



Track Team Leaders Responsibilities

- Validating the overall research track and establish its credibility.
- Updating the track as required, including time, budget, and scope of work.
- Identifying organizations that want to conduct or partner in actual research.
- Establishing and overseeing subordinate technical expert working groups as appropriate to guide complex work.
- Ensuring proper integration of discreet research work within the track and across track lines.



Track Team Leaders Responsibilities

- Review track status reports.
- Promoting track communications and outreach efforts.
- Identifying and conducting implementation (technology transfer) activities throughout the research phase.
- Identifying and facilitating the development and conduct of specific track-related training efforts.
- Continuing to solicit new and innovative ideas and concepts related to the track.



Track Team Limitations

- The National Center understands the complex issues related to establishing protocols that do not prevent participants on the Track Teams from pursuing future competitive research and technology transfer work.
- The purpose of the research team's work is not to develop a detailed statement of work for scope of service procurement, but to help develop problem statements.



What is Sustainability Development?

World Commission on
Environment and
Development



UNITED NATIONS
PLANET EARTH - SOL SYSTEM

*“Meet[ing] the
needs of the
present without
compromising
the ability of
future
generations to
meet their own
needs”*

*[UN General Assembly
1987]*

Green Highways Initiative

- Started in 2005 by EPA.
- An instrument for coordinating environmentalism and transportation.
- Industry/EPA partnership.



Green Highways Partnership



- “Green Highways” are those that are environmentally responsible and sustainable in all aspects, including design, construction and maintenance
- Major focus is to demonstrate and ensure sustainable practices in pavements can go hand-in-hand with economic success!

Sustainable Infrastructure



- Economical Understanding
- Environmental Stewardship
- Social Responsibility

What makes a Roadway Green? (Sustainable)

The use of practices and materials in concrete pavement design, construction, usage, maintenance, recycling and/or removal that minimizes the use of energy and non-renewable resources while generating a minimum of pollutants in the most cost effective manner possible, while maximizing the benefits to society.



How is This Accomplished?

By developing a means of assessing, proving, (measuring) the relative benefits of existing and proposed changes to concrete pavement technology. This includes selecting the parameters that will be considered and evaluating their relative importance.



Tools

- Develop tools that can be used to solve gaps in knowledge.
- Get the tools into the hands of practitioner as soon as we can.
- What is meant by “tool” is many faceted...
 - mainly we will be focusing research to fill the gaps in knowledge to advance the sustainability of concrete pavements
 - to educate engineers on the topic of sustainability while giving them guidance to implement.



What are Some of the Desired Milestones?

- July 18 to December 31, 2008
 - Hold an initial track leadership meeting to establish the priority of work, framework outline and low hanging fruit.
 - Interface with researchers, research institutions, and sponsors of research to establish a collaborative research program to initiate projects in accordance with an established framework on sustainability.



What Do We Want to Accomplish Today?

- Provide materials for a framework for the track
- Select and prioritize tasks that will lead to achieving these goals.
- Identify potential sources of funding for the tasks.
- Identify individuals and institutions able to conduct the work.
- Develop a plan (within the context of the CP Road Map) to get the work done.



What the Sustainability Track is NOT

- Sustainability Rating Systems should not be a focus of the track.
- Activities that are generic to all types of pavements, such as alignment and traffic volumes, are outside the scope of this track.
- There is a natural tendency to draw comparisons between concrete systems and other materials such as asphalt. This is not to be a focus of the track.



Must Produce Products That Will Be Used

- Pick the low hanging fruit
- Get the working people in our industry comfortable with the concepts of sustainability
- Assist them in making choices with confidence that improve the sustainability of concrete pavements



Wrapping It Up

- The key is we need to start moving forward even though we are not certain where we will end up.
- We must stay focused on what we are trying to achieve.
- It is an exciting time to be working in concrete pavements and opportunities to improve our economic, environmental, and societal well-being.



Track Team Structure

- There is no specific requirements for a Track Team Leadership Structure
- Each Track Team Leaders will decide how they want to operate
- Track Team members can be a single organization or a working structure consisting of either multiple research sponsors or qualified individuals who want to steer the track toward fulfilling the goals.



Track Team Structure

- Vision, mission, focus, and objectives
- Rules of order, assembly and quorums, and amendments thereof
- Members requirements; office holders
- Appointments, term length, and vacancies
- Notice and frequency of meetings
- Travel guidelines and reimbursement rules



Track Team Structure

- Motion procedures and amendments
- Voting majority and reconsideration of a vote
- Resolution formation and action signatures
- Report or technical paper requests, reception, and reviews
- Subcommittee formation and responsibilities
- Meeting recordings, minute formats, and draft reviews and action

