

# PPTG - Concept, Accomplishments, and Success Stories

Prepared for the Warm Mix Meeting

Morro Bay, CA

by

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# Presentation Outline

- Purpose
- Charter
- Organization
- Accomplishments and Success stories
- Areas of needed improvement
- Summary



# Purpose

- Caltrans needed a process to implement new technologies for pavement preservation
- It had to operate fairly and allow the same playing field (equality for all)
- It needed to be a partnership between Caltrans, industry and other agencies



# Charter

- Developed jointly between Caltrans and industry
- Intent is to foster coordination and continuous improvement in pavement preservation
- Describes the objectives, role, and organization of the PPTG
- Outlines the business process including one dealing with issue resolution



# PPTG Organization

- Consists of co-chairs from Caltrans, industry, and local agencies
- Caltrans co-chair – Shakir Shatnawi
- Industry flexible group co-chair – Hans Ho
- Industry rigid group co-chair - Casey Holloway
- Local agencies - George Bradley, Phil Demery, Erik Updyke, and Greg Kelley
- Total subtask groups - 22



# Organization

- PPTG - to meet 2 times per year for updates on activities
- PPTG co-chairs - to meet 2 times per year to ensure good progress
- PPTG subtask groups - to meet more frequently and develop deliverables
  - NSSPs
  - Test sections
  - Guides



# Overall Accomplishments

- Level playing field for all groups
- Annual conferences on pavement preservation
- Innovation process developed and products being evaluated
- Development of NSSP's for numerous products
- Placement of test sections
- MTAG for flexible and rigid pavements
- Advisory board for the CP2 Center



# Innovation Sub-Group

- Innovation process developed
- Innovative products have been placed
  - RAC-O-HB
  - European gap graded mix
  - BWC
  - Microsurfacing
  - Others
- Reviewed and planned projects
- Progress report on innovation-being developed



# Innovation Process

- Pre-Proposal
  - Title, contact info, description, benefits, selection criteria, specs, and background
- Proposal
  - Project location, costs, potential problems, warranty, safety, evaluation plan, and definition of success
- Construction Report
- Final Report Format
  - Evaluation results, performance analysis, life cycle cost, conclusions, and recommendations



# Education Sub-Group

- Developed template for MTAG training
- Oversees training needs for pavement preservation
- Need to be involved in the planning of all educational activities, including the annual conference



# Recycling Sub-Group

- Hot in-place
  - Projects to be placed-District 2 and 8 in FY 07/08
  - Center will help with the Documentation
- Cold in-place
  - Projects placed-District 3, Colusa PM 3.4/7.3 and D11, FY 07/08
  - Center will help with the documentation
- NSSPs developed
- Acts as liaison to the ACTG



# Strategy Selection Sub-Group

- Developed strategy selection process for flexible and rigid pavements
- Developed estimated lives and costs for various treatments
- Outlined scenarios to be evaluated for cost effectiveness studies
- Finalized the LCCA cost analysis procedure to be used



# Chip Seal Sub-Group

- Developed NSSP's for a variety of products, including PME, AR and PMA chip seals
- AR and PMA test sections placed in D11 and currently being evaluated
- Center is helping with the documentation



# Thin Overlay Sub-Group

- NSSP's available for several products including
  - Thin bonded wearing courses (39-700)
  - With rubber and polymer
- RAC-O-HB, European GG mixes-being evaluated
- Warm mixes- Several processes being evaluated nationwide. Center will be involved with the D5 project
- Act as liaison with ACTG



# Crack/Joint Sealing Sub-Group

- Evaluating test methods
  - Softening point
  - Cone penetration
  - Resilience
  - Flex test
  - Viscosity
  - Tensile adhesion
- Developing new climate specification



# Slurry/Microsurfacing Seal Sub-Group

- NSSP for Microsurfacing developed
- Over 17 projects placed
- Center will be involved in the evaluation of these projects



# Fog Seal/Rejuvenator Sub-Group

- Developed NSSP's for all products
- Designed a series of test sections to evaluate the new specification
- One project placed in 2007. Center is involved with this effort.
- Ultimate goal is to develop a performance based specification



# Binder Sub-Group

- Adopted the PG system for conventional and for polymer modified asphalts
- Current activities
  - PG system for “terminal blend” asphalt rubber binder
  - Evaluation of acid modification
- Will initiate work on emulsions
- Acts as liaison with ACTG



# Interlayer Sub-Group

- Developing NSSP's for the various products
- Test section placed in D2 with some PPTG involvement
- Center is helping document this project
- Developing new chapter for the for the MTAG



# Local Agency Sub-Group

- An important group of engineers representing most of the roads in CA
- Membership is expanding
- Ultimate plan is to add members to each of the other sub-groups



# Summary of NSSPs Developed

Document Title	District Used
Asphalt Rejuvenating Seal (37-600)	Planned 1, 9
Asphalt Rubber Seal Coat	2, 11
Bonded Wearing Course	1, 8
Cold-In-Place Recycle	3
Fiberglass Polyester Paving Mat	2
Fog Seal Coat (37-050)	Pilots
Hot-In-Place Recycling	5

**Can be found on the Center Web-site**



# Summary of NSSPs Developed (cont.)

Document Title	District Used
Microsurfacing (37-600)	1, 3, 4, 5, 11
PMA Seal Coat	2
Rapid Strength Concrete Base	7
Rubberized Bonded Wearing Course (Type-G) (39-700A)	9
Rubberized Bonded Wearing Course (Type-O) (39-700)	6, 10
Rubberized Bonded Wearing Course (Type-O) Warranty	6
PME Seal Coat	
Seal Random Cracks in Existing Surface	1
Stress Absorbing Membrane Interlayer (SAMI)	7



# Recognition

- The participants in the PPTG are volunteers
- Their hard work is appreciated
- Thanks are due for the timely responses and input from many individuals

**We have created a system to recognize the hard work of the volunteers-Awards**



# Areas of Needed Improvement

- Improved communications to address issues
  - Between Caltrans and the PPTG co-chairs
  - Within the PPTG
- Need more frequent co-chair meetings to provide direction
  - PPTG co-chairs need to monitor progress more regularly
  - Some groups are active and others are not
- Need to recognize the accomplishments of the various groups, particularly the volunteers



# PPTG/CP2 Center Relationship

- The PPTG plays an advisory role to the Center
- The Center is to support the PPTG activities
  - Mailings
  - Reports preparation
  - Presentations
  - Fact sheets/tech briefs
  - Annual conference



# Summary

- PPTG was developed to improve the process for introducing new products and specification
- Partnership between Caltrans industry and local agencies
- Much has been accomplished, and much is yet to be done
- We can do better and must to be effective

**We must improve the process for it to continue to succeed**

