

AASHTO TSP•2 - Emulsion Task Force (ETF) Meeting

<http://tsp2-etf.org/meetings-and-presentations/>
The Heritage Group Innovation Center and Research Lab
6320 Intech Way (near 71st street and I-465), Indianapolis, IN 46278

Meeting Minutes November 30 and December 1, 2022

Welcome, Introductions/ Roll Call and Housekeeping Franco, Lubbers

- a. Approval of Meeting Minutes (June 2022) Lubbers
- b. Motion to approve Minutes by Kelly Morse (IL DOT). Minutes approved.

AASHTO Committee on Materials & Pavements Updates (COMP)

a. TS 2a – Emulsified Asphalts Pfeifer

- Comp meeting in Miami. Full agenda.
- Changes to M316. Technical change and full comp ballot.
- Midyear meeting in January coming in 2023. If you're a friend of t2 you'll get an email about joining the zoom meeting. Reach out to Casey Soneira and also make sure you're registered for the sessions that you want to attend.
- Moving cold recycled mixtures provisional standards to full standards on next round of ballots.
- AASHTO resource adding polymer modified PSP sample in 2023.
- TFASH. Working to harmonize AASHTO and ASTM standards.
- Beginning work on T50.
- 20-44 implementing the guide specs.
- Kelly Morse gave an update on how the ETF works with 2a.
- Work by Delmar Solomon about high temp recovery. Ask Brian for slides on this if interested.

b. TS 5b – Bridge & Pavement Preservation Ilg

- Had mid year meeting.
- Working on update to M345. Working on demulsibility change
- Working on an update to M344
- Working on R108
- Construction guide specs. Reviewing and preparing for updates.

Research Project Updates Hazlett, Sade, Braham, Franco Morse

a. NCHRP 9-62 Rapid Tests and Specifications for Construction of Asphalt-Treated Cold Recycled Pavements.

- Long and short pins, how many blows can measure open to traffic.
- Also apply a torque, reach a certain threshold for open to traffic.

b. NCHRP 14-43 Construction Guide Specifications for Cold Central Plant Recycling and Cold In-Place Recycling

- Eric B. Waiting on QA guides.
- Construction guides
- Best practices
- Project nearly completed

c. NCHRP 14-44 Construction Guide Specifications for Slurry Seals, Scrub Seals, and Tack Coats.
Andrew Braham

- Project is to develop guide specs in AASHTO format for the above mentioned.
- Survey of states to see use of these products and issues from them as well as what specs they are using.
- Question from the group about the definition of shedding from the presentation: like raveling it's a loss of part of the fine aggregate mix and loss of rock in general. Somewhat of a local term. Another definition is the loss of rock on initial application of traffic.
- All 3 guides have been submitted to AASHTO.
- This presentation will be available on the NCPP site.

d. NCHRP 14-48 Construction Guide Specifications for Pavement Treatments - Sand Seals and Ultra-thin Bonded Surface Treatments.

- Project is to develop guide specs and QA Guides in AASHTO format for the above mentioned.
- 18-month project.

e. NCHRP 10-144 Developing Performance and Safety Specifications for Rejuvenating Seals.

- No updates

f. NCHRP 10-124 Development of Field Test to Determine Actual Percent Embedment of Chip Seal Aggregate.

- NCHRP committee had it's first meeting and is work on the RFP.

g. Asphalt Content in Micro Surfacing Mixtures Update.

- Work with 2b to use the solvent extraction method for micro.
- Look at updated AASHTO T164 standard which is going to be for "all mixtures."

Problem statements submitted to NCHRP. Darren Hazlet

- Pavement Marking Selection for preservation treatments
- Appropriateness of ride indices on preservation treatments
- Performance based tests for emulsion treatments for agency acceptance
- We need to have state employees submit problem statements. Colin has been doing this, but we could use more conduits to submit these. Discuss more in B/O committee on research.

Stakeholder Updates:

FP2

- Legislative
- Marketing/outreach
- Research
- How can FP2 be a bridge when an NCHRP study completes, how does it get handed off and implemented

ARRA/ ISSA / AEMA

- New design and inspection manual is published
- Annual meeting in Phoenix in February
- Slurry workshop in Las Vegas in January
- Working on LCA and EPD for emulsion treatments
 - Working to create a tool for members to use
- Outreach effort made for students - 6 modules created for colleges to use
 - Several going to implement this spring, more next fall
 - Cover all ISSA treatments

FHWA (PPTFG)

- ETG to TFG. Moving to Technical Feedback Group because of legal issues over use of ETG.
- Have been having virtual meetings
- Hoping to have first in person meeting next spring
- A number of research projects coming out of Turner Fairbanks
- 12-14 state members, 2 local, 3 university

AASHTO Resource

- New Modified Polymer Emulsion PSP sample in 2023. (PME)
- 153 labs accredited for emulsions tests.
- 32 labs accredited for pavement preservation testing.
- PSP enrollment for interested programs: EML (unmodified) 254. PME (polymer) 252. SMS 42.

NCPP

- New personnel
- Full speed on meetings 2022
- 2023 National meeting
- Effort to harmonize training
- NCHRP 20-44 - more tomorrow from Rex

Training and Certification - NETTCP Dan Brodeur

- Northeast Transportation Training and Certification Program
- 6 New England states, started 1995, now includes NY
- Nonprofit, have executive director and committee
- Board - states, FHWA, industry, academia
- Started as a pooled fund and industry
- Now charge for training courses and membership fees
- 1995 = 75 attendees in 5 courses, now 17k attendees in over 200 courses
- Focus is standardizing technicians and inspectors
- 100% follow AASHTO, ASTM
 - This allows reciprocity of contractors working across state lines
- 6 course development committees
- Feel they are good at developing manuals
- All content is reviewed annually to ensure up to date
- 2/3 courses are in person, 1/3 are online (still live)
- No formal instructor training, NHI has a 3.5 day instructor training course
- Recertification on a 5 year cycle
- Need a national standard for emulsion certification
 - Set up an organization

NCHRP 9-63 (EA-PG) Update Anderson (not present)

- no update.

MN Road - Pavement Preservation Findings Vargas, Geib

- Now have drone video of each cell
- US 169 - high volume test sections, CSAH 8 - low volume test sections
- Seeing lot of thermal cracking - several -50 degree temps
- Cape seal seems to be very durable under snow plowing
- 70th Street project
 - Constructed August 2019
 - Very cracked up pavement
 - FDR, CIR, CCPR, 2" and 3" inlay, 1" overlay on everything

NCAT - Pavement Preservation Findings Walbeck

- Lee road = 500 ADT
- US 280 = 22,000 ADT
- Scrub cape has a lot of cracking, think reason is the scrub is soft underneath, micro moves on top and get very fine cracking.
- Pooled fund extended to December 2023
- Bi-monthly webinars to discuss each treatment category
- Looking forward, beyond 2023 new pooled fund

- Key takeaways
 - Crack seal prior to treatment performs better
 - Combo treatments performing better

Fog Seals and Rejuvenators - Case Study Teto

- Presentation
- CSS-1h, Ergon eFog (rejuvenator), GSB-88 (rejuvenator), Delta Mist (plant based rejuvenator)
- Case study in a town, 1 direction, 3 year program with eFog

Training Course Development - NHI Harman (FHWA)

- Presentation
- How can we do better?
- How to engage people better? Learner centric- focus on learner needs.
- 450 courses, 150 online
- Instructor development Class
 - 6 sessions per year, limit 12/session
- https://www.nhi.fhwa.dot.gov/course-search?tab=0&key=instructor&sf=0&course_no=420018
- Value - what does a participant take back, change behavior, etc
- Starting immersive learning
 - Bridge Inspection
 - Work zone
- Certain eBooks now available
- Gamification
- No plans to charge any fees for web based training

Training Course Delivery Antonio Nieves (FHWA)

- Presentation
- New course under development - leveraging MMS (WBT)
- Design and Inspection of PP Treatments
- Recruiting members for TWG - RFP has not yet gone out
 - Maybe out in February, will be done through an IDIQ process
 - Web based training is ~\$130k to develop
 - An in-person 2 day is ~\$350k
 - Pilot mid 2024
- WBT Best Practices of Chip/Slurry/Micro Update
 - Currently under development
 - To update the ISSA training currently hosted at MSU
- New course - WBT - Combination Treatments

BREAKOUT SESSIONS

Research Subcommittee (B/O) Hazlett, Sade

- Andrew Eicher - Presentation on Thermoplastic Bonding with Fog Seal Treatments
- Ding – roadmap database form and data collection.
- Three problem statements submitted this November cycle.
 1. Pavement markings selection for asphalt emulsion based treatments
 2. Appropriateness of ride indices on preservation treatments
 3. Performance based tests for emulsion treatments for agency acceptance
- We need NCHRP lobbyists!
 - 1st step is submitting in the proper format.
 - Must be submitted by a state rep.
 - 2nd step is getting the number.
 - Then it's lobby lobby lobby.
 - We need to have state employees submit problem statements. Colin has been doing this, but we could use more conduits to submit these. Discuss more in committee on research meetings.

Emulsion Treatments Subcommittee (B/O) Morse, Walbeck

- Review of Fog Seal Best Practice document. Final draft will be sent to M. Teto for final review for formatting and photographs
- Review of CCPR Construction Guide Spec. Revisions from ETF and NCHRP TRP reviewed and discussed. Final version will be sent to L. Ilg, COMP 5b for ballot early next year.
- Review of CIR Construction Guide Spec. Limited number of additional revisions from version shared with COMP 5b this summer. Changes will be forwarded to COMP 5b for review and ballot.
- CIR and CCPR Best Practice document, provided by E. Biel, from the NCHRP project reviewed with the group. Looks very comprehensive and formatting consistent with other ETF Best Practice Documents.
- Worked on bullet points for a RNS for field sampling of pavement preservation treatments.

Adjourn Day One (Franco)

Thursday, Dec 1st

Chico State PP Center Ding

- Presentation
- Technical assistance
- New and innovative technology/treatments
- Type 2 and 3 asphalt rubber chip seals
- Use of fibers in rapid set concrete
- Use of Recycled ocean plastic waste in HMA
- Pavement Preservation Academy
 - Help local agencies
 - Major treatments
 - Development of technical manuals
 - Currently 5 (MTI website)

QA - Incentives/Disincentives - RECAP Teto/Biehl

- Presentation
- Workmanship - chip seal
 - Clean agg
 - Failure to sweep
 - Bill of lading - residue
 - Increasing asphalt residue
- Micro
 - Adherence to agg #200
 - Workmanship
 - Bill of lading residue
 - Increasing asphalt residue
- ETF should prioritize characteristics, and let states decide

BREAKOUT SESSIONS FULL GROUP

QA, Education and Certification Subcommittee - Matthew Teto/Rex Eberly

- Review of current training offerings
 - NCPP Survey
- ISSA Subcommittee on training and education
 - Supporting Andrew Braham developing college curriculum
- Rex went through the survey presentation
- Next step is coming together for certification (national)
 - What entity would manage this?
 - NCPP could manage training and testing syllabus
 - Or could NCPP approve vendor specific training? Maybe that's not a good idea.
 - Will followup with NCPP training survey results at the June meeting

Messaging and Implementation Subcommittee - Larry Tomkins

- Field Demo's
 - CTDOT - fog seal - adopting changes permanently into their spec
 - VTAOT - asphalt rubber chip seal. Local material availability needs further discussion.
 - ILDOT - Chip/Fog seal - demo job with 3 different aggs and 2 emulsions
 - UDOT - chip/fog seal. Modified their existing spec.
 - VDOT - Micro/Fog seal. One lane VDOT spec, other was AASHTO.
 - Goal is to come up with TSP2 "one pager" for each project.
 - Colin suggested we get states annual condition data for these projects.

NCHRP 20-44 Update - Rex Eberly

- Tennessee was not able to award their fog seal project. Still interested in doing the work. Fog seal over OGFC.
- Missouri went ahead and just did their micro with their own spec.
- Project didn't have any provision for actually "grading" how projects turned out.
 - Rex suggests each region's volunteers do annual reviews for at least a few years.
 - Require data from DOT
 - Keep sharepoint site up to date.
 - Do we need to ask for a contract extension? Was not able to get a micro in the western region
 - Colin thinks as we roll out more specs, there will be more opportunities for field demos and go through a similar process.
 - Could either extend existing project, or do a new one.
 - CIR, CCPR

Wrap Up - Colin

- Next meeting June-ish
- Will be Colin's last meeting, retiring DOT
- Kelly Morse taking over as agency co-chair, Chris Lubbers staying as industry co-chair.