1 - WELCOME

AFD40 Full Scale Accelerated Pavement Testing
1 - Welcome

• Welcome
• Introductions

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chair</td>
<td>Benjamin Worel</td>
</tr>
<tr>
<td>TRB Staff Representative</td>
<td>Stephen Maher</td>
</tr>
<tr>
<td>AFD00 (Pavement Management Section) Chair</td>
<td>Cheryl Richter</td>
</tr>
<tr>
<td>Committee Communications Coordinator</td>
<td>Loria-Salazar</td>
</tr>
<tr>
<td>Research Needs Coordinator</td>
<td>Stephan Romanoschi</td>
</tr>
<tr>
<td>AFD40 Website</td>
<td><a href="https://sites.google.com/site/afd40web/">https://sites.google.com/site/afd40web/</a></td>
</tr>
</tbody>
</table>

• Sign – Up Sheet
• Review the Agenda
2 - APPROVAL OF 2015 MEETING MINUTES

2016 TRB Annual Meeting

January 12, 2016
2 - Approval of 2015 Meeting Minutes

• Welcome
  – Show document
3 - GENERAL ITEMS

AFD40 Full Scale Accelerated Pavement Testing
3a – General Items

• Announcements
  – S. Maher, TRB Engineer of Design
  – C. Richter, Chair, Section AFD00

• General Questions for TRB???
  – TRB websites – myTRB – papers review ...
  – AFD00 Proposed Section and Committee Reorganization (3b slides)
  – Others
3b – General Items - Reorganization

• Current Section Name (Issue)
  “Pavement Management Section”
  • Inconsistent with the names of the other sections within the group, and potentially confusing to those who do not recognize that the areas of responsibility of the individual committees are components of a complete pavement management process.

• 5/15/16 Section Name
  “Pavements”
### 3b – General Items - Reorganization

- **AFD00 Proposed Section Reorganization**

<table>
<thead>
<tr>
<th>Current</th>
<th>Proposed in December 2015</th>
<th>Notes/Post Meeting Alternatives</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AFD10</strong> Pavement Management Systems</td>
<td>Pavement Management Systems</td>
<td></td>
</tr>
<tr>
<td><strong>AFD20</strong> Pavement Monitoring and Evaluation</td>
<td>Pavement Distress Evaluation Technologies</td>
<td>• Pavement Surface Distress Evaluation and Analysis</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Pavement Distress Evaluation Methods and Technologies</td>
</tr>
<tr>
<td><strong>AFD30</strong></td>
<td>Universal or Emerging Pavement Design</td>
<td>Emerging Pavement Rehabilitation and Design Methods</td>
</tr>
<tr>
<td><strong>AFD40</strong> Full-Scale Accelerated Pavement Testing</td>
<td>Full-Scale and Accelerated Pavement Testing</td>
<td>Accelerated Pavement Testing</td>
</tr>
<tr>
<td><strong>AFD50</strong> Rigid Pavement Design</td>
<td>Design and Rehabilitation of Concrete Pavements</td>
<td>Concrete Pavement Rehabilitation and Design Methods</td>
</tr>
<tr>
<td><strong>AFD60</strong> Flexible Pavement Design</td>
<td>Design and Rehabilitation of Asphalt Pavements</td>
<td>Asphalt Pavement Rehabilitation and Design Methods</td>
</tr>
<tr>
<td><strong>AFD70</strong> Pavement Rehabilitation</td>
<td>Pavement Rehabilitation</td>
<td>Until it sunsets</td>
</tr>
<tr>
<td><strong>AFD80</strong> Strength and Deformation Characteristics of Pavement Sections</td>
<td>Pavement Structural Modeling and Evaluation</td>
<td>Pavement Structural Evaluation and Analysis</td>
</tr>
<tr>
<td><strong>AFD90</strong> Surface Properties - Vehicle Interaction</td>
<td>Pavement Surface Properties &amp; Vehicle Interaction</td>
<td>Pavement Functional Evaluation and Analysis</td>
</tr>
</tbody>
</table>
3b – General Items - Reorganization

- AFD00 Proposed Committee Reorganization
  - AFD40 Name and Scope Change

- Current Name
  “Full-Scale and Accelerated Pavement Testing”

- 4/15/16 Proposed Name
  “Accelerated Pavement Testing”
AFD40 Current Scope
The Committee is concerned with the full-scale testing of pavement systems that reflect various construction conditions and maintenance practices. Testing can be performed using conventional or accelerated methods utilizing mobile or fixed equipment under in-situ or controlled conditions. The Committee is also concerned with the test results to assess long-term pavement system performance under full axle loads for improved modeling, design, construction, and management of pavement systems, thereby optimizing their life.

4/15/16 Proposed Scope
The Committee is concerned with the full-scale testing of pavement systems. Testing can be performed using conventional or accelerated methods using mobile or fixed equipment under in-situ or controlled conditions. The Committee is also concerned with interpretation of accelerated pavement test results to assess long-term pavement system performance under full axle loads for improved modeling, design, construction, and management.
4 – GENERAL TOPICS

AFD40 Full Scale Accelerated Pavement Testing
4a – 2016 TRB Paper Reviews

• 9 Papers Submitted
• 8+ Papers Presentations
  – 490 Key Benefits Developed from Accelerated Pavement Testing, Part 1
    • Tuesday, January 12, 2016 (8:00-9:45)
  – 553 Key Benefits Developed from Accelerated Pavement Testing, Part 2
    • Tuesday, January 12, 2016 (10:15-12:00 (noon))
  – Plus + 238 - Innovations in Airport Paving
    • Monday, January 11, 2016 8:00 AM- 9:45 AM

• 2 being Proposed to TRB publishing
4b – 2016 Sponsored Workshops

- 119 Key Stakeholder Implementation of MnROAD and NCAT Test-Track Findings

- Sunday, January 10, 2016

- Sponsored by:
  - AFD40 Benjamin Worel
  - AFD60 David Timm - Standing Committee on Flexible Pavement Design
  - AFD50 Standing Committee on Rigid Pavement Design
  - AHD18 Standing Committee on Pavement Preservation
Every three years, there must be a rotation. The two basic requirements for TRB committee rotation are:

1. Rotate off one third (⅓) of the committee’s members; and
2. Appoint new members to the committee. Your proposed rotation slate is due to TRB by January 31, 2016.

The full complement of each TRB committee includes the following:

- 25 Main Members (chair included)
- Also include (above the 25 member cap)
  - 5 additional slots for international members
  - 2 additional slots for employees of state DOTs
  - 4 additional slots for "young" members (35 years)
4c – Member Rotation

- **Last Rotation 2014**
- **Next Rotation 2016 this year**
- **Drops Needed = 9**
- **Member Count = 33 / 36**
- **Nine or More Years = 6**

**Gender (33)** Male 29 + Female 4

**Regions (33)**
- North East 2
- South East 11
- Central 4
- South West 5
- North West 3
- International 8

**Company Categories (33)**
- Federal Government 5
- State Government 5
- Local/Regional Government 0
- Industry/Research/Non-Profit 4
- Consultant 3
- Academia 14
- Other 2

**Slots (36)**
- Main 25
- International 5
- State DOT 2
- Young Member 4
4d – 2014 Triennial Strategic Plan

- TSP Submitted in April 2014
- Received written comments January 2015
  - Accepted
4e – Mid-Year Meeting

- 2015 – No meeting completed this year
- Plan to do the same for 2016
  – Thoughts?
4f – AFD40 Website

• AFD40 Website (Romanoschi)
• https://sites.google.com/site/afd40web
• Changes for 2015
• Committee’s Thoughts and Use of the site
  – Who uses
  – Why its used
4g – Liaison Reports

“Pavement” Member Input

AFD10 Pavement Management Systems
AFD20 Pavement Distress Evaluation Technologies
AFD30 Universal or Emerging Pavement Design
AFD40 Full-Scale and Accelerated Pavement Testing
AFD50 Design and Rehabilitation of Concrete Pavements
AFD60 Design and Rehabilitation of Asphalt Pavements
AFD70 Pavement Rehabilitation
AFD80 Pavement Structural Modeling and Evaluation
AFD90 Pavement Surface Properties & Vehicle Interaction
5 – SUBCOMMITTEE REPORTS

AFD40 Full Scale Accelerated Pavement Testing
5a – Subcommittee Reports

• Accelerated Pavement Testing International Conferences Subcommittee, AFD40(1)
  • Held - Monday, January 11th

• Luis Salazar
  – September 19-21, 2016 – Costa Rica
  – Details
  – Questions
  – Feedback
5b – Subcommittee Reports

• Accelerated Pavement Testing International Alliance Subcommittee, AFD40(2)
  • Held – Tuesday, January 12, 2016

• Louw DuPlessis/Buzz Powell
  – 2015 Summary and discussion of Monthly webinars
  – 2016 Proposed Webinars
  – Discussion
6 – RELATED WORKING GROUPS

AFD40 Full Scale Accelerated Pavement Testing
6a – AFD40 Related Working Groups

• Consortium of Accelerated Pavement Testing
  – Kansas DOT Lead Pooled Fund (CAPT)
  – Kansas State (Clare Drilling / Mustaque Hossain)
  – Current Tasks (under development)
    • APT facility report search based on each facilities reports web pages
    • Electronic way to search what test sections have been tested already
    • E-Circular C/B for APT facilities (existing papers)

http://pavementtesters.org/
6b – AFD40 Related Working Groups

• HVSIA Update/Status (David Jones)
  – Last meeting
    • August 11-13, 2014
    • Gainesville Florida
  – Key Efforts

http://www.gautrans-hvs.co.za/hvsia/hvsiamatrix.htm
7 - RESEARCH NEED STATEMENTS

(STEPHAN ROMANOSCHI)

AFD40 Full Scale Accelerated Pavement Testing
7 – RNS Timelines

- Research Need Statements ~due dates / Calendar

- January
  TRB

- February
  NCHRP and Synthesis
  ~Statements Due
  ~Mid Feb

- Decisions
  SCORE Recommendations
  ~End March

- Panels
  Developed

- Awards
  Funding

- 2015
  Jan  Feb  Mar  Apr  May  Jun  Jul  Aug  Sep  Oct  Nov  Dec

- 2016
1. Performance of HMA using APT for Acceptance Testing for Rutting
   • Lead - Nelson Gibson
   • 2015 Action – Hold off on this one.

FHWA has an ongoing project “Develop and Deploy Performance-Related Specifications (PRS) for Pavement Construction” that finishes in 2016. I think this work supersedes the RNS - bigger in scope and more comprehensive. The Federal Highway Administration (FHWA) is conducting research to develop and deploy performance-related specifications (PRS) for asphalt pavement and jointed plain concrete pavement (JPCP) construction so that owner agencies can use them for acceptance purposes. The objective of this work is to use existing and ongoing research to fill gaps and further the advancement and implementation of PRS for pavements such that it becomes a viable option for use during pavement construction. The ultimate goal of PRS is to help the FHWA and highway agencies to reduce short and long term costs and improve the efficiency of the nation’s highway pavements.

2016 Action ?
2. Cost Benefit Determination for Pavement Research

- Lead (Louw du Plessis), John Harvey, Dave Jones, Ben Worel

Note that KSU is developing a research synthesis based on recent papers developed over the last 2 years from APT facilities paid by the CAPT. Both activities will take place in 2015.

- 2016 Action?
7b – Possible Future Efforts

3. The effect of speed, lateral wander and HMA temperature on rutting and cracking in HMA
   – 2015 TRB Note – Wait for 2016 discussion – self driving vehicles and how APT has learned about needing wander unless roadways are built more like RR tracks in the future.
   – 2016 Action?

   – 2015 TRB Note – Expect LTPP to be including APT data in the future to calibrate ME models with both APT and in-service pavements. APT has new data LTPP does not have. Due Feb 10, 2015.
   – Shelly Stoffles and Dave Jones will develop the RNS. Shelly shared the following link sponsored by AFD60 and AFD80 - http://rns.trb.org/dproject.asp?n=37025
   – 2016 Action?
7b – Possible Future Efforts

5. Pavement Temperature Effects on Fatigue Cracking
   – Lead – Shelly Stoffles and Alireza Bayat
   – 2016 Action?

   – 2015 TRB Action – Not needed at this time
   – 2016 Action?
7c – 2015 Proposed to be Developed

7. Common National APT test track and HVS databases

- 2015 TRB Notes - A common depository is need to archive historical data related to APT testing. What common output can be used to accomplish this?

- Action – Do inside the committee – no RNS at this time – LTPP is also planning to include it in their database in the future but no timeline is set. MnROAD, NCAT, Florida will be working together to tie “Test Track” data together in the next year.

- Ben Worel, Buzz Powell, Bouzid Choubane will be working on this item in 2015 and will let LTPP know and update the group next year. Will also be working with Rongzong Wu so HVS systems will also be taken into account for the future.

- 2016 Action?
8. National Test Section Tracking

- 2015 TRB Notes - Currently each state struggles with tracking ME calibration test sections and national efforts done in their state. Need a system to allow national researchers find these hidden treasures.

- Action – Developed a RNS in 2015 but did not submit
- Ben Worel, Dave Jones, Jeff Roesler, Larry Scofield
- 2016 Action?
7e – Discussion - Other RNS Ideas?

Item – side conversation

– 2015 TRB - Discussion included testing of HMA longitudinal joints using the HVS
– Action – no action required

Item?

– No other items
8 - TECHNOLOGY TRANSFER

AFD40 Full Scale Accelerated Pavement Testing
LTPP InfoPave Demo related to Westrack Data

Riaz Ahmad
iENGINEERING Corporation

- What was learned
- Future plans for other APT facilities
- Discussion
9 - CONFERENCES, WORKSHOPS, AND OTHER ACTIVITIES OF INTEREST

AFD40 Full Scale Accelerated Pavement Testing
9 – Conference, Workshops, and other Activity

• NRRA Pavement Conference
  – February 18, 2015 in Minnesota

• MnROAD/NCAT Pavement Test track Conference
  – March 2016 (Alabama)
  – September 2016 (Minnesota)

• 5th International Conference on Accelerated Pavement Testing
  – September 2016 (Costa Rica)
10 - OPEN FORUM

AFD40 Full Scale Accelerated Pavement Testing
8 – Open Forum

• Announcements
• Thoughts / Ideas
11 - ADJOURN

AFD40 Full Scale Accelerated Pavement Testing