PAPA Regional Technical Meetings

Pavement Warranties

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Introduction / Overview

Topics:
• Past PennDOT Warranty Projects
• 5-Year Asphalt Pavement Warranty
• 7-Year Asphalt Pavement Warranty
• 10-Year Asphalt Pavement Warranty
• Concrete Pavement Warranty
• Why Warranty Pavements?
  – Improved quality and durability
  – Contractor accountability
  – Innovation
  – Lower life-cycle, inspection, and maintenance costs
  – Protection against early failures
Past PennDOT Projects

Asphalt Pavement Warranty
- District Special Provisions
- PennDOT Warranty projects since 2001:
  - 5-Year Warranty Projects: 10
  - 7-Year Warranty Projects: 2

Concrete Pavement Warranty
- No projects
## Past PennDOT Projects

### Asphalt Pavement Warranty Projects

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<th>7-Year</th>
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Past PennDOT Projects

- Maintenance issues during Warranty period:
  - Minimal crack sealing
  - Pop-outs
  - Minor repairs
  - Patching
  - No major repairs
Past PennDOT Projects

- Cost Savings in District 11-0
- SR 0376/L03
- 7-Year Asphalt Warranty
- Savings due to less inspection during warranty paving operations and no acceptance tests to process
5-Year Warranty for Overlays

• FHWA, Industry, and PTC involved in development of specification and use guidelines

• FHWA approval for specification and use guidelines received on 07/14/14

• New section in Pub. 408
  • Section 496 – Asphalt Concrete Pavement, 60-Month Warranty
5-Year Warranty Specification

- Warranty Bond
- Department’s Responsibilities
- Contractor’s Responsibilities
5-Year Warranty Use Guidelines

- Incorporated into Publication 448, Innovative Bidding Toolkit
  - 2013 Edition, Change 1

- Section 6.2 Use Guidelines – Asphalt Concrete Pavement, 60-Month Warranty

- Section 6.3 Use Guidelines – Asphalt Concrete Pavement, 84-Month Warranty (reserved)

- Section 6.3 Use Guidelines – Asphalt Concrete Pavement, 120-Month Warranty (reserved)
5-Year Warranty Use Guidelines

• Project Selection
• Pavement and Project Design
• Pre-Construction Meeting
• Construction
• District Responsibilities
5-Year Warranty: Next Steps

- Implement 5-Year Warranty on multiple projects for the 2015 Construction Season
  - Surveyed the Districts in August 2014 to compile a list of potential Warranty projects
  - Currently evaluating the list of potential projects provided by the Districts
Potential Projects

- Reviewing Potential Projects
  - Adhering to Use Guidelines
  - Existing Pavement Structure
  - Existing Pavement Conditions
  - Proposed Construction
  - District Actions
  - Meetings with PAPA
7-Year Warranty

• 7-Year Warranty for major rehabilitation projects
  - Currently in Clearance Transmittal Round 1

• Shoulder Performance Criteria
7-Year Warranty: Next Steps

- Resolve bonding issues
- Finalize 7-Year Warranty Specification and Use Guidelines and submit to FHWA for approval
- Develop list of potential pilot projects
10-Year Warranty

- 10-Year Asphalt Pavement Warranty for new full-depth construction or full-depth reconstruction

- Will be developed following the completion of the 7-Year Asphalt Pavement Warranty
Concrete Pavement Warranty

• 10-Year Warranty Special Provision out on CT1
• Multiple work group meetings held
• Discussions with bonding industry
• West Virginia DOT 9-Year Warranty
Concrete Pavement Warranty

- Warranty Requirements
  - Transverse Cracking
  - Longitudinal Cracking
  - Map Cracking
  - Spalling
  - Scaling
  - Joint Sealant Failure
  - Lane/Shoulder Separation