

# WisDOT Hot Topics

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# WAPA / WisDOT Initiatives

- **Green Team** and **HMA Tech Team**
- **High Recycle Pilot Program**
- HMA Paving Inspection
- Thin Overlay Pilot
- **Cold In Place Recycling**
- Longitudinal Construction Joint
- **Tack Coat Application Rate Specification**
- Base Course Compaction
- **Combined Bid Item**
- VMA Change
- **Performance Based Testing of Mixtures**
- Cold weather paving Specification



# High Recycle Pilot Program

- ▶ Use of more Recycled Asphalt Pavement & Recycled Asphalt Shingles
- ▶ 3 Pilot Project Initially Selected
  - STH 77, Ashland County (constructed in 2014)
  - STH 73, Dane County (constructed in 2014)
  - USH 141, Marinette County (To be constructed in 2015)
- ▶ Use of 50%+ Binder Replacement, Test Strips & Performance Testing



# RAS Stockpile Testing Requirements

- ▶ One Test per 250 Tons during pile production
  - Gradation (Pilot)
    - 100 % Passing the 3/8" Sieve
    - 93% Passing the #4 Sieve
    - Less than 1% Deleterious on R4 Material
  
- ▶ Old specification
  - 100% Passing 1/2" Sieve





# RAP Stockpile Testing Requirements

- ▶ One Test per 2000 Tons during pile production
  - P200 within 2% of stockpile average
  - Asphalt content within 0.75% of stockpile average
  - All properties within described tolerances for 80% of the tests
  - Minimum of 5 tests



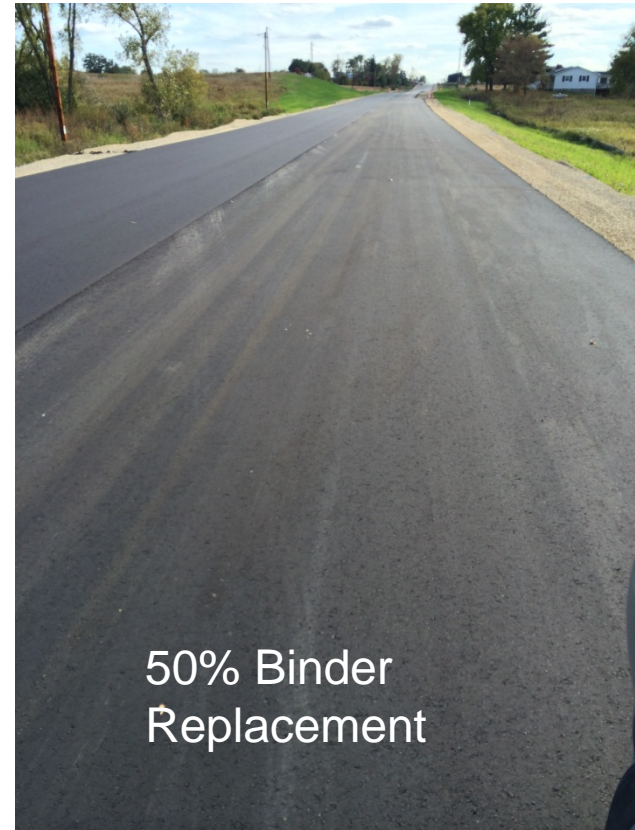
# Performance Testing

- ▶ Striping Resistance – Hamburg Wheel
  - AASHTO T324-11
- ▶ Fatigue Cracking – Semi Circular Bend Test (SCB)
  - AASHTO XXXX-XX – In Development (ASTM & AASHTO)
- ▶ Low Temperature Cracking – Disc Shaped Compact Test (DCT)
  - ASTM D 7313-07





# STH 73, Dane County



# Economics

- ▶ All projects were let with a Standard Specification & High Recycle Pilot mix (All E-3 mixes)
- ▶ Let savings of varied from 5 to 15% on HMA Items (including asphalt binder costs) for higher recycle mixes than standard E-mix.





# Cold In Place Recycling

- ▶ Pulverize, foam inject and compact existing pavement
- ▶ Overlay with HMA afterwards
- ▶ Alternative to mill and overlay
- ▶ 1 pilot in 2014 – STH 64, Taylor County
  - Late season – Weather was a factor
- ▶ Potential of 4 or more pilots in 2015 & 2016
- ▶ Lessons learned from STH 64 to be implemented in the SPV



# Tack Coat Application Rates

- ▶ Increased from 0.025 gal/sy to 0.05-0.07 gal/sy
  - ASP6 Implementation
- ▶ Team reviewing to update standards in 2015
  - Need to develop a test for residual application rate
  - Guidance for application based on surface type
    - Milled, Concrete, New Construction



# Combined Bid Item

- ▶ Looking at paying for Asphalt Binder and Mix as one combined bid item
  - Implementing new binder testing protocols
  - Eliminating seldom used mixes
- ▶ Specification under development currently
- ▶ Goal – 2016 Standard Specification





# Questions

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