WisDOT Update

Dewayne Johnson, PE
WAPA Conference
November 29, 2016

PIE!

Innovation

Partnership

Efficiency

Lab Staff

Steve Krebs – Director, Bureau of Technical Services
Barry Paye – Chief of Materials

Concrete Materials Laboratory			
10-15-07-11-00			
012131	SWB		100
Frank, Russell	CE Trans Sup		
338700	SWB		100
Lyngdal, Erik	CE Trans Sr		
022262	SWB		100
Andreini, Matthew	ES Trans Adv		
021110	SWB		100
Downing, Robert	ES Trans Adv		
018780	SWB		100
Fitzgibbon, Patrick	ES Trans Adv		
022696	SWB		100
Gambetty, Zachary	ES Trans Sr		
001656	SWB		100
Carlson, Gary	ETT Adv		

HMA Materials Laboratory			
10-15-07-12-00			
338586	SWB		100
Hefel, Steven	CE Trans Supv		
017766	SWB		100
Kopacz, Daniel	CE Trans Adv		
000172	SWB		100
Syron, Scott	ES Trans Adv		
035550	SWB		100
Anderson, Jeffery	ES Trans Adv		
006977	SWB		100
Barden, Richard	ES Trans Adv		

HMA Performance Testing

▸ WisDOT is currently conducting testing for:

- Hamburg Wheel (Moisture Sensitivity & Rutting Potential)
- Disc-shaped Compact Test (Low Temperature Cracking)
- SCB: Semi-Circular Bend (Fatigue Cracking)
- Ignition Oven (AC Content)

WisDOT/WAPA Initiatives

Green Team

▸ Set priorities and move forward with initiatives

Membership:
▸ WisDOT
  - Senior Management Team
  - Bureau of Technical Services
  - Bureau of Project Development
  - Region
▸ Industry
  - WAPA
  - Paving Company Senior Management:

HMA Tech Team

▸ Focused on Standard Spec Revisions, Construction & Materials Manual, Facilities development manual, Highway Technician Certification Program and Green Team Initiatives

Membership:
▸ WisDOT Bureau of Technical Services
▸ WisDOT Regional reps
▸ FHWA
▸ Industry Technical Reps

Aggregate Tech Team

▸ Restarted in 2016

▸ Russ Frank – DOT Lead

▸ Industry & WisDOT participation

▸ Revisions made to base course specifications

▸ Looking to improving source verification testing and tracking

▸ More to come in 2017

Green Team Updates

▸ Look to new technology areas
- Interlayers
- Pavement Preservation
- Thin Overlays

▸ WisDOT and Industry working together on future trends

▸ FHWA participation

Green Team Communication

▸ WAPA & WisDOT partnership to share the spec changes with diverse audiences
  - WisDOT internal training
  - Wisconsin Counties Highway Association
  - Wisconsin Towns Association
  - Black Bag Lunches
  - Conferences & Workshops (like this one!)

Examples of how we're improving

Efficiency	FY16 savings
Use of recycled materials	$19.6M
Cold-in-Place Recycling	$1.47M
Extended life of hot mix asphalt	$1.6M

Performance measure	How we measure it	Current report period	Goal	Goal met	Trend	Comments
Preservation: Protecting, maintaining and operating Wisconsin's transportation system efficiently by making sound investments that preserve and extend the life of our infrastructure, while protecting our natural environment.						
Program effectiveness Calendar year 2015	Scheduled improvement projects compared to modeled roadway needs (as a percent)	Location: 86; Scope: 65; Time: 85	Location: 80; Scope: 65; Time: 65	✓	↑	Location, scope and time will likely continue to improve as refinements to a statewide scoping theme and prioritization mechanism are completed and implemented.
State highway pavement condition (backbone) Calendar year 2015	Percent of state highway pavement rated fair or above	97.6	90.0 rated fair or above	✓	↑	Backbone pavement needs are prioritized because while they represent only 13.5 percent of state trunk highway miles, they carry 49 percent of traffic and approximately 70 percent of the freight tonnage and value.

Learn more with the MAPSS Performance Improvement Scorecard - WisconsinDOT.gov

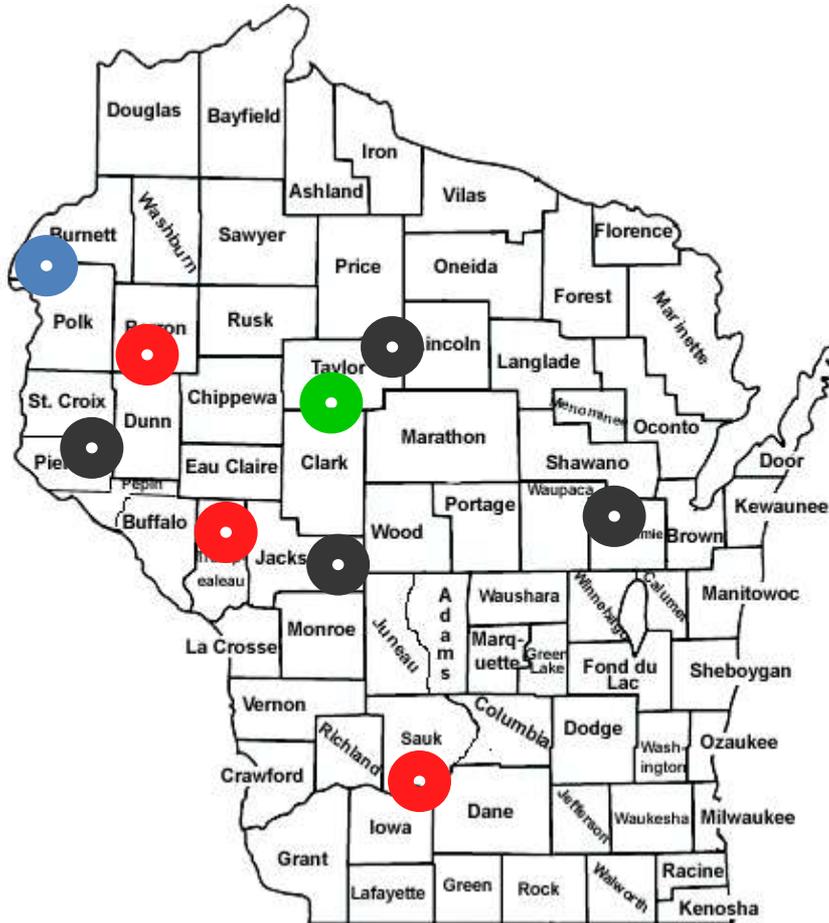MAPSS Performance Improvement

Closer Look at Cold-In-Place Recycling

❑ CIR uses mechanical process to produce RAP from the existing pavement, add a stabilizing agent, relay & compact into a stabilized base.

❑Typical CIR process treatment depth - 3 to 4"

CIR Projects Map (Since 2012)

Construction Year	Project Length (Lane-Mile)
🔵 2012	26
🟢 2014	24
🔴 2015	50
⚫ 2016	58
Total	**158**

STH 64 (Gilman - Medford)

Before CIR

CIR Operation

CIR – Both Lanes
2016

WB Lane Mill&Overlay
EB Lane CIR
2016

EB Lane CIR
WB Lane Mill&Overlay
2016

Mill & Overlay – Both Lanes
2016