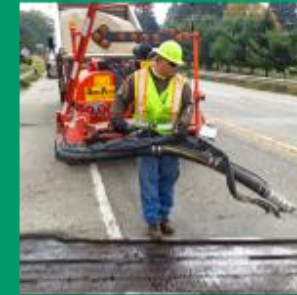


NATIONAL PAVEMENT PRESERVATION CONFERENCE • INDIANAPOLIS, 9-18-2023



OHIO DEPARTMENT OF
TRANSPORTATION

ODOT PAVEMENT PRESERVATION PROGRAM

Bill Feehan

Pavement Standards Engineer

Eric Biehl

State Asphalt Materials Engineer

PAVEMENT MANAGEMENT

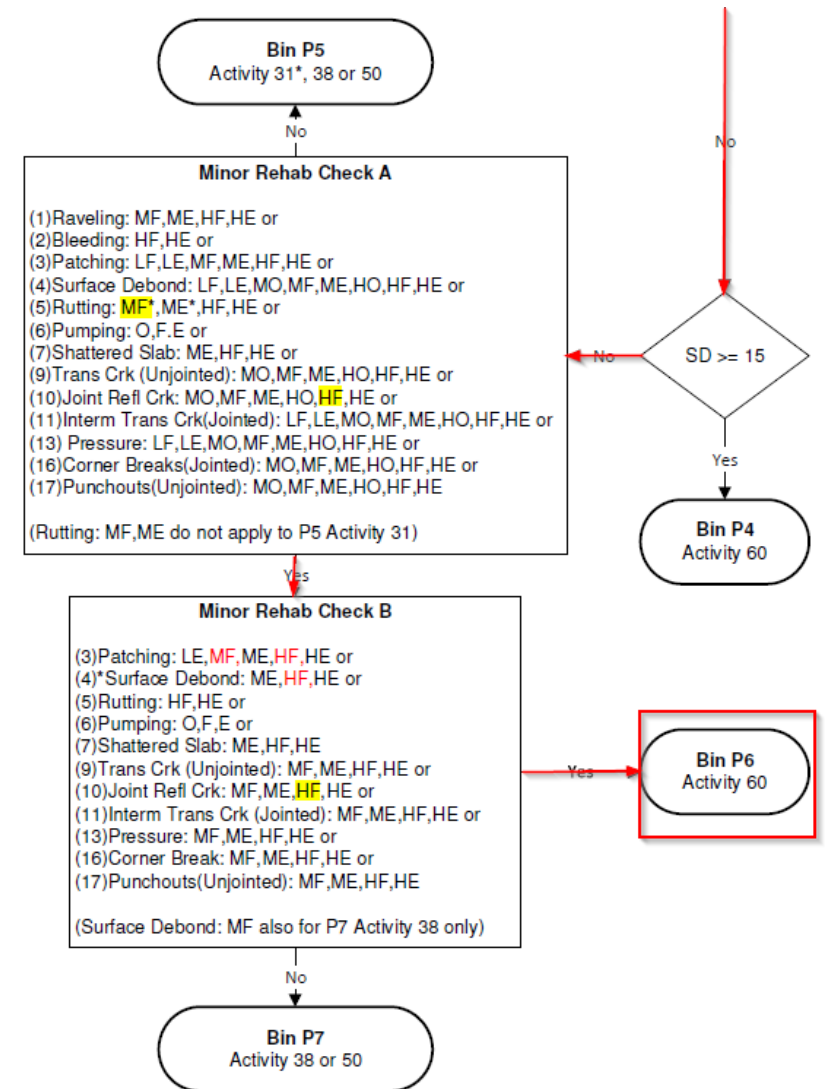
- Worst first
 - Moved away from this strategy in 2016 with introduction of pavement management system
- Preservation-first Strategy
 - Combines several factors to maximize benefit for a set dollar amount.
 - How ODOT currently manages pavements

PAVEMENT MANAGEMENT SYSTEM (PMS)

- **Goal of ODOT PMS:**
 - Determine funding required to meet network condition goals
 - Develop optimal strategy to manage network
 - Accurately predict future conditions

PAVEMENT MANAGEMENT SYSTEM (PMS)

- PMS Inputs:
 - Inventory of Assets
 - Condition History of Assets
 - Treatment Activities and Cost
 - Pavement Deterioration Models
 - Decision Tree Logic
 - Funding Budget



PAVEMENT CONDITION RATING (PCR)

- Taken annually on the state system
- Based upon visual inspection of pavement distress.

PAVEMENT CONDITION RATING SYSTEM



PAVEMENT TREATMENT ACTIVITIES

- Minor Rehab/Preservation
 - 20 - Crack Sealing
 - 25 - Chip Seal
 - 30 - Microsurfacing
 - 38 - Fine Graded Polymer AC
 - 40 - CPR
 - 50 - AC Overlay w/o Repairs
 - 60 - AC Overlay with Repairs



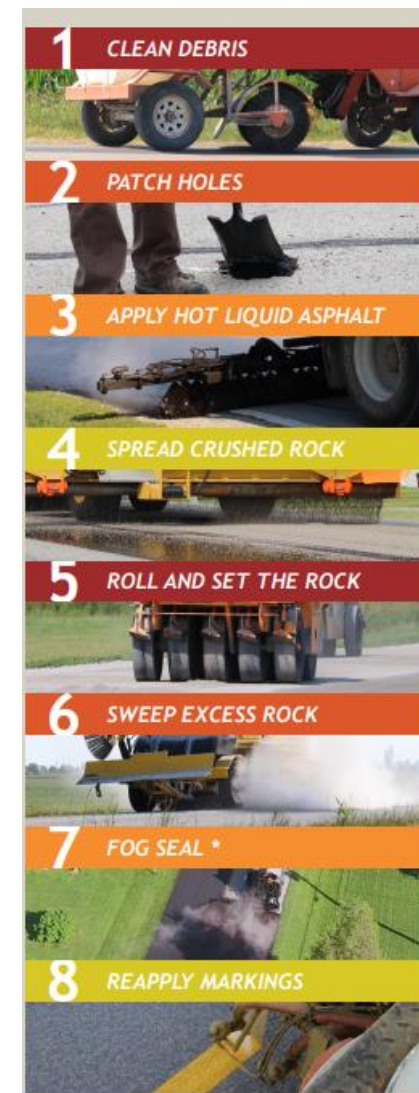
PRESERVATION TREATMENTS 2022 SUMMARY

- Crack Seal
 - 7 projects in 2022
 - Usually, county or district wide projects
 - Also done by ODOT maintenance forces



PRESERVATION TREATMENTS 2022 SUMMARY

- Chip Seal
 - 12 projects in 2022
 - Mainly done on two lane facilities
 - Have done one rural interstate lookalike with good results
 - Current cutoff is roadways with less than 4,000 ADT and 250 ADTT



PRESERVATION TREATMENTS 2022 SUMMARY

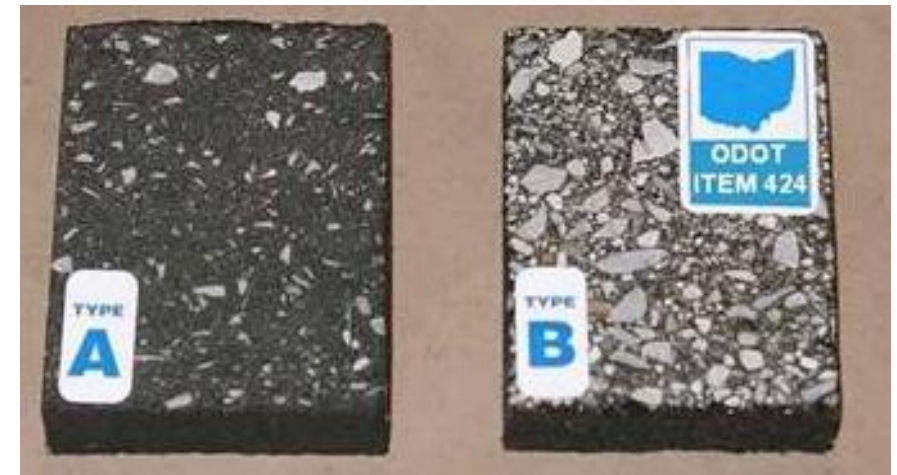
- **Microsurfacing**
 - 11 projects in 2022
 - Done on both two lane and divided facilities



PRESERVATION TREATMENTS 2022 SUMMARY

○ Fine Graded Polymer AC Overlay

- 33 projects in 2022
- Minimum of 6.7 percent polymer modified asphalt binder (Type B)
- Aggregate as large as a 3/8” sieve
- Marshall mix design method
- 0.75” - 1” lift



PRESERVATION TREATMENTS 2022 SUMMARY

- **AC Overlay**
 - Most common treatment
 - 176 projects in 2022
 - Single course mill and overlay most common on divided facilities
 - Moving to more milling on two lane

PRESERVATION TREATMENTS 2022 SUMMARY

- **Concrete Pavement Restoration (CPR)**
 - Only 3% of ODOT's network is exposed concrete
 - Dowel bar retrofit
 - Joint replacement
 - Diamond grinding
 - Cross stitching

QUESTIONS



Last updated 9/28/2023