Delaware State Report

Mike Beulah DelDOT Pavement Management

> September 18, 2023 Indianapolis, Indiana

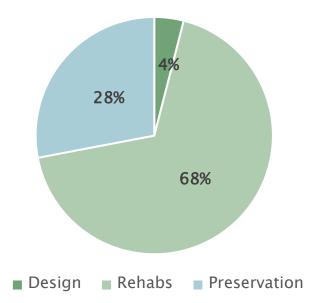


Annual Report

- > 2022 Total Tonnage: 578,844.55 tons (statewide)
- Treatments used:
 - Mill and fill/ Overlay
 - Modified edge paving
 - Thin lift paving
 - Chip sealing
 - Fog sealing
 - Hot mix and PCC patching

Total Program Budget FY23 \$73.5M

Budget Breakdown



rehabs include cost of upgrading signing, striping, guardrail, ADA ramps, and signals

Use of Recycled Asphalt Pavement (RAP)

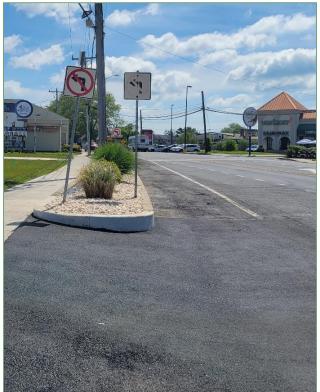
- Delaware allows up to 40% RAP in 64-22 mixes (10% on polymer modified pavements)
- RAP is used in all Superpave designs
 19mm, 12.5mm, 9.5mm, 4.75mm, and SMA
- RAP is not currently used in any porous/pervious pavements
- Delaware allows up to 4% recycled asphalt shingles (RAS) in mixes, with the use of softer binders to counter the stiff asphalt
 - Rejuvenator is used as additive to soften shingles

Use of Recycled Asphalt Pavement (RAP)

- DelDOT has a RAP calculator
 - Determines end result PG grade when combining RAP or RAS with virgin asphalt (VMA).
 - Used daily by State Material Inspectors to verify aggregate percentages at plants
- Premature Cracking has been noticed in some pavements with high percentages of RAP/RAS

Repair Alternatives

- DelDOT sees a lot of segregation on projects.
 - Requiring contract to fog seal rather than mill and replace material



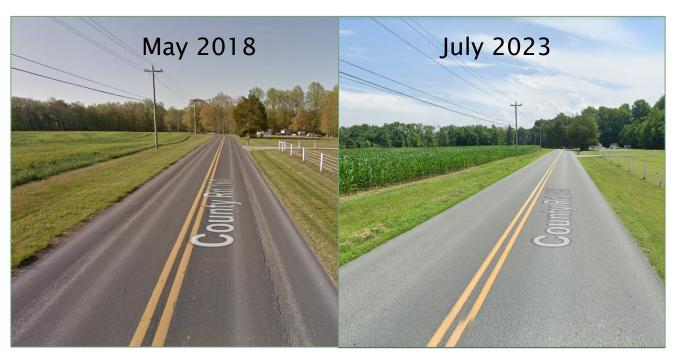




Repair Alternatives

Amish Buggy Ruts

Overlaying with PG 88-22 on high buggy traffic roads



- Maidstone Branch Rd
 - Overlayed in 2020 with 88-22
 - Have not seen a reappearance in rutting in past 3 years

