Mississippi DOT State Report

National Pavement Preservation Conference 2023 Alex Middleton, Assistant State Research Engineer Mississippi DOT















Pavement Management Advances

- Increased District/Stakeholder engagement
 - Face to face meetings to review existing network conditions
 - Assist in project selection, scoping, and timing
- Reporting improvements
 - Streamlined data reporting
 - Developed Microsoft Power BI Dashboards
- New Deighton optimization engine set for deployment
 - Simplified models and triggers
 - Modified Decision Trees

Decision Tree Modifications

- Classified by Route and Pavement Type
 - Route Types: Interstate, Fourlane, Twolane
 - Pavement Types: FLEX, COMP, JCP, CRCP
- Reduced project specific treatments into 'buckets'
 - Preservation: PM, Resurf Thin
 - Other: Resurf Thick, Minor Rehab, Major Rehab

Decision Tree Modifications

- Fog Seals
- Rejuvenators
- Crack Sealing
- Chip Seals
- Scrub Seals

- Slurry Seals
- Micro Surfacing
- Cape Seals
- Ultra Thin Overlays
- Combo Scrub/Thin Overlay

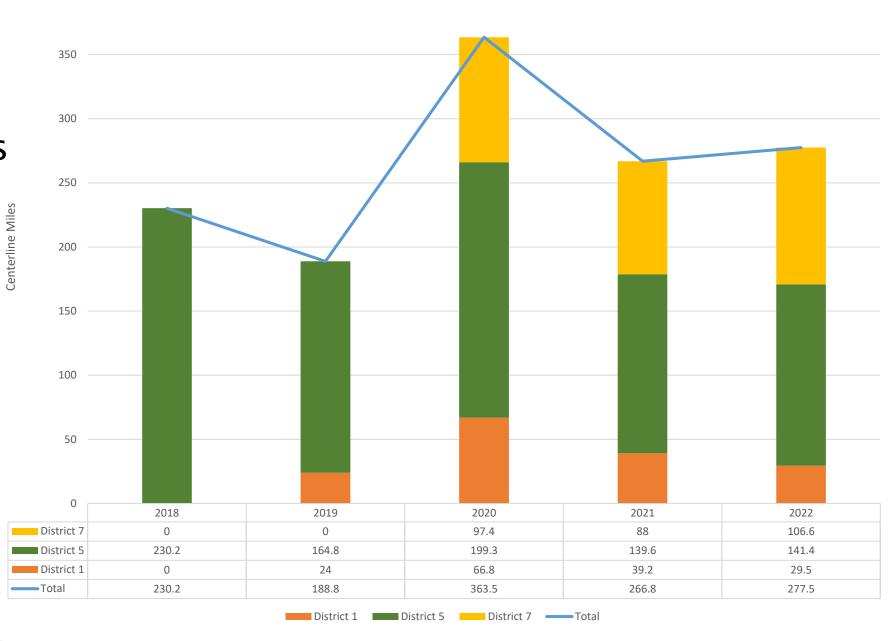
Preventive Maintenance (PM)

Thin Resurfacing (Resurf Thin)

Preservation Snapshot

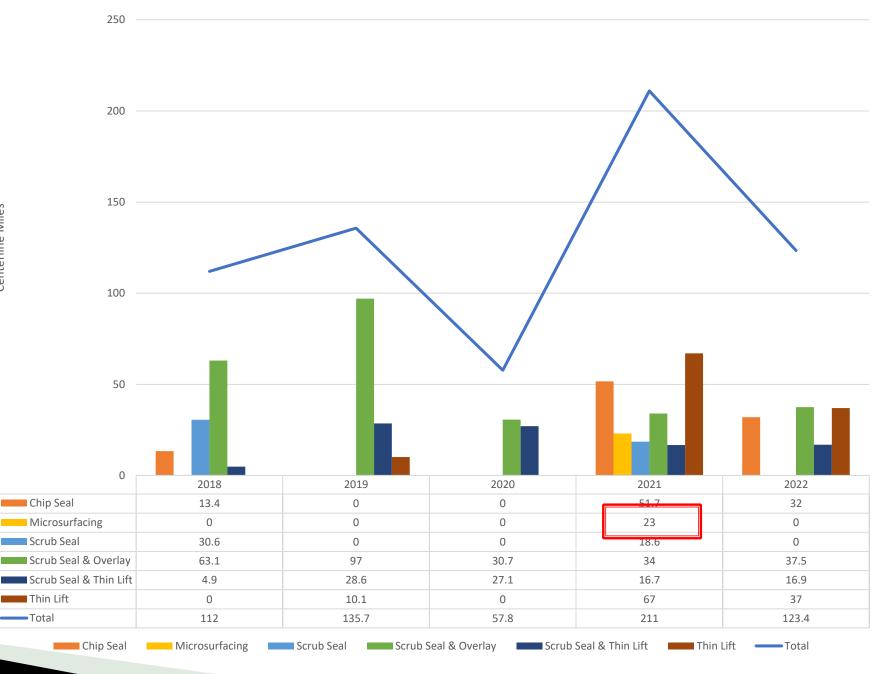
400

▶ In-House Chip Seals

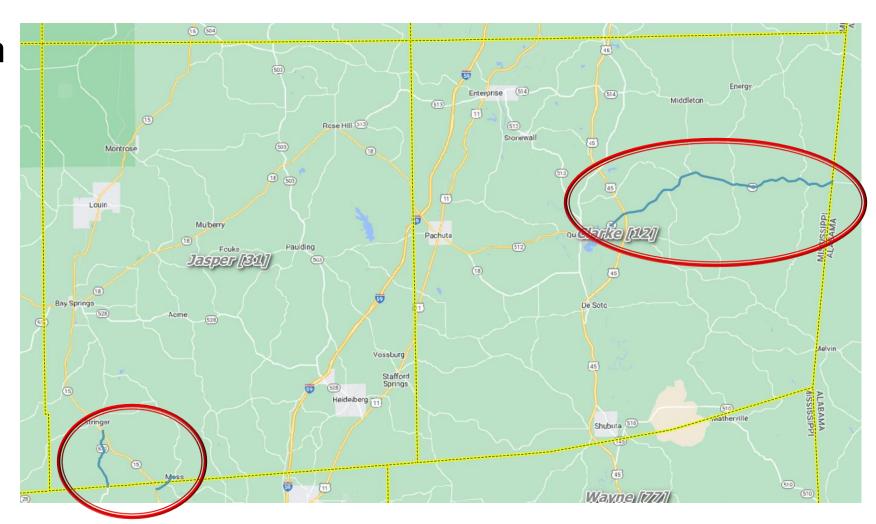


Preservation Snapshot

- Contract Projects
 - Chip Seals
 - Scrub Seals
 - Scrubs with Overlays
 - Thin Lift Overlays
 - Microsurfacing



- Let to contract in April of 2021
- Completed in November of 2021



▶ SR 18 existing surface conditions







▶ SR 18 Construction





▶ SR 533 Post Construction





▶ SR 537 Post Construction

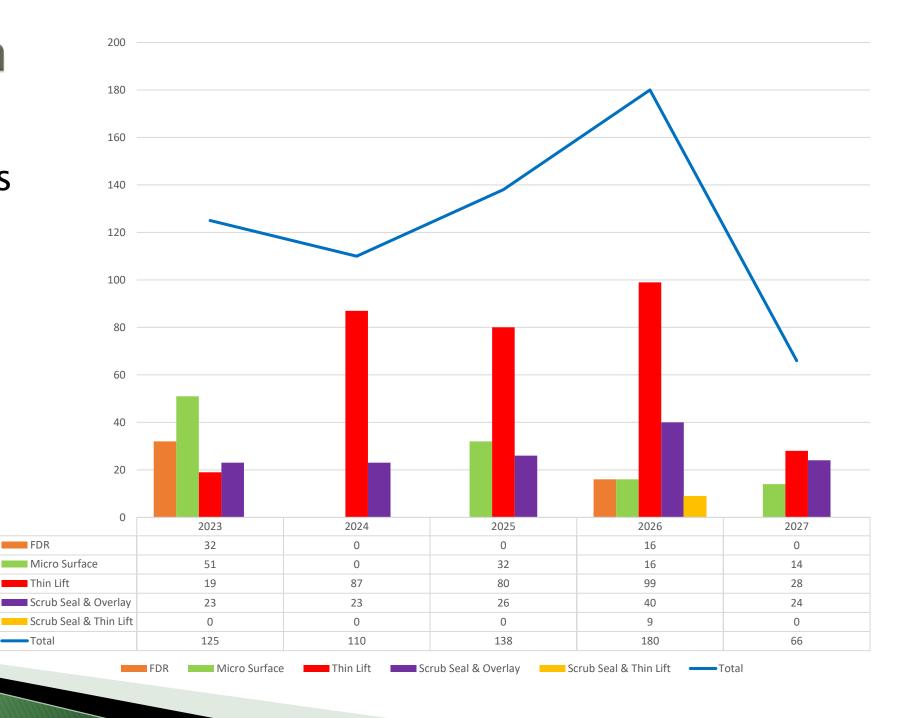




Preservation Snapshot

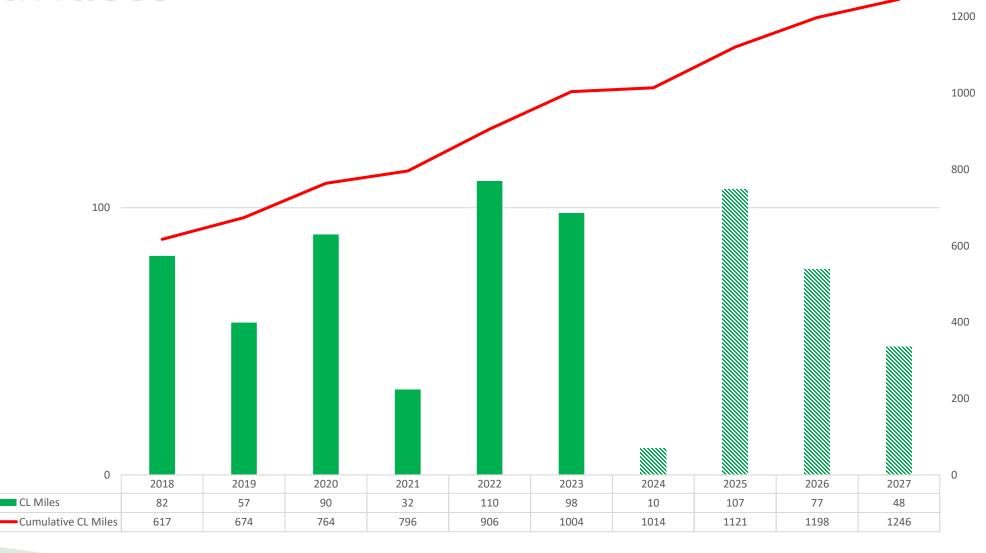
Future Projects

FDR



200 — 1400

OGFC Surfaces



Future Plans

- Developing Indices
 - IRI/Rutting/Cracking (Structural and Non-Structural)
- Refine Decision Trees and Treatment Triggers
- Leveraging Emerging Technologies
 - Continuous Deflection Data
 - Continuous Friction Data
 - Incorporation of these data sets into decision making

Questions?

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