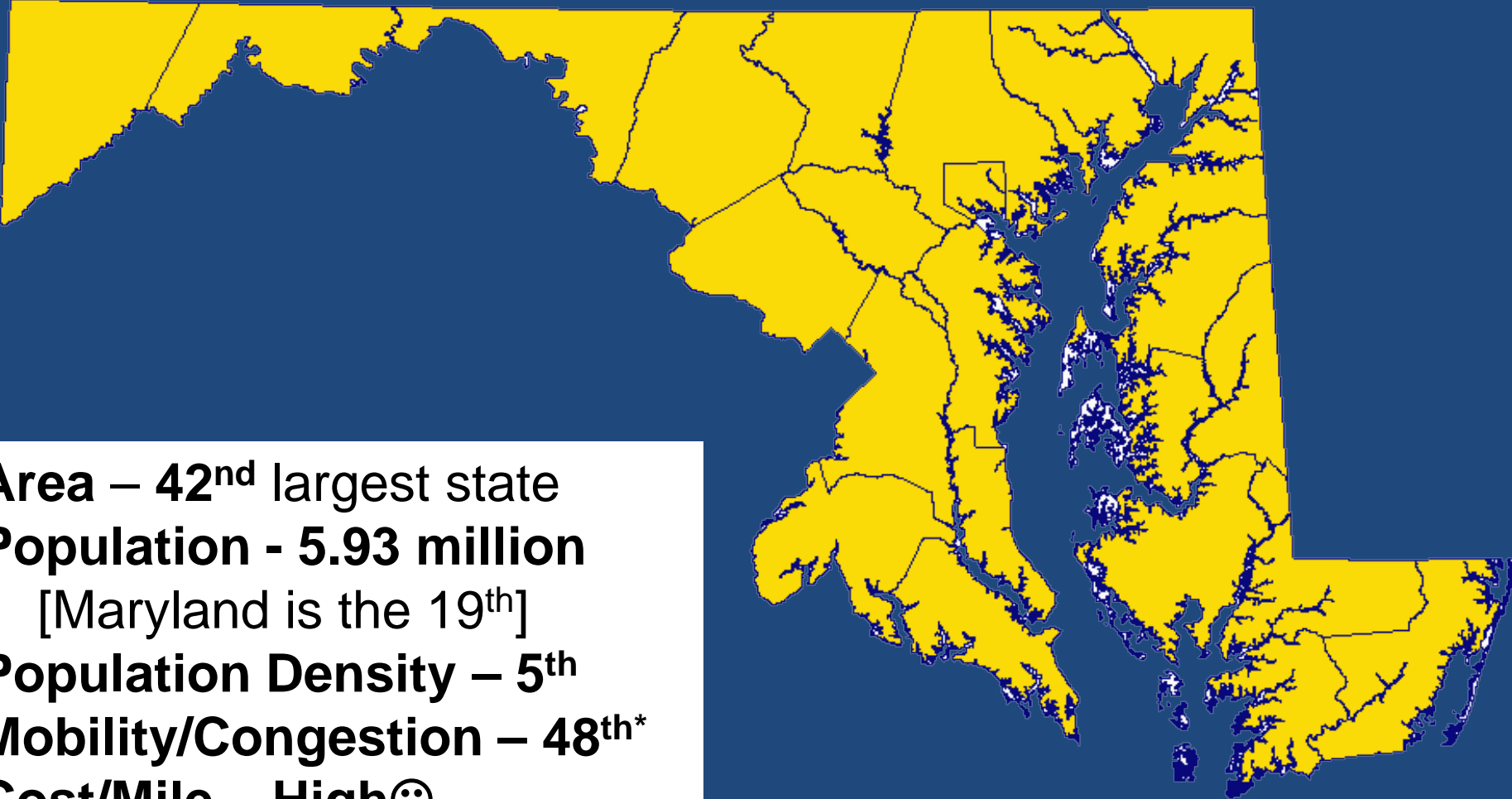


Pavement Preservation in Maryland

Nate Moore
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MD State Highway Administration
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April 30, 2015

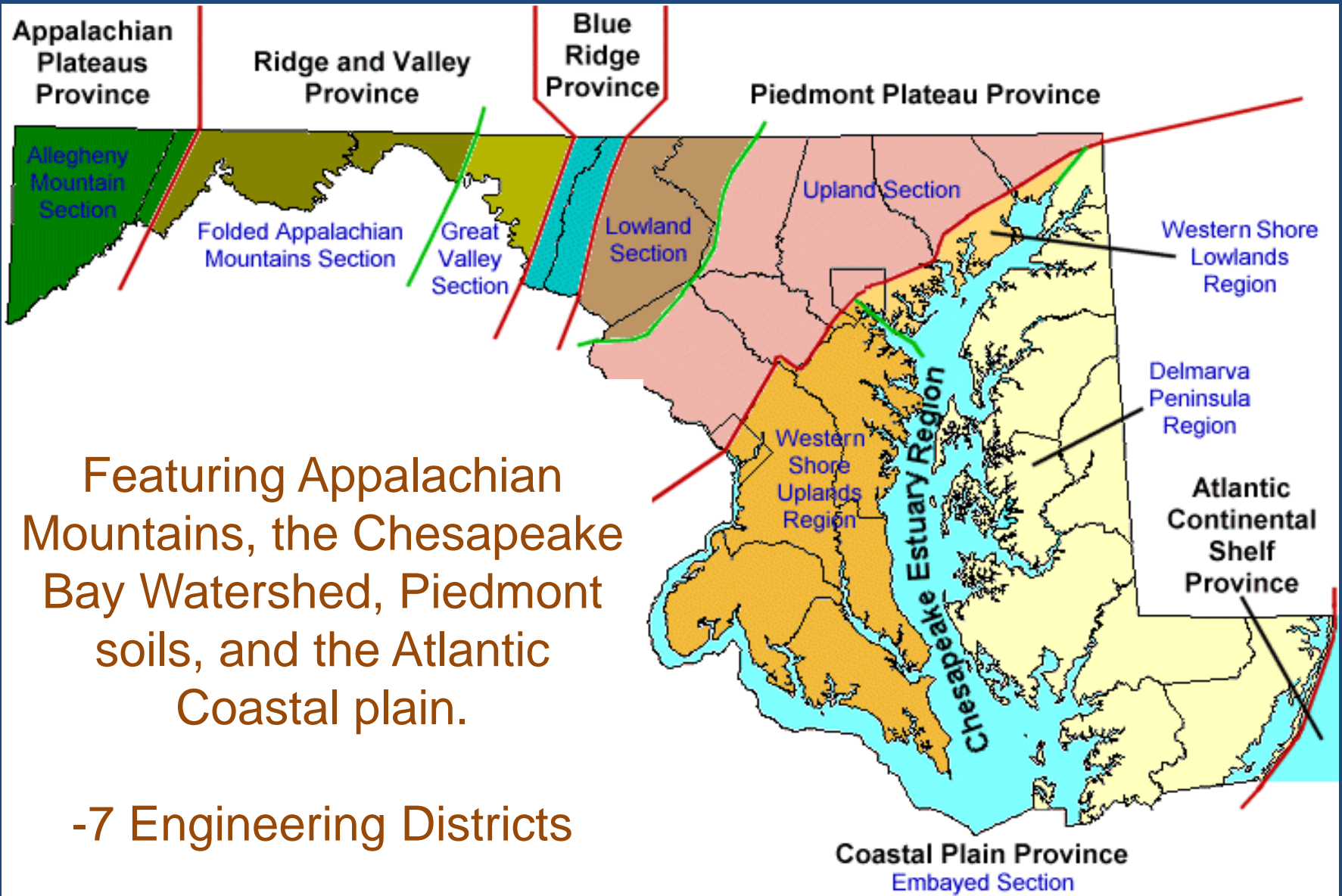


Maryland – Current Stats



Area – 42nd largest state
Population - 5.93 million
[Maryland is the 19th]
Population Density – 5th
Mobility/Congestion – 48th*
Cost/Mile – High☺

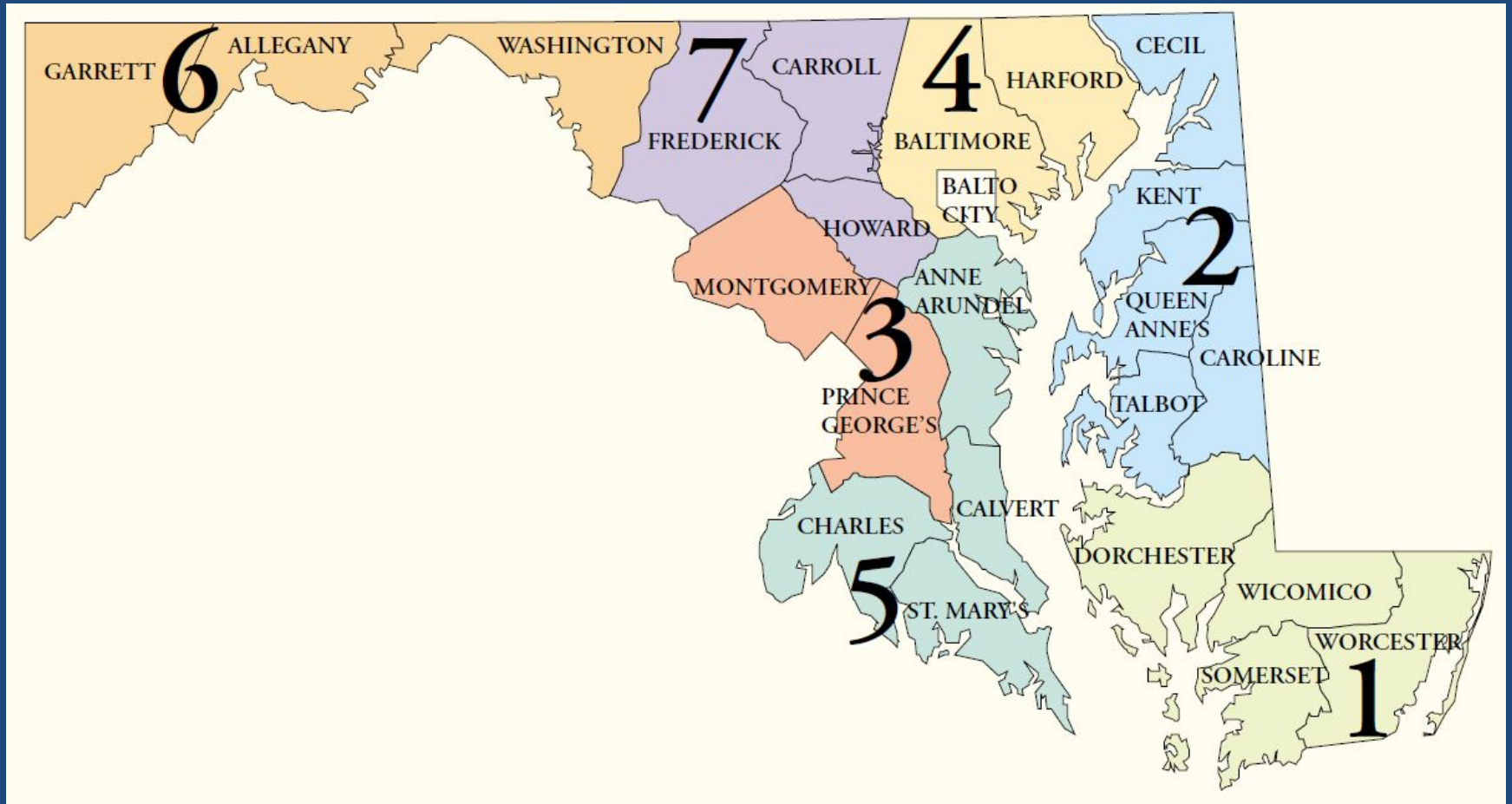
*2013 Hartgen Report – Reasons Foundation

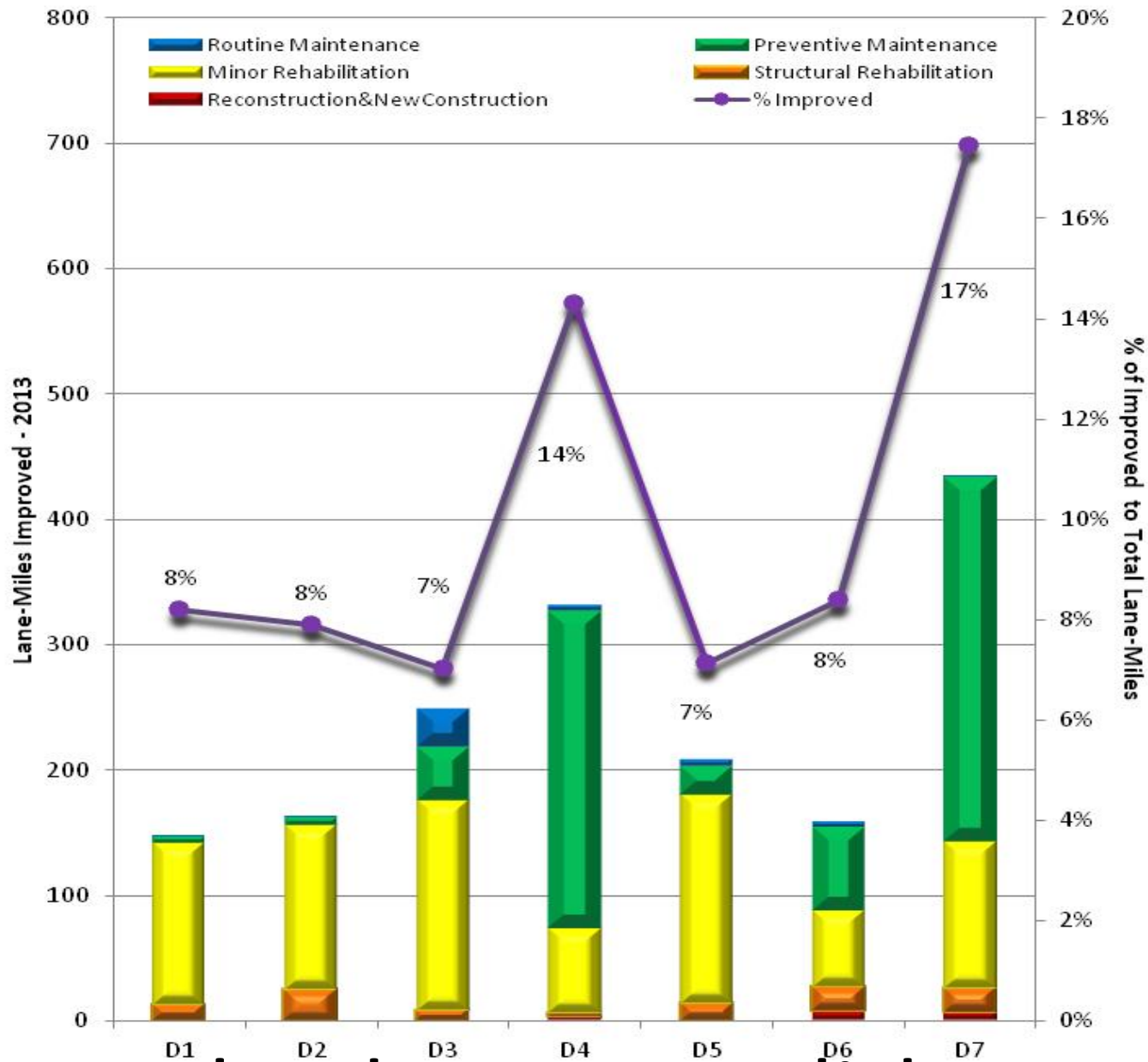


Featuring Appalachian Mountains, the Chesapeake Bay Watershed, Piedmont soils, and the Atlantic Coastal plain.

-7 Engineering Districts

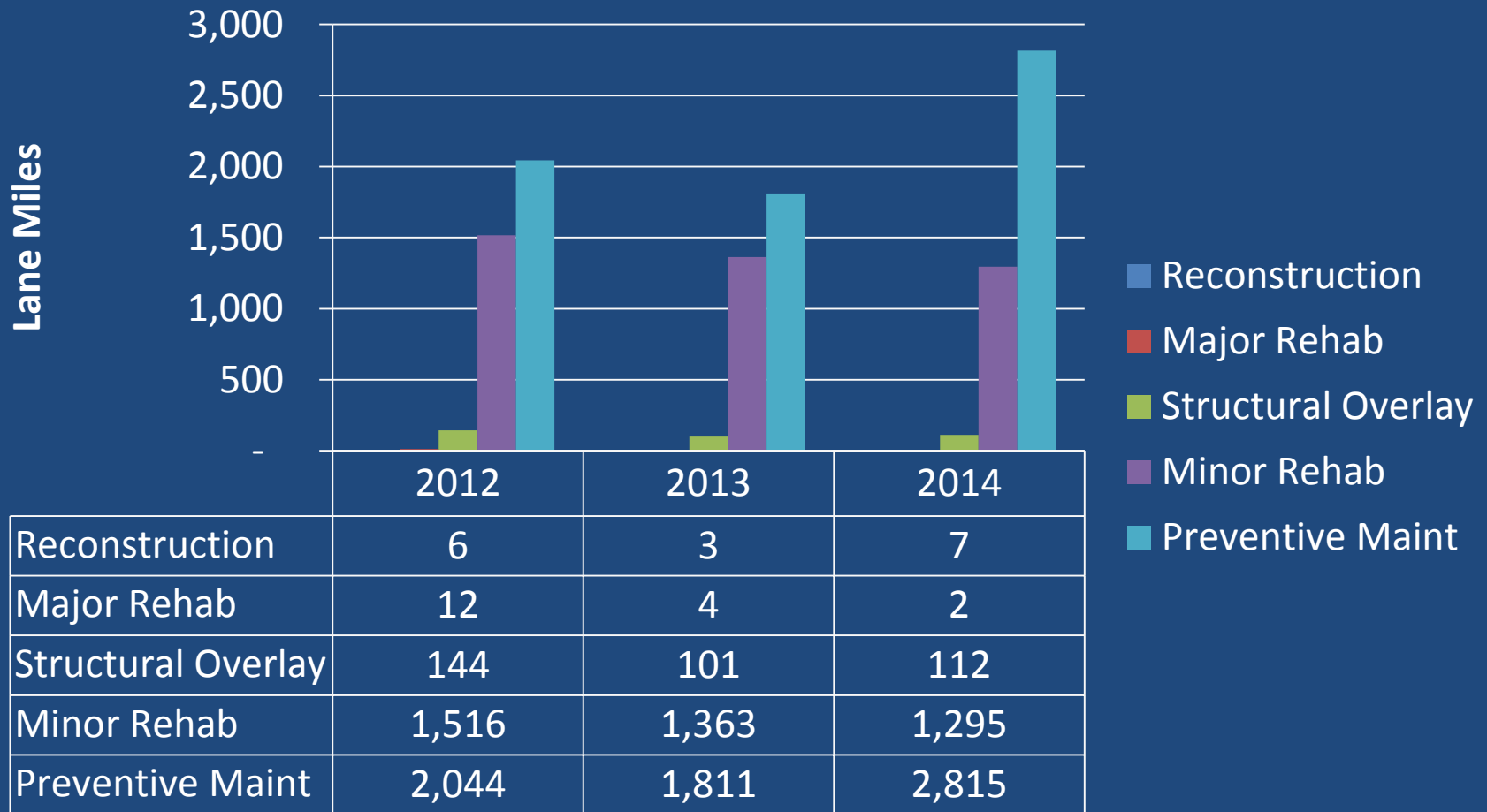
Seven Engineering Districts



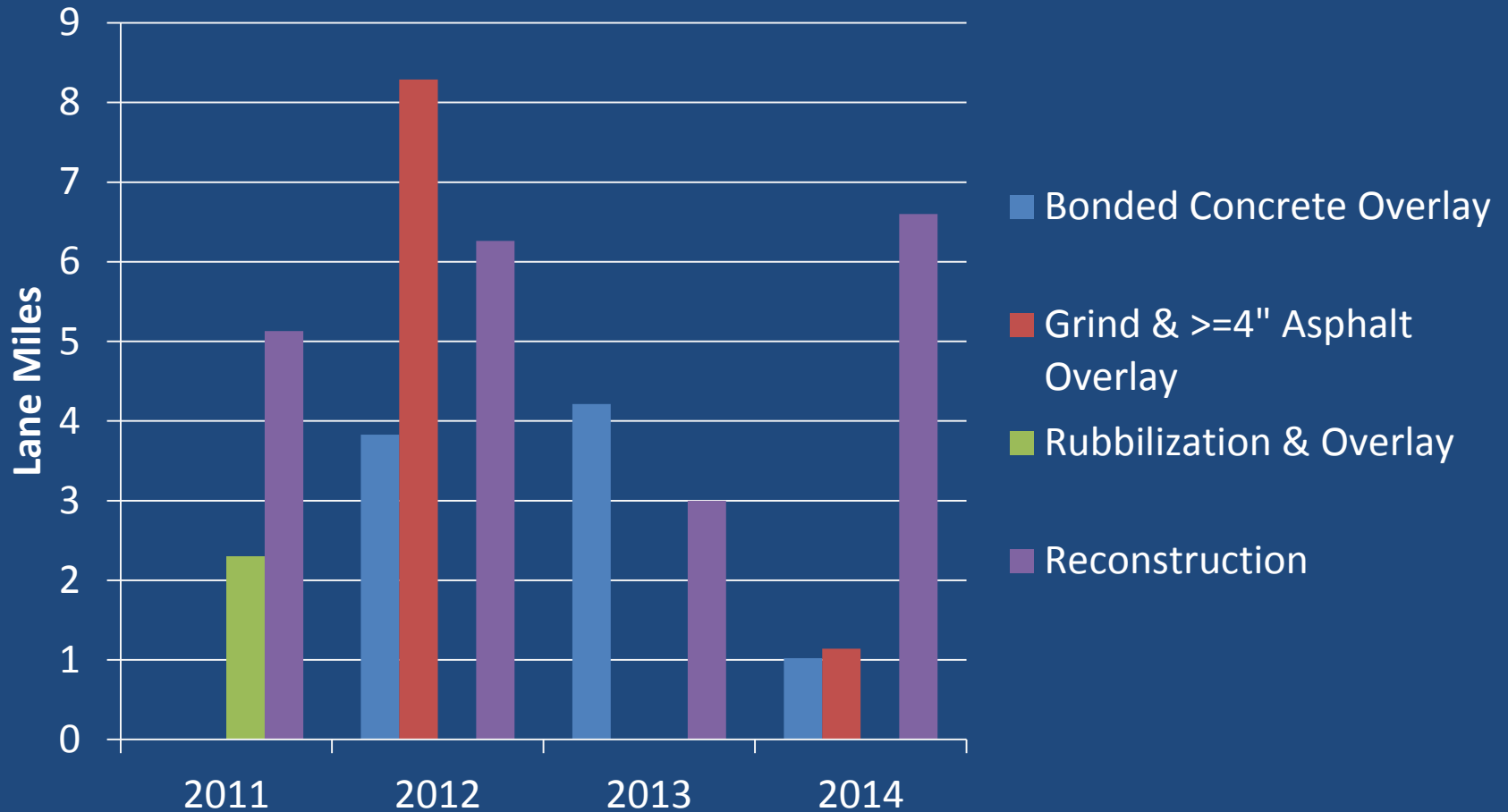


Maryland – Accomplishments

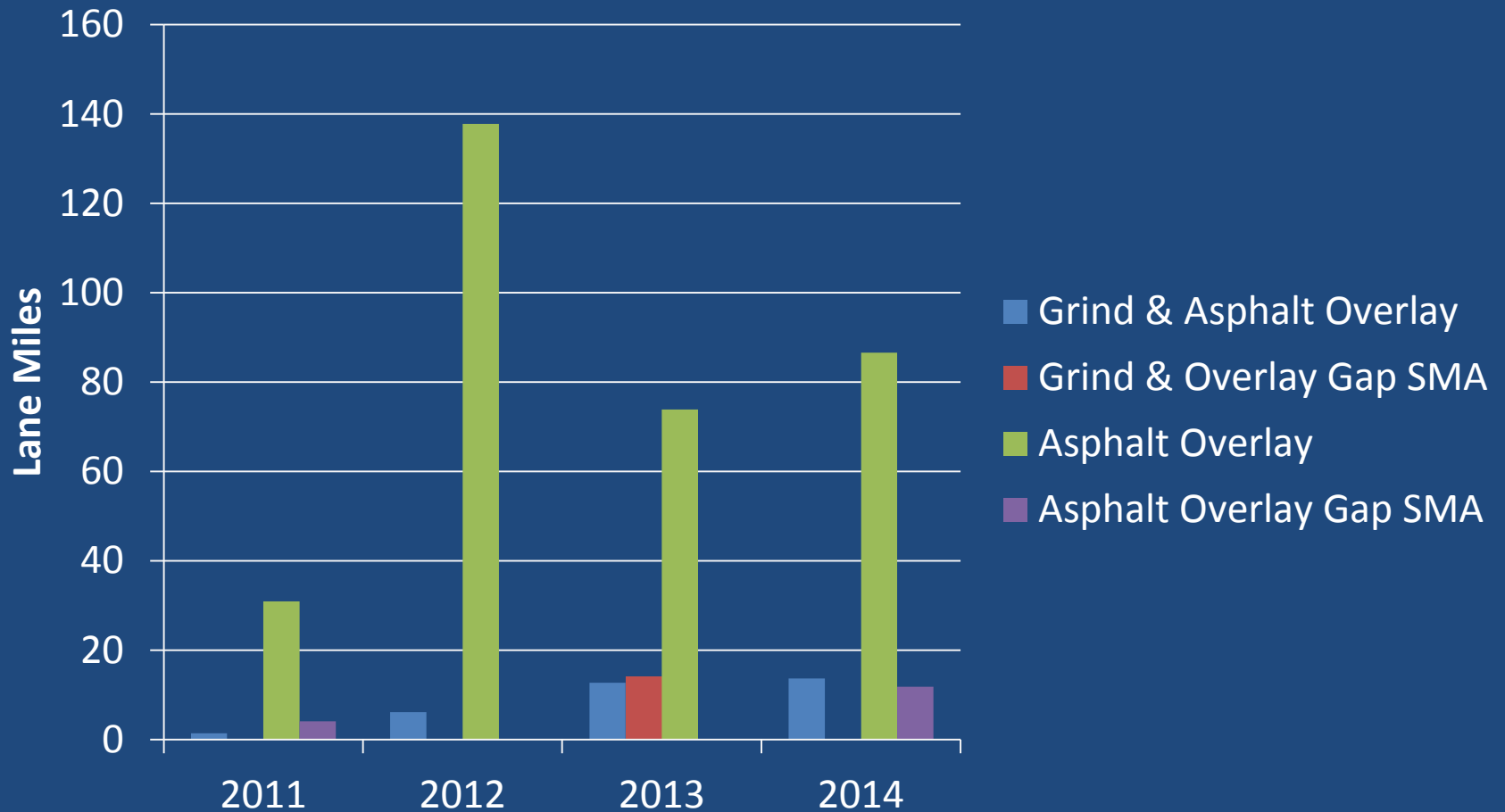
Pavement Treatments By Type and Lane Miles



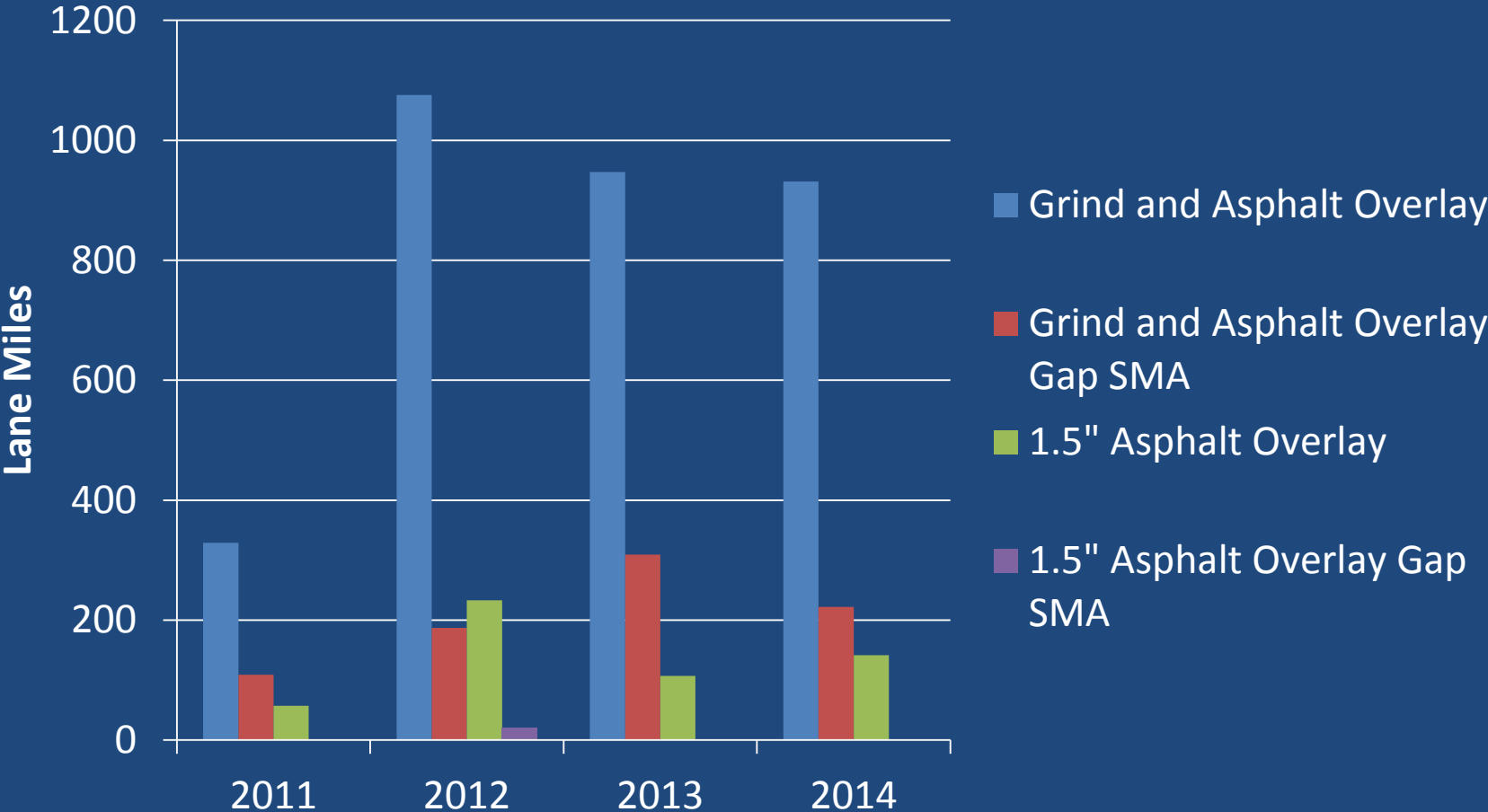
Major Rehabilitation



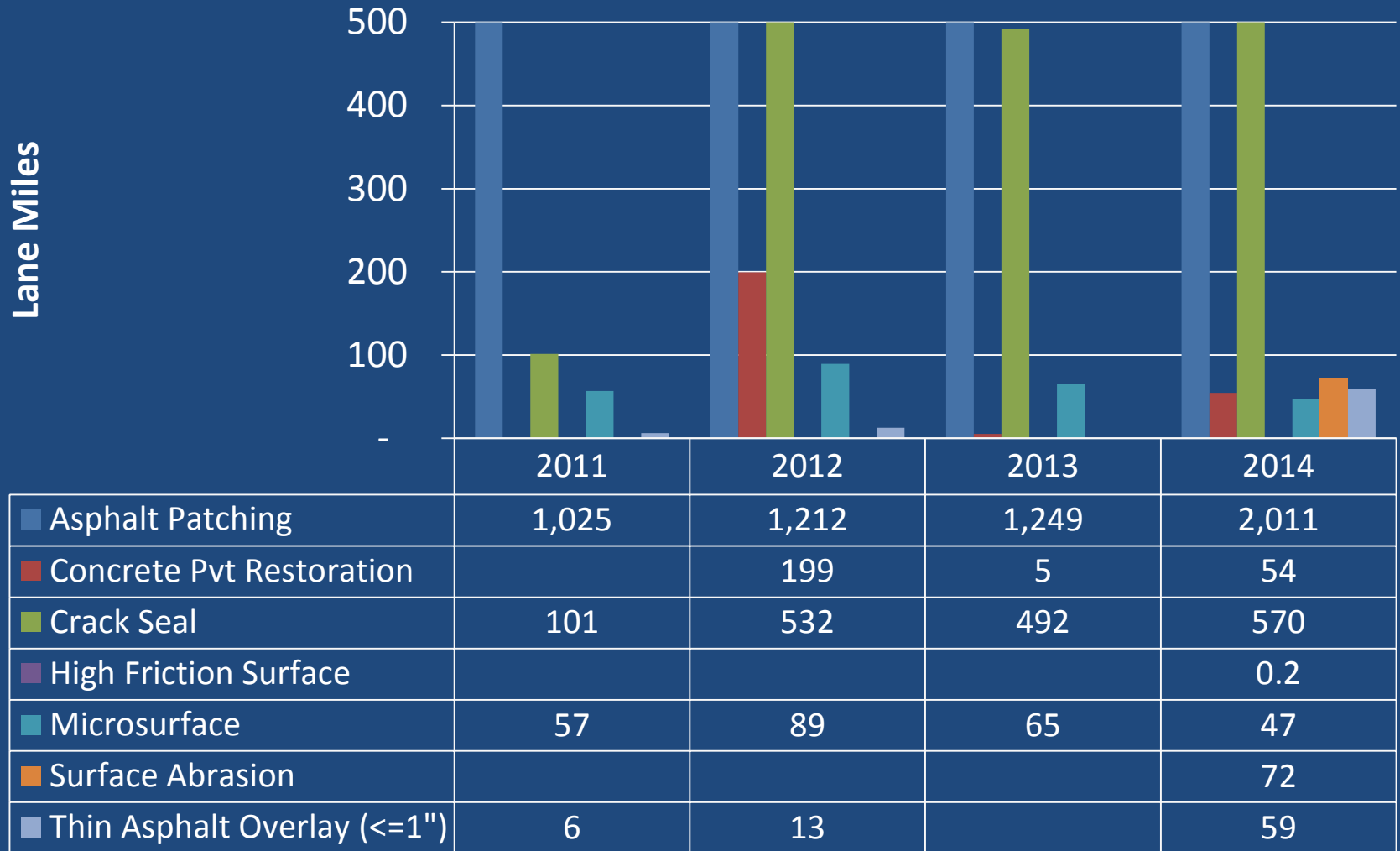
Structural Overlay (Grade Increase >1.5")



Minor Rehabilitation



Preventive Maintenance



Pavement Preservation in MD

- Prior to 2011, there was no strategic program or focus on preservation treatments
- Rehabilitation focus with limited preservation
 - Preservation treatments were not detailed out in our budget allocation optimization process
- Limited direction provided to or even definitions for preservation treatments

MDSHA Preservation Guide

- MDSHA published its 1st **Guide to Pavement Preservation** – March 2011
 - Came from lessons learned with the Northeast Pavement Preservation Partnership (NEPPP).
 - Started our philosophy change journey
- Worked closely with Larry Galehouse (Director, National Center for Pavement Preservation)

MDSHA Preservation Guide

- Available on the TSP-2 website at:
https://www.tsp2.org/library-tsp2/uploads/1847/MDSHA_Pavement_Preservation_Guide_March_2011.pdf
- Revised version embedded within the MDSHA Pavement Design Guide, at:
http://www.marylandroads.com/OMT/MDSHA_Pavement_Design_Guide.pdf

Recent Improvements

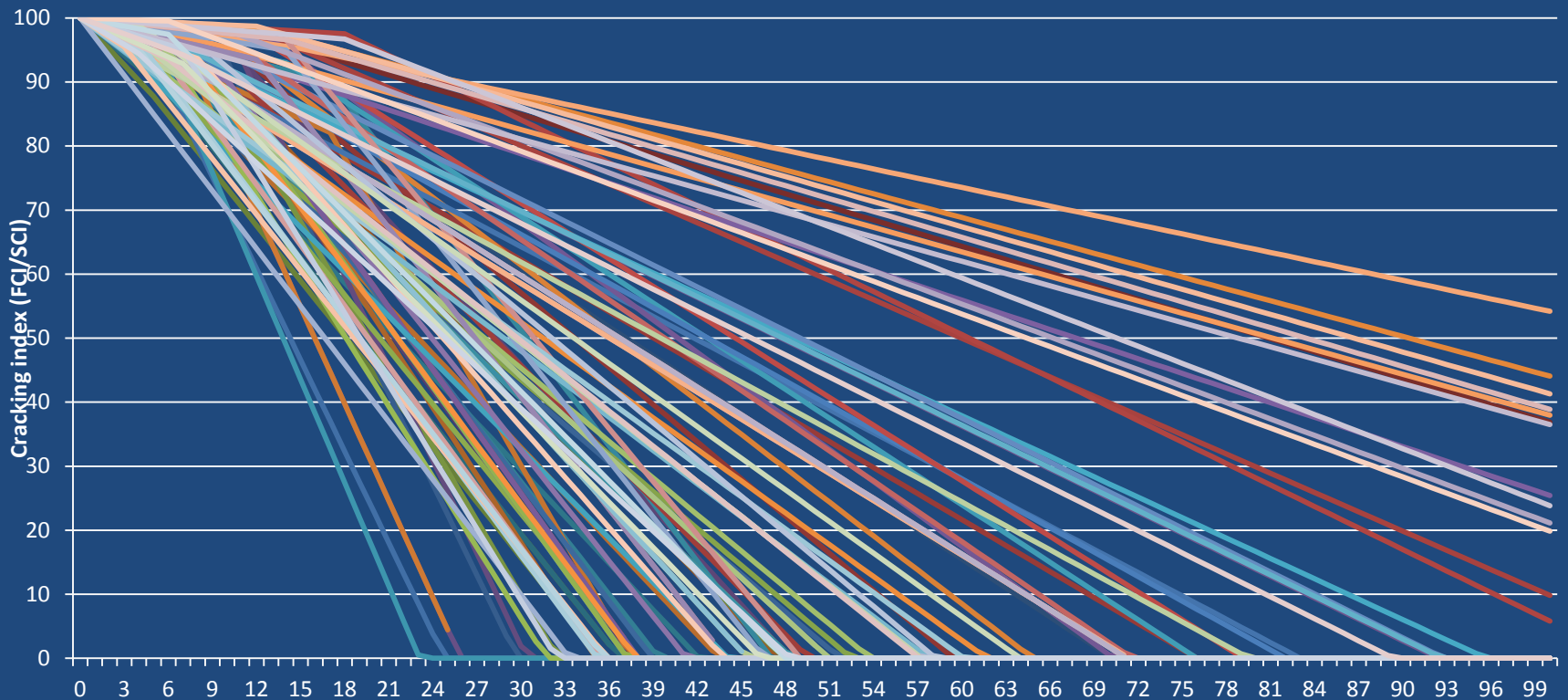
- New SHA Business Plan Measures
 - Overall of Remaining Service Life \geq 20 years.
 - Lane Mile Years of Pavement Construction Benefit = Lane Miles of pavement owned.

New Special Provisions

- We have new revised specs for the following:
 - High Friction Surface Treatment
 - Slurry Seal and Micro-Surfacing
 - Dowel Bar Retrofit, Diamond Grinding
 - Surface Abrasion
 - Cold-In-Place Recycling
 - Full-Depth Reclamation
 - Open-Graded Friction Course
 - Fog Seal
 - Ultrathin Bonded Wearing Course
 - several others in the works!

Update Performance Models

- IRI, Rutting, Friction
- Functional Cracking, Structural Cracking



Current Challenges

- Educating MDSHA staff for implementation
 - Recent slurry seal/micro-surfacing workshop
- Including Industry partners in specification development
- Continuing to change the culture
 - Industry support through quality products and services

In the next couple years...

- Microsurfacing – 60 to 80 lane miles per year
- Crack Sealing – About 500 lane miles per year
- UTBWC – 3-4 projects
- ARGG – 1 Project
- High Friction Surface – 10 Projects
- Surface Abrasion – 35 lane miles
- Cold-In-Place Recycling – 8 lane miles
- Full Depth Reclamation – 1 lane mile
- Parking Lot Treatments
 - Rejuvenator, Fog Seal, Chip Seal