



NJDOT UPDATE

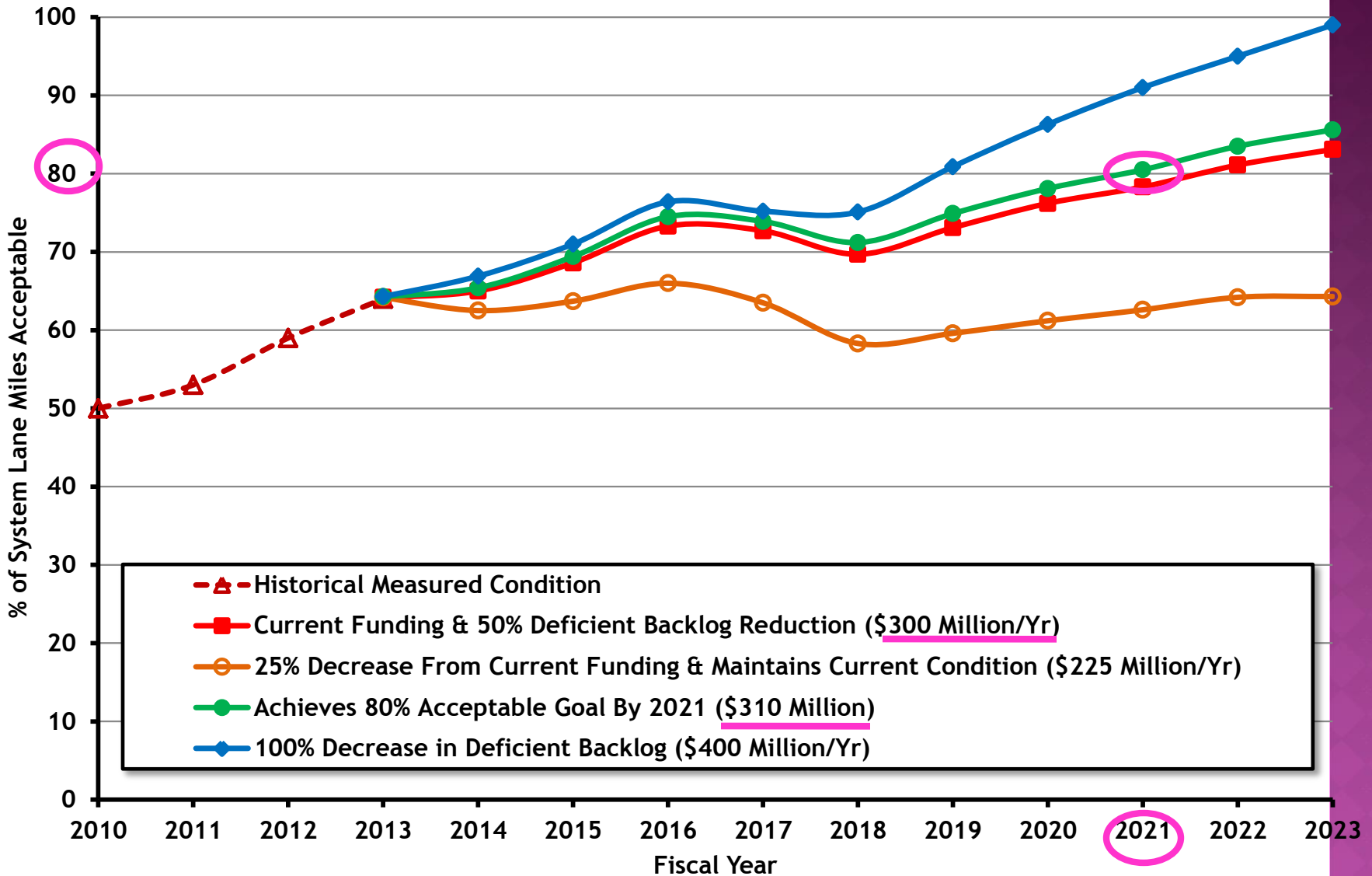
2014 NEPPP Annual Meeting

By Susan Gresavage &

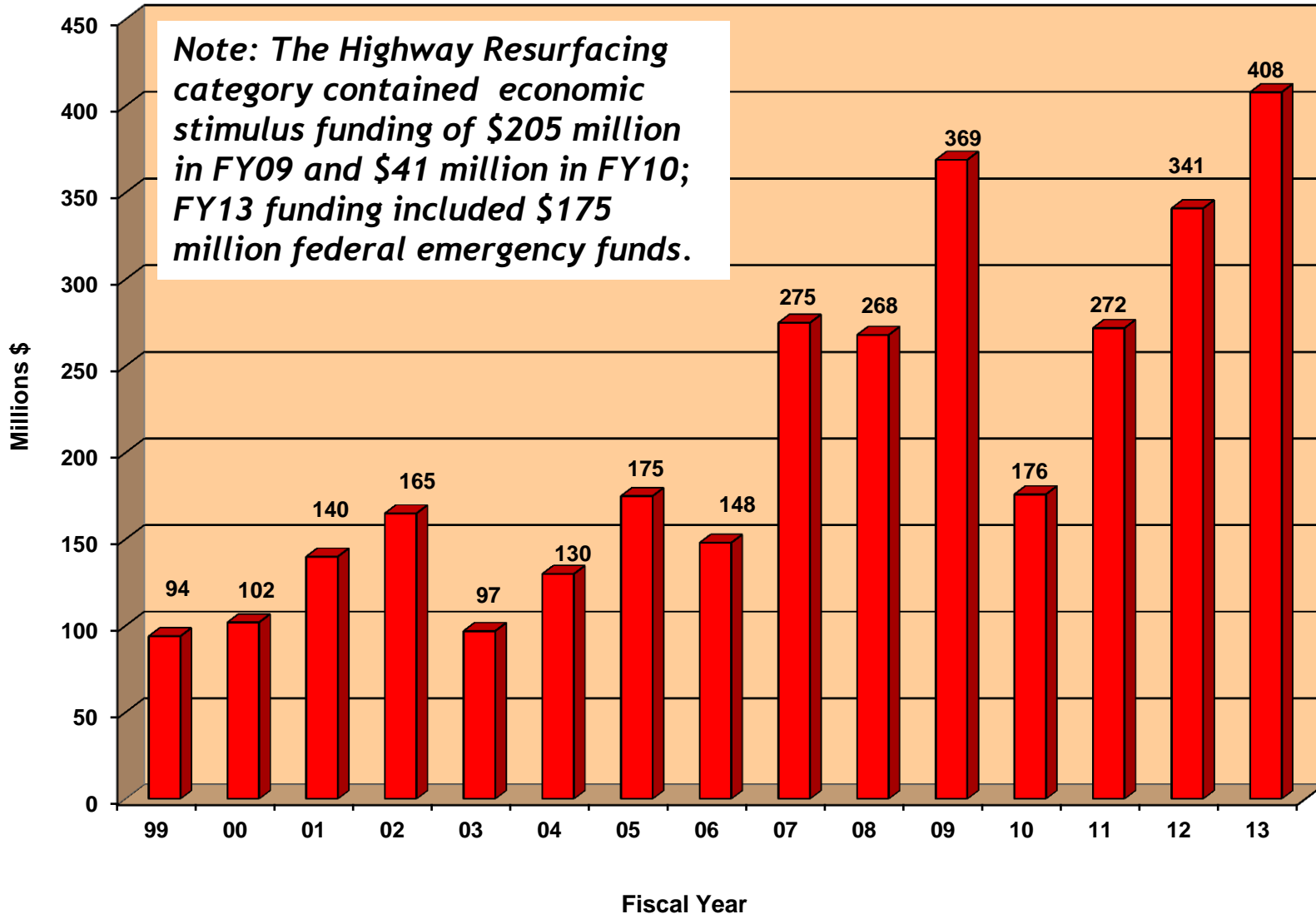
Robert Blight

ASSET MANAGEMENT/ PAVEMENT MANAGEMENT

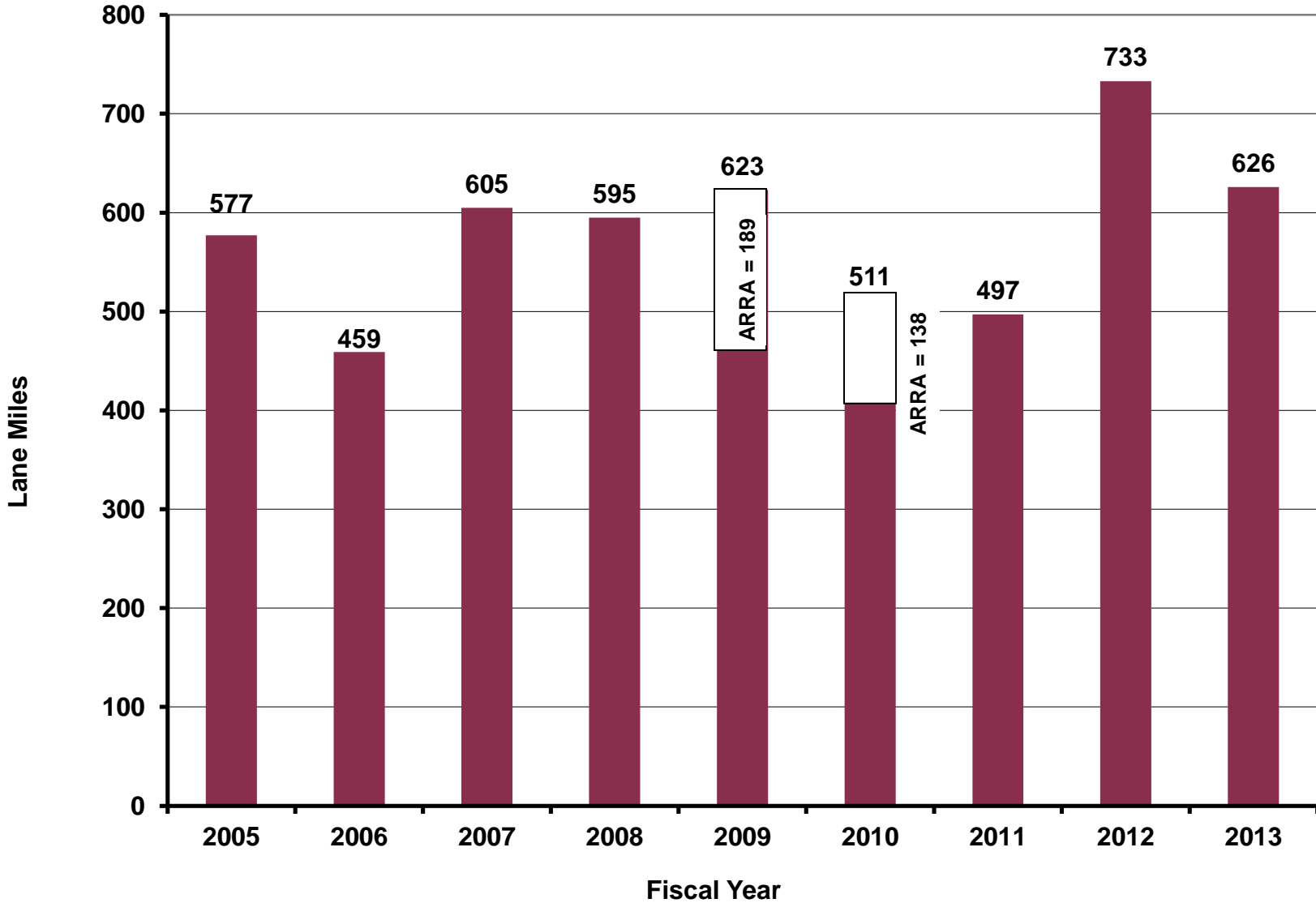
Multi-Year Performance Analysis (Updated Deterioration Curves & Triggers) State Maintained Pavement System Acceptability Based on IRI & SDI



NJ Pavement Funding History



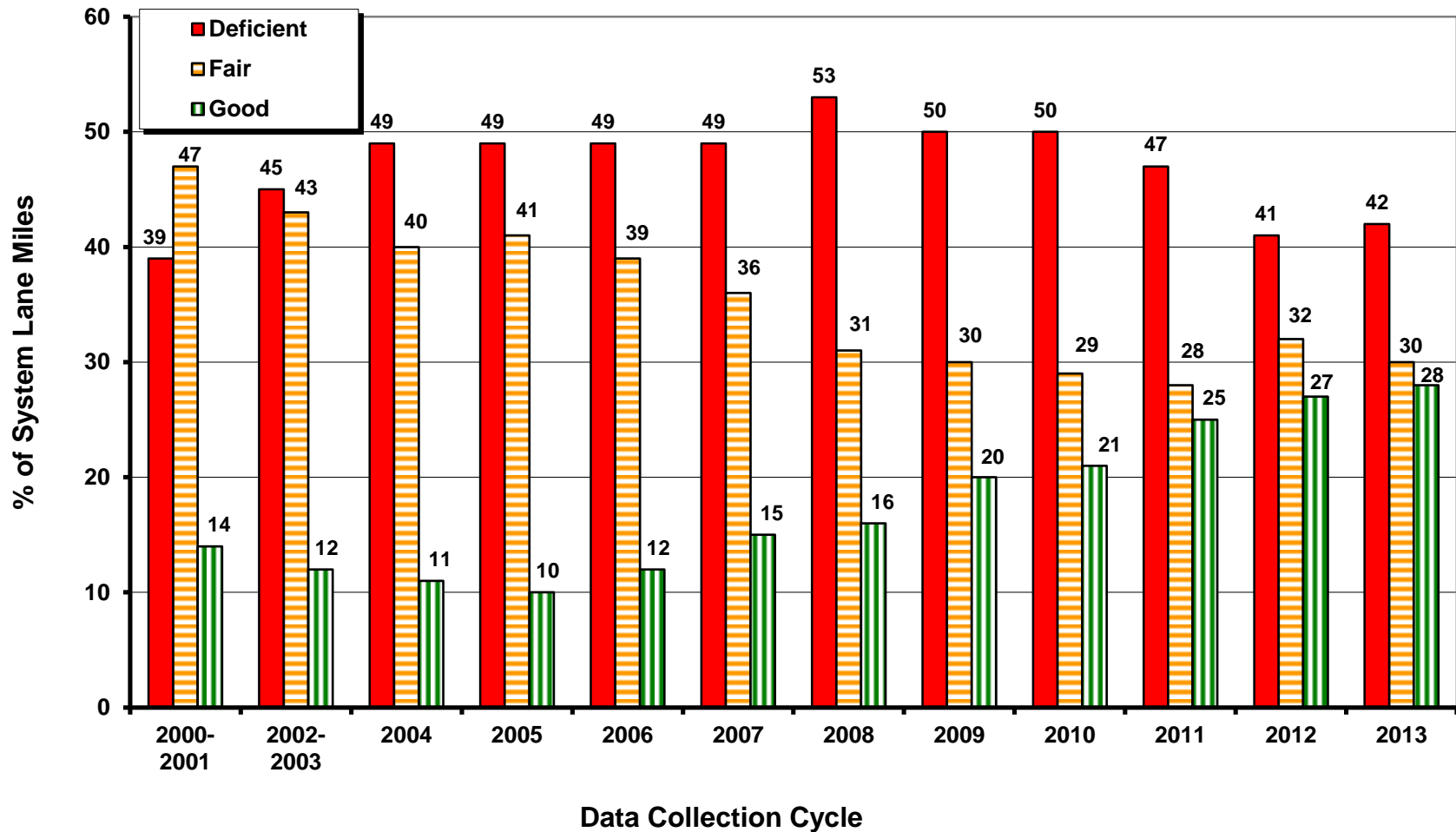
NJ State Highway System
Lane Miles of Major Pavement Work Completed
(Total system mainline lane miles = 8410)



STATUS OF SYSTEM

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Multi-Year Status of State Highway System



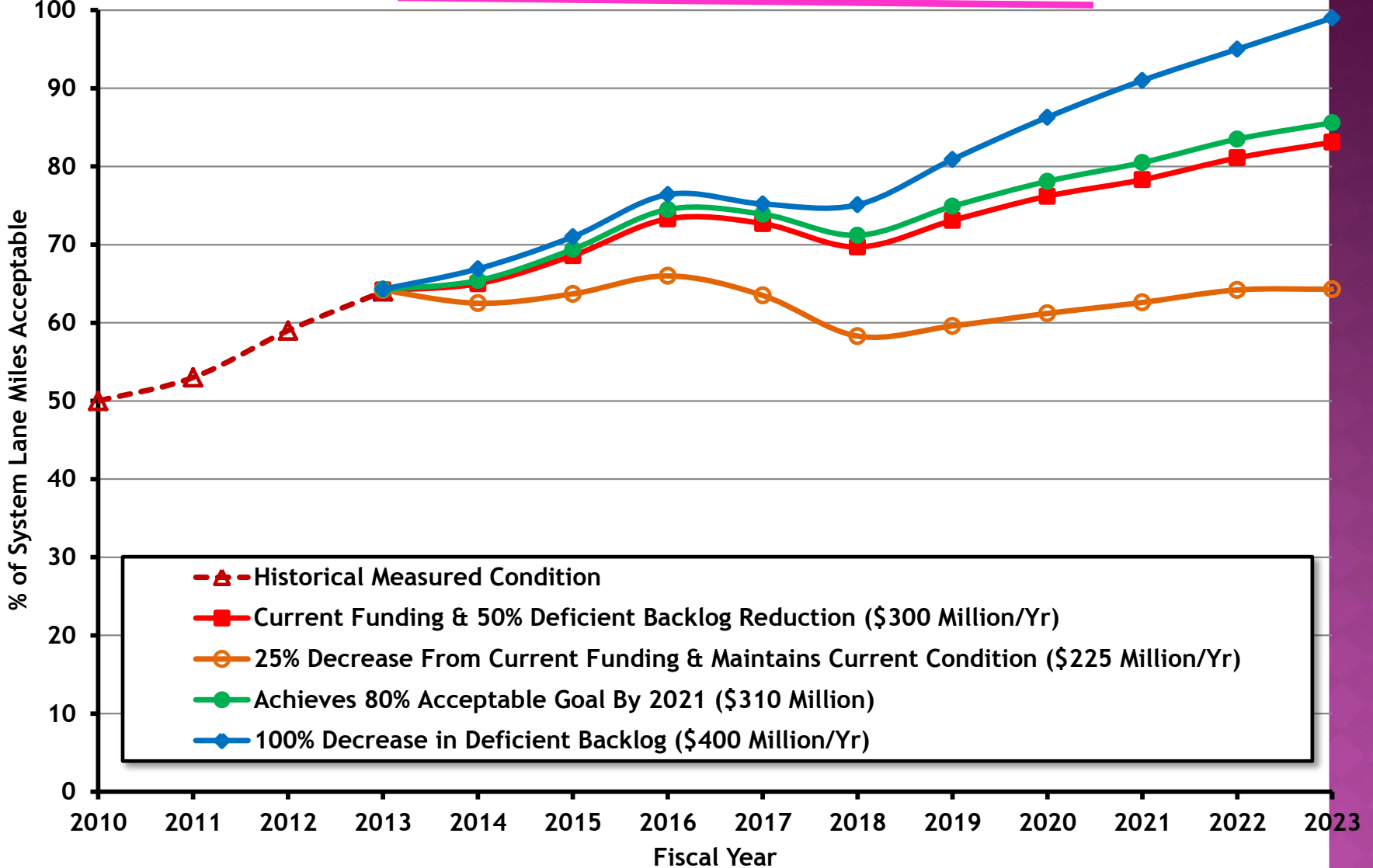
Source: NJDOT Pavement Management System

HOW DOES PAVEMENT PRESERVATION FIT IN?

PAVEMENT PRESERVATION VS. PREVENTIVE MAINTENANCE

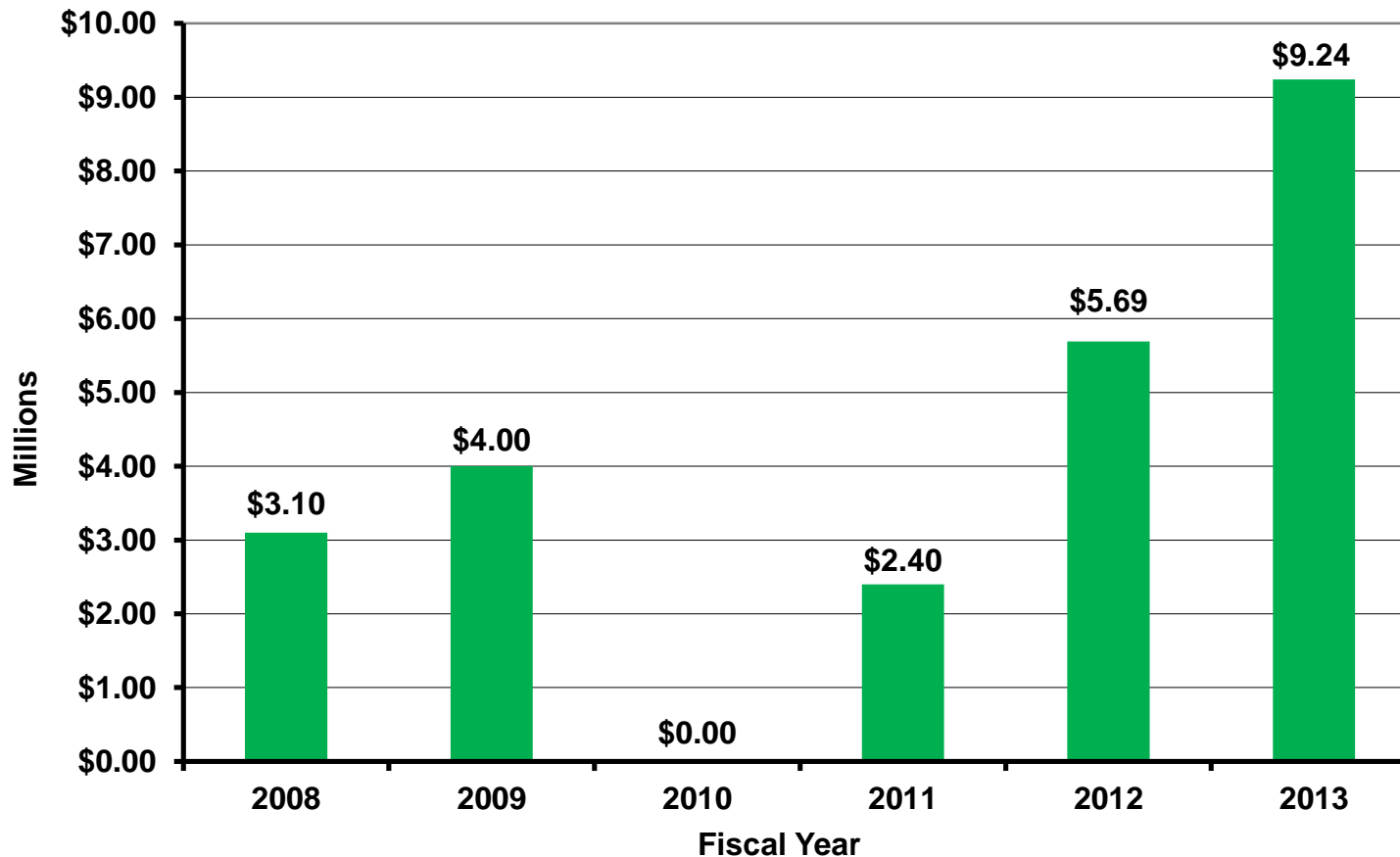
- ◉ Mill X - Pave X
VS.
- ◉ Crack Sealing
- ◉ Micro/Slurry Seals
- ◉ Thin Overlays
- ◉ CPR

Multi-Year Performance Analysis (Updated Deterioration Curves & Triggers)
State Maintained Pavement System Acceptability Based on IRI & SDI
Restricted Preventive Maintenance From \$30 to \$100 Million



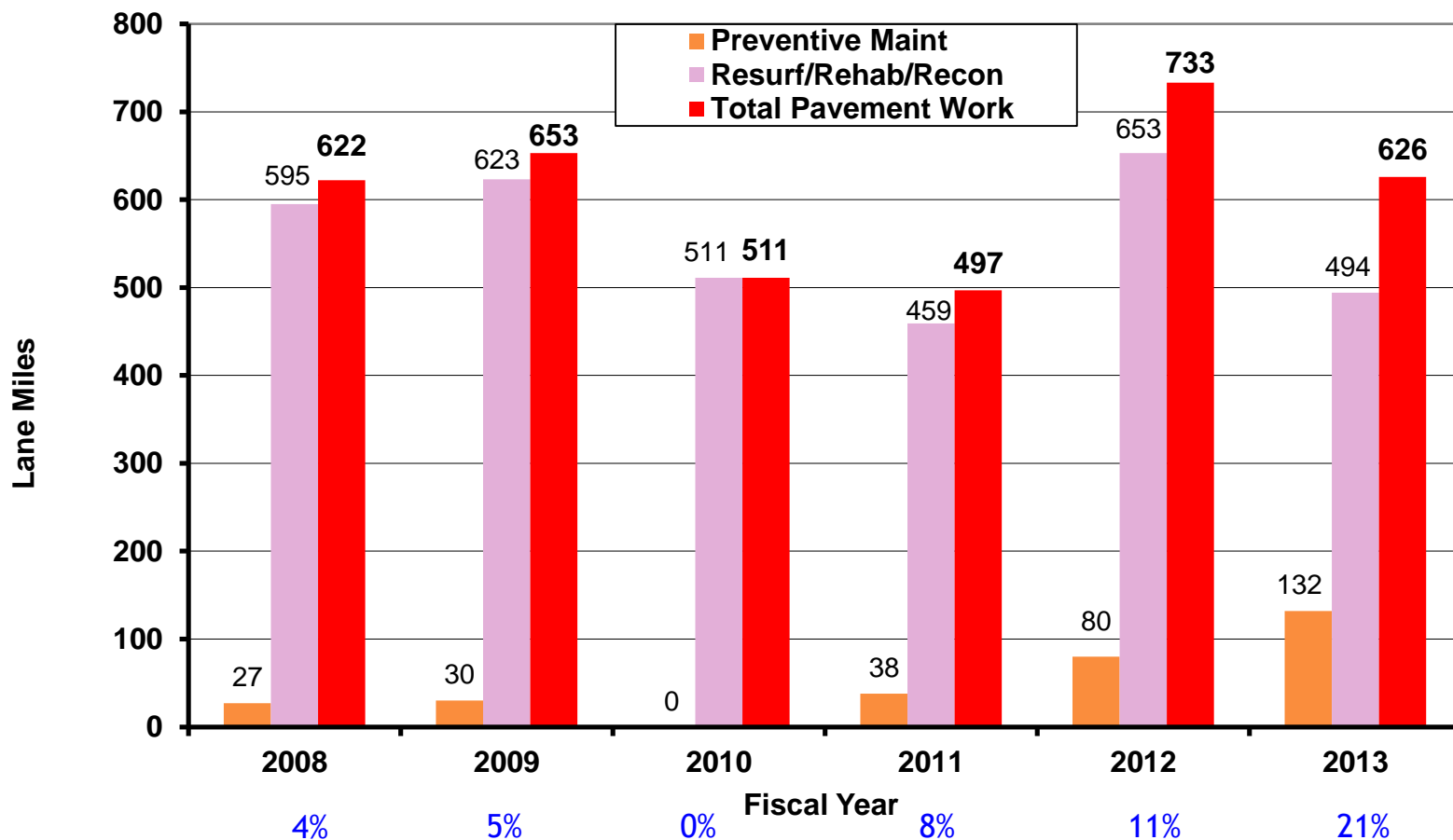
NJ PREVENTIVE MAINTENANCE

**NJ State Highway System
Annual Preventive Maintenance Pavement Investment**

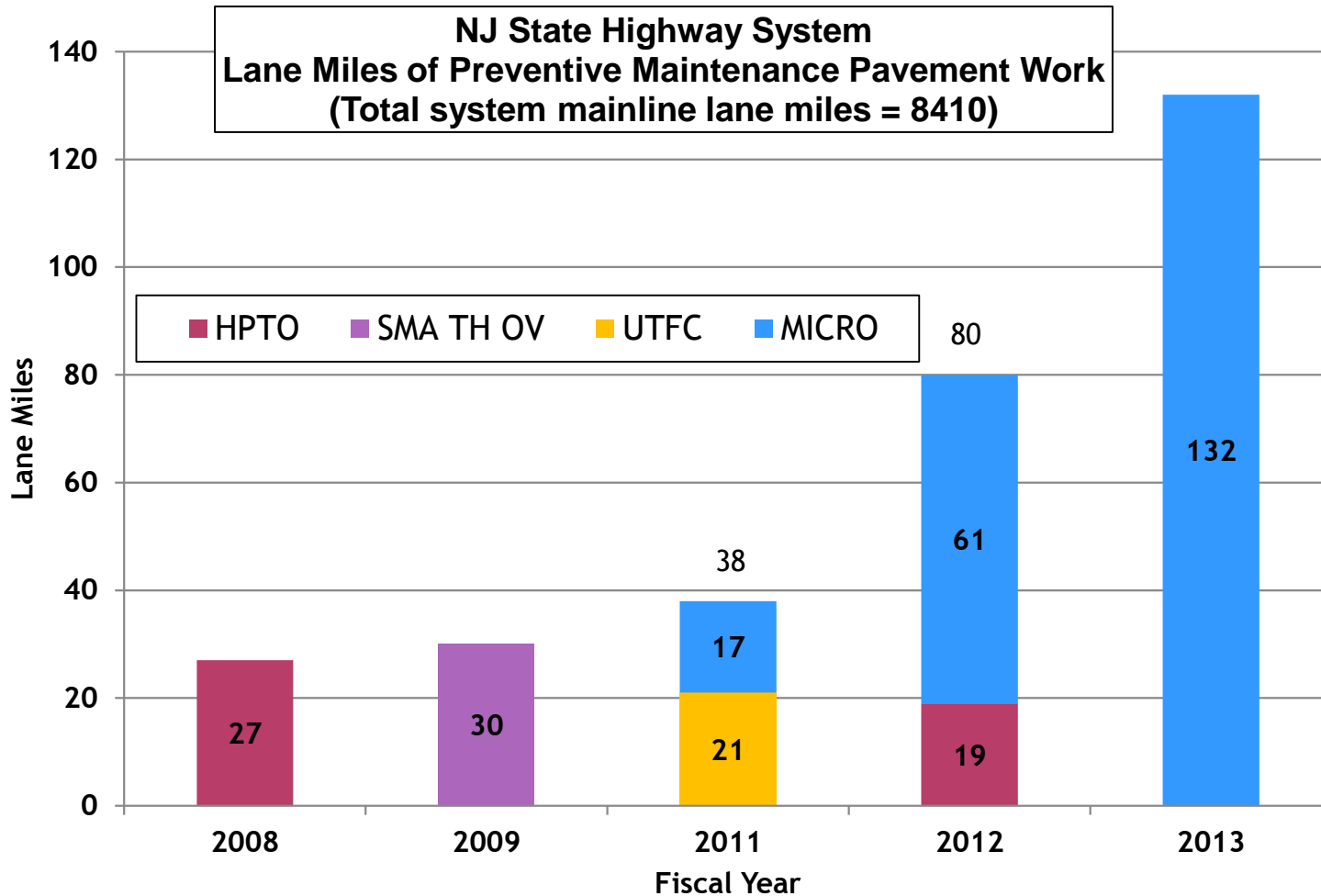


NJ PREVENTIVE MAINTENANCE

**NJ State Highway System
Lane Miles of Major Pavement Work Completed**
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NJ PREVENTIVE MAINTENANCE



PRESERVATION TREATMENTS

PREVENTIVE MAINTENANCE

HPTO

- High Performance Thin Overlay
- 6 mm mix used as Surface or Intermediate Course
 - 7% min PG 76-22 to prevent rutting
 - Voids 2% to 7% max
- Requires performance testing of the mix design.
 - APA (rutting)
- Minimal impact to profile and roadway geometry with 1" thick design

HPPTO (CONT...)

- 7 projects since 2007
 - 6 successful and performing well
 - IRI improved and surface sealed to prevent further deterioration due to moisture
 - 1 with improper bonding/tack coat issues
- Incorporate bond strength requirement for future specification improvement

ULTRATHIN FRICTION COURSE

- Non-proprietary Novachip
- Bonded, gap-graded wearing course 0.5-1.5”
- Requires spray paver
- Minimal impact to profile and roadway geometry with 1” thick design



PREVENTIVE MAINTENANCE MICROSURFACING OR SLURRY SEAL

MIXTURE OF

- POLYMER MODIFIED ASPHALT EMULSION
- AGGREGATE
- MINERAL FILLER
- WATER
- OTHER ADDITIVES



FOG SEAL

- ◉ FOG SEALS ARE USED TO RESTORE OR REJUVENATE AN HMA SURFACE
- ◉ FILL CRACKS AND VOIDS, SEALING WEATHER-TIGHT
- ◉ MATERIAL- ASPHALT EMULSION



CONCRETE PAVEMENT REPAIR

- ◉ Full and partial depth repairs
- ◉ Diamond Grinding
- ◉ Thin bituminous overlays

LOOKING AHEAD

- ◉ Continue to ramp up Preventive Maintenance
 - Expand Toolbox
 - Refine treatment selection
 - Research Project with Rutgers University



CHALLENGES

- Department
 - Funding
 - Project Delivery Process
- FHWA
 - Project Delivery Process
- Contractors
 - Resistant to Change
- Public
 - Customer Expectations
- ADA



QUESTIONS?

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