

2013 NEPPP Annual Meeting

NJDOT UPDATE

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NJ'S PAVEMENT PRESERVATION HISTORY

Year	No. of Projects	Treatment	Lane Miles	Cost in Millions
2008	2	Thin Overlay	27.2	\$3
2009	2	Thin Overlay	30.1	\$4.1
2010	1	Microsurfacing	16.6	\$1.3
2011	1	Thin Overlay	21.6	\$1.1
2012	6	Micro & Thin Overlay	79.8	\$5.7
2013	4	Microsurfacing	132.4	\$9.8

PRESERVATION FUNDING GOALS

- ✘ 2014 - \$15-\$20M
- ✘ Pavement Management System recommends up to 50% of pavement budget for Preservation (\$140-150M)
- ✘ 2015 and beyond - continue to increase annual preservation program to meet optimum preservation funding level recommended by PMS.

PRESERVATION EXPERIENCE

- ✘ Current treatments include:
 - + Asphalt Rubber Open Graded Friction Course
 - + High Performance Thin Overlay
 - + Ultra Thin Friction Course
 - + Microsurfacing

AR-OGFC

× Pros

- + Superior performance
- + Quiet
- + Better visibility in rain
- + Environmental benefits

× Cons

+ Winter Maintenance

- × Requires additional attention and product during winter storm events
- × More susceptible to plow gouging and RPM extraction

AROGFC – PLOW GOUGING



AR-OGFC FUTURE

- ✘ Future: Pursuing gap graded options as alternative

HIGH PERFORMANCE THIN OVERLAY

× Pros

- + HMA contractors can perform this work

× Cons

- + Mixed results

- × 3 projects – 2 successes

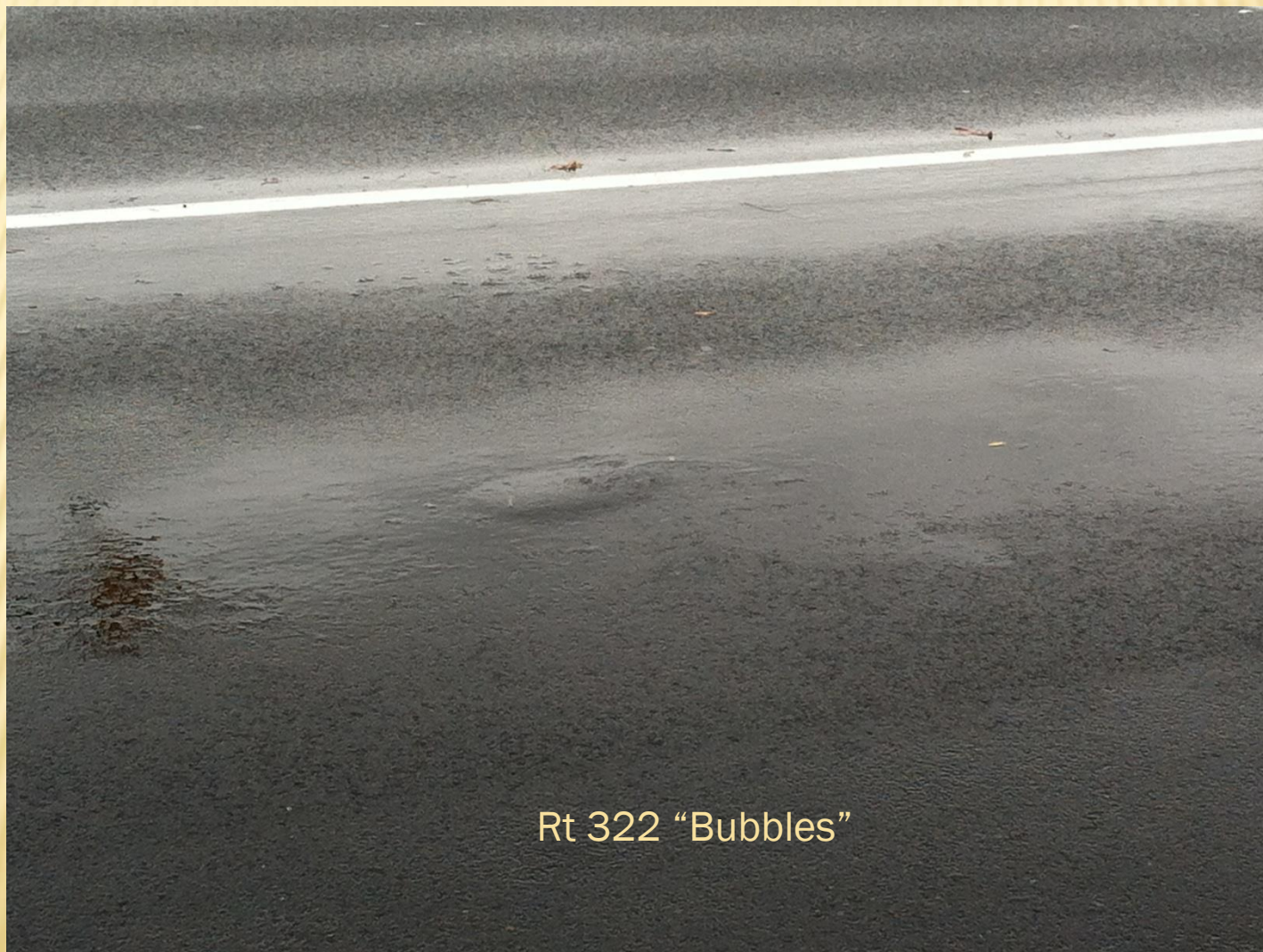
- × Heavily dependent on tack coat

HPTO FAILURE



Rt 322 "Bubbles"

HPTO FAILURE



Rt 322 "Bubbles"

HPTO FUTURE

- ✘ Future: Developing improved Tack Coat Specification to try to insure better application results

ULTRA THIN OVERLAY (GENERIC NOVACHIP)

× Pros

- + Good performance on successful applications

× Cons

+ Mixed Results

- × 3 Projects – 2 Successes
- × Rapid failure on failed project (< 3 years)
- + Requires spray paver - Limits number of contractors

ULTRATHIN FAILURE



ULTRA THIN FUTURE

- ✘ Future: Continue to use on a limited basis until we get more consistent results.

MICROSURFACING

✘ Pros

- + Least expensive treatment
- + All applications have been successful

✘ Cons

- + Limited number of contractors
 - + Louder than HMA treatments
 - + Reduced RPM visibility
- ✘ Future: Continue to increase usage

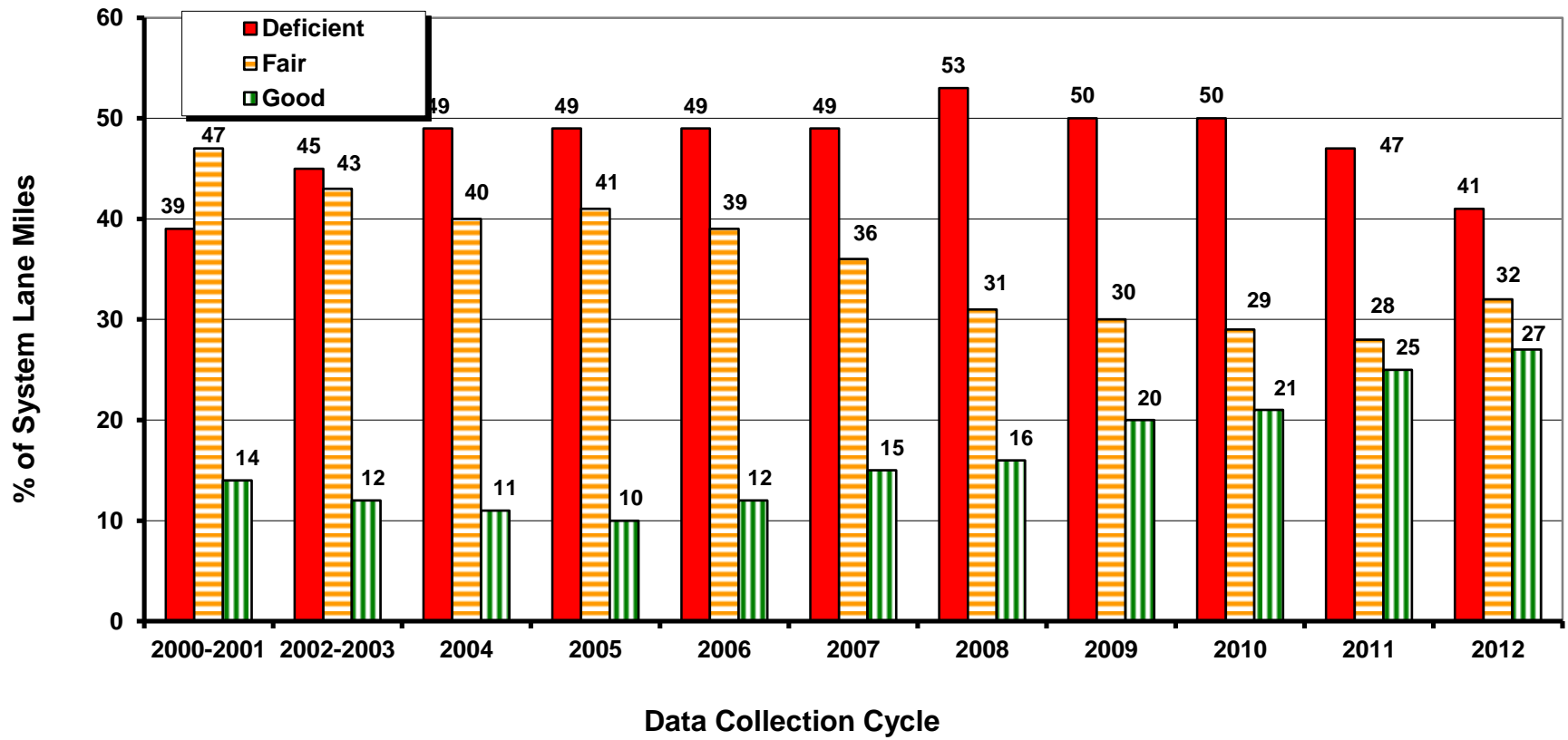
PRESERVATION TREATMENT GOALS

- ✘ Initiated Research Project with Rutgers University on the Appropriate Implementation of Pavement Preservation Treatments in NJ
 - + Improve success rate with current treatments
 - + Identify additional treatments for use in NJ
 - + Develop criteria for treatment selection.

SPECIFICATION CHANGES

STATUS OF THE SYSTEM

Multi-Year Status of State Highway System



Source: NJDOT Pavement Management System

MAP-21

- ✘ Surface Transportation legislation enacted July 6, 2012
 - + Contains language specific to Pavement Preservation that will support PMS recommended funding levels
 - + Requires Performance Based Asset Management
 - + IRI is the only well defined performance measure
 - + Other performance measures may be included later
 - ✘ Surface Distress
 - ✘ Health Index or Remaining Service Life

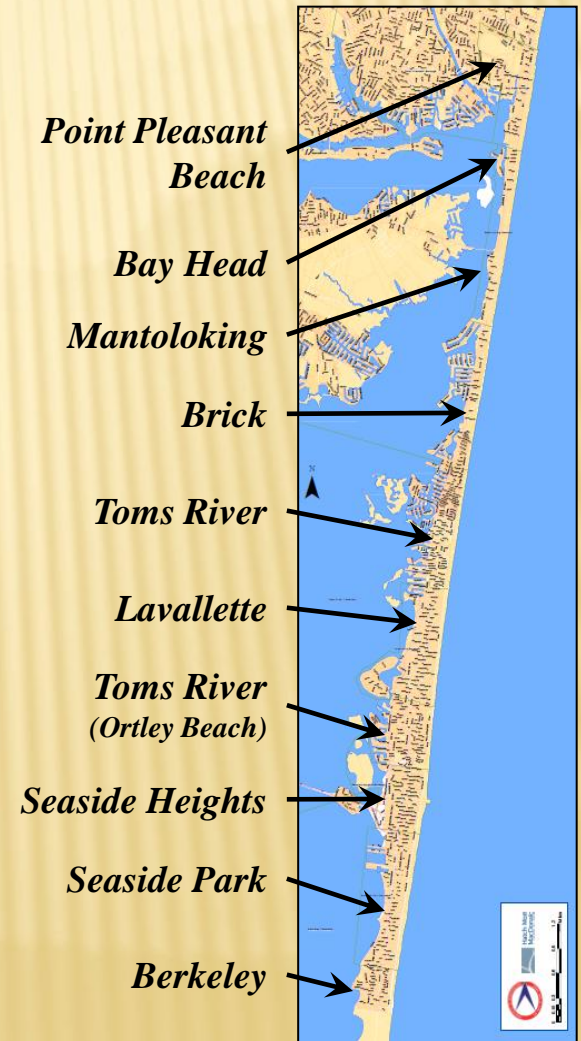
MAP-21

- ✘ What's important?
 - + IRI is here to stay!
 - + Pavement Preservation will be more important going forward
 - ✘ Preventive maintenance treatments

HURRICANE SANDY – RT.35

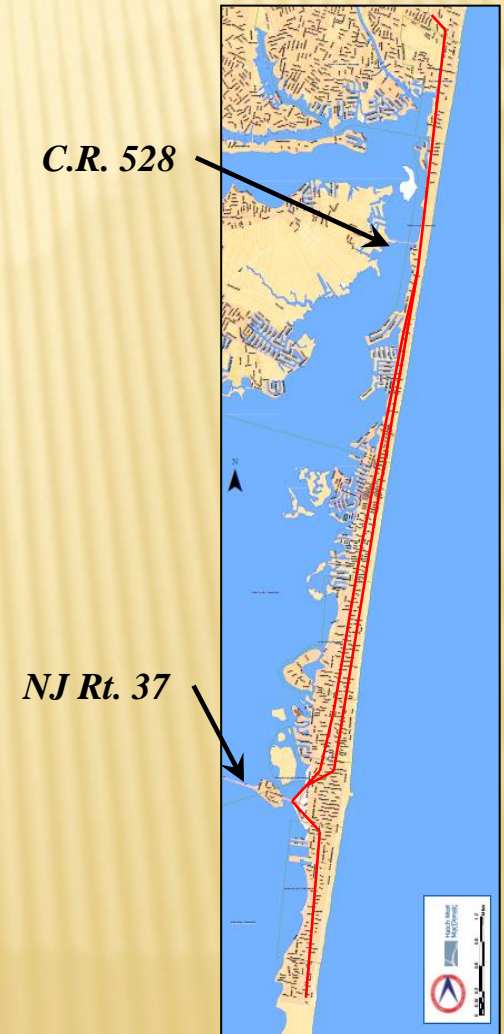
BARNEGAT PENINSULA

- **Separates Atlantic Ocean from Barnegat Bay in Ocean County**
- **Oriented in a generally north-south direction**
- **Nine municipalities in this area:**
 - **Borough of Point Pleasant Beach**
 - **Borough of Bay Head**
 - **Borough of Mantoloking**
 - **Township of Brick**
 - **Township of Toms River**
 - **Borough of Lavellette**
 - **Borough of Seaside Heights**
 - **Borough of Seaside Park**
 - **Township of Berkeley**



NEW JERSEY ROUTE 35

- **Main thoroughfare connecting shore towns on Barnegat Peninsula**
- **Principal arterial, land service highway**
- **Southern and northern sections of the peninsula, highway consists of two, undivided lanes**
- **Central portion of the peninsula:**
 - **Divided highway with four lanes**
 - **Two lanes in each direction**
 - **Lanes separated by residential and commercial properties**
- **Connection to Ocean County Route 528 Bridge in Mantoloking**
- **Connection to NJ Route 37 Bridges at Seaside Heights**



HURRICANE SANDY – RT.35



STORM DAMAGE



HURRICANE SANDY – RT.35



STORM DAMAGE



HURRICANE SANDY – RT.35



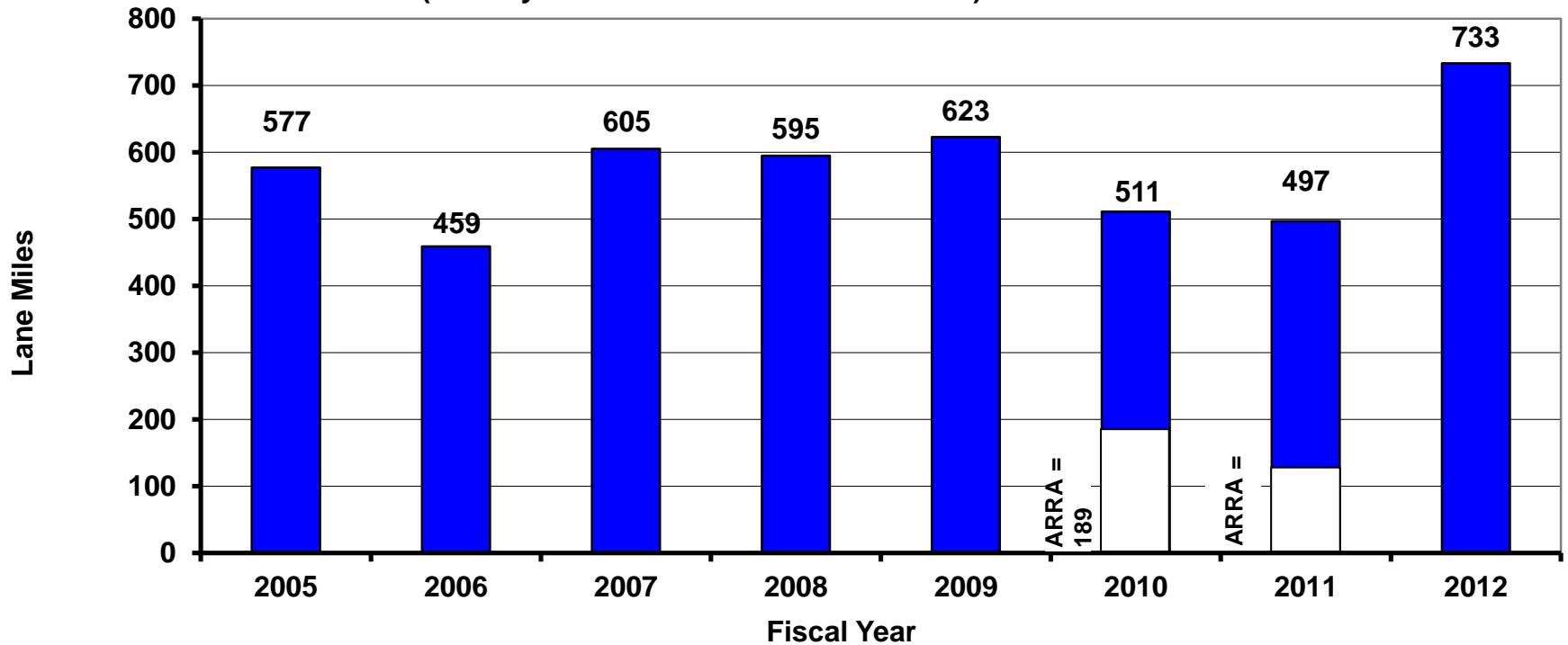
HURRICANE SANDY – RT.35



STATUS OF SYSTEM

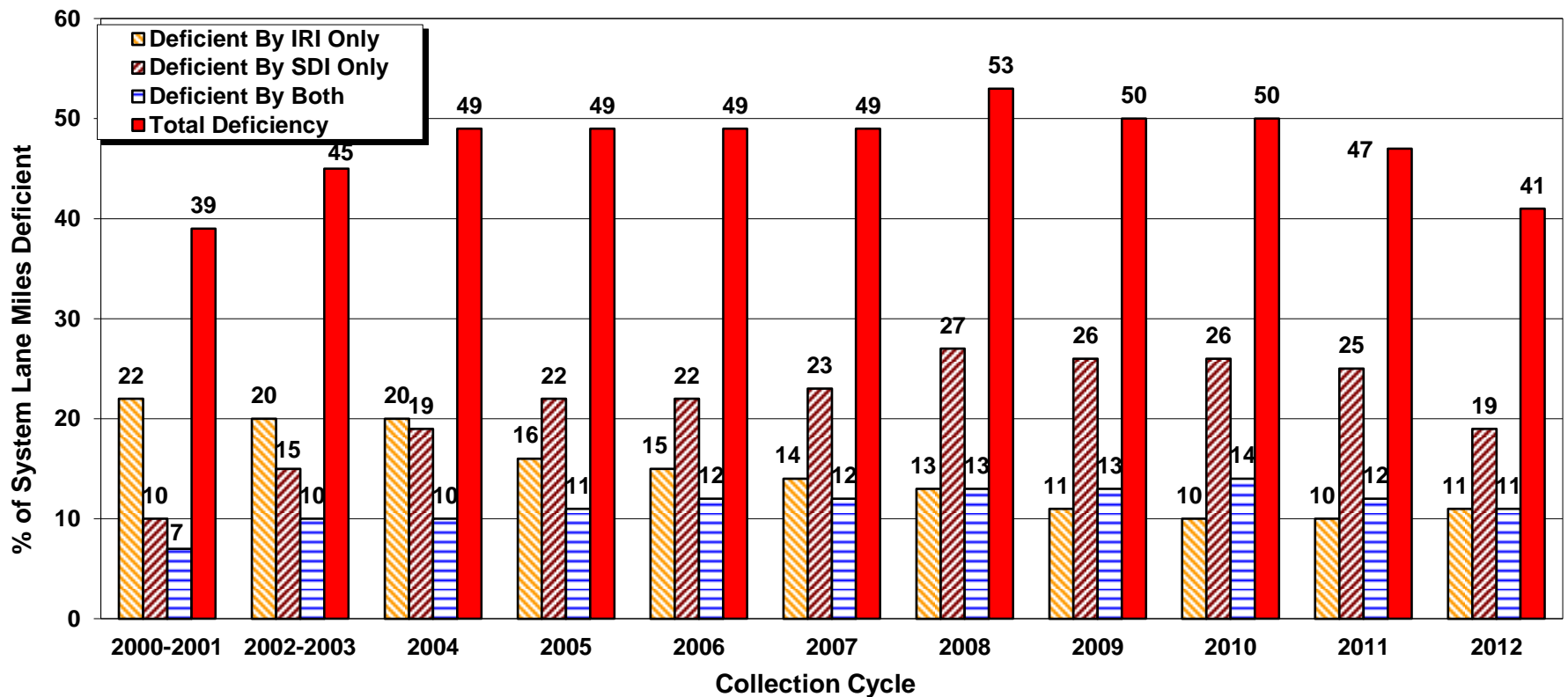
SYSTEM IMPROVEMENTS

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



BREAKDOWN OF DEFICIENT PAVEMENT

Multi-Year Deficiency of State Highway System



Source: NJDOT Pavement Management System

STATUS OF THE SYSTEM

- ✘ What's important?

- + % Good Pavement is increasing!

- ✘ From 14% in 2000-2001 to 27% in 2012

- + % Poor Pavement is decreasing!

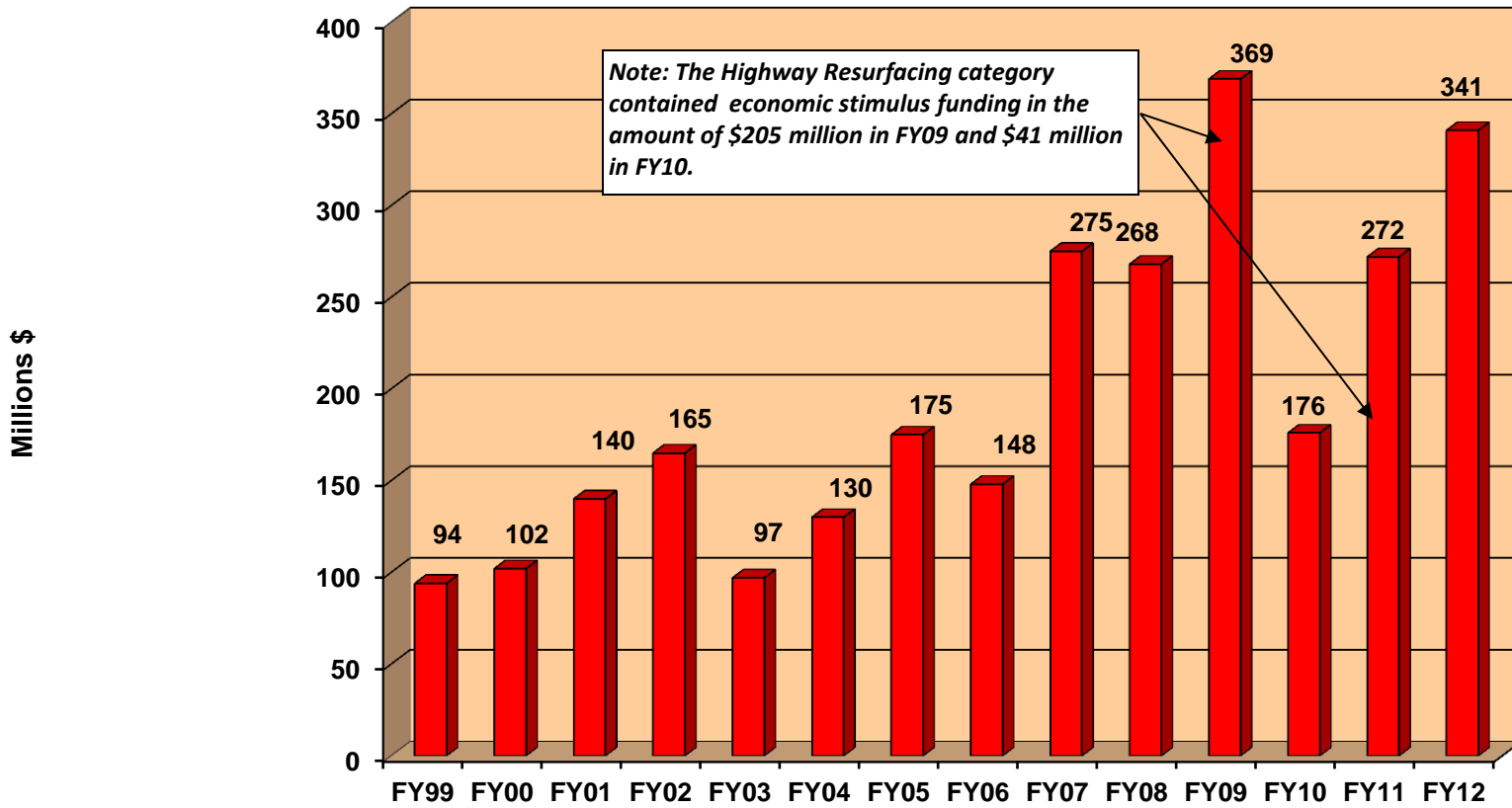
- ✘ From 53% in 2008 to 41% in 2012

- ✘ NJ Pavements Improving!

- ✘ NJDOT Goal of 80% Acceptable by 2021 is achievable IF...

FUNDING

Pavement Preservation Funding History



FUNDING

- ✘ WE ARE OPTIMISTIC FUNDING LEVEL WILL BE MAINTAINED!!
- ✘ \$300 MILLION PER YEAR WILL ALLOW US TO MEET OUR GOAL OF 80% SUFFICIENT IN 2021

