

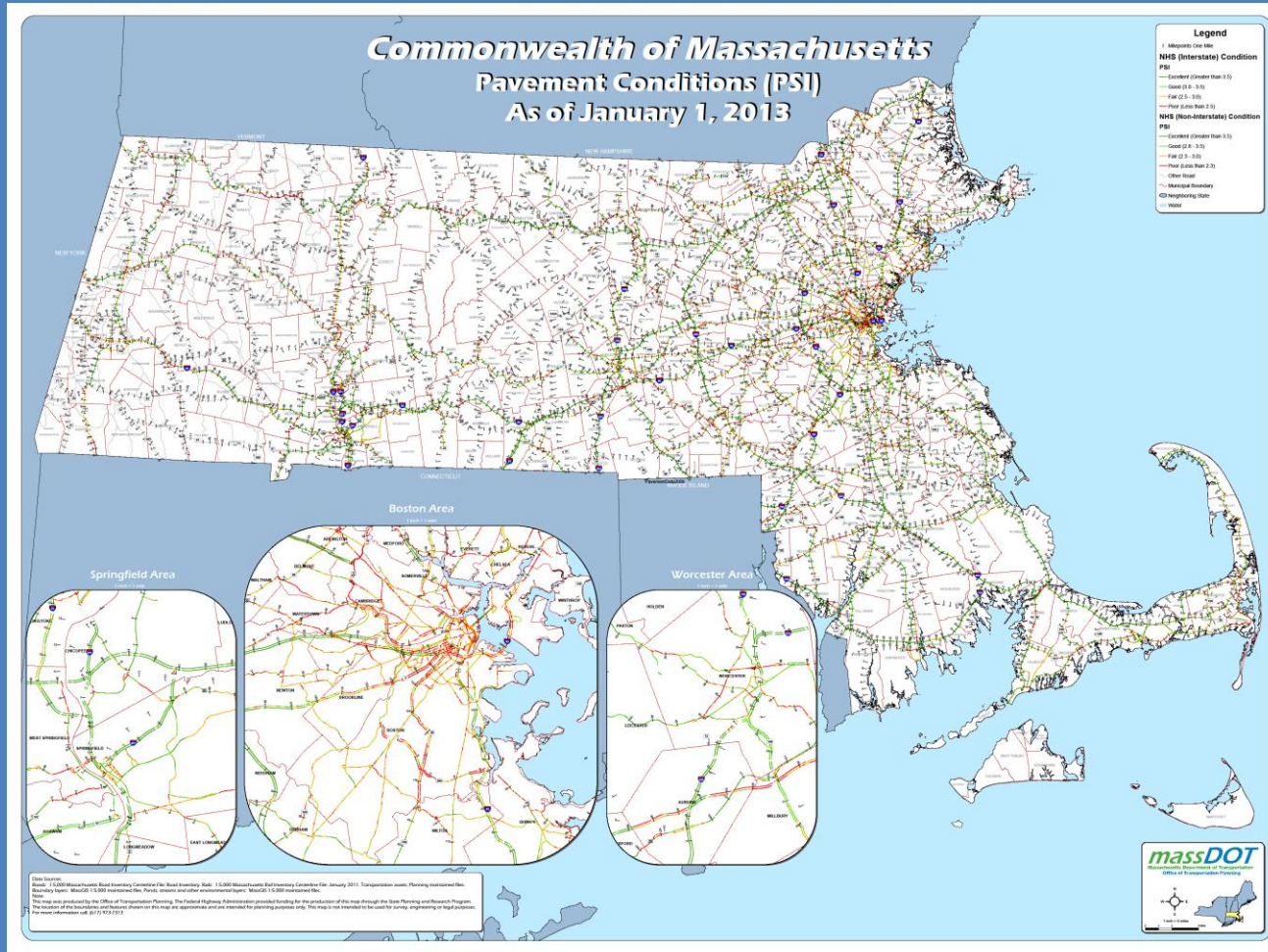
Northeast Pavement Preservation Partnership 2013

Integrating Performance Measures
into Pavement Management

Annapolis, Maryland
April 29-May 1, 2013

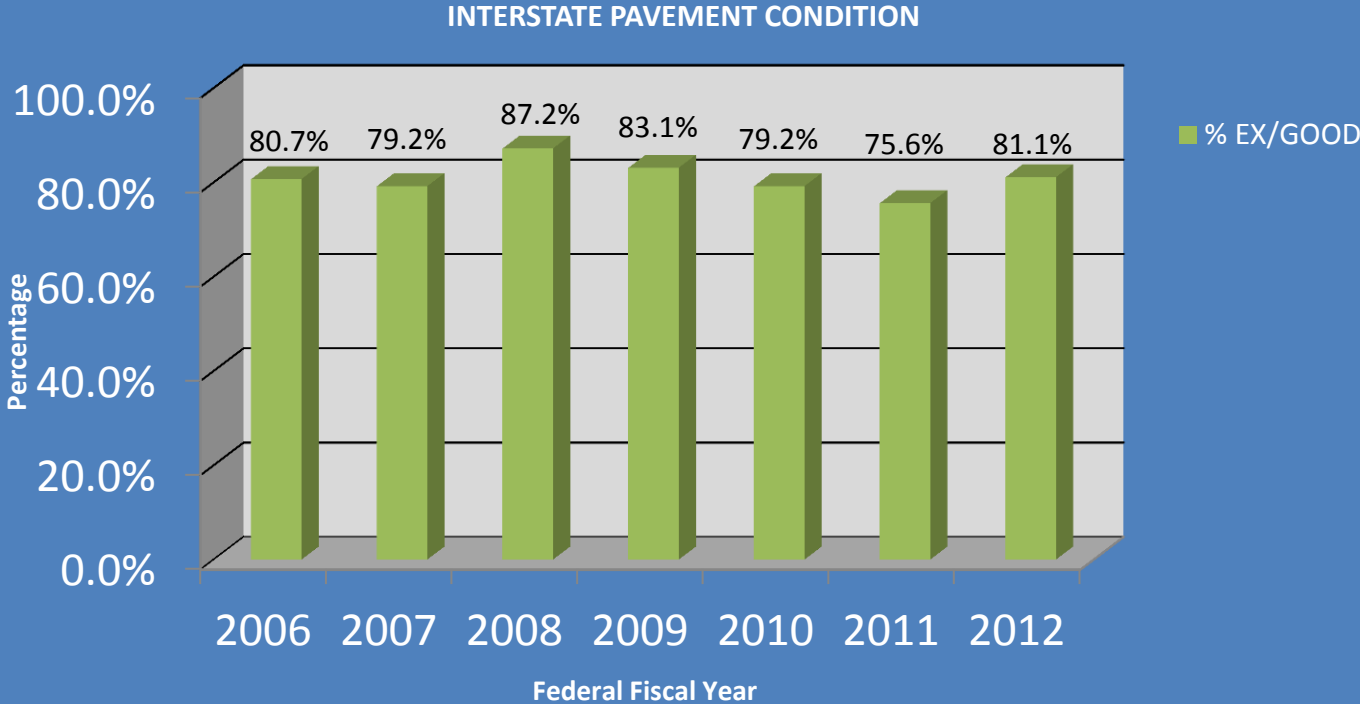
CURRENT PERFORMANCE MEASURES

- Interstate Highway System (IHS)-80% EX/GD Pavement Serviceability Index (PSI)
- National Highway System (IHS Included)-70% EX/GD Pavement Serviceability Index (PSI)



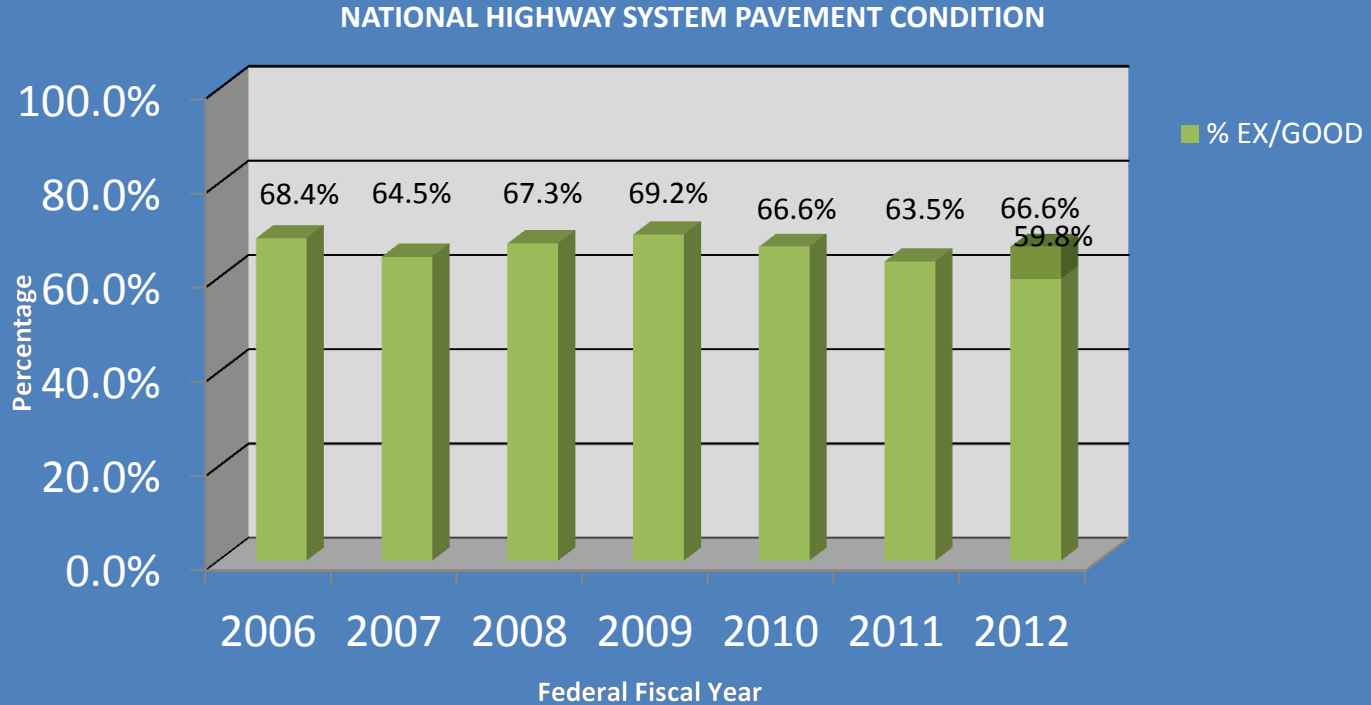
CURRENT CONDITION OF THE INTERSTATE HIGHWAY SYSTEM: PSI

For the Interstate Highway System (IHS), MassDOT's goal is to maintain 80% of Interstate Pavements in an Excellent or Good Condition as measured by the Pavement Serviceability Index (PSI).



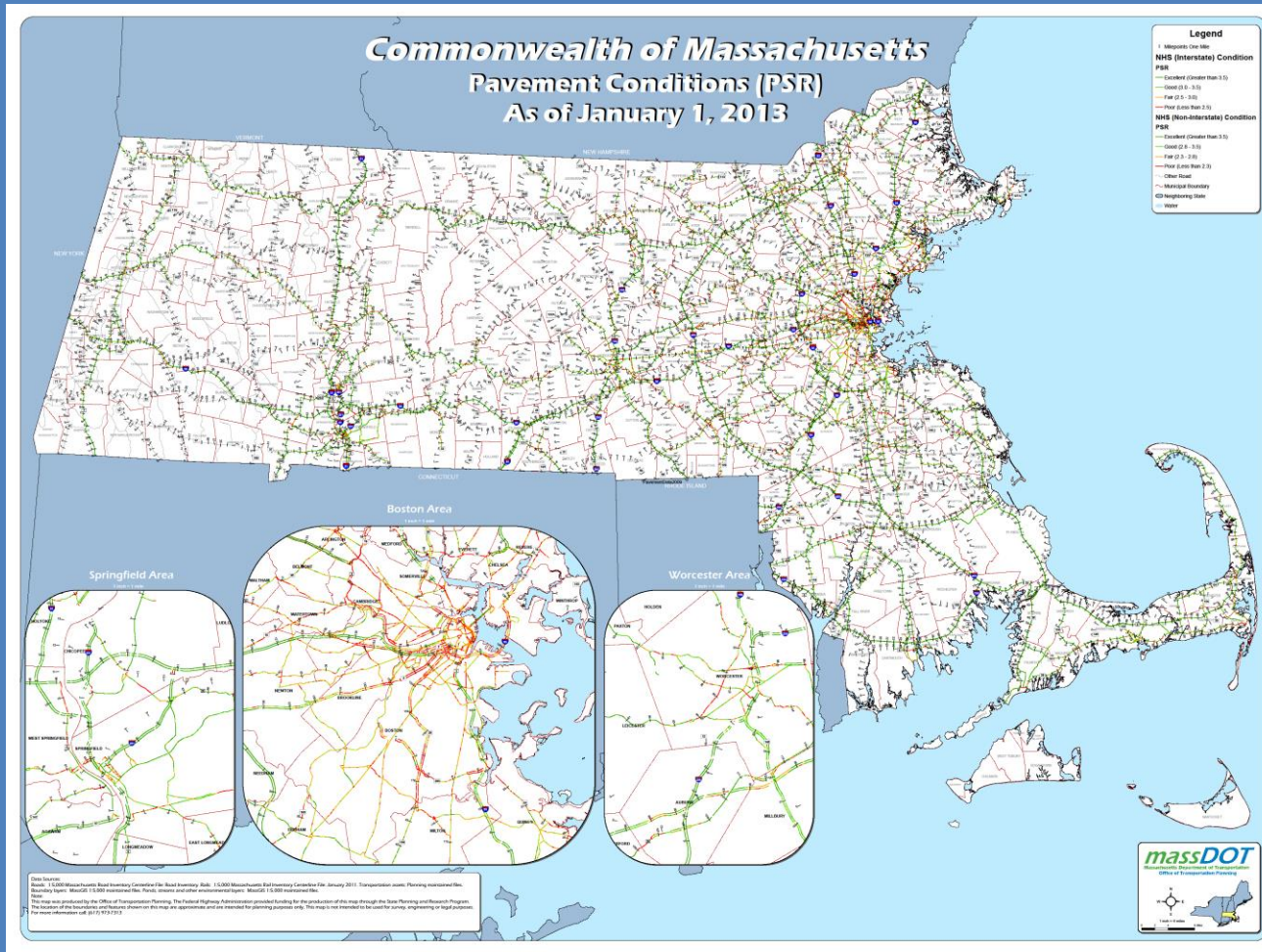
CURRENT CONDITION OF THE NATIONAL HIGHWAY SYSTEM: PSI

For the National Highway System (Includes IHS), MassDOT's goal is to maintain 70% of NHS Pavements in an Excellent or Good Condition as measured by the Pavement Serviceability Index (PSI).



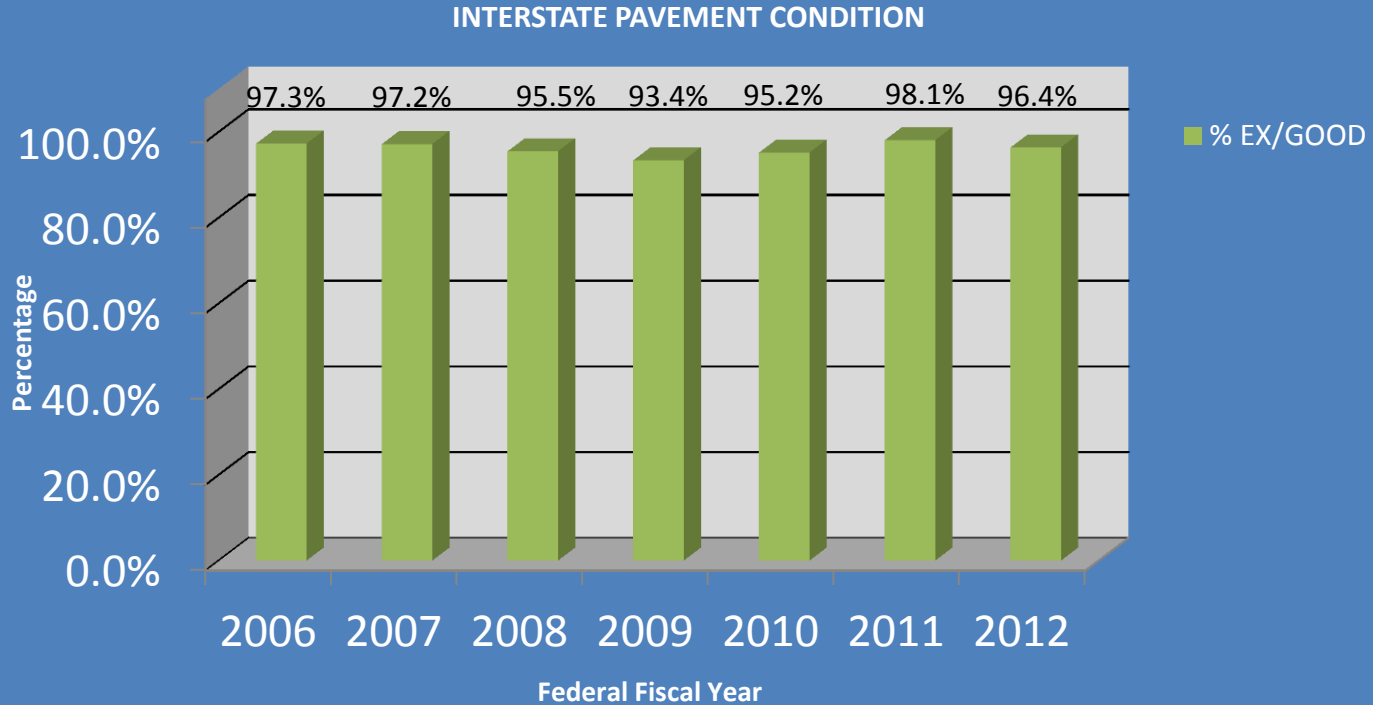
CURRENT PERFORMANCE MEASURES

- Interstate Highway System (IHS)-90% EX/GD Pavement Serviceability Rating (PSR)
- National Highway System (IHS Included)-80% EX/GD Pavement Serviceability Rating (PSR)



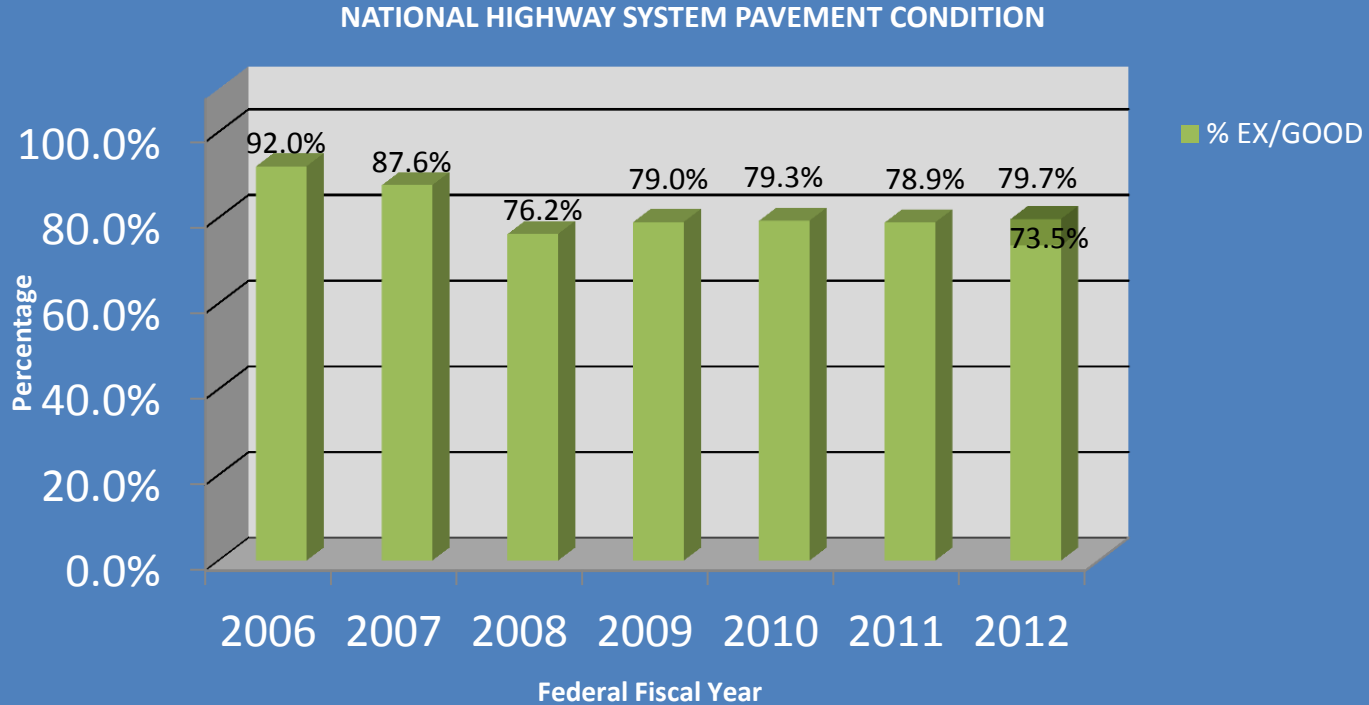
CURRENT CONDITION OF THE INTERSTATE HIGHWAY SYSTEM: PSR

For the Interstate Highway System (IHS), MassDOT's goal is to maintain 90% of Interstate Pavements in an Excellent or Good Condition as measured by the Pavement Serviceability Rating (PSR).



CURRENT CONDITION OF THE NATIONAL HIGHWAY SYSTEM: PSR

For the National Highway System (Includes IHS), MassDOT's goal is to maintain 80% of NHS Pavements in an Excellent or Good Condition as measured by the Pavement Serviceability Rating (PSR).



THINGS TO CONSIDER WHEN DEVELOPING PERFORMANCE MEASURES

- Are the targets “reasonable”?
- Do you have control over achieving these targets?? Ex. Municipally owned NHS roadways in poor condition.
- Have you changed how certain performance indicators are reported\calculated???
- New technology-Apples to Apples???
- How will MAP-21 affect these Performance Measures?

Benefits of Performance Measures in Pavement Management

- Link statewide goals and projects
- Determine appropriate budget levels
- Reallocation of resources

Integration of Current Performance Measures into Pavement Management

Software Analysis

- Analysis software is run annually on Interstate\NHS roadways for funding and impact of funding on future conditions (5 Year Projection)
- Condition is monitored after the Optimization Process to ensure Performance Measures are addressed (Iterative Process)
- Developing a “Maintain” scenario (Still refining)

Other

- Developing Performance Measures for Recycled Materials
- Developing Performance Measures for Warm Mix Asphalt
- Continued cooperation with other States as well as FHWA

UPDATE ON PRESERVATION

Year	NHS Route	Location	Proj. Num.	Dist	From	To	Lns+Shld	Tot Lane Mi	Program TFPC
2014	20	NORTHBOROUGH- RESURFACING & RELATED WORK ON ROUTE 20	605610	3	122.0	126.5	4	18.0	\$ 4,320,000.00
	28	BOURNE - RESURFACING AND RELATED WORK ON RT.28 (OTIS ROTARY)	606178	5	56.5	62.9	6	38.4	\$ 7,787,520.00
	9	WESTBOROUGH - SOUTHBOROUGH RESURFACING AND RELATED WORK ON ROUTE 9	607172	3	108.0	113.0	6	30.0	\$ 7,794,000.00
	9	CUMMINGTON RESURFACING AND RELATED WORK ON US ROUTE 9	605582	1	16.7	27.8	4	44.4	\$ 8,396,040.00
	3	WEYMOUTH - BRAintree - QUINCY - RESURFACING AND RELATED WORK ON ROUTE 3	606639	6	38.0	43.0	8	40.0	\$ 10,384,000.00
	3	BURLINGTON - CHELMSFORD VARIOUS LOCATION PAVEMENT PRESERVATION ON RT 3 (SHRP2 Candidate)	607472	4	72.0	81.5	6	57.0	\$ 4,514,400.00
			Total FFY2014:						170.8

NOTE: ALL PROJECT LOCATIONS, LIMITS AND COSTS SUBJECT TO AVAILABLE FUNDING AND FINAL APPROVAL

PROPOSED SHRP-2 PRESERVATION PROJECT

Route 3 North (Burlington, Ma-NH Border)

- ◆ Double-Barrel Limited Access
- ◆ 6.00± Miles (60 Lane Miles)
- ◆ 3 Lanes + Breakdown & High Speed Shoulder
- ◆ Between 90,000-100,000 ADT
- ◆ Rehabilitated and widened-Commonwealth's first Design-Build Project approximately nine (9) years ago
- ◆ Planning a pavement preservation project for Route 3 North in the upcoming year (FY 2014)
- ◆ Good candidate location for the deployment of the pavement preservation treatments described in the SHRP-2 R-26 program

If Selected

- ◆ Travel Lanes
 - Ultra-thin bonded wearing course preservation treatments
 - Polymer modified binder, an asphalt rubber binder and a conventional unmodified PG 64-28 asphalt binder
- ◆ Shoulders
 - Propose demonstrating a fog seal (possibly with a skidabrader pretreatment to maintain safety and high pavement friction) or micro-surfacing, or both.



THANK YOU