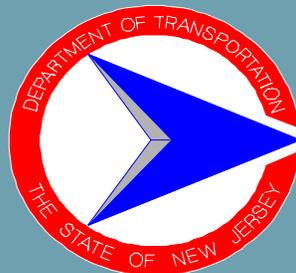


NJDOT Pavement Management System

Presented to:

Asset Management Steering Committee

10/1/08



NJ STATE MAINTAINED HIGHWAY SYSTEM

- × 8300 LM Mainline Pavement
- × 3650 LM Shoulders
- × 900 LM Ramps

- × \$19.5 Billion Asset



PMS CRITICAL COMPONENTS

- × Data

- + Inventory
- + Condition
- + Treatment History

- × Philosophy

- + Methodology for project and treatment selection

- × Technology

- + Hardware and software tools to automate and simplify data collection, storage, analysis and reporting



HOW IS NJDOT DOING?



× Data

	Inventory	Condition	Treatment History
Mainline	Complete – updated annually	Complete – updated annually	Partial & Improving
Shoulders	Partial	None	Partial
Ramps	Complete – old, updated 2000	None	None

HOW IS NJDOT DOING?

× Philosophy

- + Evolving from Worst First to Integrated Pavement Management Strategy:

The Right Fix ...

At The Right Time ...

For The Right Cost



PAVEMENT MANAGEMENT STRATEGY

CONDITION	TREATMENT
Deficient 4058 LM 49%	Reconst./Rehab \$1.5M/LM
	Resurfacing \$300K/LM
Fair 2985 LM 36%	Preventive Maintenance \$80K/LM
	No Treatment
Good 1244 LM 15%	

HOW IS NJDOT DOING?



× Technology

- + Data Collection – Adequate, Aging collection equipment and technology in need of upgrade
- + Data Storage – Good – Recently acquired dedicated 10TB Server for PMS data and applications
- + Data Analysis and Reporting – Fair and Evolving – Recently acquired new PM software which must be configured to reflect the NJDOT environment (treatments, deterioration, philosophy, constraints)

PMS GOAL

- × Maintain the state highway system in a state of good repair
 - + Reduce backlog of deficient pavement
 - + Implement most cost effective investment strategies
 - + Provide resultant savings to taxpayers through:
 - × Reduced pavement maintenance costs
 - × Reduced fuel and vehicle maintenance costs
 - × Reduced accidents, and traffic delays.



PMS OBJECTIVES



- ✘ Maintain target of 80% of the state highway system in good or fair condition
- ✘ Balance condition of the SHS among condition categories.
- ✘ Recommend appropriate annual funding for effective pavement preservation program
- ✘ Recommend appropriate funding in each of the treatment categories
- ✘ Focus pavement investments on priority pavement projects

FUTURE OF NJDOT PMS



- × Implement Deighton PMS Software
 - + Will provide enhanced analysis tools to evaluate funding and treatment scenarios based on state of the art Pavement Management investment strategies
 - + Will produce annual pavement program recommendations based on allocated funding
 - + Uses NJ pavement condition data, life cycle data and cost data to produce most cost effective program
- × Increase use of preventive maintenance strategies
- × Develop long range plan to address “high cost” pavement corridors