

FHWA Update – Transportation System Preservation

Southeastern Pavement
Preservation Partnership
Oklahoma City, OK
May 4, 2011



Keeping Good Roads Good

- Congressional Approach
 - Accountability
 - Performance management
 - Moving away from just IRI
 - Maintenance, preservation, rehab, reconstruction
 - Both pavements and bridges
- Performance based
 - Data driven
 - Incentive is to gain more flexibility
 - Increase percent of good pavements + decrease poor
 - Different targets for different classes: e.g. IHS, NHS, State

Infrastructure Reorganization

FHWA Office of Infrastructure

**Office of
Pavement
Technology**

**Office of
Bridge
Technology**

**Highways for
LIFE**

**Office of
Program
Performance
Management**

**Office of
Program
Administration**

FHWA Strategic Plan

- Performance management focus, in keeping with expectations of Reauthorization
- Objective 4 – “Data-driven national investment policies, tools, and guidance are used to support a healthy infrastructure”.
- Objective 5 – “Innovative technologies and best solutions are utilized to assure a healthy infrastructure.” (Advance High Performance Materials, Promote Best Solutions)
- Objective 7 – “National and regional needs are addressed in the delivery of the Federal-aid highway program.” (infrastructure health, system performance measures)

FHWA Preservation Vision

- Past Success – Seek Future Success
- Infrastructure Management Approach
- Fitting preservation clearly within meeting FHWA strategic goals
- June/ July workshop
- Right ways to help agencies use preservation
- Align internal and external partnerships
- Work plan, communications and marketing

Preservation Within FHWA Infrastructure RD+T Plan

- Priority initiatives
 - **5.2.2** Research, develop and deploy technologies and processes to accelerate construction and preservation.
 - **5.2.3** Develop and deploy approaches to automate the construction and preservation inspection, sampling and testing associated with the production and placement of highway related materials and systems (includes all related highway systems; pavement, bridge, culvert, etc.).
 - **6.1.1** Develop methodologies to effectively apply treatments using asset management principles at the project and network levels.

Preservation Within FHWA Infrastructure RD+T Plan

- **6.1.2** Develop and deploy technologies and processes to enhance the effectiveness of preservation activities.
- **7.2.1** Evaluate, develop policy and guidance, and implement aspects of infrastructure materials and technologies to reduce air pollutants and other emissions.
- **7.6.1** Evaluate the long-term performance of renewable, reusable, and recycled (3R) materials and implement the expanded use of 3R materials in highway-related infrastructure.

Research

- SHRP 2 implementation
 - R26 – Preservation of High-volume Roadways
- Infrastructure Health Index
- Pavement Health Tracking Tool

Infrastructure Health Index

- Uniform metrics to track pavement and bridge performance on a good/fair/poor basis
- Based on several factors including condition
- Create new consensus performance methodology
- Pavement and bridges.
- Recommended improvements to HPMS and NBI

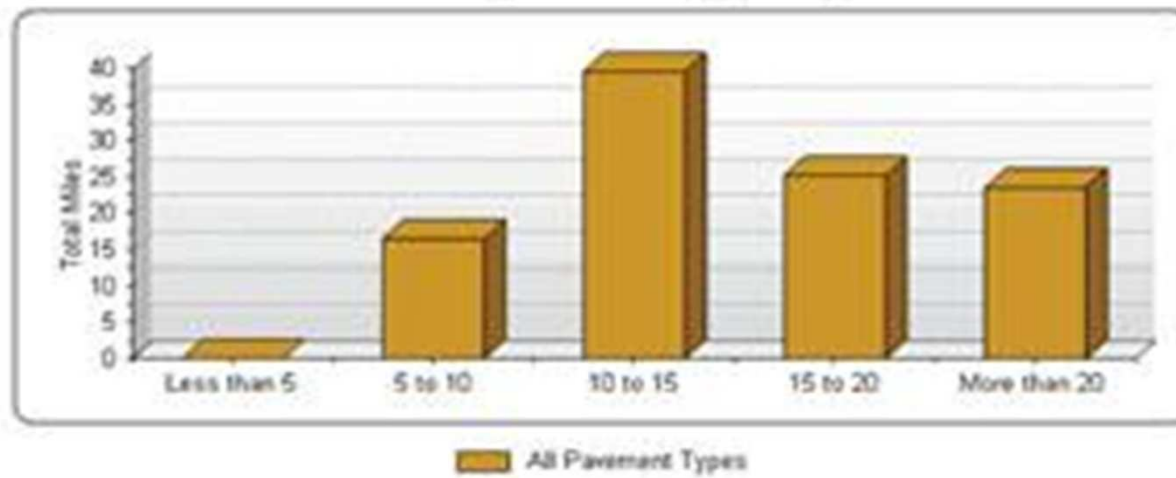
Infrastructure Health Index

- Building on the current NCHRP performance measurement project.
- Thresholds may vary according to functional classification
- Discussing extent of data collection and use associated with the Index
- Development
 - Phase 1 - identification of potential performance indicators and health indicators,
 - Phase 2 – one report on the performance indicators and one report on the health indicators,
 - Phase 3 – consensus on performance indicators and health indicators.

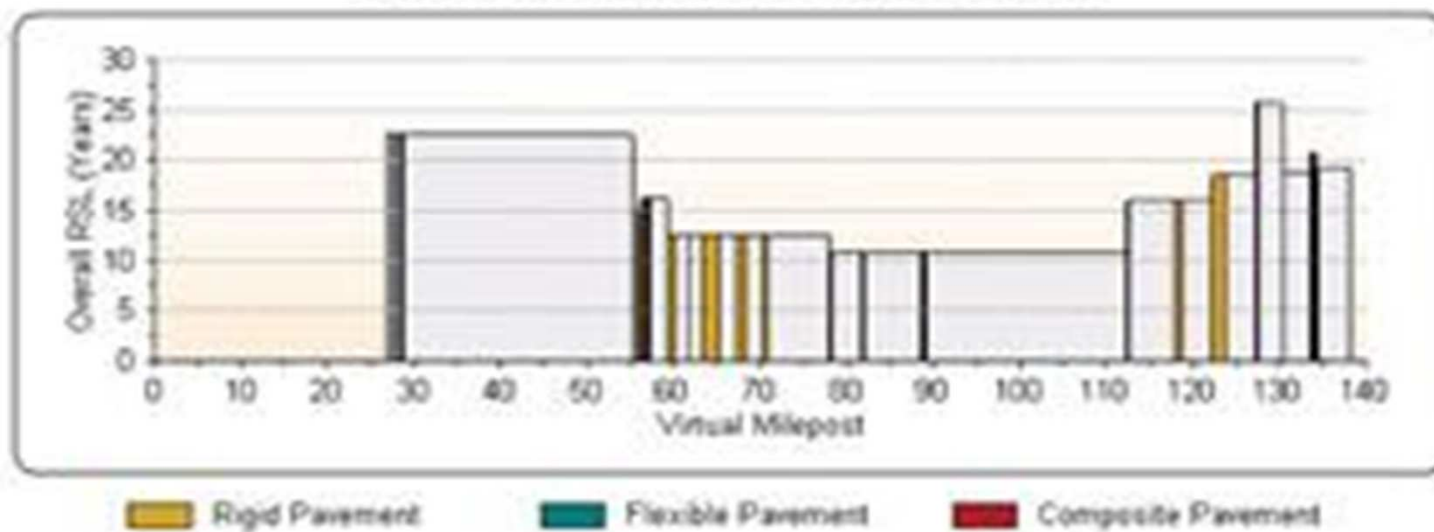
Pavement Health Tracking Tool

- Estimating RSL by pavement segment or throughout a network
- By sections – pavement type, functional class
- Uses HPMS data or loaded to function using a State's PMS data
- Effort underway to enhance based on initial product evaluation
- [http://www.fhwa.dot.gov/pavement/healthtrack /](http://www.fhwa.dot.gov/pavement/healthtrack/)

Miles by RSL Group (Years)



Corridor Profile Overall RSL (Years) for IA_Corridor



Maintenance Leadership Academy – NHI 134063

- Six modules:
 - Maintenance Management
 - System Preservation
 - Roadsides and Drainage
 - Weather-related Operations
 - Safety and Workzones
 - Environmental Factors
- Blended learning – instructor-led web-based, self-study

System Preservation Guide for FHWA Field Engineers

- Changing program responsibilities
- Clarify and collect FHWA policy and technical information
- Printed and online resource
- Preservation for pavements, bridges, and other aspects of the infrastructure
- For summer 2011 publication

In-Place Recycling Workshop

- Cooperative effort of FHWA, industry, and State + local agencies
- August 2011
- Atlanta, Georgia



Questions / Comments?

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