INDOT Pavement Preservation

Road School
March 30, 2005

William F. Flora, PE
Pavement Management Engineer
Program Development Division

Pavement Preservation

- What is Pavement Preservation?
- Deployment of Enhanced Pavement Management System (IPMS)
- Integration of Pavement Management with Maintenance Activities
- New Condition Data Collection Efforts
- Current Road Conditions
What is Pavement Preservation?

Applying the Right Fix at the Right Time

Pavement Management is used to determine possible treatments for:
- A given set of conditions
- A given level of funding

Deployment of Enhanced Pavement Management System (IPMS)

Statewide Pavement Management System
- Customized for Indiana and updatable by INDOT
- Suggests possible pavement treatments based on condition and various models
- Prioritizes projects and develops construction programs based on possible funding levels
- Shows the long-term effect of funding changes
- Intranet based delivery of information
Integration of Pavement Management with Maintenance Activities

- Maintenance Data Integrated with IPMS
  - Maintenance activities tied to locations
  - Useful in determining effective treatments
- Maintenance Activities
  - Preventative Maintenance
    - Crack Sealing, Chip Seal
  - Reactive Maintenance
    - Shallow or Full Depth Patching
- Pavement Management and Maintenance Management working together on the processes

New Condition Data Collection Efforts

- Network Level Structural Data
  - Falling Weight Deflector-(FWD)
    - Will be starting this year
  - Rolling Weight Deflector-(RWD)
    - In development for network level data collection
- New Data Collection Contract
  - Videolog, IRI, PCR, Texture data
  - Improve computer network access
- Friction/Texture Data
  - Study the relationship between friction & texture
  - Develop indexes for use in Pavement Management
Current Road Conditions

Statewide Pavement Condition

2003-2004 Data

- A-Excellent: 7%
- B-Good: 19%
- C-Fair: 19%
- D-Poor: 22%
- F-Very Poor: 13%

Current Road Conditions

Interstate Pavement Condition

2004 Data

- A-Excellent: 62%
- B-Good: 26%
- C-Fair: 9%
- D-Poor: 1%
- F-Very Poor: 2%