FHWA
Initiatives in Sustainability
Mid-Western States Regional
In-Place Recycling Conference
Schaumburg, IL

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Pavements & Construction
From Butch’s Desk

• MAP-21

• Current Issues

• Initiatives
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- 2-year Bill
- Current Funding Levels Extended
- Notable Provisions
  - Consolidated Funding Categories
    - NHPP
    - STP
    - CMAQ
  - 9 new Rules
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- Asset Management Plan and process Requirement
- Performance Management
  - Safety
  - Infrastructure – Pavement and Bridge
  - Mobility – Environment
- Performance-Based Planning
- Goals - Targets
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- Preservation a key component of MAP-21
- Needs to be addressed in Asset Management Plan and Process
- Needs to key part of the mix-of-fixes
- Needs to be a key part of the performance-based planning effort
- New statutory definition
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• Asset Management

• Establishing a process:
  • Strategic Vision and Goals
  • Inventory and condition
  • Gap Analysis
  • Life-cycle coast and Risk Management
  • Financial Plan
  • Investment Strategy
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• Collaborative effort with AASHTO
• Outreach to Partners – AGC, ARTBA, NACE etc.

• Rule making – 18 months
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- Asset Management
- New minimum requirements for PMS and BMS
- Needs to include preservation
- Need your help – ROI on preservation fixes – Financial Plan and Investment Strategies
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• Asset Management

• Focuses on Long Term
• With short term performance measures
• Looks at life cycle costs and risk
  • Keys to long term performance
• Stay away from worst-first

• Is Maintenance at the head-table discussing Asset Management?
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• Draft NPRM for Asset Management Process in legal review
  • Fall – planned publish date
  • 60 day review and comment period
  • Final Rule mid-to-late summer 2014
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- Infrastructure Performance Measures
- Pavement and Bridge
- New definitions / concepts
- Deteriorated condition
- Avoiding structurally deficient
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- Infrastructure Performance Measures
- Pavement
- Still linked to IRI, but other aspects

- Matrix – IRI, Rutting, cracking, faulting

- Again need your help. No statistical performance data on preservation treatments

- Group road segments as Good Fair Poor

- Establish minimum condition for the Interstate
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- Infrastructure Performance Measures
- Outreach and collaboration with AASHTO SCOPM and JTCP
- No common standards, procedures, or analysis tools
- Unanswered questions:
  - Lane miles vs centerline miles
  - 4 lane divided vs 12-14 lane no median
  - Where does VMT fit?
  - Composites - 6 lane divided 6 composites?
  - HMA vs PCC
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• Questions:
  • Infrastructure Performance Measures
  • Calibration centers – FWD – Skid
  • Common analysis tools
  • Common standards
  • Drive / operator certification

• Should FHWA do the annual measures?
• Role of HPMS reporting system
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- Infrastructure Performance Measures
- DRAFT NPRM nearly complete
- Tentative publishing date late 2013
- 90 days for review and comment
- Final Rule late summer 2014
Current Issues

- EDC2
  - Emerging technologies – Innovations
  - SIBC – IC – 3D-Modeling
  - Recycling just missed out last time
- SHRP2
  - Preservation (R26)
  - Rapid Renewal for Bridges (R04)
  - Next – PSPC concrete – Composite Pavements – Extending Life of Existing Pavements - NDT
Sustainable Pavements

• Relatively new concept
  • Competing Priorities / Concepts
  • Carbon foot prints – green house gases
  • Recycling – renewal

• Sound Business Practice
  • Reuse / recycle existing materials within the ROW
  • Reduce haul requirements
  • Reduce requirements for new materials
Sustainable Pavements

- Illinois Toll Authority Setting the Way Forward
  - 100% asphalt
    - Black rock for concrete
  - Concrete
  - Steel
  - PC concrete repairs
  - Two lift paving
  - In-place recycling
  - Going Green
Sustainable Pavements

- FHWA – Sustainability TWG
  - FHWA
  - State DOTs
  - Industry Reps
  - Academia

- Guidelines / concept papers
- Growing interest – Good Business Case
Sustainable Pavements

• New Associate Administrator
  • Butch Waidelich
  • Recycling / preservation background
  • Wants to make recycling flagship of EDC3
  • Speaker at ARRA/AEMA/ISSA National Meeting in Dallas
  • Future speaker at regional partnership meetings
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Thank You

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