



U.S. Department of Transportation
Federal Highway Administration

FHWA and MAP-21

A Business Approach

NWPMA 2013 Conference

Vancouver, WA

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Overview

- Fall 2012 – Vancouver, WA
 - NWPMA
- MAP-21
 - Then and now
- Asset Management
 - Moving ahead with a Business Approach



NWPMA -2012

- Thank you for the invitation then and now
 - PMA – model for NACE and APWA
 - Interest in TAM
- Lessons learned
 - Collaborative best practices
 - Interest in preserving existing pavements, maintaining value, getting best ROI



FHWA

- Current status
 - 2014 funding
 - Authorization expires 9/30/2014
- One of many issues in Congress
- Funding remains the major issue
- Preservation of existing assets
- Safety of Bridges
- Highway safety
- Freight movement



MAP-21

- 2-year Bill (5 years with 2 years of funding)
- Current Funding Levels Extended
- Notable Provisions
 - NHPP – STP
 - New rules:
 - Planning
 - System Performance
 - HSIP
 - Asset Management
 - Tunnels



MAP-21

- Changes in the FLHP
 - County related activities
 - Expanded IRR Program
- Innovation and deployment
 - Pavements Program



MAP-21

- Buy America
- Emergency Relief
- Value Engineering

- Expanded National Road System
 - NHS – Plus (220k)



MAP-21 Current Issues

- Development of Asset Management Process and Plan
- Pavement condition assessment (IHS and NHS)
- Bridge Condition assessment (IHS and NHS)
- Performance of IHS
- Minimum Condition for IHS
- Reestablish criteria for PMS and BMS



MAP-21

- Collaborative effort with AASHTO
- Outreach to Partners – AGC, ARTBA, NACE etc.
- Rule making – 18 months



MAP-21

- Asset Management
- Establishing a process:
- Strategic Vision and Goals
- Inventory and condition
- Gap Analysis
- Life-cycle cost and Risk Management
- Financial Plan
- Investment Strategy



MAP-21

- Asset Management
- New minimum requirements for PMS and BMS
- Needs to include preservation
- Focuses on long term



MAP-21

- Asset Management
- Short term performance measures
- Looks at life cycle costs and risk
 - Keys to long term performance
- Stay away from worst-first
- Are you at the table discussing Asset Management with your senior management?



Asset Management

- Risk analysis
 - Agency Risks
 - Lack of funding
 - Loss of historical information
 - Climate
 - Program Risks
 - Level of service
 - Project Risks



Asset Management

- Investment Scenarios
 - Stove pipe
 - Cross asset
 - Cross mode
- Mix of fixes
 - Touch as many miles as you can with the dollars you have
 - Right treatment, right time, right place, right people



MAP-21

- Draft NPRM for Asset Management Process in legal review
 - Fall – planned publish date
 - 60-90 day review and comment period
 - Final Rule mid-to-late summer 2014
- Staggered implementation



MAP-21

- Hosting training session – on-site and via the WEB.
- Monthly bookclub discussions by leading states
- Pilot projects in NY, MN and LA
 - NV, OR and AK
- Financial Plan workshops
- Peer Exchanges
- Still under discussion – Certification and Approval



MAP-21

- Beginning of 2nd FY Processes need to be Certified or Sanctions imposed
- Needs to lead to a “program of projects” that will be used in conjunction with other program “Plans” to formulate the STIP and TIP



MAP-21

- Significant state participation in the learning process
- Nearly all states engaged and in various stages of development
- Documenting existing processes, bringing them out from the maintenance shed to the front office.
 - When was the last time your assets were discussed at a public meeting?



MAP-21 (Part 2)

- Infrastructure Performance Measures
- Pavement and Bridge
- Bridge pretty straight forward
- But – pavements
 - No common measures
 - No common language
 - No common definitions
 - AC – PCC – Composites
 - Surface treatments – preservation - maintenance



MAP-21

- Infrastructure Performance Measures
- Still linked to IRI, but other aspects
- Matrix – IRI, Rutting, cracking, faulting
- Group road segments as Good Fair Poor
- Establish minimum condition for the Interstate



MAP-21

- Potentially multiple measures for pavements
 - HMA
 - PCC
 - Composites
- Each would require a target
- Local roads on NHS



MAP-21

- Infrastructure Performance Measures
- Outreach and collaboration with AASHTO SCOPM and JTCP
- No common standards, procedures, or analysis tools
- 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



MAP-21

- 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



MAP-21

- Infrastructure Performance Measures
- DRAFT NPRM nearly complete
- Tentative publishing date late 2013
- 90 days for review and comment
- Final Rule late summer 2014



MAP-21

- Key note:
- Overall coordination will be discussed in Safety Performance Measures rule coming out early this fall.
- Links new planning rule with asset management rule and pavement performance rule.



Asset Management

- Common approach in private sector
 - Toll Authorities
 - Concessionaires (HOV / HOT)
- More advanced states:
 - 7-8 assets
 - Multi-modal (Highways, Airports, Rail, Transit)



Asset Management

- Common Business model
 - United
 - BNSF
 - US NAVY
- Changing culture
 - Building the system (Expansion)
 - Service Provider (Preservation)



Asset Management

- Common approach
 - Where would you / should you spend that next dollar?
 - Data driven – risk-based decision
- Do you wait until the car stops running to change the oil?



Thank You

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