Performance Measures for MAP-21

NEPPPP
2015 Annual Meeting
April 29, 2015
Overview

• Highlights of Notice of Proposed Rule-Making (NPRM) 490 (Pavement Measures)
• Highlights of NPRM 515 (Asset Management)
• NEPPP Draft Comments
• Next Steps
NRPM 490 – Pavement

4 Proposed Measures:

• % Interstates Good
• % Interstates Poor
• % Non-IS NHS Good
• % Non-IS NHS Poor
NRPM 490 – Pavement

Condition – Based on combination of:

• Ride Quality
• Cracking
• Rutting (asphalt) or Faulting (concrete)

These are Metrics.

Missing data automatically = Poor.
NRPM 490 – Pavement

Conversion of Metrics to Measures:

• Different rules based on
  – Pavement Type
  – IS vs. non-IS
  – Urban vs. Rural

• More metrics required (at least for first 4 years) for IS than for NHS
NRPM 490 – Pavement

Targets:
• States set targets for 3 of 4 measures
• FHWA set 5% max for % Poor IS
• 2- and 4-year targets required for 4-year reporting period
  – 2-year targets can be adjusted at midpoint
NRPM 490 – Pavement

Reporting:

• 3 reports:
  – Baseline
  – 2-year
  – 4-year
NRPM 490 – Pavement

Penalties & Incentives:

• Penalties: Financial if targets not met

• Incentives: ...None.
NRPM 490 – Pavement

# of times Pavement Preservation is mentioned: 0

(rhymes with hero)
NRPM 515 – Asset Management

States must establish and implement an **Asset Management plan** for pavements
NRPM 515 – Asset Management

Key Ingredients:

• Asset Management objectives
• Targets and Measures
  – May include those established by SHAs, in addition to NPRM 490 requirements
NRPM 515 – Asset Management

Key Ingredients:

• List of assets and conditions
• Performance gap identification
• LCCA (network-level)
• Risk Management analysis
• Financial Plan
• Investment Strategies
NRPM 515 – Asset Management

Penalties & Incentives:

• Penalties:
  – Financial
  – Projects won’t be approved

• Incentives: ...None.
NEPPP Draft Comments – 490

Overarching:

• DOTs must manage to measures to avoid penalties.
  – Can be argued that measures promote worst-first and inhibit pavement preservation
  – What takes precedence if DOT wishes to
    • Manage using different measures?
    • Use additional metrics?
  – These could lead to very different looking paving program
§490.105 – Establishing Performance Targets:

• What is incentive to set additional targets?
• Verify that targets needed only for IS in first performance period (unclear).
NEPPP Draft Comments – 490

§490.313 – Calculation of Pavement Metrics:

• Instead of missing data = poor, instead
  – Allow previous years’ data, and/or
  – Allow data from other side of the road

• There are valid reasons for data to be missing, even with (or because of) a rigorous QA/QC program
NEPPP Draft Comments – 490

FHWA Requests – Implementation of MAP-21 performance requirements:

• #8: Recognize Fiscal Constraints – provide for an approach that encourages the optimal investment of Federal funds to maximize performance.

• Optimal investment is not encouraged
  – With Poor target, and “bins”, Worst-first is encouraged
  – Allowing RSL would encourage optimal investment and Pavement Preservation!
NEPPP Draft Comments – 490

FHWA Requests – Implementation of MAP-21 performance requirements:

• #9: *Provide for Flexibility.*

• Not apparent how flexibility is provided for

• No provision for allowing different measures that may be more cost-effective
NEPPP Draft Comments – 490

“The FHWA is required to establish minimum levels for the condition of pavement”:

• Why interpreted as a need to establish a maximum % Poor?
  – Implicitly encourages **Worst-First**

• Why not a minimum % Good?

• Why not RSL or overall Index?

These could have minimum levels
§515.007 – Process for establishing the asset management plan:

• Clarify “life-cycle benefit-cost analysis”

These have big impact on LCCA requirements (which are not clear)
NEPPP Draft Comments – 515

§515.009 – **Plan requirements:**

- Plan is to “improve or preserve condition”
  - What if insufficient funding?
  - What if declining targets?

- States may “include other public roads”
  - What is incentive to do so?
NEPPP Draft Comments – 515

§515.009 – **Plan requirements:**

- “State DOTs are encouraged...to include other...assets”
  - What is incentive to do so?

- Plan must use NPRM 490 measures and achieve/sustain state of good repair
  - What if NPRM measures conflict with goal of good repair?
Next Steps

• Discuss 11am April 30 (in place of Research Task Force)
• Finalize comments
• Submit NPRM 490 Comments by May 8
• Submit NPRM 490 Comments by May 29
Questions?