

Asset Management Requirements in MAP-21

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National Goals

Focus the Federal-aid program on the following national goals:

- 1) *SAFETY*
- 2) *INFRASTRUCTURE CONDITION*
- 3) *CONGESTION REDUCTION*
- 4) *SYSTEM RELIABILITY*
- 5) *FREIGHT MOVEMENT AND ECONOMIC VITALITY*
- 6) *ENVIRONMENTAL SUSTAINABILITY*
- 7) *REDUCED PROJECT DELIVERY DELAYS*

INFRASTRUCTURE CONDITION

- *Maintain the highway infrastructure asset system in a state of good repair.*

What is asset management?

- Asset management is a **strategic and systematic** process of operating, maintaining, and improving physical assets, with a focus on engineering and economic analysis based upon quality information, to identify a structured sequence of maintenance, preservation, repair, rehabilitation, and replacement actions that **will achieve and sustain a desired state of good repair** over the lifecycle of the assets at minimum practicable cost. (23 U.S.C. 101(a)(2), MAP-21 § 1103)

What requirements does MAP-21 have pertaining to asset management?

- Each State is required to develop a risk-based asset management plan for the National Highway System (NHS) to improve or preserve the condition of the assets and the performance of the system. (23 U.S.C. 119(e)(1), MAP-21 § 1106)
- USDOT is required to issue a regulation not later than 18 months after date of enactment, after consultation with the States and other stakeholders, which will establish the process to develop the State asset management plan for the NHS. (23 U.S.C. § 119(e)(8), MAP-21 § 1106)

Asset Management Plans

- National Highway Performance Program
- Developed using process approved by USDOT
- Recertified every 4 years

What are the scope and content of a risk-based asset management plan?

- Includes strategies that lead to a program of projects that would make progress toward achievement of the State targets for asset condition and performance of the NHS
- States must address pavements and bridges but are encouraged to include all infrastructure assets within the highway right-of-way in their risk-based asset management plan. (Also can include roads other than on the NHS.)

Highway Asset Management Plan

- Plan Contents
 - Pavement and bridge inventory and conditions on the NHS,
 - Objectives and measures,
 - Performance gap identification,
 - Lifecycle cost and risk management analysis,
 - A financial plan, and
 - Investment strategies
- (preservation)

Highway Asset Management Plan

- USDOT, in consultation with State DOTs, will establish the process to develop the plan through a rulemaking no later than 18 months after 10/1/2012
- States must have a plan developed consistent with the process by the 2nd fiscal year, otherwise federal share for NHPP will be reduced to 65%
- Process certification
 - USDOT 90 days review period to determine certification
 - States have 90 days to cure deficiencies if not certified
 - Recertification required every 4 years

Pavement Performance

- USDOT will establish a measure to assess the condition of pavements on the Interstate (Highway) System
- USDOT will establish a measure to assess the condition of pavements on the National Highway System (excluding the Interstate)
- USDOT will establish minimum condition levels for pavement on the Interstate System, for the purpose

Management Systems

- USDOT will establish minimum standards for States to use in developing and operating:
 - Bridge management systems
 - Pavement management systems

Asset Management – This is how we do business:

- Preserve our assets and minimize their whole life costs.
- Operate in a financially sustainable manner.
- Provides a framework to improve performance on a long-term basis

Resources Are Available

- NHI Transportation Asset Management Training Course
- FHWA Asset Management Today website:
<http://www.fhwa.dot.gov/asset/index.cfm>
- AASHTO Asset Management Guide – A Focus on Implementation
- FHWA Office of Asset Management
- AASHTO Asset Management Subcommittee
- TRB Asset Management Committee
- Other