



U.S. Department of Transportation
**Federal Highway
Administration**

MAP-21 and FAST Act
National Highway Performance Program

Asset Management Plan Final Rule

External Webinar
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A Message From the Associate Administrator



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Performance Areas	NPRM	Final Rule
Safety Performance Measures	March 11, 2014	Published March 16, 2016
Highway Safety Improvement Program	March 28, 2014	Published March 16, 2016
Statewide and Metro Planning; Non-Metro Planning	June 2, 2014	Published May 27, 2016
Pavement and Bridge Condition Measures	January 5, 2015	Anticipated December 14, 2016
Highway Asset Management Plan	February 20, 2015	Published October 24, 2016
System Performance Measures	April 22, 2016	Anticipated December 20, 2016

Today's Agenda

- Introduction
 - Steve Gaj
- What Has Not Changed?
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- What Has Changed?
 - Steve Gaj
- What is New and What Should I Do Now?
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- Periodic Evaluation of Facilities Repeatedly Requiring Repair and Reconstruction due to Emergency Events
 - Greg Wolf



Introduction

Public Law Requirements

Requirements established by MAP-21 & FAST Act

- States to develop and implement a Risk-Based Asset Management Plan for the National Highway System to improve or preserve the condition and performance of the NHS.
- FHWA to establish minimum standards for States to use in developing and operating bridge and pavement management systems.
- States to conduct periodic evaluations to determine if reasonable alternatives exist to roads, highways, or bridges that repeatedly require repair and reconstruction activities.

Asset Management Definition

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)

Asset Management Plan Minimum Contents

- A summary listing of the NHS pavements and bridges
- Asset management objectives and measures
- Performance gap identification
- Life-cycle planning
- Risk management analysis
- Financial plan for a minimum period of 10 years
- Investment strategies

Benefits of Asset Management

An Asset Management Plan addresses issues and challenges to answer critical questions. Like how will we:

...develop long-term **investment strategies** to manage assets over their whole life.

...manage infrastructure performance **10 years from now?**

...manage risks to system performance and condition of assets

Roles and Responsibilities

State DOTs Responsibilities

- Develop processes to prepare a risk-based asset management plan. 23 CFR 515.7
- Develop an asset management plan using the established processes. 23 CFR 515.9
- Implement the asset management plan. 23 CFR 515.13(b)

Roles and Responsibilities

- FHWA Responsibilities
 - Certify State DOT's asset management processes at least every 4 years.
 - Determine annually whether the State DOT has developed and implemented an asset management plan consistent with 23 U.S.C. 119.
 - Set forth the minimum standards for a State DOT to use in developing and operating highway bridge and pavement management systems under 23 U.S.C.150 (23 CFR515.17).

Asset Management Plan NPRM

Asset Management Plan NPRM (Feb. 20,2015– May 29, 2015)

- 59 individual comment letters
- 35 State DOTs, 7 trade, professional, and government associations, 2 MPO, 1 local government, 1 planning district commission, and several submissions from individuals and private industry



WHAT HAS NOT CHANGED (NPRM TO FINAL RULE)

What Has Not Changed

- Scope of Asset Management
- Treatment of NHS Pavements and Bridges Not Owned by States
- Coordination With Other NHS Asset Owners
- Duration of Asset Management Financial Plan
- “Desired State of Good Repair”
- “Declining Asset Condition”

Scope of Asset Management

- States must develop a risk-based asset management plan to address both the condition of NHS assets and the performance of the NHS. (23 U.S.C. 119 (e)(1))
- The final rule retains the scope with modification to clarify the relationships among system performance, asset management plans.
- The final rule requires a comparison of current conditions to State DOT section 150(d) targets for the condition of NHS pavements and bridges (515.7(a)(1)).

Scope of Asset Management

- The final rule requires State DOTs to include the gaps in the performance of the NHS that affect NHS pavements and bridges regardless of their physical condition (515.7(a)(2)).
- The Rule clarifies that it does not require any comparison between the current and targeted performance for section 150 performance measures or targets for areas other than pavement and bridge conditions.

Treatment of NHS Pavements And Bridges Not Owned by States

- 23 U.S.C. 119(e)(1) requires States to develop risk-based asset management plans for the NHS.
- No other entities are required by statute to share this responsibility.

Coordination With Other NHS Asset Owners

- The processes established by State DOTs shall include a provision for the State DOT to obtain necessary data from other NHS owners in a collaborative and coordinated effort. 23 CFR 515.7(f)
- State DOTs shall use the best available data to develop their asset management plans. 23 CFR 515.7(g)
- MPOs roles and responsibilities with regard to asset management plans are addressed in 23 U.S.C. 134(h)(2)(D) and 23 CFR 450.306(d)(4).

Asset Management Financial Plan Duration

- The final rule retains the duration of the financial plan that shall cover, at a minimum, a 10-year period. (23 CFR 515.009(e))
- Too long a period involves making many assumptions and uncertainty in revenue forecasting.
- Short periods would not allow for the strategic planning that is needed for the management of long-lived assets.
- Short periods would not provide the insight that decisionmakers need to make tough financial decisions.
- Short periods do not reveal critical information such as the impact of underfunding on long-term asset condition.

“Desired State of Good Repair”

- 23 U.S.C. 101(a)(2) includes the phrase “...achieve and sustain a desired state of good repair....”
- the national goal for infrastructure condition is “...to maintain the highway infrastructure asset system in a state of good repair.” 23 U.S.C. 150(b)(2)
- Therefore, in the final rule, the FHWA has retained the proposed language in the definition of asset management.
- However, the phrases “desired state of good repair” and “state of good repair” were removed from two places in the rule.

“Desired State of Good Repair”

- The term “state of good repair” was eliminated from the definition of investment strategy in 23 CFR 515.5.
- Also, FHWA replaced the phrase “measures and targets must be consistent with the objective of achieving and sustaining the desired state of good repair” in 23 CFR 515.9(d)(2) with “measures and targets must be consistent with the State DOT’s asset management objectives.”

“Declining Asset Condition”

- 23 U.S.C. 119(e) (1) requires States to develop risk-based asset management plans for the NHS to improve or preserve the condition of the assets.
- If, after undertaking asset management strategies, asset condition continues to decline, but at a slower rate than prior to the implementation, then consider this as an improvement, even though the condition of the asset has declined.
- Revision was made to the phrase “improve and preserve” to read “improve or preserve” in the final rule.



WHAT HAS CHANGED (NPRM TO FINAL RULE)

Significant Changes

- Redesignation of NPRM Provisions;
- Separation of the asset management plan regulations from the periodic evaluation requirements under MAP-21 section 1315(b);
- Changes to the timing and required elements for phased implementation;
- Requirements for assets other than NHS pavements and bridges; and
- Modification to STIP requirements

Redesignation of NPRM Provisions

- The MAP-21 section 1315(b) moved to part 667
- The final rule substantially reorganizes the section 1315(b) regulations
- This rule removes the bridge and pavement management systems standards from the proposed 23 CFR 515.7 discussing asset management plan processes, and places the standards in 23 CFR 515.17.
- The proposed 23 CFR 515.7(c), which would require the head of the State DOT to approve the asset management plan has moved to 23 CFR 515.9(k) of the final rule.

Separation of The Asset Management and MAP-21 Section 1315(b) Regulations

- MAP-21 section 1315(b) regulations was placed in 23 CFR part 667 and Asset Management regulations remained in 23 CFR part 515.
- To address the confusion about the relationship and differences between
 - Asset management and MAP-21 section 1315(b) evaluations; and
 - MAP-21 section 1315(b) and the title 23 Emergency Relief Program funding eligibility

Separation of The Asset Management and MAP-21 Section 1315(b) Regulations

- Now, the 1315(b) regulations are in 23 CFR part 667.
- Removed from 1315(b) regulation “the inclusion of evaluation summaries in the State DOT’s asset management plan.”
- Now, only the asset management regulations have provisions regarding treatment of the evaluation information in asset management plans. 23 CFR 515.7(c) and 23 CFR 515.9(d)

Changes to The Timing And Required Elements For Phased Implementation

- Effective date of the final rule for 23 CFR part 515 is October 2, 2017
- FHWA retains and clarifies provisions on submission of an initial asset management plan
- Deadline of April 30, 2018, for the submission of an initial asset management plan
- Deadline of June 30, 2019, for submission of a fully compliant asset management plan

Requirements For Assets Other Than NHS Pavements And Bridges

- 23 CFR 515.9(l) was added to include the requirements applicable to other public roads or other assets voluntarily included in the plan.
- Should States decide to include other public roads or other assets they are required to address the following using a level of effort consistent with their needs and resources.

Requirements For Assets Other Than NHS Pavements And Bridges

- Summary listing of assets, including a description of asset condition;
- Asset management measures and State DOT targets for asset condition;
- Performance gap analysis;
- Life-cycle planning;
- Risk analysis, including summaries of evaluations carried out under part 667 of this title for the assets, if available, and consideration of those evaluations;
- Financial plan; and
- Investment strategies.

Modification to STIP Requirements

- Proposed section 23 CFR 515.9 (h) was modified.
- The proposed section suggested that a State DOT should select projects for inclusion in the STIP to support achievement of goals listed in NPRM 515.9 (f).
- Instead, the final rule requires a State DOT to integrate its asset management plan into the State DOT's planning processes that lead to the STIP. 23 CFR 515.9 (h)
- 23 CFR 515.9(h) is consistent with the recently amended planning rule 23 CFR part 450

Clarification of Terms

- Replacing the term “Lifecycle Cost Analysis” with “Life Cycle Planning”
- Reducing the definition of “Work Type” by limiting it to the following categories:
 - initial construction, maintenance, preservation, rehabilitation, and reconstruction.
- Management systems requirements clarification
 - The final rule 23 CFR 515.17(c) replaces the phrase “determining the life-cycle benefit-cost analysis” with “determining the benefit-cost over the life cycle of assets.”

What's New

- Critical Assets
- Added Definitions
- Criteria for determining if a State DOT has implemented its asset management plan

Critical Assets

There is one Change (NPRM to Final Rule) Resulting from the FAST Act.

23 CFR 515.9(m): The asset management plan of a State may include consideration of critical infrastructure from among those facilities in the State that are eligible under 23 U.S.C. 119(c).

Added Definitions

- Asset class
- Asset sub-group
- Critical infrastructure means
“those facilities the incapacity or failure of which would have a debilitating impact on national or regional economic security, national or regional energy security, national or regional public health or safety, or any combination of those matters.”
- Financial plan
- Minimum practicable cost
- NHS pavements and bridges and NHS pavement and bridge assets

Criteria for determining if a State DOT has implemented its asset management plan

FHWA will evaluate

- Whether a State has developed an asset management plan that conforms to part 515; and
- If the funding allocations for the preceding 12 months are reasonably consistent with the asset management plan

FHWA will consider any reasons offered by the State for why the State has not been able to allocate funds in a manner consistent with one or more of the investment strategies in its asset management plan.

Important Deadlines!

Certification/Recertification

- First State-approved initial asset management plan
 - Not later than April 30, 2018
- First State-approved fully compliant asset management plan
 - Not later than June 30, 2019
- State DOT shall update and resubmit its plan development processes to the FHWA at least every 4 years.
- FHWA decides if the State DOT's processes meets the requirements no later than 90 days after receiving the State's request

Important Deadlines!

Annual Consistency Determination

- First annual consistency determination will occur after the June 30, 2019 deadline
- No later than August 31, 2019, FHWA decides if an asset management plan is consistent with the 23 U.S.C. 119
- Annual consistency determination will occur not later than July 31 in each year thereafter

Forthcoming Guidance

- FHWA had developed a draft guidance on Certification/recertification of State's asset management processes; and annual consistency determination
- FHWA is developing framework on the following:
 - Life Cycle Planning
 - Risk Management
 - Financial plan
- Anticipated release date of July 2017

What Should I Do Now?

- Download and become familiar with the new Asset Management Rule
 - Asset Management Rule
<https://www.federalregister.gov/documents/2016/10/24/2016-25117/asset-management-plans-and-periodic->
- Read the preamble in addition to the final rule

What Should I Do Now?

- Start and facilitate conversations with/between:
 - Other NHS Owners
 - FHWA Division Office(s)
- Review your current processes for managing assets
- Assess needs for improvements/enhancements
- Develop a strategy for implementation
- Let your FHWA Division know if you have questions or additional needs.

23 CFR Part 667

**Periodic Evaluation of
Facilities Repeatedly Requiring
Repair and Reconstruction
due to Emergency Events**

Statewide Evaluation

§667.1

State DOTs shall conduct statewide evaluations to determine if there are reasonable alternatives to roads, highways, and bridges that have required repair and reconstruction activities on two or more occasions due to emergency events.

Repair and reconstruction includes permanent repairs but excludes emergency repairs.

Statewide Evaluation

§667.1

Evaluation Applies to:

- All highways (as defined in 23 U.S.C. 101(a)(11))
- Must be open to the public
- Must be eligible for financial assistance under title 23
- Highways with repair and reconstruction activities on two or more occasions due to emergency events

Evaluation Excludes:

- Tribally owned and federally owned roads, highways, and bridges

Definitions

§667.3

The following terms are defined in Part 667:

- Catastrophic failure
- Evaluation
- Emergency event
- Reasonable alternatives
- Repair and reconstruction
- Roads, highways, and bridges

Data time period, availability, and sources

§667.5

- The beginning date for every evaluation under this part shall be January 1, 1997.
- End date must be no earlier than December 31 of the year preceding the date on which the evaluation is due.
- Evaluations should cover a longer period if useful data is reasonably available.
- DOTs must use reasonable efforts to obtain data.
- DOTs may use any source and type of data useful to the evaluation.

Timing of evaluations

§667.7

- Not later than November 23, 2018, DOTs must complete a statewide evaluation for all NHS roads, highways and bridges.
- Beginning on November 23, 2020, DOTs must prepare an evaluation for all other roads, highways, and bridges in the State regardless of ownership prior to including any project affecting such facility in the STIP.
- Re-evaluation due every four years or after an emergency event.

Consideration of evaluations

§667.9

- DOTs must consider the results of an evaluation when developing projects.
- FHWA will periodically review the DOTs compliance.
- This provision is independent of the ER program and is not a guarantee of ER eligibility.
- DOTs must make evaluations available to FHWA upon request.
- FHWA may consider the results of evaluations when making project development decisions.

For More Information

- FHWA Office of Asset Management
<http://www.fhwa.dot.gov/asset/index.cfm>
 - Examples of asset management plans and templates
 - Generic work plan for developing an asset management plan.
 - Publications relative to risk management and financial planning.
 - List of NHI asset management courses

For More Information

- NHI Transportation Asset Management Training Courses

<http://www.nhi.fhwa.dot.gov/home.aspx>

- AASHTO Asset Management Portal

<http://www.tam-portal.com/>

- Asset Management Expert Task Group

<http://www.tam-portal.com/tam-etg/>

Contact Information

Contact your FHWA Division Office

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QUESTIONS AND ANSWERS



Thank you!

Final Rule Recordings on the FHWA Website:

<http://www.fhwa.dot.gov/tpm/resources/presentations.cfm>