

May 29, 2015

Gregory G. Nadeau
Acting Administrator, Federal Highway Administration
U.S. Department of Transportation
1200 New Jersey Avenue S.E.
Washington, DC 20590

Re: Docket No. FHWA-2013-0052

Dear Acting Administrator Nadeau:

The American Association of State Highway and Transportation Officials (AASHTO) is pleased to provide comments on the Federal Highway Administration's (FHWA) "Asset Management Plan"; proposed rule (Docket Number FHWA-2013-0052) published in the Federal Register on February 20, 2015. Representing all 50 states, the District of Columbia, and Puerto Rico, AASHTO serves as a liaison between state departments of transportation and the federal government.

AASHTO and the State DOTs are supportive of MAP-21's asset management provisions and believe that they can be implemented in a manner that advances a safer and more efficient transportation system without imposing undue regulatory burdens on States. There are some recognized challenges ahead in the effort to achieve those goals and AASHTO and the State DOTs will continue to engage with U.S. DOT to address these challenges and work together.

AASHTO sees transportation asset management as a long-term, continuous improvement process that is implemented by a State DOT at multiple stages of an asset's life. Hopefully, the process that the State DOT goes through to develop a transportation asset management plan (TAMP) will not be just to develop another document, but to bring about improved decision making regarding assets.

AASHTO is supportive of asset management and of the asset management provisions of MAP-21. State DOTs are engaged in asset management already in the absence of any federal requirements. We ask FHWA to recognize that, given those ongoing State efforts, a new federal asset management rule should not be extensive. While we support a number of aspects of the proposed regulations, there are also a number of areas in which State DOTs have important concerns. We recommend that FHWA take action to address those concerns in finalizing this regulation.

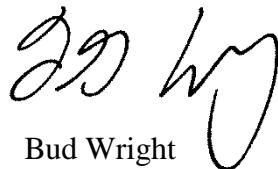
AASHTO comments are organized as follows in the attachment to this letter:

- **Principal Comments**—There are eight principal comments for which AASHTO provides an in-depth analysis and discussion.
- **Section-by-Section Comments**—AASHTO comments on each major section and sub-section of the NPRM.
- **AASHTO Response to FHWA Requests**—AASHTO responds to the questions specifically asked by FHWA in the NPRM concerning the asset management plans (12) and the Periodic Evaluation of Facilities Requiring Repair or Reconstruction Due to Emergency Events (7).
- **Proposed Changes to Text**—Suggested changes to the NPRM text based upon AASHTO analysis.

These comments represent a substantial effort among State departments of transportation to thoroughly review and comment on the Asset Management NPRM. AASHTO has in place a process to provide coordinated comments representing the different disciplines of the various standing committees on all of the performance management NPRMs being developed by USDOT. This included a coordinated effort to gather input from the AASHTO Subcommittee on Asset Management, Standing Committee on Performance Management, Subcommittee on Bridges and Structures, and the Joint Technical Committee on Pavements. These comments are but one set of more than ten that AASHTO expects to provide as USDOT issues proposals implementing performance-related provisions of MAP-21. Since this NPRM includes placeholder references for other NPRMs yet to be issued, AASHTO recommends that U.S. DOT provide an opportunity for States and others to offer any additional comments after all of the performance management related NPRMs have been issued.

We appreciate the opportunity to provide these comments and look forward to working with FHWA in the implementation of final rules. If you would like to discuss the issues raised in this letter, please contact Matthew Hardy, AASHTO's Program Director for Planning and Policy at (202) 624-3625.

Sincerely,



Bud Wright
Executive Director
AASHTO



John Cox
President, AASHTO
Director, Wyoming Department of
Transportation

PRINCIPAL COMMENTS

1) DO NOT DISCOURAGE STATE DOTs FROM INCLUDING OTHER ASSET CLASSES IN THE ASSET MANAGEMENT PLANS PRESENTED TO FHWA

The State DOTs have been implementing asset management and developing asset management plans for a number of years. Many State DOTs include assets in their asset management plans beyond only bridges and pavements. In fact, an emphasis of the AASHTO Subcommittee on Asset Management has been to provide technical guidance, lessons learned, and best practices regarding asset classes beyond pavements and bridges. Unfortunately, the current language in the NPRM would significantly discourage State DOTs from including other assets and asset classes in their plans required under this rulemaking.

At a number of points in the proposed rule FHWA would add to the burden of states that choose to undertake more asset management tasks than (would be) required by the (proposed) rule, such as asset management work regarding non-pavement assets on the NHS or regarding other roads. 515.009(c) provides that “If the state DOT decides to include other such assets on the NHS in its asset management plan, or to include assets on other public roads, the State DOT shall evaluate and manage those assets consistent with the provisions of this part.” Not all assets fit neatly into all the sections. For example, signs may not have a life-cycle cost analysis that would “minimize cost while preserving or improving” NHS condition. And, if a state chooses to do some asset management on a corridor basis, and address some highways that are parallel to but not part of the NHS, why not allow them to do some asset management planning and include it in the plan without undertaking all that is required by the proposed rule? The phrase “include it in the plan” is important, as Congress did not include in the asset management plan provision any requirement for off the NHS asset management plans. States can undertake such work but simply not integrate it into a document submitted to the FHWA. So, the effect of the proposed requirement, which would burden states if they do more than the minimum, is, truly, to discourage asset management and to discourage states from informing FHWA of their additional work. AASHTO strongly recommends that FHWA remove such provisions from the final rule so that State DOTs can include other assets in the asset management plans that are submitted to FHWA.

AASHTO recommends the following as it relates to the inclusion of other assets in the asset management plans presented to FHWA:

- **Keep the language stating that Asset Management Plans are required only for the NHS roads**—AASHTO appreciates that the NPRM reflects that it is solely the option of the state to expand the asset management plan to include roads off the NHS. It is clear that section 1106 of MAP-21 requires asset management plans for the NHS, and this is reflected in multiple places, such as §515.005, Definitions, for asset management plans to be on the “National Highway System (NHS), and other public roads included in the plan at the option of the State DOT...” This language should stay in the final rule.

- **Change 515.009(a) by striking the second sentence and inserting the following:**

“The State DOTs are encouraged to include other assets associated with public roads in its plan and if they do, are encouraged but not required with respect to such other roads to follow all asset management process and plan requirements in this part.”

- **Change 515.009(c) to following:**

“...the State DOT is encouraged, but is not required, to evaluate and manage those assets consistent with the provisions of this part.”

2) ENSURE THE PREROGATIVE OF STATE DOTs TO SELECT PROJECTS

Aspects of the proposed rule appear to suggest that FHWA has expanded the concept of asset management plan regulation to include Federal approval of State project selection – authority not available to USDOT. Proposed section 515.013 (c) states the “...FHWA will determine not later than August 31 whether the State DOT has developed and implemented an asset management plan consistent with 23 U.S.C 119.” The word “implemented” could have an extremely wide interpretation, and aspects of the FHWA’s explanation of the provision suggest a possible intent by FHWA to validate the selection of projects: “The investment decisions and judgments made by State DOTs in their asset management plans are within the scope of the FHWA asset management plan reviews.” See NPRM at page 9243. This is confusing in that investment decisions are made in the STIP; the asset management plan is certainly important, and provides a plan for thinking about specific investments. Nonetheless, the FHWA has appeared to confuse the two concepts in the rule, to the potential detriment of State flexibility and authority over project selection.

Moreover, under the discussion of proposed 23 CFR 515.015, Penalties, it states that *“The FHWA believes the plan implementation determination should be focused on whether the plan’s investment strategies satisfy the 23 U.S.C. 119(e)(2) requirements (i.e., lead to a program of projects that would make progress towards achievement of the States’ targets for asset condition and performance of the NHS...).”* It is not clear what the distinction is between this kind of review and withholding certification of the plan processes based on FHWA’s view of the State’s project selections. Accordingly, the final rule should make clear that FHWA’s role would be to ensure that a State implements the required processes, but not to dictate project selection.

AASHTO recommends the following as it relates to ensuring the prerogative of State DOTs to select projects:

- **Add language to make clear that project selection and target setting are not within FHWA authority**—Revise 23 CFR 515.001 by changing the title and adding a new subsection (f) and paragraph (1) as follows:

“23 CFR 515.001 Purpose and Scope.”

“(f) Scope. (1) Nothing in this part authorizes the disapproval of project selection by a State or the disapproval of a target set by a State for pavement or bridge performance.”

- **Revise 23 CFR 515.009(h) as follows:**

“A State DOT may select such projects for inclusion in the STIP...”

- **Make additional revisions to the proposed rule as necessary or appropriate to make clear that the investment decisions and judgments made by State DOTs in their asset management plans are not within the scope of the FHWA asset management plan review.**

3) TRANSPORTATION ASSET MANAGEMENT PLANS SHOULD ACCOMMODATE STRATEGIES CALLING FOR DECLINING ASSET CONDITIONS AND PERFORMANCE

AASHTO is concerned that the TAMP requirements of the NPRM do not adequately handle situations where declines in asset conditions and performance must be dealt with. Many states are forecasting that Federal funding levels to be provided will be insufficient to stop the decline of the conditions of their key assets. Current and proposed levels of Federal and State funding are insufficient to permit all states to positively impact all of the National Goals. Many states will be forced to make hard choices between which National Program Goals are positively addressed and which must be deferred. The TAMP, with its required minimum coverage of NHS pavements and bridges must likewise embrace the likelihood that available funds will not be sufficient to improve their conditions and performance over the foreseeable future. For such states, AASHTO believes that a TAMP can provide the decision support tools necessary to ensure that declining asset conditions can be managed in a way that minimizes impacts on the traveling public.

The proposed rule refers to “...improving the physical assets.” or “...improve or preserve...” regarding the condition of physical assets. The final rule should include specific language stating that even with the implementation of asset management plans and programs, the condition of the physical assets may be declining in nature due to lack of funding. This is consistent with the bridge and pavement national measures rulemaking where targets may be improving, remaining constant, or declining (NPRM 23 CFR 490, 80 Federal Register at 338, preamble). The recognition that targets can indicate a decline in asset performance (whether due to inadequate funding or otherwise) is made only in the preamble (discussion portion) of the NPRM, not in the proposed rule itself. AASHTO recommends that specific language to that effect be included in the asset management rule itself.

AASHTO recommends the following as it relates to accommodate strategies calling for declining asset conditions and performance:

- **The proposed rule should include specific language stating that target levels may call for improving, constant, or declining condition.** FHWA’s recognition that targets can indicate a decline in asset performance (whether due to inadequate funding or otherwise) is set forth only in the preamble of the pavement and bridge NPRM for 23

CFR 490 (Page 338, third column, second paragraph) but nowhere in that proposed rule nor in the asset management plan rule. AASHTO recommends that specific language be included in the rule itself to confirm this essential point.

4) IMPROVE LINKAGE BETWEEN THE TRANSPORTATION ASSET MANAGEMENT PLAN AND OTHER PLANNING DOCUMENTS

AASHTO believes that transportation asset management can provide a strategic and systematic process of operating, maintaining, upgrading and expanding physical assets effectively throughout their lifecycle. It promotes a focus on business and engineering practices for resource allocation and utilization, with the objective of better decision making based upon quality information and well-defined objectives. An important product of the transportation asset management process is a transportation asset management plan which is an essential management tool which helps bring together related business processes and stakeholders, internal and external, to achieve a common understanding and commitment to improved condition of the transportation assets. Accordingly, independent of the requirements of MAP-21 and any Federal rule, many State DOTs have implemented an asset management program and developed transportation asset management plans.

A very significant concern of AASHTO regarding the TAMP requirements proposed in this NPRM is the potential disconnect between the TAMP required to be developed for FHWA and a funding environment that is sporadic and of short duration. In short, because of the specific requirements of the TAMP NPRM, AASHTO is very concerned that under this proposed rule, significant additional work will be required of the State DOTs, work that may merely produce speculative results with few tangible benefits.

The asset management plan NPRM will require State DOTs to develop an asset management plan that has a new and long time horizon that is not consistent with existing and future federal requirements for planning and performance management. Proposed Section 515.009(e) would require state asset management plans to cover at least a 10 year period and section 515.007(a)(4) would require the associated financial plans to cover at least 10 years. In the preamble, the justification suggested for the 10-year period concerns life-cycle and financial forecasting considerations. Given the current limited nature of federal funding, these reasons are not a persuasive bases for a major increase in regulatory burden that is not required by statute.

More specifically, any theoretical benefit from a ten year time frame for these plan elements pales compared to the realities that a State DOT faces, today or in the near future, in 1) developing a Statewide Transportation Improvement Program (STIP) of 4 years; 2) setting 4 year targets for the national-level performance measures; and 3) coping with the uncertainty surrounding transportation funding, which has largely been provided at the federal level in recent years through a series of short-term extensions, making the funding inherently unpredictable – and far less useful for asset management decision making.

The inconsistency with other requirements, and the difficulty it will cause for states, is striking. First, 23 USC 135 is the comprehensive planning provision that State DOTs are required to

address in their planning processes. The primary product of the planning process is the STIP that identifies specific projects to be constructed. Typically, the STIP is four or five years in duration and is fiscally constrained to funding available. Also, projects that are selected to go into the STIP are derived at the local and State level without approval from FHWA (see additional discussion on *Ensure the Prerogative of State DOTs to Select Projects* above). Any aspect of the asset management plan that goes beyond the length of the STIP becomes quite speculative, making the detail called for by the asset management plan proposed rule (with regard to funding) of limited if any value for decision support. In addition, it is highly burdensome for a State to have to compile the information for a period of ten or more years, and particularly troublesome as applied to years beyond the time period addressed in the STIP. While it certainly can be allowed as a state option to have asset management and related financial plans that are longer than 4 years, it should not be required.

Second, given the extensive requirements for life-cycle cost analysis in section 515.007(a)(2), and the fact that the pavement and bridge performance measure proposed rule requires states to focus on 4 year targets, the longer time period proposed for the asset management plan will not support and will have little bearing on the decisions and strategies adopted for making the best use of available resources. So, under the proposal, significant additional work could be required for speculative if any benefit.

Finally, transportation funding has not been consistent and long-term for some time. Recently, the general rule has been that federal funding has been provided through short term extensions. Requiring states to engage in speculative work addressing periods upwards of 10 years through an asset management and financial plan is not pragmatic given the more immediate realities and decisions that State DOTs currently face.

AASHTO recommends the following as it relates to the length of asset management plan requirements and their relationship to other planning documents:

- **Provide flexibility to State DOTs regarding the duration of the asset management and financial plans by not requiring a duration of more than four years for both plans while also specifying in the rule that inclusion of a longer term in the asset management or financial plan is permitted as a “state option.”**—Given that State STIPs are generally 4 or 5 years in length, targets under the proposed 23 CFR 490 Subparts C and D (bridge and pavement performance management rule) have a four year horizon, and a State DOTs performance plan has four year duration, some State DOTs may be able to better align their asset management plan and financial plan with a 4 year timeframe, and that should be the requirement; other states may be more comfortable with a longer duration timeframe, however, and that should be allowed to be included in the Federal asset management plan presented to FHWA for such a state at the option of the state.
- **Ensure that the STIP is where individual products are identified**—The asset management plan should not include specific projects but reference back to the STIP that is the singular document where individual projects are identified and described. FHWA

should remove all references to the Federal asset management plan containing individual projects.

5) KEEP THE EVALUATION OF EMERGENCY INDUCED DAMAGE SIMPLE AND LIMITED TO THE NHS

Periodic evaluation of facilities requiring repair or reconstruction due to emergency events highlights the need to be aware of past impacts and expenditures of federal emergency funds, consistent with section 1315(b) of MAP-21. The inclusion of Section 515.019 is consistent with AASHTO's recommendation that the implementation of 1315(b) be included as part of the asset management plan development process. However, AASHTO does have some concerns with the proposed language. First, the final rule should be less burdensome on the State DOT but still be consistent with MAP-21. Due to records availability and trying to research the past funds expended in emergencies, the evaluation time should be capped. Second, if a project is a safety project, it can be eligible under title 23 on virtually any public road. Therefore, the final rule should be revised to clearly limit the scope of the data collection and reporting burden to the NHS. Accordingly, proposed Section 515.019 should be revised to delete the reference to an "evaluation of all other roads, highways and bridges...." Substitute wording should limit the scope of the reporting obligation to NHS routes. Functionally classified local roads owned by cities and counties generally receive emergency federal funding directly from FEMA, and the State DOT may not have any visibility of the process or ability to compare previous design standards. Finally, the clarification in proposed Section 515.019(c), that the evaluation excludes federally owned facilities is critical and appreciated.

AASHTO recommends the following as it relates to the evaluation of emergency induced damage:

- **Ensure the asset management plan is only required to include a summary**—It is important to maintain in the final rule the wording in proposed Section 515.019(d) that makes clear that the asset management plan is to include a summary of the evaluation regarding emergencies, not the entire evaluation.
- **Limit the evaluation period to less than 40 years**—While a forty year period would roughly follow the Disaster Relief Act of 1974, AASHTO recommends a cap of less than 40 years. A cap of forty or more years would require research of older, non-computerized records.
- **Limit the assets to be included in the periodic evaluations to the NHS.**—AASHTO recommends that the scope of the routes to be included be limited to NHS routes, which would be consistent with the rest of the proposed rule.

6) CLARIFY THE TERMINOLOGY USED THROUGHOUT THE RULE

There are a number of terms used throughout the rule that are either undefined or used interchangeably. FHWA needs to clarify the terms discussed below:

Asset, Asset Class, and Asset Sub-Group

FHWA should include definitions of these terms in CFR Section 515.005 Definitions and use them consistently throughout the final rule. AASHTO recommends the following definitions be used:

- **Asset**—Property that is owned, operated, and maintained by a transportation agency. This includes all physical highway infrastructure located within the right-of-way corridor of a highway. The term asset includes all components necessary for the operation of a highway including pavements, highway bridges, tunnels, signs, ancillary structures, and other physical components of a highway. Inclusion of property within the scope of this definition does not mean that it is a property subject to the asset management plan requirements of this part.
- **Asset Group**—A collection of assets that serve a common function (e.g., roadway system, safety, IT, signs, lighting)
- **Asset Class**—A group of assets with the same characteristics and function (e.g., bridges, culverts, tunnels, pavement, guardrail).
- **Asset Sub-Group**—A specialized group of assets within an Asset Class with the same characteristics and function (e.g., concrete pavement or asphalt pavement)

“Desired Level of Condition” versus “Target Condition Level”

AASHTO has significant concerns with including in the NPRM and proposed rule both of the terms “Desired Level of Condition” and “Target Condition Level”. In general, AASHTO recommends removing from the proposed rule, and any discussion of it, any reference to a “desired” condition. The level of condition for roads and bridges made possible by the current and projected level of revenue is nowhere near the level of condition that State DOTs desire for the infrastructure they maintain. There likely will be significant gaps between a desired condition level and the ability of a State DOT to meet a target condition level given available resources. However, if the terms are to remain, AASHTO recommends that the term “desired condition” be defined as the state established targets for the asset group. The gap between the state-established target and the existing and future condition should be the only performance gap required to be analyzed. In many places throughout the proposed rule optimistic terms like “desired condition”, “desired state of good repair”, and “improve or preserve” are used. States realistically must focus on funding driven outcomes complemented by best asset management practices and decision-making. State DOTs should not be required to devote analysis time to investigating ideal conditions. Unless there is an adequate increase in funding, many state asset management plans will be focused on reducing or minimizing the rate of decline in pavement and bridge condition. AASHTO believes the use of overly optimistic and highly subjective terms in the rule will end up imposing a large and fruitless analytical burden on the States. It may also give the public an unrealistic expectation of future outcomes from expected funding. States can undertake additional analyses if they so choose, but such analyses should not be required.

Financially Responsible Manner

Proposed 23 CFR 515.005 and 515.007(a) include the undefined phrase “financially responsible manner.” The rule should preclude the definition of the term on a case by case basis, including in the Division offices. AASHTO recommends that FHWA create the following definition in 23

CFR 515.005 which would not have a meaning apart from compliance with the specified financial elements of 23 CFR 515:

“Financially responsible manner means that a state is deemed to be implementing an asset management plan in a financially responsible manner unless it is subject to denial of certification of processes under section 515.013 for specific requirement deficiencies pertaining to financial elements of the asset management plan and beyond the applicable cure period under 515.013(a).”

Long Term

There are several references in the NPRM to “long-term,” including two references in the proposed rule itself: the definition of asset management refers to a long-term assessment of the NHS (515.005); and bridge and pavement management systems must include formal procedures for identifying short- and long-term budget needs for managing the condition of NHS bridges and pavement assets. See 515.007(b)(4). Long-term is not defined. The longest term specifically noted in the NPRM is 10 years in relation to the coverage of the asset management plan. However, State DOTs are required to develop long term transportation plans for a minimum of 20 years per the Statewide and Nonmetropolitan Transportation Planning; Metropolitan Transportation Planning rules. AASHTO recommends that the rule allow each state to determine how long the term “long term” is. If FHWA should choose to clarify the meaning other than by deferring to states, the term should not be longer than what AASHTO has recommended for the asset management and financial plans (see discussion above).

Minimum Practicable Cost

The proposed rule includes a number of references to the “minimum practicable cost”. A definition should be added to establish that any purported requirement that an asset management plan achieve its objectives at a “minimum practicable cost” over the life of an asset is not referring to a hypothetical absolute minimum cost. Instead, as referenced in the definition of life-cycle cost, it should be clearly understood as referring to the state’s having undertaken asset management “with consideration for minimizing cost.” Otherwise, there is risk to a state of arbitrary implementation, through endless requests to try to achieve someone’s vision of an absolute minimum cost. This is not to suggest a lack of eagerness to minimize costs, but a desire to express that objective in a practical manner that respects State management prerogatives.

State of Good Repair

The NPRM includes a number of references to a “desired state of good repair.” Neither “state of good repair” nor “desired state of good repair” is defined. The NPRM on Assessing Pavement Condition for the National Highway Performance Program and Bridge Condition for the National Highway Performance Program creates a very detailed process for measures and setting targets. 23 U.S.C §119(e)(2), Performance Driven Plan, states “*A State asset management plan shall include strategies leading to a program of projects that would make progress toward achievement of the State targets for asset condition...*” Most documents use the term of achieving a target, not a state of good repair, and the final rule should change any and all references to a “state of good repair” or a “desired state of good repair” to references to “State target.”

7) THE PROPOSED RULE RESTS ON A FOUNDATION THAT GREATLY OVERESTIMATES ITS BENEFITS AND GREATLY UNDERSTATES ITS COSTS

The proposal in this docket rests on an overestimation of its benefits and underestimation of its costs. The cost to implement the requirements of the proposed asset management plan rule (in both money and time) will be significant. The costs are not only the direct costs of collecting data, analyzing data, and preparing the asset management plan document, but the process requirements of coordinating with numerous additional agencies and jurisdictions. Also, these requirements would place new burdens on the State DOTs themselves. While States are already practicing asset management, under the proposed rule State DOTs would become responsible for meeting or developing a process for meeting specific federal requirements for Performance Gap Analysis, Life Cycle Cost Analysis, Risk Management Analysis, 10 year Financial Plan, and Investment Strategies. In most State DOTs, the state does not own and operate all of the assets that would be required to be included in the asset management plans. In New Jersey, for example, NJDOT maintains 63% of the NHS and, in order to provide the 5 items listed above, each of their 21 counties, toll authorities, and a large number of their 500+ municipalities will have to provide financial data, 10 year funding plans, and performance data at a minimum for their individual components of the NHS. State DOTs have little understanding of the actual costs that will be associated with the level of coordination required to ensure asset management plans are equally effective for local agencies as they could be for states. These costs will be significant, and at a time when the public is eager for investment in projects, not for administrative costs.

However, in the NPRM, FHWA claims an approximately 10-1 benefit over cost ratio for this proposal. AASHTO believes that the benefit-cost analysis significantly overestimates benefits and underestimates the costs. As to benefits, the proposed requirements appear to be based on the inaccurate premise that States do not already undertake asset management or are not effective at the work they do. Many states are concerned that the framework for pavement and bridge performance management will actually impede their effectiveness at asset management and question the benefit assumptions of this proposed rule. The discussion in the NPRM at page 9247 seems to assume that the benefits to users from using asset management approaches to strategize and implement improvements to pavements and bridges would result from the rule and that states would not be undertaking asset management or making such investments absent the rule. But, as noted, States are already practicing asset management. The discussion in the Federal Register notice does not include any attempt to identify the increase in benefits that would result from implementation of this proposed rule by states that already have asset management practices. Yet, identifying the extent, if any, that FHWA's specific proposal would provide benefits over and above the benefits derived from the current asset management practices of states should be the heart of the analysis of possible benefits.

While benefits are overstated, costs are understated. Based on the discussion in the NPRM (see 80 Federal Register at 9246-47), FHWA is estimating costs of the initial asset management plan and three updates (over 12 years) at approximately \$40 million total for all 50 states, or something in the range of \$80,000 annually per state for 12 years. This amount vastly underestimates the professional staff time and other costs needed to comply with all of the items

in the proposed rule.¹ First, this estimate does not cover the cost to build (start-up effort), track, and report the asset management plan for a year under the proposed rule. Second, the estimate does not include all of the other staff work needed to support this system. Finally, it does not seem to consider that states will have to change various data collection and analyses processes in order to develop the specific type of asset management plan proposed by FHWA.

For example, in one low population state, the state's current pavement management system requires one full time employee and a data gathering contractor, at a cost of over \$450,000 per year, plus the bridge program and inspectors are \$275,000 per year. Specifics of any such example aside, implementation of the proposed rule would undoubtedly place upward pressure on a state's current asset management costs. In a more urban state with significant experience in asset management, the state DOT identified a minimum of 32 personnel who would be directly involved in the TAMP development, with the likelihood of many more. The estimate of 2,600 burden hours is significantly too low.

AASHTO is hopeful that, after FHWA reconsiders the costs and benefits of the proposal (as well as AASHTO's comments), FHWA's final rule in this docket will include significantly fewer and less extensive requirements than the current proposal. More specifically, AASHTO recommends the following as it relates to the cost of implementing the proposed asset management plan requirements:

- **Reassess the benefit cost analysis conducted as part of this NPRM**—AASHTO very strongly recommends that FHWA reassess the costs and benefits of these proposed requirements to be more realistic, including by basing them on the premise that substantial asset management work is already undertaken by the States. It is important to note that AASHTO is supportive of the implementation of transportation asset management principles and programs. However, the specific and detailed federal regulations for asset management set forth in the NPRM are too costly, complex, and burdensome at a time when states already practice asset management and financial resources for transportation are scarce.
- **Provide more flexibility and time to implement the federal asset management plan requirements**—AASHTO encourages FHWA to allow states more time to compile all the diverse data and information into a singular asset management plan and to develop their processes and first asset management plan that will be based upon the certification process.
- **Reduce the number and extent of proposed requirements, as recommended by AASHTO.** Reducing the requirements associated with this proposed rule would improve the benefit to cost ratio of the proposal over whatever it otherwise would be.

¹ At page 9248 FHWA estimates 2,600 burden hours per State for the initial plan and 1,300 hours for an update of the plan. Presumably this overlaps with the 12 year period referenced on page 9246. Basically, this seems to mean that implementing this rule is 6,500 hours over 12 years or about 542 hours annually, about one-quarter to one-third of a full time person's work load (of course, spread over multiple people). This seems low given the complexity of the rule unless much of this work is already being done and contrary to the apparent assumption used to estimate benefits.

8) MAKE CONSISTENT THE ASSETS REQUIRED IN 23 CFR 490 AND 23 CFR 515

The requirements of the asset management plan NPRM (23 CFR 515) are closely linked with the requirements of the National Performance Management Measures; Assessing Pavement Condition for the National Highway Performance Program and Bridge Condition for the National Highway Performance Program rulemaking (23 CFR 490 Subparts C and D). This linkage includes conducting performance gap and life-cycle cost analyses based upon the targets established for the bridge and pavement assets under 23 CFR 490 Subparts C and D. Because of this tight coupling of the two rules, AASHTO believes that only the assets required under 23 CFR 490 should be required in 23 CFR 515. This includes limiting pavement assets to the Interstate and Non-Interstate NHS rather than all pavements and bridges that carry the NHS rather than all NHS bridges. AASHTO recommends that FHWA make clear in the final rule under the definitions, that the assets required to be included in the asset management plans are only those that State DOTs must establish targets for in 23 CFR 490. The inclusion of other assets, asset classes, asset groups, or asset sub-groups is solely optional and at the discretion of the State DOT.

SECTION-BY-SECTION COMMENTS

515.001 PURPOSE

AASHTO would amend this section to read “Purpose and Scope” and add a new subsection (f), to better preserve state prerogatives in target setting and project selection. See text under Principal Comment *Ensure the Prerogative of State DOTs to Select Projects*.

515.003 APPLICABILITY

AASHTO has no comments on this section.

515.005 DEFINITIONS

ASSET CONDITION

The definition should be changed to the following to remove the linkage to expected or desired physical condition:

“Asset condition *means the actual physical condition of an asset.*”

ASSET MANAGEMENT PLAN

Please see the *Clarify the Terminology Used Throughout the Rule. Financially Responsible Manner* discussion under the Principal Comments section.

INVESTMENT STRATEGY

AASHTO recommends that FHWA simplify the definition to reference a singular strategy rather than a “set of strategies.” The singular use will allow a state to pursue more than one strategy if it so chooses but would not *require* it to pursue more than one, with the attendant costly burden. Also, AASHTO recommends that the investment strategy relate specifically to the targets established by the State DOT rather than state of good repair, or some other condition level or system performance that is not defined. Finally, the definition needs to indicate that an investment strategy is constrained by the Financial Plan.

AASHTO recommends that following definition be used:

“Investment strategy *means a strategy resulting from an analysis of funding availability to achieve the performance targets established by the State DOTs and constrained by the financial plan.*”

PERFORMANCE GAP

AASHTO recommends that FHWA include language in the definition to indicate that reducing the performance gap can also be achieved through other means, such as operations. While gaps between the targets and the current condition of bridges and pavements may only be fixed with physical improvements, there may be operational improvements that may reduce those gaps in the future. The current definition may not allow the use of operational improvements in reaching a state’s targets. For example, some states have regulations that trucks use only the left lane of an Interstate Highway in order to slow the deterioration of the normal driving lane. While most

operational changes do not belong in the asset management plan, making it so restrictive should be reconsidered and flexibility should be provided.

515.007 PROCESS FOR ESTABLISHING THE ASSET MANAGEMENT PLAN

(a)(1) The proposed rule correctly describes the “minimum” gap analysis required solely with reference to the gaps, if any, between current conditions and the state’s targets. The possibility that there is a “desired state of good repair,” or an improved or preserved condition, that is separate and distinct from the state’s targets is not referenced in the description of the “minimum” gap analysis. Nor does the NPRM seem to discuss it elsewhere with respect to an action that a state must take. AASHTO believes that the state’s targets should be the only benchmarks for gap or other analysis. There should not be a separate gap analysis requirement with respect to “improving or preserving the NHS” or achieving a “desired state of good repair.”

In addition, the proposed rule is expansive with regards to the MAP 21 language requiring risk based transportation asset management plans in that it is requiring TAMPs to address freight and system performance targets that are currently undefined and may require investments to other than highway and bridge assets to meet their target levels (e.g., rail freight investments may reduce truck related freight bottlenecks; travel demand management and transit investments may address highway reliability issues). Currently, the relationships between the system performance measures and program improvements are not well established. Further, it would put greater pressure on State DOTs to include other assets (e.g., ITS, pavement markings, signage, and safety assets) for which robust inventory and condition assessment methods may not currently exist.

For these reasons, AASHTO recommends striking section 515.007(a)(1)(ii), a provision that may require an analysis of gaps that are not fiscally constrained. However, some states may desire to undertake gap analyses beyond those that would be required by the proposed rule, such as a gap analysis between current condition and a concept other than the state’s target. FHWA should make clear in the discussion accompanying issuance of the final rule that nothing in the rule would prohibit a state from undertaking such non-required work or providing it to FHWA for information.

(a)(2) Please see the *Clarify the Terminology Used Throughout the Rule. Asset, Asset Class, and Asset Sub-Group* discussion under the Principal Comments section.

(a)(2)(ii) AASHTO is concerned that requiring deterioration models for each asset class or asset subgroup would discourage State DOTs from including other assets in the plans beyond the required pavements and bridges. Accurate and proven tools to forecast asset deterioration as well as the impacts of various types of investments will be required for states to be successful at delivering results within the national framework for performance management. AASHTO recommends that FHWA make this requirement optional for assets beyond those required by MAP-21.

(a)(2)(iii) The granularity of data required down to the “relative unit cost” for a specific work type is unreasonable, especially for system level analysis. Many State DOTs will have difficulty

obtaining this type of information as their current financial management systems for maintenance projects may not effectively capture the costs associated with specific work types.

(a)(3)(i) The identification of risks should be determined by the State DOT. AASHTO recommends that this section be changed to the following:

“Identification of risks that the state considers as representing a more than remote risk of affecting NHS condition and effectiveness as they relate to the safe and efficient movement of people and goods, including any such risks considered by the state to be more than remote associated with current and future environmental conditions, such as extreme weather events, climate change”

(a)(4) Delete references to “work type”. That would require great detail, inconsistent with a system level analysis.

(a)(4)(i) and (ii) AASHTO recommends that FHWA clarify the differences, if any, between these two requirements because as currently written, the “estimated cost of expected future work” [(a)(4)(i)] should be the same as the “estimated funding levels that are expected to be reasonably available” [(a)(4)(ii)]. In other words, the work to be performed should align with the available funding.

(a)(4)(iv) AASHTO does not believe that estimating a value of the agency’s assets is useful or desirable, or should be a requirement under the FHWA’s asset management rule. Rather, AASHTO recommends that FHWA simply require the State DOT to include a discussion on the needed investment on an annualized basis to maintain their assets to meet the targets established in CFR 490 Subparts C and D.

(b) AASHTO has four concerns regarding the definition of the minimum requirements for bridge and pavement management systems. First, AASHTO believes that these minimum system requirements could be required of other asset classes if a State DOT voluntarily chooses to include them in their asset management plans. AASHTO encourages FHWA to include language in this section stating that if a State DOT includes other asset classes, a similar management system is not required with respect to those other assets.

Second, AASHTO is concerned about the use of the word “formal”. This term is not defined and could be open to varying interpretation, including by division offices. If FHWA defines formal as being a single software program that includes the six requirements listed in (b)(1) through (b)(6), then AASHTO is concerned that no “formal” bridge management system currently exists. AASHTO recommends that FHWA remove the word “formal” and include language referencing a process, procedure or framework that is used to address the six requirements. This would provide the State DOTs with flexibility in developing their own approach to addressing the six requirements.

Third, FHWA should make clear that these requirements are at a system or asset class level, not at a project or asset sub-group level. For example, 515.007(b)(3) could be interpreted such that a

separate life cycle cost analysis be conducted for each NHS asset. Accordingly, AASHTO recommends the following revisions:

“These bridge and pavement management systems are required at the system or asset class level, though they may include project level information at State option, and shall include, at a minimum, procedures and formats determined by the state for:”

Fourth, the assets that are subject to the minimum system requirements must be consistent with the assets that are included in the *National Performance Management Measures; Assessing Pavement Condition for the National Highway Performance Program and Bridge Condition for the National Highway Performance Program* rulemaking. Thus, bridges would be limited to bridges carrying the NHS. Please see the *Make Consistent the Assets Required in 23 CFR 490 and 23 CFR 515* discussion under the Principal Comments section.

(b)(3) AASHTO believes that FHWA is referring to life cycle cost analysis (LCCA) and not life-cycle benefit-cost analysis.

(b)(4) Short-term and long-term should be defined. Please see the *Clarify the Terminology Used Throughout the Rule, Long Term* discussion under the Principal Comments section.

The term “budget needs” should be defined. As written, it is unclear to what end a State must identify “budget needs.” Logically, this should be limited to the budget needed to achieve the targets established by the State DOT for NHS bridge and pavement condition (unless the State has voluntarily included additional assets in the plan).

(b)(5) The phrase “the optimal strategies” should be removed as it is highly subjective and could result in second-guessing of a State by FHWA in terms of what is “optimal.” Instead, the reference should be to “a strategy.” A strategy can have more than one element. The rule should not require multiple “strategies.”

(c) AASHTO recommends that this subsection be included in CFR 515.009 that discusses the asset management plan requirements rather than the process for developing the asset management plan.

515.009 ASSET MANAGEMENT PLAN REQUIREMENTS

(a) The proposed rule should include specific language stating that without sufficient financial resources, establishing an asset management plan may not enable a State DOT to “...improve or preserve the condition of the assets and improve the performance of the NHS...”. Improving future conditions or preserving existing conditions requires sufficient financial resources. And, the targets established by the State DOT should account for the availability of those financial resources. The recognition that targets can indicate a decline in asset performance (whether due to inadequate funding or otherwise) must be made in the text of the final rule. Please see the *Transportation Asset Management Plans Should Accommodate Strategies Calling for Declining Asset Conditions and Performance* discussion under the Principal Comments section.

(c) In issuing the final rule in this docket FHWA must make clear that in this section and similar provisions in the proposed rule, it is referring to what a state must do if it includes more than the minimum covered assets in the asset management plan that it submits to FHWA for review. The language in the rule has the effect of driving a state to prepare one asset management document for FHWA that includes only the bare minimum required by rule, and, to the extent that state does other asset management work, discuss that other work only in a separate document that is not submitted to FHWA for review under this rule. AASHTO believes that the State must always be free to develop asset management initiatives for assets not covered by the FHWA rule and must be free to address them any way that it wants for its own purposes. That should be made clear in the final rule. One way would be to revise the definition of “asset management plan” to make clear that, as used in the rule, it refers to the plan (or part of a broader asset management plan) that the state “submits to FHWA for review under this part”. AASHTO recommends changing the language to avoid discouraging a State DOT from including other assets and asset classes in the asset management plan that the State presents to FHWA. Please see the *Do Not Discourage State DOTs from Including Other Asset Classes in the Asset Management Plans Presented to FHWA* discussion under the Principal Comments section.

(d) Proposed 515.009(d)(3) specifies that the State DOT is required to include the summary listing information for all assets required under this NPRM regardless of ownership. AASHTO is concerned that the State DOTs will be required to include information about assets which they do not own. Since the authority, investment strategies and financial plans of the MPOs, NPS, BIA, or other NHS owners are variable, AASHTO believes that it should not be the responsibility of the State DOT to include information about assets which they do not own. Accordingly, AASHTO recommends striking from section 515.009(d)(3) the phrase “*...regardless of ownership of the pavement and bridge assets.*” and adding a new Section 515.001(f)(2) that states the following:

“The requirements of this rule only apply with respect to the assets owned by the State DOT.”

(e) Please see the *Make Clear How State DOTs are to Link the Transportation Asset Management Plans with Other Planning Documents* discussion under the Principal Comments section.

(f) The Asset Management Plan should be a system level plan based on expected funding the state can allocate to the NHS. Specific projects or segments should not be required to be discussed. Please see the *Make Clear How State DOTs are to Link the Transportation Asset Management Plans with Other Planning Documents* discussion under the Principal Comments section. AASHTO recommends the following change:

“An asset management plan shall establish and discuss state determined strategies leading to a program of projects that would:”

(h) AASHTO is concerned that the apparently non-binding language, that a State “should select such projects for inclusion in the STIP to support its efforts to achieve the goals in paragraphs

(f)(1) through (4) of this section,” could be misinterpreted by division offices. AASHTO believes that it needs to be made clearer that: 1) project selection is a state, not a federal prerogative; 2) this section is non-binding; and 3) this section does not require that the STIP consist entirely of “such projects” or that all such projects be included in the STIP.

(i) AASHTO supports providing the asset management plan to the public. AASHTO also supports that nothing else in this NPRM would create any new or additional public involvement requirement.

515.011 PHASE-IN OF ASSET MANAGEMENT PLAN DEVELOPMENT

AASHTO is generally supportive of the phase-in language as written. However, AASHTO does recommend that FHWA include enough flexibility under 515.011(c) to account for unintended consequences or other unknowns associated with developing the asset management plans and integrating the bridge and pavement targets.

In (b)(3) the cross reference appears to be incorrect and should be to 515.007(a)(4).

515.013 PROCESS CERTIFICATION AND PLAN CONSISTENCY REVIEW

(b)(2) State DOTs will need more than 90 days in order to coordinate with other agencies and MPOs. AASHTO recommends a minimum of 180 days.

(c) AASHTO has three concerns with this subsection. First, AASHTO is concerned about the criteria FHWA intends to use in order to make a consistency determination. It appears from the language in the preamble (page 9243) that FHWA intends to establish new authority and oversight of state project selection as part of this consistency determination (see principal comment #3 for more on this concern). In addition, the proposed language does not allow state DOTs the opportunity to appeal, rebut, or correct the findings of a consistency determination. There may be instances where a state is subject to a negative determination on the basis of inaccurate or outdated information. This situation will result in a reduced federal share when it could be easily and quickly corrected. Thirty days may be too short a time period for states and FHWA to work together to address a negative determination prior to the start of a fiscal year. AASHTO recommends following as it relates to consistency determinations:

- Add language to address options for states that receive a negative determination.
- Extend the period between the determination and the start of the next fiscal year to 60 days.
- Clarify the scope of the review FHWA intends to undertake to make a consistency determination by changing the third sentence in section 515.013(c) to the following:

“The FHWA will review a State DOT’s asset management plan to ensure that it was developed with the processes certified under this section and is consistent with 23 USC 119 (e).”

Second, this section requires State DOTs to submit evidence to demonstrate implementation of the asset management plan on an annual basis at which point FHWA will assess whether the

implementation is consistent with 23 U.S.C. 119. This in effect means the asset management plan and its execution will be reviewed by FHWA on an annual basis. AASHTO believes this is rather onerous given that certification process must be approved every 4 years. Furthermore, the evidence that FHWA requests (as discussed in the preamble) to determine if the plan has been implemented is to validate the selection of projects. AASHTO is concerned that this approach inserts FHWA into the approval of project selection within the STIP since the projects that are implemented will have to come from the STIP. Rather than focusing on a separate annual submission process for the implementation of the asset management plan, AASHTO believes that there are many methods that could be used to demonstrate successful implementation of the asset management plan. For example, if a State DOT meets their targets established under CFR 490 or is determined to have made significant progress according to FHWA in achieving their targets are but two examples. The State DOT should be able to demonstrate other methods as well.

Third, AASHTO recommends that FHWA explicitly indicate that current data available to the State DOT be used in the development of the asset management plan. AASHTO would recommend the following:

“(e) State DOTs should use current data when performing analyses and developing the plan.”

515.015 PENALTIES

Given the significant additional work involved in State implementation of asset management rules, and the potential for uncertainty in implementation, even if all of AASHTO’s comments are accepted by FHWA, we recommend that FHWA limit the penalties in the rule to the match reduction expressly noted by Congress in 23 USC 119(e). If that cannot be achieved, we would add flexibility to proposed 515.015(b)(2), as set forth below.

(b)(2) AASHTO supports the extension that FHWA may give to State DOTs in developing their asset management plans. This is a new era and there are many unknowns. However, AASHTO would recommend that FHWA include a clause that penalties would not be imposed until the first recertification of the asset management plan.

515.017 ORGANIZATIONAL INTEGRATION OF ASSET MANAGEMENT

This section encourages certain practices but does not require them: States “should” undertake certain practices. The concern of AASHTO is that there is risk that, in practice, FHWA will pressure States to take non-required steps set forth in this section. AASHTO believes that it is the prerogative of each State how they set up and implement an asset management program. If FHWA wants to provide supplemental guidance, best practices and suggestions on how an asset management program should be implemented, this should be accomplished outside of the rulemaking process. AASHTO recommends that this entire section be deleted.

**515.019 PERIODIC EVALUATION OF FACILITIES REQUIRING REPAIR OR
RECONSTRUCTION DUE TO EMERGENCY EVENTS**

Please see the *Keep the Evaluation of Emergency Induced Damage Simple* discussion under the Principal Comments section.

As a technical matter, the cross reference in 515.019(d) appears to be incorrect and should be to 515.007(a)(3).

AASHTO RESPONSE TO FHWA REQUESTS

FHWA REQUEST FOR COMMENT ON THE FOLLOWING AREAS:

- 1) Information on the quantitative benefits and costs of asset management.***

Please see the discussion under the Principal Comment *The Proposed Rule Rests on a Foundation that Greatly Overestimates Its Benefits and Greatly Understates Its Costs.*

- 2) Proposed definitions.***

Please see the comments provided under the Section-by-Section comments under *515.005 Definitions*.

- 3) Whether the specified standards for bridge and pavement are appropriate.***

Please see the comments provided under the Section-by-Section comments under *515.007(b)*.

- 4) Whether States should be required to include tunnels in the asset management plans.***

AASHTO does not support the inclusion of the tunnels in the asset management plans required under this rulemaking. Anticipated new inspection rules for tunnels have not yet been proposed. Until those rules are finalized, financial plans and investment strategies with respect to tunnels would be quite speculative. The rule should provide that tunnels need not be included in these plans until some transition period (such as two years) after the effective date of new tunnel inspection rules.

- 5) Whether the proposed phase-in approaches are desirable and workable.***

AASHTO believes that a phase-in approach is desirable. AASHTO agrees that the initial plan may exclude one or more of the three items listed (life-cycle cost analysis, risk management analysis, and financial plan analysis). AASHTO agrees that the 18 month extension to include the national-level measures, which may be extended if requested, is desirable. Please see additional comments provided under the Section-by-Section comments under *515.011*.

- 6) Feedback on the proposed certification process and consistency determination.***

Please see the comments provided under the Section-by-Section comments under *515.013*.

- 7) Whether the date of August 31 for consistency determinations is needed and if it provides adequate time before the next fiscal year. What is an appropriate effective date?***

AASHTO believes that thirty days may be too short a time period for states and FHWA to work together to address a negative determination prior to the start of a fiscal year. AASHTO would recommend a minimum of sixty days.

- 8) The FHWA considered nine principles in this NPRM and encourages comments on the extent to which this approach to performance measures, set forth in this NPRM, supports the principles discussed above.***

AASHTO appreciates the nine principles that FHWA developed in considering this NPRM. The primary concern of AASHTO with regard to current implementation is Section 515.007(b) that discusses the bridge and pavement management system requirements and the readiness of

systems to meet these requirements. Please see additional comments provided under the Section-by-Section comments under 515.007(b).

9) *Anticipated problems in identifying projects that meet the requirements of 23 U.S.C. 119(e)(2) (being a performance driven plan) and ideas for resolving problems.*

Please see the discussion under the Principal Comment *Ensure the Prerogative of State DOTs to Select Projects.*

10) *Whether the rule should specify one or more methods State DOTs could use to identify projects that meet the 23 U.S.C. 119(e)(2) requirements.*

Please see the discussion under the Principal Comment *Ensure the Prerogative of State DOTs to Select Projects.*

11) *Other possible approaches to determining whether a State DOT has implemented its asset management plan.*

Please see the comments provided under the Section-by-Section comments under 515.013(c).

12) *Potential alternative methods for meeting the §1315(b) requirements (i.e. “periodic evaluations”).*

Please see the discussion under the Principal Comment *Keep the Evaluation of Emergency Induced Damage Simple.*

SECTION 1513(B) AND 515.019

1) *Is the amount of time allotted in proposed section 515.019 for the initial evaluation of NHS assets and other assets included in the State DOT asset management plan (2 years), and for all other roads, highways, and bridges (4 years), appropriate? If not, how much time should be allotted?*

Aside from time, the requirements themselves should be curtailed. In 515.019(c) AASHTO would delete the sentence: “The State DOT must complete the evaluation for all other roads, highways, and bridges meeting the criteria for evaluation not later than [date four years after the effective date of the final rule], excluding federally owned facilities.” The data for non-state owned facilities may not be available or extremely difficult to obtain.

2) *Is the 4-year general update cycle for the statewide evaluation appropriate? If not, what would be a reasonable cycle for the ongoing periodic evaluation required under section 1315(b)?*

An exemption from providing an update should be provided if, during the period, the state does not experience an applicable disaster over a certain financial threshold, such as \$1,000,000.

3) *Should the FHWA establish a limit to the length of the “look back” State DOTs will do in order to determine whether a road, highway, or bridge has been repaired or reconstructed on two or more occasions? If so, what would be an appropriate and feasible length of time?*

AASHTO recommends limiting the evaluation period to less than 40 years. While a forty year period would roughly follow the Disaster Relief Act of 1974, AASHTO recommends a cap of less than 40 years. A cap of forty or more years would require research of older, non-

computerized records. Please see the discussion under the Principal Comment *Keep the Evaluation of Emergency Induced Damage Simple and Limited to the NHS*.

4) *Should the regulation address the types of data sources that should be considered to determine whether a road, highway, or bridge has been repaired or reconstructed on two or more occasions? If so, what types of data sources would be most appropriate?*

No. Defer to the States.

5) *Should the rule specify required content for the evaluations in greater detail? If so, what elements ought to be required?*

No. Defer to the States.

6) *Should the regulation require the State to consider the section 1315(b) alternatives evaluation prior to requesting title 23 funding for a project?*

AASHTO does not agree with the need to insert additional requirements. The purpose of 1315(b) is to reduce the regulatory burden to facilitate rapid repair or replacement of transportation infrastructure during an emergency and restore the free movement of people and goods. Developing alternatives may take months or even years to complete, which is contrary to rapidly responding to an emergency and restoring the functionality of the transportation system. A State DOT's primary goal is to get a damaged facility (or at least one lane back) open as quickly as possible to allow for the safe movement of people and goods. A State DOT will then analyze interim improvements and whether the location is susceptible to another failure.

7) *Should the regulation address when and how FHWA would consider the section 1315(b) alternatives evaluation in connection with an FHWA project approval?*

Please see the discussion under the Principal Comment *Keep the Evaluation of Emergency Induced Damage Simple*.

PROPOSED CHANGES TO TEXT

Section	Changes Recommended by AASHTO
515.001(f)(1)	(f) Scope. (1) Nothing in this part authorizes the disapproval of project selection by a State or the disapproval of a target set by a State for pavement or bridge performance.
515.001(f)(2)	(2) The requirements of this rule only apply with respect to the assets owned by the State DOT.
515.005	<p><i>Asset condition</i> means the actual physical condition of an asset in relation to the expected or desired physical condition of the asset.</p> <p><i>Investment strategy</i> means a set of strategies that result from evaluating various levels of funding to achieve a desired level of condition to achieve and sustain a state of good repair and system performance at a minimum practicable cost while managing risks strategy resulting from an analysis of funding availability to achieve the performance targets established by the State DOTs and constrained by the financial plan.</p> <p><i>Asset management plan</i> means a document that describes how a State DOT ... The term asset management plan under this part is the risk-based asset management plan that is required under 23 U.S.C. 119(e) and is intended to carry out asset management as defined in 23 U.S.C. 101(a)(2). As used in this part, the term asset management plan refers to the plan that the state submits to FHWA for review under this part.</p>
515.007(a)(1)(ii)	The gaps, if any, in the effectiveness of the NHS in providing for the safe and efficient movement of people and goods where it can be affected by physical assets;
515.007(a)(3)(i)	Identification of risks that the state considers as representing a more than remote risk of affecting can affect the NHS condition and effectiveness as they relate to the safe and efficient movement of people and goods, including any such risks considered by the state to be more than remote associated with current and future environmental conditions, such as extreme weather events, climate change, seismic activity, and risks related to recurring damage and costs as identified through the evaluation carried out under § 515.019
515.007(b)	Each State DOT shall use bridge and pavement management systems to analyze the condition of Interstate highway pavements, non-Interstate NHS pavements, and NHS bridges in accordance with 23 U.S.C. 150(c)(3)(A)(i), for the purpose of developing and implementing the asset management plan required under this part. These bridge and pavement management systems shall include, at a minimum, formal procedures for These bridge and pavement management systems are required at the system or asset class level, though they may include project level information at State option, and shall include, at a minimum, procedures and formats determined by the state for:
515.007(b)(5)	Determining a strategy the optimal strategies for identifying potential projects for managing pavements and bridges;

Section	Changes Recommended by AASHTO
515.009(a)	A State DOT shall develop and implement an asset management plan to improve or preserve the condition of the assets and improve the performance of the NHS in accordance with the requirements of this part. If the State DOT elects to include other public roads in its plan, all asset management process and plan requirements in this part shall apply. The State DOTs are encouraged to include other assets associated with public roads in its plan and if they do, are encouraged but not required with respect to such other roads to follow all asset management process and plan requirements in this part. Asset management plans must describe how the State DOT will carry out asset management as defined in §515.005.
515.009(c)	In addition to the assets specified in paragraph (b) of this section, State DOTs are encouraged, but not required, to include all other NHS infrastructure assets within the right-of-way corridor. Examples of other assets include tunnels, ancillary structures, and signs. If a State DOT decides to include other such assets on the NHS in its asset management plan, or to include assets on other public roads, the State DOT <ins>is encouraged, but is not required, to evaluate and manage those assets consistent with the provisions of this part.</ins>
515.009(d)(3)	A summary listing of the Interstate pavement assets, non-Interstate NHS pavement assets, and NHS bridge assets, including a description of the condition of those assets, regardless of ownership of the pavement and bridge assets.
515.009(f)	An asset management plan shall establish and discuss <ins>state determined strategies</ins> a set of investment strategies leading to a program of projects that would:
515.009(h)	A State DOT should <ins>may</ins> select such projects for inclusion in the STIP to support its efforts to achieve the goals in paragraphs (f)(1) through (4) of this section.
515.013(c)	The FHWA will review a State DOT's asset management plan to ensure that it was developed with the processes certified under this section and is consistent with other applicable requirements in this part <ins>23 USC 119(e)</ins> .
515.013(e)	<ins>(e) State DOTs should use current data when performing analyses and developing the plan.</ins>