

March 9, 2020

U.S. Department of Transportation
Dockets Management Facility
1200 New Jersey Avenue SE
West Building Ground Floor, Room W12-140
Washington, DC 20590-0001

Subject: Federal Docket No. FHWA-2017-0047. National Bridge Inspection Standards (NBIS)
Notice of Proposed Rulemaking, Request for Comments

The American Association of State Highway and Transportation Officials (AASHTO) has reviewed the proposed rule on the update to the National Bridge Inspection Standards (NBIS) and offers the following comments. The comments are structured into three sections: the first section contains an overview of the proposed changes, the second section contains specific comments on the proposed rule, and the third section contains specific comments on the proposed *Specifications for the National Bridge Inventory* (SNBI). These comments were developed with the assistance of the Committee on Bridges & Structures, the T-18 Technical Committee on Bridge Management, Evaluation, and Rehabilitation, and the AASHTOWare Bridge Task Force.

Overview

AASHTO concurs with the Federal Highway Administration (FHWA) that regular and thorough bridge inspections are vital to maintaining safe bridge operation and preventing failures. AASHTO also agrees that data from these inspections is a fundamental component for evaluating bridge safety and maintaining asset management programs. There are, however, significant areas of concern with the proposed rule and the proposed SNBI. State DOTs utilize their highly constrained resources to repair and maintain bridges to ensure bridge safety and efficient freight movement for the traveling public. AASHTO strongly encourages FHWA to carefully consider the absolute need for each change and to balance the perceived benefits to all parties with the impact on the resources need to implement that change.

Legal Authority

The proposed rule expands the NBIS to some privately-owned bridges. States do not have the legal authority to access these bridges for inspection, nor the ability to force the owner to have the bridges inspected. Without that authority, states are caught between private property rights and federal regulations. This issue must be addressed before privately-owned bridges can be added to the NBIS.

Mandatory criteria

The proposed rule establishes new mandatory criteria in some situations, and expands the current mandatory criteria in others (see specific rule comments for details). This rulemaking increases the training requirements for everyone involved in the bridge inspection process, yet at the same time removes their ability to use their experience and judgment in assessing bridges and determining the potential hazard to the public. States expect these changes to result in unnecessary inspections and bridge closures, leading to increased state DOT expenditures and delay to the traveling public with no commensurate increase in safety.

Element-level inspection

AASHTO is overall supportive of the move to element-level inspection and data reporting for NHS bridges. It must be noted, however, that it will not be cost effective for all states to move to element-level inspection for non-NHS bridges.

Risk-based bridge inspection

The establishment of risk-based criteria for determining inspection frequency has the potential to result in cost savings for the states while maintaining the same level of safety for the traveling public. The establishment of those criteria is a resource intensive exercise, however, that many states will be unable to conduct. In addition, the risk-based criteria as proposed are more stringent than those currently allowed by FHWA on a state-by-state basis. The net result of the rulemaking may be a decrease in the number of bridges inspected on these risk-based intervals, resulting in an increase in cost to the states as opposed to the intended decrease.

Load posting requirement

The 30 day load posting requirement is an obligation that is challenging for many states to meet, and almost impossible for many localities. When the National Tunnel Inspection Standards (NTIS) were adopted, this requirement was feasible due to the low number of tunnels requiring load rating and the fact that those tunnels are rarely owned by local governments. While MAP-21 requires that the NTIS and the NBIS be consistent, the solution is to establish a reasonable time frame in this rulemaking and then change the NTIS.

SNBI

The new coding guide incorporated into the rulemaking by reference adds a number of new data reporting items to the current list and changes how some current data items are reported. Much of this data is difficult and time-intensive to obtain, and is of little use in safety or asset management evaluations. Major changes to how the current coding items are reported will make it impossible to accurately show changes over time for both individual bridges and the bridge inventory as a whole. While some changes may be beneficial for the sake of clarity or ease of data gathering, most of the proposed changes do not fall into this category. These changes in data requirements will require states to completely revise their inspection procedures, guides, and databases, which will require substantial financial and time resources. The changes will also increase the resources needed for every inspection on every bridge going forward.

Overall costs

Taken as a whole, the increase in mandatory inspection and bridge closing criteria and the additional reporting requirements pose a significant increase in costs to the states. In addition, changes to the AASHTOWare Bridge Management software, which is used by over 40 states, are estimated to cost millions of dollars. This expense will also be borne by the states. The “Estimated Cost of the Proposed Rule” analysis in no way captures the actual expenditures the states anticipate implementation will require, as well as the future annual costs of the increased inspection and data reporting requirements. The limited resources of the states’ bridge programs should be focused on repairing the bridges in need of repair instead of gathering data of little use in managing those programs.

Timeframe

Due to the extensive changes proposed and the significant expense that will be incurred by the states, AASHTO recommends that the first inspection under the new NBIS and SNBI be required no sooner than 2 full inspection cycles (at least 4 years) from the date of the final rule.

Future rulemaking

Due to the extensive number of changes that need to be made to the proposed rule and the SNBI, AASHTO requests that another NPRM be conducted prior to the issuance of the final rule.

Conclusion

Once again, AASHTO greatly appreciates the opportunity to provide comments on the draft rule and encourages FHWA to carefully consider the input provided herein, as well as detailed comments submitted by the individual states. If you have any questions on these comments and recommendations, please contact Ms. Patricia Bush, P.E., at 202-624-8181 or pbush@ashto.org.

Sincerely,



Patrick K. McKenna
President
Director, Missouri Department of Transportation

SECTION COMMENTS

Comments are in order as 23 CFR Part 650 reads. Comments and recommendations may only be listed once, but should be taken to apply to each reference of the word, phrase, or provision.

650.303 Applicability

- The addition of privately-owned bridges to the NBIS reporting requirements poses several legal concerns for states. States do not believe they have the legal authority to require bridge inspections and reporting for privately-owned bridges. States are also concerned that they may not have the legal authority to enter private property for an inspection. There is confusion on what is intended to be included in the “privately-owned bridge” category. For example, are bridges owned by railroads to be included? Does a privately-owned bridge on a private road that connects on both ends to public roads included? The possibility that states may suffer consequences for not complying with requirements that they are legally unable to comply with does nothing to increase the safety of the traveling public.

Recommendation: AASHTO strongly recommends removing the “privately-owned bridges” provision from this proposed rule.

Section 650.305 Definitions

AASHTO has comments on several of the defined terms:

- Bridge inspection experience. AASHTO supports the proposed changes that broaden the types of experience acceptable for bridge inspectors, and recommends that bridge load rating and in-service bridge evaluation experience be included as well.
- Inspection Report. Many states complete their inspection reports in an electronic format which does not allow for traditional signatures. The wording of this proposed definition could be interpreted as requiring each report to be printed and hand signed by the team leader. AASHTO recommends that the language be changed to “approved by a team leader.”
- Load Posting. The proposed definition refers to the “maximum vehicular live load which the bridge may safely carry.” 23 U.S.C §127 *Vehicle Weight Limitations – Interstate System* refers to “overall gross weight” and “axle weight”. These should be consistent. AASHTO recommends changing the proposed definition to read “...which represent the maximum overall gross vehicle weight or axle weight which the bridge may safely carry”.
- Nationally certified bridge inspector. This term is misleading in that there is no national certification body, nor is FHWA proposing in this rulemaking to establish one. AASHTO recommends removing the word “nationally” from the phrase.
- Nonredundant member. This definition could use some clarity. One interpretation of it is that the member without load path redundancy has to be demonstrated through an FHWA-approved process, which is unnecessary. The phrase “other redundancy” is also causing some confusion.

Section 650.307 Bridge inspection organization responsibilities.

- Subsection (a) reiterates the addition of private bridges to the state responsibilities. The addition of privately-owned bridges to the NBIS reporting requirements poses several legal concerns for states. States do not believe they have the legal authority to require bridge inspections and reporting for privately-owned bridges. States are also concerned that they may not have the legal authority to enter private property for an inspection. There is confusion on what is intended to be included in the “privately-owned bridge” category. For

example, are bridges owned by railroads to be included? Does a privately-owned bridge on a private road that connects on both ends to public roads included? The possibility that states may suffer consequences for not complying with requirements that they are legally unable to comply with does nothing to increase the safety of the traveling public.

Recommendation: AASHTO strongly recommends maintaining the “located on all public roads” provision in this proposed rule.

- Subsection (d) appears to eliminate the duplication of effort regarding inspection responsibilities for border bridges.

Recommendation: AASHTO supports this provision. AASHTO further recommends that reporting responsibilities be included in this provision. This would allow one state to gather, report, and maintain the data instead of both.

- Subsection (e)(4) requires that states “maintain a central registry of nationally certified bridge inspectors”. There is no national certification body, nor is FHWA proposing in this rulemaking to establish one. As such, there can be no “nationally certified bridge inspectors”. In addition, state-specific inspector qualification requirements vary. These qualifications may exceed the current and proposed language in this rulemaking, thus an inspector qualified in one state may not be qualified in another.

Recommendation: AASHTO recommends that each state only be required to maintain a list of inspectors qualified to perform inspections within that state.

- Subsection (e)(4) also requires states to include in their registry, among other things, “...inspector’s current contact information, and detailed information about any adverse action...” States have no way of knowing if a bridge inspector has moved or changed firms, resulting in a change of address. In addition, the term “adverse action” is vague, which may lead to confusion and inconsistent definitions between states.

Recommendation: AASHTO recommends that the word “current” be removed from the contact information requirement, and that the language regarding adverse actions be removed completely.

- Subsection (f) allows the states to delegate bridge inspection responsibilities to other “individuals, agencies, or entities”. Some states already delegate these responsibilities to local governments by state law or through their bridge inspection policies. Requiring a formal written agreement in states where this is already accepted practice is a substantial burden.

Recommendation: AASHTO recommends revising the proposed language to read “...must be documented in a formal written agreement by the responsible State transportation department, Federal agency, or tribal government, or may be addressed by state law, code, or other formal state action, adopted policy, or standard.”

Section 650.309 Qualifications of personnel.

- Subsections (a), (b), and (c) require currently qualified program managers and team leaders to meet new training requirements within 24 months of the effective date of the final rule. Subsection (g)(2) requires non-NHI training courses be approved by FHWA, and subsection (g)(3) requires training courses already approved by FHWA certify they meet the new requirements within 24 months. Two years is not enough time to develop or re-certify non-NHI training courses AND have every program manager and team leader in the country complete those courses.

Recommendations: AASHTO recommends that the time period for currently qualified program managers and team leaders to meet the new training requirements be extended to 48 months.

- Subsection (g)(2) requires that instructors for non-NHI training courses must meet the qualification requirements for a program manager or team leader. Valuable instruction can be provided by a variety of specialties and backgrounds.

Recommendation: AASHTO recommends that a program manager or team leader provide oversight and review of the training materials, or that language be added clarifying that other specialties may provide instruction as well.

- Subsection (g)(3) requires that non-NHI training courses currently approved by FHWA be reviewed and certified that they meet the new requirements within 24 months. NHI has, in at least one case, been reluctant to share their course information with an organization. Should this continue to be an issue, organizations may be unable to meet the 24 month requirement. *Recommendation:* AASHTO recommends that the 24 months under subsection (g)(3) start upon of the receipt of the NHI course content by the training organization. AASHTO also requests that FHWA or NHI transmit the necessary information to every state concurrently.

Section 650.311 Inspection interval

- Under Method 1, subsection (a)(1)(ii) establishes mandatory criteria for bridges to receive routine inspections at more frequent intervals than 24 months. Currently states move to more frequent special inspections based on their own established criteria, allowing for an inspection of just the elements of concern without the need to do a regular inspection at the shortened interval. Regular inspections are an unnecessary expenditure of limited resources when a special inspection would address the concern.

Recommendation: AASHTO recommends that states be permitted to conduct special inspections on bridges requiring a more frequent inspection interval, as opposed to a regular inspection. Regular inspections would still occur at intervals not to exceed 24 months.

- Subsection (a)(1)(iii) provides for states to conduct inspections at intervals greater than 24 months. This allows states to focus resources on the bridges that need them at no decrease in safety, and is currently allowed on a state by state basis. The criteria proposed, however, are significantly more conservative than current criteria which have served both the states and the public well since they were established. These new criteria will result in a decrease in the current number of bridges that fall in this category with no corresponding increase in safety.
- Subsection (a)(1)(iii)(A) requires that bridge components have a NBI rating of seven (7) or higher to be eligible for extended inspection frequencies. States have found that bridge components rated six (6) on the currently NBI condition coding tend to stay at this component rating for significant periods of time and are a low risk to safety or serviceability. *Recommendation:* AASHTO recommends that a component condition rating of six (6) or higher be eligible for extended inspection frequencies.
- Subsection (a)(1)(iii)(C) requires an operating rating or legal load rating factor of 1.1 to be eligible for extended inspection frequencies. An operating factor of 1.0 indicates that a bridge is already able to carry those loads, and has a substantial amount of redundancy built in to the calculations. In addition, in LRFR the operating rating was calibrated at 1.0 to an inspection interval of 5 years. Requiring an even more conservative operating rating validates that calibration and provides no added benefit.

Recommendation: AASHTO recommends that the operating factor requirement be removed or reduced to 1.0.

- Subsection (a)(1)(iii)(E) requires bridges on interstates, freeways, and other arterials have a vertical clearance greater than 16' to be eligible for extended inspection frequencies, and that there be no history of overheight vehicle damage. The 16' vertical clearance is not required on all bridges, and there are hundreds of bridges that have clearances between 14' (the minimum) and 16'. Occasionally these bridges are reconstructed at clearances less than 16'. In addition, bridges with clearances of 16' or higher may have a history of overheight vehicle damage due to raised truck beds or loads not meeting permit requirements. Neither of these conditions correlate to a future risk.

Recommendation: AASHTO recommends that this provision be removed.

- Subsection (a)(1)(iii)(G) requires certain substructure materials in particular environmental conditions to be eligible for extended inspection frequencies. Substructures are assigned condition ratings regardless of the environmental condition. Those conditions are independent of risk to the component rating. If the substructure rating meets the minimum coding requirement, it should not be a factor in determining the inspection frequency.

Recommendation: AASHTO recommends that this provision be removed.

- Subsection (a)(1)(iii)(I) is vague and could be interpreted in a variety of ways.

Recommendation: AASHTO recommends that this provision be removed.

- Subsection (a)(3) requires a "service inspection" be performed on bridges with routine inspection intervals exceeding 48 months. This new type of inspection, without any previous guidance on process, will cause confusion and lead to non-uniform implementation.

Recommendation: AASHTO recommends that this provision be removed.

- In subsection (b), Method 1 establishes mandatory criteria for bridges to receive routine underwater inspections at a more frequent interval than 60 months. Currently states move to more frequent special inspections based on their own established criteria, allowing for inspection of the elements of concern without the need to do a full routine underwater inspection at the shortened interval. Routine underwater inspections are an unnecessary expenditure of limited resources when inspection of just the particular element would address the concern.

Recommendation: AASHTO recommends that states be permitted to inspect just the underwater elements that trigger the more frequent inspection interval, as opposed to a routine underwater inspection. Regular inspections would still occur at intervals not to exceed 60 months.

- Subsection (b)(iii)(D) is vague and could be interpreted in a variety of ways.

Recommendation: AASHTO recommends that this provision be removed.

- Subsection (e) provides for a three month tolerance on conducting the next regularly scheduled inspection.

Recommendation: AASHTO is fully supportive of this very reasonable change.

Section 650.313 Inspection procedures

- Subsection (a) adds language requiring that "any portion of the bridge not visible using standard access methods must be assessed via another method". There are many portions of a bridge that are inaccessible, and others that would require extensive non-destructive or destructive testing to assess. Distress of these inaccessible components will cause distress in

visible components, triggering the need for further inspection. The AASHTO *Manual for Bridge Evaluation* (MBE) appropriately covers this aspect of bridge inspection and access. *Recommendation:* AASHTO recommends that this sentence be removed, and that the MBE continue to provide guidance by reference.

- Subsection (b)(1) requires that the initial inspection for new, replaced, or rehabilitated bridges take place after construction but prior to being opened to traffic, and appears to require that submission of the NBI data take place prior to opening as well. This requirement will lead to delayed bridge openings and confusion regarding responsibilities between the various parties involved in a bridge project, with absolutely no increase in safety. There is no substantial degradation in bridge quality that takes place immediately after a bridge is open to traffic. In addition, states typically submit NBI data once per year, yet this unclear language implies that they will have to submit data every time a bridge is scheduled to open. *Recommendation:* AASHTO strongly recommends that the requirement for initial inspections to take place prior to the bridge opening to be removed and replaced with a requirement that they take place within six (6) months of the bridge being opened to traffic. In cases of phased construction, the initial inspection should take place within six (6) months of the completion of all stages of the bridge. AASHTO also recommends that initial inspection data be submitted upon the next scheduled submission of NBI data by the state.
- Subsection (b)(2) requires inspection procedures be developed for bridges in phased construction and temporary bridges. Requiring formal bridge inspections is unnecessary in a process that is already governed by design specifications, construction specifications, and contract documents previously agreed to by all involved parties. An additional step may delay construction, thus decreasing the safety of both the contractors and the traveling public. *Recommendation:* AASHTO strongly recommends that this requirement be removed.
- Subsection (c) adds language requiring that “any portion of the bridge not visible using standard access methods must be assessed via another method”. There are many portions of a bridge that are inaccessible, and others that would require extensive non-destructive or destructive testing to assess. Distress of these inaccessible components will cause distress in visible components, triggering the need for further inspection. The AASHTO *Manual for Bridge Evaluation* (MBE) appropriately covers this aspect of bridge inspection and access. *Recommendation:* AASHTO recommends that this sentence be removed, and that the MBE continue to provide guidance by reference.
- Subsection (e) requires an underwater inspection be conducted within 6 months of a bridge opening. Some states have very short windows of time when underwater inspections can safely be conducted, which may not fall within this 6 month period. Some rehabilitation projects may not impact all portions of the bridge underwater, and requiring inspections on the non-impacted portions increases the risk to the diver. *Recommendation:* AASHTO recommends that this six (6) month requirement be changed to twelve (12) months. AASHTO also recommends that this inspection only be required on construction projects that affect portions of the bridge requiring underwater inspections.
- Subsection (e) establishes the requirement that load rating calculations be completed no later than 3 months after the initial inspection. This time frame is not long enough in the cases where local jurisdictions are doing the ratings, or on complex bridges. *Recommendation:* AASHTO recommends that this requirement be extended to six (6) months where local jurisdictions are responsible for load ratings and on complex bridges.

- Subsection (e) also requires that each bridge be load rated for routine and special permit loads. Each state has established procedures for evaluating and issuing routine and special permits as they are required. These procedures involve a variety of configurations to provide the greatest flexibility to industry while ensuring bridge safety. In many cases, a specific load may not warrant rating every bridge on the route when there is one known problem bridge.

Recommendation: AASHTO recommends that this requirement be removed

- Subsection (f) requires an inspection of all nonredundant steel tension members within 6 months of the bridge being open to traffic. Some rehabilitation projects may not impact all nonredundant steel tension members, and requiring inspections on the non-impacted members increases the risk to the inspector and impact to the traveling public.

Recommendation: AASHTO recommends that this inspection only be required on those nonredundant steel tension members affected by the construction.

- Subsection (j) requires a bridge be load posted no later than 30 days after a determination that there is a need for a restriction. Absent a public safety emergency, this time period is simply not achievable in many cases. This 30 day period was set as part of the rulemaking for the National Tunnel Inspection Standards, and the potential impacts were considered in that limited context. The number of tunnels that require load rating and posting is extremely low compared to the number of load posted bridges. While we understand the NTIS and the NBIS are required by law to be similar, the ability of states and local governments to comply with the 30 day requirement is significantly different for bridges than for tunnels.

Recommendation: AASHTO strongly recommends that this requirement be changed to 120 days, and that a rulemaking process for the NTIS take place to change the tunnel posting requirement to 120 days as well.

- Subsection (j) also requires that bridges be posted when routine permit loads exceed the load capacity of the bridge. Posting bridges for routine permit loads will clutter the load posting signage and cause confusion for the traveling public. Permitted loads are evaluated when the permit is issued, and any limits that may be needed are established at that time.

Recommendation: AASHTO recommends that permit loads be removed from the load posting requirements.

- Subsection (m) requires a plan of action for deployment of countermeasures for bridges that are scour critical or have unknown foundations. For a variety of reasons, a state may decide the best course of action for the foreseeable future is to monitor the bridge. This language is unclear as to whether monitoring constitutes an acceptable action.

Recommendation: AASHTO recommends that the first sentence be revised to read "...a plan of action for monitoring and/or deployment of..."

- Subsection (o)(1)(i) expands the definition of what constitutes a critical finding. In (C), the addition of the non-redundant member reporting requirement is problematic as states are not required to conduct element-level inspections on non-NHS bridges. For (D), many states currently report critical findings based on a component rating of 2. Increasing this to 3 will increase the number of bridges with critical findings with no positive impact to the public. For (E), there are a number of immediate repairs that may be made to a bridge that are not structural or safety related in nature (patching a deck spall, for example). In addition, missing load posting signage is a service or maintenance level activity and does not rise to the level of risk that should be reported to FHWA. These items taken together will

substantially increase the reporting requirements with no corresponding benefit to the public, the states, or FHWA.

Recommendation: AASHTO recommends that critical findings be limited to items (A) and (B), with (D) revised to a condition rating of two (2) or less.

- Subsection (o)(2) requires FHWA notification within 24 hours for certain conditions, and established a monthly reporting requirement for all critical findings. In the case of a full or partial bridge closure, the first 24 hours are focused on issues immediate concern. As FHWA does not respond immediately to these situations, imposing a hard deadline of 24 hours provides no benefit and diverts attention from the problem at hand. The addition of a monthly report is excessive and unnecessary. The states are aware of the need to address critical findings in a timely manner, and producing a monthly report is a time and labor intensive paperwork exercise.

Recommendation: AASHTO recommends that the 24 hour reporting requirement in (i) be changed to “as soon as possible”, and that the monthly reporting requirement in (iii) be removed.

Section 650.317 Reference manuals

- Subsection (a) incorporates by reference two AASHTO publications – the *Manual for Bridge Evaluation* and the *Manual for Bridge Element Inspection*. It is our understanding that FHWA must reference a specific edition and cannot simply say “most current edition”. Both of these publications are updated more frequently than the NBIS, which forces states to use outdated guidance. 23 CFR 635.4 contains a list of other standards, policies, and specifications and is subject to more frequent updates.

Recommendation: AASHTO recommends adding these two publications to the next update of 23 CFR 635.4, and including in this section language referencing these specific editions or the most current ones as shown in 23 CFR 635.4.

- Subsection (a) cites the first edition of the *Manual for Bridge Evaluation*. The second edition was published in 2019 and would be more appropriate. In addition, the contact information for AASHTO publications has changed.

Recommendation: AASHTO recommends that (a)(2) be revised to cite the 2019 second edition of the MBEI. AASHTO requests that the contact information be changed to “American Association of State Highway and Transportation Officials (AASHTO), 555 12th Street NW, Suite 1000, Washington, DC 20004, 1-800-231-3475, <https://store.transportation.org>.”

SPECIFICATIONS FOR THE NATIONAL BRIDGE INVENTORY COMMENTS

- The proposed changes to the SNBI are extensive and, in many cases, of questionable value. While some of the new data items proposed might be interesting, or nice to have, they are not of enough value to warrant the substantial expenditures that will be incurred by adding them to the NBIS. The states are providing detailed comments on individual coding items. We encourage FHWA to give full consideration to those comments, as the states are the ones working with the coding guide on a daily basis and will bear the brunt of the impacts of changes to it.

The SNBI requires that border bridges be submitted by both states. This is unnecessarily duplicative work and causes conflicts when the inspection data gathered by one state doesn't match the database the adjoining state uses.

Recommendation: AASHTO recommends that only the state with inspection responsibility be required to report and maintain the data instead of both states.

- The proposed SNBI changes would remove culverts as a structure type and attempt to force culverts into deck, superstructure, and substructure components. This does not reflect the physical reality of how culverts are constructed or maintained, nor how they deteriorate through their life. This change will force states to completely change all of their policies and asset management plans that treat culverts as the single structure that they are. In addition, the changes define culverts as structures that convey water. Culverts are used to convey people, livestock, or wildlife while never conveying water. These changes will lead to increased confusion and expense, while providing no benefits.

Recommendation: AASHTO recommends that culverts continue to be maintained as a separate component rating, and that any concerns regarding the appropriate designations be addressed through the description of a culvert instead of the removal of it as a designation.

- The proposed changes would add the element level descriptions to the component ratings, which will have a negative impact on the Transportation Performance Measures (TPM) and Transportation Asset Management Plan (TAMP) implementations. Requiring that the condition of the deck, superstructure, or substructure equal the lowest condition rating of a single component will lead to a lowering of the bridge condition ratings overnight. Other changes to the component rating language is likely to cause confusion with inspectors and reduce the quality of inspection data.

Recommendation: AASHTO recommends that the element level descriptions be removed from the SNBI and that the component rating descriptions be maintained as they are currently. Additional descriptive language should be added as commentary instead of specification.