

Condition of National Highway System (NHS) Bridges Implementation Guidance

October 2, 2017

National Highway Performance Program (NHPP)

A. PROGRAM PURPOSE

The purposes of the NHPP are (See 23 U.S.C. 119(b)):

1. To provide support for the condition and performance of the NHS;
2. To provide support for the construction of new facilities on the NHS; and
3. To ensure that investments of Federal-aid funds in highway construction are directed to support progress toward the achievement of performance targets established in a State's asset management plan for the NHS.

B. GOVERNING AUTHORITY

1. Section 119 of title 23, U.S.C., as amended by section 1106 of the Moving Ahead for Progress in the 21st Century Act (MAP-21), effective October 1, 2012
2. Section 1106 of the Fixing America's Surface Transportation (FAST) Act, effective October 1, 2015
3. 23 CFR Subpart D sections 490.411 and 490.413, effective May 20, 2017

C. PROVISIONS

1. 23 U.S.C 119(f)(2) - *Condition of NHS bridges.*-
(A) Penalty.- If the Secretary determines that, for the 3-year-period preceding the date of the determination, more than 10 percent of the total deck area of bridges in the State on the National Highway System is located on bridges that have been classified as structurally deficient, an amount equal to 50 percent of funds apportioned to such State for fiscal year 2009 to carry out section 144 (as in effect the day before enactment of MAP-21) shall be set aside from amounts apportioned to a State for a fiscal year under section 104(b)(1) only for eligible projects on bridges on the National Highway System.
(B) Restoration.- The set-aside requirement for bridges on the National Highway System in a State under subparagraph (A) for a fiscal year shall remain in effect for each subsequent fiscal year until such time as less than 10 percent of the total deck area of bridges in the State on the National Highway System is located on bridges that have been classified as structurally deficient, as determined by the Secretary.
2. 23 U.S.C. 119(i) - *Additional Funding Eligibility for Certain Bridges.*-
(1) In general.-Funds apportioned to a State to carry out the national highway performance program may be obligated for a project for the reconstruction, resurfacing, restoration, rehabilitation, or preservation of a bridge not on the National Highway System, if the bridge is on a Federal-aid highway.

(2) Limitation.- A State required to make obligations under subsection (f) shall ensure such requirements are satisfied in order to use the flexibility under paragraph (1).

3. 23 CFR 490.411 - *Establishment of minimum level for condition for bridges.*

(a) State DOTs will maintain bridges so that the percentage of the deck area of bridges classified as Structurally Deficient does not exceed 10.0 percent. This minimum condition level is applicable to bridges carrying the NHS, which includes on- and off-ramps connected to the NHS within a State, and bridges carrying the NHS that cross a State border.

(b) For the purposes of carrying out this section and section 490.413, a bridge will be classified as Structurally Deficient when one of its National Bridge Inventory (NBI) Items, 58--Deck, 59--Superstructure, 60--Substructure, or 62--Culverts, is 4 or less, or when one of its NBI Items, 67--Structural Evaluation or 71--Waterway Adequacy, is 2 or less. Beginning with calendar year 2018 and thereafter, a bridge will be classified as Structurally Deficient when one of its NBI Items, 58--Deck, 59--Superstructure, 60--Substructure, or 62--Culverts, is 4 or less.

(c) For all bridges carrying the NHS, which includes on- and off-ramps connected to the NHS and bridges carrying the NHS that cross a State border, FHWA shall calculate a ratio of the total deck area of all bridges classified as Structurally Deficient to the total deck area of all applicable bridges for each State. The percentage of deck area of bridges classified as Structurally Deficient shall be computed by FHWA to the one tenth of a percent as follows:

$$100 \times \frac{\sum_{SD=1}^{\text{Structurally Deficient}} [\text{Length} \times \text{Width}]_{\text{Bridge SD}}}{\sum_{s=1}^{\text{TOTAL}} [\text{Length} \times \text{Width}]_{\text{Bridge s}}}$$

Where:

Structurally Deficient = total number of the applicable bridges, where their classification is Structurally Deficient per this section and section 490.413;

SD = a bridge classified as Structurally Deficient per this section and section 490.413;

Length = corresponding value of NBI Item 49--Structure Length for every applicable bridge;

Width = corresponding value of NBI Item 52--Deck Width

Beginning with calendar year 2018 and thereafter, Width = corresponding value of NBI Item 52--Deck Width or value of Item 32 Approach Roadway Width for culverts where the roadway is on a fill [i.e., traffic does not directly run on the top slab (or wearing surface) of the culvert] and the headwalls do not affect the flow of traffic for every applicable bridge.

s = an applicable bridge per this section and section 490.413; and

TOTAL = total number of the applicable bridges specified in this section and section 490.413.

(d) The FHWA will annually determine the percentage of the deck area of NHS bridges classified as Structurally Deficient for each State DOT and identify State DOTs that do not meet the minimum level of condition for NHS bridges based on data cleared in the

NBI as of June 15 of each year. The FHWA will notify State DOTs of their compliance with 23 U.S.C. 119(f)(2) prior to October 1 of the year in which the determination was made.

(e) For the purposes of carrying out this section, State DOTs will annually submit their most current NBI data on highway bridges to FHWA no later than March 15 of each year.

(f) The NBI Items included in this section are found in the Recording and Coding Guide for the Structure Inventory and Appraisal of the Nation's Bridges, which is incorporated by reference (see section 490.111).

4. 23 CFR 490.413 - *Penalties for not maintaining bridge condition.*

(a) If FHWA determines for the 3-year period preceding the date of the determination, that more than 10.0 percent of the total deck area of bridges in the State on the NHS is located on bridges that have been classified as Structurally Deficient, the following requirements will apply.

(1) During the fiscal year following the determination, the State DOT shall obligate and set aside in an amount equal to 50 percent of funds apportioned to such State for fiscal year 2009 to carry out 23 U.S.C. 144 (as in effect the day before enactment of MAP-21) from amounts apportioned to a State for a fiscal year under 23 U.S.C. 104(b)(1) only for eligible projects on bridges on the NHS.

(2) The set-aside and obligation requirement for bridges on the NHS in a State in paragraph (a) of this section for a fiscal year shall remain in effect for each subsequent fiscal year until such time as less than 10 percent of the total deck area of bridges in the State on the NHS is located on bridges that have been classified as Structurally Deficient as determined by FHWA.

(b) The FHWA will make the first determination by October 1, 2016, and each fiscal year thereafter.

D. APPLICABILITY

The provisions of 23 U.S.C. 119 (f)(2) and 23 CFR 490.411 and 490.413 apply only to bridges on the NHS.

E. MINIMUM CONDITION¹

1. The provisions of 23 U.S.C. 119(f)(2)(A) establish a minimum condition threshold that no more than 10 percent of the total deck area of bridges in a State on the NHS is to be classified as structurally deficient.
2. If, for the 3-year-period preceding the date of FHWA determination, more than 10 percent of the total deck area of bridges in the State on the National Highway System is located on bridges that have been classified as structurally deficient, a penalty is incurred by the State the following fiscal year.
3. For NBI data submitted in 2015, 2016, and 2017, a bridge will be classified as Structurally Deficient when one of its National Bridge Inventory (NBI) Items, 58--Deck, 59--Superstructure, 60--Substructure, or 62--Culverts, is 4 or less, or when one of its NBI Items, 67--Structural Evaluation or 71--Waterway Adequacy, is 2 or less. For NBI data

¹ 23 CFR 490.411 and 490.413

submitted in 2018 and future years, a bridge will be classified as Structurally Deficient when one of its NBI Items, 58--Deck, 59--Superstructure, 60--Substructure, or 62--Culverts, is 4 or less.

F. PENALTY²

1. If a State does not meet the minimum condition requirements in 23 CFR 490.411, an amount equal to 50 percent of the State's FY 2009 Highway Bridge Program apportionment is to be set aside from the State's NHPP annual apportionment and obligated the same fiscal year the penalty is incurred for eligible projects.
2. The obligation and set aside requirement is only for eligible projects on bridges on the NHS.
 - a. Eligible projects include construction, replacement (including replacement with fill material), rehabilitation, preservation, protection (including scour countermeasures, seismic retrofits, impact protection measures, security countermeasures, and protection against extreme events), and inspection and evaluation (as described in 23 U.S.C. 144) of bridges on the NHS. (23 U.S.C. 119(d)(2))
 - b. The set-aside may be obligated for converted advance construction projects that are eligible projects on bridges on the NHS. State DOTs should consult with FHWA on use of set aside funds for any proposed conversion of an AC project approved prior to the effective date of MAP-21 (October 1, 2012).
3. The penalty remains in effect each subsequent fiscal year until the State's percentage of deck area of bridges on the NHS classified as structurally deficient, as determined by FHWA, is less than 10 percent.
4. If a State is required to make obligations under a penalty provision in section 119(f), NHPP funds may not be obligated for a project for reconstruction, resurfacing, restoration, rehabilitation, or preservation of a bridge not on the NHS, but on a Federal-aid highway unless the requirements of 23 U.S.C. 119(f) are satisfied. (23 USC 119(i))

G. IMPLEMENTATION – DETERMINATION PROCESS

1. FHWA's National Bridge Inventory (NBI)³ is the data source for determining the percent of total deck area of bridges in a State on the NHS classified as structurally deficient. (23 CFR 490.411(d)) The Office of Bridges and Structures (HIBS) expects to complete the determination of the percentage by July 1 of every year.
 - a. Determinations made in 2017 will be based on data submitted in 2015, 2016 and 2017. For data submitted in 2015, 2016, and 2017, bridges will be classified as Structurally Deficient when one of its National Bridge Inventory (NBI) Items, 58--Deck, 59--Superstructure, 60--Substructure, or 62--Culverts, is 4 or less, or when one of its NBI Items, 67--Structural Evaluation or 71--Waterway Adequacy, is 2 or less.
 - b. Determinations made in 2018 and 2019 will be based on data submitted during the 3 years preceding the FHWA's determination (i.e., 2016, 2017, and 2018 for 2018 determination, and 2017, 2018, and 2019 for 2019 determination). For data submitted in 2016 and 2017, bridges will be classified as Structurally Deficient when one of its

² 23 CFR 490.413

³ FHWA National Bridge Inventory: <http://www.fhwa.dot.gov/bridge/deficient.cfm>.

- National Bridge Inventory (NBI) Items, 58--Deck, 59--Superstructure, 60--Substructure, or 62--Culverts, is 4 or less, or when one of its NBI Items, 67--Structural Evaluation or 71--Waterway Adequacy, is 2 or less. For data submitted in 2018 and 2019, bridges will be classified as Structurally Deficient when one of its NBI Items, 58--Deck, 59--Superstructure, 60--Substructure, or 62--Culverts, is 4 or less.
- c. Determinations made in 2020 and future years, will be based on data submitted in 2018 and later. For data submitted in 2018 and later, bridges will be classified as Structurally Deficient when one of its NBI Items, 58--Deck, 59--Superstructure, 60--Substructure, or 62--Culverts, is 4 or less.
2. If FHWA determines that a State has more than 10 percent of the total deck area of bridges on the NHS classified as structurally deficient for three consecutive NBI reporting years:
 - a. HIBS will provide the Office of the Chief Financial Officer (HCF) data in August of the preceding fiscal year, as part of the annual request for certified data for fiscal year apportionments, indicating a penalty is to be imposed and a set-aside with obligation requirement is to be established for the State;
 - b. HIBS expects to notify the appropriate division office of the incurrence of the penalty by September 1;
 - c. HCF will calculate State apportionments for the following fiscal year, including the bridge penalty set aside;
 - d. HCF will reserve the bridge penalty set aside funds from the State's NHPP apportionment and load the set aside funds into the Fiscal Management Information System (FMIS) under a separate program code (Z510);
 - e. Division office will inform the State that it will incur the penalty for the next fiscal year by October 1; and
 - f. Division office will ensure the State prioritizes the obligation of NHPP penalty funds on NHS bridges before obligating non-penalty funds.
 3. If a penalized State is determined to have less than 10 percent of the total deck area of bridges on the NHS classified as structurally deficient:
 - a. HIBS will provide the HCF data in August of the preceding fiscal year, as part of the annual request for certified data for fiscal year apportionments, indicating a penalty is no longer to be imposed;
 - b. HIBS expects to notify the appropriate division office of the rescission of the penalty by September 1;
 - c. HCF will calculate State apportionments for the following fiscal year; and
 - d. Division office will inform the State of the rescission of the penalty by October 1.

Example Expected Implementation – Determination Process Timeline:

Date	By June 15 ⁴	By July 1	By August 15	By September 1	By October 1
FHWA Action	Extract data from the March 2017 NBI submission and calculate the percent of structurally deficient deck area of bridges on the NHS	Analyze percent of structurally deficient deck area of bridges on the NHS for 2017, 2016 and 2015 and determine if the penalty provision will be imposed	Provide HCF certified data for penalized States	Notification to appropriate division offices if their State does not meet the minimum condition requirement or if the penalty provision will be imposed	Notify States and provide fiscal year apportionments

H. BACKGROUND

The FHWA initially provided implementation guidance shortly after the Moving Ahead for Progress in the 21st Century Act (Pub. L. 112-141) was signed into law on July 6, 2012. The guidance (<http://www.fhwa.dot.gov/map21/qandas/qabridges.cfm>) details that the penalty would initially be imposed on October 1, 2016 (FY 2017), using NBI data submitted by the States in April 2014, 2015, and 2016. The penalty will continue to be imposed each subsequent year until a State has reduced their percentage of Structurally Deficient deck area on the NHS to less than 10.0 percent. (23 CFR 490.413)

⁴ 23 CFR 490.411