

3.2.2.2 Increased Inspection Interval

3.2.2.2A) Above water inspections

An increase in the maximum inspection interval for certain types of bridges and culverts may be permitted when justified. Based on an evaluation of the strength and performance history of a bridge, the inspection interval may be increased to a maximum of four (4) years except for the following structure types:

Item	Item	Structural Type	Comments
43A	43B		
All	O3	Steel Girder and Floorbeam	
All	O5	Concrete and Steel Box Girders	With total of 3 or less box beams
All	O6	Concrete and Steel Box Girders	With total of 3 or less box beams
All	O8	Orthotropic Deck	
All	O9	Deck Truss	
All	10	Thru and Pony Truss	
All	12	Thru arch	
All	13	Suspension	
All	14	Stayed Girder	
All	15-17	Movables	
All	21	Segmental Box Girder	
9	All	Aluminum, Wrought Iron, Cast Iron	Except for aluminum pipes

Form BRI-8 "Inspection Frequency Change Request" must be completed for all change requests. To qualify for the extended inspection frequency, the structure shall meet all of the following requirements:

1. All steel structural members must possess load path redundancy and have no fracture critical members or elements.
2. Been in service a minimum of four (4) years with no significant problems since construction, reconstruction, rehabilitation, or major repairs. The bridge must have received an in-depth inspection. There is no in-depth inspection requirement for the None-NBIS structures.
3. Have overall condition ratings for deck, superstructure, substructure, and/or culvert, channel and channel protection of 6 or better (Item Nos. 58, 59, 60, 61, or 62).
4. The inventory rating for the structure is equal to or greater than the maximum legal weight limits for all vehicles in Connecticut (including the HS vehicle). The operating rating is equal to or greater than P204 rating. P204 is the Connecticut's Operating Vehicle used for modeling purposes when considering all vehicles that have non-restrictive annual permits. The P204 (204 Kips on eight axles) vehicle causes maximum stress for spans less than or equal to 155 feet.)

5. Item No. 113 is rated 7, 8 or 9 (low risk). The supervising engineers shall review all the None-NBIS structures that have not been evaluated for scour, and only low risk structures should be proposed for increased inspection intervals.
6. The maximum span length (Item # 48) is 100 feet or less. Except for pipes and culverts, the maximum number of spans (Item # 45) is two.
7. Has a minimum vertical under clearance of 14'-3" (4.27 m) to the superstructure from an underlying roadways. Structures that fit all the criteria but are known to have a history of repeated over-height vehicle impact are not eligible for increased inspection intervals.
8. Steel superstructures must not have an ADT in excess of 50000 and ADTT not greater than 5000. Structures that fit all the criteria but are known to have fatigue prone details (category c and higher) that are not designed for are not eligible for increased inspection intervals. Concrete superstructures must not have an ADT in excess of 125000 and ADTT not greater than 12500. This criterion does not apply to buried structures such as culverts with minimum of 3 feet of fill cover.
9. Steel structures cannot be more than 50 years old (from its original construction date of the steel component (i.e. superstructure)).
10. Structures that are not open to traffic shall be individually reviewed and may be recommended for increased inspection intervals even though they may not fit some of the above criterions.
11. Has no major deficiency.

3.2.2.2B) Underwater inspections

An increase in the maximum underwater inspection interval for certain types of bridges and culverts may be permitted when justified. Based on an evaluation of the performance history of the underwater portion of the bridge, the inspection interval may be increased to a maximum of four (4) years when the following conditions exists:

1. Scour analysis or scour comparative has been performed and structure is deemed low scour risk (Item # 113 is rated 7, 8 or 9). Structures that fit all the criteria but are known to have had exposed footings are not eligible for increased underwater inspection intervals.

2. The underwater portion of the substructure is rated 6 or better.
3. The riverbanks are not eroded and stream alignment is not directed toward the approach roadway. Item 61 and 71 are rated 6 or better.
4. Under 20' (6 m) structures that have not been evaluated for scour shall be reviewed by the supervising engineers, and only low risk structures should be proposed for increased underwater inspection intervals.

Generally, bridges will be individually proposed for an extended inspection schedule by the Transportation Engineer 3 in charge of the structure, reviewed by the Supervising Engineer and submitted to the Manager of Bridge Safety and Evaluation for approval. The proposal shall discuss the items listed above.

After approval by the Manager of Bridge Safety and Evaluation, the proposals for increased inspection intervals shall be grouped and sent to the FHWA for final approval (approximately every three (3) months). The submittal to the FHWA shall also discuss:

- A. Major maintenance or structural repairs performed during the past two (2) years on each structure.
- B. An assessment of the frequency and degree of overload that is anticipated on each structure.
- C. If the proposed structure is a town-owned bridge, the town must give its approval (in writing) to the increased inspection interval before it is eligible for submittal and approval by the FHWA.