

The National Bridge Inspection Standards (NBIS) and Michigan's Bridge Inspection Program

Q & A

Q: Can you clarify the private bridge definition? If a development has private roads with a bridge in the middle and public roads are not directly at each end of the bridge, does the bridge need to be inspected?

A: The NBIS define a private bridge as a bridge open to public travel and not owned by a public authority. The NBIS now apply to any private bridge that is connected to a public road on each end. If public roads are not directly at each end of the bridge, the bridge would not be subject to the NBIS.

Q: How will these changes impact motorized trails that would have bridges on private lands?

A: The NBIS now apply to any privately owned bridge that is connected to a public road on each end. Please contact MDOT-MiBRIDGE-Admin@michigan.gov for structure-specific questions.

Q: Who will be responsible for adding private bridges to the NBIS? The bridge owner or the agency that owns that adjacent road?

A: The bridge owner is responsible for providing the data unless the agency who owns the roadway performs the inspections.

Q: Will private bridges and pedestrian bridges over NHS routes need to be included in biennial target setting?

A: No, TPM target setting only applies to bridges carrying the NHS.

Q: So, in our county, MDOT has taken it upon themselves to inspect some bridges that are on non-public jurisdiction roads (but roads that are open and traveled on) and also do the load posting and put up signs. Will this change?

A: Please contact MDOT-MiBRIDGE-Admin@michigan.gov for structure-specific questions.

Q: How do we document experience for inspectors working with a team leader (prior to them becoming a team leader)?

A: Individuals should maintain a list of the bridges that they inspect with a team leader and submit the list with their Team Leader Qualifications form.

Q: Does the one year = 100 routine NBI inspections need to be completed within one calendar year? Alternatively, would 200 routine NBI inspections performed in one year count towards 2 years of qualification?

A: One year of experience toward meeting the NBIS requirements may be granted for every 100 routine NBI inspections performed with a team leader. The inspections do not have to be completed within a calendar year. Alternatively, 200 NBI inspections performed in a year would count towards two years of qualification.

Q: Are Non-NBI bridge inspections consider as part of NBI bridge inspection experience?

A: No, experience toward meeting team leader requirements will only be granted for routine NBI inspections performed with a team leader.

Q: How does technical work (bridge design, rehabilitation plans, etc.) equate to the number of bridge inspection experience required?

A: One year of experience toward meeting the NBIS requirements may be granted for every 3 years of technical experience in bridge design, bridge maintenance or bridge construction, where more than half of the tasks performed annually were directly related to NBI bridges and culverts.

Q: I am a registered PE with minimal bridge inspection experience. I plan on going thru the field assessment next Tuesday. Will I be required to inspect 50 bridges before I can become a QTL?

A: Effective June 6th, a registered professional engineer must also have 6 months of bridge inspection experience to meet FHWA team leader requirements. If serving as a team leader who was qualified under prior FHWA regulation, individuals have 24 months to satisfy the requirement.

Q: As a current QTL with PE but not 50 inspections will I lose QTL status? My LA only has 7 bridges and some years just one needs to be inspected.

A: By June 6, 2024, all team leaders will need to meet the education/experience requirements of the NBIS. Registered professional engineers will need to have 6 months of bridge inspection experience (or 50 NBI bridge inspections). Please reach out to MDOT-MiBRIDGE-Admin@michigan.gov to discuss specific experience toward meeting the requirements.

Q: If you are already a QTL, will you still need to complete 50 inspections every 24 months or just need to pass the field proficiency exam?

A: By June 6, 2024, all team leaders will need to meet the education/experience requirements of the NBIS. Registered professional engineers will need to have 6 months of bridge inspection experience (or 50 NBI bridge inspections). To perform bridge inspections in Michigan, team leaders must also successfully pass the Field Proficiency Exam every 24 months.

Q: Has MDOT considered adding bridges in the Southwest Region to the required Field Proficiency Exam?

A: Each year, we attempt to provide two structures in at least four of the seven MDOT regions to reduce travel time for inspectors. There is always a possibility that additional structures get added throughout the year, however at this time we do not have plans to update the list until 2023.

Q: Is FHWA refresher training required every five years for bridge inspectors? If so, would the NSTM class qualify as a refresher during that five-year period, or does it specifically need to be refresher training?

A: The NBIS now requires all team leaders to complete a cumulative total of 18 hours of bridge inspection refresher training every 60 months. Currently, the only FHWA-approved bridge inspection refresher training is NHI-130053.

Q: I took the Bridge Inspection Refresher last year to maintain my Team Leader status. Does this mean I have to also complete the NSTM course by June 6, 2024 to continue my status?

A: Team leaders that perform NSTM inspections must complete NHI-130078 by June 6, 2024 to continue to be qualified to perform NSTM inspections.

Q: Does the NHI course 130078 Fracture Critical Inspection Techniques for Steel Bridges count as the training needed to complete NSTM inspections going forward?

A: Yes, NHI-130078 satisfies the NSTM qualification requirement.

Q: How and where will we document that we have completed the NSTM course?

A: It is the team leader's responsibility to maintain certificates for all applicable bridge inspection training and licensure. Additionally, certificates and experience documentation can be uploaded and saved to your MiBRIDGE profile.

Q: The NBIS 2022 Final Rule does not state that all current divers who currently qualify (taken either the comprehensive bridge inspection training OR underwater bridge training) are required to satisfy the requirement of taking specifically the underwater bridge training course within 24 months. Are current qualified divers "grandfathered?" The NBIS 2022 Final Rule states for current team leaders and NSTM team leaders that they have 24 months to satisfy, but it does not say this for divers.

A: The Final Rule states that completion of the comprehensive bridge inspection training OR underwater bridge inspection training prior to June 6, 2022 qualifies an individual as an Underwater Bridge Inspection Diver.

Q: Do divers or qualified divers need to be team leaders or does the team leader just need to be on site?

A: If the underwater diving inspector does not meet the requirements of a team leader, then a team leader must also be on site during the inspection.

Q: Who issues these titles i.e. Bridge Inspector?

A: Roles within the bridge inspection organization are defined in 23 CFR 650.305 Definitions and 650.309 Qualifications of Personnel.

Q: Will the new/changed QTL requirements be published on MDOT website?

A: Yes, the Michigan Structure Inspection Manual (MiSIM) will be updated to reflect the updated requirements of the NBIS. The Final Rule can also be found at <https://www.fhwa.dot.gov/bridge/nbis2022.cfm>.

Q: For initial inspections, do they have to be completed by or started by 3 months after open to traffic?

A: FHWA now defines 'inspection date' as the date in which the field portion of the bridge inspection is completed; therefore, the initial inspection must be completed within 3 months of opening to traffic.

Q: We have a new bridge to be opened to traffic in June. Will an underwater inspection be required as a part of the initial inspection?

A: When work is performed on portions of the bridge that are underwater and water depths are greater than 10', an initial underwater inspection must be performed within 12 months of opening to traffic.

Q: Underwater reduced interval on scour critical structure with observed scour and over 10ft depth - does this need to be with diver or would Emily boat/similar suffice?

A: Underwater inspections for water depths greater than 10 feet require an underwater diver. The Emily boat and other depth sounding instruments may be utilized during special inspections to monitor localized scour conditions.

Q: The new NBIS mentioned a grace period for "late" inspections. Will MDOT allow for this?

A: In order to maintain inspection timeliness compliance, MDOT will not allow for this.

Q: For new structures over water (with water depths greater than 10'), how is the inspector to comment/rate BSIR Item #17 for scour if the Underwater Inspection has not been completed prior to the initial inspection? As an organization are we accepting the fact that the scour rating on the initial inspection will not be based on an UW inspection?

A: For new structures that require an underwater diving inspection, or for any structures that require an underwater diving inspection, the scour inspection during the routine inspection should consist of visually inspecting the channel, substructure units and scour countermeasures, if installed. An appropriate condition rating can be determined by inspecting the channel for steep eroding banks, tension cracking, sloughing, meandering bends, and active undercutting, and scour countermeasures for deterioration and effectiveness. In addition, efforts should be made during the routine inspection to detect scour by taking depth soundings. Utilizing the Emily boat as a tool is always an option as well. As always, please be sure to note the factors that influenced the rating. You can also note in the comments that the UW Diving Inspection is scheduled, and that the detailed findings will be incorporated into the next routine inspection.

Q: Are all inspections treated with the same importance or does the location of the bridge matter?

A: All inspections should be performed to meet NBIS requirements and MDOT policies. Factors such as design, ADT, scour and other features may contribute to the need for increased monitoring when concerns exist.

Q: Is there a date for when the new MiSIM will be updated?

A: The MiSIM is currently being reviewed and updated. Once all revisions have been finalized, an updated version will be posted on the Bridge Inspection webpage and a GovDelivery notification will be sent out.

Q: Routine Permit - Does this mean that all garbage trucks running in your county need to have an individual load rating analysis?

A: If the garbage trucks do not adhere to Michigan legal loads, then yes, they would need to be analyzed.

Q: Does that 3 months for modifications to inventory data mean that our inspection reports will be locked at that time?

A: Currently there is not a plan to "lock" inspection reports, however all data reported to the National Bridge Inventory (NBI) must be updated within 3 months. This includes SI&A data, ratings, and element level bridge inspection data for bridges on the NHS.