

MICHIGAN STRUCTURE INSPECTION MANUAL

BRIDGE INSPECTION

CHAPTER 3

INSPECTION FREQUENCY

3.01 Purpose

The National Bridge Inspection Standards (NBIS) establish maximum bridge inspection frequencies for each type of bridge safety inspection. Routine and fracture critical member inspections must occur at regular intervals that do not exceed 24 months, while underwater inspections are required to be performed every 60 months. The regulations also require each state to establish criteria for increased inspection frequencies through the consideration of factors such as age, traffic characteristics, and condition state. This section describes the requirements and procedures to ensure proper inspection frequency and timeliness in accordance with the NBIS requirements and MDOT policy.

3.02 Inspection Frequency – Reporting Field Data

Bridge inspections must be performed according to their designated frequency to ensure public safety, protect infrastructure investment, and maintain FHWA compliance. Failure to perform the inspections may lead to the restriction of federal funds. Due to the importance of adhering to the regulations, MDOT is instituting stricter guidelines for bridge safety inspection reporting. The NBIS requires the inspection report to be entered within 90 days from the date of an inspection for state owned bridges, and 180 days for all others. **Effective October 1, 2014 all bridge safety inspections performed shall be entered into MiB^{RIDGE} within 30 days of the inspection.** This policy change has been approved by FHWA to strengthen the performance of Michigan's Bridge Inspection Program by allowing timeliness verifications to be conducted 60 days earlier than current regulations require and will increase compliance during National Bridge Inspection Program reviews.

3.03 Inspection Frequency – Team Leader Responsibilities

The file review shall be conducted once a bridge is assigned to a team leader in order to address equipment, traffic control, or personnel needs. This action will aid in the prevention of delays during the inspection process. It is important to note that equipment and/or procedures for bridge inspections may impact mobility, and therefore may be restricted to certain time frames. The team leader must inspect the bridges assigned to them on or before the month they are due and enter the inspection report into MiB^{RIDGE} within 30 days of the field inspection.

In the event that a particular component cannot be inspected due to environmental limitations or an unforeseen occurrence the inspection team leader should still begin the bridge inspection and rate the components that may safely be inspected. The inspection report must be updated once the consequence requiring a partial inspection is resolved. The team leader must contact the bridge owner if an inspection cannot be completed by the required due date. **Effective October 1, 2014 the team leader must document the reason why an inspection was not completed in the month it was due. This will be documented within the routine inspection report in MiB^{RIDGE}.**

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The team leader will increase the inspection frequency according to engineering judgment and the guidelines established through the MDOT [Guidelines for Bridge Inspection Frequencies](#). The team leader should increase the inspection frequency for structural deterioration to verify the stability of the deficient element and to ensure there are no significant changes in the condition of primary components between inspections.

If the inspection frequency is not increased when a primary component is rated in poor, serious, or critical condition the team leader will be prompted to provide justification on the routine inspection report. The explanation provided should reference the particular components causing the poor, serious, or critical rating and explain why an increased frequency is unnecessary. Review of the frequency justification comments is performed periodically by the Bureau of Bridges and Structures and team leaders may be contacted to provide further clarification.

3.04 Inspection Frequency – Bridge Owner Responsibilities

Inspections should be assigned to a team leader at least 30 days prior to the inspection due date. This action will allow inspection staff adequate time to arrange for necessary items to complete the inspection. Inspection progress should be monitored by the bridge owner on a bi-weekly basis to ensure no past due inspections will be reported. If an inspection cannot be completed as scheduled the bridge owner should notify the Bureau of Bridges and Structures by emailing MDOT-MiBRIDGE-Admin@michigan.gov with the cause of the delay. This information will be needed to justify any inspection timeliness issues to FHWA during annual NBIS compliance reviews.

3.05 Verification of Inspection Timeliness and Non-Compliance Process

The Bureau of Bridges and Structures will continue to perform monthly monitoring of inspection timeliness which requires advertisement of unassigned inspections, contacting each agency with inspections greater than one month past due, and providing a list of the agencies in non-compliance with NBIS to the Development Services Division Local Agency Programs Section. The Local Agency Programs Section will follow internal processes for preparing and submitting formal notification that federal and state transportation funds will be withheld from the nonresponsive agency.

A summary of the activities for the revised process that becomes effective for all routine, fracture critical, and underwater inspections performed after December 1, 2017 is provided in Table 3.05.01.

3.06 Inspection Frequency – Bridge Program Manager Responsibilities

The development and enhancement of effective strategies to improve bridge inspection reporting is the responsibility of the bridge program manager. A system of automatic notifications for past due, and inspections due within 90 days, has been incorporated under the direction of the bridge program manager. The bridge program manager also performs a manual review of the entire bridge inventory and contacts each bridge owner once inspections are more than 90 days past due. This process will be modified following the implementation of the 30 day inspection reporting requirement.

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Statewide consultant bridge safety inspection contracts for MDOT owned bridges are also organized by the bridge program manager. These contracts allow for supplemental inspection assistance to prevent past due routine, fracture critical, in-depth, or underwater bridge inspections from occurring. The bridge program manager is also responsible for organizing quality assurance reviews to verify frequency guidelines, participating in National Bridge Inspection Program Metric evaluations that monitor annual adherence to the Code of Federal Regulations (CFR) Part 23, and preparing plans of corrective action to address the deficiencies identified.

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Table 3.05.01 Inspection Timeliness and Non-Compliance Process

Period Relative to NBI Inspection Due Date	Central Office Activities to Mitigate Late Bridge Inspections	TSC Manager Activities to Prevent Withholding of Funding from Local Agencies	Consequence of Late Inspection
3 Months Prior	Automated email notification provided to Bridge Owners registered with MiBRIDGE for all bridge inspections that are due within 90 days in their jurisdiction.	No action is necessary.	None
1 Month Prior	Table of unassigned bridge inspections manually drafted and emailed to all Consultants registered in MiBRIDGE. FHWA, Bureau of Bridges and Structures Director, and TSC Managers with agencies in the their jurisdiction included on correspondence.	No action is absolutely necessary; however, contacting the local agency to ensure their management is aware of the upcoming inspection(s) is beneficial. Notify the Bureau of Bridges and Structures if a position related to bridge management responsibilities at the agency has been vacated or if a new employee has been hired.	None
Greater than 1 Month Past Due	Bureau of Bridges and Structures will contact the agencies with inspections that are greater than one month past due and provide notification that reports must be entered in MiBRIDGE by the beginning of the following calendar month. Bureau of Bridges and Structures Director, TSC Manager, and most recent bridge inspector included on correspondence.	Communicate directly with proper local agency staff to ensure they are aware that the agency is currently in non-compliance, and that action must be taken to avoid funding restrictions.	Warning
Greater than 2 Months Past Due	Bureau of Bridges and Structures will email a letter to the Bridge Owner stating that the local agency is in non-compliance with the National Bridge Inspection Standards. The Development Services Division Local Agency Programs Section will follow internal processes to notify Bureau Management. The determination to restrict funding will be made at the Bureau Management level according to present action being undertaken by the agency.	Communicate that transportation related funds are going to be withheld, and new projects may not be obligated. Work with the agency to ensure action is taken. Provide regular status updates to Bureau of Bridges and Structures and the Development Services Division Local Agency Programs Section regarding progress to complete the work.	Non-Compliance