



### *Performance Audit*

### *Bridge Inspection Program*

### *Michigan Department of Transportation*

**Report Number:**  
591-0169-14

**Released:**  
March 2015

The Michigan Department of Transportation (MDOT) must ensure the biennial inspection of all bridges under its jurisdiction in accordance with State law. Also, MDOT must ensure that all State-owned and locally owned bridges that are longer than 20 feet are inspected in accordance with various federal requirements. MDOT delegated responsibility for inspecting locally owned bridges to their respective owners, including cities, villages, townships, and counties. As of April 30, 2014, 5,895 State-owned and 6,500 locally owned bridges required inspection at least every two years.

Audit Objective			Audit Conclusion
Objective: To assess the effectiveness of MDOT's efforts to ensure that its Bridge Inspection Program complies with State and federal requirements related to staff qualifications and inspection processes.			Moderately effective
Findings Related to This Audit Objective	Material Condition	Reportable Condition	Agency Preliminary Response
MDOT should consider seeking amendatory legislation to establish risk-based bridge inspection frequencies. Also, MDOT should consider seeking Federal Highway Administration approval to lengthen the inspection intervals for State-owned and locally owned bridges or categories of bridges that warrant longer intervals, as determined through analysis of available inspection and other data. These changes may significantly improve the efficiency of MDOT's Bridge Inspection Program by allowing for the allocation of State and local resources to other priorities ( <a href="#">Finding 1</a> ).		X	Agrees
MDOT did not ensure that the plans of action developed for scour critical bridges contained all recommended information. Comprehensive plans of action would better establish specific action to take during flood events to maximize public safety and ensure the most efficient use of State and local resources ( <a href="#">Finding 2</a> ).		X	Agrees

<b>Findings Related to This Audit Objective (Continued)</b>	<b>Material Condition</b>	<b>Reportable Condition</b>	<b>Agency Preliminary Response</b>
<p>MDOT had not instituted a sufficient process to ensure that inspectors consistently increased the bridge inspection frequency for each structurally deficient bridge or documented an acceptable rationale for not doing so. As a result, some bridges may not have been inspected as often as necessary. Ensuring that structurally deficient bridges are inspected with sufficient frequency is important for maintaining the safety and confidence of the traveling public and for effectively managing the condition of the valuable assets (<u>Finding 3</u>).</p>		X	Agrees
<p>MDOT had not implemented sufficient measures to ensure that local bridge owners and MDOT regional offices completed all routine inspections, inspections of the underwater structural elements of bridges, and fracture critical member inspections in accordance with time frames established in State statute and National Bridge Inspection Standards (NBIS). Also, MDOT did not sufficiently document some of its follow-up actions related to late or potentially late bridge inspections. Timely inspections help to ensure the preservation of assets and the safety of the traveling public (<u>Finding 4</u>).</p>		X	Agrees
<p>MDOT did not provide consistent guidance to inspectors regarding the inspection of bridges with plywood false decking. Also, MDOT did not ensure that all bridges with false decking were correctly identified in the Bridge Management System. In addition, MDOT did not adequately inspect the underside of bridges with plywood false decking. As a result of these conditions, MDOT did not consistently comply with NBIS, which was developed to help ensure the safety of the traveling public (<u>Finding 5</u>).</p>		X	Agrees

A copy of the full report can be obtained by calling 517.334.8050 or by visiting our Web site at: <http://audgen.michigan.gov>

Office of the Auditor General  
201 N. Washington Square, Sixth Floor  
Lansing, Michigan 48913

**Doug A. Ringler, CPA, CIA**  
Auditor General

**Laura J. Hirst, CPA**  
Deputy Auditor General