

Performance Audit

Aggregate Quality Process

Michigan Department of Transportation (MDOT) Report Number: 591-0420-21

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MDOT's Bureau of Field Services, Construction Field Services Division, regional offices, and transportation service centers are responsible for ensuring the quality of aggregate material used during highway construction projects. Aggregate is a substance composed of mineral crystals or mineral rock fragments used in pavement. MDOT procedures require aggregate to be quality assurance tested at established frequencies (see Exhibit 1). As of January 28, 2021, MDOT had 613 aggregate suppliers. Aggregate suppliers can apply to become prequalified to reduce required testing frequency. To become prequalified, a supplier must have a quality control plan, internal or contracted quality control testing, and qualified staff.

Audit Objective				Conclusion	
Objective 1: To assess the sufficiency of MDOT's efforts to ensure aggregate quality.				Sufficient, with exceptions	
Findings Related to This Audit Objective	Material Condition	Reportable Condition		Agency Preliminary Response	
MDOT did not retain weekly shipment summaries for 18 (45%) of 40 prequalified aggregate suppliers (<u>Finding 1</u>).	Х			Agrees	
MDOT did not test non-prequalified aggregate at the required frequency for 9 (18%) of 50 construction projects, and in 12 (29%) of 41 construction projects, MDOT did not perform physical property testing on the material (<u>Finding 2</u>).		х		Agrees	

Audit Objective	Conclusion
Objective 2: To assess the effectiveness of MDOT's efforts to administer the Aggregate Supplier Program.	Moderately effective

Findings Related to This Audit Objective	Material Condition	Reportable Condition	Agency Preliminary Response
For 36 (90%) of 40 prequalified aggregate supplier quality control laboratories and 10 (59%) of 17 quality assurance laboratories, MDOT did not have required biennial inspections (<u>Finding 3</u>).	Х		Agrees
For 10 (71%) of 14 prequalified aggregate suppliers, MDOT did not have an initial laboratory inspection and for 7 (50%) of 14 quality control plans, the prequalified supplier did not have the required elements (<u>Finding 4</u>).	Х		Agrees
MDOT did not perform Independent Assurance Tests on aggregate technicians for 6 (35%) of 17 construction projects using non-prequalified aggregate materials (<u>Finding 5</u>).		Х	Agrees

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