



Office of the Auditor General

Investigative Audit Report

Michigan Department of Transportation's Procurement of the Michigan Aggregates Market Study

October 2019

State of Michigan Auditor General
Doug A. Ringler, CPA, CIA

The auditor general shall conduct post audits of financial transactions and accounts of the state and of all branches, departments, offices, boards, commissions, agencies, authorities and institutions of the state established by this constitution or by law, and performance post audits thereof.

The auditor general may make investigations pertinent to the conduct of audits.

Article IV, Section 53 of the Michigan Constitution



OAG

Office of the Auditor General

201 N. Washington Square, Sixth Floor • Lansing, Michigan 48913 • Phone: (517) 334-8050 • audgen.michigan.gov

Doug A. Ringler, CPA, CIA
Auditor General

October 18, 2019

Mr. Todd Wyett, Chair
State Transportation Commission
and
Paul C. Ajegba, PE, Director
Michigan Department of Transportation
Murray D. Van Wagoner Building
Lansing, Michigan

Dear Mr. Wyett and Mr. Ajegba:

Consistent with our standard practices upon completing an investigative audit, we are issuing our investigative audit report on the Michigan Department of Transportation's Procurement of the Michigan Aggregates Market Study.

Copies of this report are being forwarded to various relevant entities and legislative committees. Also, the report may be viewed on our public Web site at audgen.michigan.gov.

Sincerely,

Doug Ringler
Auditor General

TABLE OF CONTENTS

MICHIGAN DEPARTMENT OF TRANSPORTATION'S PROCUREMENT OF THE MICHIGAN AGGREGATES MARKET STUDY

	<u>Page</u>
Report Letter	1
Executive Summary	6
Background for OAG Investigation, Investigation Activities, Investigation Conclusions, and Agency Response	7

EXECUTIVE SUMMARY AND
BACKGROUND FOR OAG INVESTIGATION,
INVESTIGATION ACTIVITIES,
INVESTIGATION CONCLUSIONS, AND
AGENCY RESPONSE

EXECUTIVE SUMMARY

BACKGROUND

The Office of the Auditor General's (OAG's) Fraud Investigative Services Team investigated the Michigan Department of Transportation's (MDOT's) contracting practices related to MDOT's May 2016 commissioning of the Michigan Aggregates Market Study (Study). We received allegations that MDOT allowed undue influence from an industry stakeholder when commissioning the Study and did not follow its procurement procedures. The complaint also alleged that the vendor who conducted the Study did not meet contract deliverables.

INVESTIGATION CONCLUSIONS

1. MDOT allowed industry stakeholders considerable influence in the commissioning and scoping of the Study. This may have undermined the Study's credibility and usefulness to MDOT and policymakers because of the industry stakeholders' previously disclosed position in favor of expanding permitted mining for aggregates in local communities.
2. MDOT inappropriately split the Study into two separate procurements in violation of its Selection Guidelines for Service Contracts.
3. MDOT did not ensure that the selected vendors for the Study provided all contract deliverables.

The circumstances illustrated in this report demonstrate opportunities for MDOT to strengthen its contracting and contract management practices and to better ensure that its actions are regarded as fair, equitable, and taken for the greater good of the State of Michigan and its citizens.

In addition, we noted numerous deficiencies in the Study that were caused, in large part, by poor project scoping, which ultimately was MDOT's responsibility. Because of the scoping limitations and the Study's otherwise limited usefulness, the Study's approximately \$100,000 cost does not appear to have been an effective use of the State's financial resources.

AGENCY RESPONSE

We offered MDOT an opportunity to respond to this report, and it declined.

BACKGROUND FOR OAG INVESTIGATION, INVESTIGATION ACTIVITIES, INVESTIGATION CONCLUSIONS, AND AGENCY RESPONSE

BACKGROUND

The OAG received a complaint in June 2019 which alleged that MDOT allowed undue influence from an industry stakeholder when commissioning the Michigan Aggregates Market Study (Study) in May 2016. Also, the complaint alleged that the Study did not follow MDOT procurement procedures and that the vendor who conducted the Study did not meet contract deliverables.

MDOT's former Director commissioned the Study to determine whether current permitted aggregates would be sufficient to meet the needs of MDOT's future highway construction program. The former Director wanted the Study to present to the 21st Century Infrastructure Commission, which was charged with providing infrastructure-related recommendations to then Governor Snyder by November 30, 2016.

MDOT split the Study into two phases. Phase 1 was to estimate the overall permitted inventory of quality aggregate reserves within the State and whether these reserves may be sufficient to meet future demands (next 30 to 50 years) of Michigan's Federal-Aid Highway Program. Phase 2 was to determine possible engineering and economic impacts to MDOT's transportation program budget if aggregate supply was not increased.

We initiated a limited scope, investigative audit in July 2019 of MDOT's procurement of the Study based on the specific allegations we received.

MDOT's Office of Commission Audits also investigated MDOT's efforts to procure this Study and issued its report on September 26, 2019. Although our investigations occurred simultaneously, we did not collaborate on the scope, the methodology, or conclusions. However, the two reports provide similar conclusions.

INVESTIGATION ACTIVITIES

Our investigation activities consisted primarily of inquiries and the examination of selected procurement related records and other documentation. This report does not constitute an audit or attestation engagement conducted in accordance with generally accepted government auditing standards.

Our review included analysis of the following information:

- Contract documentation.
- Contractor work plans.

- E-mail communication.
- Department of Technology, Management, and Budget and MDOT policies.
- Meeting agendas and minutes.
- Applicable State laws and policies.
- Selected records of the 21st Century Infrastructure Commission.
- Other research and records, as applicable.

In addition, we conducted interviews with MDOT employees, the vendors who conducted the Study's Phase 1 and Phase 2, and an industry stakeholder to gain a better understanding of their respective roles in the Study's commissioning and execution.

INVESTIGATION CONCLUSIONS

1. Undue Influence on the Commissioning and Scoping of the Study

MDOT allowed industry stakeholders considerable influence in the commissioning and scoping of the Study. This may have undermined the Study's credibility and usefulness to MDOT and policymakers because of the industry stakeholders' previously disclosed position in favor of expanding permitted mining for aggregates in local communities.

E-mail correspondence and other documentation we reviewed indicated that MDOT's former Director (former Director) had several communications with industry stakeholders concerning the aggregates supply in Michigan and related issues prior to the Study and directed MDOT staff to involve one particular industry stakeholder (IS) in the Study.

Phase 1

April 29, 2016: In response to a March 2016 discussion, the IS sent the former Director a letter outlining potential aggregate supply issues highlighted in a recent study of southeastern Michigan. The IS stated that "the aggregate industry will be unable to meet the foreseeable market demands if only existing permitted mines are utilized" and asked the former Director to "investigate the looming deficit and provide leadership to assist the industry and, together, develop solutions to ensure an adequate supply of aggregates in the short and long term."

The former Director forwarded the e-mail to four MDOT senior managers and stated that MDOT needed a

long-term strategy on how to address the future aggregate shortage.

May 6, 2016: The IS asked the former Director to meet with him and another individual, who was also an industry stakeholder and the appointed Chair of Governor Snyder's 21st Century Infrastructure Commission, "to discuss short and long term aggregate availability and how best to develop a plan/report that will substantiate our claim." The group agreed to meet on May 9, 2016.

May 18, 2016: The IS e-mailed the former Director, in response to a prior discussion between them, and provided a plan for an MDOT-sponsored market study "to determine if there are enough 'permitted' aggregates to meet the intermediate to long term demand."

The IS referenced a similar comprehensive study that had just been completed for the D-bar-A Project in southeastern Michigan. The IS suggested that MDOT review this study for ideas in developing its request for proposal (RFP) and as a source of data "once a finalist is selected and the work is about to commence." The IS advised that MDOT not refer to the specific study in the RFP.

May 22, 2016: The former Director forwarded the IS's suggestions for a study to his senior managers and stated that the suggestions should be used as a starting point for an MDOT study to be completed no later than the end of September or early October 2016 for presentation to the 21st Century Infrastructure Commission.

The former Director stated that he specifically asked the IS about this study and "had many conversations with aggregate suppliers across the state." He expressed his concern about the availability of reasonably priced aggregates in the future and others' concern over the lack of issuing mining permits.

June 7, 2016: MDOT's project manager (PM) sent the IS MDOT's draft scope for the RFP and stated that he had made some edits to the IS's suggestions and wanted to make sure they were appropriate and that he had not "perverted" the IS's intent.

June 9, 2016: The IS informed the PM that "we" agree with your direction.

MDOT's final project scope for Phase 1 was nearly identical to the IS's suggested scope. In addition, at MDOT's request, the IS also provided MDOT with project pricing information and recommended two vendors. MDOT readily accepted and used this information.

After finalizing its scope, MDOT solicited proposals from three vendors (the two that the IS suggested and one other) and received proposals from two of them. The selected vendor did not provide credentials of the primary investigator (PI) but instead stated that the vendor itself was highly qualified to execute the project and had been doing similar market studies for over 30 years, with some experience in Michigan approximately 15 years earlier. MDOT selected the vendor for the project solely on the basis that it could deliver a report for under \$50,000 by the former Director's deadline.

Prior to selecting the vendor, MDOT did not attempt to ascertain the vendor's capacity to complete a quality study by obtaining and contacting vendor references and reviewing reports from similar projects that the vendor had completed. MDOT informed us that because the IS suggested the vendor, it trusted that the vendor was qualified to complete the study.

We interviewed the vendor and the IS, and both denied having known each other or having any prior business relationship. The IS informed us that it recommended the vendor after consulting with other associates.

Phase 2

February 2017: The IS asked MDOT to initiate Phase 2 of the Study and provided it with a draft scope for that phase. An MDOT senior manager stated that the scope "sounds like an economic study rather than a resource study" and suggested that it would be more appropriately completed by a university than a private firm "to provide unbiased research."

MDOT's PM for Phase 1 concurred with the senior manager and stated that, if the project were to continue, it should be done through the normal call for research because "there is no priority on MDOT's end for this research needs statement." The PM also stated that Phase 2 would cost much more than Phase 1. On June 13, 2017, the Director of the Bureau of Field Services instructed the Phase 1 PM to prepare a problem statement and submit it to MDOT's research area for inclusion in its call for research.

August 23, 2017: The Phase 1 PM provided a problem statement to the Director of the Construction Field Services Division (Division Director) that was completely different from the IS's suggested scope.

September 20, 2017: The Division Director returned the problem statement to the Phase 1 PM and stated that it was not what the IS had in mind. The Phase 1 PM responded that the problem statement was a responsible

approach that would set the stage for fact-based exploration rather than a tool for the IS to use to engage in legislation that eases the permitting process by taking permitting authority away from local agencies. Although the Division Director expressed his agreement with the Phase 1 PM, he stated that "industry is requesting something different." The Division Director informed us that upper management wanted MDOT to use the IS's suggested Phase 2 scope.

As in Phase 1, the IS also provided MDOT with suggested vendors for Phase 2. MDOT initially awarded the contract to the Phase 1 vendor but, because of disagreements over indemnification language, later awarded the contract to the other vendor suggested by the IS.

**2. Inappropriate Splitting of Study
MDOT inappropriately split the Study into two separate procurements in violation of its Selection Guidelines for Service Contracts.**

MDOT's Guidelines prescribe different processes for purchases based upon a tiering of the estimated cost of the services and specifically prohibit breaking projects down into smaller components to use a lower tiered process.

MDOT attempted to complete the Study through its research area. Upon learning that the research area could not complete the Study within the desired time frame, MDOT inappropriately split the Study into two phases.

May 23, 2016: The Division Director asked MDOT's research area for assistance with developing an RFP for the Study. After MDOT's research area told the Division Director that it would take until early 2017 to complete a quality study, the Division Director replied that the extended time frame would not work and noted that MDOT would instead have to keep the project under \$50,000.

May 24, 2016: The IS sent the Division Director a new proposal that called for splitting the original proposed project into two smaller projects. The former Director concurred with this split. The IS informed us that it split the original project at MDOT's direction to keep the cost for each phase under \$50,000 and meet the former Director's time frame.

As evidenced in a June 7, 2016 e-mail, MDOT staff were aware that splitting the Study into two phases was inappropriate. In this e-mail, MDOT's Phase 1 PM informed the IS that he did not mention Phase 2 in the project scope "since we cannot give the impression that we are attempting to circumvent the 50K max contract by

splitting it up into two 50K scopes. Questionable whether this will even fly."

MDOT asserted that splitting the Study was appropriate because Phase 2 would only be completed if Phase 1 concluded that there was an impending (although undefined) aggregate shortfall. We find MDOT's explanation to be without merit.

**3. Missing Contract Deliverables
MDOT did not ensure that the selected vendors for the Study provided all contract deliverables.**

Phase 1

The following contract deliverables were not included in the vendor's report for Phase 1:

- a. A pdf wall map of locations of all MDOT-approved aggregate suppliers.
- b. A breakdown of the types of State-approved aggregates at each location and their mineralogy.
- c. The ownership, primary mode of transport to market, either the total annual aggregate production or annual State-approved aggregate production, and either the total permitted reserves or total State-approved permitted reserves.
- d. Either the total annual aggregate consumption in the State of Michigan or the total annual consumption of State-approved aggregates at each location.
- e. Either the years of overall reserves remaining or the years of State-approved reserves remaining.

The PI informed us that to gather data for his analysis, he visited with or telephoned "15 or so" of the largest aggregate suppliers that the IS identified for him. The suppliers provided him with their annual production and reserve data. However, because the suppliers provided the information to him confidentially, he was not at liberty to share it with us. Consequently, we could not verify the accuracy of the Phase 1 results.

The vendor contract required that the PI work with MDOT's PM over the course of the research to ensure that the work plan was followed and to institute any changes to the work plan that may be warranted to ensure a quality study. MDOT's PM informed us that after the project kickoff meeting, he did not have any additional contact with the PI until the PI submitted a draft of the Phase 1 report approximately two weeks later. Also, the PM stated that

the PI never asked for nor did the PM provide any data for the PI to use in his analysis.

We asked the PM if he questioned the PI about information missing from the draft report or how the PM could ensure the accuracy of the draft's findings. The PM stated that he reviewed the draft report only for layout and presentation because he had no basis for evaluating the data for accuracy.

The PM informed us that he and other MDOT senior managers were generally displeased with the report and felt that it provided little value. Notwithstanding, the PM rated the contractor 9 out of 10 in his overall evaluation of the project.

Phase 2

The objective of Phase 2 was to determine the economic impact to MDOT's road and bridge budget if the projections set forth in the Phase 1 report are not addressed and local permitted aggregate supplies are not increased. However, in its report, the vendor stated that it did not assess changing prices of aggregates and impacts to MDOT's road and bridge budget based on relative supply and projections made in the Phase 1 report. This was because of "inherent difficulty and uncertainty in establishing the actual volume of aggregates that will be needed for these construction projects over time." Instead, the report "only assesses the cost of moving aggregates greater distances."

Notwithstanding, the vendor provided several recommendations for addressing potential future aggregate supply issues. Most notably, the vendor stated that "successful management of Michigan's aggregates will include inventorying and mapping these resources in a proactive manner." Interestingly, this mirrored the recommendation from the unsuccessful vendor for the Phase 1 contract and the MDOT employees' recommendation for Phase 2, before being overridden by MDOT's upper management.

Although the contract required that the vendor provide MDOT's PM with written monthly progress reports, the vendor informed us that he did not provide these updates in written format but instead through periodic telephone calls. The PM confirmed this. As a result, there was no documentation supporting that the vendor discussed and that MDOT agreed to the very significant changes to the Phase 2 scope.

AGENCY RESPONSE

We offered MDOT an opportunity to respond to this report, and it declined.



Report Fraud/Waste/Abuse

Online: audgen.michigan.gov/report-fraud

Hotline: (517) 334-8060, Ext. 1650