

Chapter 1

Section 1.10

Ministry of Transportation— Road Infrastructure Construction Contract Awarding and Oversight

Follow-Up on VFM Section 3.10, *2016 Annual Report*

RECOMMENDATION STATUS OVERVIEW						
	# of Actions Recommended	Status of Actions Recommended				
		Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented	No Longer Applicable
Recommendation 1	2	1	1			
Recommendation 2	1	1				
Recommendation 3	5	3	1		1	
Recommendation 4	1	1				
Recommendation 5	1	1				
Recommendation 6	2	2				
Recommendation 7	4	1		3		
Total	16	10	2	3	1	0
%	100	63	12	19	6	0

Overall Conclusion

As of August 14, 2018, 63% of the actions we recommended in our *2016 Annual Report* had been fully implemented, while 12% were in the process of being implemented. There had been little or no progress on 19% of the recommended actions, and 6% will not be implemented.

Overall, the Ministry of Transportation (Ministry) has made progress on a number of our recommendations including suspending bonuses for asphalt mix properties and compaction; implementing a new process whereby the Ministry has custody and control of the asphalt samples for testing for all contracts; replacing the Quality Verification Engineers' certification process with an acceptance review process led by Ministry staff

and/or consultants retained by the Ministry to perform verification activities; and incorporating the Extended Aging test into its testing methodology.

However, some significant areas still require work, including establishing appropriate penalties for contractors with unsatisfactory ratings; incorporating stricter rules for excluding contractors from bidding if they breach safety regulations; and establishing appropriate penalties for contractors that report inaccurate financial information to the Ministry.

The status of actions taken on each of our recommendations is described in this report.

Background

The Ministry of Transportation (Ministry) is responsible for the construction and maintenance of provincial highway and bridge infrastructure, which is valued at \$82 billion. It consists of about 40,000 km of highway lanes covering a distance of about 17,000 km, and almost 5,000 bridges and culverts.

The Ministry enters into construction contracts for work either to fix existing infrastructure in order to continue using it or to build new infrastructure to expand capacity. The road network, most of which was originally built by the 1990s, requires considerable ongoing maintenance. At the time of our follow-up, the Ministry expected to spend about \$14 billion (similar to 2015/16) over the next 10 years for road and bridge rehabilitation and about \$3 billion (\$4 billion in 2015/16) for road and bridge expansion.

In the past five years, the Ministry awarded about 727 large construction contracts (worth more than \$1 million each) totalling about \$7.6 billion. (In the five years prior to our 2016 audit, the Ministry had awarded about 600 contracts totalling \$5.5 billion.) These contracts were for projects such as re-paving sections of highways, expanding highways, building new bridges or fixing

existing bridges. The average contract was valued at \$10.5 million (\$9.1 million in 2015/16). The Ministry also awarded about 1,170 minor construction contracts totalling about \$530 million (1,450 contracts totalling about \$580 million in 2015/16). Minor work usually involved less significant repairs on existing structures. The average value of these contracts was about \$450,000 (\$400,000 in 2015/16).

The road construction industry in Ontario is mainly represented by two groups: the Ontario Road Builders' Association (ORBA) and the Ontario Asphalt Pavement Council formerly Ontario Hot Mix Producers Association (OHMPA). They consult with the Ministry on technical matters and lobby on behalf of their members' interests.

Some specific observations in our 2016 audit included:

- We identified highway projects in all regions of the province where pavements had to be fixed for cracks much earlier than their expected life of 15 years—and some as early as only one year after the highway was open to the public. This led to the Ministry paying millions of dollars for early repair work.
- The Ministry studied two tests that would allow it to detect, before asphalt was laid, whether pavement was likely to crack early—both tests were required in combination to understand whether pavement will crack early. Rather than implementing these new tests as soon as they were validated in 2007, the Ministry waited five years to use one of them—and still was not using the other one across all contracts nine years later. The Ministry informed us that decisions such as using these tests were discussed and determined through a Joint Pavement Committee made up of OHMPA and Ministry staff. This, in essence, allowed the Ministry's suppliers to determine the quality of materials they would supply, even though premature cracking would result in additional revenue for the

industry as a whole and incur additional costs for taxpayers.

- In 2012, the Ministry paid contactors about \$8.8 million in bonuses for providing the quality of asphalt specified in contracts. It had continued to pay roughly the same amount of bonuses since then (although in 2013 it stopped tracking the amounts paid). However:
 - The Ministry had been aware since 2000 of quality issues surrounding asphalt, and had neither addressed its concerns about premature cracking in a timely manner, nor changed its bonus-payment practices.
 - Contractors had the opportunity to tamper with asphalt samples to obtain bonuses. The Ministry was aware of sample-switching but had neither investigated it to impose fines nor established controls to ensure that sample-switching did not occur.
- ORBA influenced internal Ministry policy in its favour, including the following:
 - **A Ministry policy changed to allow contractors to delay paying fines; some fines are now uncollectible.** With this change in policy, contractors were able to postpone paying a total of about \$6 million in fines for up to four years. During those four years, two contractors went bankrupt; the Ministry will never be able to collect the \$660,000 in late fines they owed.
 - Upon the industry's requests, the Ministry removed a contract clause in 2015 that had given the Ministry the ability to exclude litigious contractors from bidding on future contracts. Ministry records show that between 2007 and 2015, contractors filed 12 lawsuits. Prior to 2007, lawsuits were virtually non-existent.
- **Engineers who certify structures are built correctly were hired by the contractor, and had provided false certifications.** The Qual-

ity Verification Engineers (QVEs) were hired by, worked for and reported directly to the contractors. We noted that Ministry regional staff had identified instances across the province where QVEs provided erroneous or misleading conformance reports to the Ministry.

- The Ministry did not effectively penalize contractors that had serious performance issues, and allowed them to bid on future contracts. Contractors that had received unsatisfactory ratings were allowed to continue to bid on and had been awarded significant amounts of work for the Ministry. As well, the Ministry paid to repair some contractors' substandard work even when the work was to be covered by the contractors' warranty.
- **The Ministry awarded new projects to contractors that had breached safety regulations.** Rather than imposing monetary fines for unsafe work, the Ministry's penalty process was intended to reduce the amount of future work a contractor could bid on. However, we noted that in seven such infractions we examined, none of the penalties were large enough to prevent contractors from bidding on Ministry projects. This was because the ceiling amount (the maximum amount a contractor could bid on for a contract) was not reduced enough by the penalty to impact any future bids by the contractor.

We made seven recommendations, consisting of 16 action items, to address our audit findings.

We received commitment from the Ministry that it would take action to address our recommendations.

Standing Committee on Public Accounts

On May 17, 2017, the Standing Committee on Public Accounts (Committee) held a public hearing on our 2016 audit. In December 2017, the Committee tabled a report in the Legislature resulting from this hearing. The Committee endorsed our findings

and recommendations, and made 11 additional recommendations. The Ministry reported back to the Committee in February 2018 on some of the recommendations and committed to provide further responses as the information became available. The Committee's recommendations and our follow-up on its recommendations (with assurance work done by us up to August 14, 2018) are found in **Chapter 3, Section 3.07** of this volume of our *2018 Annual Report*.

Status of Actions Taken on Recommendations

We conducted assurance work between April 1, 2018, and August 14, 2018, and obtained written representation from the Ministry of Transportation (Ministry) that, effective October 31, 2018, it has provided us with a complete update of the status of the recommendations we made in the original audit two years ago.

Poor-Quality Asphalt Contributes to Additional Costs to Taxpayers for Repairs and Inconvenienced Drivers

Recommendation 1

To ensure that cracks on highways are minimized and that highways can remain problem-free for the duration of their expected life cycle, the Ministry of Transportation should:

- *review the practice of paying bonuses to contractors for providing asphalt that meets contract specifications;*

Status: Fully implemented.

Details

During our 2016 audit, we found that the Ministry paid contractors bonuses when the asphalt they used on highways met the Ministry's require-

ments—something contractors are always expected to do. In 2012, the Ministry paid contractors about \$8.8 million in these bonuses. As of the time of our audit, it had stopped tracking the amounts paid since 2012 because of increased workload and lack of time, but given that bonuses were calculated on the price of asphalt, which had increased by about 8% since 2012, it was reasonable to estimate that yearly bonus payments had continued to total at least \$8.8 million.

Since our audit, the Ministry completed a review of its payment practices and specifications for asphalt, and implemented the following changes effective March 2017:

- suspended bonuses for asphalt mix properties and compaction; and
- increased the specification requirements for pavement compaction and pavement smoothness.

However, the Ministry is continuing to pay a bonus for pavement smoothness, but has raised by eight percent the minimum requirement for contractors to be eligible for the bonus. The Ministry noted that it is continuing this bonus because pavement smoothness is a critical factor that benefits the traveling public, improves the environment and extends the life of the road.

- *assess whether contract amounts should be withheld when all contract specifications are not met.*

Status: In the process of being implemented by December 2018.

Details

During our 2016 audit, we identified highway projects in all regions of the province where pavements had to be fixed for cracks much earlier than their expected life of 15 years—and some as early as only one year after the highway was open to the public. We were able to examine the repair costs for five highway projects where the cost of premature cracking was tracked, and we noted that the Ministry paid \$23 million to repair these highways

on top of the \$143 million originally paid to pave them. The highways had to be repaired just one to three years after the pavement had been laid.

Since our audit, in March 2017, the Ministry changed the requirements for several specifications, including increasing the minimum amount that asphalt must be compacted, and reducing the amount of ash that the asphalt can contain. Failure to meet the new requirements will result in payment reductions or rejection of the pavement. According to the Ministry's research, the increase in asphalt compaction is expected to increase the pavement life by 10% to 30% while the 25% reduction in recycled engine oil as determined by the ash content will decrease the risk of cracking during cold temperatures, further increasing the life of the pavement.

In July 2017, the Ministry also completed a jurisdictional scan involving 49 road authorities from Canada and the United States. At the time of our follow-up work, the Ministry was reviewing the asphalt specifications from these jurisdictions in order to identify best practices that could be applied in Ontario. The Ministry intends to complete this review and assess by December 2018 whether further changes are needed to the way in which payments are made under the contracts.

Ministry Agreed to the Asphalt Industry's Requests to Delay Implementing Tests that Would Identify Asphalt Likely to Crack Prematurely

Recommendation 2

To identify poor-quality asphalt before it is laid on highways, the Ministry of Transportation should immediately incorporate the Extended Aging test into its standard testing methodology for asphalt.

Status: Fully implemented.

Details

Our 2016 audit found that the Ministry had studied extensively two tests that would allow it to detect,

before asphalt was laid, whether pavement was likely to crack early—both tests are required in combination to understand if pavement will in fact crack early. But rather than implementing these new tests as soon as they were validated in 2007, the Ministry waited five years to implement one of them—and still had not implemented the other one across all contracts nine years later.

Since our audit, for all contracts tendered after March 1, 2017, the Ministry has implemented the Extended Aging test, and has reduced by 25% the amount of recycled engine oil it allows to be used in asphalt. In addition, the Ministry has incorporated another test known as the Double Edge Notch Tension (DENT) test in all contracts since March 2017. Previously, this test was done only on select pavement projects. This test is also used for determining the acceptability of asphalt cement because it assesses the asphalt's ability to stretch and resist cracking.

Ministry's Internal Operational Policies Changed to Benefit the Ontario Road Builders' Association

Recommendation 3

In developing internal policy, the Ministry of Transportation should ensure that decisions made are in the best interest of all Ontarians. In this regard, the Ministry should:

- *evaluate industry best practices on the collection of liquidated damages and determine whether to re-implement its original policy of collecting liquidated damages at the field level to be in line with industry best practices;*

Status: Fully implemented.

Details

Our 2016 audit found that, since 2011, the Ministry had agreed to a change in its policy to allow contractors to delay paying fines if the contractor wanted to contest the fine. We noted

that other provinces such as Alberta, British Columbia and Quebec collect fines immediately then issue a refund if the dispute is resolved in the contractor's favour.

Since our audit, the Ministry assembled an independent expert panel of senior construction and engineering officials from across Canada, including British Columbia, Alberta, Saskatchewan, New Brunswick and Nova Scotia. The panel members had extensive experience in engineering construction and contracting.

With respect to liquidated damages, the panel was asked to consider if the Ministry's practices were consistent with other Canadian jurisdictions, if practices were fair, and if other provisions should be added to future contracts. The panel completed its report on March 14, 2018, and concluded that the existing process of deducting liquidated damages is fair and equitable.

The panel recommended that the Ministry continue its existing practice of setting the value of the liquidated damages based on estimates of direct costs specific to each contract, and continue with the practice of clearly identifying the value of liquidated damages in the contract tender documents so contractors are aware at the time of bidding.

The panel also recommended that liquidated damages be deducted from contract payments by the Ministry following the expiration of the time allowed under the contract, rather than at contract completion or substantial performance (when the work is nearly, but not totally, complete). This is in order to minimize the risk of the Ministry being unable to collect liquidated damages, and to minimize the administrative burden associated with tracking and collecting liquidated damages.

The Ministry's operations management team, consisting of senior managers from the regional and provincial offices, completed its review and consideration of the recommendations the panel made in its report in July 2018 and agreed with the recommendations. As a result, the Ministry will issue a Provincial Construction Memorandum to

confirm and clarify the process for calculating and collecting liquidated damages.

- *re-incorporate the provision for excluding highly litigious contractors from bidding on further contracts, and appropriately exercise it when needed;*

Status: Fully implemented.

Details

During our 2016 audit, we noted that, prior to 2015, the Ministry could prohibit contractors that filed multiple lawsuits against the Ministry that it deemed to be frivolous from bidding on future contracts. Lawsuits considerably add to the workload of Ministry staff and to legal costs for the Ministry. Upon the industry's requests, the Ministry removed the contract clause in 2015 that had given the Ministry the ability to exclude litigious contractors from bidding on future contracts.

Since our audit, as noted under the previous action item, the Ministry assembled an independent expert panel to provide advice on administrative and contracting practices. On the issue of litigious contractors, the panel was asked to consider whether the Ministry should re-incorporate the provision for excluding litigious contractors from bidding on future contracts.

The panel recommended that the Ministry retain a clause in the tender document to allow it to reject the lowest bidder on specific grounds, such as avoiding potentially high legal costs related to defending against possible subsequent legal actions if the contract was awarded to a litigious contractor. However, the panel did not see a strong rationale for including a clause that would automatically prohibit any tender from a contractor that has been involved in legal proceedings against the Ministry. The panel noted that automatically excluding a contractor on such grounds has been generally less defensible in court than rejecting such contractors' bids as they have been submitted.

The Ministry's operations management team, consisting of senior managers from the regional

and provincial offices, completed its review and consideration of the recommendations the panel made in its report in July 2018 and agreed with the recommendation to retain a clause in the tender document to exclude contractors should there be reasons to do so.

- *pilot and fully assess the use of reviews of referee decisions as an alternative to escalating to litigation before this process is included into policy and procedures;*

Status: Fully implemented.

Details

During our 2016 audit, we noted that in the Ministry's original dispute-resolution process, a contractor wishing to make a claim against the Ministry had to escalate the claim through three levels within the Ministry before launching legal action. This process worked well given that about 95% of disputes were successfully resolved through this process. However, upon the industry's request, the Ministry agreed in 2016 to change the process, allowing contractors to ask for a third-party referee to be involved at any level of the dispute process.

Since our audit, the Ministry has moved forward with implementing referee decisions as part of its policies and procedures. In total, referee decisions have been used four times in the last two years. The Ministry has assessed each decision to identify improvements to the process and to the quality of the Ministry's submission to the referee to ensure that the Ministry's position is clear, well defined and fully supported by the contract.

- *re-implement its original dispute-resolution process if it determines that the use of referees will not be incorporated into its policies and procedures;*

Status: Will not be implemented. Although the Ministry indicates that it plans to implement a new process for dispute resolution as a result of the new *Construction Act*, which introduced a new adjudication requirement, the Office of the Auditor Gen-

eral continues to believe that the implementation of our recommendation would be more effective and efficient for the Ministry in resolving disputes with contractors.

Details

As described under the previous action item, during our 2016 audit, we noted that the Ministry had amended its original dispute-resolution process to allow contractors to ask for a third-party referee to be involved at any level of the dispute process.

Since our audit, the Ministry implemented referee decisions as part of its policies and procedures and used the process four times. However, the introduction of new adjudication requirements in the *Construction Act* (formerly the *Construction Lien Act*) in December 2017 caused the Ministry to reassess its process. The Act allows parties of a contract to refer various disputes to an adjudicator, who has the power to make an interim determination that is binding on the parties to the adjudication. Either party can later take the determination to court or to arbitration.

Therefore, the Ministry plans to develop and implement a new process for dispute resolution and adjudication to comply with the new legislation, and will not be re-implementing the original dispute-resolution process.

- *ensure that whenever committees are established to review and make policy implementation decisions, that the committee members are not in a conflict of interest.*

Status: In the process of being implemented by December 2018.

Details

During our 2016 audit, we noted that the Ministry established a joint policy committee of Ontario Road Builders Association (ORBA) and Ministry representatives to review an internal audit report focused on construction contracts. Ministry staff had concerns with the establishment of this committee because it would allow ORBA to strongly influence how the report's recommendations

should be implemented, which was an internal operational matter. The Ministry decided against staff's recommendations and created a joint policy committee comprised of six ORBA members (five of whom were contractors) and six government representatives (only three from the Ministry of Transportation, with one other from the Ministry of Infrastructure, one from Infrastructure Ontario, and one from the Ministry of Finance).

Since our audit, the Ministry conducted workshops with technical stakeholders in August 2017 and in January 2018 with the goal of receiving feedback from the industry, regulators and others regarding how it can improve the manner in which it consults with stakeholders when developing policies and standards. A total of 16 different stakeholders participated, including representatives from the Consulting Engineers of Ontario, Canadian Standards Association, Ontario Good Roads Association, ORBA and Professional Engineers Ontario.

At the time of our follow-up, the Ministry was engaged in extensive internal consultations with staff and committees throughout its Provincial Highways Management Division to obtain their input on this issue. These consultations were completed at the end of June 2018 and a report detailing a summary of these consultations and the external consultations was completed in August 2018.

This report is to include recommendations by staff on how committees should be established to review and make policy-implementation decisions that are not in a conflict of interest. The Ministry may also consider the assistance of an external third party to help develop a new committee structure, if such an approach is deemed necessary. The Ministry notes that it will complete the review and evaluate any changes to be considered for implementation by December 2018.

Increased Outsourcing Has Led to Less Oversight on Construction Projects

Recommendation 4

To ensure that testing of asphalt quality is a constructive process and that information from whistleblowers is adequately investigated, the Ministry of Transportation should ensure that controls and appropriate processes over asphalt samples are in place to prevent the risk of sample switching.

Status: Fully implemented.

Details

In our 2016 audit, we found two events, in 2011 and 2012, where the Ministry noted irregularities with asphalt samples and possible sample tampering. We also noted that, in 2014, a whistleblower approached the Ministry with detailed information on how one contractor was switching samples in order to obtain bonuses. We noted that the Ministry had not taken any action to investigate which contractors could have switched samples and impose fines on them. Further, we noted that there were no controls to prevent contractors from tampering with samples as the whistleblower claimed.

Since our audit, for all contracts starting after December 15, 2017, the Ministry implemented a new sample-collection process whereby the Ministry has custody and control of asphalt samples. The Ministry implemented this approach to prevent the risk of sample switching as Ministry staff and/or consultant staff working for the Ministry are now responsible for collection of the sample from the construction site and transportation to the testing laboratory.

The Ministry noted that 40 contracts were executed prior to the new change with asphalt paving work to be completed in 2018 and 2019. However, the Ministry negotiated to have the new sample-collection process in 26 of the 40 contracts. The other 14 contracts with a remaining value of \$148 million, representing 12% of the total contract values, are carried forward under the old sampling methodology.

In addition, in January 2018, the Ministry also engaged an independent external consultant to perform a risk assessment and review of the integrity of the highway construction-material sampling process. The Ministry planned to consider the recommendations of this review, and make changes to its process, as appropriate, by November 2018.

Recommendation 5

To ensure it obtains a high level of assurance that infrastructure is safely built according to specifications, the Ministry of Transportation should hire or contract its own engineers who are independent from the contractors to perform verification activities.

Status: Fully implemented.

Details

During our 2016 audit, we found that Quality Verification Engineers (QVEs) who verify and provide certification that key construction activities have been performed to the appropriate standards were hired by, worked for and reported directly to contractors. We noted that Ministry regional staff had identified instances across the province where QVEs provided erroneous or misleading conformance reports to the Ministry. Although the Ministry had contract administrators and quality assurance staff to provide some oversight, the Ministry had relied on the sign-off by the QVEs to provide assurance to the Ministry that a structure would be safe for public use and that specifications had been met.

Since our audit, the Ministry initiated in 2017 its own review of the QVEs' certification process:

- The Ministry conducted a compliance audit of the QVEs' activities on 15 construction contracts across the province and found that only one of the 15 projects followed the QVEs' certification process with no discrepancies. The audit found that contract administration firms were not fully aware of their requirements when QVEs' work was involved. For example, contract administrators were not ensuring that documentation was submitted on time to the Ministry, and Ministry staff had

to correct work that was previously certified as being in general conformance with the contract documents. The audit also found that the contract administrators were generally reluctant to challenge the work the QVEs were submitting.

- The Ministry launched a pilot project whereby, on 15 construction projects across the province, the QVEs' certification process was replaced by a review process undertaken by Ministry staff.
- For all new contracts tendered after March 31, 2017, but before April 2018, the Ministry removed the QVEs' certification process requirement from seven specifications out of 38 in the certification process. Reviews for compliance with these seven specifications are to be completed by Ministry staff and/or consultants retained by the Ministry.

The Ministry completed its review of the QVE certification process, and, effective April 2018, replaced the QVEs' certification process with a new process whereby compliance with contract specifications is to be completed by Ministry staff and/or consultants retained by the Ministry.

Further, the Ministry plans to provide additional training for internal and consultant staff on the new requirements starting in 2018. The goal of the training is to provide an understanding of the new quality conformance process and specification changes.

Recommendation 6

To ensure that contractors perform warranty work they are responsible for, the Ministry of Transportation should:

- *change its warranty provisions so that the burden of proof is not on the Ministry to show that no other factors could have caused cracks for poorly performing pavement and that the warranty is based on items that should have been foreseen;*

Status: Fully implemented.

Details

During our 2016 audit, we found that to have contractors fix pavement defects under warranty, the burden of proof was on the Ministry to show that no other factors could have caused the defects other than the contractor's poor materials and workmanship. Ministry staff had to dedicate considerable resources in disputing contractors' claims that other factors caused the pavement defects.

Since our audit, in May 2017, the Ministry created new construction and maintenance guidelines for the administration of warranties to include formal tracking and completion of warranty reviews. For example, interim and final inspection dates are now recorded in warranty documentation. The Ministry plans to use this information to ensure all milestone inspections are completed and to schedule special inspection equipment to evaluate pavement performance.

To shift the burden of proof from the Ministry to the contractor, the Ministry added new oversight terms and responsibilities for contractors and the Ministry's contract administrators. For example, the contract administrator is now responsible for ensuring that relevant contractor staff are notified of the deficiencies and that repairs are completed. The contractor staff performing the warranty inspections are now responsible for completing warranty inspection reports, providing supporting documentation and tracking any deficiencies identified.

Once the deficient work is found, the contract administrator is responsible for following up with the contractor to address the issues. Contract terms now obligate the contractor to complete the repair once it has been identified by the contract administrator. Further, once a deficiency has been repaired, the repair must be inspected and tested at that time; testing includes sample collection as required by Ministry standards for the specific road and asphalt type.

- *enforce its warranty provisions for costs to be borne by the contractor for all contracts with warranties.*

Status: Fully implemented.

Details

During our 2016 audit, we reviewed almost all seven-year-warranty contracts—seven years because that is long enough for pavement defects requiring remedial work to show up. In about half of them, we found that contractors had repeatedly tried to absolve themselves of their responsibilities under warranty.

Since our audit, the Ministry has made a number of changes to improve how pavement warranties are administered to ensure contractors complete warranty repairs identified by the Ministry:

- The Ministry now uses a vehicle known as an Automatic Road Analyzer, which has specialized equipment to measure and record pavement condition and performance, to collect pavement data. The Ministry has also developed manuals and training on the use of the data by Ministry staff in pavement warranty administration.
- The Ministry has also implemented a province-wide tracking system for pavement warranties. For contracts tendered in 2017, provisions for warranty administration were included in a new web-based contract management system. For earlier contracts not being administered using the web-based system, all regions are now using a standardized tracking database; this information is submitted to the provincial office to ensure consistency.
- The Ministry has developed new Construction and Maintenance Guidelines for the Administration of Warranties and updates to the Construction Administration and Inspection Task Manual for use by staff in the administration of pavement warranties. The Ministry provided information updates on these to regional operations staff during its annual update sessions in spring 2018.

Further, the Ministry is also completing a review of the use of other types of warranty provisions in its contracts. The Ministry identified several possible approaches including best value procurement, use of warranty performance bonds, workmanship warranties and changes to the current qualification process based on warranty issues. Further research and evaluation of these approaches was underway at the time of our follow-up, and was expected to be completed by the end of 2018.

Ministry Selection Process Is Fair and Transparent, but Ministry Is Lenient in Managing Poor Performing Contractors

Recommendation 7

To ensure that poor-performing contractors and contractors that do not follow safety standards and other requirements are appropriately penalized for their performance or behaviour, the Ministry of Transportation should:

- *establish appropriate penalties for contractors with unsatisfactory ratings;*

Status: Little or no progress.

Details

During our 2016 audit, we found that rather than imposing monetary fines for unsafe work, the Ministry's penalty process was intended to reduce the amount of future work a contractor could bid on. However, we noted that in seven such infractions we examined, none of the penalties were large enough to prevent contractors from bidding on Ministry projects.

At the time of our follow-up, the Ministry informed us it is reviewing current qualification and procurement practices to identify opportunities to promote improved performance of contractors in areas related to safety, quality and timeliness. It had conducted interviews with one large municipality and one provincial government agency regarding their qualification and procurement practices, and planned to complete this review by October 2018.

The Ministry had not established at the time of our follow-up new penalties for contractors with unsatisfactory ratings and had yet to assess the appropriateness of existing penalties. However, the Ministry informed us that it plans to update the contractor performance rating system, which includes penalties on performance issues, by December 2019.

- *incorporate stricter rules around excluding contractors from bidding if they breach safety regulations;*

Status: Little or no progress.

Details

As noted in the previous action item, during our 2016 audit, we found that the Ministry penalized contractors if they breach safety regulations during construction. We noted that the penalties were not monetary fines; instead, the penalties limited the amount of future work on which a contractor could bid. In the samples reviewed during the audit, we found that none of the penalties were large enough to prevent contractors from bidding on Ministry projects.

At the time of our follow-up, the Ministry informed us it is in the process of developing a new contractor performance rating system, which, when implemented, will improve contractor performance and safety. However, the Ministry has not incorporated stricter rules around excluding contractors from bidding if they breach safety regulations. Pilot testing of the new rating system began in 2017. A report dated February 2018 shows that 18 contracts had been tested under the new system by that time. The Ministry plans to complete the pilot and review the new system by December 2018. Based on the results of the pilot, a schedule for implementation will be determined in 2019, but the Ministry has made no commitment as to when stricter rules around excluding contractors from bidding would be implemented.

- *establish appropriate penalties for contractors that report inaccurate financial information to the Ministry;*

Status: Little or no progress.

Details

During our 2016 audit, we found that contractors were required to self-report certain financial information that is used to determine their bidding room (the total value of contracts they can bid on). The Ministry started auditing contractors' self-reported numbers in 2014; however, it had yet to enforce action on contractors that misreported financial information.

The Ministry's review found that, on average, one in every five contractors misreported their financial information. In some of these cases, the contractors misreported information to inflate their bidding room, effectively allowing them to bid on contracts with a higher total value than they should have been allowed to.

Since our audit, the Ministry has implemented a number of new measures regarding financial requirements to hold contractors more accountable for information they report to the Ministry, including:

- accessing the industry business intelligence information on the contractors, including their credit history, risk profile, and benchmarking data with similar companies, to provide ongoing monitoring of the contractor's financial situation;
- improving the system to track and report the amount of work contractors have with the

Ministry to assess whether they can complete additional work they bid on; and

- enhancing qualification procedures to provide clear direction to international companies regarding reporting their financial information and the amount of work these global contractors have with the Ministry.

However, the Ministry has not established new penalties for contractors that report inaccurate financial information and has yet to complete an assessment of the appropriateness of existing penalties.

- *implement policies and processes to exclude smaller contractors from bidding in all regions if performance issues are noted in one or more regions.*

Status: Fully implemented.

Details

During our 2016 audit, we found that small contractors (those that can bid on minor construction projects less than \$1 million) that are banned from working with the Ministry in one region due to a history of poor performance could continue to bid on and win contracts in other regions.

Since our audit, on March 31, 2017, the Ministry changed a system process used for designated contracts so that any contractor known to have performance issues will be restricted from bidding on new contracts. This change addressed the risk of a poor-performing contractor that is restricted in one region from being able to bid elsewhere in the province.