



Hamilton

Office of the City Auditor

Roads Value for Money Audit Roads Quality Assurance Supplementary Audit Report

Recommendations and Management Responses

August 11, 2022

**Office of the City Auditor
Brigitte Minard, Deputy City Auditor
Charles Brown, City Auditor**

Introduction

The following five recommendations will strengthen controls and enhance the value for money achieved in the Roads Program, particularly in the area of Quality Assurance.

Recommendation 1

That consideration be given to increasing the inspection levels by designing and adopting a risk-based approach for weight validation processes or the use of all-inclusive lump sums and square meter payments.

Management Response

Agree

1. Develop a SOP for enhanced risk-based inspection to ensure verification of weight-based materials, including alternative processes of payment.
2. Develop a business case to increase inspection FTE's for the 2023 budget cycle.

Estimated Completion: Q4 2022

Recommendation 2

That the resources, training, and oversight in place be evaluated to ensure that weight validation, inspection and payment processes are adequately resourced to ensure compliance to the process.

Management Response

Agree

1. Assess and update Inspector Daily Diary requirements and Contract Inspectors Guidelines (Red Book) for potential improvements including defining roles and responsibilities for inspections and oversight.
2. Provide retraining to all inspection and project management staff for processes related to weight validation and payment processes.

Estimated Completion: Q1 2023

Recommendation 3

That the quality and comprehensiveness of construction project documentation is improved (including recordkeeping in the Inspectors' Daily Diaries) by implementing relevant guidelines and/or standard operating procedures.

Management Response

Agree

1. Assess and update Inspector Daily Diary requirements and Contract Inspectors Guidelines (Red Book) for potential improvements.
2. Provide retraining to all inspection and project management staff for processes related to Construction Project documentation.
3. Develop a SOP for review of Construction Project documentation by management.
4. Implement EAM for Inspectors' Daily Diaries and investigate potential use of EAM for the management of Construction Project documentation.

Estimated Completion: Items #1 – #3 Q1 2023, Item #4 Q2 2024

Recommendation 4

That quality assurance guidelines and standard operating procedures, including plant inspections and Petrographic Testing for premium asphalt aggregates, be risk-based and be formally documented and adhered to. Risks to be considered should include: financial and safety risks (including roadway traffic volume related risks).

Management Response

Agree

1. Quality Assurance Pavement Material Testing SOP to be developed in coordination with AUD21006 – Road Value for Money Audit response item #11 & 13.
2. Develop SOP specifically for Plant Inspections.
3. Develop Quality Assurance Manual to develop guidelines that consider financial and safety risks.

Estimated Completion: Item #1 Q4 2022, Item #2 Q1 2023, Item #3 Q4 2023

Recommendation 5

That consideration be given to expanding the quality assurance function during peak construction periods of the year in order adequately manage the risks associated with the construction activities.

Management Response

Agree

1. Complete a review and risk observation regarding the quality assurance function resourcing in coordination with AUD21006 – Road Value for Money Audit response item #14.
2. Develop business case to increase quality assurance FTE's for the 2023 budget cycle.

Estimated Completion: Q4 2022