



## Minutes

### Toronto Transit Commission Audit & Risk Management Committee

**Meeting No.:** 31

**Meeting Date:** Tuesday, November 14, 2023

A meeting of the TTC Audit & Risk Management Committee was held by video conference on Tuesday, November 14, 2023, commencing at 9:01 a.m. The meeting recessed at 10:23 a.m. to meet as the Committee of the Whole. The Board reconvened the public session at 12:12 p.m.

#### **Present at Committee of the Whole**

Commissioners: R. Lalonde (Chair), F. Jagdeo, and J. Osborne (Members)

Item 5: G. Downie, B. Hasserjian, J. La Vita, B. MacGregor, F. Monaco, S. Naraine, N. Poole-Moffatt, R. Wong, V. Chandrakanthan, C. Leach, A. Srivastava, D. Shanmuganayagam, V. Sukdeo, C. Finnerty, L. Soto Maya and J. Ishak were present.

T. Anderson (Auditor General), S. Ali (Assistant Auditor General, IT & Strategy), G. Mark (Audit Director), and A. Krupowics (Senior Audit Manager, IT & Cybersecurity), and J. Darmody (Live Media) were also present.

Item 6: B. Macgregor (Deputy Chief Executive Officer), V. Chandrakanthan, C. Leach, N. Pazzano, C. Finnerty, L. Soto Maya and J. Ishak were present.

S. Choudhury (Senior Manager, Ernst and Young), C. Mariglia (Engagement Partner, Ernst and Young) and J. Darmody (Live Media) were also present.

R. Lalonde was in the Chair.

## **Present at Public Session**

Commissioners:

R. Lalonde (Chair), F. Jagdeo, and J. Osborne (Members)

Staff:

G. Downie (Chief Capital Officer), B. Hasserjian (Chief Safety Officer), J. La Vita (Chief Financial Officer), B. Macgregor (Deputy Chief Executive Officer), F. Monaco (Chief Operations and Infrastructure Officer), S. Naraine (Chief People Officer), N. Poole-Moffatt (Chief of Corporate Affairs), R. Wong (Chief Transportation and Vehicles Officer), V. Chandrakanthan (Head - Audit, Risk and Compliance), P. Hrovat (Head - Streetcar Infrastructure), C. Leach (Senior Director – Audit, Risk and Compliance), N. Pazzano (Director – Enterprise Risk Management), D. Shanmuganayagam (Head – IT Services), A. Srivastava (Chief Information Officer), V. Sukdeo (Associate General Counsel), S. To (Manager, Accounting Policy & Standards), C. Finnerty (Director - Commission Services), L. Soto Maya (Coordinator, Secretariat Services) and J. Ishak (Administrator - Secretariat Services) were present.

T. Anderson (Auditor General), S. Ali (Assistant Auditor General, IT & Strategy), A. Chan (Assistant Auditor General), A. Krupowics (Senior Audit Manager, IT & Cybersecurity), G. Mark (Audit Director), C. Pastore (Senior Audit Manager), S. Del Mastro, K. Travers (KPMG), and J. Darmody (Live Media) were also present.

R. Lalonde was in the Chair.

## **Land Acknowledgement**

R. Lalonde requested C. Finnerty to acknowledge that the TTC Board was meeting on the traditional territory of many nations including the Mississaugas of the Credit, the Anishnabeg, the Chippewa, the Haudenosaunee and the Wendat peoples and is now home to many diverse First Nations, Inuit and Métis peoples. C. Finnerty also acknowledged that Toronto is covered by Treaty 13 signed with the Mississaugas of the Credit.

## **Declaration of Interest - Municipal Conflict of Interest Act**

Nil

## **Closed Session**

Commissioner Lalonde moved that the Audit and Risk Management Committee recess in-camera to consider the following confidential items:

Security of the property of the municipality or local board

Item 5 - Toronto Transit Commission Cybersecurity Audit - Phase Two: Overall Network Security and Cybersecurity Assessment of Select Critical Systems

Training Session, in accordance with Section 190 (3.1) of the City of Toronto Act, and Section 29(B) of the TTC By-law to Govern Board Proceedings

Item 6 - Training Session – Enterprise Risk Management

The motion by Commissioner Lalonde carried.

### **Minutes of the Previous Meeting**

Commissioner Osborne moved that the Audit & Risk Management Committee approve the minutes of Meeting 30 held on Monday, June 1, 2023.

The motion by Commissioner Osborne carried.

### **Motion to Amend the Order Paper**

Commissioner Lalonde moved that the Order Paper be altered as follows:

1. KPMG LLP's Audit Plan for Year Ended December 31, 2023 (For Action)
2. Audit, Risk, and Compliance – 2023 Audit Plan Status Update (For Action)
3. Audit, Risk, and Compliance – 2024 Audit Plan (For Action)
4. Audit of the Toronto Transit Commission's Streetcar Overhead Assets: Strengthening the Maintenance and Repair Program to Minimize Asset Failures and Service Delays (For Action)
5. Toronto Transit Commission Cybersecurity Audit - Phase Two: Overall Network Security and Cybersecurity Assessment of Select Critical Systems (Confidential Attachment - This report contains information related to the security of the property of the municipality or local board) (For Action)
6. Training Session – Enterprise Risk Management (For Action)

The motion by Commissioner Lalonde carried.

### **Public Presentations**

Item No.3. Audit of the Toronto Transit Commission's Streetcar Overhead Assets: Strengthening the Maintenance and Repair Program to Minimize Asset Failures and Service Delays

Alan Yule

The Committee received the deputation for information (See Item No. 3 for minute)

## **Presentations/Reports/Other Business**

### 1. KPMG LLP's Audit Plan for Year Ended December 31, 2023

S. Del Mastro, and K. Travers (KPMG) delivered a verbal presentation on this item.

Commissioner Osborne moved adoption of the staff recommendations as follows:

It is recommended that the TTC Audit and Risk Management Committee:

1. Receive this report for information.

The motion by Commissioner Osborne carried.

Approved

### 2. Audit, Risk, and Compliance – 2023 Audit Plan Status Update

Commissioner Osborne moved adoption of the staff recommendations as follows:

It is recommended that the TTC Audit and Risk Management Committee:

1. Receive this report for information.

The motion by Commissioner Osborne carried.

Approved

### 3. Audit, Risk, and Compliance – 2024 Audit Plan

Commissioner Jagdeo moved adoption of the staff recommendations as follows:

It is recommended that the TTC Audit and Risk Management Committee:

1. Approve the ARC Audit Plan (2024) – attached as Attachment 1 to this report.

The motion by Commissioner Jagdeo carried.

Approved

### 4. Audit of the Toronto Transit Commission's Streetcar Overhead Assets: Strengthening the Maintenance and Repair Program to Minimize Asset Failures and Service Delays

T. Anderson, Auditor General, C. Pastore, Senior Audit Manager, A. Chan, Assistant Auditor General, and S. Ali, Assistant Auditor General, IT & Strategy delivered a presentation on this item.

F. Monaco, Chief Operations and Infrastructure Officer delivered a presentation on this item.

Commissioner Osborne moved adoption of the recommendations as follows:

The Auditor General recommends that:

1. The Board request the Chief Executive Officer, Toronto Transit Commission, to support continuous improvement and increase streetcar service reliability by:
  - a. Reassessing and strengthening existing policies and procedures in Streetcar Overhead Operations to provide more criteria and clarity on the nature and extent of the root cause analysis and investigation required for service delays;
  - b. Determining the root causes for those delays that require investigation according to the policy, in order to prevent the same issues from recurring; and
  - c. Developing and implementing a process in Streetcar Overhead Operations to ensure compliance with the policies and procedures regarding root cause analyses and investigations of service delays.
2. The Board request the Chief Executive Officer, Toronto Transit Commission, to improve communication and information sharing across relevant streetcar and other departments, in order to support continuous improvements and reduce the number of fail-to-operate switch emergency calls. Information collection and sharing across these departments should include:
  - a. Collecting and tracking appropriate and relevant data regarding fail-to-operate switch emergency calls, including but not limited to switch IDs, number of calls, and their results; and
  - b. Using the data collected to perform root cause analyses and investigations with the goal of reducing the number of fail-to-operate switch emergency calls.
3. The Board request the Chief Executive Officer, Toronto Transit Commission, to develop and use a centralized database of Overhead Operations' assets across departments (Streetcar Infrastructure, Transit Control, Streetcar Transportation) to ensure Streetcar Overhead Operations is using an accurate and complete asset database, including a centralized switch inventory, to inform their operational decision-making and optimize their resource allocation.
4. The Board request the Chief Executive Officer, Toronto Transit Commission, to implement policies and procedures in Streetcar Overhead Operations, including oversight and monitoring policies and procedures, to ensure the assets in the Maintenance Schedule are always accurate and complete, and that any required asset changes, additions, and/or removals are made to the Maintenance Schedule on a timely basis.
5. The Board request the Chief Executive Officer, Toronto Transit Commission, to implement policies and procedures in Streetcar Overhead Operations to ensure all completed work orders are recorded on the Maintenance Schedule, in order to plan,

- manage, and schedule preventative inspections in an efficient manner that optimizes the use of time and resources.
6. The Board request the Chief Executive Officer, Toronto Transit Commission, to review, update, and approve all maintenance and inspection policies, procedures, and manuals in Streetcar Overhead Operations to ensure they are accurate, complete, and relevant, and provide training to staff on them.
  7. The Board request the Chief Executive Officer, Toronto Transit Commission, to:
    - a. Review and update the annual preventative inspection targets in Streetcar Overhead Operations on both an annual and as-needed basis; and
    - b. Establish policies and procedures to provide clear guidance in Streetcar Overhead Operations on which source data and information is needed for the reassessment.
  8. The Board request the Chief Executive Officer, Toronto Transit Commission, to establish and implement standard time expectations for common preventative inspections in Streetcar Overhead Operations and incorporate them into the employee performance evaluation.
  9. The Board request the Chief Executive Officer, Toronto Transit Commission, to install and enable GPS on Streetcar Overhead Operations' non-revenue vehicles to effectively monitor and assess performance.
  10. The Board request the Chief Executive Officer, Toronto Transit Commission, to:
    - a. Ensure policies, procedures and manuals in Streetcar Overhead Operations provide clear directions as to how preventative inspections' activity tasks, results, and observations should be performed (including the measurement method) and documented; and
    - b. Develop and implement an oversight process in Streetcar Overhead Operations (e.g., quality assurance audit program, spot checks, increased supervision) to ensure the accuracy, completeness, and reliability of the documented work orders and consistency of the work performed.
  11. The Board request the Chief Executive Officer, Toronto Transit Commission, to develop and implement formalized processes in Streetcar Overhead Operations to:
    - a. Ensure preventative inspections comply with annual inspection targets; and
    - b. Ensure preventative inspections are scheduled and completed in accordance with Overhead Operations' specified time intervals.

12. The Board request the Chief Executive Officer, Toronto Transit Commission, to develop and implement policies and procedures in Streetcar Overhead Operations to:
  - a. Provide clear expectations and training as to how crews should communicate and document preventative inspections that are only partially completed; and
  - b. Track and ensure partially completed inspections are appropriately rescheduled to be fully completed.
  
13. The Board request the Chief Executive Officer, Toronto Transit Commission, to develop and implement policies and procedures for Streetcar Overhead Operations' preventative and corrective maintenance program, which includes but is not limited to providing:
  - a. A set of criteria for each asset type to determine if corrective maintenance and repair work orders need to be generated, based on risks and implications;
  - b. Clear timing expectations for reviewing completed preventative inspections and generating any necessary corrective maintenance work orders; and
  - c. Clear criteria and timing expectations for the prioritization and completion of corrective maintenance work orders, based on risks and implications.
  
14. The Board request the Chief Executive Officer, Toronto Transit Commission, to develop and implement in Streetcar Overhead Operations:
  - a. Standard Operating Procedures that outline the steps to be taken to ensure the measuring tools used by crews during inspections (e.g., calipers) are in good working order; and
  - b. An oversight process to monitor and ensure compliance with the Standard Operating Procedures.
  
15. The Board request the Chief Executive Officer, Toronto Transit Commission, to develop a comprehensive Maximo implementation plan to ensure Maximo is implemented as both an enterprise asset management system and workflow process management system for Streetcar Overhead Operations. This implementation plan should include, but not be limited to:
  - a. Detailed implementation target dates and timelines; and
  - b. Implementation of Maximo Anywhere to all crews, not just emergency crews.
  
16. The Board request the Chief Executive Officer, Toronto Transit Commission, to provide appropriate Maximo training to responsible frontline crews/technicians/staff and management in order to fully leverage existing Maximo technology for Streetcar Overhead Operations.

17. The Board request the Chief Executive Officer, Toronto Transit Commission, to review and update Streetcar Overhead Operations' asset inventory and job plans/activity tasks in Maximo to ensure they are complete, accurate, and up-to-date, in order to support the planning and completion of repair and maintenance work.
18. The Board request the Chief Executive Officer, Toronto Transit Commission, to develop and implement a process in Streetcar Overhead Operations using Maximo to track the real-time status of work orders to support ongoing work order management and supervision.
19. The Board request the Chief Executive Officer, Toronto Transit Commission, to leverage Maximo to collect and track observations from Streetcar Overhead Operations' assets inspections, and information about maintenance and repairs activities, that can be used for data mining and trend analysis to support Key Performance Indicator reporting and inform decision-making.
20. The Board request the Chief Executive Officer, Toronto Transit Commission, to improve the Key Performance Indicator reporting for Streetcar Overhead Operations by:
  1. Establishing clearly defined, appropriate, outcome-focused Key Performance Indicators and targets;
  2. Developing short- and long-term strategies to meet these targets;
  3. Regularly reassessing to determine whether Key Performance Indicators and targets need to be revised; and
  4. Retaining supporting data and verifying the accuracy of data used for Key Performance Indicator reporting, ongoing oversight, and management decision-making.
21. The Board forward this report to City Council for information through the City's Audit Committee.

The motion by Commissioner Osborne carried.

Approved



5. Toronto Transit Commission Cybersecurity Audit – Phase Two: Overall Network Security and Cybersecurity Assessment of Select Critical Systems

T. Anderson, Auditor General, delivered a presentation on this item.

Commissioner Osborne moved adoption of the recommendations as follows:

The Auditor General recommends that:

1. The Board adopt the confidential instructions to staff in Confidential Attachment 1 to this report from the Auditor General.
2. The Board forward this report to City Council for information through the City's Audit Committee.
3. The Board recommend City Council authorize the public release of Confidential Attachment 1 to the report from the Auditor General at the discretion of the Auditor General, after discussions with the appropriate Toronto Transit Commission and City Officials.

The motion by Commissioner Osborne carried.

Approved

6. Training Session – Enterprise Risk Management

Commissioner Jagdeo moved that the Audit & Risk Management Committee receive the Training Session – Enterprise Risk Management for information.

Approved

On a motion by Commissioner Osborne, the meeting adjourned at 12:15 p.m.