



# AUDITOR GENERAL'S REPORT ACTION REQUIRED

## Review of Toronto Transit Commission Bus Maintenance and Shops Department, Phase Two Audit – Progress on Implementation of Audit Recommendations

<b>Date:</b>	June 11, 2015
<b>To:</b>	Audit Committee
<b>From:</b>	Auditor General
<b>Wards:</b>	All
<b>Reference Number:</b>	

### SUMMARY

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The purpose of this report is to provide the Audit Committee with a staff progress report on the implementation of recommendations contained in the following two audit reports:

- “Review of Toronto Transit Commission Bus Maintenance and Shops Department, Phase Two: Non-Revenue Fleet and Equipment Management and Maintenance”, and
- “Review of Toronto Transit Commission, Non-Revenue Vehicle Fuel Card Controls Need Immediate Improvement”.

This report is provided in response to the Audit Committee request of May 22, 2015. TTC staff progress reports are attached as Appendix 1 and Appendix 2. TTC management has outlined specific actions addressing each of the recommendations in the two audit reports, and have provided specific timelines for completion.

The Auditor General will formally assess the implementation status of report recommendations in early 2016 as part of the annual follow-up process. The results of the Auditor General’s follow-up on outstanding audit recommendations will be reported to the Audit Committee in 2016.

## **RECOMMENDATION**

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The Auditor General recommends that:

1. This report be received by the Audit Committee for information.

### **Financial Impact**

This report has no financial impact.

## **DECISION HISTORY**

On February 19, 2015, the Toronto Transit Commission (TTC) Audit Committee received the following two Auditor General reports:

- “Review of Toronto Transit Commission Bus Maintenance and Shops Department, Phase Two: Non-Revenue Fleet and Equipment Management and Maintenance”, and
- “Review of Toronto Transit Commission, Non-Revenue Vehicle Fuel Card Controls Need Immediate Improvement.”

The audit reports are available at:

<http://www.toronto.ca/legdocs/mmis/2015/au/bgrd/backgroundfile-79717.pdf>  
<http://www.toronto.ca/legdocs/mmis/2015/au/bgrd/backgroundfile-79724.pdf>

On March 26, 2015 the TTC Board considered the two reports and directed the TTC Chief Executive Officer to undertake the recommendations contained in the Auditor General’s reports.

On May 22, 2015 the Audit Committee requested the Auditor General to report to the June 26, 2015 Audit Committee meeting on TTC progress in implementing the recommendations in the two reports.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.AU2.1>

## **ISSUE BACKGROUND**

The Auditor General’s 2013 Audit Work Plan included an audit of the TTC Bus Maintenance and Shops Department. Due to the Department’s extensive operations, the audit was divided into two separate phases. Phase One focused on conventional buses and was completed in December 2013. This audit report was submitted to the TTC Audit Committee and TTC Board in February 2014.

The Phase Two audit focused on TTC’s non-revenue fleet and resulted in two audit reports. The report on fleet management and maintenance contains 21 recommendations

to help improve vehicle reliability, operational effectiveness and efficiency, as well as controlling fleet costs. The report on fuel card management contains four recommendations to improve existing controls and foster collaborative shared service opportunities with the City Fleet Services Division.

## **COMMENTS**

In response to the Audit Committee request, TTC staff provided a progress update and targeted timelines for implementing recommendations contained in the two audit reports. Implementation progress updates are attached as Appendix 1 and Appendix 2 to this report.

According to management, action to implement report recommendations is underway. As certain recommended changes are complex and therefore require a longer time frame for completion, full implementation of certain recommendations is anticipated in late 2016.

The Auditor General's Office conducts an annual follow-up process to determine the implementation status of recommendations included in audit reports. As Phase Two audit reports were adopted by the TTC Board in March 2015, the implementation status of audit recommendations will be assessed in early 2016 as part of the Auditor General's annual recommendation follow-up on outstanding audit recommendations. Results of the follow-up will be reported to the TTC Audit Committee, the TTC Board and the City Audit Committee in 2016.

## **CONTACT**

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## **SIGNATURE**

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Beverly Romeo-Beehler, Auditor General

## **ATTACHMENTS**

- Appendix 1: TTC staff progress report on the implementation of the Auditor General's report entitled "Review of Toronto Transit Commission – Bus Maintenance and Shops Department, Phase Two: Non-Revenue Fleet and Equipment Management and Maintenance"
- Appendix 2: TTC staff progress report on the implementation of the Auditor General's report entitled "Review of Toronto Transit Commission, Non-Revenue Vehicle Fuel Card Controls Need Immediate Improvement"

**TTC staff progress report on the implementation of the Auditor General’s report entitled “Review of Toronto Transit Commission – Bus Maintenance and Shops Department, Phase Two: Non-Revenue Fleet and Equipment Management and Maintenance”**

Rec No.	Recommendations	Management Comments and Action Plan/Time Frame
1.	The Board request the Chief Executive Officer to review the current non-revenue vehicle and equipment fleet management structure with a view to ensuring all key fleet management functions are defined and established with adequate corporate oversight.	<p><u>Actions Completed:</u></p> <ul style="list-style-type: none"> <li>- Fleet Manager Position created and filled.</li> <li>- Processes have been developed and implemented to ensure adequate corporate oversight of non-revenue fleet.</li> <li>- Standard Operating Procedures (SOP’s) are now posted for all employees to access on the TTC web site.</li> </ul> <p><u>Scheduled:</u></p> <ul style="list-style-type: none"> <li>- TTC will review the existing governance structure, including roles and responsibilities to ensure fleet management functions are defined as part of the 2016 organization structure.</li> </ul> <p><u>Target Scheduled:</u> Q4 - 2015</p>
2.	The Board request the Chief Executive Officer to consider implementing a chargeback process or other measures for non-revenue vehicle and equipment costs to help optimize use of vehicle and equipment resources by user departments and enhance accountability.	<p><u>Scheduled:</u></p> <ul style="list-style-type: none"> <li>- An annual report will be developed for Department Heads. The report will include;</li> <li>- Total Annual Maintenance Costs By Department</li> <li>- Total Annual Fuel Costs By Department</li> <li>- Total Annual Vehicle Purchases and Vehicle Rental Costs By Department</li> <li>- Due to the need to integrate vehicle repairs and mileage data in TTC’s Vehicle Maintenance System (VMS), user reports will not be fully available until 2016.</li> </ul> <p><u>Target Scheduled:</u> Q4- 2016</p>

<b>Rec No.</b>	<b>Recommendations</b>	<b>Management Comments and Action Plan/Time Frame</b>
3.	The Board request the Chief Executive Officer to enhance the current review and approval process for non-revenue vehicle and equipment acquisitions such that the needs, purposes, and projected usage of the requested vehicles and equipment can be adequately evaluated.	<u>Actions Completed:</u> <ul style="list-style-type: none"> <li>- Staff has developed a NR Business Case Document and process to ensure that all vehicles and equipment are adequately defined, including needs and usage justification, as well as reviewing alternates prior to any vehicle approval.</li> </ul>
4.	The Board request the Chief Executive Officer to conduct detailed reviews of utilization levels of non-revenue vehicles and equipment to identify and minimize underutilized vehicles and equipment.	<u>Scheduled:</u> <ul style="list-style-type: none"> <li>- NR vehicle utilization is being reviewed as part of the Business Case Assessment outlined in Rec #3.</li> <li>- Installation of GPS tracking of vehicles and equipment will allow for utilization tracking ensuring Life Cycle Management (LCM) can be maximized.</li> </ul> <u>Target Scheduled:</u> <ul style="list-style-type: none"> <li>- Complete Needs Analysis Q4-2015</li> <li>- Complete GPS Installation Q4-2016</li> </ul>
5.	The Board request the Chief Executive Officer to undertake an assessment of alternatives of meeting non-revenue vehicle and equipment needs prior to finalizing annual vehicle and equipment procurement decisions.	<u>Actions Completed:</u> <ul style="list-style-type: none"> <li>- As part of the Business Case Assessment process, alternate ways of meeting user's requirements will be investigated prior to new vehicle or equipment purchases.</li> </ul>
6.	The Board request the Chief Executive Officer to take immediate actions to identify and prioritize the replacement of existing aging non-revenue vehicles incurring significant annual maintenance and repair costs.	<u>Actions Completed:</u> <ul style="list-style-type: none"> <li>- Aged vehicles identified in the audit have been replaced in Q4 of 2014.</li> <li>- New vehicles received in 2015 have allowed staff to decommission units past their lifecycle and reduce the number of rentals required.</li> </ul>

<b>Rec No.</b>	<b>Recommendations</b>	<b>Management Comments and Action Plan/Time Frame</b>
7.	<p>The Board request the Chief Executive Officer to ensure that vehicle life cycle costs are actively monitored and analyzed as part of the non-revenue fleet management functions. A re-assessment of the current non-revenue vehicle replacement criteria should be undertaken to ensure the criteria are effective in preventing excessive maintenance and repair costs.</p>	<p><u>Actions Completed:</u></p> <ul style="list-style-type: none"> <li>- The TTC's replacement criteria have been reviewed to ensure the vehicle lifecycle is maximized without incurring excessive maintenance costs.</li> <li>- The majority of the TTC's replacement criteria are in sync with the City of Toronto's criteria for their fleet.</li> <li>- As part of the Fleet Managers roles and responsibilities, vehicle costs will be monitored and shared with users groups to maximize efficiencies.</li> </ul>
8.	<p>The Board request the Chief Executive Officer to review inventory management of non-revenue vehicles and fleet equipment to ensure the inventory is accurate, complete, and up-to-date. Steps to be taken should include but not be limited to:</p> <ol style="list-style-type: none"> <li>a. Assigning a staff person responsible for the oversight and management of inventory;</li> <li>b. Establishing clear policy and criteria defining the type and value of assets to be tracked;</li> <li>c. Ensuring records kept in the Vehicle Work Order (VWO) system meet annual asset reporting requirements; and</li> <li>d. Expanding the current criteria for tracking fleet equipment in VWO to establish a centralized and complete fleet equipment database.</li> </ol>	<p><u>Actions Completed:</u></p> <ul style="list-style-type: none"> <li>- The Fleet Supervisor is responsible for the oversight, tracking and management of all NR assets.</li> <li>- The type and value of assets tracked is outlined on the NR Planned Replacement Criteria document, posted on the TTC web page.</li> <li>- The VWO system will track all NR assets in the same manner as TTC buses are maintained.</li> <li>- Fleet equipment which is maintained by the NR repair shop will be included as an asset in VWO system.</li> </ul>

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9.	The Board request the Chief Executive Officer to review the existing list of long-term rentals of non-revenue vehicles to determine whether these long-term rentals are justified and cost-effective.	<u>Actions Completed:</u> <ul style="list-style-type: none"> <li>- Long term rentals have been reduced as new vehicles have been purchased through 2015; at the time of the audit 81 rentals were in use, as of April 10/15 there are 57 rentals in use.</li> <li>- Future rentals are justified as part of the NR Business Case Document, prior to approval.</li> </ul>
10.	The Board request the Chief Executive Officer to enhance current rental vehicle review and approval process by incorporating a corporate-wide review of rental vehicle needs, available vehicle resources, and opportunities for shared usage.	<u>Actions Completed:</u> <ul style="list-style-type: none"> <li>- A corporate wide review of rentals was completed, and rentals were replaced with extended life vehicles where practical.</li> <li>- Opportunities for shared usage within the TTC is now part of the NR Business Case Document, prior to future rental approvals.</li> </ul>
11.	The Board request the Chief Executive Officer to review rental vehicle insurance costs provided by rental companies. A determination should be made as to whether self-insurance coverage is less costly.	<u>Scheduled:</u> <ul style="list-style-type: none"> <li>- Staff will review and conduct a cost benefit analysis of vehicle insurance provided by rental companies vs self-insurance coverage.</li> </ul> <u>Target Schedule:</u> Q4 – 2015
12.	The Board request the Chief Executive Officer to work collaboratively with the Director of the City of Toronto Fleet Services Division to determine the feasibility of issuing a joint Request for Quotation (RFQ) in future acquisition of rental vehicles.	<u>Actions Completed:</u> <ul style="list-style-type: none"> <li>- TTC staff are members of the City Of Toronto - Shared Services Committee and future joint RFQ's are reviewed as part of these meetings. Joint purchases will be pursued as vehicles or equipment specifications requirements are similar.</li> </ul>



<b>Rec No.</b>	<b>Recommendations</b>	<b>Management Comments and Action Plan/Time Frame</b>
13.	The Board request the Chief Executive Officer to take steps to improve non-revenue vehicle user compliance with scheduled maintenance, including steps to address user concerns.	<p><u>Scheduled:</u></p> <ul style="list-style-type: none"> <li>- Monthly reports will be developed for Department Heads to identify planned future maintenance for user's vehicles to aid in compliance schedules.</li> <li>- More accurate maintenance scheduling will be developed with the implementation of GPS tracking. The GPS hardware pilot is required to develop two way communication protocols between employee logon when operating TTC vehicles performing circle checks and responding to planned inspections calls.</li> </ul> <p><u>Target Schedule:</u> VWO Reports Q4-2015</p> <p><u>Target Schedule:</u> GPS Pilot Begin Q2-2015</p> <p><u>Target GPS Pilot Completion:</u> Q4-2015</p> <p><u>Target GPS Fleet Completion:</u> Q4-2016</p>
14.	The Board request the Chief Executive Officer to ensure accurate and up-to-date non-revenue vehicle kilometres data are obtained to facilitate effective preventive maintenance scheduling.	<p><u>Scheduled:</u></p> <ul style="list-style-type: none"> <li>- TTC – IT Staff are currently designing and implementing software interface tools to ensure accurate collection of vehicle mileage as part of the GPS pilot.</li> <li>- Based on data collected, maintenance schedules will be enhanced.</li> </ul> <p><u>Target Schedule:</u> Q4 - 2015</p>

Rec No.	Recommendations	Management Comments and Action Plan/Time Frame
15.	<p>The Board request the Chief Executive Officer to improve the effectiveness of the Vehicle Work Order system for non-revenue fleet management. Steps to be taken should include but not be limited to:</p> <p>(a) Addressing existing preventive maintenance scheduling issues in the system;</p> <p>(b) Ensuring adequate system access is provided to garage management staff;</p> <p>(c) Re-assessing the practicality of existing data entry controls;</p> <p>(d) Ensuring accuracy of system generated management reports; and</p> <p>(e) Expanding the existing system reports to include reports on fleet management key performance indicators.</p>	<p><u>Scheduled:</u></p> <ul style="list-style-type: none"> <li>- Preventive maintenance scheduling issues, improved system access for garage staff and review of data entry controls will be addressed as part of the IFS control features improvements identified as part of the Phase 1 Bus Maintenance Dept. audit.</li> </ul> <p>These upgrades include:</p> <ul style="list-style-type: none"> <li>- Improved user interface for maintenance and materials staff</li> <li>- Improved scheduling features</li> <li>- Improved maintenance and material inventory control&amp; tracking features</li> <li>- Improved report features</li> <li>- Improved warranty administration process</li> <li>- Expand reports to include NRV, Key Performance Indicator tracking</li> </ul> <p><u>Target Schedule:</u></p> <p>Phase #1 Bus Maintenance IFS Complete – Q1-2016</p> <p>Phase #2 Non-Revenue IFS Complete – Q4-2016</p>

Rec No.	Recommendations	Management Comments and Action Plan/Time Frame
16.	The Board request the Chief Executive Officer to develop and implement non-revenue fleet quality assurance processes to systematically monitor and detect repair quality issues.	<p><u>Actions Completed:</u></p> <ul style="list-style-type: none"> <li>- A new Vehicle Reliability &amp; Quality Assurance Group was implemented within Bus Maintenance Dept. in 2014.</li> <li>- A Reliability Centered Maintenance (RCM) program was introduced in Q4 of 2014 for City Buses to improve bus reliability. This program has been introduced into the non-revenue fleet to address high duty cycle areas and reduce in service failures.</li> </ul> <p><u>Scheduled:</u></p> <ul style="list-style-type: none"> <li>- Develop RCM programs for non-revenue vehicles.</li> <li>- Develop quality measures to track vehicle Key Performance Measures (KPI's), based on mileage, fuel consumption and vehicle availability for service.</li> </ul> <p><u>Target Schedule:</u></p> <p>Develop RCM Program Q4 – 2015</p> <p>Develop QA Tracking Process – Q4-2016</p>

<b>Rec No.</b>	<b>Recommendations</b>	<b>Management Comments and Action Plan/Time Frame</b>
17.	The Board request the Chief Executive Officer to ensure adequate controls are in place at TTC garages to deter and detect ordering of non-revenue vehicle and equipment parts for non-TTC uses. Periodic reviews should be considered by TTC internal audit staff.	<p><u>Actions Completed:</u></p> <ul style="list-style-type: none"> <li>- Staff developed a vehicle post repair parts inspection process, to audit vehicle parts ordered to actual repairs completed.</li> <li>- This audit SOP is posted on the TTC web site.</li> </ul> <p><u>Scheduled:</u></p> <ul style="list-style-type: none"> <li>- Improved material inventory IFS control features identified as part of the Phase 1 Bus Maintenance Dept. audit, are being implemented Q1-2016</li> <li>- Similar controls will be implemented in the NRV sections as part of these upgrades in Q4-2016 in conjunction with Rec #15</li> </ul> <p><u>Target Schedule:</u></p> <p>Phase #1 Bus Maintenance IFS Complete – Q1-2016</p> <p>Phase #2 Non-Revenue IFS Complete – Q4-2016</p>
18.	The Board request the Chief Executive Officer to take steps to shorten garage service turnaround time for non-revenue fleet by addressing issues pertaining to garage capacity, availability of technicians, parts availability and maintenance scheduling.	<p><u>Scheduled:</u></p> <ul style="list-style-type: none"> <li>- Staff is developing methods in VWO to separate inspection and repair work orders to ensure vehicle repair times are tracked accurately.</li> <li>- Additional part suppliers will be pursued with Purchasing Dept. staff to improve parts availability.</li> <li>- Develop planned inspection reports which will be forwarded to user groups, to aid in inspection scheduling and maximize garage repair capacity.</li> </ul> <p><u>Target Schedule:</u> Q4 - 2015</p>

<b>Rec No.</b>	<b>Recommendations</b>	<b>Management Comments and Action Plan/Time Frame</b>
19.	The Board request the Chief Executive Officer to shorten the period of time readying a new non-revenue vehicle for operation. Steps to be taken should include but not be limited to setting a targeted time frame and improving coordination and communication among various TTC departments.	<u>Actions Completed:</u> <ul style="list-style-type: none"> <li>- Processes have been developed and implemented to improve and streamline vehicle receipt and prep for service.</li> <li>- These process SOPs are posted on the TTC web site.</li> <li>- As vehicles are released from prep for service, the user groups and all stakeholders are emailed of the new vehicle entering service and the NR database is updated accordingly.</li> </ul>
20.	The Board request the Chief Executive Officer to establish a formal warranty management process for non-revenue vehicles and fleet equipment such that warranty claims are maximized.	<u>Scheduled:</u> <ul style="list-style-type: none"> <li>- A NR warranty procedure will be developed to identify, track and recoup defective warranty components or equipment.</li> <li>- NR warranty will outline conditions and timeframes for all major components and these will be registered into the VWO system as part of the IFS computer system upgrades related to Rec #15</li> </ul> <u>Target Schedule:</u> Complete Warranty Procedure - Q4-2015  Complete IFS Computer Upgrades – Q4-2016
21.	The Board request the Chief Executive Officer to ensure the non-revenue vehicle procurement process take into account the ease and practicality of warranty administration.	<u>Actions Completed:</u> <ul style="list-style-type: none"> <li>- Staff has updated our vehicle purchase Request for Proposals (RFP's), to include improved warranty specifications, vendor warranty reaction timing and outline the warranty charge back process.</li> <li>- The value of warranty options offered by vehicle suppliers, will be evaluated as part of the RFP review process weighing the practicality of warranty options offered on unique equipment.</li> </ul>

## Appendix 2

### TTC staff progress report on the implementation of the Auditor General’s report entitled “Review of Toronto Transit Commission, Non-Revenue Vehicle Fuel Card Controls Need Immediate Improvement”

Rec No.	Recommendations	Action Plan/Time Frame
1.	The Board request the Chief Executive Officer to review and revise the current fuel card policy and procedures such that adequate controls are developed and implemented to facilitate effective monitoring of fuel card transactions and detection of questionable transactions.	<p><u>Actions Completed:</u></p> <ul style="list-style-type: none"> <li>- Staff updated the procedures to improve controls, which are auditable and measurable.</li> </ul> <p><u>Scheduled:</u></p> <ul style="list-style-type: none"> <li>- Staff will issue the new gas card procedures to all Department Heads and all user groups by end of June 2015</li> </ul> <p><u>Target Schedule:</u> Q2 2015.</p>
2.	<p>The Board request the Chief Executive Officer to take the necessary steps to improve compliance with fuel card policy and procedural requirements, including but not be limited to:</p> <ul style="list-style-type: none"> <li>a. Developing additional procedural requirements to hold user group management staff accountable for non-compliance with fuel card policies;</li> <li>b. Undertaking an immediate review of active Personal Identification Numbers (PINs) to identify and cancel PINs previously assigned to employees who have since terminated their employment; and</li> <li>c. Developing procedures to facilitate timely notification and cancellation of PINs upon employment termination.</li> </ul>	<p><u>Actions Completed:</u></p> <ul style="list-style-type: none"> <li>a) Any non-compliance to procedures will result in escalation to the Department Head and repeat offenders may result in cancellation of their card / PIN.</li> <li>b) System Control Administrator (SCA) obtained a Finance report listing active employees, which was compared to fuel card users with PIN’s and PIN’s for non-active employees have been cancelled.</li> <li>c) The SCA now receives a weekly report from Finance and the information is validated against user with PIN’s. PIN’s for non-active employees will be cancelled.</li> </ul>

Rec No.	Recommendations	Action Plan/Time Frame
3.	<p>The Board request the Chief Executive Officer to strengthen existing fuel card administration and monitoring processes by the Systems Contract and Administration Unit. Steps to be taken should include but not be limited to:</p> <ul style="list-style-type: none"> <li>a. Ensuring the issuance of fuel cards and personal identification numbers are in accordance with the policy and procedural requirements;</li> <li>b. Improving the effectiveness of transaction sample reviews by the Systems Contract and Administration Unit; and</li> <li>c. Defining exception reporting requirements and providing regular exception reports to aid management review of fuel card transactions and monitoring.</li> </ul>	<p><u>Actions Completed:</u></p> <ul style="list-style-type: none"> <li>a) All fuel cards were compared against Non-revenue fleet vehicles ensuring only active vehicles had live cards. As part of the new procedure, fuel cards will only be issued based on receipt of Department Head authorization, validation from Bus Operations fleet management, and SCA review on NRV list. PIN issuance will not be processed without user Department Managers and Department Head approval and employee (fuel card user) signature on Agreement Form.</li> <li>b) The SCA now selects receipts from user groups for review. The selection is based on non-compliant activity. Non-compliance is escalated to the Department Head.</li> <li>c) Exception reports have been obtained to review unusual activity. The SCA also monitors exceptions which are forwarded to the Department Head for review as required.</li> </ul>
4.	<p>The Board request the Chief Executive Officer to, prior to issuing TTC's next fuel card contract in 2016, work with the Director of the City of Toronto Fleet Services Division to determine the feasibility and merits of utilizing the City's fuel supply system including the City operated fuel stations, the City fuel card, and the radio frequency identification technology.</p>	<p><u>Actions Completed:</u></p> <ul style="list-style-type: none"> <li>- TTC Staff is part of the City Shared Service committee working group.</li> </ul> <p><u>Scheduled:</u></p> <ul style="list-style-type: none"> <li>- In Q2 – 2015, TTC staff initiated a pilot project to determine if TTC NR vehicles can fuel at City of Toronto Super Fuel Sites, if so this would adjust and reduce the need for a fuel card contract, the evaluation is expected to be completed by year end.</li> </ul> <p><u>Target Scheduled:</u> Q4 - 2015</p>