



Office of the Auditor General / Bureau du vérificateur général

**FOLLOW-UP TO THE 2007 AUDIT OF BUS REFURBISHING AND
WARRANTY PROGRAMS**

2009

**SUIVI DE LA VÉRIFICATION DES PROGRAMMES DE REMISE À
NEUF ET DE GARANTIE DES AUTOBUS DE 2007**

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EXECUTIVE SUMMARY

Introduction

The Follow-up to the 2007 Audit of Bus Refurbishing and Warranty Programs was included in the Auditor General's 2009 Audit Plan.

The key findings of the original 2007 audit included:

- The City had \$360,000 in uncollected warranty claims dating from 2003-2006, including \$158,000 from 2004.
- During 2007, the City wrote down outstanding warranty claims totalling \$723,000, by an amount of \$363,000, due to corrections and the removal of claims.
- Better management and accounting through the use of the corporate financial system would allow for better monitoring of this receivable.
- Billings under the bus refurbishing program were in compliance with supplier's contract.

Summary of the Level of Completion

The table below outlines our assessment of the level of completion of each recommendation as of Fall 2009.

CATEGORY	% COMPLETE	RECOMMENDATIONS	NUMBER OF RECOMMENDATIONS	PERCENTAGE OF TOTAL RECOMMENDATIONS
LITTLE OR NO ACTION	0 – 24	-	-	-
ACTION INITIATED	25 – 49	-	-	-
PARTIALLY COMPLETE	50 – 74	1, 2	2	100%
SUBSTANTIALLY COMPLETE	75 – 99	-	-	-
COMPLETE	100	-	-	-
TOTAL			2	100%

Conclusion

Transit has come a long way over the past eighteen months in its capability to deal with preventative maintenance (PM) and warranties. The Fleet Management System (M5) has been implemented and PMs have been entered into the system however, the overall PM to Other Repair ratio is low.

Parts continue to be a problem and there is no part level warranty tracking occurring because the current system of record (SAP) is not capable of tracking part level warranties. Transit needs to address this shortfall quickly and either out source its parts to a third party or move its parts inventory back into M5 where warranties can be properly tracked and auctioned.

The spreadsheet being used to track warranty claims should be replaced with M5 which has all of the capability to properly track warranty claims when coupled with the financial aspects residing in SAP.

Acknowledgement

We wish to express our appreciation for the cooperation and assistance afforded the audit team by management.

RÉSUMÉ

Introduction

Le Suivi de la vérification des programmes de remise à neuf et de garantie des autobus de 2007 était prévu dans le Plan de vérification du Bureau du vérificateur général de 2009.

Les constatations principales de la vérification initiale de 2007 sont les suivantes :

- La Ville n'avait pas recouvré 360 000 \$ en réclamations au titre des garanties pour la période de 2003 à 2006, y compris 158 000 \$ en 2004.
- Au cours de l'année 2007, en raison de corrections et de radiations, la Ville a retranché 363 000 \$ des 723 000 \$ de réclamations en suspens au titre des garanties.
- Une meilleure gestion et une meilleure comptabilité par le biais de l'utilisation du système financier municipal permettraient de mieux surveiller ces comptes débiteurs.
- La facturation relative au programme de remise à neuf des autobus était conforme au contrat signé avec le fournisseur.

Sommaire du degré d'achèvement

Le tableau ci-dessous présente notre évaluation du degré d'achèvement de chaque recommandation à l'automne 2009 :

CATÉGORIE	POURCENTAGE COMPLÉTÉ	RECOMMANDATIONS	NOMBRE DE RECOMMANDATIONS	POURCENTAGE DU TOTAL DES RECOMMANDATIONS
PEU OU PAS DE MESURES PRISES	0 - 24	-	-	-
ACTION AMORCÉE	25 - 49	-	-	-
COMPLÉTÉE EN PARTIE	50 - 74	1, 2	2	100 %
PRATIQUEMENT COMPLÉTÉE	75 - 99	-	-	-
COMPLÉTÉE	100	-	-	-
TOTAL			2	100 %

Conclusion

Les Services de transport en commun ont fait beaucoup de chemin au cours des 18 derniers mois en ce qui a trait à leur capacité de faire face à l'entretien préventif et aux garanties. Le système de gestion du parc automobile (M5) a été mis en œuvre et l'entretien préventif a été entré dans le système. Toutefois, le ratio global entre l'entretien préventif et les autres réparations est faible.

Les pièces détachées constituent encore un problème et aucun suivi au niveau des garanties des pièces détachées n'est effectué parce que le système actuel de consignation (SAP) n'est pas capable de faire le suivi des garanties au niveau des pièces détachées. Transport en commun doit résoudre cette lacune rapidement et, soit impartir les pièces détachées à une tierce partie, soit remettre l'inventaire des pièces détachées dans M5 où les garanties peuvent être suivies et adjugées de façon adéquate.

Le tableur utilisé pour assurer le suivi des réclamations au titre des garanties devrait être remplacé dans M5 qui dispose de la capacité d'assurer le suivi des réclamations au titre des garanties de façon appropriée quand il est associé aux aspects financiers existant dans SAP.

Remerciements

Nous tenons à remercier la direction pour la coopération et l'assistance accordées à l'équipe de vérification.

1 INTRODUCTION

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The key findings of the original 2007 audit included:

- The City had \$360,000 in uncollected warranty claims dating from 2003-2006, including \$158,000 from 2004.
- During 2007, the City wrote down outstanding warranty claims totalling \$723,000, by an amount of \$363,000, due to corrections and the removal of claims.
- Better management and accounting through the use of the corporate financial system would allow for better monitoring of this receivable.
- Billings under the bus refurbishing program were in compliance with supplier's contract.

2 KEY FINDINGS OF THE ORIGINAL 2007 AUDIT OF BUS REFURBISHING AND WARRANTY PROGRAMS

Bus Manufacturers Warranty Programs

Manufacturers require that a minimum of preventive maintenance work be performed on buses. Fleet Services managers indicated that bus-refurbishing programs might have, in the past, been performed without fully considering manufacturers' warranties. However, Management indicated that since 2006, the program has been developed and implemented.

Management represented that there is a backlog of outstanding warranty claims ranging from 2003 to present. We were informed that prior to 2006, the operating department, not the FSU recorded warranty claims collections against warranty claims submitted to supplier on an Excel spreadsheet. At that time, when a claim was written-off or paid-off, it was simply deleted from the database and therefore, as indicated by the FSU, only hard copy documentation of these transactions exist. As no electronic copy of the outstanding warranty claim database is available, we were unable to analyze pre-2006 data.

Since 2006, the FSU for Fleet Services has been keeping track of outstanding claims still using the Excel spreadsheet. When a cheque is received, it is marked as paid on the outstanding claim spreadsheet and transferred to another spreadsheet. The FSU puts through monthly actual recovery in SAP against the Operating Negative Costs - Warranty Account. In addition, on a monthly basis, the FSU ensures that an accrual entry is made to this account to reflect the level of outstanding claims.

During 2007, Fleet Management had undertaken to review the accuracy of the outstanding warranty claims database and represented that they reduced the amount outstanding owing by the supplier by 50% from approximately \$723,049 as at May 31, 2007 to \$360,200 as at September 30, 2007. It is important to note that this does not represent an inflow of revenue totaling \$362,849 but more accurately a combination of corrections, removal of claims and previous collections. In fact, the last warranty claim collection posted to SAP from the supplier was in June 2007.

Management informed us that corrections stemmed from:

- Cheques received from the supplier which had not been matched against a claim;
- Supplier being able to provide proof that they had already paid the claim by providing a copy of the cancelled cheque; and,
- Warranty group decision to remove/excuse the claim.

As time goes by, collection of previous years outstanding warranty claims, such as the \$40,818 still owing from 2003, seem less likely.

As noted earlier, management's concerted efforts to review outstanding warranty claims during 2007 resulted in a reduction from \$723,049 as at May 31, 2007 to \$360,200 as at September 30, 2007. Neither the FSU nor Fleet Services were able to provide hard copy support for the reduction of the outstanding warranty receivables.

Receivables such as warranty claims owed to the City represent significant recoveries for the City.

As part of the City's safeguarding of assets, branch receivables should no longer be managed through the use of off-line Excel spreadsheet but rather using the City's corporate financial management system, SAP. The use of SAP would provide management with real-time financial report on outstanding as well as settled warranty claims. Formal procedures should also be established for the proper management and accounting of claims, such as for the aging of outstanding claims prior to writing-off non-collectable amounts.

Bus Refurbishing Contracts

The refurbishing contract was analyzed in detail to verify if extra billing was justified. The contract was comprised of two parts:

- Category A: Mandatory work – A series of activities to be performed at each refurbishment for a lump sum price; and,
- Category B: Optional work – A list of activities with quoted flat rates to be performed as required subject to approval by a Fleet Services inspector.

Our analyses first identified 115 transactions that seemed to address exactly the same tasks as the ones in Category A. That list was submitted to Fleet Services managers for review. The group reviewed each transaction individually. As a result, the list was narrowed down to 45 transactions that required further explanation from the supplier.

The list was forwarded to the supplier. All invoices were reviewed with the supplier and satisfactory explanations for the costs were provided.

As a conclusion, all invoicing was in compliance with the contract. However, the bus-refurbishing program needed to be revised and updated. The whole contractual agreement was subject to interpretation in the way it was devised. The contract needed improvements and was completely revised in 2005. The concept of “mandatory work” at a fixed cost is no longer in effect; therefore, extra billing is not likely to be an issue in the future.

The refurbisher does provide a one-year warranty on all repairs. According to Fleet Services managers, the City has never claimed any work on warranty from a refurbisher but never had to. Our analysis of a sample of 30 work orders did not reveal any case where work should have been claimed on any bus refurbishment warranty.

New Bus Acquisitions

Internal e-mails in Fleet Services in 2006 regarding new bus acquisitions indicated that “plans are being formalized to park 44 of these units for at least one year”. Interviews were conducted with the Fleet Services Branch, Transit Services Branch and an outside supplier, related to the allegation that 44 new buses were purchased but not put in service and were instead to be parked for at least a year. The supplier confirmed that no new buses belonging to Ottawa Transit Services were ever parked at any of their facilities. There were no buses at the alleged location. In the end, we were unable to substantiate the claim.

3 STATUS OF IMPLEMENTATION OF 2007 AUDIT RECOMMENDATIONS

2007 Recommendation 1

That Fleet Services improve the management and financial accounting of the preventative maintenance (PM) program for bus bodies and structures.

2007 Management Response

Management agrees with this recommendation.

Management recognizes that the conversion from SAP R3 has not been meeting the accountability requirements for a fleet management system. Conversion to

Maximus M5, which is scheduled for implementation in October 2008, will substantially improve the management of this program.

Management Representation of the Status of Implementation of Recommendation 1 at December 31, 2008

Implementation of this recommendation is 90% complete. M5 Implementation was completed on October 22, 2008. Modifications to processes and verification of data integrity occurred in December 2008. The implementation of a formal Corrosion Prevention Program is slated for Q1 2009.

Management: % complete *90%*

OAG's Follow-up Audit Findings regarding Recommendation 1

M5 Data was analysed and PMs have been set up which include bus bodies and structures. The overall Fleet and Transit PM ratio to Other Repairs is lower than expected. A disturbing trend was found in fleet where 16% of repairs were classified as PMs in 2005 and this has dropped over time to just over 13%. Transit is currently sitting at 9.4% PM repairs to Other Repairs which is considerably lower than Fleet's 13.7%.

OAG: % complete *50%*

Management Representation of Status of Implementation of Recommendation 1 as of Winter 2010

Transit management agrees with the OAG's recommendation and its application to Transit Services following the June 2008 transfer of management responsibilities from Fleet Services to Transit Services. Transit Services only assumed responsibility to implement this recommendation and track progress as a result of the follow-up audit in December 2009.

Transit management disagrees with the OAG's follow-up audit finding that implementation of this recommendation is only partially complete. The rationale for the percentage rate for Transit PM repairs sitting lower than Fleet's rate, is due to availability improvements through the retiring of older buses and therefore, a lower requirement for structural repairs. The bus average age of 7.1 years is 39.5% of the maximum life of 18 years.

This recommendation is directly linked to recommendation 22 of the 2006 Audit of Fleet Services. A procedure is already in place for determining which buses will be reconditioned and in what frequency. Technology has been developed with the NRC to scan the frame and get an accurate view of what refurbishing is required. The refurbishing program has been documented and has been imbedded in the current RFP for bus refurbishment.

Transit management considers implementation of this recommendation to be complete.

*Management: % complete**100%***2007 Recommendation 2**

That Fleet Services in conjunction with Financial Services Branch use SAP functionality to set up receivables for outstanding warranty claims, including but not be limited to the:

- a) Writing-off any uncollectible claims;
- b) Directing either the FSU or the FSU in conjunction with the Warranty Unit to aggressively undertake the collection of all valid outstanding claims; and,
- c) Continuous monitoring and pursuing of any new and/or existing outstanding claims.

2007 Management Response

Management agrees with this recommendation.

Bus warranty tracking functionality will be obtained through the Maximus M5 and SAP systems. M5 will be used, in conjunction with SAP accounts receivable, to track and monitor warranty claims and recoveries once Transit Fleet Maintenance implements M5 in October 2008.

Pending implementation of M5 and the benefits this system offers, the value of outstanding warranty claims will continue to be accrued by the Financial Support Unit (FSU) within SAP each month. Warranty receipts will continue to be matched against outstanding warranty claims by the FSU. The current segregation of duties will also be maintained such that Fleet Services are responsible for developing warranty claims, FSU staff are responsible for recognizing all outstanding warranty receivables within SAP and separate FSU staff are responsible for receiving and depositing warranty receipts.

City Management would like to state that work to reduce outstanding warranty claims began on January 1, 2007 when a resource was assigned centralized responsibility for managing warranties, not as a result of this audit. A 2005 study, commissioned by Fleet Services, into warranty management prompted this assignment and the efforts to reduce outstanding claims.

It should also be noted that warranty settlements may, at times, and as part of the payment, include parts or labour provided free of charge. As such, the reported variances or reductions on warranty recoveries do not reflect the complete negotiated settlements.

Management Representation of the Status of Implementation of Recommendation 2 at December 31, 2008

Implementation of this recommendation is 80% complete. M5 Implementation was completed on October 22, 2008. Training of warranty admin staff is underway.

Further development of M5 to SAP interface is required and is expected to be complete by the end of Q1 2009.

Management: % complete **80%**

OAG's Follow-up Audit Findings regarding Recommendation 2

When M5 and parts warranties are considered there is a significant amount of work yet to do. Transit currently uses a spreadsheet and SAP to manage the majority of its Warranty claims. A significant write down occurred over 2009 and vehicle level warranties are being tracked and actioned. However, M5 is not yet the primary system for tracking warranties and only a fraction of the tracked warranty information from the spreadsheet is finding its way into M5.

Part level warranties are not tracked because the SAP system is incapable of tracking part level warranties. It is recommended that Transit follow Fleet's lead and outsource their parts to a third party or at least move quickly and begin to use M5 as its primary system for parts inventory so that parts warranties can be tracked and reimbursements actioned.

OAG: % complete **60%**

Management Representation of Status of Implementation of Recommendation 2 as of Winter 2010

Transit management agrees with the OAG's follow-up audit finding and its application to Transit Services following the June 2008 transfer of management responsibilities from Fleet Services to Transit Services. Transit Services only assumed responsibility to implement this recommendation and track progress as a result of the follow-up audit in December 2009.

Transit management disagrees with the OAG's representation of the current status.

Currently M5 is used to report warranty infractions and forms the basis of negotiations and claim agreement with the supplier for whole bus warranty recovery. Transit issues an SAP Accounts Receivable invoice once agreed with the supplier. The spreadsheet only provides a summary of the claim status which includes an overview of the measurement of investigation, the negotiation, the agreement and the invoice. The incorporation of these indicators into M5 is pending implementation of the Project Plan under the Work Management System development which includes establishment of KPI's and a reporting Dashboard in Q2 2010.

In 2009, staff initiated utilizing a vendor web-based warranty management system to track progress of claims through reciprocal payment to ensure warranties are earned as quickly as possible. This service is at no cost and is supplied by our largest OEM supplier.

Management’s eighty percent (80%) completion estimate had been based on the fact that most of the conceptual work had been done to begin populating existing part level fields within M5. It has now become apparent that these fields will only become operational once the Parts Inventory is visible in M5. This setback pushed percent completion back to partially complete as indicated by the OAG.

Transit is moving in the direction of incorporating parts level inventory into M5 with a project currently underway that will define the requirements and determine the implementation process. Once the implementation is complete later this year, M5 will be able to process part level warranties and systematically catch and report warranty infractions at the part level.

Management: % complete ***60%***

4 SUMMARY OF THE LEVEL OF COMPLETION

The table below outlines our assessment of the level of completion of each recommendation as of Fall 2009.

CATEGORY	% COMPLETE	RECOMMENDATIONS	NUMBER OF RECOMMENDATIONS	PERCENTAGE OF TOTAL RECOMMENDATIONS
LITTLE OR NO ACTION	0 – 24	-	-	-
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TOTAL			2	100%

5 CONCLUSION

Transit has come a long way over the past eighteen months in its capability to deal with preventative maintenance (PM) and warranties. The Fleet Management System (M5) has been implemented and PMs have been entered into the system however, the overall PM to Other Repair ratio is low.

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The spreadsheet being used to track warranty claims should be replaced with M5 which has all of the capability to properly track warranty claims when coupled with the financial aspects residing in SAP.

6 ACKNOWLEDGEMENT

We wish to express appreciation to the staff and management for their cooperation and assistance throughout the audit process.