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Office of the Inspector General Miami-Dade County

COVER MEMORANDUM

To: George M. Burgess, County Manager

From: Christopher R. Mazzella, Inspector General

Date: March 23, 2006

Re: FINAL AUDIT REPORT of MDT's Bus Service Parts Warranty Coverage IG05-92A

Attached please find the Office of the Inspector General's (OIG) FINAL AUDIT REPORT on the above-captioned item. The OIG distributed a draft version of this report to Miami-Dade Transit (MDT) on February 14, 2006. We received MDT's written response on March 17, 2006. The OIG's final report, which we have attached to this cover memorandum, incorporates MDT's response as APPENDIX A. There is no separate OIG rejoinder.

Results

The OIG's report comprised three (3) findings and eight (8) recommendations. MDT has accepted the OIG's recommendations and has implemented, or will be implementing organizational and procedural changes incorporating new reporting relationships and business practices. As such, the OIG is requesting to be provided with a 90-day status report regarding the implementation of our recommendations.

MDT's Warranty Administration (WA) unit did not operate as the central decision-making group and processor of all extended warranty related transactions. Instead, MDT's Bus Maintenance Control unit had the operational responsibility for these transactions, leaving WA to do little more than process paperwork on already completed work. MDT personnel altered vendor-reported warranty service dates when entering the data into MDT's automated warranty system files. This practice distorted vendor performance and may have affected adversely MDT's ability to determine whether it was appropriate to assess liquidated damages against non-performing vendors. Lastly, ineffectual supervision within WA allowed other adverse operational conditions to flourish undermining its ability to maximize warranty recoveries and to minimize MDT's out-of-pocket repair and maintenance costs.

The OIG recommended that MDT implement procedures establishing new business practices and review past transactions to determine whether it could recover monies that it may have not have been required to expend. During the course of the OIG's audit fieldwork and based on our preliminary feedback to the department, MDT initiated an internal financial analysis which showed a possible recovery amount of \$10.7 million for the period of January 2002 to June 2005. These recoverable amounts include MDT's cost to perform repairs that were otherwise covered by one of the three MDT warranties (original equipment manufacturer, extended or aftermarket warranty). Additionally, the OIG recommended that the MDT evaluate the effectiveness of certain functionalities provided by its newly implemented Enterprise Asset Management System. In addition, the OIG recommended that MDT make use of its outside consultant to assist it in these endeavors.

Summary

The OIG is encouraged by the MDT response and its pledge to revamp its organization and procedures. However, the OIG remains concerned, given the criticality and financial impact of this process to the success of MDT's bus services. Accordingly, the OIG requests that MDT submit a follow-up report as to the actions taken specific to each of the OIG's recommendations. We would appreciate this report in 90 days, on or before June 28, 2006. Consequently, the OIG is classifying this audit as "Completed but Unresolved."

Distribution List

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MIAMI-DADE COUNTY
OFFICE OF THE INSPECTOR GENERAL



FINAL AUDIT REPORT

Miami-Dade Transit
Bus Service Parts Warranty Coverage
IG0592A

March 23, 2006

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I. INTRODUCTION

The Office of the Inspector General (OIG) performed an audit of Miami-Dade Transit Department's (MDT) processes and procedures relating to warranty coverage for its bus service replacement parts. The purpose of the OIG audit was to determine whether MDT implemented adequate procedures for tracking warranted parts and filing warranty claims. Additionally, we sought to determine if MDT maintains complete and accurate records.

On March 15, 2005, the OIG issued an audit engagement letter addressed to the Director of Miami-Dade Transit Department advising him that a review of MDT's purchase of equipment and parts supporting the County's bus service operations would be performed. During the initial audit fieldwork, we became aware of operational deficiencies regarding the warranty of bus service parts and elected to focus our review on this area.

II. SUMMARY

Miami-Dade Transit's (MDT) Warranty Administration (WA) department should be the central decision-making group for and controller of all warranty related transactions. It is not. To achieve this role, MDT needs to develop more efficient and effective extended and aftermarket warranty administration processes. We found, for example, that extended warranty claims are a default by-product of a clerk's actions to schedule needed repairs. Reassigning decision-making authority and redirecting transaction flows would give WA the prime role in administering this process. Currently, WA is a non-participant until the very end when it performs nothing more than a data entry clerical function. These disconnections are discussed in Finding No.1.

WA even went so far as to alter vendor performance data to hide what may be vendor non-performance and the possible assessment of liquidated damages. We understand that WA has discontinued this practice. This practice is discussed in Finding No.2.

Both processes (extended and aftermarket warranties) could have benefited by more effective supervision. We found that WA handles both the extended and aftermarket warranty claims as if they were performing nothing but clerical functions. The lack of effective supervision allowed other adverse operational conditions to exist, such as:

- Inadequate claims tracking due to incomplete part information and inadequate record keeping.
- Non-existent vendor performance monitoring due to incomplete information on performance specifications, e.g., standard repair durations, service response times, etc.

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In addition, we believe that MDT's implementation of the Enterprise Asset Management System (EAMS) will have future benefits but to date, however, it appears that EAMS has had only a marginally beneficial impact on the warranty administration process. Moreover, EAMS will not work as intended, unless MDT ensures that there is effective supervision and updated written procedures. Furthermore, EAMS does not appear to have some necessary reporting capabilities.

What we have described as the Finding No. 1 condition—a procedural disconnection—was likely beyond the immediate control of WA supervision. However, the latter conditions, including date alterations, inadequate claims tracking, and the like, described in Finding Nos. 2 and 3 were clearly within the scope of the unit supervisor's responsibility to remediate. That the condition existed for an extended period reflects poorly on the quality and effectiveness of past supervision. To the extent that future supervision performs as poorly, WA will have minimal success in achieving its work objectives. The lack of effective supervision is further discussed in Finding No. 3.

III. ACTIONS TAKEN SINCE INITIATION OF THE OIG AUDIT

Throughout the course of our audit fieldwork and other documentation review activities, the OIG has maintained an on-going dialogue with MDT managers and other responsible personnel regarding our findings and the need for immediate actions.

For example, in August 2005, based on the OIG's preliminary findings, MDT took the initiative to determine the potential dollar amount of its in-house expenditures to repair/replace parts with warranty coverage and for which MDT may be entitled to recover from the vendors. MDT's internal analysis showed a possible recovery amount of \$10.7 million, for the period of January 2002 to June 2005. These recoverable amounts include MDT's cost to perform repairs that were otherwise covered by one of the three MDT warranties; original equipment manufacturer, extended or aftermarket warranty. MDT mechanics performed the subject repairs at MDT facilities.

As of the current date, we are uncertain whether MDT has completed its analysis of these costs to determine what portion it can submit to the vendors for reimbursement and, if completed, whether it has submitted any costs for reimbursement. The OIG did not review MDT's analysis for accuracy, completeness or validity of the data used, such as, labor hours, repair orders, part costs, etc. Moreover, it should be remembered that the estimate is a very rough "order of magnitude" amount that needs more work to ensure that methodology used is reasonable, reflective of the actual conditions during the scope period and includes all MDT costs eligible for recovery.

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In November 2005, based on the OIG's noted concerns to MDT's senior management of the existing deficiencies in the bus service parts warranty processes, MDT hired an outside consultant, A. L. Jackson & Company, P.A., (the consultant) to perform a thorough review of its bus service parts warranty processes. The consultant's agreement includes, but is not limited to, a review of the Warranty Administration Department's current policies, procedures and selected warranty agreements; and implementation of operational controls for the existing warranty processes.¹

In December 2005, the OIG met with various MDT senior managers whose authorities are over the Warranty Administration Department to inform them of the findings to be discussed in this report, as well as other ancillary issues concerning inventory management and the manual tagging process. These issues are now moot because of EAMS implementation.

Included in the December briefing were the MDT consultant and members of the Office of Strategic Management and Budget, Performance Improvement Division. In addition to briefing the group on our audit findings, we made available to MDT and its consultant our audit work papers and other supporting documentation in order to expedite the consultant's own review work in this area.

A final overall OIG recommendation is that, as part of the consultant's work scope, the consultant should assist MDT with establishing written procedures for both the aftermarket warranty and the extended warranty business processes. The consultants should also assist MDT personnel in evaluating EAMS capabilities to identify those system shortfalls that impair EAMS functionality to capture, track and report warranty claims.

IV. GOVERNING AUTHORITY

In accordance with Section 2-1076 of the Code of Miami-Dade County, the Inspector General has the authority to make investigations of county affairs and the power to review past, present and proposed County and Public Health Trust programs, accounts, records, contracts and transactions. The Inspector General has the power to analyze the need for, and the reasonableness of, proposed change orders. The Inspector General is authorized to conduct any reviews, audits, inspections, investigations or analyses relating to departments, offices, boards, activities, programs and agencies of the County and the Public Health Trust.

¹ In addition, the consultant's agreement includes a review of MDT's Accounting Division's organizational structure, business process, performance measurement and reporting systems. The OIG did not review MDT's Accounting Division.

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The Inspector General may, on a random basis, perform audits, inspections and reviews of all County contracts. The Inspector General shall have the power to audit, investigate, monitor, oversee, inspect and review the operations, activities and performance and procurement process including, but not limited to, project design, establishment of bid specifications, bid submittals, activities of the contractor and its officers, agents and employees, lobbyists, and of County staff and elected officials in order to ensure compliance with contract specifications and detect corruption and fraud.

The Inspector General shall have the power to review and investigate any citizen's complaints regarding County or Public Health Trust projects, programs, contracts or transactions. The Inspector General may exercise any of the powers contained in Section 2-1076, upon his or her own initiative.

The Inspector General shall have the power to require reports from the Mayor, County Commissioners, County Manager, County agencies and instrumentalities, County officers and employees and the Public Health Trust and its officers and employees regarding any matter within the jurisdiction of the Inspector General.

V. TERMS USED IN THIS REPORT

BMC	Bus Maintenance Control [MDT]
County	Miami-Dade County
EAMS	Enterprise Asset Management System
ITS	Information Technology Services [MDT]
MDT	Miami-Dade Transit Department
OIG	Office of the Inspector General
WA	Warranty Administration Department [MDT]

VI. AUDIT APPROACH

The objectives of the audit were to determine if the Warranty Administration Department implemented adequate procedures for tracking warranted parts and filing warranty claims and to determine if they maintained complete and accurate records. The audit period ranged from March 2003 to December 2005.

The OIG auditors visited MDT's warehouses, stockrooms, bus repair shops, as well as interviewed several MDT staff to gain an understanding of MDT's warranty and related processes. We also interviewed MDT's Information Technology Services (ITS) staff, to discuss current systems, as well as the Enterprise Asset Management System (EAMS). We

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reviewed MDT's policies and procedures for inventory, repair and maintenance, warranty processing, as well as bus purchase contracts and warranty documents. We also attended training classes given to MDT staff for the implementation of EAMS.

VII. BACKGROUND OF MDT BUS SERVICES AND WARRANTY COVERAGES

Miami-Dade County Transit system is the 14th largest public transit systems in the country and the largest in the State of Florida. MDT provides public transit services in four specific transportation areas: autobus, rail, automated people mover and special transportation services for people with special needs.

As of October 2005, MDT had a fleet of 979 buses servicing the County.² These buses are assigned to four bus facilities, which are the Central Facility, Coral Way Facility, Medley Facility and the Northeast Facility. The Medley Facility is operated as a lease agreement between MDT and Penske Truck Leasing Co. The other three facilities are operated and maintained by MDT. Each facility provides bus inspection, maintenance and repair services.

MDT's Materials Management Division oversees the bus service part inventory and warranty administration. The Warranty Administration Department, a department within the Materials Management Division, is responsible for tracking warranty parts and processing warranty claims on failed buses and parts. The other functional areas of Materials Management Division include contract management, including procurement, and inventory management.

Types of Bus Warranty Coverages

MDT's buses carry three types of warranties: the original equipment manufacturer (OEM) warranty, the extended warranty for major components and the aftermarket warranty on replacement parts. We audited the extended and aftermarket warranties. We did not review the OEM warranty. The Warranty Administration Department oversees these warranties.

OEM Warranty

MDT's contracts generally require the bus manufacturer to warrant and guarantee all buses received by MDT to be free of defects for one year or 50,000 miles, beginning on the date of final acceptance or in-service date. The OEM warranty covers, but is not limited to, the engine, transmission, body structure, suspension components and floor. If any parts fail

² Per MDT's monthly update of the Bus Facts-At-A Glance report dated October 2005.

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under normal wear and tear within the applicable period or mileage, the manufacturer will repair or replace the part at no cost to MDT. The OIG did not review this type of warranty coverage.

Extended Warranty

The extended warranty is partly an extension of the original manufacturer coverage and is included as part of the contract purchase price.³ MDT purchases this extended warranty for original equipment manufacturer parts and major components, such as, engines, transmissions, A/C systems and radiators. Warranties for these parts range from 3 to 6 years or mileage (whichever comes first), depending on the individual contract and are serviced by third-party vendors. See **OIG EXHIBIT 1** for a schedule of the components and parts covered by an extended warranty. The extended warranty business process should include determining warranty coverage for failed parts as well as filing and monitoring warranty claims relating to those failures.

Aftermarket Warranty

The aftermarket warranty is also a type of extended warranty, which is purchased by MDT for bus replacement parts. These replacement parts include sub-component parts, such as, engine parts, A/C parts, brake parts, fuel injection parts and transmission parts. The warranty period on these parts varies from 90 to 365 days. These aftermarket warranties are procured through a separate MDT contract to obtain repair services and to purchase replacement parts from an established vendor pool.

The aftermarket warranty process include identifying warranty parts received in inventory, issuing replacement parts for failed parts, and filing warranty claims on the failed parts. MDT purchases replacement parts from the aftermarket vendors and maintains them in inventory until needed. MDT in-house mechanics replace failed parts with aftermarket parts, which are then sent to the various aftermarket vendors for repair and/or replacement.

Transition to the County's Enterprise Asset Management System

MDT is in the process of implementing a new data system to replace its multiple, disparate systems.⁴ EAMS is part of a countywide initiative to provide a single software platform to

³ This type of warranty was commonly referred to by WA staff as "Deferred OEM" warranty. For purposes of this report, we will continue to use the term "Extended Warranty."

⁴ MDT used several different systems for inventory, repair and maintenance, and warranty record keeping. The systems are stand-alones and do not communicate with each other.

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manage assets, inventories, and work orders.⁵ MDT's inventory and warranty systems were replaced in September 2005, during the first implementation phase of EAMS. The repair and maintenance system will be replaced in the second phase of EAMS. The implementation date for phase two has not yet been determined.

The first phase of MDT's EAMS implementation focused on replacing the old stand-alone inventory and warranty systems and integrating them onto one platform with the functional areas of MDT's Materials Management Division, Accounts Payable and Budget Management. MDT's Materials Management staff received training from the department's ITS and Datastream consultants in July and August 2005. The EAMS training covered various functional areas, including inventorying, bar-coding, purchasing, warranty and reporting requirements. Our audit excluded EAMS integration of Accounts Payable and Budget functions.

According to MDT's ITS staff, benefits to be provided by EAMS include the following: all parts received in inventory will be bar-coded with an individual asset identification number for inventory and warranty tracking. Parts with serial numbers will also be identified in EAMS by their serial numbers. Therefore, asset identification numbers and serial numbers will enable EAMS to track all parts received in inventory.

For warranty purposes, EAMS will flag all parts coded as warrantable when received in inventory. Each part will be tracked when issued from inventory to a repair facility, thus, each part will have its own history from receipt, to issuance, to failure, to repair or to scrap. Warranty coverages will then be automatically tracked when the part is placed in-service, therefore, making the previous procedure of manually tagging aftermarket warranty parts with Controlled Component Tags (CC Tags) no longer necessary.⁶

The OIG auditors did not review EAMS inventory processes as the system was being implemented in the last quarter of 2005, thus, we could not determine if the system was functioning properly. However, we later observed that parts received in inventory were bar-coded with part description(s), asset identification number(s) and/or serial number(s).

⁵ The County purchased the EAMS software from Datastream Systems, Inc. and is implementing it in the Water and Sewer Department, Park and Recreation Department, as well as MDT.

⁶ Previously, CC Tags were used by the Warehouse Facilities and the Warranty Administration Department to track parts under warranty. CC Tags were placed on aftermarket warranty parts when parts were received in inventory and the tags were later used to file aftermarket warranty claims on failed parts.

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VIII. FINDINGS AND RECOMMENDATIONS

FINDING No. 1: Miami-Dade Transit's (MDT) Warranty Administration (WA) department is not the central decision-making group for all extended warranty related transactions.

WA should be the focal point for authorizing all extended warranty claims. In practice, however, WA is not exercising what should be its express authority to file such warranty claims. Instead, vendors are initiating their claim actions reacting to a clerk's exercise of what is only her apparent authority to open a claim on behalf of the MDT. This clerk works outside of WA; and WA does little to coordinate her actions with those that should be occurring within WA.

This practice amounts to a disconnected administrative process that adversely affects MDT's ability to maximize the benefits it can receive under its extended warranties. The operational disconnection of having some other unit besides WA administer the extended warranty process negatively affects the department's ability to fulfill its function. WA does not perform the most essential steps for administering an extended warranty claim. The department does not:

- make the initial determination whether warranty coverage is available to repair/replace a failed part and, if so, initiate a claim under an extended warranty,
- review the originating documentation (e.g., MDT bus failure notice),
- establish a claim record in any formal record keeping system,
- track the claim and monitor vendor performance durations,
- verify that the vendor actually provided the described services/parts,
- negotiate, if necessary, the settlement of a denied claim with the vendor,
- authorize the vendor to charge MDT with repair/replacement charges emanating from vendor claim denials,
- report on denied claims and resultant MDT costs, and
- approve payment of vendor miscellaneous charges, such as towing, mileage, telephone, other travel costs.

Currently, the process is for a Bus Maintenance Control (BMC) clerk to schedule the needed repairs and document the vendor's determination on whether there is extended warranty coverage.⁷ Neither this clerk nor any other MDT personnel, however, prepare

⁷ The Bus Maintenance Control (BMC) division works jointly with MDT's repair facilities to schedule buses for repair using third-party vendors. In addition, BMC tracks and reports on bus availability. The described process has been in place since June 1998. There is a written position description assigning her the responsibility for scheduling repairs.

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any paperwork that documents that a corresponding extended warranty claim has been filed—even if by default—with the vendor. In fact, MDT never submits an official extended warranty claim. At the onset of this process, MDT does not even recognize that a claim has been filed. Instead it is only at the end of the process, when the resulting paperwork is received from the vendor stating that services were provided (i.e., the part was repaired and/or replaced at “no cost”), when MDT recognizes that extended warranty coverages were “claimed.” Even then, the warranty system only reports claims accepted by the vendor. Vendor denied claims and MDT’s associated costs are not reported at all, under the warranty system.

The function of coordinating bus repairs with the outside vendors is a reasonable one for this clerk’s position; but since BMC is separate from WA and the Materials Management Division, the impact of these actions on WA seem to have gone unchecked. Even though the BMC clerk prepared and circulated a daily *Bus Failure Report*,⁸ wherein all the buses out of service were listed for whatever reason, including repairs taking place under an extended warranty, it is apparent that WA’s former supervisor, who was a recipient of this daily report, did not request any additional information from the BMC clerk or pass the report or information on to his staff so that they could initiate a claim record in the warranty system.

An important aspect of the BMC clerk’s work is that she has to make a key process decision early on. That decision is whether to authorize a part repair or replacement at such times when the vendor asserts that there is no warranty coverage. We understand that the BMC clerk typically relies upon a vendor determination as to whether a part is covered; but the clerk has incomplete documentation, which only the vendor has, describing the exact terms and conditions specific to that vendor’s warranty coverage. MDT needs this information to confirm or dispute a vendor determination. WA, which also does not have this information, must be part of the process at this time in order for it to ensure that MDT receives all the warranty coverage to which it is entitled.

WA’s previous participation in the extended warranty claim administration process was limited to doing nothing more than opening and closing a claim record in MDT’s warranty system. This event happened only at the very end of the process and was strictly a clerical function. Recently, WA’s upfront “participation” was increased but, nonetheless, even today it is not much more than a ratifying action to the default condition arising from the BMC clerk’s activities. In addition, notwithstanding that WA

⁸ The Bus Failure Report is updated daily by the BMC Clerk and is cumulative of the prior day’s bus failures. It includes the bus number, repair vendor, failure description, failed date, expected repair date, warranty applicable and the number of days exceeding the estimated repair date.

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now has more timely information about repair services covered under extended warranties, it still does not open a claim record in the warranty system, until the very end of the process. Moreover, the new EAMS database, as explained to the OIG auditors, does not address nor track warranties and claims for major components covered by extended warranties.

Later, the vendor invoices MDT for its repair/replacement costs (not covered by warranty) directly through the same BMC clerk, who compiles the necessary information and forwards the package to the repair shop supervisor, who approves the invoice and then forwards it to accounts payable for payment. These invoices generally involve non-warranty repairs and miscellaneous charges, such as telephone, travel and towing. However, such determinations that a charge was not covered by an extended warranty were de facto being made by the vendor without independent confirmation or even input by WA.

These costs eventually are commingled in MDT's accounting records so that their identity would only be uncovered if someone would spend hours examining original records. It is unlikely anyone at MDT, in particular within WA, has any idea of how much MDT spends to repair/replace parts whose warranties were denied by the vendor. We believe that this is essential information that MDT should have available for use as one component of a "Key Performance Indicator" to measure the cost and effectiveness of its warranty coverages.⁹

As a result of this audit, MDT made recent modifications to this business process in that WA now reviews all payment requisitions before they are forwarded to MDT Accounts Payable for payment. However, we believe that this new procedure is still shortsighted as WA is again at the tail-end of the decision making process. As emphasized throughout this finding, WA needs to be the central decision maker of all warranty-related transactions, which in this case includes determinations that certain repair services are not covered by a warranty.

We note that since WA began reviewing the non-warranty requisitions, several requisitions have been denied and returned to the vendors for further review. We are also encouraged that MDT is in the process of recovering funds from North American Bus Industries, Inc.

⁹ A "Key Performance Indicator" (KPI) is an internal measurement that management can use to assess program efficiency and effectiveness. In a December 2003 submission by Datastream (the EAMS software provider) titled *Key Performance Indicators for Miami-Dade County Enterprise Asset Management System*, KPI #3 is Warranty claim utilization per year. The stated rationale for this KPI is that "Each year companies spend millions of their own dollars repairing equipment that is under warranty and still the responsibility of the manufacturer or contractor who installed it. By tracking warranty times and terms . . . Miami-Dade can eliminate any unnecessary cost burden by claiming their rightful warranty benefits from suppliers."

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(NABI), a bus contractor, for charges that were paid by MDT to third-party vendors for non-warranty charges. Some of these requisitions previously paid are now believed to be covered under warranty and should not have been paid by MDT. Payment requisitions from 2004 and 2005 are being reviewed by the WA staff and are being submitted as warranty claims to NABI.

Extended warranty claims record keeping, approval of non-warranty covered repairs, claims tracking and vendor performance monitoring are all later actions that are not happening as part of an effective WA function, which should begin with the initial claim authorization. The solution is for MDT to "reassign" solely to WA the express authority to initiate and administer all extended warranty claims.

Recommendation No. 1

WA should perform all extended warranty administration activities, including warranty coverage determinations, negotiations to resolve vendor denied coverage and approvals of non-warranty services. This re-organization of the WA's functions, responsibilities and business process flows should be documented in a set of written procedures for the department.

Recommendation No. 2

WA should consider reviewing other vendor non-warranty invoices for otherwise warranty covered charges that were overpaid by MDT. MDT should seek to recover those charges.

Recommendation No. 3

WA should make use of its consultant to address the above-listed recommendations.

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FINDING No. 2: Date alterations on claim data may hinder MDT from evaluating vendor performance and assessing possible liquidated damages.

Even post-repair, when WA received the vendor invoices for extended warranty repairs, WA did not evaluate vendor performance.¹⁰ In fact, it actually took steps to cover-up possible vendor poor performance. The cover-up occurred when the WA clerk entered the completed claim data into the warranty system with altered "Repair Order Open" and "Repair Completion" dates. The clerk changed this vendor reported data so that both events were shown as having occurred within the same month (the current reporting month), rather than the months when they actually occurred. The clerk informed the OIG that this action was taken at the direction of the past supervisor. This supervisor, however, had been reassigned and remaining WA staff was unable to provide an explanation to the OIG auditors for a reason to change the dates.

WA reports always show that the duration from repair order open through repair completion within a 30-day period. But in fact, it may have lasted much longer. We reviewed three months of extended warranty claim data from the period of March 2003 to May 2005 and noted that 103 claims (or 39%) from a sample of 264 claims had altered repair dates. 72 of the 103 altered claims had actual repair period above 30 days. In one claim, the duration was 149 days.

WA's monthly warranty reconciliation report, therefore, never presented a complete and accurate picture of its activities. We understand that, due to OIG concerns, WA stopped altering dates and, thus, we would expect that its monthly report would now be complete and accurate. However, WA stopped producing this report in August 2005, shortly after WA stopped the practice of altering the dates. Thus, there were no new reports generated that would have shown that this practice had, in fact, been discontinued. Notwithstanding our expectation and though EAMS accumulates individual claim details, it has not demonstrated the capabilities necessary to compile, summarize and report this data, except on a claim-by-claim basis.

Moreover, this practice effectively negated MDT's ability to make an informed decision whether to assess liquidated damages against a non-performing vendor. Notwithstanding, even if the WA clerk reported the dates accurately, MDT would have problems making an informed decision because it did not have all of the authoritative documents and information that it needed to evaluate the circumstances.

¹⁰ Vendors submitted a "zero-balance" invoice to WA showing the services provided and its costs, which were "zeroed-out" indicating that it provided a warranty-covered service.

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To further illustrate this point, we reviewed five MDT bus contracts and noted that many of the contracts had little or no information relating to liquidated damages. Two of the five contracts reviewed have no explicit verbiage to determine liquidated damages for late repairs. The other three contracts have information on how to determine liquidated amounts, which is based on the repair period—a dependent factor of the vendor diagnosis. Thus, MDT staff, in order to determine the lateness of a particular repair, will have to be itself knowledgeable of what is considered as a reasonable estimated repair period or consult with third parties to confirm the reasonableness of the vendor estimated repair period. Vendor response times are a contractual issue, readily measurable and should be enforced by effective contract administration, including the assessment of liquidated damages.

Recommendation No. 4

WA should evaluate vendor performance and take the initiative to review prior repair records in order to pursue potential liquidated damages.

FINDING No. 3: **Warranty Administration's ineffectual supervision allowed other adverse operational conditions to flourish that undermined its ability to maximize MDT's warranty recoveries and to minimize MDT's out-of-pocket repair and maintenance costs.**

Earlier in this report, we described questionable supervisory practices that took place in the extended warranty process, such as that the supervisor did not act upon notices of warranty claim transactions (i.e., scheduling bus repairs) initiated by the BMC clerk and his direction to staff to alter vendor-reported repair dates. However, there are other adverse conditions that WA supervision was likely aware of and took no action to remediate. WA could have been operating more efficiently and effectively had these conditions not existed.

Claims tracking and vendor performance evaluation are two essential tasks that WA must perform if it is to carry out its administrative function effectively. Successful performance of these two tasks, however, is contingent on WA having complete, accurate and timely information on parts received into and issued from inventory, and on parts returned to inventory for repair or replacement. Moreover, WA must have all necessary vendor information regarding the specific warranty terms and conditions, in order for WA to properly administer all the various applicable coverages.

As discussed in the previous two findings, extended warranty claims tracking and vendor performance monitoring activities were nonexistent because no claim was ever set up in the warranty system and because of the date alternations. WA's aftermarket warranty claims

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tracking and vendor performance monitoring just never took place since WA did not always have the necessary information. This occurred because WA did not ensure that warehousing and stores personnel provided complete and accurate information for all parts covered by aftermarket warranties. As a result, the information was not always available when WA staff entered the part information into MDT's warranty system. Because of this, MDT's warranty system could not have been updated with the information that would be necessary when it came to time to file a warranty claim.

Consequently, if they had wanted to file an aftermarket claim, WA personnel would have had to spend countless, time-consuming hours manually researching the inventory and repair order system files so that they could file as accurate and complete of a warranty claim that they could possibly file given the inherent process limitations. Thus, we believe that WA personnel could not have applied this intensive process to all warranted aftermarket parts because it would not have been cost effective to do so. In addition, because of the resultant lengthy process duration, we believe that many such parts that otherwise would have been covered likely lost their coverages because the process duration would have extended beyond the warranty-imposed time limits for reporting failed parts.

This condition is evidenced by the fact that aftermarket claim files show that many claims remain open for long periods. As shown below in TABLE 1A, out of the 52 claims filed in November 2004, two (2) remain open and of the 34 claims filed in January 2005, nine (9) remain open, as of the date of this report. Neither WA nor the OIG have authoritative information describing vendor standard repair times, however, we find it hard to believe that these durations are acceptable.

TABLE 1A – Analysis of Aftermarket Claims on Monthly Reports

Period	Claims Filed		Claims Recovered		Claims Open		Claims Voided ⁽¹⁾		Claims Missing	
	Qty.	Amount	Qty.	Amount	Qty.	Amount	Qty.	Amount	Qty.	Amount
Nov-04	52	\$30,835	31	\$17,037	2	\$1,603	17	\$9,194	2	\$3,001
Jan-05	34	\$26,025	17	\$11,779	9	\$8,167	8	\$6,079	0	\$0
Totals	86	\$56,860	48	\$28,816	11	\$9,770	25	\$15,273	2	\$3,001
Percent	100%	100%	56%	51%	13%	17%	29%	27%	2%	5%

(1) Claims Voided means that the claim was denied warranty by the vendor.

Moreover, this characteristic is reflected in claims recovered noted next page in TABLE 1B. In November 2004 and January 2005, WA reported that it recovered 31 and 17 claims, respectively. However, 23 of the November claims and eight (8) of the January claims had been open longer than 90 days. Twenty-three out of these 31 claims have open durations between 181 and 273 days. Similar to the condition discussed in Finding No. 2, WA did not have complete and accurate part information and complete contract documentation.

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Therefore, WA could not authoritatively determine a vendor's performance and, if poor, to assess liquidated damages.

TABLE 1B - Aftermarket Parts Warranty Claims Recovered

Period	Claims Recovered	Number of Warranty Claims Recovered Between These Days						
		1 - 30 Days	31 - 60 Days	61- 90 Days	Subtotal for 1 -90 Days	91 - 180 Days	181 - 273 Days	Subtotal for 91 - 273 Days
Nov-04	31	5	1	2	8	2	21	23
Jan-05	17	1	7	1	9	6	2	8
Totals	48	6	8	3	17	8	23	31
Percent	100%	12%	17%	6%	35%	17%	48%	65%

Vendor denied claims

Similar to WA's lack of review of non-warranty covered charges under the extended warranty process, there is no evidence that WA expended much, if any, effort dedicated to reviewing the validity of vendor claim denials of aftermarket repairs and/or replacement charges. (These denials were shown as "Voids" in MDT's warranty system.) Any attempt to have an effective "check and balance" process between MDT and the vendor was thwarted by WA's inability to fulfill its half of the process—having complete and accurate parts inventory and parts tracking information. In addition, this was another adverse condition arising from the fact that WA did not have complete information on vendor performance specifications, e.g., standard repair durations, service response times, etc.

Missing Claim Numbers

Although not many in number, some aftermarket warranty claims that were listed in one of WA's monthly warranty reconciliation reports were missing from later reports; however, there was no record that they had been recovered or voided (vendor rejects). OIG auditors examined two (2) out of 12 instances of missing claim numbers shown on the monthly reconciliation reports prepared between March 2003 and May 2005. In one instance, WA files showed a claim had been filed with the vendor and in the other instance there were no records that a claim had been filed.

During the same period, there were 41 claim numbers that were never shown on any of the monthly reconciliation reports. In other words, there was a break in the system-assigned numerical numbering sequence. There are no records whatsoever associated with these numbers and, therefore, the OIG was unable to ascertain whether they represented valid claims. MDT's ITS representative stated that it was possible for someone to access the warranty system and delete records without leaving a trace that a claim was ever filed (except, of course, if the claim file number appeared in a earlier report). Admittedly, there

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are legitimate reasons that would explain a missing claim number. However, there is no reason for WA not to maintain a record explaining the circumstances for deleting the claim and/or purging the data.

This information was discussed with MDT managers from the outset of our discovery. This void continues to be of great concern to the OIG and we have stressed to ITS representatives the absolute necessity that EAMS maintains a complete audit trail of all transactions.

EAMS Transition

There is another problematic facet of WA's aftermarket warranty administrative processes not helped by EAMS. Notwithstanding that the CC Tags had been removed from aftermarket parts during the initial EAMS implementation, WA directed that old CC Tags be reattached because there was incomplete part information, typically the vendor's name, available in EAMS. It appears that this may have been an oversight during the initial phases of the EAMS implementation. Either the information should have been entered into EAMS but was not, or, perhaps, the information was entered but EAMS is incapable of reporting it in a useable manner. In the interim period, WA acknowledges that many otherwise valid warranty claims were not filed or were filed and rejected by the vendor because of the incomplete data.

WA could not quantify the number of failed parts returned by the aftermarket vendors since these failed parts were handled by Inventory Control Management, another Materials Management department, and were later repaired outside of warranty. According to WA, Inventory Control Management does not provide feedback to the WA staff regarding non-warranty repairs.

Summary

The described conditions—inadequate claims tracking and vendor performance monitoring, incomplete part and contract information, missing claim number information and problematic EAMS implementation—reflect badly on past WA supervision. These conditions adversely affected WA's operational efficiency and, without question, increased MDT's repair and maintenance costs.

What is needed is for MDT to take a look at its procedures, update them as required by the new process dynamics and take steps to train and monitor supervisory personnel to ensure that they are doing their job. In addition, the problematic EAMS issue should be researched and resolved promptly.

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Moreover, to the extent that there are written procedures for these activities, they surely could not have prescribed the practices followed. We cannot state that former supervision condoned such practices but we believe that, if they were known practices, by allowing them to continue, supervision was ineffective and irresponsible; and if they were unknown practices, then supervision was negligent too.

Recommendation No. 5

WA should train supervisors in all aspects of warranty administration and establish warranty unit benchmarks that management can use to assure itself that the unit is operating efficiently and effectively.

Recommendation No. 6

WA should establish procedures to ensure that it:

- receives all part information from other MDT units needed to create a part history file and warranty record;
- obtains all vendor warranty terms and conditions needed to evaluate warranty coverages and vendor performance, and
- reviews claim records to ensure that all claim numbers are accounted for.

Recommendation No. 7

WA should assess EAMS reporting functionalities to determine what modifications are required to allow it to generate relevant reports on warranty transactions.

Recommendation No. 8

WA should make use of its consultant to address the above-listed recommendations.

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IX. CONCLUSION

The continuous repair and replacement of bus parts covered by the various warranties discussed herein would be a substantial financial burden on MDT's business operations, if not mitigated by an effective WA process. Thus, the full application of all warranty coverages is essential to MDT's financial health.

Currently, the warranty decision-making process is hindered by WA non-participation, disconnections and lack of supervision. Also, EAMS has not fully lived up to its potential. Unless MDT takes an active role to correct these problems, the current operational process will continue to be detrimental to MDT. MDT should make good use of the consultant to review its warranty business process and EAMS implementation so that it can develop procedures for establishing and tracking warranty claims and vendor performance monitoring.

**The Office of the Inspector General appreciates and
thanks MDT staff for their courteousness and cooperation
extended during the course of this audit.**

EXHIBIT 1

EXTENDED WARRANTY FOR MAJOR COMPONENTS AND SUBSYSTEMS

Engine	5	300,000
Transmission	5	300,000
Drive Axle and Drive Shaft	3	150,000
Air Conditioning System	3	150,000
Air Conditioning Condenser Motors	4	200,000
Air Conditioning Evaporator Motors	4	200,000
Basic Body Structure	6	300,000
Suspension Components	3	150,000
Floors	12	500,000
Wheelchair Ramp	3	150,000
Body Structure Corrosion	12	500,000
Radiator	6	Unlimited
Hydraulic Cooler Fan Motor	3	Unlimited
Inverter Ballasts	5	Unlimited

Source: Contract No. 6402, Warranty, Paragraph 52.1.2, Subsystems and Components

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APPENDIX A

Miami-Dade Transit's Response to the OIG's Draft Audit Report

March 23, 2006



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- Elections
- Emergency Management
- Employee Relations
- Empowerment Trust
- Enterprise Technology Services
- Environmental Resources Management
- Fair Employment Practices
- Finance
- Fire Rescue
- General Services Administration
- Historic Preservation
- Homeless Trust
- Housing Agency
- Housing Finance Authority
- Human Services
- Independent Review Panel
- International Trade Consortium
- Juvenile Assessment Center
- Medical Examiner
- Metro-Miami Action Plan
- Metropolitan Planning Organization
- Park and Recreation
- Planning and Zoning
- Police
- Procurement Management
- Property Appraisal
- Public Library System
- Public Works
- Safe Neighborhood Parks
- Seaport
- Solid Waste Management
- Strategic Business Management
- Team Metro
- Transit
- Task Force on Urban Economic Revitalization
- Vizcaya Museum And Gardens
- Water & Sewer

March 17, 2006

Mr. Christopher Mazzella
 Inspector General
 Office of the Inspector General
 19 West Flagler Street, Suite 220
 Miami, FL 33130

Dear Mr. Mazzella:

Thank you for the draft audit report dated February 14, 2006, regarding Miami-Dade Transit's (MDT) Bus Service Parts Warranty Coverage. MDT management staff has concluded its review of the audit findings and recommendations.

The Office of the Inspector General's (OIG) insightful analysis of MDT's warranty administration (WA) effectually identified several operational inefficiencies relative to extended warranty and aftermarket warranty administration. Specifically, the OIG cited several operational inefficiencies stemming from ineffective supervision and, overall inefficient WA processes and procedures.

As a result of the audit findings, MDT management implemented immediate corrective actions. In direct response to OIG Finding Number 1, which cites that MDT's WA is not the central decision-making group, MDT has implemented the restructuring of WA with Bus Maintenance Administration. This organizational change will effectively centralize this critical functional area and provide the requisite administrative oversight and decision making. Consequently, the reorganization of WA will effectively facilitate the review of all extended warranty and aftermarket warranty administrative activities.

In response to OIG Finding Number 2, date alterations on claim data, the OIG report confirms that WA personnel have already ceased the improper altering of dates which stemmed from limitations in the existing warranty database system regarding the updating of pertinent deferred warranty claim invoices information. However, to ensure optimal, systemic efficiencies in WA processes and procedures, and effectively eliminate arbitrary, subjective WA assessments and evaluations, MDT is establishing written procedures for both the extended warranty and aftermarket warranty business processes and procedures. The written procedures will encompass the evaluation of vendor performance and the review of prior records to facilitate pursuing any potential liquidated damages, as needed.

Mr. Christopher Mazzella
March 17, 2006
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Additionally, in response to OIG Finding Number 3, which cites WA's ineffective supervision, the restructuring and functional relocation of WA to the Deputy Director of Operations' administrative purview will provide the requisite administrative oversight and respective accountability essential for this critical performance area.

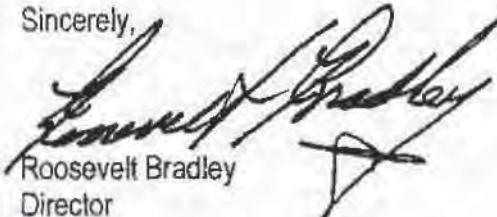
Furthermore, as to the OIG's recommendations of training and reassessment of the Enterprise Asset Management System (EAMS), MDT's action plan will include extensive employee training to include the WA's new written procedures and a comprehensive review and analysis of the EAMS, to also include reporting functionalities. MDT will also review the final report of the consultants to include the findings when revising the warranty procedures.

Finally, be advised that MDT has initiated the appropriate administrative action for the WA supervisory and management personnel involved to ensure that this type of management lapse does not occur in the future.

MDT extends its appreciation to the OIG. In that regard, MDT shall fully implement OIG's recommendations as provided in the February 14, 2006, audit report, in addition to the corrective actions detailed above.

Should you require any further information, please feel free to contact me directly at 305-375-2597 or Harpal Kapoor, Deputy Director of Operations at 305-375-4393.

Sincerely,


Roosevelt Bradley
Director

Cc: Dr. Carlos Bonzon, Assistant County Manager
Mayra Bustamante, Deputy Director of Administration, MDT
Melissa Scott, Chief of Bus Maintenance Control, MDT
Tony Arroyo, Chief of Materials Management, MDT