

**METRO MANAGEMENT RESPONSES TO  
FISCAL 2005 – FISCAL 2008 STATE REQUIRED PERFORMANCE AUDIT  
OF THE METROPOLITAN TRANSIT AUTHORITY OF HARRIS COUNTY, TEXAS**

**I. INTRODUCTION**

Pursuant to Chapter 451, Section 451.454 of the Texas Transportation Code, METRO must have an independent auditor perform a management audit every four years. The audit must include three elements, as follows:

1. Examination of compliance with Chapter 451 and other state laws
2. Review of state-defined performance indicators
3. Performance audit of one of three specified areas – transit operations; system maintenance; or administration/management

System maintenance was selected as the area for this performance audit.

Upon completion of the audit, management must prepare a written response to the report. The response must identify the recommendation status as pending, adopted or rejected. The final report for the period from Fiscal 2005 through Fiscal 2008 has been completed by an audit team headed by Booz Allen & Hamilton, Inc. and contained several recommendations. The attached document is the METRO management response to these recommendations.

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**II. RECOMMENDATIONS**

**Recommendation 1** – Review opportunities to interface other data sources to SAP to support improved maintenance management and decision-making.

**Recommendation Status:** Adopted, partially implemented.

- **Response** – Management agrees with this recommendation. Currently, METRO is awaiting a response from INIT to produce a file extract to interface IVOMS with SAP. This development will allow METRO to improve and maintain the APC system, vehicle location, and scheduling of the bus fleet. Currently, all revenue electronics are maintained in SAP as sub-components for each revenue bus.

An interface between ZONAR and SAP will be addressed in FY2010 to create notifications in SAP as Pre-Trip inspections are completed using the ZONAR equipment.

**Recommendation 2** – Update the Maintenance screens in SAP to easily view a vehicle's previous work order histories.

**Recommendation Status:** Adopted. Pending implementation.

- **Response** – METRO has been using an older version of SAP since November 2000 and the system was upgraded to the latest version of SAP in November 2008 in order to implement the SAP vehicle management system. The system is in the early stages of development and testing is underway to understand the functionality in order for METRO to improve the reporting and viewing of vehicle work order history. Currently, METRO uses the basic Vehicle History report that shows all work orders and parts used on a single report but the upgrade will allow an improvement.

METRO supports further enhancing the SAP work-order history display. As more of the Operations staff becomes dependent on the SAP reporting screens, they will have further needs for streamlining the displays.

METRO is currently in the process of testing the revision of the maintenance program that will produce a ninety-day history of specific vehicles. This action will be fully implemented by July 15, 2009.

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**Recommendation 3** – Develop a plan for a Maximus M4 migration strategy to implement an enterprise rail maintenance system.

**Recommendation Status:** Pending.

- **Response** – METRO supports phasing out the use of M4, and integrating the Rail Maintenance Sections into a Rail Maintenance Management System. The use of M4 was originally envisioned as a stop-gap measure until METRO Solution Phase II has been implemented (currently scheduled for 2012). The timing and scope of the conversion will be determined by the new vehicle delivery schedule and/or the corridor completion schedule.

**Recommendation 4** – Assist rail and bus divisions in evaluating opportunities to off-loading daily mileage automatically through wireless communications.

**Recommendation Status:** Adopted, pending implementation.

- **Response** – As part of METRO's longer term maintenance plan Operations will review the plausibility of downloading further information (i.e. miles, engine diagnostics and duty cycle information) as it becomes fiscally and technically feasible. Recent efforts have been focused on improving the use of existing on-board technologies on the bus such as IVOMS, implementation of a new fare system as well as the introduction of automatic pre-trip inspection devices.

METRO will, as part of an existing long range program called "Safe Bus", address the possibility of off loading daily mileage and other information from the bus. "Safe Bus" is a multiyear plan presently, expected to be initiated in FY 2010, which will install enhanced 3G communications on METRO buses to improve data and voice communications.

**Recommendation 5** – Improve monitoring of preventive maintenance intervals in order to improve adherence to inspection schedules.

**Recommendation Status:** Adopted and implemented.

**Response** – Management concurs with the audit findings that two of the five METRO operated BOF's have not adhered to inspection intervals. Overall METRO's performance as a system is at 88% above the FTA required 80%. Presently METRO's processes focus on providing the local management the required tools to quickly identify

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vehicles that are within the range of needing a preventative maintenance inspection (“PMI”). No report is available at present that quickly and easily indicates how a specific location is performing as it relates to PMI schedule adherence performance. Developing and implementing such reports will allow not only local BOF and Q/A personnel the ability to insure adherence but also allow senior operations management to review conformance and reacted accordingly.

Another issue raised by the auditors is how METRO handles PMI adherence if its mileage system, Fleetwatch, would fail. METRO’s Maintenance Management system utilizes life miles, based on input from Fleetwatch, not its bus hubometer miles. Life miles account for all hubometer changes that have occurred on a vehicle and represent miles since the bus has been in service. If Fleetwatch fails, the miles on SAP do not update until Fleetwatch comes back up. Since the system uses life miles, there is no direct correlation to the miles on the bus except within SAP. Identifying on the bus when a PM is due based on vehicle miles would alleviate this issue

METRO management has moved forward with the following three actions:

- Weekly and monthly PMI compliance reports reviewed by local management as well as senior operations management
- Q/A staff at each location have been charged with ensuring PMI compliance at 97%
- METRO will institute the use of PMI interval stickers on each bus utilizing hubometer miles separate from any other tracking system. In cases where Fleetwatch and SAP issues arise, service lane staff can quickly and easily check buses and pull any buses due for a PM inspection.

The 3 actions listed above were implemented by March 15, 2009 and METRO is now in full compliance at all BOF’s. There have been zero buses late for a PMI since March 16, 2009. Ongoing processes are in place to ensure compliance moving forward.

**Recommendation 6 – Review METRO’s policy for allocating warranty claim credits to appropriate Responsibility Center accounts.**

**Recommendation Status:** Adopted and implemented.

- **Response** – A review of the current warranty reimbursement policy reveals that the Responsibility Centers are receiving parts and cash credits to their account.

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This policy change was implemented in April 2008. In the past, parts credits were issued to the RC's and cash credits issued to the Maintenance, General fund. Effective April 2008, cash credits are now also issued to the RC that performed warranty work. This satisfies the auditor's recommendation.

**Recommendation 7 – Standardize METRORail's performance indicators.**

**Recommendation Status:** Adopted and implemented.

- **Response** – Rail performance indicators are currently standardized and consistent with the goals and objectives of the agency.

**Recommendation 8 – Implement more sophisticated maintenance practices and systems that are commonly used by larger systems.**

**Recommendation Status:** Pending.

- **Response** – This recommendation will be addressed via the METRO Solutions Phase II expansion program (currently scheduled to be completed in 2012). The timing and scope of the implementation (i.e. Heavy Repair capability, Truck Repair, Unit Shops, remote access, etc) will be determined by the new vehicle delivery schedule and/or the corridor completion schedule.

**Recommendation 9 – Improve METRORail Document Control Procedures.**

**Recommendation Status:** Adopted, pending implementation.

- **Response** – Rail Operations is currently investigating the possibility of utilizing Primavera (Document Control Software METRO Solutions II) as a means of document control for our Rail Home page for all documents uploaded. If this endeavor is unsuccessful, Rail Operations will procure an off-the-shelf document control program package to support this requirement. This will be programmed for implementation in FY2010.

**Recommendation 10 – Consider moving one Siemens server to the ROC.**

**Recommendation Status:** Adopted, pending implementation.

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- **Response** – Management is supportive of having one of the Rail SCADA computers in a different location, but the ROC is not ideally suited for this. The ROC does not have a data center with the needed environmental equipment (redundant power, HVAC, fire suppression, etc.). Since the primary processor is located at Transtar, the backup processor can be placed in the 1900 Main Data Center, or at the disaster recovery Data Center in Phoenix. IT will facilitate discussions with Rail Operations to develop an action plan.

**Recommendation 11** – Complete the review of the methodology for reporting bus on-time performance and, if appropriate, take steps to improve reporting.

**Recommendation Status:** Adopted. Implementation in progress.

- **Response** – METRO actively manages the on-time performance of the transit system in three key areas. First, the IVOMS technology has allowed for a much broader analysis of system on-time performance. METRO is in the process of using the technology and training supervisory staff to fully realize the return on the investment in technology. To date, agency Controllers have been assigned to supervise METRO's 13 core routes, which carry 36% of all local bus passengers. Second, the on-time performance goal for the transit system will be gradually raised as staff becomes more familiar with the IVOMS technology and learns how best to utilize the system. Third, scheduled route evaluations on the core routes will continue to be conducted to ensure adequate running time is provided within each schedule and observable load factors are within agency guidelines.

**Recommendation 12** – Continue monitoring the motorbus accident rate and taking steps to improve safety.

**Recommendation Status:** Adopted. Implementation in progress.

- **Response** – METRO has placed a priority on safety and has taken steps to continue to see a reduction in the actual number of accidents involving directly operated buses. METRO will continue to monitor accident trends and will address any accident trends through on-going training initiatives, operator safety compliance checks and other safety strategies as appropriate. METRO will also continue to recognize positive safety performance on the part of Bus Operators and their efforts to reduce accidents in the future.

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METRO currently has specific training activities and ongoing Accident Reduction Plans in place to address the trends in accidents as follows:

- Monitoring and performing a safety compliance check with newly hired operators during their probationary period.
- Align the working hours of the B.O.F. Safety Specialists to coincide with the time when the majority of accidents occur.
- Perform a trend analysis on preventable and non-preventable accidents at all bus operating facilities.
- Continue recognizing Operators' excellent driving performance with positive initiatives through a Safety awards program and by supporting the Bus Operator Rodeo competition.
- Continue promoting and performing Quarterly Safety meetings.
- Continue the usage of signage to improve accident prevention.
- Bus Operator Refresher Training Program.
- Special instruction and hands on defensive driving provided for individuals that have experienced a preventable accident.

**Recommendation 13 – Ensure that procedural requirements are met.**

**Recommendation Status:** Adopted and implemented.

- **Response** – See below.

***(Note: this recommendation covers 7 areas in which METRO is substantially compliant or non-compliant. The 7 areas are listed below.)***

***Board Matters #3 – Board must be resident citizens and qualified voters of the Authority.***

- **Response** – The Statute does not affirmatively require that METRO verify the qualifications of the independently-appointed board members by the City of Houston, Harris County, and the respective multi-cities. It is reasonable for METRO to conclude that the requisite qualifications of the persons who are appointed to METRO's board are appropriately verified by the appointing entity. Notwithstanding, METRO, the Authority, has verified that the currently-seated board members are residents of METRO's service area. Additionally, METRO will develop procedures for its own independent verification of any, and all, independently-appointed members prior to his or her official seating on METRO's board.

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These procedures will be developed by September 30, 2009.

Open Meetings #8 – Certified Board Meeting Agendas must be signed by the presiding Board member to indicate they are true and correct representations of the items discussed.

- **Response** – New and current process and procedures have been installed and all Certified Agendas are being reviewed, approved, and signed, by the current Board Chairman or his designee, on the same day that the Executive Session is held.

These changes were effective January 22, 2009 and as a result, METRO is now fully compliant.

Open Meetings #15 – METRO should ensure that the Board meeting postings are posted 72 hours prior to the scheduled time of the meeting.

- **Response** – METRO's commitment to full and unequivocal compliance to all rules and regulations, including open meetings, pursuant to the Texas Public Information Act, is unquestionable. To further fine tune the process, a log-in procedure has been instituted in order to ensure timely and appropriate location postings.

The log-in procedure was implemented February 6, 2009 in order to ensure compliance with this requirement.

Open Meetings #18 – METRO must respond to information requests within ten days after the request or by an extended due date.

- **Response** – To avoid delay in receiving and responding to open records requests, a centralization procedure has now been established and [was](#) instituted on March 4, 2009. There is now a designated open-records contact and an electronic mail box for the receipt of open records requests. This contact person and procedure has been published on METRO's internet site. Further, there is now a requirement by the General Counsel that all responses to the respective requestors be mailed from the Office of the General Counsel at least two days before such responses and releases are statutorily required.

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*Contracts #3 – For non-competitive contracts, METRO should post an announcement for two weeks prior to contract award.*

- **Response** – Procurement has established a “Best Practice” solution to fortify this possible oversight. Effective 3/1/09, in addition to posting informal public notices in a public place, Procurement staff will adhere to the following revised procedure:
  - 1) Document the posting into a log kept with the Support Staff Supervisor and;
  - 2) Post the informal public notice on the Procurement METROBids web site.

This revised procedure will enhance and strengthen the compliance mechanisms already in place.

*Finance & Administration #12 – METRO did not distribute annual financial audit reports to required parties in a timely manner.*

- **Response** – While there is no reference in the State Code to “distribute in a timely manner”, METRO did distribute most of the FY05 and FY06 annual financials in FY06 and FY07 except for a small number of the designated recipients. Electronic copies of those reports, as well as FY07 reports, were delivered to all designated recipients in January of 2009. In the future, METRO is putting in place a specific distribution plan that will automatically occur as soon as the annual reports are published and posted on the METRO website.

*Real Estate #1 – METRO should obtain two independent appraisals for interest acquired in land valued over \$20,000 to ensure compliance with code 451.054(d).*

- **Response** – For real estate acquisitions that exceed \$20,000, METRO will obtain second appraisals and this second-appraisal approach will become part of the Real Estate Department’s standard operating procedure.

**Recommendation 14 – Continue efforts to change the Performance Audit due date to a specified number of months after the end of the Authority’s fiscal year.**

**Recommendation Status:** Pending.

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- **Response** –The due date of February 1 completion is not practical. METRO’s fiscal year ends on September 30. It is late October before preliminary financial results are available. The external financial audit starts in early September but is not scheduled to finish until December 31. Frequently (including this year), the financial audit is not complete until late January or February. METRO starts the performance audit as soon as FY2008 numbers are available. It is mid to late January before the functional area first draft can be ready. METRO staff must then review the draft, evaluate the recommendations, and prepare management’s responses. If any unusual findings are noted, it can take several weeks for management to analyze the findings and prepare management’s response. The Board review process and public hearing process can take another 30 to 60 days.

METRO needs at least 6 months from the end of a fiscal year to fully complete the audit process, produce all of the documents required (3 audit reports, management responses, transcript and public hearing) and submit the final report.

As recommended by the auditors, METRO will approach the State Legislature with a proposal to modify the due date of the audit.