


Memorandum



Date: March 10, 2005

To: Honorable Chairman Joe A. Martinez and
Members, Board of County Commissioners

From: George M. Burgess
County Manager 

Subject: MDFR Fleet Maintenance

I am pleased to transmit the attached report summarizing the results of the Miami-Dade Fire & Rescue (MDFR) heavy fleet maintenance pilot program. The Office of Strategic Business Management (OSBM) has concluded that the pilot was a success, resulting in net savings to the County overall of approximately \$1,000,000 in FY 2003-04, of which \$302,000 is potentially recurring. Savings to the Fire District, relative to its annual budget target, were \$1.47 million in FY 2003-04.

The attached report also addresses the Board's September 23, 2004 request that staff examine the potential for similarly transferring the responsibility for light/ medium fleet maintenance to MDFR from the General Services Administration (GSA). OSBM's review of the limited data available indicates that the transfer of MDFR light fleet maintenance responsibilities would likely not result in cost savings. Additionally, OSBM concluded, and I concur, that the most productive approach to addressing service delivery issues is one that results in improvements to the centralized vehicle services model operated by GSA.

Heavy Fleet Maintenance Close-out

In January 2003, Miami-Dade Fire Rescue (MDFR) assumed responsibility for the maintenance of its heavy emergency vehicle fleet from the General Services Administration (GSA) on a pilot program basis under terms established in a Memorandum of Understanding (MOU) signed by the parties, including a former County Manager, and approved by the Board of County Commissioners. The pilot program was intended to address the unique service needs of heavy emergency vehicles, while committing MDFR to annual savings of at least \$500,000. A permanent determination regarding organizational placement of the heavy fleet maintenance function was to be conditioned on the results of a close-out conducted following the conclusion of Fiscal Year 2003-04.

Using two different methodologies in its financial analysis, OSBM determined that the pilot resulted in savings to the County overall, as well as the Fire District. The report also notes a number of qualitative improvements implemented by MDFR, including an online reporting system that has allowed for more efficient scheduling of vehicle maintenance and repairs and a fully automated barcode system for parts inventory management. The pilot did result in a minor negative impact to the General Fund, possibly in the \$150,000 range for FY 2004, due to a net transfer of overhead expenses from MDFR to other GSA customers. OSBM will work with MDFR to address this and other allocation issues within the context of broader, ongoing discussions regarding Fire District cost allocation matters.

MDFR Light/Medium Fleet Maintenance

In addition to managing the heavy vehicle maintenance operations, MDFR has proposed to take over light and medium vehicle maintenance and repair from GSA Fleet Management. OSBM's initial

MDFR Fleet Maintenance

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assessment indicates that the transfer would likely not result in cost savings, as it would require the purchase and installation of duplicative capital equipment and building retrofits, and a review of limited available expense data does not identify potential offsetting expense reductions.

Equally important, I concur with OSBM's determination that improving GSA's centralized vehicle services model is the best approach for the County overall. Potentially, this could include the implementation of certain successful strategies employed by MDFR in its heavy fleet operations. The County has traditionally favored the centralized provision of internal support services when economies of scale can be achieved and when service requirements are generally comparable across departments, as in the case of light/medium fleet.

To address service delivery issues, OSBM is working with GSA to develop performance targets that reflect private industry standards and the expressed desires of its customers, and to develop an agreement that will memorialize measurable service targets and provide an individual employee incentive system. I am confident in the ability of our employees to achieve private sector service levels, and I look forward to presenting an MOU for your approval in the coming year.

Attachments

- c: Corinne Brody, Special Assistant, Strategic Management Initiatives
- Joe Ruiz, Assistant County Manager
- Susanne Torriente, Assistant County Manager
- Jennifer Glazer-Moon, Director, Office of Strategic Business Management
- Herminio Lorenzo, Director, Miami-Dade Fire and Rescue Department
- Bernard McGriff, Director, General Services Administration

MIAMI-DADE FIRE & RESCUE

**HEAVY FLEET MAINTENANCE CLOSE-OUT
& REVIEW OF LIGHT/MEDIUM FLEET
PROPOSAL**

MIAMI-DADE COUNTY
OFFICE OF STRATEGIC BUSINESS MANAGEMENT
PERFORMANCE IMPROVEMENT DIVISION

JANUARY 2005

EXECUTIVE SUMMARY

In January 2003, Miami-Dade Fire Rescue (MDFR) assumed responsibility for the maintenance of its heavy emergency vehicle fleet from the General Services Administration (GSA) on a pilot program basis. Terms of the pilot program were established in a Memorandum of Understanding (MOU) signed by the parties, including a former County Manager, and approved by the Board of County Commissioners (Attachment A). The pilot program was intended to address the unique service needs of heavy emergency vehicles, while committing MDFR to annual savings of at least \$500,000. A permanent determination as to which entity would provide MDFR heavy fleet maintenance services was to be conditioned on the results of a close-out conducted following the conclusion of FY 2003-04.

At the second budget hearing on September 23, the Board requested that staff examine the potential for similarly transferring the maintenance responsibility for MDFR's light/medium fleet from GSA and report back within 90 days. The Office of Strategic Business Management (OSBM) has completed the close-out of the heavy fleet pilot program and examined the organizational placement of both MDFR's heavy and light/medium fleet maintenance operations; our main findings are summarized below.

MDFR Heavy Fleet Maintenance

Based on the review of cost and certain qualitative information, it is recommended that MDFR permanently retain maintenance responsibilities for its heavy fleet.

The analysis indicates that the pilot has resulted in savings to the Fire District and to the County overall, while having a minor negative impact on the County's General Fund. MDFR has generated operational improvements that should continue to generate some degree of sustainable savings in future years, as well as certain qualitative initiatives that have resulted in service improvements.

Financial Assessment

OSBM applied two different methods, a *charge-to-cost* and a *cost-to-cost* approach, in its analysis. Taken together, these two methods provide insights into the financial impact of the transfer of heavy fleet maintenance functions. Though this analysis examined both fiscal years covered by the pilot phase, the findings focus on the results for FY 2003-04, the first full year that MDFR performed the heavy fleet maintenance function.

OSBM estimates that in FY 2003-04, the pilot resulted in savings to the Fire District of \$1.47 million. Of this amount, we estimate that \$439,000 in net expenses were transferred from the Fire District to other GSA customers through the reallocation of administrative overhead. The remaining \$958,000 represents savings to the County overall, of which approximately \$656,000 constitutes one-time savings and \$302,000 is potentially recurring. The principal sources of savings to the County were cost reductions in commercial subcontracting (approximately \$557,000), parts (\$344,000), and the purchase of major machinery and equipment (\$147,000 combined), as well as

unfilled vacancies (estimated at \$149,000). The primary increase in costs during FY 2003-04 was personnel expense, which was partly offset by the savings from positions held vacant resulting in a net increase of \$86,000. There are likely net sustainable savings to the County overall associated with MDFR retaining heavy fleet maintenance services, primarily attributable to the reduction in use of outside commercial subcontractors.

There has been a minor negative impact to the General Fund resulting from the redistribution of GSA overhead charges from MDFR to other customers, possibly in the \$150,000 range for FY 2003-04. OSBM and MDFR are currently discussing a number of issues regarding the allocation of expenses between the Fire District and the General Fund that are unrelated to the heavy fleet maintenance pilot. Consequently, OSBM will work with MDFR to resolve the heavy fleet maintenance issues within the context of these broader discussions.

Attachment B provides additional detail concerning sustainable and one-time savings as well as the General Fund impact.

Qualitative Assessment

In addition to examining cost information, this report also discusses several qualitative improvements implemented by MDFR. Most important among them has been the implementation of an on-line reporting system. The system provides valuable and timely information on each major piece of equipment to MDFR managers, and allows for smoother scheduling and more flexible management decisions. MDFR has also moved to a fully-automated barcode system that allows for real-time management of parts inventories. There are a number of other important changes that have taken place since the transfer, particularly in the area of personnel retention and certification. The transition to MDFR has resulted in more accountability and a more timely achievement of certain operational improvements.

MDFR Light/Medium Fleet Maintenance

At this time, transferring responsibility for MDFR light/medium vehicle maintenance operations from GSA to MDFR is not recommended, as the analysis does not indicate that the proposed transfer would result in cost savings to MDFR or to the County overall.

The initial assessment indicates that the transfer of MDFR light fleet maintenance responsibilities would likely not result in cost savings. Unlike the case for heavy fleet, the transfer requires building retrofits and new capital equipment. The proposed model also points to increased personnel costs associated with a new supervisory position, and higher pay grades and new certifications for mechanics. A review of limited available expense data does not identify potential offsetting expense reductions.

Improving GSA's centralized vehicle services model, potentially to include implementation of certain strategies employed by MDFR, is the best approach for the

County overall. The County has traditionally favored the centralized provision of internal support services when economies of scale can be achieved and when service requirements are generally comparable across departments. Despite legitimate service delivery issues raised by MDFR and other departments, a compelling business case does not exist for diverging from the County's centralized service provision model.

To address service delivery issues, OSBM is working with GSA to develop performance targets that reflect private industry standards and the expressed desires of its customers and to develop a MOU that will memorialize measurable service targets and provide an individual employee incentive system.

The review of the MDFR proposal to take over maintenance of its light and medium vehicles was not exhaustive; there are factors other than cost that could be weighed in making a determination of organizational placement of the fleet maintenance function. OSBM will continue to work with GSA and their customers to build the foundation of a more responsive centralized fleet maintenance operation.

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MDFR HEAVY FLEET MOU CLOSE-OUT

GSA Fleet Management provides vehicle maintenance and repair services to a number of County departments, including MDFR. MDFR vehicles, like all vehicles serviced at GSA, are characterized as “heavy” or “light.” For purposes of this discussion, MDFR heavy equipment is understood to mean emergency vehicles weighing in excess of 10,000 lbs. such as rescue trucks, fire engines, aerial vehicles, platforms, tanks and specialty vehicles. Light equipment includes sedans and small trucks and vans.

Prior to January 2003, GSA provided maintenance services for MDFR’s heavy fleet. While noting GSA’s generally sound business practices, MDFR expressed concerns regarding heavy fleet maintenance charges as well as GSA’s ability to fully address the unique operating requirements of its heavy fleet. Additionally, both GSA and MDFR recognized that the Fire Shop had been adversely impacted by difficulties in recruiting and retaining qualified candidates due to unusually low salaries for both GSA heavy and light mechanics (Attachment C). MDFR asserted that it could deliver better service at a lower cost by bringing this operation in-house.

In response to these concerns, the former County Manager agreed to transfer this function from GSA Fleet Management to MDFR for a two-year trial basis commencing in January 2003. Terms of the pilot were contained within an MOU that was signed by the parties, including the former County Manager, and adopted by the Board. The pilot program applies solely to the maintenance of heavy emergency equipment as performed at GSA’s Fire and Tire Shops, located within its complex at 6100 S.W. 87th Avenue, to four mobile mechanic units currently assigned to perform preventive maintenance and repairs, and to the minor function of on-site tire repairs.

Prior to the transfer, GSA had estimated its total charges to MDFR for FY 2002-03 heavy fleet maintenance services at \$4.475 million. Under the terms of the MOU, MDFR committed to annual savings of at least \$500,000 (the savings goal was prorated to \$375,000 for the first year since the MOU came into effect at the start of the second quarter). The close-out was to be based on financial performance and qualitative considerations associated with the unique service needs of heavy emergency vehicles. The permanent transfer of heavy fleet maintenance was to be conditioned on the results of a close-out conducted following the conclusion of FY 2003-04.

Findings

Based on the review of cost and certain qualitative information, it is recommended that MDFR permanently retain maintenance responsibilities for its heavy fleet. Our analysis indicates that the transfer has resulted in significant savings to the Fire District and to the County overall, while having a minor negative impact on the County’s General Fund. We expect that a portion of the savings will be sustainable in future years, and that MDFR will continue to benefit from certain qualitative initiatives that have resulted in service improvements.

Financial Assessment

OSBM estimates that in FY 2003-04, the pilot resulted in savings to the Fire District of \$1.47 million. Of this amount, we estimate that \$439,000 in savings stemmed from the transfer of administrative expenses from the Fire District to other GSA customers. This increased the overhead distributed to remaining customers, resulting in a negative impact on the General Fund of approximately \$150,000. The remaining \$958,000 represents savings to the County overall, of which approximately \$656,000 constitutes one-time savings and \$302,000 is potentially recurring. The negative impact on the General Fund would have been greater in the absence of annual rent payments from MDFR to GSA for the use of GSA facilities, set at \$126,000 under the MOU. Attachment B contains a table that summarizes the results of the financial assessment.

To develop these estimates, OSBM applied two different methods: a *charge-to-cost* comparison and a *cost-to-cost* comparison. Taken together, they provide some insight into the financial impact of the pilot, even though there are certain significant changes that took place in the MDFR heavy fleet maintenance operation between 2001 and 2004 for which neither method can fully adjust. These include: achievement of additional technical certifications that made in-house performance of a wider variety of complex repairs more feasible (see “Mechanic Training and Certification”); changes in the mix of vehicles that make up the front-line and reserve MDFR heavy fleet (Attachment D); changes in the inspection policy for certain types of emergency vehicles; extended warranties negotiated for purchases of a particular brand of engine used in many of the newer vehicles; and costs associated with the implementation of MDFR’s Automated Inventory Management System and On-line Reporting System (see “Operational Improvements” below) that were not allocated to the Fire Shop.

Charge-to-Cost Comparison

The first methodology compares MDFR’s actual *costs* of providing fleet maintenance service to its heavy emergency vehicles to the total expected *charge* MDFR would pay to GSA for performing the same service. Under this method, which was implied by the language of the MOU and similarly employed by MDFR in evaluating its heavy fleet maintenance costs against the MOU budget target, the department achieved a net savings to the Fire District of \$1.38 million in FY 2002-03 and \$1.47 million in FY 2003-04 relative to the \$4.475 million MOU target. The savings exceeds the minimum \$500,000 annual goal established in the MOU. Attachment E contains MDFR’s initial high-level calculation of the savings achieved during the year of the transfer, and the adjusted calculations prepared by OSBM as a result of additional discussions with MDFR.

It is important to note that GSA’s charges to MDFR (and all its customers) included a 25 percent mark-up on parts, ten percent mark-up on commercial subcontracting and an element of overhead that built in to GSA’s hourly labor rate. (Attachment F illustrates the process by which GSA calculates the average hourly flee-wide labor rate used in developing budget estimates.) By operating its own heavy fleet maintenance shop, MDFR avoids paying these charges to GSA, resulting in a savings to the Fire District.

However, GSA must recover this revenue through redistributing charges to its remaining fleet customers. Therefore, while the elimination of these charges results in savings to MDFR, it does not result in net savings to the County. Consequently, OSBM conducted an additional analysis in order to estimate overall net savings to the County and to better understand the sources of the savings achieved during the pilot phase.

Cost-to-Cost Comparison

The second approach is a comparison of the heavy fleet maintenance costs during FY 2001-02 (the last year under GSA), FY 2002-03 (the year of the transfer) and FY 2003-04 (the first full year under MDFR). Attachment G contains the side-by side comparison.

The primary sources of the reduction in *costs* in FY 2003-04 relative to FY 2001-02 appear to be lower expenditures in the following categories:

- *Outside Contractual Services (\$557,000)*. Additional training and certifications achieved by Fire Shop mechanics and MDFR management's decision to undertake more of the large, complex repairs in-house were important drivers in reducing this category of expenditures. OSBM believes that this is a significant source of potential on-going savings and service improvements (sending vehicles out to vendors tends to result in longer downtimes than performing repairs in-house). Attachment H contains additional detail.
- *Vehicle Parts (\$344,000)*. OSBM believes that this cost reduction was driven in part by the implementation of a new inventory management system. This is essentially a one-time reduction in the necessary level of inventory stocked since, over time, the heavy fleet maintenance operation would tend to use roughly the same amount of parts whether it were run by GSA or MDFR. (It should be noted that MDFR has initiated testing of cryogenically treated brake rotors and drums on selected emergency vehicles. MDFR believes that early results may indicate that cryogenic treatment of these high-wear parts can increase brake life by as much as 40 percent. If the test is deemed successful, the results should be shared with other departments that could benefit.)
- *Equipment and Tools (\$77,000 and \$70,000 respectively)*. These are categories of expenses that tend to vary greatly from year to year since the items involved are durables that are not replaced every year. Over time, the level of expenditures on these items is likely to be similar regardless of whether the Fire Shop is operated by MDFR or by GSA.

The primary increase in costs during FY 2003-04 relative to FY 2001-02 was personnel expense. This higher expenditure was due to a reclassification of heavy mechanics and supervisors (Attachments I and J), normal growth due to merit and COLA increases, and higher temporary personnel expenses. These increases were partly offset by savings due to positions held vacant, resulting in a net increase in personnel expense of \$86,156. No vacancies are projected for the Fire Shop in future years, so attrition will not likely

