

- **Board of Directors**
Water Quality and Operations Committee

June 12, 2007 Board Meeting

7-8

Subject

Appropriate \$846,000; and authorize (1) implementation of Fleet Management and Fuel Management Systems; and (2) an agreement with Total Resource Management, Inc. in an amount not to exceed \$967,000 (Approps. 15259 and 15411)

Description

Fleet Management System (\$846,000)

To most effectively and efficiently manage Metropolitan's fleet, a modern best-in-class fleet management system is needed to track the usage of fleet assets, improve maintenance planning, integrate service parts inventory and ordering into the accounting system, and to create accurate, timely reports. Metropolitan's fleet represents a significant investment in assets that are critical to the effective operation and maintenance of the distribution system. The fleet consists of 1,765 vehicles and motorized equipment including: cars (220 units); light duty trucks (558 units); heavy duty trucks (251 units); construction equipment (70 units); yard equipment (112 units) and support equipment (554 units). The original cost of these assets was \$39 million, while \$6.5 million is included in the fiscal year 2007/08 budget for continued replacement of obsolete fleet vehicles. The need to modernize and improve fleet management practices and to implement better management controls was identified in a management assessment of fleet operations completed in 2005/06, through site visits conducted by the Board of Directors that same year, and in an internal audit from 2005/06.

A fleet management system is needed which will maintain information and provide reports specific to fleet units in order to properly and proactively manage these critical assets. The fleet management system will be used to systematically track the current age, condition, utilization, replacement cost, and salvage value of fleet units to regularly determine replacement needs as well as reallocation strategies. Management will then be better able to determine which vehicles need to be replaced, reassigned or salvaged. An integrated pool reservation function will help enforce policies and identify exceptions for timely management intervention. The new system will consolidate all fleet asset and maintenance records, replacing manual and ad-hoc systems, and enable reporting from a single, centralized database.

Currently, Metropolitan utilizes IBM's maintenance management software, Maximo, to track and schedule preventive and corrective maintenance. While this system supports Metropolitan's fleet maintenance operation, it does not track other important fleet information such as asset identification, specifications, and warranty data, which are maintained in a variety of other systems, Access databases, Excel spreadsheets, and in manual records. Staff has evaluated available fleet management systems that would better meet Metropolitan's needs and has consulted with fleet industry experts. Staff narrowed the selection to two short-listed products. Staff concluded that implementing IBM's Maximo Transportation Manager Module would best meet Metropolitan's needs. The US Navy, Maryland DOT, JB Hunt, Coca-Cola, and other companies and agencies are currently using the software. The Maximo Transportation Manager Module provides asset information, maintenance alerts based on vehicle specific meters, warranty tracking & recovery capabilities, manufacturer's recall identification and progress tracking, industry coding, life cycle cost reporting and key performance indicators, and most importantly, fully integrates with Metropolitan's Maximo maintenance management system. In addition, the Maximo Transportation Manager would be less expensive to purchase and implement than the other short-listed product.

While the primary business driver for this project is to improve management controls over the fleet assets, the new system is also anticipated to help staff achieve process efficiencies. The fleet management system is estimated to cost \$846,000. This amount represents 2.2 percent of the original cost of the fleet assets. Staff estimates that through routine annual fleet-unit utilization analyses, the transparency and timeliness of information provided by a fleet management system would allow Metropolitan to reduce its annual fleet replacement costs by approximately one percent to two percent (\$90,000) per year. In addition, the administrative overhead required to prepare management reports and research fleet asset maintenance history would be reduced by one full-time equivalent. This translates to a payback period of six years.

This action appropriates \$846,000 and authorizes implementation of a fleet management system to help better manage Metropolitan's fleet assets. As described below, Total Resource Management, Inc., is recommended to assist in implementing the Transportation Manager Module.

Fuel Management System (No funds required in this action; \$894,000 previously appropriated)

Metropolitan has 74 fuel tanks at various facilities which hold fuel stocks. Each year approximately 630,000 gallons of gasoline and 135,000 gallons of diesel fuel are consumed. Fuel costs are estimated to be \$1.88 million in fiscal year 2007/08. In the 2005/06 management assessment of fleet operations noted above, the need for improved management controls over fuel inventory was identified. An internal audit issued in February 2006 also identified the same need. Fuel usage is currently tracked through data entered into a manual log sheet at each fuel tank by individual employees. Information that is supposed to be entered accurately each time a fleet unit is fueled includes the employee's identification number, the fleet unit number, the mileage of the unit, and the gallons dispensed. Log sheet information is entered into a spreadsheet to track fuel usage. In addition, receipt of fuel from vendors is also entered. Changes in fuel inventories are reconciled using perpetual fuel inventory (PFI) reports. This practice relies on the timely and accurate manual entry of all information from the log sheets to the spreadsheet and then through the PFI reports. Many other similar utilities and all large private sector fleet operations rely on modern fuel management systems. Metropolitan's current procedures do not meet best management practices for fuel inventory due to incomplete and inaccurate recordings in the logs, and time-consuming reconciliation of fuel inventory.

To more effectively and efficiently manage fuel inventory, Metropolitan needs a modern fuel management system to track the delivery and usage of fuel and to aid in the timely reconciliation of variances. In response to a competitive selection process via Request for Proposals No. 822, staff selected the E. J. Ward Fleet Fuel System. The E. J. Ward system is currently used by many state and local utilities including the Los Angeles Department of Water and Power, Sempra Energy, and the city of Irvine. The Fleet Fuel System will control dispensing of fuel to authorized vehicles and employees, and simultaneously record the amount of fuel dispensed, mileage, any service codes, time and location. This fuel management system will also provide management with timely and reliable information such as vehicle fuel consumption, mileage, and engine hours, which may then be used to develop preventive maintenance schedules to fit the usage levels of specific vehicles or equipment. The system will improve the reconciliation of fuel purchases to disbursements, which will increase the accuracy of the quarterly maintenance fee paid to the state of California for the amount of fuel stored. In addition to improving management controls over the fueling operation, it is estimated that an electronic fuel management system would free up a significant amount of administrative labor that is currently used to track fuel inventory.

This action authorizes implementation of the E. J. Ward Fleet Fuel System. No funds are required under this action, as \$894,000 was previously appropriated for the electronic fuel management system under the Strategic Operations and Maintenance Management System Program (Approp. 15259). As described below, Total Resource Management, Inc. is recommended to assist in implementing the fuel management system.

Specialized Consulting Services

Total Resource Management, Inc. (TRM) is recommended to provide the specialized consulting services to implement IBM's Maximo Transportation Module for fleet management and a new electronic fuel management system. TRM was selected through a competitive process in response to Request for Proposals No. 822, which was

issued in February 2007. TRM brings particular expertise with the Maximo Transportation Module and fuel management systems through its significant experience in implementing similar systems for other clients. The consultant will focus on the tasks requiring specific product knowledge and prior implementation experience. TRM will configure the systems to meet Metropolitan's business requirements, assist in establishing best practices in fleet and fuel management, and manage its team's resources to meet deliverable deadlines. Metropolitan staff will perform overall project management, furnish information on Metropolitan's business rules, assist with technical tasks to ensure adequate knowledge transfer, perform final acceptance testing of all delivered modules, and help train users prior to the rollout of the new systems.

This action authorizes a professional services agreement with Total Resource Management, Inc. in an amount not to exceed \$967,000 to provide specialized services to furnish and implement IBM's Maximo Transportation Module and the E. J. Ward Fleet Fuel System.

Summary

This action appropriates \$846,000 and authorizes implementation of fleet management and fuel management systems and an agreement with Total Resource Management, Inc. The Information Technology Strategic Plan (ITSP) identified a high-priority need to implement these fleet and fuel management systems. This project has been evaluated and recommended by Metropolitan's Capital Investment Plan Evaluation Team and IT Guidance Committee, and funds have been included in the FY 2006/07 capital budget.

The total budget for work authorized under this action is \$1.74 million. Of this total budget, \$894,000 was previously appropriated (Approp. 15259) and \$846,000 is newly appropriated with this action (Approp. 15411).

See [Attachment 1](#) for the Financial Statement for Approp. 15411.

Policy

Metropolitan Water District Administrative Code Section 5108: Capital Project Appropriation
Metropolitan Water District Administrative Code Section 8121(a): Contracts Over \$250,000

California Environmental Quality Act (CEQA)

CEQA determination for Option #1:

The proposed action is categorically exempt under the provisions of CEQA and the State CEQA Guidelines. In particular, the proposed action consists of the minor alteration, maintenance and operating of existing equipment and facilities with no expansion of use beyond that existing at the time of the lead agency's determination. In addition, it will not have a significant effect on the environment. Accordingly, this proposed action qualifies as a Class 1 Categorical Exemption (Section 15301 of the State CEQA Guidelines).

The CEQA determination is: Determine that pursuant to CEQA, the proposed action qualifies under a Categorical Exemption (Class 1, Section 15301 of the State CEQA Guidelines).

CEQA determination for Option #2:

The proposed actions are not defined as a project under CEQA because they involve continuing administrative activities, such as general policy and procedure making (Section 15378(b)(2) of the State CEQA Guidelines). In addition, the proposed actions are not subject to CEQA because they involve other government fiscal activities that do not involve any commitment to any specific project that may result in a potentially significant physical impact on the environment (Section 15378(b)(4) of the State CEQA Guidelines).

The CEQA determination is: Determine that the proposed actions are not subject to CEQA pursuant to Sections 15378(b)(2) and 15378(b)(4) of the State CEQA Guidelines.

CEQA determination for Option #3:

None required

Options

Option #1

Adopt the CEQA determination and

- a. Appropriate \$846,000 in budgeted funds;
- b. Authorize implementation of the fleet and fuel management systems; and
- c. Authorize an agreement with Total Resource Management, Inc. in an amount not to exceed \$967,000 for consulting services to install, configure and implement the Maximo Transportation Module and the E. J. Ward Fleet Fuel System.

Fiscal Impact: \$1.74 million in budgeted funds; \$894,000 was previously appropriated for the fuel management system. (Approps. 15259 and 15411)

Business Analysis: This option would provide integrated fleet and fuel management systems that would provide information and reports specific to rolling stock and fuel consumption in order to properly and proactively manage these critical assets.

Option #2

Adopt the CEQA determination and

- a. Appropriate \$846,000 in budgeted funds;
- b. Authorize implementation of a fleet management system only; and
- b. Authorize an agreement with Total Resource Management, Inc. in an amount not to exceed \$416,000 for consulting services to install, configure and implement the Maximo Transportation Module.

Fiscal Impact: \$846,000 in budgeted funds (Approp. 15411)

Business Analysis: This option would provide a fleet management module that is integrated with Metropolitan’s maintenance management system. This application would provide information and reports needed to properly and proactively manage the fleet. Findings of the fuel supply audit would be addressed via changes in the manual procedures only. While this would improve management of the fuel supply, it would be less efficient and more prone to error than by using technology to assist the process improvements.

Option #3

Do not implement a fleet management system or a fuel management system.

Fiscal Impact: No immediate expenditure of capital funds

Business Analysis: This option would continue to use several manual processes and custom applications to manage Metropolitan’s fleet and fuel. This option would significantly limit Metropolitan’s ability to efficiently and effectively address the issues raised in the fleet management and fuel supply audits.

Staff Recommendation

Option #1



 Roy L. Wolfe
 Manager, Corporate Resources

5/17/2007

 Date



 Jeffrey Kightlinger
 General Manager

5/24/2007

 Date

Financial Statement for the Business, Finance and Human Resources Program

A breakdown of Board Action No. 6 for Appropriation No. 15411 is as follows:

	Previous Total Appropriated Amount (Mar. 2007)	Current Board Action No. 6 (June 2007)	New Total Appropriated Amount
Labor	\$ 4,827,710	\$ 303,000	\$ 5,130,710
Materials and Supplies	2,522,345	40,000	2,562,345
Incidental Expenses	245,000	10,000	255,000
Professional/Technical Services	7,618,000	416,000	8,034,000
Remaining Budget	1,095,175	77,000	1,172,175
Total	\$ 16,308,230	\$ 846,000	\$ 17,154,230

Funding Request

Program Name:	ITSP – Business, Finance & Human Resources Program		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15411	Board Action No.:	6
Requested Amount:	\$ 846,000	Capital Program No.:	15411
Total Appropriated Amount:	\$ 17,154,230	Capital Program Page No.:	E-34
Total Program Estimate:	\$ 25,969,000	Program Goal:	C – Customer Service