



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

8-2

August 18, 1998

To: Board of Directors (Budget and Finance Committee--Action)
(Engineering and Operations Committee--Action)
(Information Systems Ad Hoc Committee--Action)

From: *for* General Manager

Edward C. Mea III

K. Sommerville

Submitted by: David C. Edwards
for Director, Information Technology

Subject: Appropriate \$3,219,000 to Finance All Estimated Costs for Stage II of the System Upgrades for Server & Workstations Program

Reference: Appropriation No. 15308-E

RECOMMENDATION(S)

1. Appropriate \$3,219,000 from the Pay-As-You-Go Fund to finance all estimated costs for Stage II of the System Upgrades for Server & Workstations Program.
2. Authorize the General Manager to have all necessary work performed to complete Stage II of the three stage System Upgrades for Server & Workstations Program.

EXECUTIVE SUMMARY

In August 1997, the Board approved an appropriation and funding for computer system upgrades to migrate desktop personal computers and network servers to the Windows NT operating system. This migration was necessary to support the 32-bit application architecture that was planned for Metropolitan's computing environment and to move network servers to an industry standard operating system, Windows NT Server, that would ensure future compatibility and support.

Total appropriation for the program was estimated at \$6,299,000. Funding for the first stage was budgeted for \$1,518,000. This letter requests \$3,219,000 to fund Stage II of the project. During Stage II, the Windows NT operating system will be installed on personal computers throughout Metropolitan and plans will be developed to migrate network servers to Microsoft's Windows NT Server product.

JUSTIFICATION

Multiple application projects have been approved by the Board and are underway which require a 32-bit desktop operating system. Migration to a 32-bit desktop environment is essential in order for those projects to proceed. This request is funding for Stage II of a three-stage program to deploy the Windows NT operating system throughout Metropolitan's desktop and server environment.

ALTERNATIVE (S) TO PROPOSED ACTION

The only viable alternative would be to implement Windows 95 on desktop personal computers. However, Windows 95 does not offer the stability or security available in Windows NT. Microsoft has stated that Windows NT is the recommended strategic direction for corporate desktop computing environments, rather than the Windows 95/98 product, which is more suited for home use.

FUNDING REQUEST

Program Name: System Upgrades for Server & Workstations Program			
Source of Funds: Pay-As-You-Go-Fund			
Appropriation No.: 15308	Board Action No.: 2	FY 97/98 Budget: \$1,518,000.	
Requested Amount:	\$3,219,000	Capital Program No.:	15308
Total Appropriated Amount:	\$4,737,000	Capital Program Page No.:	E-79
Total Program Estimate:	\$6,299,000	Program Category:	E – Efficiency/ Productivity

ACTIONS AND MILESTONES

- Complete Metropolitan-wide Windows NT workstation rollout – March, 1999
- Develop Windows NT server configuration and migration plan– March, 1999
- Request Board Appropriation for Stage III – February, 1999
- Complete System Upgrades for Server & Workstations Program – June, 1999

DETAILED REPORT

In August 1997, the Board approved an appropriation and funding for systems upgrades to migrate desktop personal computers and network server to Microsoft's Windows NT operating system. This migration was necessary to implement a 32-bit computing infrastructure for Metropolitan's standard applications, reduce costs associated with supporting multiple operating systems, and minimize the disruption to the users. The proposed migration protects Metropolitan's investment in applications such as PeopleSoft, Oracle Financials, Electronic Document Management System (EDMS), and Maximo, which now require a 32-bit operating system to run. The migration will also move existing Banyan servers to an industry standard network platform, Windows NT Server, to ensure future compatibility and support. Windows NT is a powerful desktop and server operating system which includes improved features in stability, security, manageability, and multitasking.

The System Upgrades for Server & Workstations Program was divided into three stages. Stage I of the program included design of the computing environment, system testing, and small pilot implementations for both desktop personal computers and network servers. To date, a standard desktop configuration has been developed to support applications used through-out Metropolitan. This configuration was implemented and tested on a small group of workstations. Test procedures were developed for all applications used at Metropolitan, as well as training materials for end users. A central repository was established to track progress and results, ensure proper team coordination, and to report technical support issues.

Stage II of the program will consist of a Windows NT workstation rollout to personal computers throughout the District, Windows NT server planning and design, plus server application software testing and evaluation. While the Windows NT workstation rollout will consume the most time and physical resources during Stage II, the server migration planning and design will be the most technically challenging objective of this stage. External resources with expert technical knowledge will be used to enable the migration team to make informed technical decisions and decrease the duration of the learning curve of internal employees. During the initial planning for the Windows NT server migration it was not envisioned that server hardware would be required. However, further research has revealed that additional servers will be required to perform specialized network administration functions, like login authentication and access control. The additional servers are necessary to ensure system security, reliability, and availability. At this time, it appears the additional costs will be covered by contingency, so the program estimate remains unchanged.

Stage III of this program will consist of the Windows NT server migration and the upgrade of the Microsoft Office product suite. The major activity of Stage III is to migrate Metropolitan's existing Banyan VINES network servers to the Microsoft NT operating system.

Attachment

FINANCIAL STATEMENT

The total cost breakdown for Authorizations No.1 and No.2 to Appropriation No. 15308 is as follows:

Program Summary:

	Authorization No. 1	Authorization No. 2
MWD Labor	607,000	297,319
Professional/Technical	648,000	1,507,214
Material and Supplies	96,000	292,625
Incidental Expenses	29,000	60,000
Operating Equipment (15 servers)	0	525,000
Contingencies	138,000	536,842
	\$ 1,518,000	\$ 3,219,000
Total		

Total Program Expenditures:

Actual Expenditures through FY 1997/98 (Authorization No.1)	\$ 876,284
Projected Expenditures July - September 1998 (Authorization No.1)	\$ 281,404
Projected Expenditures through FY 1998/99 (Authorization No.2)	\$ 3,219,000
Projected Expenditures through FY 1998/99 (Authorization No.3)	\$ 1,922,312
	\$ 6,299,000
Total	