

BEFORE THE COUNCIL OF THE
METROPOLITAN SERVICE DISTRICT

FOR THE PURPOSE OF APPROVING)	RESOLUTION NO. 81-215
AN AGREEMENT WITH THE U. S.)	
LEASING CORPORATION FOR)	Introduced by the Council
COMPUTER HARDWARE PURCHASE)	Coordinating Committee

WHEREAS, Additional disk and tape drive capacity is needed for the successful operation of Metro's financing system; and

WHEREAS, The responses to the request for proposals have been evaluated and a vendor chosen pursuant to Metro contract regulations; and

WHEREAS, The U. S. Leasing Corporation requires a resolution approving an amendment to the financing agreement for computer hardware purchase for this transaction; now, therefore,

BE IT RESOLVED,

1. That the Executive Officer is hereby authorized and directed on behalf of Metro to execute this amendment and deliver same to U. S. Leasing Corporation and to execute and deliver any other documents and agreements (e.g., addenda, schedules, all financing statements) and to do and perform all other acts and things deemed necessary, convenient or proper to this transition hereby ratifying, approving and confirming all that the Executive Officer has done or may do in the premises.

2. That any assignee of U. S. Leasing Corporation may rely on this Resolution and that it will have the same binding effect as if said assignee were specifically mentioned herein in

lieu of Digital.

ADOPTED by the Council of the Metropolitan Service District
this 22nd day of January, 1981.



Presiding Officer

CS:ss
1649B/188

*Res
8/2/85*

A G E N D A M A N A G E M E N T S U M M A R Y

TO: Metro Council
 FROM: Executive Officer
 SUBJECT: Financing Agreement on Computer Hardware Purchase

I. RECOMMENDATIONS:

- A. ACTION REQUESTED: Approve Resolution authorizing Metro to enter into an agreement with the U.S. Leasing Corporation to finance the purchase of a 176 megabyte disk drive and tape drive.
- B. POLICY IMPACT: Increased disk and tape storage capacity is needed to operate the new computerized accounting system. This system is the basic tool required to meet the Council's expectation of an improved financial reporting system.
- C. BUDGET IMPACT: A one time cost of \$10,400 is required to pay off the balance due, after trade in, on the existing equipment. This amount will be divided \$8,944 to the General fund and \$1,456 to Solid Waste. (The Solid Waste amount is the prorated share of the equipment capacity required to run the landfill billing system.) A \$1,000 installation charge will also be prorated between these two funds. The monthly payment increase of \$402 can be absorbed with the existing overhead plan. Transfers from contingencies would be made in both funds to cover costs.

II. ANALYSIS:

- A. BACKGROUND: The need for increased disk and tape capacity is caused by two main factors: 1) the accounting system requires more space than was originally estimated; and 2) the installation of a billing system for the St. Johns Landfill which was not an application planned when the computer decision was made. The initial planning for the accounting system did not anticipate the large number of computer records required to meet the grant and cost accounting requirements. Efforts to operate within the constraints of existing equipment have been tried, such as storing programs on tape and disks when not in use, but have not been successful. The movement of data from on-line to storage has been time consuming and subject to error because of the limited capacity of the tape drive and the amount of data to be moved.

The financing agreement on the new equipment would be made coterminous with the existing agreement which expires in May, 1985.

- B. ALTERNATIVES CONSIDERED: 1) Timesharing the accounting system on another computer and 2) purchasing additional disk and tape capacity. The purchasing option is recommended because it cost \$2,098 per month less than timesharing. Also the purchase payments would end in May, 1985 while timeshare payments would continue. Equipment options were considered and are outlined in the attached memorandum. The single 179 megabyte disk and the large tape drive are recommended as the most effective alternative to meeting our system requirements.
- C. CONCLUSION: Approve the financing agreement to purchase a 176 megabyte disk drive and large capacity tape drive and trade in existing equipment.

CS:ss
1624B/188



METROPOLITAN SERVICE DISTRICT
527 S.W. HALL ST., PORTLAND, OR. 97201, 503/221-1646

MEMORANDUM

Date: January 9, 1981
To: Denton Kent, Chief Administrative Officer
From: Charlie Shell, Director of Management Services
Regarding: Computer Hardware Purchase

Recommendation

1. Purchase a used 176 megabyte disk drive and larger capacity tape drive.
2. Trade in existing two 28 megabyte disk drives and tape drive.

Budget Impact

1. Buy out on existing equipment

Disk drive	\$ 8,160
Tape drive	2,240
TOTAL	<u>\$10,400</u>

This represents the balance due on these two pieces of equipment after trade in.

2. Purchase of new equipment

Disk drive	\$28,500
Tape drive	7,995
Installation	1,000
TOTAL	<u>\$37,495</u>

3. Financing

Current Monthly payments	\$ 2,690
Increase for New Equipment	402
TOTAL	<u>\$ 3,092</u>

The cost of the new equipment will be spread over the remaining (four and a half years) of the financing agreement with U.S. Leasing Corporation.

4. Source of Funds

a. One time costs

	<u>Buy Out</u>	<u>Installation</u>	<u>Total</u>
Solid Waste	\$ 1,456	\$ 860	\$2,316
General Fund	8,944	140	9,084
TOTAL	<u>\$10,400</u>	<u>\$1,000</u>	<u>\$11,400</u>

The Solid Waste share of the cost is prorated on the basis that the Landfill billing system will occupy 14 percent of the space on the new disk.

Both the Solid Waste and General fund costs will be transferred from contingency.

b. Monthly

Remaining FY 81 increase \$ 2,010

The current year payments can be made from contingency funds not needed for cost of living increases.

Analysis

1. Problem:

The existing disk drive capacity is not adequate to meet the requirements of the accounting system and the Solid Waste billing system. As the chart below illustrates, there is disk capacity for only 44 percent of the current computer applications that can be placed on line on a disk at any one time (a program must be on line to be executed or to access the data). The accounting system accounts for 70 percent of the total demand.

COMPUTER APPLICATIONS

<u>Applications</u>	<u>Current Megabytes</u>	<u>Projections Megabytes</u>
System Management Program	17.8	21.8
Accounting ¹	90.0	90.0
Transportation	15.3	19.2
Metro Development	1.7	10.3
Solid Waste (nonfinancial)	1.4	1.4
Mailing List	2.0	5.2
	<u>128.2</u>	<u>147.9</u>
Capacity	56.0	176.0 ²
Balance	<u>(72.2)</u>	<u>28.10</u>

¹ Includes billing system

Estimate is for accounting system fully installed

² Recommended Disk Capacity

Even though all applications do not have to be on line at all times, there is still not adequate space to execute all of the sub-elements of the accounting system when it is fully developed in April. Efforts have been made over the last few months to operate within the limits of the disk capacity but have not been successful. Data problems have occurred as a result of moving programs between disks and tape storage. Staff time has not been efficiently used because of the frequent movement of programs on and off line.

The problem has occurred because 1) the size of the accounting system is larger than originally estimated because more records are needed to provide grant and job cost reporting system than anticipated and 2) the billing system for the St. Johns Landfill was not anticipated in the original planning for the system.

The existing CPU size is limited, but is adequate to operate the accounting system and existing nonfinancial applications. Additional computer capacity will be needed to provide the computer services for programs now being considered for implementation. A study is needed to determine how to provide this capacity. Priority would be given in this study on how to use outside computer resources to meet these needs rather than expanding in-house capacity.

2. Alternatives:

a. Timeshare:

The accounting system could be operated on another computer. To operate the system on line at all times would require 90 megabytes of disk space which would cost approximately \$3,200 per month. At a minimum 70 megabytes of space would be needed if subsystems such as payroll were not maintained on line at all times. This would cost approximately \$2,500.

b. Buy additional disk and tape drive:

(1) Disk Drive:

The next increments in disk sizes available are 69 and 176 megabyte. The alternative of two 69 megabyte disks was rejected because there was not a significant difference in price as compared to a single 176 megabyte disk, \$25,000 vs. \$28,500.

Also, the accounting system, which requires more than 69 megabytes, is programmed to operate on a single disk. Additional reprogramming costs of up to \$2,000 would be required to modify the system to operate on two disks.

(2) Tape Drive:

The purchase of a faster tape drive with greater capacity will be needed if the computer system is shifted from two disks to one. The current two-disk system allows the flexibility of backing up data between disks, which is a relatively expensive storage medium. With a 176 megabyte sized disk, a tape drive is the only source for backup. The existing tape drive is too slow to be used as the sole backup device. Also, tapes are a less expensive storage medium than disks.

c. Summary:

	<u>Timeshare</u>		<u>Purchase</u>	<u>Balance</u>
Current Monthly	\$2,690	Current Monthly	\$2,690	-0-
Timeshare Monthly	<u>2,500</u>	Purchase Monthly	<u>402</u>	<u>\$2,098</u>
Total	\$5,890		\$3,092	\$2,098