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CITY OF SACRAMENTO
CALIFORNIA

OFFICE OF THE
CITY MANAGER

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Office of the City Clerk
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APPROVED *as amended*
BY THE CITY COUNCIL

City Council
Sacramento, California

APR 21 1981

APR 28 1981

Honorable Members in Session:

OFFICE OF THE
CITY CLERK

SUBJECT: Word Processing Implementation Proposal

SUMMARY

Word processing is the conversion of ideas and information from various forms into print for the faster more effective management of procedures, equipment, and personnel. It improves efficiency of business communications through a technological advance in office machines and a systematic approach to office workflow.

Word processing, when properly applied, can substantially increase office productivity, provided the equipment, procedures and people are employed and managed properly. This is accomplished by use of a keyboard device capable of controlled storage, retrieval and automatic typing.

A feasibility study was conducted within several City departments to determine if word processing systems would be cost effective. This study concluded that word processing systems would improve office efficiency and be cost effective.

It is recommended that the City install word processing systems in the departments surveyed.

BACKGROUND INFORMATION

Other means must be explored to provide for the ever growing volume of documents without increasing the workforce. The number of pages (i.e. reports, etc.) provided annually is steadily increasing. These pages must be compiled, edited, corrected, updated, revised, collected, recorded and stored.

One method that can handle the increasing volume of written matter without increasing the workforce is automation. It is now appropriate to examine the document generation and maintenance process. It is necessary to do more without increased resources.

A proven means of automating written materials, i.e. letters, agreements, specifications, etc., is word processing systems.

A committee was formed to determine the feasibility of installing word processing equipment for the City, a cost effectiveness analysis was conducted in several departments: Mayor/Council, City Clerk, Personnel, Finance, Planning, Engineering, City Manager, Employee Relations, Data Processing and Police. This analysis was conducted under the criteria as outlined in the manual titled "Managements Guide to Word Processing" by Dartrell. The basic assumptions used in the study follow:

- I. The purpose of this cost effectiveness analysis is based on the premise that the cost of the equipment and site preparation needed by a word processing system can be offset by the increased productivity. All other things being equal, secretarial/clerical costs per document should go down to justify the investment to convert to a word processing system.
- II. The data to complete the cost effectiveness analysis is derived from the current typing being performed in the departments to be supported by a word processing system. All computations are based on a bi-weekly cost per year basis.
- III. In both the current system and a proposed system, there are various costs to be considered. There are:
 - A. Recurring costs: expenses for personnel, material consumed in use, operating, overhead, support services, and other items incurred on an annual basis. For this analysis, the recurring cost is a summation of the following items:
 1. Secretarial support for the department. The functions involved in normal secretarial support is placed in six categories. These are: typing, transcription, telephone answering, filing, clerical, mail handling, and miscellaneous.
 2. The cost of supervising the quantity and quality of the typing being performed.
 3. The cost of the author's time spent in creating the documents which are typed.
 4. The cost of proofreading the final copy.
 - B. Investment cost: cost associated with the acquisition of equipment, real property, non-recurring services, non-recurring operations and maintenance (start-up) costs. For the system that is presently in use, this investment is considered a sunk cost that has already been spent. Therefore, this would have no bearing on the results of comparative cost studies. For the proposed system, the investment cost is a summation of the following items.
 1. Cost of automatic typewriters.
 2. Cost of dictation equipment.
 3. Cost of telephone equipment installation and rental.
 4. One time moving expense.

5. One time construction costs.
6. Accessory costs.
7. Other costs as incurred.

C. Cost effectiveness: a comparison of both the current and proposed systems discounted over an 8 year economic life. A proposed system can be considered cost effective if productivity increases effect real cost savings.

A detailed cost/analysis was conducted within all of the aforementioned City departments. However, due to the length of each analysis, only the City Clerk's office is shown in this report. All of the departments show the same saving results which are on file.

The City Clerk's office has several applications that currently require an inordinate amount of time in light of today's technology in word processing. The primary categories of typing work within the office can be expressed in four general categories as an example of the current workload requirement. To perform these four functions require four (4) permanent full-time positions just to accomplish. Along with other required workloads such as answering telephone inquiries, counter inquiries, preparing bid notices, etc. leaves very little time to expand their duties without additional personnel.

The cost of accomplishing these duties is based on the average base salaries which includes the City's contributions for benefits which equals to \$14.09/hr. The workload for the four categories is as follows:

<u>PRESENT SYSTEM</u>			
	<u>Hrs. Spent Per Week</u>	<u>Hrs/Yr.</u>	<u>Cost Per Year</u>
1. Agenda Preparation	8	416	\$ 5,820
2. Minutes Preparation	4	208	2,910
3. Certificate of Appreciation	9	468	6,547
4. Letters (correspondence)	<u>28</u>	<u>1,456</u>	<u>20,005</u>
Total	49	2,548	\$35,282

It is estimated that the current time/cost figures can be shortened significantly by utilizing word processing capabilities thereby permitting additional work to be accomplished without increasing personnel. As an example, the following table represents a modest analysis of the time requirements and cost of accomplishing the same categories of work when utilizing word processing equipment.

<u>PROPOSED SYSTEM</u>			
	<u>Hrs. Spent Per Week</u>	<u>Hrs/Yr.</u>	<u>Cost Per Year</u>
1. Agenda Preparation	4	208	\$ 2,910
2. Minutes Preparation	2	104	1,455
3. Certificate of Appreciation	1	52	727
4. Letters (correspondence)	<u>7.3</u>	<u>381</u>	<u>5,330</u>
Total	14.3	745	\$10,422

As can readily be seen, the time savings alone between the two approaches is approximately 34.7 hours per week or 1,803 hours per year. This savings alone represents approximately 1 person year when vacation and sick leave time is considered. These figures do not indicate the corresponding improvement that would be allowed in other applications within the Clerk's office nor does it reflect the certainty of improvement in document shortage and recall.

Due to the strict budgetary restraints imposed on the City and the total cost of introducing word processing equipment into all of the departments surveyed by the committee, it was determined that the best and most economical way to implement word processing equipment is in phases. This method would permit an on-going evaluation of the actual usage of the equipment and provide information in determining if and where additional equipment is needed.

CONCLUSION

Based on the aforementioned facts, the committee determined that: (1) there is a valid need to update the City's present means of producing business communications through the use of the technological advances in office machines; (2) that a phased program be instituted to provide for a systematic approach and usage evaluation of word processing equipment by City departments and staff; and (3) that a Request for Proposals be prepared in order to solicit vendor bids.

FINANCIAL DATA

Utilizing the recommended phased approach, it has been determined that the equipment needed to implement Phase I (Attachment II) would be the following:

- A. 2 type/2 configurations @ \$17,500 each for the Police Department. A type 2 configuration consists of a master unit, 2 diskette drives (500,000 character storage capacity) and a character printer.
- B. 2 type/3 configurations @ \$20,000 each: one for the Planning Department and one for the General Services Department. A type 3 configuration consists of a master unit, a slave unit, 2 diskette drives (500,000 character storage capacity) and a character printer.

The estimated cost to implement Phase I is \$80,760 which would also include a maintenance agreement for the equipment. The FY 1980-81 Police Department budget has \$37,880 allocated for this purpose. Therefore, only \$42,880 of additional monies are needed to begin the implementation of this program.

The FY 1980-81 Administrative Contingency budget authorized \$5.3 million to be used to fund unanticipated expenditures which best can be handled on an administrative basis. The Finance Department estimated that \$800,000 would be expended from the Contingency budget during FY 1980-81. As of this date, only \$600,000 has been expended.

It is recommended that the additional \$42,880 needed to implement this program come from the Administrative Contingency budget.

RECOMMENDATION

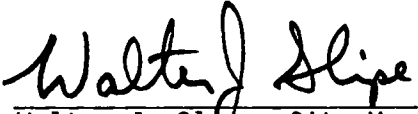
It is recommended that the City Council approve:

1. The Phase concept to implement word processing equipment into City departments.
2. The additional allocation of \$42,880 to implement Phase I of the schedule by adopting the attached resolution.
3. Instruct staff to prepare the Request for Proposal (RFP) and to solicit bids.

Respectfully submitted,


John L. Whitehead, Jr.
Associate Management Analyst

Recommendation Approved:


Walter J. Slipe, City Manager

EQUIPMENT DESCRIPTION

To aid in understanding of the system description the Committee developed the following general definitions of word processing components and the approximate of each of the standard type configuration.

Master Unit - A device that can operate as a requiring (but capable of) linkage to other devices. These units usually consist of a visual screen (CRT), keyboard or work station and processor which includes the storage unit.

Slave Unit - A device consisting of a visual screen and a keyboard work station but having no storage capacity. These units must be attached to a master unit.

Diskette Drive - A data storage device capable of supporting interchangeable platters of magnetic storage medium (diskettes) each of which is itself capable of storing approximately 250,000 characters on 75 pages of print. Storage capacity can be increased by the use of hard pack which has the capability of storing approximately 6,000 pages.

Character Printer - A printing device that outputs print of typewriter quality. Speed of the printer is between 50 and 60 characters - per second utilizing the above definitions of the basic component parts. These standard equipment configurations can be constructed that will meet the City's needs. The three standard types are as follows:

Type I - 1 master unit; 1 diskette drive (250,000 characters storage; 1 character printer).

Type 2 - 1 master unit, 2 diskette drives (500,000
character storage; 1 character printer.

Type 3 - 1 master unit, 1 slave unit, 2 diskette drives
(500,000 character storage); 1 character printer.

The cost of each type of configuration is:

Type 1 - \$15,500

Type 2 - \$17,500

Type 3 - \$20,000

WORD PROCESSING PHASE SCHEDULE

The suggested time frame to implement and complete the entire word processing program is as follows:

The maximum time for full implementation is three years. This would allow ample time to evaluate equipment usage and productivity after each phase. Significant cost and time savings may be realized if the trend of price reduction continue at the current pace.

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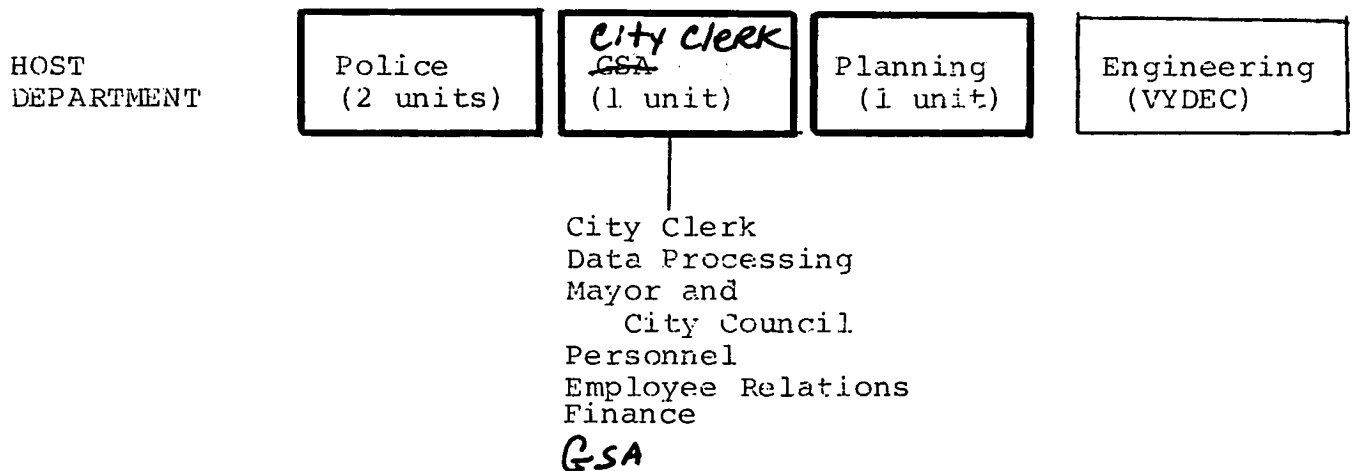
PHASE I:

Equipment	-	2 type 2 configurations@ 17,500 each	=	35,000
		2 type 3 configurations@ 20,000 each	=	40,000
Maintenance	-			<u>5,760</u>
Total	-			\$80,760*

Equipment would be distributed as follows:

2 type 2 units to the Police Department
1 type 3 unit to the General Services.
1 type 3 unit to the Planning Department

All other Departments would utilize the equipment as needed through arrangements made with the host department. The following arrangement is suggested.



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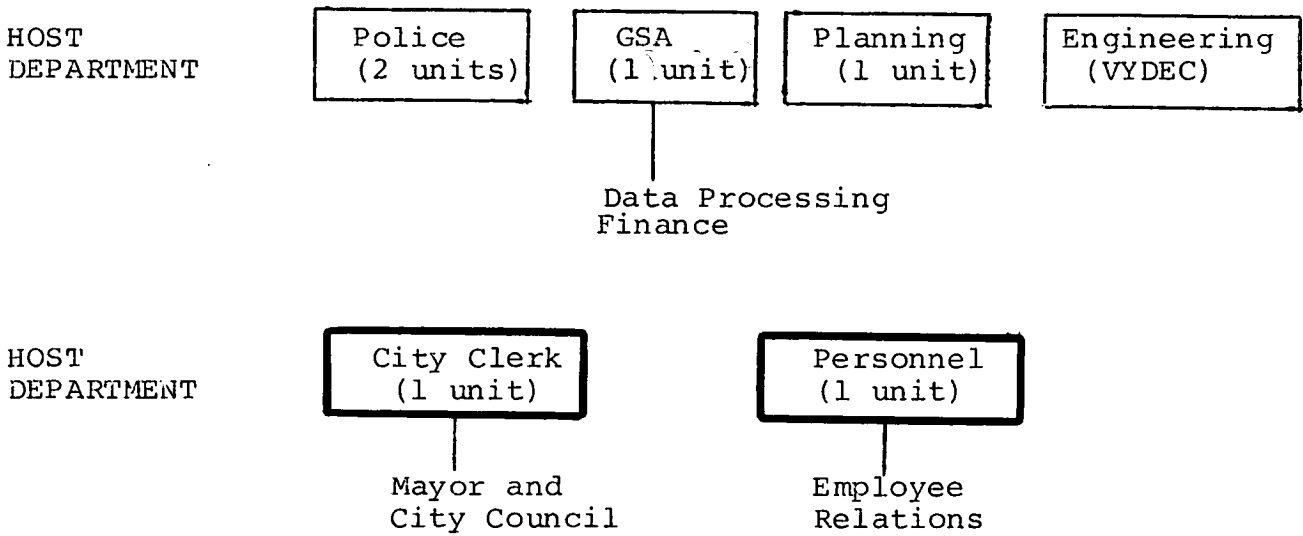
OFFICE OF THE
CITY CLERK

*Of this total \$37,880 is already appropriated to the Police Department. Therefore, \$42,880 would be new appropriation.

PHASE II

Equipment	-	2 type 3 configurations @ 20,000 each =	40,000
Maintenance	-		<u>2,880</u>
Total	-		\$42,880

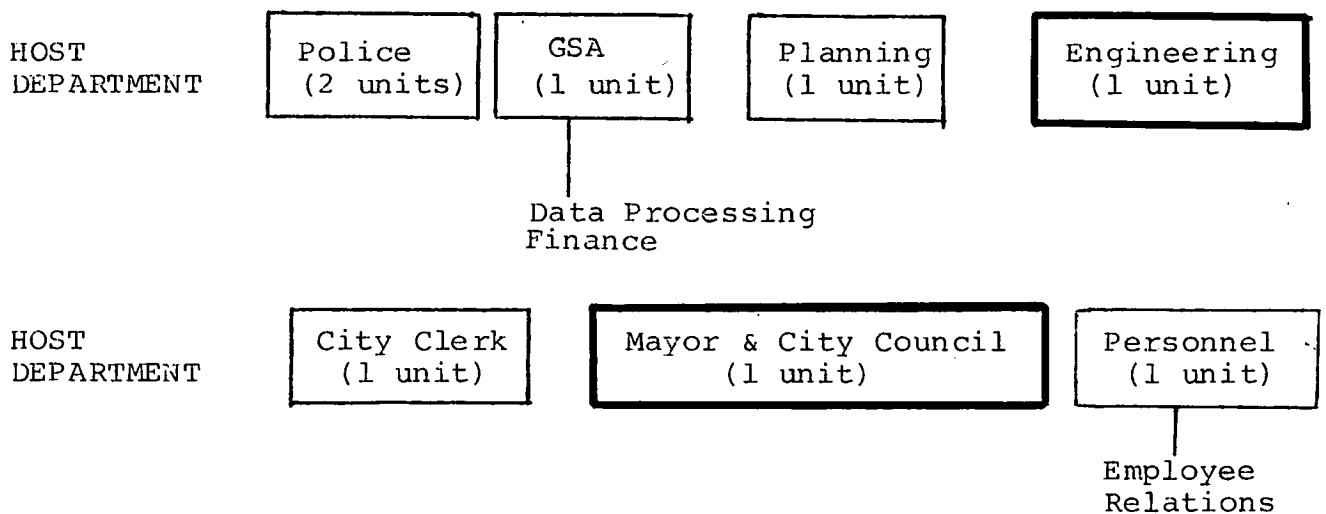
Equipment would be distributed to the City Clerk's office and the Personnel Department resulting in the following arrangement:



PHASE III:

Equipment	-	1 type 2 configurations @ 17,500	=	17,500
		1 type 3 configuration @ 20,000*	=	21,000
Maintenance	-			<u>2,880</u>
Total	-			\$41,380

Equipment would be distributed to the Mayor and City Council's office and to replace the VYDEC in Engineering. This would result in the following arrangement:



*Plus \$1,000 for math package

PHASE IV:

Equipment	-	2 type 1 units @ 15,000 each	=	30,000
Maintenance	-			<u>2,880</u>
Total	-			32,880

The equipment would go to Data Processing and Employee Relations finalizing the plan as developed by the Committee.

RESOLUTION NO. 81-303

Adopted by The Sacramento City Council on date of

April 16, 1981

RESOLUTION AMENDING THE GENERAL SERVICES DEPARTMENT
BUDGET FOR FISCAL YEAR 1980-81 TO FUND THE PURCHASE
OF WORD PROCESSING EQUIPMENT.

BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SACRAMENTO:

That the City budget for Fiscal Year 1980-81 is hereby amended
by transferring \$42,880 from the Administrative Contingency Fund
1-01-5070-0000-4399 to the General Services Department 1-01-1400-0000-4630
to purchase word processing equipment.

MAYOR

ATTEST:

CITY CLERK

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