

ITEM	12
MANAGER'S REPORT NO.	3
COUNCIL MEETING	1980 01 14

RE: DATA PROCESSING
 (ITEM 11, REPORT NO. 34, 1978 MAY 01)
 (ITEM 13, REPORT NO. 58, 1978 AUGUST 28)
 (ITEM 12, REPORT NO. 89, 1978 DECEMBER 18)
 (ITEM 9, REPORT NO. 28, 1979 APRIL 09)
 (ITEM 26, REPORT NO. 45, 1979 JUNE 25)

The following is a progress report from the Municipal Treasurer regarding the computer conversion program.

RECOMMENDATION

1. THAT the recommendation of the Municipal Treasurer be adopted.

* * * * *

1980 January 08

TO: MUNICIPAL MANAGER File: D1-1
 FROM: MUNICIPAL TREASURER
 RE: DATA PROCESSING
 (ITEM 11, REPORT NO. 34, 1978 MAY 01)
 (ITEM 13, REPORT NO. 58, 1978 AUGUST 28)
 (ITEM 12, REPORT NO. 89, 1978 DECEMBER 18)
 (ITEM 9, REPORT NO. 28, 1979 APRIL 09)
 (ITEM 26, REPORT NO. 45, 1979 JUNE 25)

RECOMMENDATION :

- 1) THAT the Treasurer prepare specifications and call bids to engage a computer software house to program the Payroll application.

REPORT

Background

In 1978 May, a decision was made to lease a Sperry/UNIVAC 90/30 computer to replace our existing IBM 360/20 computer which was obsolete. At that time it was also decided to change our approach to electronic data processing to the current "state of the art", i.e. on-line. On-line is a method whereby each department using the computer is responsible for entering its own information into the computer, and has direct access to the computer for getting out information.

What Were Our Objectives

To obtain a new computer and to convert our existing systems to on-line within about a two year period, ending 1980 October.

These objectives will be met but the completion date will be about 1981 May.

What Were the Advantages

131

We would be using the latest technology. We would reduce the annual operating costs by the end of the conversion by about \$65M annually (1979 \$'s), and annual savings of this magnitude would continue because staff would be reduced from 14 to 5 or 6, while substituted computer costs would be fixed under contract.

These advantages are in the process of being realized. In addition, because of the new computer, it has been possible to develop the accounting procedures required for the new Accountability Budget, a task that was not on hand at the beginning of the project.

What Were the Disadvantages

Computer conversion is filled with uncertainty. It is difficult to forecast the time, effort and cost involved in making a conversion.

Time has proven this disadvantage. Problems encountered have caused the completion date to be delayed and the cost for contracted assistance to be higher than anticipated.

Costs Involved

In addition to some nominal costs for maintaining the old computer while the systems for the new computer were being developed, a cost estimate was made for contracted assistance to be supplied by Computech Consulting Canada Ltd.

	<u>Cost as Estimated in 1978</u> \$	<u>Estimate Factored for Inflation</u> \$
Project supervision (in place of hiring a full-time staff member as Computer Services Manager)	46,000	48,440
Programming	<u>80,000</u>	<u>85,235</u>
	<u>126,000</u>	<u>133,675</u>

Costs are higher than expected for several reasons:

- it took longer to modify the software package we got from Coquitlam (Taxation Billing and Collection) than had been anticipated.
- The staff provided by UNIVAC, while possessing the technical skills required for the installation of the computer, lacked some of the programming and analytical skills we had counted on to assist us with programming.
- considerably more time was spent in training and upgrading the skills of our staff in order to make them effective on-line programmers than had originally been allowed for.

Since the commencement of the project, the services of the UNIVAC programmer have been discontinued in exchange for a cash settlement. Although we spent considerable time and effort, and did extensive

training with our staff, we were not entirely successful and two staff programmers had to be laid off. Since the overall plan called for a reduction in our programming staff at the completion of the project, it was considered unwise to rehire full time staff with the inherent costs of training and development, only to have to lay off those individuals in about 18 months. Instead, we used Computech programmers.

The net result is that we have increased costs for contracted programming, which is offset in part by decreased salary costs.

The following is a comparison of estimates to actual to the end of the Accounting application. The original estimates only provided for contracted assistance to the end of that project.

	<u>Estimate</u>	<u>Cost</u>	<u>Over-</u> <u>expenditure</u>	Amount of Overexpenditure Offset by Decreased Salary Cost
	<u>\$</u>	<u>\$</u>	<u>\$</u>	<u>\$</u>
Project supervision	48,440			
To 1979 December 31		43,800		
1980 to end of Accounting application		<u>10,000</u>		
	<u>48,440</u>	<u>53,800</u>	<u>5,360</u>	nil
Programming	85,235			
To 1979 December 31		123,190		37,900
1980 to end of Accounting application		<u>60,000</u>		<u>19,500</u>
	<u>85,235</u>	<u>183,190</u>	<u>97,955</u>	<u>57,400</u>
Total to end of the Accounting application	<u>133,675</u>	<u>236,990</u>	<u>103,315</u>	<u>57,400</u>

Most of the cost increase of \$45,915 (\$103,315 less \$57,400) is related to the cost of using Computech programmers to replace laid off staff.

Council, in 1979 July directed that we continue to contract programming from Computech to complete the Accounting application, with approximately \$25,000 to be provided for those services from the 1980 budget. For reasons explained, the \$25,000 estimate has grown to approximately \$60,000, which will be required in 1980. When decreased salary costs of \$19,500 are offset against the \$60,000 contracted programming cost, the net impact on the 1980 budget is \$40,500 as compared with the \$25,000 estimated in 1979 July.

Future Requirements

With the exception of the Accounting project, one major application - Payroll - remains to be done, for which outside programming assistance is required. With the reduction in staff that has taken place since the start of the project, we have neither the staff nor the expertise to do the job in-house. It is proposed that we prepare specifications and call bids to do the job.

In this regard, we are presently pursuing several alternatives:

133

- 1) To determine the availability in Canada of proven payroll software that can be purchased.
- 2) To consider the possibility of acquiring the existing payroll software which North Vancouver District uses on their UNIVAC 90/30 computer, and modify that system to meet Burnaby's requirements.
- 3) To design and write a new payroll application to meet Burnaby's requirements.

Outside technical assistance is required to properly investigate and research the various alternatives in order to decide upon a course of action. Assistance is also required to scope the payroll application in order to provide needed information to enable the Treasurer to draw specifications on which to call bids. It is proposed to use Computech to provide that technical assistance. The cost involved would be in the range of \$7,000 to \$10,000, a portion of which would be salvageable. Funds have been provided in the 1980 budget.

With the Accounting application nearing completion, and with the intent to go to outside bids for the Payroll application, we intend to phase out the services of Mr. R. Birch. Mr. Birch, under contract from Computech, has been our Computer Services Manager since the commencement of the project. It is our intention in 1980 to fill the position with a full time staff member. Funds have been provided in the 1980 budget for Mr. Birch to work with the new Manager for a period of time and to be available to answer questions of a technical nature when they arise.

1980 Budget

The 1980 budget for contracted assistance cannot be determined until such time as we decide upon what action to take with the Payroll application and receive bids to do the required work.

The 1980 provisional budget provides the following:

Project supervision	\$ 26,640
Accounting	25,850
Payroll	<u>66,000</u>
	<u>\$118,490</u>

At annual budget time, the budget will be drawn to reflect the \$60,000 required for the Accounting application and more accurate figures should be available for the Payroll application, costs for which, depending upon the course of action taken, could range from \$50,000 to \$250,000.

Summary

The objectives which we set out to achieve at the commencement of the project should be realized. Problems encountered during the conversion are causing a delay in meeting our time deadlines. Costs are higher because we are using more outside programming help than we had originally intended. One major application - Payroll - remains to be done and it is proposed that we call for bids to do the job.

B. A. M. [Signature]
MUNICIPAL TREASURER