

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)
(ITEM 12, REPORT NO. 3, 1980 JANUARY 14)

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

RECOMMENDATION

1. THAT the report of the Municipal Treasurer be received for information purposes.

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1980 April 08

TO: MUNICIPAL MANAGER

File: D1-1

FROM: MUNICIPAL TREASURER

RE: DATA PROCESSING
(ITEM 11, REPORT NO. 34, 1978 MAY 01)
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RECOMMENDATION

1. THAT this report be received for information purposes.

REPORT

This is a progress report relating to our computer conversion.

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 decided to change our approach to data processing. Rather than simply replacing our computer, it was decided that we would employ the latest state of the art and use on-line computers. 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.

WORK INVOLVED

The following summarizes the work involved in the conversion and work completed to date:

We need to convert:	We have completed to date:
Property tax system	
Billing and collection	Done
Flat rate water	Done
Local improvements	Done sufficient for billing
Growth analysis	Done
Metered water	Outstanding
Garbage	Outstanding
Planning	Done
Voters list	Done
Accounting	In progress to be completed 1980 May
Payroll/Personnel	Outstanding
Licence	Outstanding
Parking	Outstanding

PRESENT POSITION

The payroll application is the most complex of the outstanding conversions. Based on the Treasurer's recommendations, Council in 1980 January authorized the Treasurer to investigate the various alternatives available for the payroll application and to prepare specifications and call bids to engage a computer software house to program the payroll application.

The various alternatives available to us were studied:

- 1) We contacted five major companies which offer, or claim to offer, a Canadian payroll system. Four companies replied, but in every case the cash required up front plus the additional work which would have to be done, ruled out this approach.
- 2) We also contacted other cities using a UNIVAC 90/30, viz. Medicine Hat; London, Ontario; Burlington and North Vancouver. Only the North Vancouver system had potential. It would, however, have required substantial modification in order to do our job. Our payroll system incorporates the payments for sick leave made by the Burnaby Benefit Society; this one item alone is a major variance from the North Vancouver system.
- 3) We made an estimate of the time that it would take for an outside computer software house to design and program a new system. It was estimated that the cost to do the job would be between \$225,000 and \$250,000.
- 4) We examined the possibility of using our existing payroll system and converting it to run on the 90/30. Improvements which have been made in UNIVAC software since the installation of the computer make it possible to modify our existing programs to run on the 90/30. Also, UNIVAC now has available without charge an on-line data entry system.

At the time of our last report it was stated that the contracted assistance costs for the payroll application, depending upon the course of action taken, could range from \$50,000 to \$250,000. By using alternative 4), which is the method we propose to adopt, no contracted assistance is required. The job can be done by existing Burnaby staff members in about a three month period. It is the least disruptive and our overall conversion costs are reduced accordingly.

The same approach will be applied to other outstanding items, viz. metered water, garbage, Licence and parking.

NET RESULT

By using the techniques described, the conversion of systems to the 90/30 should be complete by the end of 1980. This will allow us to dispose of the IBM 360/20 in 1981.

COST COMPARISON

Following is a summary which compares the project costs as estimated at the beginning of the project with actual costs known to date and estimated for the future:

<u>Projected Data Processing Budgets</u>				<u>Actual Data Processing Expenditures</u>			
Expressed in 1978 dollars (Except for 1977)				(B - Budget)			
	Old IBM 360 Model 20 \$	New UNIVAC 90/30 \$	Total \$	Projected Budget Factored for Inflation \$	Old IBM 360 Model 20 \$	New UNIVAC 90/30 \$	Total \$
1977	325,066		325,066	325,066	325,066		325,066
1978	239,754	204,486	444,240	444,240	234,080	172,695	406,775
1979	127,654	356,712	484,366	518,270	181,995	372,575	554,570
1980		321,602	321,602	368,200	B 136,273	B 424,353	B 560,626
1981		321,602	321,602	393,975		B 354,409	B 354,409
Total 5 year projected costs			1,896,876		Total 5 year actual & estimated costs		2,201,446
Total 5 year projected costs factored for inflation				2,049,751	Less projected costs factored for inflation		<u>2,049,751</u>
					Net overrun		<u>151,695</u>

As indicated in the last report, \$103,315 of this overrun is related to contracted assistance. The remainder of the net overrun is caused by the fact that the project ran longer than originally anticipated, with resulting increased costs in salaries and equipment.

ADVANTAGES GAINED BY CONVERSION

In addition to decreased annual operating costs which are realized as a result of the conversion, many other advantages have been gained. In the taxation section we have been able to realize reduced staff costs. There is faster turnaround of cash, and a

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much improved information system which helps us to better serve taxpayers. In the Accounting section we now have the ability to account for revenues and expenditures in accordance with the new budget format. We were also able to replace a 20 year old obsolete cost accounting system. In the Clerk's office the ability to store better identification improves the accuracy of the voters list. There is also improvement in the ability to handle telephone queries from voters because the list is always up to date. Other advantages are yet to be gained in the area of payroll, licencing and metered rates.

SUMMARY

In spite of the difficulties outlined to Council in previous reports, and particularly the rather gloomy state of affairs contained in the last report, we are pleased to state that the conversion will be essentially complete by the end of 1980, at costs of up to \$250,000 less than anticipated in the last report. Although we underestimated the funds which would be required and the time it would take to do the job, we will have achieved the objective of having changed computers and improved our systems. We will also have gained the advantages previously stated.

This will be the last report relating to the conversion. In the future, if significant changes are contemplated, a report will be prepared. In accordance with established guidelines, no new applications will be programmed without the prior approval of the Computer Advisory Committee and Council.

Submitted for the information of Council.


 For MUNICIPAL TREASURER

HBK:gw