RE: DATA PROCESSING
(Item 7, Report No. 21, 1977 March 21)
(Item 17, Report No. 39, 1977 May 30)
(Item 14, Report No. 82, 1977 November 28)

The following is a report on data processing from the Municipal Treasurer.

An original copy of the report from Computech Consulting Canada Ltd. has been loosely inserted into the envelopes containing each Council member's agenda. Any member of the public wishing to obtain a copy may do so upon request at the Treasury Department.

RECOMMENDATIONS

1. THAT the Corporation accept the proposal from Sperry UNIVAC for a Series 90/30 computer, to be phased in as outlined in the consultant's report; and

2. THAT Computech Consulting Canada Ltd. be retained on a per diem basis to provide technical and managerial assistance for the development work at an estimated cost of $126,000; and

3. THAT the 1978 budget include provision for the Sperry UNIVAC lease and the services of Computech Consulting Canada Ltd.

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1978 April 17

File: D1-1

TO: MUNICIPAL MANAGER

FROM: MUNICIPAL TREASURER

RE: DATA PROCESSING

In 1977 May Council authorized the retention of a computer consultant. This action was taken upon the Treasurer's recommendation, when it was pointed out that the economic life of our existing computer was drawing to a close, and that new technology was available which would make it possible to upgrade our existing equipment to a new generation of computers, without increasing the existing level of data processing costs; that is, after implementation costs are taken into consideration.

The consultant's report submitted to Council in 1977 November supported that viewpoint, at which time Council approved the following recommendations:

1. THAT the recommendations contained in the consultant's report be approved in principle; and

2. THAT the Treasurer invite proposals from the computer vendors who have relevant municipal program packages for their hardware; and

-2-

132

3. THAT specifications and terms of reference for the new position of Computer Services Manager be prepared and that the position be filled as soon as possible; and

4. THAT Computech Consulting Canada Ltd. be retained to do the facility selection and assist with implementation.

Attached is a copy of the consultant's report dated 1978 March 30. The report recommends that the Corporation accept a proposal from Sperry UNIVAC for a series 90/30 computer.

The feasibility study which was presented to Council in 1977 November concluded that our existing equipment is obsolete and that the computer should not be upgraded. Rather, a new systems approach should be taken which would see user departments having direct access to a new computer through on line terminals. With the 90/30 computer we will be able to develop such a system.

The **attached** Schedule "A" projects the data processing budget to 1980, taking into consideration the recommendations of this report. It also expresses what our budgets might look like in 1980 if:

- we made no change
- we converted hardware only
- we changed our systems approach to on line with the appropriate hardware.

From this schedule it can be seen that if we made no change, our budget would be approximately $10,000 higher per annum than proceeding with the proposed system. It also shows that if we only upgraded our hardware with no system change, our budget would be approximately $65,000 higher per annum than going with the proposed system.

In implementing a change to our system approach to on line, development costs must be incurred. It is estimated that the cost will be $126,000 over the next two years. This does not include existing Corporation staff. It represents the cost of acquiring skilled technical assistance in the field of on line computer systems. This assistance would be contracted from Computech on a per diem basis.

An additional $24,000 for developing an interface with the mapping computer has been allowed in the projected budget. Council in 1978 February approved an application to the Federation of Canadian Municipalities for a research grant in the amount of $20,000 to offset the cost.

As indicated in the report, it is expected that we will make use of application programs developed by the District of Coquitlam, who now have a UNIVAC 90/30. This would be done on a swap basis. For example, Coquitlam now has a property system developed (tax billing and collection). They are prepared to let us use their system in exchange for programs of equal value which we would develop, such as payroll or accounting. This arrangement helps to keep our development costs down to the $126,000 anticipated.

In addition, the District of North Vancouver has a 90/30 on order, with delivery expected in the next several weeks. Preliminary discussions have been held with North Vancouver staff with a view to co-operating in developing mutually beneficial application programs. We are optimistic that a user group can be established with North Vancouver and Coquitlam with the resultant cost savings to the participants.

-3-

The report recommends that the equipment be leased rather than purchased. This provides more flexibility as it allows for changing or upgrading of all equipment during the term of the lease. It permits us to take advantage of new technological developments. Under the terms of the lease, payments made accrue toward purchase price as follows: 75% - 1st year; 50% - 2nd year; 25% - 3rd year. After two years, we would re-examine the lease to consider the advantages of purchase.

Item 3 of the recommendations adopted by Council in November called for the establishment and filling of a new position of Computer Services Manager. Considerable effort was spent in preparing specifications and terms of reference. Upon completion, it became apparent that a relatively high level senior staff member would be required. It also became apparent that after the development work for the new computer was completed, the individual would be overqualified for the job from that point onwards. As a result, it was decided to abandon that approach and to acquire professional assistance from the consultant commencing with Council's approval of the project.

Disruption to staff presents the biggest problem of conversion. It is also the matter of most concern. The new systems approach calls for phasing out approximately eight staff positions by 1980. Of these positions, two individuals will be retiring by the end of the conversion, and one position now vacant has not been filled in anticipation of the conversion. We have held discussions with both staff and Union officials. The staff members have been thoroughly acquainted with the situation and understand what is happening. Every effort is being made to retrain the people involved to provide them with skills so that they can seek work elsewhere or in other departments of the Municipality. In addition, all programmers will be trained in the new on line system technology.

In summary:

1. The existing computer installation is obsolete and has almost reached the end of its economic usefulness.

2. It is considered that a new systems approach, which would see departments having direct access to a new computer through on line terminals, is a better way to go, rather than simply upgrading our hardware.

3. System development costs are expected to be approximately $126,000 over the next two years, including the retention of a professional in place of hiring a full time Computer Services Manager. This cost is in addition to the normal programming staff costs.

4. An additional $24,000 has been allowed in projected budgets for developing an interface with the mapping computer.

5. Following a tender call, the consultant has concluded that the proposal from Sperry UNIVAC for a 90/30 computer is the machine which has the best combination of desirable characteristics and price.

6. Full advantage will be taken in co-operating with the communities of Coquitlam and North Vancouver District in developing mutually advantageous application programs.

7. Upon completion of development and conversion, the cost of data processing should be approximately $65,000 less per annum than the expected budget, had the Corporation not changed its approach to data processing and had only converted hardware.
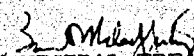
133

-4-

RECOMMENDATIONS

1. THAT the Corporation accept the proposal from Sperry UNIVAC
    for a Series 90/30 computer, to be phased in as outlined in
    the consultant's report; and

2. THAT Computech Consulting Canada Ltd. be retained on a per
    diem basis to provide technical and managerial assistance
    for the development work at an estimated cost of $126,000; and

3. THAT the 1978 budget include provision for the Sperry UNIVAC
    lease and the services of Computech Consulting Canada Ltd.

                                MUNICIPAL TREASURER

HBK:gw
Attach.

THE CORPORATION OF THE DISTRICT OF BURNABY

SCHEDULE "A"

PROJECTED DATA PROCESSING BUDGETS

	Expressed in current value dollars								Expressed in 1980 dollars		
	1977	1978			1979			1980	Existing Data Processing System No change	Existing Data Processing with Hardware Conversion only	New On line Systems Approach using UNIVAC 90/30
	Actual Data Processing $	Data Processing $	Computer Services $	Total $	Data Processing $	Computer Services $	Total $	Computer Services $	$	$	$
Staff	248,057	171,030	77,288	248,318	88,304	132,042	220,346	135,901	278,717	278,717	152,698
Contracted assistance	-	-	60,000	60,000	-	66,000	66,000	-			
Consultant	9,606	15,000	-	15,000	-	-	-				
Computer equipment	34,358	31,205	19,648	50,853	16,831	136,320	153,151	150,252	34,358	89,772	150,252
Special equipment	-	-	34,620	34,620	-	6,420	6,420	-			
Supplies, office space & other costs	33,045	22,519	12,930	35,449	22,519	15,930	38,449	35,449	37,130	37,130	37,130
	325,066	239,754	204,486	444,240	127,654	356,712	484,366	321,602	350,205	405,619	340,080
									340,080	340,080	

Approximate increase in budget by 1980 if no change in system approach is made   10,125

Approximate increase in budget by 1980 if we only upgraded our hardware with no system change   65,539