

ITEM 2
MANAGER'S REPORT NO. 68
COUNCIL MEETING 84/10/29

RE: IMPLEMENTATION OF STRATEGIC PLAN FOR INFORMATION MANAGEMENT
MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendation of the Director Administrative & Community Services be adopted.

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1984 October 19

TO: MUNICIPAL MANAGER
FROM: DIRECTOR ADMINISTRATIVE & COMMUNITY SERVICES
RE: IMPLEMENTATION OF STRATEGIC PLAN FOR INFORMATION MANAGEMENT

RECOMMENDATIONS:

1. THAT Digital Equipment Corporation be selected as the prime vendor of computer equipment and system software; and
2. THAT Synercom be selected as the vendor of mapping and related software; and
3. THAT the Director Administrative & Community Services be authorized to proceed with the acquisition by lease or purchase of the computing equipment, software and related terminals, etc. as specified in the 1984 October 17 report on "Computer Evaluation and Selection" by Robert Liley and Associates, and to
4. THAT the authority be given to execute the necessary documents to complete those acquisitions, whether by lease or purchase.

R E P O R T

Introduction:

On 1984 May 07, the Council adopted Municipal Manager's Report No. 31, 1984 April 24, thereby approving the Strategic Plan for Information Management, and directing the staff to proceed with the recommendations set out in that report.

Members of Council will recall that the plan grew out of a study conducted by the Management Information Services Developer, Robert Liley, which had as its objective the formulation of a long term strategy for Information Management within the Corporation.

The recommendations adopted by the Council on May 07 included one that the existing Engineering computer be upgraded to a DEC VAX 11/750 computer, along with an upgrade in the Synercom mapping software, and "that a Request for Proposal be issued in accordance with the Strategic Plan for Information Management to select computer vendors for computer equipment to replace the existing Finance computer equipment". The purpose of this report is to bring forward the conclusions and recommendations coming from that Request for Proposal process. A detailed technical report entitled "Computer Evaluation and Selection", prepared by Robert Liley & Associates has been provided for Council members with their agenda package. Copies of the report will be made available to others by the Municipal Clerk, on request.

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The report from the Management Information Services Developer is, of necessity, lengthy and complex. The purpose of this report is to summarize those technical recommendations for Council.

Background:

It is important to see the whole subject of Information Management in the proper context, both for Burnaby and with regard to changing technology generally. We have experienced increasing needs for improved Information Management and information processing, to support efficient and effective management generally within the Corporation; to assist with the measurement of cost, benefit and productivity; to respond to steadily improving technology; and to deal with the relative obsolescence of existing Burnaby systems, from both functional and capacity points of view.

These needs originally led to the development of the Strategic Plan, which as noted above has been previously adopted by Council, and have now led to the formulation of the recommendations now before Council from the MIS Developer and his project team.

The project team consisted of:

- Assistant Director Finance
- Mapping Services Supervisor
- Computer Services Supervisor
- Transportation Planner (representing Planning & Building Inspection Department)
- Information Services Director designate

Traditionally within the Municipality, computer applications of Information Management have been in two quite distinct areas. Burnaby continues to lead the way in the local government sector in Canada with regard to computerized mapping. At the same time, while we have a number of our "business" applications already resident on the existing Sperry 90/30 computer, there are significant improvements which could be made in those existing uses, to say nothing of a whole host of additional applications which could benefit the Corporation in virtually all areas of Municipal operations.

Future System Development

The Strategic Plan for Information Management envisages a much closer interrelation and indeed integration of the two Information Management areas. As a result, the Request for Proposals for a new computer (hardware) and the systems necessary to operate it (software) have led the MIS Developer and his project team to attempt to find solutions which best address Burnaby's needs.

There is a great deal of system development - application work to be done in the Municipality, to take best advantage of the new hardware and software which we will acquire, and to address the general management needs outlined above. As a result, one of the fundamental issues which the MIS Developer and project team, as well as the Management Committee, have spent considerable time on is the ease and efficiency of the short-listed proposals with respect to that development process. We examined in considerable detail the capability of each of the major vendors in that application development process, and spent considerable time talking with other users, in both the public and private sectors, on their experience with the equipment proposed.

As the detailed technical report describes, there is a range of development tools available from all three of the major vendors considered.

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The report recommends that the proposal submitted by the Digital Equipment Corporation (DEC) be the successful one. The MIS Developer and his project team are unanimously satisfied that the development tools proposed by DEC, as well as the technical merits of the DEC proposal, best address the needs of the Corporation. We are satisfied that the hardware and software proposed by the Digital Equipment Corporation best address Burnaby's needs in the short and long term, and that the development tools available within the DEC system will assist us in efficiently and effectively tackling the large volume of application development work ahead.

Cost:

The technical report includes a detailed examination of the costs of the three proposals put forward by the vendors. That report recommends that 2.3 million dollars be allocated to cover planned acquisition of equipment and related services through July 1985.

Included on page 33 of the technical report is a detailed analysis entitled "Economic Analysis by Phase - DEC Solution". From that analysis, it can be seen that the 2.3 million dollar figure, which includes contingencies for training of data processing (technical) staff, wiring, delivery, contingencies, etc., will provide new computers and related software in both the mapping and business areas which will significantly improve our computing capacity and speed. The DEC proposal represents considerably advanced technology over what we now have in place.

Costs have also been developed beyond the first phases of the Implementation of the Strategic Plan. For the convenience of Council, what follows is an extract from the technical report commenting on the longer term cost analysis;

"While the table shows growth of central site equipment through December, 1987 it is highly likely that this level of computing power may not be required. Accordingly, we have based our central site cost comparisons on costs to the end of Phase V, July, 1986. Even these costs may be tempered by alternative processing strategies which may be employed to reduce overall costs as new technologies are announced.

From the attached table assuming central site growth to meet the processing requirements to the end of Phase V, and assuming a total terminal and network configurations, total costs are:

• DEC Solution	-	\$3,033,800
• IBM Solution	-	\$3,051,900
• Sperry Solution	-	\$3,498,000

In addition it may be possible to reduce the terminal and network costs over time based on evolving technologies, reducing prices and changes in planned levels of utilization.

The total costs for both IBM and DEC are within the tolerances for equipment provided in the Strategic Plan. Initial costs to the end of Phase III parallel the planned costs to that point. Additional future expenditures will be determined by demand, capacity and changes in technology.

Cost for the final configuration may be greater or lesser than those proposed. Implementation will be staged over a five year period. Costs of workstations, printers and computers are decreasing while functionality is improving. The staging approach will enable Burnaby to take advantage of price and technology changes as they occur. In any case, it is not necessary for the Corporation to commit to the final costs at this juncture.

No consideration has been given by the MIS Developer or selection committee to purchase or lease alternatives."

The Strategic Plan prepared by Robert Liley & Associates anticipated equipment costs of approximately \$2.5 million to 1986. This report seeks authority to proceed with either leasing or purchasing equipment and system software to a total dollar value of approximately \$2.3 million. Attention should also be drawn to the fact that, while the total DEC solution proposed would cost \$3.03 million, there may well be changes in demand, capacity, technology and price which should be taken into consideration in the future before further expenditures were made.

As noted above, the technical report gave no consideration to the issue of purchase versus lease. It is the intention of staff to explore fully the relative advantages of leasing or purchasing the equipment, so as to determine the most economically advantageous arrangement for the Corporation. There is little technical advantage to be gained by either purchasing or leasing the equipment; the administrative decision in that respect will be based almost entirely on the relative financial merits of the two approaches.

In the event that the decision is to purchase, funds are available in the Information Services Capital Reserve, already established by Bylaw in the amount of \$2,500,000.

Related Issues:

1. Ergonomics:

The MIS Developer and staff throughout the process of reviewing the proposals have paid close attention to the ergonomic issues i.e., those having to do with the adaptation of equipment to environment and human beings. We are satisfied that the DEC proposal satisfactorily addresses ergonomic concerns, and in fact is the vendor whose equipment, in the selection committee's opinion, represents the best ergonomic features.

Appearing elsewhere on the Council Agenda, however, is a proposal from the Civic Project Coordination Committee, which deals further with the issue of adapting the environment within municipal facilities to further computerization.

2. Staff Training:

It is our expectation that significant training of staff will be necessary as new equipment and, more importantly, new applications are introduced into the Corporation over the next several years. Provision has been made within the MIS Developer's report and costing for training of the technical personnel who will work directly on and with the computers.

In addition, however, it is fully expected that more general training will be necessary throughout the organization, to introduce management, operational and clerical personnel to the computer. Again, such training will have to occur in stages as changes are introduced in different areas. Allowances will be made in the 1985 Provisional Budget for the Personnel Department for the first stages of such training.

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3. Physical Changes:

Some changes will be necessary to the Municipal Hall to accommodate the implementation of the Strategic Plan. Again, appearing elsewhere on this agenda is a report from the Civic Project Coordination Committee with respect to the necessary changes for the fourth floor of the Municipal Hall, to accommodate the new Information Services Division personnel; to the Engineering Department to accommodate relocated mapping - drafting operations; and other related changes.

4. Labour Relations:

Further to the earlier reports on the subject, discussions have been ongoing between the Director Administrative & Community Services and CUPE Local 23, with regard to the implementation of the Strategic Plan. A separate report on that issue appears elsewhere on the agenda for this meeting.

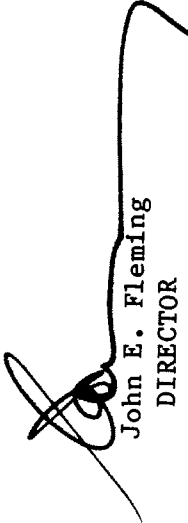
5. Staffing:

The critical first step in staffing the new Information Services Division of Administrative & Community Services Department has been achieved with the recruitment of the division's Director, Mr. Rob Macmillan, an experienced Information Services Manager, begins employment with the Corporation as of 1984 October 29.

6. Timing:

Implementation of the various recommendations in the Strategic Plan is approximately 4-8 weeks behind schedule, largely as a result of the detailed examination of the proposals received. It is the view of staff that that extra time was well spent, and that the decisions reached are sound ones.

The acquisition of new computers for the Corporation, and the subsequent development of new applications of computerization within the Municipality is a major and significant step. The Municipal Manager, the Management Committee, the MIS Developer and the Project Team are well satisfied that the proposal put forward by the Digital Equipment Corporation is the best allround package for Burnaby's needs. The cost of that proposal is within the amount set out in the Tax Sale Monies Bylaw already brought down, which appropriated 2.5 million dollars for the purchase of computer equipment. As mentioned elsewhere in this report, staff wish to assess further with the Digital Equipment Corporation, and other related vendors, the aspect of whether to lease or purchase; however, adequate financial provision has been made for the implementation of the first several stages of the plan. Members of Council will also recall that a reserve has been created to fund the operating costs associated with the implementation of the Information Services Plan.


John E. Fleming
DIRECTOR

