

ITEM 14
MANAGER'S REPORT NO. 75
COUNCIL MEETING 85/11/25

RE: 1985 STRATEGIC PLAN FOR INFORMATION MANAGEMENT
(Item 15, Report No. 35, 1985 May 21)

MUNICIPAL MANAGER'S RECOMMENDATION:

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

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1985 November 20

TO: MUNICIPAL MANAGER
FROM: DIRECTOR ADMINISTRATIVE &
COMMUNITY SERVICES

SUBJECT: 1985 STRATEGIC PLAN FOR INFORMATION MANAGEMENT

RECOMMENDATION:

1. THAT the 1985 Strategic Plan for Information Management be adopted and implemented.
2. THAT a Bylaw be brought down in the amount of \$1,300,000 to appropriate monies from Capital Reserves to fund the balance of capital needs.

R E P O R T

SUMMARY

This report presents the results of the first annual review and updating of Burnaby's Strategic Plan for Information Management. The basic direction for the plan remains unchanged and is still based on the concept of an integrated mapping and business system that, in addition to giving the Corporation a powerful and efficient management tool, remains unique in North America.

The Plan addresses the priorities for system development in the Corporation, and reassesses the equipment and software required to maximize the system's usefulness and efficiency. This report addresses the staffing and financing consequences of the 1985 Plan, and details the amounts which have been included in the 1986 Provisional Budget scheduled for submission to Council 1985 December 02.

As a result of far more experience and accurate estimating, the plan does result in costs higher by some 30% than the original plan, although benefits of the system are estimated to have increased by a larger amount, about 39%.

Background:

In May of 1984, the Council approved a Strategic Plan for Information Management, a plan which had been developed by Robert Liley & Associates with a great deal of input from staff. That report set out, as its title implies, a strategy for the management of information in the Corporation, and addressed new approaches in hardware, software, applications of the computer, and staff organization.

Subsequently, in October of 1984, the Council adopted a further set of recommendations from the Municipal Manager respecting implementation of the Strategic Plan for Information Management. More specifically, that second report approved the selection of Digital Equipment Corporation as the prime vendor of computer equipment and Synercom as the vendor of mapping software, and authorized staff to proceed with the acquisition of equipment and software.

The 1984 October report estimated the costs of computer hardware and system software, to the end of Phase V (December 1987) to be \$3,033,800. Those hardware and system software costs were to be funded from a capital account established in May of 1984, when a Tax Sale Monies Bylaw in the amount of \$2,500,000 was brought down to begin the purchase of computer equipment. Expenditures against that capital account to the end of 1985 are estimated to be \$2,454,311.

Introduction:

Since those earlier reports, a great deal of progress has been made on implementation of the Strategic Plan. The staff approved for the Information Services area have been recruited; the first three VAX 11/750 computers are now installed and operational; much of the new mapping equipment is in place and operational; word processing equipment and terminals are being installed on a phased basis throughout the Corporation; and finally, work is underway on a number of new applications, most notably our Human Resource Management System.

At the same time, staff have been developing much of the system planning and policy work so necessary to the implementation of the Strategic Plan. The Management Committee, the Computer Advisory Committee (representative of all departments in the Corporation) and a number of project-specific task forces have played key roles in that development process, ensuring that systems being changed or developed provide maximum returns to their users. At the same time, an active training program has been undertaken to address the many and varied needs for training throughout the Corporation as new equipment and systems are introduced. We have continued to offer the union an opportunity to participate in the many committee meetings. On numerous occasions, the union has brought issues to the fore for consideration.

One of the key tasks has been the first annual review of the Strategic Plan for Information Management. The first plan was prepared, albeit with much staff input, by an outside consultant. The Information Services Director, with substantial input from his own staff, the Computer Advisory Committee, and the Management Committee has now prepared a revised 1985 Strategic Plan for Information Management. The purpose of this report is to present a summary of that 1985 Strategic Plan for Council's approval, highlighting the changes from the earlier plan, presenting the organizational and financial implications of the plan, and recommending a course of action for the year ahead.

The Strategic Plan itself is a lengthy and complex document. While it is available on request from the Information Services Director, an Executive Summary of that Strategic Plan has been prepared for the Council. A copy of that Executive Summary is included in the Council members agenda packages.

Over the next four weeks, staff are planning a demonstration for members of Council of some of the equipment and system capabilities which are now operational.

The New (1985) Strategic Plan for Information Management:

The direction set in the 1984 Strategic Plan remains unchanged. The main differences between the 1984 and 1985 plans are in three areas:

- The implementation plan is revised to consider progress through 1984/85, current levels of staffing, and current estimates for development projects.
- The financial implications have been revised to reflect expenditure to date and current estimates of future costs and benefits.
- The strategy is more specific than was possible in 1984, when the type of hardware, software and staff available was unknown.

The 1985 Strategic Plan has been developed keeping three major objectives in mind. Those are:

1. Elimination of the Sperry 90/30 computer:

This is a critical objective. Our current lease arrangement expires as of 1987 March 31; continued use of the machine after that date will become quite costly. The 1985 Strategic Plan has as one of its highest priorities the steps necessary to remove the remaining data processing systems from the old equipment, as quickly as possible. In some cases this results in the need for additional resources; however, there is a clear need and advantage to completing the transfer to the new equipment as quickly as possible.

2. The development of computer applications has been prioritized with a view to putting in place as quickly as possible those systems which provide early benefits to the municipality. At the same time, however, efforts have been made to spread the benefits of new systems throughout the Corporation.

3. Productivity, i.e., a more effective use of existing resources and improved service to the public, has also been a major factor.

Major Issues:

There are a number of issues inherent in the 1985 Strategic Plan which require comment. Those are as follows:

1. Time

The 1985 plan forecasts a longer period of time - varying from project to project, but averaging approximately one year - than the 1984 plan, for the implementation of most major application developments. There are a number of

reasons for that longer time. While there have been some practical difficulties with staff recruiting, etc., the major reasons for longer estimated time lines stem from a more realistic and experience-based estimating process, and a deliberate decision to proceed carefully and with full staff participation.

The Strategic Plan recommends the addition of two permanent employees, and four temporary employees for periods of time varying from eight months to two years, in order to achieve the time lines set out in the 1985 Strategic Plan and Action Plan, to achieve the savings and benefits as early as possible, and to move implementation along as quickly as is feasible. While those two permanent positions are additional to the complement now in place, they are still within the parameters set for permanent staffing in the original, 1984 Strategic Plan.

2. Capital Cost

The 1984 October report referred to earlier estimated the cost of the "DEC Solution" to be \$3,033,800 to December 1987. With the \$2.5 million Tax Sale Monies Bylaw put in place at the time, then, it was clear that approximately \$600,000 was still to be found to finance the acquisition of the equipment.

The 1985 Strategic Plan forecasts equipment costs to the end of 1988 at approximately \$3,800,000, meaning that approximately \$1.3 million is still required through to the end of 1988 to finance the acquisition of the equipment.

The revised total costs are the result of:

- taking into account (in the forecast) the expenditures required for equipment to December 1988, rather than to December 1987;
- changes in equipment based on experience over the first year;
- additional central computer site equipment judged necessary by the Information Services Director for system reliability;
- revised estimates of numbers of terminal devices throughout the Corporation.

The revised total as envisaged in the Strategic Plan makes provision for all equipment likely to be required to December 1988. It is important to point out, however, that some of the items included in the costing are still being evaluated, and will be acquired only if staff are satisfied that there is a justified need and a reasonable benefit to flow from the acquisition. Periodic reports to Council on our progress in developing the system will come forward at the appropriate times.

It is recommended that a bylaw be brought down in the amount of \$1,300,000 to appropriate monies from our Capital Reserves to fund the balance of our capital needs. The monies appropriated together with the \$2,500,000 previously appropriated, will be repaid into a Computer Equipment Replacement reserve. This matter is discussed further under the heading of Replacement Reserve.

3. Operating Cost

The 1986 Provisional Budget has been prepared on the basis of the 1985 Strategic Plan. For the information of Council, operating costs for the Information Services area will be higher in 1985 than in 1984, reflecting an annualization of changes made in 1985, more accurate estimates of costs, particularly in the area of hardware and software maintenance, and the additional staff proposed in the 1985 Strategic Plan. The Municipal Manager and the Management Committee have scrutinized the Information Services budget in its entirety, and recommend both the Strategic Plan and the budget required to implement it.

4. Non-recurring Development Costs

At the time the decision was made to implement the original Strategic Plan for Information Management, a special reserve was established for funding the non-recurring development costs associated with the implementation. From that reserve are funded costs for such one-time expenditures as training, additional staff to supplement task force members working on new applications, application package acquisitions and special consulting services. Our most recent estimates indicate that that reserve will be depleted by late 1986. The 1986 Provisional Budget provides for an additional \$100,000 to be added to the reserve. The adequacy of this reserve will need to be reviewed again for 1987 as a part of the 1987 budgeting process.

5. Renovations and Ergonomic Furniture Costs

Keeping in mind the need to introduce a fairly significant number of new employees into the organization, and a large amount of new equipment, the Council approved the creation of a separate reserve for renovations and furniture items associated with the implementation of the Strategic Plan. This reserve was intended to fund the costs associated with adapting the workplace in such a manner as to address the "ergonomics" of new computer technology. This has been a concern of both management and CUPE Local 23, and will result in significant changes in the traditional office setting.

While that project has been a difficult one, requiring considerable intervention of interior design consultants, the renovations to the Municipal Hall are very nearly complete, with the ergonomic furniture now on order. While it was hoped that the original fund for the Municipal Hall, established in the amount of \$600,000, would have had a sufficient surplus to accommodate the necessary minor changes and ergonomic furniture items required for the West building and the Justice building, it now appears clear that an additional \$100,000 will be necessary to properly modify and equip those two buildings. I am advised by the Director Finance that the final purchase order for the ergonomic furniture for the Municipal Hall will exceed the amount reported to Council at the time the furniture order was confirmed by approximately \$42,000, although the overall project for the Municipal Hall can still be accomplished within budget. This additional cost results from the final quantities and types of furniture having been determined.

The \$100,000 additional funds required for the West and Justice buildings have been provided in the 1986 Provisional Budget.

6. Benefits

The 1985 Strategic Plan for Information Management addresses itself in some detail to the issue of benefits, particularly in light of some of the increased costs for implementation of the plan, as set out above. While there is an "intuitive" feeling that computerization is an essential and accepted part of management and office technology in the 1980's, staff have continued to assess to the greatest extent possible the benefits which will flow as a result of these changes. There continues to be, of course, the difficulty in quantifying benefits into the future, although we have attempted to do this in much the same fashion as was done in the 1984 Plan.

The analysis contained in the Strategic Plan concludes that:

"The total excess of costs over benefits to 1987 is \$1,260,000. However, the excess of benefits over costs in the succeeding four years is \$1,524,000. This results in a net benefit to the Corporation over the seven year forecast."

7. Replacement Reserves

Given the rapidly changing state of Information Management technology, we have given careful consideration to the need for replacement of the existing computer hardware and software within the next five to six years. In reviewing this matter with the Director Finance, I have concluded that the Corporation should begin in 1986 contributing to a reserve for the replacement of computer hardware and software, following much the same methodology used in building reserves for the replacement of vehicles.

The 1986 Provisional Budget includes a provision for the establishment of a Computer Equipment Replacement Reserve in the amount of \$393,000. This has been calculated on the basis of replacement values for equipment purchased to the end of 1985, assuming a six-year amortization.

The figure includes a provision for the replacement of the Burnaby Public Library's computer equipment, estimated to become necessary by 1989.

Annually the Operating Budget will contain a provision of funds to be placed into the Computer Equipment Replacement Reserve. This provision in effect repays the funds previously advanced from reserves, except that fund, so repaid, will be specifically earmarked for Computer Replacement purposes. Our Reserve Policy will be amended accordingly.

Summary of Financial Impacts of the 1985 Strategic Plan:

The 1986 Provisional Budget, which will be submitted to Council for consideration on the 1985 December 02 Agenda, fully reflects the 1985 Strategic Plan for Information Management, and includes the following:

- Full year impact of all the changes made in 1985, including new staff, new equipment and maintenance.
- Provision for additional staff required to meet the implementation plan and to remove the Sperry 90/30 on schedule. The 1986 cost is approximately \$140,000.
- An additional contribution to the non-recurring development costs reserve of \$100,000 for the West & Justice buildings.

- An additional contribution to the renovations and ergonomics reserve in the amount of \$100,000.
- The establishment of a new computer equipment replacement reserve, in the amount of \$393,000.

The 1986 - 1990 Capital Budget will reflect the capital expenditure program outlined in the 1985 Strategic Plan.

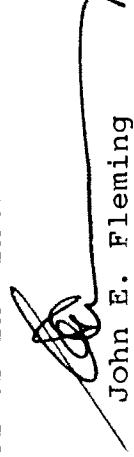
Council's attention is drawn to Exhibits 5-1 to 5-6, extracted from the Plan and attached to the Executive Summary. These exhibits analyze the various financial implications inherent in the 1985 Plan.

As the Plan indicates, overall costs (over the eight-year period) have risen by about 30% since the first Plan was prepared; at the same time, however, benefits are estimated to be up by 39% over the same period.

Action Plan:

The Strategic Plan is at the same time both a conceptual and practical document. The practical parts of it are most clearly summarized in the Application Development and Action Plans, graphically represented in Exhibits 6-1 to 6-4, attached to the Executive Summary.

Those parts of the plan provide both short and longer-term "road maps" for the growth and development of Burnaby's system, and again have been prepared with considerable input from all Departments, and with our objectives in mind.



John E. Fleming
Director Administrative &
Community Services

JEF:gmc
cc: Director Engineering
Director Finance
Director Planning & Building Inspection
Director Recreation & Cultural Services
Information Services Director
Municipal Solicitor

