REGIONAL MUNICIPALITY OF OTTAWA-CARLETON
MUNICIPALITÉ RÉGIONALE D'OTTAWA-CARLETON

REPORT
RAPPORT

Our File/N/Réf.
Your File/V/Réf.

DATE	10 September 1997
TO/DEST.	Co-ordinator Corporate Services and Economic Development Committee
FROM/EXP.	Finance Commissioner
SUBJECT/OBJET	**FINANCIAL SERVICES RENEWAL (FSR) - BUSINESS CASE FOR CHANGE AND ACQUISITION OF SOFTWARE**

DEPARTMENTAL RECOMMENDATIONS

That the Corporate Services and Economic Development Committee recommend Council approve the following:

1. The business case for an investment in renewed financial systems and processes as detailed in Annex A;

2. The establishment of capital authority of $6,250,000 for the Financial Services Renewal project;

3. The delegation of authority to the Chief Administrative Officer, Finance Commissioner and Regional Solicitor to:

a) select a software vendor following an accelerated evaluation process that includes product demonstration, pricing comparisons and consideration of industry reviews;

b) negotiate acceptable contractual terms and award a contract for software purchase.

DISCUSSION

Business Case For Change

The structure and activities of the RMOC have evolved over time in response to changing needs of the regional population and the requirements of its internal clientele. In recent years, the pace of change has increased tremendously, requiring the Corporation to rethink traditional approaches and to introduce new and innovative ways of delivering services.

In large part, the catalyst for change to financial services across the RMOC has come from external pressures, such as:

- Reductions in funding transfers from the federal and provincial governments, coupled with strong demands from taxpayers to keep spending in line. This has led to a situation where it is critical for program managers to have better financial information available to manage their programs.

- Increased operational accountability to the provincial government and the public through the requirement for business case analysis and performance measures (e.g., pending legislation surrounding *Public Accountability and Disclosure*).

- The technology imperative to upgrade financial systems to be "Year 2000 compliant"— that is, to be able to compute dates beyond December 31, 1999. The Year 2000 issue, raised two years ago in a review of RMOC's technology strategy, will be addressed through the FSR redesign. The time window for addressing this problem successfully is fast coming to a close. Decisions must be made without delay.

- The impetus for change has also come from internal continuous improvement efforts. While the RMOC financial services teams have maintained a constant focus on managing financial resources soundly, they have recognized that additional productivity gains may be achieved through lower transaction processing costs. In many cases, better practices have already been successfully adopted within the Corporation.

In response to this, on April 9, 1997, Regional Council approved the appointment of KPMG Consultants to assist staff in the FSR - Phase One Project. The objectives for FSR - Phase One were the following:

1. To conduct an analysis of the current state of financial systems and processes across the RMOC including a technology assessment;

2. To benchmark the current state against municipal and private sector organizations and review proven "best practices" of leaders to identify opportunities for improvement and significant change;

3. To develop a future vision for renewed financial services that embodies the business direction set by Management Committee, namely,

    a) to become a leader in the provision of cost-effective financial services;
    b) to satisfy external and internal clients by meeting or exceeding expectations;
    c) to maintain highly-motivated, satisfied employees;
    d) to eliminate 100% of any duplication of effort and/or systems in the capture/manipulation/reporting of data;
    e) to reduce by 25% the overall cost of financial transaction processing; and
    f) to improve by 50% the turnaround time associated with providing key financial information.

4. To develop a business case for an investment that identifies the case for changing to the future vision, the expected cost of effecting the change and, finally, the expected quantifiable benefits.

Over the summer months, staff and KPMG have worked to successfully complete the objectives of FSR - Phase One.

Attached as Annex A, is the documented future vision and business case for Council consideration.

<u>Software Acquisition</u>

If the proposed investment is approved by Council, the next requirement will be the evaluation and selection of financial software. Once the software of choice is known, the next step will be to request proposals for implementation consulting services. These services may be sourced from a professional services group provided by the successful software vendor or from one of the major management consulting firms. In either case, the software of choice must be known before an RFP can be issued.

It is expected that four software vendors are in a position to provide financial software that will meet the RMOC's requirements. Proposals will be requested from J. D. Edwards, Oracle, Peoplesoft and SAP. All four are market-leading companies that provide base functionality that would support the technological component of the FSR future vision. To assess which would be the software of choice for the RMOC, staff propose an accelerated evaluation process that would assess functional performance based on product demonstrations, client references and industry reviews. As important, and also to be considered, are the criteria of acquisition price, licensing costs, cost of related consulting services, expected costs of maintaining and supporting the computing platform, ease of implementation and user satisfaction.

While software selection is an important aspect of the FSR project, the selection of appropriate implementation consulting services is deemed to be critical. Whichever software is selected, it absolutely must be successfully installed and operating in time to process the 1999 year end. Successful implementation will be severely dependent on the right project management and consulting expertise.

It is the above issue that requires the use of an accelerated RFP process for software selection. As a result of the year 2000 issue, the market for implementation consulting services is becoming more constrained as demand begins to outpace existing supply. This is especially the case in Ottawa-Carleton where the federal government presence has a direct and substantial impact. Almost every federal government department is moving to replace its financial system. Many are expected to be in the marketplace with RFP’s for implementation consultants before March of next year. The sooner the RMOC requests proposals for implementation consulting services, the better, in terms of both the quality and cost of those services, consequently it is advisable to conduct the software evaluation and selection process in an accelerated manner.

A full RFP process, including extensive documentation of functional requirements, is a very expensive and time consuming process. Experience with such an RFP process during the HRIS software selection three years ago did not prove to be cost-effective in terms of successfully differentiating the functional capabilities of competing packages. In addition, as a result of the constrained market conditions mentioned above, a traditional RFP process is not expected to increase the price-competitiveness of vendors. More common today is the use of an accelerated evaluation and selection process. The Region of Peel, as an example, recently employed this approach in the selection of financial software.

On the basis of these issues, staff recommend that authority be delegated to the Chief Administrative Officer, Finance Commissioner and Regional Solicitor to select the software of choice (using an accelerated RFP process), negotiate contractual terms and award a contract to the successful vendor.

FINANCIAL COMMENTARY

Partial funding for the FSR initiative currently exists in Capital Project No.17942 as approved by Council as part of the 1997 Capital Budget in the amount of $1,845,000 of capital authority. Since the renewal of corporate financial systems will benefit all corporate programs, this authority was funded through an apportionment across the Region Wide, Water, Sewer, Child Care, Solid Waste and Transit Capital Reserve Funds.

The cost of FSR to date is approximately $250,000. This results in a total project spending authority requirement of $6,250,000 when combined with the budget estimate for the remaining phases of FSR of $6,000,000.

The additional authority of $4,405,000 required to increase the total project authority to $6,250,000 should be funded in the same manner.

Funds are available in the Capital Reserve Funds to fund the additional authority requirement. The final apportionment of funding requirements between the funds will be determined during the detailed process redesign exercise (part of FSR Phase II) and will be adjusted for in the 1998 Capital Budget.

Approved by
J. C. LeBelle
Finance Commissioner

Attach.

ANNEX A

Future Vision for Financial Services at RMOC

The purpose of this section is to describe a “future vision” for Financial Services Renewal at the RMOC. Defining and communicating a clear picture of the desired results and expected benefits of the renewal initiative—prior to refining and finalizing the details of the solution—is key to ensuring widespread understanding of and support for the project.

A. Five Dimensions of Financial Services Renewal

Many organizations that have embarked on projects similar to the FSR initiative have discovered that implementing a new financial system will, in and of itself, not yield the levels of performance improvement RMOC Management Committee is seeking. In order to harness the full benefits that technology can offer, any new financial system must be designed in conjunction with changes to process, policies, people and structure. In simple terms, the streamlining of processes cannot succeed without properly trained and empowered employees, and the appropriate mix of supporting technologies.

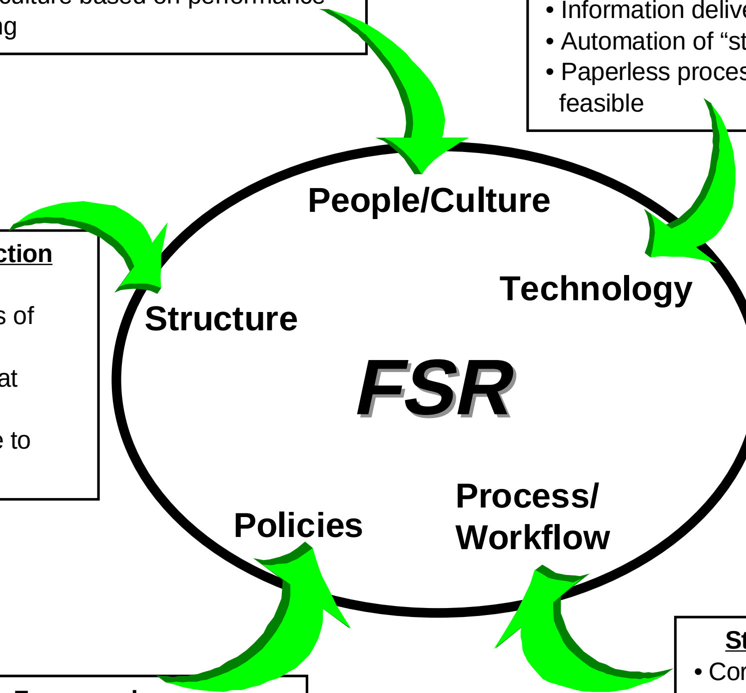
Simultaneous changes in five “dimensions” to the overall FSR program will therefore be required to enable RMOC to achieve its performance targets: People/Culture, Technology, Process/Workflow, Policies and Structure. These five dimensions can be interpreted as a set of interrelated “levers” which can be adjusted to varying degrees in order to facilitate organizational change. Typically, one change lever cannot be adjusted in isolation of the other dimensions. For example, eliminating a process step of double-checking information for accuracy might depend on simultaneous changes to policies (e.g., “spot-checks” only) and/or technology (e.g., ranges of acceptable responses programmed into software).

The five dimensions of RMOC’s FSR future vision are described in detail in the following section. For each dimension, the overriding theme has been identified to help communicate the direction in which financial services are heading.

RMOC Financial Services Renewal-Portrait of Future Vision

Measurable Performance Expectations/Goal
- Culture of understanding client needs
- Performance evaluation practices aligned with accountability framework
- Employee satisfaction, measured by ongoing feedback
- "Continuous improvement" culture based on performance measures and benchmarking

"Integrated" Resource Management System
- Single point of data entry (at the source of the infor)
- Shared access (across RMOC) to common information base
- Policy compliance embedded in technology
- Information delivery tailored to operational requirements
- Automation of "structured processes and decision-making
- Paperless processing techniques adopted whereever feasible



Optimal Structure to Suite Function
- Routine transaction processing consolidated to capture economies of scale
- Decision-making authority placed at point of operational accountability
- Consistent and "seamless" service to clients

Clear Accountability Framework
- Control framework balances compliance, control and efficiency
- Balance established between "preventative" and "detective" controls (e.g., spot-checks)
- Sound management of RMOC financial resources
- Effective reporting mechanisms

Streamlined and Simplified Processes
- Core work processes standardized across RMOC
- "Fast-track" processes for low-dollar transactions
- Single approval at point of decision-making
- Minimized manual processing by using enabling technologies

B. People/Culture: Measurable Performance Expectations/Goals

Measurable Performance Expectations/Goals
• Culture of understanding client needs • Performance measurement reflective of client needs • Performance evaluation practices aligned with accountability framework • Employee satisfaction, measured by ongoing feedback • "Continuous improvement" culture based on performance measures and benchmarking

The **People/Culture** dimension recognizes that the RMOC's employees are the Corporation's primary resource. This dimension focuses on ensuring that RMOC staff have the appropriate mix of skills and qualifications, and are adequately trained to conduct the business processes.

Highly-successful organizations are renowned for their ability to set clear, measurable goals and to monitor progress towards achieving these objectives. Measurement and feedback mechanisms help organizations focus the collective energies of employee teams towards achieving a shared vision. In this environment, managers and staff recognize the value they bring to the organization in their day-to-day work, and understand how their individual and collective efforts contribute to meeting the organization's strategic objectives.

At present, the use of performance targets and service standards as an active tool for managing daily financial operations is limited to certain pockets of the RMOC. The performance indicators that are in place are often not directly linked to the attainment of organizational goals.

In the future, the RMOC will establish and communicate a clear set of "service standards", designed to manage the expectations of both staff and clients regarding how the Corporation's key financial services are delivered. A supporting set of performance targets will be developed to assist financial services representatives in gauging their team's progress towards meeting these goals.

Gaining a clear understanding of external and internal client needs will help financial services employees across the Corporation direct their resources and continuous improvement efforts towards those activities their clients value most. The ongoing challenge facing the RMOC's financial services teams will be to surpass performance levels of previous years by building a working culture of co-operation and teamwork.

The alignment of the performance evaluation practices with the accountability framework (see Policies section below) will support sound decision-making, ensuring that people are being evaluated on work and decisions in which they are directly involved.

Regular feedback from employees will provide the Corporation with the information needed to monitor staff concerns and job satisfaction, thereby helping to foster a work environment which builds and maintains high levels of staff motivation.

A common theme encountered in top-performing organizations is that *change is continuous*. A work culture built on "understanding client needs" and "continuous performance improvement" will challenge RMOC staff to embrace change as a means of expanding their horizons and careers. Such a culture will encourage creativity and strengthen linkages between departments, contributing to the overall effectiveness of services delivered to clients.

Anticipated Benefits:

- ✓ ***Gains in productivity and accountability (through setting concrete performance goals)***
- ✓ ***Improved morale (through the adoption of a shared vision and increased staff empowerment)***
- ✓ ***Longer-term performance gains (resulting from continuous improvement initiatives)***

C. Technology: *"Integrated" Resource Management System*

"Integrated" Resource Management System
• Single point of data entry (at the source of the info)
• Shared access (across RMOC) to common information base
• Policy compliance embedded in technology
• Information delivery tailored to operational requirements
• Automation of "structured" processes and decision-making
• Paperless processing techniques adopted wherever feasible

The **Technology** dimension regards computer hardware and software as key supporting tools that will enable RMOC management and staff to perform day-to-day tasks in the most efficient manner possible. Technology, in and of itself, will not enable financial services to achieve the FSR performance goals. The tremendous productivity gains that new information technology can bring about are invariably tied to associated changes in policies, organizational structure, job design (i.e., roles/responsibilities), accountability, and workflow.

World class organizations understand the importance of managing *information* as a "strategic resource"—much like financial, materiel and human resources. They recognize that to take full advantage of each of these resources, information must be shared readily across the organization.

Data sharing is best achieved through the "integration" of an organization's resource management system, which will enable specialized computer systems to communicate with one another without additional human intervention. This smooth and rapid exchange of information is dependent on investing in the proper mix of technology and in training staff how to interpret and use this data in their day-to-day activities.

RMOC must implement a suite of highly-integrated financial software to replace the current mix of mainframe financial applications and standalone departmental systems. The new resource management system will have a shared database to eliminate redundant data entry and storage. In other words, data will be entered once only (at the point closest to the source of information), and will flow through the integrated system, providing accessibility to all users as required. Core financial applications will also be shared, providing consistency for users across applications as well as across functions or departments.

Managers and staff will be equipped and trained to access the financial data they need. The user-friendly reporting and analysis modules of the new system will enable employees to generate routine as well as ad-hoc reports as required. Information will be retrievable at both the corporate and department level, with report formats reflecting the operational requirements of each department.

To the extent possible, policy and structure will be "embedded" in the new technology (e.g., automated approvals, standard customer numbering systems, cost centres separated from general ledger accounts, integrated sub-ledgers, electronic forms, etc.). These advances will reduce or eliminate a wide range of routine manual tasks, such as reconciling duplicate versions of information, submitting paper requisitions for approval, etc.

Anticipated Benefits:

- ✓ ***Significant efficiency gains through:***
  - ***reduced workload and associated labour costs***
  - ***elimination of duplicated effort and systems***
- ✓ ***Easier access to information required for decision-making***
- ✓ ***Faster turnaround times***
- ✓ ***Increased employee satisfaction (through reduced delays and performing of redundant data entry tasks)***

D. Process/Workflow: *Streamlined and Simplified Processes*

Streamlined and Simplified Processes
• Core work processes standardized across RMOC • "Fast-track" processes for low-dollar transactions • Single approval at point of decision-making • Minimized manual processing by using enabling technologies

The **Process/Workflow** dimension focuses on streamlining the end-to-end series of activities that, taken together, generate products or services of value to a customer (internal or external). The FSR exercise is focusing on five key financial processes: Procurement and Payment, Billing and Collection, Materiel Management, Treasury Management, as well as Financial Budgeting and Reporting.

Most leading organizations have at their core an effective set of work processes which link together activities that produce products or services for clients. Achieving process efficiency allows an organization to harness specialist knowledge or skills as part of a collaborative team effort. Putting in place an “ideal” set of processes, however, relies on much more than simply streamlining work steps that add little value. World-class processes are a reflection of how effectively an organization’s supporting technology and policies facilitate the passing of information or tasks between organizational units.

The RMOC’s current processes have developed over many years and have evolved differently in each operating department. The policies and procedures which regulate these processes have been modified continuously to reflect the wide range of situations encountered across the Corporation. In many cases, however, the resultant extra steps added into work processes have led to a point where processing times are becoming unacceptably slow to clients and transaction costs are no longer affordable. In most cases, workflow crosses internal organizational boundaries—contributing to backlogs, errors/rework and lengthy delivery timeframes. Optimizing these processes therefore often calls for redefining roles and responsibilities and/or changing traditional workteams.

In the future, RMOC’s streamlined and simplified processes will incorporate “best practices” that have proven successful within selected RMOC departments or in comparable external organizations. Straightforward workflow designs will replace the traditional web of “hand-offs” and controls that have characterized many of RMOC’s financial processes.

Where feasible, core financial processes will be standardized across the Corporation, to facilitate the sharing of information and resources, as well as to reduce the complexity and costs of computer systems that support individual operating departments.

Work streams will separate simple cases from the more complex—speeding routine cases through the system, while focusing extra scrutiny and judgment on non-standard situations. For example, low dollar transactions will be “fast-tracked” while higher-risk transactions will follow a more conservative route to secure all necessary approvals.

Each work step will add demonstrable value to the process and will be performed by individuals having the appropriate skills, tools, and decision-making authority. Costly manual processing will be minimized though the use of enabling technologies such as workflow techniques (e.g., electronic notification and approvals).

Anticipated Benefits:

- ✓ ***Elimination of workload and associated costs (e.g., approvals, manual processes)***
- ✓ ***Shortened process cycle times***
- ✓ ***Elimination of duplicated effort and systems***

✓ ***Increased employee satisfaction (through recognition of value-adding role of their work)***

E. Policies: *Clear Accountability Framework*

Clear Accountability Framework
• Control framework balances compliance, control and efficiency • Balance established between "preventative" and "detective" controls (e.g., spot-checks) • Sound management of RMOC financial resources • Effective reporting mechanisms

The **Policies** dimension addresses the vast array of rules and regulations (both written and unwritten) that guide employee actions and decision-making in the conduct of their day-to-day activities. New or revised policies help ensure the new rules are adopted and applied consistently. These procedural changes require clarification and communication across the organization, to ensure people do not continue to perform certain duties "exactly as it has always been done". In some cases, policies governing risk management (e.g., financial thresholds) can be transformed into automated checks and balances in the financial system itself, freeing up resources to spend additional value-added time dealing with more complex or "gray area" issues.

Highly effective organizations empower managers and staff to make decisions (or at least provide input into decisions) that affect their immediate work environment. This level of empowerment carries with it the necessity to assign responsibility for decisions made at key points in the process. Simply stated, people are held accountable for their actions. Currently within the RMOC, accountability for actions and decisions is shared too widely and could be clarified.

Achieving increasingly-higher levels of performance and efficiency will call upon the Corporation to reaffirm the continued validity of past assumptions and policies, and to implement a variety of tools and techniques to help actively manage risk (e.g., automated approval verification, automated matching of previously unrelated information). Changes to traditional controls and delegated authorities will be in alignment with RMOC's future risk-management philosophy and approach.

In the future, RMOC will help promote the sound management of financial resources by establishing a clear "accountability framework" to ensure decisions are made at the level in the Corporation that "makes the most sense". The RMOC's control framework will balance compliance, control and efficiency to ensure that decisions are being made by individuals having the appropriate levels of authority and accountability. In other words, levels of responsibility across the organization will be clarified to reflect the premise of "holding managers accountable for those decisions over which they have direct authority."

The revised authority levels will take into consideration the balance between operational understanding and expertise along with the overriding responsibility for financial stewardship of taxpayer dollars. Such a framework will assume that decision-makers are equipped with appropriate tools and training to ensure decisions are made based on best available information (within time/cost constraints).

Automation will be used to embed preventative controls within the financial system (e.g., automatic validation by the financial system to prevent the accidental entry of data that does not fit within an expected range of responses). Furthermore, where possible, "preventative" controls will replace "detective" controls. In other words, mandatory approvals of all transactions (including those that are routine and low-risk) will be replaced by random spot-checks which trigger closer scrutiny of significant variances from expected results.

Anticipated Benefits:

- ✓ ***Elimination of workload and associated costs (due to a reduction in duplicated effort and "multiple" approvals)***
- ✓ ***Faster turnaround times for decisions***
- ✓ ***Increased employee satisfaction (through reduced delays and a clearer understanding of their roles and authorities)***

F. Structure: *Optimal Structure to Suit Function*

Optimal Structure to Suit Function
• Routine transaction processing consolidated to capture economies of scale • Decision-making authority placed at point of operational accountability • Consistent and "seamless" service to clients

Modifications to work processes often results in changes to **Structure.** The ability to reorganize into logical process teams (where appropriate) is enabled by new technology, which can allow a central pooling and subsequent widespread sharing of information to support decision-making at the point "where it makes the most sense".

Organizations of the 1990s are evolving constantly, in order to adapt to the changing demands of their clientele. The challenge for world class organizations is to align management and staff into teams that can perform work in the most efficient and effective manner possible.

When combined with changes to workflow and technology, optimal alignment of the organization structure can generate significant cost savings (e.g., through the organization-wide or department-wide sharing of "transaction" activities such as high-volume, repetitious tasks). More analytical services (i.e., those requiring considerable judgment and interpretation) are handled by specialists or project teams who bring technical expertise or a broad range of experience to the table.

At present, RMOC operating departments take pride in their ability to deliver quality results without constant reliance on RMOC central support or on other operating departments. In certain cases, this spirit of independence harnesses an entrepreneurial spirit that strengthens teamwork and productivity. In other cases, working in isolation leads to costly duplication of effort and information across departments.

The consolidation of selected departmental accounting services will deliver substantial cost savings by allowing dedicated teams to process high-volume, routine transactions. The sharing of these kinds of services will also allow increased "workload smoothing" (i.e., employee mobility within teams). Highly-efficient processing teams will also require less direction from supervisory staff, allowing for greater "spans of control" (i.e., employee/supervisor ratios).

Meeting client expectations will require that RMOC departments strive to offer services in a seamless and consistent manner. In other words, internal and external customers who deal with one department should be able to expect similar procedures and high standards of service quality from any other department.

Any changes to RMOC's organizational structure will take into account the principle "form should follow function". In other words, RMOC will first determine *what are the tasks* to be performed, then *what knowledge and skills* are required to do these tasks, and finally *who is best-suited* to do this work. Decisions will be made where they are most relevant—at the point of operational accountability—to ensure RMOC remains responsive to changing internal and external client needs.

Anticipated Benefits:

- ✓ ***Economies of scale through streamlined processes and procedures***
- ✓ ***Empowered decision-makers at operational level***
- ✓ ***Improved service to internal and external clients***

Business Case for Renewal

This section summarizes the quantitative aspects of the case for change and establishes the rationale behind recommending the RMOC proceed with a significant project investment at a time when resources are extremely limited. The methodology adopted in the *Financial Services Renewal* project has included a provision for establishing a clear link between investments and benefits, thereby creating a mechanism for holding RMOC management accountable for whether or not the project achieves the intended results within the forecast elapsed time. The publication of performance improvement goals within the Business Direction statement is an early example of the identification of evaluation guidelines for this proposed investment.

The business case examines the costs required to implement the "future state" for financial services within RMOC, and balances these costs against expected reductions in transaction processing costs. By the very nature of the existing processes, which are diverse and dispersed, it can be expected that reduced work effort will occur across the financial processes in the RMOC as a result of introducing new tools and procedures. Achieving the business case is a matter of managing both the execution of the redesign project within the stated costs and the introduction of the organizational changes needed to capture the resulting labour savings. The business case can only be achieved through the efforts of management, who must harvest these improvements and translate them into direct savings. The recommended implementation approach is designed to support the RMOC management team in this effort.

In constructing the business case, project expenditure estimates were constructed to anticipate the full set of costs that would be incurred to successfully implement and operate the technological and organizational changes being proposed.

In identifying benefits (savings) a conservative stance has been adopted, as evidenced by the following:

- Projected savings have been estimated by using what are considered to be the most reliable selected "best practice" experiences of the RMOC and other organizations. In all cases the projected savings are direct cost savings that have been identified from within a restricted set of processes (specifically, those processes which have been found to offer the highest opportunities for improvement) and the savings estimates have been kept within the 10% to 20% range (considered conservative when compared to the 25% to 40% savings that some organizations have achieved by introducing some of these best practices).

- The RMOC management team established "stretch targets" for improvement in the Business Direction phase of FSR. RMOC management remains committed to these stretch targets and will strive to achieve the targets through the redesign of the financial processes plus a program of continuous improvement.

- Over the course of FSR implementation (i.e., while redesigning processes and organizational structure) the base data used to produce the business case estimates will be refined. The design teams will be challenged to exceed the identified targets in favour of the targets established by the RMOC Management Committee as stretch targets.

- Cost avoidance arguments associated with the need to address the Year 2000 issue faced by the RMOC have not been factored into the business case. The RMOC is arguably facing an unavoidable need to make an investment in financial system technology within the next year.

It is important to note that while the quantifiable costs and benefits are used to make the case for change, the organization can also anticipate intangible benefits that will contribute to the efficiency and effectiveness of the RMOC in a less obvious manner. A list of these potential benefits is shown in the following table.

	Tangible	**Intangible**
Clearly identifiable and measurable	***Tangible improvements* can be clearly identified and are measurable:** • Reallocated workforce to other value added activities • Reduced purchasing costs • Elimination of duplicate work • Increased discounts taken • Decreased paper and photo-copying costs • Decreased inventory obsolescence • Increased investment income from improved collections • Avoidance of costs associated with Year 2000 repairs	***Intangible* improvements that can be clearly identified and are measurable (e.g. through service standards):** • Improved cycle times • Improved response time to customer inquiries • Reduced 'hand-offs' per transaction
Difficult to measure	***Tangible* improvements where benefits can be identified but are difficult to measure:** • Shortened billing and collection period • Reduced effort spent following up on insignificant value accounts that cost more to collect than they are worth	***Intangible* benefits are clearly identified but difficult to measure:** • Improved employee morale and satisfaction • Increased teamwork throughout organization • Improved customer satisfaction • Improved management information • Adherence to future legislative reporting requirements

A. Cost / Benefit Analysis

The cost/benefit analysis is the quantification of the costs and benefits of the Financial Services Renewal project. A net present value calculation has been used for the purpose of quantifying the costs and benefits.

The table below shows that the net present value calculation for the costs and benefits of the next phase of the Financial Services Renewal (Phase II) is a cost of approximately $1,500,000. The rate used to calculate the discounted cash flow of the proposed project is 5%, which represents an estimated opportunity cost of the return on investment that the RMOC would expect to earn over the period of the project.

Given the sophistication, stability and widespread use of today's off-the-shelf accounting applications, it is not unusual to expect a life of between 5 to 10 years from a new financial system before a major upgrade is required to keep up with changing technology. A reasonable estimate of the minimum useful life of the RMOC's new financial system is expected to be seven years: beginning in 1999 and concluding at the end of 2005.

Within the analysis, the costs and benefits have been applied to the period in which they are most likely to occur. For example, in 1998, costs of $4,375,000 are expected for the software purchase, required hardware upgrades and the process redesign. In addition, there are not expected to be any significant benefits until 2000 when organizational and process changes have been implemented. These benefits have been indexed to allow for annual inflation of 2%. The table below, therefore, illustrates the net present value calculation of the anticipated costs and benefits of the Financial Services Renewal project for the period 1998 to 2005.

This investment not only represents the costs of the new system but also permits the RMOC to avoid the costs related to making the current system year 2000 compliant. To make the current system capable of simply surviving into the year 2000 represents a significant investment: the current financial system was developed over many years and is an end product of patches and modifications put in place over time to meet the RMOC's requirements.

Net Present Value Calculation of Financial Services Project

Net Present Value Calculation of Financial Services Project In 000's (thousands)								
	1998	1999	2000	2001	2002	2003	2004	2005
Anticipated benefits achieved through renewal		0	1,538	1,569	1,600	1,632	1,665	1,698
Cost of change:								
Software, Hardware and Implementation	(3,650)	(300)						
Annual maintenance costs		(300)	(612)	(624)	(637)	(649)	(662)	(676)
Systems Redesign and Alignment	(725)	(475)						
Transition		(275)	(275)					
Contingency		(300)						
Net (Cost)/Benefit	(4,375)	(1,650)	651	945	963	983	1,002	1,022
Net Present Value of Financial Services Renewal	(1,431)							

B. FSR Investment

The table below describes the estimated investment for the renewed financial services of the RMOC. There are four main categories of costs: System Related; Transition; Redesign and Alignment; and Contingency. These four cost categories encompass the one-time transition costs associated with purchasing new financial software, redesigning the core financial processes and implementing the changes.

One-time Implementation/Transition Costs for FSR	
Software, Hardware and Implementation	$3,950,000
New financial systems software	
Hardware	
Implementation (including installation, conversion and training)	
Systems Redesign and Alignment	1,200,000
Organizational redesign	
Change management coaching	
Organizational alignment	
Project management and quality assurance	
Communication	
Project management and quality assurance (Approximately 10% of total cost)	
Transition	550,000
Workforce adjustment and 'backfill' provisions	
Contingency	300,000
	$6,000,000

Software, Hardware and Implementation

The expected system related cost for software, hardware, conversion and installation and start-up is approximately $3,950,000. The estimated hardware costs include system development environments required for development, testing, training, and production support as well as for the production environment. Also included is the cost of converting relevant data such as the loading of opening balances, budgets, invoices, billings and outstanding purchase orders into the new system. Concurrent with the data conversion, costs will be incurred for the installation and start up which includes the building of the production environment and testing at both the server and client level, workstation configuration and testing, network tuning, operation during data loading and start-up as well as the establishment of a back-up recovery capability. Finally, this cost also includes the development of interfaces to those systems that meet specific requirements and will not be replaced as part of the Financial Services Renewal Project (e.g., Maintenance Management Systems).

Redesign and Alignment

Redesign and alignment costs for the complete implementation period are estimated at $1,200,000, which include process redesign, change management coaching, organizational alignment, project management and quality assurance, and communication to both internal and external customers/clients on the changes to financial services.

Transition

During the transition phase of FSR, there will be a need for significant involvement of RMOC employees in designing and implementing the future vision. This involvement will vary from occasional involvement of employees in workshops or design sessions to full-time commitment to project management, communications or implementation. A provision of $250,000 to backfill positions for staff involved in FSR has been included in the transition costs.

As part of the renewal project, it is expected that there will be some workforce adjustment. As efficiencies are gained through redesigned processes and technological enablers, job descriptions will change. In some cases, the changes may be relatively insignificant, as the individual ‘touch time’ on a specific tasks may be small. It is these efficiencies gained through portions of current staff positions that will be difficult to capture and measure. However, through the overall renewal process, it is estimated that there will be a reduction of 26 full-time equivalencies (FTEs).

These costs, including the costs to backfill staff positions, are estimated to total $550,000.

Contingency

As in any other project, estimates are made based on available information and future expectations. In recognition of the fact that this project is expected to take more than 18 months to complete, an additional $300,000 (approximately 10% of the system costs) has been budgeted for as a contingency against unforeseen events.

In total, the investment in overall financial systems renewal is estimated to be approximately $6 million.

C. Quantified Benefits

Savings have been identified from labour-reduction within the five processes examined as part of the FSR initiative. The savings estimates are based on observations made by RMOC staff concerning the current processes and are supported by benchmarking findings (which provide a gross-level comparison of RMOC processing costs to those of other organizations). Savings are expected to occur by managing the adoption of “best practices” within those areas that are believed to have the highest potential for improvement, as follows:

- Procurement and Payment processing can be streamlined by approximately 20% through the introduction of:

  – an integrated FIS system that provides direct access to information concerning funds availability, automated validation and approval of procurement actions, automatic transfer of data between processes, and paperless workflow automation tools.

  – revised delegation of authority enforcement embedded in an accountability framework and supported by the integrated FIS (by providing improved post-transaction audit tools).

  – structural alignment that sees the consolidation of routine transaction processing (thereby allowing RMOC to capture further economies of scale) while strengthening decision-making support for line managers.

  – introduction of "fast-track" techniques for low-dollar/high-volume transactions (for example, procurement cards).

- Billing and Collection of non-water revenues can be streamlined by approximately 20% by providing an integrated FIS with a single point of data entry, and modifying collection requirements for low-risk transactions.

- Treasury and Cash Management can be improved by approximately 8% by introducing an integrated FIS with a single point of data entry, improved access to information, and automated work flow and paperless processing techniques.

- Materiel Management can be streamlined by approximately 12% through the introduction of an integrated FIS that provides for automated asset and inventory tracking, integrates with Maintenance Management functions and provides for single point of data entry for asset and inventory data.

- Financial Budgeting and Reporting can be streamlined by approximately 10% through a reduction in maintenance of "black book" systems, and the introduction of an integrated FIS having broad budget preparation and analysis capabilities.

D. Reaping the Benefits: When and How

As with most performance improvement projects, a one-time investment must be made in order to ensure lasting savings. The main up-front investment period will cover 1997/98 and the early part of 1999. The benefit stream of cost savings will begin in 2000, once the new processes, policies and structure have been aligned and the financial system has been implemented. It is estimated that the majority of changes will be completed by the year 2000, resulting in salary and benefit savings of approximately $1,500,000 per year.

While there is every indication that RMOC can successfully achieve its stretch targets, it must be stressed that anticipated savings can only be achieved through <u>simultaneous</u> changes in the five “dimensions”: people/culture, technology, process/workflow, policies and structure. Isolated changes made in only one of these areas will be insufficient to meet the goals RMOC has set.

Achieving certain targets (e.g., cost savings) will depend, in part, on RMOC management’s willingness to allow changes in areas that are often considered “sacred cows”—organization structure, delegation of authority, etc. For example, workload reductions identified are often fractions of many individuals’ jobs spread across several organizational units. In such cases, capturing the savings will require realigning positions to match the workload (i.e., redefining organization structures and/or job descriptions). Realization of the benefits of Financial Services Renewal is critically dependent on management’s full, continuous and open-minded support of change.

Phase II (the next phase) of FSR represents an important part of the renewal program. During this phase, design teams composed of cross-functional representatives from across the Corporation, will develop a blueprint of the desired future financial processes at RMOC. As appropriate, this blueprint will propose structural changes that will enable the organization to capture all potential savings by realigning resources to match future work requirements.