PUBLIC WORKS AND GOVERNMENT SERVICES CANADA

AUDIT AND REVIEW BRANCH

FINAL REPORT

A Review of the Management Control Framework

Long-Term Capital Planning Process in RPS

Approved by the Audit and Review Committee

June, 1999

Table of Contents

EXECUTIVE SUMMARY

Authority

This project was part of the 1998/99 Audit and Review Plan as approved by Public Works and Government Services Canada's (PWGSC's) Audit and Review Committee.

Objectives

The overall objective of the review was to assess the adequacy of the management control framework (MCF) for long-term capital planning by the Real Property Services Branch (RPS) for Federal Accommodation and Real Property holdings.

Scope

The review examined the existing management control framework for long-term capital planning in the National Capital Area (NCA), and Ontario and Quebec Regions. The Parliamentary Precinct was excluded. The review considered aspects of Phase 1 (Planning) of the Project Delivery System (PDS). Phase VI (Evaluation) was included inasmuch as lessons learned were incorporated into Phase I. Other phases of the PDS were excluded from the scope.

Background

The Real Property Services Branch of PWGSC is responsible for providing affordable and productive accommodation and related services to federal tenants, clients and others. While many of the locations that federal employees occupy are leased (over 2000 of the 2,500 locations housing 160,000 public servants), there are still a significant number of buildings in the portfolio that are owned by the federal government. RPS is responsible for approximately 300 Crown-owned office buildings as well as federal facilities (common purpose buildings, dams, bridges, wharves and highways) across the country. Approximately $280 million a year (or 22% of RPS' budget allocation) is spent on capital projects. Therefore, effective long-term capital planning is essential to protect the Crown's strategic resources as well as its investment in its assets.

In keeping with a typical Management Control Framework review, the current study examined the following aspects of RPS and how it conducts its long-term capital planning:

- Environmental factors, including external factors and influences; organizational structure; rules, factors and influences; and organizational culture and climate; and
- Operating activities, including the planning; execution; and evaluation of the long-term capital plan.

Key Findings

- ***External Factors and Influences.*** Current government priorities drive long-term accommodation plans. As such, RPS has focused on recapturing accommodation space during the recent government downsizing. At the same time, RPS has experienced its own program review cuts; including significant reductions in operating and maintenance reference levels. Government buildings have been permitted to run down. Treasury Board is aware of this "rusting out" of assets and has requested a submission during 1999-2000 on the issue.

- ***Organizational Structure.*** There are a significant number of participants in RPS's long-term capital planning process, including all three Centres of Expertise (COEs), the Client Service Units (CSUs), and Corporate Finance. A matrix organizational structure was implemented three years ago. The degree of understanding of respective roles and responsibilities under the new structure varies. Key areas of confusion relate to the responsibility and accountability for Asset Management Plans (AMPs), and to the role of Client Accommodation Services Advisors (CASAs). Recent initiatives have been undertaken in both NCA and Ontario and Quebec Regions to improve communication and cooperation among key participants in the LTCP process.

- ***Rules, Factors and Influences.*** The overall MCF for RPS long-term capital planning is based on Treasury Board policy including the Financial Administration Act, the RPS Business Management Model (September 1996) and the RPS Business Plan. Comparisons indicate that the framework established by these instruments is consistent with leading practices in capital decision-making as identified in a recent study by the General Accounting Office (GAO) in the United States[1]. However, many in RPS consider the Branch's procedures as being too cumbersome and restrictive, especially in those instances when it is known that a building will remain in the inventory and requires major renovations. It is also widely recognized within RPS that the program's policy framework requires review and updating in light of the recent organizational changes. Some elements of the framework have recently been reviewed or are currently under review including the National Investment Strategy, the AMP process and the priority ranking criteria used for funding purposes.

- ***Culture and Climate.*** The transition of the last three years has been accompanied by considerable upheaval and uncertainty for staff. Many have found themselves with new responsibilities. There has also been a significant loss of experienced staff as a result of the government's early retirement and early departure incentives. Employee workload is heavy, with many feeling that all they can do is react to the most pressing items. Although there has been extensive communication regarding the new organizational structure, many staff, especially in the Regions, expressed a desire for more training and development to equip them for their new responsibilities. Extensive training in the form of multi-day courses on specific subjects is planned for 1999.

[1] *"Executive Guide: Leading Practices in Capital Decision-Making", December 1998 (GAO/AIMD-99-32).*

There is concern about the current ability of the many participants to support the long-term capital planning process, and each other, effectively. Some concern stems from training and experience issues with respect to individuals or to others in the process. Yet other concerns stem from uncertainties about whether the proper balance is being struck in the current environment between customer satisfaction and the long term interests of the Crown in managing the assets.

- ***Planning***. In addition to the framework provided by Treasury Board policy, RPS's Business Management Model and the RPS Business Plan, the long-term capital planning process entails a series of other instruments: the National Investment Strategy (NIS), Regional Investment Strategies (RISs), Community Based Investment Strategies (CBISs), Asset Management Plans (AMPs), Building Management Plans (BMPs) and Capital Project Briefing Notes (CPBNs). On an annual basis, the funding requirements are shown in the Annual Reference Level Update (ARLU). Identified capital projects are prioritized using a ranking system, which is currently under review. The National Investment Strategy, developed in 1993, was the first time RPS had developed an overall plan to guide the program's capital expenditures. Many RPS senior managers are, however, of the opinion that elements of the long-term capital planning process are not working as they should. Many key planning documents either have not been developed or are out of date. Further, when such documents do exist, they are seldom used or linked to each other or to projects approved.

- ***Execution.*** An analysis of budgets for specific projects in NCA and the regions showed that significant changes can occur over the life of a project. A variety of reasons were cited for this, including: the use of inaccurate or outdated cost estimates; insufficient risk analysis particularly for older buildings; improperly defined and/or changing client requirements and on occasion the initial downplaying of costs in order to secure approval.

  Effective mechanisms are in place to monitor projects against budget and to reallocate funding among approved projects during the course of the year. Budgets are monitored at the individual project level by the project leader and at an aggregate level within a CSU and/or Region. Activity is over-programmed and budgets are adjusted throughout the year to minimize lapsing of funds. The amount of lapsed funds is relatively small (less than 0.8%) in comparison to RPS's total O&M and capital budgets.

  RPS has experienced a significant reduction in Operating and Maintenance (O&M) budgets because of Program Review. However they also received a significant increase in capital funding from Treasury Board with the approval of the NIS. As a result, the total amount spent on repair and minor capital combined is approximately the same pre and post Program Review. The current study found that many requirements which would previously have been called repair are now being funded from minor capital.

- ***Evaluation***. As yet, there is no formal performance measurement and evaluation conducted of the long-term capital planning process. Systems, processes or indicators that could be used for this purpose are not in place. Phase 6 of RPS's Project Delivery System (PDS) provides for post-implementation reviews, but these are not routinely carried out. The Asset Performance Monitoring Report is used to compare performance of a particular asset with similar assets operated by the private sector. OARES management see comparable performance of Crown assets as an indirect indicator that the capital planning process is working well.

Conclusion

RPS has made considerable progress in implementing its new Business Management Model, as well as other documents which provide a corporate framework for the long-term capital planning process. Nevertheless, such major change takes many years of considerable effort to implement and there are inevitably areas where progress may be slower than desired. The current review of the long-term capital planning process identified the following areas that continue to require management attention:

- ***managing the change the Branch is undergoing.*** RPS has implemented a complex organizational structure that requires a high degree of cooperation and communication to be successful. It is clear that problems still exist in this area. There are a significant number of staff who do not clearly understand what their responsibilities are and how these mesh with those of other parts of the organization. Change of the magnitude initiated by RPS requires ongoing reinforcement on a day to day basis and through internal reward mechanisms.

- ***reinforcing the need for proper long-term capital planning.*** Treasury Board policy and RPS guidelines identify a very detailed planning process involving a strategic focus that is to be translated into detailed plans at the asset level. Further, the practices stipulated are, to a large extent, consistent with leading practices for capital planning identified by the US General Accounting Office. However, senior managers are of the opinion that elements of the Long-Term Capital Planning process are not working as they should. Key documents have not been developed and/or kept up-to-date. The current demands on the organization are such that staff energies are directed to only the highest priorities of the day. Without reinforcement that the key elements of the long-term capital plan must be in place, it is likely that attention will continue to be directed elsewhere.

- ***implementing formal performance measures.*** Phase 6 of RPS's Project Delivery System calls for post-implementation review. The intent is to use lessons-learned to help improve the process. However, as yet, formal performance measures remain undesigned or inconsistently applied.

- ***developing an approval process consistent with the differing nature of projects.*** For some capital projects RPS undertakes, it is clear from the outset that the project will be mandatory. The only question is the exact form the project will take. In such situations, it is not clear that an extensive investment analysis is value-added or if, instead, some abbreviated process may suffice. Conversely, the current review identified many projects in the past for which potential risks were inadequately identified and where greater attention to risk assessment, impact analysis and attention to appropriate risk mitigation strategies would have been beneficial. For larger projects, in particular, it may be appropriate to include a formal risk assessment as part of the approval process.

The distinction of which projects must be funded as O&M and which must be funded as capital is not always clear. The classification of a project as minor capital or repair, is sometimes driven by the availability of funds rather than a clear definition and understanding of the distinction. This practice could put the NIS funding in jeopardy and could be seen as the movement of funds between controlled expenditures which would be in contravention of Section 31 of the Financial Administration Act.

Recommendations

To address the above challenges, it is recommended that the Assistant Deputy Minister, Real Property Services:

1. *provide additional support, training and communication to the entire Branch in order to increase their understanding of:*

- *the matrix organization and how each area of responsibility fits into it; and*
- *the roles, responsibilities and accountabilities of each area as it relates to long-term capital planning.*

2. *reinforce the importance of all aspects of long-term capital planning, including the need to link the various elements back to the overall strategy and Treasury Board policy, and recognize management and staff who have successfully implemented the necessary team approach required in a matrix organization.*

3. *develop and utilize performance measures for effective monitoring and reporting in support of the long-term capital planning process, to aid in its management.*

4. *ensure that financial and technical risks associated with individual projects are adequately considered during the planning process.*

5. *ensure that the Branch clarify and communicate the distinction between O&M and Capital, ensure that projects are allocated accordingly.*

1.0 INTRODUCTION

1.1 Authority for the Project

This project was part of the 1998/99 Audit and Review Plan as approved by Public Works and Government Services Canada's (PWGSC's) Audit and Review Committee.

1.2 Objectives

The overall objective of the review was to assess the adequacy of the Management Control Framework (MCF) for long-term capital planning (LTCP)[2] by the Real Property Services Branch (RPS) for Federal Accommodations and Real Property holdings. Specifically, it reviewed:

- the adequacy of key roles, responsibilities and accountabilities for capital planning;
- relevant Treasury Board (TB) policies, Departmental and Branch Procedures;
- the processes related to the development, prioritization, review and approval of capital plans;
- the processes and controls for managing capital expenditures in relation to the original budget allotments received from Treasury Board; and
- how the organization structure, the existing culture, the rules, and other factors influence the planning, implementation and evaluation of capital planning.

1.3 Scope

The review examined the management control framework in the National Capital Area (NCA), and in Ontario and Quebec Regions. The Parliamentary Precinct was excluded. The review considered aspects of Phase 1 (Planning) of the Project Delivery System (PDS). Phase VI (Evaluation) was included inasmuch as lessons learned were incorporated into Phase I. Other phases of the PDS were excluded from the scope.

Almost seventy individuals were interviewed as part of the review, including staff from the Treasury Board Secretariat (TBS). (See Annex B for a list of individuals interviewed.) In addition to TB and RPS policies and practices, and RPS capital planning documents, a document prepared by the General Accounting Office (GAO) in the United States was reviewed[3].

[2] An overview of the key documents that comprise the LTCP can be found in Annex A.

[3] *Executive Guide: Leading Practices in Capital Decision-Making, December 1998 (GAO/AIMD-99-32).*

1.4 Background

The Real Property Services Branch of PWGSC is responsible for providing affordable and productive accommodation and related services to federal tenants, clients and others. While many of the locations that federal employees occupy are leased (over 2000 of the 2,500 locations housing 160,000 public servants), there are still a significant number of buildings in the portfolio that are owned by the federal government. RPS is responsible for approximately 300 Crown-owned office buildings as well as federal facilities (common purpose buildings, dams, bridges, wharves and highways) across the country. Approximately $280 million a year (or 22% of RPS' budget allocation) is spent on capital projects. Therefore, effective long-term capital planning is essential to protect the Crown's investment in its assets.

2.0 ISSUES EXAMINED

- Management Control Framework
  - Environment
    - ✓ External Factors and Influences;
    - ✓ Organizational Structure;
    - ✓ Rules, Factors and Influences; and
    - ✓ Culture and Climate;
  - Operating Activities
    - ✓ Planning;
    - ✓ Execution; and
    - ✓ Evaluation.

3.0 MCF OVERVIEW

In managing an organization, senior managers generally undertake three key activities: *strategic planning* (the process of deciding on the goals of the organization and the strategies to achieve these goals); *management control* (the process by which managers influence other members of the organization to implement the organization's strategies) and *task control* (the process of ensuring specific tasks are carried out efficiently and effectively). This review focuses on management control.

A MCF consists of both management control operating activities and the environmental factors which influence how the controlling activities are being utilized. The seven key elements of the MCF are:

- ***external factors***. This first element of the MCF asks overall how does the organization sense and react to its environment and what has been done to manage this environment.

- ***organizational structure.*** This element of the MCF considers how authority and responsibilities are aligned and how decisions are made.

- ***rules, factors and influences.*** This element asks what is the overriding policy framework and does it support the intended results.

- ***culture and climate***. This element of the MCF looks at the values and norms of the organization and asks if it is consistent and supports intended results.

- ***planning.*** This element looks for gaps and appropriate linkages between strategic planning, annual planning and the revision process.

- ***execution.*** This element reviews the mechanisms used to ensure the effective implementation of operational activities.

- ***evaluation.*** This final element considers how performance is evaluated, as well as the quality of this information and what is done with it.

4.0 FINDINGS

4.1 External Factors and Influences

Current government priorities drive long-term accommodation plans.

Much of the 1990's has been a period of fiscal restraint for the federal government, with costs cut or constrained wherever possible. As a result, RPS focused on recapturing accommodation space as the federal government downsized. This, however, has been a challenge as other government departments' requirements did not diminish at the speed or to the extent that Program Review targets had projected. It has been a period of maintaining, renovating and consolidating existing assets as opposed to building new assets. There have been efforts to divest federal facilities (wharves, dams, highways, etc.) where agreements could be reached with other levels of government.

At the same time, RPS experienced its own program review cuts, including significant reductions in operating and maintenance reference levels. The 1993 National Investment Strategy (NIS) provided increased, stable capital funding in order to maintain the value of Crown assets. This was set at approximately $280 million a year based on a reinvestment level of 4% of the value of the assets. However, repair budgets were cut by 32% (from over $80 million to approximately $55 million), placing increased pressure on minor capital. As a result, the total amount spent on repair and minor capital combined is approximately the same pre and post Program Review. Across government, buildings have been permitted to run down such that in many cases the optimal investment decision now is to divest of the property. Treasury Board is aware of this "rusting out" of assets and has requested a separate submission from custodial departments during 1999-2000 on this issue.

4.2 Organization Structure

There are a significant number of participants in RPS' long-term capital planning process.

During the lifecycle of the LTCP process, all the COEs within RPS and the CSUs have a role. Specifically,

- ***Office Accommodation Real Estate Services*** (OARES) has ultimate responsibility for the assets as the owner/investor (O/I) and acts as the focal point for the overall long-term capital plan at the regional or national level. It does not directly control particular assets but rather allocates financial resources and Client Accommodation Service Advisors (CASAs) to the Executive Director (ED) and Regional Directors General (RDGs) for specific capital projects and provides guidance on the process. CASAs act as the project leaders for space driven capital projects. Regions and the NCA have National COE (N-COE) portfolio managers assigned to them in order to provide advice on policies, relationships and the national perspective, as they relate to capital projects. Portfolio Managers also obtain project approvals and on a portfolio basis recommend the allocation and reallocation of budgets.

- ***Property and Facilities Management*** (PFM). As part of the realignment of responsibilities three years ago, PFM became responsible for preparing all plans at the building/asset level. These include the Building Condition Report (BCR), the Building Management Plan (BMP), and the Asset Management Plan (AMP). PFM assigns resources (Asset Managers and Asset Performance Officers) to CSUs for this purpose. To prepare these documents for buildings PWGSC no longer manages itself, it must rely on input from the organization, either a private sector contractor or a provincial government, that took over responsibility for the day-to-day management of the facilities in June 1998. PFM resources act as the project leaders for asset driven capital projects.

- ***Architectural and Engineering Services*** (A&ES) either implements or assists in specific projects as requested by other COE personnel assigned to CSUs.

- ***Client Service Units*** are responsible for: determining client long-term needs and balancing this with accommodation supply; identifying solutions for client requirements; and identifying the work required and controlling the capital, and in some cases, the O&M budgets for assigned assets. They are also responsible for drafting the initial Capital Project Briefing Note for any contemplated projects and providing quarterly updates for approved projects. These responsibilities are fulfilled by making use of resources assigned to the CSU by the COE's, i.e. OARES, PFM and A&ES. The CSUs report through to the Executive Director, in NCA, and to the RDG in the regions.

- ***Investment Management Board/Regional Investment Management Board (IMB/RIMB).*** This committee at the national and regional level is responsible for recommending project approval to the Assistant Deputy Minister (ADM), RPS or the RDG (as applicable). IMB reviews projects with a projected cost greater than $2.5 million and RIMB, projects over $1 million including those that also require an IMB recommendation. The IMB is chaired by the DG, OARES. Others on the committee include: DG PFM; DG A&ES; Executive Director; Director, O/I; Director, Resources & Strategy; and the Manager, Corporate Investment Analysis from Finance. An equivalent committee exists in the Quebec and Ontario Regions (RIMB), however it has been over a year since a RIMB met in the Ontario Region. The portfolio manager from O/I provides the input to IMB for the individual projects being considered. The IMB meets at least twice a month and receives information one week prior to discussion. Client needs are assessed and challenged at these meetings. Generally this review and challenge is focused on the project's Business Case rather than technical issues as board members are expected to have reviewed the detailed technical aspects of a project for their area of expertise and responsibility prior to the project coming to IMB.

- ***Finance.*** In the Regions and NCA, Corporate Finance provides the RDG and ED, respectively, aggregated reports on capital expenditures in comparison to budget. They also have representation on IMB and RIMB and provide feedback on any Investment Analysis Report (IAR) going to the committee. Financial Management Analysts may also assist PFM in the preparation of the BMP's. There are generally no further financial controls in place over the long term capital planning process than would normally be applied to other transactions.

The degree of understanding of respective roles and responsibilities under the new organizational structure varies.

As a result of the implementation of a new matrix organizational structure three years ago, many staff members within RPS found themselves with new responsibilities. Most indicated that the change has been positive from the client's perspective. In the NCA, roles, responsibilities and accountabilities have, in general terms, been defined and the Long-Term Capital Planning process is understood. However, the linkages between the various participants are not always clear. In the regions, the process is not as well understood.

Specifically,

- ***everyone does not have the same understanding of accountabilities and responsibilities for AMPs.*** Within the NCA, CSU management recognize that they are responsible for the preparation of AMPs with assistance from the assigned PFM resource. This is consistent with a recently developed draft paper on accountabilites/responsibilities for Alternative Form of Delivery (AFD) assets that has CSUDs responsible for ensuring the development of AMPs by Asset Managers for approval by the Regional Director, OAS or the Director, Owner/Investor in NCA[4]. In Quebec Region, the CSUDs prepare the AMPs based on the BMP which the PFM Asset Manager simply forwards from the AFD contractor. In Ontario Region, the CSUDs see themselves with primary responsibility for preparing the AMP with assistance from the CASAs. The Asset Managers recognize that they have a responsibility for AMPs, which they will be undertaking for the first time in 1999-2000.

- the ***role of the CASAs*** with respect to capital planning ***does not appear to be well understood.*** There is a generic CASA position description which is applicable across the country. According to it, the CASAs are to be dealing with space related projects as driven by client demands and prepare the IARs and Capital Project Briefing Notes for these projects. For a variety of reasons they have found themselves carrying out asset related projects as well, in particular in NCA and Ontario Region. In addition, as noted earlier, CSUDs in Ontario Region also expect the CASAs to assist in the preparation of AMP's, which has been identified as an Asset Manager responsibility. OARES recognizes that there are probably at least two different CASA jobs based on how their role is currently being executed.

- The Director, Owner/Investor clearly indicated that he sees his organization as being responsible for the overall view of the capital plan. However, because of the number of players involved in developing the plan there is widespread concern, primarily amongst the COEs and Finance, that there is no one position anymore with a good overview of the overall capital plan and the various elements of it.

There are several initiatives underway to improve coordination and communication.

In response to the communications and coordination challenges inherent in any matrix organization, there have been recent initiatives in both NCA, and Ontario and Quebec Regions, to improve these activities among the key participants in the LTCP process.

In NCA, a "space council" has been created in response to the CSUs' need to integrate all accommodation planning undertaken separately by individual CSUs. The "space council" has representation from OARES (Owner/Investor, Accommodation Management and Leasing), PFM, A&ES and the CSUs (represented by CASAs assigned from Accommodation Management to the CSU) and acts only in an advisory capacity. While they are invited on particular issues, the CSU Directors are concerned that they have been excluded from these meetings. There was a conscious decision to not have the "space council" as a director-level group.[5]

In the Ontario Region, a Sensitive Project Review Committee was created where projects, once underway, were brought back for monitoring. The Committee looked at the budget/progress/client issues and undertook a working level detailed review of IARs. This

[4] This paper outlining accountabilities/responsibilities was developed by a working group but has not been formally approved.

[5] Since the review these concerns have been addressed. CSU Directors have individuals reporting to them attend Space Council meetings.

Committee used to meet every two weeks but, at the time of this review, had not met since last summer. The Region is planning on reinstituting regular meetings of this committee and the Ontario RIMB. Regional management also receives regular status reports on the progress of their "Future Directions" action plan.

In the Quebec Region, two key committees have been established to improve the lines of communication and to clarify roles and responsibilities, with respect to long term capital planning. A CASA forum, which meets every two months, has been established to share information and experiences within the regional CASA community. Also a Regional Business Committee meets on a monthly basis to deal with these issues at the Director level. This committee includes representatives from the COEs, the CSUs and Finance.

Coordination and communication within the capital planning process require strengthening.

Many of the N-COE and Regional staff interviewed identified difficulties in coordination or communication that have arisen since the implementation of the matrix organizational structure. Specifically:

- The new organization is seen as creating too many players in capital planning and as having obscured any clear focal point for it. Information flows in all directions and is dependent upon each individual to find what they need. Ontario Region COE personnel believe that team work throughout the program is undermined by a tendency for work units to focus on their immediate responsibilities without due consideration of the impact on others whose work is related.

- CSUDs are responsible for ensuring that activities associated with capital planning at the asset level are completed and as a result control the budgets. To develop elements of the capital plan, they must rely on human resources assigned by the COEs. When differences arise between the CSUDs and the COEs as to what is required, resolution is dependent on the interpersonal skills of the participants or it must be delegated upwards to the RDG or Assistant Deputy Minister for resolution. Many, especially within the COEs, are not satisfied with the way this upward delegation is working.

- A significant number of COE functional experts in the regions and NCA believe that they should be consulted more extensively. PFM is concerned that projects are approved without sufficient input from them. A&E believes that it could provide greater assistance to capital planning, especially in regard to options analysis, costing and project scheduling, and that this could help forestall the making of premature or unrealistic commitments to clients.

- Information systems problems are impeding managers' access to management information of sufficient detail, currency and accuracy. The information systems of the AFD Contractor do not link with those of RPS, hence information on O&M budgets and expenditures is not fully available.

- The communication between CSUs responsible for the operating budget and AFD Contractor's managers requires strengthening. The N-CSUDs indicated that they do not receive detailed information that they need to carry out the owner/investor oversight function. They are also concerned that the BMPs prepared for 1999-2000 may not be sufficiently informed for planning expenditures on buildings.

- Communication linkages between OARES and PFM are not seen to be as strong as they could be. PFM management within NCA identified an intent to take steps to improve these linkages.

4.3 Rules, Factors and Influences

The RPS management control framework is based on Treasury Board policy, the RPS Business Management Model and the RPS Business Plan.

The RPS policy framework for long-term capital planning is based on TB policy requirements, including the Financial Administration Act, and was put in place some years ago. The organizational structure and focus is more recent and is based on the September 1996 Business Management Model and the RPS Business Plan. The current study compared the framework established by these instruments to leading practices in capital decision-making as identified in a recent study by the General Accounting Office (GAO) in the United States (see Annex C for some of the highlights). The RPS framework was found to be generally consistent with the leading practices.

The Treasury Board policy framework is accepted and viewed as appropriate and necessary given TB's role in examining the expenditure of public funds. In addition, senior managers consider the principles of the RPS LTCP framework as valid. A significant number of staff in NCA and the Regions, however, find that Branch practices, processes and authorities are too cumbersome and restrictive, and not integrated, especially in areas of contracting, reduction of delegated authorities, and the process for ranking and analyzing investments. Concern was voiced specifically with the process for analyzing investments since it requires placing residual values on Crown-owned assets that may bear no relationship with what might actually be obtained in the open market place. Staff also saw no value added in a protracted process where it was know at the outset that the work would be conducted, i.e. a strategic asset that will always remain in the inventory, or where there is a health and safety issue involved. In fact, in some instances, the process is seen as a hurdle or burden that must be overcome to obtain the required funding for a project rather than something that will result in better capital investments. Some also believed that specific planning documents, in particular the CBIS and AMP, were far more detailed and onerous to prepare than was necessary.

Treasury Board criteria for assessing departmental performance with respect to long term capital plans[6] include a requirement for consistency between broad capital strategies contained in the LTCP and projects proposed for approval. Despite Treasury Board's approval of the National Investment Strategy, the Treasury Board Secretariat views RPS's LTCP as 'a list of projects' rather than a strategy that indicates strategic issues which are being addressed or what RPS is trying to achieve with the Plan. Hence, they see the success or otherwise of the LTCP as being difficult to ascertain.

There is a recognition that elements of the RPS framework need to be reviewed and updated in light of the organizational changes.

It is recognized that many parts of the framework need to be reviewed in light of the recent organizational changes in RPS and to take into account the many changes in size and scope of government programs. This has already started. The AMP process was evaluated and benchmarked to Canadian private sector practices and a proposal has been received for a review of the capital project priority ranking framework. The NIS is under review to adjust it to the reality of reduced government programs. The overall NIS is not expected to change to any great degree notwithstanding that it is the opinion of individuals interviewed in OARES and the Treasury Board Secretariat that, at 4%, the investment rate is lower than what is employed by the private sector.

4.4 Culture and Climate

During the ongoing transition, there has been a great deal of upheaval and uncertainty.

RPS's new organizational structure has been in place for almost three years. There has been significant upheaval during this period, however. Many have found themselves in new positions for which they have had to compete. Many others chose to take advantage of early retirement and early departure incentives. There has been a high degree of turnover among the CASAs in particular. Many have moved on to other positions within RPS. CASAs indicated that they seem to change responsibilities every four to six months (either to a new position or assigned to a new CSU). The turning over of day-to-day property management responsibilities to a private sector contractor has significantly changed PFM's role. Ontario Region has recently shifted its COEs from a geographic to a client structure. In summary, it has been a period of significant uncertainty and stress for many staff members.

Employee workload is heavy, with many feeling that all they can do is react to the most pressing items. They feel that they have no time to sit back and reflect.

[6] Treasury Board Manual, Capital Plans, Chapter 1-1, Long Term Capital Plans.

Many staff expressed a desire for more training and development related to their new areas of responsibility.

Briefings, discussion papers and group training have been utilized to communicate information on the new organizational structure. More detailed training has also been provided on investment analysis, preparation of AMPs, and CASA responsibilities.

Although improvements over the past year have been made, and are recognized and appreciated by RPS employees, many continue to seek more extensive training and development related to their specific areas of responsibility. This is especially the case where these responsibilities are new and expansive, as in the case of CASAs. Within the NCA, CASAs preference is for more day-to-day coaching rather than case-by-case calls to COEs on a crisis basis. Ongoing coaching is not sought in the same way in the Regions, where the CASAs tend to be located together and can more easily learn from one another. CSU Directors/Managers, in particular those in Québec Region who did not have previous RPS experience, indicated that a more extensive orientation to their new responsibilities would be beneficial. They noted that it can take a full year to understand the planning cycle.

Plans are underway to provide extensive multi-day training in 1999. Detailed information is also available for the CASAs through the CASA Knowledge Network on the PWGSC Intranet.

There is concern about the current ability of the many participants to support the LTCP process effectively.

There is a concern within the Branch about whether the many participants in the long-term capital planning process will be able to support it, and each other, effectively. Some concern stems from the loss of expertise which resulted from government downsizing; some stems from the training and development issues cited above both with respect to their own training or that of others. Additional concern stems from uncertainties about whether the proper balance is being struck in the current environment between customer satisfaction and the long-term interests of the Crown in managing the assets. Notwithstanding this concern about the balance, it is recognized that a greater attention to customer satisfaction is required as the provision of office accommodation moves closer and closer to "user pay".

4.5 Planning

To meet the Treasury Board's requirements for long-term capital planning, a series of documents are utilized by RPS.

The National Investment Strategy, which was first developed in 1993, provides the overall plan to guide RPS' capital expenditures. This document also fulfills Treasury Board's requirements for Part I of a long-term capital plan. Flowing from this document, Regional Investment Strategies (RIS) should be developed for the different PWGSC regions of the country. The overall strategy is further defined at the community level in the Community Based Investment

Strategy (CBIS). This document takes into account local socio-economic factors, political and community issues along with client program delivery requirements.

The overall strategy is translated further to the individual asset through the AMP. The development of this document draws on information on the physical integrity of the building as outlined in the BCR. It must also take into account specific client requirements and the overall requirements of the community as defined in the CBIS. The AMP is to be linked to the CBIS and vice versa. Minor refits or renovations to meet immediate client needs are normally funded through either minor capital or O&M. The need for this work is not usually identified in the AMP but rather in the BMP.

Using the AMP, the BMP and other available information, capital projects are identified in a Capital Project Briefing Note, priority ranked and approved. Investment Analysis Reports are prepared outlining the specific rationale for a particular project and are to provide a linkage back to the overall strategy at the community level. The Director, Owner/Investor validates the priority rankings submitted by the Regions and NCA. Health and safety issues increase the priority of a project. Political pressure can also cause the schedule for a project to be accelerated. There are plans to review this priority ranking system. These priorities are the basis for determining the funding requirements and specific projects to be included in the Annual Reference Level Update (ARLU).

Senior managers are of the opinion that elements of the Long-Term Capital Planning process are not working as they should.

Notwithstanding the existence of a very detailed framework for the development of a long-term capital planning process, many senior managers within the NCA and the Regions acknowledged that elements of the process are not working as they should. Factors contributing to this situation include:

- The ***ARLU*** which is viewed by some RPS managers as, de facto, the "real" long-term capital plan. The ARLU ***has a very short term focus.*** Most of the capital projects are grouped into years one to three. For the fourth and fifth years, funding levels have been listed but funds are only assigned to a few specific projects or buildings. Managers indicated that the projects on the ARLU did not represent a managed program of work. The Regions also indicated that the figures presented in the later years of the plan are "soft" and inaccurate. They acknowledged that there is an absence of long-term focus.

- The ***approach as implemented does not appear to consider major issues concerning the inventory***, development of specific maintenance strategies, or life-cycle decisions with respect to the buildings. Rather, the process appears to be largely driven by bottom-up client demands, with the required capital renovations linked to client requirements. It is focused on individual buildings with a heavy reliance placed on the annual building condition assessments conducted through the BCR and BMP processes. The longer term requirements that should be identified in the AMP do not appear to be explicitly taken into account in developing the LTCP.

- ***Key planning documents either have not been developed or are out of date.*** There is an absence of regional investment strategies. CBISs and AMPs in NCA and Ontario Region are currently out of date or do not exist for key communities/strategic assets. CSU and COE managers indicated that the lack of a CBIS for the NCA and the Greater Toronto Area (GTA) hampered the decision making process for potential renovations on major assets that could be used to satisfy future client requirements. The AMP, which is supposed to be a living and ongoing document and thus updated annually, has not been updated for several years for most assets. The primary reason cited by RPS is the lack of available resources necessary to keep these critical documents up-to-date. OARES in Ontario Region terminated an initiative to update the AMPs because of funding shortfalls in the region.

- ***Planning documents were developed and then not used or linked to each other or to projects approved.*** Where AMPs existed they were not seen as a useful strategic planning tool because they were not linked with other documents such as BMPs, CBISs, IARs or the annual business plans. Oftentimes, the AMPs have been shelf documents which have not been utilized since being developed.

- ***Capital Project Briefing Notes are of varying quality.*** These plans are a key tool when allocating funds to specific projects as part of the ARLU process each December. OARES believes that those who write them well tend to be more successful in having their project approved in comparison to those who have projects with more merit but where the briefing note is not as well written.

4.6 Execution

The funding of a capital project is a separate process from the recommendation of a project by IMB for inclusion in the capital plan. The project approval authorities are: CSU Director up to $1M; RDG/Executive Director NCSU up to $2.5M; Assistant Deputy Minister up to $20M; Treasury Board greater than $20M. The primary basis for allocating funds is through the ARLU. Each RDG and the ED is expected to make adjustments between the projects less than $1 million, within his/her jurisdiction as required over the course of the year.

Budgets can vary considerably over the life of a project.

A review of the ARLU for several years indicated significant changes can occur in project budgets over the life of the project. Both significant increases and decreases were observed. A variety of explanations were provided:

- ***inaccurate or outdated cost estimates used to obtain funding.*** Concern has been expressed in the regions that there is no process of sign-offs for estimates. CSUs do not return to A&ES to revisit and confirm whether estimates remain unchanged, especially when the planning period has spanned several years or where scope may have changed. IMB focuses on the business case for the higher dollar value and high profile projects with a greater inherent risk. There rarely is a challenge of the detailed technical merits of the project or the cost estimates. This is in part due to the fact that projects are often sent to IMB very late in the process for approval. There have, however, been several recent examples of projects being brought to IMB or the NCA Space Advisory Council for discussion very early in the process. This has provided management with an opportunity to review and challenge the merits of a project much sooner and to provide advice as to options and other considerations for the development of project approval documentation.

- ***inadequate analysis of risks, particularly with older buildings.*** There is general agreement in NCA and the regions that the identification and management of risk has not been performed well in the past. If done at all, it tended to be for the larger, high-profile projects. As a result of recently-imposed restrictions on delegated authorities by the Minister, risk assessment and management is receiving greater attention by the organization. The A&E staff do risk analysis as part of preparing cost estimates for construction. The new restriction on change orders has generated more effort to identify potential unknowns and required contingency funds and to include these in project approval submissions.

- ***initial downplaying of costs in order to secure approval of the project*** and get it underway. Staff indicated that there was a tendency on occasion towards developing estimates to make the project look attractive or to quickly respond to clients' accommodation needs, and thus obtain approval, and less effort was spent on identifying and quantifying costs and contingencies at the outset.

- ***proceeding with a project with inaccurate or incomplete plans and specifications.*** Fast tracking of projects to meet client time frames was one reason cited for this.

- ***improperly defined and/or changing client requirements.***

- ***more detailed analysis and identification of costs*** as the project moves from concept to Preliminary Project Approval (PPA) and Effective Project Approval (EPA).

OARES believes that capital planning, which is related to the required supply of accommodation, could be improved if the cost per square metre year by year from all sources was known and could be compared. Then, relative costs of Crown-owned, leased and lease-purchase accommodation would be known.

Effective mechanisms are in place to monitor projects against budget and to reallocate funding among approved projects during the course of the year.

When a plan is executed, several different means are utilized to monitor it. The key mechanism for monitoring individual projects by OARES is the Capital Project Briefing Notes (CPBNs). They are updated quarterly to reflect current project status and changes in project costs. These costs are monitored by OARES. CPBNs are also used for the planning, budgeting, ranking and allocating funding.

Costs at the project level are captured in the Project and Business Management System (PBMS) which was implemented in 1998. There have been problems with the system and, at the moment, project reports are not available from it. CSUDs commented that the system was not providing them with relevant information. Project managers indicated that they are using "black book" systems to track and monitor project costs.

At each level of the organization (CSU/Region/RPS as a whole), the overall capital budget is also monitored quite closely. When slippage occurs in one project, other projects are accelerated or initiated so that the total amount of lapsed funds is minimized. RPS staff indicated that on a total program budget (O&M and capital) of $1.2 billion in 1997-98, only $10 million (approximately 0.8%) was lapsed. Any funds to be carried over, as permitted by Treasury Board policy, need to be identified by December 15th each year.

Activities are over programmed at each level of the organization. Management acknowledges that, for a variety of reasons, a certain percentage of projects will inevitably slip. By over programming at the outset, they can minimize the number of adjustments that need to be made during the course of the year so that the amount of lapsed funds is kept at as low a level as possible.

Funding reallocations for minor capital projects occur in the Regions/NCA first through a mechanism known as "banking days", which are held at a minimum of three times per year. Excess funds from minor capital are only turned back to OARES for reallocation when there are no additional minor capital projects within a region that can be funded. Within a region, if a new, high priority requirement needing funding arises, it is considered at a "banking day" for possible funding through slippage. The new project does not, however, displace a project already approved as part of the ARLU. Several of the OARES managers who participated in the current study are concerned with this practice because it can potentially result in projects in one region receiving funding while other higher priority projects in some other region remain unfunded.

Current reporting on capital expenditures does not permit the tracking of minor and major capital spending and forecasting separately. Major capital project are allocated funds on a national priority basis within a specific budget and minor capital projects are funded regionally within another separately controlled budget. This causes difficulties in planning, monitoring and management of the Capital budget.

There are suggestions that funds have been diverted from minor capital to meet O&M requirements.

RPS has experienced a significant reduction in Operating and Maintenance (O&M) budgets because of Program Review. However they have also received a significant increase in capital funding from Treasury Board with the approval of the NIS. As a result, the total amount spent on repair and minor capital combined is approximately the same pre and post Program Review. The current study found that many requirements which would previously have been called repair are now being funded from minor capital. In Ontario Region, a sizable deficit in O&M is resulting in projects being funded from minor capital. The distinction of which projects must be funded as O&M and which must be funded as capital is not always clear. The allocation of funds is often driven by the availability of funds rather than a clear definition and understanding of the distinction.

4.7 Evaluation

There is no formal performance measurement and evaluation conducted of the long-term capital planning process.

NCA and the Regions indicated that there are no on-going systems, processes or indicators in place which are used to evaluate capital planning or the projects implemented under the capital plan. Post-project evaluations as required by Phase 6 of the RPS' Project Delivery System are not routinely performed. When there are overruns on major projects, there is no formal mechanism to recycle lessons-learned from these projects back into the required planning process. Limited resources to do this level of long-term analysis was cited as the primary reason. The focus is instead on the Asset Performance Monitoring Report for the purposes of comparing the performance of a particular asset with a similar asset operated by a private sector firm. If there is a significant difference, this information may trigger the identification of a future capital project. OARES management sees comparable performance of Crown assets as an indirect indicator that the capital planning process is working well.

5.0 CONCLUSIONS

RPS has made considerable progress in implementing the organizational structure envisaged by its new Business Management Model, as well as other documents which provide an overall framework for the long-term capital planning process. Further, the framework is consistent with leading practices in capital decision making.

As an organization, however, RPS has undergone considerable change over the past several years. First, a significant number of its experienced resources left as part of the early departure and early retirement incentive programs. Second, the Branch made extensive changes in its organization structure and move to matrix management. Major change, such as that undertaken by RPS, takes many years of considerable effort to implement and there are inevitably areas where progress may be slower than desired. The current review of the long-term capital planning process identified the following areas that continue to require management attention:

- ***managing the change the Branch is undergoing.*** RPS has implemented a complex organizational structure that requires a high degree of cooperation and communication to be successful. It also has a significant number of staff in new positions. Further, the responsibilities of many parts of the organization, at least as it pertains to long term capital planning, are linked, resulting in significant ramifications for others if any part of the chain cannot carry out its responsibilities.

  The new structure is a significant departure from what staff had been working within before. The leading practices as identified by the GAO, however, indicate that cross-functional teams as envisaged by the RPS organizational model, are the most effective for planning and managing capital projects.

  It is evident, however, that there are still significant communication and coordination issues. There are staff who do not clearly understand what their responsibilities are and how these mesh with those of other parts of the organization. There are indications of turf battles and the development of new "silos". Change of the magnitude initiated by RPS requires ongoing reinforcement on a day to day basis and through internal reward mechanisms. Organizations that have successfully implemented significant change, for example, include a discussion of how an individual employee's behaviour has helped or undermined the vision as part of the employee's regular performance appraisal. All possible communications channels need to be used.[7]

- ***reinforcing the need for proper long-term capital planning.*** Treasury Board and RPS policy identify a very detailed planning process involving a strategic focus (the NIS and the CBIS) that is to be translated into detailed plans at the asset level (AMP and BMP) and operationalized at the project level with Capital Project Briefing Notes. Further, the practices stipulated are, to a large extent, consistent with the leading practices as identified by the GAO. The approach, however, is not actually being followed. Over the past several years in fact, the focus has been extremely short term. Key documents required for a more strategic approach to long-term capital planning have not been developed and/or kept up-to-date.

  Staff are extremely busy. Further, it is unlikely that there will be any increase in staffing levels. What this means is that only the highest priorities of the day are likely to be addressed. Without reinforcement by senior management that the key elements of the long-term capital plan must be in place, it is likely that attention will continue to be directed elsewhere.

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[7] John B. Kotter, *Leading Change: Why Transformation Efforts Fail*, pp, 59-67, Harvard Business Review, March-April 1995 and Paul Strebel, *Why Do Employees Resist Change?*, pp. 86-92, Harvard Business Review, May-June 1996.

- ***implementing formal performance measures.*** To improve results, it is generally accepted that performance must be measured in some way on an on-going basis. Lessons need to be learned from previous experience and the process enhanced based on such lessons. At this point, there are no formal performance measures designed that are consistently applied to improve RPS's long term capital planning process, notwithstanding that Phase 6 of the PDS calls for post implementation reviews to be carried out. Further, leading practices call for examining project outcomes to determine the extent to which they have contributed towards the goals and objectives that were established when the project was approved. Success is measured using financial improvement, customer satisfaction and other indicators that link to the organization's overall goals and objectives.

- ***developing an approval process that is more consistent with the nature of the project.*** RPS is responsible for a wide range of buildings and facilities. Some, because of their location or historical significance, are likely to always remain part of the portfolio. In fact, it is difficult to imagine the circumstances under which some assets would not be kept. Similarly, there are certain projects, such as some wharf repairs, that must be undertaken on an urgent basis due to potential legal liability. In such situations it is not clear that an extensive investment analysis is value-added or if, instead, some abbreviated process may suffice. The GAO noted how one organization it examined required less up-front analysis for projects deemed to be "mandatory". Others utilize a process that varies depending on the size, complexity, strategic importance, and cost of the project.

  It was identified in the course of the current study that there were many projects in the past where potential risks were inadequately identified. Best practices call for project risks to be clearly identified, their potential impact assessed, and risk mitigation strategies considered. This is something that needs to be clearly identified at the outset of a potential capital project and monitored throughout its execution. For larger projects, especially those requiring IMB approval, it may be appropriate to include risk assessment as part of the approval process.

The distinction of which projects must be funded as O&M and which must be funded as capital is not always clear. The classification of a project as minor capital or repair is sometimes driven by the availability of funds rather than a clear definition and understanding of the distinction. This practice could put the NIS funding in jeopardy and could be seen as the movement of funds between controlled expenditures, which would be in contravention of Section 31 of the Financial Administration Act.

6.0 RECOMMENDATIONS

To address the above challenges, it is recommended that the Assistant Deputy Minister, Real Property Services:

1. *provide additional support, training and communication to the entire Branch in order to increase their understanding of:*

- *the matrix organization and how each area of responsibility fits into it; and*
- *the roles, responsibilities and accountabilities of each area as it relates to long-term capital planning.*

2. *reinforce the importance of all aspects of long-term capital planning, including the need to link the various elements back to the overall strategy and Treasury Board policy, and recognize management and staff who have successfully implemented the necessary team approach required in a matrix organization.*
3. *develop and utilize performance measures for effective monitoring and reporting in support of the long-term capital planning process, to aid in its management.*
4. *ensure that financial and technical risks associated with individual projects are adequately considered during the planning process.*
5. *ensure that the Branch clarify and communicate the distinction between O&M and Capital, ensure that projects are allocated accordingly.*

ANNEX A: KEY LONG-TERM CAPITAL PLAN DOCUMENTS AND LINKAGES

ANNEX B: INDIVIDUALS INTERVIEWED

Real Property Services

Office Accommodation and Real Estate Services

François Brazeau, Director General Office Accommodation and Real Estate Services

Gary Abson, Director Owner/Investor
Yvon Roy, Manager, Investments
Pierre Piché, Senior Real Estate Officer, Investment Analysis
François Lepage, Portfolio Manager (Ontario and Québec)
Brian Tilley, A/Portfolio Manager (NCA)

Laura Jackson, Director Resourcing and Strategies
Barry Rosenfeld, A/Manager, Strategic Initiatives

Diane Orange, Director Accommodation Management
Howard Ratcliffe, Manager, Client Services Support
Rob Dunn, Project Manager
John Garton, Manager, National Client Accommodation, INAC
Mel Thompson, Client Accommodation Service Advisor
Roy Walker, Client Accommodation Service Advisor

Property and Facilities Management

Hank van der Linde, Director General, Property and Facilities Management
Wayne Tomko, Director Asset and Facilities Management
Paul McCarthy, Asset and Facilities Management Program Officer

Architectural and Engineering Services

Garnet Strong, A/Director General, Architectural and Engineering Services

Client Service Units

Bruce Holden, Executive Director
Lynn Sherman, Director Strategies
Gérald Doucet, CSU Director, National Defence
Tim McGrath, CSU Director, Revenue Canada
Ursula Ruppert, CSU Director, HRDC, C&I, IC, NANL & agencies

Ontario Region

Office Accommodation and Real Estate Services

Fred Pincock, Regional Director, Office Accommodation and Real Estate Services

Paul LaRose, Regional Manager, Owner/Investor

Steve Morse, Regional Manager, Accommodation Management
Mike Cameron, Client Accommodation Services Advisor
Cindy Davidson, Client Accommodation Services Advisor
Ken Eller, Client Accommodation Services Advisor

Terry Homma, Associate Manager, Real Property Consulting Group

Property & Facilities Management/Architectural and Engineering Services

Paul Wong, Regional Director, PFM/A&ES
Leigh Campbell, Regional Asset Manager
Tony Margiotta, Project Manager
Vince Pereira, Project Manager
Milos Vackar, Project Manager

Client Service Units

Veronica Barnes, CSUD
Liz Roseblade, CSUD
George Zolis, CSUD, Revenue Canada

Corporate Services

Patricia Laidlaw, Regional Director, Corporate Services
Ivor Patterson, Regional Manager Finance

Québec Region

Office Accommodation and Real Estate Services

Normand Couture, A/Regional Director General, formerly Regional Director, Office Accommodation and Real Estate Services
Michel Béland, A/Manager, Strategies and Investment

Jean Lippé, Regional Manager, Real Estate Advisory Services
André Daignault, Client Accommodation Service Advisor
André Desjardins, Client Accommodation Service Advisor
Catherine Leduc, Client Accommodation Service Advisor
Lise Lefort, Client Accommodation Service Advisor
Dominique Lévesque, Client Accommodation Service Advisor
Jeanne-Mance Lévesque, Client Accommodation Service Advisor

Marguerite Letellier-Wolfe, Client Accommodation Service Advisor
Alanin Nadeau, Client Accommodation Service Advisor
Claudine Tessier, Client Accommodation Service Advisor

Lyse Dore, Manager, Business and Systems

Property and Facilities Management and Architectural and Engineering Services

André Moisan, Regional Director, Property and Facilities Management and Architectural and Engineering Services
Jean Boissonnealt, Regional Manager, Assets and Facilities Manager
Daniel Dufour, A/Asset Manager
Gilles Gagnon, Regional Manager, Project Management

Mario Arès, CSU Manager
Danielle Favreau, CSU Manager
Gary Girouard, CSU Manager
André Godin, CSU Manager

Financial Services

Pierre Pigeon, Regional Manager, Financial Services and Corporate Management

Finance Sector

Louise Holmes, Manager, Investment Analysis
Doug Maloney, Branch Financial Management Advisor (RPS)
François Picotin, A/NCA-Advisory Services, Financial Advisor

Treasury Board Secretariat

Beate Alaoui, Senior Policy Analyst, Project, Materiel and Risk Management
Claude Béland, Senior Analyst, PWGSC Portfolio and Services
Donata Zimny, Portfolio Manager, Real Property Management
Carolyn Morency, Real Property Management

ANNEX C: RESULTS FROM THE GAO STUDY ON THE LEADING PRACTICES IN CAPITAL DECISION MAKING

The GAO identified five key principles in its study. They were:

Principle 1: Integrate Organizational Goals into the Capital Decision-Making Process.

- *Conduct comprehensive assessment of needs to meet results-oriented goals and objectives* by identifying the requirements necessary to fulfill immediate requirements and anticipated future needs based on results-oriented goals and objectives that flow from the organization's mission rather than what is needed to maintain or expand existing capital stock.
- *Identify current capabilities including the use of an inventory of assets and their condition, and determine if there is a gap between current and needed capabilities.* This requires current and accurate information on the performance and use of existing assets and facilities including deferred maintenance needs and costs. There is a routine assessment of the condition of assets to allow managers and other decision makers to evaluate the capabilities of their assets, plan for future asset replacements and determine the cost of deferred maintenance.
- *Decide how best to meet the gap by identifying and evaluating alternative approaches (including noncapital approaches).*

Principle 2: Evaluate and Select Capital Assets Using an Investment Approach

- *Establish review and approval framework.* There is a framework for evaluating and selecting capital assets that encourages the appropriate level of management review and approval. It is supported by the proper financial, technical and risk analyses. Project risks are clearly identified, the potential impact of the risks assessed and risk mitigation strategies are considered. Some organizations have review processes based on the size, complexity, strategic importance, and cost of the project. One organization reviewed categorized projects as "mandatory", "necessary" or "would like to do". Mandatory projects required less up-front analysis. Projects are ranked and selected using established criteria.
- *Rank and select projects based on established criteria.* The right mix is determined by viewing all new investments and existing capital assets as a portfolio.
- *Develop a long-term capital plan that defines capital asset decisions.* Capital plans cover a five or ten year period and are updated either annually or biennially. The process of developing such plans requires the organization to establish priorities for capital project implementation over the long-term. It also requires the organization to weigh and balance the need to maintain existing capital assets against the demand for new assets.

Principle 3: Balance Budgetary Control and Managerial Flexibility when Funding Capital Projects.

- *Budget for projects in useful segments.*
- *Consider innovative approaches to full up-front funding.*

Principle 4: Use Project Management Techniques to Optimize Project Success.

- *Monitor project performance and establish incentives for accountability.* Performance was evaluated based on whether the project was completed on schedule, came in within budget, and performed as intended. To increase the likelihood of these things occurring, incentives were established to meet goals and to identify and control circumstances that would result in breaching those goals. Project managers were held accountable for meeting cost, schedule, and performance goals. In doing so, care was taken to distinguish between variations that should have been avoided and those that were legitimately unavoidable/unforeseen.

- *Use cross-functional teams to plan for and manage projects.* Individuals with particular technical or operational expertise were incorporated during appropriate phases of the project. Members typically represented those who had a major interest in the project and included people from the user community, budget, accounting, engineering, procurement and other functions. It was found that the improved communication among the various stakeholders increased the likelihood that potential problems would be identified and resolved quickly.

Principle 5: Evaluate Results and Incorporate Lessons Learned into the Decision-Making Process

- *Evaluate results to determine if organization-wide goals have been met.* Measure the extent to which project outcomes have contributed towards goals and objectives that were established when the project was approved. This may be done through post-implementation reviews. Can include financial improvement and customer satisfaction and other indicators that link to the organization's overall goals and objectives.
- *Evaluate the decision making process: reappraise and update to ensure that goals are met.* Take a critical look at how decisions are being made and are open to making significant structural and cultural changes.