



OFFICE OF THE
City Auditor

Land and Buildings Branch Audit

January 21, 2008



The Office of the City Auditor conducted
this project in accordance with the
*International Standards for the
Professional Practice of Internal Auditing*

Land and Buildings Branch Audit

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Land and Buildings Branch Audit

Summary for City Council

The Land and Buildings Branch provides a number of services that are required to support civic operations and capital projects. These services include building maintenance, accommodation planning, land acquisition and sales, property management, and land planning and development.

The primary objectives of this branch audit were to determine whether services are being delivered in an effective, efficient and economical manner; and whether risks are being managed to an acceptable level.

Council is the governing body providing overall direction for the delivery of services. Responsibility for delivering services in an effective, efficient and economical manner and for meeting Council expectations is delegated to the Administration through the City Manager.

Overall, Branch management is aware of and understands their operational risks and day to day operations appear to be well managed. Based on our assessment of services delivered by the Branch the greatest potential for improvements in the efficient, effective and economic delivery of service can be achieved in the following areas:

- Conservation of Building and Facility Infrastructure – to maximize the useful life of facilities and optimize annual investments in maintenance and repair activities.
- Determining Building and Facility Need and Usage – to ensure civic accommodations are planned and utilized effectively and efficiently.
- Land Need Identification and Acquisition – to ensure land for capital projects and development is acquired within established timeframes and at optimal cost.

A full report outlining the detailed results of our audit is attached. The purpose of this summary is to highlight areas where improvements can be made by the Administration and any direction that Council may need to provide to fulfill its governance and oversight role.

Conservation of Building and Facility Infrastructure

In a 1996 audit the OCA made a number of recommendations related to responsible building ownership and life cycle planning. While some actions were taken to address the recommendations the fact that most work orders are created for unplanned maintenance activities indicates that the recommendations have not been fully addressed. Unplanned activities result in work schedule disruptions, higher replacement costs, potential for building closure and occupant dissatisfaction. We observed four key

factors impacting the Branch's ability to implement a comprehensive planned maintenance process.

First, roles and responsibilities for life cycle planning, including budgeting, managing and reporting on the conservation activities, reside in a number of areas and have not been formally defined. This has resulted in an inability to effectively coordinate maintenance and rehabilitation activities and less than optimal allocation of available funding.

We have recommended that roles and responsibilities be defined for more effective coordination of resources and funding to optimize investment in maintenance, repair and rehabilitation activities.

Second, the replacement value listed on the building and facility inventory report are not complete for all buildings and the values for other buildings do not reflect current construction costs. In addition, information regarding actual expenditures on maintenance activities resides in several locations in the City's financial records and is not readily available. The City cannot demonstrate whether its investment in maintenance and conservation of buildings and facilities is in line with industry standards.

We have recommended that processes be developed to ensure inventory information is complete and accurate and that investment level in building and facilities be reported annually relative to industry benchmarks.

Third, since the mid-1990s the City has developed and discontinued use of a number of maintenance management systems to assist with the implementation of life cycle planning. Testing of a new system was completed in September 2007. The requirements for ongoing support agreements, user documentation and a formal implementation plan were not identified and are not yet place. This will limit the Branch's ability to maximize the benefits from the investment in the system.

We have recommended that support agreements for the Decision Support System be put in place and a comprehensive implementation plan be developed.

Fourth, limited performance data is currently available for maintenance activities. The lack of performance data leaves the Branch unable to demonstrate the effectiveness and efficiency of maintenance activities. Efforts to obtain more meaningful data are currently underway.

We have recommended that changes to reporting be implemented to facilitate meaningful performance reporting.

Determining Building and Facility Need and Usage

A long-term accommodation plan is not in place and documents guiding the delivery of accommodation services do not reflect the current environment. Planning is undertaken on a project by project basis utilizing traditional practices with projects typical taking up to 18 months to complete. As a result the annual budget process does not provide adequate lead time to acquire, plan and construct additional accommodations approved by Council.

The Branch is currently developing a long-term accommodation plan. However, the information contained in current forecasts and business plans will not provide the information the Branch requires to effectively implement long-term planning.

We have recommended that:

- A comprehensive framework, that defines information requirements and processes, be developed and reviewed on a regular basis.
- The Branch work with Corporate Business Planning to gather information for accommodation planning through existing business planning and budget processes.

Land Need Identification and Acquisition

Processes addressing the short-term land needs of the City are generally working well. Longer-term land requirements are not being identified consistently and planning for the City's long-term needs is not taking place. We observed three factors that are impacting the Branch's ability to increase the effectiveness and efficiency of its service delivery.

First, a comprehensive long-term land strategy is not in place and roles and responsibilities are not clearly defined and understood. This can result in delays in capital projects, higher costs, lost opportunities such as the ability to consolidate public service delivery in a common location.

We have recommended that a long-term strategy be developed that includes clearly defined roles and responsibilities.

Second, spending authority limits were last reviewed in 2002 and do not reflect current economic conditions. This has resulted in a higher percentage of transactions now requiring Council approval.

We have recommended that:

- Delegated spending authority limits be reviewed on a regular basis to ensure they remain in line with market conditions.
- The process for obtaining Council approval be reviewed to determine if changes can be made to reduce the risk of higher cost and lost opportunities.

Third, the Branch's land development processes generally address the requirements of approved policy and strategy; however, limited reporting of outcomes takes place. This limits Council's ability to assess the effectiveness of the policy and strategy.

We have recommended that the reporting of land development outcomes be enhanced to increase Council's awareness of land development activities.

The recommendations contained in this report provide direction that will increase the Branch's ability to improve the effectiveness, efficiency and economy of its service delivery through better role definition, longer-term planning and improved monitoring and reporting. The administration has accepted the eleven recommendations and provided Management Responses and Action Plans which are included in the body of the report. The OCA believes that the administration has the tools and experience to improve the effectiveness, efficiency and economy of its service delivery.

Other Considerations for Council

There are a number of processes that are corporate in nature involving long-term planning and require reporting that crosses departmental boundaries. These processes include areas such as the budget, business planning, accommodation planning, facility maintenance, etc.

Based in the results of this audit the coordination and exchange of information among the areas responsible for individual processes does not appear to be effective. In our opinion there is a need to improve the coordination and exchange of information among processes that are corporate in nature. If desired, Council may direct the City Manager to review the coordination and sharing of information among all functions that are corporate in nature with a view to improving the effectiveness of long-term planning.

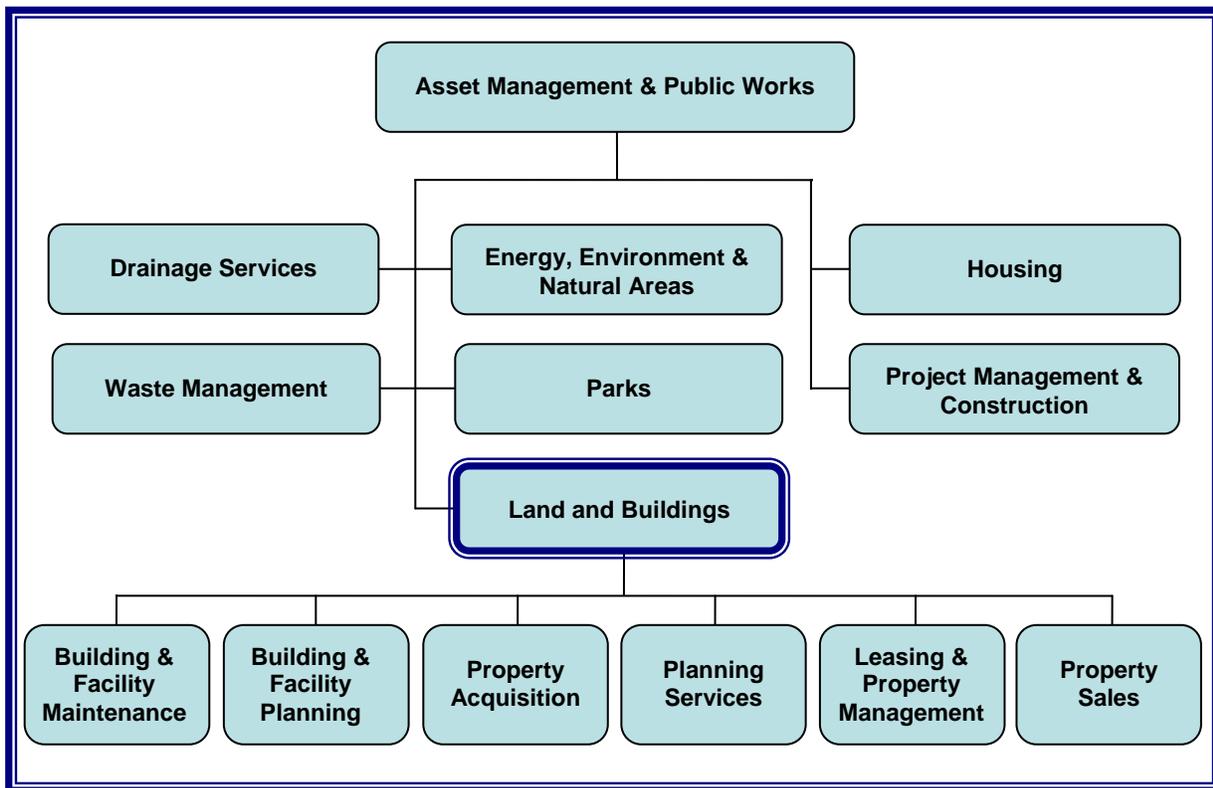
During this review there was a need to analyse maintenance information based on a function basis (i.e., building maintenance). Currently financial reporting is aligned with the City's organization structure as a result the information was not readily available. If desired, Council may direct the City Manager to enhance the City's financial reporting capabilities to facilitate reporting based on functions and projects that cross departmental boundaries as well as the corporate organizational structure.

Land and Buildings Branch Audit

1. Introduction

The Office of the City Auditor (OCA), within its approved 2007 work plan, selected Land and Buildings for a branch audit. The Land and Buildings Branch (the Branch) is one of seven branches in the Asset Management and Public Works Department. As seen in Figure 1, the Branch is divided into six sections.

Figure 1 – Organization Chart
(August 2007)



The Branch mission is to provide stewardship of the City’s land and building assets through innovation, leadership and service. Following is a brief description of the function of each section:

- Building and Facility Maintenance** provides maintenance services that conserve the City’s buildings and their components and ensure they are in safe and operable condition.



Mechanical Boilers



- Building and Facility Planning** provides accommodation programming and planning services to meet the City’s short and long-term needs.

- **Property Acquisition** is responsible for acquiring lands for capital projects.



Land Assembly for Downtown East Revitalization

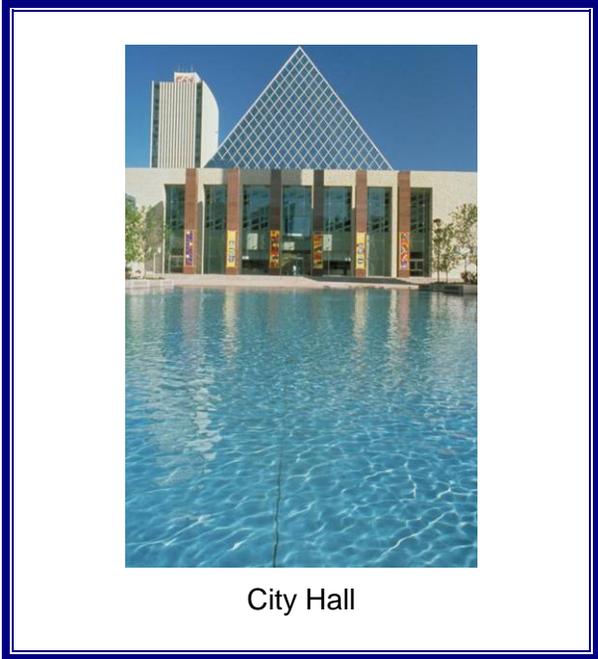


Fort Road Old Town Project

- **Planning Services** manages the land planning and coordination for City projects including residential and industrial land development. This section provide appraisal services to other sections and business units to ensure proper valuation of lands being acquired or sold as well as for buildings and facilities owned by the City. In addition, they manage the land inventory records and administer the Land Enterprise Fund¹.

¹ The Land Enterprise Fund was established for the purpose of managing the land requirements of the corporation and to position the City of Edmonton in a manner that allows it to actively promote development from the perspectives of sustainability, revitalization, and urban form.

- **Leasing and Property Management** provide management and administration for:
 - Facilities owned and leased by the City to accommodate City staff.
 - Leasing of City-owned properties to the public and non-profit organizations, as well as lease negotiations with the private sector.
 - City-owned and leased off-street parking operations.
 - In-house and contract custodial services to civic facilities.



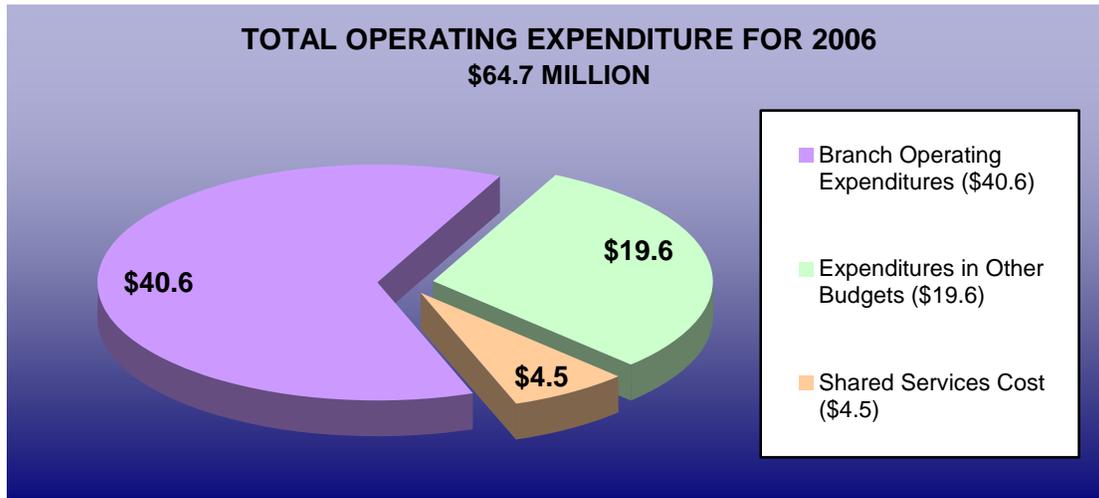
City Hall



- **Property Sales** manage the sale of surplus and developed properties.

Chart 1 represents operating expenditures incurred by the Branch in fulfilling its stewardship role. The expenditures do not include land acquisition expenditures funded from other departmental budgets.

Chart 1 – 2006 Total Operating Expenditures
(millions of dollars)



\$40.6 Branch Operating Expenditures

Table 1 presents the actual operating expenditures and revenues for 2004 to 2006 and the approved operating budget for 2007.

Table 1 – Branch Operating Costs
(millions of dollars)

	2004 Actual	2005 Actual	2006 Actual	2007 Budget
Operating Expenditures	\$35.2	\$37.9	\$40.6	\$42.4
<i>Percent Increase</i>		7.6%	7.1%	4.4%
Revenues	<u>(8.6)</u>	<u>(8.7)</u>	<u>(9.4)</u>	<u>(9.1)</u>
Tax Levy	<u>\$26.6</u>	<u>\$29.2</u>	<u>\$31.2</u>	<u>\$33.3</u>
<i>Percent Increase</i>		9.8%	6.8%	6.7%
Full Time Equivalents (FTEs) **	296.7	306.7	341.0	331.9

** Estimates only due to recent organizational changes

The expenditures and revenues included in this table reflect the Branch structure reflected in Figure 1 on page 1.

\$19.6 Expenditures in Other Budgets

The Branch is responsible for the coordination of additional maintenance activities that are funded from other departmental budgets. The expenditures are incurred by the Branch and recovered through charges to departments and other organizations. These expenditures are primarily for building maintenance and custodial services.

\$4.5 Shared Services Costs

These are the estimated shared services costs for finance, human resource, information technology, communications and law services associated with the Branch operations. These costs are managed by and reflected in the Corporate Services Department budget and do not form part of the Branch’s budget.

Table 2 presents the capital cost of acquiring and servicing residential and industrial land and preparing it for resale.

Table 2 - Capital Expenditures
(millions of dollars)

	2004 Actual	2005 Actual	2006 Actual	2007 Budget
Land Development	\$9.0	\$16.6	\$20.8	\$66.7

Between 2004 and 2006 the expenditures for development of residential and industrial land was primarily for servicing costs as the development activities all took place on existing City owned land inventory. The 2007 Budget included \$30 million for land acquisition to restore the depleted inventory of raw land for development and \$36 million for construction.

The primary source of funding for acquiring land for development is the Land Enterprise Fund which is governed by City Policy C511, *Land Management Policy*. The fund is self-sustaining, with revenues generated through the sale of surplus properties and developed industrial and residential land; it is not funded by the Tax Levy. It is worth noting that in 2006, \$15.1 million was budgeted to acquire more land for development, but no major acquisitions were completed that year.

2. Objectives and Scope

The primary objectives for this audit were to determine:

- If the Branch is managing its risks to an acceptable level,
- If the Branch programs are being delivered in an effective, efficient, and economical manner, and
- Where the greatest potential to improve service delivery exists.

Following an initial assessment of all Branch services, the scope of the audit focused on the following specific objectives where we believe there is the greatest opportunity to improve service delivery:

Conservation of Building and Facility Infrastructure – To determine whether the project selection process is effective in conserving the City's buildings and facilities.

Determining Building and Facility Need and Usage – To determine if the City's processes for accommodation planning are efficient and effective and address the City's short and long-term accommodation needs.

Land Need Identification and Acquisition – To determine if the City's processes for identifying land requirements and acquiring land are efficient and effective and address the City's short and long-term land needs.

A detailed description of the audit methodology and a list of services scoped out following the initial assessment is included in Attachment 1.

3. Detailed Audit Observations

In the late 1990s, the Branch was created to oversee the City's land and building assets. In 1999, The Branch developed a strategic plan setting out three primary purposes:

1. To recommend strategic directions, policies and programs to support the effective and efficient management of the City's land and buildings.
2. To ensure orderly and responsible acquisition, development and disposal of City land and buildings to support growth, business, emergency services, recreation and cultural activities.
3. To maintain publicly-owned City facilities to ensure maximum utilization and value received for the investment in the asset.

Over the past few years organizational changes have occurred within the Asset Management and Public Works department that have had a direct impact on the Branch.

- In 2005 the Project Management and Construction Branch was created. Building design, engineering and construction functions were transferred out of the Land and Buildings Branch.
- In 2007 the Housing Branch was created. Housing functions include the management and administration of the City's non-profit Housing Corporation, operation of the Landlord & Tenant Advisory Board and implementation of the Cornerstones Affordable Housing program.

At the time of this audit, the Branch was being restructured to address needs resulting from the current economic conditions. Branch management advised us that placing greater emphasis on longer-term planning in the areas of land acquisition and accommodation planning were the focus of the restructuring. Figure 1 on page one reflects the new branch organization.

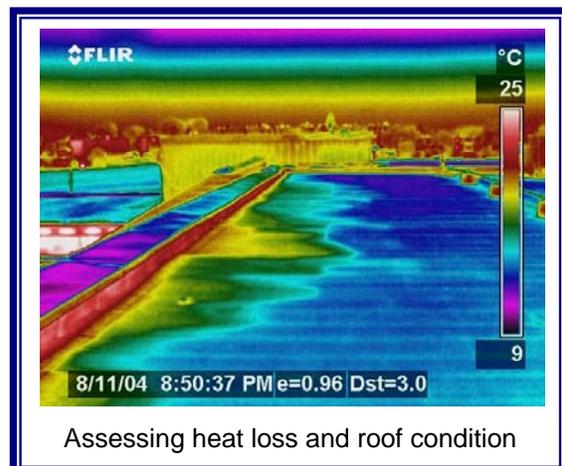
The impacts of these changes on roles and responsibilities are in the process of being clarified by the Branch. The impacts on service delivery are identified in the observations included in the remainder of this report.

3.1. Conservation of Building and Facility Infrastructure

In January 2006, City Council formally adopted an Infrastructure Strategy that articulated its commitment to develop and maintain the City's infrastructure assets in order to support program and service delivery to citizens. The strategy sets out three goals:

1. To evaluate and report the state of infrastructure.
2. To implement sustainable infrastructure asset management practices.
3. To ensure adequate fiscal tools and resources to fund infrastructure assets.

A comprehensive process which plans for responsible building ownership for the complete life cycle of a facility is required to maximize the useful life and optimize annual investments in maintenance, repair and conservation. The physical deterioration which is prevalent in the early stages of a building's life cycle can readily be accommodated by means of a sound annual preventive maintenance program. However,



as buildings age, life cycle planning² and life cycle costing³ methodologies need to be applied to optimize the use of available resources.

One of the tools we used to determine whether City practices effectively address the conservation of buildings is the Continuum of Maintenance for Buildings illustrated in Figure 2 on page 9. The continuum is made of seven levels:

- The first level (least effective) is deferred maintenance, which occurs when projects are identified as necessary but not completed due to lack of resources.
- The second and third levels are unplanned activities including emergency maintenance and corrective maintenance.
- The fourth level is general maintenance to keep components in good working condition. This maintenance may be either planned or unplanned.
- Levels five through seven (most effective) are planned maintenance which includes:
 - Preventive maintenance or scheduled inspections, adjustments and replacement of components,
 - Predictive maintenance that use techniques to detect trends that allow repairs before equipment failure, and
 - Proactive maintenance or a highly structured practice that uses information from analyzing equipment to identify origins, not just symptoms, of equipment problems.

Figure 2 – Continuum of Maintenance for Buildings

Deferred	Emergency	Corrective	General	Preventive	Predictive	Proactive
No Maintenance	Unplanned Maintenance			Planned Maintenance		
	Most expensive over the long term <ul style="list-style-type: none"> ➤ Work schedule disruption ➤ High labour costs ➤ Higher replacement costs ➤ Occupant dissatisfaction ➤ Potential building closure (loss of revenue) 			Lower overall service costs <ul style="list-style-type: none"> ➤ Less work schedule disruption ➤ Lower labour costs ➤ Lower replacement costs ➤ Fewer complaints 		

The shading at the bottom of Figure 2 reflects the results of our assessment of Building and Facilities Maintenance Section (Maintenance Section) practices. Based on

² Life cycle planning is a systematic approach to forecasting maintenance, and replacement requirements for component of facilities over its life span.

³ Life cycle costing is an economic evaluation process which is done at significant investment decision points.

discussions with building trades supervisors and review of supporting documentation, most resources are allocated to activities that range from corrective to preventative. Our review also indicates that some maintenance projects are being deferred and some emergency repairs are required as a result.

There are four key factors impacting the Maintenance Section's ability to increase the amount of planned maintenance work and implement a comprehensive planned maintenance process:

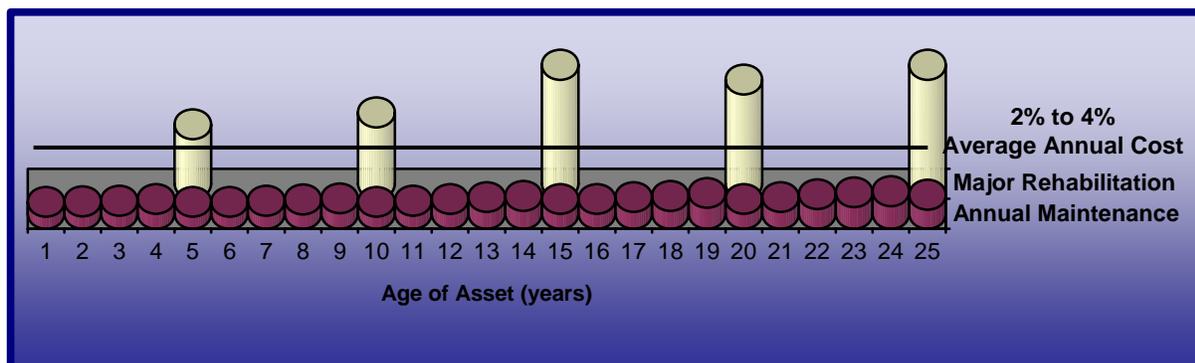
1. Roles and responsibilities associated with life cycle planning have not been defined for all stakeholders within and outside the Branch. Further, the Branch does not manage the budget for all maintenance activities.
2. Inventory information on buildings and facilities is not complete and is not used to determine whether the level of investment in maintenance and rehabilitation is in line with industry standards.
3. Ongoing support agreements for the Decision Support Software being developed to support life cycle planning are not in place and a formal implementation plan has not been prepared.
4. The corporate maintenance management process used to monitor performance has not been fully implemented and therefore does not adequately support the decision-making process for optimizing facility maintenance activities.

3.1.1. Responsibility for Life Cycle Planning and Conservation of Assets

To effectively manage life cycle planning and asset conservation, the roles and responsibilities of all stakeholders need to be clearly defined, communicated and understood. This includes aligning budgets for maintenance and rehabilitation with assigned responsibilities.

Figure 3 is an example of an expenditure pattern required to conserve a single building over its useful life (first 25 years only).

Figure 3 – Example of Life Cycle Funding



A life cycle funding program includes annual maintenance and repair costs to keep buildings and facilities in safe and operable condition and major rehabilitation costs associated with replacement of major components and changes in functional requirements to extend the useful life of the building.

The American Public Works Association suggests that appropriate levels of investment in maintenance and repair of public buildings are between 2% and 4% of replacement costs per annum.⁴ This equates to an average annual investment between \$80.0 million and \$160.0 million using the estimated \$4.0 billion estimated replacement value reported by the Branch (Table 4, page 15).

In 1997 ownership and responsibility for maintenance of City-owned facilities was transferred from departments occupying the facilities to the Branch. However, only part of the operating budget associated with these functions was transferred. Funding for facilities occupied by municipal enterprises (e.g., Mobile Equipment Services) and semi-autonomous bodies (e.g., Edmonton Police Services) remained in the respective department budgets. More than 25% of the Maintenance Section operating expenditures planned for 2007 are budgeted by other departments.

Further, the Maintenance Section does not have a capital budget to fund major rehabilitation and emergency repairs. Funding for these types of projects are budgeted by the Project Management and Construction Branch and compete for capital funding along with new construction projects in the Capital Priorities Plan process.

Planning and funding of regular maintenance of buildings such as the Shaw Convention Centre, Rexall Place, Citadel Theatre and the Winspear Centre is the responsibility of the respective operating agencies. The City becomes financially liable for unplanned maintenance and repair costs if the agencies do not adequately plan and budget for regular maintenance. Funding for these costs is reallocated within the City's approved budget by deferring planned expenditures.

The current roles of the stakeholders have not been documented; Administrative Directive A1403A, *Maintenance of City Owned Facilities* was approved in 1989. The OCA interviewed a number of stakeholders and requested documentation that supports life cycle planning processes. The interviews indicated that the following groups are involved in prioritizing maintenance projects to conserve the City's buildings and facilities:

- **The Maintenance Section** is responsible for completing building assessments and determining the remaining service life of building components (i.e., structural, mechanical and electrical). They use the recently developed Decision Support

⁴ (NRC 1990) National Research Council. *Committing to the Cost of Ownership: Maintenance and Repair of Public Buildings*. Building Research Board, National Research Council, Washington D.C. National Academy Press.

System life cycle cost module to forecast when major investments will be required to maximize the useful life of the building.

- **The Project Management and Construction Branch** provides planning, construction and project management services for new construction and major rehabilitation projects. One of its core functions is to optimize the life cycle value of City building and facilities.
- **The Office of Infrastructure and Planning, Corporate Business Planning** is responsible for implementing the recommendations emerging from the Infrastructure Strategy. One of its activities is to apply life cycle costing, risk assessment, return on investment and business case models to support infrastructure investment decisions.
- **Some Departments** take on the responsibility for determining the extent, scope and timing of required maintenance and repair for buildings they occupy.

We noted that the Maintenance Section, which is responsible for maintenance of City owned facilities, has not been routinely involved in defining maintenance requirements in leases and did not conduct regular inspections of facilities leased to outside parties. In one case, after a tenant moved out at the end of a lease agreement the City had to make a significant investment to restore or replace systems and equipment that had not been maintained to City standards.

The lack of clearly defined roles and responsibilities and decentralized maintenance budgets has limited the Branch's ability to effectively prioritize and plan for maintenance and repair projects. In some cases the funding for emerging and emergency projects was diverted from planned maintenance projects while in other cases funding was reallocated from departmental operating and capital budgets.

The OCA issued an audit report on the Maintenance of City Owned Buildings in 1996. One of the observations was "The City is not adequately addressing long-term planning for buildings but rather is primarily focusing on short-term annual programs." This condition still exists as reflected in the following observations.

- In its 2005 budget submission the Branch stated there was a backlog of 1,700 deferred maintenance projects and that 33% of major maintenance projects were unfunded.
- In October 2007 the Maintenance Section identified deferred maintenance valued at \$44.0 million for roof replacement, boiler replacement and major structural, mechanical and electrical projects. This value is based on building condition assessments that have been completed for approximately 60% of major buildings and a general knowledge of other facilities.

Table 3 summarizes the physical condition of buildings listed on building infrastructure reports provided by the Branch.

Table 3 – Building Condition Assessment

Condition Rating	Number of Facilities	Percent
Excellent to Good	129	43.2%
Fair	123	41.1%
Poor to Unacceptable	<u>47</u>	<u>15.7%</u>
TOTAL	299	100.0%

Most building condition assessments are based on visual inspections of building components that are completed by skilled trades workers employed by the Branch. Where detailed assessments have not been completed assessments are based on cursory information and a round table discussion. The Branch does not have the resources to undertake technical reviews of structural integrity that require the skills of a professional architect or engineer.

A recent example of the impact of the current practices is sudden closure of part of the Prince of Wales Armoury due to unsafe conditions even though the condition assessment, which was based on cursory information, indicated the building was in fair condition. Structural deficiencies in the 92 year old building were discovered by the Project Management and Construction Branch while completing a load capacity assessment for the reallocation of space for different use.

Based on interviews with various stakeholders, there is cooperation among branches and departments; however, there is not a coordinated approach for life cycle planning and the conservation of the infrastructure. The lack of clearly defined roles and responsibilities along with lack of control over all maintenance funding has prevented the implementation of a comprehensive life cycle planning and asset conservation program.

Recommendation

1. The OCA recommends that Land and Buildings, in conjunction with key stakeholders, define and communicate the roles and responsibilities for all areas involved in the process of life cycle planning and conservation of buildings and facilities to ensure efforts are effectively coordinated and that funding is allocated to maximize the life of buildings and facilities.

Management Response and Action Plan

Accepted: We acknowledge that gaps and overlap in the lifecycle management responsibilities have developed as a result of evolving service delivery priorities and the effect that such changes have on the most effective ways to address the service needs. Greater clarification of responsibilities through the budget process is expected with the conversion to Tangible Capital Asset accounting practices. In addition, Land and Buildings has initiated formal discussions with Project Management and Construction to develop a clearer understanding as to the roles and responsibilities for lifecycle planning and conservation of buildings and facilities. The identification of necessary funding to implement proper lifecycle management is also being facilitated through increased dialogue with client Departments and Corporate Business Planning as part of the Ten Year Capital Forecasting process. This will be complete in January 2009.

Responsible Party: Director of Building and Facilities Maintenance

3.1.2. Building and Facility Inventory

The foundation for assessing the reasonableness of funding for maintenance and rehabilitation activities is an accurate and complete building and facility inventory that includes current replacement values.

Replacement Value

Our review revealed that inventory information is maintained in a number of stand alone systems, each serving specific user needs. We noted that while each system contained a common identifier for each building or facility the remaining information was frequently different.

Table 4 summarizes the replacement value of buildings and facilities listed on a report produced by the Planning Services Section in May 2007. This report is considered the official inventory of buildings and facilities for which the City is responsible.

Table 4 – Inventory Summary

Type of Building/Facility	Number	Replacement Value (millions)
City Owned and Managed		
Office/Operational	29	\$362.0
Maintenance/Storage	203	1,007.8
Police/Emergency Response	60	226.4
Social/Cultural	42	131.8
Attraction/Recreational	355	746.0
Residential	<u>77</u>	<u>8.9</u>
SUB-TOTAL	766	2,482.9
Leased by the City	59	--
Tenant Built/Maintained **	<u>104</u>	<u>1,535.7</u>
TOTAL	929	\$4,018.6

** Tenant Built/Maintained facilities are commonly referred to as “Grey Buildings” (e.g., Shaw Convention Centre, Citadel Theatre). These facilities are included in the inventory since the City would become responsible for them should the managing organization become insolvent.

While this report shows the replacement value at \$4.0 billion we reviewed other reports that show significantly different aggregate replacement values:

- The 2006 Edmonton City Council’s Infrastructure Strategy report shows a similar total replacement value of \$2.6 billion for buildings, facilities, and other corporate assets, excluding Tenant Built/Maintained facilities.
- A major study conducted in 2003 that provided the basis for developing *A Decision Support Maintenance System for Building Maintenance* stated: “Facilities owned and maintained by the City of Edmonton comprise a building portfolio of significant durable assets that reflect an investment of more than \$6 Billion tax dollars.” This study was completed by an external consultant.

We recognize that differences in replacement values occur due to the timing and nature of reports. However, we believe the range of \$4.0 to \$6.0 billion may be excessive.

To assess the completeness and accuracy of the inventory we compared the data maintained by the Branch to that maintained by Risk Management for insurance purposes. Less than 10% of the sample items compared were the same in both systems. Most differences related to the replacement value of the buildings. However, we noted instances where buildings were not included in one of the systems or the address of the building was different.

We also obtained current construction cost estimates for five types of facilities and compared them to the recorded replacement values in the building and facility inventory report. The replacement values for one type of building were accurate. Replacement values for the remaining four types of facilities ranged from 150% undervalued to 20%

overvalued. It was also noted that replacement values were not specified for a number of buildings listed on the inventory report.

Without a complete and accurate inventory of buildings and facilities the City cannot demonstrate that a reasonable level of funding is being invested in the conservation of its infrastructure. Inaccuracies also result in the City being either over or under-insured as insurance coverage is limited to a maximum of 20% above stated values. Further, without a solid foundation based on a common understanding of reporting requirements, the corporation will not be able to produce reports that show consistently accurate results. This will impact the corporation's ability to fully implement Tangible Capital Asset Reporting to meet the Public Services Accounting Board (PSAB) financial reporting standards in 2009.

Maintaining a complete and accurate list of the inventory including corresponding replacement values will require that the following activities be undertaken in consultation with all key stakeholders:

- Understanding and formally documenting the specific information requirements of each stakeholder.
- Defining what constitutes a building and a facility.
- Consolidating, streamlining or automating transfer of data between various systems (ideally, a single system should meet the needs of all stakeholders).
- Developing a clear understanding of roles and responsibilities, not only for generating the information initially required, but also for updating and maintaining the list on an annual basis.

Recommendation

2. The OCA recommends that Land and Buildings, in consultation with other stakeholders, develop a process to ensure building and facility inventory information is complete, accurate and presented in a consistent manner.

Management Response and Action Plan

Accepted: Specific and standardized information requirements are currently being established through the conversion to Tangible Capital Asset accounting. The transfer of data collected and maintained over various systems is being addressed within the Project to ensure that full reporting capabilities are available. The issue of establishing and maintaining replacement value information has been a challenge in light of the current construction market conditions, but is also a requirement of the new TCA accounting process that is being addressed. This will be in place by January 2009.

Responsible Party: Director, Buildings and Facilities Planning

Investment in Buildings and Facilities Conservation Activities

A key performance indicator to determine whether the maintenance activity levels adequately support building and facility conservation is the ratio of maintenance, repair and refurbishment expenditures compared to the current replacement value.

In addition to not having accurate and complete inventory information, the actual expenditures on maintenance, repair and refurbishment activities resides in several dispersed locations in the City's financial records and is not readily available. As a result the Branch does not monitor maintenance activity to determine whether the City invests sufficient resources to adequately support the conservation of its building and facility infrastructure.

Without access to accurate and complete information we were unable to determine whether the City's maintenance investments are in line with the 2% to 4% industry standard. However, the major study completed in 2003 stated that the annual budget for maintenance and repair was significantly less than 2% of the aggregate current replacement of the City's building and facility portfolio.

The level of investment in maintenance, repair and refurbishment activities should be reported annually as part of the budget deliberations to provide City Council with information to assess whether the activity levels adequately support the conservation of buildings and facilities and the Infrastructure Strategy that they adopted.

Recommendation

3. The OCA recommends that Land and Buildings report the City's investment level in buildings and facilities maintenance on an annual basis in relation to the industry benchmark of two to four percent of current replacement value.

Management Response and Action Plan

Accepted: The conversion of the building maintenance software system to Mainlink (SAP) was not done in a manner that provided for adequate reporting to be carried out. The deficiencies were not in the new software, but rather in the processes applied in using the new system. Through a separate audit of the system, the gaps and inputting shortfalls were identified and efforts are now underway to correct the problems. It is expected that the enhancements and training will enable full and proper reporting to be carried out by year end 2008.

It is worth noting that although the base information is not fully defined to enable exact maintenance investment to be determined, a partial assessment of maintenance levels relative to building value has recently been carried out and the level of maintenance is well below the industry standard. This has resulted in deferred maintenance problems currently estimated in the \$45 million range.

Responsible Party: Director of Building and Facilities Maintenance

3.1.3. Life Cycle Planning Support System

Since the mid 1990s the City has developed and discontinued use of a number of maintenance management systems to assist with the implementation of life cycle planning. One of the reasons provided for discontinuing use of those tools was the lack of technical support.

An initiative currently underway in the Branch is the development of a Decision Support System (DSS). DSS facilitates long-term life cycle planning employing leading edge modeling and analysis techniques to forecast when major investments in maintenance and refurbishment will be required. The University of Alberta was contracted to undertake research and develop DSS starting in 2001.

At the time of this audit the Maintenance Section used DSS to complete an assessment of arenas. The results of the assessment are reflected in the 10-Year Arena Capital Development Strategy (2009-2019) approved by City Council on July 17, 2007. This along with other testing activities has allowed the Maintenance Section to validate the functionality of DSS. The system was certified for deployment over the corporate network by the Information Technology Branch in September 2007.

The information generated by DSS will assist in the selection of projects and enable more effective utilization of resources available to conserve the City's buildings and facilities. However, based on our review of documentation and discussions with Land and Buildings Branch and Information Technology Branch staff, we are unsure whether the City will receive the potential benefits from its investment for the following reasons:

- Agreements and documentation for DSS contain no reference for ongoing support by either the University of Alberta or by the City. Without long-term support there is a high risk that use of this product will be discontinued before maximum benefits are achieved.
- The Branch does not have an implementation plan to guide the testing, system roll out (within the Branch as well as to the Project Management and Construction Branch and Office of Infrastructure and Planning) and training activities.
- Only one individual is involved in testing the system and has knowledge of its use.
- No deliverables are identified in the software development agreement. Currently there is no documentation supporting the functionality or use of DSS.
- DSS has been developed as a stand alone system with no plans to automate transfer of data to/from SAP resulting in significant manual intervention to consolidate information.

These factors will limit the City's ability to use DSS to forecast when major investments in maintenance and rehabilitation will be required and limit the effectiveness of decision-making efforts.

Recommendation

4. The OCA recommends that Land and Buildings:
 - a. Obtain formal, long-term written support for the Decision Support System from the Information Technology Branch, the Senior Management Team and the University of Alberta.
 - b. Develop a comprehensive implementation plan, for testing and roll-out of the Decision Support System.
 - c. Conduct a review, in conjunction with the Information Technology Branch, to explore the opportunities of automating the transfer of information between SAP and the Decision Support System.

Management Response and Action Plan

Accepted: The University is finalizing the documentation for the system. This will be complete by April 2008. Land and Buildings will initiate discussions with IT and the University regarding the provision of long term support for the software. This is to commence by the end of November 2007.

Land and Buildings will develop a plan for expanding access to DSS to other departments who may find it beneficial. This will be complete by end 2008.

Land and Buildings will contact IT and BES to update the information relating to developing the interface between SAP and DSS.

It is also worth noting that additional staff training in the DSS System is underway.

Responsible Party: Director of Building and Facilities Maintenance

3.1.4. Maintenance Project Scheduling and Monitoring

The fourth area that impacts the Branch's ability to effectively conserve building infrastructure relates to scheduling and monitoring of maintenance and repair projects.

In 2002, the City of Edmonton undertook a corporate initiative to implement a standardized maintenance management process and supporting information system. In keeping with the Enterprise Resource Planning (ERP) Strategy, this initiative replaced legacy systems used by eleven business areas including the Maintenance Section with MAIN-LINK, a standardized maintenance management solution. The Plant Maintenance module of SAP, which is one of four pillar applications used by the City, was selected to enable the standardization process. The objective was to support the functional needs of the Maintenance Section while meeting the need of the City to establish a common maintenance management process and system. This is a long-term objective, and the

Maintenance Section along with other business areas, is experiencing challenges in adjusting to this change and still meet its operational objectives.⁵

The Branch currently uses MAIN-LINK to schedule maintenance activities. Currently only limited information is available from MAIN-LINK to monitor maintenance activity or the effectiveness of its resource deployment. Table 5 shows the number of work orders scheduled using MAIN-LINK in the first five months of 2007 along with the status at the end of May 2007.

Table 5 – Work Order Summary
January through May 2007

Status	Planned Maintenance	Unplanned Maintenance	Total
Completed	5,793	9,039	14,832
In Progress	<u>3,979</u>	<u>2,213</u>	<u>6,192</u>
TOTAL	<u>9,772</u>	<u>11,252</u>	<u>21,024</u>
<i>Percent of Total</i>	46.5%	53.5%	100.0%

This table shows that less than half (46.5%) of the work orders issued were for planned maintenance and only 59.3% (5,793) of these were completed. It should be noted that the information used to create this table only identified the number of work orders, not the significance of the work or the resources required to complete the work. This data does not provide information required to effectively assess the backlog of work, is of little value in prioritizing work and does not facilitate performance monitoring.

We were advised by current Branch Management that the reporting requirements were not adequately defined when MAIN-LINK was being developed. It should be noted that staff turnover at the supervisor and management levels has taken place since MAIN-LINK was deployed. The Maintenance Section has reviewed its monitoring requirements and is working with corporate support staff in Business Enterprise Services to implement enhancements in accordance with corporate priorities.

The data currently available to the Maintenance Section does not facilitate meaningful decision making. In our opinion, it will be difficult to demonstrate and improve the effectiveness and efficiency of maintenance services in the conservation of building and facility infrastructure until meaningful performance reporting is in place.

⁵ At the time of this branch audit the OCA was conducting a post-implementation review of MAIN-LINK to assess whether its objectives were achieved in an effective, efficient and economical manner and whether business processes and controls were implemented and are operating as intended. We will issue a separate report on the results of this review.

Recommendation

5. The OCA recommends that Land and Buildings, in conjunction with Business Enterprise Services, ensure changes to MAIN-LINK reporting are implemented to facilitate meaningful performance monitoring and decision making.

Management Response and Action Plan

Accepted: Land and Buildings will continue to work with Business Enterprise Services to improve MAIN-LINK performance monitoring and information to assist in decision making. This includes the fielding of the Business Intelligence module, creation of standard key performance indicator reports, and the reformatting of the “shop papers” to include the hazard assessment forms. This is ongoing and the Business Intelligence module is expected to be in place by October 2008.

Responsible Party: Director of Building and Facilities Maintenance

3.2. Determining Building/Facility Need and Usage

The accommodation planning and property management services provided by the Branch are corporate functions that include the acquisition, design and fit-up (construction) of space to meet the needs of civic operations. The efficiency and effectiveness of the service delivery is directly impacted by information supplied by operational areas.

The Branch should have a long-term strategy that provides guidance on the direction the City plans to take to address its growing accommodation needs. A management framework should also be in place that clearly defines roles and responsibilities of stakeholders, operating principles, guidelines and processes. The purpose of these documents is to promote consistency, equity, cost-efficiency, sustainability and accountability in all phases of accommodation management.

Our review of accommodation planning processes and recent project documentation resulted in the following observations:

- Documents guiding the delivery of accommodation services are not current. General accommodation management and planning strategies are included in the Branch Strategic Plan which was reviewed in June of 2003, however, the management framework has not been updated since 1989. Effectively, current accommodation planning requirements and processes have not been adequately defined and communicated, resulting in a lack of understanding between the Branch and its client departments.
- There is no long-term accommodation planning to guide the decision-making process. Further, a lease/build/buy assessment has not been completed. Without an assessment the Branch cannot demonstrate that recent decisions to lease office space are the most economical alternative to accommodate staff.

The Branch initiated a process to hire a consultant to prepare a long-term plan prior to our review of the planning process. The consultant has been selected and is now developing the plan. The Branch will need to update its management framework to include a process to regularly review the long-term plan to keep it current.

- The Branch adheres to corporate process requirements for planning and executing accommodation projects. The application of these processes in sequence results in accommodation projects taking between 9 to 18 months to complete. The annual budget approval process does not provide adequate lead time to complete accommodation projects when additional space is required.

Further, the Branch advised us that information captured in the business planning process is insufficient to forecast accommodation requirements and has contributed to the elimination of swing space formerly used to temporarily relocate staff during planned office renovations and to house temporary work groups associated with special projects. This results in lost efficiency in operational areas during office renovations and delays in starting projects when project teams need to be brought together.

- The accuracy of operational growth forecasted by departments has a direct impact on the Branch's ability to forecast building and accommodation needs. Where facilities are required to support direct citizen services (e.g. arenas), operational forecasts are well documented. Departments are not applying the same rigor where there is a need for support facilities (e.g. bus storage). Rather, the Branch engages departments when they perceive current facilities are reaching capacity or may not be meeting functional needs. The absence of reliable forecasts and delays in obtaining the information reduces the effectiveness of planning and can result in the acquisition of land and design of facilities that provide insufficient capacity for growth or fail to obtain operational efficiency.

Planning for specific office accommodation projects needs to include allowance for staff and service growth. Based on our review of planning documents, departments are not allowing sufficient space to accommodate short-term growth. In one instance, a City department's plan made allowance for three years growth. This space was utilized within the first year of occupancy. This reduced the effectiveness of the Branch's planning process and results in additional direct and indirect costs to modify work space and relocate staff due to insufficient space.

In our opinion the Branch needs to clearly define its information requirements and update its processes to reflect the current environment. The Branch also needs to work with the Corporate Business Planning department to determine how complete and reliable information can be collected through the business planning process. These steps will enable the Branch to improve the effectiveness and efficiency of accommodation services.

Recommendations

6. The OCA recommends that Land and Buildings develop a comprehensive management framework that include the requirement to complete lease/build/buy assessments on a regular basis and that the framework be reviewed on a regular basis to ensure it is in line with market conditions.
7. The OCA recommends that Land and Buildings work with Corporate Business Planning to ensure information required for long and short-term accommodation planning is collected through existing business planning and budget processes.

Management Response and Action Plan

Accepted: Land and Buildings recognises the need for a long and medium term accommodation plan and strategy, and work is underway in this regard and will be complete in March 2008. The effects of changes in service delivery and civic programs that have been evolving over the past 5 years have not been adequately addressed from an accommodation perspective, and the administration's ability to deliver programs efficiently is now affected. The Branch also supports a closer working relationship with Corporate Business Planning in order to develop more effective forecasting consistent with Operating and Capital Budgeting processes. This will be in place for the 2009 budget process.

Responsible Party: Director of Buildings and Facilities Planning

3.3. Land Need Identification and Acquisition

The City needs to acquire land to satisfy a number of needs including: roadways, parkland, drainage ponds, utility right of ways, libraries, police and emergency response stations, transit stations, BRT and LRT routes, service facilities, and development of serviced residential and industrial lands.

As the City's steward for land, the Branch strives to acquire land for capital projects and development within established time frames at optimal cost to the City.

Based on our discussions with staff within and outside the Branch and our review of processes and documentation, we concluded that:

1. A comprehensive long-term land strategy is not in place and roles and responsibilities are not clearly defined and understood.
2. The acquisition process is generally working well. However, the efficiency of the approval process for higher value transactions has decreased due to the significant escalation in the market value of property.
3. Existing land policy and strategy are current and are generally complied with. However, changes to the reporting process may improve accountability.

3.3.1. Long-Term Land Strategy – Land for Municipal Purposes

A long-term strategy serves multiple purposes. It defines processes that support achievement of corporate goals over the long-term and compliance with City policy. It also provides guidance for all stakeholders, resulting in a more efficient and effective process.

A comprehensive long-term land strategy should include the following elements:

- Clearly defined roles and responsibilities of all stakeholders.
- Specific information requirements and sources.
- Defined processes for information collection, including identifying connections with other corporate processes (such as Corporate Business Planning and Budgeting processes).
- Decision criteria that are supported by decision makers (i.e., City Council).
- Funding options, including direction on the allocation of Land Enterprise funds.
- Requirements for reporting results to key stakeholders.
- Requirements for regular reviews and updates to ensure that the strategy reflects the current and forecast economic conditions.

We observed that a long-term strategy to guide the land need identification and acquisition process is not in place and that roles and responsibilities are not fully defined, communicated and understood by all stakeholders. The current Land Development Policy and Industrial Land and Land Management Strategies have a short-term focus (3 years) and only address specific land activities. As a result, the Branch has focused its resources on acquiring land for the short-term needs of the City, rather than planning for the City's long-term needs.

At the client level, the short-term focus can delay capital projects if an agreement cannot be reached with landholders within the established time frame. It can also result in higher cost and lost opportunities such as not being able to provide multiple services from a common location.

Within the Branch, the acquisition processes may not be fully aligned with corporate goals and not be as efficient or effective as they could be with a longer-term focus. For instance, the prioritization of purchases may be misaligned if a comprehensive list of land needs is not available. Also, resources may be allocated to buy a single property when in the longer term multiple adjacent properties are needed.

Clearly defined roles and processes are required to maintain efficiency and effectiveness in the land acquisition operations. In their absence, communication between the Branch and its clients may be incomplete and efforts to collect information may be duplicated as stakeholders are unaware of information collected by other parties.

Recommendations

8. The OCA recommends that Land and Buildings develop a long-term strategy, including defining roles and responsibilities for all stakeholders, for the identification and acquisition of land needed for future municipal purposes.
9. The OCA recommends that Land and Buildings develop a process for regular review of the strategy, with input from Council and other stakeholders, to ensure it is in line with market conditions.

Management Response and Action Plan

Accepted: The Branch is currently preparing a long term strategy for addressing the corporation's long term land needs based on 10 and 20 year planning horizons. Roles and responsibilities are being defined which include:

- Departmental responsibilities and information requirements.
- An annual updating mechanism from each of the City's departments pertaining to land requirements for the ensuing 20 years.
- Development of an information sharing process that enables departments and Land and Buildings to better identify emerging land needs and enhance decision making relative to opportunity purchases identified through consideration of planning, development, subdivision and rezoning applications submitted to the City.

A new strategic property acquisition group within the Acquisition Section is being established and tasked with identifying the future requirements and updating the status of opportunity or emerging needs, developing business cases for each of the properties that are identified as opportunity purchases as well as negotiating and establishing agreements for such acquisitions.

The Branch will provide a report to City Council in February or March of 2008 seeking Council's approval of the Strategy.

Responsible Party: Director, Property Acquisitions

3.3.2. Delegation of Authority

Bylaw 12005, *City Administration Bylaw* authorizes the City Manager to approve land purchases and lease agreements that are at fair market value when the purchase price does not exceed \$1 million and lease agreements do not exceed \$250,000 per year for a maximum of 10 years. The approval limits were last reviewed in 2002.

Increases in real estate values and lease costs have eroded the City Manager's authority and reduced the overall effectiveness and efficiency of acquisition and leasing process.

We reviewed Edmonton Real Estate Board Statistics and the impact market conditions have had on the land acquisition process. Our review showed:

- The average selling price of property has doubled since 2004 with most of the increase (52%) occurring between 2006 and 2007.
- In 2004 Council was not requested to approve any land acquisition transactions
- In the first five months of 2007 Council approval was required for 16% of completed transactions. Based on our review of branch records, we estimate that more than 30% of transactions in progress will require Council approval.
- The requirement to obtain Council approval for land acquisition transactions exceeding \$1 million increases the time required to finalize a file by 1.5 to 2 months.
 - We are aware of one transaction where the City paid a premium for land and incurred additional costs due to the delay.

Information obtained on the lease environment indicates that the conditions are similar to those experienced for land acquisition. However, the number of transactions is significantly lower and the City has not yet experienced any negative impacts.

Spending authority limits should be reviewed on a regular basis to ensure they are in line with market conditions. Approval processes should also be reviewed to determine if alternate methods can be employed to reduce the time it takes to get Council approval.

Near the end of our review, we were advised that the Administration has a project underway to update the spending authority limits contained in the City Administration Bylaw. We met with representatives from the Office of the City Manager and Law Branch to determine whether there was any conflict between planned changes and our observations. All parties are in agreement with the proposed direction and we were advised that bylaw amendments will go to City Council early in 2008.

Recommendations

10. The OCA recommends that Land and Buildings:

- a. Regularly review the Land Agreement authority limits set out in the City Administration Bylaw in conjunction with the Office of the City Manager and the Law Branch to ensure they remain in line with market conditions.
- b. Review the process for obtaining Council approval for land acquisition and leasing transactions to determine whether changes can be made to reduce the risks of higher costs and lost opportunities.

Management Response and Action Plan

Accepted: The Branch will, at minimum, every 5 years review the Land Agreement authority limits as set out in the City Administration Bylaw. If the market place experiences extraordinary changes in the market values of properties then the authority limits will be reviewed sooner than the 5 year time period. Land and Buildings will consult with the Law Branch and the Office of the City Manager any request to alter the authority limits.

The Leasing Section and the Acquisition Section respectively have initiated a review of the process for obtaining Council approval for leasing and land acquisition transactions. The review will be completed by the end of March 2008. Any potential changes identified through the review will be submitted to the Office of the City Manager for consideration.

Responsible Party: Manager, Land and Buildings

3.3.3. Land Development – Industrial and Residential

City Council has approved two documents that provide direction for land development activity.

1. Edmonton's Industrial Land Strategy (approved August 2002)

The strategy was developed to help Edmonton compete for industrial development on a regional and global basis by ensuring that suitable serviced land is available to attract and accommodate growth in Edmonton's industrial areas.

The Planning and Development Department prepared a report titled "Methods and Strategies – Competitiveness of Industrial Land". The report, which includes proposed changes to the Industrial Land Strategy, is scheduled for City Council review on January 30, 2008.

2. City Policy C511, Land Development Policy (approved June 2004)

The purpose of the policy includes promoting initiatives in evolving areas of sustainability, revitalization and urban form; ensuring an ongoing supply of residential lots are available to the general public and independent small builders; and providing opportunities for affordable and/or innovative housing.

We completed a high level review of the Branch land development processes to determine the extent that they address the specific elements and direction provided in the above documents.

Based on our review, we believe the Branch processes generally address the elements of the strategy and policy statements. However, the strategy and policy provide little guidance on the reporting requirements. Some high level information on land activity is

included in budget documents; however, we believe stakeholders should be provided with sufficient information to assess the effectiveness of the strategy and the policy. The following are examples of information that would assist key stakeholders in their assessments:

- The Branch advised that they are having difficulty fully complying with requirement to maintain a minimum three-year supply of serviced industrial land. Fulfilling this requirement is heavily influenced by private sector development and the current economic conditions and real estate market.
- The policy does not provide guidelines on the amount of land activity information that should be included in the annual budget material. Detailed acquisition, development and sales information is available, but is only circulated on a request basis.

The Branch, in consultation with key stakeholders, should develop a report structure with sufficient detail that will keep City Council informed of challenges and facilitate regular assessments of the Industrial Land Strategy and Land Development Policy.

Recommendation

11. The OCA recommends that Land and Buildings enhance the reporting of the outcomes related to the Land Development Policy to increase Council's awareness of land development activity.

Management Response and Action Plan

Accepted: The Branch will be bringing forward recommendations in March 2008 as part of the Corporate Land Strategy on how to best keep Council aware of the City's land activities, not only in the area of land development, but also relative to addressing long term land requirements for civic needs. This reporting process is intended to ensure that Council is kept aware of the administration's land activities relative to Council's Strategic Direction and focus areas.

Responsible Party: Manager, Land and Buildings

4. Conclusion

Overall, Branch management is aware of and understands their operational risks and day-to-day operations appear to be well managed. However, improvements in the efficient, effective and economic delivery of service can be achieved by taking action to address the following areas of improvement.

Conservation of Building and Facility Infrastructure

Most of the Buildings and Facilities Maintenance Section work orders are being created for unplanned maintenance activities such as component failure. This is a reflection of the aging building infrastructure and increases funding for maintenance activities being

held below the annual non-residential construction price index. Aside from the funding issue, there are four key factors impacting the Branch's ability to implement a comprehensive planned maintenance process to optimize the annual investments in maintenance, repair and conservation activities and maximize the useful life of buildings and facilities:

1. Roles and responsibilities associated with life cycle planning have not been updated or clearly defined to reflect changes in organization structure and service delivery, and budgets associated with maintenance and conservation activities are not fully identified or managed by the Branch. The Branch estimates that deferred maintenance and rehabilitation activities are valued at \$44.0 million.
2. The Branch has not been able to confirm if the City investment in maintenance and conservation of its buildings and facilities is in line with industry standards as the replacement value of building and facility inventory has not been fully updated and therefore does not provide an accurate and complete accounting for the City's building inventory. Additionally, total actual expenditures on maintenance and conservation activities is not readily available.
3. Ongoing support agreements, user documentation and a formal implementation plan for the Decision Support System that supports life cycle planning are not yet in place.
4. The limited performance data currently available on maintenance activities has hindered meaningful decision making. Efforts to obtain more meaningful data are currently underway.

Determining Building and Facility Need and Usage

A long-term accommodation plan is not in place and documents guiding the delivery of accommodation services do not reflect the current environment. Rather, accommodation and facility planning is undertaken on a project by project basis. Further, the annual budget process does not provide adequate lead time to acquire, plan and construct additional accommodations approved by Council and the forecasts and business plans completed by departments do not provide sufficient information for the Branch to plan for future accommodation needs. The Branch is currently developing a long-range accommodation plan to enable more effective longer-term planning.

Land Need Identification and Acquisition

The Branch strives to acquire land for capital projects and development within established time frames at optimal cost to the City; however, efforts are focused on acquiring land to meet short-term needs. Effective planning for the City's long-term needs is not taking place with longer-term land requirements not being identified consistently nor assigned sufficient priority. The following factors are impacting the Branch's ability to increase the effectiveness and efficiency of its service delivery.

1. A comprehensive long-term land strategy defining roles and responsibilities of the Branch and other operational areas need to be clearly defined and understood. The

strategy must also include financial options to consider. The Branch plans to table a report with Council in early 2008.

2. A higher percentage of land acquisition transactions require Council approval as spending authority limits have not been reviewed since 2002.
3. The Branch's land development processes are in line with approved policies and strategies. However, limited reporting of outcomes takes place. The Branch advised that reporting guidelines will be included in the Land Strategy that is being developed.

The Office of the City Auditor thanks the management and staff of the Land and Buildings Branch for their cooperation and assistance during this audit.

Branch Audit Process

There are three phases in a branch audit: planning, fieldwork and reporting.

Planning Phase

Objective

The primary objectives for the planning phase were to gain an understanding of the programs and services and to determine:

- Whether the Branch is managing its risks to an acceptable level,
- Whether the Branch programs are being delivered in an effective, efficient, and economical manner, and
- Where there is the greatest potential to improve service delivery.

Scope

All programs, services and functions administered by the Land and Buildings Branch were included in the scope of the audit during the planning phase.

Methodology

We initially contacted the Asset Management and Public Works General Manager and the Branch Manager to discuss the project methodology and objectives. During this phase, we worked with the Branch management team to develop an understanding of its business environment, program objectives, and challenges.

To determine whether the Branch is managing its risks to an acceptable level we:

- facilitated the process with the Branch to identify and assess key business risks and the controls that exist to manage these risks,
- used the Risk Management Framework Assessment tool that is included in the City's Enterprise Risk Management model to assess the Branch risk management practices, and
- summarized our observations and discussed them with Branch management.

The assessment showed that the Branch practices are consistent with a corporate assessment completed in 2005 and that they are aware of and understand risks associated with their operations.

We surveyed all employees in the Branch to obtain their opinions on the internal control environment. The survey included ten questions covering controls such as the staff behaviour, clarity and relevance of policy/procedure, and supervision/authority to complete assigned tasks. Where responses to questions varied significantly, Branch

management has agreed to engage employees in discussions to lower the risk of employees having the wrong perception and to strengthen the control environment.

We used the results of the risk assessment and employee survey along with our observations from the review of background information to identify areas where there was the most potential for improvement.

The results from the planning phase were summarized into two categories.

- *In Scope* - Areas where we believed that we could add the greatest value. These areas were included in the project scope for the fieldwork phase and specific audit objectives and detailed audit programs were developed.
- *Out of Scope* - Areas where we believed that we would add only limited value. The following were not included in the fieldwork phase of this audit:
 - Commercial Leasing/Property Management
 - Real Estate Sales
 - Parking Services
 - Custodial Services
 - General Review of Operational Procedures

Fieldwork Phase

Methodology

The fieldwork phase of the project included completing the audit programs to address the audit objectives. Completing the audit programs included further assessment of significant risk areas, testing, and gathering evidence to satisfy the audit objectives. The activities and transactions tested in this audit were primarily from 2006 and 2007. Summary of Observation documents that present significant findings and recommendations were discussed with the Branch management prior to the end of the fieldwork phase to validate observations. Management was asked to review and respond to recommendations identified in these documents.

Reporting Phase

The third phase included disclosure and discussion of the audit results with management. From the documented results of fieldwork, we prepared a draft report that was shared with the Branch management, Department General Manager, and the City Manager. Management provided comments as to the accuracy and fairness of the report as well as provided detailed action plans and commitment dates for all accepted recommendations. We incorporated the management action plans into the final report prior to release to Members of City Council. The report is released to the public via the OCA website (<http://edmonton.ca/auditor>). We will present the report to the Audit Committee for information and discussion.