

The Need for Inventory Systems for Capital Assets

The original recommended practices were developed by the Government Finance Officers Association (GFOA). Some aspects of the practice have been revised by the Financial Management Capacity Building Committee (FMCBC) for use by Nova Scotia municipal governments. The original GFOA recommended practices are *The Need for Periodic Inventories of Tangible Capital Assets*, approved by the Committee On Canadian Issues in January 2007, and “5.2 Prepare Policies and Plans for Capital Asset Acquisition, Maintenance, Replacement, and Retirement”, approved by the National Advisory Council on State and Local Budgeting in 1998. Other sources used are footnoted in the text.

Recommendation

GFOA recommends that every local government perform a physical inventory of its tangible capital assets, either simultaneously or on a rotating basis, so that all of a local government’s tangible capital assets are physically accounted for at least once every five years. GFOA also recommends that municipalities prepare policies and plans for capital asset acquisition, maintenance, replacement, and retirement.

Purpose

The condition of capital assets affects costs and service quality within municipalities. Information obtained from an inventory system will therefore allow decision makers to integrate goals regarding service provision with budgetary priorities for capital assets.

Appropriate inventory systems are also needed to protect capital assets from the danger of loss or misuse. Information obtained from an inventory system together with policies on capital asset acquisition, maintenance, replacement, and retirement enable management and policy makers to plan for expenditures and to minimize deferred maintenance.

Background

The term “capital assets” is used to describe assets that are used in operations and that have initial useful lives extending beyond a single reporting period (one year). Capital assets may include land, buildings, building improvements, vehicles, machinery, equipment, computers, office furniture, and infrastructure.

One of the benefits of an inventory of capital assets is that it can help in the development of a capital improvement plan and in capital budgeting. A capital improvement plan

(CIP) is a multi-year plan identifying capital projects to be funded during the planning period. The CIP identifies the capital projects to be undertaken. Approval of the capital budget authorizes the following projects: the year the assets will be acquired or the project started, the amount of funds expected to be expended in each year of the CIP, and the way the expenditure will be funded. Further information on how municipalities can develop a CIP can be found in the *Local Government Resource Handbook*.¹

Information on capital assets is required as a municipality moves towards full accrual accounting for capital assets, which would include accounting for depreciation.² In addition, the Public Sector Accounting Board (PSAB) requires municipalities to report tangible capital assets. For more information on tangible capital assets, visit: http://www.psab-ccsp.ca/download.cfm?ci_id=37536&la_id=1&re_id=0.

Considerations in Policy Development

Considerations that municipalities should make when establishing and maintaining an inventory system for capital assets are also relevant when establishing a policy for smaller inventory items. Municipalities should consider the following (further explanations of to these considerations can be found in Appendix I):

- 1) Assign employee responsibilities for the inventory;
- 2) Consider different cost factors;
- 3) Establish appropriate inventory thresholds for capital assets;
- 4) Choose an appropriate inventory system;
- 5) Undertake a physical inventory and record relevant information (See Appendix II for an example of an inventory worksheet);
- 6) Establish policy on acquisition, maintenance, replacement, and retirement;
- 7) Choose appropriate technology; and
- 8) Evaluate the inventory system and policies on an ongoing basis.

Appendices

Appendix I: Considerations in Policy Development

Appendix II: Capital Inventory Worksheet

Appendix I: Considerations in Policy Development

1) Assign Employee Responsibilities for the Inventory

Employees within each department have the most knowledge of their capital assets, and responsibility for the physical inventory could be delegated to an employee in each department. Inventorying the assets should not necessarily be performed by someone with direct responsibility for the capital assets, but rather assign one department or employee to be responsible for maintaining the information in the inventory. A central coordination function should also be established. Eventual training needs for staff should also be identified and addressed.

2) Consider Different Cost Factors

The total cost of establishing inventory systems for capital assets will mainly depend on the municipality's size and the scope of services (including infrastructure) that it provides. Some of the cost factors that are directly affected by the municipality's size and the scope of services provided include³:

- Staff time allocated;
 - For both establishment of the inventory and its ongoing maintenance
- Choice of computer software; and
- Consulting services if required.

3) Establish Appropriate Inventory Thresholds for Capital Assets

It is essential to establish thresholds for capital assets included in the inventory. A threshold refers to the dollar amount used to determine whether a given capital asset should be subject to inventory or not. The benefits of choosing a particular threshold should exceed the costs.⁴

4) Choose an Appropriate Inventory System

The periodic and perpetual inventory systems are the systems most commonly used. In a periodic inventory system, a physical inventory is undertaken each month, year, or other time interval. Assets with a shorter useful life and higher maintenance requirements should be looked at more often than assets with a longer useful life and lower maintenance requirements.⁵

Perpetual inventory systems are constantly updated to reflect additions and deletions of capital assets, thus providing managers with direct access throughout the year to reliable information on capital asset accounts.

One advantage of establishing and maintaining a sound perpetual inventory system for capital assets is that such a system can relieve a municipality of the burden of performing an annual inventory of its capital assets. Maintenance of an annual

inventory system normally requires more staff time than a perpetual system. In a perpetual inventory system, managers and auditors can use tests of randomly selected items to verify that the inventory system for capital assets is continuing to function properly as designed.

5) Undertake a Physical Inventory and Record Relevant Information

When establishing an inventory system, the following two steps should be completed:

- a) *List all capital assets based on already existing information.* An assessment of existing information on capital assets should be reviewed before the physical inventory takes place.⁶ The following elements provide information on the capital assets and should be recorded (see *Appendix II* for an example worksheet):
 - *Cost.* The cost of the capital assets includes purchasing price, construction costs, and charges necessary for placing the asset in its intended location and condition for use.⁷ An estimate can be made if information on the capital asset's historical cost is missing.
 - *Cost of deferring maintenance and the useful life.* A forecast of future condition and future costs of capital assets enables decision makers to plan for large expenditures and minimize deferred maintenance.
 - *Replacement cost.* Decision makers often have to choose between repair and replacing capital assets. It is therefore valuable to compare the total cost of operating and maintaining the asset with the total cost of replacing the asset⁸ (and any operating savings that might occur).
 - *Ownership.* Determine which assets are used to carry out the different departments' activities. Ownership and valuation issues where assets are shared, loaned, or contributed from other municipal units and municipal enterprises should be addressed. Those assets not used in the department's activities should be excluded from the department's list of capital assets and considered for disposal.⁹
- b) *Verify the capital asset's physical existence and information about it.* Verify the accuracy of already existing information regarding cost, cost of deferring maintenance, replacement cost, useful life remaining, and ownership.¹⁰ Eventually, unlisted items should be verified and recorded as well.

6) Establish Policy on Acquisition, Maintenance, Replacement, and Retirement

A policy on acquisition, maintenance, replacement, and retirement of capital assets should be established to help ensure that needed capital assets or improvements receive appropriate consideration in the budget process. The older capital assets

should be considered for retirement or replacement.¹¹ It is important that those policies meet existing health and safety standards.¹² Policies on acquisition, maintenance, replacement, and retirement are necessary in order to plan for expenditures and minimize deferred maintenance. It is important to request input from staff, committee members, and senior management in the creation of the policy. Everyone involved should also be made aware of the importance of the project and why it is necessary.¹³

7) Choose Appropriate Technology

The use of software enhances consistency in record keeping of capital assets throughout different departments. There is a spectrum of software available, from more simple, commonly used programs to customized software. The time spent on tracking capital assets as they are acquired, moved, maintained, and retired can be reduced by using appropriate computer software, barcodes, and hand scanners. Modern hand scanners can store information on, for example, the capital asset's manufacturer, model, serial number, description, and current location in their memory. Costs related to the establishment of a computerized system can be significant. Some of the questions that should be asked when purchasing software package include:

- Is software provided to upload and download inventory information to specific scanning and tagging systems?
- How flexible are the rules that govern whether equipment purchases get entered automatically as asset records?
- Can the software calculate depreciation on the asset items? How hard is it to set up the depreciation rules and verify their correct operation?
- Does the system track controlled items that are not capitalized?
- Can you determine whether items get added to the inventory when they are received or when the invoice arrives?
- Can the system record warranty information, lease requirements, and maintenance schedules?¹⁴

8) Evaluate the inventory system and policies on an ongoing basis

Ongoing adjustments of inventory thresholds¹⁵ and recording procedures are normally required. Policies on acquisition, maintenance, replacement, and retirement might also need to be adjusted after conducting the first physical inventory.

The inventory system can be reviewed and improved on an ongoing or annual basis. An information system for communicating improvement suggestions should be established throughout the organization.

Appendix II: Capital Inventory Worksheet¹⁶

The following is a template that can be used when conducting an inventory of larger infrastructure.

Type of facility: _____

Name of the asset				
Description of the asset				
Identification number				
Location				
Service area				
District served				
Ownership				
Cost				
Cost of deferring maintenance				
Time plan for cost of deferring maintenance				
Useful life remaining				
Replacement cost				

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Notes

¹ Service Nova Scotia and Municipal Relations. *Local Government Resource Handbook*. Section 6.2, Part VI–Strategic Management. October 2000.

² Flood, Leonard J. “To Capitalize, or Not to Capitalize—That is the question,” *Government Finance Review* 20, no. 2 (2004): 47-49.

³ Flood, 2004.

⁴ Compare to Flood, 2004.

⁵ National Advisory Council on State and Local Budgeting, Government Officers Association. “2.2 Assess Capital Assets, and Identify Issues, Opportunities, and Challenges” *Recommended Budget Practices: A Framework for Improved State and Local Budgeting*. (1998).

⁶ Wong, Susan. “Full Speed Ahead” *CMA Magazine* 72, no. 8 (1998): 18-22.

⁷ Service Nova Scotia and Municipal Relations, October 2000.

⁸ Service Nova Scotia and Municipal Relations, October 2000.

⁹ Wong, 1998.

¹⁰ Wong, 1998.

¹¹ National Advisory Council on State and Local Budgeting, Government Officers Association. “5.2 Prepare Policies and Plans for Capital Asset Acquisition, Maintenance, Replacement, and Retirement” *Recommended Budget Practices: A Framework for Improved State and Local Budgeting*. (1998). <http://gfoa.org/services/nacslb/> (July 26, 2004).

¹² Government of Victoria. “5.1 Asset performance” *Asset Management Series: Principles Policies and Practices*. 1995.

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¹³ National Advisory Council on State and Local Budgeting 1998.

¹⁴ Adapted from Savarese, John. “Technology,” *InCircuit Development Corporation, University Business*.

http://incircuit.com/articles/university_biz.html (August 9, 2004).

¹⁵ See, for example, Flood, 2004.

¹⁶ Modification of a model created by Tighe, Patricia, Government Finance Officers Association “Inventory of Public Facilities” *Capital Improvement Programming: a Guide for Smaller Governments*. Chicago, IL: 1996.