

# New Brunswick Guide to Accounting and Reporting for Tangible Capital Assets

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## Introduction

This guide has been developed by the Department of Local Government in consultation with an advisory board made up of representatives from various local government units in New Brunswick. The guide was developed to assist the local Government unit implement the recommendations in the CICA PSAB Handbook section 3150 Tangible Capital Assets.

As you work through your project, document your decisions regarding accounting policy choices. These documents will support the disclosures in your financial statements.

## Identification of assets

To facilitate the identification and recording of assets, the Province has previously provided summary documentation and an inventory tracking model. The next step is to determine which assets should be recorded in the accounting system based upon values that represent material assets to the Municipal unit.

## Capitalization thresholds

A capitalization threshold is the minimum dollar amount that a local Government unit will identify for which it will capitalize an acquisition. If the acquisition cost is less than the amount identified, the item will be expensed. The acquisition cost includes the purchase price and all other directly attributable costs for that acquisition. There are no prescribed amounts in the CICA PSAB Handbook. The selection of the capitalization threshold should reflect what would be material for your unit and would not result in having your inventory populated with many small value items. Keep in mind that you cannot borrow for items that fall below your capitalization threshold.

There are two methods generally used to set thresholds: revenue and population.

The Department reviewed other provincial guides and revenues and population for local government units in New Brunswick in order to propose the following capitalization thresholds based on consolidated revenues:

| Revenue < \$4,000,000        | Revenue > \$4,000,000<br>and < \$14,000,000 | Revenue > \$14,000,000        |
|------------------------------|---|-------------------------------|
| Minimum Threshold<br>\$2,500 | Minimum Threshold<br>\$5,000                | Minimum Threshold<br>\$10,000 |

These are suggested minimum thresholds only. Each local Government unit can decide to use a larger threshold if it wishes.

## Asset pools

Each unit may have a large number of assets that fall below its capitalization threshold which, taken together, will be worth a material amount. To omit them from the asset valuation will result in a significant or material understatement of the unit's net worth. Typical examples would be:

- desktop computers and laptops;
- servers;
- fire hydrants;
- utility poles and street lights;
- firemen's uniforms;

- benches and other park and street furniture;
- utility meters (water, gas, electricity, etc.);
- office furniture; etc.

Assuming that someone tracks the individual items, these assets can be treated as a pool, to be valued and amortized as a pool for asset accounting purposes. They would, therefore, be regarded and identified as a single asset, with acquisitions and disposals adding to and diminishing the asset pool respectively. Details of what assets are actually included in the pool can be obtained from the asset management system, as required. The key is that someone else is maintaining the detailed data for operational purposes, and that pooling the items will not diminish the value and integrity of the accounting and financial information.

## **Asset classes**

To comply with the CICA PSAB Handbook, the local government unit will be required to report its tangible capital assets within their functional area. It is recommended that within each functional area, the asset be broken down by asset type. The Department has reviewed recommended presentations for local governments across Canada and has developed suggested asset classes for use in New Brunswick.

Please see Appendix A for the recommended asset classes.

Costing assets

## **Costing Methods**

### **Historical Cost**

Historical cost is the actual price paid when an asset is acquired. PS3150 is quite specific that this is to be the basis for costing tangible capital assets.

Section 3150.10 further defines the cost of a tangible capital asset to include the purchase price of the asset and other acquisition costs, such as installation costs, design and engineering fees, legal fees, survey costs, site preparation costs, freight charges, transportation insurance costs and duties. The cost of a constructed asset would normally include direct construction or development costs (such as materials and labor) and overhead costs directly attributable to the construction or development activity.

PSAB recommends using historical cost.

While the use of historical cost will be easy for newer assets, what do you do for older assets having limited or no purchase records? In short, you estimate. Section 3150 offers no guidance other than that a consistent method be used, unless an alternative method will yield a more realistic or reliable valuation for a specific asset. The following are alternative methods for use when historical cost is not available.

### **Deflated Reproduction Cost**

This assumes that you can buy or reproduce the asset today in its same physical form, with the same materials, design and technology. Today's price or cost is then deflated back to the year of the asset's acquisition, to come up with an approximate historical

cost. This deflated reproduction cost will be amortized to produce the net asset value for reporting in the financial statements.

An example of this might be estimating the cost when the installation techniques have not changed substantially in the past number of years. For instance, the construction of municipal buildings has not changed dramatically over the past number of years and the substantially the same materials and design would be used today as 10 years ago.

### **Deflated Replacement Cost**

This assumes that you can replace the asset today in a different physical form, but with the same productive capacity or offering the same or similar level of service. Today's price or cost is then deflated back to the year of the asset's acquisition of the asset to produce the approximate historical cost.

An example might be estimating the cost when the operations of an item have improved considerably in the past number of years, though the function and capacity might not have changed at all. For instance, a government would not replace a wooden water main with another wooden water main, but with a water main constructed of current materials such as concrete or PVC.

### **Deflated Appraisal Cost**

This method uses a professional assessment of what it would cost to replace the asset today. Today's price or value is then deflated back to the year of the asset's acquisition to produce the approximate historical cost. This is probably most useful for land and buildings. At the same time, it must be recognized that every real estate value reflects the state of the real estate market at a certain place and a certain time and, while the overall historical trend in valuations is similar, real estate values definitely do not mirror any standard index like the CPI in the short term.

### **Deflated Insurance Costs**

An alternative to using an appraiser would be to use your insurance replacement values for today's values, depending on when you had your insurance values reviewed, and deflate back to year of acquisition. It should be noted that you should talk to your auditors before using your insurance values.

### **Deflation Rates**

There are various indices that can be used to deflate costs back to the year of acquisition. The Municipal Officers' Association of Ontario (MFOA) and Association of Municipal Managers, Clerks and Treasurers of Ontario (AMCTO) released a Deflator Study to help municipalities estimate original costs as part of the exercise to comply with PS 3150. <http://www.amtco/wb3/db2file.asp?filed=20876>.

Listed below are their two recommendations:

#### **1) Consumer Price Index (CPI)**

The Consumer Price Index is readily available and easily understood. You cannot go wrong using CPI for deflating present day values back to the year of acquisition.

An inflation calculator can be found at :

[http://www.bankofcanada.ca/en/rates/inflation\\_calc.html](http://www.bankofcanada.ca/en/rates/inflation_calc.html)

## **2) Non-residential Building Construction Price Index (NRBCRI) assets**

The NRBCRI can be used to discount the cost of constructed assets for any one year to arrive at a reasonable estimate of the construction costs for any given year before that.

See Appendix B for deflation rates for this method.

It should be noted that copies of all supporting documentation and calculations for the costing of Tangible Capital Assets must be kept as the auditors will need this information to verify the opening Tangible Capital Asset balances.

If no value can be determined, following the accounting principal of conservatism would prevail, and the asset would be recorded at a nominal value.

### **Contributed/Donated Assets**

Local governments may receive contributions of tangible capital assets. For example, tangible capital assets may be transferred from senior levels of government at no or nominal cost. Frequently, development agreements require developers to provide tangible capital assets such as roads, sidewalks and street lighting.

Donated or contributed assets meet the criteria for recognition as tangible capital assets because they embody an expected future economic benefit that a local government will control. The past transaction or event that allows the local government control of the economic benefit is the transfer of the asset. As with a purchased asset, the cost of using a contributed asset over time should be reported in the financial statements. Recording donated or contributed assets will provide complete information about the cost of services and enhance comparability of financial results both within and among local governments and ensure taxpayers understand the full cost of services being provided.

The difficulty with donated or contributed assets is determining the appropriate value at which to record them. Section 3150 states that the cost of a donated or contributed asset is considered equal to its fair value at the date of contribution. Fair value is the amount of the consideration that would be agreed on in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act. Given the nature of some tangible capital assets, there may not be an active market for them. Section 3150 states that fair value of a contributed tangible capital asset may be estimated using market or appraisal values. In some circumstances, cost may be determined by an estimate of replacement cost. In unusual circumstances, where it is impossible to estimate its fair value, the tangible capital asset would be recognized at nominal value.

Where a contribution involves "bundled" assets, a cost must be allocated to each individual asset. For example, the roadways, curbs and gutters, street lighting and sidewalks contributed by a developer may include land. It is important that the land component be identified and accounted for because it is typically not subject to amortization.

## Components

Asset division is the subdividing of an asset into components, processes, parts, areas or segments. A sewage treatment plant or a water filtration plant may be considered as a single asset or disaggregated as seems appropriate.

Asset aggregation is the combining of what might be identified as several assets into a single one. An example of this would be an arterial road in an urban area. Besides the traffic lanes, it may have a median strip, gutters, sidewalks, boulevard strips, drains, protective barriers, etc. While you can treat each as a separate asset, they may be just as easily combined into a single asset, say "4- lane urban road," as the various elements are often constructed together.

Similarly, do you separate valves and chambers from pipes in a water system, or even treat the entire network as a single asset? Recording the network as a single asset may well be unmanageable, as replacement and upgrading will be done for specific segments and components. Future revaluations will have to be based on isolating the specific components of the network. The auditors will likely not approve of this approach either, because the valuation will be almost impossible to audit.

Networks, roads and utilities present an interesting challenge in terms of how to record them and what to include. The most common approach is to treat them as being made up of segments or blocks, with each component being a portion between two junctions, or a terminal line. This is commonly how they are built, maintained and replaced, whether singly or as a group. If such segments are accounted for individually, accounting records can be reconciled to operating records, where they exist, and the data record for each segment can note what extras may be present, such as hydrants, valves and chambers. Alternatively, these extras could be treated as pooled assets and accounted for separately from the segments where they are located.

Treating a major plant as a single asset does not make sense, as the accounting treatment for land, buildings, equipment, pipe and conduits and tanks will all be different, due to their different life expectancies and resulting amortization rates. Treating the aforementioned utility network as a single asset also does not make sense, as it will deteriorate and need replacing in different segments at different times. Note also that the replacement of a segment or component will be considered maintenance and will have to be expensed if it does not add to the service capacity or service life of the single consolidated asset.

If an operating unit has an asset management system in place, it may be most practical to use that set-up, so that if it identifies components within a plant for operational purposes, it would be useful to parallel that breakdown on the accounting side, bearing in mind that land will always likely be missing, since it does not require ongoing maintenance. This way, accounting can support operations with suitably segmented cost information, just as operations can support accounting by maintaining readily usable asset data.

If your source data is disaggregated, it would be preferable to leave it that way, and roll up or summarize it for reporting purposes unless the disaggregated records are very large in number. In that case, you will probably want to pool them.

## Useful life

As a general rule, expected useful life is the shortest of an asset's physical, technological, commercial and legal life. An asset's useful life is based on its use by the local government.

Section 3150 does not provide specific guidance in this regard as it is not possible to authoritatively predetermine the useful lives of assets. In determining an asset's estimated useful life, a local Government should consider its present condition, intended use, construction type and maintenance policy. It should also consider how long the asset is expected to meet service and technology demands. Useful lives should be based on the local government's own experience and plans for the assets.

For example, a local Government may pave a vacant property to provide surface parking to the downtown core. The parking lot and equipment may physically be capable of providing service for 10 years but the local government expects to redevelop the property in five years to provide affordable housing to citizens. In this case, the expected future usage of the parking lot is five years. Therefore the cost, less any residual value, should be amortized over the five years.

Factors to be considered in estimating the useful life of a tangible capital asset include:

- expected future usage;
- effects of technological obsolescence;
- expected wear and tear from use or the passage of time;
- the maintenance program;
- geological conditions;
- capacity versus actual usage;
- studies of similar items retired;
- changes in demand for services; and
- condition of existing comparable items.

The deferral of maintenance can shorten an asset's estimated useful life. For example, deferral of annual pavement crack filing programs could allow water to infiltrate the road bed, causing deterioration and shortening of the life of the road.

Many long-lived assets, such as water mains and pipes, often need replacing well within their physical life due to road repairs, corrosion and basic weather conditions. All of these factors need to be considered when determining the estimated useful life of infrastructure.

The Department has reviewed recommendations for local governments across Canada and has developed a listing of suggested useful lives for use in New Brunswick. Please refer to Appendix A.

## **Amortization methods**

Amortization treats the effective utilization and reduction in value of a capital asset as an expense during the course of a year's operations. It means writing off of the cost of the capital asset over its expected life span. Accumulated amortization will have to be calculated for existing assets in order to obtain a net book value that takes usage to date into account.

There are three common methods of amortization:

### **Straight-line amortization**

This is based on the idea that an asset deteriorates at a constant rate over its useful life. It is the easiest method to understand and apply. Straight-line amortization also results in a constant, as opposed to fluctuating, amortization expense over time, levelling the amortization expense over the expected useful life of the asset. If you base the asset valuation on amortized historical cost, which will be much lower than replacement cost for older assets, using this method won't yield much different numbers than a more complex amortization method.

### **Usage based amortization**

Some assets are guaranteed or warranted for so many hours of service, or to handle a specific volume of units. This method assumes that an asset deteriorates on the basis of traffic or usage or of hours of service. This method requires that the upset limit be specified up front, and that the monthly or annual usage be accurately measured and logged. Except for an asset on standby, this probably would not yield a materially different annual amortization expense than using straight-line amortization.

### **Declining-balance amortization**

Some assets deteriorate or lose value rapidly at first, and then the rate of deterioration slows down. Automobiles and other vehicles are perfect examples of this. This method, mandated by the Canada Revenue Agency for all classes of assets, assumes that the asset deteriorates each year by a certain percentage of the value at year end of the previous year.

### **The Department recommends using the straight-line method.**

Other items to consider:

- Residual value

A key question in calculating amortization is whether an asset will have a residual value when it is disposed of. What would a willing buyer pay for the used asset? If it can be sold, the amortization expense should theoretically cover only the buy/sell price spread rather than the total cost.

The reality is that municipalities typically drive their assets into the ground. Buildings are demolished and rebuilt. Roads are torn up and repaved. Sewer and water pipes are dug up and replaced. Vehicles and movable equipment are worn out and then go to auction. Whatever is demolished, torn up or sent to a dump or recycler clearly is a total write-off, with no residual value at all. What goes to auction or to a willing buyer generates cash or possibly an allowance off of the price of new assets. Since this will depend on the condition of the asset, the residual value will not be known until it can be sold. Thus, at time of acquisition, residual value is an unknown quantity and will most likely be less than 10% of the purchase price. For simplicity, it is suggested that residual value be ignored or deemed to be zero when calculating the amortization expense for any asset.

Although the PSAB guidelines talk about allowing for residual values, ignoring them is less likely to result in asset values being overstated and annual amortization expense being understated than the other way around.

### **Timing of amortization charges**

Amortization can be calculated and charged against the appropriate operating accounts on a monthly basis. This would provide a relatively even expenditure stream throughout the year, which may be preferred for more balanced financial reporting. If you have an asset accounting or fixed assets module as part of your accounting system, this is quite a straight-forward procedure. Simply capture acquisitions and disposals in your accounting system and/or asset inventory system in the month in which they occur, so that next month's amortization expense allocations are accurate. The month of acquisition should be part of the data on the asset record.

The other approach is to charge amortization expense annually, either at the beginning of the year or at year end. In this case, monthly updating and capturing month of acquisition is not so critical, as you will deem all acquisitions and dispositions to occur on July 1. Thus, amortization will be calculated at 50% of the normal rate for assets for their first or last year of service. Again, asset accounting systems can handle the arithmetic for you. The choice here is yours. Choose the approach that will work best for your local Government unit.

### **Other asset issues**

#### **Works of art/historical treasures**

Works of art and historical treasures would not be recognized as tangible capital assets under PS 3150. It is not possible to estimate the future economic benefits associated with such property. It is normally the intention of local governments to maintain and preserve them indefinitely because of their unique historical and cultural attributes. In many cases, it is not even possible to put a value on these types of assets – they are priceless. While some art work and historical treasures can be duplicated, they cannot be replaced. Duplicates would rarely have the same intrinsic value as the original. The existence of such property should be disclosed in the notes to the financial statements. Expenditures for preservation, cleaning and restoration that are implicit with works of art and historical treasures should be expensed in the period incurred.

#### **Leased assets**

In some circumstances, municipalities decide to lease tangible capital assets, rather than acquire them outright. Typical examples are automobiles and computer systems. These are leased for a set number of years and may be returned at the end of the lease term or retained with transfer of ownership to the municipality.

Leases fall into two general categories – operating and capital. An operating lease is one where the lessor agrees to give the lessee access to and the use of an asset for a set period of time, in return for an agreed-upon schedule of payments. While the lessee has responsibility for the asset over the term of the lease, and may have to maintain the asset at his/her expense, the lessee has no control over the asset at any point in time, other than to be able to use it. A good example of such a lease is one for occupying an apartment or office space. If an asset is held on an operating lease, it does not have to

be reported and included in your asset inventory when accounting for capital assets, because you do not own it or control it. You only have access to the use of it.

If the asset is held on what would be deemed to be a capital lease, it must be included in the asset inventory. A capital lease has the economic characteristics of asset ownership. CICA's Public Sector Guideline 2 (PSG 2.5) indicates that this occurs when one or more of the following conditions are present at the inception of the lease:

- There is reasonable assurance that you will obtain ownership of the leased property by the end of the leased term, either for a nominal amount or through a bargain purchase option, or simply by implication.
- The lease term is of such duration that your municipality will receive substantially all of the economic benefits expected to be derived from the use of the leased property over its life span. "Substantially all" is deemed to be 75% or more of the total economic benefits.
- The lessor is assured of recovering the investment in the leased property and of earning a return on the investment as a result of the lease agreement. This condition exists if the present value, at the beginning of the lease term, of the minimum lease payments, excluding any portion thereof relating to executory costs, is equal to substantially all (usually 90% or more) of the fair value of the leased property, at the inception of the lease.

The following factors should also be considered as indicative of a capital lease, even if the above three conditions are not identifiably present (PSG 2.10):

- Ownership – the asset provides an essential service for which there is no practical alternative use or lessee.
- Financing – you contribute significant financial assistance toward the cost of acquiring or constructing the property to be leased.
- Control of the asset – you have significant control over the idle capacity of the leased asset.
- Residual risk or benefit – you face significant penalties for early termination or you share in any residual loss or gain on the leased property, or the lessor has the option to transfer the leased property to your municipality at the end of the lease (the "walk-away" clause).
- Operating risk – your municipality is responsible for the performance, availability and/or maintenance of the leased asset, and may otherwise be subject to penalties.
- Business risk – you bear significant future cost increases, such as a CPI escalator.
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- Construction risk – you bear the financial or other implications of cost and time overruns caused by events outside of your control.
- Demand risk – you pay for the capacity, regardless of whether it is needed or not.
- Other potential risks – you are responsible for the asset’s obsolescence, environmental liability, uninsured damage or condemnation, etc.

A capital lease gives the lessee a de facto ownership interest or control over the asset, which meets the criteria of PS3150 for requiring the leased asset to be included in your asset inventory.

The appropriate treatment of leased tangible capital assets is documented in detail in CICA’s Public Sector Guideline 2 (PSG 2).

### **Betterments**

The cost of an asset will also include subsequent expenditures for “betterments.” Betterment is a cost incurred to enhance the service potential of a tangible capital asset. In general, for tangible capital assets service potential is enhanced:

- when there is an increase in the previously assessed physical output or service capacity;
- where associated operating costs are lowered;
- the useful life of the property is extended; or
- the quality of the output is improved.

Any other expenditure would be considered a repair or maintenance and expensed in the period.

For complex, long-lived network systems, it is more difficult to distinguish between maintenance and betterment. It is not always practical to determine whether an expenditure will or will not extend an asset’s useful life. The following basic distinctions can be used:

- Maintenance and repairs maintain the predetermined service potential of a tangible capital asset for a given useful life. Such expenditures are charged in the accounting period in which they are made.
- Betterments increase service potential (and may or may not increase the remaining useful life of the tangible capital asset). Such expenditures would be included in the cost of the related asset.

Whether a local government accounts on a single asset or component basis can also have an impact on the treatment of a subsequent expenditure. For example, if a local government accounts on a single asset basis for road systems, expenditures to widen the roads or add to the number of lanes expand the capacity of the road system are

clearly betterments. Expenditures on annual resurfacing programs or crack filling incurred to maintain the originally anticipated service potential of a road, or its estimated useful life, are more in the nature of maintenance (e.g., resurfacing). On the other hand, if the road system is accounted for on a component basis, where the pavement is a separate component, the expenditures on resurfacing would be treated as a betterment and the replaced pavement would be accounted for as a disposal and removed from the asset register.

## **Disposals**

Disposals of tangible capital assets in the accounting period may occur by sale, trade-in, destruction, loss or abandonment. Such disposals represent a reduction in a local Government's investment in tangible capital assets.

When a tangible capital asset is disposed of, the cost and accumulated amortization are removed from the accounts. Any difference between net proceeds and the carrying amount of the asset is accounted for as a revenue or expense in the statement of operations. The value given for a trade-in is the net proceeds on disposal.

When a component of a complex network is replaced, the removal from service of the old asset is treated as a disposal. For example, if a section of a road is resurfaced, the cost and accumulated amortization of the old pavement is removed from the accounts. The difference between the salvage value and the carrying amount, if any, is reported as revenue or expense.