

Tangible Capital Assets

PSAB Implementation

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Presentation Overview

- Background
- Identify & List your TCA
- Determine the value of your TCA
- Amortize your assets
- Your Auditor's Role
- Opening Balances
- Additions & Disposals
- Financial Statement Presentation
- Presentation & Disclosure
- Accounting Policies

Background

Current financial statements DO NOT provide information about the nature and age of a municipality's Tangible Capital Assets (TCA)



Background - *new rules*



**THIS IS ABOUT
TO CHANGE...**



**Change is
good,
Donkey.**

Background - *new rules*

- The Public Sector Accounting Board (PSAB) has issued new standards that will come into effect for fiscal years starting January 1, 2009.
- PSAB 3150 requires that local governments record their TCA on the statement of financial position (i.e. balance sheet) and amortize them over their useful life.



Background...*But WHY?*

Why should municipalities do this?



- Lack of knowledge about the costs of using assets and fully maintaining them limits a council's ability to:
 - make important financial decisions, or
 - know if existing financing policies are appropriate and adequate.

Background – *the benefits*

BENEFITS associated with having better information with regards to the stock of infrastructure:

Provides an inventory against which maintenance, renewals, replacement, financing and rate setting decisions can be evaluated

Allows a common basis for measurement, which provides for enhanced comparability

Starting point for evaluating the condition of infrastructure on a regular basis & highlighting changes in its condition over time

Background - *more benefits*

Provides an understanding of total service costs

Establishes full cost service fees and charges

Provides base to establish full cost budgets and conduct variance analysis

Improves accountability for allocation and use of resources

Background - *Infrastructure Deficit*

For the past several years there has been continued discussion on the Canadian infrastructure deficit.



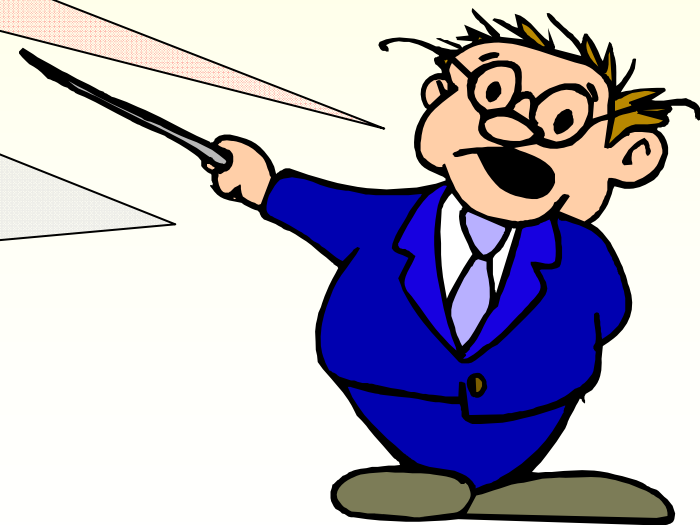
**What's the
Infrastructure
Deficit?**



Background - *Infrastructure Deficit*

It's the concept that our federal, provincial and municipal assets are wearing out at a faster rate than they're being replaced.

It has been estimated that it would cost as much as \$120 billion to upgrade all infrastructure assets in Canada to an acceptable condition.



Background - *Infrastructure Deficit*

• The goals of PS 3150 are to:

- Quantify the infrastructure deficit, and
- Permit municipalities to develop capital investment plans that will allow them to achieve and maintain community sustainability.

• To achieve this, effective January 1st, 2009:

- All municipalities in Canada will have to record and report on all Capital Assets that they control.

Background - *Infrastructure Deficit*

In the past, all levels of government could ignore asset replacement.
Why? ...Keep tax rates down.

The result of this policy?

...a general deterioration of all capital assets and government's financial position.

The effect at the municipal level?

...pushing the financial implications of capital asset replacement requirements on to future councils and taxpayers.

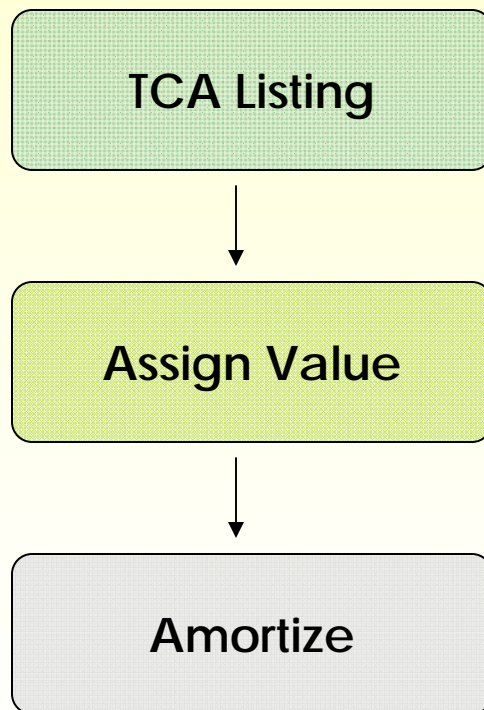
So now what?

- Take the time to PLAN your project.
- Be aware of project timelines:
 - **June to September:** Identify TCA
 - **September 30:** Complete TCA Listing
 - **December 1:** Complete TCA Valuation
 - **December 31:** Complete TCA Opening Balances
- Talk to your auditors – this will help avoid problems down the road.
- Establish a work plan.



What's the Big Picture?

Steps to Implementation



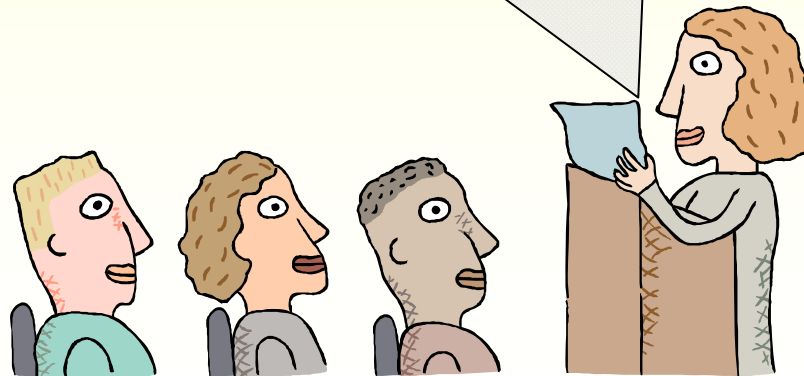
Considerations

- Classification, division of assets
- Estimated useful life
- Capitalization Threshold

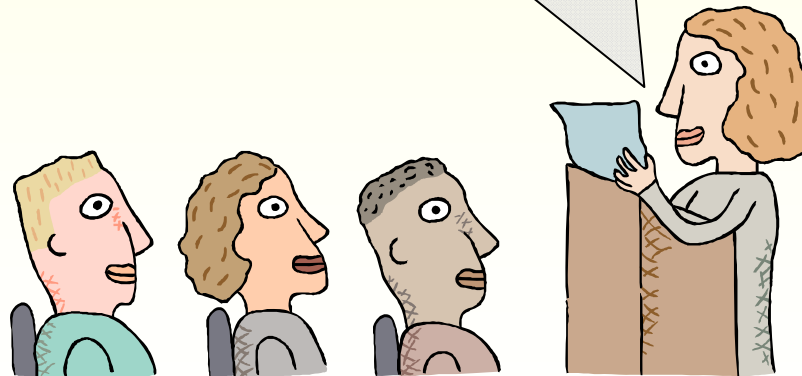
- Historical cost
- Replacement cost
- Appraisal Value
- Nominal Value

- Straight-Line

Before moving on, we
should answer one
very important
question...



What are
**TANGIBLE
CAPITAL
ASSETS?**



What are Tangible Capital Assets?

Non-financial assets having physical substance that...

Have useful lives extending beyond an accounting period

Are to be used on a continuing basis

TCA

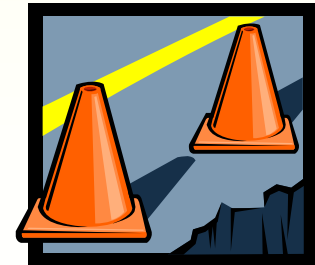
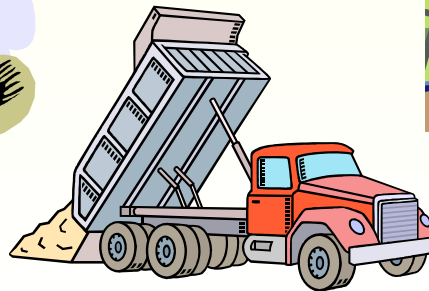
Are not for sale in the ordinary course of operations

Are held for use:

- In production of goods and services
- For rental to others
- For administrative purposes
- For the development, construction, maintenance & repair of other TCA

Tangible Capital Asset (TCA)

- 📍 **Tangible** – can be touched...*substance*
- 📍 **Capital** – lasts over time...*sustainable*
- 📍 **Asset** – has measurable value...*to the public or the municipality*



What's included...what's not?



INCLUDED

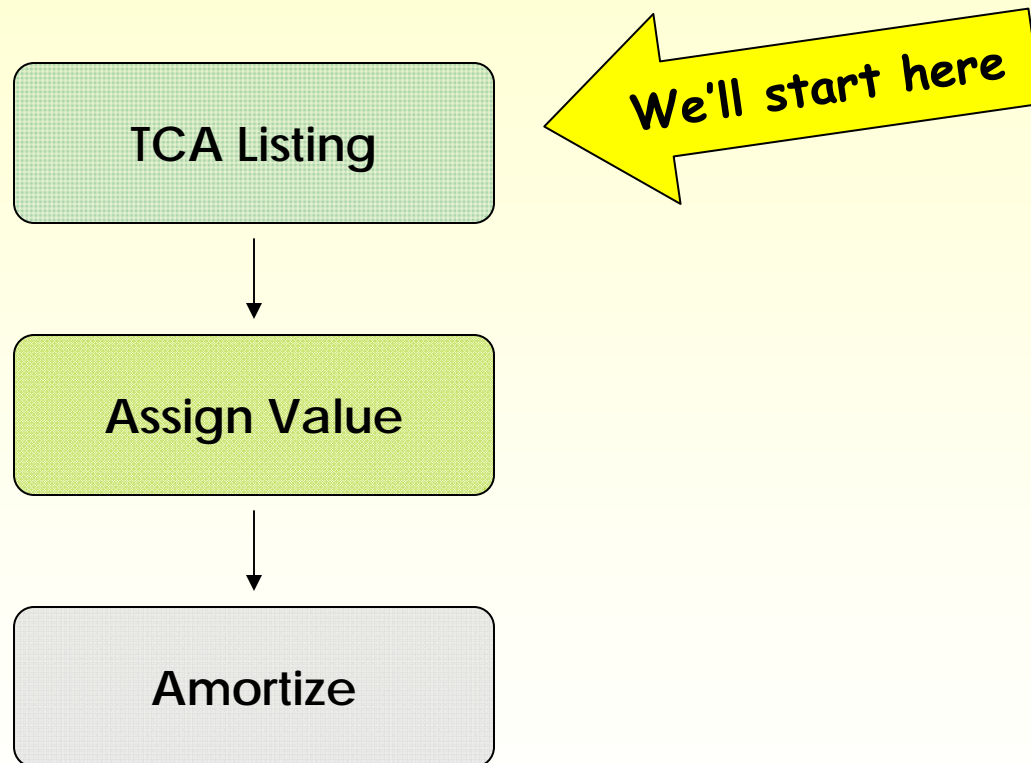
- Computers
- Computer Software
- Furniture & Fixtures
- Equipment & Vehicles
- Buildings
- Land
- Roads
- Bridges
- Water & Sewer Systems
- Dams & Canals
- Waste Management Facilities



NOT INCLUDED

- Intangible Assets (e.g. copyrights, goodwill)
- Natural Resources
- Crown Lands that have not been purchased by the municipality
- Land held for resale
- Works of art & historical treasures worth preserving perpetually

Remember the big picture?



Let's Identify Your Assets

What are you going to have to deal with?



The first step is to take an inventory and locate what TCA you own.

A computer..?

A pick-up truck..?

A bridge..?

A fire hydrant..?

TCA Listing

Appendix 1 of the Reference Manual provides a template that has been designed to help you in the process of identifying and recording relevant information about your TCA.

(see after page 29)

TCA Listing – *reminder*

Important
DATE!

Your TCA Listing
must be
completed by
September 30,
2008

TCA Listing – Appendix 1

Location: _____

Sheet # _____

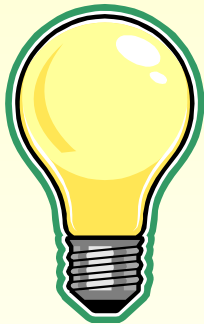
Asset #	Asset Description	Class	Year acquired	Useful Life (yrs)	Betterments since acquisition (Y/N)	Date of betterment	Residual Value (\$)

TCA Listing

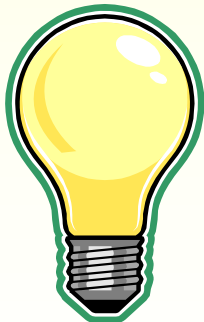
What info do you need to collect or look for?

- Description of each asset
- Asset category, or class
- Year of acquisition
- Expected useful life at time of acquisition
- Significant improvements made since acquisition
- Date of improvement; useful life of improvement
- Estimated residual value, if any, on disposal

TCA Listing



As you identify and document each asset, try to obtain appropriate cost data at the same time. This may save you from having to revisit your data sources to get this info later.



Talk to your auditor. Involve them early on.

TCA Listing – *asset classes*

- @ An asset class is a grouping of TCA that are similar in nature and useful life
- @ Examples:
 - *'vehicles'*
 - *'furniture & fixtures'*
 - *'machinery & equipment'*
- @ Appendix 2 in the Reference Manual provides an extensive list of asset classes with descriptions. These will help you identify your TCA.

TCA Listing – *asset classes*

Here is a sample asset class and description from Appendix 2.

Asset Class	Description / Notes
Vehicles	<ul style="list-style-type: none">▪ Automobiles, vans, light trucks (1 ton & under), trailers, motorcycles, snowmobiles, ambulance, law enforcement vehicles, animal control vehicles, ice resurfacing machines, bus, mini bus, ATV▪ Watercraft: motor boat, zodiac, tour boats, seadoos.

TCA Listing – *year of acquisition*

- @ It may not be possible to remember exactly when your municipality acquired the TCA.
- @ You may need to search the General Ledger details to find this information.
- @ Remember that if an asset is well beyond its useful life, you don't need to determine the acquisition date.

TCA Listing – *useful life*

- @ Useful life is the estimate of:
 - the period over which a local government expects to use a TCA, or
 - the number of production or similar units that it can obtain from the TCA

- @ The life of a TCA may extend beyond its useful life

- @ Other than land, the life of a TCA is finite and is normally the shortest of the physical, technological, commercial, or legal life

TCA Listing – *useful life*

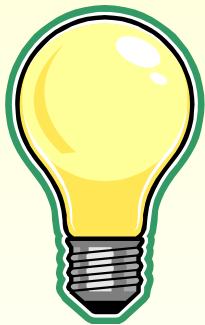
- Appendix 2 of the Reference Manual indicates the useful life for each asset class (see column called ‘amortization rate’).
- It is recommended that municipalities not use a useful life greater than the maximum in Appendix 2.
- In some cases, the maximum useful life is set at one number (e.g. road grade – 30 yrs), while in others, a range has been provided (e.g. bridges – 30 to 50 years)

TCA Listing – *useful life*

Here are sample useful lives taken from Appendix 2:

Asset Class	Amortization Rate
Dams and Water Structures	25 to 50 years
Machinery and Equipment	15 years
Buildings – Wood Frame	25 years

TCA Listing – *useful life*



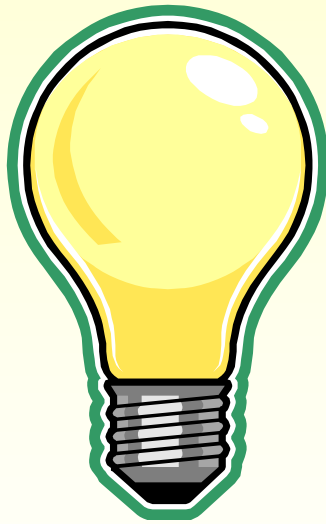
Don't go too far back when searching through the accounting records for TCA.

The useful life of an asset will tell you how far back you need to go to identify possible TCA value at December 31, 2007.

Examples:

- Vehicles (useful life = 5yrs) – *Jan. 1/03*
- Machinery & Equipment (10 yrs) – *Jan. 1/98*
- Computer hardware & software (4 yrs) – *Jan. 1/04*
- Road construction & maintenance equipment (15 yrs) – *Jan. 1/93*

TCA Listing – *useful life*



- **BUT**, this does not mean that it's OK to ignore assets that have exceeded their useful lives.
- **Records of these assets are still required.** If they are fully amortized (i.e. exceeded their useful lives), they can be recorded at a nominal value.

TCA Listing – *capitalization thresholds*

- In theory, any asset that meets the definition of a TCA should be capitalized.

Consider the stapler
on your desk. →

By definition, it's a TCA.



TCA Listing – *capitalization thresholds*

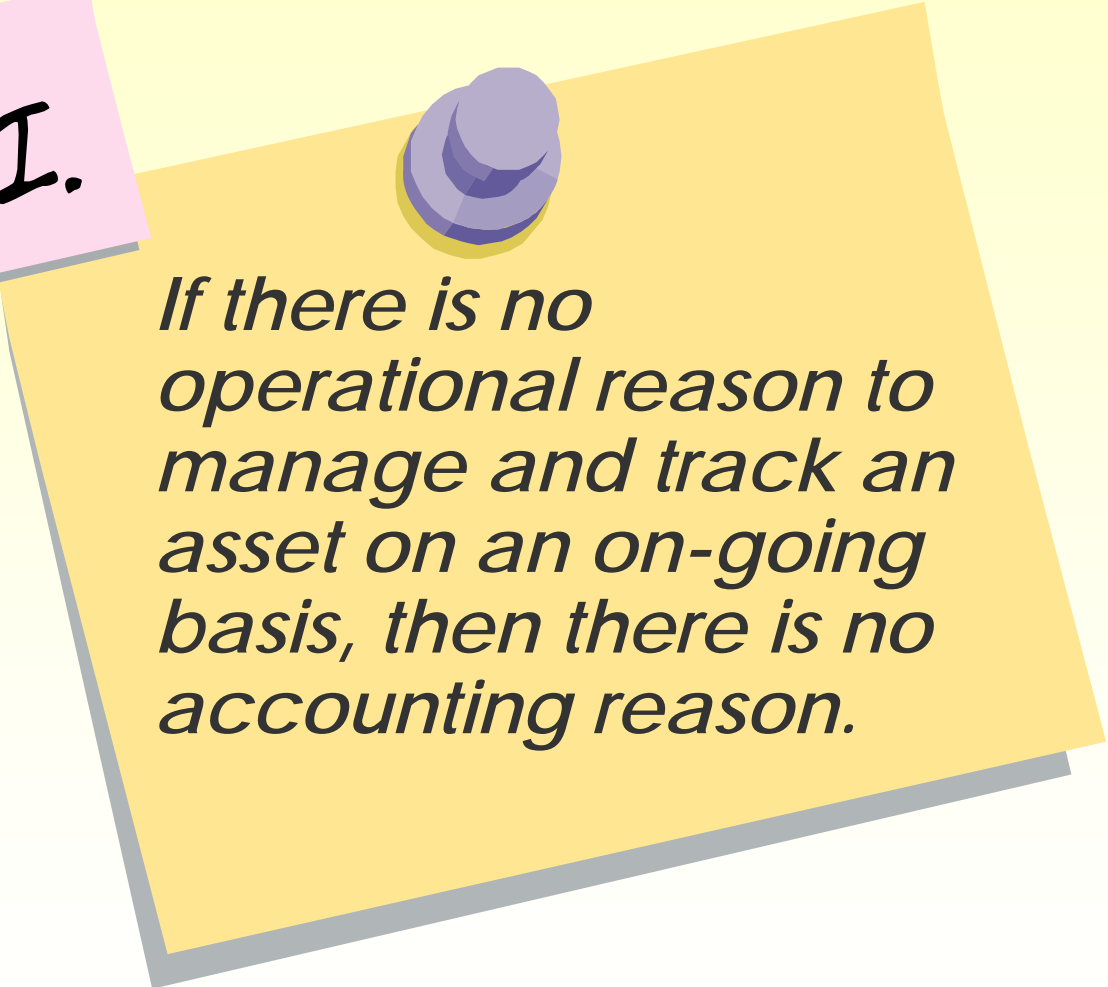


In practice, would you want to go to all the effort and expense of tracking, documenting, and reporting assets that have as small a value as a stapler?

The answer is NO!!



F.Y.I.



If there is no operational reason to manage and track an asset on an on-going basis, then there is no accounting reason.

TCA Listing – *capitalization thresholds*

So, when you're developing your **TCA list**, you will need a mechanism to make this exercise manageable and realistic – by focusing on what is **material** and significant.



TCA Listing – *capitalization thresholds*

- The **capitalization threshold** is such a mechanism.
 - defines the minimum dollar level a municipality will use to determine which expenditures will be capitalized as assets and amortized and which expenditures will be treated as current year expense.

TCA Listing – *capitalization thresholds*

- Items whose original cost or value is above the threshold are capitalized as assets.


Above
threshold=
CAPITALIZED

————— threshold

- Items whose value is below the threshold are expensed.

Below
threshold =
EXPENSED

TCA Listing – *thresholds & materiality*



Setting a high threshold value will make life easier by reducing the number of items in your TCA listing.

- But **be careful**: this may result in a large number of assets not being included in the TCA listing, and not being reported in your financial statements.
- Your auditor may deem the amount to be significant, and say that your valuation is **materially misstated**.

TCA Listing – *thresholds & materiality*



Materiality has 2 connotations:

- The general one
- The one that applies to financial statements

TCA Listing – *thresholds & materiality*

Materiality – the general idea...

- Becomes a judgment call as to whether something is worth bothering with or not.



Remember the stapler?

- The cost of tracking their numbers, location, and condition would outweigh the benefits – so they are **immaterial** in terms of managing them as assets.
- This is a cost of doing business, and is expensed in the Statement of Operations.

TCA Listing – *thresholds & materiality*

Materiality & financial statements...

- Your auditor's concern with materiality is to ensure that you have not omitted something that, were it to be included, might affect the decisions that a reader of your financial statements might make.
- If statements do not include an item deemed to be material, auditors will issue a qualified opinion, identifying the problem.

TCA Listing – *thresholds & materiality*

SO, what's the bottom line?

- The proper capitalization threshold is a balance between the:
 - Accurate presentation of results
 - Cost of acquiring & maintaining the accounting records



TCA Listing – *thresholds & materiality*

- ❖ Removing **immaterial** TCA from your listing will save you time and effort when you obtain the cost information.
- ❖ Thresholds for your initial listing at December 31, 2007 should be the same thresholds that you use for future additions in 2008 and beyond



TCA Listing – *thresholds & materiality*

- Appendix 2 lists the recommended thresholds for each asset class
- Two recommended threshold levels for each class:
 - Populations < 1,000
 - Populations > 1,000
- All municipalities should use the recommended threshold levels in Appendix 2

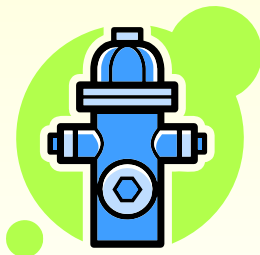
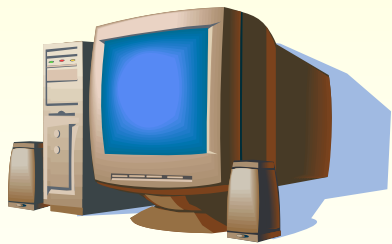
TCA Listing – *thresholds & materiality*

Here are some sample Capitalization Thresholds taken from **Appendix 2**.

Asset Class	Threshold – Pop. < 1000	Threshold – Pop. > 1000
Land Improvements	\$5,000	\$5,000
Vehicles	\$2,500	\$5,000
Road Grade	\$10,000	\$25,000

TCA Listing – *asset pools*

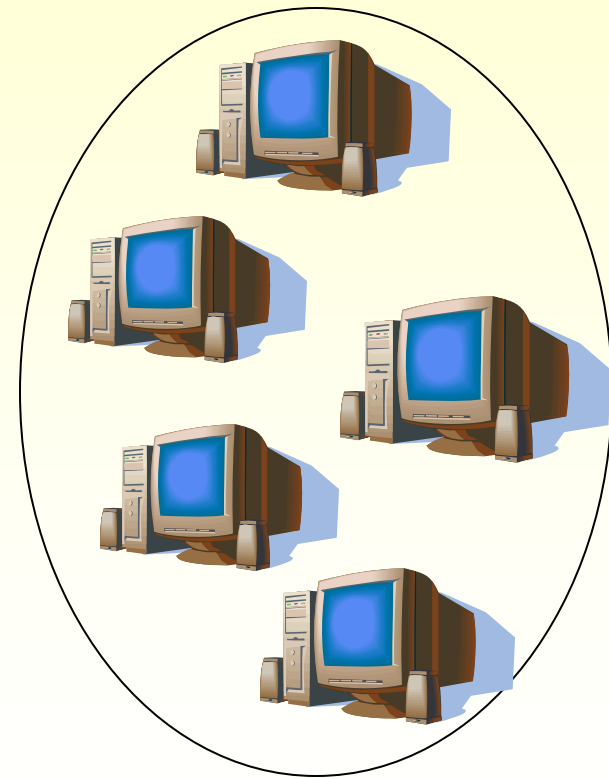
You may have a large number of assets that fall below your capitalization threshold, which, taken together, will be worth a material amount.



To omit them from your TCA listing will result in a significant or material understatement of your municipality's net worth.

TCA Listing – *asset pools*

- Solution: consider using an **asset pool**.
- This approach groups a large number of small assets and accounts for them as though they are a **single asset**
 - Single or average life expectancy
 - Single amortization rate
- Acquisitions and disposals would add to and diminish the pool respectively



TCA Listing – *asset pools*

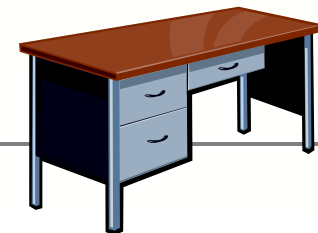
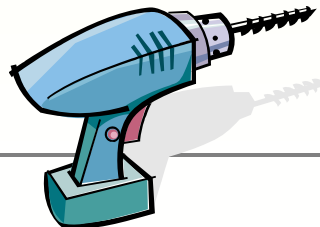
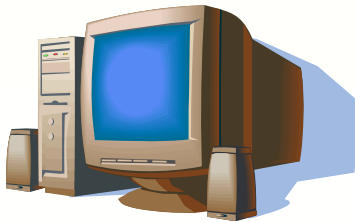
Think about your municipality...

Which of your TCA can be grouped into an asset pool?



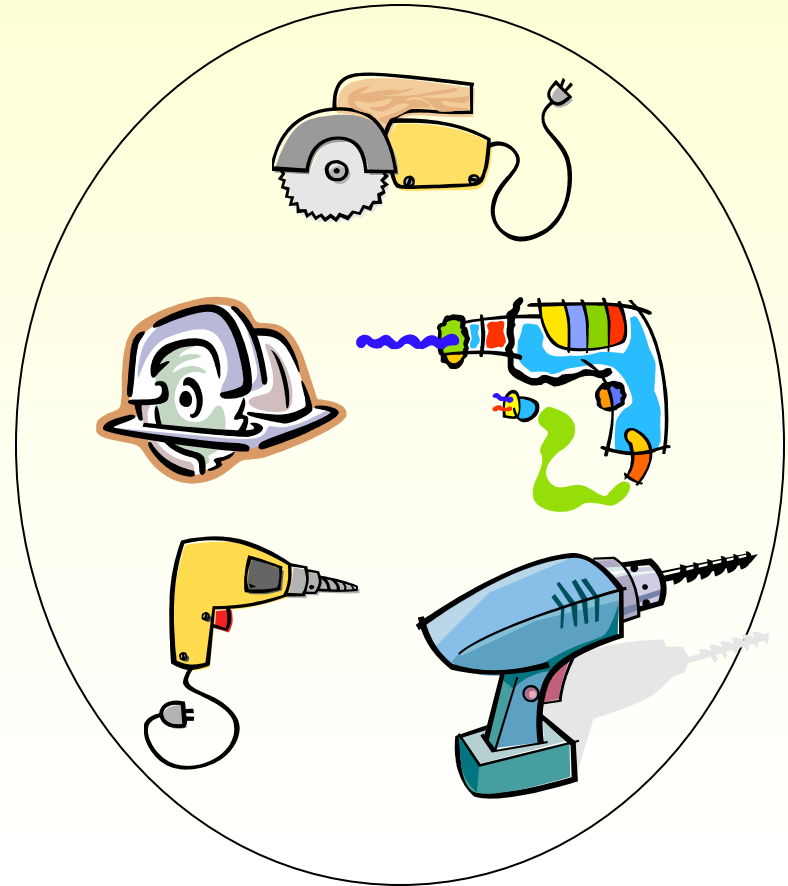
TCA Listing – *asset pools*

- Examples where pooling of assets may be appropriate are:
 - Computers
 - Benches & street furniture
 - Playground equipment
 - Office furniture & equipment
 - Hand held power tools
 - Printers & fax machines
- Even though such items may be recorded as a pooled asset in the capital asset register, the municipality should still be able to monitor and control individual assets via a subsidiary ledger.



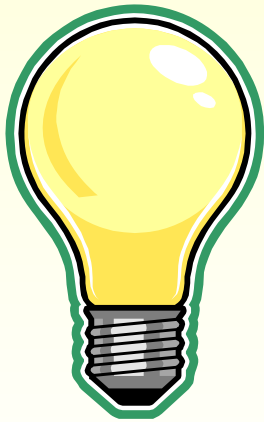
TCA Listing – *asset pools*

- The value of the pool should be at least higher than the minimum capitalization threshold.
 - If not, expense it.
- At least once a year, the value of the pooled assets needs to be updated.



TCA Listing – *asset pools*

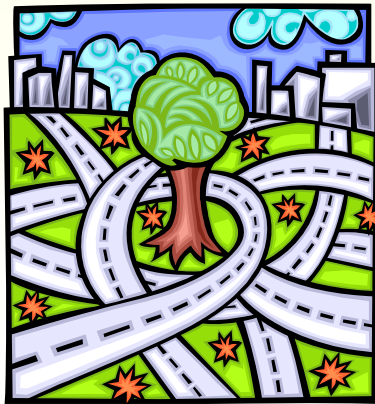
Thus, for the purposes of accounting for TCA:



Asset pooling allows you to include individual assets that have relatively low individual value, such as computers and office furniture, but which represent a substantial investment in total.

TCA Listing – *single asset vs. component*

- ❑ Complex networks (roads, water systems, sewers) consist of a number of components.
- ❑ Network systems can be accounted for as a single asset or as separate components.



TCA Listing – *single asset vs. component*

- ❖ For example, possible separate components for a road could include:
 - Grade
 - Culverts
 - Paved surface
- ❖ Or, you could see a paved road as a 'single asset'.



TCA Listing – *single asset vs. component*

- ❖ Possible separate components for a water utility system:
 - Water mains
 - Treatment plant
 - Filtration units
 - Reservoirs
 - Pumps
 - Water meters
- ❖ Or, you can see the entire water utility system as a 'single asset'.

TCA Listing – *single asset vs. component*

❖ Single asset approach:

- System is accounted for as **ONE TCA**
- As components are replaced, they are expensed.
- Estimated useful life is an average for the entire system.

❖ Less expensive and simpler – does not require detailed records and estimates of useful lives.

TCA Listing – *single asset vs. component*

❖ **Component Approach:**

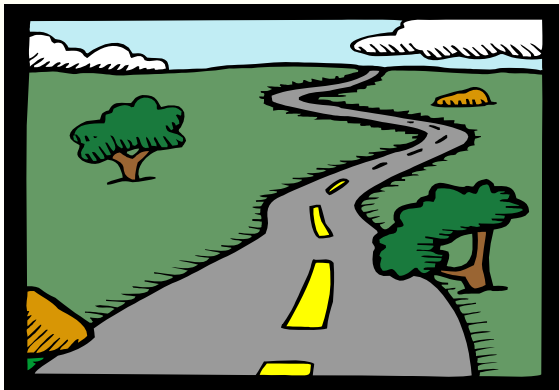
- System is broken down into major components
- Does not mean that each and every component is separately identified – just material components

❖ **Component approach provides better information for asset management**

TCA Listing – *single asset vs. component*

● Choice of approach will affect:

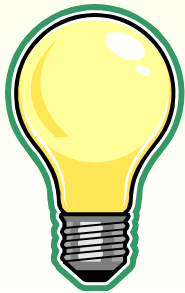
- Amortization levels
- Betterment vs. maintenance & repairs



- Example: **Roads** (road grade has 30 yrs useful life; road surface has 20 yrs)
 - Component approach - the cost of the road surface will be amortized quicker (20 yrs) than the single asset approach (30 yrs).
 - **Component approach:** resurfacing = betterment
 - **Single asset approach:** resurfacing = repairs and maintenance

TCA Listing – *single asset vs. component*

- Effect on water systems can be even more dramatic:
 - Water mains – 40 to 60 years
 - Water pump – 10 to 15 years



Both methods are acceptable, but it is recommended that NL municipalities use the **component approach** where reasonably possible.

TCA Listing – *segmentation*

- **Roads, water systems, & sewers** have linear assets that can be segmented by:
 - Unit of measure (roads – 1 mile is a segment)
 - Geographic reference (water utility by communities)
 - Starting & end point (streets – between major arteries)
 - Age (roads – old fully amortized vs. recently built)
 - Material (water mains – plastic & ductile iron)
 - Quality (roads – 1st grade, 2nd grade, etc)

TCA Listing – *segmentation*

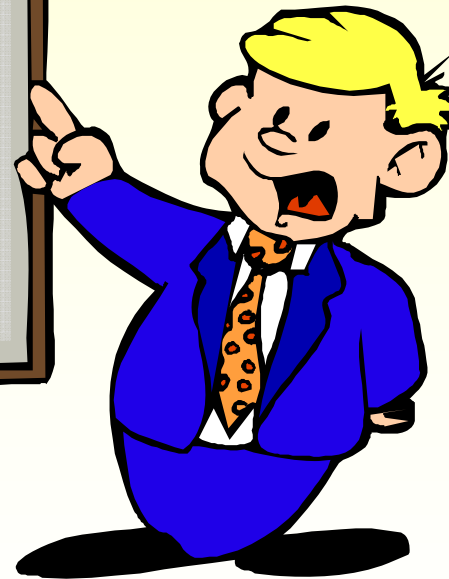
- ④ Segmentation makes the accounting for linear assets easier:
 - i.e. betterments vs. repairs & maintenance
- ④ How big is a segment?
- ④ Replace water main with new pipe:
 - 10 meters – probably R&M
 - Replace a km – probably a betterment

TCA Listing – *segmentation*

- ④ Level of segmentation is a balance between:
 - Usefulness of information
 - Cost of acquiring & maintaining it
- ④ Sound familiar?
- ④ For initial TCA listing, may use project phases to identify segments
- ④ A reasonable amount of segmentation should be utilized when accounting for infrastructure networks

TCA Listing – *segmentation*

Municipalities would not be required to segment their infrastructure for the initial TCA listing.



TCA Listing – *segmentation*

You can compile your initial infrastructure listing based on the phases in which the infrastructure was constructed.



TCA Listing – *segmentation*

• In each phase, infrastructure would have a similar:

- Age
- Useful life
- Expected date of replacement

• You can segment this information at a later date, *as long as* no major capital replacements are planned.

TCA Listing – *segmentation*

If major capital replacements are planned in the near future, segmentation of the phases should be completed prior to the start of the capital project.



WHY?

TCA Listing – *segmentation*

...because this will minimize the impact on your municipality's operating budget.





TCA Listing – *segmentation*

ALSO, if the capital replacement is only affecting one of the existing phases, the segmentation could be completed for that phase, with the remaining phases to follow.



TCA Listing – *Other Asset Issues*

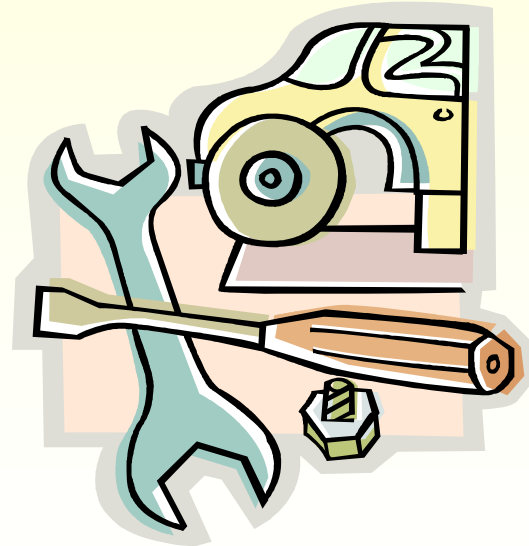
- 
1. Betterments vs. R&M
 2. Grants
 3. Donated / Contributed TCA
 4. Interest Charges

- 
5. Bundled Assets
 6. Capital Lease
 7. Engineering & Project Planning
 8. Overhead Costs

Other Asset Issues – *repairs or betterment?*

Repairs & Maintenance (R&M)

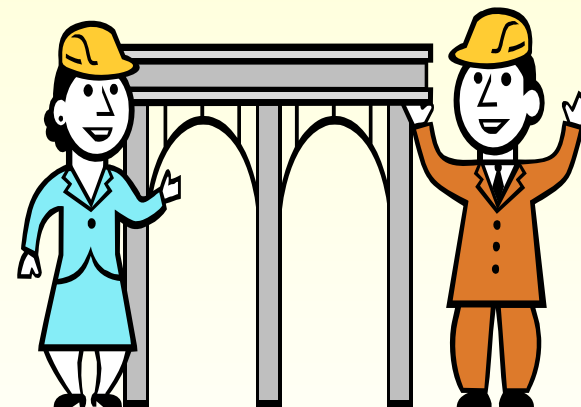
- Maintain the service level of a TCA over its given useful life
- Are an expense of the period
- **Not capitalized**



Other Asset Issues – *repairs or betterment?*

Betterment

- Include expenditures to:
 - ⊕ Reduce operating costs
 - ⊕ Increase physical output or service capacity
 - ⊕ Extend useful life
 - ⊕ Improve quality of service
- Considered to be capital asset additions to the related asset
- Recorded as separate assets
- Amortized over useful life



Other Asset Issues – *repairs or betterment?*

Let's look at some examples:

1. Replaced a building's old windows with energy efficient windows

- Betterment (lower operating costs)



2. Put new gravel on gravel road

- Repairs & maintenance

3. Paved a gravel road

- Betterment (service capacity)



Other Asset Issues – *grants*

What about grants from the Provincial and Federal Government?



Capital grants received from senior governments cannot be netted against the cost of the asset.

Cost of asset must be shown at gross amount.

Other Asset Issues – *grants*

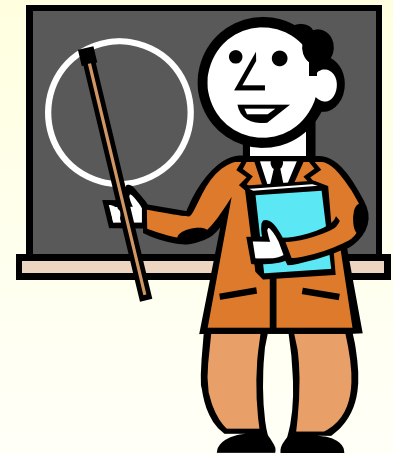
- Cost-shared capital projects:
 - Portion paid by Province must be recorded as a govt. capital transfer
 - Infrastructure built through Federal–Provincial Canada Infrastructure Program must also be recorded at gross cost



Other Asset Issues – *grants*

An Example:

- ④ Under cost-shared provincial/municipal capital works programs,
 - The province's contribution to a capital project would be recorded by the municipality as revenues, and
 - The capital project completed would be recorded at the total cost paid by both the municipality and the province



Other Asset Issues – *donated / contributed TCA*

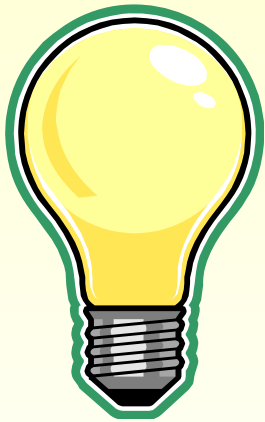
- Sometimes, TCA are acquired with no municipal cash outlay
 - E.g. developer-constructed services in a new subdivision (water and sewer mains and roads)



F.Y.I.

While no \$\$\$ was involved, these TCA should still be valued and accounted for as assets, as their service value will be consumed over their lives.

Other Asset Issues – *donated / contributed TCA*



The value associated with such donated / contributed TCA should be an estimate of '**fair value**' at the date of contribution.


As a last resort only, where it isn't possible to estimate fair value, the asset may be recognized at nominal value.


✓ **Fair Value** – what would be agreed upon in an 'arm's length transaction'

- May be estimated using market or appraised values

Other Asset Issues – *interest charges*

- The cost of a TCA can include interest costs (carrying costs) directly attributable to the acquisition, construction, or development activity.
- Capitalization of interest costs ends when
 - There is no construction, or
 - When TCA is put into use

 External interest charges (i.e. to banks) can be capitalized

 Internal finance charges cannot be capitalized

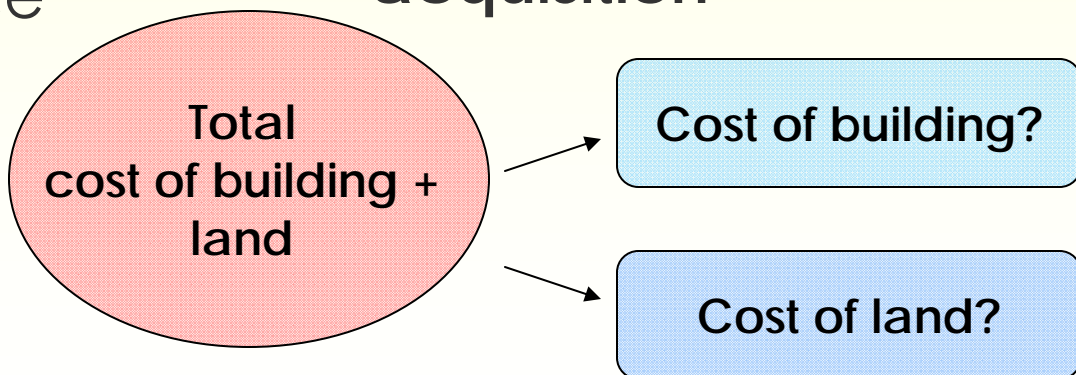
There is no requirement to capitalize interest costs.

Other Asset Issues – *bundled assets*

- Sometimes, you pay a lump sum for 2 or more assets

- E.g. building and land for a single purchase price

- Total purchase price should be allocated to each asset based on the relative fair value of each asset at date of acquisition



Other Asset Issues – *bundled assets*

Example:

- ◆ A municipality purchased *land, building, & parking lot* for \$250,000
- ◆ Property assessed at Jan. 1/05 base date as being valued at \$210,000
 - Land: \$60,000
 - Features: \$15,000
 - Building: \$135,000

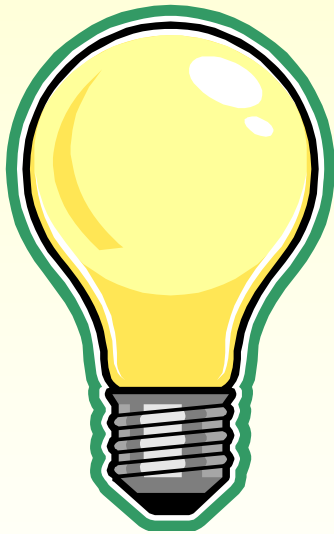
Other Asset Issues – *bundled assets*

Example, continued...

Allocation of the 3 values based on current purchase price:

- Building: $135,000/210,000 = 64.28\% \times 250,000$
= \$160,714
- Parking lot: $15,000/210,000 = 7.14\% \times 250,000$
= \$17,857
- Land: $60,000/210,000 = 28.58\% \times 250,000$
= \$71,429

Other Asset Issues – *capital lease*



Capital leases **MUST** be included in your TCA listing.

...*WHY?*

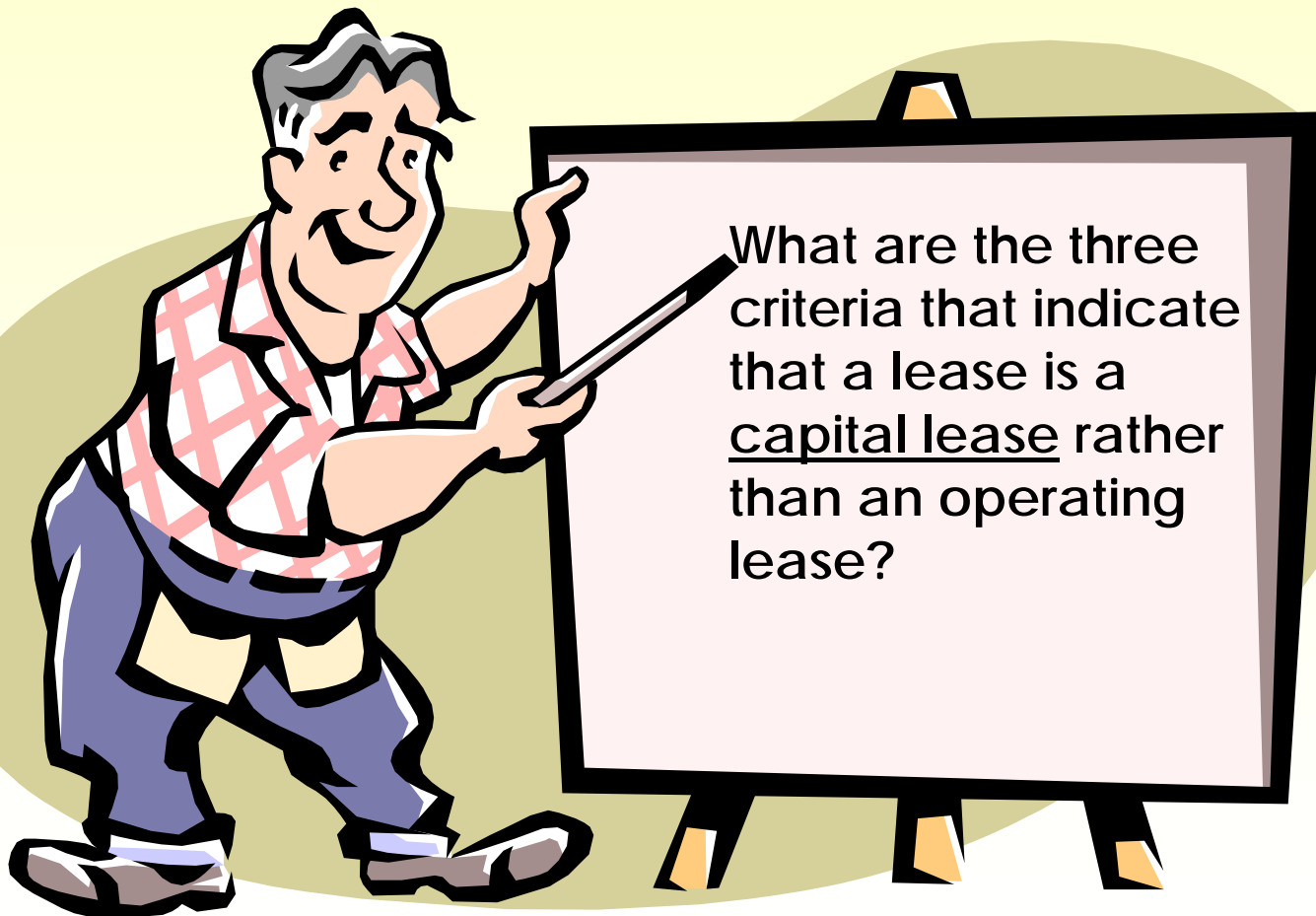
Because a capital lease gives the lessee a *de facto* ownership interest or control over the asset.

Other Asset Issues – *capital lease*

- Rather than expense the monthly lease payments, the municipality must record the TCA and the related lease (financing) obligation in its accounting records.



Other Asset Issues – *capital lease*



Other Asset Issues – *capital lease*

1. There is a bargain purchase option transferring ownership of the leased asset at the end of the lease term.
2. The present value of the lease payments is equal to 90% or more of the fair market value (cash purchase price) of the leased asset.
3. The term of the lease is equal to 75% or more of the expected useful life of the leased asset.

Other Asset Issues – *capital lease*



• If any one of these three terms exists, the lease is a capital lease

- Leased TCA will be capitalized and amortized, and
- The lease obligation will be recorded as a loan in the accounting records

Other Asset Issues – *capital lease*

The value of the leased TCA and the amount of the lease liability, recorded at the beginning of the lease term, is the present value of the minimum lease payments, excluding executory costs.

What are executory costs?

- Operating costs related to the leased asset
 - Insurance
 - Maintenance
 - Property taxes
- If unknown, estimate.

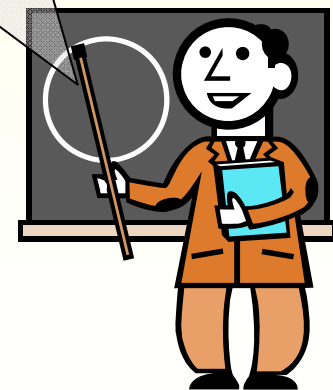
Other Asset Issues – *engineering & project planning*

Costs associated with Official Plans or feasibility study for new facilities or networks are NOT CAPITALIZED.



WAIT....

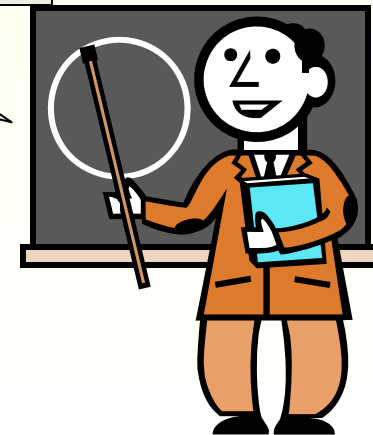
There is ONE EXCEPTION...



Other Asset Issues – *engineering & project planning*

...if you spend \$\$\$ to conduct an environmental assessment or feasibility study for a planned facility...

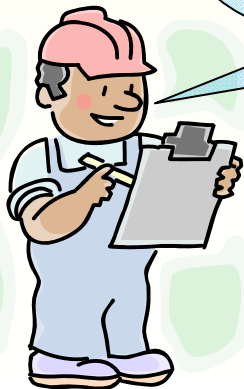
IF construction proceeds and facility is completed and becomes operational (building becomes TCA), then the cost of the studies should be capitalized, because they are **directly attributable costs**.



Other Asset Issues – *overhead costs*

I'm working on a construction project – can I capitalize the salaries & benefits for internal staff doing design work related to the project?

YES!



Other Asset Issues – *overhead costs*

Well what about some of the costs from HR, legal, purchasing, or accounting?

Definitely NOT.

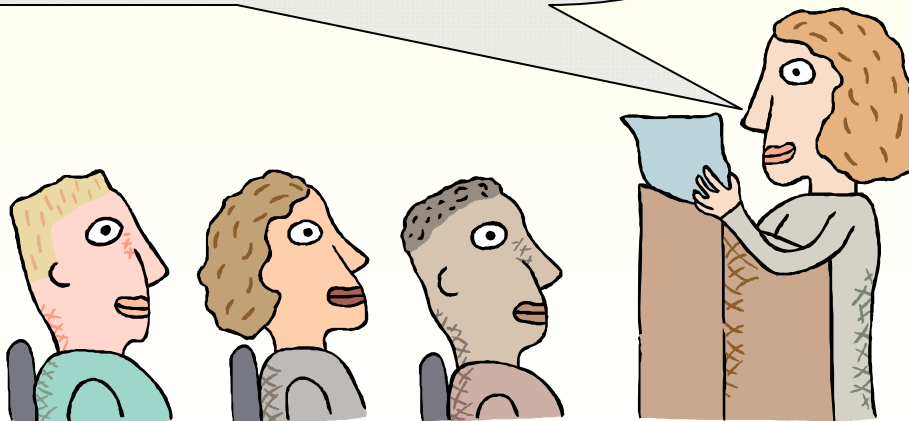
These costs are incurred whether or not the project is undertaken.

They are not overhead expenses directly attributable to the cost of the project.

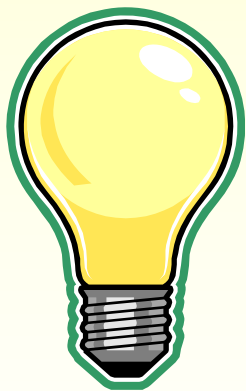


Other Asset Issues – *overhead costs*

Directly attributable overhead costs refers to direct expenses incurred for technical activities related to the construction of a TCA.



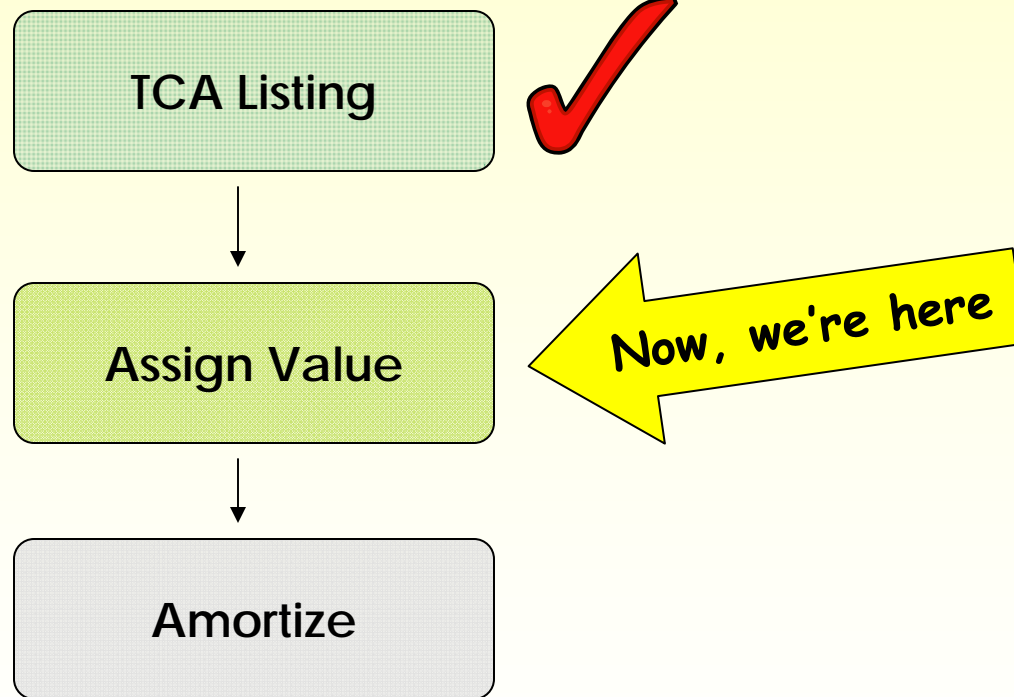
Other Asset Issues – *overhead costs*



Capitalize only those overhead or indirect costs that can be directly attributed to a TCA.

There must be a clearly identifiable relationship between the cost incurred and the asset.

Here's the 'big picture' again...



Assign Value

How much did everything cost?

Does anyone know?



Now that the assets have been identified and catalogued, it is necessary to value them.

Assign Value – *guiding principles*

1. Assigning value to your TCA is not an exercise in precision

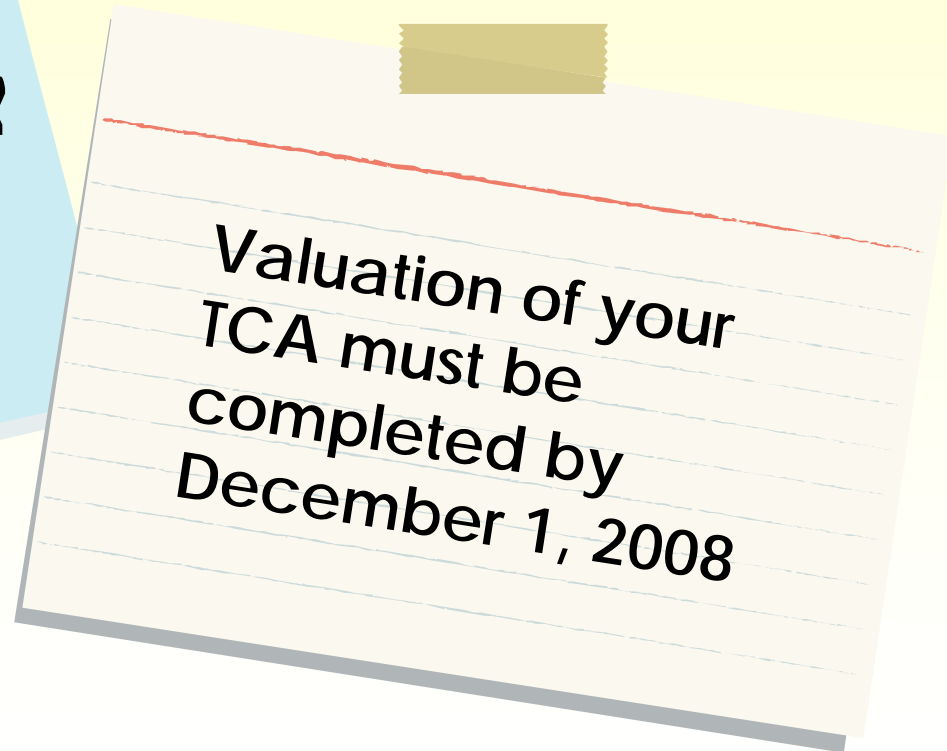
- Reasonable estimates & assumptions will meet audit requirements

2. The need for precision decreases proportionately with the length of time the asset has been in use

3. Don't bother finding the cost for short lived fully amortized assets

4. More important to be accurate on a go-forward basis

Assign Value - *reminder*



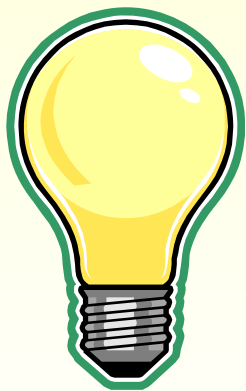
Assign Value

- The cost of a TCA includes the purchase price of the asset and other acquisition costs such as:
 - Installation costs
 - Design & engineering fees
 - Legal fees
 - Survey costs
 - Site preparation costs
 - Freight charges
 - Transportation insurance costs
 - Duties



Assign Value – *historical cost*

The standard is historical cost...it's the most objective...



TCA are to be valued at **historical cost**, or the price actually paid, whenever possible.

Assign Value

What if historical cost is not available?

What do we do for older assets having limited or no purchase records?

Assign Value – *alternative approaches*

- When historical cost information is not available, valuation can be based on:
 - Ⓜ Discounted Replacement Costs
 - Ⓜ Discounted Appraisal Values
- These two approaches value the TCA today and then discount the value back to the year in which the asset was initially purchased or constructed to estimate the original cost

Assign Value – *alternative approaches*

Discounted Replacement Cost:

- Cost of replacing an asset with a 'replacement' asset
- Asset has the same functionality but uses current technology or construction methods.
- Insurance policies normally refer to replacement costs
- Can think of replacement in terms of 'renovation'. You get something new but it's different

Ⓢ *Example: estimating the cost of a pump bought in 1995.*

Assign Value – *alternative approaches*

Appraisal Value:

- Some assets have a ‘market value’ or ‘fair value’
- Appraisal values are mainly used for buildings and land
- Will need reports from qualified appraisers or valuers to support values
 - Ⓜ *Example: estimating the cost of an acre of land acquired in 1975.*



What if we can't determine historical cost, discounted replacement cost, or discounted appraisal value?

Assign Value – *alternative approaches*

If there is NO information
at all,
Use **NOMINAL VALUE**
(\$1)



*See the decision tree on page 15 of
your Reference Manual.*

Assign Value – *let's review...*

- Always use **historical cost** if that info is available
- Historical cost not available?
 - ▶ Use **discounted replacement cost**
- Discounted replacement cost not available?
 - ▶ Use **discounted appraisal value**
- No information available?
 - ▶ Use **nominal value (\$1)**



Assign Value - *nominal value*



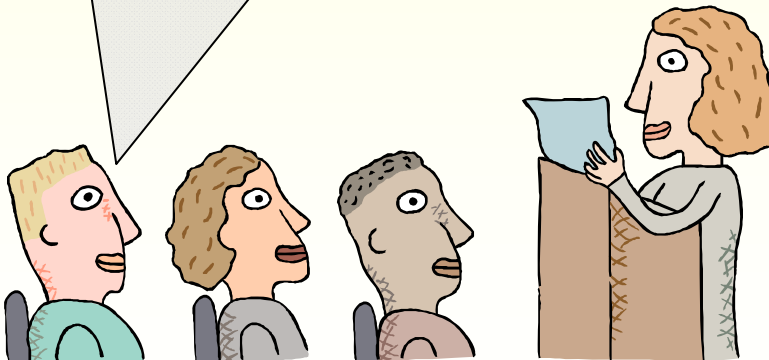
Can use **nominal values** for:

1. Fully amortized network assets
 - Roads & streets
 - Water systems
 - Sewer systems
2. That are still in use and being maintained by the municipality
3. Appropriate replacement cost information not available

Assign Value – *discount rates...*

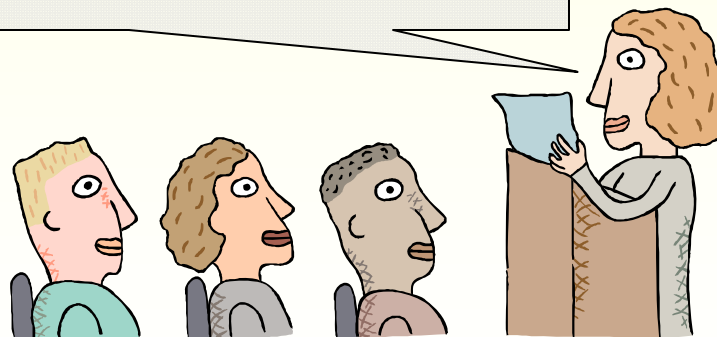
How do we get from
today's pricing to back
then?

How do we use discount
rates?



Assign Value – *discount rates...*

You can't go wrong using the **Consumer Price Index** for discounting your present-day values back to the year of acquisition.



Assign Value - *discount rates...*

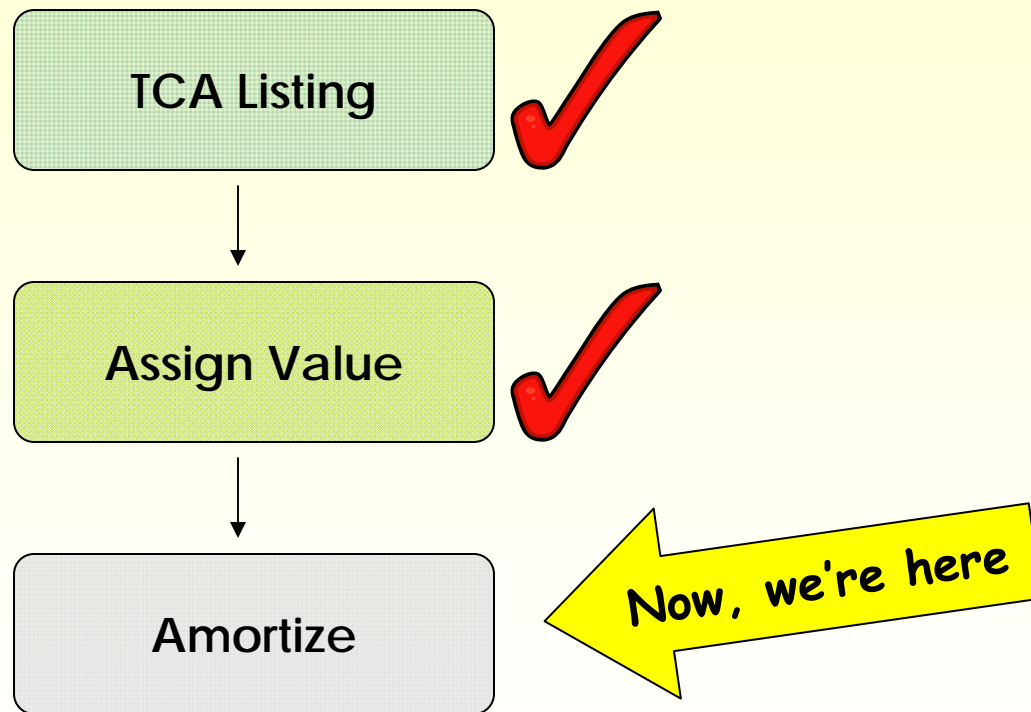
- Appendix 3 of the Reference Manual provides the **Consumer Price Index** values, using 2002 as the base (=100) from 2006 back to 1914 for comparison

Assign Value - *discount rates...*

Here are some Consumer Price Index values, taken from Appendix 3.

Year	All items	Change from previous year
	2002 =100	%
1987	68.5	4.4
1988	71.2	3.9
1989	74.8	5.1

Another look at the 'big picture'...



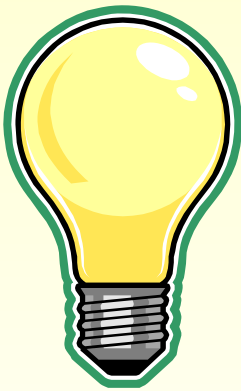
Amortization

- TCA wear out or deteriorate over time
- Amortization over the expected service life of the TCA is the accounting treatment for this deterioration
- Amortization means writing off the cost of the TCA over its expected life span
- Starting in 2009, municipalities will need to record amortization as an expense

Amortization

- ④ Method used must be rational, systematic, and consistent
- ④ It is recommended that NL municipalities use straight-line method
 - Assumes TCA deteriorates at a constant rate each year
 - Easiest to explain and apply

Amortization – *straight-line*



Use straight-line amortization. It is easy to use and calculate, and results in a constant amortization expense for each asset over the years.

□ Formula:

$$\frac{\text{Original cost of TCA} - \text{residual value}}{\text{Estimated useful life (in years)}}$$

Amortization – *straight-line*

Let's try an example:

Sam, Springfield's Public Works Manager, estimates the *useful life* of the city's salt dome to be 50 years. He knows that the *original cost* was \$125,000, and the dome has *no residual value*. Therefore, the amortization for each year of the dome's life is:

$$\$125,000 / 50 = \$2,500$$



Amortization- *net book value (NBV)*

NBV – the difference between the initial cost of TCA and its accumulated amortization to date

Also called unamortized balance

Example:

Truck

- Initial cost: \$45,000
- Accumulated amortization: \$15,000
- Net Book Value: $45,000 - 15,000 = \$30,000$



Amortization- *net book value (NBV)*

Example:

- Remember the salt dome?
- Estimated initial value 12 years ago was \$125,000
- Useful life of 50 years
- Annual amortization of \$2,500

- Therefore, initial recording of the salt dome on the financial records will be:

Salt dome (TCA)	\$125,000
Accum. Amort.	\$ <u>30,000</u>
(12 yrs x \$2,500 per yr.)	
<i>NBV at time of TCA inventory</i>	\$ <u>95,000</u>

Amortization – *residual value*

- Where it is expected to be significant, municipalities must estimate the future financial amount they might receive on the disposal (i.e. the residual value) of any TCA.
 - What would a willing buyer pay for the used asset?

- See **Appendix 3** of the Reference Manual
 - Provides residual values that are limited to a small group of asset classes and described as a *maximum allowable percentage of cost*.

Amortization – *residual value*

Here are some sample residual values & amortization rates from Appendix 3.

Asset Class	Residual Value	Cap. Thres. Pop < 1000	Cap. Thres. Pop > 1000	Amortization rate #
Vehicles	<10% of acquisition cost	\$2,500	\$5,000	5 years
Computer hardware / software	None	\$2,500	\$5,000	4 years
Machinery & Equipment	<10% of acquisition cost	\$2,500	\$5,000	5 years

Amortization – *residual value*

Example:

- @ Truck purchased two years ago for \$50,000.
- @ Useful life of 5 years and had a trade-in value of \$4,500 at that point
- @ Annual amortization of truck is
 - @ $(\$50,000 - \$4,500) / 5 \text{ yrs} = \$9,100$



Amortization – *leased TCA*



Amortize them in the same way as you would for totally owned assets.

- If lease contains bargain purchase option or a clause allowing ownership to pass to your municipality, period of amortization will be the economic life of the property.
- Otherwise, amortize leased TCA over term of the lease

Amortization – *leased TCA*

And how do you account for the lease payments?

Each lease payment allocated out between:

- Repayment of the liability, since the TCA was essentially bought on credit
- Interest expense on the net balance of the liability for the period; and
- Any related executory costs



Amortization – *land*



Land costs are **NEVER** amortized, except at landfill sites!

- Land is an enduring asset, neither created nor destroyed
- Never consumed or used up
- Exception – when purchased for a purpose that will render it useless for any other purpose (e.g. landfill site)

Amortization – *write downs*

- ❖ Sometimes things don't work out as planned.
- ❖ TCA may be redundant, or unable to contribute to your ability to provide goods & services
- ❖ Future economic benefits associated with TCA are less than its net book value.



Amortization – *write downs*

- Write-down warranted when:
 - Physical damage
 - Technological developments
 - Change in extent that an asset is used

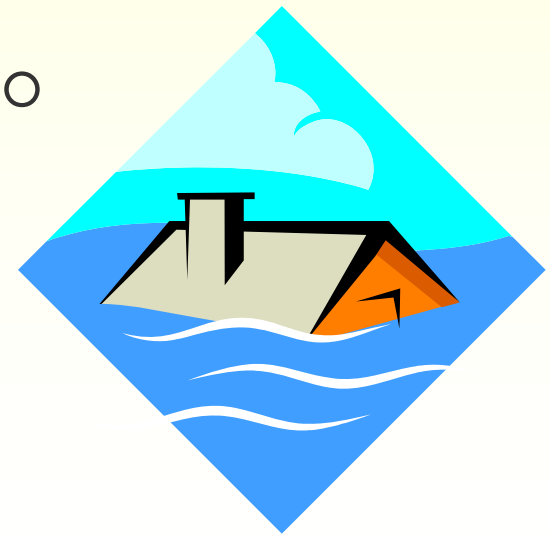


- In these cases, cost of asset should be reduced, or written down, to reflect decline in value
- Net write-down to be expensed in statement of operations
- Write-down never reversed

Amortization – *write downs*

Example from page 17 of Reference Manual:

- Cost of developing camp site: \$60,000
- Put into use on May 1, 1998
- Useful life: 30 years
- No residual value
- Spring 2007 – major flood – could no longer use camp site



Amortization – *write downs*

Example, continued...

To determine NBV of camp sites at May 1/07:

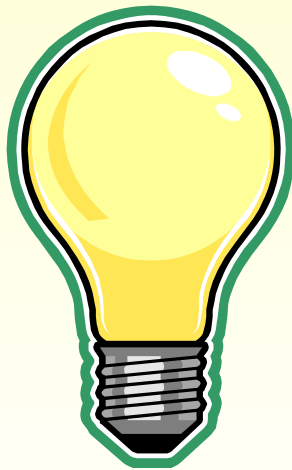
$$\begin{array}{rcccl} \$60,000 & - & (60,000/30 \times 9 \text{ years}) & = & \$42,000 \\ \downarrow & & \downarrow & & \\ \text{Initial cost} & \text{less} & \text{accumulated amortization to date} & & \end{array}$$

The entry to record the write-down would be:

Dr	Accm. Amortization – Land improvements	18,000
Dr.	Loss on write-down	42,000
Cr.	Land improvements	60,000

Amortization – *write downs*

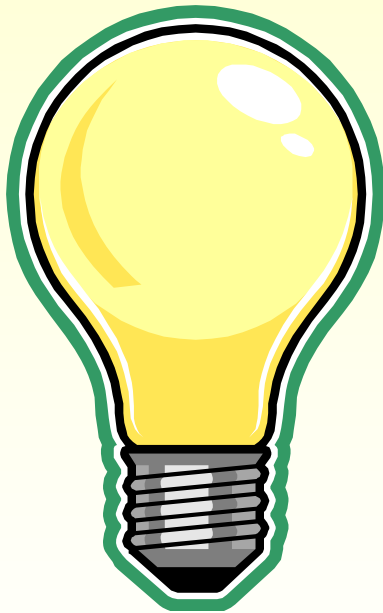
Regular Review of Remaining Useful Life



The amortization method & estimate of useful life of the remaining unamortized portion of the TCA should be reviewed on a regular basis and revised when appropriate.

Useful lives of assets are normally adjusted downward, but they can be increased.

Amortization – *write downs*



Write down the cost of a TCA when you can demonstrate that the reduction in the asset's future economic benefits is expected to be permanent.

A write-down is never reversed.

Disposals

- At times, a TCA is sold outright
- Difference between the net proceeds and the remaining net asset value should be recorded as either a gain or loss in the statement of operations.



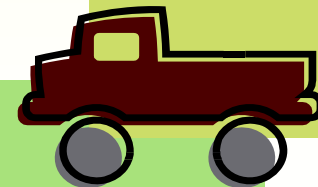
Disposals

Example from Page 18 of Reference Manual.

- June 30/04: purchased vehicle for \$31,000
- Useful life: 10 years
- Residual value: \$1,000
- June 30/07: sold vehicle for \$20,000

What was the accumulated amortization of vehicle at June 30/07?

$$\begin{aligned} &= (31,000 - 1,000) / 10 \times 3 \text{ yrs} \\ &= \$9,000 \end{aligned}$$



Disposals

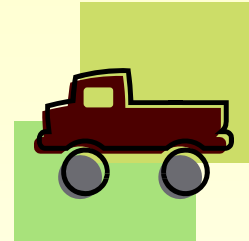
Example, continued...

- ❖ Determine NBV of vehicle at June 30/07:
 - = initial cost less accumulated amortization
 - = 31,000 – 9,000
 - = \$22,000
- ❖ Remember, vehicle sold for \$20,000
- ❖ So, loss on sale of vehicle is \$2,000



Disposals

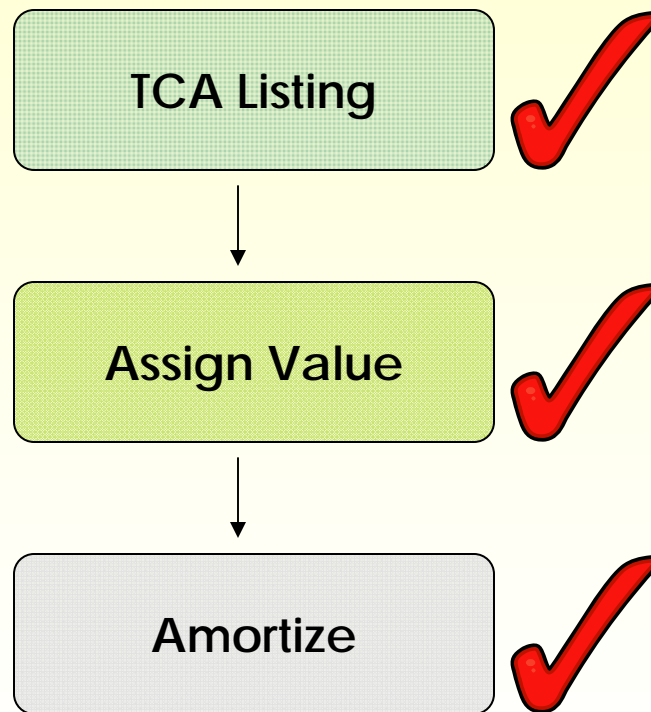
Example continued...

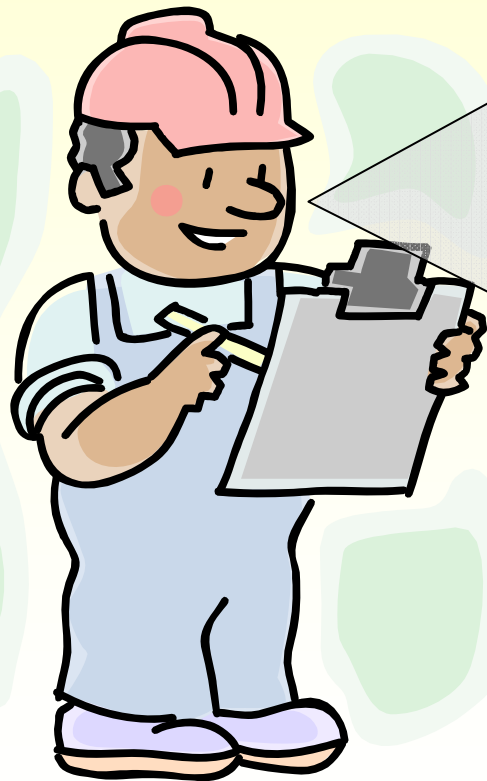


- Entry to record the disposal would be:

Dr.	Cash (proceeds on sale of vehicle)	20,000	
Dr.	Accm. Amortization – vehicle	9,000	
Dr.	Loss on sale of vehicle	2,000	
Cr.	Vehicle		31,000

A final look at the 'big picture'...





We're not done yet. We still need to talk about:

- The Auditor's Role
- Entries for Opening Balances
- Additions & Disposals
- Financial Statement Presentation
- Presentation & Disclosure
- Accounting Policies

Auditor's Role

- It will be the responsibility of each municipality to develop the financial valuation of its TCA
- Auditors will act as very interested, **uninvolved** advisors and guides.
- They will not tell you what to do or be actively involved in the project at any point.



Auditor's Role

As you establish the value of your TCA, you should:

- Maintain sufficient, appropriate audit evidence that indicates where and how each and every asset value was obtained.
- Speak to your auditor early and often on:
 - Assumptions
 - Approaches
 - Major decisions
 - Accounting policies



Entries for Opening Balances - *Overview*

Opening TCA
Balance @ Jan.
1/08

Opening TCA
Balance @ Jan.
1/09

Record in GL

Dec. 31, 2009

Calculate accumulated
amortization to Dec.31,
2007

Additions, disposals, &
amortization for the Y/E
Dec. 31, 2008

Additions, disposals, &
amortization for the Y/E
Dec. 31, 2009

Track using TCA
Continuity Schedule

Track using TCA
Continuity Schedule and
record in GL

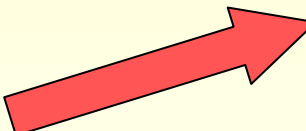
Entries for Opening Balances - *Reminder*

**Important
DATE!**

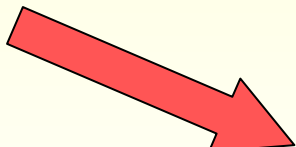
Your TCA opening
balances must be
completed by
December 31,
2008

Entries for Opening Balances

For each
asset in your
TCA Listing



Record a **value** for
asset



Record **accumulated
amortization** for the
period from which asset
was put into service until
December 31, 2007

Entries for Opening Balances

For example:

■ Municipality purchased a Rubber Tire Loader on Jan. 1, 1998

- Cost: \$155,000
- Useful life: 15 years
- Residual Value: \$5,000



Entries for Opening Balances

The accumulated amortization is calculated as follows:

$$\begin{aligned}\text{Amortization per year} &= (\text{cost} - \text{residual value}) / \# \text{ years useful life} \\ &= (155,000 - 5,000) / 15 \\ &= 150,000 / 15 \\ &= \mathbf{10,000 \text{ per year}}\end{aligned}$$

The 98 loader has been in use for 10 years, so the **accumulated amortization** from Jan. 1/98 to Dec. 31/07:

$$\begin{aligned}&= 10 \text{ years} \times \$10,000 \text{ per year} \\ &= \mathbf{\$100,000}\end{aligned}$$



Entries for Opening Balances

At December 31, 2007, accounting records would show:

98 Rubber Tire Loader (at cost)	\$155,000
Accumulated Amortization	(\$100,000)



Entries for Opening Balances

Another example:

On January 1, 1985,
municipality purchased:

- A building
 - \$80,000
 - Useful life: 40 years
 - No residual value
- The land on which building is located
 - \$25,000



Entries for Opening Balances

The accumulated amortization is calculated as follows:

$$\begin{aligned}\text{Amortization per year} &= (\text{cost} - \text{residual value}) / \# \text{ years useful life} \\ &= (80,000) / 40 \\ &= 2,000 \text{ per year}\end{aligned}$$

The building has been in use for 23 years, so the accumulated amortization from Jan. 1/85 to Dec. 31/07 is:

$$\begin{aligned}&= 23 \text{ years} \times \$2,000 \text{ per year} \\ &= \$46,000\end{aligned}$$

Land does not have a useful life, so don't record any accumulated amortization.



Entries for Opening Balances

At December 31, 2007,
accounting records would
show:

Building (at cost)	\$80,000
Land (at cost)	\$25,000
Accumulated Amortization	(\$46,000)



TCA Additions & Disposals



Municipalities will be required to record any capital assets purchased during 2008.

TCA Additions & Disposals

- On January 1, 2008, a municipality...



Purchased a new Rubber Tire Loader...

- For \$185,000
- Useful Life: 15 years
- Est. Residual Value: \$5,000



Sold the 1998 Rubber Tire Loader...

- For \$45,000

TCA Additions & Disposals

➤ The 08 loader would be recorded at cost, and the accounting records would show:

➤ The 98 loader that was sold would have to be removed from the accounting records

08 Rubber Tire Loader (at cost)	\$185,000
---------------------------------	-----------



TCA Additions & Disposals

- ⓐ A loss would be recorded on the 98 loader
 - The amount received for the 98 loader was less than its net book value

98 Rubber Tire Loader (at cost)	155,000
Accumulated Amortization	<u>(100,000)</u>
Net Book Value	55,000
Proceeds on sale	<u>(45,000)</u>
Loss on disposal	<u><u>10,000</u></u>



TCA Additions & Disposals

- At December 31, 2008, annual amortization expense has to be calculated for the new 08 Rubber Tire Loader.

$$\begin{aligned}\text{Amortization per year} &= (\text{cost} - \text{residual value}) / \# \text{ years useful life} \\ &= (185,000 - 5,000) / 15 \\ &= 180,000 / 15 \\ &= 12,000 \text{ per year}\end{aligned}$$



TCA Additions & Disposals

- ④ For **the year ended December 31, 2008**, the municipality would have to record the amortization expense for each of the assets that it owns, except for land.
- ④ The entry to the municipality's accounting records would be:

Amortization Expense	14,000	
Accumulated Amortization - Building		(2,000)
Accumulated Amortization – 08 Loader		(12,000)

Financial Statement Presentation

Here is the financial statement presentation of the municipality's TCA at December 31, 2008:

	2008		
	Cost	Accumulated Amortization	Net Book Value
Land	25,000	-	25,000
Building	80,000	48,000	32,000
Equipment	<u>185,000</u>	<u>12,000</u>	<u>173,000</u>
	<u>290,000</u>	<u>60,000</u>	<u>230,000</u>

Financial Statement Presentation

- For **the year ended December 31, 2009**, the municipality would once again have to record the annual amortization of its TCA.
- The entry to the municipality's accounting records would be:

Amortization Expense	14,000	
Accumulated Amortization - Building		(2,000)
Accumulated Amortization - 08 Loader		(12,000)

Financial Statement Presentation

Here is the financial statement presentation in the municipality's financial statements along with the comparative figures for 2008:

	2009			2008		
	Cost	Accumulated Amortization	NBV	Cost	Accumulated Amortization	NBV
Land	25,000	-	25,000	25,000	-	25,000
Building	80,000	50,000	30,000	80,000	48,000	32,000
Equipment	<u>185,000</u>	<u>24,000</u>	<u>161,000</u>	<u>185,000</u>	<u>12,000</u>	<u>173,000</u>
	<u>290,000</u>	<u>74,000</u>	<u>216,000</u>	<u>290,000</u>	<u>60,000</u>	<u>230,000</u>

Presentation & Disclosure

Financial statements should disclose, for each major category of TCA and in total:

1. The amount of amortization costs of TCA for the period
2. Accumulated amortization at the beginning & end of period
3. Net carrying amount at beginning & end of period

4. Costs at beginning & end of the period
5. Additions in the period
6. Disposals in the period
7. Amount of any write-downs in the period

Accounting Policies

Early on, you need to establish rules as to how TCA accounting is to be carried out in your municipality.



Accounting Policies

@ TCA policy should be:

- A written document
- Formally approved by council

@ Auditors will refer to this document

- Is municipality recording & reporting its TCA in accordance with this policy?

@ TCA policy will provide basis for much of the note disclosures required for the municipality's financial statements

Accounting Policies

- ④ Rough out what you see as the 'rules' you want your municipality to play by when it comes to TCA accounting

- ④ Brainstorm, and include whatever you think you may need

- ④ Your policies will not be carved in stone and may change over time



Accounting Policies


Sample issues that you may want to include are:

1. Authority, purpose, & scope
2. Asset definition
3. Asset categories
4. Single asset vs. component approach (segmentation)
5. Asset valuation (cost, contributed or donated assets, grants or donations, etc)

Accounting Policies

6. Capitalization Policies
7. Recognition thresholds
8. Capitalization of carrying costs
9. Betterments vs. maintenance
10. Amortization methodology and rates
11. Capital Leases
12. Reviews of estimated useful life and write-down for impairments

Accounting Policies

- 
- 13. Asset ledgers (content, maintenance, periodic inventories)
 - 14. Control (asset inventory, maintaining records, & documentation)
 - 15. Construction-in-progress
 - 16. Surplus assets
 - 17. Asset disposal (sale, abandonment, trade-in)

Accounting Policies



There's *GOOD*
NEWS...some of
this work has
already been done
for you!!!

Accounting Policies

@ The General TCA Listing in the Reference Manual provides the following for all anticipated assets:

- Asset classes
- Descriptions
- Amortization rates
- Thresholds
- Useful lives

@ These should be incorporated into your TCA policies



•See sample TCA Policy in training materials¹⁶⁸

Let's Review...

- ✓ Background
- ✓ Identify & List your TCA
- ✓ Determine the value of your TCA
- ✓ Amortize your assets
- ✓ Your Auditor's Role

- ✓ Opening Balances
- ✓ Additions & Disposals
- ✓ Financial Statement Presentation
- ✓ Presentation & Disclosure
- ✓ Accounting Policies

And now, the moment you've all
been waiting for...





That's all, folks!
Thank you!

Are there any
questions?