

# Capital Assets in a Municipal Environment



Workshop  
September 8 & 9, 2016

- Video

## What is a Capital Asset ? It Varies

### What's 2 + 2 ?

**ENGINEER:** "It lies between 3.98 and 4.02."

**MATHEMATICIAN:** "In 2 hours I can demonstrate it equals 4 with the following proof."

**PHYSICIST:** "It's in the magnitude of  $1 \times 10^1$ ."

**LOGICIAN:** "This problem is solvable."

**SOCIAL WORKER:** "I don't know the answer, but I'm glad we discussed this important question."

**ATTORNEY:** "In the case of Smith vs State, 2 + 2 was declared to be 4."

**TRADER:** "Are you buying or selling?"

**ACCOUNTANT:** "What would you like it to be?"

# Assets

PSAB PS 1000

“Assets are economic resources controlled by a government as a result of a past transaction or event from which a future economic benefit may be obtained”



“Non Financial assets are:

- used to deliver services
- consumed as part of the operation
- not for sale in the normal course of operations

# Tangible Capital Asset

- TCA
  - Non Financial Asset
  - They result from past transactions or events
  - Have a useful economic life beyond current accounting period
  - Used on a continuing basis
  - Not for sale
  - Economic resource under the control of the Municipality



## Concept of Control

- Control
  - Key to determining if Asset is recorded
  - Ownership is not the same as control (Capital Lease)
    - Bargain Purchase option
    - Used for > 75% of the estimated economic life of the Asset
    - PV of Lease payments are > 90% the fair value of the property
  - Is the Leased Asset a specialized asset i.e. Road or WTP
  - Other factors including, financing, control during idle time, operating risk for repairs and obsolescence upgrades

## Capitalization Threshold

- Municipality should establish
  - Threshold (\$, minimum amounts)
  - Items not meeting threshold are expensed
  - Once confirmed however all costs included



## Measurement of Value

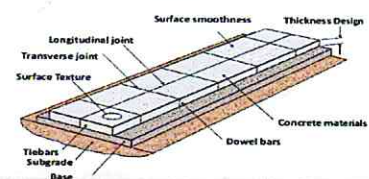
- Historical Cost - Required by PSAB 3150.09
  - Purchase Price
  - Other costs of Acquisition
    - Professional fees, engineers, architects, lawyer
    - Survey
    - Site prep
    - Freight / transportation
    - Insurance
    - Interest on Financing
  - Grants are NOT netted against the cost of the asset  
PSAB (3150.05)



## Single Asset vs. Component Approach

- Capital Assets
  - Can be complex
  - Construction can include a number of Component Parts
    - Road Construction
      - Subgrade
      - Base
      - Traveled Roadway Surface
      - Other, drainage, lighting , signage
    - Water & Sewer Systems
      - WTP
      - Sewage Treatment facilities
      - Mains
      - Distribution lines
      - Pumping stations

Basic Components of a Concrete Pavement



## Single Asset vs. Component Approach

- Single Asset Approach
  - Entire System recorded as one asset
  - Estimates of expected life and amortization are an average for the entire system
  - Simpler, faster and less expensive
  - Doesn't provide as much information as Component approach
  - As components are replaced they are expensed

## Single Asset vs. Component Approach

- Component Approach
  - Complex Systems broken down into major components
  - Each component is identified and accounted for separately
  - Components can be comprised of assets of similar useful lives, e.g. pipes, valves, base of road, surface of a road
  - More complex recording requiring greater resources and thus cost
  - Does provide more information than the Single Asset Approach

## Single Asset vs. Component Approach

- PS 3150
  - Allows for accounting of complex assets either as a single asset or by its components
  - The Municipality must decide on the cost/benefit of the approach selected
  - Consistency is important in your approach

## Temporary Account

- Assets Under Construction
  - Use of an AUC account allows you to identify cost per project
  - Allows for allocation over numerous periods
  - No amortization of AUC balances

CAPITAL ASSETS / AMORTIZATION SCHEDULE					2015		
General AUC					Enter data in yellow shaded areas		
Assets Under Construction							
Asset Description	Calendar Year Acquired	Month Acquired	Cost	Additions	Transfer	Date of Disposal	Closing Balance
<b>TOTALS &gt;</b>			107,266.55	139,067.64	211,425.08		34,909.11
Centennial Cultural Centre	2012	Dec	3,754.24				3,754.24
Centennial Cultural Centre	2013	Dec	26.35				26.35
Maclsaac Cres. Paving Project	2014		87,421.08	124,004.00	211,425.08	Dec 31/15	0.00
C-I-P Phase I Plan 33986	2013		16,064.88				16,064.88
North Fork Village Back Lane	2015	Oct		15,063.64			15,063.64

## Upgrades and Betterments

- Cost incurred to enhance the capital asset
  - Increase physical output
  - Improve efficiency and reduce operating costs
  - Extend the useful life
  - Improve the quality of the output
- Betterments and Upgrades should be Capitalized
- All other repairs should be expensed
- Single Asset vs. Component Approach can have an impact

## Contributed Assets

- TCA can be received by a municipality at no cost
  - Transfers from Senior Levels of Government
  - Developers provide roads, sidewalks and street lighting
- These assets are a TCA by definition
  - Future economic benefit
  - Results from a past transaction
  - Not fully consumed in the current period
  - Under the control of the Municipality
- Recording of Contributed Assets crucial to obtaining full costing of Services



## Contributed Assets

- Value for recording purposes
  - Fair Value on date of contribution
- Fair Value
  - Consideration provided in an arm's length transaction
  - PS 3150 provides for the use of
    - Market value
    - Appraisal value
    - Replacement Cost
    - If no ability to determine Fair Value recorded at Nominal - Value
- For Bundled assets –remove value of land

## Measurement of Value

- Capital Lease
  - Record net liability for lease payments
  - Interest and executory costs recorded separately
  - Asset amortized over the life of the lease
  - Asset amortized over the estimated life of the asset if there is a BPO or it is a specialized asset

## Exercises

### Q.1

- A. The Municipality has a \$350,000 Grader that it has leased since 2014. The lease is for 5 years and there is a BPO at the end of the lease. This past June a GPS system placed in it in for \$10,000. The Municipality's minimum threshold is 10,000

Is this an expense or capital purchase?

Why?

- B. The same Grader as in A has a new set of tires put on in July costing \$12,000

Is this an expense or capital purchase?

Why?

## Exercises

Q.2

- A. The Town has repaved street that it built in 2001 at a cost \$1,000,000. The street has been recorded as a single asset and amortized over 35 years. In 2016 the street was resurfaced with support from the Provincial Municipal Road Improvement Program at a total cost of \$350,000

Is this an expense or capital purchase?

Why?

- B. Would it have made a difference in A. if the street had been recorded on a component basis

How and Why?

What is the difference in the value of the expense recognized in 2016  
Component vs. Single Asset?

Q2

A) \* Expense

Dr Road Maintn - Contracts	350,000
Cr Bank	350,000

B) Yes

- Extending life of the road surface, so  
this would be a capital cost

w/o extending capital

$$\frac{250,000}{20} = \$12,500 \text{ /year}$$

$$12,500 \times 15 \text{ years} = 187,500$$

$$- \frac{250,000}{}$$

< 62,500 > loss on replant

Dr Accum. <del>B</del> Asset - Street Surface	187,500
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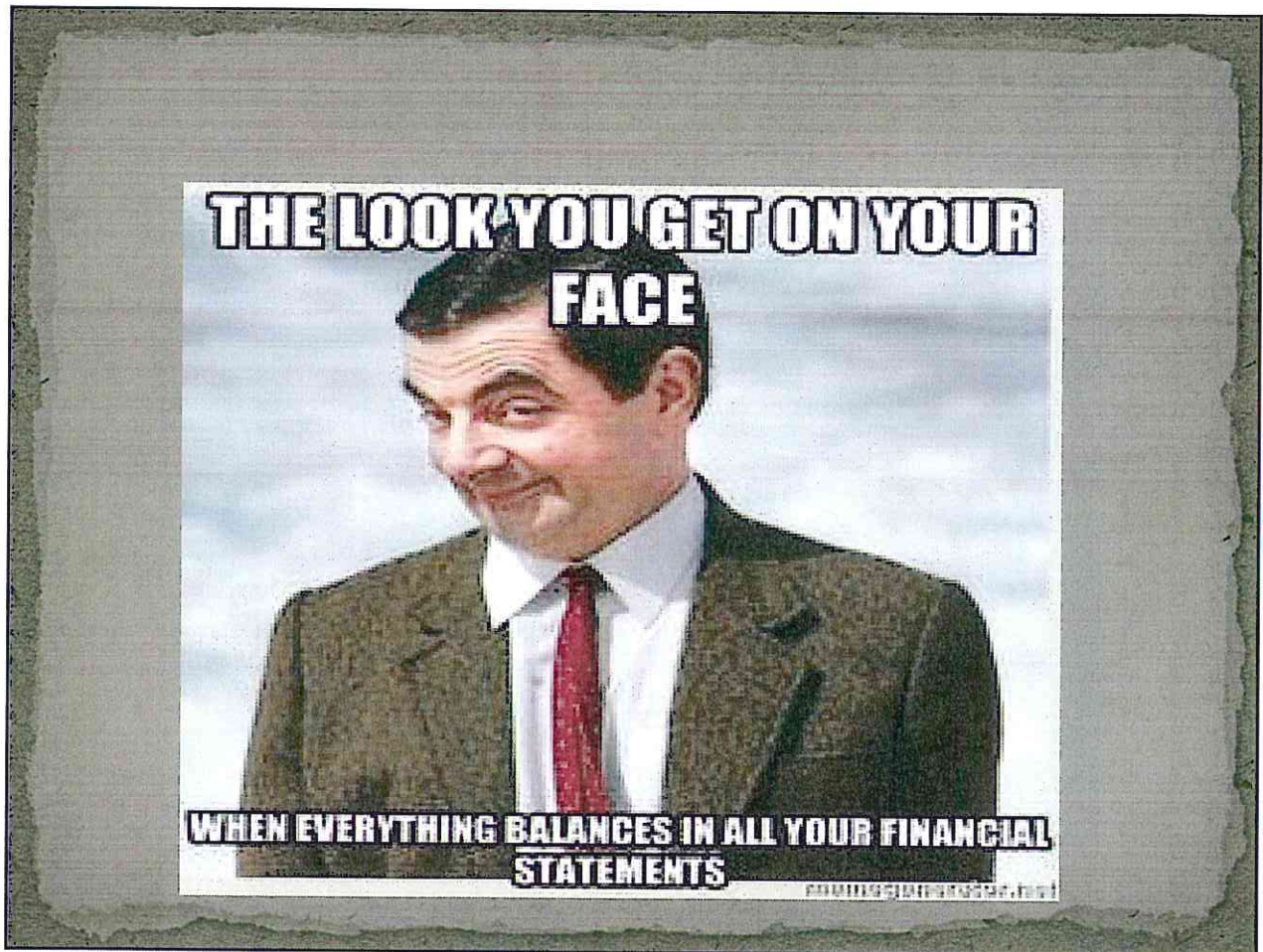
Dr loss on Replant of Surface	62,500
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Cr Asset - Street Surface	250,000
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Dr Street Surface	350,000
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Cr Bank	350,000
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Expense  $350,000 - 62,500 = 287,500$  greater end



## TCA Acquisition

- Long Term Impact
  - Benefits
    - Reduced costs
    - Increased efficiency
    - Increased Capacity
  - Costs
    - Borrowing
    - Increased operating costs
    - Training of employees
    - Upgrading other Infrastructure

## TCA Acquisition

- Consider the costs for the entire life time of the asset in making your decision.

Typical areas of expenditure which are included in calculating the whole-life cost include:

- planning and design
- construction and acquisition
- operations, maintenance
- renewal and rehabilitation
- depreciation and cost of finance
- replacement or disposal.



## TCA Acquisition

- Requires Planning
  - Page 14 of Financial Plan – Minimum
  - 10 to 50 year planning time horizon on many assets
  - Involvement of Council and Senior Staff
  - Access to Grants – “Shovel Ready” Projects
  - Need to complete preliminary work
  - Plan requires attention and annual updates



## Funding TCA Acquisition

- Use of Reserves
  - Including Transfer from General Reserve and Surplus
  - Reduced Mill Rate Impact on an annual basis
  - Allows of decisions early in the year
  - Improves flexibility
  - Limits Opportunity based on Reserve Balance
  - May be viewed as unfair

## Funding TCA Acquisition

- Use of Debt
  - Spreads Cost of Asset over its life
  - Theory is that those who benefit will pay for Asset
  - Reduces Financial Flexibility of Municipality in the future
  - Legislative restrictions on Borrowing Limits

## Debt Limits

- Total Debt Restriction
  - 7 % of At Large Portioned Assessment
- Debt Servicing Capacity
  - 20% of previous years Municipal Revenues
- Maximum Transfer from Surplus or General Reserve
  - $AS + GRF - T \geq 20\%$  of Previous Year Expenditures

# Nominal Surplus

**2015**

**MUNICIPALITY OF RUSSELL BINSKARTH**  
**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS**  
 For the year ended December 31, 2015

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**17. ACCUMULATED SURPLUS**

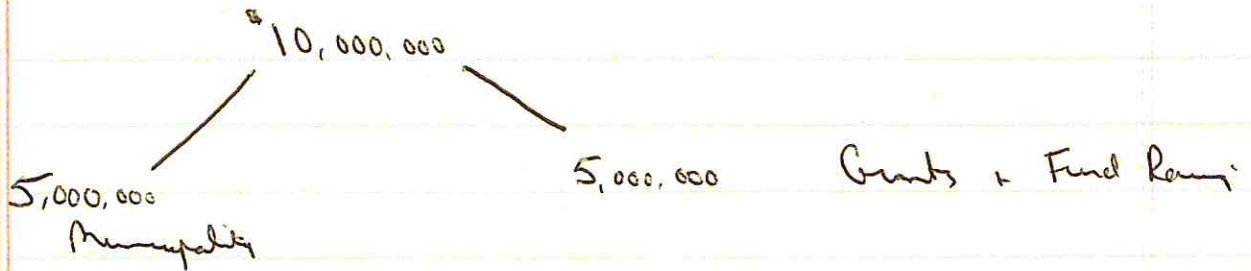
	2015	2014
Accumulated surplus consists of the following:		
General Operating Fund - Nominal Surplus	\$ 3,024,714	\$ 599,178
Utility Operating Fund(s) - Nominal Surplus	(637,208)	(24,272)
TCA net of related borrowings	16,720,322	16,302,742
Reserve Funds	1,032,865	\$41,008
Accumulated Surplus of Municipality Unconsolidated	<u>18,040,648</u>	<u>17,740,258</u>
Accumulated Surpluses of Consolidated Entities	<u>2,164,820</u>	<u>2,078,571</u>
Accumulated Surplus per Consolidated Statement of Financial Position	<u>\$ 21,195,184</u>	<u>\$19,722,229</u>

- 21 -

## Debt vs. Reserves

- Pros and Cons for both
- Current long term borrowing rates very attractive
- Borrow in times of low interest rates
- Use reserves in times of medium and high interest rates

New Anna



500,000 @ 4% for 10 years.

\$5,475,000

Construct cost up 5-10% annually.  
in 10 years project is worth  
\$16 M +.



## Recording TCA

- Once a purchase has been deemed to be a TCA it needs to be recorded
- Depending on Approach TCA recognition will change
  - Accrual Basis (Asset)
  - Cash Basis (Expense)
- The creation of Internal F/S must address the difference between how Municipality's budget (Cash Basis) and how Financial Statements are to be created for the public & Council (Accrual Basis)

## Recording TCA

- Dr Asset Account  
    Cr Bank
- Thus TCA is recorded as an asset in the current year not an expense – Contribution to Capital
- Grants provided for the TCA are recorded as Revenue
- PUB requires a different standard with regard to Capital Grants
  - Grants to be amortized over the life of the asset it supported

# Recording TCA

Schedule 9 for PUB

## Amortization

- PSAB 3150 requires that
  - The cost less residual value of a TCA with a limited life be amortized over its useful life
  - The amortization be in a rational and systematic manner
  - Amortization costs of a TCA should be expensed
  - The amortization method and estimated useful life should be reviewed regularly

## Useful Life

- Expected Useful Life is the shortest of
  - Physical
  - Technological
  - Commercial
  - Legal

Based on its use by the Municipality

- Factors to consider
  - Expected future use
  - Susceptibility to obsolescence
  - Maintenance programs and wear and tear
  - Past experience

## Types of Amortization

- Straight-line
  - Asset provides consistent benefit throughout its life
  - Based on expiration of time
  - E.g. 3 year life for a computer, 50 year life for a water main
- Activity Based
  - Benefit achieved from asset based on its use
  - Need to determine number of units in useful life of asset
  - E.g. 10,000 hr estimated life of a wheel loader, 200,000 kms for a vehicle

# Determining TCA Annual Cost

MRB TCA Recap

## Determining TCA Annual Cost

- Russell Vehicle Spreadsheet



## Recording Amortization

- The purpose of amortization is to charge or expense a portion of an asset that relates to the revenue generated by that asset.
- This principle is called the Matching Principle, where revenues and expenses both appear in the income statement in the same reporting period, which gives the best view of how well an entity has performed in a given accounting period

## Recording Amortization

- Dr Amortization Exp  
    Cr Asset's Accumulated Amortization
- Provides for compliance with Matching Principle
- Original asset balance as recorded remains intact
- Important for the entry needed to remove an asset upon its disposal

## Gain or Loss on Sale

- Under PSAB Asset sales including trade-ins could trigger a gain or loss on sale
- When an asset is sold the net book value of the asset must be compared to the price for which it was sold to determine gain or loss
- $\text{Gain}/(\text{Loss}) = \text{Sale price of Asset} - \text{Asset's Unamortized Book Value}$

## PSAB vs. CASH

- Recording Capital Transactions will improve F/S information
- Does create an information gap between Budget and F/S
- Solution provide monthly reconciliation of PSAB to Cash transactions
  - Schedule 10 & 17 of the Audited Statement
  - Less -
    - TCA acquisitions
  - Add
    - Amortization expense

# PSAB vs. CASH

**MUNICIPALITY OF RUSSELL BINSKARTH**  
**SCHEDULE 17 - RECONCILIATION OF ANNUAL SURPLUS (DEFICIT)**  
 For the year ended December 31, 2015

	2015			2014	
	General	Utility	Total	Total	Total
<b>MUNICIPAL SURPLUS (DEFICIT) UNDER THE MUNICIPAL ACT</b>	\$ 1,095,636	(412,083)	\$ 682,553	\$	122,397
<b>Adjustments for reporting under public sector accounting standards</b>					
Eliminate expense - transfers to reserves	596,470	45,000	443,470		447,275
Eliminate revenue - transfers from reserves	(329,810)	(32,589)	(362,399)		634,524
Increase revenue - reserve funds litigation	10,178		10,178		9,107
Increase (decrease) revenue - net surplus (deficit) of non-subsidiary entities	(814,131)		(814,131)		(1,357,737)
Increase expense - amortization of tangible capital assets	(709,900)	(223,333)	(1,913,233)		(626,364)
Decrease expense - principal portion of debt service cost	272,224	95,270	367,494		232,473
Increase (decrease) revenue - gain (loss) on sale of tangible capital assets	(50)		(50)		52,438
Eliminate revenue - proceeds on new debt service debt	(1,000,250)		(1,000,250)		
Eliminate revenue - proceeds on sale of tangible capital assets	(450)		(450)		(227,420)
Eliminate expense - acquisition of tangible capital assets	1,124,333	1,019,689	2,144,022		946,970
<b>NET SURPLUS PER STATEMENT OF OPERATIONS</b>	\$ (113,789)	491,055	\$ 377,256	\$	(20,224)



# PSAB vs. CASH

Municipality of Russell Binscarth Financial Statement Reconciliation PSAB to Cash Basis August 31/16		
<i>General Fund</i>		
<b>PSAB Based Net Operating Surplus/(Deficit)</b>		<b>\$ 2,104,532.01</b>
<b>Less</b>		
Debt Principal		\$ -
RM Admin Office Sale		\$ -
Land Inventory		\$ -
Tourist Booth		\$ -
CN Track Side Property		\$ -
Industrial Park Payment		\$ -
Gain on Sale of Equipment		\$ -
Allowance for Tax Assets		\$ 7,068.21
Capital Purchases		
Schutte Ditch Mower	20,025.26	
B2650 Tractor and Attachments	43,824.24	
Gambler Road		
<b> Hwy #4 - Low Level</b>	<b>375.78</b>	
<b>Total Capital</b>		<b>63,849.60</b>
<b>Add</b>		
Total Value of Land Sale Proceeds		\$ 10,531.25
Amortization		\$ -
Landsfill Post Closure Costs		\$ -
Debtventure Proceeds - Recognized		\$ -
Loss on sale of Property		\$ -
Bad Debt Expense		\$ -
<b>GDF Cash Based Surplus/(Deficit)</b>		<b><u>\$ 2,052,145.45</u></b>

## Exercises

- Q.3

- A. At the end of 2015 the Municipality purchases a 2015 tandem dump truck for \$80,000 plus taxes net of their trade-in an 8 year old 3 ton truck. The MSRP for the Tandem was \$105,000. The 3 ton truck was originally recorded on the books for \$75,000 with an expected life of 10 years and the straight line method of amortization was used.
1. How should the CAO record the initial transaction for the purchase of the Tandem and the trade in of the 3 ton.
  2. What are the entries each year there after assume a 10 year life for the Tandem

## Exercises

- Q.4

A. The Municipality has entered into a lease for Grader. Contrary to the advice of the CAO who had recently attended a Capital Asset seminar identifying the limited benefits of leases to municipalities, the Council went ahead and approved a contract with the following terms:

- 250,000 Total Value of a lease over 5 years for a piece of equipment
- BPO of \$1,000
- PV of the Lease Payments is 225,000

1. How should the CAO record the initial transaction
2. What are the entries each year there after



## Public – Private Partnership

P3s use of funds from the private sector in long-term approach to procuring public infrastructure .

Projects are usually larger in scope and cost to provide the maximum opportunity for efficiency gains and return for private sector

- Average Cost of a Project Funded under P3 Canada approximately \$60,000,000

## Public – Private Partnership

- Private Sector assumes a major share of the risks
  - financing
  - construction
  - ensuring effective performance of the infrastructure, from design and planning, to long- term maintenance.
  
- Public Sector
  - Gain access to expertise and efficiencies of private sector
  - Can avoid incurring any capital debt – User pay systems
    - Toll Roads
    - Water Treatment Plants
  - Publicly funded projects provide deferred cash flows

## Public – Private Partnership

- Examples

1. Chief Peguis Trail Expansion

- Completed in 2011
- \$60 Million
- Completed 1 year ahead of schedule

2. Southwest Rapid Transit (Stage 2)

- Approved for P3 funding in 2015
- Estimated cost \$600 million

## Public – Private Partnership

- Future of P3
  - Prior to 2015 the Federal government required a P3 option on Projects over \$100,000,000
  - Current Liberal Government has backed away from requirement
  - Issues around private ownership of public and essential service infrastructure
  - P3 projects have not always been cost efficient
  - Public opposition

# Municipal Purchases

- Municipal Policy on Purchases
  - Procurement Guidelines
    - \$ thresholds
    - Ability to attract bids
    - Agreement on Internal Trade MASH Annex 502.4
  - Control vs. Flexibility
  - Legal Requirements

## Procurement & Capital Purchasing

- Sole Source
  - Small contracts, projects or purchases
  - When only one supplier is available
  - In times of emergency
- RFI /EOI
  - Municipality looking for more information
  - Not necessarily committed to buying
  - Likely to include a further step before a decision

## Capital Purchasing

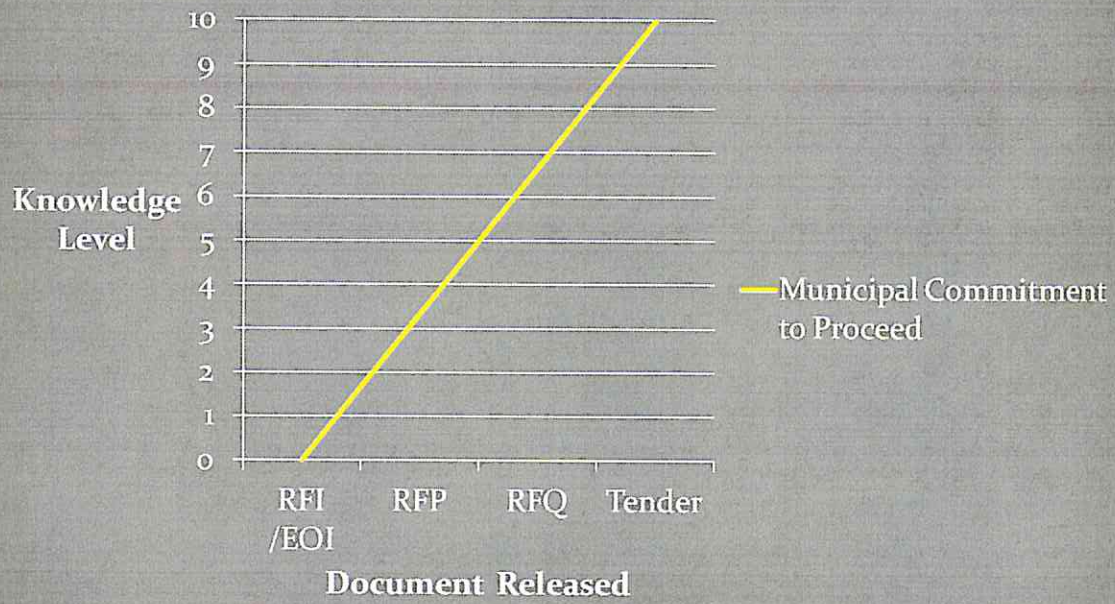
- RFP (Request for Proposals)
  - Municipality is looking a solution based submissions
  - Probably no clear specification or best solution
  - Provides flexibility to Municipality
  - Qualifications of supplier a key, may override price
  - Often used to acquire professional services(Engineering, Auditor , Architect)

## Capital Purchasing

- Requests For Quote (RFQ)
  - a lot like a Tender
  - typically used for smaller projects in size and scope.
  - seeking pricing information
  - Municipality committed to moving forward
- Request For Tender
  - Municipality has clearly defined criteria
  - Responses judged on \$ and qualitative factors
  - Municipality is very committed to buying



# Information vs. Commitment



## TCA Acquisition

- MASH Annex
  - Agreement on Internal Trade enacted on July 1, 1999
  - Municipalities included in Agreement on Internal Trade
- MASH Annex Applies to
  - Goods and Services over \$100K
  - Construction Projects over \$250K
- All Procurement Covered by MASH
  - Must be advertised on MERX
  - Use of Municipal Website

## Capital Asset Management Plan

- Asset Management
  - Process for managing a Municipality's Assets in a cost effective manner by
    - Analyzing the life cycle of all assets
    - Develop information about current status and future maintenance and developments
    - Determine future resources needed
  - Critical to effective planning
  - Projects Life Cycle Costs
  - Determines levels of service and risk

# Capital Asset Management Plan

- Process to establish Plan
  - Determine state of local infrastructure and capital assets
    - What
    - Where
    - What Condition
    - Useful life
  - Understand your financial circumstances
    - Value of Current Assets
    - Cost to replace today
    - Cost to Operate and Maintain
    - Future Capital Cost

## Capital Asset Management Plan

- Make informed decisions
  - Evaluate current decision making process, how is it done, who is involved
  - Determine the ideal process
  - Close the decision making gap
- Manage the Asset Life Cycle
  - Analyze current rates of deterioration of assets
  - Determine Priority areas and assets
  - Assess if Operations and Maintenance policy should change
- Set, review and respond

## Capital Asset Management Plan

- Asset Management Plans
  - Excellent tool to identify priorities
  - Excellent tool to assess future investment
- Senior Levels of Gov't Use them
- Many Provinces Require them of Municipalities (AB)
- Will be the norm when applying for Federal Funding

## What is a Y/E Audit

- A financial statement audit is the examination of an municipality's financial statements and accompanying disclosures by an independent auditor.
- The result of this examination is a report by the auditor, attesting to the fairness of presentation of the financial statements and related disclosures.
- The auditor's report must accompany the financial statements when they are issued to the intended recipients.

## Why is Audit Important

- Legal requirement
  - Municipal Act Section 127 (2)
  - Municipal Act Section 183 (1)
- Impacts on Financial position of Municipality
  - Gas Tax funds linked to Audited F/S
- Impacts on the confidence of the ratepayers on the professionalism of administration
- Impacts on Council confidence in staff



## Preparing for the Audit

- Schedule time when you and or your staff are available to answer questions and meet if necessary
- Make sure records are neat, orderly and easily referenced
- Ensure the F/S being used by the Auditor has been approved by Council both interim and Y/E
- Auditor testing records and your control systems, the greater the confidence the better

## Preparing for the Audit

- Prepare Documentation - Provide support for every Balance Sheet Account
  - Cash – provide evidence of year end cash count
  - Bank / Investments – provide latest Statements, balanced bank reconciliation and interest accrual
  - A/R - Provide a listing of all accounts receivable that matches the total in the individual receivable G/L accounts

## Preparing for the Audit

- Taxes on Roll – Complete the schedule requested by the auditor that details transactions through the account
- Ensure all due to/due from accounts balance
- Complete inventory counts with documentation and calculation of value. Adjust the balance from the previous year

## Preparing for the Audit

- Provide copies of all invoices for TCA expenditures in the current year
- Complete TCA listings spreadsheets including inputting additions and disposals
- Provide Journal entries if not completed for all amortization expenses

## Preparing for the Audit

- Calculate pre-paid accounts based on previous year  
e.g. Insurance
- Provide evidence of School Payable amount
- A/P - Provide a listing of all accounts payable that matches the total in the individual payable G/L accounts
- Complete vacation, banked time and sick time calculation to establish Accrued Salaries

## Preparing for the Audit

- Complete Calculation of accrued interest on Debentures
- Complete Tax Levy reconciliation
- Review all revenues and expenditures and provide reasons for significant variances
- Be patient, remain cheery

