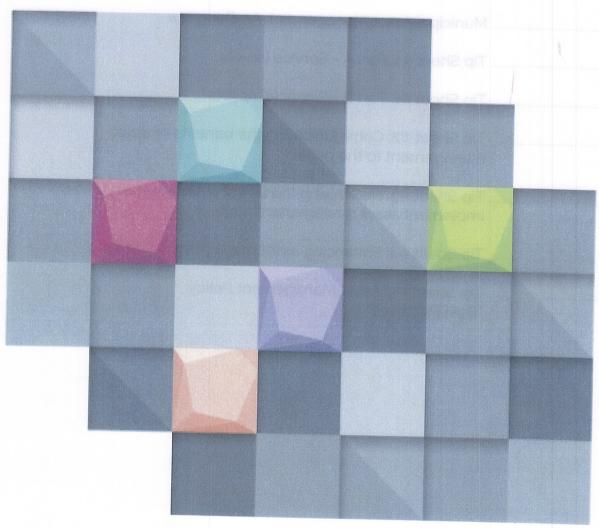
"Council Member's Toolkit

1

A practical guide to evaluating municipal asset management



Tips for evaluating asset management plans





Innovative Asset Management

Table of Contents

Page	Description
3	Municipal Asset Management: An Overview
7	Tip Sheet #1: Part A - Service Levels
10	Tip Sheet #1: Part B - Financial Assets
14	Tip Sheet #2: Communicating the benefits of asset management to the public
17	Tip Sheet #3: Maximizing the use of available tools to implement asset management plans
23	Tip Sheet #4: Enhancing asset management planning
27	Tip Sheet #5: Asset Management Policy:

Tips for evaluating asset management plans

Municipal Asset Management

An Overview

What is asset management all about? Why should I care?

For the last century, our municipalities managed our financial affairs much like any business or household. Like the family budget or the profit and loss statement of a small business, a municipality's focus has been on keeping revenues and expenditures in balance, and ensuring that cash flow is sufficient to pay our bills and to pay our staff and contractors.

But there's more to business corporations, family finances and municipal corporations than income and expenses. There are also assets and liabilities. In addition to a Profit and Loss Statement, or an annual Budget of revenues and expenditures, the annual Financial Statements of any corporation include a Balance Sheet. The Balance Sheet summarizes the financial, physical and business assets that have been built-up over the years, and against them, the obligations that have been incurred, in the way of things like borrowing and providing for depreciation, repair and replacement.

Perhaps understandably, our municipal corporations have generally paid little attention to our assets for the past century. The focus has been on providing services to our community (expenditures) and collecting revenues to provide those services and to meet our obligations (primarily revenues like taxes, fees, utility rates, development charges and investment earnings). Some assets, such as land, roads and buildings, were not even recorded in any consistent way. After they were purchased or built, these assets had little impact on our annual budgets, beyond expenses for their use, like winter maintenance or arena operation.

What's your Asset Management Plan?

In the 21st century, the traditional financial outlook of municipalities has broadened considerably. More transparent financial reporting, the burden of public debt, and a growing concern for the state of public infrastructure combined to increase the focus on the municipal Balance Sheet — on our assets and liabilities, as well as on the equipment, facilities and networks on which our municipal services depend.

In recent years, progressive thinking by municipalities, bolstered by government requirements and new accounting rules have combined to make the state of our assets and liabilities an important part of your job as a member of municipal Council. Unlike in the past, our municipalities must now develop and maintain a more complete inventory of what we own and the enterprises that we run (our municipal assets), and any obligations associated with those assets (liabilities).

We are also required to develop **Asset Management Plans**. These are our plans for keeping our assets in good repair and using them to best advantage. They also outline our plans for timely maintenance and refurbishment, as well as to add to our asset inventory, and ultimately, our plans for restoring, extending, replacing or disposing of our assets.

What is the "asset management" role of our municipal Council?

What's my role as a municipal Council member?

In addition to playing the roles of municipal legislator and community representative, a Council member is also responsible for the care and custody of a variety of valuable municipal assets, both for the present and for the future — a "fiduciary" obligation.

What questions should I ask, in discharging my fiduciary responsibility for "managing" municipal assets?

How can I monitor the actions of professional staff in preserving, enhancing and getting best performance from municipal assets?

We all know that the role of the municipal Council, or indeed the role of the 'board of directors' of any corporation, is not to manage the organization, but rather to oversee management staff and management systems, to ensure that management supports and advances the policies and strategies of the corporation.

Regardless of the professional background or managerial experience of anyone on Council, a Council member's role is not to 'manage', but rather to ensure that management staff is doing its job, and doing it in a way that is consistent with and supportive of the strategies and policies approved by Council. Sometimes, discharging that important role is relatively straightforward; in more complex fields, however, it can be more of a challenge.

When issues are complex or technically sophisticated, there is risk that professional practices or past precedents may obscure other legitimate considerations and make it difficult to crystallize the choices that are being offered. This risk is heightened if Council is asked to adopt a system or set of policies that effectively limits future options or makes decisions with wide-ranging or long-lasting implications for finances, service-delivery, community standards, or land-use.

Understanding assets and liabilities...in the municipal world

A Council member's dilemma is never more apparent than when municipalities are asked to adopt 'best practices' in the field of asset management. Collectively, Ontario's municipalities own and manage billions of dollars in public assets. Some of these assets can be found on the balance sheet of your annual, audited Financial Statements (financial reserves, land, infrastructure, buildings, etc.). Others are more "intangible" public assets, like municipal enterprises, programs, service monopolies, information technology applications, databases, "intellectual property," or even corporate reputation or "good will."

It is also important to recognize the difference between the popular understanding of the words "assets" and "liabilities," contrasted with the use of those terms in the municipal world. In everyday use, "assets" are simply 'good things' — they have intrinsic value and they can be employed, sold, rented or leased to generate revenue, either one-time or a stream of payments, or 'profits'. In this sense, "assets" are part of a calculation of "return on investment" or ROI.

Some assets, like financial assets, are entirely beneficial and can be re-invested for additional financial returns.

Some assets, like facilities or equipment, need periodic investments to retain their value, but they can generate revenues from their productive use.

In the municipal world, however, "assets" are seen in different terms. Some municipal "assets" may carry weighty financial and operational obligations, while as a practical matter, they may not have any marketable value or annual revenues.

Part of your job may be simply to insist on clarity in the discussions on this topic: "What assets are we talking about?"

What an engineer or a land-use planner means by an 'asset' or a 'liability' may not be the same thing as an accountant or a lawyer. Some discussions include real estate assets or the value of a municipal enterprise; in other contexts, these things may not be counted. As an anchor to this discussion, one of our accounting rulebooks is called PS1000, a guideline from the accounting profession's public sector accounting handbook, which is used by your auditors and your municipal treasurer to develop your financial statements, including your balance sheet of assets and liabilities. (The Public Sector Accounting Board (PSAB) also sets out the rules that Canadian municipal financial

statements must follow in this area and others).

Let's look at an example. Property assets devoted to parkland, or roadways, or used as city hall, may have a theoretical market value. But in practice, they cannot easily be sold-off and in fact, generate regular net claims on the operating budget. In other words, accounting conventions may call something an "asset" that most people would feel is more like an ongoing liability.

For this reason, for much of the 20th century, municipal balance sheets recognized assets by recording the outstanding debenture borrowing incurred to build or acquire those municipal assets (e.g., a debenture for a new bridge).

With recent PSAB municipal accounting rules, however, most physical assets are now recorded on municipal balance sheets. As a result, it is even more important to record the money invested to maintain or restore them, and to go beyond simple depreciation to produce a picture of the "return on investment." Asset management practices are therefore emerging as much more important to municipal wellbeing than they have been for a century.

Why do we have these assets?

Most people would agree that municipalities fulfill four broad types of duties: legislating and 'good governance'; deliver programs and services; provide community leadership; and, custody of public finance.

To fulfill these various roles, municipalities need more than staff, money and information. You must have public "assets" — the 'tools' we use to do our job. Some assets are physical assets, like water lines, police cars and parklands; others are 'enterprise' assets, like utilities, housing authorities, or transit systems; still other assets are "intangible" assets, like "intellectual property," municipal communications (like the recreation program newsletter or municipal website), computer systems, software and "apps," service-delivery experience, monopoly 'market position', or even simply reputation or "good will." Some of these would be part of the municipal financial statements, and some would not. But all are important to doing our job as a municipality.

Ask some basic "first principles" questions.

Under the microscope: examining municipal assets through three "lenses":

Asset Management Lens #1:

What should be our municipal program offerings and our service-levels?

Since municipal assets enable us to do our job, we first need to decide what that job should be. We should think about the range and level of services we want to deliver, **before** we decide if an investment in assets is warranted.

Asset Management Lens #2:

What is our "return on investment" or "ROI"?

Next, since you must invest taxpayers' money in assets to acquire them and to maintain them, what do you get for your 'investment' on behalf of your taxpayers?

In a business or not-for-profit setting, you would ask the question: "What is our return on our investment (ROI)?" As you know, public funds are scarce, and people resist tax and fee increases. So, this is an important preliminary question.

Asset Management Lens #3:

Can we 'lever' our existing assets, to generate more dividends, or to increase their productivity?

The private sector routinely looks to increasing productivity and leverage to boost profitability and performance. Since municipalities are not competitors in service delivery, we should do likewise: sharing these ideas can lead directly to mutual benefit. We should look to the experience of other municipalities, to find ideas to improve service or save tax dollars.

Asset management policies

Of course, it is always preferable to have a municipality's operations guided by consistently applied policy and by rational, professionally defensible systems, procedures and practices.

One of the best examples, which is easily translatable to municipalities of all sizes (and which will be discussed in the Tip Sheets), is the City of Ottawa's Asset Management Framework Policy. (http://bit.ly/1G7tvUI)

However, it is equally important, when adopting policies, systems, procedures and practices — to understand clearly what is being decided. Using the "three lenses" mentioned above will help you, as Council members, get answers to questions like those below, from your staff and professional advisors:

- What future choices are really being made? Are we effectively changing our service-standards or committing current or future operating or capital budgets?
- Are we doing a robust "risk assessment," to anticipate future problems?
- Should a higher priority be placed on assets prone to risk from natural or human-made disasters?
- If the current situation took many years to develop, what timetable is reasonable to address current and projected future needs / demands?
- What future choices are being limited, surrendered or predetermined? What are the implications of those choices for other important areas of municipality responsibility? If we do this, what will we be unable to do in other areas?
- If this course is a good idea, have we considered alternative ways to achieve these same results?
 Have others done this differently, or claim to be better, than the course recommended to us?
- Are the implications of these decisions going to be the same for all citizens or all taxpayers?
- Are we treating rate-based, tax-based and feebased customers differently? Should we put more emphasis on one than the others? Will this remedial program create hardship for some who will be unable to cope it? How should we cushion or compensate for this 'unfair' impact?

This Toolkit follows a simple two-step process...

In the five Tip Sheets, you will be offered basic information on a series of topics, along with questions that a reasonable and informed decision-maker should ask about asset management inventories and the ways in which it proposed to manage them.

Using these tools, you should consider what is needed to meet future municipal requirements, as well as identifying opportunities to leverage municipal assets to best advantage. Conversely, you should consider ways to limit or curtail investments in areas that are lower priority and low risk

If the answers that you are given to the questions posed on the individual Tip Sheets appear to be persuasive, then members of Council can demonstrate, both to themselves and to the public, that you have done your 'due diligence' as fiduciaries of public assets.

The Tip Sheets also point to other options and the 'best practices' of others. In some instances, these alternatives may be recognized examples of 'best practices' by other Ontario municipalities or by public bodies elsewhere, as recorded by the Ontario Municipal Knowledge Network (OMKN), or from other reputable sources of information and research.

The Tip Sheets also suggest ways in which you, as Council members, might become better informed about some specific area of interest, through third-party sources, such as the <u>Association of Municipalities on Ontario (AMO)</u>, <u>Ontario Municipal Knowledge Network (OMKN)</u> or <u>LAS Services</u>, or an <u>Ontario Ministry</u> webpage.

Tip Sheet #1

Part A Service Levels

We know that municipal assets really only exist to support: (1) municipal community governance (e.g., land-use planning and traffic control); (2) service delivery; (3) community leadership and "amenities"; and, (4) the financial viability of the municipal corporation.

With those purposes in mind, any assessment of the scope of an asset management program should begin with by re-confirming things like the programs to be offered in the future, at whose cost, and to what service-level. In plain language, you only need the tools to do the job you are taking on. You should invest in the tools you need, and avoid spending money on tools you won't likely need, or don't need any longer.

You recognize that there are competing financial pressures. You also recognize that there is a practical limit to financial resources that can be devoted to asset management. Some areas are more resilient than others — for example, should rate-based assets be treated differently to tax-based assets?

The goal is not to do everything possible, but to do everything prudent and practical. In asset management, as in other areas of human endeavour, "the ideal can be the enemy of the good."

Prudence in asset management however, includes at a minimum, meeting the non-discretionary requirements of asset management reporting requirements and standards.

What are our service levels, and what should they be?

- Will we meet the legal requirements of government regulations?
- Will we meet Federal / Provincial grant program eligibility conditions and allowances (for program auditing and eligibility verification purposes)?
- Will we meet our Auditor's requirements (e.g., complying with Public Sector Accounting Board (PSAB) and Chartered Professional Accountants (Canada) [formerly the Institute of Chartered Accountants (CICA)] accounting practices and reporting standards)?

Doing the "right thing" or the "advisable" thing in one area may come at the expense of budget demands in another area. In fact, fully 'prudent' asset management in one function may make it impossible to do likewise in another function — there is only so much money available for municipal activities.

Asset Management Lens #1:

What should be our municipal program offerings and our service-levels?

Since municipal assets enable us to do our job, we first need to decide what that job should be. We should think about the range and level of services we want to deliver, **before** we decide if an investment in assets is warranted.

First, ask yourself: "Do we need to be in this business?," and if so, at what level of service?

Could some other body do this job for us, or could we leave it to the retail marketplace? If so, how does that change our decisions about the related assets (i.e., maintenance, reinvestment, expanded investment, lease, sale, joint venture)?

Are we devoting a lot of resources to an activity, service or facility that is becoming obsolescent, or that few citizens are willing to use or support financially? Are we giving the community and the taxpayer more of a service (a higher level of service) than it wants or needs? As the comedian says, "If a job is not worth doing, it's not worth doing well!"

For example, only **after** a decision is made about the level of fire service required in a community (targeted response times, volunteer force versus composite force, etc.), should a decision be made about the equipment or facilities that are required (including the cost of maintaining or restoring existing equipment, or expanding the scope, volume and quality of equipment and facilities).



Deciding on service needs and levels is critical!

Make a decision about the need for a service or program, and the most appropriate level of service, then it is easier to make a logical decision about investing, over time in current and future assets to support those service-delivery decisions.

In others words, as a municipal Council, you should first make a decision about the need for a service or program, and the most appropriate level of service (balancing community needs, against minimum legal obligations or cost to the taxpayers). Then, as a Council, it is easier to make a logical decision about investing, over time, in current and future assets to support those service-delivery decisions.

Asset Management Lens #2:

What is our "return on investment" or "ROI"?

Next, since you must invest taxpayers' money in assets to acquire them and to maintain them, what do you get for your 'investment' on behalf of your taxpayers?



Try to determine the Return on Investment (ROI) of your asset.

In a business or not-for-profit setting, you would ask the question: "What is our return on our investment (ROI)?" As you know, public funds are scarce, and people resist tax and fee increases. So, this is an important preliminary question.

Will the asset management investments extend the useful life of an asset, allowing us to avoid a bigger (or sooner) major capital investment? Or has the asset outlived its usefulness? Does it still reflect our future plans for service delivery or program offerings? Are there new technologies or new service-delivery approaches that we should consider as alternatives to maintaining and re-tooling past practices / existing assets?

We can invest in the future, but we can also be "throwing good money after bad."

From there, you can run-down a logical checklist, posing relevant questions to staff and consultants...

- Are we charging enough for the use of our asset, reflecting its full life-cycle costs and its pace of deterioration? Do we, or should we, have a full-cost pricing model for rate-based services, like water and sewer?
- Should we treat rate-based assets differently from tax-based assets? Can we encourage users of a community asset to raise capital funds for its restoration, or to cover the operating costs of services above the basic "level of service" determined by Council?
- Can we make more use of the asset, by generating more revenue-producing hours, or moving subsidized users to off-peak times (e.g., time-of-day or timeof-week reduced user-fees for seniors, ice-rentals, transit routes, etc.)?

- Conversely, would the pubic (or you) support an ongoing investment in a service or facility, if they had a clear idea of the overall, full lifecycle cost? If an asset is a drain on the municipal budget, or serving a declining 'market', can we institute a "use-it or lose-it" policy to increase use by fee-paying customers, or raise other contributions / revenues, or aim to achieve a minimum level of public patronage as evidence of community support?
- In the public sector, not all "return on investment" calculations are financial. Does our investment in assets yield a community benefit or quality of life attribute that makes for a better place to live or invest?

Asset Management Lens #3:

Can we 'lever' our existing assets, to generate more dividends, or to increase their productivity?

Can we 'lever' our existing assets, to generate more dividends, or to increase their productivity?

The private sector routinely looks to increasing productivity and leverage to boost profitability and performance. Since municipalities are not competitors in service delivery, we should do likewise: sharing these ideas can lead directly to mutual benefit. We should look to the experience of other municipalities, to find ideas to improve service or save tax dollars.



Look to the experience of other municipalities to find ideas to improve service or save tax dollars.

Some public assets can attract third-party or "matching" funds, like the YMCA operating a recreation facility or a local dance studio buying space on the arena boards or in the recreation programs bulletin.

Some public assets (art galleries, recreation centres, museums, cemeteries, etc.) can be better managed by enthusiastic community organizations or experienced third-party operators, thus reducing costs or risks.

Some "intangible assets," like program monopolies (solidwaste collection, road construction, energy distribution, telecommunication systems, etc.) can be made more productive by third-party operation or private investment.

Some municipal assets are underperforming "sunk costs" (surplus land, obsolete buildings, parking lots, etc.) that could become revenue-generators through sale, lease, or joint ventures with compatible partners.

Some assets would perform better if they were "pooled" with similar assets owned by neighbouring municipalities, or transferred to a broader delivery body (e.g., upper-tier municipality, region-wide private or not-for-profit operator, etc.), often with local services contracted-back on an asneeded basis.

Once you, as a municipal Council member, have examined the municipality's major assets through these three "lenses," you can move-on to a more critical assessment of proposals for an asset management program and policies.

What are the priorities?

Should the allocation be pro-rata among various functions (e.g., meeting 85% of target need in all key areas, versus 100% in some and 50% in the "leftovers"?) Should you meet the need partially for all and each, or should priority or perceived legal obligations take precedence?

Tip Sheet #1

Part B Financial Assets

Ultimately, much of the discussion and debate around good asset management comes down to money — in this case, your custodianship of taxpayers' dollars, both current taxpayers and future taxpayers.

Financial assets can be considered in narrow terms: e.g., what cash and investments do we have available, and under what circumstances can they be used?; what debenture proceeds and other long-term borrowing are we using, and what are the repayment plans and obligations for those debts over time? How do we build-up, protect and deploy our financial assets?

Many municipalities have shorthand versions of their financial management practices — "rules of thumb" that help to guide Council members in their decision-making. Some are based in law. Some are based on good financial practices. Some are just common sense applied at home and in public life.

'Adequate' financial assets:

Examples of these "rules of thumb" to measure the adequacy or appropriateness of financial assets might include:

 What is the level of our short-term borrowing at key points during the year? For most of the fiscal year, short-term borrowing cannot exceed 50% of the budgeted operating revenues for the year.

What are our financial assets, and are they appropriate?

- What is the status of tax collection, on behalf of our municipality and others on the municipal tax bill?
 Tax arrears – both residential and non-residential – should not exceed an identified percentage of the total property tax levy, irrespective of projected penalties, tax sales and interest revenues.
- What is the size of the annual surplus or deficit?
 The law says municipalities are to target a balanced budget: have we allowed the surplus to grow too large? Is a large surplus or deficit an indication of weak budgetary estimates or financial systems?
- Any operating surpluses at year-end will be contributed to eligible reserves and reserve funds, not used to reduce the size of next year's levy.
- A fixed percentage of the charge-out cost of public works and recreation equipment should be contributed to a 'pooled' equipment replacement reserve.
- "Reserve for working funds" essentially money onhand or readily available to meet routine business
 operations should be equal to the total municipal share of the annual tax levy.
- The term of capital borrowing should not exceed the useful life of the assets being funded, either individually or on average, collectively.
- Some capital works projects should be charged back to those who are the primary beneficiaries, following the "user-pay" principle. For example, all water and sanitary sewer rates should include a provision for major capital repair and replacement.

After the relatively simple and objective process of summarizing the cash and short-term "liquid" investments, as well as the reserves and reserve funds in the hands of the municipal corporation, the management of financial assets becomes more a matter of judgment, in large measure by the Council.

Asset valuations:

As the old farmer replied, when asked the value of his farm: "Are you a purchaser or a tax assessor?" The valuations placed on assets may be legitimately different for differing purposes.

As an illustration, consider your asset valuations for insurance purposes. The municipality's inventory of physical and property assets for fire and property damage insurance purposes can represent "replacement cost" at the high end of the value scale, through to depreciated value, at the low end.

Likewise in preparing your asset management inventory, if you would likely not replace an old piece of equipment or if a deteriorating building is surplus to your needs, a decision should be made about valuing it accordingly, or even excluding it from your inventory. Of course, that type of property or equipment should also be highlighted as potential candidates for sale or disposition, to generate revenues and to avoid ongoing maintenance costs.

The value of some municipal business assets in private hands may greatly exceed their presumed value as a municipal "going concern," based on their potential for integration with other entities, "leveraging" potential as private entities, and changed business practices and customer offerings.

You also need to query the basis for the proposed investments over time. What is the underlying assumption for funding asset maintenance? Is it...

- To achieve routine maintenance and repair ("state of good repair," safety, etc.)?
- To pay for major renewal and refurbishment?
- To extend the useful life and / or reduce escalating maintenance and labour costs?
- To improve, expand or make technological upgrades (known as "betterment")?

Leveraging value from assets:

Will the proposed asset-management "investments" enable greater revenue-generating opportunities from those assets? Will those projected revenues significantly alter the net budgetary impact of asset-management provisions, or future capital budgets, or future net operating costs (including labour costs)?

Making prudent investments in assets:

In an important respect, asset management plans are like insurance plans. They make provision for losses or outlays that would be difficult to sustain in the normal course of municipal business. If asset-management reserve funds are established, they may earn some additional money against those future claims on the budget, much as insurance companies invest premiums and pension funds invest contributions.

TIP Seek a balance in investing in asset management.

But there is a "premium" to be paid for a good asset management plan, in the form of higher costs along the way. With insurance, consumers must balance the size of the annual premiums they must pay against the expense that might be incurred in the future, based on your ability to pay and your tolerance for risk.

In that sense, asset management plans are like insurance coverage and insurance premiums: you can have too little, but you can also pay too much. To some extent, the right balance may be a technical assessment, guided by staff and professional advisors; but in a very real way, it is also a subjective, political assessment.

Organizing your financial affairs...

While it may be true that you are primarily responsible for finding the money to maintain and enhance your own assets, take measures to ensure that you are "not leaving money on the table." In some instances, there may be grant conditions or capital financing arrangements that allow you to share with others, or defer the full impact, of the cost of asset replacement or expansion.



Structure financing of capital projects carefully.

Scrutinize the structuring of capital projects. Undertaking capital projects and their financing using one approach rather than another can affect your eligibility for available financial support from other levels of government and / or whether you can make full use of eligible development charges / revenues from section 37 of the Planning Act (Ontario) ('bonusing' provisions).

Will some discretionary capital levies, like section 37 contributions, create expanded, ongoing operating and asset-maintenance costs for the municipality?

You should also consider whether there are potential non-tax sources available to assist with offsetting asset management costs.

"Cookie-jar" finance:

While it is logical to expect that each department and local board of the municipality would be responsible for providing good asset management, departmental and operational "silos" can result in inconsistent approaches and unnecessary additional costs.

So-called cookie-jar financing — where revenues and expenditures are "paired" — may serve the interests of a department or function. But segregating small funds may mean missed opportunities for the municipal corporation and its taxpayers to address relative priorities for available funds.

For example, if one department takes a more aggressive approach to asset management than another that inevitably means one department gets more for the same purpose than another.

Likewise, setting funds aside to deal with maintenance, replacement, refurbishment and enhancement on a department-by-department basis obscures cross-functional budgetary priority setting. It also likely means that more money is set aside for contingencies, in total, than would be the case if contingencies were budgeted across the whole municipal corporation.

Overly specific asset-management reserves and reserve funds also reduce the potential to invest funds not

immediately required, or to use them to fund capital works on an interest-on-investment basis (similar to borrowing from development charges reserve funds by promissory note at competitive interest rates)

Accounting rules and practices:

Finally, not understanding governing accounting practices can obscure the costs and opportunities in asset management plans. There are important distinctions between using reserves, reserve funds, allowances, and depreciation provisions to deal with asset maintenance and refurbishment.



Accounting rules have significant impacts on asset management.

You should query the accounting 'vehicle' that your staff has recommended to fund the cost of maintaining, refurbishing and replacing classes of assets. You should satisfy yourself that everyone understands the basis on which assetmanagement funds will be set aside, invested, deployed, and reflected in the annual current and capital budgets and the financial statements.

Likewise, PSAB accounting rules can have an impact on decisions to disposing of assets. If the plan is to use the proceeds to fund activities in the capital budget, you should determine the degree to which net proceeds would be affected by asset-disposition rules. For example: When was the asset acquired? Has it been subject to depreciation charges, so that the proceeds of a sale may not be the same as the net proceeds to the municipality? Is it a tangible asset on your balance sheet? Is there outstanding debt (debenture) associated with the asset being disposed? and, so on.

It is also prudent to tie capital asset dispositions to capital budgets. One-time revenues should typically be used to offset one-time capital costs, not to reduce ongoing operational costs: a lesson that City of Detroit, among others learned the hard way.

Can we demonstrate that asset management plans will help to secure the future operations of the municipality and its services?



Develop principles to balance competing demands.

Finally, each Council member must your own vision about the best balance between competing demands, including those within the asset management plan(s). You may want to be guided by some practical principles. Consider these, for example:

- Plan for now, but also plan for the future: You
 and staff are not only responsible for and to
 current residents and current taxpayers. You have
 a 'custodial' responsibility for the future of your
 community. Will you have the assets that needed
 to ensure municipal operations and prosperity for
 tomorrow?
- 'A stitch-in-time': Many municipal assets have a useful life that can be extended with a relatively modest, but regular and sufficient investment in maintenance and repair. To fail to make these investments raises the prospect of a much larger investment in replacement and rebuilding sooner than would otherwise have been necessary (e.g., crack-sealing on roads and re-decking on bridges puts off costly road and bridge rebuilding for many years).

Conversely, if you have not set-aside funds in your asset-management provisions, it can be very hard to find discretionary funds in the current budget when an unplanned capital spending suddenly appears.

- It's the taxpayer's money: There is no shortage of good purposes on which you can spend taxpayers' money. But you need to remind everyone that Council should only ask the taxpayer for money that is unavoidably required. The ability to put-off a major capital expenditure, or to schedule it over several years, often means that the taxpayer is not asked to pay more prematurely, if ever. As long as your plans make prudent provision for the future, a discretionary expenditure delayed is an expense avoided, leaving the taxpayer's money for other pressing needs and priorities both municipal and personal.
- Smooth-out the 'peaks and valleys': Conscientious asset management practices should be geared to avoiding 'spikes' and one-time large demands on the

taxpayer. Modest, routine requests to fund asset preservation and prolongation on an on-going basis avoids fluctuations in tax rates and debt loads and makes financial planning easier for all concerned.

 Be decisive and innovative: Your future-oriented analysis should always include a clear-eyed decision about when to dispose of assets; and, when to invest in technology or new equipment could, over a reasonable payback period, increase productivity and reduce future operating costs.

Tip Sheet #2

Communicating the benefits of asset management to the public

When we buy a car or a computer, most people don't focus on what is under the hood, or what computer operating system is being used. In practice, most of us are simply buying transportation or information processing to suit our needs and our preferences. We're not trying to understand specific technologies.

In the same way, trying to engage the wider public about "asset management" probably approaches the issue from the wrong end: it risks losing the general public's interest, at least until the implications confront them. At worst, it may look like a sophisticated tax-grab.

Fortunately, as a municipal Council member, you deal with the public all the time. You're in a good position to understand the way the public views issues in the community. That will help you and municipal staff find creative ways to engage the public on an important but not particularly captivating topic.



Engage taxpayers on key public interests in asset management.

You understand that this sort of a public discussion should begin with a discussion about which programs and services the municipality should offer, or cause to be offered by others, at whose cost, and at what service level.

But how do you catch the community's attention and interest, in a topic that risks offering the unsavoury choice of higher costs or poorer service?

Here are five ideas:

First, you can highlight the public's awareness of infrastructure, in a way that would lend support to **keeping it in good repair**. For example, some communities have run contests or opinion surveys to identify the worst roads in town, or organized sponsorship programs to maintain community assets, like floral boulevards on main streets.

Second, you can illustrate the **cost of inaction**. For example, some municipalities have estimated how much treated water was lost due to system leaks, and expressed that lost revenue in terms of lost water revenues. Other municipalities have calculated the cost of doing a timely program of roadway patching, ditching and crack-sealing, contrasted against the timing and cost of full repaving or rebuilding.

Third, you can raise the **profile of safety** in the maintenance of infrastructure, as a rationale for preventative investment. This can be done by explaining the relationship between personal injury claims and the cost of insurance, or on a broader basis, using AMO data to demonstrate the liability risk facing municipalities from court judgments over roadway maintenance and traffic signage.

Fourth, in the Internet age, many more municipalities **survey their residents** and businesses on a variety of topics. Social media and "apps" developed by local residents or other municipalities can make this even easier. A well-crafted questionnaire can give you an opportunity to invite public comment on these topics, perhaps with the benefit of learning more about public priorities for asset-maintenance and infrastructure investment.

Fifth, **celebrate your successes**. The community likes to know that its affairs are being well, prudently and creatively managed. A number of municipalities have been recognized for their asset management plans and activities. Media reports extolling the value of these efforts build public support and confidence in ongoing asset management plans and programs.

Once that debate has been resolved, or after the municipal Council member has heard the variety of public views, then the discussion can commence on the 'tools'. What assets — such infrastructure and equipment — do we need to achieve our objectives? And equally important in an asset management context, how do we calculate the lifecycle cost of those necessary assets?

To answer these questions, individual Council members should ask themselves:

- Have we done an effective job describing our municipality's portfolio of assets, including their role in service delivery, their current condition and our future needs?
- Do we know the public tolerance for service disruptions?
- Have we listened to the public, and specifically, to the primary users / beneficiaries of public assets (including potential users of public assets)? What are their experiences, preferences and priorities? Most importantly, have we talked to "the customers," rather than just the providers?
- Does the public have views about the ownership and operation of public assets? Do they really care who delivers good quality municipal services at a reasonable price? Can we respond to those views?



Public engagement requires education, creativity and clear messaging.

Getting "buy-in" from the public:

- The public may not immediately understand the options available to them. Can we influence those views, in order to support prudent asset management, including "leveraging" public assets for greater public benefit?
- In an age of Facebook, Twitter and the Internet, what are the best tools to "listen" to the public about asset management issues? With the decline in daily newspaper, television and radio coverage of serious municipal issues outside of major media markets, new ways need to be found to reach the public.

Some members of the public want to be fully and intensely involved in municipal issues. Other residents and taxpayers just want to have a "good citizen's" perspective, based on a reasonable level of information and an understanding of the options being considered by their Council members — and what it means for them and their neighbours. Social media offers the flexibility to serve both audiences, with devices such as webinars, Tele-Town Halls, monitored blogs, and broadcast e-mail distributions.

- Asset management issues can present unique challenges for municipal Councils living with a relatively short four-year Council-term planning horizon. Asset management issues can present conflicts between near-term costs and benefits, against the interests of future taxpayers and future Councils. As is too often the case, 'doing the right thing' for the future — demonstrating leadership — can make some sound decisions somewhat unpopular in the near-term.
- Like (say) some land-use planning issues, public discussions on asset management practices and service levels can pit a broad, diffuse public concern or benefit against a very specific stakeholder interest. How do you balance that conflict, to give the broad benefit the weight it deserves?
- Can you find a way to "hear," engage and balance both audiences – the general public and taxpayers – and specific clienteles (and special interest groups), including municipal employees? What are the best tools to inform and persuade, about prudent and innovative asset management?

 Against what measures should the public decide if asset management practices produce the desired results and will be worth the investment? How do they (and you) monitor and review those decisions at a later time?

What are your "key messages" for the public, about prudent and responsible management of public assets?

Adopting sound accounting, budgeting and engineering practices are not the stuff of animated public debate or that draw the attention of a busy community. By its nature, asset management is a broad, complex and long-term topic, with many highly technical aspects.

You need to find ways to crystallize the message and to outline the implications, for a public that is very much affected by the resulting decisions, whether they realize it immediately or not.

The Ministry of Economic Development Employment and Infrastructure has a webpage (http://bit.ly/1vFoNuk)with a number of proven communications techniques on asset management:

You can't get "too far out in front" of the public. Particularly in this field, you need to find ways to explain your municipality's options and proposed courses of action, in terms they will understand and embrace.

- What is affordable, and what is the best way to explain that?
- What has priority and how should that be decided?
- What are the long-term benefits to "doing the right thing"?
- How do you explain that simply continuing past practices risks deterioration in the municipality's service-levels, quality of life, public investments, and financial position?
- What are the factoids or "descriptors" that would be most effective in explaining this to the average, intelligent voter and taxpayer?

A Council member's challenge is "translating" the technical and financial case into terms that the public will understand and support:

- What is the best way to explain to the public what you (and they) would consider to be "affordable"?
- What is the best way to explain that a small expenditure now avoids a big expenditure later?
- How can you best illustrate the importance of the extra cost of 'redundancy' or resiliency, in designing roads or storm drainage systems, whose failure would be dangerous and costly?
- Can you explain these municipal prudent practices using household or business examples or metaphors?

Of course, you are only one "voice" in championing good practices. You will need allies and support.

- Has staff done a good job in giving Council the communications tools that allow you to champion good decision-making, for now and the future?
- Are there "third parties" in the community, such as business operators or academics, or external bodies or experts, who could be enlisted to add credibility and personal experience to the case for prudent and innovative asset management?

For example, as part of its asset management program, the City of Cambridge developed unique relationships with a globally recognized information services providers. Those relationships led to Cambridge being recognized nationally and internationally as a progressive and efficient municipality. The City also won external recognition from various industry and municipal organizations for its innovative program and its results.

Those endorsements of the City's innovative work inevitably translated into greater public confidence and financial support for City Council's the asset-management initiative, and potentially, wider economic development benefits.

Tip Sheet #3

Maximizing the use of available tools to implement asset management plans

What are the best tools to manage and improve the performance of specific classes of assets (e.g., real estate assets, information and database assets, financial assets, etc.)?

While setting up reserves and allowances for various assets may have some symmetry, it may not be the best approach. You should consider "pooling" provisions for asset management, rather than segregating them by project or program or class (e.g., roads equipment; recreation buildings; computer systems; etc.). This can be more efficient, allow better priority-setting, and reduce the overall amount that needs to be set-aside for the future.

Since the nature of municipal assets can vary widely, the tools to manage them need to be equally varied. For example, the practices for dealing with real estate assets are not and should not be the same as those to deal with equipment and vehicle assets.

However, it is equally important to take an overall view of the needs of related assets. For example, roads, waterlines, sanitary sewers, sidewalks, streetlights, and urban drainage have differing lifecycles and differing maintenance requirements. But they often share the same right-of-way and working on one system (e.g., sewer lines) frequently affects the structural integrity and rehabilitation schedule of another (e.g., road surfaces).

Nothing irritates the casual observer in the community more than watching crews working on a sewer or a telephone line under a recently paved road. Decisions on the timetable for major maintenance and rehabilitation of individual public works should take into account the lifecycle of the individual pieces of infrastructure and the corresponding annual accumulation of funds set-aside to do work in

the future. Those decisions should also adjust for the relationship with other public works that should be done at the same time for reasons of efficiency, cost-saving and public acceptance.

?

What are the best-practice experiences of other municipalities? Who has been most successful in using financial provisions for asset management effectively?

One of the best and most comprehensive approaches to asset management has been undertaken by the City of Ottawa. While it's one of Canada's largest cities, its approach can be scaled to suit the smallest village or township. It combines an overall Visionary and Strategic components, with more practical Tactical and Operational elements. (See Figure One).

Ottawa's "Comprehensive Asset Management Framework" has a logical sequence that goes from a Policy Statement and Purpose, through a set of Definitions and a description of its Scope.

Next it outlines what is involved in its Comprehensive Asset Management Program: its components are the links:

- (a) to the overall corporate strategy for the City (known as its Corporate Planning Framework);
- (b) to the levels of service in programs;
- (c) to the City's sustainability objectives;
- (d) to seven Policy Statements and a five-element Policy Direction; and, ultimately
- (e) to through to the foundational documents:

the Comprehensive Asset Management Strategy; the Council-approved Customer Levels of Service document; the individual Asset Management Plans; and annual State of the Asset Report, as part of the annual Budget and Long-range Financial Planning process.

Figure One: Comprehensive Asset Management Framework

)ttawa Comprehensive Asset Management Framework Community and Stakeholder Expectations Asset Management Performance Monitoring State-of-the-Infrastructure, DWQMS, TCA Report, Benchmarking....) Corporate Strategic and Business Plans Compliance Assessments Comprehensive Asset Management Policy Strategic (Council adopted asset management principles) **Asset Reporting** Comprehensive Asset Management Strategy (Senior Management approved long-term approach to management of assets) **Demand Management** Lifecycle Management **Financial Management** EXISTING Performance Indicators, SUSTAIN Future Demand, Regulations, Level of Service Enhancements Asset Portfolio, Lifecycle Analysis, Risk Management, Decision Support, TCA Analysis, inancial Analys Funding Plan Asset Management Enablers (Knowledge Management, Resource Planning, Competency Development, Technology) Operational Asset Management Plans Renew Operate Dispose Create Design Plan Replace Maintain

Using "best practices" does not necessarily mean using sophisticate systems or technology, or complex accounting formulae. The City of Cambridge's infrastructure asset management program, which is discussed later, used a judicious combination of high-tech and "low-tech." In addition to a computer program that logged all of its infrastructure and maintenance experience, the City relied on its staff — equipment operators, sewer-repair crews, etc. — to "ground truth" what the system was saying about maintenance and repair needs across the system.

- http://www.cambridge.ca/relatedDocs/2013%20
 -%20Cambridge%20Asset%20Managment%20Plan.
 pdf
- http://www.cambridge.ca/transportation public works/asset management division
- http://www.amo.on.ca/AMO-Content/News-Releases/2012/City-of-Cambridge-Wins-AMO-Gas-Tax-Award.aspx

Against what standards should future Councils measure the success or appropriateness of our assessment management practices and level of investment? What standards are for annual or multi-year reporting? Which standards, performance indicators, or measures are for more regular reporting or monitoring? Are there mid-course checks that we should employ to adjust our course, or to verify our direction and assumptions? What would they be?

To paraphrase "reinventing government" municipal reformers Osborne and Gaebler, 'You can't measure what you can't count. And you can't manage what you can't measure'. Or: 'What gets measured, gets managed, What gets managed — gets done.'

Tools already in your toolbox:

Many assets have unrealized revenue-generating potential, either in their current form or with a change in their use.

There are always policy debates over the concept of "user pay," with many arguing that some services, such as public education or local roads, should be paid collectively by all taxpayers. In other cases, there are legitimate concerns about the ability of the less fortunate to pay for basic community services. However, many public services, even those with general application or where their cost impact needs to be 'cushioned' by fiscal policy, are delivered in whole or in part on a user-pay basis (e.g., recreation programs, drinking water, retail electricity, public transit).

TIP cost of a

Tying the use of a service to the cost of a service generates many positive results.

- A "user pay" philosophy of asset management brings 'market discipline' to decisions about the volume, level and variety of services being offered by the municipality and its local boards.
- It allows municipal Councils to judge the relative popularity or importance of some services, as they make budgetary, staffing and out-sourcing decisions.
- It makes it possible to budget for appropriate levels of maintenance and reinvestment, and to embrace prudent, full lifecycle costing, rather than 'runningon-empty' until a facility or service's needs are recognized in the competition for public funds.
- Above all, it often permits a service that is supported by the general tax rate to be moved to a rate-based or fee-based model, thereby freeingup tax room for other priorities and reducing the pressure for tax increases.

Policy Choices:

Much like zero-base budgeting, Councils have fundamental options in delivering municipal services and facilities, and these options lead to policy choices that affect the acquisition, maintenance and replacement of assets.

For example, not all municipal services are mandatory. Some mandatory services not required to be delivered at current levels or by the municipality directly (i.e., they can be delivered by contractors, or through cooperation with other municipalities or public / non-profit agencies in your area). Once you meet your basic legal obligations, the choices are open to you, as municipal legislators, to design the portfolio of facilities and services that you will offer to your community, at a cost that community will support.

TIP

Municipal collaboration can be a key tool.

Explore the feasibility of delivering some services or establishing some facilities through collaboration with others. While municipal boundaries may be important in the municipal world, they often no longer correspond to the economic region, social patterns and ecology of our daily lives. Taking a more 'regional' or county-wide approach to municipal and community services may afford real dividends in maintaining the viability of existing public assets or adding to the quality of life of all the area's municipalities.

It may be your role to push other organizations, such as the health unit, the conservation authority, the upper-tier municipality or social services agencies, to play a greater role as 'convener' of a discussion of these options. There may be much they can do to ensure that their programs, services and assets complement and mutually support the objectives and programs of local municipalities, in the interest of the common taxpayer and overall community benefits.

Getting the most from your real estate assets:

Earning dividends from municipal real estate assets – developing an "INVEST" Strategy:

All municipalities have significant property assets. They are necessary ingredients in providing municipal services and facilities. At a basic level, municipalities need to maintain and enhance their actively used property assets through a regular program of maintenance, repair and rehabilitation. But that is only part of the picture.

It is important for the municipality to understand all its property assets and have a strategy for maximizing their value. In some quarters, this broader public-sector real estate strategy is called an "INVEST" strategy.

Underutilized real estate assets have a cost consequence, in terms of both real costs and missed opportunities, especially if lands could be better maintained or better utilized. In many cases, additional taxable assessment and / or local economic benefits can be achieved through municipal involvement in the real-estate sector.

There is significant benefit in co-location of services or through the relocation of outdated and poorly located municipal and community services. As an example, a municipality may consider relocating its Public Works yard to a new, larger and more appropriately located site.

The decommissioned existing site, in turn, may present an opportunity for more strategic uses that could bring a number of benefits to the community, in addition to contributing financially to reducing the cost of the new facility.

There are also instances where municipalities can encourage local economic development through direct involvement in property acquisition or sale.



Getting the most out of real estate may require "thinking out of the box" — going beyond their current use.

Hidden opportunities?

For example, a number of municipalities are responsible, directly or indirectly, for the administration of social housing. While most social housing projects have adequate reserves to cover day-to-day maintenance and repairs, over time, cost pressures will grow on an aging housing portfolio, especially with the loss of Federal subsidies and changing housing needs / demographics in your community.

There may be opportunities to 'leverage' well located, space-extensive or under-utilized social housing sites, perhaps with the addition of adjoining lands. Ask your staff and social housing manager to examine whether a local public housing project or other social housing complexes could be redeveloped into sites for new residential or mixed-use projects, while still maintaining or even expanding the number of rent-geared-income residential units or seniors' housing apartments / aging-in-place facilities.

Council members have a responsibility to ensure that every asset is being properly managed and maximized, but land and other property assets should be a special focus of attention. Moreover, these municipal property-asset management responsibilities are often different from those of a Board Director of a private corporation.

For example, municipalities have responsibilities to provide a wide range of services that cannot always be compared directly to the business sector. Land-banking for future unforeseen needs, or to promote potential economic development investments, may be a valid, provided there is documentation and reasons provided within the real-estate asset strategy.

Governance and policy considerations and procedures:

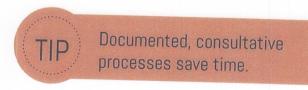
Recognizing these important differences and duties, significant governance and policy procedures should be created and put in place, prior to proceeding with this strategy, in order to avoid conflicts in both real and perceived roles. Real estate has significant financial, legal and reputational risks that must be managed and minimized.

There are a number of municipalities and other public organizations that have created separate corporations or departments for real estate development. These separate organizations are more common in large municipalities. Dedicated in-house real estate departments are generally available in mid-sized municipalities, especially those with populations beyond 50,000.

Municipal real estate departments are focused on the acquisition and sale of properties. But additional capacity would usually be required for real estate departments to undertake the full range responsibilities for property development, in order to enhance the value of properties, such as where subdivision or complicated leasing arrangements are required.

One of the most important responsibilities of a municipal Council is the decision-making role in municipal land-use planning and regulation. Not surprisingly, there can be significant conflicts, whether real or perceived, by the public and development industry and property owners, where the municipality is both the "developer" and the "approver" of related planning applications.

Municipal staff have specific roles to protect the public and municipal interests. It is difficult for municipal employees to play both roles: i.e., where they would be responsible for developing property on behalf of the municipality, and then reviewing the related applications.



Procedures and policies are critical to providing a foundation for action and decision- making. A well-documented and consultative process will save significant time and frustration later when a specific project is undertaken.

Real estate can be a litigious and even emotional matter - so it is imperative to have governance and policies in place to guide Council. Policies can determine the parameters for municipal involvement in property transactions, so that undertakings are limited to those areas where the private sector is not meeting the needs of the municipality. In addition some involvement by the municipality up-front might facilitate the ability for the private sector to proceed to implement the development.

Strategic leadership is necessary from time to time to effect change which should be clearly set out in public documents such as the Municipal Official Plan. In practice, even the best municipal plans and decisions cannot always be carried-out through friendly agreement or through purchase of land at a price that reflects good value and the public interest. While its casual use should be avoided, expropriation is a significant power given to municipalities and should be considered where the public good is being impeded, if only to focus and expedite property negotiations.

Process is important:

Public consultation in the development of good procedures and policies is critical to the success of maximizing municipal property assets. Commitment to an open and transparent process is also necessary for success. Property matters may have certain confidential aspects but the confidentiality should be limited, to avoid perceptions of conflict or "hidden agendas."

In many municipalities, real estate assets are identified as a priority and assigned for review. The problem is that there is no objective process for examination and significant professional resources are required for this process to be successful. Staff may not have the resources in-house to fully undertake this process. There may also be a need for some objective, third-party perspective, to complement and confirm staff's opinion.

The process should provide for responsibility and resources to undertake a review based on agreed criteria. One useful tool would be a matrix with every property requiring a department or function to establish responsibility and purpose for each property. An example is where the Parks or Public Works Departments may be responsible for a property that does not serve any recreation or utility function and there are no impediments to the property being developed for other purposes.

An 'opportunities requirement' would identify properties that are underutilized, or where the function could be relocated either to maximize the value of the asset or to improve the function occurring on the site. Creativity and openness towards innovation may result in lower operational costs as well asset maximization.

In some instances, there may be need to provide incentive or motivation to decide that land is surplus to operational needs, such as a share of the disposition proceeds being retained by the department for other, Council-approved purposes.

There is some significant political sensitivity to many property matters. Council members need to have their purposes and reasoning well documented, in order to respond to some of 'resistance to change' that will occur as the difficult decisions are required.

As an example, neighbours may have enjoyed the view of an empty lot or unused road allowance for many years — they may have even maintained the municipal property. The thought of new homes being built on adjacent lands can become an emotional issue. On a larger scale, the purchase of a closed school site where some development is part of the reuse of the property will require well-documented principles and plans, up-front.

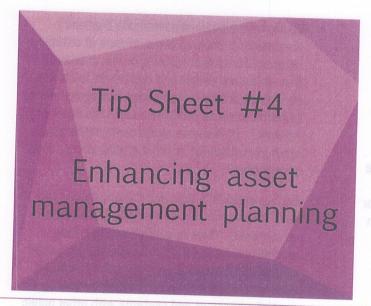
Public consultation in the development of the process is critical. The public's need to understand that when they demand efficiencies and maximizing the value of the taxpayer's dollar and public assets, acting on those mandates may have results that will affect their neighbourhood.

Summary: Substantial value base de production

By recognizing an "INVEST Strategy" as a separate undertaking, as part of a progressive approach to asset management, Council members can give direction to a more effective process. The municipality can maximize the public value of real estate assets with a distinct business plan that allows for investment in this important undertaking.

Parameters for risk and municipal involvement are critical to the success of any real estate asset maximization program. For those municipalities where this capacity is not available in-house, there are opportunities to outsource these skills and even to cover their costs from part of the proceeds of property disposition.

Very specific conflict guidelines are necessary. The same criteria for conflict of interest should apply to part time or contract personnel, as to municipal employees and members of Council. Part-time and contract individuals should view themselves as providing capacity to the senior team and Council as these undertakings may involve significant periods of time.



Can we go beyond simply maintaining and refurbishing our assets, to expand their productivity or leverage their value?

Value engineering:

The Society of American Value Engineers International (SAVE International) defines value engineering as a "function-oriented, systematic, team approach to provide value in a product, system, or service." The definition further explains that while the process is often "focused on cost reduction, other improvements such as customer-perceived quality and performance are also paramount in the value equation."

The term "value engineering" is perhaps too often used synonymously with cost-cutting for over-budget capital projects. In practice, "value engineering" has an important place in asset management plans. Done with the right terms of reference, value engineering may lead either to cost increases or cost decreases, as well as some clear policy choices for municipal decision-makers. It is certainly a useful tool for teasing-out the full life-cycle cost of a public asset, such as a municipal facility or other piece of physical infrastructure, so that asset management judgments can be made.

TIP Use value engineering to control costs.

Among the asset management "value-engineering" criteria might be these questions:

- Will this infrastructure stand the test of time?
- Can we use "value engineering" to ensure that we are not spending money that we do not need to spend?
- Can value engineering suggest ways in which a design enhancement now would reduce our on-going maintenance costs, or put-off the date on which we must spend to refurbish or replace this asset?

Risk-based approach to asset management:

Many major corporations, especially those with a significant impact on society, place substantial emphasis on a formal, risk-based analysis in making asset-management decisions. As a municipal Council member, where public scrutiny is even higher, you should consider doing likewise...

We are in an era where climate change is a topical issue and severe weather events seem to be occurring with unusual frequency. (Some municipal Council members have noted ironically that they have had several "hundred-year storms" in the past decade).

Natural and human-made disasters, from major power outages, mudslides and earthquakes to severe flooding and railway accidents are regular television images. Many of these unfortunate events are made worse by the weak design and / or operational failure of key infrastructure.

Some incidents, such as catastrophic traffic accidents or even simple "slip-and-fall" sidewalk and property claims, are

attributed by costly court judgments to poor infrastructure design or inadequate municipal asset maintenance. As AMO has noted, both litigants and judges increasingly see municipalities as the "deep pockets" in liability claims associated with injuries incurred on municipal properties and roadways.

Unwelcome events will inevitably occur in municipalities, whether they are natural disasters or simply major reverses in the local economy. Your municipality's ability to limit their potential damage, and to get the community and major employers "back on their feet" in short order, is a key, often neglected element of asset management planning.

Mitigation and resilience:

TIP Actively manage risks to secure resilience.

Adequately 'mitigating' possible disasters, and building-in resilience in infrastructure and systems, can change a budgetary discussion of asset maintenance into a risk-avoidance discussion.

Taking a "risk-based" approach to asset management, you might pose these questions to your staff and professional advisors:

- Does the asset management plan ensure the continuation of vital municipal services, both under normal conditions and under periodic stress (natural disaster, economic downturns, etc.)?
- Do the individual key assets (and the programs they support) run the risk operational failure, particularly in adverse conditions? What is the probability or likelihood of such an asset failure or loss?
- Are we designing our infrastructure and systems, from the outset, to anticipate peak demands or external threats? Are we insisting on "resilience by design" at the construction stage, to reduce our potential for system failures and losses later?
- What happens if a key asset or system is lost or fails? Has staff done any "stress testing"?
 Are there system performance or public safety implications, or just cost implications? Are there reputational risks or potential political fall-out, irrespective of the system-performance effects?

- Do we have a business continuity plan and / or recovery or back-up plans, in case of critical infrastructure asset failures, or risk of failure? Can we secure people and equipment to bolster our infrastructure, or to replace lost equipment or systems on an as-needed basis, in the event of a threat? Do we have agreements in place with other municipalities or other organizations, as a contingency?
- Can we share this risk, and thereby reduce the need for investments in "redundancy" and backup systems? There is a difference between prudently investing in "extra capacity" in systemcritical infrastructure, and "spending too much." If additional capacity can be created, by sharing the cost of equipment and systems with other public organizations facing similar risks, it may be possible to achieve greater "depth" without wasteful duplication of equipment and facilities.

TIP Integrate asset management with other key accessibility, energy and planning priorities.

Using asset management planning to meet accessibility needs:

Just as we can reduce the risks of system failures by advanced thinking and "resilience by design," we can do the same to meet contemporary accessibility needs and obligations. Many facilities and services were installed in an era before the importance of accessibility for the physically challenged was well understood. Retrofitting old buildings can be an expensive process that undermines the structural integrity and aesthetics of an historic building. Or it can be well planned and efficiently executed as part of a larger program of rehabilitation and preservation.

As you plan to refurbish and rebuild infrastructure, your plans can very economically make allowances for modification to designs, to accommodate the needs of disabled citizens with various types of mobility and perception challenges.

For example, in developing its procurement plans for municipal transit buses and in planning for other municipal services catering to an aging population, the City of Mississauga has developed a policy that governs incremental implementation of state-of-the-art accessibility features, rather than simply replacing existing equipment and facilities. To do this responsibly, the City does uses

a phased, multi-year procurement strategy that ensures costs are controlled and support systems in place (e.g., mechanical maintenance) to take-on assets with new technical requirements.

Query your staff and facility designers on the measures being taken to meet accessibility needs, including the specific requirements of legislation. Make provisions in your asset management plans to meet the needs of all of your citizens and the requirements of the law, but ideally using a priority-setting process that ensures that taxpayers' money being spent in this area achieves the greatest possible utility for those who make use of these features.

Energy-conservation and environmental performance:

Most municipalities are trying to meet the goals of a lower "carbon footprint" and otherwise reducing the environmental impact of municipal and community activities. An assetmanagement plan can be a very useful way to address these goals, with the discipline and evidence-supported measures of a multi-year planning and "payback" schedule.

In selecting goals for energy-reduction by equipment and facilities, or to achieve a higher LEED certification for new or refurbished buildings, a Council member should ask to see how asset-related investments will be evaluated, both at the proposal stage, and over time.

Taking a "value-engineering" approach can illustrate opportunities to balance investment against performance. Some Council members may be willing to trade significant incremental, non-financial gains for marginal increases in asset-management investments, in original design and over time. Can they be proven or justified, or is the claimed benefit "soft" or heavily contingent?

What is the point of greatest "leverage" between incremental investment and diminishing incremental benefit? Conversely, is a higher, more costly design standard for a facility or other piece of infrastructure worth the financial outlay, in competition with other worthwhile uses of for the taxpayer's dollar? Ask yourself: Would you spend that marginal dollar, if it were for your own house or car?

Land-use planning decisions and asset management plans:

Many land-use planning decisions have important assetmanagement implications.

How well do the planned asset management investments and replacement / refurbishment schedules correspond to existing municipal and community plans (official plan, secondary plans, strategic plan, economic development strategy, road-needs study, environmental or public health strategy, conservation authority plans, etc.)?

Most importantly, most land-use planning decisions have — or should have — built-in assumptions about infrastructure costs, related municipal service costs, and net revenues from new property-tax assessment, development levies, and user charges.

It is important to recognize that near-term development benefits (development charges, building permit fees, water and sewer hook-up fees, road access permit fees, increase property taxation, etc.) may not sustain themselves over time. Once "new" infrastructure has been built using development charges, the ongoing cost of operating, maintaining and replacing that community infrastructure falls squarely on the shoulders of those who are using the services, or on the shoulders of the average taxpayer in the municipality providing the services.

Asset management plans need to make a reasonable allowance for those effects, in the foreseeable future.

The "hidden costs" of planning policy:

Even some of our unchallenged assumptions require scrutiny. Logically, greater urban density reduces the cost of space-extensive service delivery and allows existing infrastructure to absorb new develop within existing, underused capacity. But is that always the case?

While transit-supportive design and residential intensification may meet land-use planning objectives of reduced "sprawl," greater efficiency in service-delivery, and economies of scale, however, there may be "hidden" costs.

"Underground" services and roads designed for an earlier era and for lower densities may be insufficient to support intensification. Greater density in an urban core may require, for example, an early rebuilding and expansion of "piped" infrastructure, to ensure water pressure can meet the demands of domestic consumption and fire-suppression in medium-density developments.

The scale and volume of typical municipal services, from policing and transit to recreation and social services, may also be increased with a more intensive pattern development. Additional property taxation and user charges may be insufficient, over time, to maintain those services without a cross-subsidy from the rest of the municipal taxpayers.

Some land-use decisions may have unintended economic consequences, such as an impact on the continued viability of farm operations, or from encroachment on industrial uses, or by reducing the efficiency of road transportation.

Asset management plans may need to make provision for land-acquisition or additional investments in public infrastructure, to compensate for this increased stress on existing service-delivery and economic arrangements.

Full-cycle costing vs. one-time costs:

The bottom-line in all these considerations is that the asset management plan must view the full-cycle cost of municipal infrastructure and services, not simply its one-time cost or replacement cost. In fact, some 'gifts', like the donation of an historic home or additional parkland, may be a liability when seen in full-cycle terms.

Good asset management practice argues for looking at each **capital project** through the lens that answers these fundamental guestions:

- Will this infrastructure stand the test of time?
- Can we use "value engineering" to ensure that we are not spending money that we do not need to spend?
- Can value engineering suggest ways in which a design enhancement now would reduce our on-going maintenance costs, or put-off the date on which we must spend to refurbish or replace this asset?

When we are evaluating **new development proposals**, and the infrastructure and other assets necessary to make them viable, have we made adequate provision for the lifecycle of these additional public assets, and how they will be maintained, financed and renewed, over time?

Tip Sheet #5

Asset Management Policy: "Best Practices"

Now that you've had an overview of the concepts and tools available to you to undertake successful asset management, you need to consider two other aspects.

First, you must decide what overall policy should guide staff in approaching the subject of asset management.

Second, you must have a good sense of the ways in which you can evaluate progress over time and in relation to others.

This Toolkit will propose two ideas for your consideration: a policy approach called "asset recycling"; and, some examples of peers against which you can measure your efforts and your achievements, by benchmarking them with others.

"Recycling" municipal assets: An idea whose time has come?

As a municipal Council member who has recently been through an election, you know that we are not going to hear public support for raising taxes and fees any time soon, even for much needed public and community infrastructure.

Many have made the case for revenues to support infrastructure investment (bridges, transit, social housing rehabilitation, etc.), in very persuasive terms. But apparently in the view of most successful politicians (municipal, provincial and national), we're not winning the hearts and minds of the voters for more money from taxpayers' pockets. There's even a risk that plans for prudent financial stewardship of municipal assets will be perceived, in some quarters, as a municipal staff "tax grab."



Consider the potential benefits of public asset recycling and test the market.

Faced with a range of fiscal and political challenges, some observers are now proposing a new approach: leveraging or disposing of all or part of governments' investment in their legacy assets. This concept — known as "public asset recycling" — may merit consideration by your Council and staff. In a recent study produced by the Mowat Centre at the University of Toronto in April — Recycling Ontario's Assets: A New Framework for Managing Public Finances — the concept is outlined in greater detail.

[See: http://mowatcentre.ca/recycling-ontarios-assets/]

Some public assets may be worth more to the taxpayer in private hands. Under other delivery models, some municipally controlled business operations and monopolies might still earn the same net revenues while advancing public policy goals.

Should you 'test the market' before you continue with the existing delivery format or make a big investment in a municipal facility?

The 'cycling' of public assets

Asset recycling argues that the policy governing public assets should be seen as dynamic and cyclical, not static or ideological. By levering existing public assets — from land and infrastructure, to government enterprises and intangible assets like information technology — governments

at all levels can 'unlock' the wealth of legacy assets. Recycled public assets can pay for urgently needed new or deteriorating public assets, from roads and bridges to recreational facilities and environmental projects. The role of the private and voluntary sector can be harnessed to build and deliver new public assets or to provide services traditionally provided directly by public agencies.

"The devil's in the details"

While the concept of "public asset recycling" may sound deceptively simple, there are many hurdles to its effective implementation. But they may be hurdles worth overcoming, because the potential benefits are very significant.

In looking at the experience in Australia, Canada and elsewhere, there are certainly lessons to be learned. Success depends on creating conditions that favour public support for "recycling" assets, and by matching those efforts with a clear-eyed approach to removing the barriers to private investment.

[See: list of dos and don'ts for public and private partners in: "Recycling Public Assets: A Timely Fiscal Policy for Government," Public Sector Digest, July 2014; at: https://www.publicsectordigest.com/articles/view/1309

Benchmarking: The service of benilfue at 1990,000 and

Another "policy" decision that faces you, as a municipal Council, will be how you monitor will monitor the performance of your asset management plans.

As with 443 other municipalities in Ontario, a good course for you is to benchmark against the performance of the "best in class," or those with similar characteristics to your municipality or your community.

Which municipalities, like our own, have been most successful in managing municipal assets?

Are there principles that underlie their experience that we should adopt?

Are there systems, policies or practices that we should copy, modify, or purchase?

One useful approach, in an era of google-searches, is to review the experience of other Ontario municipalities that are facing challenges similar to your own.

A review of the *Municipal Finance Officers Association* (Ontario) (MFOA) Asset Management website is an excellent place to start. The website summarizes the experience of nine municipalities of varying sizes and program responsibilities, each of which was recognized for excellence by their peers:

http://www.mfoa.on.ca/MFOA-Adds-New-Asset-Management-Tools

The Ontario Ministry of Economic Development Employment and Infrastructure's Toolkit website is another good source of information and references:

http://www.moi.gov.on.ca/en/infrastructure/building_together_mis/tools.asp

The following case studies provide examples of the kinds of real life municipal experience with asset management that you might find helpful in looking for ways to benchmark your municipality's asset management plans and programs with those of your peers...

Township of Billings:

This very small municipality engaged a consulting firm that produced an award-winning asset management plan. Despite the potential for a bewildering array of numbers and inventory items, the report is presented in accessible form and features easily understood and useful appendices. Among the interesting features of those appendices were: its Asset Report Card, listing the condition of major assets and the proposed investments in them; its two contrasting (and 'costed') Asset Management Strategies (simple replacement cost, with some maintenance; versus the results of a strategy involving inspection, programmed maintenance, and a focus on rehabilitation, before replacement); a summary of expected service levels supported by the assets; and, a risk assessment of key infrastructure.

[See asset management plan's appendices, available at: http://billingstwp.ca/wp-content/uploads/Final-Billings-AMP-with-Appendices.pdf]

Town of Ignace:

A small municipality in Northwestern Ontario included two important factors in its asset management plan. It linked sustaining the quality of infrastructure and basic services to business, in order to preserve an economic base adversely affected by changes in the resource industry.

It also routinely listed, for each major asset, a consideration of the potential for disposition during a 10-year time horizon. This latter practice foreshadows current discussions about the advantages of public asset "recycling" as a source of income for capital investment in new assets and enterprises, while winding-down assets that have outlived their usefulness, either as physical assets or as program priorities.

[See asset management plan at: http://www.town.ignace.on.ca/sites/ignace.civicwebcms.com/files/media/Asset%20
Management%20Plan.pdf]

City of Cambridge:

Like most municipalities, the City of Cambridge has an extensive portfolio of public assets, the scope of which is really not very vivid from its balance sheet and budgetary summaries. When it did its inventory, the City discovered that it has more than 250,000 individual "infrastructure assets" with a total "book" value of \$1.6 billion, including more than 300 miles of roads and more than 1,200 miles of underground water mains, sewage and storm pipes.

The City of Cambridge did know, however, that it had a repair backlog of \$54 million in its water distribution system, and further repair backlog of \$17 million in its sanitary sewer system. These unaddressed repairs were leading to extensive leaks of treated water and periodic breaks in both water and sewer lines. That meant losing over \$2 million each year in fresh water that it could be billing to customers, and a worrisome \$4 million annually in sewer line infiltration costs.

Trying to manage these problems was made more complicated by inadequate records and information about the operation and performance of the water and wastewater network in the City. Fully 25% of the "current" information on the system proved to be either incorrect or missing.

To deal with this real-life asset management challenge, the City undertook a plan to use current technology to guide its efforts and to target the use of scarce human and financial resources to address these problems. The initiative and the investment paid real dividends. The resulting database contains a rich set of data, including photographs showing the actual current condition of assets and through the use of GPS technology, exact pin-pointing of locations. Building on this positive experience, the asset management system was expanded to other key infrastructure, such as roads and streets, involving planning for all maintenance and repair activities.

Working as a team, including private-sector expertise, City staff created new work processes and workflow templates covering all of the activities performed, ranging from pothole repair to snow removal. Through better project coordination, less time spent on capital forecasting, and improved asset management, the City of Cambridge is expected to save at least \$100,000 per year. In three years, roads rated "good" went from 44% to 68%.

As the City explained to its residents: as a result of its asset management system, the City saves money every day. The system enables accurate predictions for the future — in planning, construction and maintenance. The system's computerized algorithms process data and predict which assets will fail and decide whether a sewer pipe should be re-lined or replaced entirely, or if a roadway should be resurfaced at the same time. It also incorporates a financial planning tool to help more effectively use funding for each project.

[See program descriptions:

http://www.cambridge.ca/transportation_public_works/asset_management_division_(City's explanation of the program)
http://asmarterplanet.com/blog/2010/09/building-a-smarter-city-in-cambridge-ontario.html (Program summary for US on-line magazine)

http://www.cambridge.ca/relatedDocs/AM0%20GTF%20Awards%20News%20Release%20Cambridge%20FINAL.pdf (AMO 2012 award for public-private partnership)

http://www.cambridge.ca/relatedDocs/2011-05-30%20Computerworld%20Laureate.pdf (International award for program, with description)]

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