

Why Municipalities have a Love – Hate Relationship with PSAB:

The Direct and Indirect Impacts that PS 3150 Guidelines

Have on Municipal Infrastructure Planning

by

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## **Abstract**

This research project acknowledged that the introduction of PS 3150 guidelines were presented to Ontario municipalities as a new, unfunded mandated responsibility which was viewed by these municipalities to be an impossible challenge within the completion timeline. This research project identifies impacts that PS 3150 guidelines will have on infrastructure planning for municipalities, with a population of less than 5000, in Northern Ontario. The PS 3150 guidelines were created by the Public Sector Accounting Board (PSAB) of the Canadian Institute of Chartered Accountants (CICA) to outline the general process for public sector organizations to change from a modified accrual format to full accrual accounting complete with new financial statements. Municipalities have had to better account for both financial and non-financial assets when reporting on revenues and expenditures. The evaluation of the policy mandate outlined in PS 3150 guidelines has yet to be completed, however the impacts of the guidelines can be assessed based on the development and subsequent implementation of Tangible Capital Asset policies and asset management plans by municipal governments. The findings identified four key similarities among responses from the municipal representatives. The Impacts of PS 3150 legislation are primarily related to personnel, financial, planning, and technical issues. The key recommendation arising from the completion of this research is that municipalities need to move forward, pursue complete asset management plans, in order to demonstrate in a quantitative manner the costs associated with municipal infrastructure planning.

Key words: municipal infrastructure planning, asset management, financial planning, Northern Ontario municipalities

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## **List of Copyrighted Material for which Permission was Obtained**

Reassessment Cycles in Ontario from 1998 to 2016. (As seen in Figure 1). Municipal Tax Equity Presentation titled “Working with Phased-In Assessment Data and Interpreting the Impacts of Changes in Value.” Presentation made by Carla Nell, Vice-President, Tax Policy. October 2008. p. 4.

## **Chapter 1 - Statement of Purpose**

This research project questions what impacts PS 3150 guidelines have on municipal infrastructure planning in municipalities with a population of less than 5000, in Northern Ontario. The PS 3150 guidelines were created by the Public Sector Accounting Board (PSAB) of the Canadian Institute of Chartered Accountants (CICA) to outline the general process for public sector organizations to change from a modified accrual format to full accrual accounting complete with new financial statements. In short, municipalities will have to better account for both financial and non-financial assets when reporting on revenues and expenditures. The evaluation of the policy mandate outlined in PS 3150 guidelines has yet to be completed, however the impacts of the guidelines can be assessed based on the development and subsequent implementation of Tangible Capital Asset policies and asset management plans by municipal governments.

Historically municipalities have been responsible for service provision in order to maximize economies of scale. As the local government system has evolved, municipal governments have been working to improve accountability.

This research project acknowledges that the introduction of PS 3150 guidelines was presented to municipalities as a new responsibility. This new responsibility has been identified as an unfunded mandated and municipalities were very hesitant to proceed due to the significant level of uncertainty associated with this new methodology for addressing municipal assets. The timeline to implement the PS 3150 guidelines was seen as a momentous challenge.

The change to full accrual accounting is being implemented to improve accountability through long-term financial planning for infrastructure and other services.

This system will also assist Federal, Provincial and Territorial governments assess the state of municipal infrastructure when developing infrastructure funding programs.

Ultimately the goal of the Federal Government is to facilitate Municipal, Provincial and Territorial governments' accountability to society when planning and financing publicly-owned infrastructure.

This project is of particular interest, as the researcher is a senior administrator for a municipality in Northern Ontario with a population of less than 5000. This involvement in the target research population provided insight and understanding throughout the research process, however was a recognized bias in the research process.

## **Research Objectives and Questions**

The purpose of this research is to determine how the impacts of PS 3150 guidelines affect infrastructure planning and financing for municipalities with populations less than 5000 in Northern Ontario. The Key Research Questions are:

- 1) What are the direct impacts of PS 3150 guidelines on infrastructure planning?
- 2) What are the indirect impacts of PS 3150 guideline on infrastructure planning?
- 3) How do the direct and indirect impacts affect municipal governments' ability to plan for infrastructure in a sustainable manner?
- 4) What, if any, additional support is required to ensure that municipal governments' are able to plan for infrastructure in a sustainable manner?

## **Assumptions**

There are a number of assumptions that need to be made explicit in order to adequately assess the process and results of this project. These assumptions are as follows:

- a. That PS 3150 guidelines will alter the manner that municipal governments plan for infrastructure (development and rehabilitation)
- b. That the research will be applicable to Ontario and to other areas in Canada
- c. Municipal government and implementation of PS 3150 guidelines is politically charged.
- d. That the research will outline the historical context from the municipal perspective.
- e. That the outcomes will assist in best management practices for infrastructure management

## **Limitations**

There are also a number of limitations to this research project that should be outlined in order to easily identify constraints of the project at its outset.

- a. The PS 3150 implementation process is underway and the impacts of the guidelines are not certain
- b. Municipalities across Canada have to respond to different Provincial legislation and therefore the impacts may differ from province to province

- c. The researcher is the Clerk Treasurer Administrator for a municipality, with a population of less than 5000, in Northern Ontario and therefore will attempt to identify any biases that exist due to the nature of this position.

## **Significance**

This project will be relevant to all municipalities and communities in Ontario that are required to comply with PS 3150 guidelines. As well, the implications will be relevant to municipalities across Canada, as all public sector organizations are required to be compliant with the guidelines as of January 1, 2010. The results will also be useful to municipal associations and provincial governments that are interested in the impacts that the implementation of PS 3150 guidelines has had on the target research group. This is particularly important for organizations that are aiming to develop a fair and rational methodology for funding and maintaining municipal infrastructure and municipal assets and developing a system for the management of municipal infrastructure.

While this research is specifically focused on the impacts felt by municipalities, the lessons learned may also prove significant to First Nation communities. First Nation communities are also required to follow the Public Sector Accounting Board guidelines and therefore the impacts, while likely different for First Nation communities due to circumstantial and legislative differences in comparison with municipalities.

## **Organization of the Document**

Chapter One of this document outlines the significant and purpose of the project and key research questions that are addressed throughout the research. It also addresses

the Assumptions and Limitations of the project. This chapter outlines the overlying issues and implications of the research.

The second chapter addresses municipal roles and responsibilities, fiscal imbalance, historical precedents and current infrastructure challenges for municipalities. This chapter introduces the PS 3150 guidelines and identifies the process that compliance requires. The purpose of this chapter is to present the reader with background information that is germane to the subject matter.

Chapter Three highlights the process for data collection that was utilized in the completion of the project and provides background information on the research process. This section also reviews the methodology for the project. The research utilized a qualitative approach which included a semi-structured interview process.

The fourth chapter underscores the findings of the research and provides an outline of the results determined through the research. Results speak to the impacts that PS 3150 guidelines have had on municipalities including those related to personnel, financial, planning, and technical issues.

Chapter Five analyses the results and identifies the conclusions of the project as well as identifies recommendations for ongoing infrastructure planning and financial management of municipal assets. This section presents the research in a manner that addresses the direct and indirect impacts resulting from the implementation of PS 3150 guidelines.

## **Chapter 2 – Municipal Responsibilities and Revenues**

Municipal responsibilities and revenues have proven to be a constant source of debate, frequently gracing the pages of municipal association publications and public news media. This discussion includes issues of fiscal imbalance, historical precedents and current infrastructure challenges for municipalities. This section also addresses the opportunities and options that municipalities have to generate revenue within legislative requirements. This chapter introduces the PS 3150 guidelines and identifies the process that municipalities must complete in order to comply with the guidelines.

### **Municipal Responsibilities**

Canadian municipalities are regularly referred to as *creatures of the province*. The Canadian Constitution Act, 1867 in Section 91 and Section 92 identifies the Powers of the Parliament and the Exclusive Powers of the Provincial Legislatures, respectively. In Section 92 (8), Provincial Governments are delegated the responsibility for Municipal Institutions in the Province. This responsibility has been the subject of much debate as provinces create and amalgamate municipalities. This constitutional status however was put to the test, in a 1997 court case, by five municipalities that underwent an amalgamation to create the enlarged City of Toronto (Sancton, 2000, 426). The judgment rejected the municipalities' case indicating that municipal institutions lack constitutional status and exist only if provincial legislation so provides. This is important to understand when discussing the division of responsibilities at the Provincial and Municipal levels.

Municipalities were initially created by the Provinces/Territories to provide decentralized services at the local level that would not otherwise be realized without

economies of scale. Municipalities, as the order of government closest to the people, have been delegated responsibilities by other orders of government and are also responsive to the needs expressed by local residents. This top-down and bottom-up direction gives municipal councils significant responsibilities and increased understanding of society's expectations.

The mid-20<sup>th</sup> century brought forward pressures arising from urbanization and industrialization creating serious difficulties for local governments. This included a dramatic increase in the quantity, range and type of services offered by municipal governments. The growth in the auto industry increased demand for transportation infrastructure, as well, easier ability to travel led health care to be an increasingly regional issue. These changes promoted increased involvement from other orders of government in previously local issues thereby assisting but also increasing the complexity of service provision. Urbanization resulted in the necessity for more local services including waste management, recreation programming, social services and urban planning. Changes to servicing requirements by municipalities were not confined to cities and towns. Rural areas also had increased demands for infrastructure, safety provision, recreational programming, and environmental management. These increased service demands put pressure on municipal councils to provide a large range of services while having limited access to revenue tools (Kitchen and Slack, 2003, 2224)

The advancements in transportation, due to industrialization, changed patterns of human mobility and impacted the movement of goods, economic development and service provision. The previously defined boundaries of municipalities became less relevant to new transportation patterns. Geographically small municipalities, due to

inability to levy funding and insufficient staff, were unable to provide the required services to their populations. This demonstrated the need for area wide administration of services in order to maximize upon the efficiencies garnered through economies of scale.

Revenue generation became difficult for municipalities after the rapid urbanization following WWI. Municipalities were put in an awkward position – after spending significantly in the 1920s to ensure that communities had appropriate infrastructure and services – they were forced to reduce services and decrease maintenance on infrastructure in the 1930s due to the economic depression. The state of municipal finances made it necessary for the provincial government to develop and enforce strict internal controls to ensure that municipal governments acted in a fiscally responsible manner. Post WWII years saw increased municipal spending on infrastructure however, the main source of revenue remained the highly criticized property tax. Without access to growth revenue streams municipalities had (and have) a difficult time levying necessary funds to support infrastructure and servicing requirements.

The most significant change to local governance was the politicization of municipal government. No longer could municipalities rely on financial and technical criteria as the basis for decisions; social and environmental factors became increasingly important. As well, the period saw increasing involvement of community groups and individuals through demands for transparent and accountable decision making. These changes to the operating philosophy of local government put pressure on elected officials to ensure that their actions and decisions were accountable to their communities. This was a positive period in the maturity of municipal government as decision-making began

to reflect the increasingly intricate municipal fabric of local and regional communities. While this added complexity to the municipal government system, the movement of the community toward accountable decision-making forced local governments to develop transparent management practices that were responsive to the needs of the local community and other orders of government.

The initial responsibilities that municipalities were asked to monitor and regulate included public drunkenness, profanity and the running of cattle and poultry in public places (Lidstone, 2004, 6). Presently, the number of issues that municipalities are responsible for has grown exponentially as can be seen by municipalities that own and operate public utilities, water and wastewater treatment plants, airports and drive economic development initiatives. This level of responsibility was never imagined at the outset of municipal creation. Municipalities' responsibilities are now provided under provincial legislation through a Municipal Act. Municipal Acts, along with other legislation and regulations, assign responsibilities for services as well as financial administration and accountability. Legislation varies across Canada but nevertheless demonstrates the complex and diverse rules under which municipalities are required to comply.

Mandated services vary provincially, however the five key service areas that municipalities provide are: general government, protection services, transportation, environmental (mostly waste management), and land use planning (Slack et al, 2007, 4). Offloading by federal and provincial governments has also increased both mandated and discretionary responsibilities for municipal governments across Canada.

Municipalities provide a number of discretionary services in addition to mandated ones. “A viable and vibrant municipality knows that it has to deliver a number of services whether or not they have been mandated by the province” (Slack et al, 2007, 39). Although some services, such as health care, are a Provincial responsibility, municipalities are working to attract and retain doctors to ensure that health services are available within a given community. Municipal Acts across Canada have begun to provide municipalities with natural person powers which grant municipalities the authority to exercise, in their discretion, a broad range of permissive powers. These powers allow municipal councils to address the needs of the local community within a framework from the Provincial Government. In many cases municipalities can choose whether or not to provide a given service, however if a municipal council determines that the service will be provided, Provincial Regulations shall be followed in regard to service provision. For example, if a municipality chooses to develop a road, the road must be maintained to a particular level as specified by the Provincial Government.

In 2007, a study was completed for Canadian Provincial and Territorial Municipal Associations that indicated that municipal representatives were unclear on the distinction between which services were mandated and which were discretionary (Slack et al, 2007, 4). This is an important aspect to recognize and is quite telling in the clarity of responsibilities at the municipal level. It is important to note that many, but not all, provinces have made municipal legislation quite permissive by providing natural person powers including the Provinces of Manitoba, Alberta, Ontario, Saskatchewan, British Columbia, and the Territories of Nunavut, Northwest Territory and Yukon. (Lidstone, 2004, 3-6 28-29).

Municipal councils make decisions regarding what services should be provided. These decisions are made at public meetings by by-law. The text of the by-law is presented and discussed prior to a decision being made and is available for review by the public prior to the meeting. In Ontario, by-laws can be discussed and approved at one meeting, provided that the text is acceptable to council. Although by-laws typically are read and approved a first, second and third time, this process is based more on historical parliamentary procedure rather than a required process. The public nature of these decisions attempts to make certain that a municipal council is transparent and accountable. Members of council must consider the administrative function, that is the ability for staff to deliver the service within financial and legislated guidelines, and the representative function, that is what the general public desires in terms of the mix of services provided. These two functions of council should be balanced for the municipal council to implement quality services.

Local governments create policies to address local concerns and to fulfill requirements from other orders of government. These policies and practices must also include measures that ensure accountability and transparency in order to maintain democracy and the perception thereof. Municipal councils are faced with the task of ensuring that work in municipalities is completed in the best interest of residents, is fair, and meets the requirements of provincial legislation and regulations. The act of balancing these requirements, in combination with numerous other factors, is particularly difficult when Provincial initiatives demand priority over local concerns. This conflict exists because the administrative and representative roles of municipal governments are not always easily interconnected.

Implementation of initiatives must also be sensitive to the needs of local communities. This is a challenge for municipal governments. While local priorities are clearly stated by the public, priorities of other orders of government are not always well understood at the local level. Where strong communication exists between municipal councils and the public, this issue is of less concern, however where municipal councils are unable to explain the necessity for priority, difficulties and distrust from the public becomes increasingly prevalent.

The overarching responsibility of municipal governments is to be accountable and transparent in their decision making. This is demonstrated in some municipalities through the adoption and use of an Accountability and Transparency Policy which outlines the importance of these factors. Information presented to a municipal council, save any information presented at an in-camera meeting, should all be available for review by the public. Municipalities, through council and staff, should be transparent and accountable in all activities as they are acting as stewards of public funds. Transparency and accountability were key drivers of PS 3150 development as the guidelines are meant to provide information on the state of municipal infrastructure in a standardized manner that will aid in inter-municipal comparisons.

## **Municipal Revenue**

Municipal revenue generation is legislated by provincial/territorial governments through a Municipal Act. In theory, each order of government should have sufficient financial resources to execute their responsibilities. Municipalities rely on own-source revenues which mainly come from property taxes, although increasingly user fees, investments, amusement taxes, licences and permits, fines and penalties are being

utilized. Property taxes and user fees are the two key revenue tools that municipalities utilize to pay for service delivery and infrastructure. Municipal revenue also comes from provincial/territorial and federal grants both conditional and unconditional. The grants that are available differ significantly from province to province, and can even differ within a province and in northern Ontario many municipalities rely heavily on revenue received through grants.

Property taxes, in Ontario, were initially applied in the 1840s when the local government system was established (AMCTO, 2007, 2-1). A tax on real property was deemed to be an appropriate method for providing revenue to local governments because land was the principal form of wealth and governments provided only a limited range of services. Property tax is considered a benefit-based tax which means that it is a tax used to fund a range of services that collectively benefits a community and where individual users cannot be specifically identified. An example of this type of service would be firefighting services.

Following the development of the structure of municipal government in Ontario, municipal councils experienced a number of issues as they matured including financial difficulties resulting from the administration and management of their geographic areas. The cost of financing major public works proved to be difficult given the limited financial tools available. Municipal borrowing and poor investment decisions led to huge public debt that was not being handled appropriately. This downfall in the structure of municipal government led to the development of increased legislation and regulation of municipal finances that continues to be present in Municipal Acts today.

At present, property tax as a form of taxation is widely recognized to be unresponsive to economic growth and inappropriate as the major source of municipal revenue generation. While property taxes were a means of generating revenue at the inception of municipal governments in Canada they have become an inflexible and unsuitable revenue tool as they do not grow at the same rate as inflation and are not responsive to the fact that many municipal services are not directly tied to property ownership (Slack, 2006, 7). This system leaves many municipalities without revenue or the revenue tools necessary to pay for services and proper infrastructure development and management.

The Conference Board of Canada indicates that “Canada is living with 19<sup>th</sup> century architecture in the 21<sup>st</sup> century. Its fiscal arrangement grows out of a rural experience and is not responsive to the massive shift of population to Canada’s major cities and to the settlement of immigrants in the largest cities. A rigid fiscal structure has produced ongoing arguments about redistribution and health spending while urban infrastructure decays, funding for education declines relative to other countries, and Canada invests less than it should to prepare itself for the coming century.” (Conference Board of Canada, 2007, vii). This and similar statements have come forward repeatedly in recent history as fiscal imbalance has become progressively more researched at the federal-provincial and provincial-municipal levels.

Fiscal imbalance exists when the “fiscal capacity of one order of government is insufficient to sustain its spending responsibilities while the fiscal capacity of another order of government is greater than is needed to sustain its spending obligations, while both orders of government provide public services to the same taxpayer” (Standing

Committee on Finance, 2005, 19). Municipalities have a significant number of responsibilities and an inadequate fiscal capacity to support these responsibilities.

It has also been demonstrated that “Canadian municipal governments have far fewer tools with which to raise revenue as compared to other orders of government. The fiscal tool kit available to municipal governments in comparison to [other OECD countries (organizations for economic cooperation and development)] is much more generous and flexible than that available to Canadian municipalities” (FCM, 2001). This difference has a major impact on municipal ability to generate the revenue necessary to provide and maintain public services and infrastructure.

### **Municipal Responsibilities and Revenue – Unbalanced?**

The delegation and allocation of municipal responsibilities and revenue tools is fraught with problems. Municipal councils are responsible for making decisions on how to use the revenue they generate/receive to provide services for their community and are left with the impossible task of delivering services while only having access to limited resource streams. This often results in tough choices between spending on service provision or investments for maintenance and construction of public infrastructure. A thorough review of municipal budgets and spending would demonstrate that municipalities are balancing their budgets annually; this is because they are required to do so by law. What the financial statements fail to clearly reveal is the poor condition of local roads and bridges, water and wastewater systems and other critical infrastructure (Kitchen and Slack, 2006, 14-15).

“Less than 12 per cent of total government revenue goes to municipalities.

Generally reliant on property taxes and user fees, Canadian cities cannot make the kinds

of basic investments in urban infrastructure, transportation and waste management required to build sustainable ecologies for the future” (Conference Board of Canada, 2007, viii). From 1990 to 2005 municipal own-source revenues from property taxes and user fees increased from 63 per cent to 72 per cent while intergovernmental transfers decreased from 23 per cent to 17 per cent (Slack et al, 2007, 4). While this trend in revenue generally demonstrates decreased funding to municipalities from other orders of government, it also signifies that municipalities need to become increasingly self-sufficient. Self-sufficiency requires appropriate revenue tools, to which municipalities arguably do not have access. As well, the increased percentages in municipal own-source revenues do not demonstrate where expenditures on services or infrastructure are being cut.

When federal and provincial governments downsize public services in areas traditionally provided by them, such as court services, airports and bridge maintenance, municipalities, at the appeal of the public are working to take on these financially challenging services thereby increasing their level of responsibility without any additional revenue tools. Federal and provincial offloading is not simply focused on directly increasing municipal responsibility; it has also been completed through a reduction in transfers from provincial governments to municipalities. This has essentially decreased municipal revenue and proportionally increased expenditures. Finally, federal and provincial legislation, regulations and standards can set requirements without providing funding to meet those requirements. These unfunded mandates (for example, water quality and waste water treatment standards) increase municipal expenditures however do not provide additional revenue tools to complete the tasks. These changes in

responsibilities at the municipal level severely impact the quality of services that can be provided because additional revenue sources have not been identified. (Slack, 2006, 6).

### ***Property Tax***

Municipal responsibilities regarding service provision are not balanced compared with their available revenue generation tools. There are some inherent arguments to be made to the contrary, including the ability for municipal councils to raise property taxes to levy sufficient revenue or set user fees to meet full cost accounting standards. These are compelling arguments, however municipal councils must make decisions on affordability for their individual municipalities which limits the amount that these taxes and fees can be increased.

A major difference between property tax and income tax is the visibility of the tax. A tax on property is billed annually, and typically, in two or four lump sums, whereas income tax is generally source deducted. The visibility of property tax is good because it holds municipalities accountable for their spending however it also makes it difficult to increase the tax to cover the true costs for municipal services and infrastructure (Slack, 2010, 8). The visibility of the tax tends to increase taxpayer scrutiny.

The Conservative Federal Government, under Prime Minister Stephen Harper, advocates for revenue to be generated at the level of government that provides the service. This government decreased the GST to five per cent in an attempt to provide tax space for other orders of government, while being politically favorable at the federal level. The ability to increase property taxes at the municipal level does not change the fact that property tax does not react to economic performance when compared with other

orders of governments' growth revenue tools such as income or sales tax. This problem is exacerbated by the volatility of the housing market and to irregular property assessments.

The calculation of property tax on an individual property is a theoretically simple formula whereby a tax rate is multiplied by the assessed value of a piece of property. This simplistic explanation of property taxation does not encompass the complexity of the property taxation system, in Ontario, including the legislative requirements for property assessment, tax rates, tax ratios, tax ranges, exceptions, rebates, tax capping and business taxes, however simply outlines the basic principle of property taxation. That is, property owners are taxed based on the value of their property and this revenue is utilized by municipalities to pay for municipal goods and services. The simple explanation would lead one to believe that a large property with an expensive home would pay more taxes than a small property with an inexpensive home. However, due to differences in valuation methods and tax rates, comparable properties in different areas of the province could pay significantly different amounts in property tax. Understanding the two key parts of this equation (assessment and tax formulas) is critical to recognizing the problems inherent with municipalities' key revenue tool.

Prior to 1970 municipalities in Ontario were responsible for assessing property. This changed in 1970 when property assessment in Ontario was transferred to a provincial assessment corporation (now known as the Municipal Property Assessment Corporation or MPAC) (Tindal, 2007, 14). A provincially organized group of assessment professionals was deemed the most appropriate way to regulate assessment values province wide in order to stabilize to the greatest extent possible the huge variations in assessments that had developed over time. This change in assessment responsibility has

not been a simple transition because irregular reassessment cycles have increased confusion and not improved assessment equality.

<b>Reassessment Cycles in Ontario from 1998 to 2016</b>	
<b>YEAR</b>	<b>ASSESSED VALUE</b>
1998 - 2000	Current Value on June 30, 1996
2001 - 2002	Current Value on June 30, 1999
2003	Current Value on June 30, 2001
2004 - 2005	Current Value on June 30, 2003
2006 – 2008	Current Value on January 1, 2005
2009 – 2012	Current Value on January 1, 2008
2013 – 2016	Current Value on January 1, 2012

**Figure 1 – adapted with permission (MTE, 2008, 4)**

Figure 1 identifies the timeline for reassessment cycles since the change to Current Value Assessment (CVA) in 1998. The change to Current Value Assessments was proposed to increase equality within the assessment system, particularly between similar yet geographically separate properties. In the transition period however there have been shifts in tax burden as under- and over-assessed properties move into line with their current value. Despite the good intentions of these reforms, they have added instability, complexity, and confusion to a system that they were intended to simplify (Tindal, 2008, 15).

Beyond property assessment, property taxation is also based on tax formulas. These formulas are based on rates, ratios and ranges under the current taxation system. A tax rate is equal to the amount of revenue that a municipality needs to raise through taxation divided by the total taxable, weighted assessment (i.e. tax rate = total revenue to be levied / total weighted assessment). This figure is set to eight decimal places and is

used in the determination of the amount of taxes levied on individual properties. This is why good quality assessment information is very important to municipalities.

Tax ratios are weighting factors that are used to place differing emphasis on property classes. Tax ratios are applied to the total assessment within each property class to create a weighted assessment in order to shift the tax burden by class. For example a tax ratio could shift tax burden from residential properties to commercial properties. Tax ratios were designed to distribute tax burdens by class in order to avoid shifts between classes when the assessment system began including Current Value Assessments in 1998. At the time, this protected taxpayers from drastic changes in taxation, however it also moved forward the inconsistencies that were present in the old system making the movement to Current Value Assessments less valuable. The weighting of assessments and tax rates begins to complicate tax calculations and requires increased financial checking mechanisms to ensure that figures are calculated appropriately. However the overall creation of tax ratios provided municipalities with a tool to increase their discretion in relation to tax policy. In essence, municipalities could change tax ratios to shift the burden to tax classes deemed most appropriate and would be in a position where they could address inequities in taxation that was not possible prior to use of Current Value Assessments.

Tax ranges are the provincially defined scope in which municipalities' tax ratios should sit. Tax ranges are designed to provide equality for tax classes province-wide. Tax ranges are a mechanism that removed the increased discretion provided to municipalities by tax ratios. The tax ranges that were developed in 1998 were very narrow therefore removing municipal flexibility to utilize the tax ratio tool. For example, if a

municipality's tax ratio for the multi-residential class is outside of the tax range set by the province, the municipality can only move the ratio closer to the above noted tax range (aka range of fairness). The ranges provided for commercial and industrial classes were far below the tax ratio figures used prior to the adoption of Current Value Assessments. The decision by the Provincial Government to implement these stringent and narrow tax ranges clearly shows that the Province does not believe that municipalities are competent enough to set reasonable tax ratios and therefore need to be adequately constrained.

The 2009 to 2012 assessment values are based on Current Value Assessments as of January 1, 2008, however the impact of this change is mitigated through a phase in of these assessments from 2005 to 2008. For properties with increasing assessments this is being completed through 25 per cent increment increases from 2009 to 2012. For properties with decreasing assessments the property owner realizes the full benefit of the decrease in 2009. Reassessment of property values are designed to protect the taxpayer from drastic increases which can be seen through the use of tax ratios in the late 1990s and currently through the implementation of phase in values.

### ***User Fees***

Economists generally favour greater use of user charges to increase the efficiency in public consumption of goods and services. User fees are most effective when individual users can be specifically identified and where the fees can be easily collected (Osborne and Gaebler, 1993, 204)

User fees should reflect the cost of providing a given good/service. They may be marginally higher or lower than the real cost, however need to be close in order to promote efficient consumption and minimize waste. An example can be seen in user fees

for water treatment and delivery services. Rates for water use should reflect full cost accounting principles in order to encompass the costs associated with water treatment and distribution. This method of setting user fees for water services is transparent and accountable to all users within the system. Flat rates for water use do not promote efficient consumption of the resource while rates that are tied to the quantity of water used encourages people to use water more efficiently.

Another example of how user fees can promote efficiency in the public consumption of a service can be seen through garbage fees. A user fee allocated on a per-bag basis works well theoretically, by encouraging people to generate less waste as an increased number of bags is directly linked to increased fees. Problems arise where people begin to litter or dump garbage in unauthorized areas to avoid paying fees per bag. If this was not a problem, the user fees for bag tags would work to allocate the cost of providing the service to the people who use it most.

While Bill 130, passed in December 2006, amended Ontario's Municipal Act and removed some of the legislative restrictions on user charges, municipalities still face other constraints. Bill 130 created a provision for deferred benefits which permitted municipalities to create user fees that are imposed on people who may benefit from a service in the future. This allowed municipalities to consider the sustainability of a service. These charges are constrained because they cannot be used to offset capital costs where development charges have or will be made on the same good/service. While development charges are uncommon in Northern Ontario, due to slow population growth and limited development, the provisions would still apply.

Bill 130 removed the requirements associated with public inspection of fee listings and the prescriptive nature of municipal user charges by-laws. User charges can be used for mandatory and discretionary services, however cannot be imposed for Planning Act application processing, election charges on other municipalities (with some exceptions), or property tax collection administration on school boards or upper tier municipalities. These examples demonstrate that constraints still exist in regard to municipalities' ability to levy user charges, despite the fact that Bill 130 did remove some of the legislative restrictions.

Setting user fees with regard to the full cost for service also appears to be fair in theory, however a change to increased use of user fees should be phased in to account for capital investments and affordable charges. For example, if a municipality decided to move to full cost accounting approach for water treatment and distribution overall costs associated with the purchase and installation of water meters, maintenance and replacement costs of the meters, treatment plant and distribution system and other operational expenses would have to be considered. The operational costs would be the easiest to determine, as they would already be indicated in financial statements. However the capital costs for total treatment plant and distribution system replacement may be more difficult. Municipalities may or may not have an adequate inventory of these capital assets to assess the overall replacement cost. If a municipality did have an accurate inventory, this assessment would be much simpler, however the capital replacement costs would have to be reassessed and budgeted for annually. Without comprehensive information, it would be impossible to truly identify an accurate figure for assigning accurate user fees for the provision of water services.

It is also important to consider the fairness of charging current users of a service for future aspects of service provision (i.e. replacement of infrastructure that will be built in the future). If this is a continuous process, where taxes are levied based on full cost accounting (considering lifecycle, operational, and replacement costs) and the charge forward approach is used for ongoing municipal rate payers, this methodology becomes more palatable. Determination on the means for raising revenue to pay for municipal services ultimately lies with the municipal council, in compliance with applicable legislation.

Municipalities have some revenue tools to levy funding for service provision however they are not adequate to account for the true costs for services that are provided. This is a key reason why municipalities are experiencing decay of infrastructure. Municipal councils work with staff to develop capital plans for financing infrastructure maintenance and replacement however the extent to which they are able to save is not parallel to the level of decay annually. This conundrum in combination with the instability of provincial and federal grants has reduced the ability for municipalities to adequately maintain municipal infrastructure.

## **Infrastructure Deficit**

There has been considerable literature on the Canadian municipal infrastructure deficit. A 2007 report by Dr. Saeed Mirza estimated the cost to eliminate this deficit at \$123 billion (Mirza, 2007). This figure was much higher than earlier estimates of \$60 billion, however no less harrowing (Hamel, 2007). While orders of government attempt to discuss and solve this problem, they also look for somewhere to place blame. Party politics come into play as the party in power blames the previous party in power. Federal

and provincial governments have also debated as to who is really responsible for this problem. Provincial and municipal governments and municipal associations point fingers at each other and their previous leaders in order to fend away any negative press. This blame game is not without some merit, however the media attention it receives is not generating revenue to resolve the problem.

The history of how the municipal infrastructure deficit came to be an estimated \$123 billion is relevant in the context that history is likely to repeat itself unless concrete changes are made to the process for municipal infrastructure provision. However, in an effort to move forward, the problem, simply stated, is that there is a large municipal infrastructure deficit one that is difficult to quantify, particularly in smaller municipalities. The question is – how should it be best resolved in the short and long terms?

## **Government of Canada – Context**

The Federal Government has made attempts to alleviate the pressures on municipalities through the provision of the conditional and unconditional grants. From 2003 – 2006, while the Federal Liberal Government was in power, there was a focus on allocating funding for municipal infrastructure priorities as can be seen through the development of the Municipal Rural Infrastructure Fund (MRIF). MRIF was originally slated to be a ten year program but in 2004 the term was shortened to construct a five year program. The Federal Conservative Government, elected in 2006, has indicated its preference for taxation at the order of government responsible for providing a given service as a means to promote accountability. “Harper reached out to the regions,

repeating a campaign promise to solve the fiscal imbalance” (Hahn, 2006, 1). This means that there is movement toward increasing tax space for the provinces/territories which has been initiated with the reduction of the GST to five per cent. Theoretically an increase in provincial tax space would allow provincial governments to mend the fiscal imbalances with municipalities. However, provincial governments are stating that a fiscal imbalance exists between the federal and provincial governments. This could only be possible if the fiscal imbalance that the provincial government claims it has includes municipalities as a responsibility. It is impossible for the provincial government be fiscally imbalanced with both federal and municipal governments, based on the definition of fiscal imbalance.

In 2005 the Government of Canada developed the New Deal for Cities and Communities (commonly known as the Gas Tax Fund) which allocated \$5 billion in stable funding for municipal infrastructure requirements. Approximately \$1.87 billion is being allocated to Ontario’s communities from 2005 to 2010. This program utilizes federal gas tax revenues for stable, long-term investment into communities in order to enable them to plan and implements environmentally sustainable municipal infrastructure projects. The fund’s program guidelines specify eligible categories, however the program does not require that matching funding from the Provincial or Municipal Government be sought or secured. The New Deal also included a complete GST rebate to municipalities.

In 2007, the Government of Canada committed to a \$33 billion infrastructure plan entitled the Building Canada Plan which included a four year and \$8 billion extension to the Federal Gas Tax Fund (Department of Finance, 2007, 5-7). The 2008 Budget committed to making the Gas Tax Fund permanent beyond 2014 with allocations of \$2 billion per year (Department of Finance, 2008, 11).

The Building Canada Plan also includes the Building Canada Fund (BCF) – Communities Component. This component is specifically for projects in communities with populations under 100,000. The Building Canada fund will provide 33 - 55 per cent of project funding through conditional grants providing that projects are within Federal priority areas such as drinking water and wastewater infrastructure. This predictable funding was designed to assist municipalities in long term infrastructure planning in response to the growing municipal infrastructure deficit.

In addition to the Building Canada Fund, the Federal Government (Conservative) has partnered with Provincial and Territorial Governments to deliver the Infrastructure Stimulus Program. This \$4 billion funding program focuses on short-term objectives for economic stimulus through construction ready infrastructure projects. The Infrastructure Stimulus Program was launched in Ontario in June 2009 and projects that receive funding must be substantially complete by March 31, 2011 (Infrastructure Canada, 2010, 1). For municipalities, the Infrastructure Stimulus Fund has provided up to 33 per cent of project funding. While the programs target has been increasing economic stimulus and developing infrastructure projects, the timeline has being criticized by the Association of Municipalities of Ontario and the Federation of Canadian Municipalities in an attempt to protect small communities that do not have the capacity to comply with the timelines or are struggling to finance their share (FCM, 2010, 2). This program has also been criticized by opposition parties for the potential ability to generate the economic stimulus which it was designed to create. The program requires reporting to be submitted on an accrual basis, that is, when funds are committed rather than when funds are actually spent.

## **Provincial Government of Ontario – Context**

The Provincial Government of Ontario has allocated responsibilities very differently than other provinces and territories. In addition to commonly mandated responsibilities, municipalities in Ontario have been responsible for funding social services since 1998. This has typically done by delegating the day to day administration of social services to regional service boards in northern Ontario or to upper tier municipalities in southern Ontario. Municipalities fund the regional boards and upper tier municipalities through an assessment and population based formula. As a result, municipalities in Ontario have higher taxes when compared with other jurisdictions. This has a number of negative impacts when communities attempt to increase economic development or attract an increased population base.

Ontario municipalities were forced to take on a number of responsibilities in the 1990s due to the Local Services Realignment (LSR). To be a viable and sustainable system, municipalities required modification to their revenue tools, however this change never materialized and municipalities were left without the necessary growth revenue streams to fund their service responsibilities. Some changes to municipal revenue streams were adopted including the change to the current value assessment (CVA) system, new user fees and residential property taxes. These changes were an inherently flawed attempt to allow municipalities to be sustainable forms of government (AMCTO, 2007, 30-32). The change to the CVA system is limited through provincial tax capping; a process that truly questions municipal capacity in decision making. As well, the CVA system did not consider sale prices that were proximate to the assessment date. This recommendation, which has been voiced by municipalities for some time, was ignored until a 2006

Ombudsman report (Ombudsman Ontario, 2006, 57). User fees and residential property taxes are useful tools but are not really adequate in scale to generate the level of revenue required to meet municipal needs.

Provincially, the current Liberal Government has attempted to assist municipalities by increasing funding allocations through social service programs such as the Ontario Municipal Partnership Fund (OMPF) and infrastructure programs, such as the Municipal Rural Infrastructure Fund (MRIF), Municipal Infrastructure Investment Initiative (MIII), and sharing gas tax revenues (AMCTO, 2007, 10) Ontario has also acknowledged the impact of offloaded services resulting from the LSR and, in response, has increased funding to health care and ambulance services. As well in October 2008, the Provincial Government in conjunction with the Association of Municipalities of Ontario (AMO) and the City of Toronto completed the Provincial-Municipal Fiscal and Service Delivery Review. This review was designed to have a wide scope encompassing topics of financing, service delivery and governance. The outcomes of the report are beginning to be rolled out and municipalities are now experiencing “the combined benefit of 2009 Ontario Municipal Partnership Fund (OMPF) plus the reduced costs from Ontario Drug Benefit (ODB) and Ontario Disability Support Program (ODSP) administration uploads” (Ministry of Municipal Affairs and Housing, 2008, 2). These uploads are proposed to leave municipalities with manageable responsibilities, however have not increased or modified municipalities access to revenue tools.

### **Federal and Provincial Change – Ongoing**

Recent changes at the Federal and Provincial level appear to be a good start to the process of modifying the distribution of responsibilities and revenues for municipal

governments. This is a delayed response to the Local Services Realignment that failed to address the needs of the citizens of Ontario and failed to be revenue neutral for municipalities. To make the process more meaningful, the Provincial-Municipal Fiscal and Service Delivery Review moved slowly which placed stress on municipalities that have been utilizing all existing revenue tools and remain unable to finance necessary infrastructure projects. The review was similar to those being completed in other Provinces, indicating the changing perceptions about municipal responsibilities and capabilities across many jurisdictions.

New regulations continue to impact municipalities' ability to operate in a more sustainable manner. Municipalities see the Provincial Government working with them to change the system of responsibilities and revenues, however Provincial regulations continue to restrain municipal spheres of jurisdiction. It is also important to note that municipalities have limited capacity (particularly in relation to ongoing difficulties in human resources and succession planning) to be constantly analysing the impacts of new legislation and regulations. As well, the ability to finance the huge costs associated with regulations is tenuous at best. The Provincial Government has made available some grants and loans however these are not sustainable forms of funding. As recognized by The Conference Board of Canada, "Grants are a useful tool in addressing the infrastructure gap, but as a response to municipalities' needs for a reliable revenue stream, they are an unsatisfactory solution" (The Conference Board of Canada, 2007, 95). The outcome of the Provincial-Municipal Fiscal and Service Delivery Review was long awaited by municipalities in Ontario, and despite some positive changes to the delivery of

social services a firm level of scepticism remains imbedded in municipal governments as previous attempts to remedy municipal difficulties have proven ineffective.

## **Northern Ontario – Context**

Northern Ontario encompasses an area of 800,000 square kilometres from the Manitoba Border to the Timiskaming / Nipissing area near Sudbury and North Bay. The area is made up of approximately 145 municipalities, 100 unincorporated communities and 50 First Nation communities. The area is also home to over 75 per cent of Ontario's woodlands, rich mineral deposits and thousands of kilometres of Great Lakes Coastline. Northern Ontario has a population of 785,000, or 6 per cent of the province's total population (Province of Ontario, 2008, 5). Statistics Canada figures indicate that the population trend is declining based on migration patterns and age structure (Statistics Canada, 2008, 1).

The Province of Ontario recently launched an open discussion with Northern stakeholders, including municipalities to develop a Northern Growth Plan. The report states, "Municipalities play an important role in growing the northern economy, building strong communities, providing public services and investing in infrastructure" (Province of Ontario, 2008, 3). This statement identifies the Provincial Government's expectation that municipalities will continue to play a key role in infrastructure investments. While the discussion paper is focused on economic development in Northern Ontario, undertones of municipal responsibilities in relation to infrastructure are integrated in the report.

Infrastructure in northern Ontario is subject to a significantly different environment than in southern Ontario. The climactic conditions play a role in

infrastructure expenditures. For example, a municipality in southern Ontario may be able to place a water line 4 feet below grade, while a northern Ontario municipality would likely place a line no less than 10 feet below grade due to the frost line. The frost line forces Northern Ontario municipalities to spend considerably more dollars on the *same* infrastructure. Another example is the cost associated with transportation to “remote” areas. These cost differences will be exacerbated when compared under a Province-wide inventory system where infrastructure characteristics are compared geographically.

“Municipalities that are small cannot achieve economies of scale, making it very expensive to provide services. In remote Northern communities, the costs are that much higher to deliver basic services” (Slack, 2007, 15). Meeting the demands of the residents within a small community, where economies of scale are not substantial, while balancing the need for reasonable user fees and property taxes is an ongoing challenge. This is difficult to gauge in a tangible way because unlike finances, the state of service delivery and infrastructure quality are difficult to measure.

The tools for revenue generation in northern municipalities are the same as those available in the rest of the province. Communities with small populations typically have a difficult time maximizing on economies of scale, however provincial grants including the Ontario Municipal Partnership Fund (OMPF) assist northern and rural communities with social programming costs. The OMPF is slated for gradual reduction as the Province begins to upload social services following the Provincial-Municipal Fiscal and Service Delivery Review however some mitigation funding was provided for the 2009 fiscal year. Infrastructure funding programs for northern Ontario include the Northern Ontario

Heritage Fund, the Communities Component under the Building Canada Fund (BCF), the Infrastructure Stimulus Fund and funding through FedNor.

While the role of municipalities in the North coincides with municipalities in other areas of the Province, there are some significant differences and challenges. Recruitment and retention of educated and qualified staff is a challenge. In communities of less than 5000, and some as few as 350, finding, training or attracting individuals capable of managing a complicated financial system is difficult. Recruitment professionals are regularly utilized to fill high level finance and administrative positions. In some cases, senior staff are able to pass their knowledge onto junior staff which allows for residents to remain within their community. Succession planning is an ongoing effort, and retention of youth is constantly considered.

### **Accounting and Accountability**

The Canadian Institute of Chartered Accountants (CICA) is an organization of Chartered Accountants which is responsible for the development of generally accepted accounting principles (GAAP) for financial reporting by the private and public sector. These principles were created to standardize accounting practices in order to provide greater clarity, and therefore accountability, within the private and public sectors. As well, the standardization of accounting principles promotes transferability of accounting skills. It was important to recognize the differences between public and private sector organizations given that governments are not in business to make a profit, but to provide services to the public (PSAB, 2007, 5). This means that a strict measurement of surpluses and deficits is not a good performance indicator and a specific set of accounting principles for the public sector needed to be developed.

CICA formed a board known as the Public Sector Accounting Board (PSAB) in 1981 which is comprised of senior government officials and experts in government financial reporting such as controllers general, public accountants, auditors, chief financial officers of local governments, analysts and accounting professors. The members do not receive remuneration and act independently of the government or organizations to which they belong (PSAB, 2007, 2). This group developed the Public Sector Accounting Handbook in order to clarify and improve standards for the public sector and allow governments' financial performance to be compared. These are the accounting standards and guidelines which all federal, provincial, territorial and municipal governments, government organizations and partnerships and school boards must follow unless specifically excluded.

Section PS 3150 of the Public Sector Accounting Handbook is entitled Tangible Capital Assets (TCA). This section outlines the guidelines relating to the full accrual system that municipalities are in the process of implementing (CICA, 2005, 1).

### **PS 3150: What Does it Mean?**

The Public Sector Accounting Board (PSAB) approved changes with respect to municipal accounting practices that are beginning to have a dramatic impact on municipal operations. Starting in 2009, municipalities are required to report on Tangible Capital Assets (TCA) thereby moving from a modified accrual format to full accrual accounting. These accounting standards for TCAs are similar to those initiated in other developed countries and are already being utilized by other orders of government in Canada (AMCTO/MFOA, December 2006, 2).

This process, when it was initially proposed and approved, caused municipalities to panic. What were these new guidelines? How are they going to be implemented? Who can assist with these changes? Consequentially many municipalities experienced or are in the process of experiencing a mass exodus of senior financial officers who were nearing retirement and did not have any inclination to spearhead the many changes that would be required (Williams, 2009, 2). In other municipalities, senior administrators requested support from administrators and financial officers associations and were able to access the necessary resources and training to understand how to remain in compliance with the PSAB mandate.

PS 3150 outlines the guidelines associated with Tangible Capital Assets (TCA). TCAs are defined as “non-financial assets having physical substance that are controlled by a municipality and:

- are held for use in the production or supply of goods or services, for rental to others, for administrative purposes or for the development, construction, maintenance or repair of other tangible capital assets; and,
- have useful economic lives extending beyond an accounting period; and,
- are to be used on a continuing basis; and,
- are not for sale in the ordinary course of operations” (CICA, 2005, PS 3150.05)

TCAs include assets such as water and wastewater treatment plants, distribution and collection infrastructure, roads, bridges, buildings, computer systems including software, furniture, heavy equipment, tools, library collections, fire hydrants and land holdings.

Theoretically, the change to full accrual accounting is quite logical. The accounting system is designed to ensure that municipalities have a complete inventory of

all Tangible Capital Assets (TCA), depreciate the values over the useful life of each asset, and amortize annually based on this information. The amortization amount can then be levied through municipal revenue streams in order to have the necessary funding to replace the asset. This process has evolved to allow municipalities to plan over the long term for infrastructure replacement and maintenance as they will quantitatively see how much they should budget for these costs.

The modified accrual system that municipalities previously relied on did not take into account the value of TCAs, thereby contributing further to the infrastructure deficit. Municipalities' ability to balance their books, as is required by law, did not address infrastructure because it was not included in financial statements or budgets and therefore has been easily ignored. For example, maintenance costs on a road can be deferred to the next term of council because the depreciation of the road is not accounted for quantitatively. (AMCTO/MFOA, December 2006, 1). The process of saving for maintenance or replacement of assets appears to work well in theory, however what are the implications that this process will have in reality on municipalities?

### **Difference between TCA Accounting and Asset Management**

It is important to highlight the differences between TCA Accounting as specified in PS 3150, and Asset Management. PS 3150 requires municipalities to develop an asset inventory and to report on the value of the assets, however these guidelines do not mandate municipalities to provide for repair or replacement. This decision remains the responsibility of the municipal council. An Asset Management plan is a tool that utilizes the information from the TCA Accounting process to develop long term financial plans for TCA replacement.

The use of TCA Accounting information in the development of municipalities' budgets is an opportunity for communities to work towards sustainable infrastructure financing. A comprehensive Asset Management strategy will assist in quantifying the costs associated with service delivery and therefore the development of tax rates and user fees. For example, if a municipality would like to implement full cost accounting for their water system, both operations and capital costs must be identified. Currently many municipalities are adequately charging for water delivery based solely on operating costs, and are neglecting the cost of major repairs to water treatment plants and distribution systems. When major repairs or replacement of these systems are required, municipalities look to other orders of government to finance these huge capital costs. A clear equation for full cost accounting is created by integrating both operating and capital costs. The process does fail to address the affordable cost for services, however municipal councils are ultimately responsible for setting water rates and they must address this factor in the decision making process.

The development of an Asset Management Plan will ultimately identify whether municipal revenue generation is appropriate, the true costs for council established services, whether capital reserves are adequate to cover future infrastructure projects, and whether capital planning is increasing or decreasing the municipal infrastructure deficit.

## **PS 3150 – The Guidelines**

There are 48 items within the PS 3150 guidelines, numbered PS 3150.01 to PS 3150.48, that identify the requirements with which municipalities must comply. These items are the body of the PS 3150 guideline.

Section PS 3150.05 defines terminology utilized in the discussion of Tangible Capital Assets including Tangible Capital Asset, Cost, Fair Value, Net Book Value, Residual Value, Service Potential and Useful Life. This provides terms that are utilized by and between municipalities and auditors when discussing the implementation of and compliance with the PS 3150 Guidelines.

The second key section outlines the framework for accounting. This includes statements that vaguely identify the results required. For example, Section PS 3150.07 states “Tangible capital assets should be accounted for and reported as assets on the statement of financial position” (CICA, 2008, PS 3150.07). This phrasing identifies the final result required to remain compliant, but fails to address a framework for process.

The PS 3150 Guidelines do provide some guidance on issues such as recording costs as single assets or components, costs of betterments, write-downs and disposals, however this guidance is not sufficient for a municipality to develop policies and practices. This can be seen in the common use of the words *should, if, would and normally*. These terms are not definitive and therefore have increased confusion with the implementation of the guidelines.

Section PS 3150.40, PS 3150.41 and PS 3150.42 identify the guidelines for Presentation and Disclosure. While this section continues to allow municipalities to make the final decision on the information presented, the subsequent listing of disclosure requirements in PS 3150.40 and PS 3150.42 appear to be very specific. This contrast of vague and specific guidelines adds to the complexity of the implementation process for municipalities.

The final area that is addressed by Section PS 3150.43 to PS 3150.48 is Transitional Provisions for Local Governments. Section PS 3150.43 indicates that municipalities need to comply with PS 3150 in its entirety by January 1, 2009. As well, this section gives significant responsibility to municipal governments to determine methods for implementing a system that remains compliant with the overall philosophy of the Tangible Capital Asset process.

The Public Sector Accounting Board introduced the PS 3150 guidelines in a manner that is standard to municipalities through the incorporation of the guidelines into the Public Sector Accounting Handbook. This section was added in 2007 however municipalities were initially advised of the requirement to comply in late 2006. This is a common practice for communicating with municipalities with standards and guidelines initially introduced with a timeline for compliance. The training methodology that was introduced to assist municipalities comply with the PS 3150 guidelines was primarily led by municipal financial associations.

### **Tangible Capital Asset – Policy Development**

The development of a Tangible Capital Asset Policy is a key part of becoming compliant with PS 3150. This type of policy outlines the framework for a municipality's process to collect, categorize and maintain information about the municipality's assets. The Policy framework should be informed by PS 3150, but there are significant opportunities for variations provided that municipalities and their auditors are satisfied with the justifications used throughout the process. The policy also outlines the method of storing data, whether that is through a spreadsheet or a specialized software application.

While some guidance was available through workshops, webinars, and newsletters the bulk of the work to develop the TCA Policy was completed by municipal staff or by a consulting firm. Despite the method chosen, each method comes with its unique set of challenges. Municipal staff have significant responsibility and their human capacity may be limited. While staff driven projects would include a thorough understanding of existing processes they may become excessively detailed and therefore unmanageable. Consulting firms may also pose challenges to municipalities, as their knowledge and understanding of existing municipal processes and assets is limited. Consultant driven projects may bring financial and technical expertise but may generalize to a greater extent, thereby losing depth and richness.

A municipality’s TCA Policy may address a variety of areas that meet the needs of the municipality. These include a number of areas, as identified in Figure 2, however additional areas may be required as systems become increasingly utilized. A sample policy has been included in Appendix 1.

<b>Tangible Capital Asset Policy – Section Overview</b>	
<b>Heading</b>	<b>Explanation of Section</b>
Purpose	This section of the Policy identifies the direction of the policy. It outlines the reasons that the municipality is adopting the policy and the scope of the policy.
Authority/ Responsibility	This section of the Policy identifies that the municipality has the authority to complete the scope of work as required by the Municipal Act and the CICA Public Sector Accounting Handbook. This section also identifies the person(s) responsible for making decisions with respect to the policy including any administrative functions that is required
Definitions	This section that is utilized to ensure a common understanding of the terminology utilized within the policy. The defined terms utilized in Section PS 3150.05 are included in this section.
Framework for Categorization and Segmentation	This section addresses the method for organizing assets. For many municipalities this has fallen in line with existing practices such as the General Ledger or Departmental Procedures. This section also addresses any exclusions to the policy.

Inventory Process	This section identifies the process for identifying and recording Tangible Capital Assets. This addresses the acquisition of assets through a variety of means (i.e. purchase, donation).
Data Storage Process	This section identifies the process for data storage including software requirements, records management requirements, and process for recording. Administrative procedures may be utilized to address the in depth requirements for recording.
Pooling	This section identifies the methodology for pooling assets in order to clearly identify when pooling will be utilized. This is commonly identified through valuation (i.e. Pooled assets with values over \$10,000).
Component vs. Single Asset approach	This section outlines the methodology utilized by the municipality. Some municipalities will choose one method, while some municipalities may use a blended approach.
Capitalization Thresholds	This section identifies the capitalization thresholds utilized based on the asset organization framework. This section also identifies any related procurement policy provisions through a reference to the related policy.
Valuation	This section addresses the method(s) that will be utilized in the valuation of assets. There may be a significant number of methods identified given the large number and types of assets that are owned by a given municipality. This section addresses issues such as valuing assets that do not have historical costs, methods for developing estimates/appraisal costs, and timing for accounting for assets.
Useful Life	This section identifies the useful life of assets based on the asset organization framework. This section also identifies the process for addressing any inconsistencies with an assets useful life, such as an overestimate or underestimate.
Amortization Method and Rate	This section outlines the method of amortization, and the exclusion of any assets that will not be amortized. This section also identifies if any particular rates will be utilized for assets.
Disposal of Assets	This section identifies the process for disposing of an asset in order to ensure that the data collection process remains current and accurate. Responsibility of the person(s) who will complete the task is also identified.
Write-Downs and Write-Offs	This section identifies the process to reduce or write-off the value of an asset including the timing of when this will be completed. Responsibility of the person(s) who will complete the task is also identified.
Betterment vs. Maintenance	This section clearly identifies the process for determining if an expenditure on an asset is a betterment or a maintenance item.
Training	This section addresses the training requirements for staff to ensure that all pertinent personnel have a clear understanding as to the requirements under the policy and any administrative procedures.

**Figure 2 – Tangible Capital Asset Policy – Section Overview**

The process of policy development is difficult because there is uncertainty in the process that will be followed. When the policy is tried and tested it will be possible to improve on the operational processes. The act of testing and evaluating a policy is vital to the drive for ongoing improvement. However, prior to testing there are some reasonable steps that should be taken to ensure the best framework for a complete and understandable operation is introduced to ensure that staff understand the new process.

A draft TCA Policy is typically reviewed by senior staff to address any inconsistencies, problems or opportunities for improvement. It is also highly recommended to review the draft policy with the municipality's auditors (internal and external). The input from these parties could inform operational and procedural improvements. Following a thorough review of the TCA Policy, the policy should be adopted by the municipal council.

### **Tangible Capital Asset – The Inventory Process**

Inventory is the next step that municipalities have to take when working to become compliant with PS 3150. Building inventories for PS 3150 is an opportunity to gather the necessary information for the development of asset management plans complete with financial components that assist in the determination of strategies for capital financing, user fees and reserve contributions. The inventory process is modelled by each municipality's TCA policy in order to meet their specific requirements. Some municipalities have included a significant amount of data, while others are focused on assets over a threshold value. The inventory process is designed by each municipality to identify what council and staff have determined to be important for inclusion.

This process involves, very simply stated, counting and recording everything that a municipality owns including, but not limited to, infrastructure assets (roads, bridges, buildings, streetlights, water treatment and distribution systems, wastewater collection and treatment systems etc.), land, fleet, equipment, computer hardware, and computer software. The process for doing this can be arduous and challenging if a municipality has never undertaken an inventory process previously.

For municipalities that have not completed an inventory of municipal assets, this process is labour intensive, even if utilizing a consultant. Staff are inherently aware of what are municipal assets because they work in and around these items on a daily basis. Some assets may be easier to address because there are existing sources of information that can be used. This includes licensed vehicles, library books, and land assets. These assets would typically be included in a system for registration or inventory purposes. For example in Ontario, the Municipal Property Assessment Corporation (MPAC) maintains a digital database of land ownership data that is available to municipalities. This data can be exported and manipulated to initiate the process for inventorying land assets. This dataset does not create the final listing of information required because property that is surplus and for sale by a municipality should not be included as an asset (in accordance with PS 3150), however it does provide a starting point for the inventory process.

This type of data management is somewhat simpler in a small municipality where the assets owned by the municipality are known to the person entering data. Difficulty may arise where the person entering data is unfamiliar with the assets and the ownership.

There are other assets which will require an item by item count and physical inspection in order to find the necessary information to identify the asset. Example of this

could be curb stops as part of the water distribution system, street lights, fire hydrants and unlicensed equipment. This is a time consuming process and requires staff or consultants to be aware of the assets they are gathering information on as well as the level of detail that is required.

### **Tangible Capital Asset – Organization and Grouping of Data**

Organization of the data developed during the inventory process is crucial in order to enable efficient analysis of the information. This organization process is typically developed by municipalities and is commonly aligned with existing financial accounting and provincially legislated reporting requirements.

Data will also likely be organized to ensure functionality by municipal departments. This operational organization is crucial for accountability and ongoing maintenance of the information.

The initial organization of data should be considered in light of reporting requirements and asset management planning requirements. If information cannot be adequately and easily available for analysis purposes it will not be well utilized by municipal employees or the municipal council. Quality organization is vital to the success and use of the inventory data for asset management.

### **Tangible Capital Asset – Valuation**

The valuation of assets is a crucial part of the inventory and asset data development process. Valuation of assets involves a comprehensive discussion on the process that will be undertaken to determine the value of assets. This can be completed in a variety of ways depending on a given asset.

The two key methods for valuing an asset are through either historical cost or replacement costs. Historical costs are identified through records such as invoices, contracts, deeds, tenders, or other past records. Replacement costs can be identified in numerous ways including insurance appraisals, comparable prices from suppliers, or estimates based on documented methods.

Historical costs have some benefits in that the cost for individual assets is easily justified through documentation. Depending on the timeline for retention identified in a municipality's Record Retention by-law, a municipality may be able to provide quality documentation to justify valuation. There are some concerns with this methodology in that it may not include soft costs associated with putting the asset into service. For example, if the historical cost for paving a road was \$100,000, and additional staff time was utilized to prepare the site for the paving, then the invoice for \$100,000 would not be a completely accurate valuation of the asset. However, if a municipality bought a new Fire Truck for \$350,000 and the truck was immediately put into service, the invoice may be sufficient for valuation as the Fire Truck did not require any additional work to be put into service. Justification of the process utilized is necessary to meet auditing requirements associated with the Tangible Capital Asset policy and best practices.

Replacement costs can be determined in a number of ways. Insurance appraisals and comparisons to similar products are common methods being utilized to determine values when historical records are not available. Other methods for determining value are possible and must be well documented to satisfy financial reporting requirements and municipal auditors. For example, land can be valued through land appraisals from private appraisers, sale values, or assessment values provided by the Municipal Property

Assessment Corporation. Despite the fact that each method may realize slightly different values, the values will be valuable if the process for determining them is solidly justified.

### **Tangible Capital Asset – Data Storage Requirements**

The inventory process has inherent technical requirements. The private sector has developed a multitude of software options which are able to be specifically designed to suit a municipality's requirements, at a cost. The cost of technology to manage the system may be considered immaterial to larger municipalities, however ongoing maintenance and staff training in small and remote municipalities may pose challenges for streamlined implementation. For this reason, some municipalities have chosen to use spreadsheets for the maintenance of their datasets, however this could prove unwieldy to municipalities with a large number of assets.

The technology requirements may include linking assets to systems or departments through a Geographic Information System (GIS) and/or financial software. These options link assets to broader use systems in order to integrate asset management and inventory processes into regular use. Enabling staff with appropriate technological solutions and training will improve data maintenance and asset management planning. Technological solutions, while potentially expensive, can dramatically ease the process of managing the large amounts of data that are produced through the inventory process. The cost of software was not fully conceived by municipalities at the outset of PS 3150 but has become increasingly important following recognition of the quantity of data that needed to be stored and managed. AMCTO provided a list of considerations at the outset of the planning phase for municipalities, however this only reviewed questions that

CAOs should consider and did not identify any recommendations for software requirements (AMCTO/MFOA, August 2007 b, 6).

Security and user access should also be a consideration when selecting a data storage solution. The asset information collected will be expansive and include some sensitive data. Sensitive data includes detailed information on the cost of individual municipal assets, exact asset locations (particularly in relation to municipal water systems) and confidential information such as vehicle identification numbers and insurance data. It is critical that this information is maintained in a conservative and cautious manner to ensure that it remains up to date and applicable to meet the needs of the municipality.

## **Literature Review Conclusion**

The preceding literature review was designed to provide background information as to the status of the municipal environment at the time when PS 3150 guidelines were introduced and consequentially implemented. This information is relevant to the context of the basis for this research. What are the impacts of the implementation of PS 3150 guidelines? How do the direct and indirect impacts affect municipal governments' ability to plan for infrastructure in a sustainable manner? What, if any, additional support is required to ensure that municipal governments' are able to plan for infrastructure in a sustainable manner? The answers to these questions will assist in a better understanding of the benefits of the PS 3150 guidelines and their ability to influence long term sustainable infrastructure management.

## Chapter 3 - Research Methods and Analysis

Qualitative interviews were conducted with ten CAOs for municipalities, with populations of less than 5000, in Northern Ontario in order to gather factual and perceptual information on the impacts that PS 3150 guidelines have on infrastructure planning and financing. The municipalities were selected based on geographic dispersion and range in population. Four municipalities were chosen in the Thunder Bay District, four from the Rainy River District and two from the Kenora District. Ten interviews was deemed to be a reasonable sample of municipalities in the region as the research process proposed to follow up the interviews with an email questionnaire with seven different CAOs to verify and expand upon the findings.

The municipal personnel were chosen based on their position as CAO in the municipality. In Ontario, the Chief Administrative Officer's role is identified in legislation. The position is commonly combined with other senior positions such as Clerk or Treasurer or the deputy of either of these positions (i.e. CAO / Clerk, CAO / Treasurer, CAO / Clerk Treasurer).

The interviews were examined through an interpretive social science approach in order to complete a systematic analysis of the perceptions regarding the direct and indirect impacts of PS 3150. Kvale indicates in his book *InterViews: An Introduction to Qualitative Research Interviewing* that there are 12 aspects of understanding in qualitative interviewing. These include the following:

- “Life World – the topic in any given interview is in relation to the interviewee’s perception of the world.

- Meaning – the interview attempts to uncover how the interviewee has attributed meaning within their life world.
- Qualitative – the interview attempts to capture how the interviewee describes aspects of meaning within their life world; this is completed with words, and not specific numbers.
- Descriptive – the interview endeavours to capture detailed descriptions of what the interviewee experiences, feels and how they act in relation to their knowledge gained through experience.
- Specificity – the interview tries to describe specific situations and reactions to experiences; concrete descriptions.
- Deliberate Naïveté – the interviewer needs to remain free of preconceptions in order to be open to a full understanding of the interviewee’s life world.
- Focus – the interview should be directed, but not strictly structured; this demands a semi-structured approach be taken to encourage the interviewee to bring forward the most important dimensions from their life world.
- Ambiguity – the interviewer is responsible for verifying statements made by the interviewee; it is possible that the interview will contain contradictions that exist as part of the interviewee’s life world.
- Change – the interviewer is responsible for verifying definitions used by the interviewee where two meanings are being used for the same word; interviewees may, throughout the interview, become more consciously aware of the topic being discussed allowing them to recognize new interrelationships.

- Sensitivity – the interviewer needs to be knowledgeable of the topic being discussed in order to ask probing and deliberate questions while being fully understandable to the interviewee.
- Interpersonal Situation – the interview is an interpersonal situation, an interaction between the interviewer and interviewee; positive feelings, intellectual curiosity and reciprocal respect are important for the interview to flow.
- Positive Experience – the interview should be a positive experience for all parties involved; the conversation that takes place is meant to assist the interviewer in gaining a full understanding of the interviewee’s experiences and views on a given topic.” (Kvale, 1996, 37).

The qualitative research interview in the form of a conversation is effective because it targets a natural communication method; it also emphasizes conversation as a basic way of knowing (Kvale, 1996, 37). Interviews, in the form of a conversation, permit people to exchange information in a way that encourages joint learning while allowing the interviewer to fully understand the experiences and recommendations of the interviewee. This technique also creates knowledge through the asking and answering of questions and responses.

A conversational technique was utilized in conjunction with a semi-structured interview guide to ensure that the same questions are posed within each discussion. It was important to balance the factors of deliberate naïveté and sensitivity throughout the interview process as the interviewer is intimately familiar with the impacts that PS 3150 have had within the municipality in which she works. This bias, while not removed from the conversation, needs to be recognized throughout the interview to avoid leading

statements in order to obtain information that is from a personal and organizational perspective of the CAOs interviewed.

The key factors from Kvale's 12 aspects of understanding in qualitative interviewing that were addressed were qualitative and focus. The interview was designed to uncover the impacts that PS 3150 had on the interviewee's municipality. The qualitative nature of the discussion was chosen, because quantitative factors were the indicators that were under development through PS 3150 implementation and therefore only qualitative information was available.

The knowledge creation through this research has assisted in substantiating an interpretive planning theory. Knowledge and value are "actively constructed through social, interactive processes" rather than "discovered by scientific inquiry" (Healey, 1997, 29).

## **Analysis of Survey Results**

All interviews were recorded using a digital recording device and were transcribed for analysis. The transcriptions were examined by manually coding the data based on phrasing utilized by the subjects. Common ideas and phrases were grouped and analyzed as individual items and as part of the larger context. The purpose was to develop a thorough understanding of what is relevant to the subject in order to identify trends of direct and indirect impacts that were raised by the subjects.

## **Solidification / Review of Results**

The conclusions developed through the analysis of the transcribed interviews were reviewed, via email, with a different group of seven CAOs for municipalities, having populations of less than 5000, in Northern Ontario in order to gather factual and perceptual information about the impacts of PS 3150 guidelines affecting infrastructure planning and financing. This further analysis assisted in solidifying the information presented.

The return of data to a wider group of CAOs did not yield identifying any additional direct or indirect impacts however, the exercise did expand upon some of the impact areas identified.

## **Data Collection Process**

Interviews were completed with ten CAOs from municipalities, having populations of less than 5000, in Northern Ontario over a five month period from June to October of 2009. These were completed in order to gather information on the perceived impacts that PS 3150 guidelines will have on municipal infrastructure planning. Interviews were primarily completed via the phone due to the huge distances between communities. Three interviews were completed in person when time and access permitted. All interviews were recorded, with permission, and transcribed for analysis purposes. Coding of the data was completed in order to identify trends in the impacts that were raised.

The identified impacts were then compiled and sent in November to seven CAOs of municipalities in Northern Ontario having populations under 5000. This was completed in order to achieve a broader scale of understanding regarding the impacts and

to further verify the relevance of the impacts. This exercise assisted in data verification and applicability in the wider context.

## **Chapter 4 - Results**

This chapter underscores the findings of the research. Results speak to the impacts that PS 3150 guidelines have had on municipalities.

There were numerous similarities among responses from the municipal representatives. Impacts of PS 3150 legislation are represented in four categories including personnel, financial, planning, and technical issues.

### **Personnel Impacts**

A key impact identified throughout the data collection and verification process was the direct impact on staff resources. CAOs noted that the implementation of PS 3150 has had a significant draw on staff time, even where consultant services were utilized to complement existing staff resources.

PS 3150 guidelines provide significant flexibility and this unstructured nature of developing an inventory system created an abundance of possibilities for determining the features of the system. This lack of direction and structure has caused significant difficulty for small municipalities that are already having difficulty meeting the requirements of legislation for their mandated and discretionary services. CAOs consistently voiced the need for consultants with the necessary expertise to be involved in the inventory process in order to ensure that the information that was gathered was adequately scrutinized for accuracy.

In small municipalities, municipal personnel have had to become very knowledgeable in areas related to municipal assets. This has served municipalities well, as limited financial resources have necessitated that municipal staff have a broad

understanding of many specialties. In terms of inventory, consultants have been utilized to bring forward specialized technical knowledge related to roads, bridges, utilities and other infrastructure assets controlled by municipalities. There appears to have been a marriage of local knowledge and specialized expertise garnered from municipal personnel and consultants, respectively.

An increasing concern in the municipal sector has been the loss of senior municipal personnel to retirement which increased significantly at the outset of the movement to full accrual accounting. Four of the ten municipalities examined demonstrated retirements coinciding with the change. As one CAO noted of a Treasurer's retirement:

*He was very familiar with [the inventory process], but left right in the middle of everything, because he wasn't really happy about it and thought it was a huge waste of time. He didn't like it, but knew it had to be done.*

This retirement trend has caused a loss of corporate memory that would have been beneficial to the development of the inventory systems, and has likely been detrimental to the quality of information that has been collected.

Training for the development and implementation of PS 3150 guidelines has also consumed significant staff time. As noted by one CAO:

*"The Treasurer has taken in a number of webcasts and onsite training at regular meetings of finance officers. Most of the training that I'm aware of was put on by municipal associations, such as AMCTO and MFOA, the province hasn't really provided any training for staff (laughs) but it is always interesting to see provincial staff at municipal training sessions. They don't know any more than we do about how this is all going to work."*

Training opportunities have been offered via workshops, webinars, personalized training, and newsletters. These include sessions by the Association of Municipal

Managers Clerks and Treasurers of Ontario (AMCTO), Municipal Finance Officers Association (MFOA) and other training dedicated to specific types of infrastructure have been addressed by associations such as the Ontario Good Roads Association (OGRA).

Municipally led training events began in 2006 through the provision of information regarding the upcoming compliance deadline. Further training events were made available to address the need for policy development to ensure that municipal staff and councils were able to follow a standardized procedure for the implementation of the PS 3150 guidelines, and in particular the Tangible Capital Asset inventory process. While these sessions were difficult to structure given the variety of factors available to individual municipalities, the general framework of the guidelines was addressed. Training sessions also included the restatement of financial statements, assistance on training council members to read the new statements. Training opportunities were made available from 2006 – 2009 and addressed a number of subject areas that were relevant to the implementation and ongoing management of the inventory system.

## **Financial Impacts**

Financial impacts have also resulted from the movement by municipalities to full accrual. The most common has been the costs associated with the completion of the initial inventory of tangible capital assets. This process is time consuming and therefore has required additional financial resources whether it has been completed internally, externally or through a combined approach. Costs have been substantial for training and travel associated with training, staff wages, consultant costs, and technical requirements.

In those situations where municipalities have chosen to utilize a primarily internal approach, although not common, the result has been that other operational processes have been outsourced. This indirect financial impact was difficult to quantify as municipalities that utilized a primarily internal approach did not typically track staff time or wages as dedicated to PS 3150 implementation.

The above noted financial impacts were not reported as being overly burdensome to municipalities, but it is important to identify that this change has been an unfunded mandate. Ensuring compliance with PS 3150 guidelines is mandatory for municipalities, and the initial and ongoing costs will remain the responsibility of municipalities and ultimately taxpayers. This includes the increased costs for auditing fees associated with the expanded process of accounting for Tangible Capital Assets. Auditors will now be responsible for auditing non-financial assets as they will be identified in municipalities' financial statements.

The biggest financial impact that was identified by CAOs was related to the impact that having the value of tangible capital assets identified on Financial Statements. This was addressed further through the impact of planning for Tangible Capital Assets and asset management.

## **Technical Impacts**

A number of technical impacts were identified regarding information management and training requirements. Many municipalities looked to existing technology suppliers to develop and provide training for software options that were built to suit a municipality's requirement. Where financial considerations were a concern, where capitalization thresholds were set quite high or where a municipality did not have

numerous Tangible Capital Assets, some municipalities have chosen to use spreadsheets for the maintenance of their datasets. This was chosen as the most feasible option for one of the municipalities who participated in the research.

For the clear majority of municipalities, technology requirements were key to the implementation of PS 3150 guidelines in order to maximize on analysing and reporting on information included in the system. Technology requirements included the linking of assets to Geographic Information System (GIS) and financial systems.

As identified by one CAO, quantitative data was very important for ongoing analysis of the data.

*“As far as other infrastructure, I guess one of the biggest items we would have is our bridges, not that we have a lot of them, just that they are so expensive to replace. So as far as what we are spending... Is it sustainable? Well it’s a really tough question, because we don’t have a long term plan. I think the risk is fairly low. When we do the forecasting and analysis I think we’re going to be fine but my preference would be to have some hard data to back that up.”*

Technological solutions were designed to be feasible for municipalities, but all municipalities recognized the value of easing the process of managing the large amounts of data that were produced through the inventory process. The full cost of software requirements was not fully appreciated by CAOs at the outset of PS 3150 but became increasingly important as municipalities recognized the quantity of data that needed to be stored and managed.

Drawbacks and weaknesses of the software options that were developed have not yet been identified by the municipalities as these programs are in the initial phases of use. Weaknesses are likely to become more apparent as municipal staff utilize the technology

and determine which reporting requirements will be frequently utilized. This will inform the ongoing development of software capabilities.

Technology played a key role as a significant impact in municipalities' implementation of PS 3150 guidelines, particularly in relation to training municipal staff in its use. CAOs considered prudent and crucially important to integrate technology into existing systems, procedures and operations were feasible to ensure simplicity of use and maximized efficiency.

### **Long Term Asset Management and Infrastructure Planning**

The necessity for long term asset management and infrastructure planning was the number one issue that CAOs identified as an impact of the implementation of PS 3150 guidelines. This is an interesting impact specifically because the guidelines do not require long term planning for assets. PS 3150 guidelines identify that the value of non-financial assets shall appear in municipalities' financial statements but stops shy of requiring municipalities to levy for replacement costs and therefore plan for the long term replacement of existing assets.

All CAOs recognized that the inventory and valuation of municipal assets provided an opportunity for long term planning for municipal infrastructure. The creation of an inventory system that identified the useful life and value of each piece of infrastructure was the framework needed to assess the future infrastructure needs of municipalities. This planning mechanism was deemed to be useful in spite of the cost, staffing and technological resources required to become compliant.

The framework was seen as a means to provide the ability to plan for future infrastructure needs, however CAOs did voice concerns with the amount of time that

would be required to maintain the system. Some assumed that the number of Tangible Capital Assets purchased in a single year would be minimal and therefore would not require significant time to maintain. CAOs for municipalities that had chosen a lower capitalization threshold indicated that they believed that significantly more staff resources and time would be required to maintain the inventory system. One CAO noted the following regarding future intensification of PS 3150 guidelines:

*“If the auditors, province or PSAB decide to intensify the definition of what a TCA is, we could potentially add another full time staff position to the municipality... and wages are already, probably 30 per cent of our operating budget.”*

They however also felt that the level of detail that would be included from the outset development of their system would be increasingly beneficial when assessing the long term infrastructure requirements for the municipality.

CAOs also noted that the Tangible Capital Asset system would only be useful if council fully understood the impact that it had on Financial Statements and long term asset management planning. The importance of this was stressed by one CAO:

*“You have to also get council looking past the end of their term [on council]. I know that my council didn’t want to look at the five year plan, because of the term issue. Even for setting tax rates now, you are setting them for more than one period. You can’t just pay as you go. You have to look ahead.”*

The change in the format of the financial statements will likely impact council members’ understanding of their municipalities’ financial and non-financial assets. CAOs stressed that council members would need to receive training on what the changes mean and how non-financial assets will be identified on the statements. This training could be completed by staff with the assistance of a municipality’s auditor.

Long term asset management was seen as the most logical next step for municipalities to complete as the maintenance of Tangible Capital Asset inventory would require ongoing information. This is not to say that municipalities have not been considering long term infrastructure planning, rather, on the contrary, municipalities have developed capital planning based on qualitative information, experience in the municipal setting and general knowledge of their assets. Their concerns with infrastructure sustainability are linked more to the ability to levy the necessary funds to repair or replace an asset. One CAO noted:

*“PSAB and asset management are very different. It’s been amazing that municipalities haven’t had to do this until now. On the other hand, a private business has to capitalize assets to know the value in order to sell assets, equity in the company or the company altogether. But [municipalities] have always been doing infrastructure planning for the future.”*

Another CAO noted that infrastructure concerns that were present within the municipality prior to the implementation of PS 3150:

*“When you look at the water plants and sewer plants alone, I hate to even think about having to replace one. That’s why we’ve gone to water meters, we’re trying to minimize expanding, in order to be able to maintain what we have. We’re always looking at reducing services, but not below the bare minimum. I’d give the province my water and sewer pipes back if they’d take them. But, ultimately, we are going to need better revenue tools.”*

Information on the condition of assets by class, segment or individual asset should be part of this planning process to ensure that council would have adequate information to make good decisions.

## **Chapter 5 – Summary Analysis and Conclusions**

This chapter presents an analysis of the results of the research, identifies the conclusions of the project and identifies recommendations for ongoing infrastructure planning and financial management of municipal assets. The Infrastructure Gap is addressed as it relates to the infrastructure planning and long term management.

As noted in Chapter 4, the key impacts noted by municipal senior administrators were regarding personnel, financial, technical and planning. The impacts raised regarding the personnel, financial and technical issues were all fairly minor in nature.

Personnel impacts were identified and included unqualified staff, distance from training opportunities, the significant amount of time required to implement the PS 3150 and individual policy and procedures, changes to employee duties and senior staff retirements. The implementation of PS 3150 guidelines was difficult particularly in Northern Ontario where highly educated and qualified staff have been difficult to attract and retain. Senior administrators watched as staff members nearing retirement left positions in order to avoid the complexity of learning, developing and managing a full accrual financial system. Additionally the change was viewed by personnel as constituting a significant increase in municipal and their responsibilities without any additional compensation. Staff time was utilized in the training and implementation process and this had a substantial impact on the amount of time available for other mandated and discretionary municipal responsibilities that required continued attention.

Financial impacts, particularly the initial inventory process, were recognized to be an unfunded mandate. The costs associated with the training, development and implementation of the PS 3150 guidelines have been significant, however many

municipalities utilized existing channels for ongoing development, regional administration, and cross-jurisdictional data sharing. This had the benefit of minimizing training costs to the greatest extent possible and demonstrates municipalities' methods for working with other municipalities and municipal associations in order to develop solutions for problems with wide ranging impacts.

Technical impacts were recognized by CAOs as being crucial to develop and maintain the data required to comply with PS 3150 and to enable analysis for long term infrastructure planning. The quantity of data that municipalities had to collect dictated that a technical mechanism for data management would be necessary in order for analysis to be possible. As well a significant amount of information needed to be collected in order to develop a sufficient level of data quality. The sheer quantity and quality of data required for the creation and maintenance of an inventory system made it crucial to find and utilize a software solution that would make data management and analysis possible. In order to solve this software problem, municipalities had to purchase efficient and manageable software. The cost for an appropriate and suitable software solution was identified by senior administrators to be an impact of PS 3150 however this was a minor impact in comparison to the potential for better long term planning for infrastructure, and the provision of a better picture of municipal infrastructure spending.

The largest impact noted from the interview process was the potential for long term infrastructure planning. Given the wealth of information developed throughout the inventory process, and the organization of the extensive data in an accessible format, the opportunity for better life cycle analysis is now possible. This opportunity was

recognized by CAOs despite the other negative impacts resulting from the implementation of the guidelines.

Planning for future municipal infrastructure is a challenging process and is not a simple equation to be arrived at based on the value of infrastructure and the life of that infrastructure. There are many other factors to consider including ongoing change in technology, social requirements, institutional culture, urban design, finances, available grants and responsibilities. Schedule Each of these is discussed below in further depth.

Changing technology can have a huge impact on the cost of infrastructure development and maintenance, as can be seen in new water treatment systems and building construction. As these technologies are developed, tested, improved and implemented, the cost and life cycle for infrastructure will change. The example of water treatment systems is a particularly relevant example following the increased focus on water standards following the Walkerton water tragedy in 2000 and the North Battleford incident in 2001. Reviews of these incidents increased the intensity of water regulations and inspections thereby requiring water systems operators to meet new standards and guidelines related to safe water treatment. In Ontario, this evolved through the Safe Water Drinking Act, 2002 and the subsequent production of Drinking Water Quality Management Plans by Water Treatment operators.

Building construction technology is also rapidly evolving to address changing standards for construction, newly developed materials, increased energy efficiency and green building products. Changing technology in the water treatment, building construction and other fields could significantly impact the ability for municipalities to

streamline delivery of services however this will have varying effectiveness due to geography and climactic factors.

Social and cultural changes, as well as media attention and funding availability, have popularized public and non-motorized forms of transportation which could have a significant long term impact on urban transportation systems including roads and bridges. Social and cultural changes can also be seen through the increased provincial funding programs directed toward public transit and bike lanes, however this particular issue is less of an impact in northern Ontario due to the level of isolation and small community size. These examples demonstrate the impacts that social and cultural changes can have on infrastructure planning.

The current urban design paradigm is accommodating an increasingly compact urban form while continuing to facilitate sprawling suburbs. The intensification and amplification of urban form will drastically impact transportation systems, water distribution and wastewater collection systems, recreation facilities and other municipal systems such as independent phone utilities (Shane, 2005, 292). These design decisions can be bureaucratic and political and therefore may be impacted with the wealth of infrastructure information that emerges from municipal compliance with PS 3150.

Financing and responsibility for municipal infrastructure will also play a significant role in the planning process. Municipalities are responsible for maintaining and developing municipal infrastructure, however the Province is ultimately responsible for municipalities as identified in Section 92 (8) of the Canadian Constitution Act, 1867. This leads one to consider the ongoing debate on the fiscal imbalance between municipal, provincial and federal orders of government, and in the end the derived conclusion is that

all government services are ultimately financed by the taxpayers, albeit through different forms of taxation. While the discussion on responsibility continues to be debated, a new dimension of the problem will be the information garnered through the PS 3150 process. This increased quantity and quality of information will begin to form a quantitative basis for analysis on the municipal infrastructure deficit, however the analytic use, by all orders of government, of the information has yet to be seen by municipalities.

As of August 2010, it was uncertain of the percentage of municipalities that had met the PS 3150 compliance deadline, as there were zero 2009 Municipal Financial Statements publically posted on the Ministry of Municipal Affairs and Housing website. For 2008, a total of 379 of the 445 Municipalities in Ontario had posted their financial statements on the website (Ministry of Municipal Affairs and Housing, 2010, 1). Further analysis would be required to determine the number of municipalities that were compliant by the January 1, 2010 deadline.

## **The Infrastructure Gap**

A message that has been heard nation-wide in the media and which has also been targeted to municipal staff in training exercises in Northern Ontario is that there is a huge and growing infrastructure gap. The infrastructure gap is due to the lack of funding for maintenance and replacement of infrastructure. The infrastructure gap is targeted at municipal infrastructure due to inadequate funding mechanisms to manage existing infrastructure resources.

The challenge of the infrastructure gap or deficit was raised repeatedly throughout the research inquiry because the movement to full accrual has been heralded by other orders of government as a quantitative methodology to clearly analyse and commence a

process of creating a solution to the infrastructure problem. This has left municipalities, including CAOs, with the responsibility for massive quantities of data collection without a clear understanding of how necessary maintenance of infrastructure and replacement projects will be funded. Municipal personnel interviewed were very clear on this and intuitively knew that their municipality's infrastructure was not sustainable. As one CAO stated:

*“At the end of the day, everyone is going to have to understand that municipalities aren't sustainable. But the process itself is necessary to track what's going on, and all orders of government are going to have to recognize that this is step one of a much bigger process. We can't just expect that this exercise is going to enable municipalities to become sustainable. It's not that we don't know there are funding problems, we just don't have the money to do anything about it.”*

The Infrastructure Gap was referred to numerous times throughout the process as a concern for municipal personnel and municipalities on the broader scale. The implementation of PS 3150 was seen by all the interviewed CAOs as being a positive approach to promote asset management in order to plan for increasingly sustainable municipalities. The increased access to infrastructure information will enable all orders of government to have a better understanding of the municipal infrastructure deficit which should increase the ability for an incrementally better process aimed at improving the sustainability of municipal infrastructure to be developed. The information generated through the implementation of PS 3150 will not enable municipalities to reduce or remove the infrastructure gap, rather the information will enable a better analysis of what is a reasonable infrastructure deficit and promotes increased discussion at the municipal council and public level on fiscal imbalance and municipal sustainability.

The ability to access information on infrastructure from all municipalities on a provincial and national level should allow analysts to better understand infrastructure life cycle trends. In turn, this will enable better decision making on the funding of infrastructure projects and developing long term solutions to the infrastructure gap. Municipalities have lobbied senior levels of government for long term funding and have been able to achieve it through Gas Tax and other funding programs. The emphasis on long term funding from the Provincial and Federal Governments has received significant attention by regional municipal lobby groups such as the Northern Ontario Municipal Association (NOMA), the Federation of Northern Ontario Municipalities (FONOM) as well as the Association of Municipalities of Ontario (AMO), and the Federation of Canadian Municipalities (FCM) for some time and are arguably the foremost concern at the municipal level.

## **Conclusion**

There is no doubt that municipalities have a love – hate relationship with PSAB PS 3150 guidelines. The resounding responses from represented CAOs and senior administrators indicate that implementation of the guidelines and subsequent maintenance and analysis will be relatively costly, time consuming, and will utilize and demand human, capital, and technological resources. However, CAOs recognize that the negative impacts are minimal when the larger opportunity for improved infrastructure planning is considered. These are identified in Appendix 2.

Throughout the research process, CAOs were able to vocalize and discuss that municipal infrastructure was, without a doubt, unsustainable and that there was a lack of long term financing for municipal infrastructure. CAOs continually expressed that they

did not have adequate, quantitative information to back up these issues in a factual manner prior to attaining compliance with PS 3150. The implementation of the PS 3150 guidelines and municipal policies and procedures will provide a means to examine infrastructure deficit (or surplus) and the trends in municipal infrastructure planning. The process to move forward in a measureable way has been addressed through the development of the inventory and valuation process at the municipal level. Ongoing efforts to streamline the data collection and maintenance process of the data and analysis should be increasingly useful to identify trends. This in turn will assist in long term planning by demonstrating in a quantitative manner the infrastructure needs at the municipal level. This will contribute to a thorough discussion between municipal, provincial and federal governments on the revenue tools required to finance infrastructure development and maintenance. Information collected under PS 3150 may also point to infrastructure gaps in northern Ontario that may be different than those collected in the south thereby bolstering Northern Ontario arguments for sustainability due to climate, topography, population, and remote location.

There is some uncertainty as to how the information developed through the implementation of PS 3150 guidelines will be utilized in the future, however there is also speculation that municipal governments will be asked or directed to provide for the infrastructure deficit through the development of long term financial strategies and management. It is prudent to note that Provincial and Federal Governments, if asking for municipalities to make available funds for future infrastructure replacement should ensure that they have provided adequate financial tools for municipalities to do so. In the current municipal financial climate, it is unlikely that municipalities would be able to

levy sufficient funds for the future of municipal infrastructure while maintaining a representative role as stewards for the community.

## **Ongoing Research**

Additional research and analysis on this topic would further address the movement towards the sustainability of infrastructure at the municipal level. This would be best accomplished following a review of the changes in the years following the conclusion of this research as the impacts and changes in the municipal environment are still in the process of evolving. Political impacts would need to be monitored to be fully addressed as this environment remains volatile and is subject to change on a daily, monthly and annual basis. However, political trends over time should be addressed to demonstrate direction on this issue within all orders of government. This would be necessary to the eventual methods utilized to address the municipal infrastructure gap.

Subsequent publication on the findings identified in this research is anticipated to assist municipalities, municipal organizations, as well as other orders of government better understand the impacts that the implementation of PS 3150 has had on municipal governments. The dissemination of research findings is critical to achieve a comprehensive platform of information regarding the impacts of PS 3150 guidelines and the anticipated movement towards increased sustainable infrastructure and asset management.

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## **APPENDIX 1 – Sample Tangible Capital Asset Policy**

### **Purpose**

The Tangible Capital Assets (TCA) Policy provides direction for the creation of a system that manages the Municipality’s TCA in accordance with the PSAB standards under PS3150.

The TCA Policy provides a framework to make decisions, plan for future needs, and increase public accountability in municipal financial reporting processes.

All tangible property owned or controlled by the Municipality, either through donation or purchase, and which qualifies as a TCA is included in the scope of this Policy.

### **Responsibility**

In the event of disagreement in the interpretation or implementation of these policies and procedures, the Senior Administrator shall make the final decision, guided by the Municipal Act, PS3150, and the OMBI Municipal Guide for Accounting for TCA.

The Senior Administrator is hereby authorized to establish administrative procedures as may be required to carry out the intent of this Policy. The Senior Administrator may designate to any other properly authorized Corporation employee any part or parts of the responsibilities indicated in this Policy.

### **Objectives**

The intent of this TCA Policy Document is to provide a corporate framework for the accounting treatment of TCA thereby achieving the following objectives:

- Establishing guidelines for the acquisition, development or construction of Tangible Capital Assets;
- Maintaining an acceptable balance between the level of annual debt charges with council's objective of minimizing the tax levy impact of capital financing;
- Ensuring costs and benefits obtained through infrastructure assets be borne by current and future residents;
- Maintaining manageable levels of long-term debt and facilitating the movement toward council directed pay-as-you-go capital financing;
- Maximizing the use of internal sources of funding from current budget funding (capital levy and capital reserves);
- Ensures compliance with PSAB 3150;
- Provides consistent and auditable accounting treatment of TCA related expenditures;
- Provides more meaningful financial statements;
- Provide accountability of Tangible Capital Assets;
- Facilitates asset management and control;
- Improves information for long-term planning;
- Improves performance measurements;
- Provides better communication with citizens, rate payers, elected officials, financial rating organizations and regulatory agencies.

## **Scope**

This TCA Policy applies to all Municipality Departments, Board and Committees and other Organizations included within the Financial Reporting Requirements of the Municipality.

## **Definitions**

### **In this Policy:**

**“Accumulated Amortization”** – shall be defined as: The total gross amount of the asset’s Original Cost, less Residual Value, that has been written off since its capitalization (in-service) date, to the last fiscal year end.

**“Administrator”** – shall mean the Senior Administrator or designate of the Municipality of [name of municipality].

**“Amortization”** – shall mean the process of allocating the cost of a Tangible Capital Asset over its estimated useful life to match costs with the revenues or public services that it helps provide. This term is used interchangeably with depreciation and is generally understood to mean the same thing.

**“Amortization Period”** – is the method selected to write-off the cost of a TCA over its useful life. The Municipality has selected the Straight Line Method.

**“Annual Amortization”** – shall be defined as: The annual amount of the asset’s Original Cost less Residual Value that is amortized based on a predetermined write-off rate.

**“Betterment”** – shall mean the subsequent expenditures on Tangible Capital Assets that:

- Increase previously assessed physical output or service capacity;
- Lower associated operating costs;
- Extend the useful life of the asset; or
- Improve the quality of the output.

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

An example of betterment is a road widening, since the capacity of the TCA was increased. An example of maintenance expenditure would be the replacement of the carpeting in a building, since it would not increase the overall useful life of the building.

**“Capital Leases”** – shall be defined as a lease that transfers substantially all the benefits and risks incidental to ownership of the property to the lessee.

**“Cost”** – shall mean the gross amount of consideration given up to acquire, construct, develop or better a Tangible Capital Asset, and includes all costs directly attributable to acquisition, construction, development or betterment of the Tangible Capital Asset, including installing the asset at the location and in the

condition necessary for its intended use. The cost of a contributed Tangible Capital Asset, including a Tangible Capital Asset in lieu of a developer charge, is considered to be equal to its fair value at the date of contribution. Capital grants would not be netted against the cost of the related Tangible Capital Asset. The cost of a leased Tangible Capital Asset is determined in accordance with PUBLIC SECTOR GUIDELINE PSG-2, Leased Tangible Capital Assets.

**“Cost of Reproduction New (CRN)”** – shall be defined as: the amount required to reproduce property of like kind and quality at one time in accordance with current market prices for materials, labour, manufactured equipment, contractor’s overhead, profit, and fees, but without provisions for overtime, bonuses for labour, or premiums for materials.”

**“Council”** – shall mean the Council of the Municipality of [name of municipality].

**“Department Head”** – shall mean the person hired / appointed by Council to be responsible for the operations of a Department and / or their designate.

**“Disposals”** – occur when the ownership of a Tangible Capital Asset is relinquished and may occur by sale, destruction, loss or abandonment. At this time, the cost and accumulated amortization of the asset is reduced to zero.

**“Fair Value”** – shall mean the amount of the consideration that would be agreed upon in an arm’s length transaction between knowledgeable, willing parties who are under no compulsion to act.

**“Net Book Value”** – shall be defined as: The Original Cost, less Accumulated Amortization incurred as at the last fiscal year end.

**“Municipality”** – shall mean the area included within the geographic boundary of the Municipality of [name of municipality].

**“Opinion of Market Value”** – shall mean the written opinion as to the amount that the land might be expected to realize if sold in the open market by a willing seller to a willing buyer, provided by:

- a Realtor, certified or not, acceptable to Council as an appraiser of land in the area; or
- Staff of the Municipality, whose knowledge of the property and current market values within the Municipality is acceptable to Council.

**“Pooled Assets”** – shall mean the assets that are identical or similar in nature and have a unit value below the capitalization threshold but have a material value as a group. They will be recorded as a single asset with one combined value. Although recorded in the financial systems as a single, each unit may be recorded in the asset sub-ledger for monitoring and control of its use and maintenance.

**“Residual Value”** – shall be defined as: The estimated net realizable value of a Tangible Asset at the end of its Useful Life.

**“Replacement Cost New (RCN)”** – shall be defined as the current cost of similar new property having the nearest equivalent utility as the property being appraised, as of a specific date.

**“Service Potential”** – shall mean the output or service capacity of a Tangible Capital Asset, and is normally determined by reference to attributes such as physical output capacity, quality of output, associated operating costs, and useful life.

**“Surplus Asset”** – shall mean the new or used equipment, vehicles or materials, which are of no further use to the Corporation.

**“Tangible Capital Assets”** – shall mean non-financial assets having physical substance that:

- Are held for use in the production or supply of goods and services, for rental to others, for administrative purposes or for the development, construction, maintenance or repair of other Tangible Capital Assets;
- Have useful economic lives extending beyond an accounting period;
- Are to be used on a continuing basis; and
- Are not for sale in the ordinary course of operations.

**“Useful Life”** – shall be defined as: An estimate of either the period over which a Tangible Capital Asset is expected to be used by a Government or the number of production or similar units that can be obtained from the Tangible Capital Asset by a Government. The Life of a TCA may be extended beyond its useful life to a government. The life of any TCA, other than land, is finite and normally the shortest of the physical, technological, commercial, or legal life.

## **Asset Organization**

The level of detail required in the capital asset inventory is a balance between the cost of data collection, tracking and analysis and the benefits of the information gathered. A category of assets is a grouping of assets of a similar nature or function in the Municipality's operations. Functional Classes, Sub-Functions, Departments, Asset Categories, and Asset Segments shall be used to further organize the TCA. See Schedule "A" for a complete list of asset categories and sub-categories.

## **Tangible Capital Asset Inclusions**

TCA (also known as "Fixed Assets") are assets that have physical substance. In the case of the Municipality, TCA's are a significant economic resource that are key and essential components in the delivery of the Municipal Services. More specifically, the Municipality must realize certain economic benefits from the assets to be considered as TCA and included in the Financial Statements. TCA include a wide variety of Municipal Property such as Land, Buildings, Machinery and Equipment, Vehicles, Computer Hardware and Linear Assets. The TCA can be purchased, developed / constructed internally, or acquired via capital leases or donation.

As can be surmised, the Municipality has thousands of TCA. It is imperative therefore that the Policy defines and excludes small value TCA that do not materially impact the Financial Position of the Municipality. Furthermore, it is also important that a portion of these assets be reported on a "pooled" basis to ensure the property record is maintained on a manageable level.

## **Tangible Capital Asset Exclusions**

In accordance with PS 3150 Guidelines the following Capital Assets are excluded from the TCA Policy:

- Crown Land;

- Intangible Assets such as Contracts, Copyrights, Intellectual Property, Patents, Goodwill and Easements;
- Natural Resources;
- Works of Art, Historical Treasures (should be recognized but not valued for financial reporting purposes);
- Cost of Studies not related to TCA or Official Plan or Environmental Assessment Master Plan;
- Assets Held for Sale

## **Asset Classifications**

The Municipality's TCA will be classified under two Primary Asset Classifications:

- **General Capital Assets**, which comprise Land, Land Improvements, Buildings, Machinery and Equipment, Furniture, Office Equipment, Computer Hardware and Licenced Vehicles.
- **Infrastructure Assets**, which comprise Linear Assets and Associated Specific Components, including but not limited to: Transportation Infrastructure, Environmental Infrastructure and Utilities.

## **Asset Categories**

The Municipality has defined TCA Categories and Segments as defined and detailed in Schedule "A" of this Policy Manual.

The Primary Asset Classes and Categories should be the same as the General Ledger and disclosed in the Financial Statement as recommended under PSAB 3150.40.

Asset Sub-Categories (Segments) have been developed to better allocate amortization to the pertinent Municipality Departments and facilitate service cost comparisons.

The Capital Work-in-Progress Class will include buildings, facilities and infrastructure under construction. Although the expenditures will be recorded as they occur, and disclosed on the financial statements, the asset will not be recorded until the asset is placed into service and/or receive substantial completion. At that time the asset will be moved into the appropriate Asset Class and Category, other than Capital Work-in-Progress, and amortization will start.

## **Capitalization Thresholds**

Capitalization thresholds are established to make the TCA Policy practical and easy to administer and maintain. This will reduce the number of assets required for accounting purposes, without ignoring the materiality of significant assets or asset pools. Within the legislation there is no prescribed threshold, so the Municipality established thresholds based on materiality criteria outlined in the OMBI Guide.

There are various suggestions for establishing capitalization thresholds. Thresholds cannot be set too high as to impact the materiality established by the auditors. Assets valued above the threshold will be recorded on the Balance Sheet and amortized annually on the Statement of Operations. Assets valued below the threshold are recorded as expenditures on the Statement of Operations in the year acquired and will be included in the Operating (not Capital) Budget. The recommended thresholds for capitalizing assets are outlined in Schedule “A” of this Policy Manual.

A complete review of the Capitalization Thresholds should be performed annually.

## **Functional Asset Classes**

The Municipality’s TCA must be assigned a Functional Asset Class generally in accordance with the Guidelines Outlined in Schedule “B” of the OMBI Guide.

Since the Municipality has developed a similar functional asset classification, it is recommended that the TCA are recorded in accordance with the following FIR Classification:

- General Government
- Protection Services
- Transportation
- Environmental Services
- Health Services
- Social and Family Services
- Social Housing
- Recreation and Culture Services
- Planning and Development

The Municipality will also implement a much more detailed Departmental Asset Classification System to better reflect allocation of amortization to each individual department. The TCA, therefore, will be assigned a department code / name in accordance with the Municipality's General Ledger.

### **Asset Register**

In order for the Municipality to achieve PSAB 3150 Compliance, all existing TCA that meet the Capitalization Policy criteria must be inventoried by Asset Class, Functional Class, Sub-Functional Class, Asset Category, Segment and Department and entered into a "Master" Property Record. This Asset Register should reflect a current list of the TCA owned by the Municipality to enable calculation of Amortization and Net Book Value. The register therefore will serve to justify the opening and closing balances of TCA Classes reported in the Financial Statements. Due to its intended purpose the Register must be auditable like other financial records.

### **Inventory of Tangible Capital Assets**

The Municipality has numerous TCA purchased over many years. PSAB 3150 requires that these transitional period assets be inventoried and input into the Asset Register. These TCA must be inventoried by Asset Class, Asset Category and Sub-

Category, Functional Class and Department to enable calculation and allocation of amortization. Subsequent to the initial inventory a periodic physical verification must be performed to identify any unrecorded divestitures and disposals, so the Register is maintained current.

The Municipality has engaged a consultant to perform an inventory of a portion of the Municipality's TCA. For the balance of the TCA:

- Asset inventory will be the combined responsibility of the Department Head responsible for a purchase / construction of an asset and the Accounts Payable Clerk.
- Asset inventory will be the responsibility of the Department Head responsible for a donation of an asset. The Accounts Payable Clerk will assist the Department Head in this inventory.
- Asset inventory and documentation will be aligned with the Municipality's Purchasing Procedures as outlined in the Municipality's Procurement Policy or successor.
- Where inventory fields cannot be historically produced on documented data, the Department Head who controls the asset shall provide an estimate. This can be assembled from a number of sources and is made in the best judgment of the Department Head. Justification from the manufacturer, industry, or another municipality may supplement the Department Head's judgment.
- The Accounts Payable Clerk will provide all Department Heads with monthly reports of TCA information in order for each Department Head to complete any missing information. These must be completed and returned by the 15th of the following month.

## **Asset Attributes**

The Municipality must collect the TCA inventory in a consistent and structured manner to enable its inclusion in the Asset Register and subsequent financial reporting. The information collected will not only include basic Fixed Assets Data, but also additional attributes to assist with TCA Management, Budgeting and Control. Ultimately

the Municipality may collect additional information for certain TCA, but must collect the essential assets attributes for all TCA, as detailed in Schedule “B”.

## **Whole Asset or Component Approach**

Tangible Capital Assets may be accounted for using either the single asset or component approach. The component approach is used if the major components of a TCA have significantly different useful lives and consumption patterns than the overall TCA. The use of this approach will depend on the usefulness of the information versus the cost of collecting and maintaining information at the component level.

The component approach will be used for the roads, water and wastewater infrastructure systems and other Linear Assets. Components of similar vintage can be grouped when the assets have similar characteristics and estimated useful lives. An example would be the various water pipes being grouped in components based on type (lead pipe, galvanized, PVC, copper, etc.). Alternatively, the Municipality may want to record these individually, to enable optimal Asset Management.

## **Pooling**

Where individual assets are below the threshold value, but their total group value is too large to ignore, pooling is the suggested method for recording these assets. These assets are usually bought in volume and their total value may be significant. Pooled assets are recorded as a unit but may be tracked individually in the Asset Register and for Asset Management purposes. Examples are library books and shelving, street lights, office equipment, office furniture, stacking chairs and tables, fire hydrants, computers, water meters, firefighter outfits.

## **Timing of Accounting for Tangible Capital Assets**

PSAB 3150 requires that:

- The cost, less residual value, of TCA with a limited life should be amortized over its useful life in a rational and systematic manner appropriate to its nature and use by the government (PS3150.22);
- The amortization of the costs of TCS should be accounted for as expenses in the Statement of Financial Position (PS 3150.23); and
- The amortization method and estimate of the useful life of the remaining unamortized portion of a TCA should be reviewed on a regular basis and revised when the appropriateness of a change can be clearly demonstrated (PS 3150.29).

A TCA, therefore, must be recorded in the Municipality's Financial Statements when:

- It is probable that future benefits associated with the Tangible Capital Asset will be obtained; and
- There is an appropriate basis of measurement and a reasonable estimate of the value of the asset can be made;
- The acquisition date of a TCA is the earlier of:
  - The date on which the TCA being constructed is complete and ready for use; or
  - The date on which the Municipality obtains the legal ownership of the Tangible Capital Asset.

Therefore, capital projects currently being tracked within the capital fund must be closed as soon as the asset is put into service in order to begin amortization.

For new TCA, certification that the asset has met engineering and safety standards and is ready for public use will provide evidence that the TCA is completed and ready for use.

In certain instances, the acquisition or construction of Linear Assets is comprised of distinct, multiple and self-contained phases that will be put into service at different points in time. In these cases, each phase will be capitalized upon completion.

Amortization will be calculated based on twelve periods per year and will be booked to the General Ledger on a monthly basis. The half year rule will apply for calculation of amortization in the first year of service.

## **Valuation of Tangible Capital Assets**

Tangible Capital Assets should be recorded at historical costs (actual costs at time of acquisition) including all ancillary charges necessary to place the asset in its intended location or condition for use. Since most financial records have limited retention period, actual documentation of older existing assets may not be available. Properly documented verification from long-term staff may be utilized for asset valuation if none of the following methods provide a more accurate estimate.

If historical costs are unavailable, the first preferred method is Deflated Reproduction Cost. This is the cost of reproducing the asset with a substantially similar one, or the price of reproducing the asset in its present physical form. Once the reproduction cost is established, the value needs to be deflated to the year the asset was acquired.

The next preferred method of valuation would be Deflated Replacement Cost, if the Reproduction Cost is unavailable. This is the cost of replacing an asset with one that has the same functionality and capacity but has a different physical form or uses the most common current technology.

Appraisals may be required if Reproduction and Replacement Costs are not readily available. The appraisal should take into account the date of acquisition or a deflation index will need to be applied. Appraisal may be especially appropriate for land and buildings.

As a last resort, a nominal fee of \$1 can be assigned if no other valuation methods are possible or if the asset is old enough to have surpassed its useful or projected life. This nominal value may also be used for assets that have no value to anyone other than the municipality such as cemetery land, land under road allowances and other minor value TCA.

If a TCA has exceeded its estimated useful life, the asset should still be added to the inventory of assets, even though the asset is fully amortized.

Purchased Assets are recorded based on the amount paid to acquire the asset; it includes cost of related studies, all non-refundable taxes and duties, freight and delivery charges, installation and site preparation costs. It is net of any trade discounts or rebates. Land costs include legal fees, land registration fees and transfer taxes plus any costs to make the land suitable for intended use such as pollution mitigation or demolition costs.

When two or more assets are acquired for a single purchase price, it is necessary to allocate the purchase price to the various assets based on fair value at the time of acquisition, at the discretion of the Department Head responsible for the TCA.

### **Acquired, Constructed or Developed Assets**

The value of constructed or developed assets includes all costs attributable to the acquisition, construction or development of the asset such as architectural or professional fees. Costs related to Studies specific to the TCA should be capitalized. Carrying costs such as internal design, inspection, administrative and other similar costs should be also capitalized. Capitalization of general administrative overhead is not allowed. Borrowing costs incurred by the acquisition, construction or production of an asset that takes a substantial period of time to get ready for its intended use should be capitalized as part of the cost. Capitalization of interest costs should commence when expenditures being incurred, borrowing costs are being incurred and activities that are necessary to prepare the asset for its intended use are in progress. The capitalization of interest should cease when development / construction activities are interrupted or the project is deemed complete.

### **Donated or Contributed Assets**

The cost of donated or contributed assets that meet the criteria for recognition is equal to the Fair Value at the date of construction or contribution. Fair Value may be

determined using Market or Appraisal Value. Costs may be determined by an estimate of replacement cost less depreciation or based on market comparables.

Ancillary costs should be capitalized. For works constructed by developers and assumed by the municipality, the schedule of work to be constructed, used in determining the developer's security deposit, will be referred to when determining the Fair Value.

## **Amortization Method and Rates**

The costs, less any residual value, of a TCA with a limited life should be amortized over its useful life in a rational and systematic manner appropriate to its nature and use.

There will be no amortization of land since it has an infinite life and under normal circumstances does not depreciate.

The Municipality may assign an extended Useful Life to certain Transitional Period Assets (i.e. buildings) to reflect the betterments that have occurred throughout the years, thereby extending the normal Useful Life of these assets.

Amortization will be pro-rated for assets acquired during the year. Assets will be considered to be in service on the first day of the month following acquisition or substantial completion. Any existing asset that has an unknown date of acquisition or in-service will use July 1<sup>st</sup> of the estimated year of acquisition or in-service for amortization purposes.

The Municipality will be using a straight-line method for calculating the annual amortization. There will be no residual value used for any Asset Category, except for vehicles and machinery and equipment. Residual values for vehicles, machinery and equipment should be based on the useful life established by the department and past experience with trade-in values or disposal proceeds.

The amortization method and rates will be periodically reviewed and revised by the Municipality, as appropriate.

## Useful Life

The Useful Life is normally the shortest of the asset's physical, technological, commercial or legal life. The Municipality has determined the useful lives for many common items, items that are not included in the list will be referred to the Department Head or other knowledgeable source for a determination of the useful life. Justification from the manufacturer, industry, or another municipality may supplement the Department Head's judgement. This Schedule is included as Schedule "D" of this document.

Where the Useful Life of a TCA has been under or overestimated an adjustment will be required.

- **Underestimated** – Where the Useful Life of a TCA is found to be longer than the estimate, the estimate should be reviewed and adjusted accordingly. Justification to the rationale for extending the Useful Life should be provided in writing by the Department Head to the Accounts Payable Clerk.
- **Overestimated** – Where the Useful Life of a TCA is found to be shorter than the estimate, the estimate should be reviewed and adjusted accordingly. Justification to the rationale for reducing the Useful Life should be provided in writing by the Department Head to the Accounts Payable Clerk.

## Disposal of Assets

Disposal of TCA will be processed in accordance with the Municipality's Procurement Policy and is the responsibility of the appropriate Department Head. Department Heads should notify the Accounts Payable Clerk when assets become surplus to operations.

When TCA are sold, relinquished or taken out of service, destroyed or replaced due to obsolescence, scrapping or dismantling, the Department Head must notify the Accounts Payable Clerk of the Import ID Number and Asset Description, the effective date and the proceeds of the disposal, if any. This will include the sale or trade-in of an asset.

In both cases, the Accounts Payable Clerk is responsible for updating the Asset Register and Accounting Records recording a loss or gain on the disposal based on the current Net Book Value for that asset.

As an additional means of internal control, the Accounts Payable Clerk will print a complete report for each Department Head on a monthly basis. Department Heads will check the listing to ensure that all assets on the report are still in use. If there are any inaccuracies in the report, it is the Department Head's responsibility to correct and return this information to the Accounts Payable Clerk by the 15<sup>th</sup> of the following month.

### **Impairment Losses – Write Downs and Write-Offs**

A TCA's recognized Book Value (original cost less accumulated amortization) can change when the value of future economic benefits is less than the Net Book Value of the asset and the decline in value is permanent.

The asset's Net Book Value should be reduced, or written-down, to reflect the decline in the asset's value. The following conditions may indicate a write-down is appropriate:

- A change in the extent to which the asset is used.
- A change in the manner in which the asset is used.
- Significant technological developments.
- Physical damage to the asset.
- Removal of the asset from service.
- A decline in, or cessation of, the need for the services provided by the asset.
- A decision to halt construction of the asset before it is complete or in usable or saleable condition.
- A change in the law or environment affecting the extent to which the asset can be used.

A Write-off is used to reflect a complete (100%) impairment of the value of a TCA. In these cases the carrying value of the TCA, net of its residual value, should be written off. The amount of write-down or write-off should be recorded as an expense in the period of the permanent impairment.

The Department Head should notify the Administrator if any of these conditions arise and indicate the effective date. The Treasurer is responsible for determining the new asset value and adjusting the Asset Register and Accounting Records for the write-down.

## **Capital Leases**

Leases fall into two categories – operating and capital:

An **Operating Lease** – lessor agrees to give the lessee access to and the use of an asset for a set period of time, in return for an agreed upon schedule of payments. While the lessee has to maintain the asset over the term of the lease they have no direct control over the life of the lease. These leases are not deemed to be TCA, and do not have to be reported in Financial Statements as asset inventory.

A **Capital Lease** is defined as a lease that transfers substantially all the benefits and risks incidental to ownership of the property to the lessee. (CICA 2.5) for leases which are internally financed, it would be dealt with as debt financing as no obligation to a third part. A Capital Lease would normally occur when at the inception of the lease, one or more of the following conditions are present:

- There is reasonable assurance the lessee will obtain ownership of the leased property by the end of the lease term. This condition is usually signified when ownership does pass at the end of the lease or when the lease provides for a bargain purchase option.
- The lease term is of such duration that the lessee will receive substantially all of the economic benefits expected to be derived for the use of the leased property over its life span. The threshold for this benefits test is 75%.
- The minimum lease payments, excluding any portion relating to executors costs, is equal to 90% or more of the Fair Market Value of the leased property at the inception of the lease.

For the purpose of PSAB 3150 Operating Leases are to be ignored, whereas, Capital Leases are to be set up within the Asset Register. An example of a Capital Lease may be the long term lease with the Federal Government for harbours.

Capital Leases are valued at the Net Present Value of all minimum lease payments required, less executor costs (Operational Expenses). (PSG 2.14) The discount rate to use in calculating the present value is the lesser of the rate specified in the lease, and the Municipality's rate for borrowing at time of execution. A double check of calculation can be done by comparing the Net Present Value of the lease with the assumed Fair Value of the asset less any deemed Residual Value.

### **Amortization of Capital Leases**

The Useful Life of the asset will be the lease period, unless there is a purchase option or a clause transferring ownership to the Municipality, where then the Useful Life would be the economic life of the asset. If at the end of the lease, the asset is transferred for a bargain price, then the term of the lease is likely the life of the asset.

### **Accounting for Lease Payments**

The Capital Lease will be set up as an asset on the Balance Sheet, and amortized monthly. The lease at time of execution will also be set up as a liability and monthly payments will write down against the liability, as opposed to being expensed.

### **Replacement of Components**

If the component being replaced had previously been segregated in the Asset Accounting Register as a distinct asset for amortization over its specific expected useful life, then the new component is capitalized and the old component is retired with its Residual Net Book Value removed from the accounts.

If on the other hand, the component being replaced was not significant enough to be previously segregated from the whole property as a distinct asset, then the replacement is normally considered a repair and the costs are expensed as incurred). Consideration of the differences between a betterment which is of a capital nature vs. repairs must be determined when the annual Budget is prepared.

## **Betterment vs. Maintenance**

After an asset is constructed / acquired, decisions need to be made on how to treat subsequent expenditures on the asset. The acquisition cost of an asset is recognized in the Statement of Financial Position when it is acquired. The cost includes an estimate of any subsequent expenditure required to be spent after the planned date of retirement or disposal of the asset.

Expenditures on an asset incurred after it comes into service and prior to, or on its disposal, must either be accounted for as:

- Recurrent expenditure and expensed; or
- Capital expenditure and added to the carrying amount of the asset when it is incurred.

A betterment is the spending on an asset after its initial acquisition that:

- Increases previously assessed physical output or service capacity;
- Lowers the associated operating costs;
- Extends the useful life of the asset; or
- Improves the quality of the output.

The amount spent on the betterment is capitalized as at the completion and amortized over the remaining life of the asset. The capitalization thresholds for betterments are identical to new purchases / constructed assets.

An example of a betterment is an expenditure to change the building lighting or heating systems to high-efficiency, as this will lower operating costs.

Any other expenditure that does not meet the capitalization threshold or does not improve the asset would be considered a repair or maintenance and expensed in the period. These expenses are typically incurred on a continuous basis and do not enhance the functionality, capacity and efficiency of the TCA.

## **Financial Statement Disclosure**

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

- Cost at the beginning and end of the period;
- Additions in the period;
- Disposals in the period;
- The amount of any write-downs in the period;
- The amount of amortization of the costs of Tangible Capital Assets for the period;
- Accumulated amortization at the beginning and end of the period; and
- Net Carrying Amount at the beginning and end of the period.

Financial Statements should also disclose the following information about TCA (PSAB 3150.42):

- The amortization method used, including the amortization period or rate for each major category of TCA;
- The Net Book Value of TCA not being amortized because they are under construction or development or have been removed from service;
- The nature and amount of contributed TCA received in the period and recognized in the Financial Statements;
- The nature and use of TCA recognized at Nominal Value;
- The nature of the works of art and historical treasure held by the government; and
- The amount of interest capitalized in the period.

## **Accountability**

### **Department Heads' Responsibilities:**

- Assisting with initial inventory and providing all available TCA Data to Consultants;
- Providing information on Capital Request Forms identifying all information required for set up of amortization and operating costs of assets;
- Advising Finance of when an asset is in service, and subsequently closure of the capital project;
- Confirming TCA life expectancy data of fixed assets as suggested under Schedule "D";
- Advising Finance of any acquisitions, disposals, asset life expectancy changes, for the corporate maintaining of capital asset information such as location, condition, maintenance records etc.;
- Ensuring proper control of TCA is maintained;
- Appointing stewards for the TCA that are responsible for providing information about the availability, condition and usage of the asset;
- Ensuring timely communication of any changes, updates or relevant information / needs with the Financial Services;
- Correct allocation of all TCA to Asset Classes and Categories;
- Ensuring that expenses are charged to the correct account.

### **Administration Department's Responsibilities:**

- Maintaining the Municipality Asset Register;
- Accounting for TCA in accordance with this Policy;
- Generating the monthly Amortization Schedules;
- Reporting TCA in the Financial Statements of the Municipality;
- Updating this Policy on a regular basis, and monitoring compliance on an on-going basis;

- Recording capital assets appropriately, confirming departments are charging expenses correctly, and that all asset costs are valid;
- Establishing Policies in compliance with PSAB, the Municipal Act and other Ministry guidelines;
- Ensure disposals are accounted for and written off, accounting for gains / losses as required;
- Monitoring Asset Useful Lives;
- Arranging periodic physical inventories to ensure all asset are still valid;
- Performing asset inventory spot-checks;
- Reporting to departments re: TCA.

**SCHEDULE “A”**

**TANGIBLE CAPITAL ASSET CATEGORIES AND  
SUB-CATEGORIES (SEGMENTS) WITH  
CAPITALIZATION THRESHOLDS**

**SCHEDULE “A”**

**Municipality of [name of municipality]  
Schedule of Tangible Capital Assets  
Categories and Sub-Categories (Segments)**

<u>Asset Category</u>	<u>Asset Sub-Category (Segment)</u>	<u>Capitalization Threshold</u>	
		<u>Individual</u>	<u>Pooled</u>
Land	- N/A	\$0	N/A
Land Improvements	- Paved Areas	\$5,000	\$10,000
	- Exterior Lighting	\$5,000	\$10,000
	- Fencing	\$5,000	\$10,000
	- Landscaping	\$5,000	\$10,000
	- Signs	\$5,000	\$10,000
Buildings		\$5,000	N/A
Machinery and Equipment	- Communication Systems	\$5,000	\$10,000
	- Health and Safety	\$5,000	\$10,000
	- Fire Services	\$5,000	\$10,000
	- Maintenance	\$5,000	\$10,000
	- Water Treatment	\$5,000	\$10,000
	- Waste Water Management	\$5,000	\$10,000
	- Gym/Fitness & Recreational Assets	\$5,000	\$10,000
	- Kitchen Equipment	\$5,000	\$10,000
	- Play Structures	\$5,000	\$10,000
Fleet (Vehicles)	- Licenced Vehicles	\$5,000	N/A
	- Unlicensed Mobile	\$5,000	N/A
Office Equipment	- Office Equipment	\$5,000	\$10,000
Computer Hardware	- Computer Hardware	\$5,000	\$10,000
Computer Software	- Computer Software	\$5,000	\$10,000
Linear Assets	- Roads (including Curbs, Gutters and Sidewalks)	\$25,000	N/A
	- Street Lights	\$5,000	\$5,000
	- Signs	\$5,000	\$5,000
	- Bridges and Culverts	\$5,000	\$5,000
	- Sanitary Sewer System	\$25,000	N/A
	- Storm Sewer System	\$25,000	N/A
	- Water Distribution System	\$25,000	N/A
Linear Assets	- Paths and Trails	\$5,000	N/A
Collections	- Library Collection	\$5,000	\$10,000
	- Museum Collection	\$5,000	\$10,000
	- Toys	\$5,000	\$10,000
Capital Works in Progress	In accordance with the appropriate Segment	N/A	N/A

**SCHEDULE “B”**

**SUGGESTED ASSET ATTRIBUTES FOR  
EACH ASSET RECORD**

## SCHEDULE “B”

### SUGGESTED ASSET ATTRIBUTES FOR EACH ASSET RECORD

<u>Field Name</u>	<u>Field Properties</u>	<u>Suggested Field Size (# of Characters)</u>
Asset ID Number	Numeric	15
Primary Asset Class	Alpha	15
Asset Category	Alpha	20
Asset Sub-Category (Segment)	Alpha	20
Asset Name	Alphanumeric	30
Asset Description	Alphanumeric	120
Location (City)	Alpha	30
Location (Street Address)	Alphanumeric	30
Functional Class	Alpha	15
Functional Sub-Class	Alpha	15
Department	Alpha	30
Ownership Origin	Alpha	20
Acquisition / Construction Date	Numeric	10
In-Service Date	Numeric	10
Quantity	Numeric	5
Replacement Cost	Currency	10
Acquisition Cost	Currency	10
Residual Value	Currency	10
Amortization Method	Alpha	20
Useful Life	Numeric	6
Monthly Amortization	Currency	10
Accumulated Amortization	Currency	10
Net Book Value	Currency	10

### SUGGESTED ADDITIONAL ASSET ATTRIBUTES FOR MACHINERY AND EQUIPMENT AND LICENCED VEHICLES

<u>Field Name</u>	<u>Field Properties</u>	<u>Suggested Field Size (# of Characters)</u>
Supplier	Alphanumeric	30
Manufacturer	Alphanumeric	30
Model Number	Alphanumeric	30
Serial Number / VIN #	Alphanumeric	30
Location (From)	Alphanumeric	20
Location (To)	Alphanumeric	20
Construction Material	Alphanumeric	20
Length	Alphanumeric	15
Width	Alphanumeric	15

## **SCHEDULE “C”**

### **SAMPLE TANGIBLE CAPITAL ASSET INPUT FORM WITH ASSET ATTRIBUTES**

\*Note: Form is subject to modification for administrative purposes.

**SCHEDULE “C”**

**INVENTORY INFORMATION - GENERIC**

Import ID Number \_\_\_\_\_ Asset Category: General Capital / Infrastructure

Functional Class: \_\_\_\_\_  
(Based on FIR Information)

Sub-Functional Class: \_\_\_\_\_  
(Based on FIR Information)

Category: \_\_\_\_\_  
(As identified in the TCA Policy)

Segment: \_\_\_\_\_  
(As identified in the TCA Policy)

Asset Name: \_\_\_\_\_  
(General / Generic Name)

Asset Description: \_\_\_\_\_  
(Detailed description)

Location: \_\_\_\_\_  
(Street Address)

Date of Acquisition: \_\_\_\_\_  
(Month Day Year)

In-Service Date: \_\_\_\_\_  
(Month Day Year)

Acquisition Cost: \_\_\_\_\_  
(Excludes rebated HST; includes labour to install, delivery charges, applicable studies)

Valuation Method: Historical Cost / Estimated Cost

Useful Life: \_\_\_\_\_  
(As identified in the TCA Policy)

Department Head: \_\_\_\_\_

**SCHEDULE “D”**

**TANGIBLE CAPITAL ASSET  
USEFUL LIVES  
SCHEDULE**

**SCHEDULE “D”**

**TANGIBLE CAPITAL ASSET USEFUL LIFE SCHEDULE**

<b><u>PRIMARY CATEGORY</u></b>	<b><u>ASSET SEGMENT – GENERAL ASSET DESCRIPTION</u></b>	<b><u>USEFUL LIFE</u></b>
Buildings	Garages – Frame	35
Buildings	Garages – Masonry	45
Buildings	Masonry Load Bearing Frame	45
Buildings	Park Pavilions	20
Buildings	Portable Structures	25
Buildings	Reinforced Concrete Frame	60
Buildings	Salt / Sand Domes	25
Buildings	Steel Frame	50
Buildings	Wood Frame	40
Collections	Library Collection	15
Collections	Museum Collection	N/A
Collections	Toys	5
Computer Hardware	All Types (Desktops and laptops, Mainframe or Mini, Printers)	4
Computer Software	All Types	5
Land	All Types	N/A
Land Improvements	Alley Ways – Asphalt	20
Land Improvements	Alley Ways – Brick or Stone	40
Land Improvements	Alley Ways – Concrete	30
Land Improvements	Athletic Field	20
Land Improvements	Ball Diamond	20
Land Improvements	Basketball Court	20
Land Improvements	Bleachers	20
Land Improvements	Fencing and Gates	20
Land Improvements	Landscaping	20
Land Improvements	Outdoor Lighting	20
Land Improvements	Patio – Concrete	30
Land Improvements	Patio – Wood	20
Land Improvements	Paving – Asphalt	20
Land Improvements	Paving – Brick or Stone	40
Land Improvements	Paving – Concrete	30
Land Improvements	Recreational Improvements	20

Land Improvements	Running Track – Dirt	15
Land Improvements	Running Track – Paved	20
Land Improvements	Signage	10
Land Improvements	Sprinkler System	25
Land Improvements	Tennis Court	20
Land Improvements	Underground Site Services	40
Land Improvements	Water Fountain – Basic	25
Land Improvements	Water Fountain – Significant	40
Leasehold Improvements	All Types	15
Licensed Vehicles	Ambulances	5
Licensed Vehicles	Automobiles – Regular Use	7
Licensed Vehicles	Boats	10
Licensed Vehicles	Buses	15
Licensed Vehicles	Fire Trucks	20
Licensed Vehicles	Heavy Duty Vehicles	15
Licensed Vehicles	Light Duty Vehicles	7
Licensed Vehicles	Medium Duty Vehicles	12
Licensed Vehicles	Police Patrol Cars	3
Licensed Vehicles	Trailers	15
Linear Assets	Airport Infrastructure – Runways	20
Linear Assets	Airport Infrastructure – Taxiways	20
Linear Assets	Booster Station – Civil Works (Concrete Structure)	40
Linear Assets	Booster Station – Generator	25
Linear Assets	Booster Station – Instrumentation	10
Linear Assets	Booster Station – Mechanical	20
Linear Assets	Booster Station – Pump	20
Linear Assets	Bridges – Concrete	50
Linear Assets	Bridges – Deck	25
Linear Assets	Bridges – Pedestrian	30
Linear Assets	Bridges – Steel	45
Linear Assets	Bridges – Structure	75
Linear Assets	Bridges – Timber Wood	40
Linear Assets	Dams	50
Linear Assets	Fire Hydrants	40
Linear Assets	Major Culvert – Concrete	40
Linear Assets	Major Culvert – Steel	30
Linear Assets	Major Culvert – Timber Log	30

Linear Assets	Marine Infrastructure – Boardwalk	20
Linear Assets	Marine Infrastructure – Dock / Pier	40
Linear Assets	Paths & Trails – Brick or Stone	40
Linear Assets	Paths & Trails – Asphalt	20
Linear Assets	Paths & Trails – Concrete	30
Linear Assets	Paths & Trails – Gravel	15
Linear Assets	Pumping Station – Civil Works (Concrete Structures)	40
Linear Assets	Pumping Station – Generator	25
Linear Assets	Pumping Station – Mechanical	20
Linear Assets	Pumping Station – Pump	20
Linear Assets	Pumping Station – Wet Well	50
Linear Assets	Road – Asphalt	20
Linear Assets	Road – Base	50
Linear Assets	Road – Brick or Stone	40
Linear Assets	Road – Concrete	30
Linear Assets	Road – Dirt	10
Linear Assets	Road – Gravel	15
Linear Assets	Sanitary Manholes	75
Linear Assets	Sanitary Sewers – Brick	90
Linear Assets	Sanitary Sewers – Concrete	60
Linear Assets	Sanitary Sewers – Metal	50
Linear Assets	Sanitary Sewers – PVC	60
Linear Assets	Sanitary Sewers – Service Connections	50
Linear Assets	Sanitary Sewers – Wood	50
Linear Assets	Sidewalk – Asphalt	20
Linear Assets	Sidewalk – Brick or Stone	40
Linear Assets	Sidewalk – Concrete	30
Linear Assets	Small Culvert – Cast Iron	30
Linear Assets	Small Culvert – Concrete	40
Linear Assets	Small Culvert – Metal Corrugated	30
Linear Assets	Small Culvert – Plastic	25
Linear Assets	Storm Drains – Cast Iron	30
Linear Assets	Storm Drains – Metal Corrugated	30
Linear Assets	Storm Drains – Plastic	25
Linear Assets	Storm Sewers – Brick	90
Linear Assets	Storm Sewers – Concrete	60
Linear Assets	Storm Sewers – PVC	60
Linear Assets	Storm Sewers – Wood	50
Linear Assets	Street Lighting – Concrete Pole	35
Linear Assets	Street Lighting – Lamps (High-Pressure Sodium)	5

Linear Assets	Street Lighting – Luminaire	15
Linear Assets	Street Lighting – Metal Pole	30
Linear Assets	Street Lighting – Wood pole	25
Linear Assets	Traffic Light – Lamp LED	10
Linear Assets	Traffic Lights – Control Signal	25
Linear Assets	Traffic Lights – Controller Cabinet	20
Linear Assets	Traffic Lights – Lamp Arms	25
Linear Assets	Traffic Lights – Lamp Incandescent	2
Linear Assets	Traffic Lights – Pole	30
Linear Assets	Traffic Lights – Stop Flasher	25
Linear Assets	Tunnels	60
Linear Assets	Valves and Chambers	40
Linear Assets	Waste Treatment – Civil Works	40
Linear Assets	Waste Treatment – Earthen Berms	25
Linear Assets	Waste Treatment – Electrical	25
Linear Assets	Waste Treatment – Instrumentation	15
Linear Assets	Waste Treatment – Lagoon	75
Linear Assets	Waste Treatment – Process Equipment	25
Linear Assets	Waste Treatment – Process Piping	40
Linear Assets	Waste Treatment Tank – Concrete	40
Linear Assets	Waste Treatment Tank – Metal or Fibreglass	30
Linear Assets	Water Main – Concrete	60
Linear Assets	Water Main – Metal	50
Linear Assets	Water Main – PVC	60
Linear Assets	Water Main – Service Connections	60
Linear Assets	Water Meters	15
Linear Assets	Water Reservoirs	50
Linear Assets	Water Towers	50
Linear Assets	Water Treatment - Tank Concrete	40
Linear Assets	Water Treatment – Civil Works (Concrete Structures)	40
Linear Assets	Water Treatment – Electrical	25
Linear Assets	Water Treatment – Instrumentation	15
Linear Assets	Water Treatment – Process Equipment	25
Linear Assets	Water Treatment – Process Piping	40
Linear Assets	Water Well	50
Machinery and Equipment	Audio-Visual Equipment	7
Machinery and Equipment	Blowers	20
Machinery and Equipment	Dental Equipment	10
Machinery and Equipment	Electrical Substation	30

Machinery and Equipment	Fire Services Equipment	10
Machinery and Equipment	Fitness Equipment	15
Machinery and Equipment	Fuelling Systems	25
Machinery and Equipment	Game Tables (Foosball table, Pool Table)	15
Machinery and Equipment	Generator	25
Machinery and Equipment	Housekeeping Equipment	10
Machinery and Equipment	Ice Making Equipment	20
Machinery and Equipment	Instrumentation	15
Machinery and Equipment	Kitchen Equipment	15
Machinery and Equipment	Laboratory Equipment	8
Machinery and Equipment	Landfill Scale	20
Machinery and Equipment	Laundry Equipment	20
Machinery and Equipment	Machine Shop Equipment	15
Machinery and Equipment	Maintenance Equipment / Tools	15
Machinery and Equipment	Medical Equipment	10
Machinery and Equipment	Playground Equipment	20
Machinery and Equipment	Power Feed Wiring	25
Machinery and Equipment	Process Piping	40
Machinery and Equipment	Pump	20
Machinery and Equipment	Refrigeration Equipment	20
Machinery and Equipment	Road Maintenance Equipment	15
Machinery and Equipment	Scoreboard / Clock	25
Machinery and Equipment	Security Equipment	10
Machinery and Equipment	Snow Removal Equipment	15
Machinery and Equipment	Sorting Equipment – Waste	20
Machinery and Equipment	Sound and PA System	15
Machinery and Equipment	Telecommunication Equipment	10
Machinery and Equipment	Tractor	15
Machinery and Equipment	Transformer	25
Machinery and Equipment	UV Sterilizer	10
Machinery and Equipment	Waste Clarifier	30
Machinery and Equipment	Waste Treatment – Process Equipment	25
Machinery and Equipment	Waste Water Treatment – Process Equipment	25
Machinery and Equipment	Zamboni Ice Surfacing Machine	15
Office Equipment	Office Equipment	10
Office Equipment	Office Furniture	10
Unlicensed Mobile	Golf Carts	15
Unlicensed Mobile	Lawnmowers	10
Unlicensed Mobile	Trailers	15

Unlicensed Mobile	Heavy Equipment	25
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## APPENDIX 2 – Love / Hate Summary

The following figure outlines the reasons why municipalities have a demonstrated love / hate relationship with PS 3150.

<b>Why Municipalities Love PS 3150</b>	<b>Why Municipalities Hate PS 3150</b>
<p>PS 3150 is the first logical step towards the development of a high level asset management program which will assist in demonstrating the revenue requirements for municipalities to have a sustainable infrastructure system.</p>	<p>The process requires significant workloads, particularly in the inventory phase. This quantity of work should theoretically decrease once the backlog of Tangible Capital Assets have been entered, however the process does require ongoing data entry, analysis and maintenance which has an impact on staffing levels in a period of time where municipal budgets are stretched thin.</p>
<p>The inventory of Tangible Capital Assets increases the quantitative information and understanding about municipal infrastructure.</p>	<p>The new process and technology (data storage software) requires additional staff training and therefore additional financial resources.</p>
<p>The process has mandated that an increased amount of quantitative information be presented to municipal councils to ensure that they are aware of the state of municipal infrastructure (non-financial assets). This emphasis is designed to assist municipal councils make decisions about the level of funding required to maintain municipal infrastructure.</p>	<p>Increased costs to implement the PS 3150 guidelines – staff time, training, technology requirements. There are also ongoing costs to maintain the inventory system.</p>
<p>The process has provided flexibility throughout the implementation period however maintains standardization of report formats which assists the public to understand information presented in Financial Statements.</p>	<p>Significant uncertainty and confusion (due to flexibility of implementation framework) throughout the implementation process.</p>

## **APPENDIX 3 – Presentation**

See attached.