
HALDIMAND COUNTY

Report CS-FI-12-2018 Asset Management Plan

For Consideration by Council in Committee on June 19, 2018



OBJECTIVE:

To present Council with an updated Asset Management Plan, as required to meet funding eligibility requirements for certain Federal and Provincial infrastructure grants, specifically to incorporate estimated values for the tax supported asset classes of Buildings, Land Improvements, Machinery and Equipment and Fleet.

RECOMMENDATIONS:

1. THAT Report CS-FI-12-2017 Asset Management Plan be received as information.

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Approved: Donald G. Boyle, Chief Administrative Officer

EXECUTIVE SUMMARY:

Infrastructure is inextricably linked to the economic, social and environmental advancement of a community. Canadian municipalities own and manage nearly 60% of the public infrastructure stock in Canada. Based on 2016 replacement values, Haldimand County owns approximately \$1.16 billion in infrastructure to provide numerous services to residents, taxpayers and visitors to our County. As part of the approved annual capital budgets, the County has developed long term financing plans to address the replacement of existing infrastructure. Asset management, as a more comprehensive strategy, can best be defined as an integrated business approach within an organization, with the aim to minimize the lifecycle costs of owning, operating and maintaining assets, at an acceptable level of risk, while continuously delivering established levels of service for present and future customers.

The Federal Gas Tax Grant program is administered through the Association of Municipalities of Ontario (AMO) on behalf of Ontario municipalities. The County currently receives \$2.9 million annually under this program. As required under our Municipal Funding Agreement, a comprehensive Asset Management Plan (AMP) must be in place for all assets eligible for Federal Gas Tax funding. In 2014, with the assistance of the consultants, Public Sector Digest, the County completed an AMP for core infrastructure assets only. At that time, these were the only assets required under our funding agreement. The asset categories included in the AMP were Roads, Bridges/Culverts, Water, Wastewater and Stormwater Management. These assets account for approximately \$865 million or 75% of the County's current infrastructure (based on 2016 replacement values).

With the assistance of the same consultants, the Asset Management Plan now being presented covers the remaining tax supported classes of Buildings, Machinery and Equipment, Land Improvements, and Vehicles. These assets account for approximately \$296 million or 25% of the County's current infrastructure (based on 2016 replacement values). The detailed AMP attached to this report outlines the current condition of the assets as well as financial information but has not been vetted on a strategic

level. For example, although the AMP notes an estimated funding shortfall, this does not take into account several key factors and assumptions that need to be further reviewed/developed, such as:

- The current condition of the underlying asset has not been used in all cases in determining the timing of the asset replacement – in many cases this would overestimate the funding requirement;
- It does not account for any current capital reserves that the County has available for the replacement of the underlying assets – the availability of these reserves would reduce the estimated infrastructure deficit;
- The estimated deficit only includes replacement costs and does not include costs for capital maintenance/repairs or new/enhanced assets – these cost would be above and beyond the estimated replacement costs;
- The AMP also identifies an estimate of the current “backlog” of infrastructure replacement - again, in many cases, primarily based on the documented age of the infrastructure but not on an objective review of the current condition or the future need for such assets.

As such, this is a very preliminary estimate that will be refined as future analysis is undertaken, which will include at a minimum:

- Evaluation of the underlying infrastructure to determine the need to replace the infrastructure based on service standards and scope of services to be provided in the future, as determined by Council;
- For all infrastructure to be replaced, the timing needs to be determined based on a thorough condition and risk assessment as well as a link to other strategic priorities and initiatives;
- Review of options to address current asset condition considering return on investment and value derived for the public.

In the interim, completion of the second phase of the County’s AMP will meet our funding requirements under the Federal Gas Tax Funding program. Recent legislative changes will require Haldimand County to prepare a strategic asset management policy, and comply with regulations for determining current and desired levels of service, performance measures for each asset category, condition and risk assessments, as well as lifecycle activities and associated costs. As a first step in this more comprehensive approach, Haldimand County will need to establish a strategic asset management policy by July 1, 2019.

The strategic asset management policy must address the following focus areas: alignment with land use planning framework, commitment to consider climate change, continuous improvement, engagement with public, best practices, etc. It is clear that the senior levels of government want municipalities to ensure that asset management is viewed as more than about financial sustainability. It needs to be a ubiquitous part of all business decisions, both strategic and operational, ensuring well managed assets that meet the service needs of the present without compromising the sustainability of the infrastructure required for the demands of the future. This will be accomplished by implementing approaches that help Council, staff and the public better understand the County’s assets in relation to the: service expectations and gaps; alignment with corporate strategies and objectives; condition and risk; maintenance to maximize the useful life; and associated budget implications. A comprehensive corporate approach to this evolutionary phase of asset management will be brought forward in the coming year.

BACKGROUND:

Beginning in 2008, the Province required municipalities to record and report their tangible capital assets on their balance sheets and amortize their historical values in accordance with the Public Sector Accounting Standard - PSAB 3150. Additionally, the Province encouraged municipalities to use their asset inventories to strategically plan future replacements and improvements using an AMP framework.

In 2012, the Ministry of Infrastructure determined that, despite significant investments by all orders of government, more needed to be done to address the emerging municipal infrastructure needs. In response, the Province committed to work with municipalities and the federal government to establish a municipal infrastructure strategy. Among other principles, the strategy was to be modelled around a comprehensive asset management plan that guides investment decisions and satisfies all provincial requirements related to municipal asset management. The Province stated that any municipality seeking provincial infrastructure funding must demonstrate how its proposed project fits within a detailed asset management plan – to help ensure that limited resources are directed to the most critical needs. In response to this initiative, the Province has standardized municipal asset planning by providing a guide for municipalities to use in developing detailed asset management plans – referred to as “Building Together Guide for Municipal Asset Management Plans”.

In 2014, the County first completed an AMP for core infrastructure assets only as required by current legislation at that time. The asset categories that were included in the first rendition of the County’s plan were Roads, Bridges/Culverts, Water, Wastewater, Stormwater Management. This AMP was presented and approved by Council in April 2014 through Report *PW-GM-01-2014 Re: 2014 Asset Management Plan*.

It is evident from the required components of the AMP that there is much more to asset management planning than financial forecasting and analysis for developing financing strategies. The Ministry has designed the Guide to ensure AMPs are living documents, based on a thorough understanding of the characteristics and condition of infrastructure assets, as well as the service levels expected from them. In other words - a sound enterprise asset management program is required to set the foundation for optimally managing, reporting and recording attributes and performance of the municipality’s physical assets, designed to maximize value and compliment the County’s Long Term Financial Sustainability Plan.

The Infrastructure for Jobs and Prosperity Act, 2015 was created to establish mechanisms to encourage principled, evidence-based and strategic long-term infrastructure planning in the broader public sector, including municipalities. This Act required municipalities to include the additional asset categories. Also, as initiated in 2014, Ontario municipalities (through the Association of Ontario Municipalities) entered into a new Federal Gas Tax Funding Allocation Agreement with the Government of Canada. As part of this updated agreement, Ontario Municipalities were required to provide AMPs for all asset categories that are eligible for gas tax funding. With the addition of this new AMP, coupled with the existing core infrastructure AMP, which was approved in 2014, the County will have satisfied the AMP requirement under the Federal Gas Tax agreement.

It is also important to note that the AMPs only address assets that are intended to be replaced (i.e., assets not to be replaced are not included in the funding analysis). Growth related assets, new and enhanced services, and maintenance and repair activities that are traditionally included in the Capital Budgets have also been excluded from the AMP.

ANALYSIS:

In order to complete the update of the AMP for the remaining asset classes, Council approved funding in the 2016 Tax Supported Capital Budget for the purpose of retaining a consultant to assist staff in meeting current AMP requirements. The plan for the remaining asset classes focused on increasing data integrity and laying the foundation for future lifecycle analysis. As a result, significant time was allocated by both Finance and asset owner Divisions on refining existing data contained within the County's asset registry. Each Division that manages assets were asked to review the County's asset registry for accuracy, as well as to provide updated replacement cost projections, replacement cycles and asset conditions if such information was available.

The remaining tax supported asset classes included within this AMP are outlined as follows:

- Buildings
 - Includes all tax supported buildings, such as Administration, fire stations, arenas, libraries, miscellaneous park buildings, etc.
- Machinery and Equipment
 - Includes furniture and fixtures, library books, information systems equipment, and other equipment required for parks, fire services, Grandview lodge, ambulance etc.
- Land Improvements
 - Includes items such as cemeteries, municipal drains, parking lots, park playing fields and pathways, etc.
- Vehicles
 - Includes licensed and unlicensed vehicles.

This AMP does not include growth related projects, or new initiatives that may be proposed in future years.

Although condition data is not maintained within the tangible capital assets database, regular condition review is performed by several Divisions, impacting the estimated replacement date. As an example, the Fleet Division performs annual condition reviews in preparation for the capital budget, and standard preventative maintenance programs are in place. The results of this review may cause the delay or acceleration of replacement dates for specific vehicles and equipment.

Staff attempted to provide updated replacement costs for larger assets by utilizing data from several 2016 and prior construction projects. Recent tenders have shown that those cost estimates may not be in line with the current market. Several assets utilized inflation measures (i.e. CPI) to inflate historical costs in the absence of actual replacement costs. Again, this may not accurately reflect the current market. As a result of these, the infrastructure deficit is just an estimate that will need refinement as better data is collected.

As shown in the table below and based on the assumptions above, the annual infrastructure deficit is estimated at \$4,600,000. It should be noted that the vehicles class is currently in a minor surplus position – likely because this Division's asset condition data is most refined given the annual inspections and related replacement planning. As other Divisions are able to integrate the same type of strategies, it is expected that the valuations, replacement plan and funding will be better aligned.

Haldimand County Summary of Tax Supported Infrastructure Requirements (excludes Roads, Bridges/Culvers, Water & Wastewater, Stormwater Management)						
Asset Category	Estimated Replacement Cost	Estimated Annual Investment Required	Annual Funding Available from Reserves (2017)	Estimated Annual Deficit	Estimated Asset Replacement Backlog	Available Reserves (Dec 31/16)
<u>Tax Supported:</u>	\$	\$	\$	\$	\$	\$
Buildings	193,567,034	4,031,000	1,179,000	2,852,000	7,180,000	4,878,000
Machinery and Equipment	33,109,884	2,645,000	1,487,000	1,158,000	6,163,000	5,977,000
Land Improvements	42,341,271	1,312,000	616,000	696,000	12,512,000	3,103,000
Vehicles	<u>27,182,503</u>	<u>2,079,000</u>	<u>2,192,000</u>	<u>-113,000</u>	<u>761,000</u>	<u>6,788,000</u>
Total	<u>296,200,692</u>	<u>10,067,000</u>	<u>5,474,000</u>	<u>4,593,000</u>	<u>26,616,000</u>	<u>20,746,000</u>

Estimated Asset Replacement Backlog

As shown in the table above, the estimated asset replacement backlog as identified during the AMP preparation process, totaled \$26.6 million. A significant portion (\$12.5 M) can be attributed towards the land improvements category. Generally, a backlog of asset replacements is assumed when the typical service life of that asset has expired, yet the asset remains in service. While the backlog may be a good indicator of asset replacement need, it may not have considered the actual condition (performance) of an asset that allowed it to function beyond the typical life. Asset condition data has been utilized in the preparation of this AMP to determine asset replacement timing when such information was available. When actual condition data was not available, the condition is then inferred by utilizing the age of the asset and the typical accounting useful life. In these cases, when the accounting useful life is utilized, the overall backlog of asset replacement may be overstated. Age based condition does not appropriately gauge the condition of an asset and whether or not that asset is still performing as intended (i.e., meeting expected service levels). As a specific example within the land improvements category, cemeteries and municipal drains, although past their service life, will never be replaced, but are maintained to continue to be in service.

Available Reserves

There are several reserves utilized for funding of these classes of assets (buildings, machinery and equipment, land improvements, and vehicles), including Capital Replacement Reserve (CRR)-General, CRR-Community Halls, CRR- Information Technology, CRRF-Library, CRRF-Waste Management, the Municipal Drain fund, and all of the fleet equipment replacement reserves. In the table above, the allocation of these reserves to the applicable asset class was determined based on three years of usage data. In the future, improvements to our asset management strategies will provide better information for staff to review the use of these reserves, and to better align usage with the asset classes. This will also involve a review of required contributions to better align with the financing needs of the asset management plan. It should also be noted that current capital reserves may be used as a source of funding for capital repairs and maintenance, and sometimes to acquire new/enhanced assets, leaving less funding available for future asset replacement.

Financial Strategy

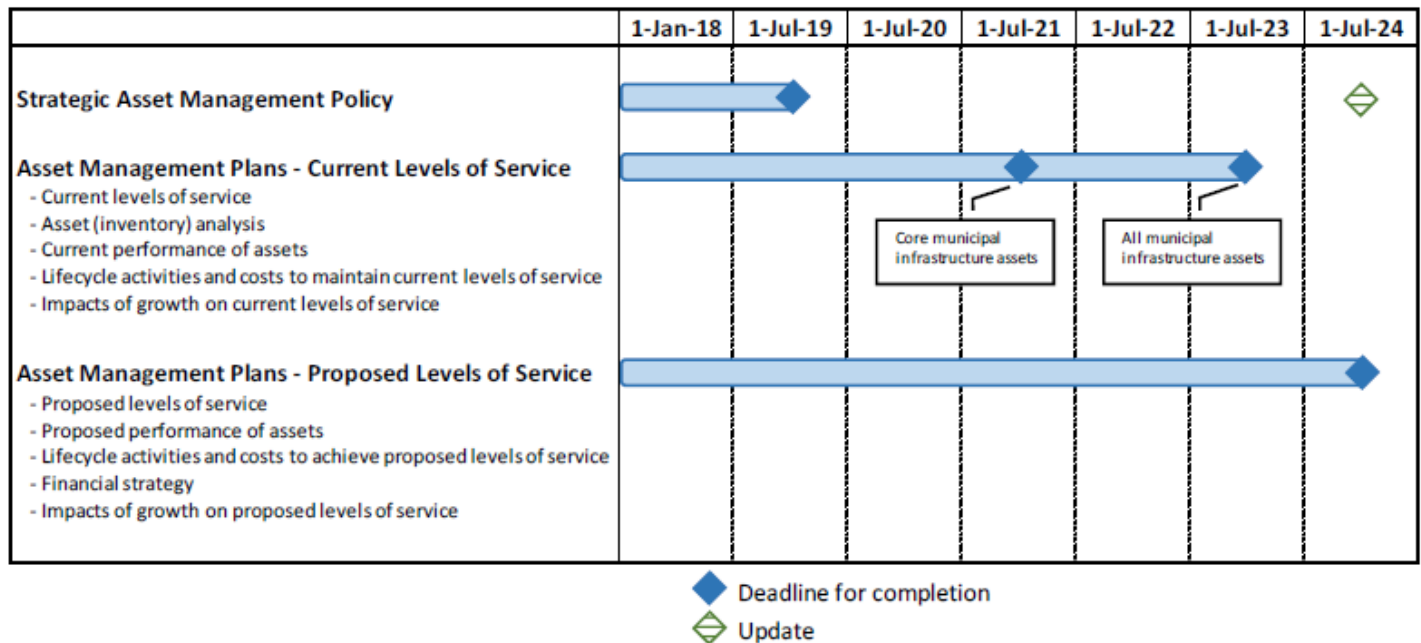
The financing strategy recommendations, included within the attached AMP report, provide for full funding being achieved over 15 years through the following:

- As debt repayments are reduced when existing debt matures, reallocate the annual savings to contributions to capital replacement reserves for these asset categories;
- Increase annual contributions to capital replacement reserves for these asset categories each year for the purpose of phasing in full replacement cost funding
- Reallocate reserves from categories in a surplus position to those in a deficit position
- Increase existing and future infrastructure budgets by the applicable inflation index on an annual basis.

Although the above steps are theoretically appropriate, they are based on the assumption that the AMP reflects accurate valuations, condition assessments, utilization/service indications and links to other corporate strategies in order to determine the need and timing for the asset replacement. Haldimand County is not yet at that stage so the financing strategy recommendations outlined in the AMP will be used as a guide for future decision making. As well, the above strategy assumes that debt would not be issued for some of the major asset replacements, which is not always appropriate given the life of some of these assets.

Legislative Changes for Municipal Asset Management

In December 2017, the Province of Ontario released Ontario Regulation 588/17, Asset Management Planning for Municipal Infrastructure, under the *Infrastructure for Jobs and Prosperity Act, 2015* (IJPA). The figure below provides a graphical representation of the phase-in timing identified in the Regulation. First to note is that every municipality will have to prepare a strategic asset management policy (SAMP) by July 1, 2019. The Province had previously established grant funding to meet these requirements and has also provided funds to the Municipal Finance Officers Association (MFOA) for training and tools to assist municipalities towards meeting these objectives. Haldimand's strategic approach is being discussed at the Senior Management Team level but will need to include participation from all Divisions.



Aligning our current Business Application Software implementation with the requirements within this regulation will also assist in bringing Haldimand County closer to compliance with this legislation.

Summary

Asset management strategies will need to be developed as an integral part of normal business operations in order to identify and prioritize renewal, rehabilitation and maintenance activities.

Service Levels

Operational groups will need to clarify and confirm the existing and established service levels for each asset class. Further service level review will include establishing defined administrative processes that will accurately monitor and track asset performance as per the approved service levels to ensure the asset is performing as per the County's expectations.

Condition Assessment Programs

Comprehensive and reliable information on the current condition of the infrastructure is required. Municipalities need to have a clear understanding regarding the performance and condition of their assets, as all management decisions regarding future expenditures and maintenance activities should be based on this knowledge.

Lifecycle Analysis Framework

A determination of which lifecycle activities can be applied at the appropriate time in an asset's life is required, to provide the greatest additional life at the lowest cost. Simply put, doing the right thing at the right time to the right asset will assist in gaining the best overall condition while expending the lowest total cost for that program.

Growth and Demand

Growth is a driver for most infrastructure services. Projected population changes will require the municipality to determine the lifecycle cost, service levels, and increases to the existing asset inventory for anticipated capital projects associated with growth.

Risk Assessment

Risk assessment for each asset class and more importantly each asset segment is a useful tool in prioritizing rehabilitation practices. When the risk factor is determined and applied to each asset segment, a replacement schedule can be applied in a comprehensive and prioritized fashion that can be justified and/or defended taking all factors into consideration.

The asset management strategies noted above will be required to comply with the legislative changes, and will result in a growing living asset management document which can serve as a blueprint for the County's asset investments into the future.

Finally, it must be highlighted that Haldimand County, when benchmarked against other municipalities, is near the top of the class when considering our financial viability and long term fiscal strategies. Third party experts note the financial resiliency, low debt levels and high reserve balances that set us apart from most municipalities – especially considering our large geographic area, small population and single tier service delivery responsibilities. As a go forward strategy, we will continue to refine the data but stay on course with the financial strategies that have been successful to date.

FINANCIAL/LEGAL IMPLICATIONS:

As discussed, one of the principle drivers behind the completion of an AMP for the remaining asset classes is as a result of the revised Federal Gas Tax Allocation agreement. The County received approximately \$2,859,000 in Federal Gas Tax funding for 2018. With the completion of this project, the County will remain eligible for future Gas Tax Allocations.

Further to this, AMPs are becoming an increasing area of focus for other grant opportunities that the County secures on an annual basis. By having an AMP for all asset categories, the County will continue to be in a position to apply for, and potentially receive, other future grant funding opportunities.

As well, best practices for municipalities are increasingly encompassing integrated asset management that identifies service levels, conditions, risk assessments, lifecycle management, resulting in a sustainable financial strategy tied directly to the annual budget process.

STAKEHOLDER IMPACTS:

As noted, Managers that are responsible for the operation, maintenance and ultimate replacement of the underlying assets assisted with the development of this AMP. As Asset Management in Ontario continues to evolve and becomes an even greater component of grant funding programs and applications, compliance with legislation is required; greater attention will need to be directed towards Asset Management activities by all County divisions that are responsible for tangible capital assets. Future revised AMPs will also need to incorporate forestry related assets.

REPORT IMPACTS:

Agreement: No

By-law: No

Budget Amendment: No

Policy: No

ATTACHMENTS:

1. The 2017 Asset Management Plan for Haldimand County as prepared by Public Sector Digest Inc. (PSD)