



City of Wannabe Sustainable

Council Report

For the Meeting on May 11, 2016

To: Mayor & Councillors **Date:** May 11, 2016
From: Joann Newton, General Manager, Planning and Engineering Division
Subject: Sustainable Growth and Asset Management

PURPOSE

The purpose of this report is to provide Council with a progress update on the infrastructure cost implications of the OCP growth management and land use decisions. This includes:

- An overview of where the City is in meeting financial and land-use goals;
- An update on the use of the Community Lifecycle Infrastructure Costing (CLIC) Tool for lifecycle costing;
- Options to support our growth management framework; and,
- The recommended option based on this information.

RECOMMENDATION

Council undertake a comprehensive review of growth management by examining and implementing the use of a number of tools and processes identified in the body of this report (see summary OPTION 2, page 4).

WHERE ARE WE?

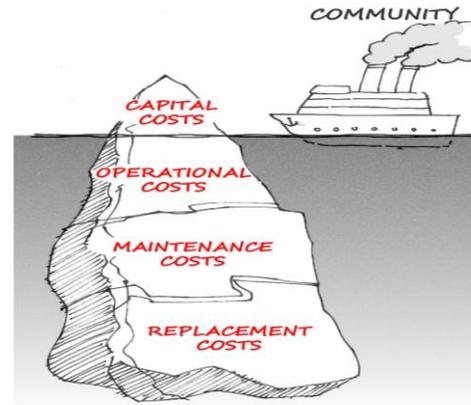
Assets are the physical infrastructure owned by the City, and the natural resources that enable service delivery such as; water and wastewater systems, drainage and flood protection systems, transportation systems, civic facilities, parks and fleet.

After conducting an Asset Inventory and Condition Assessment study, engineering staff have identified the following:

The City's Assets are in poor condition. The recent Asset Inventory and Condition Assessment Report indicated 30% of City assets are in poor condition, needing either major repair or replacement. The report concluded the City requires about \$1.8 million to \$2.4 million each year for asset replacement. There is a lack of available funding. The situation is unsustainable and ultimately threatening the quality of life of residents.

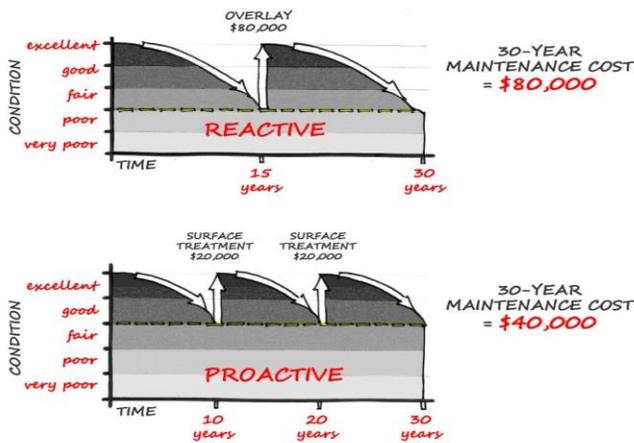
Sustainability goals and density targets are not being met. As identified by a review of the sustainable growth policies and density targets contained in the Official Community Plan (OCP) over the past 10 years, Greenfield development has not met density targets and has dominated over infill in core areas. This has resulted in significantly higher infrastructure servicing costs and other municipal service costs. It also seriously impedes implementation of our Integrated Community Sustainability Plan (ICSP) and Community & Corporate Greenhouse Gas Emissions Plans.

The 80/20 rule: On average 20% of the life cycle cost of an asset is capital, so a new asset provided at no cost initially to a local government imposes an 80% total asset cost on the existing tax base through ongoing Operating, Maintenance and replacement costs. The cost varies based on the asset, but 80/20 is an average used. Property taxes from new development will contribute to the cost recovery, which will increase over time to full build-out, but it does not pay for itself¹.



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HOW DID WE GET HERE?



Our approach to asset management has been reactive as opposed to proactive. The City has not set aside adequate funding for general maintenance of assets overtime leading to faster degradation. Asset improvement has been addressed when problems arise, costing the City more in the long term. This is illustrated in the example of road pavement management costs to the left.. When added to the fund shortage for asset replacement, there are both short and long term funding shortfalls.

http://assetmanagementsk.ca/+pub/docu ment/pdfs/Asset%20Mgmt%20Getting%20 Started%20Guide_web.pdf

Our approach to managing our assets has not been integrated. Much of the asset management work has been the responsibility of our engineers. Financial officers, responsible for annual budgets have not participated in discussions related to the ongoing maintenance and operation of assets. Planners, whose land-use proposals will influence the costs of maintenance and operation overtime, have not been connected to the asset management process.

We have been supporting land-use decisions that do not consider comparative or lifecycle infrastructure costs. Our financial framework does not account for the long-term operations, maintenance, and replacement costs of development. This is incenting low density and sprawl over higher density development and infill and costing the City more than if more compact development was supported and encouraged.

Impacts of Urban Sprawl: Urban sprawl has been estimated to cost the USA economy more than US\$1 trillion annually, including greater spending on infrastructure, public service delivery and transportation. Sprawl increases the costs of infrastructure and public services up to 40% over smart growth².

¹ Wally Wells, Asset Management BC, www.assetmanagementbc.ca

² Federation of Canadian Municipalities, *The State of Canada's Cities and Communities 2012*.

https://www.fcm.ca/Documents/reports/The_State_of_Canadas_Cities_and_Communities_2012_EN.pdf , Accessed on April 17, 2016.

Revenues from development fees and charges do not fully cost recover the costs to the municipality of providing services generated by growth. This means general revenues must be used to subsidize new development. The cost of lower density development is much higher per household unit, so the subsidy per unit is higher. Mayor Nenshi of the City of Calgary called this the “sprawl subsidy”.

Paying for the costs of growth: For one new neighbourhood costed by the City of Edmonton, the City cost recovered approximately 2/3rds the cost of the infrastructure required by the development, leaving the City to fund the remaining 1/3rd from general revenue (all taxpayers)³.

WHERE DO WE WANT TO BE?

This work directly supports Council's Strategic Plan and Council's Asset management Policy by helping the City move towards its goals for:

- Providing effective, efficient, sustainable and resilient service delivery
- Meeting sustainability targets.
- Effectively working toward meeting GHG targets.
- Integrating natural and built environments
- Fully managing infrastructure assets to sustain and improve the quality of life of citizens.
- Reducing deficits and debt
- Attracting business and investment

HOW DO WE GET THERE?

Effective Asset Management that is pro-active, long-term and integrated by:

- Identifying an ongoing management and decision-making process to fund priorities based on asset inventory and condition.
- Recognizing the importance of asset maintenance and properly supporting an asset replacement reserve fund.
- Valuing natural assets for the community services they provide, such as improving water quality.
- Coordinating infrastructure works to improve efficiency and set priorities across departments.
- Engaging the community and regulators to discuss levels of service, which are the costs of providing services at current levels, how to pay for them and determine expectations and trade-offs.
- Evaluating the risks threatening our assets – both natural risks such as climate change and human risks, such as delaying maintenance.
- Understanding land use and growth decisions dictate servicing requirements and costs.

Growing Where We Can Afford (Application of the CLIC Tool). Mounting evidence is proving more compact, mixed-use development is a more cost-efficient and environmentally and financially sustainable form of development compared to low-density sprawling development.

Benefits of Compact Development: The Global Commission on the Economy and Climate report found more than US\$3 trillion could be saved on urban infrastructure capital requirements over the next 15 years with more compact and connected urban development, built around mass public transport. These cities will be more economically dynamic and healthier, and have lower emissions than urban sprawl⁴.

Compared with smart growth, sprawl typically increases per capita land consumption 60-80% and motor vehicle travel by 20-60%.⁵

³ http://www.fcm.ca/Documents/presentations/2016/SCC/Edmontons_Impact_Tool_Bradley_Leeman_EN.pdf

⁴ Litman, Todd (2015), *Analysis of Public Policies That Unintentionally Encourage and Subsidize Urban Sprawl*, Victoria Transport Policy Institute, Supporting paper commissioned by LSE Cities at the London School of Economics and Political Science, on behalf of the Global Commission on the Economy and Climate (www.newclimateeconomy.net) for the New Climate Economy Cities Program

⁵ Litman, et.al., p.3.

Community Lifecycle Infrastructure Costing (CLIC)

The use of the Ministry of Community, Sport & Cultural Development (MCSCD)'s Community Lifecycle Infrastructure Costing (CLIC) Tool assists local governments in estimating planning level lifecycle cost and revenues associated with different types of residential developments over 100 years. 'Lifecycle costs' include initial capital, annual operating and maintenance, and replacement costs.

The CLIC Tool was used by Wannabe Sustainable staff to estimate the costs and revenues of developing in a low density form (population and households) versus a more compact urban form. The results of this are identified in Appendix B.

As the example in Appendix B illustrates:

- An increase in the residential density of a development in a centralized location that is close to amenities, has the potential to save the City in initial capital infrastructure and servicing costs, and costs half as much for annual operating & maintenance costs for community services over the 100 year lifecycle.
- Currently, with lower density development the City is not cost recovering the incrementally higher costs of low density development.
- Given the majority of the infrastructure cost is borne by municipalities for its installation, maintenance and replacement (80/20), this is a significant financial issue that is not sustainable.

The CLIC tool is excel based and can be downloaded from the MCSCD webpage:

http://www.cscd.gov.bc.ca/lgd/greencommunities/sustainable_development.htm

Long-term Fiscal Management. This involves using financial tools and incentives. These tools can be broken up into two categories:

1. Processes that help reveal financial realities and establish a sustainable financial framework. These include:
 - CLIC Tool
 - Asset Management
 - Eco-Asset Management
2. Specific Tools and Incentives that can be directly applied within a sustainable financial framework. These include:
 - Development Cost Charges
 - Revitalization tax Exemptions
 - User Fees and Charges
 - Self Funding Utilities
 - Local Area Service Tax

It is also important to note that by demonstrating that by engaging in a pro-active approach to asset management, the City puts itself in a much stronger position to apply for infrastructure improvement grants. A list of these can be found in Appendix A.

OPTIONS & IMPACTS

Option 1: *No changes to the current growth management framework in the City.*

Impact:

- The City's infrastructure deficit will exponentially increase resulting from failure to cost recover infrastructure and related services from low density land development.
- Significant reductions in levels of service, curtailment of future new services or expansion of existing ones, and significant property tax increases as a result of fiscal constraint.
- The OCP policies and targets for sustainable development, complete communities, GHG reduction, infill redevelopment, mixed use and higher density will not be achieved.

- The OCP, ICSP and CEEP should be amended to reflect the lower density projections, high infrastructure maintenance and replacement costs and higher GHG emissions.
- The ability to secure Federal and Provincial infrastructure grants will be very limited due to the lack of an asset management plan and failing to support GHG emissions reduction.

Option 2: Sustainable Growth Management: *Council undertake a comprehensive review of growth management in the City, including, but not limited to:*

- Creating an interdepartmental review team (Planning, Engineering, Finance, Operations).
- Establishing an asset management plan to a level adequate to accurately calculate development cost charges, GHG emissions and qualify for Provincial and Federal government infrastructure and other related funding programs.
- Using the CLIC tool to: encourage land-use decisions that consider lifecycle costs of infrastructure costs, and review development cost fees & charges, use of local area service charges, and utility charges.
- Reviewing legislative authority, policy tools and local government best practice available to better achieve the sustainable development goals of the OCP.
- Investigating available funds or grants to undertake this review. See Appendix B.
- Initiating a dialogue with residents about the cost of services and their expectations around the levels of service.
- Evaluating the value of our natural assets.
- Assessing the vulnerability of our infrastructure and community to climate change.

CONCLUSIONS

The City is having limited success in achieving density and infill targets identified in the OCP. This seriously impedes implementation of our ICSP and Community & Corporate Greenhouse Gas Emissions Plans.

The weak linkage between land use planning and asset management is a main cause of the City's mounting infrastructure deficit. It must be integrated to achieve sustainable land use planning and financial management.

Facilitating implementation of sustainability goals requires understanding the existing asset costs and being able to provide sound financial arguments to support more sustainable growth

Tools like CLIC can be used to undertake municipal financial impact analyses on different land use options and encourage discussion on how to pay for additional infrastructure, and how to minimize environmental and social impacts.

Financial sustainability will require those who use more City infrastructure and services to pay closer to the full cost of the City providing those services. A "user pay" system will provide clear market signals to achieve OCP goals in growth management, and reduce the City's mounting infrastructure deficit. This will require a multi-year work program as a strategic plan priority to transition to a more fiscally, environmentally and socially sustainable growth pattern and improve fiscal management of growth.

Respectfully submitted,

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Appendix A - Asset Management Funding Programs

Background: Asset management is integrated into Federal/Provincial infrastructure grant programs (Gas Tax Fund – Strategic Priorities Fund and the New Build Canada Fund – Small Communities Fund) depending on the type of project. The specifics on how asset management is assessed in the application and reporting out processes are detailed below.

New Build Canada Fund – Small Communities Fund

Application requests local governments to identify:

- How long-term financial plans are linked to asset management plans and other strategic community and corporate plans;
- If a proportion (%) of infrastructure replacement can be funded through current revenues;
- If there is an up to date asset inventory/registry for the asset class you are applying for;
- If a conditional assessment has been completed for the asset class;
- Which 'Basic Level' building blocks of the AM BC Roadmap has been achieved; and,
- What effect the project will have on service levels and how they will be measured.

Conditional reporting requirements (when applicable):

- Summary of current state of asset management in the organization and how it relates to the asset group of the project;
- Summary of the activities the local government intends to carry out to improve asset management practices within the organization; and,
- An asset renewal profile for the asset group of the project for which the grant was awarded (e.g. for a water supply project, the asset group would be 'all water assets').

Gas Tax Fund – Strategic Priorities Fund

Strategic Priorities Fund:

- Application requires local governments to explain how the project fits into, or is supported by, an asset management planning process; and,
- AM Framework was developed to guide LGs in meeting their AM commitment under the SPF.

Strategic Priorities Fund Capacity Building Projects:

- Provides grant funding for LG's that want to build capacity through asset management, long term infrastructure planning and sustainability planning;
- Funding available for AM studies, strategies, or systems related to AM, which may include software acquisition and implementation; training directly related to AM planning; or, long-term infrastructure plans; and,
- Projects are not eligible under the Capacity Building stream if they have been submitted under the UBCM Asset Management Planning (details below) grant program, unless they are identified as a distinct phased component of the overall project.

UBCM Asset Management Planning Program

- Created in 2014 through a \$1.5 million grant from MCSCD;
- Grants of up to \$10,000 available to support activities that advance a local government's asset management planning or practices, and that facilitate better integration of AM planning with long term financial planning.