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The City of Calgary 2017 Infrastructure Status Report

EXECUTIVE SUMMARY

The 2017 Infrastructure Status Report (ISR) is a key document helping City Council make informed infrastructure investment decisions. It is produced every business cycle, providing information on overall infrastructure condition to inform and guide decisions to ensure that The City's infrastructure maintains the ability to deliver required services to the citizens of Calgary.

ADMINISTRATION RECOMMENDATION:

That the Standing Policy Committee on Utilities and Corporate Services recommends that Council receive the 2017 Infrastructure Status Report for information.

RECOMMENDATION OF THE SPC ON UTILITIES AND CORPORATE SERVICES, DATED 2018 APRIL 18:

That Council:

- 1. Receive Report UCS2018-0116 and Revised Attachment 1 for information; and
- 2. Approve the SPC on Utilities and Corporate Services' request that a Strategic Session of Council be held in May or June 2018 on the Capital Infrastructure Management to include:
 - addressing City-Owned assets
 - short and long term infrastructure risks
 - addressing the infrastructure gap

Excerpt from the Minutes of the Regular Meeting of the SPC on Utilities and Corporate Services, dated 2018 April 18:

"And further that this Report be forwarded to the 2018 April 23 Regular Meeting of Council as an item of Urgent Business.

MOTION CARRIED"

PREVIOUS COUNCIL DIRECTION / POLICY

City of Calgary's Asset Management Policy – ALT2016-0829 (GN-001(B))

BACKGROUND

The Infrastructure Status Report (Attachment 1) is prepared every business cycle in alignment with the business planning and budgeting process. It supports Council's Fiscal Plan for Calgary and Calgary's Municipal Development Plan. The 2017 Infrastructure Status Report is the fifth iteration of the document since the initial publication in 2004.

Calgary's Asset Management Strategy identified 11 essential elements of an effective asset management system. The four elements listed below guide the development of the ISR:

• An accurate and consistent inventory for all municipal infrastructure.

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 Continual infrastructure status reporting to enable asset stewards to develop infrastructure investment priorities. Alignment between service and infrastructure decisions with future urban form goals. Benchmarking to measure infrastructure performance.
As a result, the ISR provides answers to five key questions: What do we own? What is it worth? What condition is it in? What is its remaining service life? What is the infrastructure funding gap?
 The benefits of knowing the answer to these questions assists with: Ability to plan for and manage the delivery of the required level of service Avoidance of premature asset failure Risk management associated with asset failures, and mitigation of the consequences of failure Accurate prediction of future expenditure requirements through understanding remaining asset life and capital investment needs
An essential element of a successful asset management program is an understanding of the condition and needs of a corporation's infrastructure that enables educated investment decisions. The ISR provides The City of Calgary with a reference point to benchmark infrastructure needs. It identifies investment shortfalls and provides future direction for managing corporate assets.
The current replacement value and age data for the 2017 ISR represents post-flood data, reflective of The City's portfolio of assets as of January 1, 2017.
INVESTIGATION: ALTERNATIVES AND ANALYSIS
 The 2017 Infrastructure Status Report has the following key findings: Since the last Infrastructure Status Report (2013), The City's infrastructure assets have increased in value, from \$60.48 billion to \$84.70 billion. The primary reasons for this increase in inventory replacement value include implementation of new cost evaluation methods, improvement in The City's understanding of its asset inventory, addition of new assets built by The City and acquired from developers, cost escalation factor and the delivery of a broader portfolio of services.
 Average life expectancy of the infrastructure, on a weighted scale, is currently about 68 years with the remaining life at 29 years. Since 2013, remaining asset life has decreased slightly. 88% of The City's infrastructure assets are in good or very good physical condition and 9.70% are in fair condition. Approximately 2.30% of The City's assets are in poor physical condition.
• Over the next 10 years, The City of Calgary will require an additional investment of \$5.67

- of \$5.67 billion to fund infrastructure maintenance, growth and operating requirements.
- Budget cuts in 2017-2018 will have an impact on service levels and capital maintenance • which can affect this 10-year funding gap forecast and hence, service delivery.

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- The 10-year operating gap forecast has dropped by \$1.04 billion since 2013.
- The capital maintenance gap forecast has dropped by about \$0.29 billion indicating that additional commitments have been made to maintaining The City's assets based on business units' better understanding of levels of service and risk.
- Currently identified financing sources for service growth over the next 10 years, also fall short by \$3.19 billion. This was identified in 2013 as \$3.23 billion.

Stakeholder Engagement, Research and Communication

The 2017 Infrastructure Status Report is a consolidation of corporate-wide asset data and has been developed from inputs from all City of Calgary asset managing business units. Business units have been involved in providing and confirming asset data as well as review and approval of the report. The report was communicated to business units through the Accommodation and Infrastructure Steering Committee (AISC) and the Asset Management Network.

Strategic Alignment

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The 2017 Infrastructure Status Report is presented to Council to provide perspective regarding the state of The City's infrastructure to support capital allocations and infrastructure decision making. It aligns with the corporation's Asset Management Policy – ALT2016-0829 (GN-1001(B)) and the four identified elements of an asset management system: Plan, Do, Check, Act. The 2017 Infrastructure Status Report supports the Check component of the Policy, specific to managing the performance of asset management. The 2017 Infrastructure Status Report also supports Calgary's Asset Management Strategy (2005).

Social, Environmental, Economic (External)

The City can play its role in fostering the local economy through ongoing investments in infrastructure.

Financial Capacity

Current and Future Operating Budget:

The Infrastructure Status Report is presented to provide perspective regarding the state of The City's infrastructure to support capital allocations and infrastructure decision making.

Current and Future Capital Budget:

The Infrastructure Status Report is presented to provide perspective regarding the state of The City's infrastructure to support capital allocations and infrastructure decision making. The findings of this report will act as input to ongoing actions by business units in their actions and objectives in asset management and business plans.

Risk Assessment

The two key risk areas are:

The quality of analysis and decision making resulting from nonaligned or nonstandard data and reporting between various Business Units.

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The ability or speed of adoption of the asset management practice as a result of embedded corporate culture and/or resource availability.

Significant risks are associated with deteriorating or failing infrastructure. At a Corporate level, the risk to The City includes, but is not limited to, the ability to provide appropriate level of service, injury or death, alignment with sustainability objectives and financial viability. In accordance with The City's Integrated Risk Management Framework the Infrastructure Status Report is one mechanism for monitoring and reporting on the status of The City's infrastructure health as a risk management strategy. Successful implementation of the asset management program and the continued use of the Infrastructure Status Report to enable budget decision making helps mitigate these risks.

REASON(S) FOR RECOMMENDATION(S):

The 2017 Infrastructure Status Report is presented to Council to provide perspective regarding the state of The City's infrastructure to support capital allocations and infrastructure decision making.

ATTACHMENT(S)

Revised Attachment 1 – The City of Calgary 2017 Infrastructure Status Report
 2017 Infrastructure Status Report PowerPoint presentation