SOUTHEAST TRANSITWAY INNOVATIVE FUNDING AND FINANCING REPORT

EXECUTIVE SUMMARY

In order to complete construction of the Southeast Transitway, Green Line LRT, and other unfunded or partially funded transportation infrastructure projects, new stable and reliable sources of capital funding will be required. Administration with consultants AECOM Canada Ltd. have completed an initial analysis of new funding options and financing mechanisms that would enable construction of these projects.

The analysis of innovative funding and financing mechanisms included a literature review of options considered or utilized by other jurisdictions, interviews with key internal and external stakeholders, and facilitation of a workshop to gather additional feedback and ideas from stakeholders. The resulting report explains the various funding and financing mechanisms in greater detail, considers the Calgary context and summarizes the key findings from the stakeholder interviews and workshop.

Recommended next steps include more detailed analysis of the funding options to determine which have the greatest potential to bridge the funding gap identified in Investing in Mobility, and development of a engagement process to build understanding and incorporate public feedback into final recommendations.

ADMINISTRATION RECOMMENDATION

That Council direct Administration to evaluate the full range of 27 potential funding mechanisms, using best practice evaluation criteria, to identify which mechanisms are best suited to fund the future transition to the Green Line LRT, and the remainder of the unfunded list in Investing in Mobility, and report back to the SPC on Transportation and Transit no later than 2015 June.

PREVIOUS COUNCIL DIRECTION / POLICY

At the 2013 March 04 Combined Meeting of Council, the following Notice of Motion (NM2013-08) was moved by Councillor Keating, Seconded by Councillor Demong:

> NOW THEREFORE BE IT RESOLVED Council direct Administration to conduct a workshop outlining various options for funding the SETWAY and exploring pros and cons, returning to Council no later than 2014 January.
>
> AND BE IT FURTHER RESOLVED that Administration engage stakeholders along the SETWAY for input.

BACKGROUND

Transportation has identified the need for $4.5 billion in infrastructure investment over the next decade. However, the decline in our traditional grant funding from the provincial and federal governments will result in a funding gap of up to $2 billion over the next decade based on currently announced programs. Council's decision on 2013 November 27 to create a $520 million Green Line Fund will reduce this gap. The new Building Canada Fund (BCF) announced by the Federal Government in 2013 March may further help to reduce the gap, but details of the program have not yet been released.

Without new sources of stable and reliable funding, Transportation anticipates that there will continue to be a substantial gap between the traditional capital funding streams and transportation infrastructure needs in the future. Major projects such as upgrading the bus-based Southeast Transitway to become part of the Green Line LRT would therefore continue to be either unfunded or only partially funded.

INVESTIGATION: ALTERNATIVES AND ANALYSIS

Administration selected the consulting firm AECOM Canada Ltd. to conduct research, lead a series of stakeholder interviews, and facilitate a workshop as directed by Council. AECOM has significant experience in the field of innovative funding and financing mechanisms, having recently worked with Metrolinx (of the Greater Toronto and Hamilton Area) to identify similar options for the region's $50 billion Big Move program.

The Southeast Transitway Innovative Funding and Financing workshop was held on 2013 December 9. Workshop participants included nine external stakeholders, 17 City staff, approximately five Provincial and Federal representatives, as well as representatives from Wards 9, 12 and the Mayor's Office. Keynote speakers discussed the range of funding and financing mechanisms available, where they have been used successfully (or unsuccessfully), and how they could be adapted to the Southeast Transitway and Green Line LRT. Workshop participants discussed these options with the keynote speakers, and provided preliminary feedback on which options may have the highest potential using a dotmocracy exercise.

AECOM's report summarizing their findings is available on the Investing in Mobility page on The City's website (www.calgary.ca, search for 'Investing in Mobility'). The report explains the variety of financing options and funding mechanisms that can be used to deliver major transportation infrastructure projects. Stakeholder feedback from the workshop and the one-on-one interviews serves to put these funding and financing options into the context of the Southeast Transitway and Green Line LRT.

Key findings and recommendations based on the report can be broken down into three categories.

Funding Tools

Funding tools refer to the various sources of funds needed to pay for the development and operation of new infrastructure. Funding sources can either be public, such as general tax revenues collected by government, or private as in the case of user charges, such as public transit fares or road tolls. The financing mechanisms discussed below (collectively known as public-private partnerships, or P3) require stable funding for regular payments over a defined period of time to the private industry partner(s).

In addition to closing the funding gap for the transition to the Green Line LRT, various funding tools can also be used to close the overall funding gap identified in Investing in Mobility. Stable and secure funding sources are required for goods movement, traffic growth, optimization projects and lifecycle infrastructure replacement in addition to transit infrastructure projects.

The AECOM report identifies 27 different funding tools that represent the full spectrum of options available to transportation and transit authorities (see pages 20 to 26 of the AECOM report for a summary). Some of these tools can be implemented by The City directly, while others would require new legislation or authority from the Provincial government. Further analysis of funding tools will therefore need to be closely linked to the ongoing City Charter negotiations.

According to AECOM's report, *"there is much more than just revenue at stake when analyzing the choice of revenue tools. Some revenue tools tend to reduce the productivity and competitiveness of the affected city-regions – as in the case of most traditional tax-based revenue sources such as income taxes and payroll taxes. Other revenue tools can do the opposite, especially when based on user-changing principles. Some tools have no impact on mobility while others can help mitigate road congestion and thereby generate travel time savings."* Any new revenue tools should seek to maximize efficiency while minimizing adverse economic impacts.

During the workshop, participants expressed initial preferences for Mobility User Charges (such as fuel taxes and high occupancy tolls) and Land Based Taxes (such as development charges) types of funding tools. A range of other tools (such as vehicle registration fees) received various initial support, while Conventional Tax Tools (such as sales taxes) received little support from workshop participants. Based on the experience of other jurisdictions, no one funding tool may be sufficient to close the funding gap identified in Investing in Mobility. Several funding tools may to be combined, with some able to provide a larger portion of the necessary funding than others.

The City should analyze all 27 funding tools to identify which have the highest potential to close the funding gap, while also maintaining or improving Calgary's economic competitiveness and quality of life. The analysis could be based on evaluation criteria already used in other jurisdictions that consider potential revenues, impact on travel behaviour, implementation challenges, equity and economic efficiency. The analysis would also take advantage of any other funding tool reviews previously completed by Administration. The analysis would be used in support of overall City Charter and funding discussions, as required.

Financing and Project Delivery Mechanisms

Financing mechanisms involve borrowing funds in order to meet up-front payment obligations for an infrastructure project. All financing mechanisms require regular repayments, so financing is not a substitute for funding. Financing options can be either public, such as borrowing from other levels of government, or private financing through Public-Private-Partnerships (P3).

P3 financing mechanisms enable the public sector to spread capital and lifecycle costs over an extended period, similar to other debt financing arrangements The City can initiate without a private partner. In the case of P3s, regularly scheduled payments to the private partner include repayment of capital costs, lifecycle maintenance costs, any specified operating costs, financing charges, costs that cover risks that have been transferred to the private partner, and private sector profits.

P3s are not a source of new funding, although access to some grants from other orders of government may be contingent on pursuing a P3 approach. Projects completed through a P3 process are constrained by The City's borrowing limits, the same as other City led projects.

A range of P3 financing mechanisms exist that allow the public sector to transfer varying degrees of risk for design, construction, ongoing operations and maintenance to a private partner. These mechanisms are described on pages 7 and 8 of the AECOM report. The Build-Own-Operate-Transfer (BOOT) financing mechanism has fallen out of favour with the private sector since the economic downturn of 2008, since it transfers too many project risks to the private sector that are beyond their control. Recent P3 arrangements in Canada have seen the public sector retain risks for land acquisition, environmental assessments and transit ridership levels.

During the workshop, and as shown on page 10 of the AECOM report, participants felt that P3 financing mechanisms appear to be a promising option to facilitate construction of the Southeast Transitway and/or Green Line LRT. In particular, P3 options that include transferring risks and responsibilities for maintenance and possibly operating costs received the most initial support. These types of P3 approaches are referred to as Design-Build-Finance-Maintain (DBFM) and Design-Build-Finance-Operate-Maintain (DBFOM). Given the unique nature of each major infrastructure project, The City should remain open to all P3 financing mechanisms ranging from Design-Build-Finance (DBF) to DBFOM, as per Figure 3.1 shown on page 7 of the AECOM report.

The City's Public Private Partnership (P3) Policy outlines a project screening process, using standardized criteria, to determine whether or not a P3 approach is suitable for a given project. Where they are found to be appropriate, P3s have been shown to provide cost savings over the timeframe of the P3 agreement (typically around 30 years). P3 agreements are based on measurable outcomes rather than specific inputs, allowing for design and operational innovations by the private partner in order to maximize their return on investment. Administration will continue to evaluate major infrastructure projects, including the Southeast Transitway and ultimate Green Line LRT, to determine which projects are appropriate for P3 financing.

Benefits Case Analysis
Through RouteAhead and the subsequent report TT2013-0290 - Investing in Mobility: Transit Corridor Cost/Benefit Analysis, Administration has completed an extensive prioritization process for the 10-year transit corridor projects. Additional analysis of ridership, costs, technology and staging options for the Southeast Transitway was provided to Council in report TT2012-0360 – Southeast Transitway (SETWAY) Staging Update.

Based on the experiences of Metrolinx in the Greater Toronto and Hamilton Area, and The City of Edmonton, securing funding for major infrastructure projects requires a holistic and transparent comparison of different options for a given project. One industry standard approach is a Benefit Case Analysis (BCA), which considers cost-benefit analysis, ridership and user benefits, as well as broader social, economic and environmental benefits of a project. This information provides the basis for engaging the public and other orders of government on the need for funding to support high-value projects.

To strengthen the case for additional funding, Administration will complete Benefit Case Analyses for the Southeast Transitway, and the ultimate Green Line LRT. The analysis will build on the prioritization and staging analysis already completed by Administration for the Southeast Transitway.

Stakeholder Engagement, Research and Communication
Key internal and external stakeholders were engaged through the Southeast Transitway Innovative Funding and Financing workshop held on 2013 December 9, as well as a series of one-on-one interviews conducted in advance of the workshop. Both the workshop and the one-on-one interviews were facilitated by AECOM staff. Consistent with Council direction, external stakeholders were primarily identified based on their proximity and relationship to the Southeast Transitway corridor. In addition to members of Administration, internal stakeholders included the Councillors of Wards 9 and 12 and representatives from the Mayor's Office. Additional public engagement will occur at a later date in alignment with other corporate initiatives and projects.

Strategic Alignment
Securing long-term funding for major municipal infrastructure projects is fundamental to City strategy. The bus-based Southeast Transitway has been identified by Council as a short-term infrastructure requirement in the RouteAhead 30-year strategic plan for Calgary Transit, while upgrading to LRT is identified as a medium-to-long term need. Upgrading of the corridor to LRT (part of the Green Line along with the North-Central corridor) is also consistent with the Primary Transit Network shown in Map 2 of the Calgary Transportation Plan.

Social, Environmental, Economic (External)
Investment in the Southeast Transitway corridor and overall Green Line LRT corridor provides multiple positive triple bottom line outcomes. Improved transit infrastructure and service will:

- Mitigate congestion by reducing automobile use, which will improve economic efficiency by reducing travel times for commuters and goods movement;
- Facilitate redevelopment of underutilized lands around LRT stations, increasing social and economic activity;
- Reduce the growth in greenhouse gas emissions by increasing use of public transit;
- Provide access to jobs and services for people who cannot or do not drive; and
- Create health benefits for Calgarians by reducing pollution from automobiles and facilitating walking and cycling around LRT stations.

Financial Capacity

Current and Future Operating Budget:

The recommendation contained in this report does not have operating budget implications. Recommendations in subsequent reports may have operating budget impacts. The proposed next steps can be accommodated within existing operating budgets.

Current and Future Capital Budget:

The recommendation contained in this report does not have capital budget implications. Recommendations in subsequent reports are intended to have capital budget impacts.

Risk Assessment

Without identifying and securing new, stable sources of funding, The City will:

- have a diminished ability to effectively maintain the transportation system, and
- be unable to initiate construction on high-priority transportation projects in a timely fashion.

As Calgary grows, the amount of infrastructure that requires ongoing maintenance and lifecycle replacement grows. Investing in Mobility currently identifies the need for $1.2 billion in maintenance funding over the next decade for lifecycle and asset management capital projects, 75% of which will be covered by current funding levels. New sources of funding are required to ensure that the safety and reliability of the transportation system is maintained for all users. Without sufficient funding, deferred maintenance will lead to an increased risk of travel time delays and service disruptions on the transportation system. The City’s ability to proactively address safety issues through capital maintenance will also be reduced.

Investing in Mobility further identifies the need for $3.3 billion in new infrastructure to address existing capacity constraints and accommodate growth across the city. Of this, only 70% will be covered by current funding levels. Delays in constructing the remaining unfunded infrastructure will reduce mobility options for citizens, increase commuting times, reduce economic productivity, increased greenhouse gas emissions and result in an overall reduction of quality of life in Calgary. As travel activity continues to grow, it also becomes increasingly difficult to manage disruptions for existing user during construction when necessary upgrades are delayed due to lack of funding.

REASON(S) FOR RECOMMENDATION(S):

Administration’s recommendations align with the key findings produced by AECOM as a result of their literature review, one-on-one stakeholder interviews and the Southeast Transitway Innovative Funding and Financing Workshop held on 2013 December 09.

ATTACHMENT(S)

None