

Building Canada Fund

City of Edmonton's Priority Projects, Provincial-Territorial Infrastructure Component

Recommendation:

The Executive Committee recommend to City Council:

That the following motion passed at the February 10, 2015, City Council meeting:

That designation of the following projects as the City's priority projects under the Provincial-Territorial Infrastructure Component of the new Building Canada Fund, be approved:

- a) LRT Expansion
- b) Key Grade Separations, including 50 Street and 75 Street CPR Underpasses and the Manning/Meridian Interchange
- c) Neighbourhood Flood Mitigation Program
- d) Fort Edmonton Park Utility Infrastructure Upgrades
- e) Edmonton Energy and Technology Park

Be amended by substituting with the following motion:

That the designation of the following projects as the City's priorities under the Provincial-Territorial Infrastructure Component of the New Building Canada Fund, be approved:

- 50 Street Rail Grade Separation
- 75 Street Rail Grade Separation
- - Anthony Henday Drive and 135 Street Interchange

Report Summary

This report provides a summary of the review process and rationale for selecting the City of Edmonton's priority projects for funding under the Provincial-Territorial Infrastructure Component of the New Building Canada Fund.

Previous Council/Committee Action

At the February 10, 2015, City Council meeting, the following motions were passed:

That designation of the following projects as the City's priority projects under the Provincial-Territorial Infrastructure Component of the new Building Canada Fund, be approved:

- a) LRT Expansion
- b) Key Grade Separations, including 50 Street and 75 Street CPR Underpasses and the Manning/Meridian Interchange
- c) Neighbourhood Flood Mitigation Program
- d) Fort Edmonton Park Utility Infrastructure Upgrades
- e) Edmonton Energy and Technology Park

That Administration provide a report to Committee with an analysis of the economic impact, eligibility and relative priority of the projects designated as the City's priority projects under the Provincial-Territorial Infrastructure Component of the new Building Canada Fund.

Report

Program Recap

The \$10 billion Provincial-Territorial Infrastructure Component of the New Building Canada Fund provides funding support for predominantly medium and large scale infrastructure projects of national, regional and local significance that contribute to objectives related to economic growth, a clean environment, and stronger communities.

From this pool of funding each province and territory receives a base amount of \$250 million over 10 years (\$25 million per year) plus a per capita allocation. Eligible projects are for the construction, renewal, rehabilitation, or material enhancement of infrastructure for public use or benefit and must fall under one of 14 eligible categories.

The maximum federal contribution from all sources is typically one-third of the total eligible costs of a project (with the municipality and province each providing a matching one-third), with no grant stacking allowed beyond the specified cap.

Projects with total eligible costs of over \$100 million are required to undergo a Public-Private Partnership Screen, which is administered by PPP Canada. If the Screen determines project delivery would generate better value for money as a Public-Private-Partnership, federal funding is contingent on procuring the project in this manner. The maximum federal contribution for projects that are procured as a Public-Private-Partnership is 25 percent.

Projects are jointly identified and negotiated between Canada and Alberta, and must be designated by Alberta as a provincial priority. Applicants are initially required to submit a project proposal to their provincial ministry responsible for infrastructure for review. Only projects that are considered candidates for program funding are asked to submit a detailed business case.

Over the 10-year life of the program, Alberta's Provincial-Territorial Infrastructure Component pool for National-Regional Projects is \$848 million. With \$150 million already earmarked for Edmonton's Valley Line LRT, there is approximately \$698 million

remaining for other projects in the province's Capital Plan that are designated as provincial priorities for program funding. Alberta, at this time, has no plans to initiate a formal intake process for applications.

Currently identified provincial priorities and the manner in which the New Building Canada Funding is being allocated may change with the new government. In the meantime, however, Alberta's present approach to this funding demands that the City's priorities beyond the Valley Line Stage 1 are clearly understood and that the City's elected officials and Administration are able to communicate and reinforce the merits of these priorities consistently to provincial officials. This will help ensure the projects the City wishes to advance for funding are reflected in the province's next capital plan and are designated as provincial priorities for Building Canada Funding.

Funding the City's Share

As a cost-sharing program the New Building Canada Fund requires municipalities to, at a minimum, match the funding contributions of their federal and provincial partners. As noted above, the maximum federal contribution from all sources will normally be one-third (33.3 percent) of the total eligible project costs or 25 percent in the case of Public-Private-Partnership projects.

To obtain funding, the City needs to contribute anywhere from one-third to 50 percent of the total projects costs, assuming the other two orders of government provide their maximum contribution. The City is also required to fund any ineligible costs the federal and provincial governments do not cover; ineligible costs include land purchase.

In the current capital budget cycle (2015-18), Council approved \$4.49 billion in capital projects, of which more than one-third (\$1.59 billion) was already allocated through prior Council decisions. Of the remaining \$2.90 billion, Council allocated \$1.77 billion to maintain the City's renewal needs and \$1.13 billion to new growth.

Administration is projecting available funding of about \$4.5 billion over the period 2019-24. During the same timeframe, the City's renewal requirements are projected to be approximately \$3.6 billion. With \$1.4 billion of already approved commitments, the next capital cycle would see projected needs exceed available funding by about \$0.5 billion.

When taking into account the City's renewal requirements, the current commitment to approved projects in 2019 and beyond, and factoring in future growth, the funding of new projects would require reallocating dollars from already funded profiles, or financing these projects through debt. With tax-supported debt likely the best option to fund the City's required contribution under the New Building Canada Fund, the number of projects and the level to which the federal and provincial governments contribute to them would impact the total amount of City debt and debt servicing.

The City's total debt (tax supported and self-liquidating) was approximately \$2.82 billion

at the end of 2014, and is projected to increase to \$4.05 billion in 2020. This increase can mostly be attributed to investment in large transformational projects like the Valley Line LRT. As this debt retires in future years, debt servicing used for the retired debt would be available to allow the City to reinvest in projects on a pay-as-you-go basis or to service new debt.

Tax-supported debt servicing costs on capital projects that were approved by Council prior to the 2015-18 Capital Budget are projected to peak in 2018. After this point, debt on larger projects will be reduced, opening up debt service room that can be applied to other capital projects as per the City's Debt Management Fiscal Policy. The tax-supported debt service room forecasted to become available between 2019 and 2025 is projected to start at \$1.7 million in 2019 and grow to \$15.4 million annually by 2025.

As the City is within its policy imposed debt servicing limits, Council may also opt to add debt financing during the current capital cycle (2015-18), depending on project timing and need. Should taking on additional debt be contemplated in this capital cycle, before debt servicing room begins to steadily increase in 2019 and beyond, Council would need to consider its level of comfort relative to debt, as well as the affordability of taking on additional borrowing during this time.

Administration's Assessment

Administration completed a review of the following projects for potential funding under the Provincial-Territorial Infrastructure Component of the New Building Canada Fund:

- Key Grade Separations, including 50 Street and 75 Street CPR Underpasses and the Manning Drive and Meridian Street Interchange
- LRT Expansion
- Neighbourhood Flood Mitigation Program
- Fort Edmonton Park Utility Infrastructure Upgrades
- Edmonton Energy and Technology Park.

The review evaluated the projects according to the following criteria: eligibility, program alignment, corporate priorities, cost, timing and provincial interest. Based on the criteria, Administration concluded that investment in priority grade separations would be the best fit for advancing under the Provincial-Territorial Infrastructure Component.

Rapid growth, high traffic volumes, and continued development in all areas of the City has increased pressure on the City's transportation system. In particular, investment in corridor projects that target improvements on the inner ring road and on heavy commuter routes are of key importance when considering growing traffic and truck volumes, levels of congestion and delay, as well as the positive impacts such improvements would have on the regional economy.

The funding of grade separations along key corridors is one of the most critical

transportation needs the City has to address. A point that was emphasized in the City Interchange Needs report (CR_1331) presented to Council in October 2014, which identified 53 new or significantly modified interchanges that would require funding over the next 30 to 50 years, at a cost of \$4 to \$7 billion (in 2013 dollars).

Projects Recommended for Funding

To determine which grade separation projects were of the highest priority, 37 of 53 locations identified in the City Interchange Needs report (CR_1331) were reviewed by Transportation Services for this report; these included existing interchanges in need of modifications, new interchanges, and rail grade separations. Sixteen other locations identified in the report were excluded from review as they were deemed longer-term needs, or were part of the Yellowhead Trail corridor, which Council has already designated for funding under the National Infrastructure Component of the New Building Canada Fund.

The review also took into consideration:

- Provincial-Territorial Infrastructure Component eligibility criteria, program objectives, and the project's ability to demonstrate required program outcomes and benefits
- Intersection characteristics, such as volumes, collisions, and truck movements
- Timing and cost of the improvement
- Whether the improvement would provide or improve access to commercial and industrial areas, opposed to only residential areas
- Whether the improvement had provincial and/or regional interest.

The projects that ranked the highest, based on the previous noted criteria, are being recommended as the City's priorities under the Provincial-Territorial Infrastructure Component of the New Building Canada Fund. In order of priority these are:

- 1) 50 Street Rail Grade Separation (estimated Cost - \$78 million)
- 2) 75 Street Rail Grade Separation (estimated Cost - \$60 million)
- 3) Anthony Henday Drive and 135 Street Interchange (estimated Cost - \$105 million)

Depending on funding availability and partner government interest, the three recommended projects could be bundled under one application, or alternatively advanced individually as a stand-alone project.

During Capital Budget deliberations last fall, specific reference was made for a future interchange at Manning Drive and Meridian Street, which would replace the at-grade intersection at Manning and 195 Avenue. While considered as part of the grade separation review, analysis showed that based on current traffic volumes and the low number of recorded collisions, an interchange at this location would be required in the medium-term, once development has significantly progressed on either side of Manning Drive. Currently, development in the area, which includes Horse Hill and the Edmonton

Energy and Technology Park, is just beginning and is anticipated to occur over the next 30 to 50 years.

The addition of traffic signals and the modification of side street approaches are intermediary improvements that could adequately serve the developing area for another 10 to 15 years. This would be a more cost-effective solution and allows for allocation of the New Building Canada Funding to more critical locations, such as those recommended in this report. On this matter, Administration is working with a consultant and Alberta Transportation to undertake a safety audit for Manning Drive to review and evaluate measures to address safety and access issues over the short to medium term.

More detail on the recommended grade separation locations is provided below:

1) Rail Grade Separation at 50 Street (South of Whyte Avenue)

As a major arterial roadway in southeast Edmonton, 50 Street serves as a major goods movement and commuter corridor, as well as a transit route. Traffic volumes along 50 Street, near Whyte Avenue, are in the order of 34,000 vehicles per day, including approximately 2,400 trucks per day.

The Lambton Park CP rail yard is located immediately east of the 50 Street rail crossing location. Recent train monitoring data suggests that more than 34 trains per day block 50 Street at this location. Moreover, the crossing and shunting of trains results in average vehicle delays on 50 Street of 3 minutes and 48 seconds. On occasion, delays have been observed to exceed 18 minutes.

The grade separation of this top priority rail crossing is required in the short-term to address existing and future delays along a high volume arterial with significant train crossing activity. The upgrade of the rail crossing will reduce vehicle delays for passenger cars, transit buses, and trucks, as well as reduce emissions from idling vehicles. Other benefits include improved safety along the road and rail corridors, enhanced traffic and rail operations, and increased citizen satisfaction with travel along the route.

As the Valley Line LRT will be under construction along 75 Street in the area until 2020, and the City would not typically undertake road work along two parallel arterials, the suggested timing for the 50 Street grade separation would be 2021 or later.

The estimated cost of the project is \$85 million.

2) Rail Grade Separation at 75 Street (between 68 Avenue and Argyll Road)

As a goods movement and commuter corridor, 75 Street forms a critical link in the overall inner ring road within the city. Existing traffic volumes along 75 Street combined with the frequency of train crossings, make the 75 Street CP rail crossing another key

priority for grade separation.

Traffic volumes along 75 Street at the rail crossing location are in the order of 40,000 vehicles per day, including approximately 1,200 trucks. Train monitoring data for this crossing suggests that approximately 13 trains per day cross 75 Street, resulting in an average delay to vehicles of approximately 3 minutes and 13 seconds per crossing. The construction of a grade separation at this location will reduce vehicle delays, emissions, and collisions, improve rail operations, and increase citizen satisfaction with the corridor.

As part of the Valley Line LRT construction, the City plans to widen 75 Street to a six lane divided urban arterial standard between Whitemud Drive and Wagner Road. Based on the approved LRT plans, 75 Street will transition back to the existing four lane arterial cross-section north of Wagner Road. As LRT construction will be ongoing along 75 Street until 2020, it would be opportunistic for the City to construct the 75 Street rail grade separation at the same time as LRT construction is occurring to avoid sequential impact and disruption to corridor traffic.

The estimated cost of the project is \$67 million.

3) Anthony Henday Drive and 135 Street (Heritage Valley Trail) Interchange

As a designated provincial highway Anthony Henday Drive operates as a ring road within the City. The southwest section of the Anthony Henday was completed in 2006. Along this section of the corridor, there are two remaining at-grade right-in/right-out intersections at 127 Street and 119 Street. The traffic volume along Anthony Henday Drive in the vicinity of these intersections is approximately 47,000 vehicles per day.

The current configuration of the Anthony Henday Drive and 127 Street right-in/right-out intersections is not up to current design standards and creates operational and safety concerns along this key provincial corridor, impacting traffic flow on Anthony Henday Drive.

Construction of the Anthony Henday Drive and 135 Street (Heritage Valley Trail) interchange would eliminate the need for these at-grade intersections and would provide all-directional access between Anthony Henday Drive, Heritage Valley and Twin Brooks. The interchange would also provide access to current and future residential developments, the future Park and Ride location at Ellerslie Road and 127 Street, as well as lands currently owned by Alberta Infrastructure that are designated for future institutional land uses.

The province has an interest in seeing improvements at this location, or alternatively closure of the at-grade intersections, and has expressed concerns with the current situation. The province has also advised the City that constructing and paying for the interchange would be a municipal responsibility.

Given the significant cost of the project, securing New Building Canada Funding would reduce the City's overall contribution and allow the City to construct a priority interchange location along the city's high volume ring road earlier than otherwise possible. The preferred timing for the design and construction of this interchange is between 2017 and 2020.

The estimated cost of the project is \$105 million.

Other Candidate Projects

As per Council's direction, the other projects evaluated for Provincial-Territorial Infrastructure Component suitability were:

- LRT Expansion
- Neighbourhood Flood Mitigation Program
- Fort Edmonton Park Utility Infrastructure Upgrades
- Edmonton Energy and Technology Park.

While these projects were designated as potential candidates for program funding, further review indicates they are less of a fit based on program eligibility and alignment, project cost and timing, and, in some cases, the availability of alternate sources of funding.

These projects are discussed in more detail in Attachment 1.

Corporate Outcomes

The recommendations in the report supports the Corporate Outcomes "Goods and Services Move Efficiently" and "City of Edmonton has Sustainable and Accessible Infrastructure" by committing to investments such as key grade separations which target improvements on critical goods movement corridors, heavy commuter routes and the city's inner ring road.

Budget/Financial Implications

Tax-supported debt is contemplated to fund the City's share of the projects recommended for Provincial-Territorial Infrastructure Component funding. The number of projects and the level to which the federal and provincial governments contribute to them will impact the total amount of City debt and debt servicing. An analysis of the debt impacts as well as a funding strategy would need to be developed upon Council determining the priority projects to advance for program funding.

The New Building Canada Fund will contribute up to one-third of total eligible project costs, or 25 percent in the case of Public-Private-Partnership projects. The City is therefore required to contribute anywhere from one-third to 50 percent of the total

projects costs, assuming the other two orders of government provided their maximum contribution. The City would also be required to fund any ineligible costs the federal and provincial governments do not cover; ineligible costs include land purchase.

Justification of Recommendation

A re-defined priority list of projects for the Provincial-Territorial Infrastructure Component of the New Building Canada Fund would allow Administration to begin the process of developing funding strategies for the City's contribution and preparing the necessary application documentation. It also helps form the basis for ongoing discussions among members of Council and partner government officials. The three projects recommended are the highest - ranked priorities based upon need and eligibility criteria..

Attachment

1. Evaluation of Other Candidate Projects

Others Reviewing this Report

- R. G. Klassen, General Manager, Sustainable Development
- D. Wandzura, General Manager, Transportation Services