Evaluation of Other Candidate Projects

LRT Expansion

With the goal of expanding Light Rail Transit (LRT) service to all sectors of the City by 2040, LRT is a key civic priority that is forecasted to be the City's largest infrastructure investment.

The City began constructing its LRT network in the mid-1970s with the first line between Central Station and Stadium Station opening in 1978. Built over the last four decades, the existing Capital LRT line now stretches from Clareview Station in the northeast to Century Park in the south.

The recently completed Metro Line that will begin revenue service this spring will link Churchill Station to NAIT. The Valley Line, approved by Council as the City's next LRT priority, will ultimately extend from Mill Woods to Lewis Farms and is to be built in two stages – Mill Woods to Downtown with the next leg continuing from the city's center to the west end. Construction of Stage 1, which will be delivered as a Public-Private-Partnership, is scheduled to start in early 2016 with service delivery beginning in late 2020. New Building Canada Funding under the Provincial-Territorial Infrastructure Component has been committed for the Valley Line Stage 1, with the federal and provincial governments each contributing $150 million.

The full build-out of the LRT, as outlined in the City's LRT Network Plan that Council adopted 2009, also calls for extensions to the existing Capital Line north to Gorman and south to Heritage Valley. New lines include northwest toward St. Albert to the city limits and east towards Sherwood Park. A Central Area LRT Circulator between Downtown and high-activity areas near the University of Alberta and Old Strathcona is also part of the plan. Further extensions being contemplated include a southeast extension from Mill Woods to Ellerslie and a south extension from Heritage Valley to the city limits. A high level estimate of these future lines is approximately $6.7 billion in 2015 dollars.

While LRT expansion remains the City's top priority, and aligns well with the New Building Canada Fund, the new Public Transit Fund announced in federal Budget 2015, provides a dedicated stream of funding for public transit which now allows the City to target the New Building Canada Funding to other priority projects. The Public Transit Fund is to commence in 2017-18 and will be phased in over the next five years, with $1 billion in annual funding beginning in 2019-20 and continuing on a permanent basis.

This timetable aligns well with the planning of the City's next line, as the City does not have the capacity to build or finance the next LRT extension until the Valley Line Stage 1 is completed. The timing also gives the City an opportunity to develop a plan for financing and funding other LRT lines, as well as reassessing the long-term LRT network in terms of priority and the most effective expansion sequencing for moving forward.

Council Report CR_2172 provides more detailed information on the Public Transit Fund.

Neighbourhood Flood Mitigation Program

In response to severe storms and flooding in 2004 and 2012, the City developed a proactive long-term flood mitigation strategy, which initially led to a capital investment of $146 million to address flooding issues in 31 at-risk neighbourhoods, and a further investment of $200 million over the 2015-22 capital cycle to support an additional 24 at-risk neighbourhoods.

With the goal of assessing all areas of the city that have the potential to be affected by flooding during major storm events, the City's Flood Mitigation Program will be expanded further starting in 2019. Based on a preliminary assessment study, about 123 neighbourhoods and 26 industrial areas have been identified for further investigation and potential flood mitigation enhancements. Early cost estimates indicate that starting in 2019, about $2.4 billion in investment will be required or approximately $25 million to $50 million per year for the next 50 to 100 years.

While the City's Drainage Utility uses utility rates to fund both operating and capital needs without the use of tax levy or grant funding, various funding options, including grants, have recently come under consideration given the magnitude of future investment required. In terms of the Provincial-Territorial Infrastructure Component of the New Building Canada Fund, the City's flood mitigation work could potentially fit under the category of Disaster Mitigation Infrastructure or Wastewater Infrastructure.

Currently, the only municipal grant that is specifically targeted at flood prevention is the Alberta Community Resilience Program, which has a total value of $500 million over 10 years (2014-23). The City was recently granted $16.4 million from this program. All other grants are existing programs that are also key funding sources for the City's significant non-utility infrastructure needs and priorities.

The primary benefit of financing the flood mitigation works through grants is to accelerate the program. With reasonable forecast rate increases, the Drainage Utility is able to undertake the flood mitigation works through Drainage Utility rate increases over a span of approximately 100 years. This could be significantly shortened with appropriate grant funding.

With the City's flood mitigation program beyond 2019 envisioned as a funding commitment that will span many decades, it is important that any funding solution contemplated is also long-term, as the infrastructure built during the first part of the program will very likely need to be renewed during the latter part of the program. The problem with one-time grants, such as the New Building Canada Fund, is that they do not provide a sustainable source of funding.

The City's flood mitigation work is therefore more appropriately funded through utility rates, or preferably through a commitment by partner governments to provide a permanent and dedicated grant program (such as the new Public Transit Fund) that can give municipalities predictable long-term sustainable funding to address immediate and preventative flood mitigation measures.

Fort Edmonton Park Utility Infrastructure Upgrades

A key component of the Fort Edmonton Park Expansion Program is the repair, replacement and upgrade of utility infrastructure to support current operations and new park development, which includes the construction of additional attractions planned between 2015-18, and beyond.

A comprehensive Utility Assessment of the park was completed in 2010, followed by a Utility Master Plan in 2011. Both reports confirmed that all utilities are close to the end of their life cycle and need replacement, and that the future planned development in the park will place a significant and added strain on the aging infrastructure.

The current situation requires upgrades to the following systems: storm and drainage collection, water distribution, sanitary sewer, gas and power distribution. The cost of the utility replacement is $70.7 million; project funding was approved in the 2015-18 Capital Budget.

As the Fort Edmonton Park Expansion project is largely a heritage, culture and tourism based initiative, the only aspect of the project that would potentially be eligible for New Building Canada Funding is the utility infrastructure replacement.

To ensure the City is in the best position to secure unallocated Provincial-Territorial Infrastructure Component funding, Administration suggests that only projects that most closely align with provincial priorities and which the City would otherwise be unable to move forward without match funding from our partner governments be advanced. These are likely to have the greatest chance of success given the limited pool of funding available and the competitive nature of the program.

With the utility replacement project fully funded in the current capital cycle, the New Building Canada Funding is better leveraged for more critical civic priorities, such as those being recommended in this report, that require partner funding to proceed.

<u>Edmonton Energy and Technology Park</u>

Located in northeast Edmonton, the Edmonton Energy and Technology Park is envisioned as a world-class eco-industrial park with precincts for petrochemicals, manufacturing, logistics, related support industries and research development.

In order for the City to facilitate development of this 4,800 hectare area and attract national and international firms to invest in value-added energy sector industries, a considerable amount of infrastructure will need to be delivered. This includes water, sewer and drainage servicing (including oversizing), as well as road/interchange construction for access from Manning Drive. A preliminary cost estimate for these initial components could exceed $100 million.

Required drainage infrastructure includes the construction of a stormwater trunk that extends from the Edmonton Energy and Technology Park through Horse Hill to the North Saskatchewan River. A similar storm trunk is also needed to service on-going and future development in Horse Hill.

To serve the future needs of the Edmonton Energy and Technology Park, both of these storm trunks need to be oversized. At this time, only the first section, from the North Saskatchewan River into the Horse Hill Stage 1 development, is funded in the current capital cycle (2015-18). The remainder of the storm trunk through Horse Hill and into the Edmonton Energy and Technology Park is presently unfunded.

Road infrastructure is also key to improving access to the Edmonton Energy and Technology Park. Bounded by Anthony Henday to the south, Manning Drive to the east, Highway 37 to the north, and the Canadian Forces Base to the west, an important entry point into the area is Manning Drive. Construction of a future interchange at Manning Drive and Meridian Street and/or the improvement of the Manning Drive and 195 Avenue intersection will be required as development progresses.

There is currently an existing interchange along Anthony Henday at 66 Street, which provides access into the Edmonton Energy and Technology Park from the south, and a number of at-grade unsignalized intersections that provide entry from Highway 37 as well as Manning Drive, which, at present, are adequately serving the area.

Although City investment in stormwater and roadway projects in the area would likely help spur activity and/or potentially reduce overall development costs, this work is not required to fill a pressing need, as development in the area is just beginning and is anticipated to occur over the next 30 to 50 years. The New Building Canada Funding is therefore better utilized for more immediate priorities, such as the grade separation projects recommended in the report.