

NO: R050

COUNCIL DATE: March 7, 2016

REGULAR COUNCIL

TO: Mayor & Council **DATE: March 3, 2016**

FROM: General Manager, Engineering **FILE: 0430-01**
General Manager, Planning & Development
General Manager, Parks, Recreation & Culture
General Manager, Finance & Technology

SUBJECT: Infrastructure Projects and Federal Funding

RECOMMENDATION

The Engineering Department, the Planning & Development Department, the Parks, Recreation & Culture Department, and the Finance & Technology Department recommend that:

1. Endorse the list of projects as documented in Appendix “I” attached to this report as priority projects to be prioritized further once the Federal government announces guidelines and details on the new Federal infrastructure funding; and
2. Confirm that Light Rail Transit (LRT) remains the top priority infrastructure project for the City of Surrey.

INTENT

The purpose of this report is to provide information regarding updated commitments from the Federal government on infrastructure funding programs, and a list of the City’s “shelf ready” infrastructure projects which demonstrates the City’s strong interest and commitment to infrastructure investment in our community.

BACKGROUND

As part of the 2015 Election Campaign, the Liberal Government made commitments to infrastructure investment and transparency under the New Building Canada Fund. The Liberal Government’s focus was aimed at providing significant, separate investments in public transit, social infrastructure and green infrastructure to enable the New Building Canada Fund to make greater investments in Canada’s roads, bridges, transportation corridors, ports and border gateways, helping Canada’s manufacturers get their goods to market. Their commitment included making the Build Canada Fund more transparent by providing clearer project criteria, alongside faster approval processes.

Since being elected, the Federal Minister of Infrastructure and Communities has continued to emphasize the Federal government's commitments in regards to infrastructure investments, focusing on those shovel-ready projects that meet the Liberal Government's objectives of growing the economy, creating jobs and making the country more sustainable. Shovel-ready projects were identified as those which a municipality has done all the relevant studies, public consultation and planning – projects which would qualify for financial help from the Federal government.

The Federal Minister of Infrastructure and Communities, Honourable Amarjeet Sohi, was recently at the City of Surrey and in his briefing he provided more information on the government's vision for infrastructure investment – \$60 billion of new investment over the next 10 years, including an additional \$10 billion over the next two years. The \$60 billion is to be invested equally in three areas: \$20 billion in public transit, \$20 billion in green infrastructure and \$20 billion in social infrastructure.

A general description of the three infrastructure areas and applicable projects is as follows:

- **Public Transit:**

With major cities dealing with major gridlocks there is a pressing need to have access to affordable, reliable and efficient public transit for a faster movement of people and goods, as well as a goal for reduced greenhouse gas emissions. The Liberal Government has made commitments to invest in the capital for long-term strategic transit initiatives that include both new public transit facilities and the state of good repair of existing transit facilities. Projects such as Surrey's Light Rail Transit (LRT) have been specifically identified as those suitable for Federal funding.

- **Green Infrastructure:**

Green infrastructure includes projects such as local water and wastewater facilities, clean energy, solid waste management, and climate resilient infrastructure such as improved storm water systems and building of additional dams and dikes to prevent flooding.

- **Social Infrastructure:**

Investment in social infrastructure is intended to aid in overcoming the challenges that the lack of affordable housing has on our economy and our communities. Projects under the area of social infrastructure have been identified as affordable housing, social housing, seniors' facilities, early learning and child care, and cultural or recreational infrastructure. These projects include the construction of new housing units as well as the refurbishment of existing facilities.

DISCUSSION

The City of Surrey has identified the immediate need for \$3.7 billion in infrastructure improvements to service our existing residents and businesses, and in order to sustainably support the fastest-growing city in British Columbia and one of the fastest-growing in Canada.

It is anticipated in Spring 2016, the Federal government will unveil more details on the New Build Canada Plan including application process, scheduling and funding timelines. Staff expect that those proponents which are the most aggressive and have done the most preparatory work in planning and public consultation, including due diligence and official support from Council, will have the greatest chance of success for securing Federal funding.

To enhance the potential for Surrey to obtain funding, staff have identified \$3.7 billion in high priority, shovel-ready projects for the City, as documented on the list attached as Appendix "I", which meet one of the three funding program areas: Public Transit, Green Infrastructure and Social Infrastructure.

A summary some of the highlighted City of Surrey projects is provided below, under each funding area category, and a complete list of the City of Surrey's identified projects is provided in Appendix "I", including a description of the project, department lead, estimated capital cost and project status.

Public Transit

TransLink and the City of Surrey have undertaken extensive planning work to develop plan options for Rapid Transit in Surrey. The City of Surrey's population will grow by 50% by 2041, from 500,000 today to approximately 750,000. Rapid Transit is critical to ensure the City is able to shape this growth to create liveable, sustainable communities around rapid transit stations and accommodate complementary economic growth.

A \$2.6 billion Light Rail Transit (LRT) network is planned to link communities South of the Fraser including 27 kilometres of LRT that would link the communities of City Centre, Guildford, Newton, Cloverdale and the neighbouring municipalities of the City of Langley and Township of Langley.

LRT is a cost effective, high quality and flexible form of rapid transit that businesses and residents in Surrey support. This project will best achieve local and regional goals for land use shaping and mobility now and into the future, and will encourage increased transit use. Early implementation will enable the biggest impact in relation to shaping the on-going growth in Surrey.

Green Infrastructure

Green infrastructure projects have been identified as those which promote improvements to water and wastewater facilities, solid waste and flood protection/mitigation measures.

The City has identified a number of capital projects which are aligned with this funding area, including new capital construction to service development within the community while supporting energy conservation, sustainability and climate change initiatives, as well as state of good repair projects to provide wastewater facility improvements to aging infrastructure. A few of the identified City of Surrey green infrastructure projects are described below:

- Fraser River and Coastal Dyke Upgrades:
The City of Surrey is bordered by the Fraser River to the north and the coastal region to the southwest. Dykes were originally constructed in the early 1900's to provide flood protection, as well as irrigation capability to the vast inland agricultural farms within the Serpentine and Nicomekl Rivers. To address coastal flood protection from climate change and sea level rise, combined with the need for seismic modifications to withstand most earthquakes, nearly \$400 million of upgrades will be required for the initial phases of the improvements to the dyke systems around the City, namely:
 - i. \$150 million for Fraser River dyke upgrades;
 - ii. \$150 million for dyke improvements within Mud Bay;
 - iii. \$75 million for dyke improvements at Crescent Beach; and
 - iv. \$25 million replacement of the Serpentine and Nicomekl Sea Dams.

- West Village District Energy Plant:
Surrey is advancing a hot water district energy (DE) system in its rapidly growing City Centre. This system will facilitate a transition from fossil fuels used to generate heat and hot water for buildings to renewable low-carbon energy sources while increasing resilience to energy price escalation. Surrey's City Centre DE System commenced operation in late 2014 and is providing hot water DE to new buildings in the City Centre area. By 2045, the integrated system may connect more than 25 million square feet of new development in addition to existing buildings such as a regional hospital and various schools. To provide the need for cleaner, green energy solutions and service development, the City will be constructing a \$17 million energy plant at the West Village Park in City Centre.

- Bridgeview Vacuum Sewer Replacement Phase 3 and 4:
The Bridgeview area of Surrey is serviced by an aging vacuum sanitary sewer system that is approaching the end of its service life, and has insufficient capacity and reliability to support redevelopment in the area. Phase 3 and 4 are the final phasing of replacement of the vacuum sewer system in East Bridgeview with a more reliable sanitary sewer system that would also remove servicing constraints for the development community in the benefitting area. The project consists of constructing a new sanitary pump station, 5 kilometres of gravity sewers low pressure sewers to service residential and industrial properties. The estimated construction cost is \$15 million.

- LED Streetlight Replacement:
Since the early 1970's, the City has installed over 28,000 high pressure sodium (HPS) roadway lighting fixtures. LED roadway lighting fixtures have been readily available for the past 10 years, and recent changes to LED technology have resulted in the ability to direct retrofit HPS street lights with LED fixtures without pole modifications; the LED lights will outperform existing HPS fixtures.

LED roadway lighting offers superior light quality, lower maintenance requirements, increased life expectancy, greener infrastructure through substantial power savings and favourable public opinion when compared to existing HPS lighting. The City would like to complete a \$11 million City-wide street light upgrade program to LED fixtures.

Social Infrastructure

Social infrastructure projects have been identified as those projects which include the construction of new affordable housing, cultural and recreational facilities, as well as the construction of refurbishment projects to improve the livability of existing facilities.

With our rapidly growing population, the City has identified a number of cultural and recreational facilities for the community.

- Spectator Sports Facility and North Surrey Arena:
The City is interested in developing a Spectator Sports facility that would have economic development benefits, entertainment and sport development opportunities, social, cultural, and recreational benefits to our community. The proposed \$90 million Spectator Facility would serve as a community hub that promotes economic development, with recreational facilities, dry floor summer uses, a welcoming lobby and overall spectator services. In conjunction with the Spectator Facility, the City would be replacing, and relocating, the aging North Surrey Arena with a \$45 million two rink community ice complex that could facilitate ice hockey, sledge hockey, figure skating, public skating and skating lessons.
- City Centre and South Surrey Performing Arts Centre:
The City desires to build two new Performing Arts Centres, one in City Centre and one in South Surrey, that reflect the expectations of the City's growing population and provide a new opportunity for community events and world class performances in Surrey. The \$150 million City Centre facility would include a 1,200 seat flexible theatre and a 250 seat studio theatre, which would transform the area into an energetic hub of entertainment and cultural activity. The \$35 million South Surrey Visual and Performing Arts facility will be a combined contemporary artist run exhibition space and a performing arts space accommodating approximately 300 to 350 seats and rehearsal hall.
- East Clayton Recreation, Arts and Library Centre:
Construction of a new \$40 million Recreation Centre is needed to address the needs of the new community of East Clayton within the Cloverdale area and the projected growth in West Clayton. A new facility including a large gymnasium, fitness facilities and multi-purpose spaces, arts amenities and library services will allow a broad range of recreation and cultural programming for all ages.
- Surrey Museum Expansion:
The \$10 million Surrey Museum expansion includes public service and collections preservation spaces that fulfill the vision of the Museum, adopted through extensive public planning in 1999. The expansion will include critical functional space to the 2005 Museum building for galleries to host national travelling exhibitions and to engage families and children in hands-on experiential learning.

- Newton Fitness Addition and Roof Replacement:
A significantly expanded fitness facility and roof replacement will be constructed at the Newton Recreation Centre/Wave Pool to better meet the demands of the continuing growth in the Newton area of Surrey. The proposed \$7 million facility expansion will integrate the goals of the Newton Town Centre Plan by supporting active living and healthy community.

SUSTAINABILITY CONSIDERATIONS

Participation in the new Federal government funding programs plan will assist in achieving the objectives of the City's Sustainability Charter; more particularly, the following action items:

- EC1: Corporate Economic Sustainability; and
- EC3: Sustainable Infrastructure Maintenance and Replacement.

CONCLUSION

Based on the above discussion and to ensure the City is prepared for, and in position to secure, Federal government funding contributions for Surrey capital projects, it is recommended that Council:

- Endorse the list of projects as documented in Appendix "I" attached to this report as priority projects to be assessed and prioritized further once the Federal government announces guidelines for infrastructure funding; and
- Approve that Light Rail Transit (LRT) remain the top priority infrastructure project for the City of Surrey.

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FS/SN/clr

Appendix "I" - Priority Capital Projects

LIST OF CITY OF SURREY INFRASTRUCTURE PROJECTS

Project	Cost	Department	New or State of Good Repair	Fund			Size			Description
				Public Transit	Green Infrastructure	Social Infrastructure	Small <\$5 M	Medium \$5-50 M	Large >\$50 M	
Light Rail Rapid Transit	\$2,600,000,000	Engineering	N	X					X	LRT along 104 Avenue, King George Boulevard and Fraser Highway
Dyke Improvements – Fraser River	\$150,000,000	Engineering	S		X				X	To address Impacts of Climate Change and Seismic Vulnerability
Dyke Improvements – Mud Bay	\$150,000,000	Engineering	S		X				X	To address Impacts of Climate Change and Seismic Vulnerability
Dyke Improvements – Crescent Beach	\$75,000,000	Engineering	S		X				X	To address Impacts of Climate Change and Seismic Vulnerability
New Interchange at Highway 99 and 152 St	\$32,000,000	Engineering	N		X			X		Replacement of existing two lane overpass with six lane overpass and construction of four new on-off ramps
Serpentine River and Nicomekl River Sea Dam Replacements	\$25,000,000	Engineering	N		X			X		The new design will be seismically stable and have an allowance for future sea level rise scenarios and coastal protection requirements.
128 Street Widening – 104 Ave to 110 Ave	\$24,000,000	Engineering	N		X			X		Construction of new 4 lane arterial connection and widening of existing two lane section to arterial 4-lane standard
184 Street Roberts Bank Rail Corridor Overpass	\$22,000,000	Engineering	N		X			X		Construction of two lane overpass of Robers Bank Rail Corridor for Railway safety improvements.
Extensive sidewalk and pavement repair program to replace aging infrastructure	\$20,000,000	Engineering	S		X			X		Replacement of existing asphalt sidewalks with new concrete sidewalks and accelerateion of Arterial, Collector and Local road repaving programs to eliminate backlog
West Village District Energy Plant	\$17,000,000	Engineering	N		X			X		Development of a West Village Park which will contain a District Energy Plant and DE piping to service the City Centre area.
168 Street Roberts Bank Rail Corridor Overpass	\$17,000,000	Engineering	N		X			X		Construction of two lane overpass of Robers Bank Rail Corridor for Railway safety improvements.
South Surrey Operations Centre	\$16,000,000	Engineering	N		X			X		New South Surrey Operations facility to replace the one that was sold in 2005 for Grandview's development
Bridgeview Vacuum Sewer Replacement Phase 3/4	\$15,000,000	Engineering	S		X			X		Replacement of aging vacuum sanitary sewer, which is over capacity, serving 1,000 properties and will boost development in the industrial corridor
Lowland Drainage Pump Station Upgrades (3 stations)	\$11,000,000	Engineering	N		X			X		Construction of 5 low land pump stations to provide ardsa drainage servicing improvements to improve agriculture / crop production
LED Replacement	\$11,000,000	Engineering	S		X			X		Replacement of existing Citywide HPS streetlights with LED
Interchange Improvements at Highway 99 and 32 Avenue	\$8,000,000	Engineering	N		X			X		Addition of an on-ramp / off-ramp and a 24 Avenue highway interchange
64 Ave Widening – Fraser Hwy to 196 Street	\$6,000,000	Engineering	N		X			X		Widening to arterial 4-lane standard for 1200m.
80 Ave Widening – 128 St to 132 St	\$5,000,000	Engineering	N		X		X			Widening to arterial 4-lane standard for 800m with railway safety improvements.
Fergus Creek bridge and habitat	\$550,000	Parks, Recreation & Culture			X		X			Rehabilitation
Godwin Forest Park	\$460,000	Parks, Recreation & Culture			X		X			Rehabilitation
Colebrook Park Trails	\$300,000	Parks, Recreation & Culture			X		X			New

Project	Cost	Department	New or State of Good Repair	Fund			Size			Description
				Public Transit	Green Infrastructure	Social Infrastructure	Small <\$5 M	Medium \$5-50 M	Large >\$50 M	
City Centre Performing Arts Centre	\$150,000,000	Parks, Recreation & Culture				X			X	New Performing Arts Centre including a 1,600 seat flexible theatre and a 250 seat studio theatre
Spectator Arena	\$90,000,000	Parks, Recreation & Culture				X			X	Partnership project, will only proceed to design if partners are involved.
North Surrey Arenas Replacement	\$45,000,000	Planning & Development	N			X		X		Replacement of older facilities and new addition. Part of urban renewal of an area of Surrey to generate increased development activity in that area.
Clayton Rec. Centre / Library / Arts complex	\$40,000,000	Parks, Recreation & Culture				X		X		New multi purpose facility
South Surrey Performing Arts Centre	\$35,000,000	Parks, Recreation & Culture				X			X	Proposed facility for a combined contemporary artist –run exhibition space and performing arts space accommodating 300 to 350 seats and rehearsal hall.
Greenways and Multi-Use Path Bridges	\$20,000,000	Engineering Department	N			X		X		Construction of 5 new pedestrian cyclist bridges and 5km of Multi Use Pathway connections
Old City Hall Renovation for RCMP Expansion	\$11,000,000	Planning & Development	S			X	X			Renovation and repurpose of existing building to house additional contingent of municipal RCMP force
Surrey Museum Expansion	\$10,000,000	Planning & Development	N			X	X			Addition to existing museum
Newton Wave Pool Expansion and roof replacement (under construction)	\$7,000,000	Planning & Development	S/N			X		X		Replace existing and New Addition
Central Training Facility at Hall 9	\$6,000,000	Fire				X	X			New
Newton Urban Park	\$5,000,000	Parks, Recreation & Culture				X	X			New
Fleetwood Recreation Centre and Library rehabilitation project	\$3,200,000	Planning & Development	S			X	X			Building envelope rehabilitation
Newton Athletic Park Master Plan	\$2,000,000	Parks, Recreation & Culture				X	X			New
Artificial Turf Fields	\$2,000,000	Parks, Recreation & Culture				X	X			New
SSAP Rugby Fieldhouse	\$1,800,000	Parks, Recreation & Culture				X	X			New
South Surrey Water Park	\$1,000,000	Parks, Recreation & Culture				X	X			Old, inefficient waterpark
Green Timbers Cape Cod Renos	\$600,000	Parks, Recreation & Culture				X	X			Poor repair
Holland Park Plaza	\$450,000	Parks, Recreation & Culture				X	X			New
City Centre Arts Space Renovation	\$300,000	Planning & Development	S			X	X			Renovate and repurpose existing building.
Renovation of Fire Hall #6 to accommodate newer and larger fire apparatus	\$75,000	Fire				X	X			Currently in state of good repair other than restricted height & width for modern fire apparatus.
Refurbish 4 th floor space at City Centre Library; renovate room 306 (lease with SFU expired)	\$50,000	Libraries				X	X			Renovation / re-purpose of existing space – good repair