

City of Saskatoon

Business Case to PPP Canada

North Commuter Parkway Project and the Traffic Bridge Replacement Project

December 2013

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Important Notice

This report has been prepared by the City of Saskatoon (the “City”) for its own use and in connection with its application to PPP Canada for funding. It is not intended to be used nor relied upon by other third parties. The results of this report were intended to assist the City and PPP Canada in making decisions with respect to the Project described in this report. This version of the report has been prepared for public circulation and may not represent all of the business plan information developed by the City or communicated to PPP Canada.

Any reader is cautioned that there is no assurance or warranty, expressed or implied, regarding the accuracy and reliability of any information contained in this report. The underlying assumptions and inputs may change subsequent to this report date and changes may have an impact on the results. Since these assumptions reflect anticipated future events, actual results may vary from the information presented and these variations may be material.

1 Executive Summary

The City of Saskatoon has been provided with a mandate by City Council to proceed with plans to replace the existing Traffic Bridge (the Traffic Bridge Replacement) and to build a new bridge across the South Saskatchewan River as well as associated roadways (the North Commuter Parkway) to link the Marquis Industrial Area in the northwest with University Heights in the eastern and northeastern portions of the City. Both projects have been bundled into one package for consideration of delivery through a public private partnership (“PPP” or “P3”).

Saskatoon was reported as the fastest growing city in Canada and is expected to continue to grow rapidly. The project is needed to help alleviate major traffic congestion, improve travel times and reduce fuel consumption for commuters and public transit, thereby reducing greenhouse gas emissions, improving business productivity and enhancing the quality of life for the City’s citizens.

The City has prepared and submitted an application for the P3 Canada Fund, seeking approval by PPP Canada to fund 25% of the project’s eligible direct costs. Meanwhile, City Council has identified this project as a priority and has shown support to delivering the project using a P3 model. Related funding plans are already in place to cover both the planning and procurement costs and the source of City funding during construction and operations by the private sector partner has been clearly identified. On October 7, 2013, PPP Canada advised the City that the application had been pre-screened as an appropriate project for consideration, and, as a next step to support the application, the City was required to submit a business case for review by PPP Canada.

KPMG has been retained by the City and prepared the first draft of the business case (following the PPP Canada guideline), based on the assumption that the entire project will be built during 2.3 years and bundled together under one P3 contract. The draft business case defined the project scope, identified the project need, assessed a range of alternative procurement methods, and ultimately made a recommendation on the optimal method of procurement of the project, along with a credible procurement structure and a realistic implementation plan.

The business case for the proposed procurement process includes the results from numerous analytical reviews, from the qualitative market sounding, jurisdictional scan, procurement objective and constraints analysis, to the quantitative VFM assessment and affordability analysis.

A number of delivery models were considered that involve various degrees of private sector responsibility and transfer of risk, including the City’s traditional Design-Bid-Build (DBB) delivery model. The suitability of a P3 delivery model was initially assessed by Brookfield Financial who concluded that a P3 model delivers the highest tangible value to the City. This conclusion was validated by KPMG through a high-level P3 screening assessment that determined that the project satisfies a number of criteria that supports a P3 delivery and market sounding consultations that indicated significant private sector interest towards the size and scope of the project.

Based on the project’s objectives and constraints, as well as precedent P3 transportation projects and market sounding results, it was determined that the Design-Build-Finance-Operate-Maintain (DBFOM) delivery model should be further assessed and other alternative delivery models should not be further considered as they do not adequately meet the requirements of the project. A detailed qualitative assessment framework was developed to assess the DBFOM and traditional DBB delivery models based on a weighted scoring methodology. The assessment results demonstrate that the project is well-suited for P3 delivery using a DBFOM model and is more advantageous than the traditional DBB model.

To quantitatively assess the DBFOM delivery model, KPMG conducted a project risk assessment and developed a comprehensive financial model to assess Value for Money and affordability. The results indicated that a DBFOM delivery model is estimated to generate Value for Money of approximately \$26.6 million (net present value). The business case confirms that a DBFOM delivery model is the optimal approach for the project.

The first draft of business case was submitted to PPP Canada in December 2013, with the objectives of receiving feedback and ensuring it meets PPP Canada's needs. Based on the submitted business case, the City further engaged in discussion with PPP Canada, around the completeness and adequacy of the business case.

Based on the latest cost estimates developed by CIMA+, Stantec and BTY Group as well as other assumptions made in the business case, the contribution sought by the City from PPP Canada would be in the order of \$60.8 million. With the funding support from PPP Canada and through the DBFOM delivery method, the City is confident that it will realize significant Value for Money while achieving other social and economic benefits in a timely and efficient manner.

KPMG believes that there is significant interest in this project due to a limited PPP project pipeline in the Canadian marketplace and an attractive project size and scope to the private sector. To maximize competitive pricing tension and to minimize construction inflation uncertainty, it is important to bring the project to market as soon as possible.

The City is looking forward to continuously working with PPP Canada on the Traffic Bridge Replacement and the North Commuter Parkway and believes that this project will build on the success of the P3 Civic Operations Centre to continue to deliver other major infrastructure projects in Saskatoon in the future.

2 Project Description and Investment Decision

2.1 Strategic Context

Saskatoon is Saskatchewan's largest city with an estimated population in 2013 of 246,300 (284,000 if the census metropolitan area is included). Saskatoon's population has increased approximately 24,000 in just the past two years; it has been reported by Statistics Canada as the fastest growing city in the country over the last three years. In addition, Saskatoon's economic growth is forecast to reach 5.2% in 2013, up from 4.1% in 2012.

This growth is expected to continue with the sustained strength of the agriculture, potash and energy sectors. The Conference Board of Canada recently said, *"a very active labour market in Saskatoon will continue to attract new migrants, bolstering population growth and housing starts"* for the foreseeable future.

The city has the potential to more than double its population in the next 40 years. The prospect of significant economic, population and physical growth in the coming decades positions Saskatoon at a pivotal point in its history. To effectively plan for this growth, the City of Saskatoon recently undertook the development of a formal strategic plan for 2013-2023. The visioning process began in May 2010 and involved the engagement of around 10,000 citizens in discussing opportunities and challenges for Saskatoon as it grows over the next 50 to 70 years. This community engagement initiative is called *Saskatoon Speaks*. Refer to **Appendix A** for the *Community Vision: Saskatoon Speaks (June 2011)*.

Despite the economic downturn in 2008-2009, the city has posted a decade of strong economic growth. Saskatoon has consistently had higher employment and lower unemployment rates than the national average. Almost every sector in the city's diverse economy has enjoyed strong gains in recent years, and the local housing market has rebounded faster than those in other Canadian cities. Consistent with strong economic growth and increased employment, the median income and disposable income are rising. To remain economically strong, a few priorities were identified during Saskatoon Speaks identified below.

Saskatoon is economically strong. We need to continue to diversify the economy, promote innovation, remain competitive, attract investment globally and ensure everyone has opportunities to share in the prosperity.

Attracting investment relies on promoting the city as a great place to live and a competitive place for business. The city's major strengths are a large industrial base related to the resource sector and major research centres. However, it is not only Saskatoon's larger corporations and institutions that are valued by citizens, but also the smaller, local businesses and the spirit of creative entrepreneurship that is rooted in the prairie pioneering tradition.

The resulting Community Vision was used to inform the development of City Council's Corporate Vision to describe Saskatoon 20 to 30 years from now.

Our Vision

In 2030, Saskatoon is a world class city with a proud history of self-reliance, innovation, stewardship and cultural diversity. Saskatoon is known globally as a sustainable city loved for its community spirit, robust economy, cultural experiences, environmental health, safety and physical beauty. All citizens enjoy a range of opportunities for living, working, learning and playing. Saskatoon continues to grow and prosper, working with its partners and neighbours for the benefit of all.

City of Saskatoon Strategic Plan 2013-2023

The Corporate Vision was the basis for the City's Strategic Plan to prepare the City for a population of 500,000. The City's Projected Growth Concept Plan identifies and anticipates future growth areas in the west, northeast and southeast corners of the city, effectively rounding out development on both sides of the South Saskatchewan River. To effectively serve this growth, the Strategic Plan 2013-2023 identified a number of success drivers to guide policy decisions and the City. One of the City's seven success drivers is: "economic diversity and prosperity, of which transportation is a key strategy."

Strategic investments in public infrastructure are integral to economic growth and prosperity. According to recent research conducted by the Canada West Foundation: *"Canada's governments should not hesitate to maintain a high level of investment in infrastructure. Sustained and strategic investment in public infrastructure is essential to Canada's long-term economic growth and is critical to the quality of life."*

The City of Saskatoon has been aiming to meet these goals. From 2007 to 2011, the City has partnered with the federal and provincial governments to invest over \$600 million in strategic infrastructure projects that are now providing numerous benefits to the City's citizens and businesses.

These investments have contributed to the jobs and significant growth in recent years of the Saskatoon economy, as illustrated by the following statistics:

- In February 2013, Statistics Canada reported that Saskatoon has been the fastest growing city in Canada for three consecutive years. Statistics Canada also reported that no other city has registered such strong annual growth in more than 15 years.
- Also in February 2013, the Conference Board of Canada declared: *"A thriving job market is attracting newcomers in droves to Saskatoon, which helps everything in the economy from housing starts to retail trade. The Saskatoon CMA's real gross domestic product (GDP) is expected to grow by 3.7 per cent this year, number one in the country, and is expected to have the strongest growth rate over the 2014-2017 period as well."*
- Further to these trends, the Saskatoon Chamber of Commerce recently reported that Saskatoon employers have created 6,500 net new jobs in the first half of 2013.

To continue to support this strong economic growth, the City needs to bridge the gaps in its transportation infrastructure. Bridging these gaps will help to ensure that businesses can create more jobs, and that our City can continue to grow and support the citizens and community to build on this new-found prosperity.

2.2 Project Drivers

The City has identified a number of drivers for undertaking the proposed project.

2.2.1 Economic Development

Saskatoon's main economic drivers are described below:

Agriculture. Saskatchewan grows half of Canada's major export crops: wheat, oats, barley, rye, flaxseed and canola. Saskatoon is at the heart of this market, providing a variety of services and products to the agricultural sector. Value added food processing is one of the fastest growing industries in Saskatoon, which is considered the agriculture biotechnology capital of Canada.

Mining. Mining is also an important part of Canada's economy. Nearly two-thirds of the world's recoverable potash reserves are located near Saskatoon, and the Saskatoon region is the world's largest exporter of uranium. Currently, the city has two new potash mines under development.

Energy Resources. Saskatchewan is a significant producer of crude oil, natural gas, and coal and electrical energy, with about 10% of Canada's reserves for oil and 25% of its gas reserves. Saskatchewan is the second largest oil producer in Canada after Alberta, accounting for more than 20% of the total Canadian oil production. There are an estimated 25 billion barrels of heavy oil in-place in the west-central region of the province, which represents the greatest potential for future development. About 20% of Saskatchewan's production is currently used within the province, 10% in the rest of Canada, and about 70% is exported to the US. Saskatchewan natural gas producers account for more than 6.5 billion cubic metres of production annually.

Scientific Research. The University of Saskatchewan is located in Saskatoon. The university has an institute called the Canadian Light Source (CLS) which opened in October 2005 and operates a synchrotron that accelerates electrons to nearly the speed of light. The CLS fosters cutting-edge innovation, attracting top researchers and students, and has established Canada as a leader in synchrotron science.

Saskatoon is also a leading centre for agricultural research, home to a significant group of research colleges (e.g., College of Agriculture and Bioresources) and organizations (e.g., Agriculture and Agri-Food Canada) whose focus is on agriculture, the environment, biotechnology and the processing of agricultural products.

Further development of these economic sectors requires the development of an effective transportation system for the movement of people, services and goods.

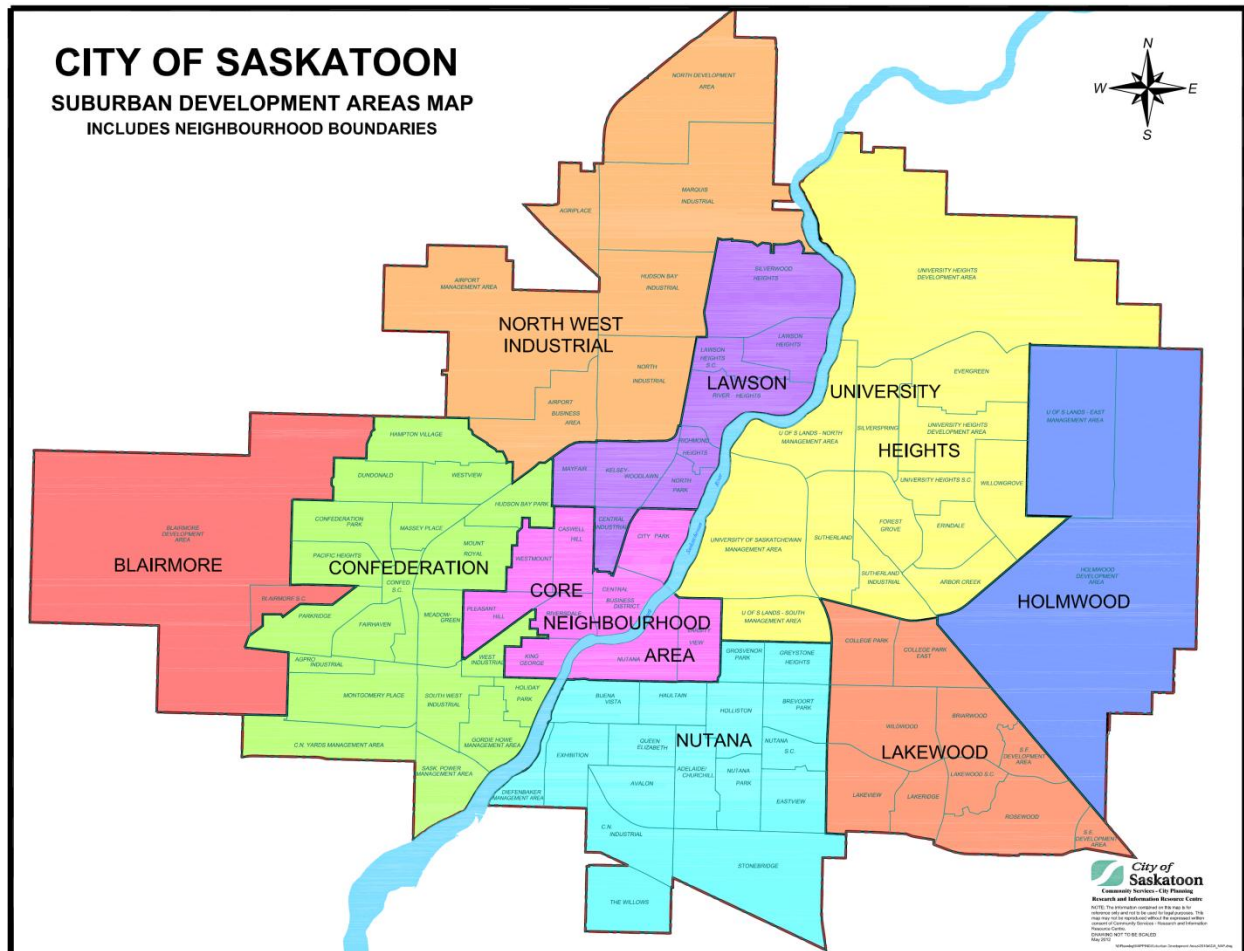
This project will also contribute to job creation and job growth which are primary focuses for the federal government. It is estimated that this bundled project has the potential to create at least 100 to 150 new construction and engineering jobs over a three-year period. All of these new jobs contribute income tax and payroll tax revenue to the federal and provincial governments.

2.2.2 Surrounding Development

City Council endorsed the Integrated Growth Plan (IGP) in 2012 (**Appendix B**). The IGP elaborates on how the City will achieve the goals of 'Sustainable Growth' and 'Moving Around' cited in the Strategic Plan. The IGP is a new way of growing the city and it involves a re-orientation of community planning and building processes. The IGP supports balancing outward growth with strong infill development in locations that support higher densities and access to transit.

The City has large-scale plans to develop two Suburban Development Areas (SDA's) made up of Saskatoon's north-east and east neighbourhoods, the University Heights Sector and Holmwood East Sector, respectively. These sectors are currently unserviced land awaiting future development, which is scheduled to begin in 2014. As part of the City's June 2000 Future Growth of Saskatoon Study, both sectors were identified as a desirable location for residential growth. The aim for both of these plans is to develop interconnected, human-scale neighbourhoods featuring a variety of housing forms and a mixture of land uses, along with a high-quality employment area and vibrant mixed-use Suburban Centre. Exhibit 1 shows the City's development areas map.

Exhibit 1: Saskatoon Development Areas



The University Heights SDA is made up of Saskatoon's north east neighbourhoods, the University of Saskatchewan lands, Agriculture and Agri-food Canada research lands, and future urban development lands. At full build-out of the SDA, the total estimated number of additional dwelling units is 12,308, the estimated additional population is 28,131 people, and the total estimated employment is 8,256 jobs.

The East Sector (Holmwood) currently has land sufficient for up to nine future neighbourhoods and approximately 73,600 people within its boundaries. The East Sector ensures the city continues to balance east and west growth, which maintains the downtown as the center of the community. At full build-out of the East Sector, the total estimated number of dwelling units is 32,700, the total estimated population is 73,600 people, and the total estimated employment is 18,500.

The development of these areas is a major factor driving the Project as these new neighbourhoods will need to be supported by an adequate transportation system. A more northern river crossing is required to achieve this since the current northernmost river crossing in Saskatoon is the Circle Drive North Bridge which currently experiences an average of 80,000 vehicles per day, with peaks as high as 90,000 vehicles per day depending on the day of the week and time of year. An adequate transportation system will also attract citizens to the new residential neighbourhoods to ensure the new housing capacity is met.

2.2.3 Fiscal Considerations

The City's Strategic Plan 2013-2023 identifies Asset and Financial Sustainability as a key priority. Within this priority, it has identified two relevant strategies for this Project:

- Smart spending and debt; and
- Funding growth.

The City has determined that a public-private partnership (P3) is the most prudent and financially advantageous approach to funding these transportation projects to support continued growth. As noted later in this business case, the value to the City of a P3 approach is estimated to be approximately \$26.6 million (net present value).

In addition to the financial merits of a P3 approach to the design, construction, financing and management of the Project, the project will also generate new revenues for the City. The continued development of the land to the west and northwest of the North Commuter Parkway is expected to generate significant revenue for the City initially through land sales, development fees and ultimately through a broader property tax base. The Project is a critical enabler of this continued development; without the proposed bridge and parkway, the plans for this development would be severely compromised or, at best, significantly delayed.

2.2.4 Environment

Saskatoon is surrounded by, and serves, prime agricultural and resource-rich lands. The South Saskatchewan River runs through the city, providing habitat for wildlife, open space, recreational facilities and scenic beauty.

Among Saskatonians there is a growing understanding and concern about how their actions impact both the city of the future and the larger world. As the city continues to develop, it has the opportunity to show leadership on environmental issues and enhance its global image as a green city. To address this opportunity, one of the City's strategic goals identified in its Strategic Plan 2013-2023 is Environmental Leadership. This goal aims to preserve and protect the long-term health of the city's urban environment.

Saskatoon's strong economic growth has contributed to increasing traffic congestion, particularly for commuters needing to cross the South Saskatchewan River. While the use of public transit has increased in recent years, Saskatoon remains one of the most car-oriented and car-dependent cities in Canada, with approximately 85% of people driving to work. This dependency is a result of harsh winters that result in fewer opportunities to use alternative modes of travel.

The opening of one additional bridge in the north area of the City will divert considerable traffic from the congested bridges and arterial roads to the south, and the Traffic Bridge will provide an alternate route for crossing the river in the downtown core. The Traffic Bridge will also include pedestrian and bike lanes on both sides of the bridge and connect with the city's network of pedestrian and bicycle paths to support this

environmental priority. With the opening of these two bridges, traffic congestion will be reduced and travel times will be shorter for vehicles and public transit, resulting in reduced greenhouse gas emissions and improved air quality. These benefits are quantified in Table 1 below.

Table 1: Impacts of Reduced Traffic Congestion

	300,000 population	400,000 population
AM peak hour delay reduction	2,641 hours	15,284
PM peak hour delay reduction	4,122 hours	25,571
Fuel savings from idling engines (1.8 L/hr)	12,000 L per day	74,000 L per day
CO₂ emissions reduction from fuel savings	28 tonnes per day	175 tonnes per day

At a population of 300,000, traffic reductions across the City's other river bridges is expected to be reduced by 6% to 27% after completion of the Project as commuters find more optimal commuting routes through the City. At a population of 400,000, traffic volumes across the City's other river bridges are expected to be reduced by 9% to 27%.

2.2.5 Social

One of the City's strategic goals identified in its Strategic Plan 2013-2023 is Quality of Life. The strategic plan emphasizes that culture enriches quality of life, enhances community well-being, and develops the creative economy.

A significant part of the City's culture is embedded in the history of its Traffic Bridge. The heritage value of the Traffic Bridge lies in its status as a prominent feature of Saskatoon's urban landscape and an important community landmark.

In 1905, the Town of Saskatoon proposed to the Villages of Nutana and Riversdale that the three communities amalgamate to form the City of Saskatoon. In 1907, the Traffic Bridge was built at a cost of \$106,000 at the insistence of the people of Nutana, who needed a safe and reliable bridge for vehicles, pedestrians, and freight to cross the river. Construction of the bridge supported Nutana's agreement to join the west side communities of Saskatoon and Riversdale in forming the City of Saskatoon in 1906. The Traffic Bridge was the first vehicle bridge over the South Saskatchewan River within Saskatchewan and Saskatoon's first bridge to carry vehicular traffic. Without this bridge, the City of Saskatoon could not have developed as quickly as it did.

On June 7, 1908, the Traffic Bridge was the site of Saskatoon's only maritime disaster, when the steamship S.S. City of Medicine Hat crashed broadside into one of its concrete piers and sank. The ship wreckage was rediscovered in September 2012 during pier testing being conducted for this Project. The wreckage now resides under several metres of earthen fill and river sands adjacent to the land pier just north of Saskatchewan Crescent on the south side of the river.

The heritage value of the structure also resides in its technology. The bridge was constructed in 1907 from plans provided by the Canadian Bridge Company. It is the oldest surviving steel Parker through-truss bridge in the province and, at the time of construction, it was the longest purely traffic bridge in existence in either Saskatchewan or Alberta. Steel through-trusses made their appearance in Saskatchewan in 1900 and represented a significant engineering advance over earlier timber bridge structures. The structure remains largely unchanged and, except for short periods for rehabilitation, the

bridge has been in continual use by vehicles and pedestrians since its completion in 1907 until its closure in 2010.

The heritage value of the bridge is also connected to the establishment of a scientifically-based, cement-testing laboratory by the provincial government. Prior to the construction of the Traffic Bridge, contractors supplied their own cement, and there were no quality control procedures in place. This testing facility, which was initially established to support the construction of the Traffic Bridge, ensured that only high-quality cement would be used in future provincially-funded projects, including the replacement of piles under steel bridges with concrete piers, and the construction of many public buildings throughout the province.

The Traffic Bridge will continue to be designed as a Parker through-truss bridge to maintain this linkage of the City's present with its past and the pivotal role that Saskatoon's first bridge played in amalgamating Saskatoon, Nutana and Riverdale; as well as the sense of character, authenticity and human scale that the bridge encapsulates for these communities.

2.3 Project Need

As noted previously, Saskatoon was reported as the fastest growing city in Canada and is expected to continue to grow rapidly. The Project is needed to help alleviate major traffic congestion, improve travel times and reduce fuel consumption for commuters and public transit, thereby reducing greenhouse gas emissions, improving business productivity and enhancing the quality of life for the City's citizens.

The City has commissioned the following studies to assess the need for the Project and to study the viability of alternative models for the design, construction, rehabilitation, financing and maintenance of the Project:

- *Traffic Bridge Needs Assessment and Functional Planning Study Final Report, January 2011, Stantec*
- *University Heights Sector Plan, 2013, City of Saskatoon, Planning & Development Branch*
- *East Sector (Holmwood) Plan, City of Saskatoon, Planning & Development Branch*
- *North Commuter Parkway Project Functional Planning Study, 2013, City of Saskatoon, Transportation Branch*

Information from these studies has been used by the City to assess the need for the Project. These studies have played a crucial role in the development of the business case and will be critical to the successful execution of this Project. Below, we present some of the key findings that have been identified in the reports and studies mentioned above.

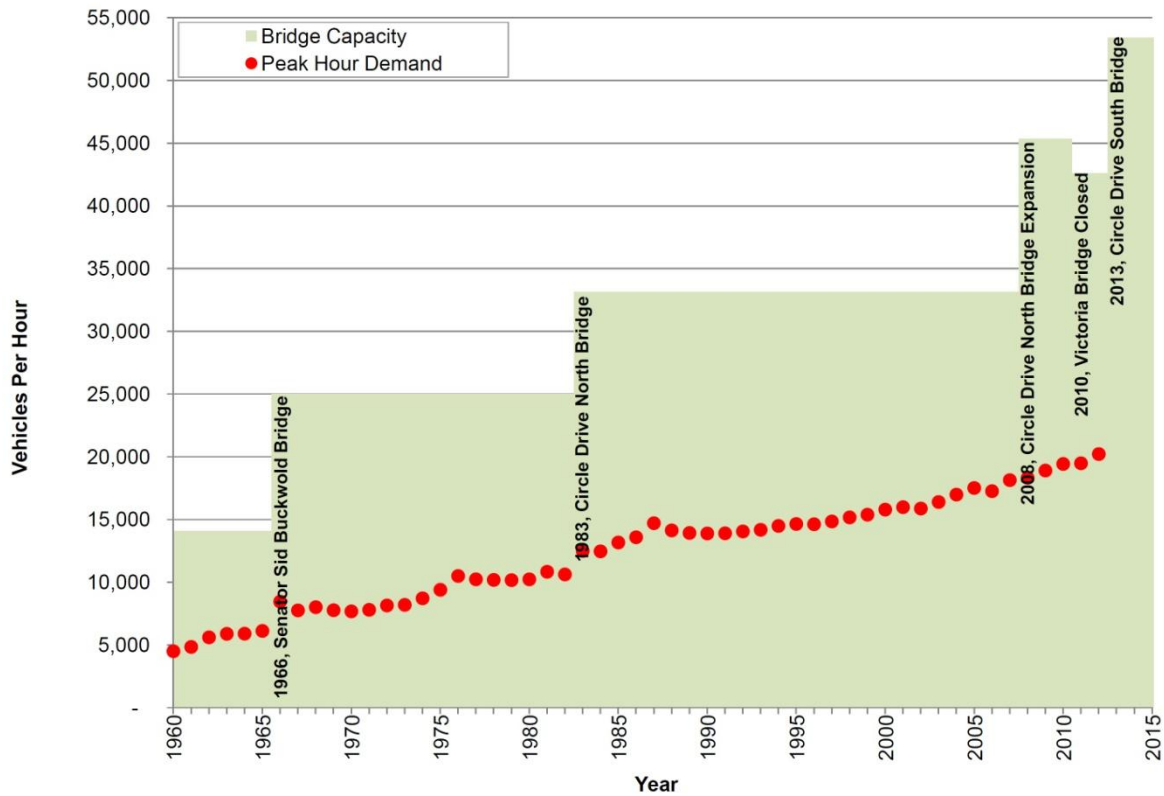
2.3.1 Congestion Relief

As illustrated in Exhibit 2 from the *Traffic Bridge Needs Assessment and Functional Planning Study Final Report (Appendix C)*, new river crossings have historically been built as the crossing demand reached the available capacity of the existing bridges. Furthermore, the exhibit shows that river crossing demand reached the theoretical cumulative capacity of the existing five bridges in 1999, indicating a need for a new river crossing to accommodate travel demand. The closure of the Traffic Bridge in August 2010 removed capacity from the transportation network, putting additional pressure on the other existing river crossings. Although the Circle Drive South project was completed in July 2013, additional capacity is still needed.

The need for both bridges is supported in the estimated average daily traffic volumes expected on opening day:

- Between 14,600 and 21,700 vehicles for the new North Commuter Parkway Bridge.
- Between 8,700 and 10,900 vehicles for the replacement Traffic Bridge.

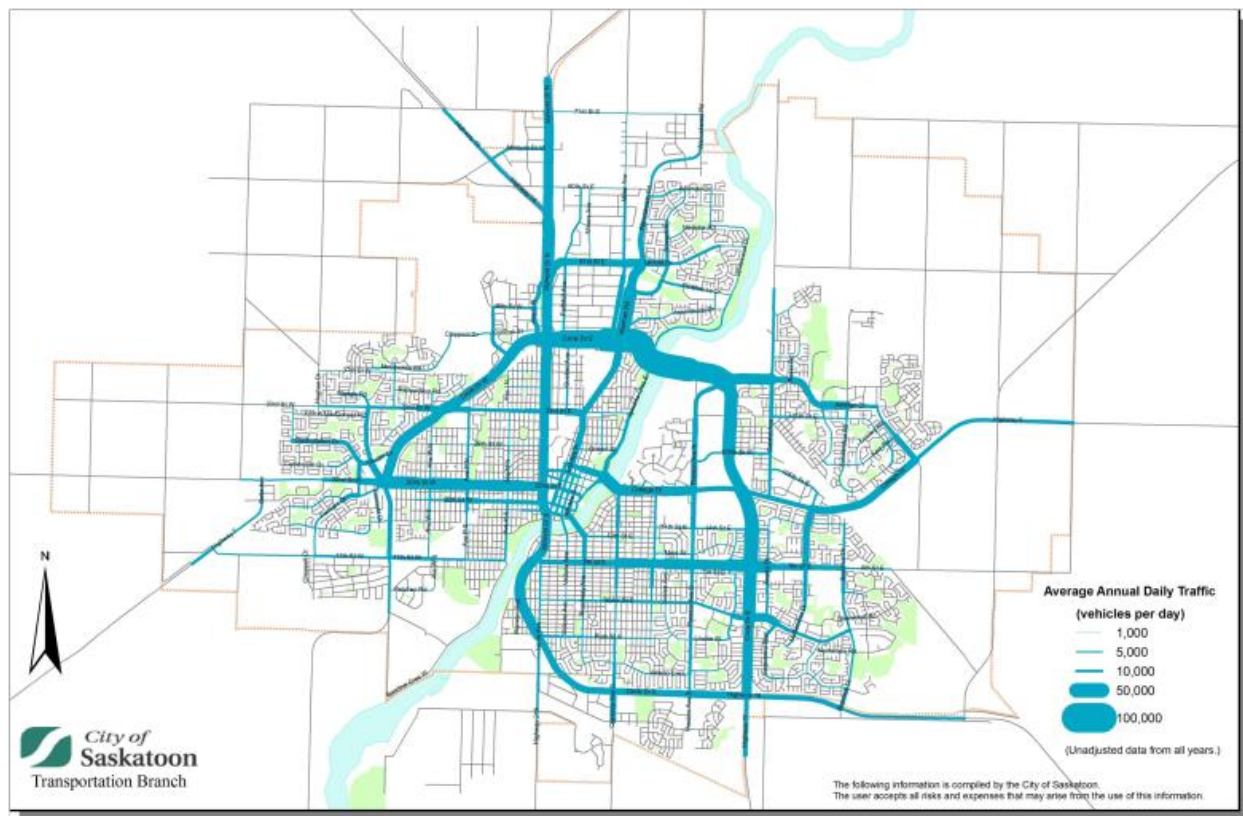
Exhibit 2: Saskatoon River Crossing Peak Hour Capacity & Demand



The *2010 Traffic Characteristics Report* also showed the high concentration of traffic on the Circle Drive North Bridge, as shown in Exhibit 3, the current northernmost river crossing in Saskatoon (the Circle Drive North Bridge is shown in Exhibit 3 as the thick blue line). The Circle Drive North Bridge currently experiences an average of 80,000 vehicles per day, with peaks as high as 90,000 vehicles per day depending on the day of the week and time of year. In addition to the above exhibit, traffic projections show that approximately 30,000 vehicles are expected per day on the Circle Drive South Bridge; at the time of writing this business case report, traffic counts were not yet available for the newly opened Circle Drive South Bridge.

Construction of the proposed bridges will result in reduced trip times for commuters crossing the river at all bridge locations; in transportation planning, travel routes will “sort” based on available crossing capacity as users adjust their routes to optimize their personal travel times through the city.

Exhibit 3: 2010 Traffic Flow Map



Source: Traffic Characteristics Report 2010, City of Saskatoon Transportation Branch

The Project includes the bundling of the North Commuter Parkway Project and the Traffic Bridge Replacement Project described further in Section 2.6. Traffic projections show the North Commuter Parkway and the re-opening of the Traffic Bridge will significantly supplement available capacity for trips between key employment centres and rapidly growing residential developments in east Saskatoon. These bridges will also significantly reduce commuter traffic on the City's other river bridges, thereby reducing trip times for all users crossing the river in Saskatoon. Evaluation of the Project shows significant system-wide benefits through reduced intersection delays, improved travel times, and fuel savings for commuters and public transit and substantially reduced congestion on other corridors. Refer to Section 2.2.4 for quantification of these benefits.

2.3.2 North Commuter Parkway Needs Assessment

The proposed North Commuter Parkway will link the Marquis Industrial Area in the northwest with University Heights in the central east and north east, providing relief to the existing Circle Drive North Bridge. It will provide transportation routes for commuter traffic between east side neighbourhoods and the most active employment area in the City's north end. In addition, the North Commuter Parkway will provide a more direct travel path between the North Industrial Area and the developing neighbourhoods within the University Heights Sector and Holmwood East Sector.

The North Commuter Parkway and associated arterial roadways will function similarly to the existing University and Broadway Bridges. The bridge is not intended to function as a designated truck route; rather, truck routes will remain on Circle Drive and other routes through Saskatoon.

The University Heights Sector is expected to become home to an additional 28,000 people. Based on the rate of growth being experienced in Saskatoon, and that continued economic growth is spurring growth rates even higher, it is expected that the areas of the University Heights SDA adjacent to the North Commuter Parkway will develop within the next 10 to 20 years. In fact, construction of the North Commuter Parkway is anticipated to become a focal point for development in this area of Saskatoon.

Within the transportation model described in the Traffic Characteristics Report, the North Commuter Parkway unloads demand on Circle Drive between Idylwyld Drive and Attridge Drive; however, these improvements in travel time “pull” trips towards the improved corridor, further unloading each river crossing. In general, all existing river crossings are expected to benefit from reduced traffic demand from the completion of the proposed North Commuter Parkway.

Projected average daily traffic on the bridge is 34,500 vehicles, when Saskatoon reaches a population of 300,000. As the population grows to 400,000, the average daily traffic is projected to be between 49,600 and 65,700, depending on the development of a perimeter highway during this period.

2.3.3 Traffic Bridge Replacement Project Needs Assessment

Until its closure in 2010, the Traffic Bridge served as a neighbourhood bridge carrying up to an average of 11,000 vehicles per day. In addition to contributing an additional option and considerable capacity for crossing the South Saskatchewan River in the downtown area, the Traffic Bridge was also a critical by-pass route providing a “release valve” when other nearby bridges were closed or under reduced capacity due to repairs, maintenance or traffic collisions. The Traffic Bridge also provided an important pedestrian and cyclist crossing of the South Saskatchewan River, connecting the neighbourhood of Nutana with Saskatoon’s River Landing and Downtown employment area.

Beginning in the 1980s, the bridge started to show its age and needed to be closed periodically for refurbishment. During a routine annual inspection in 2005, the bridge was found to have major structural defects related to corrosion and section loss of the main truss elements. The bridge was immediately closed to traffic and repair work was planned and performed to upgrade the trusses. In 2006, the City repaired the many critical elements of the bridge to allow it to reopen.

In May 2010, the City of Saskatoon commissioned Stantec Consulting Ltd. and Fast Consulting to conduct a Needs Assessment and Functional Planning Study of the Traffic Bridge (**Appendix C**). This study involved developing options for the future of the Traffic Bridge and its potential to accommodate a variety of pedestrian, cyclist, transit, vehicular and community functions. The scope of work included:

- An assessment of current traffic conditions;
- An assessment of current structural conditions;
- A review of the heritage significance;
- An analysis of future traffic conditions;
- Development of preliminary options; and
- An analysis of the preferred options.

A comprehensive structural inspection and an updated load analysis of the Traffic Bridge were performed in late August 2010. The inspection revealed that the rate of corrosion since the last inspection in 2005 had been higher than anticipated. Several components of the bridge that were not identified as being in poor condition in 2005 were found to be in a very advanced state of corrosion. The condition of some critical elements was so poor that there was no certainty that the bridge would support its own weight

within an acceptable margin of safety. Accordingly, the structural integrity of the bridge was found to be highly questionable, and the bridge was closed immediately to both vehicles and pedestrians.

The unexpected closure of the Traffic Bridge on August 24th 2010, coupled with the reduction in capacity of the Senator Sid Buckwold Bridge due to maintenance, created additional congestion on the nearby bridges reinforced the significance and value of the Traffic Bridge for vehicles, pedestrians, and cyclists.

2.4 Project Options Considered

2.4.1 North Commuter Parkway Assessment of Alternatives

For the North Commuter Parkway, the *North Commuter Parkway Project Functional Planning Study (2013)* identifies the alternatives that were assessed to determine the optimal configuration (refer to **Appendix D**). Four alignments were examined using a travel demand model and a 300,000 population scenario. In this 300,000 population scenario, Circle Drive South and the development of certain surrounding neighbourhoods is complete.

2.4.1.1 Option Analysis

In the functional plan, four north bridge options examined were:

- Pinehouse Drive, 2-lane minor arterial (50 km/hr) bridge
- Lenore Drive, 4-lane major arterial (50 km/hr) bridge
- Marquis Drive, 4-lane major arterial (60 km/hr) bridge
- Perimeter Highway, 4-lane controlled access highway (110 km/hr) bridge

Table 2 shows the impacts outlined in the *North Commuter Parkway Project Functional Planning Study* on the transportation network and return on investment of adding a bridge at each location. The estimated total user delay and fuel savings in the peak hours represents the expected system-wide improvements provided by that connection. This aggregates such things as intersection delay and improved travel times (reduced delay) at a network-scale.

Table 2: Screening at 300,000 Population

Bridge Location	Estimated Total Delay & Fuel Savings (in the Peak Hours)	Initial Cost Estimate	Pay-Back Period (years)	Estimated Average Daily Traffic
Pinehouse Drive, 2-lane minor arterial, 50 km/hr (Central Ave. to Spadina Cres.)	\$14.9M	\$52.6M	3.5	23,200
Lenore Drive, 4-lane arterial, 50 km/hr (Central Ave. to Whiteswan Dr.)	\$20.2M	\$59.6M	3.0	27,800
Marquis Drive, 4-lane arterial, 60 km/hr (Central Ave. to Wanuskewin Rd.)	\$21.9M	\$78.7M	3.6	21,200
Perimeter Highway, 4-lane highway, 110km/hr (Central Ave. to Wanuskewin Rd.)	\$20.6M	\$243.0M	11.8	19,200

Three locations provide similar returns on investment; Perimeter Highway provides the smallest return for the largest investment.

Table 3 outlined in the *North Commuter Parkway Project Functional Planning Study* summarizes the relative merits of each proposed crossing location.

Table 3: Relative Merits of Each River Crossing Corridor

	Pinehouse Drive (Central Ave. to Spadina Cres.)	Lenore Drive (Central Ave. to Whiteswan Dr.)	Marquis Drive (Central Ave. to Wanuskewin Rd.)	Perimeter Highway (Central Ave. to Wanuskewin Rd.)
Traffic impact on adjacent residential neighbourhoods	High	High (school zones)	None	None
Leverages existing road infrastructure	Yes	Yes	Some	No
Impact on private property	Little	Little	Yes	High
Requires new roads to be constructed	Little	Some: extend Central Avenue	Significant: extend Central Avenue, McOrmond Drive	Extensive : extend Central Avenue, McOrmond Drive, build Perimeter Highway
Provides good network connectivity	No	Yes	Yes	Limited
Traffic impacts on 51 st St. & Wanuskewin Rd.	Little	Increased traffic	Little	Little
Traffic impacts on Central Ave. & Attridge Dr.	Increased traffic	Increased traffic	Decreased traffic, improved traffic operations	Increased traffic
Traffic impacts on McOrmond Dr. & College Dr.	None	None	Improved operations	None
Impact on Northeast Swale	None	None	Yes	Yes

2.4.1.2 Recommended Alternative

Of the four possible alignments for a north river crossing, **the connection at Marquis Drive was deemed superior and was identified as the recommended option.** This has now become part of the scope of the North Commuter Parkway.

In general, the greatest advantage for the Marquis Drive location is the leveraging of existing transportation infrastructure relative to current development plans. The biggest disadvantage is the impact on a single private industrial site. The extension of McOrmond Drive also will require an amendment to the University Heights Sector Plan (to accommodate the new roads), a crossing of the Northeast Swale for the extension of McOrmond Drive, and re-alignment of the intersection of McOrmond Drive and Fedoruk Drive (under construction in 2012).

Traffic projections for the 300,000 population show the proposed bridge significantly supplements the available capacity for trips between the employment center developing in the Marquis Industrial Area and the suburban expansion in the University Heights and Holmwood Sectors.

The Perimeter Highway river crossing is a Saskatchewan Ministry of Highways & Infrastructure project. The two advantages of this crossing are the early start to the development of Perimeter Highway, and the very high-capacity river crossing that would be constructed. However, the City of Saskatoon may have little input on project timing. Additionally, Perimeter Highway is a controlled access highway and by design will have limited integration with City of Saskatoon road infrastructure, and ultimately, it would provide a less direct route between the Marquis Industrial Area and University Heights and Holmwood Sectors.

2.4.1.3 Northeast Swale Crossing

In all projected population scenarios examined, the extension of McOrmond Drive (through the swale) to the east abutment of the bridge provides significantly shorter routes than the alternatives: Fedoruk Drive-to-Central Avenue or McOrmond Drive-to-Attridge Drive-to-Central Avenue routes for residents in the University Heights Sector.

The Northeast Swale is an important ecological resource and has a specific management plan. The extension of McOrmond Drive through the Northeast Swale was located after extensive discussions with the Meewasin Valley Authority (MVA) to reduce the impact of the crossing on the swale and to preserve the largest continuous blocks of grasslands and wetlands.

The cross-section of the arterial road has been chosen to reduce the attractiveness of the right-of-way to wildlife by eliminating the center median. The driving lanes are narrowed to reduce the entire paved surface and encourage drivers to lower their vehicle speeds. At both ends of the parkway cross section “Wildlife Crossing” and “No Stopping” signs should be installed. The MVA will be designing observation areas along the multi-use trail in one or more locations within the swale; “Pedestrian Crossing” signs will have to be installed along with enhanced pedestrian crossing facilities.

The MVA desires dark-sky compliant street lighting through the swale.

2.4.2 Traffic Bridge Assessment of Alternatives

During 2010, Stantec conducted a *Traffic Bridge Needs Assessment and Functional Planning Study (January 2011)* that developed options for the project and its potential to accommodate a variety of pedestrian, cyclist, transit, vehicular and community functions (**Appendix C**). The scope of work included:

- An assessment of current traffic conditions;
- An assessment of current structural conditions;
- A review of the heritage significance;
- An analysis of future traffic conditions;
- Development of preliminary options; and
- An analysis of the preferred options.

The option analysis of the Traffic Bridge also included an extensive stakeholder consultation and public participation program, including three public open houses and on-line forums, to ensure that the public was given an opportunity to express views and to help guide the development of potential alternatives.

2.4.2.1 Option Analysis

For the replacement of the Traffic Bridge, various options considered were related to the overall design of the bridge. These design considerations were reviewed through extensive public consultations and supporting technical and financial analyses to highlight the feasibility and merits of each option.

The specific options considered were:

- Option 1 – Rehabilitation for vehicular, pedestrian, and cyclist use.
- Option 2 – Rehabilitation for pedestrian and cyclist use only.
- Option 3 – Rehabilitation for pedestrian and cyclist use only, with landscaping and aesthetic features added.
- Option 4 – Replacement with a conventional structure (girder and deck) for vehicle, pedestrian, and cyclist use.
- Option 5 – Replacement with a modern steel truss with similar form for vehicle, pedestrian, and cyclist use.
- Option 6 – Replacement with an architecturally significant structure for vehicle, pedestrian, and cyclist use.
- Option 7 – Replacement with a conventional structure (girder and deck) for pedestrian and cyclist use only.
- Option 8 – Replacement with a conventional structure (girder and deck) for pedestrian and cyclist use only, with various aesthetic features.
- Option 9 – Replacement with an architecturally significant structure for pedestrian and cyclist use only.
- Option 10 – Demolish the existing bridge with no replacement.

The public participation process included three open houses and an online forum was developed to obtain effective community engagement that was inclusive to all, providing a balance of information regarding the project and effective means of capturing public sentiment.

Approximately 250 to 300 people attended the first open house on June 22, 2010. Approximately 125 persons attending the open house completed comment forms, and another 420 people responded to the survey at the online community forum, which was open until mid July. From this input, it was noted that the majority of respondents would like to see the Traffic Bridge rehabilitated.

In terms of how the bridge should be rehabilitated, respondents were divided between a pedestrian/cyclist bridge only or rehabilitating the existing bridge to its current usage, which includes vehicular traffic as well as pedestrians and cyclists. A small percentage of respondents supported a new bridge, and very few supported demolition of the existing bridge with no replacement.

The Traffic Bridge closed to traffic on August 24th 2010 and demonstrated the significant need for the bridge due to increased congestion. Accordingly, the following options that were discussed during open houses in June 2010 were removed from further consideration, including (1) restricting the bridge to pedestrian and cyclist traffic only (Options 2, 3, 7, 8, 9) and (2) complete demolition (Option 10).

A second public open house was held on September 15, 2010, at which the public was asked to provide input on four remaining options for vehicular, pedestrian and cyclist use:

- Rehabilitation of the existing bridge (Option 1);
- Replacement with a conventional structure (Option 4);

- Replacement with a modern steel truss bridge (Option 5); and
- Replacement with an architecturally significant structure (Option 6).

Comment forms were filled out by 360 of the more than 400 people who attended the open house, which showed that the preferred options were rehabilitation of the existing bridge (33% of votes) and the replacement with a modern steel-truss bridge (34%). Replacement with an architecturally significant structure did not have significant support and was dropped from further consideration.

At the end of the third round of public consultation, the citizens of Saskatoon were found to be divided among preference for rehabilitating the existing bridge (42%), replacing the bridge with a conventional (concrete) design (27%) and replacing it with a modern steel truss (32%). Each of the three options had a significant contingent of community support, and all three options addressed City Council's directive that vehicular, cycling and pedestrian traffic modes all be accommodated. The main differences among the options lie in the estimated capital and operating costs, the heritage value, level of function, and aesthetics.

2.4.2.2 Recommended Option

On December 6, 2010, City Council resolved that the existing Traffic Bridge be replaced with a modern steel-truss bridge for vehicle, pedestrian, and cyclist use; that the replacement structure be completed through a design-build process; and that, as part of the design-build process, efforts be made to incorporate elements that are sympathetic to the heritage and architecture of the existing bridge. At subsequent meetings in 2011, City Council resolved various aspects of the conceptual design of the replacement bridge.

On December 22, 2010, a Request for Proposals (RFP) was issued for an Owner's Engineer to assist the City with developing the framework for the design-build process, in order to prepare the Request for Qualifications (RFQ) and RFP for the design-build agreement. Stantec Consulting Ltd. (Stantec) was awarded the contract in February, 2011.

At subsequent meetings in 2011, City Council resolved various aspects of the conceptual design of the replacement bridge. These aspects included:

- Adaptive Reuse – Council resolved that there be no adaptive reuse of any portions of the steel trusses from the existing bridge.
- Creation of Community Space – Council resolved that community space be created by constructing viewing bays on each walkway at each pier, and gates/portals (one per side per span) to connect the sidewalk to the bridge deck, but that there be no dedicated water connections. Power receptacles would be provided on the bridge to provide for future community events.
- Architectural Lighting – Council resolved that architectural lighting would be provided in the form of flood lights spaced 25 ft apart, mounted to the top of each vertical member of the truss.
- Public Art – Council resolved that public art be integrated into the design of the new Traffic Bridge in a separate contract.
- Heritage and Architectural Elements – Council resolved that a “shopping list” of the following prioritized list of items of significant architectural and heritage value be included in the procurement package:

- Retain proportions of the truss height to span length.
 - Retain the look of the sidewalk handrail.
 - Retain the look of the wooden sidewalk.
 - Retain the portal (or entrance truss) lattice.
 - Retain the look of the lattice (built up members).
 - Limit the use of welding in visible connections (bolts instead of welds).
- Span Arrangement – Council resolved that the new bridge retain a 5-span arrangement.

Over the course of 2011 and 2012, Stantec completed the schematic design of the Traffic Bridge Replacement and produced “shelf-ready” Request for Qualifications (RFQ) and Request for Proposals (RFP) documents for the project. This included load testing of the land pier on the south side of the bridge to certify a “base” load capacity for potential proponents to rely on during the procurement process. It was during load testing that the aforementioned remains of the steamship S.S. Medicine Hat were discovered.

The RFQ and RFP documents have been shelf-ready since January 2013, and waiting for a funding source to be secured before implementation. In May 2013, during deliberations on the funding strategy for the North Commuter Parkway, City Council elected to bundle the Traffic Bridge Replacement to increase its appeal for potential grant funding by senior government partners.

2.5 Project Sponsor

The City of Saskatoon will be the Project Sponsor for the Project.

2.5.1 Mandate and Governance

The Province of Saskatchewan, through legislation, sets out the powers of municipal governments. The City operates under the *Cities Act* which sets out City Council’s main powers. City Council decides what programs will be delivered, the level of service, and the allocation of human and financial resources. The City Manager’s role is to carry out the policy and directions set by City Council and to supervise the day-to-day operations of the City.

At its meeting on May 21, 2013, City Council adopted the functional plan for the North Commuter Parkway and determined that the Traffic Bridge Replacement project should be combined with the North Commuter Parkway project. The City’s Administration was instructed to proceed with the North Commuter Parkway project based on the bridge and arterial roadway configuration recommendations of the Functional Planning Study and to include the Traffic Bridge Replacement project. The Administration was further advised to pursue available funding for this project from the federal and provincial governments.

City Council will be the main decision making authority for the project to ensure the City’s strategic objectives are met. The City established a North Commuter Parkway Project (NCP) Governance Committee that consists of Murray Totland, City Manager, and Mike Gutek, Project Champion/Sponsor. The Governance Committee will maintain oversight and governance of the Project to ensure that the City’s strategic objectives are met, and that sufficient internal resources are applied to the Project to ensure success.

A NCP Steering Committee has also been established as follows:

- Project Executive: Doug Drever
- Project Manager: Dan Willems
- Project Financial Lead: Linda Andal

The Steering Committee is the guiding force for the Project and will be responsible for delegating authority to the Project team, including the Project Manager and the financial, technical and legal teams during the procurement. The members of this committee are experienced in the delivery of major projects and P3s from their recent work on the Civic Operations Centre Project.

2.5.2 Budget and Fiscal Capacity

In 2012, the City reported revenues of approximately \$757 million against expenses of \$576 million, which included \$126 million for transportation¹. Standard & Poor's currently assigns a AAA credit rating to the City, evidence of its strong financial position.

A proposed project budget was presented to Council at its meeting on May 21, 2013. The proposed project budget included \$194,473,500 for the North Commuter Parkway component, and \$35,000,000 for the Traffic Bridge Replacement component. The funding plan assumed significant participation from the Federal and Provincial Governments. The City's funding would include a cash payment, with a major portion of the funding coming from borrowing.

The City's cost consultant advised that the budget be adjusted to reflect escalation to December 2015, based on the current project schedule and bidding practices anticipated under a P3 project delivery. The consultant recommended that the project budget should be \$252,638,000 (December 2015 dollars). The City affordability limit will be capped at the cost consultant's current cost estimate for the project.

This business case is intended to demonstrate the Project's eligibility for up to 25% of eligible direct construction costs and development costs. The remainder of the project costs will be funded by the City's funding partners and funding that will proceed alone.

2.5.3 Experience

The City of Saskatoon performs extensive work to preserve and construct roadways, bridges, and water and sewer systems to meet the needs of its rapidly growing population. This work varies in duration from several days to several months, or even years. The City's Infrastructure Services Department has undertaken the following significant transportation infrastructure projects in recent years:

- **Civic Operations Centre.** The Civic Operations Centre (COC) and surrounding site will be developed in phases, co-locating several key operations and services. Phase One will be delivered via a DBFOM delivery model and will involve the relocation of the City's Transit Operations and the construction of a permanent Snow Management Facility for the city's southwest quadrant. Phase Two will involve the eventual relocation of City Yards. Construction costs for Phase One of the COC are estimated to cost \$128 million, plus interest, financing, and transaction fees. PPP Canada approved funding for the Project in January 2013.
- **Circle Drive South Project.** Saskatoon's bridge and road infrastructure was most recently improved through an investment of \$223.7 million the Circle Drive South Project, which included:
 - A new six-lane bridge;
 - Five new interchanges;
 - Ten kilometres of expressway from Clarence Avenue to Clancy Drive;

¹ DRAFT - Consolidated Financial Statements, City of Saskatoon, Saskatchewan, Canada. Year Ended December 31, 2012

- Three railway grade separations;
- Sound attenuation walls;
- Relocation of utilities; and
- Pedestrian and cyclist facilities.

The new bridge, four of the interchanges, pathways, and pedestrian connections opened July 31, 2013. The Preston Avenue South Interchange opened in October 2013.

- **River Landing Phase II.** This redevelopment project was designed to enhance the sustainability of the downtown by reclaiming and developing the A.L. Cole "brownfield" site and surrounding area. In December 2004, the Federal Government, Provincial Government and the City of Saskatoon committed nearly \$30 million in capital funding to reclaim the riverfront. The redevelopment includes:
 - The clean-up of contamination on the former A.L. Cole power site to residential standards;
 - The clean-up, design and development of the riverfront including a new boat dock, the construction of public spaces, and new linkages to the River Landing Phase I site and other related amenities;
 - The installation of underground services, parking, and roadways to provide proper access to the site;
 - The construction of a park, with appropriate sound attenuation, including berming to mask an unsightly and loud electrical transformer site;
 - The reclamation and conversion of an old electrical building into a farmers' market, business centre (incubator), and village square;
 - The removal of the unsightly, unused 19th Street overpass, and the streetscaping of all the entry ways to the site; and
 - The development of a licensed restaurant and new residential opportunities including an innovative live-work complex.
- **25th Street Extension Project.** The first phase of this \$25 million project in downtown Saskatoon, completed in 2006, involved the rehabilitation of 25th Street from Spadina Crescent to 2nd Avenue North, including curb-to-curb reconstruction of the roadway to expand the width, installation of additional left-turn bays and streetscaping. The second phase, completed in 2009, involved rehabilitating 25th Street from 2nd Avenue to 1st Avenue. The third phase, to be completed in the fall 2013, involves the extension of 25th Street from 1st Avenue to Idylwyld Drive, including the construction of underground services, roadway construction and streetscaping.

2.6 Project Description

2.6.1 Project Mandate and Scope

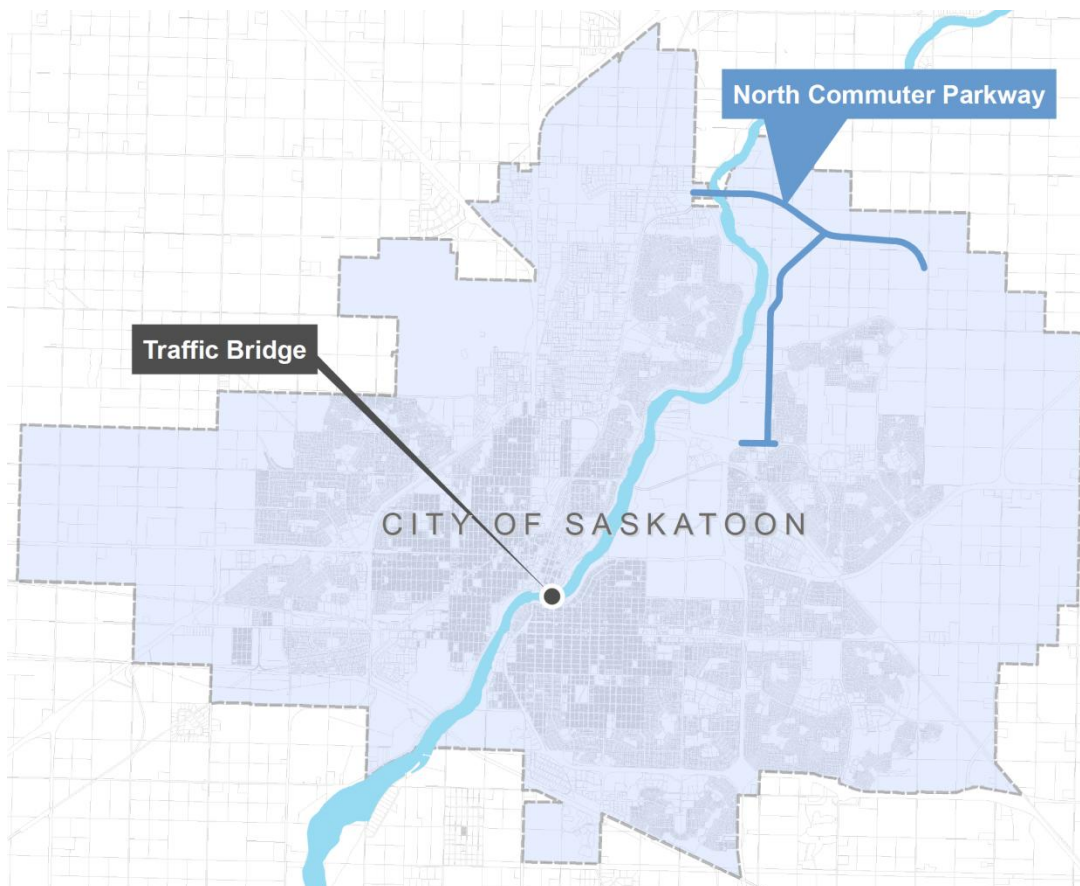
The City is undertaking two river-crossing infrastructure projects and connecting roadways as a single project. The Project totals approximately 86 lane-kilometers and consists of:

- Development of a new river bridge and connecting roadways (the North Commuter Parkway);
- Improvements to existing arterial roadways at Attridge Drive and Central Avenue to accommodate adjustments to existing commuter routes to the new bridge; and
- Replacement of the existing Traffic Bridge.

The Project provides critical commuter connections across the South Saskatchewan River in Saskatoon between residential developments and key employment centres (i.e., the Downtown Core and the Marquis Industrial Area), as shown in Exhibit 4.

The City is interested in using a P3 procurement model to deliver the project, including the design, construction, long-term maintenance, rehabilitation and financing of the North Commuter Parkway and the replacement, long-term maintenance and financing of the Traffic Bridge.

Exhibit 4: Project Map



2.6.1.1 Bundling

The City believes that the North Commuter Parkway and the Traffic Bridge Replacement projects bundled under a single contract is one of the unique aspects of the Project that will attract private sector interest and encourage innovation. Bundling will create economies of scale and will reduce procurement and overhead costs, as well as encourage service level consistency.

Project Size

The North Commuter Parkway and the Traffic Bridge Replacement projects are being bundled under one contract due to a number of potential efficiencies and innovations that may be realized during construction and operations due to the larger size and scope of the Project.

During a market sounding exercise, all participants, including smaller firms, indicated that bundling the North Commuter Parkway Project and the Traffic Bridge Replacement is preferred because a larger project is more attractive to the potential bidders.

Economies of Scale

One of the main benefits of bundling the two projects together is the overall lower procurement costs and operational savings. Operational savings in labour and overhead costs will be realized, such as having one project management team and plan, safety plan, and quality management plan for both projects. As well, there will be reduced monitoring and labour requirements. The cost savings during the procurement will be a result of lower bid costs, legal fees and due diligence costs.

Combining the two projects under a single bundle will also result in greater purchasing power for the private partner due to a larger size contract. Economies of scale will be achieved in material purchases, such as concrete and steel. This will result in lower costs and, ultimately, better value for the City.

Service Level Consistency

Bundling the two projects will create consistent service levels between the two projects during the operations and maintenance period. If the two components of the Project were delivered separately, the City would expend additional resources and time to track the performance of two independent private partners.

Innovation

The bundling of the North Commuter Parkway and the Traffic Bridge also introduces opportunities for innovation in both the design and delivery of the Project. By constructing these two projects in parallel, the contractor will be able to share management, labour, special equipment and technology between the two sites. For instance, the private partner will have flexibility in the scheduling of its resources between the two components.

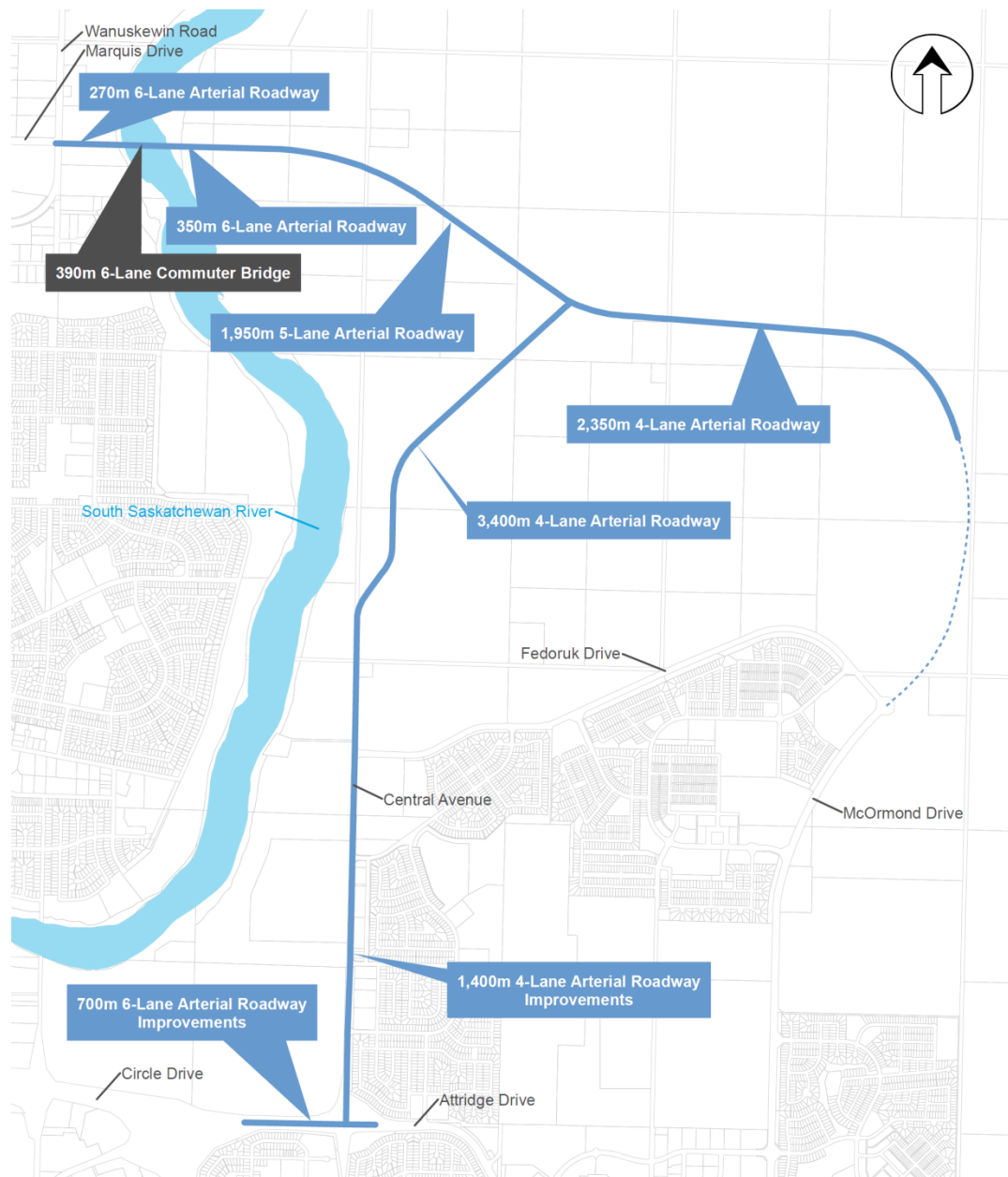
Precedent Projects

There have been a number of precedent P3 projects that have had more than one project successfully bundled under one contract. Examples of bundled P3 projects include Alberta's Building Alberta's School Construction Program (formerly known as Alberta Schools Alternative Procurement), the Ontario Provincial Police Modernization (OPPM) Project, and the highway service centres bundled project.

2.6.1.2 North Commuter Parkway

The North Commuter Parkway will include a 400-meter river bridge (six-lane) and is located directly east of Marquis Drive. As a new structure in a relatively undeveloped part of the City, the North Commuter Parkway will also require the construction of arterial road ways to connect to existing roadways. This includes 10 km of new arterial roadways and improvements to 2.4 km of existing roadways to accommodate projected traffic volumes as illustrated in Exhibit 5.

Exhibit 5: Map of the North Commuter Parkway



It is anticipated that a North Commuter Bridge will divert average daily traffic of 15,000 to 22,000 vehicles during peak times from the Circle Drive Bridge, rising to between 50,000 to 60,000 vehicles per day when the City's population reaches 400,000.

2.6.1.3 Traffic Bridge Replacement

The Traffic Bridge Replacement will include demolition and replacement of a steel-truss bridge that was originally constructed in 1907 as the City's first vehicular bridge. The rehabilitation of the bridge will restore an important linkage for commuters, pedestrians, and cyclists crossing the river between the downtown employment area and residential areas in the south sector of the city.

The design of the Traffic Bridge will include a two-lane modern steel-truss bridge with multi-use pathways on either side. This will accommodate average traffic volumes estimated to average 11,000 vehicles per day, with capacity to serve over 20,000 vehicles per day. Consistent with the public input to the planning process, efforts will be made to incorporate elements of the heritage and architecture of the existing bridge.

2.6.2 Studies and Planning

The needs identification, scope definition, and initial planning for the Project have been informed by the following planning studies and reports:

- North Commuter Parkway Conceptual Design Estimate, BTY Group (November 2013)
- Traffic Characteristics Report (2010).
- City of Saskatoon Strategic Plan 2013-2023,
- City of Saskatoon, East Sector Plan (November 2011)
- City of Saskatoon, University Heights Sector Plan Amendment, City of Saskatoon (October 2013)
- Traffic Bridge Needs Assessment and Functional Planning Study, Final Report, Stantec Consulting Ltd (January 2011)
- North Commuter Parkway Functional Planning Study (2013)
- North Commuter Parkway – Baseline Terrestrial and Aquatic Field Studies, and Heritage Resource Impact Assessment. Stantec Consulting Ltd. (August 2013)
- Permitting Summary for the North Commuter Bridge. Clifton Associates Ltd. (March 2013)
- Geotechnical Report North Commuter Bridge Saskatoon, Saskatchewan. Clifton Associates Ltd. (July 2013)

2.6.3 Project Costing

In October 2013, BTY Group was retained by CIMA+ to prepare a Conceptual Design Estimate for the Project based on the quantities and scope items provided by CIMA+ and other consultants.

The overall unit cost estimate and associated unit pricing of the project design were developed based on the quantities provided by CIMA+ and other consultants. The unit priced cost estimate is based on Industry Standard Best Practices as outlined by the Canadian Institute of Quantity Surveyors (CIQS) and the requirements noted in PPP Canada's Schematic Design Estimate Guide. BTY Group reviewed the drawings provided by the design team and confirmed that the drawings appear detailed enough for a Schematic Design Estimate. Based on the assumptions that the scope items are complete and appropriate allowances have been made for undefined items within the quantities provided to BTY Group, the cost estimate should achieve an accuracy level of +/- 15%.

2.6.4 Project Timing

The procurement process for the project is expected to begin in April 2014, with construction expected to begin in July 2015. For the new arterial roads, the expected length of time before major refurbishment is needed is approximately 25 years, which is prior to the end of the proposed 30 year term of the P3 agreement. Major rehabilitation for the bridges may be required before the 30 year term depending on the type of deck surface that is used. If the deck is constructed with an asphalt surface it is likely that a major rehabilitation will be required, and if exposed concrete is used then it is less likely. As the project is expected to be delivered as a P3, with the P3 Contractor responsible for operating the facilities, this term encourages a lifecycle approach to the delivery of the systems.

The anticipated timing of project delivery is shown in Table 4.

Table 4: Project Schedule

ITEM	DATE
RFQ Release	April 2014
RFP Release	July 2014
RFP Close	March 2015
Construction Start	July 2015
Construction End	October 2017
Open to Traffic	November 2017

2.7 Conclusion

Saskatoon is “The City of Bridges” and appropriately named due to the seven structures that span the South Saskatchewan River. These bridges are a vital part of the fabric of the community and the history of Saskatoon. From the railway bridges that helped make Saskatoon the central economic hub of the province, to the first traffic bridge that served as a catalyst to the formation of the city, the building of each bridge has driven the growth of Saskatoon.

Due to the significant population growth experienced in recent years and further growth expected, as well as the expanding north-east and east end neighbourhoods, there is an increasing need for additional transportation routes to help alleviate major traffic congestion, improve travel times and reduce fuel consumption for commuters and public transit.

The North Commuter Parkway and the re-opening of the Traffic Bridge will significantly supplement available capacity for trips between key employment centres and residential areas, and will also reduce commuter traffic on the city’s other river bridges. This will improve travel times and congestion resulting in a higher quality of life for citizens and lower greenhouse gas emissions to help the City meet its’ environmental leadership goal.

Based on the needs and merits of the Project outlined in Section 2, City Council has identified the Project as an investment priority to accommodate current and future river-crossing volumes as the City’s economy and population grows. Significant planning has already been completed for the Project as the City is committed to meeting the Project’s procurement and construction schedule. While the City has the project budget approved by Council, the Project is dependent on receiving a significant contribution from provincial and federal levels of government.

The Project will not only relieve congestion and provide additional transportation routes, but it will also support the City of Saskatoon’s future projected population and economic growth to continue to be one of the most economically thriving cities in Canada.

3 Procurement Options

This section of the Business Case discusses the alignment of a range of project delivery models to the Project objectives and constraints. The shortlisted alternative delivery model is then assessed against characteristics of similar precedent projects, qualitative assessment criteria and market sounding findings. This shortlisted delivery model and the Public Sector will be further tested in the VFM analysis in Section 4.

3.1 P3 Screening

3.1.1 P3 Suitability

The suitability of a P3 delivery model for this Project was initially assessed by Brookfield Financial, as documented in its report dated April 2013. Brookfield explored the viability of a DBFOM delivery model for the Project, performed an initial market sounding exercise to understand market interest and views of the proposed deal structure, analyzed project costs and provided an overview of regulatory requirements and project governance options. The report concluded that *“the DBFOM model allows the City to partner with private sector participants and pursue a “win-win” solution that best leverages the skills and resources of each party, encourages innovation, and ultimately delivers the highest tangible value to the City.”*²

This conclusion is further supported on the basis that many P3 model screening criteria are met by the Project. Table 5 contains screening criteria from PPP Canada’s federal P3 screening tool and adjusted to be directly applicable to municipal P3 transportation projects. The table also includes a high-level preliminary assessment of each criterion for the Project.

Table 5: High-Level P3 Suitability Screening Criteria

Criterion	Criteria	Project Specific Assessment
Project Size	Is the project’s size sufficient to support higher transaction costs that accompany a P3 delivery approach (\$100M or more)?	Yes , the North Commuter Parkway and the Traffic Bridge will be bundled and procured under one P3 contract to increase the base construction costs.
Type of infrastructure site and nature of Project	Does the Project involve new construction on a previously undeveloped site? Is the project a new build or a refurbishment?	Yes , most the North Commuter Parkway is greenfield. The replacement of the Traffic Bridge will involve an entirely new structure aside from the piers which the proponents will have the option to replace or maintain. A small section of the arterial roads will involve refurbishment rather than new build.
Contract Integration	Is there potential for project phases to be integrated into one contract?	Yes , all P3 project phases including design, construction, financing, maintenance and operations will be integrated into one contract.
Asset Complexity	Are there different asset classes combined for the Project?	Yes , the Project involves the delivery of both road and bridge infrastructure. The two river bridges will differ structurally (i.e., Traffic Bridge will remain a Parker through-truss bridge) and will require a different set of skills to construct each.
Performance Measurement	Are the output specifications for the construction of the assets	Yes , the City has a large transportation network and extensive experience constructing road and

² Roads and Bridges DBFOM Initiative, Analysis of Structural Considerations and Cost Impact, April 2013, Brookfield Financial

for Construction	easily defined?	bridge assets. The City will use this knowledge to develop suitable output specifications for the Project with the assistance of its technical advisors to meet its requirements.
Operations & Maintenance Requirements	Are the long-term operational and maintenance needs relatively stable and predictable?	Somewhat , the City has been the fastest growing City in Canada for the past three years and the current population is 246,300 people. The population of the census metropolitan area is expected to increase to 400,000 by 2032. Despite this growth, the maintenance and operational requirements should remain relatively stable over the 30-year term.
Performance Measurement for Operations & Maintenance	Can service performance for the operations and maintenance be easily described and measured?	Yes , the performance standards can be easily described and measured. The City currently subcontracts certain operations and maintenance activities and has articulated its minimum operating and maintenance standards to the private sector previously.
Payment	Can payment be tied to measured performance?	Yes , the proponent's performance can be defined during both the construction and maintenance periods.
Asset Life	Is the service life of the capital asset at least 20 years?	Yes , the arterial roads will have an expected life span of at least 50 years (before reconstruction) and both bridges will have an expected life span at least 75 years.
Refurbishment Requirements	Is the refurbishment cycle for the project relatively predictable and stable?	Yes , refurbishment requirements and costs have been developed by the City's technical advisors. For the new arterial roads, the expected length of time before major refurbishment is needed is approximately 25 years, which is prior to the end of the proposed 30 year term of the P3 agreement. Major rehabilitation for the bridges may be required before the 30 year term depending on the type of deck surface that is used. Refurbishment requirements are predictable and stable as there have been a number of precedent P3 transportation projects completed that can be assist in developing the refurbishment cycle.
Scope for Private Sector Innovation Gains	Are the City's needs or expectations compatible with realizing gains from private sector innovation?	Yes , the City will encourage innovation by performance based requirements and design output specifications. The City will only be prescriptive in certain areas of the design to ensure the Traffic Bridge has a similar design to the original structure and that the scope meets the City's requirements. Both bridges span the South Saskatchewan River and, due to the aggressive construction timeline, the private sector will have an incentive to develop an innovative design and construction plan.
Revenue Generation	Does the project have inherent scope to generate any revenue?	Yes, indirectly , The continued development of the land to the west and northwest of the North Commuter Bridge is expected to generate significant revenue for the City initially through land sales, development fees and ultimately

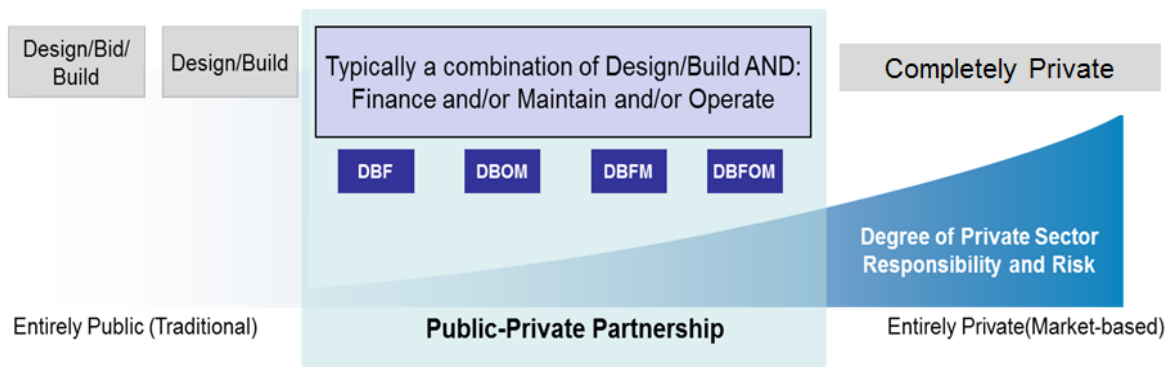
		through a broader property tax base. The Project is a critical enabler of this continued development.
Stakeholder Support	Are stakeholders in support of the Project and a P3 delivery model?	Yes , a number of community open houses indicate significant support of the Project and support from City Council for a P3 model. Two stakeholder groups that the City will continue to engage during the procurement and construction stages are the Meewasin Valley Authority and the Crime Prevention Through Environmental Design (CPTED) Review Committee.
Private Sector Expertise and Interest	Are there likely to be a sufficient number of bidders for the project if it is procured as a P3?	Yes , two market sounding exercises indicate significant private sector interest in the Project and the Saskatchewan market.
	Are there precedent projects in other jurisdictions?	Yes , there have been numerous precedent P3 road and bridge projects and bundled P3 projects throughout Canada (Refer to Section 3.3.4)
	Does the private sector have the expertise to deliver on the performance specification?	Yes , there are a number of contractors that specialize in the construction and operation of both roads and bridges. The scope of the operations and maintenance component of the Project will only include activities that the City currently subcontracts to the private sector to ensure that there is sufficient local capability.

3.2 Potential Delivery Models

A number of delivery models were considered for the Project from the City's traditional Design-Bid-Build model to alternative delivery models that involve various degrees of private sector responsibility and transfer of risk. The alternative delivery models considered range from single-firm responsibility for both design and construction (Design-Build), to P3s with a mix of design, build, financing, and operating responsibilities. The DBOM delivery model is not considered since a main priority for the Project is to include private sector financing.

The role of the design and construction firms changes with each delivery model, as do the role and expectations of the public-sector. As the roles of the public and private sector change, so does the overall distribution of the risks associated with the Project. As illustrated in Exhibit 6, the degree of risk transfer increases as the involvement of the private sector increases.

Exhibit 6: Range of Delivery Models



3.2.1 Public Sector Comparator

The City traditionally delivers its transportation projects using a Design-Bid-Build (DBB) model. As this model would likely be used if the Project is not delivered as a P3, the DBB delivery model is identified as the City's Public Sector Comparator (PSC).

Under this option, the design and construction services for the Project are procured in a sequential manner. The City will first procure the design of the asset from a private sector design firm. Despite the unique nature of the Project consisting of two distinct bridges (as well as connecting roads), the City is confident that a final design for the entire Project can be procured effectively from a single design firm. The design firm will receive a lump sum payment from the City once the design is completed.

Following the completion of the design documents, the City will then procure the construction works based on the completed design, on a low-bid basis. The City would do so by hiring a general contractor to complete the project in accordance with the design firm's plans and specifications. The City would warrant to the contractor the sufficiency of the design firm's plans and would assume all risks associated with the design, to the extent that the City cannot recover the cost of changes or amendments from the design firm. The contractor would look to the City to remedy any inadequacies in the plans, the result of which is usually increased costs. In addition, this procurement arrangement can create design coordination issues that increase construction costs since the construction firm did not have input in the design. Such increase in construction costs will be borne by the City under this delivery option.

During construction, the City would manage and oversee the general contractor. If the construction works have been contracted out to more than one general contractor, the City must coordinate multiple firms. Since there is not one single contact for the contractors, the City can expend significant resources and time managing the construction process.

The City would pay for the construction project through monthly progress payments to construction contractors during the construction period, based on work completed. With this method of payment, construction contractors do not have to obtain significant amounts of private financing to carry out construction. Performance is secured through performance bonding and limited construction warranties. At completion, the City would lead the testing and commissioning process.

Following completion, the assets are turned over to the City, which then assumes full responsibility for operations and maintenance (O&M). The method of budgeting and payment for O&M is carried out

according to the City's established practices. Under this delivery model, the City maintains ownership of the assets at all times.

3.2.2 Alternative Delivery Models

In the sections below, a range of viable and marketable P3 delivery models for the Project are described. Both the advantages and disadvantages of the models are identified to qualitatively assess the optimal alternative delivery model based on the Project requirements identified in Section 3.1.

Design-Build (DB)

Under the DB model, the City would hire a single private sector partner (the "Design-Builder") for the design and construction of the Project. This model integrates the final design and construction roles with one private entity, transferring design and coordination risks to the private sector partner as well as compressing the schedule to the extent that design and construction can proceed concurrently.

The advantage of this model over the traditional model is that there is a single entity responsible for meeting the performance specifications of the Project. The designer and the constructor work together to develop a design that meets the required performance parameters and the construction firm is confident that the design can be implemented efficiently to result in cost savings. In addition, this model facilitates input from all disciplines without the loss of cost control.

Similar to the DBB model, the City pays for the asset through progress or milestone payments to the Design-Builder contractor during the construction period based on the value of work completed. With this method of payment, the design-builder does not have to source significant amounts of private financing. Performance security is also limited to less liquid methods including performance bonding and construction warranties.

Also similar to the DBB model, following completion, the asset is turned over to the City, which then assumes full responsibility for O&M work. Under this model, the City maintains ownership of the assets at all times.

Design-Build-Finance (DBF)

Under this model, the private partner is responsible for designing, building and financing the project. This model integrates the final design and construction roles with one private entity, transferring design and coordination risks to the private sector partner as well as compressing the schedule to the extent that design and construction can proceed simultaneously.

The City is required to make a lump-sum payment to the private partner upon substantial completion (or possibly a series of payments over time commencing at substantial completion and ending with acceptance following commissioning) and, therefore, the private sector partner must obtain construction financing from third-party lenders or its own equity resources (which would not be expected for a project as large as this Project). The lump-sum payment is designed to pay off design and construction costs, and construction financing obtained by the private partner. This payment mechanism provides a more liquid form of security for the City, since payment for construction is performance based and, therefore, the contractor is not paid until it demonstrates compliance with the City's technical specifications. A regimen is also included to ensure that final completion is achieved as well. Once the project is operational and accepted, the City assumes full responsibility for O&M work. Ownership of the asset generally rests with the private partner until substantial completion, when it is transferred to the City.

Design-Build-Finance-Operate-Maintain (DBFOM)

Under the DBFOM model, the private sector P3 consortium would be responsible for the design, construction, financing, operations and maintenance of the bridge and road infrastructure. This structure enables significant integration among all components of the Project.

The financing component of this option includes both short-term and long-term financing. The long-term financing is needed since the private sector partner would not be fully paid for construction of the asset following completion of construction, but would be paid in installments over the length of the maintenance term. The installments over the length of the maintenance term include:

- A fixed capital repayment component to repay the private sector partner's long-term debt and equity investors for its financing of the construction; and
- A performance-based payment to compensate the private sector partner for its ongoing maintenance work, subject to deductions for failing to meet contractual performance obligations.

The City is considering a model in which it would pay a substantial completion payment. The City will repay the residual capital cost in a blended fashion with the ongoing maintenance and lifecycle payments over the agreed upon maintenance term. The maintenance term would be 30 years, and the private sector partner would have to meet pre-defined performance standards during this period. Payment for regular and rehabilitative maintenance would occur throughout the maintenance term and would include a performance-based bonus or penalty formula.

While the newly constructed assets would be owned by the City, the private sector partner would assume responsibility for the regular maintenance and rehabilitation of the assets over the contract term in accordance with the City's performance specifications.

At the end of the operations and maintenance term, the consortium would transfer control of the assets to the City under agreed-upon terms and conditions, known as hand-back conditions. The hand-back conditions would explicitly outline the expected condition in which the assets must be returned to the City and a stipulated life-expectancy beyond the concession period (e.g. five years post-contract).

A DBFOM approach allows the City to allocate significant risks related to the capital cost, regular operating and maintenance costs, lifecycle (rehabilitation) costs and performance standards to the private sector. VFM is achieved through a competitive procurement process, private sector efficiencies and a lifecycle approach to ensure an appropriate trade-off between upfront capital expenditures and long term rehabilitation costs. This model can be advantageous compared to the traditional DBB approach as it results in cost and budget certainty, transfers significant risk, and encourages private sector efficiencies.

There are two major drawbacks to this model. The financing costs or the cost of capital under this model typically exceeds that of the City, since private financing includes both equity and private debt, both of which have higher expected rates of return than public debt due to risk premiums and the absence of a City covenant to pay. The complexity of this model is also likely to require increased due diligence, overhead and consultation costs.

3.3 Shortlisting Procurement Options

3.3.1 Project Objectives and Considerations

Timely and Efficient Project Delivery

The targeted start of construction is July 2015 and substantial completion deadline is October 2017 for both the North Commuter Parkway Project and the Traffic Bridge Replacement Project. Timely and efficient delivery is an important procurement objective for this Project for which maintaining adherence to the Project timeline is of particular importance. The advantages of a P3 delivery model are that there would be payment and/or other penalties imposed on the private sector if substantial completion is delayed. The private sector recognizes the time value of money and that a small delay in receiving a substantial completion payment can have a major negative financial impact.

Timely delivery of the Project is required to provide additional transportation routes to alleviate major traffic congestion, enable the efficient and timely development of new areas in the northwest part of the City, improve business productivity and enhance the quality of life for the City's citizens. Evaluation of the Project shows significant system-wide benefits through reduced intersection delays, improved travel times, and fuel savings for commuters and public transit and substantially reduced congestion on other corridors.

Remain on Budget

One of the City's requirements for the Project is cost certainty during construction and throughout the 30 year maintenance term. Shifting the risk of increasing construction costs and other financial risks to the P3 Contractor can ensure cost certainty for the construction, and maintenance of the Project.

Achieve Value for Money

The City wants to see robust competition among private sector contractors, financiers and maintenance providers to ensure the Project is delivered and maintained at a competitive price and generates VFM. Additionally, competition can facilitate innovation among the private sector bidders, potentially revealing improved designs or processes not already specified in the Project requirements to create further efficiencies and long-term cost savings.

Meet High Maintenance and Operations Standards

The City needs to ensure that its transportation infrastructure is effectively maintained throughout the entire life span of each asset. Due to limited budget allocated to the ongoing maintenance and rehabilitation of the City's transportation assets, certain roads and highways have been deteriorating before the end of their useful lives. A DBFOM delivery model avoids the problems associated with deferred maintenance and rehabilitation as the City would stipulate strict performance requirements during the term of the Agreement.

3.3.2 Procurement Constraints

Prescriptive Design Specifications

As mentioned in Section 2.0, the Traffic Bridge has significant heritage value as it is a prominent feature of Saskatoon's urban landscape and an important community landmark as the first vehicle bridge over the South Saskatchewan River. As a result, bidders will be provided with a preliminary design that is around

50% complete and technical specifications will be provided to ensure the bridge's character and authenticity is maintained.

While there will be some limitations for design innovation for the Traffic Bridge, the private sector will have considerable flexibility to be innovative during the construction period to meet the completion deadline. For instance, due to the extreme winters in Saskatchewan, bidders may be inclined to develop a construction plan using technologies that limit and/or avoid the need for in-river structures and associated construction. Further, the proponents in the procurement process will be given the option as to whether or not they want to use the existing piers.

The bidders will have much greater flexibility with respect to design on the other elements of the Project, the North Commuter Parkway road and bridge elements, which are the majority of the project budget.

Constrained Funding

The City currently has limited capital to fund the construction of the Project due in part to other major projects that the City needs to undertake. While the City currently has surplus debt capacity and can request to have its debt cap raised by the Saskatchewan Municipal Board, the ability to obtain funding from both the provincial and federal levels of government to deliver the Project will assist it in delivering its broader capital plan. Having the ability to obtain a fixed price and withhold payment until certain construction milestones are achieved would allow the City to mitigate against possible construction risks, such as project delays, and cost increases.

Procurement Bylaw

Projects that are over \$75,000 require City Council approval under *The City Administration Bylaw*. This bylaw requires for the disclosure of information including the total contract amounts and the identification of the successful bidder.

3.3.3 Shortlisting Delivery Models

The objectives of the Project, noted in Section 3.3.1, have been ranked against the three alternative delivery models to determine the most appropriate option to compare to the traditional DBB model. As shown in Table 6, both the DBF and DBFOM models score high on all objectives. However, DBFOM scores higher than DBF as it provides more cost certainty during the entire 30-year maintenance term, ensures that the appropriate capital cost/operating cost tradeoffs are made, and that maintenance is not deferred.

Table 6: Ability to Deliver Against the Project Assessment Criteria

Criteria	Delivery Models		
	DB	DBF	DBFOM
Timely and Efficient Project Delivery	Med	High	High
Budget Certainty	Med	Med	High
Achieve Value for Money	Med	Med	High
Meet High Maintenance and Operations Standards	Med	Med	High

Criteria	Delivery Models		
	DB	DBF	DBFOM
Meets Project Constraints	Low	Med	High
Precedent Projects	High	High	High
Marketable to Private Sector	High	High	High

Based on the screening against project objectives and considerations as reflected in the project requirements outlined above, the DBFOM delivery is more advantageous than the DB and DBF models.

The DB and DBF model do not adequately meet the project objectives. These models do not include private sector financing during the operation and maintenance term and consequently do not provide budget certainty during the 30 year term. These models do not include a lifecycle approach to delivery since operations and maintenance is not included in the scope. These characteristics are expected to result in a lower VFM compared to the DBFOM model.

The assessment resulted in high ratings for all criteria used to evaluate the DBFOM delivery model. The results indicate that a DBFOM model could be very successful and more likely to achieve the Project's stated objectives, meet constraints, and achieve private sector interest. This model is supported by a number of successful precedent P3 projects which are described in Section 3.3.4.

3.3.4 Precedent P3 Projects

Road and bridge projects encompass a unique set of challenges for the public sector, such as maintaining safety standards, defining the desired service levels, and structuring a payment mechanism that will incentivize the desired behaviour. A number of successful DBFOM-delivered road and bridge projects throughout Canada have demonstrated both the successes and lessons learned from these projects.

Descriptions of four successful DBFOM projects that demonstrate the benefits of a DBFOM delivery model for road and bridge projects are presented below. Also included is a description of one non-transportation project that demonstrates how similar attributes to the NCPP project have lead to successful projects in another infrastructure sector.

1. Southeast Anthony Henday Drive

Location: Edmonton

Delivery Model: DBFOM

Price of Contract: \$493 million

Estimated Value for Money: \$4 million³

Project Description:



³ <http://www.transportation.alberta.ca/3787.htm>

Southeast Anthony Henday Drive is an important part of Edmonton's transportation network and is Alberta's first highway P3 project. The project includes an 11-kilometre freeway and 24 separate bridge structures that were built to reduce traffic congestion. Completed in October 2007, the Southeast Anthony Henday Drive was on budget and on schedule.

The scope of the project included:

- 11 kilometres of highway with six lanes between Highway 2 and 50th Street and four lanes between 50th Street and Highway 14/216
- 24 separate bridge structures including five interchanges.

Procurement Process:

The bidding process for this project was competitive, open and transparent. The first stage of the process, a Request for Qualifications (RFQ), received six submissions. Proposals had to meet rigorous standards established by the Province, and three companies were invited to submit firm prices. Access Roads Edmonton Ltd. was chosen to design, finance, build and maintain the road.

Based on the success of the Anthony Henday Drive Southeast project, the Alberta government followed the same made-in-Alberta P3 process for the Calgary Northeast Ring Road and the northern leg of Anthony Henday Drive.

Similarities to the Project:

- **Alberta's First P3 Highway:** The Southeast Anthony Henday Drive was Alberta's first P3 highway. The North Commuter Parkway and Traffic Bridge Replacement Project will be the first road and bridge P3 project in Saskatchewan.
- **Funding:** The southeast ring road was cost-shared by the province and the federal government through the Canada Strategic Infrastructure Fund (CSIF), and also included private sector equity financing. The North Commuter Parkway and Traffic Bridge Replacement Project requires a significant level of funding from senior governments and will include private sector equity financing.
- **Project Agreement:** Certain risk sharing provisions that are part of the Southeast Anthony Henday Drive Project Agreement are being contemplated by the City. This key Project Agreement features include⁴:
 - All bidders had to satisfy rigorous standards during the procurement process.
 - The contractor would be severely penalized if the project was not completed by October 26, 2007.
 - Tolls and advertising along the road were prohibited.
 - The private partner is providing a 30-year warranty; typically, construction projects only come with a one to two-year warranty.

Delivering the Southeast Anthony Henday Drive as a DBFOM insulated the Province from risk including cost overruns, construction delays, weather delays, design risk, and construction defects. As two of the

⁴ <http://alberta.ca/release.cfm?xID=17518283FCDE1-8C4E-4EB3-A93F13E86CE3C94F>

Project objectives identified by the City for the North Commuter Parkway and Traffic Bridge are timely and efficient project delivery and remaining on budget, the results of the Southeast Anthony Henday Drive are particularly significant.

2. Rt. Hon. Herb Gray Parkway (formerly the Windsor-Essex Parkway)

Location: Windsor-Essex Region

Delivery Model: DBFOM

Price of Contract: \$1.4 billion

Estimated Value for Money: \$325.4 million⁵ (15% savings)



Project Description:

The Rt. Hon. Herb Gray Parkway is part of the Ontario's long-term transportation solution to improve the movement of goods and people through Canada's busiest gateway -- the Detroit-Windsor border. The primary objective of the Windsor Essex Parkway Project is to connect Highway 401 in Ontario to a new international crossing over the Detroit River to Interstate 75 in Michigan. The Parkway is not tolled, and it passes through downtown Windsor. It will be owned by the Province.

Project features include:

- A six-lane, 11 kilometre freeway and four-lane service road that will have 11 covered tunnels.
- Tunnels ranging in size from 120 metres to 240 metres long, totaling 1.8 kilometres.
- Extensive landscaping with more than 300 acres of green space and 20 kilometres of recreational trail.

Procurement and Marketability:

Infrastructure Ontario (IO) and the Ministry of Transportation undertook a two-stage procurement process. Companies from all over the world submitted bids during the RFQ process. Following evaluations, five consortia met the qualifications criteria, and the three highest scoring ones were short-listed for the project. These consortia were diverse, and their team members included many local contractors and businesses.

The winning bidder for the project was selected in December 17, 2010 to design, build, finance and maintain the Parkway. The winning bidder, Windsor Essex Mobility Group (WEMG) is a partnership between ACS Infrastructure Canada Inc., Acciona Concessions Canada, and Fluor Canada Limited. The entire procurement process (RFQ issuance to financial close) occurred over a period of less than 1.5 years. The Parkway is scheduled to be open completely to traffic in fall 2014.

⁵ <http://www.infrastructureontario.ca/Templates/Projects.aspx?id=2147485308&langtype=1033>

Similarities to the Project:

- **First Transportation Sector P3:** While Infrastructure Ontario had completed many P3 transactions in the social/accommodation sector (e.g., hospitals, courthouses), the Rt. Hon. Herb Gray Parkway was the first major P3 for IO in the transportation sector. The North Commuter Parkway Project and Traffic Bridge Replacement Project will be the first transportation P3 project in Saskatchewan.
- **Scope:** As part of the project agreement, key risks associated with the design, construction, and maintenance responsibility of the Rt. Hon. Herb Gray Parkway over the 30-year service period were transferred to WEMG.⁶ The North Commuter Parkway and Traffic Bridge Replacement Project will also include risk transfer and risk sharing during these phases of the Project.
- **Multiple Stakeholders:** A key challenge for the Rt. Hon. Herb Gray Parkway was to develop a successful transaction in a multiple stakeholder environment that often had competing interests. Stakeholders included all three levels of government, local and regional communities, and various business interests. For the North Commuter Parkway and Traffic Bridge Replacement Project, all three levels of government are expected to be involved, as well as multiple community and special interest groups.

3. Chief Peguis Trail Extension

Location: Winnipeg

Delivery Model: DBFOM

Price of Contract: \$100 million

Estimated Value for Money: \$31 million⁷
(17.6% savings)



Project Description:

Chief Peguis Trail (formally the Kildonan Corridor) is intended to form part of the City of Winnipeg's Inner Ring Route. The first section of Chief Peguis Trail (Route 17) is a four-lane divided road, built between Main Street and Henderson Highway in 1990. This includes the Kildonan Settlers Bridge and Bunn's Creek Box Culvert and currently serves approximately 25,000 vehicles per day. The Chief Peguis Trail Extension Project is the second phase of construction of the Chief Peguis Trail.

The Chief Peguis Trail Extension Project (the "Project") involves the construction of a new segment extending the Chief Peguis Trail for 3.7 kilometers in an east-west direction within a designated right-of-way, and will be a four lane, divided roadway. This new section of roadway will be designated as a truck route, thereby attracting truck traffic from many of the surrounding streets. The design of the roadway will also allow for expansion to six lanes in the future. Substantial completion was achieved in November

⁶ <http://www.infrastructureontario.ca/Templates/Projects.aspx?id=2147485308&langtype=1033>

⁷ <http://www.winnipeg.ca/publicworks/MajorProjects/ChiefPeguisTrail/PDF/2011-11-25-CPTEP-ProjectReportFinal.pdf>

2011, and the Roadway was opened a year ahead of schedule. PPP Canada provided \$25 million for the project.

Project features include:

- Grade separation
- Multi-use pathways
- Multi-use bridge
- Pump station and dry pond
- Intersection improvements and lane widening
- Sound attenuation,

Similarities to the Project:

- **PPP Canada Funding:** This project received PPP Canada Funding which is a critical element to deliver the North Commuter Parkway and Traffic Bridge Replacement Project.
- **Public Sector Partner:** Unlike the previous two examples, this project was transacted by a City as opposed to a provincial agency. The North Commuter Parkway Project and the Traffic Bridge Replacement Project will be transacted by the City.
- **Payment Mechanism:** The City will pay the P3 Contractor over the term of the DBFOM Agreement, which is more than 30 years. The majority of the City's payment is not provided until the P3 Contractor has completed construction of the roadway and structures sufficient for commissioning. Of that amount, a significant portion of payment to the P3 Contractor is performance based, meaning that amounts paid to the P3 Contractor are dependent on the quality of its services⁸. This payment mechanism will be used for the North Commuter Parkway and Traffic Bridge Replacement Project.
- **Risk Transfer:** The contractual terms of the P3 transaction require the private sector to bear most of the risks associated with design deficiencies, construction cost overruns, and maintenance and major capital (lifecycle) repair cost overruns. This is a key component of the North Commuter Parkway and Traffic Bridge Replacement Project.

4. Desraeli Bridge

Location: Winnipeg

Delivery Model: DBFM

Price of Contract: \$195 million

Estimated Value for Money: \$47.7 million (17.1% savings)



Project Description:

The need for this Project arose due to the age and condition of the previously existing bridges. This project involved the rehabilitation of the roadways and bridges that stretch from Main Street to Henderson

⁸ <http://www.winnipeg.ca/publicworks/MajorProjects/ChiefPeguisTrail/PDF/2011-11-25-CPTEP-ProjectReportFinal.pdf>

Highway at Hespeler. This approximately 2 kilometer stretch included approach streets, traffic interchanges, an overpass for pedestrians, as well as the two bridges spanning the CPR mainline and the Red River.

Similarities to the Project:

- **New Bridges:** The Red River Bridge and CPR overpass were replaced with entirely new structures. The new Red River bridge is immediately west of the previous structure, and the new CPR Mainline overpass east of the previous overpass. The North Commuter Parkway Project and the Traffic Bridge Replacement Project will also be replaced with new structures, aside from the existing piers for the Traffic Bridge which Proponents will have the option to replace or retain.
- **Piers and In-River Work.** The P3 Contractor assumed responsibility for the rehabilitation and maintenance of the existing piers. The rehabilitation of the piers required in-river work and as a result increased the EAs required for the project. Despite this, the project was opened on time and on budget. Depending on the designs proposed by the selected Proponent, the North Commuter Parkway and the Traffic Bridge may involve in-river work. During market sounding interviews, participants indicated that there may be technological alternatives to avoid any in-river construction.

Results:

The \$195 million Disraeli Bridges Project opened on time and on budget last fall and resulted in multi-million dollar cost savings in comparison to a traditional delivery approach.

The results from the Final Value for Money report for the Desraeli Bridge indicated the VFM of the DBFM delivery model results in approximately \$47.7 million (NPV) of savings to the City, in comparison to the traditional delivery model. This represents a 17.1% savings⁹.

5. Building Alberta's School Construction Program (formerly known as Alberta Schools Alternative Procurement)

Location: Alberta

Delivery Model: DBFOM

Price of Contract: See "Results" section below

Estimated Value for Money: See "Results" section below

Project Description:

Alberta has experienced significant growth in young families moving into new subdivisions in Edmonton and Calgary. Because existing schools are close to the city centres, many students need to bus to school and most of these schools are overcrowded. The Government of Alberta decided that the province required a large number of new schools in newly developed neighbourhoods to meet these needs.

⁹ <http://www.winnipeg.ca/publicworks/MajorProjects/DisraeliBridges/Disraeli-Bridges-Project-VFM-Report-Final.pdf>

In Alberta, the P3 model had proven its success in the transportation sector and the government was interested in delivering school infrastructure following a similar delivery model. As a result, the Building Alberta's School Construction Program (BASCP) was created in 2007 as a public-private partnership model and as an alternative to the government's traditional method of building new schools.

The BASCP is a new approach to building schools in Alberta. The Government of Alberta is undertaking four phases of BASCP projects that will result in new schools for the Edmonton and Calgary regions.

Similarities to the Project:

- **Bundling:** Each phase of the BASCP project involves one procurement for a number of schools that are bundled together under one DBFOM contract. There were two important criteria that led to the success of this approach including: (1) there were a large enough number of schools to permit bundling; and (2) the schools were in close enough proximity for a consolidated approach to be successful. The North Commuter Parkway Project and the Traffic Bridge Replacement Project will be bundled together and delivered by a single private sector partner.
- **Payment Mechanism.** Payment to the contractor is performance based. The Alberta government will advance financing to the private sector partners when the schools become available, and will at that time, begin capital and maintenance payments for the 30-year term.
- **Tight Timelines.** One of the key issues the project faced was a very tight procurement timeline and construction completion date. To address this challenge, particular focus was paid to the scheduling of tasks and milestones in order to meet the tight project timeline. As well, the government advised on a dual approach of applying significant penalties for late completion and sharing of uncontrollable delay risks. This involved "anticipatory" termination and step-in provisions during the construction period; these were introduced in the project agreement to ensure the Province had the ability to deliver the schools on time. This is an innovative provision not common in other PPP agreements. The procurement and construction timeline for the North Commuter Parkway Project and the Traffic Bridge Replacement Project is also tight with the target opening date set to November 2017 for the North Commuter Parkway Project and the Traffic Bridge Replacement Project.
- **Managing requirements of multiple stakeholders.** Throughout all phases of the BASCP projects, a number of school boards were new to the P3 process. Alberta Infrastructure addressed this knowledge-gap by ensuring coordination of the school boards requirements early in the process, establishing appropriate expectations of process and outcomes, and setting up communications and approval procedures. The delivery of the North Commuter Parkway Project and the Traffic Bridge Replacement Projects will involve a number of key stakeholders including multiple levels of government and special interest groups such as the Meewasin Valley Authority (MVA) and the Crime Prevention Through Environmental Design (CPTED) Review Committee.

Results:

- **BASCP I** - By using a P3 to design, build, finance and maintain 18 schools in Calgary and Edmonton, the Alberta government saved \$97 million over 32 years (in today's dollars) compared to a traditional

approach (\$634 million instead of \$731 million, a 13% savings). It will also deliver the schools two years earlier than with traditional methods¹⁰.

- **BASCP II** - By using a P3 to design, build, finance and maintain 10 schools in Edmonton and the Calgary region, the Government of Alberta saved \$105 million (in today's dollars) over 32 years compared to a traditional approach (\$253 million instead of \$358 million, a 29% savings). These schools will also be delivered up to two years earlier than with the traditional method¹¹.

3.4 Qualitative Analysis

A final qualitative assessment was completed for the Project to further validate its candidacy to be delivered via a DBFOM.

3.4.1 Qualitative Criteria and Scoring Method

Robust criteria were developed to assess the delivery models under consideration. The criteria are based on the project and procurement objectives identified in earlier sections, as well as policy direction, risk profile, stakeholder considerations, market sounding feedback, and insights from precedent transactions.

Table 7 identifies nine criteria that were assessed against the traditional Design-Bid-Build model (identified as the PSC previously) and the DBFOM model.

Table 7: Qualitative Assessment Criteria

Qualitative Assessment Criteria	Details
Cost Certainty	The extent to which each delivery model assists in providing cost certainty to the City.
On Time Delivery	The extent to which each delivery model is likely to achieve substantial completion for the Project by October 31 st , 2017.
Lifecycle Approach	The extent to which each delivery model can integrate design, construction and long-term maintenance of the Project to encourage a life-cycle approach to the design and construction of the assets.
Private Sector Market Interest/Capacity	The extent to which each delivery model generates market interest in the project amongst the appropriate players with the relevant skills, expertise and capacity to deliver the infrastructure, while promoting fair and transparent competition.
Potential for Innovative Solutions	The extent to which each delivery model offers an element of innovation.
Social Factors	The extent to which each delivery model addresses social and community needs regarding sustaining heritage aspects of the Traffic Bridge.
User Considerations	The extent to which each delivery model addresses expectations of users.
Implementation and Capacity Considerations	The extent to which each delivery model aligns with the City's capacity to oversee or manage the infrastructure investment.
Approval Constraints	The extent to which each delivery model can manage approvals.

¹⁰ <http://education.alberta.ca/media/1320820/asapip3valueformoneyassessmentandprojectreport.pdf>

¹¹ <http://www.education.alberta.ca/media/5222425/asapiivalueformoneyassessmentandprojectreport.pdf>

3.5 Results and Recommended P3 Models

Based on the outcome of the shortlisting of procurement options in Section 3.3.3, only the DBFOM model was identified as a suitable alternative delivery model to be assessed against the PSC.

To assess how well each procurement option matches the criteria, a numerical scoring system was used to distinguish among each procurement option. The following even-numbered evaluation scale was used to evaluate each alternative in order to facilitate the development of relative scores.

Score of 1: Disagree

Score of 2: Tend to Disagree

Score of 3: Tend to agree

Score of 4: Agree

Cost Certainty

The City has limited funding available and therefore cost certainty is a crucial qualitative assessment criterion. As mentioned, one of the City's project objectives is to stay on budget for capital costs. As operations and maintenance will be funded through the City's Public Works Division, having a predictable O&M payment stream is also highly valued to assist with budgeting and planning purposes for the City's entire transportation network.

P3s can provide cost certainty over the long-term while guaranteeing a level of service¹². The City can use the DBFOM model to "lock in" its project costs for design and construction, as well as for maintenance and operations for the project term, shifting the risk of increasing construction costs and other financial risks to the private sector partner. Transferring financial and schedule risk discourages late scope and design changes, thereby limiting the City's exposure to change orders and associated delays and cost overruns commonly experienced on large capital projects.

Despite the higher spread to privately finance the withheld construction costs as compared to public financing costs, competitive pressure and up-front due diligence by lenders would compel the private sector to optimize management and produce design, construction, operations and maintenance innovations, resulting in better value and a lower total project cost (construction, operation and maintenance). As illustrated from precedent DBFM and DBFOM projects identified in Section 3.3.4, competitive pressures as well as innovations introduced by private sector bidders have resulted in private sector bidders coming forward with construction costs that are significantly below the public sector's original cost estimates. These factors influence higher VFM which is another objective for the Project identified by the City.

The PSC model has the potential to avoid some cost escalation exposure and facilitates competition on construction price; however there is no cost certainty.

¹² Identifying P3 Potential, A Guide for Federal Departments & Agencies, http://www.p3canada.ca/_files/file/FederalP3Screen_UserGuide_en.pdf

As a result of the analysis described, the City allocated a score of 2 to the PSC and 4 to the DBFOM delivery model, indicating that the City “agrees” that the DBFOM model provides budget certainty to the City and “tends to disagree” that a traditional delivery model provides budget certainty.

Time to Deliver Project

On-time completion is critical to the City. The current need for the Project requires that the Project be completed by a committed project delivery date of October 2017. Adherence to the project schedule is critical because delays to the project schedule have the potential to result in increased costs and delayed benefits.

A DBFOM delivery model has a solid track record of on-time or early construction completion since payment is aligned to the delivery of project. This transfers the risk of construction delays to the private sector.

Under the PSC, the City retains all of the risks of construction delays. In addition, unlike the DBFOM delivery model, the PSC does not integrate the final design and construction roles with one private entity, increasing the design and coordination risks assumed by the City. The PSC also does not take advantage of the opportunity to compress the construction schedule to the extent that design and construction can proceed concurrently, which is possible under a DBFOM model.

This rationale resulted in the City “tending to disagree” under the PSC model and “agreeing” under a DBFOM whether each respective model achieves budget certainty.

Lifecycle Approach

Integrating the design and construction functions on the Project from the onset encourages a holistic project delivery approach allowing for greater efficiencies to be realized. Integration advantages can be further enhanced by bringing the maintenance components into the planning equation earlier.

In a DBFOM arrangement, the full life cycle costs of the asset are transparent and predictable as the costs are factored into the project costs, unlike in a traditional procurement where the full costs of the asset over its lifecycle are often unknown or unavailable.

Design and construction integration can provide opportunities for superior maintenance solutions where length of warranty on design and construction form a key element of the bid evaluation criteria. The DBFOM contract will set performance standards for the system for the entire project term, assuring service quality over this period.

A well-defined payment mechanism, penalties for non-performance, and long-term financing ensures high performance of assets. In addition, a DBFOM model provides a 30-year warranty that is unavailable under traditional and design-build delivery models. The P3 Agreement will also set a standard for system condition at the end of the project term, ensuring the system is “handed back” to the City in good condition.

This analysis of the criterion resulted in the City “disagreeing” under the PSC model and “agreeing” under a DBFOM that each respective model achieves a lifecycle approach to the delivery of the Project.

Private Sector Market Interest and Capacity

Ensuring that there will be private sector interest in the Project is an important qualitative assessment criterion because the value proposition of a P3 is enhanced by competition. Private sector interest is a primary driver in the ability of the model to deliver value.

Market soundings undertaken by both Brookfield and KPMG confirm that considerable interest exists if the Project is delivered as a DBFOM. The scope would attract top contractors and financiers to Saskatchewan that have been previously absent from the marketplace. Market capacity would likely be sufficient to ensure a competitive process and timely delivery as there is an expectation based on the market soundings that more than three firms will respond to the RFQ.

The Project could be precedent setting as it will be the first bridge and road P3 project in the province, which has already been identified by the City as one of the potential benefits of this Project. The City may see some cost-reducing as consortia seek to define their presence in this sector through this pioneering Project.

The City expects that under both the PSC and the DBFOM delivery model, there would be substantial private sector market interest and sufficient capacity. As a result, the City scored both models equally indicating that it “agrees” that both models will attract private sector market interest and firms have sufficient capacity to deliver the Project.

Potential for Innovative Solutions

Innovation in design and delivery can add significant value to the Project. While the Traffic Bridge will, by necessity, be governed by more prescriptive requirements than the North Commuter Parkway, the overall Project will afford considerable opportunity for innovation and creativity on the part of a private sector partner.

A DBFOM model offers opportunities for innovation in design, construction and maintenance. The private sector will have flexibility to be innovative during the construction period to meet the tight deadlines. There will also be potential for innovation in ongoing maintenance and lifecycle activities. These opportunities for innovation are greater under a DBFOM delivery model as the private sector has greater incentives to achieve efficiencies. For instance, competition during the procurement process introduces pressure for firms to identify more cost effective construction techniques.

The bundling of the North Commuter Parkway and the Traffic Bridge also introduces opportunities for innovation, however bundling is assumed under both the PSC and the DBFOM delivery models. Combining both components of the Project into one procurement will afford the private sector the opportunity for innovation in the scheduling of its resources between the two components.

Overall, a DBFOM delivery model will allow the City to benefit from greater innovation in both the design and delivery of the Project compared to the PSC. This benefit is accounted for by a score of 3 indicating that the City “tends to agree” that there are opportunities for innovations compared to a score of 2 for the PSC indicating the City “tends to disagree” that this is the case for a traditional delivery model.

Social Factors

The heritage value of the Traffic Bridge is deeply appreciated by the City and its citizens as the first traffic bridge and the role it played in amalgamating Saskatoon, Nutana and Riverdale. A traditional DBB

delivery model will involve more prescriptive design specifications compared to a DBFOM approach to ensure the Traffic Bridge continues to have the sense of character, authenticity and human scale that the bridge encapsulates for the City. As a result, the private sector has limited flexibility which in turn decreases the potential for innovation..

A DBFOM approach is less prescriptive as it focuses on output specifications rather than input specifications. As a result, the private sector will have greater design flexibility compared to a traditional approach and may stray farther from the “traditional” design of the bridge.

User Considerations

Assessing previous DBFOM road and bridge projects demonstrates the success of this delivery model to allow the public sector to meet the expectations of the end user. This model focuses on whether the asset is performing as required, rather than simply whether it was built according to the input based specifications.

A DBFOM delivery model would provide better accountability compared to the PSC. In addition, since the DBFOM delivery model involves a lifecycle approach to operations and maintenance to meet handback requirements at the end of the term, the private sector partner is motivated to not only meet the performance based maintenance and operations requirements but to exceed them.

This analysis of the criterion resulted in the City “tending to agree” under the PSC model and “agreeing” under a DBFOM that each respective model considers user expectations and needs.

Implementation and Capacity Considerations

The complexity and multidisciplinary requirements of P3s carry unique organizational demands. The City considered whether it has the internal capacity to carry out the project, the long-term implications of managing the resulting asset, and whether any gaps in capacity need to be filled.

As the procurement process for the DBFOM Civic Operations Centre is currently underway, the City will have some limited in-house expertise and internal resources to deliver this Project as a DBFOM. External advisors and PPP Canada’s in-house expertise will be used to supplement any gaps in capacity.

The City has extensive experience in delivering infrastructure projects using a DBB model, as this is the traditional procurement model for past projects. There is no need to adjust to new models, design new processes, train staff or develop new communications strategies for a new way of delivering projects. It is an approach that City staff are comfortable working with.

As the City continues to grow and expand its transportation network, the City may begin to face capacity constraints due to limitations on the number of staff that oversee or manage the infrastructure investment, including operations and maintenance. Under a DBFOM, the City is still responsible for oversight to ensure that performance requirements are met, however the private sector must manage itself and is motivated by payment penalties. As a result, the DBFOM model has the ability to better predict and manage the capacity requirements compared to the PSC.

This analysis of the criterion resulted in the City “agreeing” under the PSC model and “tending to agree” under a DBFOM that each respective model meets implementation and capacity requirements.

Obtaining Approvals

The DBFOM delivery model provides the opportunity to transfer the risk of certain approvals to the private sector. The market sounding exercise indicated that the market is prepared to assume responsibility for permitting and unwilling to assume risks associated with environmental approvals such as construction delays however would assume responsibility for completing Environmental Assessments (EA) once selected as Preferred Proponent.

The City is planning on transferring responsibility of completing EA to the private sector partner since the final design will not be completed until after the Preferred Proponent is identified. As a result, a DBFOM delivery model introduces greater complexity for obtaining EA compared to the PSC. To adequately account for this advantage that the PSC has over the DBFOM delivery model, a score of 2 indicating that the City “tends to disagree” that a DBFOM model enhances the ease of obtaining EA.

Results – Recommend DBFOM model for VFM analysis

The qualitative assessment results demonstrate that the Project is well-suited for P3 delivery using a DBFOM model and is more advantageous than the traditional DBB model which is defined as the PSC.

Positive ratings on most of the factors used to evaluate the Project for its P3 candidacy and against the qualitative assessment criteria suggest that a DBFOM model would be very successful and more likely to achieve the Project’s stated objectives than traditional (design-bid-build) delivery and other delivery models.

3.6 Market Sounding Methodology

3.6.1 Overview

A market sounding exercise was undertaken to collect insights from the P3 bidder community on several topics related to the Project. Specifically, the objective of the market sounding exercise was to solicit project-specific and market-specific feedback on the market’s interest in the Project and to receive input on certain elements of the deal structure, including risk transfer and retention.

The main areas of focus during the market sounding exercise included:

- Marketability of the Project
- Potential project challenges and constraints
- Willingness to accept certain project risks
- Proposed solutions to risk-related issues
- Potential composition of consortia

3.6.2 Methodology

KPMG carried out the market sounding with individuals from companies active in the design, construction, maintenance, and financing of road and bridge infrastructure projects in Canada and internationally. Firms were identified as potential interviewees and contacted to participate in an interview. If a firm expressed interest in participating, it was sent a “Market Sounding Questionnaire” document via email with background information on the Project and the interview questions (**Appendix E**).

The participants were selected based on their:

- Depth of experience and expertise in dealing with P3 projects
- Range of experience and expertise within each category of the delivery (i.e., design, build, finance, operations and maintenance)
- Local Saskatchewan experience and presence on P3 road and highway projects
- Likelihood of bidding on a project of this nature
- Sufficient qualifications as a decision maker in the organization to comment meaningfully about the details of the project

There were 11 interviews conducted with 12 firms. Each firm had expertise in one or more areas of interest including construction, design, operations, and/or finance. In order to ensure that the participants were able to speak freely about their concerns regarding the project, KPMG conducted one-on-one market sounding interviews.

The interviews consisted of open-ended questions specific to the Project that were intended to encourage detailed responses from participants on each topic. Participants were also encouraged to identify and discuss related issues that were most relevant to them. In a market sounding exercise conducted by Brookfield Financial in April 2013 for the City, Brookfield identified concerns in the market about the adequacy of the scope of the maintenance contract. The questions in this second exercise were intended to provide additional insights into this area.

As the participants were from different sectors (i.e., construction, design, operations, and finance) and had different skills and interests related to the Project, it was not the intent to ask all questions of all participants. Rather, the intention was to capture responses that would be most valuable for the City in the time available for each interview.

3.6.2.1 Market Sounding Questions

As mentioned, participants were emailed a Market Sounding Questionnaire prior to the date of their interview to provide background information on the Project and the list of interview questions. The Market Sounding Questionnaire is attached to this business case as **Appendix E**.

The questions for the market sounding were broken down into categories as follows:

- Part A - Company Information and Experience: Basic information on the company, its operations and business activities, and its geographic presence and the experience on P3 projects, projects in Saskatchewan, and design, construction, operations, maintenance, or financing.
- Section B - Project Risk Allocation: Questions regarding the willingness of the respondent to accept various risk related to the Project.
- Part C - Construction: Questions regarding concerns of the respondent with the proposed size and scope of the Project.
- Section D - Maintenance: Questions to solicit feedback on the challenges or suggestions for the proposed scope of maintenance work.
- Section E - Financing: Questions on the likely source and structure of funding for the Project.
- Section F - Concluding Questions: Feedback on the overall attractiveness of the Project and likelihood to bid.

4 Value for Money

4.1 Value for Money Methodology

A Value for Money analysis is undertaken to evaluate, on a quantitative basis, the potential for different P3 models to create value for Project Sponsors by comparing the estimated costs of delivering a project via a traditional procurement model (the “Public Sector Comparator” or “PSC”) to those of a P3 delivery model (the “Shadow Bid”). The objectives of the PSC and Shadow Bid are described below.

4.1.1 Objective of the Shadow Bid model

The Shadow Bid is a financial model based on similar assumptions that the private sector would use to estimate the cost of the Project under a P3. The Shadow Bid includes estimates of the private sector’s design and construction costs, operating and maintenance costs, debt servicing and investment return requirements¹³.

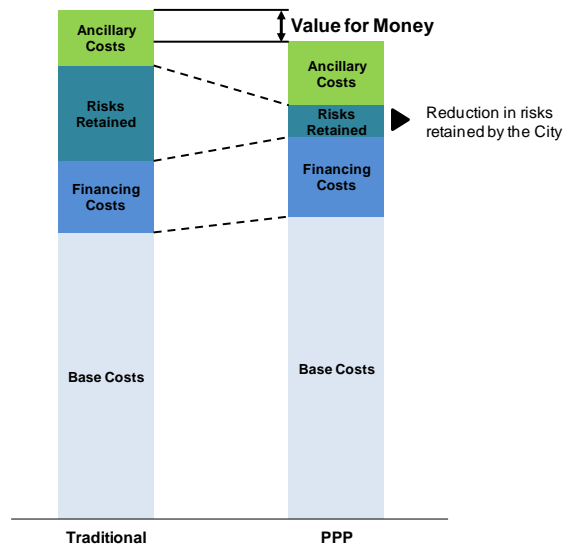
4.1.2 Objective of the Public Sector Comparator model

The PSC is a financial model used to estimate the cost of the Project under a traditional procurement. It is used as a benchmark to compare the costs between traditional and P3 procurement models. In order to achieve a like-for-like comparison between the PSC and the Shadow Bid, both models assume the same specification and the same level of performance over the same operating period.

4.1.3 VFM calculation

VFM is calculated by comparing project costs on a risk-adjusted basis. The chart below presents a conceptual illustration of the VFM calculation.

Exhibit 7: Conceptual Illustration of VFM Calculation



¹³ It is important to note that the Shadow Bid is a high-level model and does not involve the same level of details as in a private sector’s bid model.

The key in a VFM assessment is the estimation of the risk adjusted costs, which consists of base project costs (which includes transferred risks), ancillary costs (e.g. procurement and monitoring), and value of the retained risks.

Project costs before risks are typically higher under PPP procurement models due to financing costs. VFM in PPP procurement models is usually achieved because of the private sector's ability to manage some risks better than the public sector and the ability to achieve efficiencies between the design, construction and operation/maintenance elements of the project. This can reduce total project costs below that of traditional procurement models.

For a positive VFM, reduction in risks retained by the City must exceed:

- Incremental financing costs; and
- Incremental ancillary costs

4.2 General Assumptions

The table below presents the assumptions that have been used to develop the Shadow Bid and the PSC.

Table 8. General Assumptions

Assumption	Public Sector Comparator	Shadow Bid (DBFOM)
Project Schedule		
Date of Financial Close	–	June 30, 2015
Construction Start Date	April 1, 2014	July 1, 2015
Construction End Date – NCP	October 31, 2017	October 31, 2017
Construction End Date – Traffic Bridge	October 31, 2017	October 31, 2017
Total design and construction period	3.6 years	2.3 years
Maintenance period	30 years	30 years
Concession End Date	–	October 31, 2047
Inflation Assumptions		
Capital costs	Non-residential construction prices forecasts (source: Conference Board of Canada-Canadian Outlook 2013)	Non-residential construction prices forecasts (source: Conference Board of Canada-Canadian Outlook 2013)
Regular maintenance costs	CPI forecasts (source: Conference Board of Canada-Saskatchewan Outlook 2013)	CPI forecasts (source: Conference Board of Canada-Saskatchewan Outlook 2013)
Major maintenance costs	Non-residential construction prices forecasts (source: Conference Board of Canada-Canadian Outlook 2013)	Non-residential construction prices forecasts (source: Conference Board of Canada-Canadian Outlook 2013)

4.3 Risk Analysis and Quantification

This section presents the methodology used for the risk analysis along with the results of this process.

4.3.1 Methodology

Exhibit 8: Risk Assessment Process



An overview of the risk methodology used in this Business Case is provided below.

Step 1 described in the above figure was undertaken prior to the risk workshop and involved identifying and compiling a list of Project risks.

Steps 2 and 3 involved evaluating and quantifying the impact of the risks for the P3 and DB. In particular, a consensus estimate of the following inputs was developed during a risk workshop:

- Cost Base – this refers to the cost portion of the project that the risk will affect.
- Probability – overall probability that the risk would occur (between 0% and 100%);
- Most likely outcome – the most likely cost impact of the risk occurring;
- Low Case – the estimated ‘low case’ cost impact that would occur for 1 in 20 events (i.e. 5th percentile); and
- High Case – the estimated ‘high case’ cost impact that would occur for 1 in 20 events (i.e. 95th percentile).

Risks are quantified using the following formula:

$$\text{Risk Cost} = \text{Cost Base} * \text{Probability of Risk Occurring} * \text{Impact of Risk}$$

An estimate of the proportion of a risk that would be transferred to the private sector in a P3 delivery method was also developed for each risk in the risk registry.

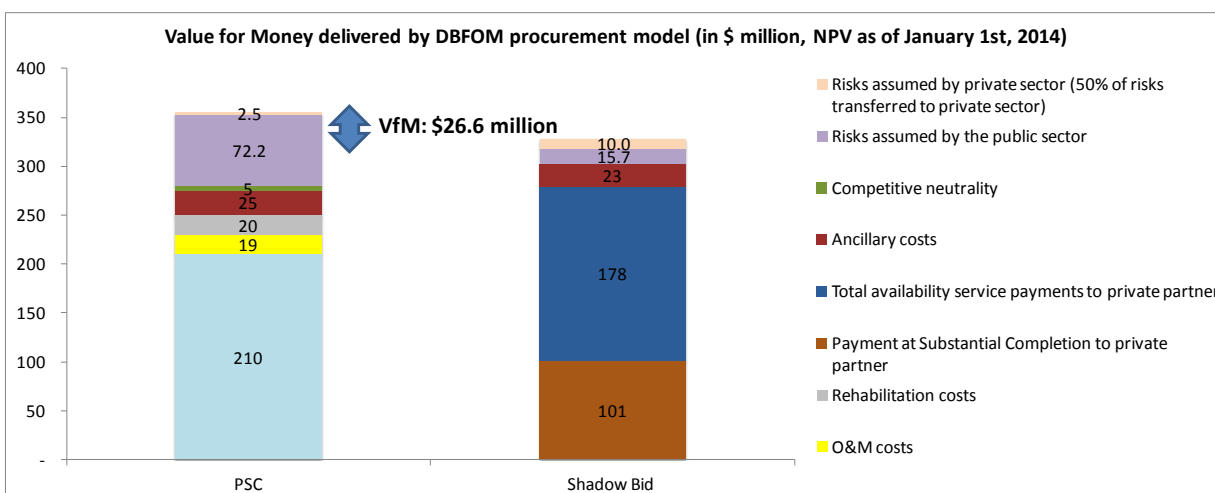
Step 4 of the risk methodology was completed following the risk workshop. As part of this step, the inputs developed in steps 2 and 3 were used to develop probability curves. The risk modeling software @Risk was used by KPMG for this purpose. @Risk was used to conduct a Monte Carlo analysis of potential outcomes. The Monte Carlo Simulation used the low, typical and high cost impacts estimated in the risk workshop in a probability distribution (in this case a triangular distribution) to calculate the cost impact of each risk. The probability distribution allows for estimated total risks to be calculated at different confidence levels. Risk averse organizations will typically use a higher confidence interval (75% to 80%) compared to less risk averse organizations.

The risk workshop was conducted on October 7, 2013 in Saskatoon with representatives of the City of Saskatoon and its technical advisors.

4.4 Preliminary Value for Money Assessment

The estimated amount of VFM delivered by the DBFOM procurement model is \$26.6 million or 7.5% of the PSC costs. The following exhibit provides a visual overview of the VFM results and cost components of each procurement model.

Exhibit 9: Visual overview of the VfM results



Based on the results of this quantitative assessment and the overall qualitative evaluation presented in the previous sections of this business case, the DBFOM procurement model can be confirmed as the preferred delivery model for the North Commuter Parkway and Traffic Bridge Replacement Project.

4.5 Sensitivity Analysis

A number of assumptions were made in order to derive the VfM for this Project. This section summarizes the results of the sensitivity analysis performed to test the robustness of the VfM to changes in the underlying economic assumptions. The results of the sensitivity analysis are summarized in the table below. Of note when reviewing the table, the base case VfM for this project is \$26.6 million as indicated in the left column of the table.

Table 9. Results of the sensitivity analysis

Shadow Bid			
Variables	Current Assumptions	Sensitivity using Low Value for Variable	Sensitivity using High Value for Variable
Short-term Private Financing		-1%	+1%
VFM (in M\$ as of January 1st, 2014)	26.6	27.4	25.7
Long-Term Private Financing		-1%	+1%
VFM (in \$M as of Jan 1st, 2014)	26.6	36.0	16.5
Construction Costs		-10%	+10%
VFM (in \$M as of Jan 1st, 2014)	26.6	25.9	27.3
Operation and Rehabilitation Costs		-10%	+10%
VFM (in \$M as of Jan 1st, 2014)	26.6	24.5	28.7
IRR		-0.5%	+0.5%
VFM (in \$M as of Jan 1st, 2014)	26.6	29.1	24.1
Discount Rate		-0.5%	+1%
VFM (in \$M as of Jan 1st, 2014)	26.6	17.8	34.4

The sensitivity analysis indicates that the DBFOM procurement model generates VfM across all scenarios considered in the sensitivity analysis. However, the amount of VfM differs depending on the scenario under consideration. For example, if the interest rate on the long-term private sector debt increases by 1.0 %, the VfM would fall to \$16.5 million. Ultimately, the amount of VfM generated by the DBFOM procurement model – and whether VfM is generated at all – will only be known once the successful bid is evaluated at financial close.

5 Integrated Recommendation

The results of the qualitative analysis in Section 3 suggest that the DBFOM is the optimal P3 delivery model for the Project. The quantitative Value for Money analysis in Section 4 further supports this conclusion.

5.1 Summary of Qualitative Analysis

The suitability of a P3 delivery model was initially assessed by Brookfield Financial and concluded that a P3 model delivers the highest Value for Money for the City. This was validated by a high-level P3 screening assessment that determined the project satisfies a number of criteria that supports a P3 delivery, such as large project size, scope for private sector innovation, stakeholder support, private sector expertise and interest, and a sufficient asset life. Market sounding consultations indicated significant private sector interest regarding the size and scope of the project.

Based on the project's objectives and constraints, as well as precedent P3 transportation projects and market sounding results, it was determined that the Design-Build-Finance-Operate-Maintain (DBFOM) delivery model should be further assessed and other alternative delivery models should not be further considered, as they do not adequately meet the requirements of the Project.

5.2 Summary of Quantitative Analysis

To quantitatively assess the DBFOM delivery model, KPMG conducted a risk workshop for City staff and developed a comprehensive financial model to conduct a Value for Money and affordability analysis. The results indicated the value to the City of a DBFOM delivery model is estimated to be approximately \$26.6 million (net present value).

The Project is a priority for the City and it is committed to investing in the Project. Council has recommended for the City to pursue financing options that may include borrowing, third party financing, user fees, and provincial support.

The City will make a substantial completion payment to repay the private partner a portion of the capital costs. During operations, the City's Transportation and Utilities Department will fund the O&M portion of the required ASP from its Operating Budget, and the capital component will be financed through cash reserves and borrowing if required..

5.3 Critical Rationale

In summary, the following factors substantiate the recommendation for the DBFOM as the optimal model for delivering this project:

- 1 The project was screened for P3 suitability by assessing the Project against a number of criteria and determined that the Project has desirable P3 characteristics.
- 2 Evaluated on the basis of the model's ability to meet the basic requirements of the project in Section 3.2, the DBFOM was the only qualified model.
- 3 A collection of five precedent road and highway projects have been successfully delivered using the DBFOM delivery model, ranging in size and geography. In addition, 12 firms were interviewed during a market sounding exercise. Assessing precedent project and the findings from the market sounding exercise suggest there would be sufficient market appetite for the Project.

- 4 As outlined in Section 3.4, the DBFOM model achieved a higher score when assessed against a number of qualitative assessment criteria indicating it is more capable of meeting the project and procurement objectives.
- 5 The estimated amount of VFM delivered by the DBFOM procurement model is \$26.6 million or 7.5% of the PSC costs.

6 Procurement Strategy

6.1 Recommended Procurement Process

6.1.1 Procurement Options Considered

The procurement process for the Civic Operations Centre that will be delivered as a P3 is currently underway. The RFQ closed in November 2013 and the City is in the process of reviewing submissions received. The procurement process has been running smoothly and there has been significant market interest.

To prepare for the Civic Operations Centre procurement, the City undertook an extensive planning process and looked at alternative procurement strategies critically. A two-stage procurement process including an RFQ stage and a RFP stage was selected as the optimal procurement strategy since it has proven its success in other jurisdictions that have implemented successful P3 projects, including British Columbia, Alberta and Ontario.

Although the Civic Operations Centre and the Project described in this Business Case are in two different sectors, a two-stage procurement strategy is suitable for both projects as demonstrated through successful precedent P3 projects. As such, the Project will be following a similar procurement strategy as the Civic Operations Centre.

6.1.2 Recommended Procurement Strategy

As mentioned, the City intends to conduct a two-stage procurement process – a Request for Qualifications (RFQ) leading to a shortlist of three proponents and a Request for Proposals (RFP) that will be issued to those proponents that have been shortlisted. Shortlisting is used to allow each proponent team a reasonable chance of success in the procurement while ensuring there is sufficient competition to generate the best value for the City.

During the RFP stage, proponents will submit a technical proposal and a financial proposal. The technical proposals are to be evaluated on a pass/fail basis prior to the City evaluating the financial proposals. Among the proponents with acceptable technical proposals, the preferred proponent will be selected based on the best financial proposal based on lowest net present value.

In addition to a multi-staged procurement process, the City will facilitate a question and answer process during the RFQ and will have “Commercially Confidential Meetings” or “CCMs” during the RFP. The intention is to provide early feedback to proponents to minimize the possibility of unacceptable technical proposals and optimize the effort expended by the proponents.

Request for Qualifications

The RFQ stage will be the first step in the procurement process for selecting a team to deliver the Project. The purpose of the RFQ stage is:

- To officially signal the intent of the City to proceed with the Project;
- To confirm sufficient interest among qualified private sector participants to proceed effectively with the procurement process;
- To allow interested parties to assemble the requisite resources and form teams as appropriate;

- To evaluate both the technical (i.e., design, construction, and operations and maintenance) and financial capabilities of bidders; and
- To identify three respondents to proceed with the RFP phase of the procurement process.

A scoring system will be used for the technical submissions during the RFQ stage. The scoring system will be carefully developed to reflect the goals of the Project prior to receipt of proposals. Each respondent will be evaluated against the evaluation criteria that have been established prior to the release of the RFQ. Respondents to the RFQ will be asked to demonstrate their experience and expertise in the delivery of municipal infrastructure projects for road and bridge projects.

It is expected that firms will team up to prepare RFQ responses, since any one firm is unlikely to have the requisite capabilities in all required areas. The operations and maintenance activities are likely to be subcontracted to one or more local Saskatoon firm(s). The prime team members will be evaluated to ensure they have the technical experience to undertake the work as operations and maintenance is a major component of the Project.

Teams will be evaluated and ranked, and three shortlisted teams will be invited to respond to the RFP.

Request for Proposals

The purpose of the RFP stage is:

- To provide proponents the opportunity to demonstrate their understanding of the project, as well as their respective role and responsibilities;
- To enable the proponents to develop and present their technical and financial solutions to meet the project objectives;
- To allow proponents to review and comment on the draft Project Agreement that will be signed by the Preferred Proponent; and
- To select the Preferred Proponent.

After the RFP is released in mid-September 2014, Proponents will be given approximately 6.5 months to prepare their technical and financial submissions. This period from when the RFP is issued to the submission deadline will be known as the “PA/RFP Open Period” or the “Open Period”.

To assist Proponents in preparing their technical proposals, CCM's will be held during the Open Period with each Proponent to clarify the design, scope and the performance criteria, as well as to explore innovation technical solutions. The feedback received by a Proponent in a CCM is intended to assist the Proponent in preparing a technical proposal submission that will meet or exceed the Project requirements. The feedback received by a Proponent in a CCM is non-binding. Proponents must submit a formal clarification to receive a binding response.

Prior to submitting the technical proposal submission, each Proponent will have the opportunity to meet with the City during the Open Period, on a confidential basis to discuss their comments on the draft Project Agreement. These CCM's may result in more than one meeting with a Proponent, depending upon the level of complexity and input received. The CCMs will afford the City the opportunity to hear the issues, but it will not be obligated to amend the terms and provisions of the draft Project Agreement or schedules to it, as a result of such discussions.

The discussions held in the CCMs will be strictly confidential and the City will respect any proprietary information provided by a Proponent. The CCMs will be attended and monitored by the Fairness Monitor for the Project to ensure that the meetings are conducted in a fair manner.

A final version of the draft Project Agreement will be issued to all Proponents prior to the closing of the RFP with any amendments arising out of the CCMs incorporated.

The submission process will not be staged, but rather Proponents will be required to submit their technical and financial submissions by the same date and time, in two separate envelopes which the City will evaluate to determine the preferred proponent.

The technical proposals are to be evaluated on a pass/fail basis prior to the City evaluating the financial proposals. Among the proponents with acceptable technical proposals, the preferred proponent will be selected based on lowest NPV price bid that is under the Affordability Threshold.

The best financial proposal will be on a net present value basis considering all cash flows and the value of any approved technical adjustments. The NPV is determined by discounting the 30 year payment stream bid by the proponents and adding the NPV of the Substantial Completion Payment to determine a total NPV for each proponent. The same discount rate will be used for this process as used in the calculating the Affordability Threshold. This approach selects the proponent that meets the acceptable technical requirements at the lowest cost to the City (i.e., the best VFM).

This “technical pass/fail, lowest price wins” approach has been developed based on best practices of similar and comparable procurements in Canada, including Alberta, and specifically fits the transportation sector.

Finalization of Project Agreement

Since a final version of the draft Project Agreement will be issued to all Proponents prior to the closing of the RFP, after the preferred proponent is selected, there will be limited negotiations. Instead, this stage of the procurement process will involve mainly incorporating elements of the preferred proponent’s submissions into the final Project Agreement (e.g., the preferred proponent’s financial offer and its technical plans).

6.1.3 Procurement Objectives

A number of factors can influence the success of a procurement process and, ultimately, generate VFM for the City. Key procurement objectives include ensuring the procurement process is competitive, fair, and transparent and encourages innovation.

Ensuring a Competitive Process

A competitive procurement is a main procurement objective as it aims to get the best value from the private sector. A competitive process will result if there is sufficient private sector expertise and interest in the Project.

The City has begun efforts to solicit market interest for the Project to maximize competitive tension in the marketplace. The market sounding conducted by Brookfield in early 2013 provided background on the Project and gauged the interest of potential private sector participants given the size and scope. As a follow-up to the findings of Brookfield’s market sounding exercise, a second market sounding was conducted by KPMG for this business case which provided a more detailed description of the project’s

scope and received detailed feedback from the market on the contemplated deal structure, including the proposed risk transfer. The results of both market soundings indicated that there would be a number of firms interested in pursuing the Project.

In addition to market sounding exercises, the City's project team has begun reaching out to the industry to heighten awareness and knowledge of the Project. The City has had meetings with several interested parties to ensure firms are kept updated on the project status and have the opportunity to begin teaming. Reed Construction Data has been in contact with the City during critical points of the project planning and development phases and has posted information on its website to ensure the construction industry is informed on the Project.

To further maximize competitive tension, the City will invite all RFQ registered parties to a bidder's meeting. Invitations for the bidders meeting will be released in the local newspaper, on the Sasktenders website, and on the MERX website. This meeting will not be mandatory for potential bidders to attend, however it will provide an opportunity for the market to receive detailed information about the Project and meet the City's project team. The bidders meeting will also include a Q&A period and a site tour. Information presented or exchanged during the information meeting will be documented and disseminated to all bidders via the electronic data room. In addition, the Fairness Advisor will review the transcripts of the questions and answers for the information meeting.

As mentioned, the City plans to engage the shortlisted bidders with CCMs to assist it in developing the optimal RFP and Project Agreement. These CCMs will allow the City to adjust its procurement process to best meet the needs of the proponents as well as provide the proponents an opportunity to better understand and potentially influence the Project requirements, the procurement process and the Project Agreement. This approach will result in more compliant and responsive bids for the City to evaluate.

Ensuring a Fair and Transparent Process

The City plans to widely publish the RFQ (i.e., local newspaper, Sasktenders website, and MERX) and to give a sufficient amount of time to bidders to respond to ensure that all qualified firms have equal opportunity to access and respond to the RFQ. All potential and actual bidders will receive access to the same type and level of information throughout the entire procurement process.

The procurement process will be designed in considerable detail prior to the RFQ evaluation commencement, in part to ensure the evaluators and individuals involved in the procurement process have a common understanding of the procurement and Project objectives.

Included in the procurement process will be a comprehensive process framework for both the RFQ and RFP stages in order to ensure a rigorous and unbiased evaluation process. Through documentation of all aspects of the evaluation in advance, the process will insulate the City from claims of unfairness. The evaluation framework will provide guidelines for the conduct of the procurement process, will detail the evaluation criteria, and will identify roles, responsibilities and codes of conduct for each participant in the evaluation process. This approach ensures that the evaluation process yields a result that is fair and defensible, and clearly identifies the preferred private sector partner to take on the Project.

During the evaluation of responses to the RFQ and RFP, the City will establish a single point of contact to receive and respond to questions from respondents/proponents. All the questions and answers will be posted to all respondents/proponents, all the communications will be documented, and all the transaction documents including the final project agreement will be disclosed to the public.

To ensure compliance with best practices, a Due Diligence Committee of City employees not engaged in the project will be established. The Due Diligence Committee will be engaged to provide an opinion as to any apparent conflict of interest brought forward during the RFQ and RFP periods. The findings of the Due Diligence Committee will be vetted by an independent Fairness Advisor, retained by the City who will report directly to the Project Steering Committee. In addition, the Fairness Advisor will provide an opinion as to whether the process was carried out in a manner that is consistent with the procurement documents issued to bidders and was carried out with openness, transparency, and integrity.

Encouraging Innovation

By virtue of selecting a delivery model that incorporates the design element of the Project, the City will invite a certain degree of innovation from the private sector in how the Project is designed, working within the parameters of the design specifications and overall Project requirements.

The City will provide a preliminary design for the Traffic Bridge (around 50% completion), although to encourage innovation, the private sector proponent will have flexibility in the technology and delivery methods used to construct, operate and maintain the Traffic Bridge. During the market sounding, the private sector already identified a number of technological alternatives to construct in an efficient manner. The City will complete around 60% of the design work for the North Commuter Parkway.

The project designs have been advanced beyond the 30% schematic design level, to ensure a higher level of confidence in the potential project costs so that sufficient budget can be applied to the project to ensure success. The current designs for the North Commuter Parkway are not intended to be enforced on the private partner; P3 proponents will be allowed full opportunity to evaluate alternative designs for the arterial roadways and bridge within the limitations of the approved functional plan for the project (i.e. general roadway alignments, number of lanes, and intersections). While the Traffic Bridge is somewhat more prescriptive in its requirements to be a modern steel truss structure, there is significant opportunity for design/construction innovation with respect to materials engineering, construction engineering, and other opportunities.

Although the Traffic Bridge and the North Commuter Bridge are different types of bridges (i.e., the Traffic Bridge is a Parker through-truss bridge), the City is confident that there will be efficiencies in the staging of construction of various components of both bridges. For instance, the private sector partner may realize material savings due to economies of scale, share special equipment to reduce rental costs, or share labour between sites due to the close proximity of both bridges. In fact, the City believes that the bundling of these two bridges (and associated connecting roads) into one P3 procurement is one of the unique aspects of the Project that will both attract private sector interest and encourage innovation. The results of the market sounding support the City's decision to bundle the two bridges.

6.1.4 Procurement Constraints

The City has identified several factors that have the potential to constrain the procurement process. As these constraints have been identified early on in the process, the City has already started to develop contingency plans and identify ways to ensure the procurement achieves the objectives described above.

Complying with Legislative Requirements

There are a number of legislative requirements that must be met during the procurement process. Specifically, the procurement and delivery shall be undertaken in accordance with any and all applicable laws such as the Freedom of Information and Protection of Privacy Act, the Occupational Health and Safety Act, and the Labour Standards Act. The procurement will also be compliant with environmental

laws, statutes, codes, licensing requirements, directives, rules, regulations, protocols, policies, guidelines, specifications, by-laws, orders, injunctions, rulings, awards, judgments or decrees or any requirement or decision or agreement with or by any federal, provincial, municipal, judicial, administrative or other governmental authority.

Stakeholder Approvals

City staff will request authorization from Council to proceed with the procurement and P3 delivery model prior to the release of the RFQ. City Council will ensure the following have been met prior to authorization:

- A positive VFM;
- A secured grant from the P3 Canada Fund for 25% of the Project's eligible costs; and

The proposed design will need to be reviewed by the City's Transportation Division if there is any diversion from the approved functional plan. To reduce the possibility of a delay in the procurement process, the City will include specifications in the RFP based on the functional plan and will provide feedback to proponents during the CCM's to avoid any major change that will require significant new internal approvals.

The Governance Committee and City Council will be required to approve the selection of the preferred proponent prior to award of the contract.

Two other key stakeholders that will need to approve the Project, include the Meewasin Valley Authority (MVA) and the Crime Prevention Through Environmental Design (CPTED) Review Committee.

The MVA is a conservation agency dedicated to conserving the cultural and natural resources of the South Saskatchewan River Valley. The MVA is comprised of three participating parties including the City of Saskatoon, the Province of Saskatchewan, and the University of Saskatchewan.

The responsibilities of the CPTED Review Committee are to review all new or major renovations affecting City of Saskatoon structures, facilities, and developments with any public access or assembly potential or the potential to put the public or employees at risk by its' design. The Project will be reviewed to ensure the principles of CPTED, as adopted by City Council, are applied to the design.

The MVA and the CPTED Review Committee will undertake reviews of the Project's components prior to and during the procurement process. If either opposes a proposed decision of the project team and the disagreement is not resolved, City Council has the authority to overrule the opposition to ensure the Project stays on schedule, on budget, and meets functional requirements. The City anticipates that MVA's main involvement will relate to the Project's connections with pedestrian trails.

MVA and CPTED will not be involved during the operations and maintenance period of the Project.

Integration of other Members

Due to existing union agreements and standard City practice, traffic signals and street lighting will be subject to design by the City's Traffic Operations Department and Saskatoon Light and Power Department. Similar to the City's Circle Drive South project, the two city departments will coordinate with the three shortlisted proponents during the RFP period to design the traffic signals and street lighting, respectively, based on each proponent's design. This coordination is required during the RFP period to

ensure each proponent is preparing their proposal based on a complete traffic signal and street lighting plan for their chosen design.

The preferred proponent will be responsible for the supply and installation of all underground conduits and pole bases while the City's Traffic Operations Division and Saskatoon Light and Power will be responsible for the wiring, poles, and light standards. While there is some risk to the partner in relying on City business units for these components, in effect this coordination is no different than that required with any private utility companies which may be affected within the project area (i.e., utility relocations for Sasktel, Shaw Cable, SaskPower, SaskEnergy, etc.).

During the concession period, the City's Traffic Operations Division and Saskatoon Light & Power will be responsible for the operation and maintenance of these assets.

6.1.5 Evaluation Procedures

The City, in conjunction with the City's external advisors, will develop a detailed evaluation framework to support a fair and defensible evaluation process. The framework will document the various procurement procedures and principles to be employed during the RFQ and the RFP stages. Specifically, the framework will describe:

- The governance structure of the procurement process;
- The overall procurement process and the intended timeline;
- The work steps within the RFP and RFQ processes;
- Evaluation team roles and responsibilities;
- The detailed evaluation criteria; and
- The procedures and guidelines for conduct and management of the procurement process.

The evaluation team will score proposals against predetermined criteria, clearly articulated to the bidders in the procurement documents. The procedures for the procurement process will include:

- Appropriate approvals are obtained in advance of commencing the procurement;
- Potential bidders are informed of the evaluation criteria;
- Proponents are not re-evaluated on qualitative factors already considered at the RFQ stage; and
- Sufficient time must be allowed during the evaluation to ensure the criteria are consistently interpreted and applied.

An affordability threshold may be used to ensure the Project is within the City's budgetary and financial constraints. At this time, it is envisioned that this would follow a similar process for the Civic Operations Centre which will be published in the RFP document. Awarding the Project within this threshold will provide the City the assurances of having the Project constructed, as well as operated and maintained for 30 years, within a funding limit that the City can afford.

The affordability threshold will be outlined in the RFP document for proponents and will be based on the Net Present Value of capital costs (including interest expense and financing fees) during construction, as well as the NPV of the budgeted/approved annual stream of funding that the City has available for the Project to pay the private partner over the 30-year term in exchange for the provision and maintenance and operation of the Project. This payment stream will be expected to cover the capital payment, operations and maintenance payment and major maintenance & rehabilitation (lifecycle) payment payable to the private partner as part of the P3 structure.

When the bids are received from the proponents, the NPV of the 30 year payment stream they bid, as well as the Substantial Completion Payment, will be compared against the Affordability Threshold to ensure compliance with the requirement of the bid to be under the Affordability Threshold. The same discount rate will be used to discount the bid payment stream as was used to determine the Affordability Threshold.

The City may consider scaling back the scope based on an industry accepted process if needed.

6.1.6 Value for Money Refreshes

The VFM analysis that has been conducted for this business case will be refreshed at three stages before financial close by the City's Financial Advisor for the Project.

VFM Refresh 1 – Project budget update

The City's Technical Advisors will be providing updated cost estimates prior to the release of the RFQ. At this point, the City's project budget will be updated and approved by Council. The project budget is required for final project approval by Executive Committee to proceed with the procurement process and to officially proceed with issuing the RFQ. Once the new cost estimates are provided, the VFM analysis will be refreshed to confirm VFM is still positive.

VFM Refresh 2 - Authorization to release the Request for Proposal

The release of the RFP by the City must be approved by its Governance Committee. The Governance Committee does not approve release of an RFP unless, among other factors, positive VFM is demonstrated by procuring a P3 project. Prior to release of the RFP, the VFM will be refreshed by the City's Financial Advisor to confirm if VFM is still positive.

VFM Refresh 3 - Authorization to enter into the Project Agreement

Upon close of the RFP process, bids are evaluated by an evaluation committee. The preferred bid is then compared to the public sector comparator and presented to the Governance Committee. At this point the Shadow Bid is updated to reflect the most current cost information. The City Council will be responsible for final approval and will not approve proceeding with P3 procurement unless positive VFM is demonstrated.

6.1.7 Procurement Schedule

The procurement schedule in Table 10 includes the major milestones and timeframe for the procurement process. It provides bidders with sufficient time to assess the risks associated with the role of the P3 Contractor, to assemble a team with appropriate capabilities, and to prepare a responsive submission for both the RFQ and RFP stages. Additionally, the schedule provides the evaluation teams with sufficient time to evaluate and for the City to approve shortlisted respondents during the RFQ stage and the preferred proponent during the RFP stage.

Table 10: Procurement Schedule

ITEM	TIMEFRAME
RFQ Release	End of April 2014
RFQ Close	End of June 2014
Shortlist Respondents	July 2014
RFP Release	September 2014
RFP/PA Open Period (7.5 months)	September 2014 – Mid April 2015
RFP Close	Mid April 2015
Evaluation of RFP Submissions (3 weeks)	Mid April 2015 – Beg May 2015
Preferred Proponent Notification	Beg May 2015
Finalization of Project Agreement and Approvals	Beg May 2015 – June 2015
Commercial / Financial Close	End of June 2015

The schedule represents the City's assessment of a reasonable procurement schedule, which helps support a fair and competitive process. This length of the RFP/PA Open Period was assessed against two major transportation projects in Canada to ensure that the City and bidder's have a sufficient amount of time to hold Commercially Confidential Meetings and for the bidder's to effectively incorporate feedback and comments from the City into their technical submissions.

The Rt. Hon. Herb Gray Parkway (formerly the Windsor-Essex Parkway) in Ontario is anticipated to have a capital cost in excess of \$1.4 billion and is being delivered as a DBFOM P3 project. The RFP was released on January 1st, 2009 and closed on August 6, 2009, which resulted in approximately a 7 month period for bidder's to prepare their submissions.

The Route 1 Gateway Project in New Brunswick is anticipated to have a capital cost of approximately \$580 million and encompasses the design, construction and financing of 37 miles of a new four-lane divided highway completing the transition of Route 1, which runs from the Canada/U.S. border to the Trans-Canada Highway. The RFP was released on June 22, 2009 and closed on November 26, 2009, which resulted in approximately a 5-month period for bidder's to prepare their submissions.

6.2 Project Governance

6.2.1 Mandate

The Project's procurement governance framework is established as a full partnership between the City's Project Team and its advisors and will provide clear direction in the planning and implementation of the Project.

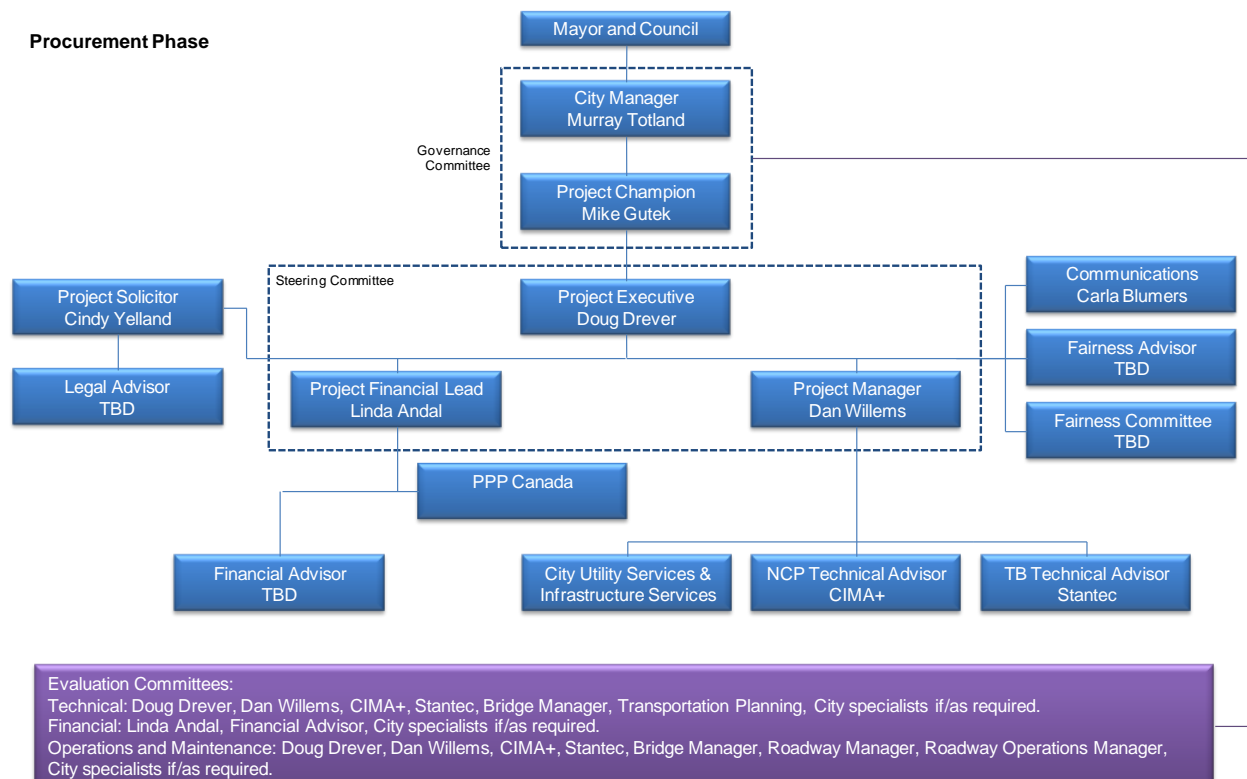
The City's Steering Committee is responsible for ensuring that the Project meets the procurement objectives. The Committee understands the Project's constraints as each team member has been involved in the planning and development of the Project and has the decision-making authority to ensure any issue that arises is addressed adequately.

The City's Steering Committee will report to the Governance Committee. The Council will be responsible for all approvals which will be presented by the Governance Committee.

6.2.2 Governance Structure and Authority

The Governance Structure shown in Exhibit 10 has been developed based on the governance structure mandate to provide clear direction in the planning and implementation of the Project.

Exhibit 10: Project Governance Structure



The Steering Committee will provide oversight and direction to the project team, including the external advisors. The Project Financial Lead, Linda Andal, will be responsible for communicating directly with PPP Canada and the Financial Advisor regarding funding of the Project, and will coordinate with other advisors and internal team members, as required. The Project Manager, Dan Willems, will communicate and work directly with the Technical Advisors and will coordinate with other advisors and internal team members, as required.

The Governance Committee will be directly responsible for the evaluation and will provide oversight and approvals, as required. The Technical evaluations will be led by Doug Drever and Dan Willems with support from the Technical Advisors (CIMA+ and Stantec), the Bridge Manager, Transportation Planning, and other City staff, as required. The Financial Evaluation will be led by Linda Andal with support from the Financial Advisor and city staff, as required.

6.2.3 Key Points of Consultation with Oversight Committees

As mentioned, P3 delivery models and procurement strategies for this Project were initially assessed by Brookfield Financial, as documented in its report dated April 2013. As part of this report, project governance options were assessed, including:

- (1) Upfront approval from City Council to proceed with procurement within pre-determined scope and cost constraints
- (2) Staged approvals from City Council upon the achievement of select milestones during procurement

Brookfield indicated that both options are appropriate for different types of projects. It was determined that obtaining upfront approval from City Council would facilitate a streamlined procurement, as exclusive authority would be delegated to the Steering Committee. A staged approval was noted as effective for large-scale projects that are subject to significant public scrutiny and require all internal stakeholders to actively voice their feedback and participate directly in the decision-making processes.

A staged approval process was selected as the optimal model as it ensures that there is strong oversight throughout the entire procurement. City Council will be updated on the status of the Project on a regular basis (approximately every six months). The Governance Committee will be updated on a monthly basis.

6.3 Project Team

The City has established a project team with the appropriate expertise and resources to successfully run the procurement process.

The City has also engaged consultants and advisors with a wealth of experience in designing P3s, on behalf of both the public and private sector, from which they have developed a solid understanding of how to structure an attractive deal from both perspectives.

6.3.1 Roles and Responsibilities

Each of the key roles and responsibilities throughout the procurement of the Project are outlined in the sections below.

6.3.1.1 Mayor and Council

Council is the main decision authority for the procurement to ensure the City's strategic objectives are met. The results of the RFQ and RFP evaluation stages to identify the shortlisted proponents and the preferred proponent are subject to approval from Council. The Mayor will be responsible for executing the Project Agreement on behalf of the City.

6.3.1.2 Governance Committee

The Governance Committee consists of the City Manager and Project Champion, and provides oversight and governance over the duration of the project. The Governance Committee will provide direction to the Steering Committee on key strategic decisions, as required. The Governance Committee will also be responsible for due-diligence and oversight, approve or deny scope change requests as appropriate, evaluate need for scope change requests, and accept project deliverables, as required.

Project Champion (Mike Gutek)

Time Commitment: In his role as Project Champion, up to 25% of Mike Gutek's time is available to assist the project team as necessary through construction completion. Mike has experience in delivering large infrastructure projects for both the private and public sector.

6.3.1.3 Steering Committee

The Steering Committee will be responsible for delegating authority to the Project Manager and the financial, technical and legal teams. Additional responsibilities include:

- Propose and approve any divergence from the evaluation framework;
- Approve all documents related to the evaluation process, including the evaluation framework;
- Approve evaluation criteria to be used by the evaluation teams;
- Rule on any non-compliance issue identified by the completeness review team and evaluation teams;
- Undertake initial pre-screening of innovation submissions (if any) to determine which ones should be reviewed by the relevant evaluation team;
- Ultimately decide which innovation submissions are accepted for formal scoring by the relevant evaluation teams;
- May review the proponent submission and may review the work of the evaluation teams;
- Review findings from the completeness review team, technical evaluation team, and the financial evaluation team;
- Review the ranking of proponents, which will be based on the final proposal score and, in the event of a tie, the tiebreaker established in the RFP;
- Endorse the recommendation of the preferred proponent for approval by the Council;
- Oversee the budget and ensure that the City's affordability threshold is met;
- Advise on risk allocation and project agreement; and
- Provide guidance around the output specifications, including handback conditions, to ensure that the City's objectives are met (i.e., delivery of a quality facility at a competitive price).

Project Executive (Doug Drever)

Doug Drever will act as the Project Executive for this Project, providing oversight and senior advisory services to the Project Manager over the course of the Project.

Doug Drever, P.Eng. FEC - is the Project Director for two of the City's current alternative procurement projects: the Circle Drive South project and the Civic Operations Centre. Doug is a graduate of the University of Saskatchewan in Civil Engineering. He has worked for the City in a variety of capacities since 1979, such as a Project Engineer, Land Development Engineer, Interim Department Business Administrator, Operations Engineer, Roadways Manager, Public Works Branch Manager, and Strategic Services Manager. Prior to that Doug was a Civil Design Engineer with the Saskatchewan Power Corporation.

Role: The Project Executive will support the Project Manager with internal approvals and briefings, as required, and assist with technical reviews.

Time Commitment: It is anticipated that on average Doug will commit up to 25% of his time to the Project to assist the project team.

Project Manager (Dan Willems)

The Project Manager will be Dan Willems who is the Special Projects Manager with the Corporate Projects Team in the City Manager's Office.

Dan Willems is a Professional Engineer that received a Bachelor of Science in Civil Engineering from the University of Saskatchewan in 2001. Dan joined the City of Saskatoon in 2011 and he served as an Infrastructure Analyst and Bridge Manager, before being promoted to Special Projects Manager in early 2013. Among several other projects and initiatives currently ongoing, Dan is project manager for the City's McOrmond Drive Sanitary and Storm Trunk Sewer project, a \$33M design-build project employing tunneling construction methods. Prior to joining the City, he worked as a consulting engineer in the Edmonton region.

Role: The Project Manager's role will be to oversee the entire procurement process and manage the day-to-day work tasks and teams until construction completion. The Project Manager will be supported by the Steering Committee and external consultants.

Other responsibilities will include:

- Manage and coordinate on a day-to-day basis all activities;
- Measure and verify project scope.
- Act as primary contact for all bidders during the procurement process;
- Approve all communications to proponents, as well as all public communications;
- Track and advise on the development of Project and procurement related documents;
- Ensure compliance with the Project budget;
- Ensure that all Project milestones are met;
- Appoint and direct external advisors;
- Present key options and recommendations to the Governance Committee; and
- Be responsible for day-to-day management (e.g., budget, process, project scope, project schedule, and stakeholder relationship) and coordination of the project team, including most external advisors.

Time Commitment: Dan Willems will be 100% allocated to this project from the planning stages of the Project until construction completion. Delegating additional internal resources such as hiring an Assistant Project Manager is an option, subject to the Project receiving PPP Canada funding.

Project Financial Lead (Linda Andal)

Linda Andal will be the Financial Lead for this Project. Linda is the Director of Financial Planning with the City's Asset and Financial Management Department.

Linda joined the City in 1985. She is a Certified Management Accountant (CMA) and has held several progressive accounting management positions within the corporation. Linda led the business case development and Value for Money analysis for Saskatoon's Police Headquarters project and Civic

Operations Centre. Linda recently attained her Certification as a Public-Private Partnership Specialist. Linda is also acting as the Financial Lead for the Civic Operations Centre P3 project.

Role: As Project Financial Lead, Linda will be responsible for providing financial expertise and advice to the Steering Committee on all financial and commercial issues that arise. Linda will take a lead role in the development of the P3 business case, including liaison with counterparts at senior government organizations to assist in securing necessary grant funding contributions. Linda will also work closely with the Financial Advisor to develop and refine the assumptions for the financial model during the RFP stage.

Other responsibilities will include:

- Ensure compliance with the City's financial policies and procedures;
- Lead the financial evaluation of the responses to the RFQ and RFP; and
- Support the Project Manager with internal approvals and briefings, as required.

Time Commitment: It is anticipated that Linda will commit approximately 50% of her time on average to the Project. The other 50% of her time will be spent on the Civic Operations Centre.

6.3.1.4 Financial and Procurement Advisor

The City has worked with KPMG LLP to develop this business case. Specifically, KPMG has assisted the City in refining its funding options, conducting the VFM analysis, assessing alternative delivery models, conducting a market sounding, developing the business case document and helping to structure the proposed procurement process.

The City will retain a Financial and Procurement Advisor to assist throughout the procurement and closing phases. The financial responsibilities will include the following:

- Advise on all financial matters;
- Review financial models submitted as part of the RFP submission to ensure compliance with the RFP and the Project Agreement;
- Develop affordability threshold and, if necessary, a scope ladder (should affordability be an issue);
- Structure commercial and financial terms;
- Work with the Technical Advisor to develop and calibrate the payment mechanism;
- Advise on funding sources;
- Develop the payment mechanism;
- Develop and refine the financial model;
- Assist in developing the reference projects and VFM benchmarks and lead the risk identification and quantification required for the VFM;
- Provide support during the commercial and financial close periods, as required (e.g., provide input to the Legal Advisor, as required, regarding PA financial matters);and
- Support the City through negotiations and finalization of the PA.

The Financial and Procurement advisor's responsibilities for the procurement process will include the following:

- Advise on the procurement process;
- Structure and draft bid documents (RFQ and RFP), including a customized evaluation methodology and all financial submission requirements, to ensure good quality responses. The Financial and Procurement Advisor will be assisted by the City's other advisors (e.g. legal advisor, technical advisor);
- Develop evaluation criteria and manual, and train the evaluation team;
- Participate in post-issuance process, including bidder workshops, bidder Q&As and addenda;
- Participate in and assist with oversight of the evaluations;
- Advise on strategies to protect commercially-sensitive information from public disclosure; and
- Support the City through negotiations and finalization of the contract.

The Financial and Procurement Advisor will also work with the City's Project Team in the following activities:

- Attend commercially confidential meetings, as required;
- Prepare responses to bidder questions and addenda, as required;
- Develop evaluation worksheets required for the evaluation framework;
- Provide support during the Commercial and Financial Close periods, as required; and
- Assist in sounding out the market and raising the profile of the project (in conjunction with the Project Manager).

6.3.1.5 Communications Team Lead (Carla Blumers and Leanne Nyirfa)

The Communications Lead will be Carla Blumers, Communications Manager with the City Manager's Office. Carla will be assisted by Leanne Nyirfa, Communications Consultant for the City. The Communications Team will provide assistance to the Steering Committee on any communications issues as they arise. The Communications Team will be responsible for all outbound communications regarding the Project, helping the Steering Committee and Governance Committee ensure all external communications have consistent messaging, and coordinating regular project updates and community consultation events.

6.3.1.6 Technical Advisor

The role of Technical Advisor involves the following responsibilities:

- Prepare design documentation, performance specifications, operation specifications, life cycle replacement specifications and other documentation that fully detail the planning, design and operational requirements for the assets (collectively referred to as the output specifications) that will form the basis for the proponents' proposals;
- Ensure that the output specifications are fully coordinated and integrated with the related documentation prepared by the City and its advisors, and incorporated as such into the Project RFP documentation and the Project Agreement;

- Assist the City and its advisors in the development of the Project RFP processes and assist the City in the evaluation and selection of a preferred proponent during the Project RFP process;
- Attend commercially confidential meetings, as required;
- Develop hand-back specifications;
- Prepare responses to bidder questions and addenda, as required; and
- Review and evaluate the technical aspects of any interim and final submissions prepared by proponents during the RFP process leading to the selection of a preferred proponent.

CIMA+ has been retained by the City to take a lead role for Technical Advisor services. Stantec Consulting Ltd. was retained by the City in 2011 as the City's Technical Advisor for the Traffic Bridge Replacement Project. Stantec's involvement for this Project will be limited to only those technical items which directly pertain to the Traffic Bridge, as CIMA+ will be the Lead Technical Advisor for the Project.

6.3.1.7 Procurement Team

The Procurement Team will be led by Project Manager and supported by a senior member of the City's Purchasing Services division of the Finance Branch, Corporate Services Department, the Due Diligence Committee and Fairness Advisor, and the Project Solicitor and Legal Advisor. The Procurement Team will support the Project Manager on procurement specific issues as they arise. The Procurement Team will also work to develop and refine the procurement approach, including the release of RFQ and RFP documents and consultations with interested parties.

6.3.1.8 Project Solicitor

The Project Solicitor will be led by Cindy Yelland. The Project Solicitor will provide assistance and guidance to the Project Manager on legal issues as they arise (in the context of the P3 procurement). The Project Solicitor will coordinate the Legal Advisor to develop and refine key project documents, including the RFQ, RFP and Project Agreement. Cindy holds this same role with the Civic Operations Centre project.

6.3.1.9 Legal Advisor

The Legal Advisor's role will include the following responsibilities:

- Provide general corporate and commercial legal advice;
- Review documents for consistency with the draft Project Agreement and legal content / legal issues;
- Draft potential financing arrangements and supporting agreements;
- Advise on strategies to protect commercially-sensitive information from public disclosure;
- Identify issues and potential options for resolution on matters of risk, financing, liability, indemnity, transparency, confidentiality, and fairness, when and where appropriate;
- Finalize the Project Agreement following selection of a preferred proponent; and
- Prepare for and close the Project Agreement and financing.

6.3.1.10 Due Diligence Committee

To ensure compliance with best practices, a Due Diligence Committee of City employees not engaged in the project will be established. The Due Diligence Committee will be engaged to provide an opinion as to any apparent conflict of interest brought forward during the RFQ and RFP periods. The findings of the Due Diligence Committee will be vetted by an independent fairness monitor, retained by the City and who will report directly to the Project Steering Committee,

6.3.1.11 Fairness Advisor

The Fairness Advisor will act as an independent observer of the fairness of the implementation of the procurement process and deliver a report at the conclusion of the procurement process. The Fairness Advisor's role will include:

- Provide proactive input on potential fairness issues during the procurement process;
- Review the evaluation documentation, including the evaluation criteria;
- Attend evaluation sessions to monitor the evaluation process, including compliance with the evaluation documentation;
- Review clarifications and addenda issued to the respondents and proponents;
- Attend meetings throughout the procurement process that are appropriate for it to monitor the procurement process and to complete its report; and
- Deliver a report to provide an opinion on whether the City carried out the procurement process in a fair and consistent manner.

6.3.1.12 Evaluation Committees

Technical, Financial, and Operations and Maintenance Evaluation Committees will be established to complete respective reviews of the RFQ and RFP submissions, as follows:

- Technical Evaluation Committee: Doug Drever, Dan Willems, CIMA+, Stantec, Bridge Manager, Transportation Planning, and other City specialists if/as required.
- Financial Evaluation Committee: Linda Andal, Financial Advisor, and other City specialists if/as required.
- Operations and Maintenance Evaluation Committee: Doug Drever, Dan Willems, CIMA+, Stantec, Bridge Manager, Roadway Manager, Roadway Operations Manager, and other City specialists if/as required.

6.3.2 Transition Planning

To ensure a smooth transition to the post-procurement period, the Steering Committee will continue to provide oversight during the Design-Build period. The City Manager, Murray Totland, is a key member of the Governance Committee during the procurement phase and his continued involvement throughout the Project will ensure consistency and smooth transition between each stage of the Project (procurement period, Design-Build phase, and O&M period). Further details on transition planning are provided in Section 7.0.

6.3.3 Resourcing Constraints and Mitigation

The City's procurement team consists of City staff that have years of experience in P3 and/or complex infrastructure procurement. Although there is a certain amount of in-house experience, the City understands the in-depth knowledge and experience that external advisors can bring that is over and above what exists in-house.

The City has already engaged consultants and advisors with a wealth of experience in designing P3s, on behalf of both the public and private sector, from which they have developed a solid understanding of how to structure an attractive deal from both perspectives. The City will retain additional advisors to direct the RFQ/RFP processes. As identified in the sections above, external advisors will include:

- Technical Advisors
- Legal Advisor
- Financial Advisor
- Fairness Monitor

The City's current budget for internal and external resources for the Project has been approved by Council.

6.4 Procurement Documents

As mentioned, the Civic Operations Centre is currently in the RFQ stage. In addition to the RFQ being developed, the City is currently finalizing the RFP document with the assistance of its advisors. The RFQ, RFP and Project Agreement for the Civic Operations Centre have been developed using Alberta's procurement documents as a template. The procurement documents have undergone extensive review and modification by the City and its advisors to ensure the documents meet the City's project and procurement goals, follow the City's governance structure, and include relevant and detailed project specific information.

The procurement documents that have been developed for the Civic Operations Centre will be used as a template for the Project. The City will involve its external advisors in all development and review of the RFQ, RFP and Project Agreement for the Project.

6.5 Project Resourcing and Budget

The Project budget has been developed internally by Linda Andal, Project Finance Lead, and includes costs of the various technical, pre-feasibility and feasibility studies that have been carried out to date. Budgeting has also covered the cost of financial and procurement advisory services. As the Project progresses, the budget will be updated and all necessary spending approvals will be obtained from Council as required. Certain technical costs and the land acquisition costs have been estimated and provided by Technical Advisors for the Project.

In addition, this business case is intended to demonstrate the Project's eligibility for up to 25% of eligible development costs. The City will continuously work with Council and other stakeholders to secure any further resources (e.g., staff time and training, budget) that may be required to move the project through the planning, procurement and post-procurement.

The City recognizes the significant commitment of manpower resources required to successfully deliver a P3 project of this scale. Training these resources to fulfill their responsibilities, particularly regarding RFQ and RFP evaluations, is a time consuming process. To that end, the Project Team has been assembled

to provide sufficient resources and expertise to move the Project forward on a timely basis. The time commitments for the Project Manager, Team Leads and the Project Sponsors are well understood and will be communicated to those individuals as the Project proceeds. Recognizing that some of the resources that will be involved have other responsibilities outside the Project, alternative resources within the City will be drawn upon to manage those other responsibilities and allow the Project Team to focus on the Project.

7 Implementation Plan

7.1 Project Status

7.1.1 Previous Work and Current Status

The Project is currently in the planning and design stage, and the planning is well advanced. The North Commuter Bridge has been endorsed by City Council and the Rural Municipality of Corman Park, and approved by the Province of Saskatchewan. The City Council's decision to replace the Traffic Bridge with a modern steel truss bridge was made in December 2010. Prior to and after City Council's approval to move ahead with the planning of these projects, a number of major milestones have been achieved.

- **March 2013** - A Public Open House was held to provide information on the functional plan for the Parkway project.
- **May 21 2013** - City Council approved the Functional Planning Study, which evaluated the relative merits of crossings at particular locations, and how each crossing contributes to transportation system performance in the future based on population growth projections. The study also includes the details of the required road network.
- **June 2013** – City Council approved the award for Technical Advisor services to CIMA+.

For the Traffic Bridge, the initial step of planning the new bridge was the completion of a Traffic Needs Assessment and Functional Planning Study. A conceptual design, based on the approved functional plans, was developed and approved by the City and its technical advisor, Stantec Consulting.

Extensive public consultations have been held for the Traffic Bridge. The consultations made it clear that the new bridge must accommodate all modes of transportation (i.e., vehicular, pedestrian and cycling traffic). Three Open House Events were held between June and October 2010.

The following milestones have occurred for the Traffic Bridge Replacement:

- **May 2010** - Stantec Consulting was hired to complete a Traffic Bridge Needs Assessment and Functional Planning Study. In addition to traffic and structural analyses, the study included the development of options for the future use of the bridge and extensive stakeholder consultation.
- **June 22, 2010** - Open House Event #1 was held and attended by 250-300 people. In total 545 people provided input both at the event and via an online community forum. Nearly all wanted to maintain a river crossing at this location, and the majority of respondents wanted to see the Traffic Bridge rehabilitated. Opinions were split in terms of whether it should be a pedestrian/cyclist-only bridge or a bridge for vehicular traffic as well as pedestrian and cyclists.
- **August 2010** - The Bridge was closed due to public safety concerns.
- **September 15, 2010** - Open House Event #2 was held and attended by 400 people. Input was sought on the four remaining bridge options (rehabilitation of the existing bridge, replacement with a modern steel truss bridge, replacement with a conventional bridge, and replacement with a signature bridge). Nearly 1,000 people provided input at the open house and later on the online survey. After this open house the signature bridge option was removed.

- **October 20, 2010** – Open House #3 was held and attended by 150 people; 285 people provided input at the event and online.
- **December 20, 2010** - City Council approved Administration's recommendation to replace the existing Traffic Bridge with a modern steel truss bridge; that the replacement structure be completed through a design-build process; and that efforts should be made to incorporate elements that are sympathetic to the heritage and architecture of the existing bridge.
- **January 2011** – The Traffic Bridge Needs Assessment and Functional Planning Study Final Report was completed. At the time, the report estimated that the construction time would be 18 to 24 months, and that the cost to replace the Traffic Bridge with a modern steel truss bridge would be between \$27,000,000 and \$34,000,000 (2011 dollars).
- **October/November 2012** – The southernmost span of the Traffic Bridge was demolished, which allowed Saskatchewan Crescent to be reopened in the area.
- **May 2013** - Stantec Consulting Ltd was awarded an Engineering Services Agreement as the City's Owner's Engineer for the design-build of the Traffic Bridge. When the two projects were combined, Stantec was listed as a designated sub-consultant to provide technical advisory services for the Traffic Bridge component of the work.
- **June 10, 2013** – City Council approved award of the Project's technical advisory services role to CIMA+.

Milestones for the overall Project include:

- **June 2012** - City Council adopted the Integrated Growth Plan, which outlines a transit, land use, and roadway strategy for the growth of Saskatoon to a population of 500,000 people.
- **May 21, 2013** - City Council made the decision to include the Traffic Bridge replacement as a 'bundled' project with the North Commuter Parkway project. City Council also decided that Administration continue to pursue available funding for the Project from the Federal and Provincial Governments.
- **June 2013** - A funding application was submitted to PPP Canada for the North Commuter Parkway and Traffic Bridge Replacement project.
- **September 2013** - City Council approved the award for the Project P3 business case to KPMG LLP.
- **October 7, 2013** - PPP Canada accepts the P3 Canada Fund Screening Application for the Project.

7.1.2 Future Work

A number of approvals and permits are required prior to the start of construction. The City and the P3 proponent will consult and coordinate with the applicable regulatory agencies including Saskatchewan Environment, Fisheries and Oceans Canada, Environment Canada, Saskatchewan Water Security Agency, Transport Canada, and Meewasin Valley Authority, as required throughout the project. The key actions are described below.

Akzo Nobel Site

The City has identified contaminated material along the proposed roadway route. These soils will be mitigated as part of the project and any material that does not meet the Ministry requirements will be managed in the most appropriate way.

Northeast Swale

The extension of McOrmond Drive between Fedoruk Drive and Central Avenue will include a crossing of the Northeast Swale. The crossing location for the roadway was determined following thorough consultation between the City, environmental engineers, scientists, and the Meewasin Valley Authority. As the Parkway crosses the Northeast Swale, the design and construction of the Parkway will be required to comply with the Northeast Swale Development Guidelines.

Environmental Assessment

The City has completed significant environmental investigations of the sites to-date. Currently, a consultative development review is being completed by Wanuskewin Heritage Park to ensure the Parkway does not hinder the environment inside and surrounding the Park.

A Phase 1 Environmental Site Assessment, consisting of an environmental screening, has been completed for the entire project. This will be reviewed with the Saskatchewan Ministry of the Environment in advance of procurement. Additional environmental assessments may be undertaken by the proponents if necessary based on their detailed designs and potential impacts.

Land Acquisition

The City has not acquired all of the land required for the Project. Most of the land on the east side of the river crossing is already owned by City; however, five acquisitions are needed. The City has completed the acquisition of one piece of land, two have pending offers; one offer is ready to be issued, and the fifth needs to be completed (the firing range). Land acquisition is anticipated to be fully complete by early 2014.

Due to the limited amount of land involved on the west side, the Akzo Nobel site is anticipated to be the only land that could create an issue if the land is not acquired on time. The City has been in talks with Akzo Nobel since early 2013 and a deal is anticipated to be in place before the end of the year.

Design Approvals

A Safety/Crime Prevention Through Environmental Design (CPTED) review will be required for each preliminary design submission during the RFP period. Preliminary CPTED review has already been completed on the Schematic Design.

Preliminary reviews have also been completed with the Meewasin Valley Authority, Akzo Nobel, Fire and Protective Services, Transportation, Lands, Public Works Division, and Transit to solicit feedback on the Schematic Design so any items of importance can be incorporated into the RFP document.

Regulatory Approvals

The following regulatory approvals are expected to be required for the Project:

- Saskatchewan Environment (Project Description and Aquatic Habitat Protection)
- Saskatchewan Ministry of the Environment
- Fisheries and Oceans Canada Environmental Assessment (application for Authorization for Works or Undertakings Affecting Fish Habitat)
- Transport Canada Navigable Water Protection Program and Environmental Assessment (application to Navigable Water Protection Program)
- Environment Canada/Canadian Environmental Assessment Agency (erosion and sediment protection, groundwater flow and recharge, wildlife habitat)
- Saskatchewan Water Security Agency
- Meewasin Valley Authority (Consultative Development Review)
- Wanuskewin Heritage Park (Consultative Development Review)

7.1.3 Studies Completed

Significant accomplishments to date include the completion of the following studies and reports related to various aspects of the Project:

- *Traffic Characteristics Report, City of Saskatoon, Transportation Branch – 2010*
- *Traffic Bridge Needs Assessment and Functional Planning Study, Stantec – 2011*
- *East Sector Plan, City of Saskatoon, Planning & Development Branch – 2011*
- *North Commuter Parkway Project Functional Planning Study, City of Saskatoon, Transportation Branch – 2013*
- *University Heights Sector Plan, City of Saskatoon, Planning & Development Branch - 2013*
- *North Commuter Parkway – Baseline Terrestrial and Aquatic Field Studies, and Heritage Resource Impact Assessment, Stantec – 2013*
- *Remedial Options for the AkzoNobel Former Waste Disposal Site, Clifton Associates Ltd. – 2013*
- *Ecological, Environmental and Heritage Review of the North Bridge Corridor, Canada North Environmental Services – 2013*
- *Corrective Action Plan for Akzo Nobel Wanuskewin Road, Clifton Associates Ltd. – 2013*
- *Remedial Options Report, Clifton Associates Ltd. – 2013 (Akzo Nobel site)*
- *Phase II Environmental Site Assessment, Clifton Associates Ltd. – 2013*
- *Permitting Letter, Clifton Associates Ltd. – 2013*
- *Geotechnical Report, Clifton Associates Ltd. – 2013*
- Preliminary market sounding exercise, Spring 2013

In addition, a number of reports relating to the combined Project have been completed:

- *Project Charter, June 2013*
- *Project Implementation Plan, June 2013*
- *Risk Register, June 2013*
- *Stakeholder Analysis Checklist, April 2013*
- *Responsibility Matrix, June 2013*

- *Architectural Drawings*
- *North Commuter Parkway Communication Plan, 2013-2017. Draft August 2013.*

7.2 Project Schedule and Implementation Plan

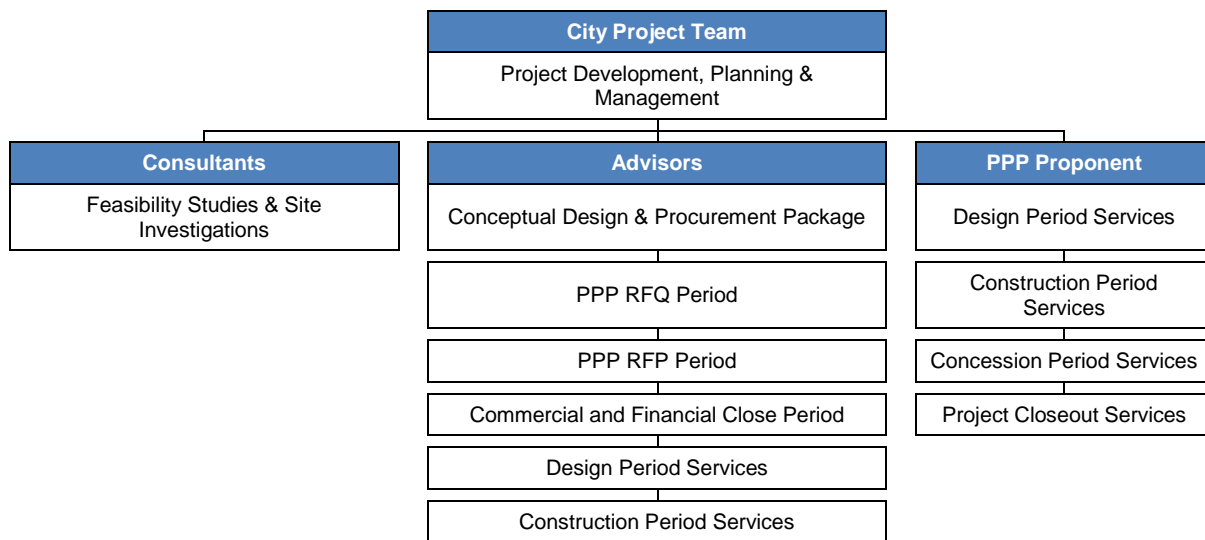
The City has developed a detailed Project Implementation Plan. This document was prepared by the Project Manager and will be used to guide the Project Team throughout the implementation of the Project. This plan is described in this section of the Business Case.

7.2.1 Roles and Responsibilities

Both internal and external resources will be used to implement the Project. It is expected that the Governance Committee will assist in supporting the project as needed, and that adequate internal resources will be made available for the successful completion of this project.

The Project will be executed in several key phases: project development and planning (including feasibility), advisory services procurement, conceptual design and procurement package development, procurement period, design period, construction period, and operations and maintenance period. Exhibit 11 shows the Work Breakdown Structure (WBS) framework proposed for this project.

Exhibit 11: Work Breakdown Structure



7.2.2 Project Road Map

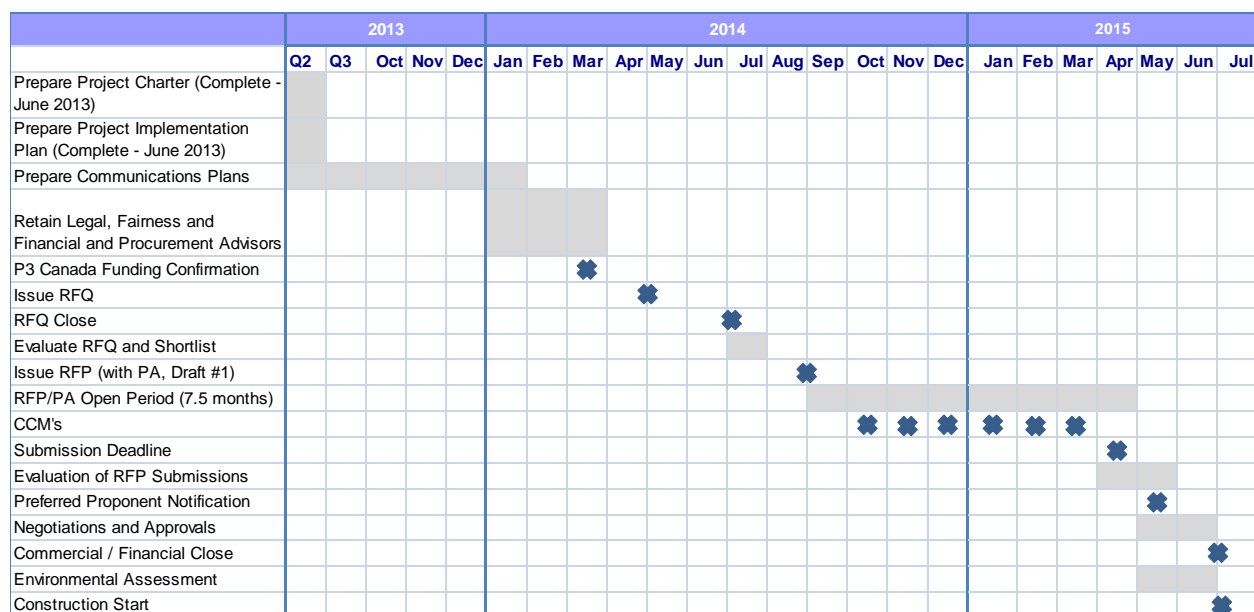
Assuming that the PPP Canada approval and necessary provincial funding approval are received by March 2014, the RFQ for the Project will be issued at the end of April 2014. Approximately three months will be allowed for the RFQ period, from the time the RFQ is released to the identification of three shortlisted proponents.

The RFP is planned to be issued in September 2014. Assuming approximately 8.5 months is allowed for the RFP/PA Open Period and evaluations, the PA finalization and council approval portions of the procurement will not commence until mid-May 2015. The commercial and financial is estimated to close at the end of June 2015.

Construction of the Project must begin on July 1st, 2015 to meet the October 2017 target deadline for the Project. Based on feedback from the City's Technical Advisors and internal project team, as well as feedback during the market sounding exercise, a minimum of two full years of construction will be required as a minimum to construct the Project, and three full summer construction seasons is preferred. The proposed construction schedule aligns with the private sector's preferences.

The Gantt chart in Exhibit 12 highlights the Project timelines.

Exhibit 12: Gantt Chart for the Project



7.2.3 Schedule Management Plan

The Project is to be complete and open to traffic by November 2017. To stay on track to meet this target date, the City has developed a detailed schedule management process which will be the responsibility of the Project Manager. Project tasks have been identified in the WBS and duration estimating will be used to calculate the work periods required to complete each task.

Table 11 defines the roles and responsibilities for the schedule management of the Project.

Table 11: Project Team Roles and Responsibilities for Schedule Management

Name & Department	Role	Responsibility
Mike Gutek	Project Champion	<ul style="list-style-type: none"> Review and approve baseline schedule Review and approve schedule change requests from the Project Manager.
Dan Willems	Project Manager	<ul style="list-style-type: none"> Define WBS, estimate activity durations, and prepare baseline schedule Review the schedule with the project team and revise as necessary Monitor the progress of the Project against the schedule Update and maintain the schedule over the course of the project Communicate schedule updates to the Steering Committee and Key

Stakeholders		
Doug Drever Dan Willems Linda Andal	Steering Committee	<ul style="list-style-type: none"> • Assist the Project Manager in development of the baseline schedule • Communicate any changes to actual start/finish dates to the Project Manager
Angela Gardiner Rob Frank Paul Bracken	Key Stakeholders	<ul style="list-style-type: none"> • Assist the Project Manager as necessary as a technical resource for schedule development • Communicate any changes to actual start/finish dates to the Project Manager

The Project Manager will review and update the project schedule as necessary on a monthly basis with actual start, actual finish, and completion percentages, as provided by task owners. The Project Manager will be responsible for determining impacts of schedule variances and providing schedule updates to the project team and Stakeholders.

If any member of the Steering Committee determines that a change to the schedule is necessary, the Project Manager and Steering Committee will meet to review and evaluate the change. The Project Manager and Steering Committee must determine which tasks will be impacted, the schedule variance as a result of the potential change, and any alternatives or variance resolution activities that may be utilized.

A schedule change request must be submitted to the Project Champion for approval if the change is estimated to reduce the duration of the overall baseline schedule by three months or more, or increase the duration of the overall baseline by one month or more. Any change requests that do not exceed these thresholds may be submitted to the Project Manager for approval.

Once the change request has been reviewed and approved, the Project Manager will be responsible for adjusting the schedule and communicating all changes and impacts to the Steering Committee, Project Champion, and Key Stakeholders. The Project Manager must also ensure that all change requests are appropriately archived in the project files.

Any proposed changes in the project scope will require the Steering Committee to evaluate the effect of the scope change on the current schedule. Any impact to the project schedule shall be documented in the scope change request to the Project Champion.

7.2.4 Scope Management Plan

Scope management will be the sole responsibility of the Project Manager. The scope for the Project is defined by the Project Charter and WBS.

Proposed scope changes may be initiated by the Project Manager, Project Champion, Project Team or Key Stakeholders. All change requests will be submitted to the Project Manager who will then evaluate the requested scope change for impacts on budget and schedule. Upon acceptance of the scope change request, the Project Manager will submit the scope change request to the Project Champion for approval. Any impact to the project budget and/or schedule shall be documented in the scope change request.

Table 12 defines the roles and responsibilities for the scope management of this project.

Table 12: Scope Management Roles and Responsibilities

Name & Department	Role	Responsibility
Mike Gutek	Project Champion	<ul style="list-style-type: none"> • Approve or deny scope change requests as appropriate • Evaluate need for scope change requests • Accept project deliverables
Dan Willems	Project Manager	<ul style="list-style-type: none"> • Measure and verify project scope • Facilitate scope change requests • Facilitate impact assessments of scope change requests • Communicate outcomes of scope change requests • Update project documents upon approval of all scope changes
Doug Drever Linda Andal	Steering Committee	<ul style="list-style-type: none"> • Measure and verify project scope • Assist with scope change requests • Participate in impact assessments of scope change requests
Angela Gardiner Rob Frank Paul Bracken	Key Stakeholders	<ul style="list-style-type: none"> • Participate in defining change resolutions • Evaluate the need for scope changes and communicate them to the Project Manager as necessary

At various points throughout the Project, the Project Manager will verify interim project deliverables against the original scope as defined in the WBS. This will ensure that work remains within the scope of the Project on a consistent basis throughout the life of the Project.

It is imperative that any changes, disputes, conflicts, or discrepancies that arise during the course of the Project communications are resolved in a way that is conducive to maintaining the Project schedule, minimizing impacts to the project budget, and preventing any ongoing difficulties. Table 13 defines the priority levels, decision authorities, and timeframes for resolution of project issues.

Table 13: Decision Escalation Model

Priority	Definition	Decision Authority	Timeframe for Resolution
1	Major impact to project budget, schedule, or City operations. Requires immediate response to mitigate impact.	Project Champion or City Manager	< 4 hours
2	Medium impact to project budget, schedule, or City operations. Requires quick response to mitigate impact.	Project Champion	< 2 business days
3	Slight impact to project schedule but no impact to project budget or City operations.	Project Manager	< 5 business days

4	Insignificant impact to project but possible alternative solution(s).	Project Manager	Work continues while alternatives are reviewed
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7.3 Stakeholder Engagement and Communications

7.3.1 Communications and Engagement Strategy

A communications agency has been retained through the City's technical advisor, and a phased-in communication strategy has been developed. Although the Traffic Bridge Replacement and the North Commuter Parkway are being bundled under one P3 contract, each will be communicated to the public separately as the concept of "bundling" is not an important concept for the public and media to understand.

A "Frequently Asked Questions" document for each bridge will explain that *"each project is separate, however funding is being requested for the two projects in one application to take advantage of joint financing opportunities and to reduce costs"*. As a result, separate Communications and Engagement Strategy plans have been developed for each the North Commuter Parkway component and the Traffic Bridge component of the Project.

The following communications goals have been identified in the separate Communications and Engagement Strategy plans for both the Traffic Bridge and the North Commuter Parkway:

1. Educate, Engagement and Inform
2. Build Excitement and Public Confidence
3. Alleviate Concerns over Infrastructure Overload
4. Minimize Opposition on P3 Funding
5. Alleviate Civic Employee Concern
6. Recognize Funding Partners

The overall strategy to achieve these goals is to approach communications according to the stage of the Project. Each stage of the Project will require the City to communicate with different stakeholders via different mediums. Although the stakeholder's differ, the key messages have been defined and will remain consistent throughout all stages of the Project.

The tools and tactics that will be used to communicate with the target audiences, in order to achieve the communication strategy and goals, are summarized below.

Table 14: Project Team Roles and Responsibilities for Schedule Management

	Internal	Public	Media	Unions
Target Audiences	<ul style="list-style-type: none"> • City Councillors • Leadership Team • Funding Partners • Employees 	<ul style="list-style-type: none"> • City of Saskatoon Citizens • Saskatoon Business Community • Special Interest Groups 	<ul style="list-style-type: none"> • News Media • Civic Bloggers 	<ul style="list-style-type: none"> • All impacted unions
Tools and Tactics	<ul style="list-style-type: none"> • City Council tour • Reports/Email Messages/ FAQs/Briefing Notes • Video Messages • Speeches • Staff Information Sessions 	<ul style="list-style-type: none"> • Project webpage • P3 brochure • Artists' rendering of finished bridge • Progress timeline • Blog • Photos • Construction camera footage • Video • Site signage • On-site message boards • Service alerts 	<ul style="list-style-type: none"> • Technology briefing • News releases • Media scrums • Media tours • Informational open houses • Bridge ceremony event • Grand opening • City page ads 	<ul style="list-style-type: none"> • One-on-one meetings

7.3.2 Public Communications

There are a number of stakeholders involved in the Project. The City has completed a “Stakeholder Analysis Checklist” (**Appendix F**) that the Project Team completed to effectively consider a wide variety of stakeholders in decision making for the Project.

The external stakeholders include:

- Commuters and road users;
- Saskatchewan Environment (Project Description and Aquatic Habitat Protection);
- Fisheries and Oceans Canada/Environmental Assessment (application for Authorization for Works or Undertakings Affecting Fish Habitat);
- Transport Canada/Navigable Water Protection Program/Environmental Assessment (application to Navigable Water Protection Program);
- Environment Canada/Canadian Environmental Assessment Agency (erosion and sediment protection, groundwater flow and recharge, wildlife habitat);
- Saskatchewan Water Security Agency;
- Saskatchewan Ministry of the Environment;
- Meewasin Valley Authority (consultative development review);
- Wanuskewin Heritage Park (consultative development review);

Previous sections of the business case have demonstrated that significant stakeholder engagement has been sought throughout the planning process for the Project. For instance, the City has held multiple

public open houses to solicit public input in the development and planning stages. Effective communication of the Project will encourage public and key stakeholder support.

All news releases and announcements from the City will be channelled through PPP Canada for review. The City understands that PPP Canada has specific templates that are available for communication purposes. The Financial Team Lead will coordinate with PPP Canada and the Project Manager will ensure effective communications on this Project.

Information will be disseminated to the public through the project website, the media, or other forums. The Project Manager will coordinate with the Communications Team to ensure communications are consistent with City policy. Project information contained on the City's website (under index 'N' and "North Commuter Parkway" and 'T' for "Traffic Bridge") shall be regularly updated by the Project Manager, as applicable. The P3 Contractor shall also be responsible to establish and maintain a more detailed project website during design and construction of the Project.

A web site will be developed and updated for both the Traffic Bridge and the North Commuter Parkway with milestones and key decisions. Each website will be the main source of information for all target audiences throughout the life of the Project. Information will be provided such as basic information about each project (what, where, when), planning process, funding and funding process, consultation, progress timeline, and construction process.

Traffic Bridge Replacement Project Website:

<http://www.saskatoon.ca/DEPARTMENTS/Infrastructure%20Services/Transportation/TransportationPlanning/TrafficBridgeReplacementProject/Pages/TrafficBridgeReplacementProject.aspx>

North Commuter Parkway Project Website:

<http://www.saskatoon.ca/DEPARTMENTS/Infrastructure%20Services/Transportation/TransportationPlanning/NorthCommuterBridgeProject/Pages/NorthCommuterParkway.aspx>

Various community events will be planned in order to engage and educate the public. Regular project updates will be provided to City Council by the Project Manager, and more broadly to the general public, directly and through the media.

The Project website will include "Frequently Asked Questions" for each of the bridges. This will provide information on Project scope, need, status and decisions made to date. As both the Traffic Bridge and North Commuter Project will have separate project websites, each component will also have separate "Frequently Asked Questions" section.

7.3.3 Internal Communications

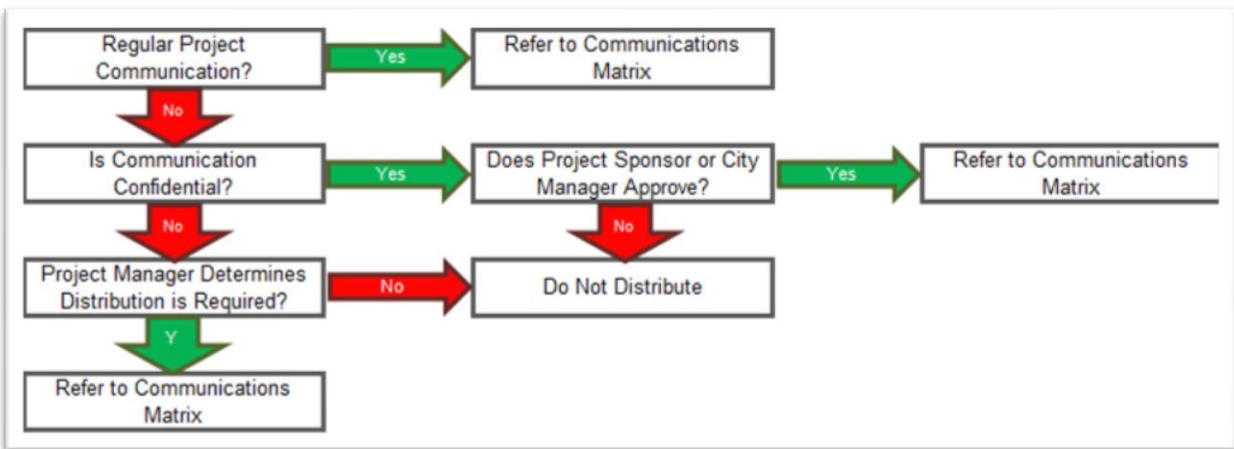
The Project Manager will ensure effective internal communications throughout this Project. The communications requirements are documented in the communications matrix presented in Table 15. The communications matrix will be used as the guide for what information to communicate, who is to do the communicating, when to communicate it and to whom to communicate.

Table 15: Communications Matrix

Role	Information Needs	Frequency	Medium
Project Sponsor	Project Status Updates	Monthly	Email
Project Team	<ul style="list-style-type: none"> Project Status Updates Progress Meetings Progress Meeting Minutes 	<ul style="list-style-type: none"> Monthly Weekly / Bi-Weekly Weekly / Bi-Weekly 	<ul style="list-style-type: none"> Email Face-to-Face Soft Copy on Network
Communications	Project Status Updates	Monthly	Email
Stakeholders	Project Status Updates	As Needed	Email

Exhibit 13 below shows the communication flowchart for the Project. This flowchart provides a framework for the Steering Committee to follow for this Project. However, there may be occasions or situations that fall outside of the communication flowchart where additional clarification is necessary. In these situations, the Project Manager will be responsible for making a determination on how to proceed.

Exhibit 13: Communication Flowchart



The City recognizes that efficient and timely communication is key to successful project completion. It is imperative that any disputes, conflicts, or discrepancies regarding project communications are resolved in a way that is conducive to maintaining the project schedule, ensuring the correct communications are distributed, and preventing any ongoing difficulties.

7.3.4 Staff and Union Communications

As ambassadors for the City, staff will be provided with regular project updates. While many various City roadway maintenance activities are currently contracted to external construction firms, some staff may be concerned about loss of work and/or the amount of additional work that may be required. Unions will be provided with information on the Project. The Public Works Division will be kept up to date on decisions so they can plan their work requirements. The City will also undertake one-on-one meetings with the unions Presidents throughout project planning and delivery.

7.3.5 Funding Communications

Typically, PPP Canada does not encourage formal communication about the status of the application until it has been reviewed and approved by the Minister of Finance. Once the business case is approved by the PPP Canada Board and the Minister of Finance, the City and its advisors will work together with PPP Canada to develop appropriate and seamless public communications about the project in accordance with P3 and provincial government protocol. The City will fully comply with all PPP Canada requirements in this regard.

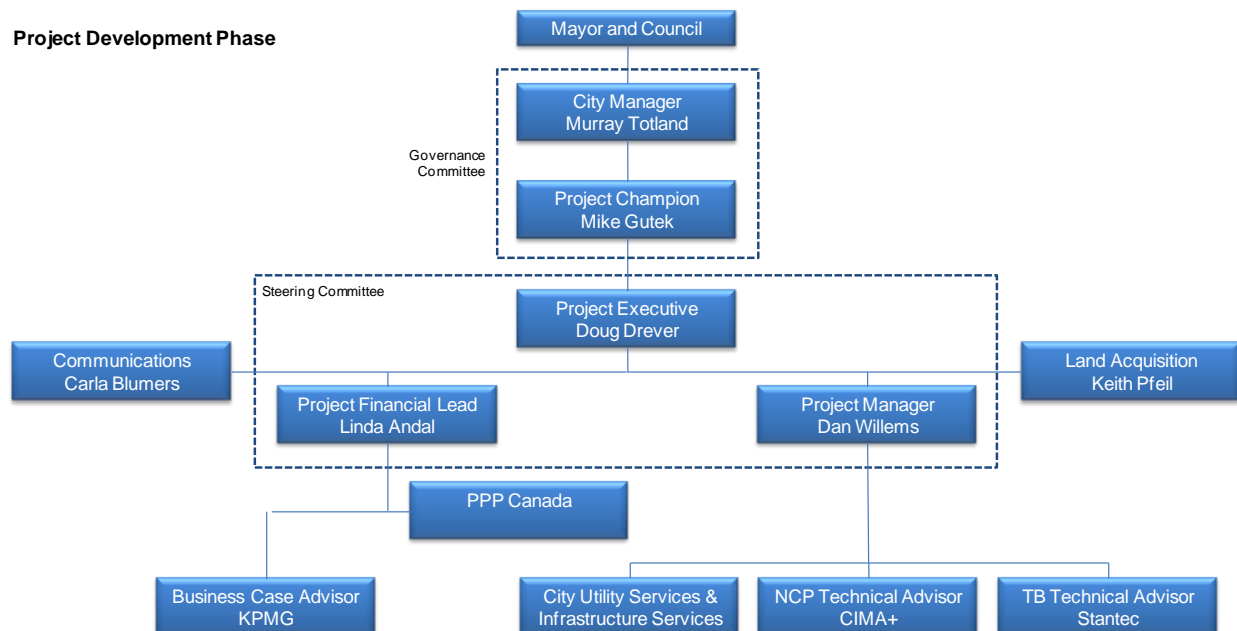
7.4 Post-Procurement Contract Administration

The City understands the importance of contract administration post-procurement and construction in order to maximize VFM. An important mechanism to achieve this goal is to have key members of the Steering Committee involved in all phases of the Project. To that end, the following high-level transitioning and contract management plan has been proposed.

7.4.1 Planning, Design and Procurement Phase

Long-term success under a DBFOM contract depends on integrating those individuals who will be responsible for contract administration early in the planning, design and procurement phase. The Project Team involved in the project development phase includes individuals who will have responsibilities for contract administration.

Exhibit 14: Project Development Phase Organizational Chart



During the procurement phase, the Steering Committee, Project Solicitor, Legal Advisor, Financial Advisor, and Technical Advisors will be involved in developing Project documents, including the Project Agreement. The Steering Committee and Technical Advisors will develop the operations, maintenance and lifecycle requirements within the Project Agreement.

The Project Manager will provide oversight and management for all procurement activities to effectively deliver the Project. The Project Manager will work with the Steering Committee to identify all items and/or

services to be procured for the successful completion of the project. Table 16 lists the major procurement items and/or services which have been determined to be essential for project completion and success.

Table 16: Procurement Services

Item/Service Required	Justification	Needed By
Land Acquisitions	Required for necessary right-of-ways along selected alignment.	January 2013
Legal Advisor	Required to assist in preparation of the PPP procurement package and advise during procurement.	March 2014
Financial Advisor	Required to assist in preparation of the PPP procurement package and advise during procurement.	March 2014
Fairness Advisor	Required to assist in preparation of the PPP procurement package and advise during procurement.	March 2014
Private Partner	Required to design, construct, finance, operate, and maintain the project.	April 2015

All procurement activities will conform to current City purchasing policies.

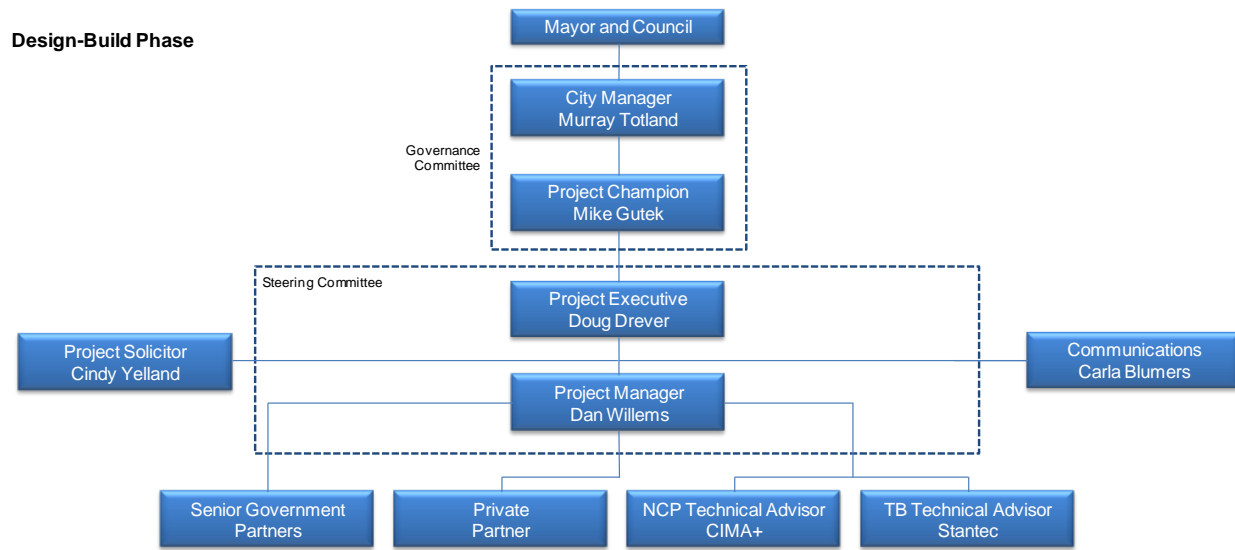
The Legal Team Lead and Financial and Legal Advisors will play a key role in developing and refining the Project documents, including the Project Agreement. During this phase, the Legal Lead will help to develop mechanisms for ensuring that the private-sector partner fulfills its maintenance and lifecycle obligations under the contract. The Financial Advisor will provide input to the Legal Team Lead, as required, regarding Project Agreement financial matters. By integrating the City in this phase, it will be better positioned to enforce the terms of the agreement during the construction and operations phases.

7.4.2 Construction Phase

During the construction phase, the role of the Steering Committee, including the Project Manager, is to help ensure that the Project is being built according to the design specifications, with particular attention on any construction issues that could affect the eventual operations of the Project. This task is particularly important for ensuring that the entire system can operate as designed. The Steering Committee will draw on the project advisors as necessary, particularly the Technical Advisors, City engineers and, if necessary, the Legal Team.

Requirements for safety measures and documentation of training are enforced with all contractors. In the event of a crisis over the course of the construction period, the City will work with the contractor and City Occupational Health and Safety experts as required to communicate the incident to the media/public.

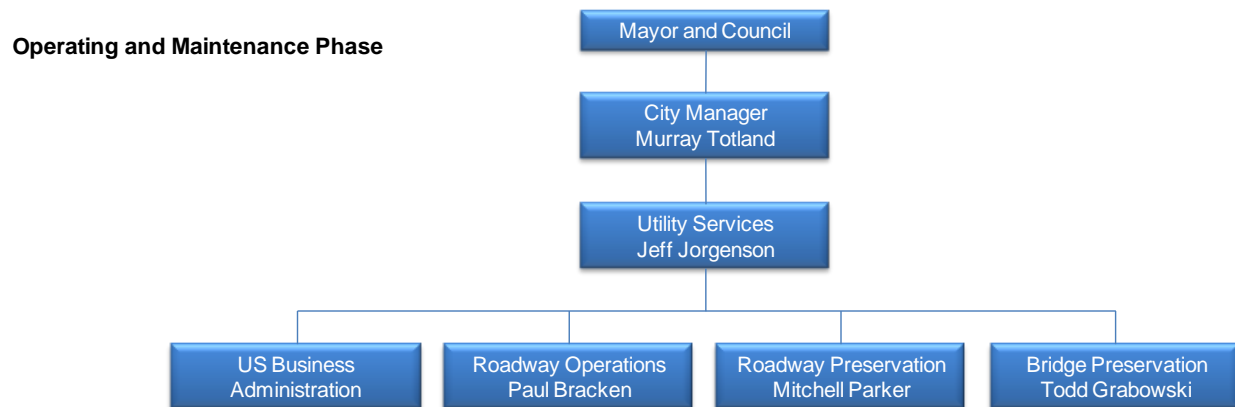
Exhibit 15: Design-Build Phase Organizational Chart



7.4.3 Operating and Maintenance Phase

Once the Project is commissioned and operational, it is important to make sure the private sector partner fulfills its obligations under the Project Agreement and the Project is available for use as anticipated. The City's Utility Services Department will be responsible for monitoring the Project's operations, maintenance and lifecycle schedules and identifying deviations from the contract.

Exhibit 16: Operations and Maintenance Phase Organizational Chart



With the long operating period for this Project, there is a high likelihood of turnover within the Project Manager and Team Leads, and within their respective teams. Therefore, it will be important that succession planning be undertaken to ensure contract oversight duties are properly executed for this phase. Where turnover is anticipated, the respective team leads will work closely with other individuals to transfer their knowledge and responsibilities and facilitate a smooth transition of responsibilities.

Appendix A – Community Vision: Saskatoon Speaks

To view this Appendix please visit:

<http://www.saskatoon.ca/DEPARTMENTS/City%20Managers%20Office/Pages/CommunityVisioning.aspx>

Appendix B – Integrated Growth Plan

To view this Appendix please visit:

<http://www.saskatoon.ca/DEPARTMENTS/City%20Clerks%20Office/Documents/Reports%20and%20Publications/Integrated-Growth-Plan.pdf>

Appendix C – Traffic Bridge Needs Assessment and Functional Planning Study Final Report

To view this Appendix please visit:

(<http://www.saskatoon.ca/DEPARTMENTS/Infrastructure%20Services/Transportation/TransportationPlanning/TrafficBridgeReplacementProject/Pages/TrafficBridgeReplacementProject.aspx>)

Appendix D – North Commuter Parkway Project Functional Planning Study

To view this Appendix please visit:

(<http://www.saskatoon.ca/DEPARTMENTS/Infrastructure%20Services/Transportation/TransportationPlanning/NorthCommuterBridgeProject/Pages/NorthCommuterParkway.aspx>)

Appendix E – Market Sounding Questionnaire

Appendix F – Stakeholder Analysis Checklist