Table of Contents	
Project Title	Page
Fire Priorities	
Fire Station No. 10 & Engine for Northwest area known as Region A - North	3 - 5
Fire Station No. 11 & Engine for Southwest area known as Region A - South	6 - 8
Regional Training Facility	9 - 13
Fire Station No. 6 Renovation	14 - 15
SFD Maintenance and Mechanical Building	16 - 18
Fire Station No.1 SFD Headquarters	19 – 21
Fire Station No. 12 – Northwest Area of District One	22 - 24
Fire Station No. 14 & Engine for eastern area known as Region D	25 - 27
Fire Station No. 13 & Engine for eastern area known as Region C	28 - 30
Increase Apparatus Reserve to Purchase of Electric Fire Engines	31 - 32
Sustainability Priorities	
Zero Emissions Transit Fund	33 - 34
Civic Water Conservation	35 - 37
Green Networks - Natural Areas Program	38 - 41
Fleet Replacement with Electric Vehicles	42 - 44
Recovery Park Complete Master Plan & Recycling Depot Improvements	45 - 46
Solar PB on Municipal Building Rooftops	47 - 48
Deep Retrofits	49 - 52
Home Energy Loan Program Expansion	53 - 54
Green Network - Naturalization and Low Impact Development (LID)	55 - 59
Integrated Civic Energy Management Program (ICEMP)	60 - 62
Multi-Unit Organics Program	63 - 64
Solid Waste Reduction & Diversion Plan Implementation	65 – 67
Electric Vehicle Chargers at Civic Facilities	68 - 70
Climate Innovation Fund	71 - 72
ICI (Industrial, Commercial, and Institutional) Energy & Water Efficiency with Loan	73 - 74
Financing	
Home Energy/Water Efficiency and Solar Panel Rebates	75 - 76
Industrial, Commercial, and Institutional (ICI) Energy and Water Efficiency Rebates	77 - 78
& Enabling Activities	
District Energy Pilot	79 - 80
Green Network - Food Program	81 - 84
Renewable Natural Gas Procurement Funding	85 - 86
Compost Depot Processing Facility	87
Renewable Energy Procurement through Renewable Energy Credits	88 - 89

Recreation & Culture Priorities	Page
East Side Leisure Centre	90 - 91
White Buffalo Youth Lodge	92 - 93
Arena to replace Archibald Arena	94 - 96
Pool to replace George Ward	97 - 98
Urban Forest Management Plan	99 - 101
Independent Office of the Representative of the Matriarch	102 - 103
Forestry Farm Park and Zoo: Barn Replacement and Master Plan Components	104 - 105
Urban Ceremonial Spaces	106 - 107
Civic Conservatory Restoration and Uplift	108 - 110
Leisure Centres and Outdoor Pools Accessibility and Inclusivity Upgrades	110 - 113
Permanent Outdoor Festival Site	114 - 116
Parks Cemetery Master Plan Implementation	117 - 118
Civic Infrastructure Priorities	
Downtown Arena/Convention Centre	119 - 120
Corporate Fuel and Fueling Infrastructure Management Project	121 - 124
Corridor Public Realm Improvements	125 – 126
Civic Operations Long Term Project – Phase 1	127 - 128
Civic Operations Long Term Project – Phase 2	129 - 130
Imagine Idylwyld	131 - 132
Civic Operations Long Term Project – Phase 3	133 - 134
Active Transportation Plan - Sidewalk Network Expansion	135 - 137
Snow and Materials Management Facility – North Site	138 - 139
Snow and Materials Management Facility – Southeast Site	140 - 141
Active Transportation Corridors	142 - 144
Parks Ave P O&M Facilities Master Plan	145 - 146
Broadway Bridge Rehabilitation	147 - 148
Parks NE Quadrant Satellite Facility	149 - 150
Highway 11 and 16 Interchange Improvements	151 - 153
Corporate Infrastructure Priorities	
Fusion Upgrades - Finance and General Upgrades	154 - 156
New Customer Information System (CIS) for Corporate Revenue	157 - 158
Saskatoon Emergency Management Interoperability Enhancement	159 - 162
New Computer Assisted Mass Appraisal (CAMA) System for Assessment Office	163 - 164
Corporate Accommodations - Facility & Supply Chain Management Consolidation	165 - 167
Inventory Centralization and Optimization	168 - 169
Corporate Accommodations - City Hall Lobby Renovations	170 - 171
SAP Ariba	172 - 173
Corporate Accommodations - City Hall Furniture and Carpet Replacement	174 - 176

# **Fire Services Priorities**

# <u>Fire Station No. 10 & Engine for Northwest area known as Region A - North</u>

#### **Project Description**

Build a single engine fire station to service the northern west portion of the city previously reported as Region A – North. The project would include the selection and purchase of suitable land as well as the purchase of a fully equipped fire engine. The station would provide initial response to all or portions of Hampton Village, Kensington, Elk Point, Dundonald, Massey Place, Confederation Park, Westview, Mount Royal, and Hudson Bay Park.

#### **Total Capital Estimate**

5 million to 20 million.

### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

#### **How does this Project Address Council Priorities?**

Community Safety and Well-being: The SFD provides response to all emergencies involving fire, prehospital emergency medical, water rescue, entrapment of persons, and unplanned releases of regulated or hazardous materials and substances, for the safety of the public.

Emergency Response service, along with fire dispatch agreements, are also provided to surrounding communities. Extensive fire prevention, education, enforcement, and safety programs, such as fall prevention, lift assists, and needle pickups are also provided. Community safety and well-being is the key service element provided by SFD. This project will enable SFD to provide this region service within the industry standard time objectives improving safety and well-being of citizens and responders.

Environmental Sustainability: Develop initiatives to improve energy conservation and efficiency in buildings, transportation, and land-use planning.

In 2021, SFD responded to 1065 calls for service in Region A – North. The Out-of-Range region consisting mainly of the North part District 2. Calls to this area all exceed the 240 second travel time. This project will provide travel times to calls within this region less than 240 seconds, thereby reducing fuel consumption. For many incidents, the travel time/distance will be reduced by 50% or more.

#### How does this project address Core Services & Operational Priorities?

Equitable Services:

This project will address inequitable service levels experienced in Region A – North.

Quality of Life and Public Safety:

As stated in the City of Saskatoon 2022 – 2025 Strategic Plan:

"Improve the Saskatoon Fire Department's service level targets by regularly assessing the resources needed to ensure adequate and effective coverage as the city grows."

"Continue to provide high-quality essential services and municipal programs that ensure quality of life and enable the public to safely engage in everyday life."

#### **How does this Project address Corporate Transformational Change?**

Customer-centric Service Delivery:

A customer-centric service culture that enables the City to reliably meet established levels of service and consistently achieve high-customer satisfaction across the organization. In 2021, SFD responded to 1065 calls for service in Region A – North. The Out-of-Range region consisting mainly of the North part of District 2. These accounted for 43.5% of all our out-of-range calls for service in 2021.

This project will enable SFD to meet established levels of service consistently to people in this region.

#### Efficiency & Effectiveness:

The City invests in what matters to keep improving the organization — the right processes, systems, technology, and initiatives. This drives operational excellence and helps deliver established levels of service to the public.

This project will help deliver established levels of service to the public.

### How does this project mitigate Corporate Risk?

Building this fire station will help to ensure service levels can be met, reduce the risk of public or City Council dissatisfaction, while helping to reduce the risk to people, property, and environment.

#### What is the impact if this project is delayed?

Calls for service that are beyond the 240 second travel time from our current fire stations are referred to as out-of-range calls.

SFD is experiencing out-of-range calls for service in many districts.

In 2021, SFD responded to 1065 calls for service in Region A – North. The Out-of-Range region consisting mainly of the North part of District 2. These accounted for 43.5% of all SFD out-of-range calls for service in 2021.

Delay of this project will ensure the region remains outside of the travel time service level objective. This will create increased risk for people and responders as the region will continue to see an increase of population and activities.

Fire growth and fire behavior are scientifically measurable, as are the expected outcomes associated with untreated cardiac arrest, and specific resource requirements to control fires and prevent deaths.

Important criteria in National Fire Protection Association (NFPA) 1710 are based on the Fire Propagation Curve, a universally accepted, empirically based measurement of how quickly a fire will reach the flashover stage and potential spread to surrounding buildings if left unaddressed. Established medical response times are based on well-established, empirically based measurements of the maximum amount of time that a patient in cardiac arrest can survive without intervention.

#### What is the impact if this project is not funded by 2035?

Based on current data, SFD will respond to approximately 13,000 calls for service into region A – North between 2024 and 2035. Many of these calls will be immediately dangerous for the health and safety of the citizens involved. Extended response times increase the risk of negative outcomes to these events.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact? Safety:

Improve the safety of people and/or their possessions.

This project would enable the SFD to provide the expected level of service in this region. The status quo is that all homes and businesses in Region A - North live outside the recommended travel time for initial arriving fire crews. This project will significantly improve SFD service level performance in this area. Improving safety of people, property, and environment.

#### What are other Triple Bottom-Line Co-Benefits?

Reduce GHGs:

This project will provide travel times to calls within this region of less than 240 seconds. For many incidents in this region, the travel time/distance will be reduced by 50% or more, thereby reducing fuel use.

Health, Wellbeing, and Self-sufficiency:

SFD paramedic/firefighters provide emergency medical care, rescues, fire protection, lift assists, hazardous materials response, carbon monoxide, and other investigations. SFD crews perform proactive wellness checks to support people to feel well and stay healthy. Unsafe housing is reported for follow-up and support. These services all lead to a higher quality of life for all.

#### Civic Participation:

SFD incorporates a variety of multi-use rooms within fire stations. SFD supports community organizations and community led efforts by providing use of these spaces.

Efficient and effective asset management and use:

Extended travel distances to calls for service increase the maintenance cost and frequency and shorten the expected life span of apparatus. This project will reduce apparatus travel distances to calls within this region, thereby decreasing vehicle maintenance cost and frequency. For many incidents, the travel distance will be reduced by 50% or more.

# <u>Fire Station No. 11 & Engine for Southwest area known as Region A – South</u>

#### **Project Description**

Build a single engine fire station to service the southern west portion of the city previously reported as Region A – South. The project would include the selection and purchase of suitable land. The station will not require an apparatus purchase or new staff. Existing staff and an apparatus will be utilized. The station would provide first in response to all or portions of Montgomery Place, Southwest Industrial, Holiday Park, Meadowgreen, West Industrial, Pleasant Hill, King George, Fairhaven, Agpro Industrial, and CN Yards Management Area.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

#### **How does this Project Address Council Priorities?**

Community Safety and Well-being: SFD provides response to all emergencies involving fire, prehospital emergency medical, water rescue, entrapment of persons, and unplanned releases of regulated or hazardous materials and substances, for the safety of the public.

Emergency Response service, along with fire dispatch agreements, are also provided to surrounding communities. Extensive fire prevention, education, enforcement, and safety programs, such as fall prevention, lift assists, and needle pickups are also provided. Community safety and well-being is the key service element provided by SFD. This project will enable SFD to provide this region service within the industry standard time objectives improving safety and well-being of citizens and responders.

Environmental Sustainability: Develop initiatives to improve energy conservation and efficiency in buildings, transportation and land use planning.

In 2021 SFD responded to 489 calls for service in Region A – South. The Out-of-Range region consisting mainly of the North part District 2. Calls to this area all exceed the 240 second travel time. This project will provide travel times to calls within this region less than 240 seconds, thereby reducing fuel consumption. For many incidents the travel time/distance will be reduced by 50% or more.

#### How does this project address Core Services & Operational Priorities?

Equitable Services:

This project will address inequitable service levels experienced in Region A – South.

Quality of Life and Public Safety:

As stated in the City of Saskatoon 2022 – 2025 Strategic Plan:

"Improve the Saskatoon Fire Department's service level targets by regularly assessing the resources needed to ensure adequate and effective coverage as the city grows."

"Continue to provide high-quality essential services and municipal programs that ensure quality of life and enable the public to safely engage in everyday life."

#### How does this Project address Corporate Transformational Change?

Customer-centric Service Delivery:

A customer-centric service culture that enables the City to reliably meet established levels of

service and consistently achieve high customer satisfaction across the organization.

In 2021, SFD responded to 489 calls for service in Region A – South. The Out-of-Range region consisting mainly of the South part of District 2. These accounted for 20% of all our out-of-range calls for service in 2021.

This project will enable SFD to meet established levels of service consistently to people in this region.

#### Efficiency & Effectiveness:

The City invests in what matters to keep improving the organization — the right processes, systems, technology and initiatives. This drives operational excellence and helps deliver established levels of service to the public.

This project will help deliver established levels of service to the public.

#### **How does this project mitigate Corporate Risk?**

Building this fire station will help to ensure service levels can be met, reduce the risk of public or Council dissatisfaction, while helping to reduce the risk to people, property, and environment.

#### What is the impact if this project is delayed?

Calls for service that are beyond the 240 second travel time from our current fire stations are referred to as out-of-range calls.

SFD is experiencing out-of-range calls for service in many districts.

In 2021, SFD responded to 489 calls for service in Region A – South. The Out-of-Range region consisting mainly of the South part of District 2. These accounted for 20% of all SFD out-of-range calls for service in 2021.

Delay of this project will ensure the region remains outside of the travel time service level objective. This will create increased risk for people and responders.

The busiest areas in the city exist in District 1 and 2. These Districts account for about 50% of the call volume throughout the city. The boundary where the two districts meet is one of the busiest areas in the city in terms of call volume. Service levels are not being achieved in this area due to this high call volume and simultaneous calls for service. This station will provide response into this high workload area to help maintain service levels.

Fire growth and fire behavior are scientifically measurable, as are the expected outcomes associated with untreated cardiac arrest, and specific resource requirements to control fires and prevent deaths.

Important criteria in National Fire Protection Association (NFPA) 1710 are based on the Fire Propagation Curve, a universally accepted, empirically based measurement of how quickly a fire will reach the flashover stage and potential spread to surrounding buildings if left unaddressed. Established medical response times are based on well established, empirically based measurements of the maximum amount of time that a patient in cardiac arrest can survive without intervention.

#### What is the impact if this project is not funded by 2035?

Based on current data, SFD will respond to approximately 6000 calls for service into region A – South between 2024 and 2035. Many of these calls will be immediately dangerous for the health and safety of the citizens involved. Extended response times increase the risk of negative outcomes to these events.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact? Safety:

Improve the safety of people and/or their possessions.

This project would enable the SFD to provide the expected level of service in this region. The status quo is that all homes and businesses in Region A - South live outside the recommended travel time for initial arriving fire crews. This project will significantly improve SFD service level performance in this area. Improving safety of people, property, and environment.

#### What are other Triple Bottom-Line Co-Benefits?

Reduce GHGs:

This project will provide travel times to calls within this region less than 240 seconds. For many incidents in this region the travel time/distance will be reduced by 50% or more, thereby reducing fuel use.

Health, Wellbeing, and Self-sufficiency:

SFD paramedic/firefighters provide emergency medical care, rescues, fire protection, lift assists, hazardous materials response, carbon monoxide and other investigations. SFD crews perform proactive wellness checks to support people to feel well and stay healthy. Unsafe housing is reported for follow up and support. These services all lead to a higher quality of life for all.

#### Civic Participation:

SFD incorporates a variety of multi-use rooms within fire stations. SFD supports community organizations and community led efforts by providing use of these spaces.

Efficient and effective asset management and use:

Extended travel distances to calls for service increase the maintenance cost and frequency and shorten the expected life span of apparatus. This project will reduce apparatus travel distances to calls within this region thereby decreasing vehicle maintenance cost and frequency. For many incidents the travel distance will be reduced by 50% or more.

# Regional Training Facility

#### **Project Description**

The SFD is focused on improving the quality of life in our community through public safety emergency response activities and risk prevention services.

A purpose-built training site has been recognized as a need by the SFD. Phase 1 site development focused on the development of live-fire training and the infrastructure to accomplish this.

Phase 2 is to create an all-season, indoor area where skills-training can occur year-round, unaffected by inclement weather. Part of phase 2 will include dedicated training engine, equipment, self-contained breathing apparatus, and tools.

The benefits of the project will enhance the safety of emergency responders across the province through training and skills development, as well as enhanced regional interoperability through standardized and integrated training evolutions.

An important component of this project is moving to a new hiring model that provides equal opportunity and eliminates barriers to employment by providing fire training in-house once someone is hired. This will create a model that sees SFD employee's diversity more reflective of the community served.

As well, there is an opportunity to consolidate other SFD project proposals with this location. The vision to collocate several services at this location will create efficiencies and provide potential for regional benefit.

#### **Total Capital Estimate**

5 million to 20 million.

### Overview of potential non-city funding sources

This project has qualified for funding as a part of Sustainability's Saskatoon Green Network Project for naturalization considerations specific to the water capture and biofiltration ponds. The project has been allocated \$1,000,000 for eligible costs. The Federal NIF grant will reimburse 60%. Grant funds are expected to be dispersed in 2023.

Maximize other sources of funding – partnerships and shared funding conversations have been initiated at the regional and provincial levels with both governments and private sector stakeholders. Federal grant money has also been secured for the biofiltration ponds and associated naturalization project. There is a high likelihood of outside funding for both capital contributions, as well as ongoing operating expenses.

#### **How does this Project Address Council Priorities?**

REDI: SFD strives to represent the community in which we live and whom we serve. Completion of Phase 2 will facilitate wholesale changes to SFD recruitment and selection processes. Currently, applicants must acquire hiring prerequisites out of province. This facility and recent third-party certification agreements will allow SFD to reduce barriers to a more diverse applicant pool.

Economic Development: As the City prepares to grow to 500k citizens, it is believed that this facility will continue to develop into a world-class, public safety training institution like no other in

the province. As external training offerings grow, economic development spinoff will benefit local hotels and restaurants, as well as other facility servicing contracts.

Community Safety and Well-being: SFD provides response to all emergencies involving fire, prehospital emergency medical, water rescue, entrapment of persons, and unplanned releases of regulated or hazardous materials and substances, for the safety of the public.

Emergency response service, along with fire dispatch agreements, are also provided to surrounding communities. Extensive fire prevention, education, enforcement, and safety programs, such as fall prevention, lift assists, and needle pickups are also provided. Community Safety and Well-being is the key service element provided by SFD.

Skills competence training is the fundamental starting point for all these services. This project will enable SFD to provide this region service within the industry standard time objectives improving safety and well-being of citizens and responders.

Regional Planning: This project has been a part of regular P4G discussion and endorsement. Partnerships and shared funding conversations have been initiated at the regional, and provincial levels with both governments and private sector stakeholders. Federal grant money has been secured for the biofiltration ponds and associated naturalization project. There is a high likelihood of outside funding for both capital contributions, as well as ongoing operating expenses.

Environment sustainability: Naturalized landscapes, water conservation, and diversion and reuse. Due to the scale of this project, several opportunities exist to integrate renewable energy option in the project and future site development.

#### How does this project address Core Services & Operational Priorities?

Civic Asset: The City is the owner of the existing property, and any future phases will be an enhancement to the corporate asset. Regional contribution provides long-term value to residents. Shared costing of this project is a benefit to the region and the province. This will include shared site development costs, as well as revenue generation or ongoing contribution to offset operating costs and future capital investments.

The key outcomes of this project will be:

- 1) To ensure City staff have adequate facilities and equipment necessary to deliver established levels of service; and
- 2) Ensure energy efficient design and environmentally conscious for long-term resilience to ensure the City is prepared to mitigate current and future contributions to climate change.

Quality of Life: The SFD works collaboratively with community partners to ensure the collective safety and wellbeing of the public and is focused on improving the safety of our community via our emergency response activities and proactive prevention services.

This project is at the core of ensuring a coordinated and collaborative approach for emergency response training. Training is the first step to ensure responders have the skills required to deliver the emergency services to the public.

#### How does this Project address Corporate Transformational Change?

Efficiency and Effectiveness: This initiative will drive operational excellence and will allow transformational change in processes to enhance workplace safety through skills development.

This will ultimately aid in the delivery of excellence in core public safety service to the established levels of service the public expects.

Completion of Phase 2 will create process efficiency in the SFD by bringing all its training to one location. The major benefit is that the creation of an indoor training area will extend the departments practical annual training calendar to year-round. This will result in efficiencies in staff time usage of both instructors and students by making more of the annual calendar available for skills enhancement. As well as allowing things like recruit onboarding, where skills learning is key, to occur as required throughout the year.

This infrastructure will have the potential for use by many internal departments engaged in safety-sensitive work. As well, other local industrial sectors have indicated interest in contributing into this project as it addresses a recognized facilities gap in the province of Saskatchewan.

People and Culture: The City is an inclusive, respectful, and collaborative workplace that fosters safety and high performance. Practical skills development in safety sensitive work builds team cohesion, this is supported by the corporate values of Trust, People Matter, and Safety in all we do. This project will enhance employee engagement by empowering teams to work together and strengthen our culture of safety and excellence.

Completion of Phase 2 will facilitate wholesale changes to SFD recruitment and selection processes and support the implementation of Council's REDI priority. This project will eliminate current barriers and allow SFD to hire, train, and certify candidates here as a part of their internal employment onboarding. This project will enhance SFD's commitment to represent the community in which we live and whom we serve.

#### How does this project mitigate Corporate Risk?

SFD is challenged to meet its training requirements and to ensure a competently trained workforce due to a current lack of purpose-built training infrastructure and the risks and challenges in learning in ad hoc, real-world environments. This has direct bearing on safety compliance. Currently, we assume some added risk learning skills in the real world. These limited options pose a risk to staff and potentially public safety and corporate reputation.

This project will include engineered training environments that ensure skills learning and development is conducted with limited risk. This infrastructure will allow for training evolution to be conducted in risk-controlled environments with built-in safety mechanisms. Evolutions conducted in these environments are easily repeatable so skills can be critiqued for accuracy and the evolution can be repeated for consistent learning results.

The outcome is reduced risk through enhanced worker skill and safety. It is expected this will have an impact on public safety and decrease potential of any negative impacts to corporate reputation.

#### What is the impact if this project is delayed?

Deferral from funding this project will impact SFD's Reconciliation, Equity, Diversity, and Inclusion (REDI) hiring goals. In the interest of broadening the candidate pool with more diverse, local candidates, SFD would like to move away from requiring that candidates come from a certified fire college. Tuition fees and decreased proximity to socio-cultural support systems are barriers for some candidates.

This project will eliminate these barriers and allow SFD to hire, train, and certify candidates here as a part of their employment onboarding.

Without funding, status quo reliance on 3rd party colleges for candidate preparation would remain. SFD has no direct influence on college entry; therefore, REDI initiatives would not be able to strategically be initiated.

Revenue potential would be eliminated due to lack of key infrastructure amenities at current locations. Phase 1 was designed to meet internal use needs.

Some elements required for worker safety, such as decontamination shower facilities and change rooms would not be realized. SFD staff return to their station after training and decontaminate there. This is not an OHS best practice and such facilities on site are needed for delivery of firefighter training to external partners, stakeholders, and customers.

SFD is currently challenged to meet training requirements and to ensure a competently trained workforce. This has direct bearing on safety compliance, which poses a risk to staff safety, public safety, and corporate reputation.

Current facility is at capacity and barely able to meet current internal need. Training areas are distributed across various locations, meaning lost time in a training day travelling between sites.

#### What is the impact if this project is not funded by 2035?

If this project is not funded by 2035, other REDI hiring strategies will need to develop more aligned with the current 3rd party certification qualifications model.

Revenue generation from this project is contingent on the having a comprehensive and completed facility infrastructure to conduct several unique training areas that would be developed in this project phase. Deferring funding would likely negate any potential external shared contributions that are currently being discussed.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Safety, or resiliency of essential services – This project will be a transformational change to training for responders in the Saskatoon area with potential to cross several safety sensitive sectors. This infrastructure will allow for training evolution to be conducted in risk-controlled environments with built-in safety mechanisms. Evolutions conducted in these environments are easily repeatable so skills can be critiqued for accuracy and the evolution can be repeated for consistent learning results. Repetition builds familiarity and skill muscle-memory. This type of skills development allows individuals to complete sequential tasks in high-stress environments without having to the stop and think about how a task is to be performed. This decreases cognitive fatigue in high-stress situations aiding in worker resilience and the resilience of the team when effectively carried out across the work group.

#### What are other Triple Bottom-Line Co-Benefits?

Conserve Energy: Due to the size of site, this project lends itself to the incorporation of onsite, renewable energy production. The project will support energy reducing design and operations practices. These elements will be considered in finalized project design planning.

Conserve Water: This project has qualified for funding as a part of Sustainability's Saskatoon Green Network Project for naturalization considerations specific to the water capture and biofiltration ponds. Water used for fire suppression training evolutions will come from onsite

ponds. Water capture of all site precipitation, along with grey water will be collected in a pond system that will use natural settlement and biofiltration before being recirculated for reuse. Onsite storm water retention is also a design element.

Naturalized landscapes will be designed to eliminate irrigation needs.

REDI: In alignment with Council's REDI priority and The Saskatchewan Human Rights Commission's employment equity guidelines, SFD strives to have representation of equity seeking groups across its organization. Firefighting is an occupation where diversity groups are currently underrepresented. At the SFD, this is partially due to current hiring practice. These practices are directly related to our current lack of training infrastructure and its impact on our ability to certify new candidates locally.

This project will impact SFD's REDI hiring goals. In the interest of broadening the candidate pool with more diverse, local candidates, SFD would like to move away from requiring that candidates come certified from a fire college. Tuition fees and decreased proximity to socio-cultural support systems are barriers for some candidates.

This project will eliminate these barriers and allow SFD to hire, train, and certify candidates here as a part of their employment onboarding.

Without funding, status quo reliance on 3rd party colleges for candidate preparation would remain. SFD has no direct influence on college entry and so REDI initiatives would not be able to strategically be initiated.

# Fire Station No. 6 Renovation

#### **Project Description**

Station No. 6 at 3309 Taylor Street East has been identified as the optimum location to deploy one of SFD's two frontline aerial apparatus from. A significant renovation is required to Station No. 6 to provide adequate apparatus bay areas as necessary. Renovations will also be required in the office areas, washrooms, and other activity areas in the station to accommodate the response crew that will be working in the facility.

Modifications will include the Integration of proper occupational hygiene components to minimize firefighter contamination and long-term health effects.

Accessibility features will be integrated for visitors and staff. Upgraded locker rooms, washrooms, and break out areas will be designed to achieve an inclusive gender-neutral facility.

#### **Total Capital Estimate**

2 million to 5 million.

#### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

#### **How does this Project Address Council Priorities?**

Reconciliation, Equity, Diversity, & Inclusion:

Upgraded locker rooms, washrooms, and break out areas will be designed to achieve an inclusive gender-neutral facility which will support equal opportunity for all staff.

Community Safety and Well-being:

The Saskatoon Fire Department (SFD) provides response to all emergencies involving fire, prehospital emergency medical, water rescue, entrapment of persons, and unplanned releases of regulated or hazardous materials and substances, for the safety of the public. Emergency Response service, along with fire dispatch agreements, are also provided to surrounding communities. Extensive fire prevention, education, enforcement, and safety programs, such as fall prevention, lift assists, and needle pickups are also provided. Community safety and well-being is the key service element provided by SFD. This project will enable SFD to provide this region service within the industry standard time objectives improving safety and well-being of citizens and responders.

#### How does this project address Core Services & Operational Priorities?

**Equitable Services:** 

This project will address inequitable service levels experienced in numerous districts across the east of the City.

Quality of Life and Public Safety:

As stated in the City of Saskatoon 2022 – 2025 Strategic Plan:

"Improve the Saskatoon Fire Department's service level targets by regularly assessing the resources needed to ensure adequate and effective coverage as the city grows."

"Continue to provide high-quality essential services and municipal programs that ensure quality of life and enable the public to safely engage in everyday life."

#### **How does this Project address Corporate Transformational Change?**

Customer-centric Service Delivery:

A customer-centric service culture that enables the City to reliably meet established levels of service and consistently achieve high customer satisfaction across the organization.

This project will enable SFD to meet established levels of service consistently.

#### Efficiency & Effectiveness:

The City invests in what matters to keep improving the organization — the right processes, systems, technology and initiatives. This drives operational excellence and helps deliver established levels of service to the public. This project will help deliver established levels of service to the public.

#### **How does this project mitigate Corporate Risk?**

Renovating this fire station to optimize ladder deployment will help ensure service levels can be met, reduce the risk of public or council dissatisfaction, while helping to reduce the risk to people, property, and environment.

#### What is the impact if this project is delayed?

The aerial ladder will remain at its current position of Station No. 8. Data analysis has indicated that this location creates increased areas in the city outside the service level objectives. Delay of this project will increase the number of incidents with reduced levels of service, thereby increasing the risk of negative outcomes and lower the level of safety in the community.

#### What is the impact if this project is not funded by 2035?

Extended delay will inhibit SFD's ability to reach optimum deployment across the eastern side of the city. Aerial ladder location is one element of a full deployment model. Delaying the ladder relocation to number 8 inhibits SFD ability to create optimal deployment across the entire east side of the city.

This would also delay the optimum deployment for other associated services, such as Rescue units, Wildland fire apparatus, and Decontamination units.

Extended delays increase the risk of negative outcomes by inhibiting the capability to provide a total effective response force within the NFPA Standard recommended time frame. Station No. 6 was built in 1977. The facility requires renovations. The delay beyond 2035 will increase energy inefficiency costs, higher renovation costs and repairs. Improvements to occupational hygiene will be further delayed.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact? Safety:

Improve the safety of people and/or their possessions.

This project will significantly improve SFD service level performance in this area. Improving safety of people, property, and the environment.

#### What are other Triple Bottom-Line Co-Benefits?

Efficient and effective asset management and use:

Aerial ladder apparatus are one element within an initial full alarm assignment to structure fires and other alarms. The apparatus and crew complete time sensitive critical fireground tasks as part of the total effective response force. It is very beneficial to locate the apparatus in the center of its response zone to provide efficient, effective, and equitable service to the entire area.

Conserve energy or reduce GHGs

Energy conservation will be maximized through efficient building design and components. Optimizing the location for the areal ladder will reduce the average travel distance to incidents thereby reducing fuel consumption.

# SFD Maintenance and Mechanical Building

#### **Project Description**

Design and construction of a new maintenance and mechanical building.

This project requests six apparatus and fleet service bays with ceiling height available to service ladder trucks, maintenance technician workspaces, and a secure inventory and parts area.

In 2019, the Land Branch purchased land for the SFD at 1935 1st Ave. North. The land purchased was to accommodate a new maintenance and mechanics building and to relocate Fire Station No. 4. The relocation to 1st Ave. is a viable option.

However, a new opportunity is available with the existing-purchased land for the SFD Regional Training Facility. The relocation of the maintenance and mechanical building to the Training Facility supports a multiuse function of the site and supports potential regional partnerships without additional land purchase.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

#### **How does this Project Address Council Priorities?**

REDI:

SFD maintenance and mechanical will create an increased capacity for partnerships to maintain and service fire apparatus similar to the current relationship with Whitecap Dakota First Nations.

#### Economic Development:

Relocation of the maintenance and mechanical building away from downtown creates the opportunity for valuable real estate to be available for infill opportunities.

### Community Safety and Well-being:

Maintenance and mechanical's role is to support all SFD areas: Emergency Operations, Community Risk Reduction, Community Relations, Emergency Management Organization, Central Dispatch, and Staff Development and Safety. A larger facility is a critical component to improving efficiency and effective response to emergency situations.

### Regional Planning:

The Regional Training Facility is working with municipalities of Corman Park, Martensville, and Warman.

The maintenance and repairs of apparatus and firefighting equipment are a potential extension to this current partnership.

Potential agreements for maintenance and service courses and workshops for regional volunteer departments.

#### Downtown Development:

Relocation of the Maintenance and Mechanical Shop enables utilizing the existing site for downtown planning strategies (Imagine Idylwyld, DEED).

#### How does this project address Core Services & Operational Priorities?

Civic Assets - Key Actions

• Create a long-term plan for safe, adequate administrative and operational facilities to enable City staff to deliver established service levels as Saskatoon grows.

To support the outward facing divisions of the SFD, an adequate operational facility is a vital component to address current workload relating to the incident increase.

• Enhance the City's Fusion Enterprise Asset Management (EAM) processes to improve predictive maintenance, operational efficiency, asset reliability, and overall decision-making for civic assets.

The effectiveness of EAM can only be realized once the SFD is able to fully implement all EAM roles. The facility is a significant part of the overall solution to update working conditions and incorporate the use of EAM into the daily work routine.

Quality of Life and Public Safety - Key Actions

• Improve the SFD's service level targets by regularly assessing the resources needed to ensure adequate and effective coverage as the City grows.

SFD Logistics is responsible for ensuring that all areas can respond with properly functioning vehicles, equipment, and Personal Protective Equipment (PPE). The five-year trend of increasing incidents has significantly increased the frequency of repairs and service maintenance intervals. The lack of building space is limiting the ability to achieve maintenance service levels.

• Continue to provide high-quality essential services and municipal programs that ensure the quality of life and enable the public to safely engage in everyday life.

The current building's lack of appropriate space (2 bays) inhibits high-quality essential services and contributes to notable lost time away from hands-on maintenance and repair activities. Lost time occurs as technicians must transition away from hands-on work to move apparatus out of the shop and store at a remote fire station.

### **How does this Project address Corporate Transformational Change?**

Efficiency and Effectiveness

A secure inventory and parts area and a dedicated shipping and receiving bay will align SFD with Supply Chain Management (SCM) best practices. These are important improvements recognized by the City's Supply Chain Operations working group that is currently supporting SFD Logistics.

#### How does this project mitigate Corporate Risk?

The lack of space, coupled with the remarkable rise in incidents, translates into longer wait times between required service intervals, leading to a potential increase in the number of repairs. The current situation decreases the reliability of frontline apparatus and equipment to meet the emergency needs of the residents. A larger facility, with updated equipment, is an important step to help mitigate these risks.

#### What is the impact if this project is delayed?

Delays or defers to building a new facility will seriously impact the logistics' ability to maintain apparatus and equipment. The Maintenance Facility's limited space is a contributing factor that inhibits the technicians' ability to keep pace. This, coupled with the five-year trend of increased incidents, has significantly accelerated the frequency of service maintenance intervals and the number of repairs to apparatus and firefighting equipment is rising, resulting from more use.

A safety impact is the increased likelihood of a breakdown during emergency operations, creating a life-safety risk for firefighters and the citizens involved.

#### What is the impact if this project is not funded by 2035?

Delaying until 2035 is a significant risk due to the difficulty of maintaining assets resulting from an ongoing rise of incidents.

Preventive maintenance intervals will not be met, increasing the likelihood of apparatus and equipment failures, major repairs with significant apparatus downtime, and forfeiting warranty agreements by failing to meet service intervals.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Logistics is critical to ensuring SFD maintains the ability to provide essential services to the community. A new facility addresses the current challenges of maintaining service levels. The rising number of incidents and the increased frequency of service maintenance and repairs have shown that the current facility is no longer effective.

A new facility allows for modern equipment, dedicated workspaces, a secure location for inventory and parts, and additional hoists to enable the Maintenance/Mechanical workforce to efficiently and effectively complete essential tasks to support all areas of SFD.

#### What are other Triple Bottom-Line Co-Benefits?

Conserve energy or reduce GHGs:

Supports building design that reduces energy and GHGs

As the SFD prepares for the future and the planned expansion of the City populous, it is necessary to align with the City's Climate Priorities. Preparation involves implementing green initiatives during the building phase rather than costly renovations to retrofit existing infrastructure to align with climate strategies.

Efforts will be concentrated on creating a flexible design to allow future ecofriendly technology to be easily implemented in the new facility

Efficient and Effective Asset Management:

- Avoid the development of stranded assets
- Ensure assets are multi-use, or provide value beyond their primary use
- Ensure connectivity to existing or planned infrastructure, services, and assets

Relocation to the Regional Training Facility enables multi-use assets and expands potential opportunities through regional partnerships. The relocation also vacates valuable real estate within the downtown.

# Fire Station No.1 SFD Headquarters

#### **Project Description**

Relocate Saskatoon Fire Department (SFD) Headquarters/Station No. 1 from 125 Idylwyld Drive South to a new location. The project would include the selection and purchase of suitable land. The station will not require an apparatus purchase or new staff. Existing staff and an apparatus will be utilized. The station would provide first in response to all or portions of Downtown, Riversdale, Central Industrial, City Park, Nutana, King George, Caswell Hill, Pleasant Hill, Westmount, Mount Royal, Hudson Bay Park, Mayfair, Holiday Park, and Gordie Howe Management Area.

SFD Administrative Headquarters and SFD Community Risk Reduction Department will be colocated in the facility. Co-location partnerships have been explored with a variety of community organizations. There is strong interest from community groups, not for profit groups, and private developers to co-locate with this project.

#### **Total Capital Estimate**

20 million to 50 million.

#### Overview of potential non-city funding sources

The Federal Rapid Housing Initiative has different streams that can support co-location in future fire stations. The opportunity to explore the Community-Based Tenant Initiative program that fund projects to raise awareness of tenant issues, and to support the implementation of new and improved tenant engagement practices.

#### **How does this Project Address Council Priorities?**

Reconciliation, Equity, Diversity, & Inclusion:

Modern building standards within the facility will include upgraded locker rooms, washrooms, and break out areas designed to achieve an inclusive gender-neutral facility which will support equal opportunity for all staff. The project would focus on accessibility for all.

#### Community Safety and Well-being:

The Saskatoon Fire Department (SFD) provides response to all emergencies involving fire, prehospital emergency medical, water rescue, entrapment of persons, and unplanned releases of regulated or hazardous materials and substances, for the safety of the public. Emergency Response service, along with fire dispatch agreements, are also provided to surrounding communities. Extensive fire prevention, education, enforcement, and safety programs, such as fall prevention, lift assists, and needle pickups are also provided. Community safety and well-being is the key service element provided by SFD. This project will enable SFD to provide this region service within the industry standard time objectives improving safety and well-being of citizens and responders.

#### Engagement on Infill & Growth:

Incorporates innovative ways to align neighbourhood desires with city-building goals by minimizing the footprint as well as providing an opportunity to collocate with a variety of housing initiatives.

#### **Downtown Development:**

This project will allow for the repurpose a high value 1.49 acre (0.604 hectare) property to complement the rejuvenation of the downtown through it's close proximity to the Downtown Entertainment & Event District as well as in coordination with Imagine Idylwyld. Enables the new Station No. 1 site to minimize footprint in the core downtown through efficient design principals.

Reduces the impact to residents and vehicles of fire apparatus movement on a major arterial route. Apparatus exiting and returning to Station No.1 often creates traffic congestion and delays.

#### How does this project address Core Services & Operational Priorities?

Civic Assets:

This project supports a long-term plan for safe, adequate administrative and operational facilities to enable SFD to deliver established levels of service as Saskatoon grows.

#### **Equitable Services:**

This project will address inequitable service levels experienced in Districts 1 and 2.

Quality of Life and Public Safety:

As stated in the City of Saskatoon 2022 – 2025 Strategic Plan:

"Improve the Saskatoon Fire Department's service level targets by regularly assessing the resources needed to ensure adequate and effective coverage as the city grows."

"Continue to provide high-quality essential services and municipal programs that ensure quality of life and enable the public to safely engage in everyday life."

This project is required to maintain service levels as described to ensure safety and quality of life.

#### **How does this Project address Corporate Transformational Change?**

Customer-centric Service Delivery:

A customer-centric service culture that enables the City to reliably meet established levels of service and consistently achieve high customer satisfaction across the organization.

This project will enable SFD to meet established levels of service consistently to people in this region.

Efficiency & Effectiveness:

The City invests in what matters to keep improving the organization — the right processes, systems, technology and initiatives. This drives operational excellence and helps deliver established levels of service to the public.

This project will help deliver established levels of service to the public.

#### **How does this project mitigate Corporate Risk?**

Building this fire station will help to ensure service levels can be met, reduce the risk of public or council dissatisfaction, while helping to reduce the risk to people, property, and environment.

#### What is the impact if this project is delayed?

Maintenance costs for Station No.1, built in 1964, have continued to impact reserve funds. Delay of potential redevelopment of current site will mean SFD Headquarters/Station No. 1 will remain overcrowded. Physical space for apparatus, people, equipment will continue to negatively affect operational capacities and safety.

SFD Headquarters and Station No. 1 will remain with limited accessibility design for the benefit of all people regardless of age or abilities. Occupational hygiene improvements will be delayed.

#### What is the impact if this project is not funded by 2035?

Building age will be more than 70 years old. The expected associated maintenance and repairs would be significant. This would create a shortage of space for Administration, Community Risk Reduction, and operational staff. A substantial renovation, including required building standards compliance costs would be required to maintain operational needs.

Occupational hygiene improvements to the busiest fire station in the city would be further delayed.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Health, Well-being, & Self-sufficiency:

Strongly supports and improves the traditional standalone model for fire stations. A co-location has many different opportunities where community-based organizations and affordable housing could occupy the floors above the downtown headquarters. This model would support the health and well-being of residents with programming provided by SFD staff.

Assisting people to feel well and leading to a higher quality of life for all.

#### What are other Triple Bottom-Line Co-Benefits?

Reconciliation, Equity, Diversity, & Inclusion:

Modern building standards within the facility will include upgraded locker rooms, washrooms, and break out areas designed to achieve an inclusive gender-neutral facility which will support equal opportunity for all staff.

The project would focus on accessibility for all.

#### Civic Participation:

SFD incorporates a variety of multi-use rooms within fire stations. SFD supports community organizations and community led efforts by providing use of these spaces.

Innovation, quality workplace, or skill training:

Innovative co-location with community-based organizations, affordable housing, and not for profits will provide services in house. Bringing the services to the residents will create a hub for advanced skill development. One example is housing for older adults with services within coordinated with SFD proactive education programs. This will create an inclusive building that is focused on supporting community.

#### Support financial and human resources:

The co-location model will provide options for the type of ownership to best suit the City of Saskatoon. Full ownership with leased space above the facility, shared ownership with condominium structure, or other. Revenue generation will occur and an increased tax base on a fire station site that traditionally does not see property tax revenue generated.

Efficient and effective asset management and use:

Ensure assets are multi-use or provide value beyond their primary use. Co-locating with a community organization would be a premiere example of asset multi-use providing value beyond the primary use.

# Fire Station No. 12 – Northwest Area of District One

#### **Project Description**

Build a single engine fire station to service the northwestern west portion of District One. The project would include the selection and purchase of suitable land. The station will not require an apparatus purchase or new staff. Existing staff and an apparatus will be utilized. The station's first due response zone would include all or portions of Westmount, Mount Royal, Pleasant Hill, Caswell Hill, Hudson Bay Park, and Mayfair.

Colocation opportunities with community housing organizations will be explored.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

The Federal Rapid Housing Initiative has different streams that can support co-location in future fire stations. The opportunity to explore the Community-Based Tenant Initiative program that fund projects to raise awareness of tenant issues, and to support the implementation of new and improved tenant engagement practices.

#### **How does this Project Address Council Priorities?**

Reconciliation, Equity, Diversity, & Inclusion:

Modern building standards within the facility will include upgraded locker rooms, washrooms, and break out areas designed to achieve an inclusive gender-neutral facility which will support equal opportunity for all staff. The project would focus on accessibility for all. Also, the colocation model would support equitable housing for residents in need of affordable housing.

#### Community Safety and Well-being:

The Saskatoon Fire Department (SFD) provides response to all emergencies involving fire, prehospital emergency medical, water rescue, entrapment of persons, and unplanned releases of regulated or hazardous materials and substances, for the safety of the public. Emergency Response service, along with fire dispatch agreements, are also provided to surrounding communities. Extensive fire prevention, education, enforcement, and safety programs, such as fall prevention, lift assists, and needle pickups are also provided. Community safety and well-being is the key service element provided by SFD. This project will enable SFD to provide this region service within the industry standard time objectives improving safety and well-being of citizens and responders.

#### Engagement on Infill & Growth:

Incorporates innovative ways to align neighbourhood desires with city-building goals by minimizing the footprint as well as providing an opportunity to collocate with a variety of housing initiatives. Based on neighbourhood demographics the co-location model would be determined by the need for services to support residents.

#### Downtown Development:

Related to the relocation of Station No. 1 at 125 Idylwyld Drive South, this project facilitates the redevelopment/repurpose of 125 Idylwyld Drive.

This station project will enable the reduced footprint of the new Station No. 1 site in the core downtown area while improving service levels.

Distributing the resources in District One lessens the impact of the rail line bisecting the district and delaying emergency response to one of the busiest areas of the city.

### How does this project address Core Services & Operational Priorities?

Civic Assets:

This project supports a long-term plan for safe operational facilities to enable SFD to deliver established levels of service as Saskatoon grows. A whole community approach with colocation model strengthens the civic asset. A multi-dimensional site provides added value through reputational, financial, and supportive model.

#### Equitable Services:

This project will address inequitable service levels experienced in Districts 1 and 2.

Quality of Life and Public Safety:

As stated in the City of Saskatoon 2022 – 2025 Strategic Plan:

"Improve the Saskatoon Fire Department's service level targets by regularly assessing the resources needed to ensure adequate and effective coverage as the city grows."

"Continue to provide high-quality essential services and municipal programs that ensure quality of life and enable the public to safely engage in everyday life."

This project is required to maintain service levels as described to ensure safety and quality of life.

#### **How does this Project address Corporate Transformational Change?**

Customer-centric Service Delivery:

A customer-centric service culture that enables the City to reliably meet established levels of service and consistently achieve high customer satisfaction across the organization.

This project will enable SFD to meet established levels of service consistently to people in this region.

Efficiency & Effectiveness:

The City invests in what matters to keep improving the organization — the right processes, systems, technology, and initiatives. This drives operational excellence and helps deliver established levels of service to the public.

This project will help deliver established levels of service to the public.

#### How does this project mitigate Corporate Risk?

Building this fire station will help to ensure service levels can be met, reduce the risk of public or council dissatisfaction, while helping to reduce the risk to people, property, and environment.

#### What is the impact if this project is delayed?

The provision of effective fire and emergency services is reliant on the proper combination of distribution and concentration of resources. The SFD's deployment strategy, based on continuous data analysis, identifies the improvements and changes needed in deployment priorities. This is used as a basis to align with community risk and strategic and master planning. Immediate priorities have been identified, for station location and apparatus deployment, and updated to include additional resource requirements to maintain current emergency service levels.

The SFD has identified the busiest areas in the City exist in District 1 and 2. The boundary where these two districts meet is one of the busiest areas in the City in terms of call volume. District 1 accounts for about 33% of total call volume throughout the City. SFD must also evaluate geographic distribution and depth, or concentration of resources deployed based on time parameters. Deployment models often require a concentration of resources to maintain service level objectives in high workload areas with multiple simultaneous alarms. GIS Mapping based on posted road speeds has shown SFD should be meeting response times. However, SFD is not meeting service level objectives in District 1 due to several factors.

The current deployment of resources providing response coverage to the central area of Saskatoon is from a single facility – Station No. 1. While the quantity of resources is adequate, the analysis of data indicates redistribution of those resources would improve service level performance in some of the busiest areas and minimize the impact of the geographical restrictions for response. An example of this is the CP railway that bisects the response district.

SFD continues to see an increase of calls for service yearly. Total calls per year are at the highest levels ever. Yearly totals have increased an average of 12 % per year in 2019, 2020, & 2021. Currently 2022 is on a record pace with 9.68% increase over last year. Delay to restore service levels in the busiest area of the city will increase the number of incidents with reduced service. This will increase the risk of negative outcomes and reduce the level of safety in the community.

#### What is the impact if this project is not funded by 2035?

Extended delays continue to increase the risk of negative outcomes and further reduces the level of safety in the community.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact? Safety:

Improve the safety of people and/or their possessions.

This project will significantly improve SFD service level performance in this area. Improving safety of people, property, and the environment because of the geographic restriction bisecting several neighbourhoods (rail line). Also, this location supports a creative co-location model that will transform the community in shared spaces.

#### What are other Triple Bottom-Line Co-Benefits?

Reduce GHG's:

This project will provide travel times to calls within this region less than 240 seconds. For many incidents in this region the travel time/distance will be reduced by 50% or more, thereby reducing fuel use.

Health, Wellbeing, and Self-sufficiency:

SFD paramedic/firefighters provide emergency medical care, rescues, fire protection, lift assists, hazardous materials response, carbon monoxide and other investigations. SFD crews perform proactive wellness checks to assist people feel well and stay healthy. These crews ensure unsafe housing is reported for follow up and support. These services all lead to a higher quality of life for all.

#### Civic Participation:

SFD incorporates a variety of multi-use rooms within fire stations. SFD supports community organizations and community led efforts by providing use of these spaces.

Innovation, quality workplace, or skill training:

Innovative co-location with community-based organizations, affordable housing, and not for profits will provide services in house. Bringing the services to the residents will create a hub for advanced skill development. One example is housing for older adults with services within coordinated with SFD proactive education programs. This will create an inclusive building that is focused on supporting community.

#### Support financial resources:

The co-location model will provide options for the type of ownership to best suit the City of Saskatoon. Full ownership with leased space above the facility, shared ownership with condominium structure, or other. Revenue generation will occur and an increased tax base on a fire station site that traditionally does not see property tax revenue generated.

# Fire Station No. 14 & Engine for eastern area known as Region D

#### **Project Description**

Build a single engine fire station to service the eastern portion of the city previously reported as Region D. The project would include the selection and purchase of suitable land, as well as the purchase of a fully equipped fire engine. The station would provide initial response to all or portions of Brighton, Holmwood Business Park, Holmwood Suburban Centers #1 & #2, and neighbourhood develop areas 2, 3, & 4 as listed in the Holmwood Sector Plan.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

#### **How does this Project Address Council Priorities?**

Community Safety and Well-being: The SFD provides response to all emergencies involving fire, prehospital emergency medical, water rescue, entrapment of persons, and unplanned releases of regulated or hazardous materials and substances, for the safety of the public.

Emergency Response service, along with fire dispatch agreements, are also provided to surrounding communities. Extensive fire prevention, education, enforcement, and safety programs, such as fall prevention, lift assists, and needle pickups are also provided. Community safety and well-being is the key service element provided by SFD. This project will enable SFD to provide this region service within the industry standard time objectives improving safety and well-being of citizens and responders.

Environmental Sustainability: Develop initiatives to improve energy conservation and efficiency in buildings, transportation and land use planning.

In 2021, SFD responded to 106 calls for service in Region D, the Out-of-Range region east of District Nine in the eastern part of the city. There have been 107 calls for service to date this year. Calls to this area all exceed the 240 second travel time and will increase every year. This project will provide travel times to calls within this region less than 240 seconds, thereby reducing fuel consumption. For many incidents the travel time/distance will be reduced by 50% or more.

#### How does this project address Core Services & Operational Priorities?

Equitable Services:

This project will address inequitable service levels experienced in Region D.

Quality of Life and Public Safety:

As stated in the City of Saskatoon 2022 – 2025 Strategic Plan:

"Improve the Saskatoon Fire Department's service level targets by regularly assessing the resources needed to ensure adequate and effective coverage as the city grows."

"Continue to provide high-quality essential services and municipal programs that ensure quality of life and enable the public to safely engage in everyday life."

This project is required to maintain service levels as described to ensure safety and quality of life.

#### How does this Project address Corporate Transformational Change?

Customer-centric Service Delivery:

A customer-centric service culture that enables the City to reliably meet established levels of service and consistently achieve high customer satisfaction across the organization.

In 2021, SFD responded to 106 calls for service in Region D, the Out-of-Range region east of District Nine.

This project will enable SFD to meet established levels of service consistently to people in this region.

#### Efficiency & Effectiveness:

The City invests in what matters to keep improving the organization — the right processes, systems, technology, and initiatives. This drives operational excellence and helps deliver established levels of service to the public.

This project will help deliver established levels of service to the public.

#### **How does this project mitigate Corporate Risk?**

Building this fire station will help to ensure service levels can be met, reduce the risk of public or council dissatisfaction, while helping to reduce the risk to people and property.

#### What is the impact if this project is delayed?

Calls for service that are beyond the 240 second travel time from our current fire stations are referred to as out-of-range calls.

SFD is experiencing out-of-range calls for service in many districts.

In 2021 SFD responded to 106 calls for service in Region D, the Out-of-Range region consisting mainly of Brighton and proposed Holmwood Sector. SFD has responded to 107 calls in the region this year.

This region is experiencing rapid development. The population of Brighton is expected to reach approximately 15,000 people. The two suburban center areas and the two neighborhood areas that will be adjacent to Brighton have projected populations of another 28,000 people. Delay of this project will ensure the region remains outside of the travel time service level objective. This will create increased risk for people and responders as the region will continue to see this increase of population and activities.

Fire growth and fire behavior are scientifically measurable, as are the expected outcomes associated with untreated cardiac arrest, and specific resource requirements to control fires and prevent deaths.

Important criteria in National Fire Protection Association (NFPA) 1710 are based on the Fire Propagation Curve, a universally accepted, empirically based measurement of how quickly a fire will reach the flashover stage and potential spread to surrounding buildings if left unaddressed. Established medical response times are based on well established, empirically based measurements of the maximum amount of time that a patient in cardiac arrest can survive without intervention.

#### What is the impact if this project is not funded by 2035?

SFD will see a significant increase in the out-of-range calls for service in Region D between 2024 and 2035. Many of these calls will be immediately dangerous for the health and safety of the citizens involved. Extended response times increase the risk of negative outcomes to these events.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact? Safety:

Improve the safety of people and/or their possessions.

This project would enable the SFD to provide the expected level of service in this region. The status quo is that all homes and businesses in Region D live outside the recommended travel time for initial arriving fire crews. This project will significantly improve SFD service level performance in this area. Improving safety of people, property, and Environment.

#### What are other Triple Bottom-Line Co-Benefits?

Reduce GHG's:

This project will provide travel times to calls within this region less than 240 seconds. For many incidents in this region the travel time/distance will be reduced by 50% or more, thereby reducing fuel use.

Health, Wellbeing, and Self-sufficiency:

SFD paramedic/firefighters provide emergency medical care, rescues, fire protection, lift assists, hazardous materials response, carbon monoxide and other investigations. SFD crews perform proactive wellness checks to support people to feel well and stay healthy. Unsafe housing is reported for follow up and support. These services all lead to a higher quality of life for all.

#### Civic Participation:

SFD incorporates a variety of multi-use rooms within fire stations. SFD supports community organizations and community led efforts by providing use of these spaces.

Efficient and effective asset management and use:

Extended travel distances to calls for service increase the maintenance cost and frequency and shorten the expected life span of apparatus. This project will reduce apparatus travel distances to calls within this region thereby decreasing vehicle maintenance cost and frequency. For many incidents the travel distance will be reduced by 50% or more.

# Fire Station No. 13 & Engine for eastern area known as Region C

#### **Project Description**

Build a single engine fire station to service the eastern portion of the city previously reported as Region C. The project would include the selection and purchase of suitable land as well as the purchase of a fully equipped fire engine. The station would provide initial response to all or portions of Aspen Ridge, Evergreen, and neighborhood 3 as listed in the University Heights Sector Plan.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

#### **How does this Project Address Council Priorities?**

Community Safety and Well-being: The Saskatoon Fire Department (SFD) provides response to all emergencies involving fire, prehospital emergency medical, water rescue, entrapment of persons, and unplanned releases of regulated or hazardous materials and substances, for the safety of the public.

Emergency Response service, along with fire dispatch agreements, are also provided to surrounding communities. Extensive fire prevention, education, enforcement, and safety programs, such as fall prevention, lift assists, and needle pickups are also provided. Community safety and well-being is the key service element provided by SFD. This project will enable SFD to provide this region service within the industry standard time objectives improving safety and well-being of citizens and responders.

Environmental Sustainability: Develop initiatives to improve energy conservation and efficiency in buildings, transportation and land use planning.

In 2021 SFD responded to 247 calls for service in Region C, the Out-of-Range region northeast of District Nine in the eastern part of the city. There have been 239 calls for service to date this year. Calls to this area all exceed the 240 second travel time and will increase every year. This project will provide travel times to calls within this region less than 240 seconds, thereby reducing fuel consumption. For many incidents the travel time/distance will be reduced by 50% or more.

#### How does this project address Core Services & Operational Priorities?

Equitable Services:

This project will address inequitable service levels experienced in Region C.

Quality of Life and Public Safety:

As stated in the City of Saskatoon 2022 – 2025 Strategic Plan:

"Improve the Saskatoon Fire Department's service level targets by regularly assessing the resources needed to ensure adequate and effective coverage as the city grows."

"Continue to provide high-quality essential services and municipal programs that ensure quality of life and enable the public to safely engage in everyday life."

This project is required to maintain service levels as described to ensure safety and quality of life.

#### How does this Project address Corporate Transformational Change?

Customer-centric Service Delivery:

A customer-centric service culture that enables the City to reliably meet established levels of service and consistently achieve high customer satisfaction across the organization.

In 2021 SFD responded to 247 calls for service in Region C, the Out-of-Range region northeast of District Nine.

This project will enable SFD to meet established levels of service consistently to people in this region.

### Efficiency & Effectiveness:

The City invests in what matters to keep improving the organization — the right processes, systems, technology and initiatives. This drives operational excellence and helps deliver established levels of service to the public. This project will help deliver established levels of service to the public.

#### How does this project mitigate Corporate Risk?

Building this fire station will help to ensure service levels can be met, reduce the risk of public or Council dissatisfaction, while helping to reduce the risk to people, property, and environment

#### What is the impact if this project is delayed?

Calls for service that are beyond the 240 second travel time from our current fire stations are referred to as out-of-range calls.

SFD is experiencing out-of-range calls for service in many districts.

In 2021 SFD, responded to 247 calls for service in Region C, the Out-of-Range region consisting mainly of Aspen Ridge and northeast portions of Evergreen. SFD has responded to 239 calls in the region this year.

This region is experiencing rapid development. The population of Aspen Ridge is expected to reach approximately 10,000 people. The proposed UH3 University Heights neighborhood, Mixed-use core and District Village Commercial areas that will be adjacent to the Northeast Swale, have projected populations of another 17,500 people. Delay of this project will ensure the region remains outside of the travel time service level objective. This will create increased risk for people and responders as the region will continue to see this increase of population and activities.

Fire growth and fire behavior are scientifically measurable, as are the expected outcomes associated with untreated cardiac arrest, and specific resource requirements to control fires and prevent deaths.

Important criteria in National Fire Protection Association (NFPA) 1710 are based on the Fire Propagation Curve, a universally accepted, empirically based measurement of how quickly a fire will reach the flashover stage and potential spread to surrounding buildings if left unaddressed. Established medical response times are based on well established, empirically based measurements of the maximum amount of time that a patient in cardiac arrest can survive without intervention.

#### What is the impact if this project is not funded by 2035?

SFD will see a significant increase in the out-of-range calls for service in Region C between 2024 and 2035. Many of these calls will be immediately dangerous for the health and safety of the citizens involved. Extended response times increase the risk of negative outcomes to these events.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact? Safety:

Improve the safety of people and/or their possessions.

This project would enable the SFD to provide the expected level of service in this region. The status quo is that all homes and businesses in Region C live outside the recommended travel time for initial arriving fire crews. This project will significantly improve SFD service level performance in this area. Improving safety of people, property, and environment.

#### What are other Triple Bottom-Line Co-Benefits?

#### Reduce GHGs:

This project will provide travel times to calls within this region less than 240 seconds. For many incidents in this region the travel time/distance will be reduced by 50% or more, thereby reducing fuel use.

Health, Wellbeing, and Self-sufficiency:

SFD paramedic/firefighters provide emergency medical care, rescues, fire protection, lift assists, hazardous materials response, carbon monoxide and other investigations. SFD crews perform proactive wellness checks to support people to feel well and stay healthy. Unsafe housing is reported for follow up and support. These services all lead to a higher quality of life for all.

#### Civic Participation:

SFD incorporates a variety of multi-use rooms within fire stations. SFD supports community organizations and community led efforts by providing use of these spaces.

Efficient and effective asset management and use:

Extended travel distances to calls for service increase the maintenance cost and frequency and shorten the expected life span of apparatus. This project will reduce apparatus travel distances to calls within this region thereby decreasing vehicle maintenance cost and frequency. For many incidents the travel distance will be reduced by 50% or more.

# **Increase Apparatus Reserve to Purchase of Electric Fire Engines**

#### **Project Description**

This project provides funding for two electric apparatus as diesel-powered units are scheduled for replacement. There are eight fire apparatus scheduled to be replaced between 2024 to 2028.

The increased funding is required to complete a pilot within the Fire Apparatus Reserve. In addition to the differential cost between the diesel and electric apparatus, the project includes the projected cost of purchasing and installing charging stations with appropriate infrastructure into the required facilities.

#### **Total Capital Estimate**

2 million to 5 million.

#### Overview of potential non-city funding sources

- 1. The Green Municipal fund offers, Regular loans and grants: Receive a low-interest loan of up to \$5 million and a grant worth up to 15% of the loan; cover up to 80% of your eligible costs. High-ranking project loans and grants: These qualify for a low-interest loan of up to \$10 million and a grant worth up to 15% of the loan; cover up to 80% of your eligible costs.
- Purchasing properly sized municipal vehicles for various uses (e.g., fleet optimization)
- Alternative fueling infrastructure for vehicles providing municipal services (e.g., fast charging stations)

All classes of vehicle are eligible for this funding. It applies to your fleet (i.e, all municipally owned vehicles such as police cruisers and fire trucks) and private vehicles that deliver municipal services (e.g., waste management or leased vehicles).

2. Transport Canada offers,

Incentives of \$100,000 per battery electric vehicle (BEV) and \$50,000 per Plug-in hybrid electric vehicle (PHEV). Firetruck manufacturers presently eligible for these incentives are, Rosenbauer (BEV), and Pierce (PHEV).

#### **How does this Project Address Council Priorities?**

Replacement electric apparatus will provide a significant reduction of GHG emissions compared to the diesel-powered unit, up to 24% over the asset lifespan.

#### How does this project address Core Services & Operational Priorities?

Civic assets:

Replacement of diesel-powered with electric apparatus ensures energy efficiency and long-term resilience while supporting reduced ongoing operating costs.

Quality of Life and Public Safety:

A reliable electric fire fleet will ensure service levels are met while reducing GHG emissions.

#### How does this Project address Corporate Transformational Change?

Investing in alternative energy high-performing fleet will help SFD be efficient in delivering service to the community while protecting the environment.

#### **How does this project mitigate Corporate Risk?**

This project will reduce the risk of public or council dissatisfaction relating to the failure to achieve GHG reduction targets.

#### What is the impact if this project is delayed?

Starting in 2024, SFD would continue to purchase diesel powered apparatus as the fleet is replaced until additional funding is realized for the capital apparatus reserve fund to facilitate the transition to electric vehicles.

Every replacement apparatus purchased with a diesel engine will lengthen the timeline to convert SFD's fleet to electric. Currently the replacement cycle for a single apparatus is 18 years.

#### What is the impact if this project is not funded by 2035?

SFD would continue to purchase diesel apparatus. The ability to purchase electric apparatus is not achievable until successful budget increases provide enough capital reserve funding. Complete conversion to electric power will not be achieved until 2053 or later based on the replacement schedule for the SFD fleet.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Currently, fire response models worldwide consist of predominantly fossil-fuel powered vehicles. Transitioning to electric powered apparatus is a significant paradigm shift away from the traditional SFD response approach to emergency situations.

This project is an important step towards reducing SFD's fossil fuel consumption and aligning with City Council priorities to conserve energy and reduce GHG's.

#### What are other Triple Bottom-Line Co-Benefits?

Healthy Ecosystems or Reduced Pollutants

Electric fire apparatus reduce GHG emissions compared to diesel-powered units. The reduction of GHG's reduces the SFD's contribution to global climate change. Also, diesel exhaust particulates are known pollutants, affecting the environment and poses health-risks to humans.

#### **Support Climate Adaptions**

• Community or corporate adaptation to climate change activities

Transitioning to electric fire trucks is a significant change to the SFD response model. To support corporate climate adaptations, the SFD is initiating this project with the understanding that external funding and corporate alignment with partners like Sustainability is vital. Implementation of this project requires support to build a resilient project that achieves ecofriendly outcomes, reduces climate change risks, and nurtures partnerships to share knowledge to "proactively address the effects of climate change." The Strategic Goal of Environmental Leadership

#### Support Financial resources

"Incremental expenditures in buildings, vehicles, and other energy related equipment and infrastructure increase costs in the short-term but result in long-term savings." City of Saskatoon - Low Emissions Community Plan (LEC Plan)

The operational cost savings are apparatus maintenance cost savings of approximately 24% over the life cycle of the asset. Fuel saving costs less the increased electrical consumption costs.

# **Sustainability Priorities**

# **Zero Emissions Transit Fund**

#### **Project Description**

The ZETF Federal Fund allows for funding to increase the amount of Zero Emission Buses (ZEBs) in a municipality's fleet. This fund allows for buses and infrastructure investment. This capital project ask is for the City's portion, \$18 million, of the total ZETF ask of \$36 million.

#### **Total Capital Estimate**

20 million to 50 million.

#### Overview of potential non-city funding sources

This project has applied for and will receive Zero Emission transit funding of approximately \$18 million.

#### **How does this Project Address Council Priorities?**

Investing in transit ensures equal access to spontaneous, dependable, and safe transportation for all citizens of Saskatoon regardless of where they live and what their income is. Investing in transit will support the Downtown development and encourage citizens and visitors to Saskatoon to make use of a robust transit system to gain access to the proposed downtown amenities. Investment in ZEV will encourage the reduction of GHG for the City of Saskatoon as a whole. Supporting Transit will allow for improved transportation for all citizens and visitors of Saskatoon allowing them better and more reliable service to all corners of our city.

#### How does this project address Core Services & Operational Priorities?

Investing in Transit means Saskatoon will have updated and more reliable buses on the road. This ensures that disruptions to service are reduced, providing more reliable service to our customers. Investing in Transit ensures an excellent customer experience for citizens of all ages, demographics, and abilities when travelling on a Saskatoon Transit Bus.

#### **How does this Project address Corporate Transformational Change?**

Updated and more reliable buses leads to more consistent and reliable service for the citizens of Saskatoon. This improved service keeping in mind the end user will mean a more satisfied customer base and this will also attract more riders as the use of the bus becomes more convenient than the use of a private vehicle. The move to ZEV will increase the fuel efficiency of the vehicles reducing GHG emissions.

#### **How does this project mitigate Corporate Risk?**

Maintaining a consistent, regular injection of new rolling stock reduces the chance of service disruptions as newer buses require less repair and are more dependable.

### What is the impact if this project is delayed?

The ability for the City of Saskatoon to take advantage of the ZETF funding may be lost. This would result in the City of Saskatoon needing to absorb all of the costs related to the ZEV purchase and infrastructure investments. Saskatoon Transit would be at risk of not meeting the GHG reduction goals that have been set departmentally and corporately by City of Saskatoon. In addition, to improve the average age of Saskatoon's fleet, there needs to be an injection of new rolling stock. Failure to do so will continue to put the overall service of Saskatoon Transit at risk.

What is the impact if this project is not funded by 2035?
Saskatoon transit will continue to be at risk of providing essential services to the citizens of Saskatoon.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The reduction in greenhouse gases is significantly improved. Based on the pilot program that was implemented and measured by SRC, it is estimated that noise will be reduced by 5 decibels on an electric bus compared to a diesel and the reduction in CO2 equivalent is 45 tonnes annually.

#### What are other Triple Bottom-Line Co-Benefits?

Reconciliation, Equity, Diversity, and Inclusion; (removed)

Safety, or resiliency of essential services;

# **Civic Water Conservation**

#### **Project Description**

Civic Water Conservation Program, identified as a priority in the Water Conservation Strategy, involves improving the water efficiency in facilities and operations. Two thirds of the City's own water use is used outdoors in the summer, the majority for irrigation. Initiatives involve:

- maximizing water efficiencies in parks and green spaces.
- transitioning irrigated areas to naturalized areas.
- using non-potable water sources (such as raw water, storm water, roof water and reused water) to maintain green infrastructure.
- maximizing water efficiencies in spray pads and paddling pools.
- · maximizing efficiencies of facilities and operation.s
- using AMI data to manage and track water use.
- integrating water conservation into planning, land use, and urban form policies, standards, and plans.
- continuing existing education and grant programs.
- \*This work compliments the Naturalization and Low Impact Development project which is focused on increasing naturalization beyond the irrigated areas that are the focus of this project.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

\$800,000 Natural Infrastructure Fund grant in 2024. Will continue to look for other funding opportunities to accelerate Civic Water Conservation implementation.

#### **How does this Project Address Council Priorities?**

Civic Water Conservation supports the following key actions:

- Recreation, Culture and Leisure:
- o Develop asset management plans for key recreation infrastructure and equipment and incorporate green infrastructure and natural assets into existing asset management plans for parks.
- o Develop more resilient design standards for parks to respond to higher density neighbourhoods, increased park usage and climate change.
- Environmental Sustainability:
- o Implement climate actions in the Low Emissions Community Plan and the Corporate Adaptation Strategy within proposed timeframes.
- o Implement innovative and efficient water conversation practices and programs for indoor and outdoor uses.
- o Develop proactive policies, strategies and practices to ensure the environment is protected from damage and, where possible, ecosystems are enhanced.

#### How does this project address Core Services & Operational Priorities?

Civic Water Conservation supports the following key outcomes:

- Civic Assets:
- o Saskatoon's built and natural assets are managed in a manner that maximizes benefits, manages risk to an acceptable level, and provides established levels of service throughout the full lifecycle.
- o Civic assets are energy efficient and designed for long-term resilience, ensuring the City is prepared to mitigate current and future contributions to climate change. Investment in water

conservation aligns with intent of energy efficiency and is required to support GHG emissions goals and provide great climate resilience.

#### **How does this Project address Corporate Transformational Change?**

Civic Water Conservation supports the following key outcomes:

• Efficiency and Effectiveness:

o Increased operational efficiency and effectiveness has resulted in greater savings and organizational success.

#### How does this project mitigate Corporate Risk?

The Low Emissions Community Plan identifies that a third of municipal GHG emissions come from pumping and treating water and without implementing the water conservation strategy, we risk not meeting our local and global commitments to reduce GHG emissions. Water conservation helps reduce GHG emissions and energy used to pump and treat water. The Climate Projections and Possible Impacts Report identifies that increased demand on the water and wastewater utility and delivery system due to warmer weather has a high risk to impact operations. It also identifies a high risk from increased stress on plants and the urban forest and a moderate risk of loss of plant and urban wildlife diversity due to heat stress, water availability reductions and habitat losses.

The Water Treatment Plan Long Term Capital Strategy identifies a risk that capacity expansion will be required sooner if water reduction measures are not implemented.

Water conservation can help prepare for less predictable precipitation, less dependable water flows and more frequent droughts that we expect to face in the future.

#### What is the impact if this project is delayed?

Savings from efficiency improvements will not be realized and water conservation targets will not be met. The Low Emissions Community (LEC) Plan identifies targets for water conservation which are a 5% overall reduction by 2026, a 20% outdoor and 30% indoor reduction by 2050.

#### What is the impact if this project is not funded by 2035?

Savings from efficiency improvements will not be realized and water conservation targets will not be met. The targets for water conservation are a 5% overall reduction by 2026, a 20% outdoor and 30% indoor reduction by 2050. The baseline year is 2016. The Water Treatment Plan Long Term Capital Strategy identifies a risk that capacity expansion will be required sooner if water conservation measures are not implemented.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Implementing the suite of Civic Water Conservation initiatives listed above will significantly reduce civic water use. The impacts will be sustained long-term and address numerous risks. This work involves piloting and subsequently implementing new ideas and approaches that will transform civic operations and practices.

#### What are other Triple Bottom-Line Co-Benefits?

- Conserve energy or reduce GHGs
- o A third of the City's own emissions come from pumping and treating water. Water conservation is a key way to reduce these emissions.
- Healthy Ecosystems or reduced pollutants.
- o Water conservation helps protect and enhance green spaces that are at risk from climate change.
- Support Climate Adaptation.
- o Water conservation is a key way to increase resiliency of the water treatment and distribution

system, and the green infrastructure network.

- Safety, or resiliency of essential services.
- o Water conservation will help prevent essential service disruptions to the water system and reduce the need to implement water use restrictions.
- Efficient and effective asset management and use.
- o Water conservation helps defer the need to prematurely replace or expand water system infrastructure arising from capacity limitations.

# <u> Green Networks - Natural Areas Program</u>

#### **Project Description**

The purpose of the Green Network - Natural Areas Program is to protect, restore, and manage significant natural areas in the City's green network.

While natural areas in Saskatoon connect residents to nature and provide other important services, many sites are degraded and unmanaged. Restoring high priority natural areas and bringing these sites under formal stewardship will maximize ecosystem services and help to realize the full benefits of these spaces.

The first phase of this work, Natural Areas Management – Pilots and Policy, proceeded in 2022-2023 with the development of a natural area policy framework, and the completion of pilot natural area management plans at 2 priority sites. This major capital ask is for the continuation of this work through the roll-out of management and restoration work at additional natural areas. Policy and process development that supports this work will occur concurrently. Opportunities to implement recommendations from an upcoming Traditional Land Use and Knowledge Assessment will also be explored.

The Natural Areas Program will align with and support concurrent initiatives such as Meewasin's feasibility study for a National Urban Park, Wanuskewin's bid for UNESCO designation, and the creation of a ceremonial space in Saskatoon.

#### **Total Capital Estimate**

50 million to 150 million.

#### Overview of potential non-city funding sources

Funding for early site enhancements may be available through the Natural Infrastructure Fund – Large Project Stream. This is anticipated to bring an additional \$700,000 to the current project budget.

The Federal Government has made various commitments to protecting nature and biodiversity and has demonstrated this through recent funding opportunities such as Nature Smart Climate Solutions, Natural Infrastructure Funding, 2 Billion Trees, and investments in protected areas. We anticipate the Natural Areas Program will be eligible for additional external funding in future. Linkages to future climate adaptation funding (e.g., FCM funding) are also expected.

#### **How does this Project Address Council Priorities?**

Reconciliation, Equity, Diversity, and Inclusion:

- -The Natural Areas Program supports the City's reconciliation goals including the United Nations Declaration on the Rights of Indigenous Peoples, and particularly Articles 11, 12, and 13. Progressing towards these Articles will be supported by a Traditional Knowledge Specialist and the delivery of a natural area's education program.
- -This project will work towards the key action in the strategic plan to "Create spaces where all community members feel safe and welcomed to ensure cultural identities and living experiences are reflected in the community." For example, the natural areas education program will support Indigenous student involvement in natural areas.

#### Regional Planning:

-This program will advance the opportunity to connect the P4G Green Network Study Area with the City's Green Network. This supports the Green Infrastructure Strategy Action 5.2: Work with regional partners to coordinate Green Network development and management in urban areas that intersect with the region.

#### Environmental Sustainability:

This program will implement actions in the Green Infrastructure Strategy and Green Pathways within their proposed timeframes. Specific initiatives addressed are:

- -Action 1.1: Protect prioritized natural areas through policies and processes
- -Action 1.2: Manage and restore natural areas through Natural Area Management Plans.
- -Action 1.3: Create partnerships to support Indigenous land management.
- -Action 1.4: Integrated natural assets into the City's asset management system.

Through the development and implementation of a policy framework, proactive policies, strategies, and practices will ensure that environmental quality is protected from damage and where possible, ecosystems are enhanced.

#### How does this project address Core Services & Operational Priorities?

Civic assets: This program directly contributes to the Strategic Plan outcome that "Saskatoon's built and natural assets are managed in a manner that maximizes benefits, manages risk to an acceptable level, and provides established levels of service throughout the full lifecycle." Specifically, this program will adopt, maintain and fund asset management plans for key civic assets to support established levels of service. The development of asset management plans for natural areas, which will be developed through a climate adaptation lens.

Quality of life: This program directly contributes to the Strategic Plan outcome of "Welcoming and inclusive public infrastructure, spaces and natural assets that bring people together." Specifically, the program will improve the public's access to nature and natural spaces, which is shown to improve quality of life including mental and physical health and well-being.

#### **How does this Project address Corporate Transformational Change?**

Efficiency and Effectiveness: This program contributes directly to the Strategic Plan Outcome "Our ability to proactively respond to opportunities and challenges, while managing risk and organizational change, is enhanced." Specifically, the restoration of natural assets will proactively alleviate risks that may result from climate change such as the urban heat island effect and overland flooding.

People and Culture: This program directly contributes to the Strategic Plan Outcome "the City is an inclusive, respectful, and collaborative workplace that fosters safety and high-performance". Specifically, a natural areas education program will support youth employment, skills building, and training opportunities.

#### How does this project mitigate Corporate Risk?

Operational Risks:

- -Natural assets provide many benefits that are not always apparent until they are degraded or destroyed. "Avoided Cost" is a method of valuing natural assets by calculating the damages that would occur if the natural assets were lost. For example, wetlands play an important role in preventing overland flooding. If this service is lost through wetland removal, it can lead to significant "downstream" costs such as flood damage to other infrastructure and assets. The consistent protection and management of natural assets will help to reduce these hidden costs to other civic infrastructure.
- -Natural assets that are currently unmanaged are degrading or contaminated, which can provide a risk to both the community and ecosystems. For example, several natural assets currently have illegal dumping occurring. Increasing management to these sites through operational planning will help ensure these risks are reduced or eliminated.

Safety and Public Perception Risks:

-Public feedback is consistently strongly in favor of managing natural assets and other green

infrastructure to the level that other infrastructure is managed.

-Many citizens are already informally using undesignated natural assets. There is an opportunity to increase customer satisfaction by formalizing these site uses. At the same time, there is a public safety risk if these sites remain unmanaged.

#### Risks to the City's Reputation:

-There is a risk that citizen's overall confidence in the City may be reduced as a result of leaving natural areas unmanaged, or not being transparent about the City's protection and management processes related to natural areas.

#### What is the impact if this project is delayed?

Missed Opportunities:

- -This work aligns with upcoming external opportunities such as the feasibility study for a National Urban Park. The Natural Areas Program is the best mechanism that the City has to understand the implications of an urban park from the City's perspective and act on any resulting recommendations.
- -The opportunity to create a clear policy and process for natural areas management, after the initial investment in a policy framework in 2022-2023, would be missed if funding does not continue. This would likely lead to increase public complaints, and natural areas continuing to be addressed "off the side of desk", which is not a sustainable approach. Related to this, if the work does not continue, there is a risk of staff turnover, since expertise has been developed in this area to support this ongoing work.

#### What is the impact if this project is not funded by 2035?

In addition to the risks described above, by 2035 many natural areas may be permanently destroyed or damaged. The impact of the loss of these ecosystem services is not quantified but expected to be significant.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The project represents a substantial change to the way the City approaches natural areas. Over 2,000 hectares of natural area within City limits are currently unprotected and unmanaged, which, in addition to posing a significant risk to the ecosystem services these sites provide, also represents a lost opportunity for the City to capitalize on these services. This program will reduce these risks and advance the opportunity by:

- -Establishing a clear path forward for the restoration of natural areas in the City, allowing full realization of the ecosystem services they provide.
- -Establishing clear policy and process for natural areas from screenings to protection mechanisms.
- -Determining sustainable service levels by taking a natural asset approach, to determine an appropriate balance between the City's investment and the delivery of ecosystem services.
- -Establishing a partnership with Meewasin, and particularly regarding the National Urban Park feasibility study, and other landowners in the management of natural areas

#### What are other Triple Bottom-Line Co-Benefits?

Conserve water or improve water quality:

Wetlands, often considered the "kidneys of the earth" are a type of natural area that will be restored through this program. One report estimates the approximate value of wastewater treatment of wetlands at \$15,893/ha/year. Several additional studies show that wetlands can reduce nitrogen and phosphorus loading in the water flowing through them on average by 58-67%. Urban wetlands can play a critical role in mitigating non-point source pollution and treating dust and pollutants such as heavy metals from storm water runoff.

#### Support climate adaptation:

The Natural Areas Program will play an important role in the City's Climate Adaptation Plan including through carbon sequestration and increased climate resilience.

- -Carbon Sequestration: Saskatoon's Low Emissions Community Plan highlights the role of natural areas in capturing and storing carbon, including in wetlands, grasslands, and forests/shrublands. The Natural Capital Asset Valuation study estimates that: wetlands sequester 5.31 tonnes of carbon per hectare per year, grasslands sequester 4.1 tonnes of carbon per hectare per year, and forests and shrublands sequester 2.77 tonnes of carbon per hectare per year.
- -Climate Resilience: The Natural Capital Asset Valuation study estimates that wetlands provide \$926/ha/year in the moderation of extreme events. 4 Other communities are also noting the benefits of wetlands, especially under changing climate scenarios. For example, a recent study of 6 Canadian cities by the Municipal Natural Assets Initiative found the value of natural assets such as wetlands grows under extreme rainfall or intensified development scenarios. The City of Nanaimo found that a 55-hectare wetland delivered substantial flood attenuation services such that its replacement with constructed wetlands would cost almost \$4.7 million, a value which would increase between \$6.5 and \$8.2 million under climate change scenarios.6 Conserving and restoring wetlands within the urban landscape helps to cool cities by absorbing heat and reflecting solar radiation; a service valued at \$1,168/ha/year.

Reconciliation, Equity, Diversity, and Inclusion:

Embedding REDI into the Natural Areas Program will occur primarily through the following considerations:

- -Partnerships and capacity building: The Indigenous Technical Advisory Group (ITAG) and the Indigenous Initiatives Department have provided feedback on how to embed anti-racism and decolonization into the project from the start through a partnership and capacity building approach.
- -Equitable and inclusive engagement: In addition to partnerships, our engagement approach will be guided by Indigenous Elders, Knowledge Keepers, and community members with living experiences of systemic barriers. Our Engagement Strategy will incorporate the guiding principles of the City's Public Engagement Policy to ensure that impacted community members have an opportunity to provide feedback early in the process. Project management tools such as the City's Equity Toolkit and Triple Bottom Line analysis can further guide these considerations.

Health, well-being and self-sufficiency:

Access to nature is shown to have a significant impact on community well-being including mental and physical health.

Efficient and effective asset management and use:

One of the transformative elements of this project is the use of an asset management framework to apply to natural areas.

# Fleet Replacement with Electric Vehicles

#### **Project Description**

Fleet Services has compiled its anticipated replacement schedule for vehicles that would be eligible for an electric vehicle (EV) switch by 2034, including construction equipment, garbage trucks, heavy trucks, light units, roadway maintenance, tandem, and others. This Capital Project Submission would provide Fleet with sufficient funds to purchase EVs and install their charging stations to replace 528 internal combustion engine vehicles at end-of-life. Based on the replacement schedule, and assuming each vehicle will need a charging station port installed, the total capital project request for the electrification of 528 vehicles is \$27.8M - \$30.1M.

#### **Total Capital Estimate**

20 million to 50 million.

#### Overview of potential non-city funding sources

The City of Saskatoon has been approved for a grant in the amount of up to \$85,500 through the Green Municipal Fund (GMF) for the following project: "The City of Saskatoon's Community Electric Vehicle Adoption Strategy-Feasibility Study".

The City has applied for funding through the Natural Resources Canada's (NRCan) Zero Emission Vehicle Infrastructure Program (ZEVIP). ZEVIP will fund the installation of charging stations for various location types, including public places, on-street parking, workplaces, and light-duty vehicle fleets. The grant funding can cover 50% of project costs up to \$5,000 per charger/connector.

#### **How does this Project Address Council Priorities?**

Economic Development: an increase from 4 fleet EVs right now, to 528 vehicles by 2034, is a significant increase to the amount of EVs that are sold in Saskatoon and will strengthen the enabling environment in Saskatoon to encourage entrepreneurs, businesses, and educational institutions to pursue new opportunities in the electric vehicle supply, repairs, and maintenance market to the region.

Environmental Sustainability: the switch to electric vehicles implements climate action 17 in the Low Emissions Community Plan, which can result in a 30-56% reduction of emissions from the replacements, given the current grid emissions intensity. As the grid's renewable energy sources increase, the emission reductions will also increase.

Transportation: This project directly works towards increasing the number of zero emission vehicles in the civic fleet.

# How does this project address Core Services & Operational Priorities?

Civic Assets: the switch to EVs would be done systematically when vehicles reach their end-of-life, so that the City optimizes the management and maintenance of these assets. The City would also be improving its facility infrastructure through the installation of EV charging stations for all facilities that host Fleet vehicles.

Procurement and Project Management: The electric vehicles will be procured through sustainable procurement methodology and will include indigenous participation and the Triple Bottom Line Policy within the evaluation criteria. The procurement and replacement schedule will be managed using the City's PMI standards and best practices for proper reporting and closure of the project.

Quality of Life: the switch to EVs for Fleet provides high-quality essential services through quieter, efficient and innovative vehicles with no tailpipe emissions improving the community's air and sound quality.

#### **How does this Project address Corporate Transformational Change?**

Customer-centric Service Delivery: EVs are significantly quieter than internal combustion engines, with no tailpipe emissions, which will reduce noise and air quality disturbances where these vehicles may be needed (e.g. regular garbage collections), enabling the City to consistently deliver exceptional, accessible and equitable services.

Efficiency and Effectiveness: This project will feed into the development of an overarching EV Adoption Strategy and will align with internal Asset Management Plans.

#### How does this project mitigate Corporate Risk?

It assists with the mitigation of climate risks by reducing emissions.

#### What is the impact if this project is delayed?

The City would miss opportunities to replace internal combustion engine vehicles with electric vehicles, with the risk of having to wait until the new replacements' end-of-life to switch, and an inability to progress the Low Emissions Community (LEC) Plan's action 17: Electrify the Municipal Fleet over the near term, with the target of 100% of the fleet is electrified by 2030. The City will not be perceived as a leader in the switch to EVs. Maintenance savings will not be realized.

#### What is the impact if this project is not funded by 2035?

LEC targets will not be met, and there will be less reductions in greenhouse gas emissions, with potentially larger impacts to the climate if delayed beyond 2035. The City will not be perceived as a leader in the switch to EVs. Maintenance savings will not be realized.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The switch to electric vehicles substantively improves upon current practices or norms and can result in a 30-56% reduction of emissions from the replacements, given the current grid emissions intensity. As the grid's renewable energy sources increase, the emission reductions will also increase. It will affect all fleet vehicle users in the corporation, require new infrastructure (charging stations), and reduce reliance on gas and diesel.

If the entire fleet is switched to electric by 2030, then the City will reduce a cumulative 77,000 tonnes CO2e by 2050.

#### What are other Triple Bottom-Line Co-Benefits?

Waste reduction and diversion: With the electrification of vehicles, vehicle maintenance is reduced, which subsequently reduces the waste associated with it. For example, without the need for oil or oil changes, there is a reduction in used oil waste. With battery regeneration through braking, brake pads last longer and do not need to be replaced as often. The reduction in waste will also reduce any leachate that may contaminate surrounding ecosystems.

Support climate adaptation: in addition to reducing the effects of climate change through reducing emissions, the electrification of Fleet vehicles also provides the City with portable energy storage (i.e. the vehicle's large batteries) in climate-related power outages.

Innovation, quality workplace, or skill training: the city will increase its driver employee's quality of life through the switch to EVs, as they as more efficient, quieter, and have no tailpipe

emissions, when compared to internal combustion engines.

Improving affordability for users: As Fleet operations become more electrified, there is an anticipated return on the initial upfront investment which in turn could be returned to residents through reduced utility costs, property taxes, or an increase/improvement to municipal services available.

Supporting the local economy: an increase from 4 fleet EVs right now, to 528 vehicles by 2034, is a significant increase to the amount of EVs that are sold in Saskatoon and may encourage growth in the supply market to the region. This growth may also encourage local business development for electric vehicle repairs and maintenance.

# Recovery Park Complete Master Plan & Recycling Depot Improvements

#### **Project Description**

This project will complete Recovery Park and develop recycling markets to move the facility and its operations to being in line with the fully envisioned master plan of becoming a one-stop facility. Part of this project includes assessing and modeling the depot-based diversion needs of the City once Recovery Park is operational. Based on current best practices from other jurisdictions, this is expected to result in at least one additional staffed depot on the eastside of the City that accepts more items for diversion and the closure of unstaffed depots.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

The City's HHW service is for funding from the provincial household hazardous waste stewardship program. It is expected to offset some capital and operating costs, but not completely.

Recycling Depots may be eligible for some level of funding from the updated provincial Multi-Material Recycling Program. Further information is expected in late 2022 or 2023. The current Recovery Park scope has received ICIP.

#### **How does this Project Address Council Priorities?**

Economic Development – waste diversion stimulates the local economy through local processing of materials. New recycling markets could be developed or enhanced through policy.

Regional Planning – HHW depot funded through Product Care would be intended for regional use and the provincial government is looking to support regional waste initiatives. Environmental Sustainability – Implementation of Solid Waste Reduction and Diversion Plan actions; protection of soil and water quality.

#### How does this project address Core Services & Operational Priorities?

Civic assets – The infrastructure and operations at recovery park are intended to maximize the use of the existing landfill site ensuring longevity of this important municipal asset. Equitable and accessible services – The intention of Recovery Park to be a "one-stop" facility that functions to provide clear, easy, efficient, flexible, and cost-effective waste diversion and landfill transfer, as part of the Saskatoon Regional Waste Management Centre.

#### How does this Project address Corporate Transformational Change?

Customer-centric Service Deliver - The intention of Recovery Park to be a "one-stop" facility that functions to provide clear, easy, efficient, flexible, and cost-effective waste diversion and landfill transfer, as part of the Saskatoon Regional Waste Management Centre. The recycling depot review will consider access to these waste diversion services for all Saskatoon residents.

#### How does this project mitigate Corporate Risk?

EL-1 The City's waste and recycling services may not be meeting customer service delivery and environmental stewardship expectations.

#### What is the impact if this project is delayed?

The Household Hazardous Waste program will either operate as events or at a temporary footprint at Recovery Park.

Progress on recycling depots and new waste diversion opportunities will stop and Recovery Park may not reach its full potential of increasing the City's diversion rate by 19%.

#### What is the impact if this project is not funded by 2035?

Landfilled or improperly disposed (sanitary sewer) HHW can be a hazardous to people and the environment, which is more likely with event-based service levels.

Diversion rates may stagnate if Recovery Park is unable to complete the master plan once current capacity has been reached.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The Recovery Park Master Plan has a potential to divert 19% (26,000 tonnes) diversion rate impact above business as usual.

#### What are other Triple Bottom-Line Co-Benefits?

Healthy ecosystems or reduced pollutants – HHW expanded level of service is expected to capture and properly dispose of/recycling materials.

Reconciliation, equity, diversity and inclusion – expansion of diversion services could create more opportunities for social enterprises offering diversion services.

Supporting the local economy – local economic development through local diversion services, working with SREDA to develop recycling markets.

Efficient and effective asset management and use – maximize the use of Recovery Park facility to its full vision.

# Solar PB on Municipal Building Rooftops

#### **Project Description**

This project includes the installation of approximately 16 MW of solar PV on existing municipal building rooftops (new buildings are not included as this should be scoped into the new build). This project will also look for opportunities to install renewable energy storage with the rooftop installation, targeting 1.6MW.

#### **Total Capital Estimate**

20 million to 50 million.

#### Overview of potential non-city funding sources

The City applied for Low Carbon Economy Funding for 40% of the costs of the first 10 buildings, however was unsuccessful. Potential exists for future funding opportunities to become available but are unknown at this time.

#### **How does this Project Address Council Priorities?**

Economic Development: 16 MW of solar power and 1.6MW of battery storage is a significant increase to current installations within Saskatoon and will strengthen the enabling environment in Saskatoon to encourage entrepreneurs, businesses, and educational institutions to pursue new opportunities in solar PV supply and installation.

Downtown Development: Many of the selected buildings will be in the downtown core, which will create a sense of pride in our efforts towards sustainability and draw residents into the downtown area. Installing solar downtown would show a long-term commitment to the vitalization and use of the area by the City and would improve livability in the region. Environmental Sustainability: The generation of solar energy significantly progresses climate action 29 in the Low Emissions Community Plan will offset the City's electricity consumption that is currently sourced by carbon-intensive technologies.

#### How does this project address Core Services & Operational Priorities?

Civic Assets: Solar PVs are valuable assets that have a return-on-investment. Building rooftops are pre-existing Civic Assets that could have increased benefits through the installation of solar PV systems. These installations incorporate improvements that support Triple Bottom Line considerations, equity principles and climate change mitigation and adaptation strategies. Equitable and Accessible Services: Many residents may wish to generate their own renewable energy, but do not have the capacity or ability. Through municipal rooftop solar, the City is able to lead by example and ensure that the services that are provided at these buildings for its residents are (at minimum) partially powered by renewable energy.

Procurement and Project Management: The solar pv systems, batteries, and installations will be procured through sustainable procurement methodology and will include indigenous participation and the Triple Bottom Line Policy within the evaluation criteria. The procurement and installation schedule will be managed using the City's PMI standards and best practices for proper reporting and closure of the project.

Quality of Life: a reduction in GHGs will lead to an overall improvement of air quality and a potential sense of community pride in our climate action, creating an enabling environment where everyone can enjoy the benefits of the City's improved civic facilities.

#### **How does this Project address Corporate Transformational Change?**

Efficiency and Effectiveness: For optimized return-on-investment, rooftop solar PV systems would be right-sized for the building's electricity consumption needs. Rooftop replacement

schedules will also be incorporated into timing considerations, and will align with internal Asset Management Plans

# **How does this project mitigate Corporate Risk?**

This project mitigates EL-3, "the City may fail to identify and pursue corporate CO2 reduction initiatives" by reducing GHG emissions from energy.

#### What is the impact if this project is delayed?

The Low Emissions Community (LEC) Plan identifies Actions 29: Install solar PV on municipal buildings, with the target of installing 24MW of solar capacity by 2026 on municipal buildings. This project already delays the target completion by over 9 years, which significantly impacts the emission reduction savings for the near future. The City will not be perceived as a leader in the switch to Renewable Energy, and municipal buildings will have less climate resiliency.

#### What is the impact if this project is not funded by 2035?

LEC targets will not be met by 2050, and there will significantly less reductions in greenhouse gas emissions, with potentially larger impacts if delayed beyond 2035. The City will not be perceived as a leader in the switch to Renewable Energy, and municipal buildings will have less climate resiliency.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Procuring the targeted annual MWh of renewable energy would significantly displace the City's electricity consumption needs. This displacement would start at 15% in 2024 to up to 50% in 2034, reducing our dependence on a grid that's currently primarily powered by carbon-intense sources, such as coal and natural gas. If the project gets back on track of the Pathway to a Low Emissions Community, a total 3,782,160 tonnes CO2e would be reduced by 2034. If the LEC target of 1600 MW of electricity is purchased by 2050 is met, a cumulative 54,119,000 tonnes CO2e would be reduced by 2050.

#### What are other Triple Bottom-Line Co-Benefits?

Support climate adaptation: Improves building resiliency by generating energy, especially with battery storage included.

Innovation, quality workplace, or skill training: The increase demand for renewable energy generation will increase the demand for skills training in renewable energy technology. Through increased support of this sector, innovation may be enabled as well.

Improving affordability for users: through the bulk purchasing of large-scale renewable energy generation, the City can offer electricity with less emissions to its residents at the most effective price.

Supporting the local economy: The purchase of renewable energy at this scale would be a significant increase to current regional generation, and will enable the growth of regional renewable energy suppliers and installers

# **Deep Retrofits**

#### **Project Description**

The Capital Project submission is an extension of the current Deep Retrofit project to provide capital funding that will allow the implementation of deep retrofits for City of Saskatoon Civic buildings. Feasibility studies and planning was funded in the 2022-2023 budget and work is currently underway and will be completed in the next two years.

A Deep Energy Retrofit can defined be as "a whole-building analysis and construction process that aims at achieving on-site energy use minimization in a building by 50% or more compared to the baseline energy use."

Note: This project, as proposed below, will NOT meet the LEC targets and applies a slower implementation then identified milestone targets in LEC.

#### **Total Capital Estimate**

5 million to 20 million.

## Overview of potential non-city funding sources

While specific funding programs are unknown, it is expected that any future federal funding opportunities will require the project to show GHG emissions savings to align with the Government of Canada goals. Without planning and available municipal funding, these funding opportunities maybe lost. Recent funding opportunities from Natural Resources Canada and Infrastructure Canada have been grants between 40-80%.

The formal program for the federal Greenhouse Gas Pollution Pricing Act that will distribute 10% of the collected carbon charges is called the Climate Action Incentive Fund (CAIF). The amount is intended to be set aside and allocated to the MUSH (municipalities, universities, schools and hospitals) building sector. To date, and through CAIF, Canada has only returned the proceeds to schools in Saskatchewan by way of an application based for energy retrofits. Nothing has been returned for municipalities. It is expected that a program for municipalities would operate in a similar manner to the schools and be a merit-based application. Deep Energy Retrofits align with current GOC goals and so may be eligible for future funding programs and opportunities.

#### **How does this Project Address Council Priorities?**

Deep Retrofits supports Environmental Sustainability:

- a. Implement climate actions in the Low Emissions Community Plan and the Corporate Adaptation Strategy within proposed timeframes.
- b. Develop initiatives to improve energy conservation and efficiency in buildings, transportation and land use planning.

Energy and water efficiency upgrades reduce emissions from Civic buildings and help the City achieve it's LEC plan goals, the project is to accomplish long-term energy conservation and efficiency within buildings.

# How does this project address Core Services & Operational Priorities?

Deep Retrofits advances Civic Assets:

- a. Develop, adopt, maintain and fund asset management plans for key civic infrastructure The development of asset management plans is linked to deep energy retrofits since many typical asset renewals can have large energy implications. Asset renewal is also the key opportunity for advancing deep retrofits during existing and planned upgrades or projects.
- b. Civic assets are energy efficient and designed for long-term resilience, ensuring the City is

prepared to mitigate current and future contributions to climate change." Investment in Civic buildings is required to support GHG emissions goals and provide great climate resilience.

# **How does this Project address Corporate Transformational Change?**

Deep Retrofits supports Efficiency and Effectiveness:

o Increased operational efficiency and effectiveness has resulted in greater savings and organizational success. - This project provides a dedicated actions towards improving energy efficiency within Civic Buildings.

#### How does this project mitigate Corporate Risk?

There are financial risks since it is expected that any future federal funding opportunities will require the project to show GHG emissions savings to align with the Government of Canada goals. Without planning and available municipal funding, these funding opportunities maybe lost. Recent funding opportunities have been grants between 40-80%.

Not proceeding with implementation of deep energy retrofits, the City will also likely see energy costs and the resultant operating costs increasing. Market volatility may result in difficulty in preparing operating budget projections for longer terms. Without planning and capital funding for Deep Energy Retrofits, the understanding of the broader scope of work, creating long-term operating projections for Business as Usual versus the energy-improved building stock and looking at a long-term financial plan to carry out this work cannot occur.

Deep Energy Retrofits first work toward energy efficiency, and then eventually toward electrification of the building systems including heating. Without a comprehensive plan for this work, there is a risk that it will not be appropriately and adequately coordinated with the utility providers. Further understanding of site scale renewable energy applications as well as grid impacts from heat-pump and electric vehicle charging at these sites would factor into the long-term retrofit planning and coordination – and this cannot occur without the project proceeding. There is risk that ad hoc energy retrofits would not adequately consider the broader implications for the operational costs, impacts to the electrical grid, and utility revenue.

There is an operational risk of asset deterioration of this project does not proceed. Deep Energy Retrofit planning looks to improve performance of the City's existing building stock, and better align performance expectations of existing buildings and new buildings. Without carrying out deep energy retrofits, long term operational impacts are likely to occur if, increasingly, operational costs are spent on energy and utilities instead of maintenance and programming. Deterioration of assets could occur. Conversely, as demonstrated with the Energy Performance Contract, other non-energy maintenance and replacements may be more efficiently accelerated in tandem with energy retrofits.

Deep Energy Retrofit planning will also prompt consideration for a building's resiliency and its potential community role in substantial weather events, as these events become more likely and potentially more extreme. In addition to other structural and site qualities, highly efficient buildings that require very little or no grid energy may be reconsidered as community hubs for emergency events.

Without the creation of a Civic Deep Energy Retrofit program, the City risks losing an opportunity to lead by example and contribute to the development of local trades and construction knowledge of this work in the institutional sector.

The Low Emissions Community Plan identifies that 40% of municipal GHG emissions come from buildings and without deep retrofits, we risk not meeting our local and global commitments to reduce GHG emissions. Deep Retrofits reduce GHG emissions related to energy and water used within Civic Facilities. The City has committed to greenhouse gas reduction targets and

the actions in the LEC Plan. This initiative is an important component to meeting these goals and negative public/media attention will likely result if actions aren't taken as planned.

#### What is the impact if this project is delayed?

The Low Emissions Community (LEC) Plan identifies Action 2: Perform Deep Energy Retrofits on municipal buildings, with a target of 60% of buildings upgraded by 2031. This project, as currently defined, will NOT meet the LEC targets and applies a slower implementation then identified targets in LEC. Any funding delays will push back even further meeting the 2031 LEC targets.

The portfolio feasibility study to be completed by mid-2024 will provide additional information that can inform schedules and targets to meet 2050 goals and define progress towards 2031 goals. The slower approach is practical and designed to allow time for the proper studies and planning to align with existing asset management work. It is critical to have access to additional capital funding for this work to proceed when other maintenance and renovation work is planned. While the 2031 LEC milestone targets for Action #2 may not be realized the project does advance towards the 2050 goals.

#### What is the impact if this project is not funded by 2035?

Energy use from Civic Buildings represents 40% of the City of Saskatoon corporate greenhouse gas (GHG) emissions. The Low Emissions Community Plan (LEC Plan) includes Action #2 that is directly related to performing deep energy retrofits on municipal buildings. Deferring the program will result in delays to meeting targets as planned in the LEC Plan. This project, as currently defined, will NOT meet the 2031 LEC targets and applies a slower implementation schedule. Any funding delays will push back even further meeting the 2031 LEC targets.

Dedicated funding for deep retrofits will allow synergies and alignment with other facility asset management projects during this time. Opportunities for deeper retrofits are lost if funding is not available during other scheduled renovation work.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The implementation of a Deep Retrofit program would be transformative. It is an ambitious target to reduce energy use by 30-50% which goes beyond typical "low-hanging" or "standard" energy efficiency projects. This is the next level of extensive investment and upgrades.

#### What are other Triple Bottom-Line Co-Benefits?

Conserve Water – Deep Retrofits will also include planning for water upgrades. Capital for water upgrades is included in the Civic Water Conservation project.

Support climate adaptation – The project is expected to support the planning and implementation of the action items outlined in the Low Emissions Community (LEC) plan related to the improvement of energy efficiency at City buildings:

- o LEC Action #2: Perform deep energy retrofits on municipal buildings.
- o LEC Action #3: Upgrade plugged appliances and energy conservation behaviors in municipal buildings.
- o LEC Action #5: Retrofit municipal heating and cooling systems with ground source or air source heat pumps.

Safety, or resiliency of essential services & Efficient and effective asset management and use The project supports reliable and efficient buildings, which are the basis of service delivery.

Support financial and human resources – By managing the City's energy use and investing in deep energy upgrades, the project can bring significant financial benefits to the City including

utility cost savings, carbon charge avoidance, and reduced O&M expenses. Reduce operating costs may manifest as lower future budget increases.

# **Home Energy Loan Program Expansion**

#### **Project Description**

This Capital Project submission is for extension of the current Home Energy Loan Program (HELP) to provide over 7,000 additional low interest loans to single family property owners for energy and water efficiency or renewable energy retrofits, starting in 2024 with those already on the waitlist. Rebates and education initiatives are not included in this project and are captured in a separate worksheet. Current HELP funding was made available through a capital allocation, an internal loan, and an FCM grant/loan (totaling \$9,833,200 in loans, \$250,000 capital, \$3,666,600 grant) and provided approximately 328 loans of \$30,000 each. All loan funding is already allocated through the existing program so additional funds are needed to continue the program.

#### **Total Capital Estimate**

over 150 million.

#### Overview of potential non-city funding sources

HELP currently has grant and loan funding from Federation of Canadian Municipalities. There may be future opportunities through FCM or the federal government for community energy financing.

#### **How does this Project Address Council Priorities?**

This project encourages investment in the local economy through hiring of local contractors, tradespeople, energy advisors and the purchase of supplies and materials from local businesses which progresses the Economic Development Goal.

Energy/water efficiency and renewable energy home upgrades reduce emissions from residential households and help the City achieve its LEC plan goals, responding directly to the Environmental Sustainability Goal and the outcome of "Greenhouse gases are reduced in a way that maximizes co-benefits and doesn't leave anyone behind". This project could reduce emissions by 21,200 over the next 10 years.

#### How does this project address Core Services & Operational Priorities?

Equitable and Accessible Services – The project progresses the outcome of "enhanced equity and accessibility of services meeting the needs of a diverse public". HELP was designed with an equity lens to reduce barriers and increase access. For example, admin fees are waived for income qualified households.

Quality of Life – this project helps achieve the outcome "municipal programs, infrastructure, and essential services meet established levels of service and support a high-quality of life". HELP improves the quality of homes, increasing resiliency to climate change by improving heating/cooling systems and efficiency, and can improve comfort by reducing drafts. It reduces costs for residents by reducing energy and water bills. In some instances, loans are used to remove asbestos during their energy upgrade which improves health and safety.

#### **How does this Project address Corporate Transformational Change?**

Customer-centric Service Delivery – this project helps achieve the outcomes of customer-centric service delivery by ensuring knowledgeable staff is available to support each applicant through the online process. There is also a website with factsheets and infographics for residents to learn about product specifications, air sealing, property liens, net zero renovations, and more.

#### **How does this project mitigate Corporate Risk?**

Mitigates (EL-2) "The City's community education and awareness initiatives regarding carbon footprint may not be affecting change in people's attitudes and behaviors" by enabling residents to reduce their GHG's.

Mitigates (SG-4) "The City may not be prepared for the effects of climate change" by improving resilience to extreme heat through improved air conditioning systems and better insulating homes and helps prepare households for increasing energy/water prices.

#### What is the impact if this project is delayed?

Energy use from single-family homes represents 26% of Saskatoon's total greenhouse gas (GHG) emissions. The Low Emissions Community Plan (LEC Plan) includes 5 actions (10, 14, 25, 26, & 32) related to energy/water efficiency and renewable energy generation required to reduce emissions from this sector and meet GHG reduction targets. Deferring the program will result in delays to meeting targets as planned in the LEC Plan. There are 175 residents currently on the waitlist for HELP, deferring will mean they must continue waiting to complete retrofits if they cannot find other financing. Further, momentum and awareness for home energy retrofits will be lost and more efforts could be needed in the future to re-establish and communicate the benefits of this program to residents.

#### What is the impact if this project is not funded by 2035?

LEC actions and GHG reduction targets outlined in the previous question will likely not be met and an innovative service offering for residents will not be sustained. Homes in the community will still use excess energy and emissions which costs residents money and comfort, likely resulting in community dissatisfaction.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact? The implementation of the original rebate package through HELP was transformative. It is a new innovative service that did not previously exist for residents. This program is an incremental improvement with long-term, sustained funding that will benefit many additional households.

#### What are other Triple Bottom-Line Co-Benefits?

- •Water conservation rebates like low flow toilets and fixtures or irrigation systems can be included.
- •Homes that are air tight with less drafts and leakage are more resilient to extreme cold and heat and will require less usage of electricity for AC for example during peak periods, homes with a solar PV system provide clean power to the grid that, through grid modernization and/or battery storage, could help SL&P with demand loads.
- •Renovated homes for energy, water, and renewables are healthier, more comfortable, and more affordable through a reduction in utility bills for the occupants.
- •A rebate offering incentivizes skills and job growth in energy audits, a variety of skilled trades, and the renewable energy industry. Demand for more efficient products will grow in the market and more supplies will be ordered through local businesses to keep up with the demand. A sustained long term rebate program encourages a variety of sectors to hire more people, train them in energy renovations and residents are investing substantial dollars into the local economy through this program.

# **Green Network - Naturalization and Low Impact Development (LID)**

#### **Project Description**

The purpose of the Naturalization and Low Impact Development Program is to enhance sites through naturalization and "grey-green" storm water infrastructure. Establishing a naturalization and LID approach for the City would not only meet the City's climate adaptation priorities, but also support biodiversity, increase the quantity and quality of greenspace, improve water quality, and reduce risks such as flooding and heat island effect.

Enhancements could include: tree planting and addition of green space, green roofs, permeable pavement, structural soil cells, naturalized drainage ways, rainwater harvesting, bioswales, etc. Naturalization and LID infrastructure could be considered in areas such as: parks; rights-of-way (i.e. medians, boulevards, berms, buffer strips); the river valley; corridors; Business Improvement Districts; the downtown entertainment district; City facilities/buildings; roadways; underutilized spaces (i.e. vacant lots, brownfields); and private lots.

This major capital ask is to:

- -Identify opportunities to support naturalization and LID through City-led projects.
- -Create standards, policies, guidelines, and procedures to support naturalization and LID.
- -Provide funding to support multiple City departments to integrate naturalization and LID.
- -Develop new incentives and/or improve existing incentives for the ICI sector and residents to encourage lot-level improvements.

#### **Total Capital Estimate**

20 million to 50 million.

#### Overview of potential non-city funding sources

Federal funding (pending approval) will support several projects that have a focus on naturalization and/or low impact development; however, no additional/future funding has been awarded.

It is likely that future external funding opportunities will be available to support this type of work. However, a source of City capital is required in order to leverage external grant dollars.

Gaps in existing funding include:

- •The Green Pathways Implementation Plan currently has no capital funding allocated to implement the initiatives outlined in the Plan. While operating dollars for the Green Network Program will begin in 2023 (pending approval at the next budget deliberations), this operating is only enough to cover one project manager.
- •The Parks Department has identified a number of sites that could be naturalized but has not received funding for this work.
- •The Parks Department's naturalized park program currently has no funding for capital improvements/enhancements.
- •Existing Parks Capital P.00901 is for Municipal Reserve (MR) space only and does not cover naturalized areas or other sites. P.00901 is tied directly to the Parks Asset Management Plan, which does not yet identify green infrastructure, naturalization, or LID as assets; therefore, the existing P.00901 funding source does not cover this type of work.
- •The Streetscape Reserve Fund currently supports Urban Design's operations and capital, but it is insufficient to fund current and planned works. The reserve is funded by parking meter revenue, which has not kept up to UD's needs.
- •Some City projects budget for naturalization and/or LID, but it's inconsistent and risks being dropped due to lack of funding/mandate.
- •The existing Storm Water Credit for the ICI sector is not robust enough to effectively incentivize

lot-level LID improvements. Additional incentives (or re-examination of the existing credit) will be required to encourage LID improvements on private lots.

# **How does this Project Address Council Priorities?**

Reconciliation, Equity, Diversity, and Inclusion:

The City of Saskatoon's Green Infrastructure Strategy established a baseline of the current state of green space access in terms of availability, quality, accessibility, safety, and inclusion. Multiple gaps were identified, which this project will help to support.

#### **Economic Development:**

- •The project will generate economic activity through contracts and by supporting procurement of materials, supplies, and services.
- •This project may also generate other economic co-benefits through tourism. For example, bringing additional sites into the green network that are not currently publicly accessible and enhancing the overall quality of sites is expected to generate additional tourism.
- •The project supports the City's existing and future assets. The 2020 Natural Capital Asset Valuation estimated that all natural assets in the green network (river, wetlands, grassland, and forest/shrubland) conservatively provide at least \$48 million per year. The 2020 Urban Forestry Management Plan estimated that in 2019 the value of public trees (excluding shelterbelts and afforestation areas) was more than \$530 million.

#### Engagement on infill and growth:

Designing an interconnected green network is part of a broader strategy to encourage appropriate densification and infill, create walkable communities, and mitigate the urban heat island effect through adequate green spaces.

Much of the City's built-up areas have a high percentage of hard surface and grey infrastructure, which not only compromises the quality and functioning of existing green infrastructure but also makes it challenging to incorporate new green infrastructure. As such, these areas are now prone to increased storm water runoff, reduced infiltration, flooding, the urban heat island effect, and lower amounts of and/or quality of green space. Applying Low Impact Development in these locations (e.g. bioswales, rain gardens, green roofs, rain water harvesting, tree wells, etc.) would reduce the amount of surface water runoff and peak volumes, improve water quality through soil filtration and phytoremediation, and maintain natural hydrologic processes on site.

#### Recreation, Culture and Leisure:

Green space is increasingly being recognized as having a strong influence on mental, physical, spiritual, and emotional well-being. One study shows that parks and green spaces provide \$5,266/ha/year in recreation, mental, and physical health services. Not only that, but research from other municipalities indicates:

- •Improved well-being such as happiness and life satisfaction because of improved environmental quality and opportunities for social interaction;
- •Improved physical health and subsequent reduced physiological impacts such as stress because of recreation opportunities:
- •Improved mental and spiritual health because of increased nature access.

#### Downtown Development:

As a highly built-up area, there are opportunities to better incorporate low impact development into Saskatoon's downtown – e.g. in the Business Improvement Districts and downtown entertainment district, and through corridor planning and urban design initiatives. The Business Improvement Districts support the City's street tree planting program in Saskatoon, and there may be opportunities to develop an enhanced service level for urban forestry in Business Improvement Districts, as identified in Pathway to a Sustainable Urban Forest (Action 3.3).

Environmental Sustainability:

This project addresses multiple Environmental Sustainability priorities of Council:

- 1. Green Pathways.
- 2. Official Community Plan.
- 3. Low Impact Development: Design Guide for Saskatoon.

#### How does this project address Core Services & Operational Priorities?

Green space is increasingly being recognized as having a strong influence on mental, physical, spiritual, and emotional well-being. However, not everyone in Saskatoon has the same access to nature. This project supports improving equitable access to green space in the city.

#### In terms of availability:

- o 18 neighbourhoods were shown to have less than 2 hectares of green space per thousand people, even though the City's Official Community Plan identifies 4 hectares per thousand people as a desirable standard.
- o There are insufficient community garden spaces to meet demand.
- o Several neighbourhoods have an underrepresentation of trees. For example, Saskatoon has a canopy cover goal for the urban forest of 15-20% canopy cover by 2060. However, canopy is currently distributed unevenly across neighbourhoods, ranging from 2% coverage to 39%.

#### From a quality perspective:

- o 36% of parks are rated in poor or very poor condition.
- o Many green spaces are serving more residents than they were designed for, which leads to over-use of these sites.

#### In terms of distance:

- o 18% of residents live farther than a five-minute walk to a green space.
- o Safe and accessible access points to and through green spaces are not always present.

#### In terms of safety and inclusion:

Some people report feeling unsafe and unwelcome in many green spaces, in particular, Indigenous and racialized communities. As such, there are opportunities to identify and support diversity, inclusion, and reconciliation in how Saskatoon designs and manages its green spaces.

#### **How does this Project address Corporate Transformational Change?**

Efficiency and Effectiveness:

Developing standards, policies, guidelines, and/or procedures to support naturalization and LID for the City will allow departments and project leads to apply a consistent approach to this work and will reduce the existing "run around" to figure out how to achieve these City priorities.

#### How does this project mitigate Corporate Risk?

The City is facing challenges in its current work because it does not have clear standards, policies, guidelines, and/or procedures to support naturalization, LID, and wetland / storm pond restoration. As such, this project will:

- Address funding gaps.
- •Improve consistency and coordination between Departments.
- •Enable Project Managers to clearly and effectively define project scope and requirements (for staff and/or contractors).
- •Enable the City to meet external funding requirements/criteria (for existing and future funding opportunities).
- •Improve efficiency in project planning because project leads will know how to appropriately apply naturalization and LID to their projects.
- •Improve coordination.

•Reduce the likelihood of naturalization and/or LID being dropped due to lack of funding/mandate.

#### What is the impact if this project is delayed?

The City is facing challenges in its current work because it does not have clear standards, policies, and/or procedures to support naturalization, LID, and wetland / storm pond restoration. This has become apparent with the projects that are receiving federal funding for natural infrastructure, as there is no current, clear approach for project managers to follow in project planning, design, and establishment of contracts. The risks of delaying funding for this project include: inconsistency between Departments and contractors; inability to meet external funding requirements/criteria (for existing and future funding opportunities); additional time spent by project leads to learn how to appropriately apply naturalization and LID to their projects; and lack of a coordinated City approach.

Delaying this project may also reduce opportunities to take advantage of existing work that is already underway by the City. For example, there may be opportunities to better support naturalization and LID in the City's corridor planning project, downtown entertainment district, and/or outdoor festival site; however, without adequate resourcing, the City may experience lost opportunities to integrate naturalization and LID into this work.

#### What is the impact if this project is not funded by 2035?

Multiple initiatives in the Green Pathways Implementation Plan will not be achieved.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact? Healthy ecosystems or reduced pollutants:

In ecosystem service terms, this project supports many tangible benefits including improved water quality, storm water management and flood protection, carbon sequestration, biodiversity, habitat, soil formation, and cultural services such as education, community building, and recreation.

Developing standards, policies, guidelines, and/or procedures to support naturalization and LID for the City will improve current practices and norms by providing a clear direction and mandate for this work.

Providing resources to Departments to install naturalization and LID will enable projects to meet existing and future standards, policies, guidelines, and/or procedures. The amount of funding being sought through this capital project supports first steps for the City to lead by example; however, because this type of infrastructure can be very costly (especially engineered, "greygreen" low impact development improvements), a substantial increase in funding would be required to have a transformational impact. After early work is completed over the next 10 years, there may be an opportunity to seek additional funding to move the City from "Improves" to "Transforms."

#### What are other Triple Bottom-Line Co-Benefits?

Conserve water or improve water quality:

Low impact development features and systems decrease the quantity of water runoff, lower peak runoff volumes and flow rates, and improve runoff water quality. LID seeks to improve and maintain natural hydrologic processes on site: absorption, infiltration, evaporation, evaporation, filtration through soils, pollutant uptake by select vegetation, and biodegradation of pollutants by soil microbes.

Naturalized stormwater systems are living ecosystems that incorporate natural biological processes designed to improve watershed health. They provide better water quality and

increased carbon sequestration and decreased greenhouse gas emissions.

Support climate adaptation:

Municipal climate adaptation planning encourages nature-based adaptation whenever possible, such as naturalized storm ponds and park spaces. Naturalization and LID can support carbon sequestration, reduce risks of flooding through storm water management, and reduce urban heat island effect.

Reconciliation, Equity, Diversity, and Inclusion:

This project could support efforts to address inequitable access to Saskatoon's Green Network, as well as work with partners to create spaces that are welcoming and inclusive.

Recreation, or civic participation:

Naturalization and LID projects can enhance recreational opportunities, tourism, and placemaking.

# Integrated Civic Energy Management Program (ICEMP)

#### **Project Description**

The purpose of the Integrated Civic Energy Management Program is to develop a roadmap of actions that will help conserve energy at City buildings and embed energy efficiency best practices into building operations. This integrated approach aims to enable the City's energy management and sustainability goals, foster a culture of energy conservation and continuous improvement, and leverage best practices and technology. The project will develop and implement best practices in energy data management, energy projects, policies and procedures, employee education and training program, and facility recommissioning. It will include equipment improvement-based solutions, but also incorporates organization, technical, and behavioral aspects of energy use.

The City Administration has been developing energy management projects and programs since 2008. This project plans for the next 10-years to build on existing processes and incorporate more technology and reporting for energy data-informed decision making. New energy efficiency projects are planned along with an education, training and management systems to integrate the new technology with maintenance and operations. The human element is also key with training and education for employees and staff.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

The capital funding could provide an opportunity to pursue additional funding from Federation of Canadian Municipalities' Green Municipal Fund – Community Buildings Retrofit – Community building monitoring and analysis grant for up to 80% of eligible costs for the feasibility study (up to \$25,000).

#### **How does this Project Address Council Priorities?**

The ICEMP supports Environmental Sustainability:

- a. Implement climate actions in the Low Emissions Community Plan and the Corporate Adaptation Strategy within proposed timeframes.
- b. Implement innovative and efficient water conversation practices and programs for indoor and outdoor uses.
- c. Develop proactive policies, strategies and practices to ensure the environment is protected from damage and, where possible, ecosystems are enhanced.

Existing civic buildings account for approximately 40% of the City's greenhouse gas (GHG) emissions, through lighting, heating, air conditioning, ventilation, and plug loads. Achieving energy efficiency and emissions reductions targets in buildings is becoming increasingly more important not only to improve their operational and environmental performance but also to avoid exposure to fluctuating energy costs and rising cost of carbon pollution. Continuous commitment to further improve energy conservation and efficiency can help the City advance its Environmental Sustainability goals, save energy, reduce operational costs, reduce GHG emissions, and demonstrate social responsibility.

#### How does this project address Core Services & Operational Priorities?

The ICEMP advances Civic Assets:

a. Saskatoon's built and natural assets are managed in a manner that maximizes benefits, manages risk to an acceptable level, and provides established levels of service throughout the full lifecycle.

b. Civic assets are energy efficient and designed for long-term resilience, ensuring the City is prepared to mitigate current and future contributions to climate change. Investment in water conservation aligns with intent of energy efficiency and is required to support GHG emissions goals and provide great climate resilience.

The project supports reliable and efficient buildings, which are the basis of service delivery. One of the project goals is to embed energy efficiency best practices into existing building operations to improve operational efficiency. An effective O&M program that incorporates energy efficiency is critical to maintaining equipment performance, ensuring reliability and safety, sustaining energy savings, and increasing productivity and customer satisfaction. Proper O&M improves asset resiliency and prevents unplanned building closures and service disruptions due to unexpected equipment failure.

#### **How does this Project address Corporate Transformational Change?**

**ICEMP** supports Efficiency and Effectiveness:

o Increased operational efficiency and effectiveness has resulted in greater savings and organizational success.

The project will allow the City to make meaningful changes in the way it manages energy by adopting best practices that will improve the City's energy and emissions performance. It will enable the City to meets its energy and sustainability goals, foster a culture of energy conservation and continuous improvement, and leverage best practices and technologies.

#### **How does this project mitigate Corporate Risk?**

There are financial risks of not proceeding with implementation of ICEMP as the City will likely see energy costs and the resultant operating costs increasing. Market volatility may result in difficulty in preparing operating budget projections for longer terms. The introduction of a carbon charge on utilities also increases risk and costs. Plans to reduce consumption reduce risks associated with these rate increases.

The Low Emissions Community Plan identifies that 40% of municipal GHG emissions come from buildings and without a dedicated and integrated energy management program, we risk not meeting our local and global commitments to reduce GHG emissions. Energy Management reduces, manages and maintains GHG emissions related to energy and water used within Civic Facilities. The City has committed to greenhouse gas reduction targets and the actions in the LEC Plan. This initiative is an important component to meeting these goals and negative public/media attention may result if actions aren't taken as planned.

#### What is the impact if this project is delayed?

ICEMP project delay will lead to deferred financial, social and environmental benefits to the City. The cost of waiting may pose the following risks:

- o Increased difficulty in achieving the corporate GHG emission reduction goals.
- o Increased operational costs due to higher energy costs and carbon charge, which may manifest as higher future budget increases.
- o Inability to sustain savings from prior energy efficiency investments.
- o Decreased reliability of operations and lower equipment efficiency.
- o Lower capacity to apply for external funding for energy efficiency projects.
- o Decreased public confidence in the City's ability to modernize its facilities and demonstrate Corporate Leadership in Sustainability.

#### What is the impact if this project is not funded by 2035?

Carbon charges and utility costs are expected to increase dramatically by 2035, inaction to provide resources to improve energy management will have higher impacts if not implemented by 2035.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

ICEMP will determine future steps for a phased implementation of a comprehensive energy management program at the City of Saskatoon.

Major Components of the Integrated Civic Energy Management Program are expected to be:

- 1. Energy Information System to identify where energy is used, how much it costs and communicate this information to operations staff and stakeholders.
- 2. Energy Projects to improve equipment efficiency and ensure reliability and safety.
- 3. Education and Training to increase staff engagement and support, improve competency and awareness in energy efficiency.
- 4. Facility Recommissioning to sustain energy savings from projects and initiatives and support continuous improvement.

# What are other Triple Bottom-Line Co-Benefits?

Conserve Water - The ICEMP program will also include data collection, reporting for water through the Energy Information System for consistency with all utility tracking and management. Education and Training on water related topics is also expected.

Support climate adaptation – The project is expected to support the planning and implementation of the action items outlined in the Low Emissions Community (LEC) plan related to the improvement of energy efficiency at City buildings:

- o LEC Action #2: Perform deep energy retrofits on municipal buildings.
- o LEC Action #3: Upgrade plugged appliances and energy conservation behaviors in municipal buildings.
- o LEC Action #5: Retrofit municipal heating and cooling systems with ground source or air source heat pumps.

Safety, or resiliency of essential services & Efficient and effective asset management and use The project supports reliable and efficient buildings, which are the basis of service delivery. One of the project goals is to embed energy efficiency best practices into existing operations to improve operational efficiency. An effective O&M program that incorporates energy efficiency is critical to maintaining equipment performance, ensuring reliability and safety, sustaining energy savings, and increasing productivity and customer satisfaction. Proper O&M also prevents unplanned building closures and service disruptions due to unexpected equipment failure.

Innovation, quality workplace, or skill training – The project will develop an education and training program to engage staff, increase knowledge and awareness about energy use, and motivate them to support energy efficiency initiatives at work. The project aims to engage with all employees including senior management, engineering, technical and supervisory staff, and building operations, and develop a customized education and training plan depending on their role.

Support financial and human resources – By managing the City's energy use and investing in cost-effective measures, the project can bring significant financial benefits to the City including utility cost savings, carbon charge avoidance, and reduced O&M expenses. Reduce operating costs may manifest as lower future budget increases.

# Multi-Unit Organics Program

#### **Project Description**

This project will implement the multi-unit residential organics program. The final cost will depend on the program design, which is currently underway. For this request, the estimated budget assumes a City-delivered program similar to how multi-unit garbage is collected.

#### **Total Capital Estimate**

2 million to 5 million.

# Overview of potential non-city funding sources

This would be a good candidate for the FCM Green Municipal Funding – pilot stream. There may be additional federal funding available because this is an action in the Low Emissions Community Plan and will mitigate GHG emissions.

#### **How does this Project Address Council Priorities?**

This project directly responds to "Implement actions in the Solid Waste Reduction and Diversion Plan within proposed timeframes to achieve 70% diversion from the Saskatoon Landfill" which is identified as a Key Action in the 2022-2025 Strategic Plan.

The multi-unit residential organics program is a key action in the Solid Waste Reduction and Diversion Plan and is anticipated to have the following environmental benefits:

- Diversion: 600 (0.5%) 900 (1%) tonnes per year.
- GHG reduction: 431 980 tonnes CO2e per year.

This project provides equitable waste collection services to the multi-unit sector, while addressing some of the specific safety and waste diversion issues of the sector.

#### How does this project address Core Services & Operational Priorities?

Delivering a multi-unit organics program will ensure that all Saskatoon residents have access to an organic's diversion service at their household. This builds on public engagement findings to continually improve service offerings in the community.

#### How does this Project address Corporate Transformational Change?

The project will continue to use data informed decision making, including public engagement results, statistically representative surveys, and waste characterization studies to design and deliver customer-centric services.

The project will use best practices and controls to achieve responsible financial stewardship and accurate, transparent reporting.

#### How does this project mitigate Corporate Risk?

The following has been an identified corporate risk for the last few years and is addressed by this project:

EL-1 The City's waste and recycling services may not be meeting customer service delivery and environmental stewardship expectations.

#### What is the impact if this project is delayed?

This project has already been deferred since 2018, when engagement was completed. Capital funding is being spent starting in Q4 2022 to design the program, re-fresh engagement results and prepare a pilot project. Starts and stops on this project are likely to result in a need to duplicate work.

#### What is the impact if this project is not funded by 2035?

Multi-unit organics waste will continue to be landfilled and residents who have expressed a high level of support for this program will be unsatisfied. Landfilling multi-unit organics is estimated to create 431 - 980 tonnes CO2e per year.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

This project improves the following TBL initiative included in the guide:

• Divert waste from landfills through prevention, reduction, reuse, exchange, sharing, repurposing, recycling, and/or composting initiatives.

This program delivers a small but important contribution to the City's overall waste diversion target of 70%.

#### What are other Triple Bottom-Line Co-Benefits?

Conserve energy or reduce GHGs - Reduces greenhouse gas emissions emitted by landfilling organic waste

Safety, or resiliency of essential services – ensures all households have access to an organic waste diversion service.

# Solid Waste Reduction & Diversion Plan Implementation

#### **Project Description**

This project focuses on the medium and long-term actions in the SWR&DP. It includes the capital funds for the development and implementation of special/bulky waste program, construction and demolition waste regulation/program, public space and event waste reduction, disposal ban at the Saskatoon landfill, share/reuse/repair program, textile and apparel reduction/recycling, and single use item reduction program.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

The SWRDP has two potential funding sources, but the future of these is uncertain.

MMSW funds are provided through a provincially regulated paper and packaging stewardship program that is in the process of being updated. This may impact the available of funds or restrict the use of the funds to the recycling program only.

The Waste Minimization Reserve (as recently updated) now funds SWRDP implementation. It will receive excess funds from the Waste Stabilization Reserve; however, it will take some time to build these reserves and consistent excess may likely result in utility rate adjustments.

This project is a strong candidate for receiving the Federation of Canadian Municipalities Green Municipal Fund grants for feasibility and pilots, which could offset the fund required by the City.

#### **How does this Project Address Council Priorities?**

This project directly responds to "Implement actions in the Solid Waste Reduction and Diversion Plan within proposed timeframes to achieve 70% diversion from the Saskatoon Landfill" which is identified as a Key Action in the 2022-2025 Strategic Plan.

This project plans to work with SREDA on circular economy opportunities, which have been identified as an economic development opportunity. It also addresses community safety and well-being through reduced illegal dumping and littering.

#### How does this project address Core Services & Operational Priorities?

The Solid Waste Reduction and Diversion Plan is being implemented using the Triple Bottom Line, Equity toolkit, and public engagement. This supports the key actions of a "robust engagement strategy that connects with the community and is reflective of the community's diverse needs and expectations with respect to civic services" and "Build on public engagement findings to continually improve service offerings in the community."

Some of the initiatives in the project will also address ongoing waste enforcement and safety issues, such as illegal dumping, charity bins, and litter. These will contribute to "Community safety and well-being are enhanced by the City's approach to property maintenance and overall bylaw compliance."

#### **How does this Project address Corporate Transformational Change?**

The project will continue to use data informed decision making, including public engagement results, statistically representative surveys, and waste characterization studies to design and deliver customer-centric services.

The project will use best practices and controls to achieve responsible financial stewardship and accurate, transparent reporting.

#### **How does this project mitigate Corporate Risk?**

The following has been an identified corporate risk for the last few years and is addressed by this project:

EL-1 The City's waste and recycling services may not be meeting customer service delivery and environmental stewardship expectations.

#### What is the impact if this project is delayed?

Delaying the project will stop progress on the City's Waste Reduction and Diversion Plan. Some components of this project are designed to complement planned or existing programs or services. For example:

- The special/bulky waste program will help reduce illegal dumping and help residents right-size their carts with the introduction of the new garbage utility.
- The construction demolition waste regulation/program has been timed to be initiated after Recovery Park opens and the disposal ban at the landfill to help maximize the diversion at the new facility and infrastructure.
- Other actions like public space/event waste reduction, textiles reduction/recycling, and single use item reduction have had high public demand.

#### What is the impact if this project is not funded by 2035?

The SWRDP provides a series of actions that combined get the City of Saskatoon within reach of its 70% waste diversion target and sets the stage for meeting the Low Emissions Community Plan targets for waste reduction and diversion by 2050. Delaying or deferring funding for the project will delay the City reaching its targets.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact? This project substantially improves all TBL waste reduction initiative that were included in the quide:

- Divert waste from landfills through prevention, reduction, reuse, exchange, sharing, repurposing, recycling, and/or composting initiatives.
- Use deconstruction techniques and/or adaptive re-use of materials (instead of demolition).
- Reduce litter and the improper disposal and/or dumping of waste materials.
- Address household waste, construction and demolition waste, ICI waste, festival and event waste, public space waste.

The project also marks a shift toward reduction and reuse of waste instead of the current focus on recycling/composting, which will be a cultural shift.

The initiatives are expected to benefit all residents and much of the Industrial, Commercial and Institutional sector.

#### What are other Triple Bottom-Line Co-Benefits?

Conserve energy or reduce GHGs - Reduce of sequester greenhouse gas emissions, as outlined in the Low Emission Community Plan.

Safety, or resiliency of essential services - Improve the safety of people and/or their possessions through reduced illegal dumping and safe disposal or diversion of materials.

Recreation, or civic participation - Maintain an attractive city, year-round through a reduction of illegal dumping and litter, Support volunteering and/or increase volunteer opportunities through community-based programs and services, Support community organizations and community-led efforts through building partnerships with non-governmental organizations.

Innovation, quality workplace, or skills training - Provide incentives for businesses to transition

to sustainable ways of operating through waste diversion and transitioning to a circular economy.

Improving affordability for users - Provide value to citizens at a reasonable cost through programs design using the equity toolkit, Maintain affordable civic services and programs, especially for low-and moderate-income households.

# **Electric Vehicle Chargers at Civic Facilities**

#### **Project Description**

This project is to encourage the adoption of EVs through the installation of EV Charging stations at public facilities, starting with recreational facilities and libraries, and progressing to civic operating facilities for employee parking as required. Assuming that by 2035, over 35% of new vehicles purchased are EVs, and 1 public port is required to support 20-40 EVs, and that the City will lead the installation of one third of the publicly available ports, this project would include the purchase and install of 606 EV stations across the community over the next 10 years.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

Administration has applied for funding for 29 charging stations from NRCAN. Additional funding opportunities for charging stations are expected.

#### **How does this Project Address Council Priorities?**

Economic Development: 606 public EV stations is a significant increase to what is currently available and will strengthen the enabling environment in Saskatoon to encourage entrepreneurs, businesses, and educational institutions to pursue new opportunities in the electric vehicle & station supply, repairs, and maintenance market to the region.

Recreation, culture and leisure: all civic libraries, recreation and leisure centers, are anticipated to include charging stations by the end of this project, which will reduce barriers, improve access and increase participation in recreation facilities and programs.

Downtown Development: all downtown civic service centers are anticipated to include charging stations by the end of this project, which could be a part of the implementation of a Downtown parking authority to optimize parking options and availability.

Environmental Sustainability: the switch to electric vehicles implements climate action 22 in the Low Emissions Community Plan, which can result in a 30-56% reduction of emissions from the replacements, given the current grid emissions intensity. As the grid's renewable energy sources increase, the emission reductions will also increase.

Transportation: this project adopts industry benchmarks for reliability and efficiency by aligning with NRCan's recommended public EV stations ratio per personal EVs on the road, which will improve upon its residents' personal vehicle transportation through supporting their switch to electric vehicles.

#### How does this project address Core Services & Operational Priorities?

Civic Assets: The City would also be improving its facility infrastructure through the installation of EV charging stations for all civic facilities, which incorporates improvements that support Triple Bottom Line considerations, equity principles and climate change mitigation and adaptation strategies.

Equitable and Accessible Services: the increase in availability of public EV stations at civic facilities enables residents who may not own their home and/or may not have the ability to install a private charging station in their home to purchase an EV.

Procurement and Project Management: The electric vehicle charging stations will be procured through sustainable procurement methodology and will include indigenous participation and the Triple Bottom Line Policy within the evaluation criteria. The procurement and replacement

schedule will be managed using the City's PMI standards and best practices for proper reporting and closure of the project.

Quality of Life: Installing EV stations at public civic centers will create an enabling environment where everyone can enjoy the benefits of the City's civic facilities, including EV drivers without access to personal charging.

#### How does this Project address Corporate Transformational Change?

Customer-centric Service Delivery: Residents will have the opportunity to "top up" their EVs as they attend Civic facilities, reducing the need to drive to additional location or returning home to charge, enabling the City to consistently deliver exceptional, accessible and equitable services. Efficiency and Effectiveness: This project will feed into the development of an overarching EV Adoption Strategy and will align with internal Asset Management Plans.

#### **How does this project mitigate Corporate Risk?**

Mitigates (EL-2) "the City's community education and awareness initiatives regarding carbon footprint may not be affecting change in people's attitudes and behaviors" by enabling residents to reduce their GHG's.

#### What is the impact if this project is delayed?

Not investing in EV charging stations for the public could hinder the adoption of EVs by residents. As well, the City's reputation could be damaged as it would not be showing leadership in this area. This may slow progress toward meeting Low Emissions Community (LEC) Plan's action 22: Electrify personal vehicles through incentive programs, education, and automotive dealer partnerships, with the targets: of 30% of all new vehicle sales are electric by 2030, 90% by 2050.

#### What is the impact if this project is not funded by 2035?

The LEC 22 targets will likely not be met, and there will be less reductions in greenhouse gas emissions, with potentially larger impacts to the climate if delayed beyond 2035. The City will not be perceived as a leader in the switch to EVs.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The switch to electric vehicles substantively improves upon current practises or norms and can result in a 30-56% reduction of emissions from the replacements, given the current grid emissions intensity. As the grid's renewable energy sources increase, the emission reductions will also increase.

If 30% of all new personal vehicle sales are electric by 2030, and 90% by 2050, a cumulative 2,756,000 tonnes CO2e will be reduced.

#### What are other Triple Bottom-Line Co-Benefits?

Support climate adaptation: in addition to reducing the effects of climate change through reducing emissions, the electrification of personal vehicles provides the community with portable energy storage (i.e. the vehicle's large batteries) in climate-related power outages. Health, wellbeing, and self-sufficiency: the increase in availability of public EV stations at civic facilities enables residents who may not own their home and/or may not have the ability to install a private charging station in their home to purchase an EV. A switch to EVs will also improve air quality through reducing tailpipe emissions.

Recreation, or civic participation: all civic recreation and leisure centers are anticipated to include charging stations by the end of this project. Residents will have the opportunity to "top

up" their EVs as they attend Civic facilities, reducing the need to drive to additional location or returning home to charge.

Innovation, quality workplace, or skill training: the encouragement of EVs may encourage local skill training related to their repair and maintenance. An increase in public stations may also improve the workplace quality of employees with EVs.

Supporting the local economy: 606 public EV stations is a significant increase to what is currently available and may encourage growth in the supply and installation market to the region.

# **Climate Innovation Fund**

#### **Project Description**

This capital submission is for establishment of a fund and third-party organization to administer that fund, based on The Atmospheric Fund (TAF) in Toronto and now available in numerous Canadian cities through the Low Carbon Cities (LC3) initiative. Climate Innovation Funds provide funding for emissions-reducing community initiatives such as deep energy retrofits, renewable energy, and electric vehicle charging stations. The fund would likely have a revolving aspect, often called Impact Investing where organizations receive a loan that is paid back, as well as a grant aspect.

#### **Total Capital Estimate**

20 million to 50 million.

#### Overview of potential non-city funding sources

LC3 innovation funds were established through a \$183 million endowment from the Federal Government.

#### **How does this Project Address Council Priorities?**

- Environmental Sustainability- the proposed project responds directly to the outcome of "Greenhouse gases are reduced in a way that maximizes co-benefits and doesn't leave anyone behind" by facilitating energy retrofits, green transportation, and other GHG-reduction or climate adaptation projects.
- Economic Development- This project would enable the establishment or growth of a third-party organization to administer innovation funds. Further, the funds would be invested into the community spurring new, sustainability-focused, business.

# How does this project address Core Services & Operational Priorities?

Equitable and Accessible Services – The project progresses the outcome of "enhanced equity and accessibility of services meeting the needs of a diverse public" by investing in community actions that will benefit the public through improved buildings that are less expensive to heat/cool and more resilient to climate change, diversification of energy and more access to electric vehicle infrastructure.

Quality of life – benefits from investments into higher-quality buildings, electrification, climate adaptation, and other projects have many co-benefits such as improving health, increasing resiliency, and creating jobs that improve the quality of life for the citizens that use them.

#### **How does this Project address Corporate Transformational Change?**

Customer-centric Service Delivery – this project would be established through a third-party that would be expected to uphold the outcomes of customer-centric service delivery by ensuring knowledgeable staff is available to support the community.

#### How does this project mitigate Corporate Risk?

- Mitigates EL-2, "The City's community education and awareness initiatives regarding carbon footprint may not be affecting change in people's attitudes and behaviors" by enabling the community to reduce their GHG's.
- Mitigates SG-4, "the City may not be prepared for the effects of climate change" by providing funding for building improvements to increase resiliency to climate change.

#### What is the impact if this project is delayed?

The innovation fund model is successfully being used in 7 Canadian cities to accelerate community climate action in a flexible and innovative way. Delaying the funding would result in slower community action.

#### What is the impact if this project is not funded by 2035?

The innovation fund model is successfully being used in 7 Canadian cities to accelerate community climate action in a flexible and innovative way. Not doing this project may reduce our ability to meet climate action targets, especially those that depend on community-led actions.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact? An innovation fund administered by a third-party would be an innovative and transformative way for Saskatoon to introduce and scale-up local climate actions.

#### What are other Triple Bottom-Line Co-Benefits?

- Water conservation measures like low flow toilets are likely to be a component of deep energy retrofits.
- The fund will support Climate adaptation measures to improve the resiliency of buildings such as renewable energy and battery storage, low-energy use buildings, efficient heating/cooling, and storm-water management. Solar PV system provide clean power to the grid that, through grid modernization and/or battery storage, could help SL&P with demand loads.
- Health and well-being can be improved through improved air quality overall and inside renovated buildings.
- Building costs go down due to reduced energy/water use.
- This program encourages skill development and job growth in many areas of sustainable-building, renewable energy, and electrification trades

## ICI (Industrial, Commercial, and Institutional) Energy & Water Efficiency with Loan Financing

#### **Project Description**

This Capital Project Submission is for Loan financing to support ICI Energy and Water Efficiency retrofits on 800 ICI buildings over the next 10 years. The targeted beneficiaries are businesses, multi-unit tenants/renters, large property owners, associations, schools, and other ICI stakeholders.

#### **Total Capital Estimate**

50 million to 150 million.

#### Overview of potential non-city funding sources

The Community Energy Financing Program through FCM only includes single-family households right now, but there may be ICI opportunities in the future.

#### **How does this Project Address Council Priorities?**

Economic Development Goal - The project will generate job opportunities in the field of energy advising and auditing for buildings. Furthermore, by reducing the operation cost of the buildings, businesses can optimize their financial returns which could attract more investment in the city.

Environmental Sustainability - The proposed project helps the City achieve it's LEC plan goals, responding directly to the Goal and the outcome of "Greenhouse gases are reduced in a way that maximizes co-benefits and doesn't leave anyone behind". It will reduce the GHG emissions from reducing use of energy in buildings that is generated from conventional fuels like coal and gas and will also reduce the burden on water resources by conserving water. This project through Incentivizing and later mandating ICI owners and operators to perform deep energy retrofits will contribute to an overall target of reducing 3.47 million tons of CO2e from 2020-2050. (Source- Action 11 under Phase 2 of the Low Emissions Community plan).

Smart City- Community buildings are an essential component of a smart city. This project will gather utility data like energy and water consumption in buildings which can be fed to smart analytics to generate intelligent solution for building operation and control.

#### How does this project address Core Services & Operational Priorities?

Equitable and Accessible Services – The project aims to progress the outcome of "enhanced equity and accessibility of services meeting the needs of a diverse public". The program targets multi-unit buildings which house a large proportion of Saskatoon's low-income residents. Enabling landlords of multi-unit buildings, especially affordable housing providers, will reduce costs and comfort for those tenants.

Quality of Life - this project helps achieve the outcome "municipal programs, infrastructure, and essential services meet established levels of service and support a high-quality of life". A reduction in GHGs will lead to an overall improvement of air quality across the province from less dependence on coal/natural gas. It will also improve the quality of life for multi-unit residents and building occupants as the retrofitted buildings will be more comfortable, more resilient to hot/cool days, have lower operating costs, and add to a general sense of community pride in our climate action.

#### How does this Project address Corporate Transformational Change?

Customer-centric Service Delivery – this project will achieve the outcomes of customer-centric service delivery by ensuring that the ICI sector is supported through the enabling and capacity activities planned.

#### How does this project mitigate Corporate Risk?

- -Mitigates (EL-2) "The City's community education and awareness initiatives regarding carbon footprint may not be affecting change in people's attitudes and behaviors" by enabling the ICI sector to reduce their GHG's.
- -Mitigates (SG-4) "The City may not be prepared for the effects of climate change" by improving resilience to extreme heat through improved air conditioning systems and better insulating buildings.

#### What is the impact if this project is delayed?

The Low Emission Community Plan (LEC Plan) projected that greenhouse gas (GHG) emissions from all ICI buildings will increase by 29% by 2050. To mitigate this, the LEC Plan identifies 5 actions for ICI energy and water improvements, including a target of making all community buildings net zero ready through envelope and mechanical system retrofits and renovations with 50% of existing buildings being 50% more energy efficient by 2030 and 90% by 2050. The delay or deferred in project for multiple years will delay the actions to meet these targets. Further, the enabling activities project is critical to the success of the overall ICI energy and water efficiency initiative as it will help building owners understand how and why to make energy upgrades and prepare them to uptake loan and rebate programs.

#### What is the impact if this project is not funded by 2035?

Research done on the project to date indicates that the sector lacks capacity, awareness, and experience which are intended to be enhanced thought this proposed project. Energy efficiency retrofitting, especially in the ICI sector, is complex and expensive. Not providing rebates and other enabling activities will result in not completing LEC actions and missing GHG reduction targets.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact? Community buildings emitted 1.9 million tonnes CO2e in 2016. These are expected to increase by 28.7% by 2050. The ICI and multi-unit residential buildings are the largest contributors to GHGs of about 35%. The project is targeting to reduce GHG emission in 50% of the buildings which will be substantial and transformational.

#### What are other Triple Bottom-Line Co-Benefits?

- •Water efficiency improvements can be included.
- •Buildings will have improved heating and cooling systems to prepare for climate change.
- •Renovated buildings for energy, water and renewables are healthier, more comfortable, and more affordable through a reduction in utility bills.
- •Incentivizes skills and job growth in energy audits, a variety of skilled trades, and the renewable energy industry. Demand for more efficient products will grow in the market and more supplies will be ordered through local businesses to keep up with the demand. A sustained long term rebate program encourages a variety of sectors to hire more people, train them in energy renovations and businesses are investing substantial dollars into the local economy through this program.

## **Home Energy/Water Efficiency and Solar Panel Rebates**

#### **Project Description**

This Capital Project Submission is for rebates for energy/water efficiency and solar panels on over 7,000 single-family homes once current funding through the Home Energy Loan Program (HELP) is used up. Rebates are expected to target high-impact/high-cost retrofits such as such as heat pumps, solar panels, and insulation as well as low-cost and easy-to-install items such as thermostats, water fixtures, and lightbulbs. Rebates can be targeted at those that need it the most using income-qualification tests and/or home age. The solar panel rebate program is expected to offset the impact of a reduction in the net metering rate that SaskPower introduced in 2019 and that Saskatoon Light & Power may also implement.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

Yes, it has other funding identified.

#### **How does this Project Address Council Priorities?**

This project encourages investment in the local economy through hiring of local contractors, tradespeople, energy advisors and the purchase of supplies and materials from local businesses which progresses the Economic Development Goal.

Energy/water efficiency and renewable energy home upgrades reduce emissions from residential households and help the City achieve it's LEC plan goals, responding directly to the Environmental Sustainability Goal and the outcome of "Greenhouse gases are reduced in a way that maximizes co-benefits and doesn't leave anyone behind". This project could reduce emissions by 21,200 over the next 10 years.

#### How does this project address Core Services & Operational Priorities?

Equitable and Accessible Services – Rebates can be targeted based on need by requiring income-qualification to be eligible to reduce the up-front cost of home upgrades and make them more accessible to low-income households. Providing a solar panel rebate will reduce the need to have unsustainable net metering rates, will align with what SaskPower customers receive, while still providing incentives for solar panel installations. Providing rebates for a high-quality specification of product ensures low-quality poorly efficient equipment is used less in the local market.

Quality of Life – Once the high-cost retrofits (i.e. solar panels, heat pumps for efficient heating/cooling, or furnace replacements) are installed they can make homes more comfortable and reduce utility bills. The program improves the quality of individuals homes and can improve comfort by reducing drafts in a home. It also improves quality of life by reducing their utility costs depending on the type of upgrades performed.

#### How does this Project address Corporate Transformational Change?

Customer-centric Service Delivery – customer service for the program will be developed for the targeted customer-base using similar principles as HELP, ensuring knowledgeable staff are available to support each applicant through the process in addition to online resources for self-service.

#### How does this project mitigate Corporate Risk?

- -Mitigates (EL-2) The City's community education and awareness initiatives regarding carbon footprint may not be affecting change in people's attitudes and behaviors by enabling residents to reduce their GHG's.
- -Mitigates (SG-4) The City may not be prepared for the effects of climate change by improving resilience to extreme heat through improved air conditioning systems and better insulating homes and helps prepare households for increasing energy/water prices.

#### What is the impact if this project is delayed?

Deferring the program will result in delays to meeting targets for 5 actions (0, 14, 25, 26, & 32) in the LEC Plan. Households will miss out on energy savings.

#### What is the impact if this project is not funded by 2035?

LEC actions and GHG reduction targets will likely not be met and an innovative service offering for residents will not be sustained. Homes in the community will still use excess energy and emissions which costs residents money and comfort, likely resulting in community dissatisfaction.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact? The implementation of the original rebate package through HELP was transformative. It is a new innovative service that did not previously exist for residents. This program is an incremental improvement with long-term, sustained funding that will benefit many additional households.

#### What are other Triple Bottom-Line Co-Benefits?

- Water conservation rebates like low flow toilets and fixtures or irrigation systems can be included.
- Homes that are air tight with less drafts and leakage are more resilient to extreme cold and heat and will require less usage of electricity for AC for example during peak periods, homes with a solar PV system provide clean power to the grid that, through grid modernization and/or battery storage, could help SL&P with demand loads.
- Renovated homes for energy, water, and renewables are healthier, more comfortable, and more affordable through a reduction in utility bills for the occupants.
- A rebate offering incentivizes skills and job growth in energy audits, a variety of skilled trades, and the renewable energy industry. Demand for more efficient products will grow in the market and more supplies will be ordered through local businesses to keep up with the demand. A sustained long term rebate program encourages a variety of sectors to hire more people, train them in energy renovations and residents are investing substantial dollars into the local economy through this program.

## Industrial, Commercial, and Institutional (ICI) Energy and Water Efficiency Rebates & Enabling Activities

#### **Project Description**

This Capital Project submission is for rebates and enabling activities to facilitate the ICI sector to support ICI energy/water efficiency and renewable energy initiatives for up to 1000 ICI buildings. The targeted beneficiaries are businesses, multi-unit tenants/renters, large property owners, associations, schools, and other ICI stakeholders. Enabling activities include benchmarking, disclosure and labeling, building energy audits, decision-making tools, and capacity building and networking activities.

#### **Total Capital Estimate**

50 million to 150 million.

#### Overview of potential non-city funding sources

The Community Energy Financing Program through FCM only includes single-family households right now, but there may be ICI opportunities in the future.

#### **How does this Project Address Council Priorities?**

Economic Development Goal - The project will generate job opportunities in the field of energy advising and auditing for buildings. Furthermore, by reducing the operation cost of the buildings, businesses can optimize their financial returns which could attract more investment in the city.

Environmental Sustainability - The proposed project helps the City achieve it's LEC plan goals, responding directly to the Goal and the outcome of "Greenhouse gases are reduced in a way that maximizes co-benefits and doesn't leave anyone behind". It will reduce the GHG emissions from reducing use of energy in buildings that is generated from conventional fuels like coal and gas and will also reduce the burden on water resources by conserving water. This project through Incentivizing and later mandating ICI owners and operators to perform deep energy retrofits will contribute to an overall target of reducing 3.47 million tons of CO2e from 2020-2050. (Source- Action 11 under Phase 2 of the Low Emissions Community plan).

Smart City- Community buildings are an essential component of a smart city. This project will gather utility data like energy and water consumption in buildings which can be fed to smart analytics to generate intelligent solution for building operation and control.

### How does this project address Core Services & Operational Priorities?

Equitable and Accessible Services – The project aims to progress the outcome of "enhanced equity and accessibility of services meeting the needs of a diverse public". The program targets multi-unit buildings which house a large proportion of Saskatoon's low-income residents. Enabling landlords of multi-unit buildings, especially affordable housing providers, will reduce costs and comfort for those tenants.

Quality of Life - this project helps achieve the outcome "municipal programs, infrastructure, and essential services meet established levels of service and support a high-quality of life". A reduction in GHGs will lead to an overall improvement of air quality across the province from less dependence on coal/natural gas. It will also improve the quality of life for multi-unit residents and building occupants as the retrofitted buildings will be more comfortable, more resilient to hot/cool days, have lower operating costs, and add to a general sense of community pride in our climate action.

### How does this Project address Corporate Transformational Change?

Customer-centric Service Delivery – this project will achieve the outcomes of customer-centric service delivery by ensuring that the ICI sector is supported through the enabling and capacity activities planned.

#### How does this project mitigate Corporate Risk?

- -Mitigates (EL-2) "the City's community education and awareness initiatives regarding carbon footprint may not be affecting change in people's attitudes and behaviors" by enabling the ICI sector to reduce their GHG's.
- -Mitigates (SG-4) "the City may not be prepared for the effects of climate change" by improving resilience to extreme heat through improved air conditioning systems and better insulating buildings.

#### What is the impact if this project is delayed?

The Low Emission Community Plan (LEC Plan) projected that greenhouse gas (GHG) emissions from all ICI buildings will increase by 29% by 2050. To mitigate this, the LEC Plan identifies 5 actions for ICI energy and water improvements, including a target of making all community buildings net zero ready through envelope and mechanical system retrofits and renovations with 50% of existing buildings being 50% more energy efficient by 2030 and 90% by 2050. The delay or deferred in project for multiple years will delay the actions to meet these targets. Further, the enabling activities project is critical to the success of the overall ICI energy and water efficiency initiative as it will help building owners understand how and why to make energy upgrades and prepare them to uptake loan and rebate programs.

#### What is the impact if this project is not funded by 2035?

Research done on the project to date indicates that the sector lacks capacity, awareness, and experience which are intended to be enhanced thought this proposed project. Energy efficiency retrofitting, especially in the ICI sector, is complex and expensive.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The project is targeting, with the ICI loan program, approximately 50% of buildings in Saskatoon. ICI and multi-unit residential buildings account for 35% of Saskatoon's GHG emissions. In 2016, this was 1.9 million tonnes CO2e, expected to increase by 28.7% by 2050, if action is not taken. This project could reduce CO2e by 3.47 million tonnes.

#### What are other Triple Bottom-Line Co-Benefits?

- •Water efficiency improvements can be included.
- •Buildings will have improved heating and cooling systems to prepare for climate change.
- •Renovated buildings for energy, water and renewables are healthier, more comfortable, and more affordable through a reduction in utility bills.
- •Incentivizes skills and job growth in energy audits, a variety of skilled trades, and the renewable energy industry. Demand for more efficient products will grow in the market and more supplies will be ordered through local businesses to keep up with the demand. A sustained long term rebate program encourages a variety of sectors to hire more people, train them in energy renovations and businesses are investing substantial dollars into the local economy through this program.

### **District Energy Pilot**

#### **Project Description**

This Project would include completing a feasibility study for District Energy (DE) for civic buildings, building on a previous feasibility study conducted for north downtown, followed by a Pilot of DE (location TBD) that would have the potential for further expansion. DE can be an efficient way to produce and distribute thermal energy to clusters of buildings. When built with the possibility of expansion and flexible fuel use, DE systems can change with energy demand and evolved energy technologies. Ideal buildings for District Energy would be large with a high load, very close together, and with the ability to commit to a 20-year contract for heating. Given these criteria, many civic buildings, especially in the downtown core, could be a potential fit.

#### **Total Capital Estimate**

50 million to 150 million.

#### Overview of potential non-city funding sources

The Federation of Canadian Municipality's Green Municipal Fund has grant funding for feasibility studies for using recovered or renewable energy (up to \$175,000). Other funding opportunities will be investigated through feasibility study.

#### **How does this Project Address Council Priorities?**

Economic Development: a DE system would demonstrate the potential expansion of its use within the region and strengthen the enabling environment in Saskatoon to encourage entrepreneurs, businesses, and educational institutions to pursue new opportunities within this field of work.

Recreation, Culture and Leisure: DE is suitable for high load density buildings, such as recreational facilities, arenas, and office buildings, helping these facilities meet changing community needs, including a need for climate action.

Downtown Development: The City has many buildings potentially suitable for DE in the Downtown core. Installing DE downtown would show a long-term commitment to the vitalization and use of the area by the City and would improve livability in the region.

Environmental Sustainability: DE system development progresses climate action 36 in the Low Emissions Community Plan and provides an efficient use of thermal heating and electricity potential, that enables local resiliency for the buildings that are connected.

#### How does this project address Core Services & Operational Priorities?

Amount of heating and cooling assets to track, operate, and maintain. This incorporates improvements that support Triple Bottom Line considerations, equity principles and climate change mitigation and adaptation strategies. Fuel switching is also much simpler as it will be for one or a few systems to enable an emissions-reducing switch for many buildings connected to that system(s).

Procurement and Project Management: DE Systems will be procured through sustainable procurement methodology and will include indigenous participation and the Triple Bottom Line Policy within the evaluation criteria. The procurement and contracts will be managed using the City's PMI standards and best practices for proper reporting and closure of the project.

Quality of Life: a reduction in GHGs from will lead to an overall improvement of air quality and a potential sense of community pride in our climate action, creating an enabling environment where everyone can enjoy the benefits of the City's improved civic facilities.

#### **How does this project mitigate Corporate Risk?**

Mitigates EL-3 "the City may fail to identify and pursue corporate CO2 reduction initiatives" by reducing corporate GHG emissions.

#### What is the impact if this project is delayed?

LEC targets for Action 36: Implement district energy systems in the downtown and north downtown areas (or similar) will not be met, and there will be less reductions in greenhouse gas emissions. The City will not be perceived as a leader in the switch to Renewable and Lowemissions Energy. Opportunities to optimize the installation of DE with upcoming downtown construction projects may be missed.

#### What is the impact if this project is not funded by 2035?

LEC targets for Action 36 will not be met, and less reductions in greenhouse gas emissions with potentially larger and irreversible impacts to the climate if delayed beyond 2035. The City will not be perceived as a leader in the switch to Renewable and Low-emissions Energy. Opportunities to optimize the installation of DE with upcoming downtown construction projects will be missed.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact? District energy is an innovative approach that has not been used by the City before, that has the potential to reduce emissions by 1,079,000 tonnes CO2e by 2050, and be utilized by an entire neighborhood or commercial area.

#### What are other Triple Bottom-Line Co-Benefits?

Safety, or resiliency of essential services: through localized energy generation, especially if paired with energy storage, the City would be able to provide some energy support in cases where the electricity grid has been compromised due to increased extreme weather events.

Innovation, quality workplace, or skill training: The increase to District Energy systems will increase the demand for skills training in renewable energy technology. Through increased support of this sector, innovation may be enabled as well.

Supporting the local economy: a DE system would demonstrate the potential expansion of its use within the region and could increase economic opportunities within this field of work. Efficient and effective asset management and use: DE enables one building to supply heat to multiple other buildings, which reduces the amount of heating and cooling assets to track, operate, and maintain. Fuel switching is also much simpler as it will be for one or a few systems to enable an emissions-reducing switch for many buildings connected to that system(s).

## <u>Green Network - Food Program</u>

#### **Project Description**

The purpose of the Green Network Food Program is to enhance our urban environment and improve community health & wellbeing by establishing a food system approach for the City. This work will support food production by the City and community, help address food insecurity, and improve access to healthy, local food.

This major capital ask is to:

- -Develop a Sustainable Food Action Plan to identify the City's roles and responsibilities in supporting Saskatoon's local food system, including growing, processing, distributing, and disposing of food in the city;
- -Lead to the development of standards, policies, guidelines, and/or procedures to support Saskatoon's food system;
- -Pilot on-the-ground food system initiatives and expand food production opportunities in public space:
- -Build capacity in our community, for example, through a social enterprise pilot that supports equitable employment and training opportunities;
- -Develop new incentives and/or improve existing incentives to encourage food initiatives by community, residents, and the ICI sector; and
- -Build on existing community-led food system initiatives.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

Federal funding (pending approval) will support a food forest pilot in 2022-24, using money leveraged from the Sustainability Reserve; however, no additional/future funding has been awarded.

It is likely that future external funding opportunities will be available to support this type of work. However, a source of City capital is required in order to leverage external grant dollars.

The Green Pathways Implementation Plan currently has no capital funding allocated to implement the initiatives outlined in the Plan, including Pathway 5: Food Security from Seed to Table to Soil.

#### **How does this Project Address Council Priorities?**

Reconciliation, Equity, Diversity, and Inclusion:

The City of Saskatoon's Green Infrastructure Strategy established a baseline of the current state of green space access. Multiple gaps were identified, including:

- •There are insufficient community garden spaces to meet demand.
- •Many green spaces are serving more residents than they were designed for, which leads to over-use of these sites.
- •Some people report feeling unsafe and unwelcome in many green spaces, in particular, Indigenous and racialized communities.

The Saskatoon Food Action Plan will identify:

- •New opportunities for food production on publicly accessible land (including but not limited to parks) to help improve equitable access to Saskatoon's food system.
- •How to incorporate reconciliation, equity, diversity, and inclusion into how Saskatoon designs and manages public food system spaces/initiatives.

- •Opportunities to address food insecurity in our community.
- •Opportunities to incorporate traditional and Indigenous plantings.
- •Ways to celebrate and incorporate culturally appropriate foods, plants, growing and processing methods, and other food-related protocols.

#### Community Safety and Wellbeing:

Cities across Canada are working towards sustainable local food systems, as it has been shown to improve public health outcomes and reduce the carbon footprint of the food we eat.

The Green Network Food Program would help identify the City's roles and responsibilities in helping to address hunger, food insecurity, and rising food prices affecting our community.

#### **Environmental Sustainability:**

This project addresses multiple Environmental Sustainability priorities of Council in the following ways:

- 1. Green Pathways
- •5.1.1: Green Network food program
- •5.1.2: Food waste projects
- •5.2.1: Sustainable Food Action Plan
- •4.3.1: Street Garden Program
- •4.3.2: Community stewardship program
- •4.3.3: Social enterprise models
- •3.1.1: Green network policies
- 2. Pathway to a Sustainable Urban Forest
- •4.6 P: Develop a communications campaign about fruit trees (e.g., where fruit trees are located on public land, fruit identification, how and when to pick fruit).
- •2.1 C: Work with Sustainability on an approach for planting fruit trees and shrubs on public land and in community gardens
- 3. Official Community Plan
- •2.5 Food Systems
- •4.1 Reduction

#### How does this project address Core Services & Operational Priorities?

Equitable and Accessible Services:

The Green Network Food Program will support initiatives that improve access to locally grown food, in particular for people who are experiencing food insecurity. Site selection criteria will not only consider a site's features and compatibility to support food production, processing, distribution, and/or disposal, but also safety, equitable access, and whether the location is in (or supports) a food-insecure neighbourhood.

"Every Saskatoon resident should have access to an adequate supply of nutritious, affordable and safe food without social and economic barriers. In Saskatoon, we must work with those communities most affected by lack of access to nutritious, affordable and safe food." (Saskatoon Food Charter)

#### Quality of Life:

- •Participating in food system activities—such as gardening, harvesting, and cooking—can connect people to the cultural, health, and community benefits of food.
- Local foods are fresh and full of flavour.
- •Local foods can showcase what can be grown locally and seasonally and can lead people to discover new foods.

"Food brings people together in the celebration of family and community, strengthening links between diverse cultures and urban and rural communities. The preparing, eating and sharing of food engages individuals and families in a social and community fellowship that balances physical and spiritual needs." (Saskatoon Food Charter).

#### **How does this Project address Corporate Transformational Change?**

Efficiency and Effectiveness:

Establishing the City's roles, responsibilities, and approach to Saskatoon's local food system will enable the City to achieve priorities and support community. It will also identify a clear procedure and criteria to support food system initiatives based on, for example:

- •Where available land, venues, and amenities exist.
- •The level of demonstrated interest and commitment by the community.
- •Community engagement and neighbourhood support.
- •Site compatibility with adjacent land uses.
- •Where appropriate planting sites exist (i.e. in terms of drainage, soil quality, sun, access to water).
- •Safety and CPTED considerations.
- •Supporting access in and distribution to food-insecure neighbourhoods.
- •Which locations could benefit from food system enhancements.

#### How does this project mitigate Corporate Risk?

Many local community organizations support Saskatoon's food system and past engagement indicates that residents would like the City of Saskatoon to become more involved in and supportive of this work. In particular, the community has provided feedback that it's crucial for the City to identify its roles and responsibilities in the food system, and improve its support for existing work being led by the community. There has been interest and demand for the City to participate in this work for over a decade. For example, community-led reports such as the 2014 Saskatoon Regional Food System Assessment and Action Plan identify recommendations for the City, but most of these recommendations have gone unaddressed and unfunded. With such high interest and demand in the community to further this work, there exists some tension and frustration by community organizations and residents due to the City's lack of participation and leadership.

The City's involvement in this area has been lacking, in part, because there had been no established mandate or resources to support this work. However, recent strategies such as the updated Official Community Plan and Green Pathways have taken the first step in establishing a direction for the City.

There now exists an opportunity to:

- •Solidify the City's roles and responsibilities to support Saskatoon's food systems.
- •Establish clear direction for the City.
- •Allocate time and resources to further this work in a consistent and dedicated manner.
- Address funding gaps.
- •Enable the City to leverage external funding.
- •Come to the table where the community has been waiting for us to pull up a chair.

#### What is the impact if this project is delayed?

If the project is delayed, the City will continue with an unfunded, piecemeal approach to supporting City- and community-led food system initiatives.

Delaying the City's involvement is impacting our community's ability to fully benefit from a comprehensive and effective local food system. Multiple food initiatives are only

possible/enabled if the City provides leadership and direction, establishes policies or guidelines, or participates as an active partner.

#### What is the impact if this project is not funded by 2035?

Multiple initiatives in the Green Pathways Implementation Plan will not be achieved.

## What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Health, wellbeing and self-sufficiency:

Not only does food security contribute to the physical, mental, spiritual and emotional well-being of residents, but healthy foods are important factors in determining the overall health of the city's population. (Saskatoon Food Charter).

#### What are other Triple Bottom-Line Co-Benefits?

Conserve energy or reduce GHGs:

- -Local food production and processing reduces "food miles" and lowers associated greenhouse gas emissions.
- -Proper disposal of organics/food—e.g. through composting instead of landfilling—reduces GHGs
- -Local food may use less packaging and preservatives than "far away" foods.

Supporting the local economy:

Supporting our local food system can lead to a strong local economy by supporting businesses, organizations, tourism, and training and employment opportunities.

"Food is an integral part of the economy of Saskatoon and the surrounding area. A commitment to building bridges between urban and rural communities on food security will strengthen the food sector's self-reliance, growth and development." (Saskatoon Food Charter)

## Renewable Natural Gas Procurement Funding

#### **Project Description**

Thermal and electrical energy production that currently relies on natural gas is responsible for over 20% of the City's current emissions. Natural Gas can be replaced with Renewable Natural Gas (RNG) sources for direct emissions reductions. This Capital request is to cover the costs of the required premium to begin replacing 3,940,000 GJ of natural gas used with renewable natural gas over 8 years, starting in 2028 (a 5-year delay to the implementation pathway recommended by the LEC plan), assuming there is a mechanism to purchase RNG by then through SaskEnergy.

#### **Total Capital Estimate**

20 million to 50 million.

#### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

#### **How does this Project Address Council Priorities?**

Economic Development: The amount of renewable natural gas required to be purchased to meet LEC targets is a significant increase to what is available regionally and will strengthen the enabling environment in Saskatoon to encourage entrepreneurs, businesses, and educational institutions to pursue new opportunities in renewable natural gas.

Environmental Sustainability: The switch to renewable natural gas implements climate action 40 which will considerably offset the City's emissions from heating that is currently sourced by carbon-intensive natural gas.

#### How does this project address Core Services & Operational Priorities?

Civic Assets: The City may be able to use renewable natural gas that is created as a biproduct at both the landfill and the wastewater treatment plant, optimizing these facilities' co-benefits. The switch to RNG could also be directly used by the city's facility's current natural gas-fueled space and process heating systems and would require minimal asset changes. The switch to Renewable Natural Gas incorporates improvements that support Triple Bottom Line considerations, including climate change mitigation and adaptation strategies.

Procurement and Project Management: Renewable natural gas will be procured through sustainable procurement methodology and will include indigenous participation and the Triple Bottom Line Policy within the evaluation criteria. The procurement and replacement schedule will be managed using the City's PMI standards and best practices for proper reporting and closure of the project.

Quality of Life: a reduction in GHGs from will lead to an overall improvement of air quality and a potential sense of community pride in our climate action, which will create an enabling environment where everyone can enjoy the benefits of the City's core services being offset by renewable natural gas.

#### **How does this Project address Corporate Transformational Change?**

Efficiency and Effectiveness: renewable natural gas is a simple switch that would require minimal changes to the City's current space and process heating systems, while reducing emissions drastically.

#### **How does this project mitigate Corporate Risk?**

This project mitigates EL-3, "the City may fail to identify and pursue corporate CO2 reduction initiatives" by reducing GHG emissions from energy.

#### What is the impact if this project is delayed?

LEC targets for Action 40, which progresses towards displacing 50% of natural gas demand with RNG by 2050, will be further delayed, and there will be less reductions in greenhouse gas emissions. The City will not be perceived as a leader in the switch to Renewable Energy.

#### What is the impact if this project is not funded by 2035?

LEC targets for Action 40 will not be met, and less reductions in greenhouse gas emissions, with potentially larger and irreversible impacts to the climate if delayed beyond 2035. The City will not be perceived as a leader in the switch to Renewable Energy.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Procuring the targeted annual GJ of renewable natural gas would significantly displace the City's heating needs. This displacement would start at <1% in 2024 to up to 45% in 2034, reducing our dependence on a fossil fuel source. If the project gets back on track of the Pathway to a Low Emissions Community, a total 1,042,780 tonnes CO2e would be reduced by 2034.

If the LEC target of 50% of natural gas is displaced by renewable natural gas by 2050 is met, a cumulative 40,607,000 tonnes CO2e would be reduced by 2050.

#### What are other Triple Bottom-Line Co-Benefits?

Innovation, quality workplace, or skill training: The increase demand for renewable natural gas will increase the demand for skills training in renewable natural gas technology. Through increased support of this sector, innovation may be enabled as well.

Supporting the local economy: The purchase of renewable natural gas at this scale would be a significant increase to current regional generation and will enable the growth of regional renewable natural gas suppliers and equipment manufacturers.

Efficient and effective asset management and use: renewable natural gas is a simple switch that would require minimal changes to the City's current space and process heating systems, while reducing emissions drastically. The City may also be able to use renewable natural gas that is created as a biproduct at both the landfill and the wastewater treatment plant, optimizing these facilities' co-benefits.

## Compost Depot Processing Facility

#### **Project Description**

This project will site and construct a permanent compost depot location to replace the current location at Highway 7 and 11 St. The current depot is situated in the new Blairmore development and will need to be moved when the area is developed. This project will consider processing materials currently accepted at the compost depots and potentially processing materials from the curbside program.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

There are several grant opportunities for waste reduction projects, although none were identified for a new organics processing facility.

#### **How does this Project Address Council Priorities?**

This project supports waste diversion by providing residents a free location to drop off organic materials that are not accepted in the curbside organics program. The compost depot also provides organics disposal for contract haulers and internal City departments.

#### How does this project address Core Services & Operational Priorities?

This project helps create an enabling environment where everyone can enjoy the benefits of the City's core services, including green spaces, civic facilities and programs.

## **How does this Project address Corporate Transformational Change?**

This project ensures that the public has free access to dispose of organics not accepted in the green cart program (larges branches and stumps). There could also be efficiencies gained if all organic material generated by City programs is processed at the same facility.

#### What is the impact if this project is delayed?

The timing of this project is dependent on the Blairmore development, there is no immediate need to move the depot's location. Once houses start being built in proximity of the area, dust and odor may be an issue with the new homes.

#### What is the impact if this project is not funded by 2035?

The internal City departments will not have a location to drop off organics and will have to pay a third party to compost the material. Residents would be required to bring their organic material not accepted in the curbside program (large branches and stumps) to an alternate location.

## What is the Triple Bottom Line Primary Indicator this project addresses and its impact? Residents are currently able to drop off of organic materials at the West depot, this project will

ensure that this service is still provided by the City.

#### What are other Triple Bottom-Line Co-Benefits?

Composting waste reduces methane generation during organic waste decomposition.

## Renewable Energy Procurement through Renewable Energy Credits

#### **Project Description**

It is anticipated that Saskatoon's target of 80% emissions reductions by 2050 will not be achieved without purchasing renewable energy that is generated outside of city limits, through purchasing Renewable Energy Certificates (RECs). In addition to paying the utility for the electricity consumed at established rates, REC participants pay a premium for renewable energy generated by their agreed-upon capacity to account for grid access and solar production costs. This project is to cover the costs of the required premium to purchase a total of 15,612,079 MWh of renewable energy electricity over this 10-year period.

#### **Total Capital Estimate**

over 150 million.

#### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

#### **How does this Project Address Council Priorities?**

Economic Development: The amount of renewable energy required to be purchased to meet LEC targets is a significant increase to what is available regionally and will strengthen the enabling environment in Saskatoon to encourage entrepreneurs, businesses, and educational institutions to pursue new opportunities in renewable energy.

Environmental Sustainability: The generation of solar energy implements climate action 39 in the Low Emissions Community Plan and will considerably offset the City's electricity consumption that is currently sourced by carbon-intensive technologies.

#### How does this project address Core Services & Operational Priorities?

Equitable and Accessible Services: Many residents may wish to generate their own renewable energy, but do not have the geographical or financial capacity or ability. Through the City purchasing renewable energy, the City is able to lead by example and ensure that the City and Community's electricity consumption is offset by regional renewable energy development, and residents can take pride in what the City is doing to reduce emissions from their resident's electricity consumption.

Procurement and Project Management: Renewable energy will be procured through sustainable procurement methodology and will include indigenous participation and the Triple Bottom Line Policy within the evaluation criteria. The procurement and replacement schedule will be managed using the City's PMI standards and best practices for proper reporting and closure of the project.

Quality of Life: a reduction in GHGs from will lead to an overall improvement of air quality and a potential sense of community pride in our climate action, which will create an enabling environment where everyone can enjoy the benefits of the City's core services being offset by renewable energy.

#### **How does this Project address Corporate Transformational Change?**

Efficiency & Effectiveness: Purchasing Renewable Energy Credits may be the most effective and efficient way to meet LEC targets.

#### How does this project mitigate Corporate Risk?

This project mitigates EL-3, "the City may fail to identify and pursue corporate CO2 reduction initiatives" by reducing GHG emissions from energy.

#### What is the impact if this project is delayed?

LEC targets for action 39, which progresses towards a total generating capacity of 1,600 MW purchased by 2050, will not be met, and less reductions in greenhouse gas emissions. The City will not be perceived as a leader in the switch to Renewable Energy.

#### What is the impact if this project is not funded by 2035?

LEC target for action 39 will not be met, and less reductions in greenhouse gas emissions, with potentially larger and irreversible impacts to the climate if delayed beyond 2035. The City will not be perceived as a leader in the switch to Renewable Energy.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact? Procuring the targeted annual MWh of renewable energy would significantly displace the City's electricity consumption needs. This displacement would start at 15% in 2024 to up to 50% in 2034, reducing our dependence on a grid that's currently primarily powered by carbon-intense sources, such as coal and natural gas. If the project gets back on track of the Pathway to a Low Emissions Community, a total 3,782,160 tonnes CO2e would be reduced by 2034. If the LEC target of 1600 MW of electricity is purchased by 2050 is met, a cumulative 54,119,000 tonnes CO2e would be reduced by 2050.

#### What are other Triple Bottom-Line Co-Benefits?

Innovation, quality workplace, or skill training: The increase demand for renewable energy generation will increase the demand for skills training in renewable energy technology. Through increased support of this sector, innovation may be enabled as well.

Improving affordability for users: through the bulk purchasing of large-scale renewable energy generation, the City can offer electricity with less emissions to its residents at the most effective price.

Supporting the local economy: The purchase of renewable energy at this scale would be a significant increase to current regional generation, and will enable the growth of regional renewable energy suppliers and installers

## **Recreation & Culture Priorities**

### **East Side Leisure Centre**

#### **Project Description**

The East Side Leisure Centre project is the construction a new district leisure center to support the Holmwood Sector, providing opportunities for residents to have access to, and participate in, leisure activities. The Holmwood Sector will be comprised of five residential neighborhoods', a suburban center, business park, two regional commercial sites and a suburban center commercial site with an estimated 70,000 residents living in the sector. The facility is expected to include a 25m pool, a leisure pool, gymnasium, fitness spaces, weight room, multipurpose rooms/child minding spaces, and supporting accessible locker/change/washroom facilities. Estimated footprint of 4500 square meters with aquatic components accounting for 2300 square meters, gymnasium 1000 square meters, fitness and workout spaces 300 square meters, multipurpose rooms/childminding spaces 300 square meters, accessible locker/change/washroom facilities 300 square meters, 300 square meters for administration support spaces. The facility will be connected to the two new high schools in partnership with the public and catholic school boards.

#### **Total Capital Estimate**

50 million to 150 million.

#### Overview of potential non-city funding sources

ICIP funding has been approved by City Council for this project in the amount of \$40.5M of eligible costs. Link - Investing in Canada Infrastructure Program Application Intake Report

#### **How does this Project Address Council Priorities?**

Recreation facilities and programs are accessible, inclusive and meet changing community demand and needs. This project meets the demand of a growing city for recreation, continues to implement the Recreation Facilities Game Plan regarding development of new and improved recreation facilities. The facility will reduce barriers, improve access, and increase supports participation in recreation facilities and programs. The partnership with the YMCA provides other funding opportunities for a new facility and programs and reduces the reliance on property tax support. For REDI, this new facility will be a space where all community members and residents feel safe and welcomed and would incorporate indigenous consultation and participation into the project. For economic benefit, the work with community partners including the school boards to develop a new facility that would attract participation and generate significant economic benefits of a major capital project.

#### How does this project address Core Services & Operational Priorities?

As a civic asset, the new leisure center would be constructed as HPCBP that would be energy efficient and designed for long-term resilience, ensuring the City is prepared to mitigate current and future contributions to climate change. The City have access to safe, adequate facilities and equipment necessary to deliver established levels of service. For equitable/accessible services, this new facility would enhance the equity and accessibility of recreational services meeting the needs of a diverse public. As a major project, the goal would be to achieve best value thru procurement and the opportunity increased procurement from Indigenous suppliers and diverse groups. The key outcome for this project is Quality of Life as City facilities and programs, infrastructure and essential services meet established levels of service and support a

high-quality of life for the physical and mental wellbeing of our residents. This facility would be an inclusive public space that provides the opportunity to bring people together.

#### **How does this Project address Corporate Transformational Change?**

The City recognizes the diverse and changing needs of the public and as a growing city we strive to consistently deliver exceptional, accessible and equitable services which includes access to recreation.

#### How does this project mitigate Corporate Risk?

The risk to the corporation on two fronts, the ability to provide adequate space and programs to meet the demand of a growing community and residents for recreational opportunities including corporate reputation. Secondly, the risk of unrealized funding opportunities from other sources of funding other than the city and partnership opportunities to reduce the economic impact of developing and operating this facility.

Risk is that project will not align with the development and construction of the new high schools which would result in additional capital cost associated with constructing two major joint facilities in stages.

#### What is the impact if this project is delayed?

Risk is that project will not align with the development and construction of the new high schools which would result in additional capital cost associated with constructing two major joint facilities in stages.

#### What is the impact if this project is not funded by 2035?

In addition to the risk of not constructing in concert with the high schools, significant risk of insufficient indoor recreational space and amenities for residents in the Holmwood Sector. Secondly, partnership with the YMCA would be potentially jeopardized due to the significant delay in development of the facility. Finally, increased capital cost to construct simply based on inflation.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The partnership opportunities identified for this project for development and operation of the facility represent an incremental shift in current practices that are expected to result in significant savings and reduced reliance on property taxes and continue to meet service levels. This model may to establish a new norm for future projects.

#### What are other Triple Bottom-Line Co-Benefits?

Leisure Centers are generally high energy/water users, as a new facility, would be designed as a HPCB and meet criteria that would ensure a high standard of energy efficiency and environmental sustainability. For REDI, leisure centers provide spaces that are inclusive, free of discrimination, move to universal access, the TRC calls to action for access to recreation, and will enable residents from a wide range of economic levels to access thru our Leisure Access programs. Recreation is proven to improve physical, mental, emotional and spiritual wellbeing and this facility would support that for all residents. The City Leisure Centers are mandated to provide affordable access to recreation by support from the mill rate and accessible programs that maintain access for all and support for low-income households.

## White Buffalo Youth Lodge

#### **Project Description**

This project involves the significant capital improvements or replacement of the existing White Buffalo Youth Lodge city center recreation facility. The facility is operated in partnership with Saskatoon Tribal Council, CUMFI, and the Saskatchewan Health Authority.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

Project has been identified as potential project for submission to the Green and Inclusive Community Buildings (GICB)GICB funding stream in fall of 2023. Would qualify as a large retrofit or new build project for 60% to 80% of total eligible project costs. Based on a project of up to \$10M, would account for \$6M to \$8M. In addition, partners in the WBYL may bring capital dollars to the project, amounts unknown at this time.

#### **How does this Project Address Council Priorities?**

The project supports REDI as is a partnership with the indigenous community on a facility in the core neighborhoods that have a high indigenous population and high usage by indigenous youth and creates a space where all community members feel safe and welcomed to ensure cultural identities and living experiences are reflected in the community. This project will also work with community partners to enhance/ replace an existing facility to attract residents and visitors. The WBYL provides a safe place for youth to recreate and work with underserved populations to improve quality of life and community well-being. The WBYL by design is intended to reduce barriers, improve access and increase participation in recreation and programs and support partnership opportunities for redevelopment of a WBYL. Through these partnerships with community, the additional goal of reducing the reliance on property taxes to support this facility and programs. Regarding Environmental Sustainability, the new facility Develop would improve energy conservation and efficiency in by a new build/upgraded would be higher efficiency to the City's HPCBP building and the location supports current transportation and BRT. The project also represents positive infill development in a core neighborhood.

#### How does this project address Core Services & Operational Priorities?

This project touches all areas. As a new or upgraded facility would be energy efficient and designed for long-term resilience and city/partner staff have access to safe, adequate facilities to deliver established levels of service. The development of a new WBYL would enhance equity and accessibility of services to underserved populations in the City's core while meeting the needs of a diverse public. As a new project in partnership with the indigenous community, the opportunity for increased procurement from Indigenous suppliers and diverse groups that are historically underrepresented. The focus of the WBYL is to create a welcoming and inclusive public facility with spaces that bring people together and continue to provide high-quality recreation programs that ensure quality of life and enable the public to safely engage in everyday life.

How does this Project address Corporate Transformational Change? None.

How does this project mitigate Corporate Risk?

This project mitigates the risk of not having suitable facilities to meet community demand for access to recreation spaces and programs and the access to safe, welcoming and inclusive spaces for community participation.

#### What is the impact if this project is delayed?

Programming and operations would continue in the existing facility that is too small for community demand and reputational impact to the City of servicing core neighborhoods.

#### What is the impact if this project is not funded by 2035?

Existing facility if not sufficient for programming and community needs and City Council has identified this as a priority project. In addition, we have strategic partners that are involved that may not be willing to wait 13 years for a new facility to be developed.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The current facility is dated and not sufficient to meet community demand. A new facility would be designed to reflect community needs and meet the growing demand for recreation in the core to a diverse population. In addition, the facility strengthens the relationship with the indigenous community by partnering with indigenous organizations in the development and operation of the facility.

#### What are other Triple Bottom-Line Co-Benefits?

A new facility would be more energy efficient. The WBYL is by design a partnership with the indigenous community and supports reconciliation and calls to action and is intended to be a safe, welcoming and inclusive community facility. The facility would also serve the community as a space for animation of indigenous and other demographics cultural and artistic expression. As a community hub, the WBYL would be a safe place to participate in recreation and programs increasing residents' health and well-being.

## Arena to replace Archibald Arena

#### **Project Description**

The Archibald Arena was constructed in 1972 and is beyond its current useful life. The facility is facing requirements for significant capital renewal due to the building age, increasing expectations from the users, and need to phase out the use of R22 refrigerant. Accessibility, code compliance, energy efficiency, and building envelope integrity are also concerns with the building.

A replacement facility would include: dual rink surfaces, universal/gender neutral locker/change/dressing/washroom facilities, multipurpose/meeting room, ice plant/ mechanical room, Zamboni room, and administration and maintenance support spaces. Accessibility/inclusivity to all areas would be increased.

#### **Total Capital Estimate**

20 million to 50 million.

### Overview of potential non-city funding sources

It is likely that both Federal (GICB), Provincial and/or Private funding opportunities would be available and would be explored.

#### **How does this Project Address Council Priorities?**

Recreation facilities and programs are accessible, inclusive, and meet changing community demand and needs. This project meets the demand of a growing city for recreation, continues to implement the Recreation Facilities Game Plan regarding development of new and improved recreation facilities. The facility will reduce barriers, improve access, and increase participation in recreation facilities and programs.

For REDI, this new facility will be a space where all community members and residents feel safe and welcomed and would incorporate indigenous consultation and participation in public engagement processes and activities.

For Economic Development, this new facility would enhance existing facilities to attract events, visitors, and business opportunities. With the development of a new facility, we would be able to improve our environmental sustainability in all aspects of the facility.

As with all ice arenas, this facility would be in support of the Winter City Strategy. With the new facility it would be better suited to encourage social activity in winter and ensure the public spaces within are designed for winter comfort, safety, and activity. In addition, with the creation of a second ice sheet it would create more options for winter activities and tourism.

As with all new facilities, we will be able to tap into new technology for not only energy efficiency, conservation, and renewable energy but also implement innovative ways use the data of our buildings in maintenance, repairs, and capital replacement.

#### How does this project address Core Services & Operational Priorities?

As a civic asset, the replacement facility for Archibald Arena would be constructed as per the High-Performance Civic Building Policy. This policy guidance would provide the design to be more energy efficient and designed for long-term resilience, ensuring the City is prepared to mitigate current and future contributions to climate change.

The City would have access to safe, adequate facilities and equipment necessary to deliver established levels of service. For equitable/accessible services, this new facility would enhance the equity and accessibility of recreational services meeting the needs of a diverse public.

As a major project, the goal would be to achieve best value through procurement and the opportunity increased procurement from Indigenous suppliers and diverse groups. The key outcome for this project is Quality of Life, as City facilities and programs, have a significant impact on an individual's physical and mental health.

#### **How does this Project address Corporate Transformational Change?**

This project will allow the City to maintain established levels of service and to continue to provide a quality/improved customer experience for all residents.

In consultation with the public the feedback will be used to ensure a much-improved customer experience at the facility with upgraded accessibility, inclusivity and better run facilities.

The new facility would bring improved facility operations for both programming and operations and maintenance teams with improved customer comfort through improved mechanical, heating, ventilation and building envelope upgrades. These improvements would be beneficial to employee safety and demonstrates management's commitment to core values.

#### How does this project mitigate Corporate Risk?

The building of a new Ice Arena mitigates the organizational risks by:

- Being able to maintain the City's current level of service for ice arenas and meet the demands, as the City continues to grow which would result in a shortage of ice arena space for residents.
- Minimizes the service level impacts or potential for facility closures.
- The risk of Archibald Arena components/ equipment failing prior to a new facility being built.
- Reduce operating and maintenance costs.
- A new facility would mitigate environmental risk with the improved efficiencies based on new technologies for Ice Plants/ Arenas and the High-Performance Civic Building Policy.

#### What is the impact if this project is delayed?

Over the last few years, there have been increased costs to maintenance, repairs, utilities, and capital replacement. This trend is believed to continue to go up from here with many more of the assets failing due to being beyond its service life.

In addition, there is also a potential for the facility to be closed due to the failure of the ice plant and/or the lack of replacement refrigerant (R22) or parts available.

With the aging assets of the facility, there is potential for further decreased service level due to emergency shutdowns caused by the facility being beyond its useful life.

#### What is the impact if this project is not funded by 2035?

If there is no funding for the facility for 10+ years, there will be a closure of this facility. As stated previously, this facility infrastructure is beyond its service life with many of the parts not being manufactured including the refrigerant (R22). The R22 was phased out many years ago and therefore the supply of the refrigerant is only able to be purchased through other facilities that are decommissioned.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

- Replaces current infrastructure with modern facility that meets accessibility, inclusivity, building code, and high-performance building policy requirements.
- Significantly improves programing and facility operations. Aging infrastructure.

#### What are other Triple Bottom-Line Co-Benefits?

The current Archibald Arena is a high energy user due to the inefficient / beyond service life assets within. With a new facility, we would be able to design with new technologies that would

ensure a high standard of energy efficiency and environmental sustainability due to the HPCBP criteria.

For REDI, a new arena would provide spaces that are inclusive, free of discrimination, move to universal access, the TRC calls to action for access to recreation, and will enable residents from a wide range of economic levels to access through our Leisure Access programs. Recreation is proven to improve physical, mental, emotional, and spiritual well-being and this facility would support that for all residents.

Aging infrastructure will be replaced per Facilities Asset Management strategy.

Reduction in greenhouse gas emissions due to efficiencies of a new building and equipment/ assets.

## Pool to replace George Ward

#### **Project Description**

The George Ward Pool opened in 1965 and is beyond the end of its useful life. The basin and pool piping have had mechanical issues and issues with water leakage, the current facility has limited leisure amenities, accessibility/inclusivity to the facility do not meet current standards, the current washroom and change room facilities do not have gender neutral/universal options and do not meet current user needs.

A replacement facility would include leisure amenities like a waterslide, spray features, zero beach entry, a lane swimming area, universal/gender neutral locker/change/washroom facilities, multipurpose/meeting room and administration and mechanical support spaces. Accessibility/inclusivity to all areas would be increased.

#### **Total Capital Estimate**

5 million to 20 million.

### Overview of potential non-city funding sources

No funding has been awarded, but it is likely that both Federal (GICB), Provincial and/or Private funding opportunities would be available and would be explored.

#### **How does this Project Address Council Priorities?**

Recreation facilities and programs are accessible, inclusive and meet changing community demand and needs. This project meets the demand of a growing city for recreation, continues to implement the Recreation Facilities Game Plan regarding development of new and improved recreation facilities. The facility will reduce barriers, improve access, and increase participation in recreation facilities and programs. For REDI, this new facility will be a space where all community members and residents feel safe and welcomed and would incorporate indigenous consultation and participation in public engagement processes and activities. For Economic Development, this new facility would enhance existing facilities to attract events, visitors and business opportunities. With the development of a new facility, we would be able to improve our environmental sustainability in all aspects of an outdoor pool.

#### How does this project address Core Services & Operational Priorities?

As a civic asset, the replacement facility for George Ward would be constructed as HPCBP that would be energy efficient and designed for long-term resilience, ensuring the City is prepared to mitigate current and future contributions to climate change. The City would have access to safe, adequate facilities and equipment necessary to deliver established levels of service. For equitable/accessible services, this new facility would enhance the equity and accessibility of recreational services meeting the needs of a diverse public. As a major project, the goal would be to achieve best value through procurement and the opportunity for increased procurement from Indigenous suppliers and diverse groups. The key outcome for this project is Quality of Life as City facilities and programs, have a significant impact on an individual's physical and mental health.

#### How does this Project address Corporate Transformational Change?

This project will allow the City to maintain established levels of service and to continue to provide a quality/improved customer experience for all residents.

Improves facility operations for both programing and Operation & Maintenance teams. Improved mechanical/chlorine/filtration systems would be very beneficial to employee safety and demonstrates management's commitment to core values.

#### **How does this project mitigate Corporate Risk?**

It mitigates the following risks. First, the risk of not being able to maintain the City's current level of service for outdoor pools and meet the demands as the City continues to grow which would result in a shortage of outdoor pool space for residents. Second, the risk of George Ward failing prior to a new facility being built and/or significant operating and maintenance costs. Finally, a new facility would mitigate environmental risk with the improved efficiencies based on new technologies for pools and HPCBP (High Performance Buildings) Policy.

#### What is the impact if this project is delayed?

Over the last several years George Ward Pool has had water leakage and mechanical issues. If the project is delayed, George Ward may not operational or there may be increased maintenance and utility costs. In addition, the City would only have 3 Outdoor Pools, which is a service level reduction and may result in a shortage of outdoor pool space during the summer season for Saskatoon residents.

A delay may also result in increased capital costs for the project.

#### What is the impact if this project is not funded by 2035?

George Ward pool will not be operational, meaning a reduced service level and a shortage of Outdoor Pool space. It may also result in increased capital costs for the project.

## What is the Triple Bottom Line Primary Indicator this project addresses and its impact? This project would maintain the service level of Outdoor Pools within the City of Saskatoon.

However, leisure amenities, accessibility/inclusion would be enhanced; high performance building policy requirements would be met, and mechanical equipment would be more energy efficient.

#### What are other Triple Bottom-Line Co-Benefits?

Outdoor pools are generally high energy/water users, as a new facility, would be designed with new technologies and as a HPCB and meet criteria that would ensure a high standard of energy efficiency and environmental sustainability. For REDI, a new outdoor pool would provide spaces that are inclusive, free of discrimination, move to universal access, the TRC calls to action for access to recreation, and will enable residents from a wide range of economic levels to access through our Leisure Access programs. Recreation is proven to improve physical, mental, emotional and spiritual well-being and this facility would support that for all residents. The City's outdoor pools are facilities that are mandated to provide affordable access to recreation by support from the mill rate and accessible programs that maintain access for all and support for low-income households. Outdoor pools provide that added benefit of access to outdoor water play in the summer for residents that do not have other options as well as opportunities for cool down activities to beat the summer heat.

Aging infrastructure will be replaced per Facilities Asset Management strategy.

Reduction in greenhouse gas emissions due to efficiencies of a new building and equipment/ assets.

## <u>Urban Forest Management Plan</u>

#### **Project Description**

The Urban Forest Management Plan and associated Implementation Plan identifies 181 strategic initiatives that address planning for trees, planting strategies, managing the urban forest, protecting the urban forest, and reimagining the urban forest.

#### **Total Capital Estimate**

2 million to 5 million.

#### Overview of potential non-city funding sources

The UFMP has several federal funding opportunities including Natural Infrastructure Fund and 2 Billion Trees - which if successful have the potential to start or expand the scope of specific initiatives. We anticipate other Federal opportunities in addition to internal funding sources to further initiatives in the Plan.

#### **How does this Project Address Council Priorities?**

Reconciliation, Equity, Diversity, and Inclusion

Reimagining the Urban Forest, a section in the Plan, connects the urban forest to REDI objectives in the Strategic Plan. By way of example two short term initiatives include connection to the urban forest through Traditional Land Use and Knowledge Assessment partnering with Green Pathways and a review of the urban forest from a reconciliation, equity, diversity, and inclusion lens to create a variety of safe and inviting urban forestry spaces, activities and partnerships.

#### **Downtown Development**

The Plan supports downtown development primarily through action 3.3 'Develop an enhanced service level for urban forestry in the Business Improvement Districts'. The plan identifies challenges to maintaining trees in Business Improvement Districts, data collection, and enhanced service levels that are likely to increase survivorship of trees in these commercial areas.

#### **Environmental Sustainability**

The urban forest is a critical piece of green infrastructure that provides connection between other green spaces, stores carbon and continues to sequester more carbon annually, reduces energy use through shading and providing a wind break, reducing flooding and soil erosion, improving air quality, and decreasing stormwater runoff. The Plan looks to enhance the benefits the urban forest by more effectively managing existing trees and creating opportunities for more tree planting.

#### **Economic Development**

Trees provide many economic benefits including

- Enhanced commercial activity by providing attractive and safe environments in treed commercial areas, which are positively correlated with increased purchasing activity. o Action 1.2 addresses tree planting in Industrial, Commercial, and Institutional and multiresidential units by exploring opportunities for more trees through the landscape guidelines and other incentives.
- Increasing property values: multiple studies demonstrate that the presence of mature trees can increase the value of a range of property types and can reduce the time-on-market for listed properties.
- o Supported by several initiatives in the Plan but most notably a tree protection bylaw, standards and specifications which will retain more trees in established areas.

- Reducing infrastructure costs by offsetting the need for, or complementing, the functions of traditional infrastructure systems and, if properly situated, reducing wear-and-tear on infrastructure elements such as pavement.
- o Supported by several initiatives but most notably those that impact mature trees including the tree protection bylaw, standards and specifications

Community Safety and Wellbeing

Trees promote physical health and wellbeing by encouraging outdoor recreation and active transportation, protecting cardiovascular health by removing air pollutants, sheltering against the harmful effects of UV radiation through shading, and reducing heat stress.

Trees also improve psychological wellbeing through promoting nature connection and reducing stress levels. Trees strengthen community connections by enhancing neighbourhood aesthetics, providing spaces for social interaction, and fostering strong sense of community.

#### How does this project address Core Services & Operational Priorities?

The Plan addresses several key actions in civic assets, for example:

Action 3.4 works towards the integration Fusion into the tree work order management system and the key action of enhancing the City's enterprise asset management processes to improve predictive maintenance, operational efficiency, asset reliability and overall decision making; and
Action 4.7 develop a formalized asset valuation approach for trees which relates to continuing to refine the Corporate Asset Management System.

The Plan impacts quality of life and the respective key actions through enabling an environment where everyone can enjoy the benefits of green spaces and continue to provide high quality essential services and programs that enable the public to safely engage in everyday life. This is exemplified by Action 3.1 developing planting and maintenance plans for areas that do not have them which identifies key areas that lack specific management plans or well-defined service levels including golf courses, Forestry Farm Park and Zoo, afforestation areas and the river valley.

#### **How does this Project address Corporate Transformational Change?**

Implementation of the Plan will achieve a closer connection with the objective of the Official Community Plan 'to protect the urban forest through sustainable practices, including new planting and the protection and maintenance of existing trees throughout the City' which strengthens the corporate sense of direction.

The Plan identifies data sharing primarily access to the tree inventory as being critical in implementing many of the goals. Key actions within efficiency and effectiveness highlight the need to improve accuracy and transparency in reporting and improve our ability to share data across work groups.

#### How does this project mitigate Corporate Risk?

A better managed urban forest is more resilient to the impact of climate change but additionally the urban forest can help to mitigate the impact of climate change to our community. Mitigation occurs in both the short term

- through intercepting or absorbing rainwater from intense storms
- prevent erosion
- reducing the effects of extreme heat, and longer term
- sequestering and storing carbon.

The urban forest also provides habitat and connectivity between green spaces to mitigate threats to biodiversity.

#### What is the impact if this project is delayed?

The Plan lays out a series of interconnected initiatives that lead to a better managed urban forest. The urban forest is under significant pressure from changing conditions included inconsistent precipitation, insects, diseases, heat stress and limited diversity. Other difficult to quantify, without action it is likely that the urban forest will continue to degrade in quality.

#### What is the impact if this project is not funded by 2035?

With significant delays it is unlikely that the urban forest will be able to achieve significant goals like increase canopy cover to 15-20%.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The Plan alters many aspects of the Urban Forest which will dramatically shift current practices and has the potential to significantly alter the amount of carbon sequestered and stored in addition to dramatic reduction in energy use primarily through shading and providing wind break.

### What are other Triple Bottom-Line Co-Benefits?

The urban forest conserves water and improve water quality through uptake and storage of water, filtration as trees use water, slowing water from entering the stormwater system thereby decreasing pollution. Trees remove air pollutants including ozone, carbon monoxide, sulfur dioxide, nitrogen oxides and particulates and support ecosystems through the provision of habitat and connectivity between other types of green infrastructure.

Trees promote physical health and wellbeing by encouraging outdoor recreation and active transportation, protecting cardiovascular health by removing air pollutants, sheltering against the harmful effects of UV radiation through shading, and reducing heat stress.

Trees also improve psychological wellbeing through promoting nature connection and reducing stress levels.

Trees strengthen community connections by enhancing neighbourhood aesthetics, providing spaces for social interaction, and fostering strong sense of community.

### **Independent Office of the Representative of the Matriarch**

#### **Project Description**

In December of 2020, an RFP was issued for a consultant to prepare a report and recommendations on the City's response to the National Inquiry on Missing and Murdered Indigenous Women and Girls and Two Spirit (MMIWG2S) Calls for Justice. Hope Restored Canada's Report to Council in July 2021 was the IWG2S: Coming Home Report that recommended "listen to the aunties". It includes 3 phases as follows:

- 1) Laying the Groundwork and Hiring the Representative of the Matriarchs.
- 2) Indigenous Women and Girls and Two Spirit (IWG2S) Women's Centre.
- 3) Extend Role to Become an Officer of Accountability and Transparency.

This project is the implementation of the recommendation.

## **Total Capital Estimate**

2 million to 5 million.

#### Overview of potential non-city funding sources

There is no specific program that has been identified yet.

#### **How does this Project Address Council Priorities?**

This work aligns with advancing Council's priorities of Reconciliation, Equity and Inclusion. Creating an independent Office of the Representative of the Matriarchs provides Indigenous women with a voice, power, authority and an ability to be included in decision-making. Working with the community to identify next steps in the implementation of the MMIWG2S report recommendations is a key action listed under the REDI priority area.

It also aligns with Community Safety and Well-Being. Safety, security and trust were the key themes identified in IWG2S: Coming Home. The establishment of the Representative of the Matriarchs and the IWG2S are solutions to creating community safety and well-being.

Healthy Indigenous women means healthy families. That in turn means inclusion in business, education, health care, business and all the components that make up the City of Saskatoon. As a result, it aligns with the strategic priority of economic development as well.

And lastly, the Matriarch and the Women's Centre will work to ensure equitable access to Recreation, Culture and Leisure.

#### How does this project address Core Services & Operational Priorities?

The Matriarchs and the Women's Centre will coordinate, refer, support, review, evaluation, assess, decide, investigate, and advise and create a hub to ensure delivery of excellent services aligned with the needs of IWG2S and will improve the ability to meet the dynamic needs of IWG2S.

It will also work to ensure the safety of IWG2S and basic services are provided contributing overall to quality of life.

#### **How does this Project address Corporate Transformational Change?**

The development of an independent Office of the Representative of the Matriarchs with power and authority is transformational. It will ensure that diverse community voices are engaged and heard; voices that are currently under-represented. It supports the implementation of City Council's priority on REDI.

## How does this project mitigate Corporate Risk?

It increases trust and confidence in the City. We would be following through to build on the City's initial commitment of funding.

There are high expectations from the Indigenous and non-Indigenous community that the City of Saskatoon provide bold leadership and make significant changes as it relates to safety, security and trust of IWG2S.

If we don't do this project, we will not be responding to a recommendation in a report that states we should be creating spaces like this to further advance reconciliation at the City.

#### What is the impact if this project is delayed?

If the decision is to delay, the risk is that it will be viewed by the Indigenous community that the City is not fulfilling its commitment or that the City is not authentic in its commitment to Missing and Murdered Indigenous Women and Girls and Two Spirit and the National Inquiry's Calls for Justice.

There are high expectations from the Indigenous and non-Indigenous community that the City of Saskatoon provide bold leadership and make significant changes as it relates to safety, security and trust of IWG2S. If we only provide commitment to.

Lack of action means that IWG2S continue to go missing and murdered which is unacceptable. Indigenous women and girls are 12 x more likely to be missing or murdered than any other women in Canada.

## What is the impact if this project is not funded by 2035? See question above.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact? The City of Saskatoon does not currently focus on providing Indigenous women with voice and authority so this would be a transformation. The project is meant to work with partners and community organizations to improve upon service delivery.

#### What are other Triple Bottom-Line Co-Benefits?

This work aligns with advancing Council's priorities of Reconciliation, Equity and Inclusion. Creating an independent Office of the Representative of the Matriarchs provides Indigenous women with a voice, power, authority and an ability to be included in decision-making. Working with the community to identify next steps in the implementation of the MMIWG2S report recommendations is a key action listed under the REDI priority area.

It also aligns with Community Safety and Well-Being. Safety, security and trust were the key themes identified in IWG2S: Coming Home. The establishment of the Representative of the Matriarchs and the IWG2S are solutions to creating community safety and well-being.

Healthy Indigenous women means healthy families. That in turn means inclusion in business, education, health care, business and all the components that make up the City of Saskatoon. As a result, it aligns with the strategic priority of economic development as well.

And lastly, the Matriarch and the Women's Centre will work to ensure equitable access to Recreation, Culture and Leisure. Culture and support from Elders and knowledge keepers are an important component.

## <u>Forestry Farm Park and Zoo: Barn Replacement and Master Plan</u> <u>Components</u>

#### **Project Description**

This project involves the replacement of the barn building that is used as an animal habitat attraction. Facilities Department based on their most recent building assessment have determined it is near end of life and in addition, it does not meet current CAZA standards for animal holding and exhibits. Other components related to the Master Plan involve the construction of a new concession building, bear habitat, and wolf habitat. These were identified and approved in the Recreation and Parks Master Plan- Facilities Game Plan and have approved funding of \$1,850,000 in place. Costs and requirements for animal habitats have escalated and additional funding is required. These projects also receive funding from private contributions from the Saskatoon Zoo Foundation.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

Saskatoon Zoo Foundation raises funds for capital improvements to the facility. To date they have raised approximately \$1.0M for bears/wolf. The Zoo Foundation is projecting that they can raise an additional \$400K towards the barn and another \$2.0M to \$2.5M for bear/wolfs.

#### **How does this Project Address Council Priorities?**

Recreation facilities and programs are accessible, inclusive and meet changing community demand and needs needs. This project meets the demand of a growing city for recreation, continues to implement the Recreation Facilities Game Plan regarding development of new and improved recreation facilities. The upgrades and improvements to the SFFP&Zoo would improve the facility, maintain it as one of the most popular tourist attractions in the province, provide access for residents to experience seeing animals that they would not otherwise be able to. In addition, the facility contributes to conservation and the protection of endangered animals. The partnership with the Saskatoon Zoo Foundation provides other funding opportunities for capital development thus leveraging city funds. For REDI, the upgrades to the facility will be a supports spaces where all community members and residents feel safe and welcomed and would incorporate indigenous consultation and participation into the project.

#### How does this project address Core Services & Operational Priorities?

As a civic asset, the improvements to the SFFP&Zoo including new buildings would be constructed as HPCBP that would be energy efficient and designed for long-term resilience, ensuring the City is prepared to mitigate current and future contributions to climate change. The City would have access to safe, adequate facilities and equipment necessary to deliver established levels of service. For equitable/accessible services, the improved facility would enhance the equity and accessibility of recreational services meeting the needs of a diverse public. As a major project, the goal would be to achieve best value thru procurement and the opportunity increased procurement from Indigenous suppliers and diverse groups. The key outcome for this project is Quality of Life as City facilities and programs, infrastructure and essential services meet established levels of service and support a high-quality of life for the physical and mental wellbeing of our residents that is supported by access to indoor and outdoor recreational attractions. This facility would continue to be an inclusive public space that provides the opportunity to bring people together and experiences not otherwise available anywhere in the province.

#### **How does this Project address Corporate Transformational Change?**

None.

#### **How does this project mitigate Corporate Risk?**

The risk that zoo facilities will not be able to maintain existing service levels and continue to be one of the most popular tourist attractions in the City. Reputation of the City in maintaining its assets and recreational opportunities for residents.

#### What is the impact if this project is delayed?

The barn and current concession are at the end of their useful life based on building assessments conducted by Facilities and need to be replaced in the next 2-3 years otherwise they will not be able to be used and service levels would be reduced. Bear and Wolf habitats need to be upgraded to new standards as primary attractions that support revenues from admissions and meet/exceed CAZA standards.

#### What is the impact if this project is not funded by 2035?

The barn and concession would not be able to be used and as such service levels would be reduced as well as a reduction in usable animal habitats. Future CAZA accreditation and standards may not be able to meet for the bear and wolf enclosures that would result in loss of species/attractions and therefore reduced revenue as a popular tourist attraction and could affect possible accreditation which is essential to continue to operate the zoo.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

This project significantly improves the attractions (animal habitats and animal care facilities) at the SFFP&Zoo along with maintaining/exceeding existing service levels. The ongoing partnership with the Zoo Foundation provides leveraged funding to support these upgrades. In addition, this project supports the continued goal of CAZA accreditation.

#### What are other Triple Bottom-Line Co-Benefits?

As a new facility with support buildings, these would be designed as a HPCB and meet criteria that would ensure a high standard of energy efficiency and environmental sustainability. For REDI, the SFFP&Zoo provide spaces that are inclusive, free of discrimination, move to universal access, the TRC calls to action for access to recreation, and will enable residents from a wide range of economic levels to access thru our low-cost admissions. In addition, as new outdoor spaces are designed, consultation with the indigenous community would occur. Recreation is proven to improve physical, mental, emotional and spiritual wellbeing and this facility would support that for all residents. The capital project would support the local economy not only by work for development of the new facilities as a major capital project as well as the continued tourism dollars generated by the popularity as a key attraction in the city.

## <u>Urban Ceremonial Spaces</u>

#### **Project Description**

The objective is to develop urban ceremonial spaces in the City of Saskatoon and area where Indigenous people can practice their diverse cultures and traditions, allow for cultural revitalization, teaching and learning and contribute to well-being for Indigenous people in the City of Saskatoon.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

There is no specific program that has been identified yet.

#### **How does this Project Address Council Priorities?**

Increasing the number of ceremonial spaces in the City and area means working with the community to identify next steps in implementation of TRC Calls to action and implementation of MMIWG2S report recommendations. It also creates spaces where all community members feel safe and welcomed to ensure cultural identities and living experiences are reflected in the community.

It is consistent with the importance of culture and language outlined in the Truth and Reconciliation Commission Calls to Action;

It meets Missing and Murdered Indigenous Women and Girls and Two Spirit National Inquiry Call for Justice #2.3; and

it responds to many of the Articles in the United Nations Declaration on the Rights of Indigenous Peoples which reinforce the importance of culture and language and revitalization. An Urban Ceremonial space(s) supports key actions within Council's Priority of REDI, Reconciliation, Equity, Diversity and Inclusion, - spaces that reflect cultural identities and are welcoming, as well as Indigenous and more inclusive placemaking.

Also Supports the Priority area of Community Safety and Wellbeing.

Additionally, a report that was prepared by the Office of the Treaty Commissioner for the City of Saskatoon on assessing and advancing the City of Saskatoon's journey towards, truth, reconciliation and Treaty implementation in January 20, 2021 recommended to:

Increase the number of spaces dedicated for Ceremony within the City of Saskatoon. Ensure these spaces are adequate and properly resourced.

Having ceremonial spaces will also contribute to addressing social challenges allowing people to practice their culture and language means greater well-being and connection to community.

#### How does this project address Core Services & Operational Priorities?

Equitable and Accessible Service - leaving the city to go back to home communities/reserves is not an option for many people who can't afford it or don't have the transportation. Having ceremonial spaces here in the City makes it more accessible.

Quality of Life: having ceremonial spaces will allow people to practice their culture and language here in the city and contribute to wellbeing and connection to community.

#### **How does this Project address Corporate Transformational Change?**

Customer-centric - having ceremonial spaces for Indigenous people is responsive to the diverse needs.

People and Culture - this project supports the implementation of the Council priority of REDI.

#### How does this project mitigate Corporate Risk?

There is reputational risk if the City does not invest in projects such as this since the idea of creating spaces to improve wellbeing and inclusiveness is threaded throughout the 2022-2025 Strategic plan. If this is the only project proposed of this nature, and the decision is not to proceed the risk is that it will be viewed by the indigenous community that the City is not fulfilling its commitment to reconciliation. If we don't do this project, we will not be responding to a recommendation in a report that states we should be creating spaces like this to further advance reconciliation at the City. There are also multiple partners on this project (SHA, Wanuskewin, USask, MVA,) so if we don't provide a contribution, it may harm relationships with these partners.

#### What is the impact if this project is delayed?

The need for cultural and ceremonial spaces continues to increase as people start to heal from intergenerational trauma. Many individuals and families are not able to travel back to their home communities so access to culture is an issue.

The loss of culture and language with the loss of our Elders, ceremonialists and knowledge keepers is also becoming more and more of a concern. If we don't allow for spaces for teaching and learning, certain practices and knowledge may be lost forever.

#### What is the impact if this project is not funded by 2035?

The need for cultural and ceremonial spaces continues to increase as people start to heal from intergenerational trauma. Many individuals and families are not able to travel back to their home communities so access to culture is an issue.

The loss of culture and language with the loss of our Elders, ceremonialists and knowledge keepers is also becoming more and more of a concern. If we don't allow for spaces for teaching and learning, certain practices and knowledge may be lost forever.

If the project is not funded by 2035, many of our Elders, knowledge keepers and ceremonialists will be gone (pass away) without the ability to share and teach.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact? The City of Saskatoon does not currently provide ceremonial spaces for Indigenous people so this would be a transformation.

### What are other Triple Bottom-Line Co-Benefits?

This project contributes to the health and well-being of Indigenous people as they would be provided space to be practice their culture and be connected to each other and community. It also supports culture by allowing people to practice their culture as well as contribute to cultural revitalization.

## **Civic Conservatory Restoration and Uplift**

#### **Project Description**

The Civic Conservatory (Conservatory) has been closed to the public since September 2017 and requires significant repair prior to reopening. Options for expanding the Conservatory to help address some of the facility's accessibility challenges and provide increased programming space was proposed as part of the 2011 Kinsmen Park Master Plan and a 2016 building condition assessment.

Subsequent restoration and design options were presented to the SPC on Planning, Development and Community Services and in June 2021, Administration was provided direction, by Council, to explore the "Restoration Plus" option as well as to explore sources of external funding.

The Restoration Plus option involves renovation/restoration of the existing Conservatory with expansion to include a new enclosed glazed walkway/ramp external to the current Conservatory building to address accessibility and maintain the same approximate programmable space and service level.

Activities involved in this restoration project include:

- a. Repair or replacement of the roof.
- b. Replacement of the glazing to a more energy efficient and bird-friendly glass product.
- c. Installation of an upgraded heating and cooling system.
- d. Restoration of the walled Japanese garden adjacent to the south elevation of the Civic Conservatory. e. Repair of the east (river side) heritage brick wall.
- f. Upgrades to address accessibility of the Conservatory area.

#### **Total Capital Estimate**

5 million to 20 million.

<u>Overview of potential non-city funding sources</u>
Parks will apply for the fall 2022 Scheduled Intake of Green and Inclusive Community Buildings (GICB) Program funding. The Conservatory restoration falls under the Large Retrofit Project category and many of the activities required to restore this building fall under the grant guidelines. The federal share of the project cost would be 80%, leaving the balance to the City to cover.

Using previous cost estimates, the City's total costs associated with this project (eligible and ineligible costs) would be approximately \$1.75 million.

#### **How does this Project Address Council Priorities?**

As a Municipal Heritage building, the Conservatory is a valuable part of Saskatoon's history and was identified as an important part of the 2011 Kinsmen Park Master Plan.

The project ensures safety and wellbeing by bringing the Conservatory in line with current building codes. The Conservatory acts as a place of respite during the winter months, and through programming we can provide educational content and messaging of cultural importance.

## How does this project address Core Services & Operational Priorities?

Civic Assets

- Restoration of the Conservatory renews an important civic asset as well as improves upon it. Restoring and protecting the Conservatory, as well as updating the facility and its system allows for continued operation for many years to come. The project provides consideration for future expansion of this facility to provide more programming/placemaking/gathering space.

Equitable and Accessible Services and Quality of Life

- Located in the Kinsmen Park Master Plan, this facility refresh will include the installation of an enclosed walkway for accessibility where the current space is limited in this capacity.

The Conservatory itself is a free service to the community, within close walking distance of downtown transit services and Meewasin Valley trails. The Conservatory provides a winter respite and calming atmosphere for the enjoyment of visitors.

#### **How does this Project address Corporate Transformational Change?**

Efficiency and Effectiveness

- The Conservatory restoration will present an opportunity to improve on the building envelope, heating and cooling systems present in the facility. Potential energy savings as well as the ability to educate the public on sustainable practices support this aspect of transformational change.

#### People and Culture

- Restoration of service levels at the Civic Conservatory will provide certainty and stability for the staff in the Parks Greenhouse program who maintain the plant materials at this amenity. The project represents the Corporate Value of People Matter to these staff, as they feel the Conservatory is an important part of their work.

#### How does this project mitigate Corporate Risk?

Re-opening of the Civic Conservatory will:

- Mitigate the risk of potential harm associated with catastrophic failure of either the roof or glass/glazing of the Civic Conservatory.
- Meet Council's expectations of restoration of previous service levels.
- Improve on the public image of a Municipal Heritage building being closed to the public for an extended period of time.

#### What is the impact if this project is delayed?

If the restoration project is deferred, the following impacts will occur:

- Delays to securement of internal funding puts us at high risk of denial of our GICB grant application which relies heavily on this criterion.
- The service level of the Conservatory will remain unmet.
- The facility will continue to require maintenance to keep it from further deteriorating.
- Existing glass/glazing sides and the roof on the Conservatory have long exceeded their life cycle.
- o The roof of this building does not meet current building code and must be replaced to ensure safety. The roof shows signs of UV damage and leaking. Servicing and maintaining the roof structure is not feasible due to lack of proper tie-offs and/or guard rails, thus the risk of significant failure is possible with no way of forecasting the event.
- o Further study is required; however, it is unclear whether the glass/glazing on the Conservatory is adequately reinforced to withstand current design wind-loads. There is a risk of catastrophic failure with no way of forecasting the vent.
- The closure of the Conservatory has shelved a significant portion of the Greenhouse portfolio. Delaying funding will leave allocated staff and resources in limbo.

#### What is the impact if this project is not funded by 2035?

- A minimum of 18 years during which the Conservatory will be closed to the public.
- Indefinite timeline to secure external funding sources.
- Further risk of catastrophic failure to the structure.
- Continued budget dollars contributing to ongoing maintenance and repair required to keep the building safe.
- Missed opportunities for this space to be used in placemaking activities and public awareness and education around both Indigenous plantings and sustainable planting activities.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact? Restoration of this Municipal Heritage building will return service levels to the norm. The ability to use this building will also bring opportunities for the City to introduce programming related to planting, sustainability, art, culture or otherwise, thereby advancing Heritage, Art and Culture in the community.

#### What are other Triple Bottom-Line Co-Benefits?

Conserve Energy or Reduce GHGs

- Upgrading the building envelope (glazing walls and roof/skylight system) and mechanical systems to current standards could result in up to a 70% reduction in fuel consumption.

Reconciliation, Equity, Diversity, and Inclusion

- Design elements and placemaking will play a significant factor in the design of the restored Conservatory. The facility, through the implementation of indigenous plantings, art, design and placemaking can play an important role in Reconciliation and DEI in the community and create a safe and inclusive space. The addition of accessibility features will also contribute to this benefit.

# <u>Leisure Centres and Outdoor Pools Accessibility and Inclusivity Upgrades</u>

#### **Project Description**

SEPW Architecture Inc. was commissioned in late October 2021 to assist the City of Saskatoon with a review of the existing conditions in key locations at three aging leisure facilities: Lathey Pool, Lakewood Civic Centre and Lawson Civic Centre. These facilities were to be reviewed in the context of accessibility and gender inclusivity only.

The review of all three facilities suggested recurring issues at each location. On the exterior of all three facilities, the parking did not meet the identification requirements of the Facility Accessibility Design Standards (FADS); access from parking stalls to the sidewalks was difficult and provided as an afterthought. All three facilities had concerns regarding their entrances and the accessibility of transaction counters. On the interior of all facilities, the primary concern was regarding access and inclusivity of the washroom and changing facilities.

Barrier-free accessibility in these facilities no longer meet the requirements of the current National Building Code of Canada. The locker rooms at all facilities offered no individual or private changing options to patrons of the gendered locker rooms. Both Lakewood and Lawson have existing "family" change rooms that are meant to provide inclusivity options, but access corridors are restrictive, and the rooms provided do not meet suggested sizes provided in the FADS guidelines.

The intent of this project would be to address the prioritized accessibility and inclusivity issues identified in these facilities. Future Predesign studies and upgrade projects will also need to be completed on remaining Leisure Centres and Outdoor Pools.

The SEPW report is available upon request.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

No funding has been awarded, but it is likely that both Federal (GICB), Provincial and/or Private funding opportunities would be available and would be explored.

#### **How does this Project Address Council Priorities?**

Recreation facilities and programs are accessible, inclusive and meet changing community demand and needs. This project meets the demand of a growing city for recreation, continues to implement the Recreation Facilities Game Plan regarding development of new and improved recreation facilities. These facilities will reduce barriers, improve access, and increase participation in recreation facilities and programs. For REDI, these upgraded facilities will be a space where all community members and residents feel safe and welcomed and would incorporate indigenous consultation and participation in public engagement processes and activities. For Economic Development, improving accessibility/inclusivity would enhance existing facilities to attract events, visitors and business opportunities. With the replacement of the changeroom/ washroom assets in these buildings to an accessible plan, we will have the ability to replace the aging infrastructure with more efficient components that will save energy and water.

How does this project address Core Services & Operational Priorities?

The City would have access to safe, adequate facilities and equipment necessary to deliver established levels of service. For equitable/accessible services, these upgraded facilities would enhance the equity and accessibility of recreational services meeting the needs of a diverse public. As a major project, the goal would be to achieve best value through procurement and the opportunity for increased procurement from Indigenous suppliers and diverse groups. In addition, to being able to advance the implementation of the Triple Bottom Ling Policy to support sustainable procurement. The key outcome for this project is Quality of Life as City facilities and programs, have a significant impact on an individual's physical and mental health.

#### **How does this Project address Corporate Transformational Change?**

This project will allow the City to improve established levels of service and to continue to provide a quality/improved customer experience for all residents. This project would support the implementation of Council's priority on Reconciliation, Equity, Diversity and Inclusion.

With the replacement of the aging infrastructure related to the upgrades required for accessible and inclusive washrooms/ changerooms, there will be increased efficiency in the new infrastructure installed.

#### How does this project mitigate Corporate Risk?

It mitigates the following risk - the risk of not being able to meet current standards for accessibility/inclusivity of Leisure Centres and outdoor pools.

#### What is the impact if this project is delayed?

Service levels will be impacted as the accessibility/inclusivity of these facilities does not meet current standards. The current washroom and change room facilities do not have gender neutral/universal options and do not meet current user needs.

A delay may result in increased capital costs for the project.

#### What is the impact if this project is not funded by 2035?

Service levels will be impacted as the accessibility/inclusivity of these facilities does not meet current standards. The current washroom and change room facilities do not have gender neutral/universal options and do not meet current user needs.

A delay may result in increased capital costs for the project.

No additional funding for the project will result in delays in providing proper service levels to all residents of Saskatoon and delay our civic responsibility in providing inclusive, diverse and accessible services to our residents.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

This project would improve the accessibility/inclusivity service level of Outdoor Pools and Leisure Centres within the City of Saskatoon. It also facilitates opportunities for people to engage in sports and visit Leisure Centres/outdoor Pools.

#### What are other Triple Bottom-Line Co-Benefits?

For REDI, enhancing the accessibility/inclusivity of outdoor pools and Leisure Centres would provide spaces that are inclusive, free of discrimination, move to universal access, the TRC calls to action for access to recreation, and will enable residents from a wide range of economic levels to access through our Leisure Access programs. Recreation is proven to improve physical, mental, emotional and spiritual well-being and this facility would support that for all residents. The City's outdoor pools/Leisure Centres are facilities that are mandated to provide affordable access to recreation by support from the mill rate and accessible programs that

maintain access for all and support for low-income households. Outdoor pools provide that added benefit of access to outdoor water play in the summer for residents that do not have other options as well as opportunities for cool down activities to beat the summer heat. With the replacement of the changeroom/ washroom assets in these buildings to an accessible plan, we will have the ability to replace the aging infrastructure with more efficient components that will save energy and water.

#### **Permanent Outdoor Festival Site**

#### **Project Description**

The City of Saskatoon has identified the need for a permanent outdoor festival site to assist festivals and events with their programming while also protecting existing green infrastructure from reoccurring damage. The Permanent Outdoor Festival Site concept showcases responsive improvements which address the top priorities provided through stakeholder and public engagement data, accessible washrooms, provision of utility services and redesigning Friendship Park to allow for increased capacity of up to 7,500 spectators for an event. In addition, changes to slopes and surfaces provide optimization and efficiency for event operation as the Main Stage Plaza allows for various sizes of staging to be accommodated. It will also provide physical accessibility to the area and significantly reduce the impact on green infrastructure.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

It is likely that future external funding opportunities will be available to support this type of work. However, a source of City capital is required in order to leverage external grant dollars.

#### **How does this Project Address Council Priorities?**

**Economic Development** 

- Work with community partners to enhance existing facilities/venues to attract events, visitors and business opportunities that generate significant economic benefits in a post-pandemic world. This includes advancing the vision of a vibrant Downtown Event & Entertainment District.
- Review and develop appropriate strategies and policies for growing the arts and culture sector

#### Recreation Culture and Leisure

- Continue to implement the Recreation and Parks Facilities Game Plan regarding development of new and improved recreation facilities. Support the vision of a vibrant Downtown Event & Entertainment District.
- Develop and enact plans to reduce barriers, improve access and increase participation in recreation facilities and programs.
- Support the Winter City Strategy through providing a variety of activities which bring people outside in the winter and establishing a location to host a diverse range of social and cultural events and festivals that spark interests and build community spirit.
- Explore sponsorship and other funding opportunities for existing and new facilities and programs.

#### Downtown Development

- Develop vibrant public spaces that are welcoming and accessible to everyone.
- Continue to encourage increased exploration of the City Centre, including River Landing, Downtown Event & Entertainment District, and Meewasin Trail.
- Develop a plan to provide adequate public gathering spaces for a thriving Downtown residential community.
- Expand and improve the pedestrian experience as a top priority for the Downtown.

#### **Environmental Sustainability**

- Integrate Triple Bottom Line (TBL) considerations (environmental, social, economic, governance) into decision making and budgeting processes.
- Implement actions in the Green Infrastructure Strategy and Implementation Plan within

proposed timeframes.

• Develop strategies and practices to ensure the environment is protected from damage and, where possible, ecosystems are enhanced.

#### Transportation

• Deliver the BRT implementation plan to support the vision of a vibrant Downtown Event & Entertainment District with an efficient and reliable mass transit system

#### How does this project address Core Services & Operational Priorities?

Quality of Life

Create an enabling environment where everyone can enjoy the benefits of the City's core services, including green spaces, civic facilities and programs.

Continue to provide high quality essential services and municipal programs that ensure quality of life and enable the public to safely engage in everyday life.

Saskatoon events and festivals are important to everyday quality of life and contribute to the vibrancy of outdoor recreational activities.

In alignment with WintercityYXE Action Plan, the Permanent Outdoor Festival Site will promote street activation in the public realm, provide a variety of activities which bring people outside in the winter and establishing a location to host a diverse range of social and cultural events and festivals that spark interests and build community spirit.

#### **How does this Project address Corporate Transformational Change?**

Efficiency and Effectiveness - Our ability to proactively respond to opportunities and challenges, while managing risk and organizational change, is enhanced.

#### **How does this project mitigate Corporate Risk?**

By creating a permanent outdoor festival site to assist festivals and events with their programming while also protecting existing green infrastructure from reoccurring damage. The impact on existing green infrastructure (trees & turf damage - soil compaction, turf wear & thinning of the tree canopy);

Impacts to tourism without having a proper venue to host large outdoor events.

#### What is the impact if this project is delayed?

Impact if project is delayed - capital cost increases; impact on existing green infrastructure (trees & turf damage - soil compaction, turf wear & thinning of the tree canopy); impacts in tourism without hosting large outdoor events

#### What is the impact if this project is not funded by 2035?

Outdoor festival venue priority identified in the Recreation and Parks Master Plan and Facilities Game Plan will not be achieved.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Saskatoon has identified the need for a permanent outdoor festival site to assist festivals and events with their programming while also protecting existing green infrastructure from reoccurring damage. This will enhance the Recreation and culture activities in the downtown. The Permanent Outdoor Festival Site showcases substantial improvements which address the top priorities provided through stakeholder and public engagement data. Encouraging and supporting festivals will continue to play a significant role in the cultural, recreation, social, and economic life of the city.

<u>What are other Triple Bottom-Line Co-Benefits?</u>
The project supports initiatives and infrastructure that enable active transportation as site selection placed a priority on active transportation, transit and using existing parking supply. This included the accommodation of BRT planning, transit connections and bike valet services.

The project supports the reduction of environmental nuisances such as noise and pollutant generators by developing utility nodes, a stage plaza designed to minimize sound reverberation and proposed odor mitigation from the lift station.

#### **Parks Cemetery Master Plan Implementation**

#### **Project Description**

Woodlawn Cemetery, as the City's only active burial site, is approaching an important threshold. Much of the current internment inventory at Woodlawn is in limited supply, and as the city grows, Woodlawn will experience increasing demand for cemetery services. The Cemetery Master Plan (Master Plan), approved in principle by City Council in early 2022, outlines an implementation plan for developing remaining lands and planning for future cemetery lands in a way that responds to the needs of the City.

This project identifies the capital funding that will be required to support the various aspects of the implementation of the Master Plan over the next 10 years.

This project also includes the planning, detailed design, assessment, and procurement of approximately 40 acres of land associated with the new municipal cemetery for future cemetery operations. Once open the new cemetery would sustain burial services over the next 125-150 years.

The Master Plan provides financial forecasts identifying that the Woodlawn Cemetery will begin to exceed its Operating Break-Even Point realizing consistent profits within the next 3 to 10 years. Implementation of the capital improvements outlined within the Master Plan will accelerate the timelines associated with Woodlawn achieving a fully funded status. A Capital Development Fund will be initiated to hold future profits to help fund future land development, land acquisition, infrastructure improvements and extraordinary capital asset purchases for cemetery operations.

#### **Total Capital Estimate**

2 million to 5 million.

#### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

#### **How does this Project Address Council Priorities?**

Intrinsic values of Woodlawn Cemetery include:

- Honouring veterans,
- creating places of communal grief and mourning,
- places for our diverse society to celebrate their dead and honour those anniversaries,
- provision of additional green space to the City's urban parks and open space system,
- · contribution to the City's urban forest, and
- provision of places of quiet contemplation and solace.

#### How does this project address Core Services & Operational Priorities?

Woodlawn Cemetery provides a key service for the community. This includes providing a plot and burial services free of cost to an indigent person (Indigent: describe a person(s) who, at the time of need, do not have sufficient funds, assets, credits or other means to provide payment for interment services and other necessary end-of-life expenses).

#### **How does this Project address Corporate Transformational Change?**

Customer – centric Service Delivery – the implementation of the Master Plan will ensure that Woodlawn is able to efficiently and effectively provide the burial and memorial services that future generations of residents of Saskatoon and surrounding regions will require.

Efficiency and Effectiveness – implementation of the Master Plan will provide the proactive planning, and capital investment required overtime to ensure that effective and efficient service

provision can be sustained as the business continues to expand and meet the needs of a growing community and region.

#### **How does this project mitigate Corporate Risk?**

Without implementation of the Master Plan, there is a risk of future financial losses and reduced levels of service occur at the Cemetery in the future.

#### What is the impact if this project is delayed?

The development of new burial lands, cremation gardens, green burials and other infrastructure improvements such as replacing the end-of-life irrigation system and improving wayfinding will not be completed and would result in status quo revenues and in the case of a required irrigation upgrade a reduced level of aesthetic service to the community.

#### What is the impact if this project is not funded by 2035?

In addition to the above statement, future cemetery services would be jeopardized due to the lack of land securement to support future interment requirements. It generally takes 6-8 years from the time the process of searching for new burial lands begins to the cemetery being able carry out the first interments. Given it is estimated that Woodlawn Cemetery has approximately 25 years (2045) of traditional in-ground burial inventory left to sell, the process of acquiring and developing new burial land should not begin later than 2030 to allow a 5-year overlap in supply, and time to transition managing the new site (as well as Woodlawn Cemetery).

What is the Triple Bottom Line Primary Indicator this project addresses and its impact? Implementation will improve the health and wellbeing of our citizens through quality memorialization offerings.

#### What are other Triple Bottom-Line Co-Benefits?

- Water Conservation through replacement of the irrigation system with a more efficient one
- Reconciliation: As part of long-term relationship building objectives, create a forum that includes Indigenous, ethnic and faith-based representatives for ongoing engagement and collaboration on a range of projects that will come forward from this master plan. Address Truth and Reconciliation Commissions Call to Action #57 and #79, for example:
- o Include Treaty 6 and Métis Nation flags along with the Canadian national and Provincial flags at the Soldiers' Cairn in recognition of contributions of Indigenous soldiers to Canada's war efforts.
- Heritage: Woodlawn Cemetery is of great value to the community from a heritage perspective such as the Field of Honour and Next-of-Kin-Memorial Avenue.
- Efficient and Effective Asset Management: Our only public cemetery needs to be maintained and invested in for it to continue to provide the crucial service that is expected of it.

#### **Civic Infrastructure Priorities**

#### **Downtown Arena/Convention Centre**

#### **Project Description**

Includes the detailed design and construction of a new arena and new or expanded convention centre in Downtown Saskatoon as part of a new Downtown Event and Entertainment District.

#### **Total Capital Estimate**

Over 150 million.

#### Overview of potential non-city funding sources

The goal is to fund the project with little to no increase in property taxes. It is intended to rely on grant funding from other orders of government in addition to alternative revenue streams expected to include Tax Increment Financing, Private Partner Contributions, and Hotel/Bed Tax at a minimum. Additional alternative tax tools are also being evaluated.

#### **How does this Project Address Council Priorities?**

REDI #8 - Incorporate Indigenous and more inclusive placemaking into City infrastructure projects and naming of civic assets. Support the vision of a vibrant Downtown Event and Entertainment District.

ED #5 - Work with community partners to enhance existing facilities (or venues) to attract events, visitors and business opportunities that generate significant economic benefits in a post-pandemic world. This includes advancing the vision of a vibrant Downtown Event and Entertainment District.

RCL #5 - Continue to implement the Recreation and Parks Facilities Game Plan regarding development of new and improved recreation facilities. Support the vision of a vibrant Downtown Event and Entertainment District.

DD #1 - Develop a comprehensive plan for the Downtown Event and Entertainment District, with vibrant public spaces that are welcoming and accessible to everyone. This work spans several of Council's priorities and will be a collaborative effort.

DD #12 - Explore implementation of a downtown parking authority to optimize parking options and availability.

#### How does this project address Core Services & Operational Priorities?

CA - Design of the new facilities will incorporate improvements over the existing facilities that support TBL considerations.

QoL – The new facilities will create an enabling environment for everyone to enjoy the event and entertainment hosted by these facilities, including enhanced public realm and plaza space within the District.

#### How does this Project address Corporate Transformational Change?

None.

#### **How does this project mitigate Corporate Risk?**

This project would reduce the risk of lost revenue due to event and entertainment organizers flying over Saskatoon to other destinations.

#### What is the impact if this project is delayed?

Revenue generation at the existing SaskTel Centre and TCU Place is expected to decrease over time as these facilities become less competitive at attracting events to the Saskatoon market.

#### What is the impact if this project is not funded by 2035?

Major arena and convention centre facilities could be constructed by another competing city in Saskatchewan, potentially pulling major event and entertainment markets away from Saskatoon for decades.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The existing SaskTel Centre and TCU Place are reaching the end of their useful service lives. The construction of a new Downtown arena and new or expanded convention centre within a new Downtown Event and Entertainment District will create the conditions for us to stimulate the economy and bring renewed energy and life to Saskatoon's Downtown.

- So young people see a strong future for themselves.
- Companies can attract talent.
- Bring world touring shows and sports experiences into Saskatoon and the Province of Saskatchewan.

#### What are other Triple Bottom-Line Co-Benefits?

The new facilities will be constructed in accordance with the High-Performance Building Standards and reduce GHG emissions and energy use through more efficient building design.

The new facilities, along with the Auditorium, provide a hub for hosting heritage, arts and culture events in Saskatoon.

The Downtown Event and Entertainment district is intended to continue to support the local economy by allowing Saskatoon to continue to be competitive in the event and entertainment hosting market, and drive further economic development through animation of the District and providing event attendees enhanced access to local restaurant, bar, retail, hotel and hospitality businesses before and after events.

#### Corporate Fuel and Fueling Infrastructure Management Project

#### **Project Description**

The scope of this project includes:

- development of a long-term strategy for the management of corporate fueling infrastructure in alignment with the City's strategy for fleet electrification by 2030;
- development of an asset management plan for all City-owned fueling infrastructure;
- decommissioning and potential replacement of City-owned fuel tanks and pumps that have exceeded their design/service life. Most of the City's fuel tanks are considered past their current useful life. The underground fuel storage tanks at the Saskatoon Light & Power, and the Vic Rempel Yards (Avenue P) sites are the top two priorities that are in contravention of current regulatory requirements. As the condition of these underground tanks is unknown and they are still in active use, they need to be removed and the sites decommissioned as they pose the greatest environmental risk. These two sites will either be decommissioned completely with alternate fueling locations being made available (other City facilities or vendor-provided cardlock sites), or decommissioned and replaced with above-ground fuel storage tanks that will be in compliance with current regulations.;
- identified maintenance work that is required at various fueling sites to bring them in compliance with the safety and regulatory requirements;
- soil testing, contamination monitoring, and reporting that is required by EMO; and
- allocation of a dedicated resource (FTE/funding approval) for the administration of a corporate fuel management program that would include monitoring of operational requirements, administration of fuel cards, tracking of fuel usage, assessment of corporate needs and risk mitigation, working with SCM to identify best procurement strategy, annual reporting, continuous improvement etc.

#### Estimated project budget:

Capital costs \$2.1 mil

2024-25 budget submission

- development of a long-term strategy for the management of corporate fueling infrastructure (assessment of future needs; assessment of the cardlock sites and fueling stations city-wide; alignment with the fleet electrification strategy; how many fuel tanks and pumps will the City need to own in the future; transition plan etc.) \$75K (capital cost)
- development of an asset management plan for the fueling structure that will be owned by the City by 2030 and beyond \$75K (capital cost)
- replacement of underground fuel tanks that have exceeded their design/service life and are corporate risks due to environmental, safety, and regulatory concerns (SLP & Ave P sites) \$1.6 mil. (capital cost)
- overdue maintenance of existing fuel pumps at various City sites approximate costs to bring existing active fueling infrastructure into compliance (hoses, nozzles, paint, small tank replacement if required, etc.) \$250K (capital cost)
- approximate costs of additional fuel card lock/reader infrastructure: \$5-10K per site \$100K (capital cost)

Operating impacts \$175K

- ongoing operating requirements (soils sampling and testing, reporting to EMO etc.) assumed \$25K annually
- dedicated corporate fuel management administrator \$100K annually (The responsibilities of this position will include the day-to-day administration of the corporate fuel program including: user training and access, providing usage reports to departments, reconciling monthly fuel usage to invoices received, ongoing maintenance and monitoring of internal system controls, working with IT and external fueling software groups to ensure software functionality for all

departments etc. This position would also work with SCM to update the corporate fuel contract, as required.)

TOTAL ESTIMATED PROJECT COSTS: \$2.1 mil capital investment and operating impacts \$175K.

#### **Total Capital Estimate**

2 million to 5 million.

#### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

#### **How does this Project Address Council Priorities?**

The risk of safety incidents or environmental impacts due to malfunctioning/ leaking fueling infrastructure or electrical issues at the sites that are embedded in the community, would be mitigated.

#### How does this project address Core Services & Operational Priorities?

Fuel and physical fueling infrastructure are critical for the functioning of all operational groups within the City. The project would ensure that all obsolete underground tanks and fueling infrastructure is either decommissioned or replaced in the short term, and in the long term properly maintained and at the right intervals. The project would also ensure that moving forward all fueling infrastructure is either replaced or decommissioned in a timely manner, that asset management principles are applied to optimize the life cycle cost of these assets, and that full compliance with the regulatory requirements is achieved.

#### **How does this Project address Corporate Transformational Change?**

This project would result in the implementation of a centralized approach to managing fuel and associated infrastructure with a dedicated resource in place. The existing decentralized approach with unclear responsibilities for inspections and environmental monitoring and reporting, and without and dedicated funding and resources to ensure timely replacements and regular upkeep, would be replaced with a centralized approach and a dedicated corporate resource who would ensure that the existing fueling infrastructure is decommissioned/replaced/maintained in a timely manner, and scaled down over time in alignment with the increase in the number of charging stations for the electrification of corporate fleet. These changes would result in more effective and effective management of fuel and fueling infrastructure across the organization.

The project would demonstrate due diligence and accountability for the assets that are essential to the City and ensure that a road map for the transition from the existing fueling infrastructure toward the required electrification infrastructure is developed.

Aside from the urgent requirement to bring the City's fueling infrastructure into compliance, having a corporate fuel management program with a dedicated administrator would result in better monitoring, tracking, and consumption data for approximately 10M litres of fuel used annually across the organization.

The cost savings realized should offset the implementation of internal control measures and the corporate fuel management program administrator FTE. For example, even a 1% improvement in the management of 10M litres of fuel at an average cost of \$1.3/l is equivalent to \$130K annually. With the implementation of the EAM module through Fusion and increased internal controls and reporting, it is estimated that this project could improve fueling efficiencies up to 5% annually, resulting in potential annual savings to the City approaching \$0.65M. Updated fuel

consumption tracking may result in other potential savings due to efficiencies gained across the organization. The transition to automated processes from manual processes, as well as increased reporting from a dedicated program administrator, should free up resources in other departments.

Increased understanding of the fuel usage and consumption rates across the organization will also help identify opportunities for the next stages of the fleet electrification strategy and transition to EVs.

#### How does this project mitigate Corporate Risk?

The project would mitigate the risk of safety incidents or environmental impacts due to malfunctioning/ leaking fueling infrastructure or electrical issues at various fueling sites, especially at the two sites where the age of the existing underground tanks is well past their expected service life.

Some of the fueling sites don't have proper controls in place to prevent fuel theft. Sites are open and can be accessed by anyone (public, ex City employees etc.). The project would mitigate this risk and ensure that proper controls are put in place for accountable use and management of the City's fuel supplies.

The project will develop a plan for bringing the current City-owned fueling infrastructure into compliance with various regulatory requirements. As of now, most of the fuel tanks and infrastructure are not in compliance with the current applicable regulations (no regular inspections, tank design life significantly exceeded/delayed replacements, unknown environmental impacts, missing permits etc.).

#### What is the impact if this project is delayed?

Many of the important safety-related deficiencies identified during an inspection that was conducted in the summer 2021 by a third-party certified petroleum inspection contractor will continue to be unaddressed and as such pose safety and environmental risks to the organization. The risk and liability associated with the continued use of underground tanks that have exceeded their expected service life will continue to increase. Aging infrastructure along with insufficient reporting and outdated information that does not meet regulatory permit requirements will continue to be a risk to the City. The physical and regulatory status of the fueling locations have varying degrees of issues. The Ministry of Environment is not actively penalizing the City for the state of our fueling infrastructure or permit status at this time, and they are willing to work with the City towards compliance. The Ministry of Environment may take a more active role in requesting that all identified issues and known environmental risks be mitigated and managed.

#### What is the impact if this project is not funded by 2035?

Increased risk that many known safety deficiencies identified at multiple fueling sites, along with underground fuel tanks that were installed in 1989/90 and 1992 and are well past their expected service lives, could result in safety incidents and expensive environmental remediation. The City would not be in alignment with the Ministry of Environment regulations. The City would not meet its mandate of providing responsible municipal governance by meeting regulatory compliance and safety standards for our fueling sites. By not performing regular maintenance work at the fueling sites, work required in the future may be more major and costly. In the absence of dedicated funding, the fueling infrastructure will likely continue to suffer from the lack of consistent and comprehensive inspections, up-to-date permitting, or appropriate monitoring plans which are currently creating safety and environmental risks for the City.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The switch to electric vehicles substantively improves upon current practises or norms and can result in a 30-56% reduction of emissions from the replacements, given the current grid emissions intensity. As the grid's renewable energy sources increase, the emission reductions will also increase. It will affect all fleet vehicle users in the corporation, require new infrastructure (charging stations), and reduce reliance on gas and diesel. If the entire fleet is switched to electric by 2030, then the City will reduce a cumulative 77,000 tonnes CO2e by 2050.

#### What are other Triple Bottom-Line Co-Benefits?

Waste reduction and diversion: With the electrification of vehicles, vehicle maintenance is reduced, which subsequently reduces the waste associated with it. For example, without the need for oil or oil changes, there is a reduction in used oil waste. With battery regeneration through braking, brake pads last longer and do not need to be replaced as often. The reduction in waste will also reduce any leachate that may contaminate surrounding ecosystems.

Support climate adaptation: in addition to reducing the effects of climate change through reducing emissions, the electrification of Fleet vehicles also provides the City with portable energy storage (i.e. the vehicle's large batteries) in climate-related power outages.

Innovation, quality workplace, or skill training: the city will increase its driver employee's quality of life through the switch to EVs, as they as more efficient, quieter, and have no tailpipe emissions, when compared to internal combustion engines.

Improving affordability for users: As Fleet operations become more electrified, there is an anticipated return on the initial upfront investment which in turn could be returned to residents through reduced utility costs, property taxes, or an increase/improvement to municipal services available.

Supporting the local economy: an increase from 4 fleet EVs right now, to 528 vehicles by 2034, is a significant increase to the amount of EVs that are sold in Saskatoon and may encourage growth in the supply market to the region. This growth may also encourage local business development for electric vehicle repairs and maintenance.

#### Corridor Public Realm Improvements

#### **Project Description**

Detailed design and construction for Corridor public realm improvements including roadway alterations, streetscaping, street furniture, active transportation facilities and parklets/plazas.

#### **Total Capital Estimate**

50 million to 150 million.

#### Overview of potential non-city funding sources

Depending on federal funding opportunities. Corridor public realm improvements are expected to leverage opportunities to "green" corridor, helping to support green infrastructure/low impact development - current federal funding programs are centered around these goals and could be leveraged to support some of this work.

#### **How does this Project Address Council Priorities?**

Environmental Sustainability - supports active transportation and mode shift, sustainable urban form, and "greening" the city through urban forest expansion, storm water management, etc. Transportation - incorporates enhanced opportunities for active transportation and supports BRT system.

Infill/Growth - extensive community/stakeholder engagement for corridor growth, of which these public realm improvements are a key component.

Community Safety and Well-being - affordability, better access to housing adjacent to public transportation, improved pedestrian safety, promote community health.

Ec. Dev - Public investment in public realm supports proposed land use changes and improves marketability of corridors as a place to invest, do business and live.

Reconciliation, equity, diversity and inclusion - consultation with elders/traditional knowledge keepers is ongoing to include reconciliation content in corridor public realm design.

#### How does this project address Core Services & Operational Priorities?

Improvements on corridors improve quality of life for current and future residents by adding amenities and improving public spaces. Additionally, in some instances, they will replace existing, aging infrastructure, extending the replacement lifecycle for these things.

#### How does this Project address Corporate Transformational Change?

None.

#### **How does this project mitigate Corporate Risk?**

Infill growth, as described in the City's Growth Plan to Half a Million and OCP, is required to mitigate the long-term financial risks of unhindered outward expansion and reinforce existing and planned investments.

Public realm improvements specifically help mitigate risks by ensuring the public spaces interface appropriately with the planned development/land use - mitigate risks of injury/death.

#### What is the impact if this project is delayed?

Alignment of College Drive streetscaping improvements with BRT construction may not be possible.

#### What is the impact if this project is not funded by 2035?

Land use changes and transit investment will not be supported by complementary public realm enhancements, risking the potential appeal of the Corridor Growth area as a place to live, work, play and invest. This poses a risk to the goals identified in the Corridor Transformation Plan, the City's OCP, and the success of the BRT.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact? The underlying rationale for the shift in the city's growth pattern to include corridor growth and infill (via the Growth Plan) is to leverage existing built city infrastructure and operating investments (transit, roadways maintenance, etc.) and public and private amenities while mitigating additional extension of future operating obligation by continued outward expansion.

#### What are other Triple Bottom-Line Co-Benefits?

Enhances walkable communities and supports transit use, reducing reliance on autos (GHGs). Storm water mitigation and heat island reduction through "greening". Healthy spaces that encourage active travel modes and community participation. Reinforces existing services and amenities by adding additional people/units while requiring modest new infrastructure and operating obligation. Public investment in public realm supports proposed land use changes and improves marketability of corridors as a place to invest, do business and live.

#### <u>Civic Operations Long Term Project – Phase 1</u>

#### **Project Description**

To redevelop North Downtown and support infill targets in the Growth Plan, a significant component of the City's existing operations based at the City Yards requires relocation. The existing City Yards are over capacity and many buildings are beyond their useful service life putting at risk the delivery of essential civic services.

The goal of the Civic Operations Long Term project is move civic operations into safe and productive facilities at appropriate locations to best service our citizens now, at 375,000, and at 500,000 populations.

Phase 1 of the project involves design and construction of new civic operations facilities at the Civic Operations Centre to accommodate the relocation of a portion of the civic operations from City Yards to this southwest satellite site, including Waste Stream (garbage collection), Fleet Services, Sign Shop, Electronics Shop, and Facilities Management Shops (provided these aren't relocated to a new facility with Stores and Supply Chain Management).

#### **Total Capital Estimate**

50 million to 150 million.

#### Overview of potential non-city funding sources

P3 Canada funding was able to be secured for the Civic Operations Centre project and there's a possibility a similar federal program may materialize to fund civic operations projects of this nature.

#### **How does this Project Address Council Priorities?**

N/A

#### How does this project address Core Services & Operational Priorities?

CA #5 - Create a long-term plan for safe, adequate administrative and operational facilities to enable City staff to deliver established levels of service as Saskatoon grows.

#### How does this Project address Corporate Transformational Change?

Efficiency and Effectiveness – More efficient set up, satellite yards, etc. All offer avenues to more efficiently complete work.

People and Culture – A motivated workforce that feels valued and supported to perform at their best by providing them with modern, safe facilities to best fulfill their duties.

#### How does this project mitigate Corporate Risk?

The goal of the project is to relocate civic operations into safe and productive facilities at appropriate locations to best service our citizens now, at 375,000, and at 500,000 populations. This will ensure the City's public works departments are able to continue to provide service efficiently and effectively to our residents into the future.

#### What is the impact if this project is delayed?

Operating funding to get existing facilities within City Yards added to the CBCM program will be required in the short term to ensure these facilities are able to be maintained through 2035. Depending on city growth, service levels may also be impacted since the existing City Yards are at or near 100% capacity. This may also require off-site leases to provide additional indoor and outdoor storage capacity for civic operations, which will erode the efficiency of civic operations.

#### What is the impact if this project is not funded by 2035?

See previous question.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The existing City Yards have been the central civic operations hub for the City since the 1940s. With few exceptions, most of the facilities within the existing City Yards were not purpose-built to support civic operations. Ensuring that facilities and site layouts at new satellite yards are designed and suitable for purpose will greatly improve employee health and safety and enhance resiliency and efficiency of our essential services.

#### What are other Triple Bottom-Line Co-Benefits?

Relocating civic operations from City Yards into purpose-built/designed satellite yards will improve workplace quality and safety for staff. In addition, abandoning existing facilities that are beyond their useful life will result in operational cost savings by reducing overall major maintenance costs, and provide an opportunity to impose effective asset management of new facilities as they are brought online.

#### **Civic Operations Long Term Project - Phase 2**

#### **Project Description**

To redevelop North Downtown and support infill targets in the Growth Plan, a significant component of the City's existing operations based at the City Yards requires relocation. The existing City Yards are over capacity and many buildings are beyond their useful service life putting at risk the delivery of essential civic services.

The goal of the Civic Operations Long Term project is move civic operations into safe and productive facilities at appropriate locations to best service our citizens now, at 375,000, and at 500,000 populations.

Phase 2 of the project involves design and construction of new civic operations facilities in the CN Industrial area to accommodate the relocation of a portion of the civic operations from City Yards to this southeast satellite site, including approximately 50% of Roadways.

#### **Total Capital Estimate**

50 million to 150 million.

#### Overview of potential non-city funding sources

P3 Canada funding was able to be secured for the Civic Operations Centre project and there's a possibility a similar federal program may materialize to fund civic operations projects of this nature.

#### **How does this Project Address Council Priorities?**

N/A.

#### How does this project address Core Services & Operational Priorities?

CA #5 - Create a long-term plan for safe, adequate administrative and operational facilities to enable City staff to deliver established levels of service as Saskatoon grows.

#### How does this Project address Corporate Transformational Change?

Efficiency and Effectiveness – More efficient set up, satellite yards, etc. All offer avenues to more efficiently complete work.

People and Culture – A motivated workforce that feels valued and supported to perform at their best by providing them with modern, safe facilities to best fulfill their duties.

#### **How does this project mitigate Corporate Risk?**

The goal of the project is to relocate civic operations into safe and productive facilities at appropriate locations to best service our citizens now, at 375,000, and at 500,000 populations. This will ensure the City's public works departments are able to continue to provide service efficiently and effectively to our residents into the future.

#### What is the impact if this project is delayed?

An alternative capital project will be required to ensure sufficient budget is set aside to address critical safety concerns at the existing City Yards through at least 2035. Depending on city growth, service levels may also be impacted since the existing City Yards are at or near 100% capacity. This may also require off-site leases to provide additional indoor and outdoor storage capacity for civic operations, which will erode the efficiency of civic operations.

#### What is the impact if this project is not funded by 2035?

See previous question.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The existing City Yards have been the central civic operations hub for the City since the 1940s. With few exceptions, most of the facilities within the existing City Yards were not purpose-built to support civic operations. Ensuring that facilities and site layouts at new satellite yards is designed and suitable for purpose, will greatly improve employee health and safety, and enhance resiliency and efficiency of our essential services.

#### What are other Triple Bottom-Line Co-Benefits?

Relocating civic operations from City Yards into purpose-built/designed satellite yards will improve workplace quality and safety for staff. In addition, abandoning existing facilities that are beyond their useful life will result in operational cost savings by reducing overall major maintenance costs, and provide an opportunity to impose effective asset management of new facilities as they are brought online.

#### Imagine Idylwyld

#### **Project Description**

The report detailing the concept for Imagine Idylwyld was received for information at City Council's Standing Policy Committee on Transportation (SPCT) on June 11, 2018.

The purpose of Imagine Idylwyld was to develop a vision and conceptual plan to improve the function, safety, connectivity and quality of the roadway and public realm along Idylwyld Drive, between 20th Street and 25th Street East.

The concept design is a hybrid of tested options that minimizes travel time for the most drivers while achieving the desire to support all modes of transportation and enable redevelopment opportunities. The concept design is compatible with the intended evolution of the land use along Idylwyld Drive and adjacent neighbourhoods and enables safer connections for people riding bicycles or walking, including better access to the proposed Bus Rapid Transit (BRT) station near 22nd Street.

The initial step would be to complete the detailed design based on the conceptual design.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

This project has been connected with the Downtown Entertainment District which is vying for funding from other levels of government.

#### **How does this Project Address Council Priorities?**

Economic Development - By increasing the viability of land use densification.

Community Safety and Wellbeing - By increasing the potential for land use densification, this will increase the number of people using the corridor, and thus increasing safety by having more eyes on the street.

Recreation, Culture and Leisure - The project includes AT facilities that will connect the River with the future Entertainment District area, thus helping to promote that area of the Downtown.

Downtown Development - The project includes AT facilities that will connect the river with the future Entertainment District area, thus helping to promote that area of the Downtown. It will also promote development and intensification of land use along Idylwyld Drive.

Environmental Sustainability - The project includes AT facilities which will promote sustainable modes of transportation thus reducing the needs for vehicles that produce GHG.

Transportation - The project will provide improved traffic safety and operations for all modes of transportation. The travel lanes will be re-aligned resulting in less lane changes required, and significant improvements of the AT facilities will promote other modes of travel.

#### How does this project address Core Services & Operational Priorities?

By providing alternate ways to move along a corridor that is predominately pavement with very narrow sidewalks. The improved transportation system will in turn promote land use densification.

#### <u>How does this Project address Corporate Transformational Change?</u> None.

#### What is the impact if this project is delayed?

Active Transportation is harmed, and modal shift away from reliance of the single passenger vehicle is delayed.

#### What is the impact if this project is not funded by 2035?

Active Transportation is harmed, and modal shift away from reliance of the single passenger vehicle is delayed.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Today Idylwyld is not safe for pedestrians and unsafe for cyclists. The project will provide improved pedestrian facilities and also basic facilities for cyclists, thus very significantly improving the safety of the corridor.

#### What are other Triple Bottom-Line Co-Benefits?

The provision of AT facilities will provide space for alternative modes of travel to happen. These modes of travel reduce GHG's, conserve energy, are people powered so healthier, provide recreation opportunities for people, and the expected land use densification provides jobs for people, and has people work and live downtown.

#### **Civic Operations Long Term Project - Phase 3**

#### **Project Description**

To redevelop North Downtown and support infill targets in the Growth Plan, a significant component of the City's existing operations based at the City Yards requires relocation. The existing City Yards are over capacity and many buildings are beyond their useful service life putting at risk the delivery of essential civic services.

The goal of the Civic Operations Long Term project is move civic operations into safe and productive facilities at appropriate locations to best service our citizens now, at 375,000, and at 500,000 populations.

The City purchased 3815 Wanuskewin Road (Norseman Structures site) in 2020. The purchase included a leaseback agreement with Norseman Structures, who will continue to occupy the property until 2029. Phase 3 of the project involves preparing, augmenting and enhancing this site to accommodate the relocation of a portion of the civic operations from City Yards to this north satellite site, including approximately 50% of Roadways, 75% of Water and Sewer, and the Support Section.

#### **Total Capital Estimate**

50 million to 150 million.

#### Overview of potential non-city funding sources

P3 Canada funding was able to be secured for the Civic Operations Centre project and there's a possibility a similar federal program may materialize to fund civic operations projects of this nature.

#### **How does this Project Address Council Priorities?**

N/A

#### How does this project address Core Services & Operational Priorities?

CA #5 - Create a long-term plan for safe, adequate administrative and operational facilities to enable City staff to deliver established levels of service as Saskatoon grows.

#### How does this Project address Corporate Transformational Change?

Efficiency and Effectiveness – More efficient set up, satellite yards, etc. All offer avenues to more efficiently complete work.

People and Culture – A motivated workforce that feels valued and supported to perform at their best by providing them with modern, safe facilities to best fulfill their duties.

#### How does this project mitigate Corporate Risk?

The goal of the project is to relocate civic operations into safe and productive facilities at appropriate locations to best service our citizens now, at 375,000, and at 500,000 populations. This will ensure the City's public works departments are able to continue to provide service efficiently and effectively to our residents into the future.

#### What is the impact if this project is delayed?

This property would see limited or no use until funding is made available to complete site improvements and relocate existing operations from the City Yards. For example, the floor of the fabric buildings is unreinforced and therefore not suitable for heavy vehicle traffic associated

with the civic fleet (i.e., the buildings house a manufacturing operation, not heavy civil operations equipment storage and movement).

#### What is the impact if this project is not funded by 2035?

This property would so limited or no use until funding is made available to complete site improvements and relocate existing operations from the City Yards. Operating funding to get existing facilities within City Yards added to the CBCM program will be required in the short term to ensure these facilities are able to be maintained through 2035. Depending on city growth, service levels may also be impacted since the existing City Yards are at or near 100% capacity.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact? The existing City Yards have been the central civic operations hub for the City since the 1940s. With few exceptions, most of the facilities within the existing City Yards were not purpose-built to support civic operations. Ensuring that facilities and site layouts at new satellite yards is designed and suitable for purpose, will greatly improve employee health and safety, and enhance resiliency and efficiency of our essential services.

#### What are other Triple Bottom-Line Co-Benefits?

Relocating civic operations from City Yards into purpose-built/designed satellite yards will improve workplace quality and safety for staff. In addition, abandoning existing facilities that are beyond their useful life will result in operational cost savings by reducing overall major maintenance costs, and provide an opportunity to impose effective asset management of new facilities as they are brought online.

#### Active Transportation Plan - Sidewalk Network Expansion

#### **Project Description**

Walking is the most common form of transportation. If a community has a complete, connected sidewalk network, safe crossings and major destinations within walking distance of residential areas then walking can be suitable for almost all short trips throughout the year.

There is a need for sidewalk infrastructure in established neighbourhoods, as outlined in the City's Active Transportation Plan. Expanding the sidewalk network supports the goals of creating more places for walking, safer walking and making walking a more convenient and attractive choice for moving around.

A lack of sidewalks can discourage people from walking as they are forced to walk on the street or on unpaved areas beside the street. This is not only less accessible and desirable, it is also unsafe. Connectivity for walking focuses on both expanding the sidewalk network and addressing barriers.

This project would construct sidewalks to eliminate gaps in the sidewalk network, particularly for locations with high pedestrian demand.

## <u>Total Capital Estimate</u> 20 million to 50 million.

#### Overview of potential non-city funding sources

In July 2020, a report was brought before Council regarding the Municipal Economic Enhancement Program – Reallocation Prioritization List. This report discussed the reallocation of \$3.0M from a different program to the sidewalk infill program.

In May 2021, a report was brought forward regarding the Investing in Canada Infrastructure Program – Budget Adjustment. This report identified the funding received as a result of obtaining approval from the federal and provincial government for the sidewalk expansion project applied for under the ICIP funding. As noted in the report, the total approved project of \$5,260,000 includes Canada and Saskatchewan contributions of \$3,666,500 and City contributions of \$1,593,500. The City contributions will be covered by part of the previously approved Municipal Economic Enhancement Program reallocation funding of \$3,000,000 (July 2020 report) within Capital Project 2468 Active Transportation.

#### **How does this Project Address Council Priorities?**

Active transportation can contribute to the development of a healthy and diverse local economy. A balanced, efficient, and accessible transportation system is one of the drivers of success for economic diversity and prosperity. Walking-supportive neighbourhoods, employment areas and other destinations throughout Saskatoon can encourage residents to support local businesses.

Neighbourhoods and destinations that are accessible and attractive for active transportation users can attract more visitors, who will in turn be patrons of local services and amenities. For employment areas, active transportation provides more choice for people travelling to work, which is essential for lower income individuals, youth, seniors and others who may not access to a vehicle.

Having options that support residents who use active forms of transportation in their neighbourhoods and to other destinations can decrease traffic congestion and increase the attractiveness and vibrancy of the area for both locals and visitors.

Active transportation can also help to support a high-quality of life and keep Saskatoon competitive as both a place to live and do business.

The City's Active Transportation Plan target is to double walking and cycling trips to 24% of all daily trips and 15% of all commute trips by 2045. This project will support a shift away from cars by filling gaps in the sidewalk network for walking. This project will provide connections to places of work, school, recreation, transit stops, and the wider active transportation network.

The project also supports the following City Council approved plans:

Climate Action Plan - A shift towards active modes of transportation is necessary to achieve Saskatoon's transportation related targets to reduce emissions. A lack of dedicated walking and cycling infrastructure is a major barrier for people choosing to use active transportation.

Official Community Plan - Provide strategically located destinations throughout the city that include a mix of services and amenities in a walkable, dynamic setting that is well served by transit services and active transportation networks. Establish active transportation networks connecting Community Focal Points and surrounding neighbourhoods.

#### Low Emissions Community Plan

- Several actions are proposed to meet Saskatoon's GHG reduction targets, while also providing benefits of a low emissions community.
- Improvements to individual and public health More active lifestyles, more walkable and transit-oriented communities, will lead to improvements to individual and public health, significantly reduce rates of hospitalization, illness, and even mortality. Reducing transportation emissions (which requires a shift to active and public transportation) improves health through reduced air pollution from vehicles, reduced injuries and deaths from vehicle collisions, and reduced obesity as a result of more active lifestyles.
- Increased social equity and quality of life Destinations become more accessible (i.e. if dwellings are located in closer proximity to commercial destinations and/or are centered around transit and active transportation networks).
- Improved land-use planning and development Sustainable land-use supports the integration and accessibility of transit and active transportation.

Transportation Master Plan - The sidewalk infill project was the top priority on the Transportation Infrastructure Projects List.

#### How does this project address Core Services & Operational Priorities?

Equitable and Accessible Services - Enhanced equity and accessibility of services meeting the needs of a diverse public - having an accessible active transportation network would ensure that the diverse mobility needs of the public would accommodate their travel to access services. The sidewalk project would include the installation of accessible pedestrian ramps with proper texturing to accommodate people who travel with mobility aids and people with low vision.

Quality of life - Saskatoon is a city where residents have access to facilities, infrastructure and programs that promote active living. - Expanding the sidewalk network makes walking a more convenient and attractive choice for moving around, fundamental to active living.

### How does this Project address Corporate Transformational Change? None.

#### What is the impact if this project is delayed?

A lack of sidewalks can discourage people from walking as they are forced to walk on the street or on unpaved areas beside the street. This is not only less accessible and desirable, but also unsafe.

Increased risk that the City's Active Transportation Plan target to double walking and cycling trips to 24% of all daily trips and 15% of all commute trips would not be met by 2045.

#### What is the impact if this project is not funded by 2035?

A lack of sidewalks can discourage people from walking as they are forced to walk on the street or on unpaved areas beside the street. This is not only less accessible and desirable, but also unsafe.

High risk that the City's Active Transportation Plan target to double walking and cycling trips to 24% of all daily trips and 15% of all commute trips would not be met by 2045.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

A shift towards active modes of transportation is necessary to achieve Saskatoon's transportation related targets to reduce emissions. Providing dedicated walking infrastructure would eliminate barriers for people choosing to use active transportation. "Improves" was selected because this would not address all the missing sidewalk locations in the city.

#### What are other Triple Bottom-Line Co-Benefits?

Reconciliation, Equity, Diversity, and Inclusion - For employment areas, active transportation provides more choice for people travelling to work, which is essential for lower income individuals, youth, seniors and others who may not access to a vehicle. Having options that support residents who use active forms of transportation in their neighbourhoods would ensure that the transportation system accommodates the needs for traditionally under-served populations.

Health, wellbeing, and self-sufficiency - Providing dedicated walking infrastructure would eliminate barriers for people choosing to use active transportation. Pedestrian ramps will allow users with mobility aids with improved access and will incorporate appropriate texturing for low vision users who use canes as assistive devices.

Supporting the local economy - Active transportation can contribute to the development of a healthy and diverse local economy. A balanced, efficient, and accessible transportation system is one of the drivers of success for economic diversity and prosperity. Walking-supportive neighbourhoods, employment areas and other destinations throughout Saskatoon can encourage residents to support local businesses. Active transportation can also help to support a high-quality of life and keep Saskatoon competitive as both a place to live and do business.

#### **Snow and Materials Management Facility - North Site**

#### **Project Description**

The project involves the design and construction of a new engineered Snow and Materials Management Facility in the north end of Saskatoon. Project to include:

- 1) soil farming areas to dry the saturated soil generated from water and sewer repair work;
- 2) snow storage facility with gravel surfaced pad (with geosynthetic liner to protect soil and groundwater) and meltwater containment pond; and
- 3) other necessary infrastructure to allow for safe and efficient use of the site (e.g., fencing, gate, lighting, equipment storage, etc).

If funding for this project is approved before funding for the proposed Southeast Snow and Materials Management Facility, this site would allow for the decommissioning of Nicholson Yards.

As of October 2022, a potential site for the North Snow and Materials Management Facility has been identified within city limits. If the north site is confirmed to be feasible and can be acquired at a reasonable cost to the City, it is likely that the north site would be easier to develop for snow management than the southeast site currently under consideration (see submission for Snow and Materials Management Facility – Southeast Site). This is due to the potential site in the southeast being within the RM of Corman Park, which requires time and resources to allow the site to be approved for snow management. Therefore, it is recommended that funding for the north site be a higher priority at this time.

#### **Total Capital Estimate**

2 million to 5 million.

#### Overview of potential non-city funding sources

P3 Canada funding was able to be secured for the Civic Operations Centre project and there is a possibility that a similar federal program may materialize to fund civic operations projects of this nature. There may also be green grant funds available in the future which could be access in support of establishing engineered snow management facilities.

#### **How does this Project Address Council Priorities?**

"The green network is integrated, managed, and enhanced to protect land, air and water resources. Develop proactive policies, strategies, and practices to ensure the environment is protected from damage and, where possible, ecosystems are enhanced." The Central Avenue and Wanuskewin Road snow storage sites are located on unimproved land with no systems in place to manage melt water. They do not meet industry best practices (see Transportation Association of Canada – Best Practices for Snow Storage and Disposal) for snow storage sites. Both sites are located within or adjacent to natural wetland areas (Small Swale and North Swale). Developing snow storage sites that meet industry best practices would ensure that the environment is protected from damage and that the ecosystem is enhanced.

#### How does this project address Core Services & Operational Priorities?

CA #5 - Create a long-term plan for safe, adequate administrative and operational facilities to enable City staff to deliver established levels of service as Saskatoon grows.

**How does this Project address Corporate Transformational Change?** 

"Efficiency and Effectiveness – Increased operational efficiency and effectiveness has resulted in greater savings and organizational success." By providing snow and material storage sites that meet industry best practices and are strategically located across the city, we are demonstrating operational efficiency and effectiveness.

#### How does this project mitigate Corporate Risk?

The goal of the project is to relocate civic operations into safe and productive facilities at appropriate locations to best service our citizens now, at 375,000, and at 500,000 populations. This will ensure the Water and Waste Operations and Roadways Fleet and Support departments are able to continue to provide service efficiently and effectively to our residents into the future.

#### What is the impact if this project is delayed?

If both this project and the Southeast Snow and Materials Management Facility do not receive funding, Nicholson Yard and the Old Central Avenue Snow Dump, located within the Small Swale, will need to remain active to support civic operations. If these existing sites were closed without new facilities in place, levels of service for key civic operations (e.g., water & sewer repairs, snow removal) will be negatively impacted.

#### What is the impact if this project is not funded by 2035?

Delaying until 2035 is a significant risk due to the difficulty of maintaining assets resulting from an ongoing rise of incidents.

Preventive maintenance intervals will not be met, increasing the likelihood of apparatus and equipment failures, major repairs with significant apparatus downtime, and forfeiting warranty agreements by failing to meet service intervals.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The Old Central Avenue and Wanuskewin Snow Dumps are not engineered snow management sites, and site drainage is not collected and pre-treated prior to entering the City's drainage system or natural water bodies. Construction of an engineered snow management facility will provide the benefit of pre-treatment (sediment settling and removal) and collection/diversion into the City's sewer collection system.

<u>What are other Triple Bottom-Line Co-Benefits?</u>
The Central Ave and Wanuskewin Rd sites are not suitable for long term snow storage sites. New sites that meet best practices are required. Evenly distributing snow storage sites across the City will minimize the travel time for users. This impacts not only GHG generation for civic operations and private haulers, but also reduces fuel use (i.e., operational costs) for the City.

The northeast site (Central Avenue Snow Dump) is located within the Small Swale. The north site (Wanuskewin Road Snow Dump) is located adjacent to the North Swale. Decommissioning of these sites would eliminate pollutants entering natural wetlands from melt water generated by the sites.

Climate change is making our local climate wetter, warmer, and wilder. More frequent heavy snowfall events can be expected to occur over time. Providing sufficient snow storage capacity for our growing city is important to ensure residents are able to move around.

#### **Snow and Materials Management Facility - Southeast Site**

#### **Project Description**

The project involves the design and construction of a new engineered Snow and Materials Management Facility on the southeast side of Saskatoon. Project to include:

- 1) soil farming areas to dry the saturated soil generated from water and sewer repair work;
- 2) snow storage facility with gravel surfaced pad (with geosynthetic liner to protect soil and groundwater) and meltwater containment pond; and
- 3) other necessary infrastructure to allow for safe and efficient use of the site (e.g., fencing, gate, lighting, equipment storage, etc).

If funding for this project is approved before funding for the proposed North Snow and Materials Management Facility, this site would allow for the decommissioning of Nicholson Yards.

As of October 2022, a potential site for the North Snow and Materials Management Facility has been identified within city limits. If the north site is confirmed to be feasible and can be acquired at a reasonable cost to the City, it is likely that the north site would be easier to develop for snow management than the southeast site currently under consideration. This is due to the site in the southeast being within the RM of Corman Park, which requires time and resources to allow the site to be approved for snow management. Therefore, it is recommended that funding for the north site be a higher priority at this time.

#### **Total Capital Estimate**

2 million to 5 million.

#### Overview of potential non-city funding sources

P3 Canada funding was able to be secured for the Civic Operations Centre project and there is a possibility that a similar federal program may materialize to fund civic operations projects of this nature. There may also be green grant funds available in the future which could be access in support of establishing engineered snow management facilities.

#### **How does this Project Address Council Priorities?**

"The green network is integrated, managed, and enhanced to protect land, air and water resources. Develop proactive policies, strategies, and practices to ensure the environment is protected from damage and, where possible, ecosystems are enhanced." The Central Avenue and Wanuskewin Road snow storage sites are located on unimproved land with no systems in place to manage melt water. They do not meet industry best practices (see Transportation Association of Canada – Best Practices for Snow Storage and Disposal) for snow storage sites. Both sites are located within or adjacent to natural wetland areas (Small Swale and North Swale). Developing snow storage sites that meet industry best practices would ensure that the environment is protected from damage and that the ecosystem is enhanced.

#### How does this project address Core Services & Operational Priorities?

CA #5 - Create a long-term plan for safe, adequate administrative and operational facilities to enable City staff to deliver established levels of service as Saskatoon grows.

#### How does this Project address Corporate Transformational Change?

"Efficiency and Effectiveness – Increased operational efficiency and effectiveness has resulted in greater savings and organizational success." By providing snow and material storage sites that meet industry best practices and are strategically located across the city, we are demonstrating operational efficiency and effectiveness.

#### How does this project mitigate Corporate Risk?

The goal of the project is to relocate civic operations into safe and productive facilities at appropriate locations to best service our citizens now, at 375,000, and at 500,000 populations. This will ensure the Water and Waste Operations and Roadways Fleet and Support departments are able to continue to provide service efficiently and effectively to our residents into the future.

#### What is the impact if this project is delayed?

If both this project and the North Snow and Materials Management Facility do not receive funding, Nicholson Yard and the Old Central Avenue Snow Dump, located within the Small Swale, will need to remain active to support civic operations. If these existing sites were closed without new facilities in place, levels of service for key civic operations (e.g., water & sewer repairs, snow removal) will be negatively impacted.

#### What is the impact if this project is not funded by 2035?

Delaying until 2035 is a significant risk due to the difficulty of maintaining assets resulting from an ongoing rise of incidents.

Preventive maintenance intervals will not be met, increasing the likelihood of apparatus and equipment failures, major repairs with significant apparatus downtime, and forfeiting warranty agreements by failing to meet service intervals.

#### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The Old Central Avenue and Wanuskewin Snow Dumps are not engineered snow management sites, and site drainage is not collected and pre-treated prior to entering the City's drainage system or natural water bodies. Construction of an engineered snow management facility will provide the benefit of pre-treatment (sediment settling and removal) and collection/diversion into the City's sewer collection system.

#### What are other Triple Bottom-Line Co-Benefits?

The southeast sector of the city lacks a snow storage facility. This requires that haulers travel a longer distance to existing snow storage sites in the southwest, north, and northeast areas of Saskatoon. This impacts not only GHG generation for civic operations and private haulers, but also operational costs for the City.

The northeast site is the Old Central Avenue Snow Dump, located within the Small Swale. The north site is the Wanuskewin Road snow dump, located adjacent to the North Swale. Decommissioning of these sites would eliminate pollutants entering natural wetlands from melt water generated by the sites.

Climate change is making our local climate wetter, warmer, and wilder. More frequent heavy snowfall events can be expected to occur over time. Providing sufficient snow storage capacity for our growing city is important to ensure residents can move around.

#### **Active Transportation Corridors**

#### **Project Description**

As part of the development of a complete and connected bicycle network for all ages and abilities, proposed designs for active transportation improvements on the following streets were developed through the Neighbourhood Bikeways Project:

14th Street East, from Saskatchewan Crescent to Cumberland Avenue;

Dudley Street, from Dawes Avenue to Spadina Crescent;

Victoria Avenue, from 8th Street E to Taylor Street E;

3rd Avenue, from 25th Street E to 2nd Avenue N; and

29th Street W (or 31st Street W) from Circle Drive to Idylwyld Drive.

The Neighbourhood Bikeways Project will help provide more travel choices and improve safety, accessibility and connectivity.

Active transportation can contribute to the development of a healthy and diverse local economy. A balanced, efficient, and accessible transportation system is one of the drivers of success for economic diversity and prosperity. Walking and bicycle-supportive neighbourhoods, employment areas and other destinations throughout Saskatoon can encourage residents to support local businesses. Neighbourhoods and destinations that are accessible and attractive for active transportation users can attract more visitors, who will in turn be patrons of local services and amenities.

Having options that support residents who use active forms of transportation in their neighbourhoods and to other destinations can decrease traffic congestion and increase the attractiveness and vibrancy of the area for both locals and visitors. Active transportation can also support and encourage tourism. Active transportation can also help to support a high-quality of life and keep Saskatoon competitive as both a place to live and do business.

#### **Total Capital Estimate**

5 million to 20 million.

#### Overview of potential non-city funding sources

The City of Saskatoon applied to the federal government's Active Transportation Fund for the Dudley Street Bikeway, Pedestrian and Traffic Safety Improvement project. The City's funding responsibility for capital projects is 40% of the project total, or \$1,073,354. To provide the City's portion of funding, the Administration recommends altering the scope of the Avenue C new sidewalk project from Circle Drive to Haskamp Street, previously funded in Capital Project P.02468 - Active Transportation Implementation Plan for \$1,462,000, by reprioritizing \$1,100,000 from this portion of the project.

The federal government response to the funding application has not yet been received.

Infrastructure Canada - Active Transportation Fund Report

#### **How does this Project Address Council Priorities?**

The City's Active Transportation Plan target is to double walking and cycling trips to 24% of all daily trips and 15% of all commute trips by 2045. This project will support a shift away from cars by providing a new pathway for walking and biking, providing a traffic calmed street to create a more comfortable shared space for people to ride their bike in traffic, and filling gaps in the sidewalk network for walking. This project provides connections to places of work, school, recreation, transit stops, and the wider active transportation network.

Climate Action Plan - A shift towards active modes of transportation is necessary to achieve Saskatoon's transportation related targets to reduce emissions. A lack of dedicated walking and cycling infrastructure is a major barrier for people choosing to use active transportation.

Official Community Plan - Provide strategically located destinations throughout the city that include a mix of services and amenities in a walkable, dynamic setting that is well served by transit services and active transportation networks. Establish active transportation networks connecting Community Focal Points and surrounding neighbourhoods.

#### Low Emissions Community Plan

- Several actions are proposed to meet Saskatoon's GHG reduction targets, while also providing benefits of a low emissions community.
- Improvements to individual and public health More active lifestyles, more walkable and transit-oriented communities, will lead to improvements to individual and public health, significantly reduce rates of hospitalization, illness, and even mortality. Reducing transportation emissions (which requires a shift to active and public transportation) improves health through reduced air pollution from vehicles, reduced injuries and deaths from vehicle collisions, and reduced obesity as a result of more active lifestyles.
- Increased social equity and quality of life Destinations become more accessible (i.e. if dwellings are located in closer proximity to commercial destinations and/or are centered around transit and active transportation networks).
- Improved land-use planning and development Sustainable land-use supports the integration and accessibility of transit and active transportation.

Transportation Master Plan - The Active Transportation Corridors project is in the top 10 priorities of the prioritized transportation infrastructure projects list. This project will improve the safety of active transportation users by providing an all ages and abilities cycling facility and sidewalks.

#### How does this project address Core Services & Operational Priorities?

Equitable and Accessible Services - Accessible civic service must consider geographical, financial, physical and cultural elements. All ages and abilities (AAA) cycling facilities are safe and comfortable for all people riding bikes, regardless of their age or ability. There are many people interested in riding their bike that are not comfortable riding in mixed traffic on busy streets, and their needs must be considered when designing a bicycle facility. Some users of a AAA cycling facility may include but is not limited to:

- Children
- Seniors
- Women
- People of Colour
- Low Income Riders

The cycling facility along these streets have been designed with the intent to be a AAA facility. The project will provide connections to businesses, an elementary school, a major recreational facility, residential areas, and the wider AT network in Saskatoon.

The project includes pedestrian ramps that will allow users with mobility aids with improved access and will incorporate appropriate texturing for low vision users who use canes as assistive devices.

Providing a safe cycling and pedestrian facility to these areas could eliminate financial barriers of transportation for some residents. Low-income residents could now reach potential employers without a private vehicle or transit pass.

Quality of Life - Saskatoon is a city where residents have access to facilities, infrastructure and

programs that. promote active living.

Providing a complete and interconnected network of bicycle facilities throughout Saskatoon is critical to supporting and encouraging more cycling. There are significant gaps in the existing bicycle network as well as many areas with no bicycle facilities.

By filling gaps in the sidewalk network, installing missing curb ramps, and improved intersection crossings on these streets will be safer and more convenient for people of all abilities to travel.

### How does this Project address Corporate Transformational Change? None.

#### What is the impact if this project is delayed?

Increased risk that the City's Active Transportation Plan target to double walking and cycling trips to 24% of all daily trips and 15% of all commute trips by 2045 would not be met.

#### What is the impact if this project is not funded by 2035?

High risk that the City's Active Transportation Plan target to double walking and cycling trips to 24% of all daily trips and 15% of all commute trips by 2045 would not be met.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact? The City's Active Transportation Plan target is to double walking and cycling trips to 24% of all daily trips and 15% of all commute trips by 2045.

Supporting Active Transportation is a key initiative in Saskatoon's Low Emissions Community Plan. This project will support the lowering of harmful emissions by providing a safe alternate mode of transportation.

Cycling and walking have many environmental benefits including reduced reliance on vehicles for moving around,

reduced traffic congestion, air pollution and greenhouse gas (GHG).

A shift towards active modes of transportation is necessary to achieve Saskatoon's transportation related targets to reduce emissions. A lack of dedicated walking and cycling infrastructure is a major barrier for people choosing to use active transportation.

This project will support a shift away from cars by providing a new pathway for walking and biking, providing traffic calmed streets to create a more comfortable shared space for people to ride their bike in traffic, and filling gaps in the sidewalk network for walking. This project provides connections to places of work, school, recreation, transit stops, and the wider active transportation network.

#### What are other Triple Bottom-Line Co-Benefits?

Reconciliation, Equity, Diversity, and Inclusion - Providing a safe cycling and pedestrian facility to these streets could eliminate financial barriers of transportation for some residents. Low-income residents could now reach potential employers without a private vehicle or transit pass.

Health, wellbeing, and self-sufficiency - By filling gaps in the sidewalk network, installing missing curb ramps, and improved intersection crossings along these streets, the streets will be safer and more convenient for people of all abilities to travel. Pedestrian ramps will allow users with mobility aids with improved access and will incorporate appropriate texturing for low vision users who use canes as assistive devices. This would allow people with varying mobility needs to be able to travel independently.

### Parks Ave P O&M Facilities Master Plan

### **Project Description**

Parks has 18 operational facilities to stage staff and the equipment necessary to provide park maintenance services located throughout the city. The Avenue P location is the Departments central hub providing an efficient location inside Circle Drive where administration, and operations provide City Wide and Southwest quadrant parks services from. Operations and Maintenance (O&M) Facilities such as the tree nursery and greenhouse facility which grow and provide plant material to flower and tree planting programs are also located at the Ave P location. Some of the Park's O&M facilities have approached or are beyond their useful life or require expansion and improved staffing areas to support the continued growth of the City's parks and open space system.

The Parks Ave P O&M Facilities Master Plan (Ave P O&M FMP) project supports and is aligned with a Facilities Management/Supply Chain Management (FM/SCM) relocation project. The project also includes an option that could be implemented if the FM/SCM relocation project does not proceed. These projects are intended to mitigate accommodation pressures faced by the Parks, Facilities and Supply Chain Management Departments. More detailed business case development is in progress with the Facilities Management team and will be brought forward for further consideration and information in 2023.

### **Total Capital Estimate**

5 million to 20 million.

### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

### **How does this Project Address Council Priorities?**

Recreation, culture, and Leisure

This project will ensure the continued safe and efficient delivery of Sports Field, Urban Forestry and Greenhouse services to the community.

### How does this project address Core Services & Operational Priorities?

The Plan addresses several key actions in civic assets, for example:

Appropriately renovated or new O&M facilities in good condition will support the ongoing delivery of Core Services that the community has come to expect.

The project will support quality of life through enabling an environment where everyone can enjoy the benefits of green spaces and continue to provide high quality essential services and programs that enable the public to safely engage in everyday life.

### **How does this Project address Corporate Transformational Change?**

Improved O&M facility conditions associated with this project will improve the departments long term ability to ensure efficient and effective customer-centric service delivery. Good condition purpose-built O&M maintenance facilities in parks will provide staff/people confidence in the facilities staff use daily, allowing them to implement their operational programs in as safe, efficient and effective manner as possible. Providing these well-conditioned facilities will improve overall culture of the department.

### How does this project mitigate Corporate Risk?

Given the age, condition, of the Surveyors Building (Downtown), lack of area for heated equipment storage and condition of staff areas (Building#1), and poor structural condition of the

greenhouse – there is a risk that these buildings may not be able to support sports field, urban forestry and greenhouse operations in the future. Improved facility conditions will mitigate this risk.

### What is the impact if this project is delayed?

Continued degradation of poor condition O&M facilities have (greenhouse) and will continue to become structurally unstable possibly deemed unsafe, unable to support operations. This type of disruption would have a major impact on the department's ability to meet their levels of service to the community.

### What is the impact if this project is not funded by 2035?

Temporary locations or the relocation of existing staff from unsafe/ closed work locations to areas of current operation would be required – resulting in a loss in efficiency with reduced number of staging/storage locations – assets would not be able to be organized, scheduled, and stored in an organized coordinated way – resulting in damage, theft and safety concerns. Inefficiencies in terms of distances to travel to work sites or stored equipment locations would result in lost productivity. Without appropriate O&M facilities service levels associated with the Sports Field, Urban Forestry and Greenhouse program would be negatively impacted.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The provision of appropriate O&M maintenance facilities ensures that City staff have access to safe, adequate facilities and equipment necessary to deliver established levels of service." These services directly contribute towards the advancement of the City's resident's ability to participate in recreation.

### What are other Triple Bottom-Line Co-Benefits?

- Facility energy efficiencies,
- Improved work environment for staff and
- storage/weather protection for equipment and supplies.

# **Broadway Bridge Rehabilitation**

### **Project Description**

Broadway Bridge is an arch bridge built in 1932 that spans the South Saskatchewan River and has significant heritage value. This capital project submission is to support the rehabilitation of the structure.

### **Total Capital Estimate**

5 million to 20 million.

### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

### **How does this Project Address Council Priorities?**

Broadway Bridge is a historical structure in the core of Saskatoon and provides a major link for active transport, Bus Rapid Transit, and commuters to downtown.

The rehabilitation prioritizes positive investment to critical transportation infrastructure, while promoting City action on maintaining access to saskatoon's vibrant downtown and encouraging greater development.

### How does this project address Core Services & Operational Priorities?

The rehabilitation of Broadway Bridge ensures the safety of the public using the structure, promotes active living, and advances the delivery excellence in core services and operation priorities.

The projects managing the risk to an acceptable level and maintains the established level of service throughout the full lifecycle of the structure.

### How does this Project address Corporate Transformational Change?

Customer-centric Service Delivery: The project supports customer-centric service culture that enables the City to reliably meet established levels of service for bridges and structures and consistently achieve high customer satisfaction with the state of infrastructure across the organization.

Efficiency and Effectiveness: The City invests in infrastructure to keep improving the organization. This drives operational excellence and helps deliver the established levels of service to the public.

#### How does this project mitigate Corporate Risk?

According to the corporate risk appetite document the City has a low appetite for risks that would significantly affect our ability to provide uninterrupted essential services to our citizens or that jeopardizes public safety. The Broadway bridge is an essential river crossing for the City of Saskatoon and the project ensures the structure can continue to be safe and operational into the future.

### What is the impact if this project is delayed?

The structure could be delayed or deferred by multiple years, with the bridge minor maintenance program addressing any safety concerns with failing/falling concrete noted at the utility duct. The project delay would increase the scope of the work, construction duration, and cost.

The project timing is also aligned with the BRT project, a delay would cause increased impacts

to residents, require multiple major restrictions to high traffic roadways and potentially delay the BRT project.

### What is the impact if this project is not funded by 2035?

Increased cost to preserve the bridge assets with a potential of major damages and emergency repairs required on Broadway bridge.

### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

This project supports the efficient and effect asset management by ensuring the timing of the projects is aligned to reduce the overall lifecycle cost while ensuring the Bridge remains safe and operational.

### What are other Triple Bottom-Line Co-Benefits?

Conserve energy or reduce GHCs: Maintaining the structure contributes less GHG emissions than allowing the degrade requiring replacement or closure.

- Structure includes 2 walkways that promote the use of active transportation.
- -Additional commute time and associated emissions of 20,000 vehicles per day if the structure was not in place.
- -The structure is a main route for BRT, supporting alternate transportation reducing GHCs.
- -Delay or replacement will require additional time at materials, including concrete, which would increase GHCs.
- -Concrete work completed in 1932 did cause significant GHC emissions. However, the structure now absorbs carbon each year through carbonation reducing GHC's.

Waste reduction and diversion: The project includes provisions to redirect products, such as asphalt milling, to be reused for other purposes diverting the material from the landfill.

Heritage, Arts, and Culture: Broadway bridge is included in Saskatoon Register of Historic places, identifying the structure as significant heritage value that has helped shape our community and tell the story of Saskatoon.

Improving affordability for users: Maintaining structures at optimal timing helps reduce the lifecycle cost of the asset to the structures users, making the structure more affordable to maintain and operate.

# Parks NE Quadrant Satellite Facility

### **Project Description**

The Parks Department's main facility for the northeast quadrant of the city is located inside the Forestry Farm, located in the Header House for numerous decades. This building is beyond its useful life and is inadequate for the size and scope of this fast-growing area. This project would support the construction of a new purpose-built maintenance facility in an area to the south of the current forestry farm parking lot

### **Total Capital Estimate**

2 million to 5 million.

### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

### **How does this Project Address Council Priorities?**

This project will ensure the continued safe and efficient delivery of turf maintenance and horticulture work in the city's northeast.

### How does this project address Core Services & Operational Priorities?

A new building for the NE quadrant would contribute greatly to ensure excellence in terms of managing and maintaining city parks and open spaces.

### **How does this Project address Corporate Transformational Change?**

Improved O&M facility conditions associated with this project will improve the departments long term ability to ensure efficient and effective customer-centric service delivery. Good condition purpose-built O&M maintenance facilities in parks will provide staff/people confidence in the facilities staff use on a daily basis, allowing them to implement their operational programs in as safe, efficient and effective manner as possible. Providing these well-conditioned facilities will improve overall culture of staff in the department.

### How does this project mitigate Corporate Risk?

Given its age and other issues (asbestos, structural, fire exit concerns on the second floor), there is a risk that this building may not be usable in the future.

### What is the impact if this project is delayed?

Continued risk of compounding structural issues and the need for asbestos abatements. Increasing risk of the need for ongoing short term expensive building repairs.

#### What is the impact if this project is not funded by 2035?

There is risk that the facility condition continues to deteriorate to failure condition and is no longer able to stage equipment, supplies and staff necessary to carry out maintenance program in the Northeast Quadrant of the city. This would then require relocating existing staff from this site to another temporary site or building that may require additional travel time to get to the parks and green spaces in the NE quadrant – thereby adding to lost productivity in the additional travel time required.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The provision of appropriate O&M maintenance facilities ensures City staff have access to safe, adequate facilities and equipment necessary to deliver established levels of service." These services directly contribute towards the advancement of the City's resident's ability to participate in recreation.

### What are other Triple Bottom-Line Co-Benefits?

The current Northeast O&M maintenance building is not energy efficient and does not provide the best work environment for Parks staff that operate from this location.

# <u>Highway 11 and 16 Interchange Improvements</u>

### **Project Description**

The main operational issue occurring at this interchange is the bridge structure having substandard vertical clearance. The proposed project will address this operational issue by helping to protect the bridge structure from being struck.

The major components of this project are outlined below:

- · Constructing a low-speed high load bypass lane for northbound traffic to prevent the bridge structures from being struck; and
- · Constructing an over height load detector and guide signs to divert over height trucks to the bypass.

This project supports and enhances planned work as it is meant to improve the existing operational issues of today while bringing this infrastructure closer to the future ultimate configuration.

The completion of this project supports the fluidity of Canadian trade by alleviating capacity constraints and bottlenecks, and strengthens modal interconnectivity and operability by:

- Enabling vehicles that have a higher vertical clearance than 4.7 meters to travel northbound through this interchange. Currently, the City's permitting group must re-route vehicles over the 4.7-meter threshold. The travel time and distance of this re-routing varies depending on the vehicle's ultimate destination. This vertical restriction does not support the efficient movement of Canadian goods and people; and
- · Improving the overall safety at a busy highway to highway interchange.

### **Total Capital Estimate**

2 million to 5 million.

### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

### **How does this Project Address Council Priorities?**

Economic Development and Regional Planning - removing a significant bottleneck to trade and transportation, as well as eliminating the economic impacts of detour and delays.

### How does this project address Core Services & Operational Priorities?

In August 2013 the Circle Drive South Bridge opened. This was a major addition to Saskatoon's transportation network as it connected the south portion of Circle Drive across the South Saskatchewan River completing Saskatoon's ring road. It is assumed that once this connection was made a significant increase in traffic volume at the Highway 11 & Highway 16 interchange occurred. This is reflected in the spike of collisions that happened in the years after 2013. A major deficiency at this interchange is the bridge has a vertical clearance of only 4.7 meters while the current standard is 5.6 meters. Each year the bridge is struck several times by vehicles which is reducing the remaining service life for the structures. This is reflected in the 12% of fixed/movable object collision type that have occurred from 2010 to 2015. Currently there are on average 2 to 3 major reported collisions per year of northbound over height vehicles striking the structure. The structure of this interchange is likely hit more times than what is reported but the incidences that are not captured are the incidences that are more minor. All over-height related collisions should be eliminated with the completion of this proposed project. For these major collisions (2 to 3 per year) there is an average cost to the vehicle insurers of \$113,000 per collision. To quantify this further that would be a potential cost savings of \$1,695,000 over the short-term (5 years) and \$6,780,000 over the longer-term (20

years).

Alleviating capacity constraints and bottlenecks and strengthens modal interconnectivity and operability by:

- Enabling vehicles that have a higher vertical clearance than 4.7 meters to travel northbound through this interchange. Currently, the City's permitting group must re-route vehicles over the 4.7-meter threshold. The travel time and distance of this re-routing varies depending on the vehicle's ultimate destination. This vertical restriction does not support the efficient movement of Canadian goods and people; and
- · Improving the overall safety at a busy highway to highway interchange.

### How does this project mitigate Corporate Risk?

Currently there are on average 2 to 3 major reported collisions per year of northbound over height vehicles striking the structure. The structure of this interchange is likely hit more times than what is reported but the incidences that are not captured are the incidences that are more minor. All over-height related collisions should be eliminated with the completion of this proposed project. For these major collisions (2 to 3 per year) there is an average cost to the vehicle insurers of \$113,000 per collision. To quantify this further that would be a potential cost savings of \$1,695,000 over the short-term (5 years) and \$6,780,000 over the longer-term (20 years).

When one of these major collisions occurs there is an increase in travel time experienced by the roadway users. This is due to the imposed speed reduction put in place while the structure is being inspected and repaired. On average, the imposed speed reduction is in place for one week, is 1.2 kilometers long, impacts the northbound, eastbound and westbound traffic, and reduces speeds in these directions from 90 kilometers per hour to 30 kilometers per hour. Using the 2016 Average Daily Traffic Counts (excluding all right turns, since it is assumed they will not be impacted by the speed reduction), the hourly values of travel time savings there is a cost of \$175,500 per major collision. To quantify this further that would be a potential cost savings of \$2,632,500 over the short-term and \$10,530,000 over the longer-term.

### What is the impact if this project is delayed?

Continuation of the ongoing operating impact to the community, insurers, and the regional economy.

### What is the impact if this project is not funded by 2035?

Continued and increased costs to the organization, the community and the region.

### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The Highway 11 & Highway 16 interchange was constructed in the 1960's and the existing bridge structures remaining service life is approximately 10 to 15 years. In June 2017 the Highways 11 and 16 Interchange Functional Planning Study was completed by ISL Engineering and Land Services on behalf of the City. Within this study, Stage 1 Improvements were identified to address the existing operational issues and an ultimate interchange configuration was developed to support the long-term travel demands in the area. It is anticipated that the ultimate configuration construction would likely not occur until the existing bridge structures are at or near the end of their service life. The Stage 1 Improvements are compatible with the ultimate interchange configuration.

### What are other Triple Bottom-Line Co-Benefits?

Reduce GHGs - reduced travel time delay should directly relate to reduced GHGs. Supporting the local economy - reduced travel time delay, reduced congestion, improved freight operations will benefit the local economy.

Safety, or resiliency of essential services - improving the resiliency of major transportation infrastructure to change by removing a substantial risk.

Efficient and effective asset management and use - The Highway 11 & Highway 16 interchange was constructed in the 1960's and the existing bridge structures remaining service life is approximately 10 to 15 years. Removing a substantial risk is an effective asset management technique.

# **Corporate Infrastructure Priorities**

# Fusion Upgrades - Finance and General Upgrades

### **Project Description**

This project is a combination of mini projects for various required upgrades or enhancements to the SAP system. Not all of these are Finance specific, but they are of importance to the entire organization and include:

- 1. BPC to SAC The current budgeting module of SAP (BPC) will not be supported past 2027; therefore movement to the new SAC (cloud analytics) will be mandatory. The SAC will also upgrade the functionality of what was installed at go-live ensure better salary, and operational tracking.
- 2. Investment Software This may be SAP but could also be another software provider. The current system is extremely old, was built in house but has limited IT support as all people who had expertise in the system have retired.
- 3. Advanced Scheduling- Many areas require the advanced Scheduler module which has been purchased but is not implemented.
- 4. Reporting and an ABAP Developer The current reporting project that IT has initiated cannot continue without proper resourcing for funding as well as staffing. An ABAP developer is required for many reporting needs but also ticket resolution.
- 5. Roles and Security Audit and Amendments Since going live it is determined that a full review of all Roles and Security is required which would mean additional specialized resources would be needed for any overall changes or revamping of current role structure.
- 6. Collections Management the legacy collections software was decommissioned with SAP, however no SAP alternative was implemented with Wave 1. The corporate collections group requires configuration of the collection's module ("Financial Supply Chain Management") in SAP to eliminate the new manual process that was introduced with SAP.

### **Total Capital Estimate**

2 million to 5 million.

### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

### **How does this Project Address Council Priorities?**

Improved decision making in operations and service delivery through the application of City data - This project ensures data integrity and will help in decision making for many areas of the City including budgeting, revenue, investment tracking, payroll related reports for all managers and will help the City ensure data governance is strong in those areas.

### How does this project address Core Services & Operational Priorities?

Civic Assets - These systems manage financial assets such as monies received, investments, staffing. Without these systems in place tracking and review of budgeting, funding and investments becomes very manual and prone to additional errors and fraud without system built-in controls. Collection has gone from an automated system to a manual collection process.

### **How does this Project address Corporate Transformational Change?**

Continue to implement best practices and controls to achieve responsible financial stewardship and accurate transparent reporting - This whole project is about ensuring best practices and data integrity as well as efficiency in producing that data. Staff currently have reverted back to many manual processes for all of these items which has increased time, reduced in-system controls and efficiency.

A motivated workforce that feels valued and supported to perform at their best - Our people matter and as a City we expect high-performance of our staff and the system limitations are not allowing our staff to complete their tasks efficiently. Staff is frustrated at the efficiency lost and additional effort to complete tasks that were automated prior. These manual items are (or will be) prone to errors.

### **How does this project mitigate Corporate Risk?**

Collections are approximately \$19 million as of today and these are now manually being tracked on a spreadsheet. There is additional opportunity for error and reduced collections by this being manual. There are no automated follow-up reminders from a fully functioning system.

Roles and Security Audits and subsequent amendments to the system will ensure full segregation of duties, reducing opportunity for fraud that exists now with people having roles that should be segregated. It will also reduce privacy risks within the system with people seeing information that they should not have access to as there are general roles that have been identified have access to information they should not.

Activating advanced scheduler can help managers better manager their staff and match to the timesheets being approved. This can avoid over or underpayments of staff.

### What is the impact if this project is delayed?

There is an expiry on the BPC module so it cannot be delayed past a full implementation by 2027 or we will lose the ability to budget within the system.

Roles and security review and delays will ensure proper segregation of duties and fraud prevention, delaying this project will impact those. People will also continue to access to information that they do not require for their jobs which is a Privacy risk.

Collections Management and Scheduling delays reduce efficiency and effectiveness for staff who are having to do things outside of the system in spreadsheets or other systems not directly linked to SAP; and Collections poses a risk of error and not collecting full or correct amounts.

Currently the investment software does not allow for corrections so if an error is made the error must be manually tracked and updated for as long as the investment is held which could be years, also if something were to go wrong with the Investment software, IT support is limited and we would have to move to tracking all investments, along with move all automated entries into a manual process.

The reports required as fundamental for day to day and regulatory requirements such as PayOffice who still do not have a Payroll register (which has also been recommended by the external auditor as a mandatory report), overtime and Labour reports are a very manual process which require many hours on a per-pay period basis to produce for the corporation and require manually merging data from different areas where errors could easily be made. An ABAP developer is not on PWC staff and is required for many of our tickets that have been outstanding for a long period as well as the reporting project.

### What is the impact if this project is not funded by 2035?

All of the answer above applies here and will be repeated below. Also, we will not be able to see the efficiencies that were promised with the new system without some of these fixes, changes or upgrades.

There is an expiry on the BPC module so it cannot be delayed past a full implementation by 2027 or we will lose the ability to budget within the system.

Roles and security review and delays will ensure proper segregation of duties and also fraud prevention, delaying this project will impact those.

Collections Management and Scheduling delays reduce efficiency and effectiveness for staff who are having to do things outside of the system in spreadsheets or other systems not directly linked to SAP; and Collections poses a risk of error and not collecting full or correct amounts.

Currently the investment software does not allow for corrections so if an error is made the error must be manually tracked and updated for as long as the investment is held which could be years, also if something were to go wrong with the Investment software, IT support is limited and we would have to move to tracking all investments, along with move all automated entries into a manual process.

The reports required as fundamental for day to day and regulatory requirements such as PayOffice who still do not have a Payroll register (which has also been recommended by the external auditor as a mandatory report), statistical reports as required by Stats Can, overtime and Labour reports are a very manual process which require many hours on a per-pay period basis to produce for the corporation and require manually merging data from different areas where errors could easily be made. An ABAP developer is not on PWC staff and is required for many of our tickets that have been outstanding for a long period as well as the reporting project.

### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

The ability to properly manage the collection of money is imperative to ensure that bad debts do not increase resulting in subsequent increases to the property taxes or alternatively reduce other essential services to cover the loss of revenue. The roles and security audit and subsequent fixes will ensure greater control and fraud prevention within our SAP system. Several areas are requesting the Scheduler module as they are unable to Schedule staff and integrate properly with SAP. These projects substantively support the ability to track, budget, manage, collect money and without these systems functioning at a high level will introduce more errors, fraud, and risk into our processes.

### What are other Triple Bottom-Line Co-Benefits?

Upgrading and implementing these new improvements will help ensure quality work is completed, employees can efficiently do their work, can focus on analytical work rather than manual tracking. It ensures continuation of our essential, mandated and provincially regulated services of creating a budget, collection of money, and managing investments, can be completed which in turn ensure funding is available for operational requirements.

# New Customer Information System (CIS) for Corporate Revenue

### **Project Description**

CIS was implemented in the last 1990's and has many limitations due to its age. This project involves replacing both components, meaning a new Utility Billing System as well as a new Property Tax Billing System. Currently the City's CRM is CIS as well, although that will not likely be the case once the corporation finds a new CRM solution.

### **Total Capital Estimate**

5 million to 20 million.

### Overview of potential non-city funding sources

No external funding: however, a minimum of 50% of this project would be funded by the City's utility departments.

### **How does this Project Address Council Priorities?**

N/A

### How does this project address Core Services & Operational Priorities?

The billing of property tax and utilities results in approximately \$900M of revenue each year. Given that, CIS should be considered a key civic asset, therefore it must be maintained to maintain/exceed our established levels of service.

### **How does this Project address Corporate Transformational Change?**

A modern billing system will present numerous opportunities to improve on current billing, and collections, processes for both utilities and property tax. It also is more likely to better integrate with SAP, allowing more timely and accurate financial reporting. This would be of significant benefit to internal and external customers, as CIS is essential in our ability to provide data for customers and ourselves.

### How does this project mitigate Corporate Risk?

A new CIS would allow for more automated processes, which will reduce errors and reduce the need for additional FTE's as the City grows due to fewer manual processes.

Also, CIS is currently based on a programming language that is antiquated. This is a significant risk as any new IT support will not have experience in operating under PowerBuilder. A new system will allow for much quicker onboarding of Revenue and IT staff.

Lastly, if CIS were to become unavailable for any significant period of time, we would be unable to bill and collect the vast majority of our operating revenue.

### What is the impact if this project is delayed?

IT has done a lot of good work recently to extend CIS's lifespan, but there's only so much that can be done given the solution is over 30 years old. As billing becomes more complex (new utilities, deferrals, etc.) there is an increasing need to develop more manual processes, which is not sustainable with current resources.

### What is the impact if this project is not funded by 2035?

Going beyond 2035 with CIS is not feasible. More clarity will be provided once the consultant has done their work. In addition, the risk of IT not being able to train and/or find people able to support CIS grows as it continues to age.

What is the Triple Bottom Line Primary Indicator this project addresses and its impact? A new CIS will not only allow us to continue being able to calculate, bill, collect and track amounts owed to the City, but will also allow for better, more timely reporting on usage, etc.

### What are other Triple Bottom-Line Co-Benefits?

Innovation and skills training – a new system will provide a much more adaptable framework for staff, which will enable many continuous improvement opportunities.

Resiliency and essential services – without the ability to bill and collect monies owed, all core services would be at risk.

# Saskatoon Emergency Management Interoperability Enhancement

### **Project Description**

The City of Saskatoon requires an updated interoperability facility – Emergency Operation Centre - and mobile command unit. This project provides a consultation process, selection of location, project management and design and build of an updated City of Saskatoon Emergency Operations Centre. To support this enhanced interoperability there is also a need for the Mobile Command Unit to be replaced.

### **Total Capital Estimate**

5 million to 20 million.

### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

### **How does this Project Address Council Priorities?**

Reconciliation, equity, diversity and inclusion.

Saskatoon Emergency Management has embraced the "whole of community" approach to emergency management to identify inequities in planning, mitigation, response and recovery that lead to a disproportionate impact on those in our community who are marginalized because of their race, gender/sexual identity, physical ability, and/or or lived experience. This requires engaging with non-traditional emergency management partners and sectors. This expands the role of interoperability and the complexity of planning, mitigation, response and recovery. The impact is that there may be more frequent and longer duration responses that involved both the Mobile Command Unit or Emergency Operations Centre.

### Community Safety and Wellbeing.

Saskatoon Emergency Management processes and resources provide an increase in the collaboration and coordination for emergency events. This increases the ability to respond to life-safety events by all sectors of a response.

### Regional Planning.

Saskatoon EMO has responsibility for the emergency management planning, mitigation, response and recovery for 11 communities around Saskatoon. Our critical infrastructure partners in Saskatoon often have responsibility for services in surrounding communities as well. There would be exploration of opportunities to partner with more communities in the development of an Emergency Operations Centre to provide support for the region.

### Environmental Sustainability.

In both the development of the Emergency Operations Centre and the Mobile Command Unit environmental opportunities will be considered. In addition, an interoperable emergency response plan can contribute to environmental sustainability by providing the opportunity to both mitigate environmental hazards that could impact Saskatoon and when an event occurs impact on the environment is one of the key principals in the response plan.

### How does this project address Core Services & Operational Priorities?

Civic Assets – Both the Mobile Command Unit and the Emergency Operations Centre provide increased interoperability in a whole community approach to mitigate the impact of major emergency events on civic assets and services. This includes civic assets and critical infrastructure in the whole community. This project to increase interoperability both with City divisions and within the community contributes to the outcome of Saskatoon's built and natural assets being managed at an acceptable level of risk to ensure that levels of service continue.

Equitable and Accessible Services – large and complex emergencies or disasters have historically had a more significant impact on individuals who are living in poverty or are marginalized in communities. Saskatoon EMO has prioritized a whole-community emergency management framework. Increased interoperability through the Mobile Command Unit and Emergency Operations Centre includes non-traditional sectors and groups to address systemic imbalances in response.

Quality of Life – Saskatoon EMO leads collaboration with critical infrastructure and community partners from a whole-of-community approach. This inter-operability project would continue to build on this increase in partners to strengthen community and regional resilience and mitigate public risk and vulnerability, especially on those who are disproportionally impacted during emergencies and disasters. During COVID-19 the City of Saskatoon provide a whole-community response that considered varying degrees of vulnerability for residents and organizations. This standard is now the community expectation in all emergency events.

### **How does this Project address Corporate Transformational Change?**

Customer-centric – this project increases inter-operability through the Mobile Command Unit and EOC. These two City of Saskatoon resources are key to continuity of services during emergency and disaster events. The preparedness, planning, response and recovery for Saskatoon are supported and conducted during emergency and disaster events through the process and resources from these projects. They underly and support all other departments and critical infrastructure in Saskatoons ability to provide ongoing services during and after emergencies and disaster events.

Efficiency and effectiveness – The outcome of "our ability to proactively respond to opportunities and challenges, while managing risks and organizational change" is enhanced with increased interoperability from a whole community – one-city approach that the projects provide. Increased interoperability through the Mobile Command Unit and the EOC provides risk management during emergencies and disaster events.

People and Culture – Increased interoperability fosters safety of City staff and residents. Review of major emergency events after-Action reports note that increased interoperability increases safer outcomes for all impacted. Both projects encourage inter-connected and interoperable planning and response.

### **How does this project mitigate Corporate Risk?**

The Mobile Command Unit and the Emergency Operation Centre both provide resources and processes to mitigate the risk of service disruptions for any reasons within City operations. These both can be used during events ranging from severe weather, labour disruptions, cyberattacks, and other hazards regularly occurring in our community.

During large emergency and disaster events Saskatoon EMO provides resources and processes that impact the outcomes of the response. In the FEMA After-Action review of the response to the Las Vegas shooting in 2017, the executive summary notes "the importance of coordinated planning and response across agencies cannot be understated in terms of its impact on response." When pre-established plans, procedures, and resources (like the Mobile Command Unit and EOC) are improved and strengthened the response is strengthened.

Through the whole-community inclusion that is foundational for emergency management in Saskatoon the community is empowered to work together to mitigate risks to our community and to respond with unity of leadership in the face of major events.

### What is the impact if this project is delayed?

The Emergency Operation Centre, located at 870 Attridge Drive, was established in 2008. The requirements for an EOC in the City of Saskatoon have changed dramatically since then. In addition, the expansion of the sectors involved in an emergency response have expanded and a review of the Emergency Operations Centre requirements will assist in ensuring the whole community is engaged in responding to major emergency events. Communications have also become more complex with multiple communication channels and increased need for coordination of communications partnerships during an emergency event. The current EOC location does not provide the need for this increased interoperability requirement for information officers from critical infrastructure partners.

During a large or complex emergency or disaster event, effective decision-making relies on the ability to collect emergency-related information, which requires close coordination between key leaders from a variety of divisions, organizations, agencies and government operations. The City of Saskatoon must be ready to direct and control emergency operations. The EOC is the physical location to coordinate information and resources to support the priorities of life-safety, critical infrastructure and service continuity, environment, economy and cultural heritage.

At this time the Mobile Command Unit has been impacted by increased use and more partners involved with complex response. There are ongoing mechanical issues that are creating safety concerns for staff operating this apparatus. The current Mobile Command Unit was a retrofitted recreational vehicle. This provided an opportunity to build capacity for inter-operability and develop policy and procedures for incident command post in Saskatoon.

During activations there can be up to 30 individuals representing multiple organizations, levels of government and emergency responders on the mobile command unit. The use of the mobile command post has increased yearly (outside of 2020 – due to COVID 19) and this increased frequency and intensity of usage has strained the mechanical operations of this unit. It has become increasingly expensive and challenging to complete repairs.

Multiple After-Action Reports from large scale events/incidents have recommended that emergency response organizations establish a single incident command post to provide a more comprehensive, coordinated and timely response to significant events. Saskatoon's mobile command unit is activated by special events, Saskatoon Police Service, and Saskatoon Fire Department during complex emergency events. If this project is delayed or deferred for multiple years Saskatoon will be without a Mobile Command Post and will not be able to respond as effectively to complex incidents and large-scale special events. There is risk to residents' safety and reputational risk to the City of Saskatoon.

It is important to note that with growth of the city and complexity of events there is increased need for a functional Mobile Command Unit.

A significant delay in this project will impact the City of Saskatoon's ability to protect these priorities in a large scale/complex emergency/disaster event.

### What is the impact if this project is not funded by 2035?

The City of Saskatoon Emergency Operations Centre has not been upgraded or reviewed since 2008. Without this updating and review the EOC will become inoperable and the City will not have a facility to manage large scale/complex emergency/disaster events.

The Mobile Command Unit is rapidly developing major mechanical failures. There will be several possible impacts. Mechanical failures will need to be addressed and the cost for these failures are becoming substantial. If the choice is made not to fund this project the Mobile Command Unit will become inoperable and will not be able to provide the incident command interoperability during major or complex events. There will be an increased risk to resident and

responder safety in these events. There will also be an increased risk to the reputation of the City in responding to these events.

# What is the Triple Bottom Line Primary Indicator this project addresses and its impact? Safety, or Resiliency of Essential Services.

Saskatoon EMO's primary responsibility is to increase the resiliency of the City of Saskatoon to major emergency events. Through planning, training, response and recovery the Mobile Command Unit and Emergency Operations Centre works with all critical (essential) services in Saskatoon – both internal to the City and external critical infrastructure. Training, response, and recovery activities occur using the tools of the Mobile Command Unit and the Emergency Operations Centre. These resources need to meet the requirements of all partners and need to be inter-operable with all critical (essential) services.

### What are other Triple Bottom-Line Co-Benefits?

Reconciliation, Equity, Diversity and Inclusion:

As has been mentioned emergency management is responsible for increasing resiliency of the whole community and works with all sectors to mitigate the different impacts of major emergency events on all residents.

Health, Wellbeing and Self-sufficiency:

Major emergency events and localized events can be mitigated in a timelier manner when interoperability tools like the Mobile Command Centre and the Emergency Operations Centre and their processes are implemented with all critical infrastructure partners. This timely response and recover increases the health and well-being of residents of Saskatoon.

Efficient and Effective Asset Management and use:

Taking a whole-city and whole community approach to emergency management, both resources increase the mitigation of major events that could impact city assets.

Recreation or Civic Participation:

The Mobile Command Unit provides increased safety coordination for large scale public events in Saskatoon. This includes safety briefings and contingency planning with all partners. This decreases the risk for these events.

# New Computer Assisted Mass Appraisal (CAMA) System for Assessment Office

### **Project Description**

Current CAMA system (AO) has been in use since 2002 and has many limitations hindering the City's ability to efficiently assess property. This project is to fund the purchase and implementation of a new CAMA system.

### **Total Capital Estimate**

2 million to 5 million.

### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

### **How does this Project Address Council Priorities?**

N/A

### How does this project address Core Services & Operational Priorities?

A new CAMA system will allow the Assessment Office to provide a lot more information (via self-service) to citizens regarding property assessment information. By doing this, the City will finally be on par with other Assessment service providers within the province.

### **How does this Project address Corporate Transformational Change?**

Supports the goal of developing a modern customer service system by improving supporting technology (i.e., 24 hour access to data), automating processes that are currently manual, and allowing the Assessment Office to implement industry best practices regarding data retention and access.

### How does this project mitigate Corporate Risk?

A new CAMA system would allow for more automated processes that ensure more reliable property assessments. This is critical as the Assessment Roll is the foundation of the property tax levy each year. Errors also have significant impact on the public perception of the City and have, will continue to lead to an erosion of public trust in the property tax levy.

### What is the impact if this project is delayed?

Given the current system is over 20 years old, any further delays increase the risk of inaccurate property assessments. Current processes are in place to alleviate this as best as possible; however, AO's limitations present significant challenges to the Assessment Office's daily operations.

#### What is the impact if this project is not funded by 2035?

Given the current system is over 20 years old, any further delays increase the risk of inaccurate property assessments. Current processes are in place to alleviate this as best as possible; however, AO's limitations present significant challenges to the Assessment Office's daily operations.

### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Allows a more stable property tax levy that is based on more reliable assessments.

What are other Triple Bottom-Line Co-Benefits?
Innovation and skills training – competitors for staff have new systems already, new systems also allow for better customer access.

Safety or resiliency of essential services – Reliable collection of property taxes is essential to the Corporation.

# <u>Corporate Accommodations - Facility & Supply Chain Management</u> Consolidation

### **Project Description**

This work is focused on relocating and consolidating offices, workspaces, stores and inventory operations for both the Facilities Management (FM) and Supply Chain Management Departments. The consolidation of FM spaces significantly supports the expansion and consolidation of Parks Department operations at the Ave P site. A detailed consolidation project charter, report and business plan has been developed to support this project.

### **Total Capital Estimate**

5 million to 20 million.

### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

### **How does this Project Address Council Priorities?**

Engagement on infill and growth - As we divest or develop City sites to improve and consolidate operations we coordinate and work with private industry to engage and improve infill and growth.

Regional Planning – consolidation of civic services supports the City of Saskatoon as we service both the City and the surrounding economic region.

Downtown Development – Alignment of civic service delivery in application of the Official Community Plan including the divestment and acquisition of downtown properties and sites supports effective development of our City Centre.

Environmental Sustainability - This project addresses operational deficiencies in divestment of existing facilities and purchase, renovations, and improvement of new buildings in application/adherence to HPCB Policy requirements.

Smart City – Improves the operations of civic facilities through integrated building management systems. This project also supports and improves civic procurement and inventory operations with the business community through the consolidation and coordination of SCM and FM services in a centralized and centre-led operation.

### How does this project address Core Services & Operational Priorities?

Civic Assets – Consolidation and optimization of civic operations and corresponding purchase and divestment of civic facility assets to support the effective delivery of civic services is the key purpose of the corporate accommodation and corporate asset management strategies. This project both consolidates civic operations for three departments, divests or disposes of aging assets and allows for future expansion.

Equitable and Accessible Services – this project provides significant improvement to service delivery of three departments for the organization and the community (Parks, Facilities and SCM).

Procurement and Project Management – Consolidating SCM operations at one central location improves the delivery of procurement in inventory management services for the entire corporation. Divestment of aging store's location and developing a centre-led strategy is core to SCM's operational priorities. All civic departments will experience a significant benefit from improved inventory management operations both at a new centralized site and across planned satellite sites (i.e., New space at Ave. P for Parks, Facilities and Public Works).

Quality of Life – Effective delivery of Parks and Facilities services supports the delivery of all civic services across the corporation. Essential services and municipal programs are better supported with consolidated operations and maintenance teams and supporting SCM services.

### **How does this Project address Corporate Transformational Change?**

Efficiency and Effectiveness – Consolidation of operations and effective management of civic facility assets through accommodation of corporate services supports the implementation of best practices and controls for responsible financial stewardship. This project is essential to the execution of the supply chain management transformation strategy.

People and Culture – supports the employee engagement strategy and corporate values providing employees safe work facilities through the divestment and replacement of aging unhealthy infrastructure.

### How does this project mitigate Corporate Risk?

Multiple Facilities Management performance and coordination issues and SCM items identified in 2020 MNP Audit that will be improved through the consolidation and better delivery of civic services.

Unsafe and aging infrastructure requires facility replacement for uninterrupted civic services. This project allows for Parks Department to consolidate and expand operations at Ave P site.

Continues to be significant risk in the procurement and management of civic inventory and the delivery of SCM services.

### What is the impact if this project is delayed?

- 1. Leasing of civic sites. \$300K annual. Cardinal Cres.
- 2. Opportunity to sell two sites (\$3-5M). (202 Portage Ave. & 333 Ontario Ave).
  - a. Ontario Ave. \$1.5 3.0M (Demo and Rebuild);
  - b. Ave P Site. \$2.0M Build for Parks;
  - c. SCM Inventory Management \$1.0M Portage;
  - d. SCM Build new at Ave P. \$2.0 4.0M Ave P.
- 3. Required to purchase / lease a new SCM site. (many variations).
- 4. Significant Health and Safety issues with existing sites. Substandard conditions for operations teams (Surveyor's site).

### What is the impact if this project is not funded by 2035?

As above with potential for additional new construction and lease sites.

### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Efficient and effective asset management and use

Consolidation of numerous operational services for multiple departments in purpose designed spaces to improve and transform delivery of civic services.

### What are other Triple Bottom-Line Co-Benefits?

Waste Reduction & Diversion – Improved civic operations with effective divestment of aging facilities and adherence to the high-performance civic building policy supports this co-benefit.

Support Climate Adaptation – New or modified newer buildings aligned with the high-performance civic building policy support climate adaptation.

Health, Wellbeing and Self-sufficiency – New and consolidated operations improve employee wellbeing and effective delivery of civic services.

Safety, or Resiliency of Essential Services – Improved facility operations supports all essential services by improving facility conditions and indoor environments.

Innovation, Quality Workplace, or Skill Training – Consolidation and improved service delivery fosters internal coordination, skill training and improved workplace dynamics

# **Inventory Centralization and Optimization**

### **Project Description**

Inventory Centralization and Optimization - ensure all corporate inventory operations are aligned with current and future operational needs.

### **Total Capital Estimate**

5 million to 20 million.

### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

### How does this project address Core Services & Operational Priorities?

Internal and external audit findings have determined there are specific segregation of duties issues. Centralizing the reservations and requisitions, issuance of purchase orders, and goods receipt/service entry receipt.

Central warehousing will ensure physical and transactional receiving is complete and done in a timely fashion. This will ultimately lead to reduction in accounts payable seen issues as well as reduce the time spent on cleaning up the payables, contacting internal personnel for issues, and working with vendors to submit proper invoices and reference to internal purchase orders.

Central operational buying will have individuals specialized in the operation procurement of goods and services. Focal points for issuing, monitoring, and expediting purchase orders, as well as working between AP and vendors to resolve any issues related to the purchase of goods and services

### How does this Project address Corporate Transformational Change?

Through implementation of centralized warehouse and operational procurement, we will benefit from:

- reduction of unproductive labour hours,
- clearly defined roles and responsibilities.
- freight reductions,
- vendor price breaks and enhanced purchasing power,
- reduced stock outs through increased inventory control,
- Improved spend accountability and transparency,
- reduction in Goods Receipts/Invoice Receipt (GR/IR) issues,
- key people becoming super users within SAP in their focused area (train the trainer),
- · Increased visibility and control,
- · Increased communication,
- Reduction of pgroups and users able to issue purchase orders,
- Standardization and alignment of procurement and warehouse processes and procedures.

### How does this project mitigate Corporate Risk?

The historical methods of divisional silos have led to different operating models for inventory management and purchasing of goods and services. With the implementation of SAP, we continue to highlight and see various opportunities across the City to standardize procedures, create new, or improve current policies, and optimize standard work for our employees.

### What is the impact if this project is delayed?

Lack of centralized compliance and governance. Resources continue to be constrained and inventory operations continue in risky, outdated, poorly located facilities. Inventory operations continue to lag behind operational needs and growth.

### What is the impact if this project is not funded by 2035?

Inventory operations continue to and significantly fall behind operational requirements.

### What are other Triple Bottom-Line Co-Benefits?

The following high-level benefits can be achieved:

Recognition and investment in the role of inventory plays across the organization.

Functional level leadership, mentoring, and guidance.

Ability to develop and maintain organizational wide culture for inventory management.

Significant reduction in operating costs.

Rent and other utilities.

Achieve cost efficiencies through optimization and streamlining of business processes leveraging SAP/Fusion.

Centralized inventory uses fewer human resources as few people can give maximum results. Resource Efficiency.

Presents the opportunity to update job descriptions and combine roles into a single Union. Provision of better customer service through a focus on skilled workers, increased ability to

respond to inquiries and requests.

Modernized facility, fit for purpose, better equipment.

Risk associated to outdated equipment, racking, and design are mitigated.

# **Corporate Accommodations - City Hall Lobby Renovations**

### **Project Description**

Renovation of City Hall Lobby to relocate all public facing services to the main floor lobby of the building and reduce or eliminate the need for visitors to access other areas (i.e., Building Standards, Human Resources etc.) while still allowing staff to access building amenities (i.e., Cafeteria). This includes improvements to visitor processing to restricted areas, and improved wayfinding signage.

The lobby renovations will incorporate accessible meeting rooms for all City services including Councillor meetings, Building Standards, Community Standards, Planning & Development, Human Resources, and City Solicitor's office.

Renovations include Safety/Security improvements with input from Corporate Security stakeholders. Involve minor passive controls and/or panic buttons, and other programming changes. These proposed interventions will be compatible with long-term Security plans.

A phased planning approach will allow for varying levels of intervention and capital investment. A detailed report and presentation were provided and supported by the ALT. Project includes partial CBCM funding for replacement of existing infrastructure (Entrance, flooring, finishes, etc)

### **Total Capital Estimate**

2 million to 5 million.

### Overview of potential non-city funding sources

CBCM Funding is available for a small portion.

Other federal funding may be available for improved delivery of civic services. \$250K.

### **How does this Project Address Council Priorities?**

Reconciliation, Equity, Diversity, and Inclusion - Allows community meeting spaces to work with the community groups to identify next steps in implementation of the Truth and Reconciliation Commission (TRC) Calls to Action. Allows for placemaking opportunities in City Hall.

Community Safety and Wellbeing - Create spaces where all community members feel safe and welcomed to ensure cultural identities and living experiences are reflected in the community.

Recreation, Culture and Leisure – Provides cultural opportunities, artwork and placemaking at City Hall in new meeting spaces and community service orientated lobby.

Smart City Advance a customer service strategy and roadmap, building on the foundation of Service Saskatoon.

# How does this project address Core Services & Operational Priorities?

Civic Assets – Improves longevity of civic infrastructure with improvements to City Hall Council and Lobby areas.

Equitable and Accessible Services – supports the implementation of a robust engagement strategy with modern and accessible city hall lobby areas that connects with the community and is reflective of the community's diverse needs and expectations.

Quality of Life – Provides a modern enabling environment at City Hall welcoming residents and visitors to the City. Ensuring high quality and citizen centric service delivery at City Hall.

### **How does this Project address Corporate Transformational Change?**

Customer -centric Service Delivery – Provides new accessible spaces for civic staff to provide effective customer service.

Efficiency and Effectiveness – Improves effective delivery of customer centric services for all services at City Hall.

People and Culture - Support safety and wellbeing of civic staff and citizens in the delivery of civic services in a welcoming and accessible lobby and Council chambers.

### **How does this project mitigate Corporate Risk?**

Mitigates risk through the efficient and secure spaces provided in City Hall lobby. In addition, it supports the relocation of the cafeteria to the main floor limiting all public access to the main lobby and associated spaces.

### What is the impact if this project is delayed?

If this project was delayed then there would be impacts to staff and Councillor security and failure to meet expected customer service levels. There would be a potential loss of reputation.

### What is the impact if this project is not funded by 2035?

As above with potential for significant security risks and reduced opportunities to provide accessible and equitable civic services.

### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Allows for transformative change to customer service options and delivery in the City hall lobby. Placemaking, meeting spaces, cafeteria operations. Civic events and gathering spaces. Provides enhanced security for public and staff isolating public to the main floor.

### What are other Triple Bottom-Line Co-Benefits?

Supports multiple co-benefits supporting opportunities for cultural events, art installations. Allows for improved safety and wellbeing of visitors to City Hall. Improves opportunities for civic participation in events at City Hall. Improves innovations in customer service and quality workplace by limiting public access to workspaces.

### **SAP Ariba**

### **Project Description**

With strategic sourcing solutions from SAP Ariba, you can manage and optimize your entire sourcing, contracting, and spend analysis processes for all types of spend – direct and indirect materials as well as services. Integrated into your execution and procurement processes, these solutions can help aggregate and classify all purchases, gain visibility, segment spend, and identify savings opportunities company wide. Standardize source-to-contract processes across teams and business units. Drive materials cost savings and optimization across all spend categories and ensure that the savings you negotiate are fully realized. Increase speed and drive up SCM throughput and reduce risk by finding better suppliers, increase diverse and social spend.

### **Total Capital Estimate**

2 million to 5 million.

### Overview of potential non-city funding sources

None and it is unlikely to receive other funding.

### **How does this Project Address Council Priorities?**

Faster time to market and time to volume: Integrate R&D and product design with sourcing, procurement, and supply chain management to accelerate innovation, including environmental sustainability. Quick and accurate sourcing supports the ability to drive social procurement initiatives and outcomes. (REDI).

Effective supplier collaboration, better product cost management. Minimize contract leakage and realize negotiated savings when all purchase orders reflect supplier agreements. Stronger compliance tie supplier qualification and sourcing together to ensure selection of qualified suppliers and mitigate supply chain disruptions. (Economic Development / Environmental Sustainability)

Complete supply chain visibility: Collaborate with multiple tiers of suppliers to manage your nonlinear and external supply chains, reduce inventory levels, increase fill rates, and increase team productivity. (Smart City)

### How does this project address Core Services & Operational Priorities?

Complete supply chain visibility: Collaborate with multiple tiers of suppliers to manage your non-linear and external supply chains, reduce inventory levels, increase fill rates, and increase team productivity. (Smart City)

Reduces risk with existing SCM software and adds additional functionality to significantly improve vendor master data and the correct approval and execution processes.

### **How does this Project address Corporate Transformational Change?**

Centralize the procurement function across Divisions for enhanced compliance, coordination, and standardization. Reduce procurement costs, leverage buying power to achieve organizational and/or City Council Priorities and increase the use of automation across the function. Helps SCM transition to strategic procurement vs. tactical or transactional buying.

### How does this project mitigate Corporate Risk?

Reduces risk with existing SCM software and adds additional functionality to significantly improve vendor master data and the correct approval and execution processes.

### What is the impact if this project is delayed?

Risk in procurement governance and compliance, inefficient and outdated processes. Lack of full system integration and failure to achieve efficiencies. Failure to meet social procurement goals.

### What is the impact if this project is not funded by 2035?

Risk, inefficient and outdated processes. Lack of full system integration and failure to achieve efficiencies. Additional risk of falling further behind the curve in strategic sourcing and spend management.

### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

A transformed, centralized, and efficient procurement organization with higher savings and greater automation of channels across guided buying, material and service design, and spend control. Increased spend visibility with improved analytics and performance management. Enables the City to apply the appropriate level of governance, identify risk and value across the source-to-pay cycle and to better connect SCM internal and external stakeholders.

A better customer experience and culture of partnership with vendors, communities, and stakeholders that build a stronger foundation and framework to fully support the City's Triple Bottom Line Policy.

### What are other Triple Bottom-Line Co-Benefits?

A transformed, centralized, and efficient procurement organization with higher savings and greater automation of channels across guided buying, material and service design, and spend control. Increased spend visibility with improved analytics and performance management. Enables the City to apply the appropriate level of governance, identify risk and value across the source-to-pay cycle and to better connect SCM internal and external stakeholders.

A better customer experience and culture of partnership with vendors, communities, and stakeholders that build a stronger foundation and framework to fully support the City's Triple Bottom Line Policy.

# <u>Corporate Accommodations - City Hall Furniture and Carpet Replacement</u>

### **Project Description**

Replacement of obsolete furniture (unfunded) and carpet (CBCM funded) throughout City Hall. Items like carpet and furniture are subject to ongoing wear and tear, and eventually require complete replacement. Extremely worn and soiled carpet have created air quality concerns and trip hazards in several areas. The existing furniture product has been obsolete for about 15 years and replacement parts are not available nor does the City own any excess inventory. There are advantages to considering furniture upgrades at the same time area carpet is being replaced, and vice versa, as labour and material costs can be reduced overall if upgrades are completed simultaneously. Additionally, this aligns with staff expectations when accommodations projects are completed.

Facilities has purchased enough stock of the replacement carpet product to ensure that all of City Hall can be replaced as needed, with or without furniture upgrades. Replacement carpet is the responsibility of CBCM through Facilities, however, the costs of furniture replacements are responsibility of the Department, and as a result, do not always occur. As a result, obsolete furniture is not consistently replaced throughout City Hall. The older office furnishings are showing considerable damage in some areas and has presented safety concerns. The electrical raceways have been modified in places creating code issues and in a couple of locations, actual burn marks have been found when the product was dismantled. Anticipating further issues with dismantling the product, the Designers are reluctant to proceed with installing new carpet without replacing the old furniture. Removing the electrical raceways and running extension cords and power bars has resulted in increased cord issues in work areas. Typically, Divisions like to take advantage of the opportunity to reconfigure their spaces when carpet is replaced. There is little to no opportunity to realize improvements in layouts when limited to the existing furniture in the spaces.

Facilities is proposing that a capital project to fund the replacement of obsolete furniture be considered, ensuring that Departments with limited resources are not left behind other groups in the corporation. If dedicated funding was made available to cover the replacement costs of obsolete furniture, Facilities has the in-house expertise and necessary vendor agreements in place to administer the area upgrade projects in conjunction with the carpet replacements and can ensure that corporate standards are met throughout City Hall.

### **Total Capital Estimate**

2 million to 5 million.

### Overview of potential non-city funding sources

CBCM Funding is available for carpet replacement and components of the City Hall Lobby renovations. Carpet has already been purchased and is in place for multiple areas of City Hall.

### **How does this Project Address Council Priorities?**

Community Safety and Wellbeing – supports safe working and visiting environment for staff and public at City Hall. Improves operations lighting, reduces fire hazards and improves general professionalism and welcoming environment.

Environmental Sustainability - This project addresses operational deficiencies at City Hall improving operations, air quality and reducing energy costs with existing furniture in application/adherence to HPCB Policy requirements.

Smart City – Furniture investments to address opportunities and challenges around digital infrastructure, connectivity, and technology to support effective and efficient office spaces.

### How does this project address Core Services & Operational Priorities?

Civic Assets – Directly improves city workspaces to ensure safe, adequate administrative and operational facilities to deliver established levels of service as Saskatoon grows.

Equitable and Accessible Services – Improves service offerings in the community and considers the impacts of growth and new technology used with new architectural furniture.

Procurement and Project Management – Uses current blanket contracts established in adherence with the corporate purchasing policy to purchase systems furniture in transparent and cost-effective manner. Utilizes existing stock material that was also purchased in accordance with corporate policies.

Quality of Life – Provides safe and welcoming environment for citizens and staff at City Hall allowing public to engage in civic services.

### **How does this Project address Corporate Transformational Change?**

Efficiency and Effectiveness – Supports the effective operation of administrative and operational teams in City Hall with improved (health and safety, appearance, air quality) working environments.

People and Culture – Supports all City Hall staff and visitor with improved appearance, indoor air quality and professional environment support employee engagement and increased staff morale.

### **How does this project mitigate Corporate Risk?**

Health and Safety of City Hall environment and supports employee engagement and professionalism.

### What is the impact if this project is delayed?

There are safety risks and hazards associated with continuing to use obsolete furniture, especially as the technology trends towards an increase in the number of monitors, phones, cords and other IT equipment continues. Proper cord management is not achievable when reconfiguring areas with old furniture, creating fire and trip hazards. Older-style furniture does not have adequate raceways, or raceways are blocked with broken/damaged wiring. For staff who work in spaces where obsolete furniture continues to be used, perceived inadequacy of these work environments can be frustrating and demoralizing. As furniture does deteriorate, there are no replacement parts/pieces available to make proper repairs. Departments are not typically prioritizing office furniture replacements in their annual budget and operational planning, and as it represents a large cost impact to some departments struggling with limited resources, and therefore it continues to deteriorate.

Increased operational costs will occur as we replace furniture in small quantities resulting in continued mobilization / demobilization and carpet replacement projects will require a full area shutdown significantly disrupting operations.

### What is the impact if this project is not funded by 2035?

Continued health and safety risks for staff at City Hall. Increased operations and maintenance costs managing older furniture and cleaning / replacing aging carpet in reactive manner.

### What is the Triple Bottom Line Primary Indicator this project addresses and its impact?

Provides new and professional quality spaces for staff across city hall recognizing importance of workplace safety, appearance and general enjoyment of all staff. Could be transformative for staff. Compare new spaces at CSE to City Hall or parts of third floor City Hall for significant differences in appearance.

### What are other Triple Bottom-Line Co-Benefits?

Conserve Energy & Reduce GHG's – New carpet and furniture reduces operational costs, energy lost due to inefficient or damaged electrical systems (within old furniture).

Health, Wellbeing, and self-sufficiency – New furniture and carpet reduces health and safety issues in the workplace (air quality, fire hazards reduction).

Efficient & Effective Asset Management and Use – Replacement of carpet & furniture aligns with minimizing life cycle costs of these assets. Old systems require increased operational and maintenance expenditures to meet minimum level of service while new systems reduce O&M costs while providing increased service levels.