

2019

Budget

2019 APPROVED CAPITAL PROJECT DETAILS

APPROVED BY CITY COUNCIL
November 28, 2018



City of Saskatoon

2019 APPROVED

CAPITAL PROJECT DETAILS

APPROVED BY CITY COUNCIL,
NOVEMBER 28, 2018

The projects contained in this section are sorted by project number order. An index is included at the back of this section that cross references the Business Lines in which each of these projects are budgeted within.

0582 FIRE-EQUIPMENT & SMALL VEHICLE REPLACEMENT

Project Status	Open	Year Identified	2010
Project Type	EQUIPMENT REPLACEMENT	Manager	Glenn Ledray
Asset Type	Fire Apparatus	Est. End Date	-

Project Description

This project provides the replacement and refurbishment of cars, trucks, vans and equipment used by the Saskatoon Fire Department.

General Comments

Vehicles and equipment are scheduled to be replaced as they reach the end of their safe serviceable life.

Scheduled to be replaced in 2019:

- rescue tools including additional fire hose and appliances for the purpose of high-rise firefighting;
- water rescue, tech rescue, and apparatus equipment; and
- vehicles scheduled for replacement - training van, dive trailer, and 2 inspector vehicles.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Equipment Replacement	135.0	130.0	135.0	135.0	135.0
Vehicle Replacement	95.0	235.0	75.0	50.0	80.0
Total	230.0	365.0	210.0	185.0	215.0
FINANCING DETAILS					
FIRE SMALL EQUIPMENT REPL RESERVE	230.0	365.0	210.0	185.0	215.0
Total	230.0	365.0	210.0	185.0	215.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0583 TR-REPLACE/REFURB BUSES

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Paul Bracken
Asset Type	Transit Buses	Est. End Date	-

Project Description

This project provides for the scheduled replacement and/or refurbishment of existing buses in order to maintain an in-service fleet size of 137 buses. This will be accomplished by purchasing replacement buses and by refurbishing buses when it makes economic sense to do so. The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized services.

General Comments

In an effort to achieve its target average fleet age of 9 years, Transit put forward a report called "Building Better Transit: an Asset Management Plan for Transit and Access Transit Fleet" which was adopted by City Council July 2016. With the announcement of the Growing the Middle Class Infrastructure Plan by the Federal Government, City Council approved the Public Transit Infrastructure Fund strategy in principle to purchase up to 40 conventional buses over the period 2016 to 2018. Through 2016 to 2017, an order of 26 transit low-floor buses and eight 30 foot buses at an estimated cost of \$18.5 million was placed, and received in 2017 and 2018.

From 2018 to 2019, Transit is planning to purchase up to 7 regular size low-floor buses worth \$4.1 million.

In 2018 through 2019 the funding from both internal sources and the Public Transit Infrastructure Funding allowed for Transit's Fleet Renewal Strategy to be expedited. Future purchases planned for 2019-2027 that are required to continue with the Asset Management Plan presented in 2016 (10 bus replacements a year) are unfunded.

A conventional (low floor) bus is estimated at \$590,000 and an articulated bus at \$800,000. Refurbishments are estimated at \$100,000 per bus.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Bus Refurbishment	1,000.0	1,000.0	720.0	0.0	0.0
Bus Replacement	0.0	6,100.0	5,724.0	6,138.0	6,588.0
Funded Bus Replacement/Refurbs	0.0	0.0	636.0	682.0	732.0
Total	1,000.0	7,100.0	7,080.0	6,820.0	7,320.0
FINANCING DETAILS					
TRANSIT VEHICLE REPLACEMENT RESERVE	1,000.0	1,000.0	1,356.0	682.0	732.0
UNFUNDED TVRR	0.0	6,100.0	5,724.0	6,138.0	6,588.0
Total	1,000.0	7,100.0	7,080.0	6,820.0	7,320.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0584 TR-ADDITIONAL BUSES

Project Status	Open	Year Identified	2010
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Paul Bracken
Asset Type	Transit Buses	Est. End Date	-

Project Description

This project provides for the expansion of the in-service fleet to provide new service to existing subdivisions, the University of Saskatchewan, high schools, or to provide additional service on routes with capacity problems.

General Comments

The current cost of a new articulated bus is \$800,000 and the cost of a new conventional (low floor) bus is \$590,000.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Additional Buses Purchases	0.0	0.0	0.0	682.0	0.0
Total	0.0	0.0	0.0	682.0	0.0
FINANCING DETAILS					
TRANSIT ADDITIONAL VEHICLES RESERVE	0.0	0.0	0.0	682.0	0.0
Total	0.0	0.0	0.0	682.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0616 LAND DEV'T-PRIM WTRMN-NORTHEAST SECTOR

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the extension of primary water mains to the University Heights and North East Sectors. These primaries will facilitate approximately 1,200 hectares of staged development in the North East Sector in the near future. In the long term these primaries will also facilitate approximately 1,800 hectares of development in the East Sector.

General Comments

Note: Primary water mains required for any given neighbourhood may also be required for subsequent neighbourhood

SECTION *	LENGTH (m)	SIZE (mm)	YEAR(s)	
AB	5,620	750	1982/84	Complete
BB'	910	750	1984/85/86	Complete
AE	1,610	600	1987	Complete
B'C	600	900	2000	Complete
CF	2,000	1,050	2009	(Required for Evergreen)
KH	4,800	1,050	1998/99/2000	Complete
HF	3,200	1,050	2017 & Beyond	(Required for Neighbourhood#2) Fill Main
LF'	3,100	600	2011/2013	(West portion required for Evergreen)
FF'	945	1,050	2012	(East portion of Evergreen)
MM'	600	1,050	2014	(Required for UHII & NE Sector)
M'N'N1	930	900	2015	(Required for UHII & NE Sector)
N'P	170	600	2015	(Required for UHII & NE Sector)
N1N2	360	600	2018	(Required for UHII & NE Sector)
N2N	300	600	2019	(Required for UHII & NE Sector)
PP1	660	600	2020	(Required for UHIII & NE Sector)
LK	670	600	2020	(Required for UHIII & NE Sector)
KP'P1	4,085	600	Beyond 2023	(Required for UHIII & NE Sector)
KR	5,456	1,350	Beyond 2023	
HL	1,150	600	1998/2011	(Required for Evergreen)
CO	1,500	1,050	2013	(Required for East Sector)

AA' Isolate NE sector water system at College Dr. to improve control of water pressures east of Preston Avenue 2003 Complete

* A map indicating the location of the sections is available from the Transportation and Utilities Department upon request.

Note: As neighbourhood concept plans are approved, the route, the length, and diameter of some segments, and therefore the estimated cost will be updated.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Fill Mains/Internal PWM's - 42nd St Fill main - RK	0.0	0.0	0.0	0.0	5,793.0
Fill Mains-Cent/NE Res aka Evergreen (now Land Dev project)	3,500.0	0.0	0.0	0.0	0.0
HF - Reservoir Fill Main-Cent/NE Res	119.0	0.0	0.0	0.0	0.0
LK - Central - Fedoruk to Perimeter	0.0	1,213.0	0.0	0.0	0.0
MM',M'N'N1P, N1N2,N1N/PP' McOrmond-Fedoruk North to Perimeter Rd.	0.0	1,195.0	0.0	0.0	0.0
Total	3,619.0	2,408.0	0.0	0.0	5,793.0
FINANCING DETAILS					
PRIMARY WATERMAIN RES	0.0	2,408.0	0.0	0.0	0.0
WATERWORKS CAPITAL PROJECTS RESERVE	3,619.0	0.0	0.0	0.0	5,793.0
Total	3,619.0	2,408.0	0.0	0.0	5,793.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0625 LAND DEV'T-TR SWR-NORTHEAST SECTOR

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the extension of the storm and sanitary trunk sewers north, south, and east from the Saguenay Drive river crossing to facilitate approximately 1,200 hectares of staged development in the northeast sector in the near future. In the long term, these trunks will also facilitate approximately 1,800 hectares of development in the east Sector.

General Comments

Note: Trunks required for any given neighbourhood may also be required for subsequent neighbourhoods. Changing the order of development will not necessarily delay a given project.

SECTION *	LENGTH (m)	SIZE (mm)	YEAR(s)	
River to A	-	3,050/1,200	1980/84	Complete
AA' Isolate NE sector water system at College	900	3,050/1,200	1984/85	Complete
AB	300	1,800/525	1986	Complete
AC	650	3,050/1,200	2000	Complete
B-Erindale Basin	-	-	1987/88/89	(Required for Evergreen)
C'D	1,450	3,050/1,200	2012	(Required for east Sector)
CE	630	1,800/450	2003/04	Complete - Willow Grove
E-Willowgrove North Basin	3,100	-	2005	Complete - North Willow Grove
EE-Phase I	570	1,650	2005	Complete - North Willow Grove
EE-Phase II	710	1,350	2006	Complete - North Willow Grove
F-Willowgrove South Basin	-	-	2003/08	Complete - South Willow Grove
GH	950	1,800/750	1987	Complete
HI	525	1,500/675	1997	Complete
IJ	350	1,050/600	1997	Complete
JJ	200/820	1,350/600	1998	Complete
ABCD	1,700	1,350/600	2009/12	Complete - Evergreen
Pond #1	-	-	2009	Complete - Evergreen
Pond #1 to River	1,400	1,500	2009	Complete - Evergreen
Lift Station	-	-	2013	(Required for UH2)
Force Main - MI	3,582	450	2013	(Required for UH2)
Stm Tr-S. Willow Grove	-	Open Channel	2008	Complete - South Willow Grove
Pond 2	-	-	2015	(Required for UH2)
MN/MO-O'/MN' - San Trunks	1,690	375/450/525/600	2014 & Beyond	(Required for UH2)
ST, TU, TV Stm Trunk	2,350	1,350/1,800	2013 & Beyond	(Required for UH2)
FGG' - Force Main San	1,600	450	2021	(Required for UH3/UH4)
Temp. LS San	-	-	2021	(Required for UH3)
FGHJK - San	2,640	381/450/525	2021	(Required for UH3)
EF - River Xing San	-	-	2021	(River Crossing reqd. for UH3/UH4/FG)
HIJKL ST	810	1350/1500/1650	2021/22 & Beyond	(Required for UH3)
Pond 3 ST	-	-	2022	(Required for UH3)
FUVWXYZ San	4,425	381/450/525/675/750	Beyond 2023	(Required for UH3/UH4)
PQRXYZ ST	2,450	1050/1200	Beyond 2023	(Required for UH3/UH4)
Pond 4 ST	-	-	Beyond 2023	(Required for UH3 @ North of NE Swale)
Pond 5 ST	-	-	Beyond 2023	(Required for UH3/UH4)
Lift Station (Y) San	-	-	Beyond 2023	(Required for UH3/UH4)
Force Main	1,160	250	Beyond 2023	(Required for UH3/UH4)

* A map indicating the location of the sections is available from the Transportation & Utilities Department upon request.

Land Development

Approved 2019

Prior Budget Approval

\$90,259,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
EF - Sanitary River Crossing	0.0	0.0	9,370.0	0.0	0.0
San Trunks - UH2 - MN,MM', MOO'	0.0	140.0	0.0	0.0	0.0
Sanitary - FG/GH/HJ/JK	0.0	0.0	3,436.0	0.0	0.0
Stm Trunks - UH2 - TU, TV, TS	100.0	0.0	0.0	0.0	0.0
Stm Trunks/Pond - N of Evergreen - Pond 3/HJ/JI/JK/JL	0.0	0.0	300.0	1,905.0	0.0
Total	100.0	140.0	13,106.0	1,905.0	0.0
FINANCING DETAILS					
TRUNK SEWER RESERVE	100.0	140.0	13,106.0	1,905.0	0.0
Total	100.0	140.0	13,106.0	1,905.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0626 LAND DEV'T-SUBDIVIS'N WARRANTY

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves warranty work in prepaid subdivisions.

General Comments

In this project, funding is provided for warranty construction after the issuance of the final acceptance certificate. Funding from the Property Realized Reserve is used for reconstruction of sidewalks in City development areas that are damaged during home construction.

Prior Budget Approval

\$4,509,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction	412.0	247.0	0.0	0.0	0.0
Total	412.0	247.0	0.0	0.0	0.0
FINANCING DETAILS					
PRR-LAND DEVELOPMENT	100.0	50.0	0.0	0.0	0.0
WARRANTY RESERVE	312.0	197.0	0.0	0.0	0.0
Total	412.0	247.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0627 LAND DEV'T-SUBDIVIS'N FENCING

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the construction of fencing relating to various prepaid subdivisions.

General Comments

Fencing is constructed in various prepaid subdivisions as development of the neighbourhood progresses.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Fencing - Rosewood	0.0	0.0	92.0	0.0	0.0
Fencing-Aspen Ridge	0.0	0.0	64.0	0.0	0.0
Fencing-Brighton	0.0	0.0	61.0	0.0	0.0
Fencing-Kensington	0.0	0.0	73.0	0.0	0.0
Total	0.0	0.0	290.0	0.0	0.0
FINANCING DETAILS					
FENCING RESERVE	0.0	0.0	290.0	0.0	0.0
Total	0.0	0.0	290.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0631 TU-TRANSPORTATION SAFETY IMPROVEMENTS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Nathalie Baudais
Asset Type		Est. End Date	-

Project Description

This project includes various transportation safety improvements throughout the City including intersection and right-of-way improvements, safety messages and the management and implementation of the Road Safety Action Plan.

General Comments

This project supports the City of Saskatoon's long-term 'Moving Around' strategy as traffic safety devices provide safety to motorists, cyclists and pedestrians.

Details on the program proposed for the budget year will be presented in an administrative report prior to, or concurrent with, the Council budget meeting.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
CONSTRUCTION	250.0	200.0	200.0	200.0	200.0
Total	250.0	200.0	200.0	200.0	200.0
FINANCING DETAILS					
TRAFFIC SAFETY RESERVE	250.0	200.0	200.0	200.0	200.0
Total	250.0	200.0	200.0	200.0	200.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0634 LAND DEV'T-TR SWR-NORTH INDUSTRIAL

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the extension of the sanitary trunk sewers from the pollution control plant to service the Marquis Industrial Area. These Trunks are required to serve new and existing industrial areas in the northern part of the City. This project also includes Storm Trunks and Storm Ponds.

General Comments

This strategy will provide trunk services to the area bounded by the perimeter highway, 1/2 mile west of Idylwyld Drive and north of 60th Street.

SECTION *	LENGTH (m)	SIZE (mm)	YEAR(s)	
Wetland Design Industrial	-	-	2006	Engineer Consultant to propose Wetland System
AB	613	1,500/3,050	2006	Complete
BC	400	1,200/2,400	2006	Complete
CD	673	1,200/2,100-2,400	2006	Complete
DD'/D'EFN	1,020	1,050/1,050-1,200	2011/12	Complete
FG	1,000	1,050	2013	Complete
DT Pond #2	-	-	2012	Conversion of Existing Wetland to 12.1ha Wetpond
HN	470	1,350	2013	
EI Stm/San	887	900/1200/1500/1800	2020	Required for area S of 71st Street
IJ Stm	500	1,050	2022	Required for area W of Faithfull
II' San	825	1,050	2022	Required for area N of 71st Street
BC'CD'	900	1,050/2,100	2014	
BI	640	1,050/2,100	2009	
STM Pond #1	-	Dry pond	2009	
D'D"E Stm/San	3,345	375/450/750/1500/1800	2022	North of CNH
I'M/KM San/Stm	2,250	1200/1350	2023	West of Idylwyld & North of 71st
F'GHJJ'J'KK'K"L Stm	3,800	1000/1200/1350/1500	Beyond 2023	West of Arthur Rose
Pond 5	-	-	Beyond 2023	
I'KK'LL' San	2,110	375/525/900	Beyond 2023	West of Arthur Rose
MNOP Stm/San	5,330	375/425/525/900/1050/1350/1500	Beyond 2023	West of Idylwyld
Pond 7 & 8	-	-	Beyond 2023	West of Idylwyld
XYZ Stm	1,200	450/600/1500	Beyond 2023	
Pond 14	-	-	Beyond 2023	
EEF'G Stm/San	1,990	375/600/750/1050/1350/1500	Beyond 2023	
F'F"Z San	800	375/450	Beyond 2023	West of River
Lift Station (F') San	-	-	Beyond 2023	West of River
Force Main - FF' San	1,620	350	Beyond 2023	West of River
ABCL'MM'NOP	20,580	450/525/600/750/900/1050	Beyond 2023	North of Highway 16
QRSTUUVWW' Stm/San		1200/1350/1500/1800/2100		
Pond 9, 10 & 13 Stm	-	-	Beyond 2023	North of Highway 16
STM Pond #4	-	3.38ha Dry P	2013	North of 71st

* A map indicating the location of the sections is available from the Transportation and Utilities Department upon request.

Land Development

Prior Budget Approval

Approved 2019

\$46,651,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
D'E - Sanitary & Storm Trunk - N of CNH	0.0	0.0	0.0	11,289.0	0.0
EI - Faithfull E - Marquis to 71st	100.0	3,611.0	0.0	0.0	0.0
II', IJ - San & Stm (71st & Idylwyld)	0.0	0.0	0.0	2,275.0	0.0
San & Stm - (E&W of Idylwyld) - I'M, KM	0.0	0.0	0.0	0.0	9,357.0
Total	100.0	3,611.0	0.0	13,564.0	9,357.0
FINANCING DETAILS					
TRUNK SEWER RESERVE	100.0	3,611.0	0.0	13,564.0	9,357.0
Total	100.0	3,611.0	0.0	13,564.0	9,357.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0636 LAND DEV'T-TR SWR-MONTGOMERY PLACE WEST

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the construction of the storm and sanitary trunk sewer systems to serve new development in Montgomery Place West. The storm sewer component (AB) may be combined with future servicing of the West Sector.

General Comments

SECTION *	LENGTH (m)	SIZE (mm)	YEAR(s)
A- Stormwater Storage Basin	-	-	Beyond 2023
AB	2,200	600	Beyond 2023
DE - Sewage Lift Stn & Forcemain	620	200	Beyond 2023

* A map indicating the location of the sections is available from the Transportation and Utilities Department upon request.

Prior Budget Approval

\$72,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
AB - Trunk Storm Sewer	0.0	0.0	0.0	0.0	2,500.0
DE-Sewage Lift Stat'n & Forcemn	0.0	0.0	0.0	0.0	2,735.0
Stm Wtr Storage Basin A	0.0	0.0	0.0	50.0	0.0
Total	0.0	0.0	0.0	50.0	5,235.0
FINANCING DETAILS					
TRUNK SEWER RESERVE	0.0	0.0	0.0	50.0	2,500.0
WASTEWATER LIFT STATION RES	0.0	0.0	0.0	0.0	2,735.0
Total	0.0	0.0	0.0	50.0	5,235.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0639 LAND DEV'T-SUBDIVIS'N BUFFERS

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the construction of buffer strips adjacent to prepaid subdivisions.

General Comments

Construction of buffer strips may include grading, topsoil, seeding and shelter belts. This project also involves reimbursement for costs incurred by the developer for berm construction.

Prior Budget Approval

\$5,910,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Buffers - Aspen Ridge	0.0	0.0	173.0	0.0	0.0
Buffers - Brighton	0.0	186.0	187.0	0.0	0.0
Buffers - Kensington	102.0	0.0	0.0	0.0	0.0
Buffers - Rosewood	40.0	0.0	0.0	0.0	0.0
Total	142.0	186.0	360.0	0.0	0.0
FINANCING DETAILS					
BUFFER RESERVE	142.0	186.0	360.0	0.0	0.0
Total	142.0	186.0	360.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0655 LAND DEV'T-ARTL RD-MCORMOND(E SECT-PERIMETER RD)

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the design and construction of a North-South arterial roadway extending to the future commuter bridge crossing. This roadway is the main North-South arterial that will provide access to the University Heights Suburban area and the Holmwood Sector. In the long term, this roadway will form part of the roadway network feeding the proposed Perimeter Road.

General Comments

The construction in 2003 included a joint project with the Ministry of Highways and Infrastructure to upgrade the intersection of McOrmond Road and Highway 5.

Prior Budget Approval

\$28,983,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
6th Collector to 8th Street	0.0	0.0	2,481.0	2,261.0	0.0
Brighton Common to 6th Collector	0.0	3,794.0	0.0	3,457.0	0.0
Total	0.0	3,794.0	2,481.0	5,718.0	0.0
FINANCING DETAILS					
ARTERIAL ROAD RESERVE	0.0	3,794.0	2,481.0	5,718.0	0.0
Total	0.0	3,794.0	2,481.0	5,718.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0668 PARK DEV-BOULEVARD DEVELOPMENT

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Michelle Chartier
Asset Type		Est. End Date	-

Project Description

The Community Tree Planting Program (CTPP) involves planting trees on boulevards adjacent to serviced lots and on separate boulevards where planting set-back requirements are met.

General Comments

The project involves investigating planting requests, identifying appropriate plant sites, site preparation including soil amendments if required, tree planting, and the three year establishment maintenance of trees in new residential neighbourhoods. It also includes supplemental establishment maintenance, as required, on approved tree planting by developers in new neighbourhoods.

Operating Impacts

\$9,900 in 2022 (average annual life cycle cost of 175 trees at \$56.40 per tree)

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction	120.0	120.0	120.0	120.0	120.0
Total	120.0	120.0	120.0	120.0	120.0
FINANCING DETAILS					
PARKS AND RECREATION LEVY (MULTI-DISTRICT)	120.0	120.0	120.0	120.0	120.0
Total	120.0	120.0	120.0	120.0	120.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	9.9	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0671 TR-AUXILIARY VEH/EQUIP

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Paul Bracken
Asset Type		Est. End Date	-

Project Description

This project involves the ongoing purchase/upgrade/replacement of non-fleet Transit System vehicles and equipment in accordance with the Capital Reserves Bylaw.

General Comments

Radios for the buses bought under Public Transit Infrastructure Fund will be paid through this project.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Equipment Purchase	100.0	100.0	100.0	100.0	250.0
Total	100.0	100.0	100.0	100.0	250.0
FINANCING DETAILS					
TRANSIT CAPITAL PROJECTS RESERVE	100.0	100.0	100.0	100.0	250.0
Total	100.0	100.0	100.0	100.0	250.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0677 AF-ALBERT COMM CENTRE RENOS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Craig Senick
Asset Type	Buildings	Est. End Date	-

Project Description

This project involves identifying and completing the necessary major repair or replacement expenditures as required by the Facility's Comprehensive Maintenance Program.

General Comments

Current emergent needs include roofing access improvements and building envelope capital renewal. Planning for portions of this major renewal will require project funding to accrue until sufficient funding is in place.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Repairs	100.0	75.0	75.0	75.0	75.0
Total	100.0	75.0	75.0	75.0	75.0
FINANCING DETAILS					
ALBERT MAJOR REPAIR RES	100.0	75.0	75.0	75.0	75.0
Total	100.0	75.0	75.0	75.0	75.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0679 AF-GROUNDS MTNCE-EQUIPMENT REPL

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Jason Kennon
Asset Type	Parks Equipment	Est. End Date	-

Project Description

This project involves the purchase of replacement equipment in accordance with Capital Reserves Bylaw #6774. Replacements are required as the units have reached or passed their scheduled life spans and are experiencing unacceptable maintenance and repair costs, excessive downtime and/or a loss in productivity.

General Comments

The pieces of equipment to be replaced will be disposed of by public auction, by public tender or as trade-ins. The pieces of equipment scheduled for replacement are as follows:

Small equipment (chainsaws, whippers etc) - limited to \$20,000

Trailer (2 axle) \$19,000

Tree Spade (Large) \$40,000

5x Mini-haul Trucks \$83,000

Mower (50") \$15,000

2x Aerator \$29,000

Mower (6') \$35,000

2x Tractor (60HP) \$120,000

3x Groomers \$39,000

The planned procurement method for this project is to be accomplished utilizing internal staff, due to existing staff capacity to perform the work.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Equipment Purchase	400.0	375.0	375.0	375.0	375.0
Total	400.0	375.0	375.0	375.0	375.0
FINANCING DETAILS					
GROUND'S MAINTENANCE EQUIPMENT RES	400.0	375.0	375.0	375.0	375.0
Total	400.0	375.0	375.0	375.0	375.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0681 LAND DEV'T-ARTL RD-TAYLOR(MCKER-CP TRACK)

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the extension of Taylor Street East of McKercher Drive to the Canadian Pacific Railway (CPR) tracks. This is required to provide access to the Lakeview, Lakeridge, Lakewood, Briarwood and Rosewood subdivisions and is the only East-West arterial roadway South of 8th Street.

General Comments

Additional construction for Rosewood Gate to CPR tracks section is planned for 2021 and beyond.

Prior Budget Approval

\$5,432,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Rosewood Gate North to Rosewood Drive	0.0	0.0	3,519.0	0.0	3,207.0
Total	0.0	0.0	3,519.0	0.0	3,207.0
FINANCING DETAILS					
ARTERIAL ROAD RESERVE	0.0	0.0	3,519.0	0.0	3,207.0
Total	0.0	0.0	3,519.0	0.0	3,207.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0687 WWT- ASSET REPLACEMENT

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Pam Hamoline
Asset Type		Est. End Date	-

Project Description

This project involves the replacement of deteriorating Wastewater Treatment Plant assets (in accordance with the Capital Reserves Bylaw) that have reached the end of their useful life. The assets are replaced by similar equipment or equipment with a similar function. The planned procurement method for this project is to be accomplished utilizing external contractors, due to existing staff capacity to perform the work.

General Comments

The asset group defined by the project are subject to a review to determine condition and eligibility. The project includes an item labelled Existing System Replacements. This provides funding for assets that experience premature failure and require immediate return to service.

External service providers will be utilized on selected projects within the overall Asset Replacement Program.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Bioreactors - Pumps & Processes	1,025.0	0.0	0.0	225.0	348.0
Digester - Pumps	75.0	78.0	757.0	787.0	2,433.0
Fermentor - Pumps & Processes	180.0	62.0	97.0	67.0	70.0
Grit & Screen - Pump and Processes	530.0	562.0	54.0	56.0	58.0
Heating Bldg - Pumps/Piping/Processes	100.0	104.0	0.0	0.0	0.0
Liquid Wastehaulers Station	0.0	0.0	0.0	112.0	0.0
Other - Labs, Server	40.0	0.0	0.0	0.0	0.0
PEP - Pumps	0.0	62.0	65.0	135.0	0.0
Primary Basins - Pumps & Processes 2	125.0	167.0	174.0	181.0	187.0
Sec Clarifiers - Pumps & Processes	0.0	52.0	0.0	0.0	0.0
Thickener - Pumps	0.0	0.0	63.0	112.0	0.0
Utility Building	0.0	0.0	0.0	0.0	110.0
UV - Processes & Electrical	100.0	104.0	0.0	0.0	0.0
Total	2,175.0	1,191.0	1,210.0	1,675.0	3,206.0
FINANCING DETAILS					
SEWAGE COLL & TRTMNT REPL RES	2,175.0	1,191.0	1,210.0	1,675.0	3,206.0
Total	2,175.0	1,191.0	1,210.0	1,675.0	3,206.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0706 CY-LEIS SERV-FACILITY EQUIP REPL

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Bruce Pearson
Asset Type		Est. End Date	-

Project Description

This project involves the replacement of major pieces of equipment for the Recreation and Community Development Division of the Community Services Department, in accordance with the Capital Reserves Bylaw.

General Comments

The 2019 budget includes the replacement of recreation, fitness and aquatic equipment at the indoor leisure facilities, and the replacement of the ice resurfacing machine at Gordie Howe Kinsmen Arena.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Equipment Purchase	125.0	125.0	125.0	125.0	125.0
Zambonis	105.0	0.0	110.0	0.0	0.0
Total	230.0	125.0	235.0	125.0	125.0
FINANCING DETAILS					
LEISURE SERVICES EQUIPMENT REPL RES	230.0	125.0	235.0	125.0	125.0
Total	230.0	125.0	235.0	125.0	125.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0720 SL&P - CAPACITOR INSTALLATIONS

Project Status	Open	Year Identified	2009
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Mehmoosh Janbakhsh
Asset Type		Est. End Date	-

Project Description

The objective of this project is to provide power factor correction to reduce the peak electrical demand of the electrical distribution system. The installation of capacitors reduces power demands and the associated cost of bulk power purchases. With the completion of the Smart Meter installations, more information on voltage at the customer end-points will be available and allow for a more systematic approach to demand reduction and power delivery efficiencies.

General Comments

Traditionally, capacitor banks are installed on the electric distribution lines to offset power characteristics from transformers, motors, and other loads that result in less efficient power delivery. There are a variety of approaches available depending on the operating requirements, real-time data available, and economic conditions. This project will include a review of these requirements and use the available data to determine a more optimal system operating condition that could result in significant savings to the utility. Typical system improvements result in reduction of line losses from 2% to 5%.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Volt/Var Demand Reduction	0.0	150.0	0.0	0.0	0.0
Total	0.0	150.0	0.0	0.0	0.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	0.0	150.0	0.0	0.0	0.0
Total	0.0	150.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0724 SL&P - REVENUE METER - NEW & REPLACEMENT

Project Status	Open	Year Identified	2010
Project Type	EQUIPMENT REPLACEMENT	Manager	Moussa Fadlelmawla
Asset Type		Est. End Date	-

Project Description

This project is for the installation of electrical revenue meters. The electronic meters being installed provide greater accuracy and comply with Measurement Canada requirements. They also provide the opportunity for the collection of additional engineering data to enhance the operation of the electric system (part of a Smart Grid implementation).

General Comments

Many of the revenue meters currently in service use older electromechanical technology. The accuracy of an electromechanical meter declines as the mechanical components wear out. As a result, the amount of power registered by the meter is less than is actually used. When meters fail to meet Measurement Canada accuracy standards, replacement is mandatory.

Electronic meters (referred to as 'smart' meters) will replace all the existing electromechanical meters and form the basis of Saskatoon Light & Power's Advanced Metering Infrastructure (AMI) system. The smart meters are able to securely send revenue metering data and other engineering information to a central location for verification, analysis and billing. The engineering data can provide status information which can be used to detect power disturbances, outages and restoration.

Since 2008, virtually all electric meters have been upgraded. Ongoing funding is required to maintain the upgraded population of meters and to meet the demand for new metered electric services.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Meters - Growth & maintenance	350.0	350.0	350.0	350.0	350.0
Total	350.0	350.0	350.0	350.0	350.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	350.0	350.0	350.0	350.0	350.0
Total	350.0	350.0	350.0	350.0	350.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0736 SL&P - CUSTOMER UPGRADES AND EXTENSIONS

Project Status	Open	Year Identified	2009
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Ashish Pattanashetty
Asset Type		Est. End Date	-

Project Description

This project is for upgrades and extensions of the electrical distribution system due to customer demand for new electrical service or electrical load growth. The load types include residential, industrial, commercial, and institutional throughout the electrical service area of Saskatoon Light & Power.

The planned procurement method for this project is to be accomplished utilizing internal staff due to expertise of existing staff to perform the work.

General Comments

The budget for this project is developed from a generalized expectation of demand for new services and upgrades to existing services. Project funding includes contributions from the customer and an investment from Saskatoon Light & Power based on anticipated revenue increase.

The electrical facilities normally provided under this project are an electric transformer and cabling from the primary system to the point of service. The work required for a particular service may extend beyond the property being served. However, the scope of work is expected to remain within the immediate locale of that service. The extent of the required construction may be affected by work identified in other active capital projects.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Customer Connections	2,250.0	2,400.0	2,560.0	2,560.0	2,560.0
Total	2,250.0	2,400.0	2,560.0	2,560.0	2,560.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	750.0	800.0	1,000.0	1,000.0	1,000.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	500.0	500.0	410.0	410.0	410.0
SL&P CUSTOMER CONTRIBUTION	1,000.0	1,100.0	1,150.0	1,150.0	1,150.0
Total	2,250.0	2,400.0	2,560.0	2,560.0	2,560.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0740 TCU PLACE-EQUIPMENT REPAIR/REPLACEMENTS

Project Status	Open	Year Identified	2010
Project Type	EQUIPMENT REPLACEMENT	Manager	Bob Korol
Asset Type		Est. End Date	-

Project Description

This project provides for the repair or replacements of TCU Place equipment.

General Comments

Building repairs are not part of this project and are provided for under the Civic Buildings Comprehensive Maintenance Reserve, which is under the jurisdiction of the Facilities Management service line within the Corporate Asset Management business line.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Caretaking and Maintenance	0.0	16.0	44.0	28.0	29.0
Computer	153.0	55.0	0.0	56.0	84.0
Furnishings and Misc	74.0	9.0	233.0	99.0	0.0
Kitchen	552.0	0.0	100.0	0.0	0.0
Lighting	323.0	0.0	111.0	0.0	40.0
Sound	167.0	0.0	56.0	68.0	0.0
Theatre	0.0	0.0	0.0	197.0	103.0
Total	1,269.0	80.0	544.0	448.0	256.0
FINANCING DETAILS					
TCU PLACE EQUIPMENT RESERVE	1,269.0	80.0	544.0	448.0	256.0
Total	1,269.0	80.0	544.0	448.0	256.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0748 LAND DEV'T-GEN ADMIN-OLD AREAS

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the general administration related to the completion of work in old prepaid areas.

General Comments

This project includes the preparation of as-built drawings, an update of the aerial photographs of old prepaid areas, an analysis of the operation of existing storm water drainage ponds and final inspections.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
General Admin	113.0	0.0	0.0	0.0	0.0
Total	113.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
GEN PPD SERVICES-GENERAL	113.0	0.0	0.0	0.0	0.0
Total	113.0	0.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0778 LAND DEV'T-TR SWR-STONEBRIDGE

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the extension of the trunk sewers to the proposed South Bridge and development of the Stonebridge neighbourhood. It will also improve storm sewer services to the Avalon and Adelaide extensions.

This project is subject to further review of servicing and cost implications as well as approval of an overall neighbourhood concept plan.

General Comments

Other funding is from Developers for retrofit/reconstruction of existing services.

SECTION *	LENGTH (m)	SIZE (mm)	YEAR(s)	
A- Stonebridge Neighbourhood Lift Stn	-	-	2009	Req'd for east- design req'd to size FM
AB- Preston Forcemain-CNR to Arlington	1,800	375	-	Cancelled
BC- Preston Forcemain-Arlington to 8th	2,400	375	-	Cancelled
DE- Preston Twinning-College to 115th	1,600	600	-	Cancelled
F- Jasper Ave Lift Station Upgrade	-	-	2009	Req'd for west
J- Stonebridge east Pond neighbourhood	-	-	2007/09	Req'd for east
GH- Storm Trunk River to Lorne	1,700	Swale	2006/10	
HL- Storm Trunk-Lorne to brand	1,640	1350/1500	2010	
IJ- Storm Forcemain-Preston to Clarence Neighbourhood	2,100	625	2006/08	Req'd for east
IK- Clarence Storm trunk-Circle to Melville Neighbourhood	350	600	2005/07	Req'd for west
AP- Forcemain-Preston to Brand neighbourhood	2,800	350	2007	Req'd for west
FM- Forcemain-Jasper to Taylor Neighbourhood	2,180	450	2009	(No longer required)
N- Lorne Ave Lift Station Upgrade	-	-	-	(To be handled under separate project)
NO- Forceman-Lorne Lift to 20 & Spadina	-	-	-	(To be handled under separate project)
J- Storm sewer lift station	-	-	2009	Funded from TSR (req'd for east nhbrd)
PF- Forcemain - Brand to Jasper	1,040	350	2015	After South River Crossing
PR- Melville-Stonebridge res. to comm. Neighbourhood	280	375	2005	Req'd for west
RI- Melville-Stonebridge comm. to Clarence Neighbourhood	510	1200/1350/375ss	2005/07	Req'd for west
IL- Melville-Clarence to Brand Neighbourhood	680	900st/450ss	2006	Req'd for west
QR- Storm-West Pond to Melville Neighbourhood	400	750	2006	Req'd for west
Q- Stonebridge West Pond	-	-	2005	Req'd for west neighbourhood
SA- Sanitary East of Preston neighborhood	700	375/450	2008	Req'd for east

* A map indicating the location of the trunk sections, stormwater storage basins, and lift stations are available from the Transportation and Utilities Services Department upon request.

In 2018/2019, additional funding has been identified for sanitary sewer remediation construction to mitigate odors along Lorne Avenue between 8th Street and Rotary Park.

Prior Budget Approval

\$31,094,000

Land Development

Approved 2019

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Lorne Avenue Odor Abatement	670.0	0.0	0.0	0.0	0.0
Total	670.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
PRIVATE CONTRIBUTIONS	670.0	0.0	0.0	0.0	0.0
Total	670.0	0.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0825 SL&P - STREET LIGHT UPGRADES

Project Status	Open	Year Identified	2010
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Gord Stushnoff
Asset Type		Est. End Date	-

Project Description

This project involves the upgrading of street lighting on roadways (not associated with roadway projects).

General Comments

The lighting upgrades are typically in response to public safety issues regarding roadway intersection, railway crossings and mid-block lighting. This includes unanticipated requests by City Council, Saskatoon Police Service or special interest groups for lighting upgrades requiring immediate attention.

Additional budget provisions are for localized conversion of street light fixtures from traditional high pressure sodium (HPS) lights to LED (light emitting diode) technologies.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
LED Conversion	450.0	400.0	400.0	400.0	400.0
Lighting Upgrade	0.0	65.0	0.0	65.0	0.0
Total	450.0	465.0	400.0	465.0	400.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	50.0	115.0	50.0	115.0	50.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	400.0	350.0	350.0	350.0	350.0
Total	450.0	465.0	400.0	465.0	400.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0832 TU-CENTER MEDIAN REHABILITATION

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Jay Magus
Asset Type		Est. End Date	-

Project Description

This project involves the redevelopment of various centre medians along major arterial streets. The work consists of curb replacements where required, hard surfacing, installation of irrigation systems, tree planting and flower pots.

General Comments

Priorities are established annually in consultation with the various divisions of the Community Services and Transportation and Utilities Departments. Prior years actual costs have been apportioned approximately 75% for curb and utility replacements, and 25% for landscaping.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Street Medians	0.0	200.0	200.0	200.0	200.0
Total	0.0	200.0	200.0	200.0	200.0
FINANCING DETAILS					
UNFUNDED TRANSPORTATION INFRA RES	0.0	200.0	200.0	200.0	200.0
Total	0.0	200.0	200.0	200.0	200.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0837 TU-LANE REHAB & DRAINAGE IMPROV

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Chris Duriez
Asset Type		Est. End Date	-

Project Description

This project involves lane rehabilitation on both paved lanes and gravelled lanes. Rehabilitation is to the original service level of load capacity, ride, drainage and grade elevation.

General Comments

A more selective process has been implemented to rehabilitate gravel lanes which involves a localized reconstruction program.

The planned procurement method for this project is to be accomplished utilizing a combination of internal staff, due to existing staff capacity and expertise to perform the work, and external contractors due to requirement of specialized services.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Drainage Improvement	127.0	127.0	127.0	127.0	127.0
Gravelled Lanes	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0
Paved Lanes	658.0	658.0	658.0	658.0	658.0
Total	1,785.0	1,785.0	1,785.0	1,785.0	1,785.0
FINANCING DETAILS					
INFRA RES-TRANSPORTATION	1,785.0	1,785.0	1,785.0	1,785.0	1,785.0
Total	1,785.0	1,785.0	1,785.0	1,785.0	1,785.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0838 LIBR-EQUIPMENT REPLACEMENT

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Laura Warner
Asset Type		Est. End Date	-

Project Description

This project involves the replacement of equipment associated with the Public Library in accordance with Policy 03-019 (Equipment Reserve Fund - Public Library).

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Equipment Purchase	200.0	200.0	200.0	100.0	100.0
Total	200.0	200.0	200.0	100.0	100.0
FINANCING DETAILS					
PUBLIC LIBRARY EQUIP REPL RES	200.0	200.0	200.0	100.0	100.0
Total	200.0	200.0	200.0	100.0	100.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0877 AF-TRUNKING RADIO INFRASTRUCTURE REPLACEMENT

Project Status	Open	Year Identified	2009
Project Type	SUPPORT SYSTEMS	Manager	Del Ehlert
Asset Type	Communication systems	Est. End Date	-

Project Description

This project involves the upgrade and maintenance of the core infrastructure for the City's trunked radio system. The trunking system infrastructure is a corporate resource that is shared by all user departments. The system provides radio communications for Police, Fire, Transportation and Utilities, and other civic departments.

General Comments

This project includes the purchase of equipment for planned repairs and replacements of existing infrastructure components of the City's trunked radio system, in accordance with Capital Reserves Bylaw #6774.

This project provides funding for the design and subsequent construction of infrastructure components and equipment to meet the needs identified in the design phase. Planned expansion of additional repeater towers throughout the City's growing neighbourhoods.

The planned procurement method for this project is to be accomplished utilizing internal staff, due to existing staff capacity to perform the work.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction	100.0	0.0	0.0	0.0	0.0
Infrastructure Replacement	384.0	476.0	475.0	475.0	585.0
Total	484.0	476.0	475.0	475.0	585.0
FINANCING DETAILS					
TRUNKED RADIO SYS INFRAS REPL RES	484.0	476.0	475.0	475.0	585.0
Total	484.0	476.0	475.0	475.0	585.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0901 CY-PARK UPGRADES, ENHANCEMENTS & REPAIRS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Darren Crilly
Asset Type		Est. End Date	-

Project Description

This project involves the upgrade, enhancement and repairs of parks throughout the City. Landscape upgrades and enhancements include additional plantings, irrigation system replacements, and installation of subsurface draining systems, lighting, site furniture and play equipment.

General Comments

Funding identified in 2019 will reduce the current backlog of park renewal and rehabilitation requirements associated with drainage, pathways and irrigation park infrastructure. The following parks will be upgraded in 2019:

- Crocus Park: Drainage, grading, pathways, irrigation (19.02 acres)
- Marriott Park: Grading, drainage, pathway (0.82 acres)
- Albert Rec Unit Park - Replace Irrigation System
- Pathway upgrades to expand current park pathways from 1.8 to the current park standard of 2.4 meters wide

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Albert Rec Unit Park	50.0	0.0	0.0	0.0	0.0
Crocus Park	850.0	0.0	0.0	0.0	0.0
Marriott Park	50.0	0.0	0.0	0.0	0.0
Pathway Reconstruction	50.0	0.0	0.0	0.0	0.0
Upgrades, Enhancements & Repairs	0.0	1,000.0	1,000.0	1,000.0	1,000.0
Total	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0
FINANCING DETAILS					
INFRASTRUCTURE RESERVE - PARKS	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0
Total	1,000.0	1,000.0	1,000.0	1,000.0	1,000.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

0959 TU-UPGRADE BOUNDARY ROADS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Chris Duriez
Asset Type		Est. End Date	-

Project Description

This project involves the upgrading of interim stage gravel roads throughout the City. Treatments could include seal treatment, recycled asphalt, temporary hard surfacing, ditch grading and culvert installation.

General Comments

Boundary roads are the roads that are between the built up area of the City and the municipal boundary. Most of these roadways are gravel rural grid roads. The size of the boundary roadway network has grown significantly with recent increases in the municipal boundary.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	260.0	400.0	400.0	400.0	400.0
Total	260.0	400.0	400.0	400.0	400.0
FINANCING DETAILS					
INFRA RES-TRANSPORTATION	260.0	260.0	260.0	260.0	260.0
UNFUNDED TRANSPORTATION INFRA RES	0.0	140.0	140.0	140.0	140.0
Total	260.0	400.0	400.0	400.0	400.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1016 SL&P - NEIGHBOURHOOD STREET LIGHT UPGRDS

Project Status	Open	Year Identified	2010
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Gord Stushnoff
Asset Type		Est. End Date	-

Project Description

This project involves upgrading of street lighting in established neighbourhoods. The purpose is to improve the lighting in older established neighbourhoods to match those of neighbourhoods being developed now.

General Comments

The layout of street lights in established neighbourhoods is essentially a light at the street corners and one light at midblock. This project will improve the lighting level for the entire block. The light now at midblock will be relocated and a new light installed. The two midblock lights will be approximately evenly spaced in the block. There are variations of street layouts such as centre medians, non-grid layouts, and street width variations where the upgraded lighting layout will be more complicated.

Timing for neighbourhoods is dependent upon a variety of factors including other streetscape projects, neighbourhood traffic patterns, and roadways projects. The following areas are proposed for upgrades to the neighbourhood street lighting: Sutherland, Adelaide/Churchill, North Park, Avalon, Nutana Park, C.N. Industrial, North Industrial, Southwest Industrial, Central Industrial, West Industrial, University Heights Industrial, and Airport Business Park.

Periodic reassessment of the project will occur to determine specific neighbourhoods for the budget year.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Neighbourhood Lighting Upgrade	0.0	0.0	300.0	0.0	150.0
Total	0.0	0.0	300.0	0.0	150.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	0.0	0.0	220.0	0.0	110.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	0.0	0.0	80.0	0.0	40.0
Total	0.0	0.0	300.0	0.0	150.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1018 SL&P - MONITORING SYSTEM UPGRADE (SCADA)

Project Status	Open	Year Identified	2011
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Don McPhee
Asset Type		Est. End Date	-

Project Description

This project is for a Smart Grid Control System for Saskatoon Light & Power (SL&P). The Smart Grid Control System is a hardware and software platform used for the remote operation of the power grid. The system is based around a Supervisory Control and Data Acquisition (SCADA) system with various additional modules that augment the system and integrate with other smart grid components. A complete Smart Grid Control System is complex and many components are dependent upon other base systems. The implementation will start with the replacement of the existing SCADA system followed by integration with the GIS and AMI data and systems.

General Comments

A new Smart Grid Control System is needed for SL&P to build a smarter energy infrastructure and an advanced energy delivery system. SL&P's existing SCADA system has diminishing vendor support and is not compatible with long term smart grid strategies such as integration with the City's Advanced Metering Infrastructure (AMI) and Geographic Information System (GIS). A new Smart Grid Control System will have state-of-the-art master station hardware and software and workstation software interfaced with existing field Remote Terminal Units. The new system will leverage existing field devices and integrate with GIS and AMI assets. Long term plans are to continue investing in new technologies and implement system optimization modules that improve the way energy is delivered. These will be coupled with new technologies for data acquisition, control and flexibility. The final phases are to implement outage detection, management, and restoration modules to create a dynamic and more secure power grid and more rapid outage response.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Scada System Upgrade	200.0	0.0	0.0	0.0	0.0
Total	200.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	120.0	0.0	0.0	0.0	0.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	80.0	0.0	0.0	0.0	0.0
Total	200.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1036 TU-TRAFFIC CONTROL UPGRADES

Project Status	Open	Year Identified	2009
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Goran Lazic
Asset Type		Est. End Date	-

Project Description

This project upgrades existing traffic controls at one or more locations per year. Upgrades may include installation of new traffic signals or roundabouts or upgrades to existing signals.

General Comments

This project supports the City of Saskatoon's long-term 'Moving Around' strategy by providing improved traffic controls for all road users to safely move through an intersection.

Details on the program proposed for the budget year will be presented in an administrative report prior to, or concurrent with the Council budget meeting.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction	350.0	400.0	400.0	400.0	400.0
Total	350.0	400.0	400.0	400.0	400.0
FINANCING DETAILS					
TRANSP INFRAS EXPANSION	350.0	400.0	400.0	400.0	400.0
Total	350.0	400.0	400.0	400.0	400.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1041 TU-BENCHMARK REHABILITATION

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Todd Kuntz
Asset Type		Est. End Date	-

Project Description

This project encompasses the construction, replacement and maintenance of a network of benchmark monuments within the City that provide essential horizontal and vertical control for private and public construction purposes.

General Comments

Included under the terms of this project are:

- Establishing and maintaining an electronic benchmark database layer within the Enterprise GIS framework
- Providing auxiliary GPS definitions for the benchmark network
- Replacement of damaged or destroyed monuments
- Regular inspection of monuments for condition assessment
- Vertical control verification
- Development and maintenance of information distribution and tracking formats

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	0.0	0.0	50.0	0.0	0.0
Total	0.0	0.0	50.0	0.0	0.0
FINANCING DETAILS					
GENERAL PPD SERV-ENGINEERING	0.0	0.0	15.0	0.0	0.0
INFRA RES-WTR & SAN SWR	0.0	0.0	35.0	0.0	0.0
Total	0.0	0.0	50.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1054 WTP-ASSET REPLACEMENT

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Pam Hamoline
Asset Type		Est. End Date	-

Project Description

This project involves the replacement of deteriorating Water Treatment Plant assets (in accordance with the Capital Reserves Bylaw) that have reached the end of their useful life. The assets are replaced by similar equipment or equipment with a similar function. The planned procurement method for this project is to be accomplished utilizing external contractors, due to availability of technology in-house and long-term requirements.

General Comments

The asset group defined by the project are subject to a review to determine condition and eligibility. External service providers will be utilized on selected projects within the overall Asset Replacement Project.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Acadia Reservoir Structural Repair	400.0	0.0	0.0	0.0	0.0
Chemical Feeding System	75.0	0.0	0.0	0.0	0.0
Clarifier Refurbishment	0.0	0.0	0.0	0.0	1,946.0
Electrical/Mechanical Replacements	0.0	624.0	0.0	0.0	0.0
Filter Plant Refurbishment	0.0	572.0	1,092.0	1,755.0	0.0
Low Lift Pumping	0.0	1,940.0	2,017.0	0.0	0.0
Plant HVAC	90.0	0.0	0.0	0.0	0.0
Residual Handling Facility	200.0	0.0	0.0	0.0	0.0
Screen Chamber	50.0	0.0	0.0	0.0	0.0
Total	815.0	3,136.0	3,109.0	1,755.0	1,946.0
FINANCING DETAILS					
WATER SUPPLY REPL RES	815.0	3,136.0	3,109.0	1,755.0	1,946.0
Total	815.0	3,136.0	3,109.0	1,755.0	1,946.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1055 WTP-AUTOMATIC METER READING CONV

Project Status	Open	Year Identified	2009
Project Type	SUPPORT SYSTEMS	Manager	Fred Goodman
Asset Type		Est. End Date	-

Project Description

The project involves installation of AMI systems to transmit electricity and water consumption data from the individual meters to the utilities. An AMI system uses smart electricity and water meters that measure and record actual power and water usage at set time intervals throughout the day. The information is then transmitted wirelessly over a secure network to a central database, which allows for remote meter reading.

General Comments

Benefits to our customers include receiving monthly bills based on the actual amount of water used which would eliminate reliance on estimated usage between meter readings, help residents manage their water use and detect unusual consumption patterns which could impact their bill. An AMI system would benefit the City through more precise metering and reduced revenue losses caused by meter failure.

In order to take advantage of the many benefits of the AMI system, Saskatoon Water will accelerate its meter and communication module deployment program to be completed by 2019.

Customers who have already received their new smart meters have their meters read electronically and will receive monthly bills based on actual, not estimated, usage. As the deployment of smart meters continues, the balance of customers will be converted to the AMI system.

The project targets reducing greenhouse gas emissions and labour costs associated with manual meter reading would also be reduced. It is estimated that 35 tonnes of CO₂e tied to vehicle use would be reduced each year, while reductions from decreased water use are estimated at 3,300 tonnes CO₂e the equivalent of removing over 685 vehicles from Saskatoon roads each year.

Operating Impacts

Total capital costs are estimated at \$24.3 million and system operation costs are estimated at \$22.1 million. Over a 20-year period, the total projected savings are estimated to be \$76.1 million. The project is expected to pay for itself within 11.43 years with an internal rate of return of 11 per cent.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Automatic Meter Reading Conversion	2,200.0	0.0	0.0	0.0	0.0
Total	2,200.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
WATERWORKS CAPITAL PROJECTS RESERVE	2,200.0	0.0	0.0	0.0	0.0
Total	2,200.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1057 PARK DEV-IND'L AREA BLVD TREE PLANTING

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Michelle Chartier
Asset Type		Est. End Date	-

Project Description

The Industrial Tree Planting Program involves planting 60 to 75 mm basket trees on boulevards adjacent to serviced lots in industrial areas where planting set-back requirements are met.

General Comments

The project involves investigating planting requests, identifying appropriate plant sites, tree planting, and three year establishment maintenance of trees in industrial areas.

Operating Impacts

\$2,800 in 2022 (average annual life cycle cost of 50 trees at \$56.40 per tree)

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction	50.0	50.0	50.0	50.0	50.0
Total	50.0	50.0	50.0	50.0	50.0
FINANCING DETAILS					
INDUSTRIAL PARK DEVELOPMENT RES	50.0	50.0	50.0	50.0	50.0
Total	50.0	50.0	50.0	50.0	50.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	2.8	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1083 CP-CORPORATE NETWORK EQUIPMENT REPL

Project Status	Open	Year Identified	2010
Project Type	EQUIPMENT REPLACEMENT	Manager	Jazz Pabla
Asset Type	Network	Est. End Date	-

Project Description

This project provides for the replacement/upgrading of corporate servers for the ongoing operation of the corporate local area network, corporate Internet access and the corporate database server environment. With ongoing demand for storage, additional backup capacity is required and the replacement of aging servers that no longer meet the corporation's needs will continue.

General Comments

This project will enable the City to keep the client/server hardware environment operating at an acceptable level of performance and to ensure there are adequate backup facilities.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Electronic Equipment Replacement	0.0	550.0	550.0	575.0	575.0
Total	0.0	550.0	550.0	575.0	575.0
FINANCING DETAILS					
COMPUTER EQUIPMENT REPL RES	0.0	550.0	550.0	575.0	575.0
Total	0.0	550.0	550.0	575.0	575.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1135 AF-CIVIC BLDGS COMPREHENSIVE MAINTAINANCE PROGRAM

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Troy LaFreniere
Asset Type	Buildings	Est. End Date	-

Project Description

This project involves planned expenditures from the Civic Buildings Comprehensive Maintenance Reserve for major replacements and repairs in accordance with the comprehensive maintenance program.

General Comments

A comprehensive maintenance program includes a preventative maintenance element and identifies a scheduled refurbishment of the major components of the facilities infrastructure. The preventative maintenance is necessary to ensure facilities are maintained to established standards. The scope of the work involves all major categories of the infrastructure (i.e. electrical, mechanical, carpentry and painting).

The facilities covered under the program are identified below:

Boards - Remail Modern, SaskTel Centre, TCU Place, River Landing, Libraries located in the Leisure Centers and various parks along the river bank.

Offices - City Hall, Civic Square East, John Deere Building and Saskatoon Police Service Building.

Pools - All indoor and outdoor pools except Shaw Centre.

Program Facilities - Vic Rempel Yards, all Fire Halls, Derrick Carrol Building, Transit Buildings, Electronics and Sign Shop, Woodlawn Cemetery, SPCA and satellite facilities.

Recreation Facilities - All Arenas, Saskatoon Field House, Forestry Farm Park & Zoo, Gordie Howe Complex, golf course club houses, as well as recreation units, washrooms and other storage buildings in those parks that do not have pools or any other water feature.

Maintenance Support - Facility management programs.

Shaw Centre & Parks with Aquatic Features - Shaw Centre, as well as recreation units, washrooms and other storage buildings in those parks that have pools or any other water feature.

The planned procurement method for this project is to be accomplished utilizing internal staff, due to existing staff capacity to perform the work.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Asbestos Assessment and Abatement	75.0	75.0	75.0	75.0	75.0
Maintenance Support	235.0	253.0	255.0	255.0	255.0
Offices	3,249.0	3,507.0	3,663.0	3,780.0	3,850.0
Pools	1,534.0	1,656.0	1,730.0	1,785.0	1,795.0
Program Facilities	571.0	616.0	664.0	664.0	794.0
Recreation Facilities	2,616.0	2,824.0	2,950.0	3,044.0	3,050.0
Shaw Centre and Parks with Aquatic Features	131.0	436.0	623.0	1,111.0	815.0
Total	8,411.0	9,367.0	9,960.0	10,714.0	10,634.0
FINANCING DETAILS					
CIVIC BLDGS COMPR MTNCE	8,411.0	9,000.0	9,420.0	9,700.0	9,700.0
UNFUNDED CIVIC BLDGS COMP MNTCE	0.0	367.0	540.0	1,014.0	934.0
Total	8,411.0	9,367.0	9,960.0	10,714.0	10,634.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1174 SL&P - STREET LIGHTS - LAND DEVELOPMENT

Project Status	Open	Year Identified	2009
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Gord Stushnoff
Asset Type		Est. End Date	-

Project Description

This project reflects the gross costs of installing street lighting in prepaid subdivisions in Saskatoon and identifies Saskatoon Light & Power's capital reserve funding contribution.

The planned procurement method for this project is to be accomplished utilizing internal staff due to expertise of existing staff to perform the work.

General Comments

On an annual basis this project is adjusted to reflect land development plans.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Blairmore	0.0	201.0	0.0	0.0	0.0
St Ltg Aspen Ridge	488.0	435.0	472.0	0.0	0.0
St Ltg Hampton Industrial	85.0	0.0	0.0	0.0	0.0
St Ltg Holmwood	802.0	1,238.0	925.0	0.0	0.0
Street Ltg - Neighbourhood Development	0.0	0.0	0.0	1,500.0	1,500.0
Street Ltg - Rosewood	90.0	165.0	165.0	0.0	0.0
Street Ltg - Silverwood Industrial	0.0	250.0	196.0	0.0	0.0
Total	1,465.0	2,289.0	1,758.0	1,500.0	1,500.0
FINANCING DETAILS					
COST RECOVERY PPD LAND DEVELOPMENT	1,380.0	2,158.0	1,657.0	1,372.0	1,372.0
ELECTRICAL DISTRIBUTION EXTENSION RES	85.0	131.0	101.0	128.0	128.0
Total	1,465.0	2,289.0	1,758.0	1,500.0	1,500.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	84.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1194 TR- ENGINE OVERHAUL			
Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Paul Bracken
Asset Type	Transit Repair shop	Est. End Date	-

Project Description

This project involves the ongoing overhaul of transit bus engines.

General Comments

To maintain the existing fleet 15 engine overhauls are required on an annual basis. The life expectancy of an overhauled engine is eight to nine years.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Engine Overhaul	350.0	300.0	300.0	300.0	300.0
Total	350.0	300.0	300.0	300.0	300.0
FINANCING DETAILS					
TRANSIT CAPITAL PROJECTS RESERVE	250.0	200.0	200.0	200.0	200.0
US - CAPITAL RESERVE	100.0	100.0	100.0	100.0	100.0
Total	350.0	300.0	300.0	300.0	300.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1243 WWT- LIFT STATION UPGRADES

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Ross Elliott
Asset Type		Est. End Date	-

Project Description

The lift station upgrades are a continuation of work from past years. There are about 30 lift stations in the City of Saskatoon with many being decades old and in need of upgrades. The project involves some design and then construction based on a priority list of importance and need. As lift stations are a critical part of the wastewater process to prevent sewer backups, the mechanical and electrical systems must be upgraded to ensure they continue working. The control system at the WWTP has been upgraded and now the controls for each lift station must be changed to meet this new standard. The planned procurement method for this project is to be accomplished utilizing external contractors, due to expertise of staff to perform the work.

General Comments

Work for 2019 includes ongoing mechanical replacements, repairs and improvements for various locations in the lift station network as recommended in the 2018 MPE Lift Station Assessment Report.

With appropriate technical expertise, this project could be completed in house. External service providers are currently expected to carry out the upgrades.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Lift Station Upgrades	1,022.0	1,560.0	1,622.0	1,687.0	1,738.0
Total	1,022.0	1,560.0	1,622.0	1,687.0	1,738.0
FINANCING DETAILS					
WASTEWATER TRTMNT CAP RES	1,022.0	1,560.0	1,622.0	1,687.0	1,738.0
Total	1,022.0	1,560.0	1,622.0	1,687.0	1,738.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1252 SL&P - SUBSTATION CONTINGENCY

Project Status	Open	Year Identified	2015
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Brendan Lemke
Asset Type	Electrical Substations	Est. End Date	-

Project Description

This project is to determine contingency requirements and remediation for events that compromise major transmission, distribution, and substation assets in Saskatoon Light & Power's electric system.

General Comments

There are any number of unplanned events and unpredictable equipment failures that are possible on the electric system. Historically, there has been sufficient redundancy and reserve capacity to reconfigure the system after an event and maintain ongoing supply of power. With the continued load growth on the system, this capacity is being diminished.

Contingency plans for all major equipment outage events will be performed to determine 'weak spots' in the system. Based on these results, the best mitigation will be selected. Typical mitigation possibilities include the addition of more feeder interconnection, load shift/balancing, mobile substations, mobile power generation, and power storage.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Substation Contingency Mitigation	500.0	0.0	0.0	0.0	0.0
Total	500.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	350.0	0.0	0.0	0.0	0.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	150.0	0.0	0.0	0.0	0.0
Total	500.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1255 SL&P - DISTRIBUTION - EQUIPMENT UPGRADE

Project Status	Open	Year Identified	2016
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Brendan Lemke
Asset Type		Est. End Date	-

Project Description

This project is for the upgrade and installation of various types of electrical distribution equipment on existing underground and overhead systems. Typical equipment includes switches, capacitors, transformers, pedestals, and fault indicators. As existing distribution equipment reaches end of life and when safer equipment is available, equipment will be replaced or upgraded. Work will be coordinated with other distribution projects and priorities established based on safety implications, system performance, and other risk factors.

Installation of equipment on new line construction or voltage upgrades will be part of those specific projects. This project does not include the downtown secondary network system.

General Comments

With development of the SL&P communication networks and control (SCADA) systems there is opportunity to upgrade existing field devices to ones with communication capabilities that allow for remote control, monitoring, and data acquisition. This will improve the efficiency of day-to-day operations and can also reduce the safety hazards associated with equipment operation and speed restoration times in the event of outages.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
DISTRIBUTION- EQUIPMENT UPGRADE	400.0	250.0	250.0	250.0	250.0
Total	400.0	250.0	250.0	250.0	250.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	160.0	200.0	200.0	200.0	200.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	240.0	50.0	50.0	50.0	50.0
Total	400.0	250.0	250.0	250.0	250.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1256 SL&P - SUBSTATION UPGRADES

Project Status	Open	Year Identified	2018
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Gavrilo Saric
Asset Type		Est. End Date	-

Project Description

This project is for the upgrade and renovation of electrical substations in the Saskatoon Light & Power franchise area. Upgrades may include new power transformers, electrical switchgear and breakers, high voltage switches, and upgrades to buildings and support infrastructure.

The planned procurement method for this project is to be accomplished utilizing internal staff due to expertise of existing staff to perform the work.

General Comments

Saskatoon Light & Power has 17 major substations with 36 power transformers and high voltage switches and switchgear with more than 200 breakers. These substations are the source for power delivery to all neighbourhoods in the SL&P franchise area.

Upgrades may be required due to load growth and changes in electrical usage through development and redevelopment of residential and commercial areas. Upgrades are also required to maintain optimal asset management and service reliability. Extensive condition monitoring and assessments of the equipment will be performed and the results used to schedule and prioritize upgrades. Upgrades may also be required to maintain or enhance system redundancy and contingency requirements.

The scope of this project focuses on substation power delivery components. Communications and control system upgrades will be funded through Capital Project #1301-Substation Communication Upgrade and Capital Project #1326-Substation Monitoring System Upgrade.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Substation Upgrades - Bldg & Structures	900.0	100.0	0.0	100.0	0.0
Substation Upgrades - High Voltage	350.0	400.0	400.0	200.0	650.0
Substation Upgrades - Switchgear	2,000.0	1,750.0	1,500.0	0.0	1,000.0
Substation Upgrades - Transformers	1,500.0	4,000.0	2,500.0	2,500.0	2,500.0
Total	4,750.0	6,250.0	4,400.0	2,800.0	4,150.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	1,400.0	1,600.0	1,100.0	550.0	1,100.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	3,350.0	4,650.0	3,300.0	2,250.0	3,050.0
Total	4,750.0	6,250.0	4,400.0	2,800.0	4,150.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1257 SL&P - SUBSTATION SECURITY IMPROVEMENTS

Project Status	Open	Year Identified	2012
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Gavrilo Saric
Asset Type		Est. End Date	-

Project Description

This project provides for security improvements at SL&P facilities.

General Comments

Recent copper theft and vandalism incidents have occurred at SL&P substations. To combat this, video monitoring has been put in place at key and vulnerable substation facilities. Improved monitoring capabilities and monitoring at additional locations, as well as card access functions, are required for future security improvements. Other considerations to prevent copper theft include the use of a copper clad steel (which has essentially no salvage value) instead of the normal copper used in substation grounding.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
S/S - Accessories/Security/CCTV	0.0	120.0	120.0	120.0	100.0
Total	0.0	120.0	120.0	120.0	100.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	0.0	70.0	70.0	70.0	50.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	0.0	50.0	50.0	50.0	50.0
Total	0.0	120.0	120.0	120.0	100.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1272 SL&P - BUILDINGS & GROUNDS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Brad Fritz
Asset Type		Est. End Date	-

Project Description

This project covers the building and grounds for the Electrical Operations Centre (322 Brand Road) and the Electrical Service Centre (619 Avenue N South). Renovation and expansion is required at the Electrical Operations Centre for infrastructure improvements and to meet operational requirements.

The planned procurement method for this project is to be accomplished utilizing internal staff due to expertise of existing staff to perform the work.

General Comments

Renovations to the Operations Centre including additional infrastructure, office layouts, washrooms, change rooms, workstations, and storage need to change to better match the present business operation and staffing levels. Heating, ventilation, electrical and other systems are in need of renewal or replacement.

The SL&P Training Centre was leased in 2008 and planning is underway to move the storage and training activities at this center to the Operations Centre by the end of 2020.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Bldgs/Grnds - Operation Centre	3,000.0	1,600.0	250.0	250.0	250.0
Total	3,000.0	1,600.0	250.0	250.0	250.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	2,375.0	1,250.0	50.0	50.0	50.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	625.0	350.0	200.0	200.0	200.0
Total	3,000.0	1,600.0	250.0	250.0	250.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1281 SL&P - SUSTAIN POWER GENERATION OPTIONS

Project Status	Open	Year Identified	2009
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Brendan Lemke
Asset Type		Est. End Date	-

Project Description

This project investigates new power supply options for Saskatoon Light & Power. It will cover the cost of consulting services to prepare cost benefit analyses of various power supply options and green power. It also provides funding to review power generation alternatives in general. This may include coordination with electrical energy consumers to curtail excess consumption or energy returned to the electrical system by a consumer.

Portions of the planned procurement method for this project is to be accomplished utilizing external contractors due to requirement of specialized services.

General Comments

Specific projects are expected to have joint funding from the Saskatoon Light & Power reserves and others. Other sources of funding may consist of green loans, SaskPower grants, and partnerships with other agencies which may include other corporate entities.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Investigate New Power Supply	0.0	200.0	200.0	200.0	200.0
LFG Air-Fuel Ratio Controller	80.0	0.0	0.0	0.0	0.0
Total	80.0	200.0	200.0	200.0	200.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	40.0	200.0	200.0	200.0	200.0
LANDFILL REPLACEMENT RESERVE	40.0	0.0	0.0	0.0	0.0
Total	80.0	200.0	200.0	200.0	200.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1282 SL&P - STREET LIGHTS - MITIGATION

Project Status	Open	Year Identified	2009
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Gord Stushnoff
Asset Type		Est. End Date	-

Project Description

This project provides for the inspection and mitigation required for steel street light poles and related street light equipment throughout the city. Poles will be repaired when practical, otherwise they will be replaced. The scope of this project includes repairs and replacement to the concrete base and the steel pole as well as to street light controllers and deteriorated wiring.

The planned procurement method for this project is to be accomplished utilizing internal staff due to expertise of existing staff to perform the work.

General Comments

Deterioration of steel lighting poles and equipment is primarily a result of corrosion. The corrosion of particular concern is at the base of the pole where the mechanical loading is the greatest. Periodic inspections of the street lights will be performed to determine their condition. The objective will be to deal with the most serious corrosion deterioration first. An accelerated inspection of steel street light poles was completed in 2018. Inspection results identified significantly more poles than average nearing end-of-life. This requires an accelerated replacement in the near term.

Motor vehicle incidents are also a significant cause of pole failures. Insurance money will be collected where possible in these cases.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
St. Lights - Steel Pole - Traffic Cause	0.0	350.0	450.0	450.0	450.0
St. Lights - Steel Pole Mitigation	2,500.0	0.0	100.0	750.0	750.0
Total	2,500.0	350.0	550.0	1,200.0	1,200.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	0.0	80.0	80.0	80.0	80.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	2,500.0	0.0	200.0	850.0	850.0
SL&P CUSTOMER CONTRIBUTION	0.0	270.0	270.0	270.0	270.0
Total	2,500.0	350.0	550.0	1,200.0	1,200.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1286 SL&P - ELEC SYS PLANNING STUDIES

Project Status	Open	Year Identified	2014
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	MD Mohoshin
Asset Type		Est. End Date	-

Project Description

This project will fund studies of the electrical distribution system where the services of consulting firms are required.

The planned procurement method for this project is to be accomplished utilizing external contractors due to requirement of an independent opinion.

General Comments

Saskatoon Light & Power will undertake planning studies on multiple subject matters utilizing the services of consulting firms where applicable. It is expected that consulting firms will bring to SL&P experience gained from performing similar studies for other electrical utilities.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Electrical Systems Planning Studies	0.0	0.0	205.0	0.0	0.0
Total	0.0	0.0	205.0	0.0	0.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	0.0	0.0	75.0	0.0	0.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	0.0	0.0	130.0	0.0	0.0
Total	0.0	0.0	205.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1295 SL&P - NETWORK - MAJOR ASSETS

Project Status	Open	Year Identified	2015
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Brendan Lemke
Asset Type		Est. End Date	-

Project Description

This project involves the purchase, installation, maintenance, refurbishment, and upgrade costs associated with all major assets in the electrical network, including network transformers, network protectors, and network moulded-vacuum interrupters (MVIs).

All new major assets attached to a new vault project will be budgeted and purchased through the specific new vault project.

General Comments

Saskatoon Light & Power currently owns and maintains approximately 50 network transformers, network protectors, and network interrupters. Future costs will include:

- Refurbishing or replacing end-of-life electrical assets
- Upgrading electrical assets with new sensor technologies

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
NETWORK - MAJOR ASSETS	300.0	500.0	300.0	0.0	400.0
Total	300.0	500.0	300.0	0.0	400.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	50.0	50.0	50.0	0.0	50.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	250.0	450.0	250.0	0.0	350.0
Total	300.0	500.0	300.0	0.0	400.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1296 SL&P - NETWORK - CIVIL INFRASTRUCTURE

Project Status	Open	Year Identified	2015
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Brendan Lemke
Asset Type		Est. End Date	-

Project Description

This project involves the installation and maintenance of all network civil structures, including vaults, manholes, and ducts. Structural upgrades and sidewalk/street reconditioning are within the scope of this project.

All civil work attached to a new vault project will be budgeted and purchased through the specific new vault project.

General Comments

Saskatoon Light & Power currently owns and maintains 20 network vaults, 65 manholes, and approximately 300km of duct within the boundaries of the Central Business District. Many of these assets were first installed in 1966, and the network has since expanded to accommodate downtown development.

General deterioration of the network civil structures necessitates repair and upgrades to meet current standards and to ensure public and worker safety. All network civil structures will be inspected to determine the severity of the deterioration and to develop a schedule that prioritizes repairs. It is expected that a minimum of two vaults per year will require upgrading or major maintenance.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
NETWORK - CIVIL INFRASTRUCTURE UPGRADES	450.0	300.0	300.0	300.0	300.0
Total	450.0	300.0	300.0	300.0	300.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	100.0	50.0	50.0	50.0	50.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	350.0	250.0	250.0	250.0	250.0
Total	450.0	300.0	300.0	300.0	300.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1297 SL&P - NETWORK - PRIMARY LINES

Project Status	Open	Year Identified	2015
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Brendan Lemke
Asset Type		Est. End Date	-

Project Description

This project involves the installation, connection, and maintenance of electrical primary feeder cables in the network system. To accommodate load growth, enhance reliability, and to assist with maintenance and scheduling in the network, a fourth feeder will be installed from both substations to each downtown vault. In addition to the additional cables, existing primary cables and cable splices will be remediated upon engineering assessment.

All new primary cables attached to a new vault project will be budgeted and purchased through the specific new vault project.

General Comments

The entire downtown network is powered by three primary (14.4kV) feeder cables from the Avenue C Substation and three primary feeder cables from the North Central Substation. From both substations, these cables are brought to every vault in the Central Business District.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
NETWORK - PRIMARY LINES	0.0	350.0	200.0	200.0	200.0
Total	0.0	350.0	200.0	200.0	200.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	0.0	175.0	100.0	100.0	100.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	0.0	175.0	100.0	100.0	100.0
Total	0.0	350.0	200.0	200.0	200.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1298 SL&P - NETWORK - SECONDARY LINES

Project Status	Open	Year Identified	2015
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Brendan Lemke
Asset Type		Est. End Date	-

Project Description

This project involves the installation, connection, and maintenance of secondary cables in the network distribution system, excluding new customer connections to the network. The scope of this project includes, but is not limited to, the sectionalizing, tying, or installing secondary switches between spot-networks, upgrades to vault and ring main bus cable, and upgrades to network services that require a higher cable capacity.

General Comments

The majority of the downtown core businesses and facilities are serviced by the network distribution system. The network is currently comprised of 20 vaults, with each vault containing 2-3 transformers. A spot network is a group of vaults that are connected by their secondary cables, ensuring reliable power to the customers who are also supplied from the network via secondary cables.

The existing spot-networks of the downtown network distribution system will be sectionalized. Restructuring the network system into a greater number of smaller spot-networks will lower the fault currents, provide a greater level of safety to workers and the public, and increase system reliability. Spot-networks may also be temporarily tied together, or connected by a secondary switch, in order to complete certain work.

All secondary cable work pertaining to new customers will be budgeted in a separate customer project. Existing customers that require an upgrade may be processed through this project.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
NETWORK - SECONDARY LINES	60.0	0.0	0.0	60.0	0.0
Total	60.0	0.0	0.0	60.0	0.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	40.0	0.0	0.0	40.0	0.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	20.0	0.0	0.0	20.0	0.0
Total	60.0	0.0	0.0	60.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1299 SL&P - NETWORK - PROTECTION & CONTROL

Project Status	Open	Year Identified	2015
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Brendan Lemke
Asset Type		Est. End Date	-

Project Description

This project provides for all protective, communicative, or controlling devices for the downtown underground electrical network system. This includes control (RTU) cabinets, protector relays, fuses, cable protectors, modelling software, and all engineering design costs within the network system.

All new protective, communicative, or controlling devices attached to a new vault project will be budgeted and purchased through the specific new vault project.

General Comments

The downtown network distribution system requires multiple levels of protection and coordination to ensure safety and reliability. Controllers and communicative devices will be implemented in each vault in order to remotely (SCADA) monitor customer loads and vault data, and to control large assets by utilizing protective devices such as interrupters and protector relays. Each vault requires a control (RTU) cabinet to allow the operations staff to fully control and monitor the vault equipment.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
NETWORK- PROTECTION & CONTROL	520.0	520.0	520.0	260.0	0.0
Total	520.0	520.0	520.0	260.0	0.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	360.0	360.0	360.0	180.0	0.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	160.0	160.0	160.0	80.0	0.0
Total	520.0	520.0	520.0	260.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1301 SL&P - SUBSTATION COMMUNICATION UPGRADE

Project Status	Open	Year Identified	2011
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Gavrilo Saric
Asset Type		Est. End Date	-

Project Description

This project provides for an upgrade to the communication system between remotely located substations and interrupters and the master control facility located at the Brand Road Operations Center.

General Comments

Existing remote terminal units at substations and at remote switches are aging. Communication difficulties and failures are occurring. The installation of wireless and fiber optic Ethernet equipment will improve communication reliability.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Elec - S/S - Station RTU Upgrade Comm	500.0	500.0	135.0	135.0	135.0
Total	500.0	500.0	135.0	135.0	135.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	200.0	200.0	55.0	55.0	55.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	300.0	300.0	80.0	80.0	80.0
Total	500.0	500.0	135.0	135.0	135.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1305 SL&P - FEEDER UPGRADES/REPLACEMENT

Project Status	Open	Year Identified	2009
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Mehmoosh Janbakhsh
Asset Type		Est. End Date	-

Project Description

This project includes the upgrading, replacement, and extension of primary and secondary electrical circuits. This project is to enhance/maintain system reliability, and maintain service within the existing distribution area. The primary objective is to repair the critical deficiencies found through inspections of the existing electrical distribution system.

Excluded from the scope of this project are extensions of the distribution system for new electrical services.

General Comments

Distribution system line inspections will identify system assets which need major maintenance or replacement in the budget year. Additionally, work performed by other utilities such as Shaw Cable or SaskTel may provide opportunities to complete upgrades. Consequently, this project scope is general. Typical work includes pole replacements, line upgrades and underground cable replacement.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Feeder Upgrades Construction	2,000.0	2,100.0	2,200.0	2,300.0	2,550.0
Telecom Upgrades	0.0	75.0	75.0	75.0	75.0
Total	2,000.0	2,175.0	2,275.0	2,375.0	2,625.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	350.0	375.0	375.0	375.0	625.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	1,600.0	1,750.0	1,850.0	1,950.0	1,950.0
SL&P CUSTOMER CONTRIBUTION	50.0	50.0	50.0	50.0	50.0
Total	2,000.0	2,175.0	2,275.0	2,375.0	2,625.0
Incremental Operating Impacts (000's)					
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1308 SL&P - 15 KV CONV - INTERMED SUBSTATIONS

Project Status	Open	Year Identified	2011
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Mehmoosh Janbakhsh
Asset Type		Est. End Date	-

Project Description

The objective of this project is to progressively convert the existing 4.16kV primary electric distribution to 14.4kV distribution. There are 14, 4.16kV intermediate substation service areas that supply over 30 different neighbourhoods.

This project is related to Project Number 1332 - SL&P - Substation Service Life Extension and does not include work within existing substations.

The planned procurement method for this project is to be accomplished utilizing internal staff due to expertise of existing staff to perform the work.

General Comments

Voltage conversions are a means of providing additional system capacity within the same equipment footprint. As such, the timing of voltage conversions is linked to the load growth in a specific area. Densification projects, infill development and other land use changes may have significant impact on the requirement and schedule for voltage conversions.

Timing of voltage conversions is generally driven by the combination of system load growth and the age/condition of the pole, transformer, and cable assets. Conversions are typically performed in stages and may be triggered by the addition of new large customers/loads on the electric system.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
4.16/14.4 Kv conversion	0.0	1,200.0	1,200.0	1,200.0	1,200.0
Garfield 4.16/14.4 Kv conversion	1,200.0	0.0	0.0	0.0	0.0
Total	1,200.0	1,200.0	1,200.0	1,200.0	1,200.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	450.0	450.0	450.0	450.0	450.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	750.0	750.0	750.0	750.0	750.0
Total	1,200.0	1,200.0	1,200.0	1,200.0	1,200.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1310 SL&P - UTILITY - RESEARCH & DEVELOPMENT

Project Status	Open	Year Identified	2010
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Brendan Lemke
Asset Type		Est. End Date	-

Project Description

This project will fund Saskatoon Light & Power's participation in research and development focused on asset management for electric utilities. Activity is primarily directed through the Centre for Energy Advancement Through Technological Innovation (CEATI) International in cooperation with other electric utilities.

The planned procurement method for this project is to be accomplished utilizing external contractors due to requirement of specialized services.

General Comments

Research is directed through the following technical areas: Distribution Line Asset Management (DLAM) and Substations Equipment Asset Management (SEAM). These groups identify and manage research and development projects that include smart grid, grounding and lightning, protection and coordination, and transmission line assets. The participants of the interest groups co-fund these projects.

Saskatoon Light & Power co-funds research and development with other Canadian, American, and international electric utilities. Some of these utilities are: SaskPower, Manitoba Hydro, Hydro One, Fortis, EpCor, Enmax, BC Hydro, Toronto Hydro, Hydro Quebec, Newfoundland Power, American Electric Power, Duke Energy, Consolidated Edison New York, and others.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
R & D Dist & Trans	90.0	90.0	90.0	90.0	90.0
R & D Station & Apparatus	75.0	75.0	75.0	75.0	75.0
Total	165.0	165.0	165.0	165.0	165.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	165.0	165.0	165.0	165.0	165.0
Total	165.0	165.0	165.0	165.0	165.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1315 SL&P - 138 KV TRANSMISSION LINE UPGRADE

Project Status	Open	Year Identified	2009
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Joe Lee
Asset Type		Est. End Date	-

Project Description

Saskatoon Light & Power is currently supplied by five transmission lines at 138kV. These transmission lines are the conduits for bulk power supply to the nine major substations. This project provides for the expansion of the transmission capacity and operational flexibility required to continue to support load growth and system operation requirements for Saskatoon Light & Power.

Planned project components include the addition of a new transmission line from the North side of the franchise area and a new transmission connection centrally between Avenue C Substation and North Central Substation. There are also long term requirements for upgrades to the existing transmission lines to increase capacity.

General Comments

The objective for Saskatoon Light & Power is to have transmission backup capacity from various sources. In particular, the north supply is needed for risk mitigation since all the other transmission lines originate from a single source at the SaskPower Queen Elizabeth Switching Station.

SaskPower has long range plans for multiple transmission lines around Saskatoon, including an additional switching station near Martensville. This provides Saskatoon Light & Power an opportunity for another 138kV supply point in the northwest sector.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
138kV Line - University	0.0	0.0	0.0	300.0	300.0
Total	0.0	0.0	0.0	300.0	300.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	0.0	0.0	0.0	20.0	20.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	0.0	0.0	0.0	130.0	130.0
SL&P CUSTOMER CONTRIBUTION	0.0	0.0	0.0	150.0	150.0
Total	0.0	0.0	0.0	300.0	300.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1316 SL&P - TRANSMIS POLE/STRUCTURE UPGRADES

Project Status	Open	Year Identified	2009
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Brendan Lemke
Asset Type		Est. End Date	-

Project Description

Saskatoon Light & Power operates transmission lines at 138,000 Volts. There are four basic construction types which are wood pole, steel monopole, steel lattice tower, and underground insulated cable. This project is for repair, refurbishing, and replacement of the structural components of these lines. The typical problems are corrosion, metal failure, and insulator deterioration.

General Comments

The failure of a transmission line has significant consequences, impairing the ability to supply bulk power via the transmission system. While rapid deterioration of components is not expected, remedial action is required to ensure continuous reliable operation of the bulk power supply system. A variety of techniques for assessment, maintenance, and remediation of the system components will be employed.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
138 Kv Insulator Mitigation	0.0	0.0	0.0	100.0	0.0
138 Kv Transmission Foundation	0.0	0.0	0.0	0.0	150.0
Total	0.0	0.0	0.0	100.0	150.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	0.0	0.0	0.0	20.0	0.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	0.0	0.0	0.0	80.0	150.0
Total	0.0	0.0	0.0	100.0	150.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1326 SL&P - SUBSTATION MONITORING SYS UPGRADE

Project Status	Open	Year Identified	2009
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Gavrilo Saric
Asset Type		Est. End Date	-

Project Description

This project puts in place a communication network and the supporting communication equipment for the electrical distribution system.

General Comments

A fiber optic communication network is being expanded to permit high speed data transmission from the electrical substation and remote equipment to the central SCADA (System Control And Data Acquisition) system. The SCADA facilities are located at the SL&P Operations Centre. The substations and certain distribution equipment report their status along with other engineering information and have remote control capability.

The scope of this project is for the provision of the fiber optic system inclusive of headend equipment and intermediate equipment.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Communication Equipment	50.0	0.0	50.0	0.0	50.0
Communication Network	100.0	100.0	100.0	100.0	0.0
Total	150.0	100.0	150.0	100.0	50.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	150.0	100.0	150.0	100.0	50.0
Total	150.0	100.0	150.0	100.0	50.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1329 SL&P - SUBSTATION RELAY UPGRADES

Project Status	Open	Year Identified	2012
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Gavrilo Saric
Asset Type		Est. End Date	-

Project Description

This project involves upgrades to electrical substation protective relaying equipment. Many substations are using electromechanical relays for detection of system disturbances and operation of the protective equipment. These relays are subject to mechanical wear and degradation over time. Other substations are using microprocessor-based protective relays that have reached end of life.

This project will provide for the replacement of these relays and any associated upgrades to related substation equipment and communication systems. Periodic testing and in-service performance will be used to determine the priority for the upgrades. Work may be accelerated or delayed based on other project work planned for specific substations.

General Comments

The extended capabilities of microprocessor-based relays also allow for implementation of more comprehensive protection schemes resulting in better protection of personnel and equipment. These relays have metering and remote communication capabilities that can be used for additional functions. This project is part of the overall strategy for substation protection, on-line monitoring, and SCADA control.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Substation Relay Upgrades	250.0	550.0	550.0	550.0	550.0
Total	250.0	550.0	550.0	550.0	550.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	250.0	100.0	100.0	100.0	100.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	0.0	450.0	450.0	450.0	450.0
Total	250.0	550.0	550.0	550.0	550.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1332 SL&P - SUBSTATION SERVICE LIFE EXTENSION

Project Status	Open	Year Identified	2009
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Gavrilo Saric
Asset Type		Est. End Date	-

Project Description

This project covers reliably extending the service life of existing bulk power substations and medium voltage substations. The apparatus and equipment installed in an electrical substation is expected to be in service in excess of 40 years. Major system apparatus and equipment can be expected to fail over its service life and particularly as useful/economic life is nearing its end or has been exceeded. It is unreasonable to allow such failures to compromise general system reliability. Equipment failure for similar assets is typically random, so sufficient redundancy and reliable protective equipment must be in place.

General Comments

Planned substation upgrades and replacements are covered by specific projects. Minor failures are covered through funding from operating budgets.

The typical work covered by this project would include but is not limited to the following:

- Repairs to power transformers which may include components such as online tap changers, bushings, seals and gaskets;
- Repairs to switchgear, communication, metering, protective equipment, etc.;
- Repairs to the substation infrastructure which may include the building and yards with the various system structures and components;
- Repairs to the utilities serving the substation which includes electrical, water, sewer, etc.

These repairs may be required at more than one substation in the budget year.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Bulk Power S/S Mitigation	300.0	0.0	150.0	0.0	150.0
Medium Voltage S/S Mitigation	150.0	0.0	150.0	0.0	150.0
Total	450.0	0.0	300.0	0.0	300.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	50.0	0.0	50.0	0.0	50.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	400.0	0.0	250.0	0.0	250.0
Total	450.0	0.0	300.0	0.0	300.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1352 SL&P - LIFE CYCLE MANAGEMENT

Project Status	Open	Year Identified	2009
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Glen McDonald
Asset Type		Est. End Date	-

Project Description

This project is to put the formal asset management structure in place to ensure equipment is available and in service as needed. This program will include policies, procedures, and criteria to assess the transmission, substation, distribution and lighting systems. The intent of the asset management system is to help ensure assets are used in the most efficient manner, and that the systems provide reliable service at an economical cost. This program will set standards for inspections, maintenance, and replacement of system components.

Some of the major components of the electrical system may require an additional detailed condition assessment and the analysis of the condition/capacity that is needed.

The purchase of software systems and their integration will be coordinated with other corporate information technology initiatives.

General Comments

The electrical and lighting systems consist of many pieces of equipment and subsystems. Specific equipment can, in general, be expected to be in service for well over 30 years. To obtain this performance, maintenance and/or mitigation is required.

This program will provide information for the long range planning of the electric power and lighting systems. It is not expected to identify capital works that would be the result of system expansion or generalized load growth.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
System Life Cycle Management-Implementation	0.0	0.0	524.0	0.0	0.0
Total	0.0	0.0	524.0	0.0	0.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	0.0	0.0	524.0	0.0	0.0
Total	0.0	0.0	524.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1353 SL&P - EQUIPMENT UPGRADE & REPLACEMENT

Project Status	Open	Year Identified	2009
Project Type	ELECTRICAL AND STREET LIGHTING	Manager	Don McPhee
Asset Type		Est. End Date	-

Project Description

This project provides for the planned purchase of vehicles and equipment required for electric system construction and maintenance. Saskatoon Light & Power employs the use of various vehicles, trailers and mobile equipment for overhead and underground construction and maintenance. In addition, other equipment is necessary to support operations at the SL&P Operations Centre and the SL&P Service Centre.

The equipment covered by this project would include the following:

- Costly test equipment which may be portable or located at either the Operations Centre or Service Centre;
- Line equipment including trailers, trailers with motorized equipment, or self-propelled equipment;
- Costly motorized equipment such as front end loaders, fork lifts, sweepers, etc.;
- Vehicles - expanding the SL&P fleet (Capital funding for acquisition).

General Comments

This equipment is normally durable in nature. This project covers major refurbishing needed to maximize useful life. This project also covers replacement cost for the equipment directly under the control of SL&P.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Mobile Equipment	300.0	0.0	300.0	0.0	300.0
Test Equipment	185.0	185.0	185.0	185.0	185.0
Vehicles	500.0	75.0	75.0	350.0	75.0
Total	985.0	260.0	560.0	535.0	560.0
FINANCING DETAILS					
ELECTRICAL DISTRIBUTION EXTENSION RES	760.0	260.0	335.0	485.0	335.0
ELECTRICAL DISTRIBUTION REPLACEMENT RES	225.0	0.0	225.0	50.0	225.0
Total	985.0	260.0	560.0	535.0	560.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1356 AF-V&E ADD'L VEHICLES & EQUIPT

Project Status	Open	Year Identified	2009
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Jason Kennon
Asset Type	V&E vehicles	Est. End Date	-

Project Description

This project provides for the purchase of additional fleet vehicles and equipment in accordance with Capital Reserves Bylaw #6774. These vehicles or pieces of equipment have been requested by various departments as additions to the previous years' permanently assigned complement which are required due to increased demand resulting from the City's growth and/or to provide improved service.

Bylaw #6774 also states that funds may be used to finance the purchase or construction of capital assets required to maintain the fleet.

General Comments

Where applicable, this project is subject to City Council's approval for the rental of the equipment in the appropriate departmental Operating Budget.

The units to be purchased in 2019 are as follows: (Parks Grounds Maintenance Equipment Acquisition Reserve)

Turf Sweeper \$55,000

Leaf Trailer \$16,000

3x Mini haul truck \$40,000

Slope Mower \$60,000

Seeder \$12,000

Aerator \$12,000

Mover 6' \$35,000

The planned procurement method for this project is to be accomplished utilizing internal staff, due to existing staff capacity to perform the work.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Parks Equipment Purchase	230.0	255.0	255.0	255.0	255.0
Snow & Ice Equipment Acquisition	0.0	400.0	330.0	0.0	400.0
Total	230.0	655.0	585.0	255.0	655.0
FINANCING DETAILS					
PARKS GROUNDS MTCE EQUIP ACQ RES	230.0	255.0	255.0	255.0	255.0
SNOW & ICE MGT EQUIP ACQUISITION	0.0	400.0	330.0	0.0	400.0
Total	230.0	655.0	585.0	255.0	655.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1357 AF-V&E REPL'T VEHICLES & EQUIPT

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Jason Kennon
Asset Type	V&E vehicles	Est. End Date	-

Project Description

This project involves the purchase of replacement fleet vehicles and equipment in accordance with Capital Reserves Bylaw #6774. Replacements are required as the units are experiencing unacceptable maintenance and repair costs, excessive downtime, and/or a loss in productivity, and have reached or passed their scheduled life spans.

General Comments

The units to be replaced will be disposed of as trades, by public auction, or by public tender. The units scheduled for replacement, within reserve funding available, are as follows:

8 - 1 Ton Truck - \$527,300
 3 - 1/2 Ton Truck - \$145,000
 5 - 1/4 Ton Truck - \$229,500
 2 - 3/4 Ton Truck - \$107,100
 1 - Asphalt Patcher - \$200,000
 1 - Backhoe - \$408,000
 1 - Boiler Truck - \$200,000
 2 - Compressor - \$40,800
 1 - Crawler Loader - \$714,000
 2 - Flusher Truck - \$920,000
 3 - Forklift - \$180,000
 1 - Hydrant Truck - \$200,000
 6 - Mini Van - \$180,000
 9 - Police Sedan - \$495,900
 11 - Police SUV - \$606,500
 1 - Police Van - \$55,200
 1 - Sidewalk Cleaner - \$165,000
 4 - Skid Steer - \$224,400
 2 - SUV - \$71,400
 1 - Sweeper - \$357,000
 3 - Tandem Truck - \$495,600
 4 - Trailer - \$86,200
 5 - Van - \$231,800

The planned procurement method for this project is to be accomplished utilizing internal staff, due to existing staff capacity to perform the work.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Equipment Purchase	6,840.0	6,800.0	7,215.0	8,430.0	8,210.0
Total	6,840.0	6,800.0	7,215.0	8,430.0	8,210.0
FINANCING DETAILS					
VEHICLE EQUIPMENT REPLACE RESERVE	6,840.0	6,800.0	7,215.0	8,430.0	8,210.0
Total	6,840.0	6,800.0	7,215.0	8,430.0	8,210.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1364 CP-SERVICE SASKATOON-CITIZEN INPUT/SYSTEMS/STANDARDS/STAFFING

Project Status	Open	Year Identified	2015
Project Type	SUPPORT SYSTEMS	Manager	Pat Hyde
Asset Type		Est. End Date	-

Project Description

Capital Projects 1364 - CP Service Saskatoon-Citizen Input/Systems/Standards/Staffing, 1829 - AF Service Saskatoon-Systems, 1942 - AF Corporate Security Plan, and 1949 - AF Service Saskatoon-Staffing Accommodation are inter-related to each other in regards accommodating the vision of the Service Saskatoon citizen service model.

Service Saskatoon is the overall strategy for the City to provide responsive and reliable services to citizens. One of the planned initiatives under the provision of personalized access is the implementation of a 311/Customer Relationship Management System. 311 is a coordinated approach to responding to citizens' phone calls and inquiries on programs and services. It is an easy-to-remember telephone number that provides citizens with simplified access to non-emergency government services. It eliminates the need for a caller to understand which department provides a service and finding a number for that service. CRM is a software application that is used to track interactions with residents on an ongoing basis and manages data and information effectively. The 311/CRM will be integrated with the digital strategy the City is currently developing.

General Comments

The 2019 continued costs include a variety of processes, technology and support in order to continue the transition of services to the Service Saskatoon 311/CRM model. The model consists of four key pillars:

- 1) Citizen Input** - A Citizen First approach to the design and delivery of services;
- 2) Staffing** - Ensure dedicated customer service staff are trained, equipped and ready to respond;
- 3) Systems** - Citizens will have easy access to information including the ability to request services and track the progress from start to finish;
- 4) Standards** - Commitment to deliver quality and consistent service to every citizen, every time.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Project Implementation	200.0	200.0	200.0	200.0	200.0
Total	200.0	200.0	200.0	200.0	200.0
FINANCING DETAILS					
CORPORATE CAPITAL RESERVE	200.0	200.0	200.0	200.0	200.0
Total	200.0	200.0	200.0	200.0	200.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1391 LAND DEV'T-PARKRIDGE SUB

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the construction of municipal services on City-owned and privately owned land.

General Comments

Funding from the Property Realized Reserve is for required maintenance in the area.

Prior Budget Approval

\$9,579,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Earthfill and Enhancements	95.0	105.0	0.0	0.0	0.0
Total	95.0	105.0	0.0	0.0	0.0
FINANCING DETAILS					
PRR-LAND DEVELOPMENT	95.0	105.0	0.0	0.0	0.0
Total	95.0	105.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1403 LAND DEV'T-ROSEWOOD

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the construction of municipal services on City-owned and privately owned land.

General Comments

Prior years funding from the Property Realized Reserve is for the completion of the neighbourhood concept plan, preliminary engineering design and site grading for rubble disposal as well as utilities not provided for in land development rates and for other neighbourhood enhancements.

Year	City Lots	Private Lots	Multi Family/Commercial
2018	-	201	-
2019	-	161	6.64 ha
2020	-	257	5.69 ha

Prior Budget Approval

\$27,808,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
2010 - C1 - Priv (East of Rosewood Gate N.)	72.0	186.0	0.0	0.0	0.0
2011 - B2 - City (Werschner, Hastings, Rosewood Blvd & Gate)	76.0	0.0	0.0	0.0	0.0
2012 - D1 - Private (Tweed, Phelps)	60.0	162.0	0.0	0.0	0.0
2016 - F1 - Priv(Rosewood Commercial)	0.0	11.0	0.0	0.0	0.0
2017 - E1 Private (SE of Olson Lane East, S of Rosewood Blvd East)	0.0	123.0	0.0	0.0	0.0
Total	208.0	482.0	0.0	0.0	0.0
FINANCING DETAILS					
GENERAL PPD SERV-ELEC-CITY	112.0	393.0	0.0	0.0	0.0
GENERAL PPD SERV-ENGINEERING	84.0	47.0	0.0	0.0	0.0
GENERAL PREPAID SVCES-ELEC-SPC	0.0	42.0	0.0	0.0	0.0
PRR-LAND DEVELOPMENT	12.0	0.0	0.0	0.0	0.0
Total	208.0	482.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1407 LAND DEV'T-KENSINGTON

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project is for the construction of all municipal services on City-owned and private land for the development of the Kensington neighbourhood.

General Comments

Property Realized Reserve funding is for enhanced neighbourhood services, walkout basement grading, wet pond landscaping/irrigation and Kensington Village Centre streetscape design.

Year	City Lots	Private Lots
2017	-	88
2018	-	7.0 ha (multi)
2019	-	100 + 7.28 ha
2020	112 + 4.41 ha (multi)	

Prior Budget Approval

\$62,757,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
2012 - C1 City (Kensington Blvd, LaBine, Ells)	203.0	0.0	0.0	0.0	0.0
2013 - C2 - City (McArthur, Nightingale)	75.0	0.0	0.0	0.0	0.0
2014 - A3 - City (Antonini, Kens Blvd, Nightingale)	1,861.0	3,104.0	0.0	0.0	0.0
Earth Fill & Enhanced Features	229.0	327.0	0.0	0.0	0.0
Total	2,368.0	3,431.0	0.0	0.0	0.0
FINANCING DETAILS					
GENERAL PPD SERV-ENGINEERING	1,584.0	3,070.0	0.0	0.0	0.0
GENERAL PREPAID SVCES-ELEC-SPC	146.0	0.0	0.0	0.0	0.0
PRR-LAND DEVELOPMENT	638.0	361.0	0.0	0.0	0.0
Total	2,368.0	3,431.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1408 LAND DEV'T-AIRPORT INDUSTRIAL BUS PARK

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the construction of municipal services on private and City owned land in the Airport Industrial Business Park area including the Hampton Business Park.

General Comments

Prior years funding from Property Realized Reserve is for the functional engineering and conceptual design.

Prior Budget Approval

\$301,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
2016 - B1 - City (South of Claypool Dr)	0.0	0.0	1,204.0	0.0	0.0
Total	0.0	0.0	1,204.0	0.0	0.0
FINANCING DETAILS					
GENERAL PPD SERV-ENGINEERING	0.0	0.0	1,204.0	0.0	0.0
Total	0.0	0.0	1,204.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1410 LAND DEV'T-ELK POINT

Project Status	Open	Year Identified	2011
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the construction of municipal services on City-owned and privately owned land for the development of the Elk Point neighbourhood.

General Comments

Prior years Property Realized Reserve funding is for the topographical survey of the land in this proposed neighbourhood, the preliminary engineering design, other required engineering and environmental studies, preliminary design work on the neighbourhood concept plan. Current Property Realize Reserve funding is for maintenance of land.

Prior Budget Approval

\$30,796,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
2012 - A1 - City (NE of 33rd St)	377.0	0.0	0.0	0.0	0.0
2015 - B1 - Priv (N of Main Entrance)	0.0	0.0	383.0	0.0	0.0
Earthfill and Enhanced Services	60.0	60.0	0.0	0.0	0.0
Total	437.0	60.0	383.0	0.0	0.0
FINANCING DETAILS					
GENERAL PPD SERV-ELEC-CITY	0.0	0.0	130.0	0.0	0.0
GENERAL PPD SERV-ENGINEERING	377.0	0.0	28.0	0.0	0.0
GENERAL PREPAID SVCES-ELEC-SPC	0.0	0.0	225.0	0.0	0.0
PRR-LAND DEVELOPMENT	60.0	60.0	0.0	0.0	0.0
Total	437.0	60.0	383.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1411 LAND DEV'T- ASPEN RIDGE

Project Status	Open	Year Identified	2011
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project is for the development of City-owned and privately owned residential land within the Aspen Ridge neighbourhood.

General Comments

Development in 2017 is for municipal services on City-owned residential land including 10 parcels.

Funding from the Property Realized Reserve is for the cost of relocating telephone lines, a 25kv powerline and moving a 138kv power line.

Year	City Lots	Private Lots	
2016	371	-	West of McOrmond
2017	11	-	Parcels adjacent to McOrmond
2018	261	-	Lots & 6.62 ha (east of McOrmond)
2019	125	92	Lots & 0.87 ha/1.10 ha (east of McOrmond & adjacent to Woolf bend)
2020	180	-	Lots & 12.74 ha (east and west of McOrmond)

Prior Budget Approval

\$55,811,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
2014 - B1 - City	(2,120.0)	1,629.0	0.0	0.0	0.0
2014 - B2 - City	7,649.0	0.0	0.0	0.0	0.0
2015 - D1 - City	820.0	8,361.0	0.0	0.0	0.0
2015 - D2 - City	0.0	5,380.0	0.0	0.0	0.0
2020 - E1 - City	0.0	909.0	0.0	0.0	0.0
Earthfill and Enhanced Services	1,173.0	0.0	0.0	0.0	0.0
Total	7,522.0	16,279.0	0.0	0.0	0.0
FINANCING DETAILS					
GENERAL PPD SERV-ELEC-CITY	827.0	439.0	0.0	0.0	0.0
GENERAL PPD SERV-ENGINEERING	4,798.0	14,636.0	0.0	0.0	0.0
GENERAL PREPAID SVCES-ELEC-SPC	(124.0)	566.0	0.0	0.0	0.0
PRR-LAND DEVELOPMENT	2,021.0	638.0	0.0	0.0	0.0
Total	7,522.0	16,279.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1416 LAND DEV'T-TR SWR-HAMPTON VILLAGE

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the extension of the trunk sewers and pond requirements to the proposed Hampton Village neighbourhood. The general PPD-Services-Eng Reserve is used as an interim source of funding and will be reimbursed in future years.

General Comments

SECTION *	LENGTH (m)	SIZE (mm)	YEAR(s)	
AB Forcemain phase II	-	-	2004/06/07	Req'd for residential phase
C Stormwater Storage Basin II	-	-	2002/04	Req'd for residential phase
D Stormwater Storage Basin	-	-	2005	Req'd for residential phase II
D Lift Station	-	-	2021	Req'd for industrial
E Stormwater Basin	-	-	2012	Req'd for residential phase
E Lift Station II	3,650	350	2004/06	Req'd for residential phase
DE San Trunk	1,500	300/450	2008	Kingsmere lift to Lakewood Lift Station
E Lift Station Stage II	-	-	2004	Req'd for suburban Ctr east
EF Forcemain	4,500	300	2021	Req'd for industrial
F'G Sanitary Trunk	790	675	2015	
F'F	340	675	2022	
H Dundonald Pond	-	-	2004/05	Req'd for residential phase
AB Sanitary Trunk	110	600	2004/07	Req'd for residential phase
CD Storm Trunk	900	1050	2004/05	Req'd for residential phase
EI Storm Trunk	500	525	2012	Req'd for residential phase
Abandon Lift Station	-	-	2005	
F- Stormwater Basin	-	-	2021	Req'd for industrial
FG- Storm Trunk Outlet	1,500	900	2021	St. piping: Req'd for industrial

* A map indicating the location of the trunk sections, stormwater storage basins, and lift stations are available from Transportation and Utilities Department upon request.

Special Note

A share of the costs will be covered through the flood protection program in project 1678 in 2015 as detailed below:

D Lift Station - \$275,000 EF- Forcemain - \$105,000 FG- Sanitary Trunk - \$84,000

Prior Budget Approval

\$11,663,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
FG - Stm Trunk - Industrial (Pond to Circle)	0.0	0.0	2,347.0	0.0	0.0
F'G/FF' -Sanitary Trunk (NS) Hampton to Blairmore Lift	0.0	0.0	0.0	728.0	0.0
Force Main EF-Hampton-58th St-Industrial	0.0	0.0	15,820.0	0.0	0.0
Lift Station D - Industrial	0.0	0.0	4,239.0	0.0	0.0
Pond F - Hampton Industrial	0.0	0.0	3,360.0	0.0	0.0
Total	0.0	0.0	25,766.0	728.0	0.0
FINANCING DETAILS					
TRUNK SEWER RESERVE	0.0	0.0	21,527.0	728.0	0.0
WASTEWATER LIFT STATION RES	0.0	0.0	4,239.0	0.0	0.0
Total	0.0	0.0	25,766.0	728.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1417 LAND DEV'T-TR SWR-BLAIRMORE

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the extension of the trunk sewers to the proposed west sector.

General Comments

Details for servicing some parts of Blairmore have not been finalized. As a result, it is expected that the servicing scheme may be altered.

SECTION *	LENGTH (m)	SIZE (mm)	YEAR(s)
A- Lift Station- Suburban Area	-	-	2005/2007
AC- Forcemain-Lift Station A to trunk CD	575	250	2005
CC'- Forcemain-Temp to Confed Drive	2,540	250	2005
A- Pond	-	-	2005
AA'- Storm-Pond A to McCormack	325	600	2005
AB- Trunk-dalmeny rd/22nd to Dalmeny Lift	50	1,500	2005
H- Lift Station-Blairmore Neighbourhood 1	-	-	2009/2010
HI- Forcemain-Lift Stn to Marquis Trunk	-	-	2010/2011
F- Pond 1 Blairmore Neighbourhood 1	-	-	2011
FG/GH/HI Sani (EW) Yarrow	1,064	900/1,050/675	-
C'D/DE/EF Sani. (NS) Yarrow to S. of pond 4	1,405	900	2013
AB - Storm Trunk Outlet Pond 1 to Diefenbaker	-	600/675	2011
CD- Trunk Sanitary (NS) N of Pond 3 to 22nd St	1,200	600/675	2013-2016
EF/FG/GH-St. Trunks (EW) Pond 1 to N of Yarrow	1,168	750-1,500	2011-2014
CD-NS-Storm Trunks-Pond 2 to Pond 3&4	457	1,050	2013
AC-EW-St Trunk- Pond 3 to Steeves Ave.	580	750	2013
Pond 2- S of Yarrow	-	-	2014/2015
Pond 3 & 4 Central Kensington	-	-	2013-2015
Blairmore Pond 2 & Piping	-	-	2015
CC' Sani Trunk	-	-	2013-2015
AB- Storm Trunk- Pond 2 to Trail	468	1,350	2022/2023
CE - Storm Pipe	450	900	2023
Pond 3 (2.2 ha)	-	-	2020
AB - Kensington to Blairmore San	850	600	Beyond 2023
West swale stormwater mgt feasibility study	-	-	2017/2018

The general PPD-Services-Eng Reserve is used as an interim source of funding and will be reimbursed in future years.

* A map indicating the location of the trunk sections, stormwater storage basins, and lift stations are available from Transportation and Utilities Department upon request.

Special Note

A share of the costs were previously covered through the Flood Protection Program in project 1678 as detailed below:

H Lift Station - \$1,026,000

HI- Forcemain - \$2,694,000

A share of the costs will be covered through the Flood Protection Program in project 1678 in the future as detailed below:

C'C- Sanitary Trunk (NS) S of Pond 4 to 22nd - \$321,000

Prior Budget Approval

\$57,405,000

Land Development

Approved 2019

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Elk Point - AB Storm Pond - Pnd 2 to Trail	0.0	0.0	0.0	0.0	1,309.0
Elk Point - Pond 1 & 2	0.0	0.0	0.0	4,500.0	0.0
Elk Pt - CE Storm Pipe and Pond 3	0.0	1,495.0	0.0	0.0	593.0
Total	0.0	1,495.0	0.0	4,500.0	1,902.0
FINANCING DETAILS					
TRUNK SEWER RESERVE	0.0	1,495.0	0.0	4,500.0	1,902.0
Total	0.0	1,495.0	0.0	4,500.0	1,902.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1418 LAND DEV'T-TR SWR-HOLMWOOD

Project Status	Open	Year Identified	2012
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the extension of the trunk sewers from the intersection of Highway 5 and McOrmond Drive south, east, and west into the east suburban development area to facilitate approximately 2,717 hectares of staged development including approximately nine future neighbourhoods.

General Comments

SECTION *	LENGTH (m)	SIZE (mm)	YEAR(s)	
BCD Sani- Hwy 5 to end intersection	1,134	1,200	2014	(Req'd for 1st nbhd - Phase 1)
BC Storm- Hwy 5 to 2nd intersection	1,093	1,500/1,200	2014	(Req'd for 1st nbhd - Phase 1)
CD Storm- EW Piping to Pond 1	1,730	1,200/1,800	2013	(Req'd for 1st nbhd - Phase 3)
D- Pond 1	-	-	2014	(Req'd for 1st nbhd - Ph 1 -total size 15ha)
CC'-San-EW of McOrmond Dr	1,386	600/375	2013/14	(Req'd for 1st nbhd - Phase 1)
DE-Sani 2nd intersection to 8th St	1,500	900	2019	(Req'd for 1st nbhd - Phase 2)
CE-Storm 2nd intersection to 8th St	1,500	2,100	2019	(Req'd for 1st nbhd - Phase 2)
JK- West of McOrmond Dr	550	375	2019	(Req'd for 1st nbhd - Phase 2)
EFGHI Storm	2,960	1,050/2,100	Beyond 2023	(Req'd for 3rd neighborhood)
Pond 9 Storm	-	-	Beyond 2023	(Req'd for 3rd neighbourhood)
EFGHI Sanitary	4,000	523/600/750/900	Beyond 2023	(Req'd for 3rd nbhd)
E'E, EI Sanitary	2,040	450	2021/Beyond 2023	(Req'd for 3rd nbhd)
EJKL Storm	1,600	600/1,500	2021/Beyond 2023	(Req'd for 3rd nbhd)
Pond 7/8 Storm	-	-	Beyond 2023	(Req'd for 3rd nbhd)
MNOPQ Storm	2,200	1,050/3,000	2021/Beyond 2023	(Req'd for 2nd nbhd)
Pond 2/3/4 Storm	-	-	2021/23 & Beyond	(Req'd for 2nd nbhd)
RSTUVWXY Storm	3,640	1050/1500/1800/2000/3000	Beyond 2023	(Req'd for 2nd nbhd)
Pond 5/6 Storm	-	-	Beyond 2023	
CMDL Sanitary	1,430	600	2021/23	(Req'd for 2nd neighbourhood)
NOQRPB Sanitary	3,000	375/450/525/600	Beyond 2023	(Req'd for 2nd neighbourhood)

Prior Budget Approval

\$14,843,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
CE - Stm - Brighton Common to 8th Street	16,617.0	0.0	0.0	0.0	0.0
DE - San - Brighton Common to 8th Streen	6,593.0	0.0	0.0	0.0	0.0
San - 8th St - West & East of McOrmond - E'E, EI	0.0	0.0	1,456.0	0.0	0.0
San - E of McOrmond - CM, DL	0.0	0.0	3,756.0	0.0	3,896.0
San - W of McOrmond (D1) - JK	1,253.0	0.0	0.0	0.0	0.0
Stm - 8th St - West & South of McOrmond - EJ/JK/KL/Pond 7, 8	0.0	0.0	732.0	0.0	0.0
Stm - Suburban Centre - MN/NO/OP/PQ/Pond 2, 3, 4	0.0	0.0	5,200.0	0.0	1,441.0
Storm - 8th St to CPR Tracks - EF/FG/FH/HI/Pond 9	0.0	0.0	50.0	0.0	0.0
Total	24,463.0	0.0	11,194.0	0.0	5,337.0
FINANCING DETAILS					
TRUNK SEWER RESERVE	24,463.0	0.0	11,194.0	0.0	5,337.0
Total	24,463.0	0.0	11,194.0	0.0	5,337.0
Incremental Operating Impacts (000's)					
Budget	2019	Plan	Plan	Plan	Plan
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1419 LAND DEV'T-BRIGHTON

Project Status	Open	Year Identified	2014
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project is for the City's portion of residential municipal services on privately developed land within the Brighton Neighbourhood. Also included is the municipal servicing of the second phase of Brighton.

General Comments

Prior years funding from the Property Realized Reserve - Fund 50 is for the cost of fill removal from the pond site and clearing of the site.

Year	City Lots	Private Lots
2017	-	243 & 14.93 ha
2018	-	580 & 3.20 ha
2019	-	205 & 4.17 ha
2020	181 + 7.4 ha	351 & 5.22 ha

Prior Budget Approval

\$12,943,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
2014 - A1 - Private	80.0	0.0	0.0	0.0	0.0
2016 - C1 - Private (E of CPR)	771.0	1,320.0	0.0	0.0	0.0
2016 - D1 - City	6,564.0	12,089.0	0.0	0.0	0.0
2019 - D2 - City	1,459.0	0.0	0.0	0.0	0.0
Earthfill and Enhancements	3,719.0	173.0	0.0	0.0	0.0
Total	12,593.0	13,582.0	0.0	0.0	0.0
FINANCING DETAILS					
GENERAL PPD SERV-ELEC-CITY	372.0	965.0	0.0	0.0	0.0
GENERAL PPD SERV-ENGINEERING	8,196.0	10,859.0	0.0	0.0	0.0
GENERAL PREPAID SVCES-ELEC-SPC	306.0	794.0	0.0	0.0	0.0
PRR-LAND DEVELOPMENT	3,719.0	964.0	0.0	0.0	0.0
Total	12,593.0	13,582.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1435 LAND DEV'T-PRIMARY WATER MAINS-NORTH INDUSTRIAL

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the extension of primary water mains (WM) to the North Industrial Area and Agriplace. It will allow additional industrial development and will increase system reliability.

General Comments

The current design is for 600mm water main. Preliminary findings of a study currently being completed by Utility Services indicate that upsizing the primary water main to 900mm could enable the City to significantly defer the construction of the future North Industrial reservoir. If it is resolved to upsize this primary water main, a new budget and funding strategy will be developed for this project.

SECTION	LENGTH (m)	SIZE (mm)	YEAR(s)	
AB	3,400	600	2011	Required for Phase 1 Marquis Industrial
BC	855	600	2009	Required for Ph 1 Marquis Ind. including repurchase of 750mm Sask WM
C'D	1,000	600	2012	Required for Phase 2 Marquis Ind.
DE	887	600	2020	Required for Phase 2 Marquis Ind.
EF	830	600	2022	Required for completion of Marquis Ind.
FGL	2,690	600	2023	
HI	800	750	2014/16/17	Along Arthur Rose Ave. North of 71st
IJ	1,117	750	2022	Required for Area North of Marquis 11
JK'	3,950	1,050	Beyond 2023	North of Highway 11
LR- Fillmain	8,080	1,050	Beyond 2023	North Industrial Fillmain
K'LMN	8,060	600/1,050	Beyond 2023	West of Idylwyld

Related Project:

Project 713 (Water Reservoir Pumping Capacity) provided for a pump house and installation of additional pumps at the 42nd St. Reservoir to help handle the requirements for this watermain network.

Prior Budget Approval

\$7,884,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
DE - Marquis to 71st	0.0	1,400.0	0.0	0.0	0.0
EF - 71st St - West of Millar to Idylwyld	0.0	0.0	0.0	1,503.0	0.0
FG/GL - Hwy 11 - 71st to Hwy 12	0.0	0.0	0.0	0.0	4,870.0
HI - Arthur Rose - 71st to 81st	457.0	0.0	0.0	0.0	0.0
IJ - 81st - North Quarter	0.0	0.0	0.0	2,496.0	0.0
Total	457.0	1,400.0	0.0	3,999.0	4,870.0
FINANCING DETAILS					
PRIMARY WATERMAIN RES	457.0	1,400.0	0.0	3,999.0	4,870.0
Total	457.0	1,400.0	0.0	3,999.0	4,870.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1436 LAND DEV'T-BLAIRMORE PRIMARY WATER MAINS

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the extension of primary water mains to the proposed Hampton Village Neighbourhood and the future West Sector Suburban Development area. Upgrades to fill-mains due to future growth will be required in 2019 and 2020. The unfunded portion of these years will be cost shared between Saskatoon Water and future development levies, which will be identified in a future Administrative report.

General Comments

This project is subject to the approval of the overall neighbourhood concept plan.

SECTION	LENGTH (m)	SIZE (mm)	YEAR(s)	
AB	600	600	2005	Required for Hampton Village
BC	1,800	600	2012	Required for Hampton Village
CD'	1,600	600	2013	Required for Hampton Village
D'E	1,600	600	2014	Required for Kensington
EF	2,400	600	2018/2019	Required for Blairmore
FG	1,620	600	2021	Required for Blairmore
FH	1,650	600	Beyond 2023	Required for Blairmore
GJ	1,606	600	2023	Required for Blairmore
KLF	7,400	1,200	2021/22/Beyond 23	Required for System Upgrade/Future Growth
PK	6,880	1,050/1,350	Beyond 2023	Required for System Upgrade/Future Growth
EONH	7,330	600	Beyond 2023	Required for Future Growth

Additional segments will be added to this project in the future for future Blairmore Sector neighborhoods.

Prior Budget Approval

\$6,905,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
EF - Neault Rd - 33rd to 22nd	2,500.0	0.0	0.0	0.0	0.0
FG- Hwy 7 - 22nd to CNR	0.0	0.0	2,173.0	0.0	0.0
KLI - Fillmain Treatment Plant - 22nd/Circle	0.0	0.0	0.0	0.0	14,852.0
Total	2,500.0	0.0	2,173.0	0.0	14,852.0
FINANCING DETAILS					
PRIMARY WATERMAIN RES	2,500.0	0.0	2,173.0	0.0	0.0
WATERWORKS CAPITAL PROJECTS RESERVE	0.0	0.0	0.0	0.0	14,852.0
Total	2,500.0	0.0	2,173.0	0.0	14,852.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1437 LAND DEV'T-PRIMARY WATER MAINS-HOLMWOOD SECTOR

Project Status	Open	Year Identified	2012
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project is for the construction of primary Watermain within the East Sector. These primaries will facilitate approximately 1,200 hectares of staged development in the East Sector in the near future. In the long term these primaries will also facilitate approximately 1,800 hectares of development in the East Sector.

General Comments

Notes: Primary water mains required for any given neighbourhood may also be required for subsequent neighbourhoods.

SECTION	LENGTH (m)	SIZE (mm)	YEAR(s)	
BCD	1,141	1,050	2013	Required for 1st Neighbourhood
DE	1,500	1,050	2019	Required for 2nd Neighbourhood
EF	1,040	1,050	2023	Required for 3rd Neighbourhood
FG	1,000	1,050	Beyond 2023	Required for 3rd Neighbourhood
EH	2,390	600	Beyond 2023	Required for 3rd Neighbourhood
HIJKLMG	15,620	600/1,050	Beyond 2023	Required for 3rd Neighbourhood
POQNM	17,340	1,050/1,350	Beyond 2023	Required for System Upgrade

Prior Budget Approval

\$3,435,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
DE - McOrmond - 2nd Round-About to 8th Street	4,628.0	0.0	0.0	0.0	0.0
EF - McOrmond - 8th St to Sec 20	0.0	0.0	0.0	0.0	3,114.0
Total	4,628.0	0.0	0.0	0.0	3,114.0
FINANCING DETAILS					
PRIMARY WATERMAIN RES	4,628.0	0.0	0.0	0.0	3,114.0
Total	4,628.0	0.0	0.0	0.0	3,114.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1456 TU-RAILWAY CROSSING SAFETY IMPROVEMENTS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Goran Lazic
Asset Type		Est. End Date	-

Project Description

This project provides funding for the installation of railway crossing improvements undertaken by Canadian National and Canadian Pacific Railways at level crossings within City limits. Under the current funding agreement with Transport Canada and Pacific Railways, each party is responsible for a percentage of the costs associated with safety upgrades done at level crossings (gates and automated warning systems).

General Comments

Crossing improvements are typically mandated by Transport Canada through the issuance of a 'Notice of Order' and as such the City is required to participate in funding a portion of the improvement. This program also includes an annual inspection program for signage, independent safety inspections required for whistle cessation requests and the installation of an uninterrupted power supply at various locations. It should also be noted that changing regulations by Transport Canada have resulted in increased funding requirements as the warrant system for railway gate installations has changed.

The following are the City's requirements under Transport Canada's new grade crossing regulations: **a)** road authorities and railway companies will be required to share critical information with each other by November 2016 in relation to the railway crossings under the City's jurisdiction; **b)** road authorities will be required to meet the safety standard at their existing railway crossings by November 2021; **c)** the Regulations apply to both the private and public crossings; **d)** grade crossing improvements may be eligible for federal funding and road authorities can apply for a grant before undertaking the work; and, **e)** under the Railway Safety Act, road authorities can be held liable and/or found guilty of an offense if they fail to meet the new Regulations.

Work planned for 2019 includes remediation of safety deficiencies identified in the 2017 Rail Safety Assessments.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
CONSTRUCTION	150.0	200.0	200.0	100.0	100.0
Total	150.0	200.0	200.0	100.0	100.0
FINANCING DETAILS					
TRAFFIC SAFETY RESERVE	150.0	200.0	200.0	100.0	100.0
Total	150.0	200.0	200.0	100.0	100.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1458 LAND DEV'T-ART RD-CLAYPOOL DR (DALMNY-AIRPRT DR)

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project is for the construction of an arterial roadway between Neault Road and Airport Drive.

General Comments

The construction in 2005 was for the initial two lanes of an ultimate four lane roadway extending along the North perimeter of the neighbourhood between McClocklin Road and Airport Drive. The remaining roadway constructed in the future will be a four lane roadway from Neault Road to McClocklin Road and will be subject to the development of the Blairmore area and the adjacent Industrial Lands.

Note: The 2021 budget is being cash flowed by private development (57%) and the Property Realized Reserve (43%). The funding distribution represents the contribution of the Arterial Roadway Reserve.

Prior Budget Approval

\$11,254,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Hampton Gate North to Hughes Drive	0.0	0.0	6,665.0	0.0	0.0
Hughes Drive to Neault Road	0.0	0.0	6,665.0	0.0	0.0
Total	0.0	0.0	13,330.0	0.0	0.0
FINANCING DETAILS					
ARTERIAL ROAD RESERVE	0.0	0.0	13,330.0	0.0	0.0
Total	0.0	0.0	13,330.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1460 LAND DEV'T-ARTL RD-NEAULT RDWY (22ND-SEC 2)

Project Status	Open	Year Identified	2012
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the design and construction of the Neault Roadway from 22nd Street to Section 2, Township 37. This roadway will provide access to 22nd Street and the neighbourhoods North of 22nd Street in the Blairmore Sector.

General Comments

Construction of the portion from 33rd Street to Claypool Drive will depend on the build-out of Kensington.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
22nd Street - Kensington Gate W	0.0	0.0	5,308.0	0.0	4,837.0
33rd Street - Claypool Drive	0.0	0.0	3,429.0	0.0	0.0
Kensington Gate W - 33rd Street	0.0	4,504.0	0.0	0.0	4,104.0
Total	0.0	4,504.0	8,737.0	0.0	8,941.0
FINANCING DETAILS					
ARTERIAL ROAD RESERVE	0.0	4,504.0	8,737.0	0.0	8,941.0
Total	0.0	4,504.0	8,737.0	0.0	8,941.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1464 LAND DEV'T-ART RD-FEDORUK DRIVE

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project is for the design and construction of Fedoruk Drive from Central Avenue to McOrmond Drive.

General Comments

Fedoruk Drive is a main East/West arterial roadway within the University Heights area.

The project included grading to accommodate the relocation of a 138kV power line.

Prior Budget Approval

\$7,257,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Central to Konihowski	0.0	3,270.0	0.0	0.0	0.0
Konihowski/Lowe Rd	0.0	1,309.0	0.0	0.0	0.0
Total	0.0	4,579.0	0.0	0.0	0.0
FINANCING DETAILS					
ARTERIAL ROAD RESERVE	0.0	4,579.0	0.0	0.0	0.0
Total	0.0	4,579.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1466 LAND DEV'T-ART RD-WANUSKEWIN RD

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project includes the design and construction of Wanuskewin Road from 51st Street to North of SE 1/4 Sec. 27 as well as traffic noise attenuation measures from 51st Street to Adilman Drive and on Lenore Drive from Wanuskewin Road to Russell Road.

General Comments

Construction of the 51st Street roadway and noise attenuation began in 2009.

Prior Budget Approval

\$3,724,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
71st Street to North of SE 1/4 Sec. 27	0.0	0.0	0.0	3,005.0	0.0
Total	0.0	0.0	0.0	3,005.0	0.0
FINANCING DETAILS					
ARTERIAL ROAD RESERVE	0.0	0.0	0.0	3,005.0	0.0
Total	0.0	0.0	0.0	3,005.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1468 LAND DEV'T-ART RD-8TH STREET EAST

Project Status	Open	Year Identified	2014
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project is for staged construction of the 8th Street East arterial roadway between McOrmond Drive and the planned Canadian Pacific Railway overpass to serve the Brighton neighbourhood.

General Comments

Construction of the initial phase of the arterial roadway serving the Brighton neighbourhood is expected to begin in 2022 after the trunk sewers are installed.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
CPR Overpass to RR #3045	0.0	0.0	0.0	4,586.0	0.0
RR #3045 to McOrmond Drive	0.0	0.0	0.0	0.0	3,332.0
Total	0.0	0.0	0.0	4,586.0	3,332.0
FINANCING DETAILS					
ARTERIAL ROAD RESERVE	0.0	0.0	0.0	4,586.0	3,332.0
Total	0.0	0.0	0.0	4,586.0	3,332.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1474 LAND DEV'T-ESTIMATED FUTURE DIRECT SERVICING PROJECTS

Project Status	Open	Year Identified	2014
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the costs for Future Direct Servicing Projects.

General Comments

The costs identified in the plan for 2021 to 2023 are estimated and will be adjusted to actual projects in future budgets.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Future Direct Servicing	0.0	0.0	49,247.0	35,744.0	29,853.0
Total	0.0	0.0	49,247.0	35,744.0	29,853.0
FINANCING DETAILS					
GENERAL PPD SERV-ENGINEERING	0.0	0.0	49,247.0	35,744.0	29,853.0
Total	0.0	0.0	49,247.0	35,744.0	29,853.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1475 US-AUTO'D GARBAGE CONTAINER REPL

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Mark Shaw
Asset Type	Garbage Collection Containers	Est. End Date	-

Project Description

This project involves the provision of new or replacement roll-out garbage carts used for automated waste collection.

General Comments

Each year approximately 5,000 garbage containers require replacement and approximately 1,500 additional containers are required to service new households.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Equipment Purchase	346.0	346.0	346.0	346.0	346.0
Total	346.0	346.0	346.0	346.0	346.0
FINANCING DETAILS					
AUTO GARBAGE CONTAINER REPL RES	346.0	346.0	346.0	346.0	346.0
Total	346.0	346.0	346.0	346.0	346.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1493 TU-EAST RIVERBANK STABILIZATION

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Lowell Reinhart
Asset Type		Est. End Date	-

Project Description

The project provides for slope monitoring and instrumentation of the City's east riverbank sites and the rehabilitation of slope failures. Sites include sections of riverbank land or City-owned land and do not include private property.

General Comments

Riverbank monitoring and inspections are conducted annually to support the asset management plan for the City's east riverbank, along the Meewasin conservation area, up to and including some City streets. Remediation projects for preservation and stabilization are implemented as required.

Depending on results of assessments during the second half of 2018, the section of City-owned land along the riverbank between East Lake Avenue and 17th Street may require remediation of sub-drainage to reduce the risk of damage to City-owned infrastructure. A projected annual budget for east riverbank stabilization will ensure that funding is available for unexpected emergency repairs.

The planned procurement method for this project is to be accomplished utilizing internal staff and external contractors, due to existing staff capacity and expertise to perform the work, and requirement of specialized service. External service providers are intended to be used for riverbank site assessments and monitoring.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Subdrain Monitoring & Instrumentation System	102.0	104.0	106.0	108.0	110.0
Subdrain Preservation & Slope Stabilization	979.0	999.0	1,019.0	1,040.0	1,060.0
Total	1,081.0	1,103.0	1,125.0	1,148.0	1,170.0
FINANCING DETAILS					
INFRA RES - STORM WATER	1,081.0	1,103.0	1,125.0	1,148.0	1,170.0
Total	1,081.0	1,103.0	1,125.0	1,148.0	1,170.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1504 TU- NEIGH.TRAFFIC REVIEW PERMANENT INSTALLATIONS

Project Status	Open	Year Identified	2015
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Nathalie Baudais
Asset Type		Est. End Date	-

Project Description

This project permanently constructs the traffic calming devices installed temporarily through the neighbourhood traffic review process.

General Comments

Traffic calming devices such as curb extensions, median islands, pinch-points, etc. will be funded from this project.

Details on the program proposed for the budget year will be presented in an administrative report prior to, or concurrent with Council budget meeting.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction & Design	275.0	700.0	840.0	840.0	320.0
Total	275.0	700.0	840.0	840.0	320.0
FINANCING DETAILS					
TRAFFIC SAFETY RESERVE	275.0	225.0	560.0	600.0	320.0
UNFUNDED TRAFFIC SAFETY RES	0.0	475.0	280.0	240.0	0.0
Total	275.0	700.0	840.0	840.0	320.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1505 TU-TRAFFIC SIGNAL INFRASTRUCTURE UPGRADES

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Goran Lazic
Asset Type		Est. End Date	-

Project Description

This project involves essential maintenance of the City's traffic signal system and life cycle replacement of major electronic and hardware components.

General Comments

The City currently has 275 signalized intersections, of which many are under centralized computer control. There is a need to continually upgrade the aging infrastructure in order to maintain safe and reliable traffic signal operations.

High priority has been given to replacement of major hardware components, such as traffic controllers, conflict monitors, signal heads, poles and communications cables. This funding is critical for essential intersection repairs and upgrades, including underground conduit/cable replacement, communications network expansion, vehicle detector repairs, incorporation of non-intrusive detection, replacement of older cabinets and electronics as required.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction	375.0	375.0	375.0	400.0	400.0
Total	375.0	375.0	375.0	400.0	400.0
FINANCING DETAILS					
INFRA RES-TRANSPORTATION	375.0	375.0	375.0	400.0	400.0
Total	375.0	375.0	375.0	400.0	400.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1506 TU-TRAFFIC SIGNING REPLACE-INFRA

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Dylan Ramsay
Asset Type		Est. End Date	-

Project Description

This project involves the upgrade and rehabilitation of the City's traffic signs.

General Comments

This program will develop and implement the following programs on an annual basis:

- 1) Stop and yield sign program: review, inspect and replace stop and yield signs to ensure that all signs meet standards
- 2) Arterial roadway sign program: review, assess, and replace the City's regulatory and warning signs on major arterial roads
- 3) Prepare as-built drawings in a digital format, compatible with the City's GIS system, for all programs
- 4) Street name plate replacement program
- 5) Pedestrian/School signing replacement program
- 6) Guide sign and overhead sign structure replacement program
- 7) Tree trimming program to ensure adequate visibility of control devices at intersections

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction	300.0	400.0	450.0	450.0	500.0
Total	300.0	400.0	450.0	450.0	500.0
FINANCING DETAILS					
INFRA RES-TRANSPORTATION	300.0	300.0	350.0	350.0	400.0
UNFUNDED TRANSPORTATION INFRA RES	0.0	100.0	100.0	100.0	100.0
Total	300.0	400.0	450.0	450.0	500.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1507 TU-GUARDRAILS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Dylan Ramsay
Asset Type		Est. End Date	-

Project Description

This project involves the installation of new guardrail for public safety, as well as the inspection and replacement of existing guardrail (and crash cushions) that have deteriorated to the point where structural integrity is compromised.

General Comments

The list of locations requiring either guardrail installation or replacement has grown significantly and will require several years of funding to complete. Guardrail will be installed and/or replaced at specific locations in order of priority as determined through the ranking system.

This program is an on-going, annual program.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Installation/Replacement	0.0	75.0	125.0	125.0	125.0
Total	0.0	75.0	125.0	125.0	125.0
FINANCING DETAILS					
INFRA RES-TRANSPORTATION	0.0	0.0	50.0	50.0	50.0
UNFUNDED TRANSPORTATION INFRA RES	0.0	75.0	75.0	75.0	75.0
Total	0.0	75.0	125.0	125.0	125.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1512 TU-NEIGHBOURHOOD TRAFFIC MANAGEMENT

Project Status	Open	Year Identified	2009
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Nathalie Baudais
Asset Type		Est. End Date	-

Project Description

This project addresses shortcutting, speeding and road user safety issues within neighbourhoods and on local and collector streets. The project includes comprehensive neighbourhood-wise traffic reviews. Further details, including information on the Neighbourhood Traffic Reviews, are provided in the Neighbourhood Traffic Management Guidelines and Tools, City of Saskatoon, May 2016.

General Comments

This project supports the City of Saskatoon long-term 'Moving Around' strategy as neighbourhood traffic management provides safety for motorists, cyclists and pedestrians.

This program will include:

- 1) Eight Neighbourhood Traffic Reviews per year
- 2) Conducting traffic studies and holding neighbourhood meetings (early spring and late fall) to determine and develop the traffic management plan
- 3) Maintenance of the existing temporary traffic calming locations
- 4) Temporary implementation of the completed neighbourhood traffic calming plans

Details on the program proposed for the budget year will be presented in an administrative report prior to, or concurrent with the Council budget meeting. It is intended to use external service providers for facilitation of the Neighbourhood Traffic Reviews.

The planned procurement method for this project is to be accomplished utilizing a combination of internal staff and external contractors, due to existing staff capacity and expertise to perform the work, and requirement of specialized services.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	300.0	100.0	100.0	100.0	100.0
Total	300.0	100.0	100.0	100.0	100.0
FINANCING DETAILS					
TRAFFIC SAFETY RESERVE	300.0	100.0	100.0	100.0	100.0
Total	300.0	100.0	100.0	100.0	100.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1513 TU-PAVEMENT MARKING PROGRAM-INFRA

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Dylan Ramsay
Asset Type		Est. End Date	-

Project Description

This project involves the installation and rehabilitation of permanent pavement markings that have been installed on freeway/expressway and arterial roadways over the last 20 years.

General Comments

There is no provision for this work in any operating program and rehabilitation of the markings has only been conducted under the arterial resurfacing program. Many of the permanent markings which have been installed have exceeded their design life and in areas of heavy travel, such as weave areas and intersections, the markings are completely gone.

The program includes the review, assessment and replacement of:

- Permanent markings on freeway/expressway roadways as required
- Permanent markings on arterial roadways as required
- Crosswalk and stop line markings on the above roads
- Guideline, continuity line and chevrons on the above roads

This program is also responsible for the placement of semi-permanent markings on the roadways rehabilitated by arterial resurfacing and micro surfacing.

This program is an on-going, annual program.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction	310.0	310.0	350.0	350.0	300.0
Total	310.0	310.0	350.0	350.0	300.0
FINANCING DETAILS					
INFRA RES-TRANSPORTATION	310.0	310.0	350.0	350.0	300.0
Total	310.0	310.0	350.0	350.0	300.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1518 CY-PAY STATION PURCHASES & IMPLEMENTATION

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Jo-Anne Richter
Asset Type		Est. End Date	-

Project Description

A new electronic pay station parking system was implemented in 2015 to replace the aging coin meters. This project provides for the continued implementation of to the pay-by-plate parking system.

General Comments

The project now provides the necessary resources to retrofit the parking services program to better adapt to the changing needs of the new system.

The implementation phase includes project management to lead the continued implementation of the new parking system and the purchase of maintenance and systems equipment.

Prior Budget Approval

\$4,577,000 Contractual agreement with Cale Systems Inc.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Implementation	60.0	60.0	60.0	60.0	60.0
Total	60.0	60.0	60.0	60.0	60.0
FINANCING DETAILS					
PARKING RESERVE	60.0	60.0	60.0	60.0	60.0
Total	60.0	60.0	60.0	60.0	60.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1522 TU-TRAFFIC NOISE ATTENUATION

Project Status	Open	Year Identified	2009
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Mariniel Flores
Asset Type		Est. End Date	-

Project Description

This project involves the design and construction of traffic noise attenuation devices to reduce the negative impacts of vehicle related noise on abutting residential properties.

General Comments

The traffic noise attenuation project is designed to address those residential areas that are adjacent to high volume roadways. Funding shown in 2019 and future years will provide for the ongoing monitoring of traffic noise levels throughout the City.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Ongoing Noise Monitoring	50.0	0.0	0.0	50.0	0.0
Sound Wall Tree Removal	70.0	0.0	0.0	0.0	0.0
Total	120.0	0.0	0.0	50.0	0.0
FINANCING DETAILS					
TRAFFIC NOISE ATTENUATION CAP RESERVE	50.0	0.0	0.0	50.0	0.0
TU - CAPITAL RESERVE	70.0	0.0	0.0	0.0	0.0
Total	120.0	0.0	0.0	50.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1523 AF-TRUNKING RADIO REPLACEMENT

Project Status	Open	Year Identified	2011
Project Type	SUPPORT SYSTEMS	Manager	Del Ehlert
Asset Type	Communication systems	Est. End Date	-

Project Description

This project involves the replacement of all analog radio's to digital. This involves the replacement of City owned portable and mobile radios from analog to digital and replacement of radios due to end of life cycle.

General Comments

This project provides funding for the replacement of Corporate radio's.

The planned procurement method for this project is to be accomplished utilizing internal staff, due to existing staff capacity to perform the work.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
EQUIPMENT PURCHASE	360.0	360.0	360.0	360.0	360.0
Total	360.0	360.0	360.0	360.0	360.0
FINANCING DETAILS					
CIVIC RADIO REPL & EXPN RESERVE	360.0	360.0	360.0	360.0	360.0
Total	360.0	360.0	360.0	360.0	360.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1526 TU-CIRCLE DR BRIDGE REPAIR

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project involves rehabilitation of the Circle Drive North Bridge, both eastbound and westbound.

General Comments

The Circle Drive North Bridge consists of two separate bridge decks (eastbound and westbound) founded on a shared pier system. The eastbound and westbound bridge structures are curved, five span, three lane steel girder bridges. The estimated replacement cost for each structure is approximately \$45.1 million.

Proactive rehabilitation work planned for 2021 includes removal and replacement of the asphalt wearing surface and membranes, spot repairs to the concrete decks, replacement of the expansion joints and spot repairs to concrete surfaces. The design and engineering services for the rehabilitation work is planned in 2020.

If a 'Do Nothing' approach were taken with preservation of the two bridge superstructures, service life prediction modeling indicates that structural failure, necessitating costly emergency repairs, can be expected to occur by the year 2035, requiring complete replacement of the superstructures. The cost estimate for deck replacement is approximately \$18 million for each structure.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	0.0	200.0	4,950.0	0.0	0.0
Total	0.0	200.0	4,950.0	0.0	0.0
FINANCING DETAILS					
BRIDGE MAJOR REPAIR RESERVE	0.0	200.0	2,240.0	0.0	0.0
UNFUNDED BRIDGE MAJOR REPAIR RES	0.0	0.0	2,710.0	0.0	0.0
Total	0.0	200.0	4,950.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1527 TU-UNIVERSITY BRIDGE REHAB

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project involves the rehabilitation of the University Bridge.

General Comments

The University Bridge is a 10 span, four lane concrete arch and girder bridge, originally constructed in 1916. The estimated replacement cost for this structure is approximately \$78.1 million.

Rehabilitation of the bridge piers' arches is planned for the year 2023. This work would include external engineering consulting and construction services for the repair of concrete section loss on piers between spans C and D as well as spans G and H, and rehabilitation of the concrete arches.

The City of Saskatoon is currently completing a study on the arches of the University Bridge which will be able to provide additional information relating to costs on the rehabilitation of the arches that may be required in 2023.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services.

Prior Budget Approval

\$2,022,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Rehabilitation	0.0	0.0	0.0	0.0	16,000.0
Total	0.0	0.0	0.0	0.0	16,000.0
FINANCING DETAILS					
UNFUNDED BRIDGE MAJOR REPAIR RES	0.0	0.0	0.0	0.0	16,000.0
Total	0.0	0.0	0.0	0.0	16,000.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1551 TU-BROADWAY BRIDGE REPAIRS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project includes the rehabilitation of the Broadway Bridge.

General Comments

The Broadway Bridge is a 12 span, four lane concrete arch and girder bridge, originally constructed in 1932. The estimated replacement cost for this structure is approximately \$69.3 million.

Study work planned for 2023 includes engineering services for inspection, testing, and analysis of the bridge arches and piers, complete with an updated long term rehabilitation plan.

Rehabilitation work planned for 2025 and 2026 includes engineering services, spot repairs to the substructure and arches, application of an arc zinc coating to the substructure and arches, removal and replacement of the asphalt wearing surface and membrane, removal and replacement of a portion of the concrete deck, replacement of the expansion joints, spot repairs to concrete surfaces, application of silane sealer to walkways and repairs to the pedestrian railing.

If a 'Do Nothing' approach were taken with preservation of this bridge, service life prediction modeling indicates that structural failure of the deck, necessitating costly emergency repairs, can be expected to occur by the year 2035, with complete replacement of the deck and barriers required by year 2040. The cost estimate for emergency deck repairs and subsequent deck rehabilitation is approximately \$33.5 million. Substructure repairs, estimated at \$16 million, would still be required to prevent structural failure of the bridge.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Deck Rehab	0.0	0.0	0.0	0.0	1,000.0
Total	0.0	0.0	0.0	0.0	1,000.0
FINANCING DETAILS					
BRIDGE MAJOR REPAIR RESERVE	0.0	0.0	0.0	0.0	610.0
UNFUNDED BRIDGE MAJOR REPAIR RES	0.0	0.0	0.0	0.0	390.0
Total	0.0	0.0	0.0	0.0	1,000.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1553 TU-SID BUCKWOLD BRIDGE REPAIRS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project includes rehabilitation of the Sid Buckwold Bridge.

General Comments

The Sid Buckwold Bridge is a three span, six lane post-tensioned concrete girder bridge, originally constructed in 1965. The estimated replacement cost for this structure is approximately \$66.1 million.

Rehabilitation work planned for 2019 includes engineering services, removal and replacement of the asphalt wearing surface and membrane, removal and replacement of a portion of the concrete deck, increasing the concrete cover over the rebar on the deck, removal and replacement of the median and interior traffic rails, replacement of the expansion joints, spot repairs to concrete surfaces, application of silane sealer to the walkway and replacement of the pedestrian railing.

This work will be done using external service providers.

If a 'Do Nothing' approach were taken with preservation of this bridge, service life prediction modeling indicates that structural failure of the deck, necessitating costly emergency repairs, can be expected to occur by the year 2027, with complete replacement of the deck and barriers required by the year 2032. The cost estimate for emergency deck repairs and subsequent deck rehabilitation is approximately \$40.8 million.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Bridge Deck Resurfacing	13,500.0	0.0	0.0	0.0	0.0
Total	13,500.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
BRIDGE MAJOR REPAIR RESERVE	13,500.0	0.0	0.0	0.0	0.0
Total	13,500.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1556 TU-SYSTEM UPGRADES/REPLACEMENTS

Project Status	Open	Year Identified	2012
Project Type	SUPPORT SYSTEMS	Manager	Shelley Korte
Asset Type		Est. End Date	-

Project Description

This project is to fund the investigation, procurement and implementation of system replacements or upgrades required in the Transportation and Utilities Department.

General Comments

There are many internal systems used by Transportation and Utilities which are integral to its operations. These systems eventually need upgrading, or need to be able to realize efficiencies by taking advantage of available advanced technology.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Design and Implementation	50.0	100.0	100.0	100.0	100.0
Total	50.0	100.0	100.0	100.0	100.0
FINANCING DETAILS					
TU - CAPITAL RESERVE	50.0	100.0	100.0	100.0	100.0
Total	50.0	100.0	100.0	100.0	100.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1557 TU-OFFICE MOD'NS/FURNITURE REPL/UPGRADES

Project Status	Open	Year Identified	2011
Project Type	EQUIPMENT REPLACEMENT	Manager	Shelley Korte
Asset Type	Building Contents	Est. End Date	-

Project Description

This project is to provide funding to address identified office modifications and required replacements and/or upgrades to systems furniture for open office areas in the Transportation and Utilities Department.

General Comments

Existing systems furniture is dated and no longer manufactured - any required upgrades or modifications are not compatible with the existing furniture. Funding identified for Access Transit is required for office upgrades to the booking and scheduling area at Access Transit.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Access Transit	75.0	0.0	0.0	0.0	0.0
Office Furniture System Replacement	50.0	100.0	100.0	100.0	100.0
Total	125.0	100.0	100.0	100.0	100.0
FINANCING DETAILS					
TU - CAPITAL RESERVE	125.0	100.0	100.0	100.0	100.0
Total	125.0	100.0	100.0	100.0	100.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1561 TU-COLLEGE DRIVE WESTBOUND OVER CPR OVERPASS

Project Status	Open	Year Identified	2015
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project involves preservation activities for the College Drive westbound over CPR overpass.

General Comments

College Drive westbound over CPR overpass was bestowed to the City of Saskatoon in late 2011 by the Saskatchewan Ministry of Highways. The structure is a two lane, three span, steel girder bridge, originally constructed in 1965.

The rehabilitation of the structure is planned for 2023 and includes engineering services, removal of asphalt wearing surface and membrane, removal and replacement of portions of the concrete deck, spot repairs of the concrete surface and installation of a new membrane and wearing surface.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
College Drive Westbound Over CPR Overpass	0.0	0.0	0.0	100.0	1,500.0
Total	0.0	0.0	0.0	100.0	1,500.0
FINANCING DETAILS					
BRIDGE MAJOR REPAIR RESERVE	0.0	0.0	0.0	100.0	1,500.0
Total	0.0	0.0	0.0	100.0	1,500.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1562 TU-COLLEGE DRIVE EASTBOUND OVER CPR OVERPASS

Project Status	Open	Year Identified	2015
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project involves preservation activities for the College Drive eastbound over CPR overpass.

General Comments

The College Drive eastbound over CPR overpass was bestowed by the City of Saskatoon in late 2011 by the Saskatchewan Ministry of Highways. The structure is a two lane, three span, steel girder bridge, originally constructed in 1993.

The rehabilitation of the structure is planned for 2022 and includes engineering services, removal of asphalt wearing surface and membrane, removal and replacement of top portion of the concreted deck, spot repairs to the concrete surface and installation of the new membrane and wearing surface..

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
College Drive Eastbound Over CPR Overpass	0.0	0.0	80.0	2,780.0	0.0
Total	0.0	0.0	80.0	2,780.0	0.0
FINANCING DETAILS					
BRIDGE MAJOR REPAIR RESERVE	0.0	0.0	80.0	1,397.0	0.0
UNFUNDED BRIDGE MAJOR REPAIR RES	0.0	0.0	0.0	1,383.0	0.0
Total	0.0	0.0	80.0	2,780.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1564 TU-TRAFFIC COUNTERS EQUIPMENT REPLACEMENT

Project Status	Open	Year Identified	2018
Project Type	EQUIPMENT REPLACEMENT	Manager	David LeBoutiller
Asset Type		Est. End Date	-

Project Description

This project is to replace aging portable traffic counting equipment used for short-term traffic volume, classification and speed studies.

General Comments

This project is to develop an equipment replacement fund to address equipment failures and slow erosion of our ability to complete short-term traffic volume and speed studies.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Equipment Replacement	65.0	0.0	0.0	0.0	0.0
Total	65.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
TRANSP INFRAS EXPANSION	65.0	0.0	0.0	0.0	0.0
Total	65.0	0.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1568 PARK DEV-ROSEWOOD

Project Status	Open	Year Identified	2010
Project Type	PREPAID LAND DEVELOPMENT	Manager	Bruce Laing
Asset Type		Est. End Date	-

Project Description

This project involves the development of parks in the Rosewood neighbourhood.

The planned procurement method for the construction is to be accomplished utilizing external contractors due to lack of internal capacity.

General Comments

Funding identified in 2019 is for the construction of a 3.9 acre secondary core parks, design of a 4.52 acre park, and the design of two linear parks totaling 8.13 acres.

Operating Impacts

\$27,300 for Park Maintenance in 2021 (3.9 acre secondary core park)

\$88,500 for Park Maintenance in 2022 (4.52 acre secondary core park and two linear parks totaling 8.13 acres)

Prior Budget Approval

\$74,000 for the design of the 3.9 acre secondary core park

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Core Parks	969.0	1,006.0	0.0	0.0	0.0
Linear Parks	171.0	1,539.0	0.0	0.0	0.0
Pocket Parks	0.0	431.0	0.0	0.0	0.0
Village Square	0.0	270.0	0.0	0.0	0.0
Total	1,140.0	3,246.0	0.0	0.0	0.0
FINANCING DETAILS					
PARKS AND RECREATION LEVY (NBHD)	1,140.0	3,246.0	0.0	0.0	0.0
Total	1,140.0	3,246.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	27.3	88.5	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1570 PARK DEV-KENSINGTON

Project Status	Open	Year Identified	2012
Project Type	PREPAID LAND DEVELOPMENT	Manager	Bruce Laing
Asset Type		Est. End Date	-

Project Description

This project involves the development of parks in the Kensington neighbourhood.

General Comments

Funding identified in 2019 is for the design of the water feature and construction of two linear parks totaling 4.3 acres.

The neighbourhood park is named the Lions Century Park and the Saskatoon Lions Club will be contributing approximately \$100,000 to allow for enhanced accessibility.

Operating Impacts

\$30,100 for Park Maintenance in 2021 (two linear parks totaling 4.3 acres)

\$58,000 for CBCM, Maintenance and Utilities related to the operation of the water feature beginning in 2022

\$14,600 for Playground programming beginning in approximately 2023

Prior Budget Approval

\$85,000 for the design of two linear parks

\$310,000 for design of the neighbourhood park, planned to be constructed in 2020

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Core Parks	100.0	2,881.0	0.0	0.0	0.0
Linear Parks	877.0	14.0	360.0	0.0	0.0
Pocket Parks	0.0	0.0	0.0	40.0	361.0
Water Feature	83.0	742.0	0.0	0.0	0.0
Total	1,060.0	3,637.0	360.0	40.0	361.0
FINANCING DETAILS					
PARKS AND RECREATION LEVY (NBHD)	960.0	3,637.0	360.0	40.0	361.0
PRIVATE CONTRIBUTIONS	100.0	0.0	0.0	0.0	0.0
Total	1,060.0	3,637.0	360.0	40.0	361.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	30.1	58.0	14.6
FTEs	0.0	0.0	0.0	0.0	0.0

1574 PARK DEV-ASPEN RIDGE

Project Status	Open	Year Identified	2015
Project Type	PREPAID LAND DEVELOPMENT	Manager	Bruce Laing
Asset Type		Est. End Date	-

Project Description

This project involves the development of parks in the Aspen Ridge neighbourhood.

General Comments

Funding identified in 2019 will be used for the design and construction of a 0.14 acre linear park, the design of two linear parks totaling 4.26 acres and the design of a 1.23 acre pocket park.

Operating Impacts

\$1,000 for Park Maintenance in 2021 (.14 acre linear park)

\$41,500 for Park Maintenance in 2022 (1.23 acre pocket park and two linear parks totaling 4.26 acres)

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Core Parks	0.0	0.0	252.0	3,036.0	0.0
Linear Parks	182.0	897.0	491.0	17.0	151.0
Pocket Park	42.0	380.0	0.0	56.0	500.0
Village Square	0.0	35.0	311.0	0.0	0.0
Water Feature	0.0	0.0	85.0	765.0	0.0
Total	224.0	1,312.0	1,139.0	3,874.0	651.0
FINANCING DETAILS					
PARKS AND RECREATION LEVY (NBHD)	224.0	1,312.0	1,139.0	3,874.0	651.0
Total	224.0	1,312.0	1,139.0	3,874.0	651.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	1.0	41.5	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1575 PARK DEV-ELK POINT

Project Status	Open	Year Identified	2015
Project Type	PREPAID LAND DEVELOPMENT	Manager	Bruce Laing
Asset Type		Est. End Date	-

Project Description

This project involves the development of parks in the Elk Point neighbourhood.

General Comments

Future timing of park development is based on development plans and is anticipated to begin in 2021.

Prior Budget Approval

\$103,000 for design of one linear park

\$190,000 for design of two district parks

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Core Parks	0.0	0.0	326.0	2,931.0	0.0
District Park	0.0	0.0	1,882.0	116.0	1,047.0
Linear Parks	0.0	0.0	1,244.0	1,220.0	886.0
Pocket Parks	0.0	0.0	32.0	329.0	347.0
Village Square	0.0	0.0	0.0	36.0	322.0
Water Feature	0.0	0.0	84.0	758.0	0.0
Total	0.0	0.0	3,568.0	5,390.0	2,602.0
FINANCING DETAILS					
PARKS AND RECREATION LEVY (DISTRICT)	0.0	0.0	1,882.0	116.0	1,047.0
PARKS AND RECREATION LEVY (NBHD)	0.0	0.0	1,686.0	5,274.0	1,555.0
Total	0.0	0.0	3,568.0	5,390.0	2,602.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1576 PARK DEV-BRIGHTON

Project Status	Open	Year Identified	2015
Project Type	PREPAID LAND DEVELOPMENT	Manager	Bruce Laing
Asset Type		Est. End Date	-

Project Description

This project involves the development of parks in the Brighton neighbourhood.

The planned procurement method for the construction is to be accomplished utilizing external contractors due to lack of internal capacity.

General Comments

Funding identified in 2019 will be used for the design of a 24.78 acre core park and water feature, the design of two linear parks totaling 2.86 acres, and the construction of two parks totaling 7.07 acres.

Special Note

Typically construction of the neighbourhood park is undertaken when the residential component of the neighbourhood has reached the 20% build out level. On March 26, 2018 City Council approved the Developer's request to advance the construction of the neighbourhood park, pending the execution of an agreement outlining the terms of early development.

Operating Impacts

\$49,500 for Park Maintenance in 2021 (two parks totaling 7.07 acres)

\$193,300 for Park Maintenance in 2022 (24.78 acre core park and two linear parks totaling 2.82 acres)

\$73,400 for CBCM, Maintenance and Utilities related to the operation of the water feature beginning in 2022

\$14,600 for Playground programming beginning in approximately 2023

Prior Budget Approval

\$111,000 for the design of two parks totaling 7.07 acres to be constructed in 2019

\$153,000 for the design of a 9.71 acre park to be constructed in 2020

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Core Parks	479.0	4,313.0	0.0	0.0	0.0
District Park	1,000.0	1,616.0	2,181.0	0.0	0.0
Linear Parks	68.0	667.0	566.0	0.0	0.0
Pocket Parks	0.0	153.0	1,380.0	0.0	0.0
Water Feature	124.0	1,115.0	0.0	0.0	0.0
Total	1,671.0	7,864.0	4,127.0	0.0	0.0
FINANCING DETAILS					
PARKS AND RECREATION LEVY (DISTRICT)	651.0	1,616.0	2,181.0	0.0	0.0
PARKS AND RECREATION LEVY (MULTI-DISTRICT)	349.0	0.0	0.0	0.0	0.0
PARKS AND RECREATION LEVY (NBHD)	671.0	6,248.0	1,946.0	0.0	0.0
Total	1,671.0	7,864.0	4,127.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	49.5	266.7	14.6
FTEs	0.0	0.0	0.0	0.0	0.0

1578 CY-SILVERWOOD INDUSTRIAL AREA PARK

Project Status	Open	Year Identified	2015
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Darren Crilly
Asset Type		Est. End Date	-

Project Description

This project involves the development of two parcels of land located in the Silverwood Industrial area of Saskatoon.

General Comments

The Silverwood Industrial Area Park plan is to develop two parcels of land located on the north and south side of Wanuskewin Road in the Silverwood Industrial area.

The allotment gardens is set for construction in 2019 on the north parcel of land. Funding is required for services and infrastructure such as roadway construction, drainage installations and parking lot infrastructure to be included with the project. Redesign and relocation of the proposed gardens was required to support the development and use of the softball fields beginning in 2021. Park infrastructure will be shared and as such, savings associated with future design and construction costs.

The plan is to develop two softball diamonds (north parcel adjacent to the allotment gardens) in 2021, and develop two multipurpose fields (south parcel adjacent to Fire Hall #7) in 2024.

These projects were approved in principle, by City Council on March 26, 2018 through the Recreation and Parks Facilities Game Plan Proposed Funding Plan, subject to a funding plan being identified and approved.

Special Note

The funding source for the allotment garden would be an exception to City Council Policy No. C03 011, Parks and Recreation Levy, which identifies levies collected from industrial properties may be used for multi-district parks, boulevard trees, and recreation facilities.

Operating Impacts

2022 - \$37,200 - Sport Field Maintenance (relating to 2021 Budget)

2025 - \$37,200 - Sport Field Maintenance (relating to 2021 Budget)

Prior Budget Approval

\$378,000 Allotment Gardens

\$22,000 Park design

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Allotment Gardens	340.0	0.0	0.0	0.0	0.0
Silverwood North District Park	0.0	0.0	1,880.0	0.0	0.0
Total	340.0	0.0	1,880.0	0.0	0.0
FINANCING DETAILS					
FUNDING PLAN CONTRIBUTION	0.0	0.0	1,515.0	0.0	0.0
INDUSTRIAL PARK DEVELOPMENT RES	340.0	0.0	0.0	0.0	0.0
PARK ENHANCE RES	0.0	0.0	365.0	0.0	0.0
Total	340.0	0.0	1,880.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1584 CIVIC OPERATIONS CENTRE

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Nicole Slade
Asset Type	Buildings	Est. End Date	-

Project Description

This project consists of the relocation of Transit, Public Works and City Yards to a new combined location.

This project has two phases of construction:

Phase One included the relocation of Transit from Caswell Hill, allowing for the decommissioning and the redevelopment of the vacated portion of Caswell Hill which has been identified as a Council priority. This Phase will also provide the first permanent Snow Storage Facility. This facility will manage snow melt water and meet environmental regulations. Phase One construction is complete.

Phase Two of this project consists of the planning, design and construction of a new facility for the Water & Waste Stream Division and Roadways & Operations Division (also known as Public Works or City Yards).

General Comments

The John Deere Plow Co. Ltd. built the John Deere building in 1910 and occupied it until 1961, when it was sold to the City of Saskatoon. The four-storey, 16,000-square-foot building currently houses about 470 employees, many of whom are field staff that report in at the beginning and end of shifts. The John Deere building has had minimal maintenance performed since the middle of the last century to keep it habitable; major maintenance or lifecycle upgrades have not been completed and are long overdue.

The primary goals for building a new facility are to support Public Works operations with appropriate, long term, purpose specific facilities and to enlarge the overall space in line with accepted 'best practice' in Canada. Other goals related to the new facility include locating the facility in a strategic location with ready access to a high volume transportation network, streamlining operations and avoiding the need to lease storage space.

In 2017, \$500,000 was approved to: fine tune project space and requirements; evaluate the need/opportunities for satellite yards; evaluate operating budget impact; and develop phasing strategies. All of these will ultimately result in a greater certainty of costs.

Specialized work functions require purpose built facilities that accommodate round-the-clock (24x7) operations. The following are a few examples:

- Designated self-contained area for the Sewer group
- Heated indoor storage to stockpile material for emergency repairs in the winter months
- Heated indoor storage for the fleet
- Multi-purpose indoor training facility for Public Works staff, Fire and sub-contractors
- Adequate office space for daily safety/tailgate meetings which are required by Occupational Health and Safety
- Amenities as available to other City Divisions (such as showers, appropriate washrooms and lunch rooms)

Prior Budget Approval

\$131,926,000 Prior budget approvals funded an environmental assessment, a feasibility study, relocation studies, a P3 business case and a communication plan as well as Phase One construction of the Transit and Snow Storage Facility.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
City Yards	0.0	0.0	0.0	35,000.0	0.0
Total	0.0	0.0	0.0	35,000.0	0.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	0.0	0.0	35,000.0	0.0
Total	0.0	0.0	0.0	35,000.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1615 TU-WATER DISTRIBUTION

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Steve Wood
Asset Type		Est. End Date	-

Project Description

This project is an annual program to undertake major rehabilitation and replacement of water mains and appurtenances in the water distribution system.

General Comments

The network management component of this project involves the evaluation and planning to manage overall condition and capacity of the water distribution system.

The preservation program involves the project level design, construction administration and construction/contract activities to deliver the annual major rehabilitation and replacement programs and capacity improvement programs. Future years' preservation budgets reflect the cost to replace mains and service connections that are anticipated to reach the economic life in the respective year subject to a maximum 12 breaks.

The capacity program is directed at ensuring adequate pressure and volumes. Capacity improvements are typically driven by the need to meet minimum fire flow standards for fire suppression and to ensure adequate water pressure during flushing and water quality programming.

The capital operations component of the capital budget reflects capital investment directed at supporting operating programs.

The general support capital expenditure provides support to all programs including the continued development of GIS.

The lead connection program involves the construction administration and construction/contract activities for the replacement of lead connection on an emergency basis as well as in conjunction with roadway preservation and homeowner requests.

The planned procurement method for capital operations, general support and network management components is to be accomplished utilizing internal staff, due to frequency for the need of the required expertise, availability of technology in-house and long-term requirements, and expertise of existing staff to perform the work. The planned procurement method for capacity programs, lead connections and preservation program components is to be accomplished utilizing external contractors, due to existing staff capacity to perform the work and expected timeline of delivery.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Capacity Programs	5,815.0	5,815.0	5,815.0	5,815.0	5,815.0
Capital Operations	203.0	203.0	203.0	203.0	203.0
Flow Monitoring	22.0	22.0	22.0	22.0	22.0
General Support	38.0	38.0	38.0	38.0	38.0
Lead Connections	808.0	808.0	808.0	808.0	808.0
Longterm Lead	2,899.0	2,899.0	2,899.0	2,899.0	2,899.0
Modelling and Monitoring Support	50.0	50.0	50.0	50.0	50.0
Network Management	162.0	162.0	162.0	162.0	162.0
Preservation Program	6,233.0	6,233.0	6,233.0	6,233.0	6,233.0
Total	16,230.0	16,230.0	16,230.0	16,230.0	16,230.0
FINANCING DETAILS					
INFRA RES-WTR & SAN SWR	16,230.0	16,230.0	16,230.0	16,230.0	16,230.0
Total	16,230.0	16,230.0	16,230.0	16,230.0	16,230.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1616 TU-WASTE WATER COLLECTION

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Steve Wood
Asset Type		Est. End Date	-

Project Description

This project is an annual program to undertake major rehabilitation and replacement of waste water sewer mains and appurtenances in the waste water collection system.

General Comments

The network management component of this project involves the evaluation and planning to manage the overall condition and capacity of the waste water collection system.

The preservation and capacity programs involve the project level design, construction administration, and construction/contract activities to deliver the annual major rehabilitation and replacement programs and capacity improvement programs. The preservation program is directed at replacement and rehabilitation of sewer mains and service connections that are structurally unsound and pose a high risk of failure leading to sewer backup. The capacity improvement program is directed at mains that are undersized due to development intensification and wet weather inflow.

The capital operations component of the capital budget reflects capital investment directed at supporting operating programs.

The general support capital expenditure provides support to all programs including the continued development of GIS.

The connection replacement program involves the construction administration and construction/contract activities for the replacement of sewer connections.

The planned procurement method for capital operations, general support and network management components is to be accomplished utilizing internal staff, due to frequency for the need of the required expertise, availability of technology in-house and long-term requirements, and expertise of existing staff to perform the work. The planned procurement method for connection replacements and preservation program components is to be accomplished utilizing external contractors, due to existing staff capacity to perform the work, and expected timeline of delivery.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Capital Operations	187.0	187.0	187.0	187.0	187.0
Connection Replacements	1,262.0	1,262.0	1,262.0	1,262.0	1,262.0
Flow Monitoring	43.0	43.0	43.0	43.0	43.0
General Support	38.0	38.0	38.0	38.0	38.0
Modelling and Monitoring Support	50.0	50.0	50.0	50.0	50.0
Network Management	296.0	296.0	296.0	296.0	296.0
Preservation Program	3,384.0	3,484.0	3,384.0	3,384.0	3,384.0
Total	5,260.0	5,360.0	5,260.0	5,260.0	5,260.0
FINANCING DETAILS					
INFRA RES-WTR & SAN SWR	5,260.0	5,360.0	5,260.0	5,260.0	5,260.0
Total	5,260.0	5,360.0	5,260.0	5,260.0	5,260.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1617 TU-PRIMARY WATER MAINS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Steve Wood
Asset Type		Est. End Date	-

Project Description

This project is an annual program to undertake major rehabilitation and replacement of the pipelines and appurtenances in the large diameter transmission system.

General Comments

The program will continue to focus on corrosion protection on the primary water mains to control corrosion failures, a common cause of leaks on these large diameter mains. A second component of the program includes the replacement and retrofitting of control valves/chambers to provide for the shutdown and isolation of the primary water main for maintenance and operations. A third component of this program is the major rehabilitation or replacement of primary water main sections.

The network management component of this project involves the evaluation, inspection and planning to manage the capacity in relation to demand, and the overall condition of the primary water main system. The work on this network will focus on demand/capacity modeling, cathodic protection and condition assessment.

The preservation and capacity programs involve the project level design, construction administration, and construction/contract activities to deliver the annual major rehabilitation and replacement programs and capacity improvement programs.

The capital operations component of the capital budget reflects capital investment directed at supporting operating programs.

The general support capital expenditure provides support to all programs including the continued development of GIS.

The planned procurement method for network management, preservation and capacity programs components is to be accomplished utilizing external contractors, due to requirement of specialized services, existing staff capacity to perform the work, and expected timeline of delivery. The planned procurement method for general support component is to be accomplished utilizing internal staff, due to availability of technology in-house and long-term requirements.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Capacity Programs	248.0	248.0	248.0	248.0	248.0
Flow Monitoring	22.0	22.0	22.0	22.0	22.0
General Support	32.0	32.0	32.0	32.0	32.0
Network Management	108.0	108.0	108.0	108.0	108.0
Operating Programs	26.0	26.0	26.0	26.0	26.0
Preservation Program	2,250.0	2,250.0	2,250.0	2,250.0	2,250.0
Total	2,686.0	2,686.0	2,686.0	2,686.0	2,686.0
FINANCING DETAILS					
INFRA RES-WTR & SAN SWR	2,686.0	2,686.0	2,686.0	2,686.0	2,686.0
Total	2,686.0	2,686.0	2,686.0	2,686.0	2,686.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1618 TU-SANITARY SEWER TRUNKS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Steve Wood
Asset Type		Est. End Date	-

Project Description

This project is an annual program to undertake major rehabilitation and replacement of waste water trunk sewers and appurtenances in the large diameter waste water collection system.

General Comments

The network management component of this project involves the evaluation and planning to manage the overall condition and capacity of the waste water trunk sewer system. The planning work will focus on demand/capacity modeling and the inspection of critical trunk sewers.

The preservation program involve the project level design, construction administration, and construction/contract activities to deliver the annual major rehabilitation and replacement programs and capacity improvement programs. Trunk sewers are critical sewers that cannot readily be taken out of service and in the event of a failure have a major environmental impact. The preservation program is directed at preventing failures through early rehabilitation or replacement.

The capacity improvement program is directed at mains that are undersized due to development intensification and where loading exceeds capacity. Other capacity funding is allocated to programming to reduce wet weather inflow, which leads to local sanitary sewer overflows to the river.

The capital operations component of the capital budget reflects capital investment directed at supporting operating programs.

The general support capital expenditure provides support to all programs including the continued development of GIS.

The planned procurement method for capital operations, general support and network management is to be accomplished utilizing internal staff, due to expertise of existing staff to perform the work, frequency for the need of the required expertise, availability of technology in-house and long-term requirements. The planned procurement method for preservation and capacity programs is to be accomplished utilizing external contractors, due to existing staff capacity to perform the work and expected timeline of delivery.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Capacity Programs	172.0	172.0	172.0	172.0	172.0
Capital Operations	68.0	68.0	68.0	68.0	68.0
Flow Monitoring	43.0	43.0	43.0	43.0	43.0
General Support	32.0	32.0	32.0	32.0	32.0
Network Management	248.0	248.0	248.0	248.0	248.0
Preservation Program	1,391.0	1,391.0	1,391.0	1,391.0	1,391.0
Total	1,954.0	1,954.0	1,954.0	1,954.0	1,954.0
FINANCING DETAILS					
INFRA RES-WTR & SAN SWR	1,954.0	1,954.0	1,954.0	1,954.0	1,954.0
Total	1,954.0	1,954.0	1,954.0	1,954.0	1,954.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1619 TU-STORM SEWER TRUNK AND COLLECTION

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Lowell Reinhart
Asset Type		Est. End Date	-

Project Description

The project is an annual program to support major rehabilitation, upgrading, and replacement of small and large diameter collector and trunk storm sewer mains and connections. The City's storm water assets include over 700 km of storm water pipes. Storm sewer asset management seeks to provide lowest life cycle costs.

General Comments

The project includes Network Management which involves the management, evaluation and planning required to support the Preservation and Capacity Improvement components. The Preservation Program includes inspection and assessment of the storm water infrastructure and lining of priority storm pipes to extend their life. Capacity Improvement includes design and construction to enhance drainage in areas that experience flooding.

In August 2017, City Council approved an extension and phase-out of the temporary Flood Protection Program (FPP) which had funded infrastructure to reduce risk of sanitary sewer flooding. From 2019 to 2021, the FPP funding will be directed to the Storm Water Utility for high priority flood risk mitigation projects and appears as funding from the Infrastructure Reserve - Water and Wastewater.

The planned procurement method for this project is to be accomplished utilizing a combination of internal staff and external contractors, due to existing staff capacity and expertise to perform the work, and requirement of specialized services. External contractors are intended to be used to upgrade IDF curves and help develop climate change adaptation strategies.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Capacity Program	4,449.0	4,726.0	4,821.0	4,917.0	5,016.0
Capital Operations	51.0	52.0	53.0	54.0	55.0
Network Management	400.0	408.0	416.0	424.0	432.0
Preservation Program	1,172.0	1,672.0	1,705.0	1,739.0	1,774.0
Total	6,072.0	6,858.0	6,995.0	7,134.0	7,277.0
FINANCING DETAILS					
INFRA RES - STORM WATER	3,414.0	4,891.0	5,982.0	7,134.0	7,277.0
INFRA RES-WTR & SAN SWR	2,658.0	1,967.0	1,013.0	0.0	0.0
Total	6,072.0	6,858.0	6,995.0	7,134.0	7,277.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1621 TU-STORM SEWER POND PRESERVATION

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Lowell Reinhart
Asset Type		Est. End Date	-

Project Description

This project is an annual program to undertake rehabilitation of storm water retention ponds. The storm water system includes 28 storm retention ponds - 20 are wet and 8 are dry. Annual storm pond asset management will protect property from flooding and ensure water quality.

General Comments

The Network Management component involves evaluation and planning to support the Preservation and Capacity Improvement components. The Preservation Components involve project design, administration and construction to preserve the storm ponds on a priority basis. This includes potential sediment removal to extend pond lifespan.

The planned procurement method for this project is to be accomplished utilizing a combination of internal staff and external contractors, due to existing staff capacity and expertise to perform the work. External contractors are intended to be used for surveying and assessing the sediment levels in wet ponds throughout the City where water quality and storage volume are being affected by sediment build up over time.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Capital Operations	82.0	83.0	85.0	87.0	88.0
Network Management	22.0	23.0	23.0	24.0	24.0
Preservation Program	346.0	500.0	510.0	520.0	532.0
Total	450.0	606.0	618.0	631.0	644.0
FINANCING DETAILS					
INFRA RES - STORM WATER	450.0	606.0	618.0	631.0	644.0
Total	450.0	606.0	618.0	631.0	644.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1650 CY-MUNICIPAL CEMETERIES MASTER PLAN

Project Status	Open	Year Identified	2009
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Gerald Rees
Asset Type	Cemeteries - Land Improvement	Est. End Date	-

Project Description

This project provides funding for the development of a Saskatoon Municipal Cemetery Master Plan.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized services.

General Comments

The 2005 Woodlawn Cemetery Value for Money Audit confirmed that the City of Saskatoon should remain in the cemetery business in order to meet the objectives of ensuring protection of public health and access to cemetery products and services at reasonable and relatively stable market prices. Based on current burial trends and regulations allowing four interments per single casket plot, Woodlawn will have capacity for approximately 25 years.

The Master Plan will provide high level guidance with regards to an accurate count of the number of years of available gravesites remaining in Woodlawn Cemetery and provide a report that would outline the future needs including, but not limited to: interment demand; land purchase and capital cost estimates; location options; and management strategies.

Operating Impacts

The future operating impact will be identified in the Master Plan.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Feasibility Study	80.0	0.0	0.0	0.0	0.0
Total	80.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
CY CAPITAL RESERVE	80.0	0.0	0.0	0.0	0.0
Total	80.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1658 CY-PARKS NEW SATELLITE MTNC BLDG

Project Status	Open	Year Identified	2012
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Darren Crilly
Asset Type		Est. End Date	-

Project Description

This project allows for the implementation of service review findings that indicate an expansion of Parks maintenance buildings is necessary as the area of parks and open space continues to grow.

General Comments

To improve operating efficiencies of the Parks Maintenance program, a service delivery model has been implemented that includes new satellite maintenance buildings and equipment strategically located geographically closer to parks in new neighbourhoods. This reduces travel time to and from maintenance facilities to the parks, and results in more effective use of staff resources and improves the safety of workers that travel on city roadways.

In 2019 the construction of the Brighton satellite maintenance building is planned. The Elk Point facility is expected to be designed in 2021.

Special Note

The Elk Point maintenance building is subject to the approval of the 2018 Parks & Recreation Levy.

Operating Impacts

Each building has an operating impact of \$15,200 (\$3,000 for CBCM contributions, \$2,200 for utilities and \$10,000 for seasonal portable washroom, septic, and fuel storage services).

Prior Budget Approval

\$20,000 for design of the building to be located in Brighton

\$1,620,000 for six satellite maintenance building located at Kinsmen, Hyde, Peter Zakreski and Lakewood Parks, and in the Hampton Village and Evergreen neighbourhoods.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Brighton	250.0	0.0	0.0	0.0	0.0
Elk Point	0.0	0.0	20.0	250.0	0.0
Total	250.0	0.0	20.0	250.0	0.0
FINANCING DETAILS					
PARKS AND RECREATION LEVY (MULTI-DISTRICT)	250.0	0.0	20.0	250.0	0.0
Total	250.0	0.0	20.0	250.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	15.2	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1663 PARK DEV - N.E. SWALE

Project Status	Open	Year Identified	2017
Project Type	PREPAID LAND DEVELOPMENT	Manager	Tyson McShane
Asset Type		Est. End Date	-

Project Description

This project involves all aspects of implementation of Phases One and Two of the Meewasin Northeast Swale Master Plan (Master Plan). Specifically, it includes detailed design, tendering and project management of Phase One and Two, and subsequent construction. Phase One includes protective fencing, trail construction, interpretive opportunities and other amenities. Phase Two includes additional trail development and seating/interpretive node construction. Additionally, this project involves grassland restoration in and around City wet and dry ponds that were previously developed in the Northeast Swale (Swale) and that were developed under a Meewasin Valley Authority (Meewasin) condition that native grassland be re-established.

General Comments

In October 2015, City Council approved in principle the Master Plan. The Master Plan includes a significant number of proposed amenities: trails, boardwalks, parking areas, facilities (benches, picnic areas, waste receptacles, etc.), signage, access control, lighting, and the Greenway (trail and transition area adjacent to urban development).

Funds are to be provided to Meewasin for project management and implementation. The City will monitor progress and review detailed designs administratively to ensure compliance with all City policies and plans and the approved Master Plan.

This capital project excludes funding for the Greenway. This is addressed, in part, through the development of the Aspen Ridge neighbourhood (southern Swale boundary) and the remainder (northern Swale boundary) will be addressed through a future capital project.

For 2018, the funding source was an allocation from the Neighbourhood Land Development Fund. This enabled Meewasin to continue with important design work, take steps to secure the Swale from illegitimate access, begin the multi-year process to restore impacted grasslands in and around the wet and dry ponds and begin construction of the internal trail network and some of the seating and interpretive nodes. The funding source for 2019 is a combination of allocation from the Neighbourhood Land Development Fund and Meewasin, with potential sources including fundraising and/or grants. The Meewasin-funded portion is subject to fundraising efforts and portions may be available earlier or later than identified. Due to recent changes to Meewasin's funding agreements, fundraising may take longer than expected due to their limited resources for fundraising and grant writing.

Phases Three through Five are dependent on the pace of development of neighbourhoods in the University Heights Suburban Development Area beyond Aspen Ridge and will be brought forward in future years.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to the existing partnership with the Meewasin Valley Authority as the project management and implementation lead for this work.

Prior Budget Approval

\$1,000,000 allocation from the Neighbourhood Land Development Fund (\$500,000 in each of 2017 and 2018)

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
N.E. Swale	1,870.0	0.0	0.0	0.0	0.0
Total	1,870.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
NEIGHBOURHOOD LAND DEVELOPMENT FUND	500.0	0.0	0.0	0.0	0.0
PRIVATE CONTRIBUTIONS	1,370.0	0.0	0.0	0.0	0.0
Total	1,870.0	0.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1664 CY-GORDON HOWE COMPLEX UPGRADES

Project Status	Open	Year Identified	2016
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Mike Libke
Asset Type	Parks and Open Spaces	Est. End Date	-

Project Description

This project encompasses a number of initiatives planned as upgrades and/or enhancements to various amenities at the Gordie Howe Sports Complex to support programming and events. The sports complex includes the Saskatoon Minor Football Field, Bob Van Impe Softball Field, Joe Gallagher Softball Field, Clarence Downey Speedskating Oval, Gordie Howe Kinsmen Arena, Glenn Reeve Softball Diamonds, Geoff Hughes Baseball Fields, Cairns Baseball Stadium, and Leakos Baseball Field.

General Comments

The vision is to create a world-class sports complex that will benefit Saskatoon athletes for generations to come. Thousands of athletes use the facilities each year for practices and local competitions as well as national and world events. The Friends of the Bowl Foundation (FOTBF) is focused on upgrading the facilities to meet the growing demand for sports facilities in Saskatoon and to attract more national and international events.

City Council approved the Friends of the Bowl to manage the design and construction of the Master Plan capital upgrades. The planned procurement method for this project is to be accomplished and managed by the Friends of the Bowl, and following best value procurement as outlined in the construction agreement between the City and Friends of the Bowl.

The \$5.0 million contribution from the City of Saskatoon will be paid out \$1.25 million in 2019 through 2022 as part of the Recreation and Parks Funding Plan.

Prior Budget Approval

\$37,000,000

This included the following:

- a new 400 meter synthetic track for track and field;
- upgrades to the speed skating oval;
- a new building to replace the existing clubhouse at Cairns Field that will serve track and field, baseball, speed skating and cross country skiing;
- asphalt parking lots in all areas;
- new bleacher seating for track and field, speed skating, and replacement bleachers at Cairns Field;
- new lights and score board for track and field, speed skating, and cross-country skiing;
- a tree planting/removal and relocation project;
- a multisport ticket booth to service the track and field, speed skating and baseball;
- a new outdoor multi-purpose turf field with seating for approximately 300;
- a new Indoor Sports Training Centre for off season training for baseball, softball, field hockey, and track and field.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Gordie Howe Sports Complex Master Plan	5,000.0	0.0	0.0	0.0	0.0
Total	5,000.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
DEDICATED LANDS RESERVE	166.0	0.0	0.0	0.0	0.0
FUNDING PLAN CONTRIBUTION	4,834.0	0.0	0.0	0.0	0.0
Total	5,000.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1669 CY-PSYLLID IMPACTED TREE REMOVAL/REPLANTING

Project Status	Open	Year Identified	2018
Project Type	ENVIRONMENTAL PROTECTION	Manager	Darren Crilly
Asset Type	Parks and Open Spaces	Est. End Date	-

Project Description

This project involves the removal of Ash trees impacted by the Cottony Ash Psyllid insect, along with the replanting of another tree species.

General Comments

In the spring of 2017 a city-wide canopy assessment was undertaken to determine the extent of tree decline related to the Psyllid insect. This assessment identified approximately 1,000 trees that warranted removal and replacement.

The 2018 funding allowed for the removal of 1,000 Ash trees negatively impacted by psyllids, and the replanting of 385 of these trees with another tree species.

2019 funding in the amount of \$423,000 will allow for the replacement of approximately 515 trees. It has been determined that about 10% of the existing trees will not be replaced as the planting sites do not meet current setbacks. The replacement trees will provide increased tree diversity and a more resilient urban forest.

Further assessments of the remaining 6,000 City-owned susceptible trees is being undertaken. It is expected that this number of trees requiring removal will grow as the psyllid population increases. The full cost of the next phases of tree removal and replanting along with the funding have not yet been identified and will be subject of a future report.

Special Note

The establishment of a new Urban Forestry Sustainability Reserve was approved by City Council for 2019, with an initial funding contribution of \$150,000. The 2019 funding will be allocated to this project to continue with the removal and replanting of newly identified infected trees.

Prior Budget Approval

\$757,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Pest Control	150.0	0.0	0.0	0.0	0.0
Tree Removal/Replanting	423.0	0.0	0.0	0.0	0.0
Total	573.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
RESERVE FOR CAPITAL EXPENDITURES	423.0	0.0	0.0	0.0	0.0
URBAN FOREST & PEST MGMT CAP RES	150.0	0.0	0.0	0.0	0.0
Total	573.0	0.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1670 CY-PARK DEVELOPMENT STANDARDS UPDATE

Project Status	Open	Year Identified	2019
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Darren Crilly
Asset Type	Parks and Open Spaces	Est. End Date	-

Project Description

The Recreation and Parks Masterplan identified that new and upgraded recreation and park infrastructure will be required to meet community needs. Park Development Guidelines, Landscape Design and Development Standards all work together to guide the development of the city's park space, with the cost of new parks funded by the Parks and Recreation Levy. The Community Centre Levy is also a consideration as it relates to community program space and support amenities in adjacent parks. A comprehensive review of these documents and the levies is required to ensure that the mix of recreational opportunity and green park infrastructure continues to meet the needs of an increasingly diverse community.

The planned procurement method for this project is to be accomplished utilizing internal staff, due to expertise of existing staff to perform the work.

General Comments

The review involves updating the design and development standards and guidelines to reflect community needs and best practices. The Parks and Recreation and Community Centre levy policy will then be reviewed. Once appropriate alignment of the levies and corresponding guidelines and standards is achieved, they will be presented as a total package, for consideration by City Council in late 2019.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Parks Review	100.0	0.0	0.0	0.0	0.0
Total	100.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
PARKS AND RECREATION LEVY (MULTI-DISTRICT)	100.0	0.0	0.0	0.0	0.0
Total	100.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1671 CY-COMMUNITY ENGAGEMENT PROCESS - UPDATE OF RESIDENTIAL PARKING PERMIT PROGRAM BYLAW

Project Status	Open	Year Identified	2019
Project Type	STUDY/PLANNING	Manager	Jo-Anne Richter
Asset Type	Studies - Non capitalized expenditure	Est. End Date	-

Project Description

Residents in some Saskatoon neighbourhoods experience significant on-street parking congestion, usually generated by a nearby hospital, university, or business district. The Residential Parking Program Bylaw, 1999 (RPP Bylaw) was established to designate certain streets as residential parking zones which limit non-resident parking to a short period of time (typically 1 to 3 hours).

As the City grows and existing neighbourhoods redevelop, the demand for on-street parking increases. The RPP program was established prior to the current period of rapid growth and strategic change in the City, and updates to this Bylaw are necessary to address new pressures and needs, including:

- The RPP zone creation and modification process
- Permit types, fees and eligibility criteria
- Administrative and operational processes

General Comments

A comprehensive review of the RPP Bylaw is required to identify revisions that will better address current needs and pressures. An engagement initiative that includes people in the community who have first-hand knowledge of the program (residents, stakeholders and community based associations such as the Community Associations and BIDS) is a key component in identifying appropriate and necessary program changes.

The intent of this capital project is to engage a consultant to complete the engagement and provide recommendations on RPP program updates based on the input gathered. A consultant can also provide a neutral third party perspective that will enhance the consultation process.

The consultation program will include:

- constraints and opportunities of the existing program, and recommended program improvements to address the issues identified;
- assessing the RPP program as it affects non-resident stakeholders, residents in multi-unit dwellings, and residents in blocks adjacent to a RPP zone, and identifying potential solutions to these impacts, while maintaining the purpose/intent of the RPP program;
- options for a proactive and accelerated RPP zone establishment/modification process;
- appropriate permit types and fees to improve access and to reinforce the program's purpose;
- identify opportunities for use of online tools to streamline communication and operational processes;
- assess opportunities to accommodate additional vehicles in the RPP zones, through potential initiatives such as provision of a commuter pass allowing day long parking in underutilized streets, or selective designation of on-street pay parking zones.

A variety of engagement formats, including focus groups, stakeholder meetings, online public survey and general public information meetings, will be held to facilitate discussions and gather information.

A final report will be required, and will address the above noted items, as well as any other considerations identified through the consultation process in identifying Bylaw amendments recommended to effectively deliver the RPP program to the desired standard.

In addition, the consultant will be asked to recommend the resource requirements (program staff, enforcement staff, material and equipment) and outline appropriate cost recovery considerations and revised fee schedules as appropriate.

The work to be undertaken by a consultant is estimated to take approximately one year to complete. Existing Parking Services staff will provide project management support.

Operating Impacts

The need for sufficient operational funding to meet customer expectations in the implementation of new RPP zones, and the ongoing management and enforcement of existing RPP areas will be identified through the RPP review process. Use of technology may offset administrative and enforcement staff requirements as the RPP program expands into new areas.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Community Engagement Process	90.0	0.0	0.0	0.0	0.0
Total	90.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
PARKING RESERVE	90.0	0.0	0.0	0.0	0.0
Total	90.0	0.0	0.0	0.0	0.0

Transportation

Approved 2019

Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1761 LIBR-NEW CENTRAL LIBRARY CONSTRUCTION

Project Status	Open	Year Identified	2013
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Carol Cooley
Asset Type		Est. End Date	-

Project Description

This project involves the development of a new Central Library in Saskatoon's city core.

General Comments

The New Central Library will replace the aging Frances Morrison Public Library building and provide state of the art library services to Saskatoon's growing and diverse population. In the 2015 budget, it was approved that \$6.0 million would be spent on the land purchase for the New Central Library. The land purchase is no longer expected to occur in 2015 and has been pushed forward to future budget years. The 2015 approved funding of \$6.0 million from the Public Library Capital Expansion Fund and New Central Library reserve was returned to source per Board approval.

New Central Library Construction includes \$500.0 for continued public consultation and planning, and to build a base for a potential new central library.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
New Central Library Construction	500.0	1,000.0	4,000.0	4,000.0	5,000.0
Total	500.0	1,000.0	4,000.0	4,000.0	5,000.0
FINANCING DETAILS					
LAND SALES	0.0	0.0	0.0	300.0	300.0
PUBLIC LIB CAP EXP'N FUND	0.0	0.0	0.0	0.0	3,725.0
PUBLIC LIBRARY NEW CENTRAL LIBRARY RESERVE	500.0	1,000.0	4,000.0	3,700.0	975.0
Total	500.0	1,000.0	4,000.0	4,000.0	5,000.0
Incremental Operating Impacts (000's)					
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1769 LAND DEV'T-MARQUIS INDUSTRIAL AREA

Project Status	Open	Year Identified	2009
Project Type	PREPAID LAND DEVELOPMENT	Manager	Daryl Schmidt
Asset Type		Est. End Date	-

Project Description

This project involves the construction of municipal services on privately owned land in the Marquis Industrial Area.

General Comments

This project includes the construction of municipal services North of 71st Street and East of the Canadian National Railway right of way for approximately 140 acres of industrial land. Part of the funding is from the Property Realized Reserve for moving unsuitable material, hauling of suitable material and grading.

Prior Budget Approval

\$87,282,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
2006 - A1 - City (71st & Millar)	60.0	0.0	0.0	0.0	0.0
2011 - C6 - City (68th, 70th and Burron, Aronec)	0.0	60.0	0.0	0.0	0.0
2013 - C11 - City (North of 71st, East of CNR)	2,437.0	2,430.0	0.0	0.0	0.0
2015 - C12 - City (N of Marquis Dr)	0.0	2,437.0	0.0	0.0	0.0
Total	2,497.0	4,927.0	0.0	0.0	0.0
FINANCING DETAILS					
GENERAL PPD SERV-ENGINEERING	2,330.0	4,867.0	0.0	0.0	0.0
PROPERTY REALIZED RES	167.0	60.0	0.0	0.0	0.0
Total	2,497.0	4,927.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1812 SASKTEL CENTRE-EQUIPMENT PURCHASES

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Trevor James
Asset Type		Est. End Date	-

Project Description

This project reflects equipment replacement purchases at SaskTel Centre in accordance with SaskTel Centre Reserve Fund Policy 01-0006.

General Comments

Funding for equipment purchases is from Capital Equipment Reserve and Capital Enhancement Reserve.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Air Curtains	153.0	0.0	0.0	0.0	0.0
Box Office System	0.0	10.0	0.0	10.0	0.0
Computers	137.0	0.0	10.0	0.0	10.0
Concession - Heaters & Poppers	0.0	0.0	0.0	20.0	0.0
Concession Equipment	51.0	20.0	0.0	0.0	0.0
Custodial Equipment	10.0	0.0	0.0	0.0	0.0
Electrical Equipment	67.0	0.0	0.0	0.0	50.0
Forklift (15 ton)	21.0	0.0	0.0	0.0	0.0
Forklift- 5 Ton	0.0	40.0	0.0	0.0	0.0
Ice Decking System	0.0	8.0	8.0	8.0	8.0
Ice Resurfacers	27.0	0.0	0.0	100.0	0.0
LED Ribbon	0.0	0.0	0.0	0.0	250.0
Office Furniture & Equipment	80.0	0.0	0.0	0.0	10.0
Outdoor Signage	10.0	0.0	0.0	0.0	0.0
POS System	260.0	5.0	5.0	5.0	5.0
Radios	0.0	10.0	10.0	10.0	10.0
Sound System	0.0	0.0	50.0	0.0	0.0
Staging	298.0	10.0	0.0	0.0	10.0
Tables & Draping System	10.0	10.0	0.0	0.0	10.0
Vehicles	0.0	0.0	15.0	0.0	0.0
Video Equipment	85.0	10.0	10.0	10.0	10.0
Total	1,209.0	123.0	108.0	163.0	373.0
FINANCING DETAILS					
SASKTEL CENTRE EQUIPMENT REPL	204.0	123.0	108.0	163.0	373.0
SASKTEL FACILITY ENHANCEMENT RESERVE	1,005.0	0.0	0.0	0.0	0.0
Total	1,209.0	123.0	108.0	163.0	373.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1834 REMAI MODERN- EQUIPMENT PURCHASES

Project Status	Open	Year Identified	2015
Project Type	EQUIPMENT REPLACEMENT	Manager	Dean Summach
Asset Type		Est. End Date	-

Project Description

This project reflects equipment replacement purchases at Remai Modern in accordance with Reserve Fund Policy C03-016.

General Comments

The funding is for equipment such as a point of sale system, electronic equipment and system upgrades.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Equipment Replacement	86.0	86.0	0.0	0.0	0.0
Total	86.0	86.0	0.0	0.0	0.0
FINANCING DETAILS					
REMAI MODERN EQUIPMENT REPLACEMENT	86.0	86.0	0.0	0.0	0.0
Total	86.0	86.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1876 AF-TENNIS COURT-ACRYLIC SURFACE

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Gord Hundebby
Asset Type		Est. End Date	-

Project Description

This cyclical renewal project provides for the reapplication of the acrylic protective coating to existing tennis courts to prevent deterioration of the asphalt base and reapplication of the court lines.

General Comments

Current and future funding identified is for the repair of tennis courts based on condition assessments at the time.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Surface Coating	50.0	0.0	50.0	0.0	50.0
Total	50.0	0.0	50.0	0.0	50.0
FINANCING DETAILS					
CIVIC BLDGS COMPR MTNCE	50.0	0.0	50.0	0.0	50.0
Total	50.0	0.0	50.0	0.0	50.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1883 CK-ELECTRONIC RECORDS MANAGEMENT

Project Status	Open	Year Identified	2009
Project Type	SUPPORT SYSTEMS	Manager	Diane Kanak
Asset Type	Software	Est. End Date	-

Project Description

To continue the implementation of the electronic records management system throughout the corporation.

General Comments

Documentum Records Manager, the corporate standard electronic records management system (ERMS) for the City of Saskatoon has been in place since 2000. The system is fully utilized in the City Clerk's Office and has been implemented strategically across the corporation. Minor and major upgrades to the ERMS have been undertaken as necessary. During 2018 and 2019, the City Clerk's Office is assessing current and future corporate business requirements relating to electronic records and information management. This includes a review of the City's records retention and classification system, streamlining processes for record capture, and addressing increased volume of electronic records as the City moves to digital records management. A major upgrade will be occurring in 2019. One FTE will be in place as project staff for the upgrade and implementation of updated retention schedules and new classification system. Management of the corporate records is a legislative requirement under The Cities Act.

Prior Budget Approval

\$645,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Equipment Purchase	250.0	200.0	150.0	72.0	95.0
Total	250.0	200.0	150.0	72.0	95.0
FINANCING DETAILS					
CK - CAPITAL RESERVE	250.0	200.0	150.0	72.0	95.0
Total	250.0	200.0	150.0	72.0	95.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1884 CK-ELECTRONIC AGENDA & MEETING MGT SYSTM

Project Status	Open	Year Identified	2012
Project Type	SUPPORT SYSTEMS	Manager	Diane Kanak
Asset Type	Software	Est. End Date	-

Project Description

To implement an Electronic Agenda and Meeting Management System.

General Comments

The City Clerk's Office will continue with the implementation of the electronic agenda and meeting management system, to streamline processes and improve access to information from City Council and Standing Policy Committee meetings. In 2019, the five-year agreement will be extended and the online option pursued.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
EQUIPMENT PURCHASES	0.0	0.0	0.0	0.0	250.0
Total	0.0	0.0	0.0	0.0	250.0
FINANCING DETAILS					
CK - CAPITAL RESERVE	0.0	0.0	0.0	0.0	250.0
Total	0.0	0.0	0.0	0.0	250.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1892 TU-ACCESS SECURITY-CITY YARDS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Cathy Davidson
Asset Type		Est. End Date	-

Project Description

This project involves the purchase and installation of a security system for the downtown City Yards and the 8th Street Nicholson Yards. The system includes electronic gates, ID cards for employees, card readers and computer software.

General Comments

The basic security package, including ID cards, card readers, and computer software has been purchased and is in place. Electronic gates and cameras have also been installed at Nicolson Yards. Controlled access to the Sign & Paint Shop and Radio Shop has also been implemented. Man gates installed at two corners of 25th Street and one gate for Ontario access.

The last portion of this project is to upgrade the electronic gate located at the City Yards, King Street entrance.

Prior Budget Approval

\$155,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	75.0	0.0	0.0	0.0	0.0
Total	75.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
PUB WORKS BLDG CIVIC FACILITY RES	75.0	0.0	0.0	0.0	0.0
Total	75.0	0.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1914 FIRE - NEW FIRE STATIONS & REPLACEMENTS

Project Status	Open	Year Identified	2010
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Morgan Hackl
Asset Type	Fire Stations	Est. End Date	-

Project Description

On October 6, 2003, City Council adopted Standard National Fire Protection Association (NFPA) 1710 which establishes benchmark travel times of 4 minutes for the 'first-in' unit or single unit response and 8 minutes for all apparatus dispatched to a full first alarm assignment. This standard specifies safe and effective emergency response standards for all services provided by the Saskatoon Fire Department (SFD) in the City of Saskatoon. To achieve that standard, the placement of the fire station is key to the effective and efficient delivery of emergency services to residents and ensure the occupational safety and health of firefighters.

The project will recommend the priority order for new fire stations, which will be determined by city growth, along with the relocation of existing Fire Stations as they reach the end of their life cycle. Locations for the fire stations will be determined through the study of response data in conjunction with the use of Geographical Information Systems Mapping (GIS). GIS mapping uses posted road speeds to determine travel times to incidents and is plotted on heat maps. Such information allows for data-driven decision making to occur and support both realignment, relocation, and future fire stations to be added.

The planned procurement method for this project will primarily be accomplished utilizing internal staff, due to the expertise of existing staff to perform the work. Consideration will be given to contract out portions of the plan if other specialized knowledge or expertise is required.

General Comments

Strategic Facility Planning:

The Strategic Facility Plan is being analyzed and developed by a committee consisting of members from Major Projects, Finance, Strategic and Business Planning, Long Range Planning, and SFD Management. Plan reporting will take place in late 2018, continuing in 2019, and will prioritize replacement for existing stations, and future stations, to best support the SFD response model as the City grows to 500,000 people.

Some of the priorities that are being considered include:

- Replacement of Station 1 and Headquarters (built in 1964)
- Replacement of Station 4 (built in 1961)
- Relocation of Maintenance/Mechanical (downtown location not ideal)
- New Station - East Saskatoon
- New Station - Northwest Saskatoon
- New Station - Northeast Saskatoon

Operating Impacts

The annual cost for 20 additional fully-equipped Firefighters and one Inspector is approximately \$2,400,000. The impact to the operating costs for the apparatus and building maintenance is \$200,000 per year on a continual basis. The reserve replacement contributions for equipment and uniforms is estimated at \$70,000.

Prior Budget Approval

\$650,000 in 2010 for land acquisition for the Northwest Station.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
STRATEGIC FACILITY PLANNING	250.0	0.0	0.0	0.0	0.0
Total	250.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
FIRE - CAPITAL RESERVE	250.0	0.0	0.0	0.0	0.0
Total	250.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1938 AF-PLAY STRUCTURE UPGRDE AND REPL

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Gord Hundebly
Asset Type	Parks Equipment	Est. End Date	-

Project Description

This project involves the repair and modification of the City's play structures located throughout the City's playgrounds to address safety concerns, and the phased rebuilding or replacement of old wooden structures that cannot be repaired. This project also involves the incorporation of accessible components such as gradual ramps, transfer stations, and play features, as well as some accessible resilient surfaces in and around the new or rebuilt play structures.

General Comments

The budgeted amount for general repairs represents funds to repair and modify various play structures as recommended by the consultant who was retained to assess the condition of all the play structures throughout the City. The replace/rebuild component will be allocated on a priority basis to the replacement and rebuilding of specific structures that are heavily utilized but can no longer be repaired. City Council was presented with a report called "Building Better Parks: An Asset Management Plan for Parks" in November 2017 with options to address the funding gap for the City's play structures.

Play structures in Cannon Smith, Dr. J Valens, Wilson, Albert Milne, and the Forestry Farm Zoo are examples of priority areas that are scheduled for replacement in 2019.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Replace/Rebuild Playstructures	0.0	675.0	675.0	675.0	675.0
Total	0.0	675.0	675.0	675.0	675.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	675.0	675.0	675.0	675.0
Total	0.0	675.0	675.0	675.0	675.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1939 AF-PADDLING/SPRAY POOL REPLACEMENTS

Project Status	Open	Year Identified	2012
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Dan Swerhone
Asset Type		Est. End Date	-

Project Description

This project consists of the replacement of older paddling pools and spray pools.

General Comments

The City operates paddling pools and spray pools with associated recreation buildings. This project continues with the phased replacement of the older facilities when it is no longer feasible and economic to continue to maintain and operate the existing facilities. Paddling and spray pools are planned for upgrades/repairs based on priority needs and prior condition assessment audits.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	0.0	800.0	0.0	800.0	0.0
Total	0.0	800.0	0.0	800.0	0.0
FINANCING DETAILS					
UNFUNDED CIVIC BLDGS COMP MNTCE	0.0	800.0	0.0	800.0	0.0
Total	0.0	800.0	0.0	800.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1940 AF-GREENHOUSE REPLACEMENT

Project Status	Open	Year Identified	2012
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Troy LaFreniere
Asset Type		Est. End Date	-

Project Description

This project involves the replacement of the existing greenhouse facility at 1101 Avenue P North. Prior facility assessments indicated replacement of this greenhouse will be required within the next 5 years. Consulting services from industry experts will be necessary to ensure efficient greenhouse design and function is achieved. Funding identified in 2019 will support greenhouse replacement by providing project evaluation, greenhouse design with associated cost options as well as the development of a business case to support future operations.

General Comments

The greenhouse operations provide plant propagation and plant maintenance services that are necessary to support the display of live plant material at the Civic Conservatory, City Hall, Leisure Centres, over 900 BID /center median flower pots, and over 800 m2 of park and open space flower beds. The current level of plant display services would not be maintained without a dedicated greenhouse facility providing necessary plant propagation and plant maintenance services. The risks associated with not designing and constructing a replacement greenhouse facility would include the potential of facility closure, due to poor structural condition forcing the discontinuation or suspension of live plant display services.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	0.0	150.0	1,350.0	0.0	0.0
Total	0.0	150.0	1,350.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	150.0	1,350.0	0.0	0.0
Total	0.0	150.0	1,350.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1942 AF-CORPORATE SECURITY PLAN

Project Status	Open	Year Identified	2017
Project Type	SUPPORT SYSTEMS	Manager	Nicole Garman
Asset Type		Est. End Date	-

Project Description

Capital Projects 1364 - CP Service Saskatoon-Citizen Input/Systems/Standards/Staffing, 1829 - AF Service Saskatoon-Systems, 1942 - AF Corporate Security Plan, and 1949 - AF Service Saskatoon-Staffing Accommodation are inter-related to each other in regards to accommodating the vision of the Service Saskatoon citizen service model.

The City depends on its people and assets to deliver vital services to the citizens of Saskatoon every day. The City has an obligation to protect employees and the visiting public, preserve the availability of assets and assure the continued delivery of services in an effective, safe and sustainable manner.

An appropriate balance of human, physical and operational controls and practices will help ensure achievement of the following objectives:

- Create a safe and secure work environment for employees and elected officials;
- Create a safe and secure environment for the visiting public, contractors and other service providers; and
- Safeguard the capital assets of the corporation.

General Comments

The primary focus of the 2019 funding requirements will be to continue implementation of the Corporate Security Strategy within City Hall and Civic Square East, expand implementation of physical security measures in other civic facilities, and launch supporting policies, guidelines and training programs that ensure achievement of the Plan's objectives corporate-wide.

Operating Impacts

For 2020 and beyond, operational requirements are required to sustain newly implemented corporate security strategies and measures in the amount of \$225,000. Additional operating impacts will be determined as the Corporate Security Strategy continues to develop over the next two years.

Prior Budget Approval

Prior years approved budgets of \$300,000 have been allocated to begin implementation of physical security measures within the corporation and establishing supporting policies, guidelines and training programs.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Corporate Security Plan	85.0	0.0	0.0	0.0	0.0
Total	85.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
AFM - CAPITAL RESERVE	85.0	0.0	0.0	0.0	0.0
Total	85.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	225.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1949 AF-SERVICE SASKATOON - STAFFING ACCOMMODATION

Project Status	Open	Year Identified	2009
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Jeanna South
Asset Type	Buildings	Est. End Date	-

Project Description

Capital Projects **1364** - CP Service Saskatoon - Citizen Input/Systems/Standards/Staffing, **1829** - AF Service Saskatoon-Systems, **1942** - AF Corporate Security Plan, and **1949** - AF Service Saskatoon Staffing Accommodation are inter-related to each other in regards to accommodating the vision of the Service Saskatoon citizen service model.

The purpose of the project is to ensure suitable and sufficient space is available for on-going operations of the City of Saskatoon. Included in this is the ongoing evaluation of current and future space requirements, analysis of existing facilities, functional planning and space design considering the four pillars of Service Saskatoon as a basis. Space improvements in various City facilities will occur alongside the identified space requirements.

General Comments

Continued efforts will include space improvements at City Hall and 88 King Street. Renovations to these spaces will free up areas on the ground floor City Hall and the John Deere Building. Work is also planned on long-term planning for future office space needs.

These projects in aggregate are anticipated to exceed \$1,000,000.

The planned procurement method for this project is to be accomplished utilizing a combination of internal staff and external contractors. Due to the expertise and capacity of existing staff, we are able to utilize internal staff to perform some of the work. We also plan to utilize external contractors, due to the requirement of specialized services, such as mechanical and electrical engineering design and the requirement of an independent opinion for cost estimating.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Civic Accommodation	5,000.0	5,250.0	2,250.0	1,250.0	1,250.0
Total	5,000.0	5,250.0	2,250.0	1,250.0	1,250.0
FINANCING DETAILS					
CORPORATE CAPITAL RESERVE	0.0	250.0	250.0	250.0	250.0
FUNDING PLAN CONTRIBUTION	5,000.0	5,000.0	2,000.0	1,000.0	1,000.0
Total	5,000.0	5,250.0	2,250.0	1,250.0	1,250.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1963 TU-CORP. ACCESSIBILITY IMPLEMENTATION

Project Status	Open	Year Identified	2009
Project Type	SUPPORT SYSTEMS	Manager	Angela Gardiner
Asset Type	Buildings	Est. End Date	-

Project Description

This project addresses the identified priorities of the Accessibility Service Level Guidelines approved in principle by City Council on September 2, 2008 and supported by the recommendations presented in the Accessibility Implementation Action Plan.

General Comments

The City of Saskatoon has been addressing access issues for persons in need of accessibility services on an on-going basis. Numerous initiatives have been undertaken involving City of Saskatoon Civic Departments, including the input of persons with disabilities and community advocate groups, for the purpose of improving access for persons with disabilities.

In 2008, an Accessibility Implementation Plan was adopted by City Council. Within this Plan there were eight recommendations for implementation, with priority given to formalizing the facility design standards, infrastructure, snow removal and transit. In 2016, a review of the Implementation Plan was conducted to assess progress in addressing the recommendations over the past eight years and to determine priorities for the next five to ten years.

Details on the program proposed for the budget year will be presented in an administrative report prior to, or concurrent with Council budget meeting.

The installation of Audible Pedestrian Signals (APS) at key intersections is required to improve mobility for the visually impaired. A list of desired locations has been developed in conjunction with input from the National Foundation of the Blind: Advocates for Equality, the CNIB and the general public. It is the intent of this project to cover the cost of retrofitting five signalized intersections with APS devices every year. To date, this annual quota has been met and approximately 90 intersections are now equipped with APS in accordance with national implementation and design guidelines. Funding will be requested on a bi-annual basis (\$50,000 per year).

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Assessments, Repairs & Modifications	75.0	0.0	0.0	0.0	0.0
Total	75.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
CIVIC BLDGS COMPR MTNCE	75.0	0.0	0.0	0.0	0.0
Total	75.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1973 CK-LEASING OF AUTOMATED VOTE COUNTING EQUIPMENT

Project Status	Open	Year Identified	2019
Project Type	SUPPORT SYSTEMS	Manager	Diane Kanak
Asset Type		Est. End Date	-

Project Description

This project involves the replacement of the automated vote counting equipment.

General Comments

The current operating system of the existing vote tabulating machines are no longer supported and the machines have become redundant. Therefore machines will need to be leased for future elections.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Voting Machine Lease	0.0	250.0	0.0	0.0	0.0
Total	0.0	250.0	0.0	0.0	0.0
FINANCING DETAILS					
VOTING RESERVE	0.0	250.0	0.0	0.0	0.0
Total	0.0	250.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1974 CP-TRUTH AND RECONCILIATION INITIATIVES

Project Status	Open	Year Identified	2019
Project Type	STUDY/PLANNING	Manager	Gilles Dorval
Asset Type		Est. End Date	-

Project Description

In 2015, City Council made a commitment to respond to the Truth and Reconciliation Commission of Canada's (TRC) Calls to Action. The past number of years have realized substantial efforts dedicated to responding to the Calls to Action working to promote reconciliation in our community and our province. The growing list of initiatives related to TRC continues to grow and a capital program to address a foundational framework is required.

General Comments

In order to effectively achieve the commitment to the Calls to Action, temporary resourcing is required for 2019 and 2020 to address the community projects, policy and procedure reviews and ongoing support to the various initiatives the City is undertaking. These initiatives include such as the Strategic Plan and Business Plans, P4G Regional Plan, Green Infrastructure Strategy, Public Art/Placemaker Program, Recovery Park, Hydro-electric project, Community Partnerships and the Office of the Treaty Commissioner educational programs.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Truth and Reconciliation	0.0	100.0	100.0	0.0	0.0
Total	0.0	100.0	100.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED RCE	0.0	100.0	100.0	0.0	0.0
Total	0.0	100.0	100.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1977 CP-LOCAL AREA NETWORK & DATA SECURITY

Project Status	Open	Year Identified	2009
Project Type	SUPPORT SYSTEMS	Manager	Jazz Pabla
Asset Type	Network	Est. End Date	-

Project Description

This project provides for the improved physical and electronic security of Information Technology to ensure that there is no unauthorized access to City servers, network infrastructure, applications and data.

General Comments

The need to improve the security of the computing environment and protect the City applications\data from unauthorized access is based on the City's ever increasing reliance. Upgrades are required to protect against new threat types, increased operations on the Internet, as well as internal threats (either accidental, or malicious).

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Local Area Network & Data Security	150.0	0.0	0.0	0.0	0.0
Total	150.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
COMPUTER EQUIPMENT REPL RES	150.0	0.0	0.0	0.0	0.0
Total	150.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

1994 TU-MARQUIS DR/IDYLYWYLD DR INTERCHANGE

Project Status	Open	Year Identified	2009
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	David LeBoutillier
Asset Type		Est. End Date	-

Project Description

This project involves the construction of an interchange at the intersection of Marquis Drive and Idylwyld Drive. The project to date has been a partnership between the City and Saskatchewan Ministry of Highways and Infrastructure (MHI).

General Comments

In 2001, a partnership with MHI was entered into to share the costs of completing the final interchange design. This design project was completed in 2002. Construction of the interchange and associated roadways is projected to take place in 2021. Discussions have taken place with MHI with respect to the funding of the future interchange.

Special Note

Provincial funding is subject to government approval upon agreement reached between both the Provincial Government and the City.

Prior Budget Approval

\$313,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	0.0	0.0	25,000.0	30,000.0	0.0
Total	0.0	0.0	25,000.0	30,000.0	0.0
FINANCING DETAILS					
INTERCHANGE LEVY	0.0	0.0	2,700.0	0.0	0.0
UNFUNDED MAJOR PROJECTS	0.0	0.0	22,300.0	30,000.0	0.0
Total	0.0	0.0	25,000.0	30,000.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2003 TU-HWY 14/HWY 7 GRADE SEPARATION

Project Status	Open	Year Identified	2009
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	David LeBoutillier
Asset Type		Est. End Date	-

Project Description

This project involves the design and construction of the grade separation at Highway 14 and the re-alignment of Highway 7.

General Comments

Construction of an at-grade diamond intersection was completed in 2012. The next phase of the project will be the completion of the north ramps at an expected cost of \$5 million. The construction of the grade separation is projected to proceed in 2023 at an expected total cost of \$55 million.

This project would qualify for the Urban Highway Connector Program. Another source of funding will be the Interchange Reserve (approximately \$5 million).

Prior Budget Approval

\$10,560,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Hwy 14/Hwy 7 Grade Separation	0.0	0.0	0.0	0.0	55,000.0
Total	0.0	0.0	0.0	0.0	55,000.0
FINANCING DETAILS					
INTERCHANGE LEVY	0.0	0.0	0.0	0.0	4,792.0
UNFUNDED MAJOR PROJECTS	0.0	0.0	0.0	0.0	50,208.0
Total	0.0	0.0	0.0	0.0	55,000.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2011 TU-TRANSPORTATION MODEL IMPLEMENTATION

Project Status	Open	Year Identified	2009
Project Type	SUPPORT SYSTEMS	Manager	David LeBoutillier
Asset Type		Est. End Date	-

Project Description

This project is for the ongoing development of the Transportation Model to support the Growing Forward Shaping Saskatoon, and other transportation planning and development initiatives.

General Comments

This project consists of the following phases:

- The first phase was for the purchase of a new transportation modelling software package, staff training and the development of a new City Transportation Model.
- The second phase involved the completion of a household travel survey (or, Origin-Destination study) in the fall of 2013. The information from the survey has been used to support the ongoing development of a detailed, multi-modal transportation model which supports the Growth Plan and other transportation planning and development initiatives.
- The next phase of the model design, which started in 2016 and continues in the future years is the ongoing model maintenance and development to align with the growth and employment plans. In 2020, an investment of \$150,000 is shown as a model update to reflect the growth of the region and network changes since the last revision; the cost will be shared with the Ministry of Highways and Infrastructure (MHI). In 2022 an investment of \$300,000 is shown as the development and expansion of the model to fully incorporate the development of a regional transportation plan.

Prior Budget Approval

\$1,011,000

Prior budget has been used for software purchase and model development.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Model Maintenance and Development	0.0	150.0	0.0	300.0	0.0
Total	0.0	150.0	0.0	300.0	0.0
FINANCING DETAILS					
TRANSP INFRAS EXPANSION	0.0	150.0	0.0	300.0	0.0
Total	0.0	150.0	0.0	300.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2013 TU-CIRCLE DR/AIRPORT DR GRADE SEPARATION

Project Status	Open	Year Identified	2010
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	David LeBoutillier
Asset Type		Est. End Date	-

Project Description

This project involves the construction of a grade separation at Circle Drive and Airport Drive.

General Comments

This intersection carries 43,800 vehicles daily and is among the highest volume intersections in the City. The construction of the grade separation is planned in 2023 at an estimated cost of \$35 million.

Subject to funding availability in 2019 a verification study to confirm the functional plan of the interchange including public consultation will be carried out. If funded, external service providers will be used to carry out the study, due to requirement of specialized services.

Prior Budget Approval

\$100,000 - functional design and pre-engineering

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	0.0	70.0	0.0	0.0	0.0
Total	0.0	70.0	0.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	70.0	0.0	0.0	0.0
Total	0.0	70.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2020 TU-17TH STREET CORRIDOR EXTENSION

Project Status	Open	Year Identified	2009
Project Type	REJUVENATION	Manager	Jay Magus
Asset Type		Est. End Date	-

Project Description

This project involves the extension of 17th Street from Avenue P to 11th Street West.

General Comments

This project includes the extension of 17th Street from its present terminus at Avenue P to 11th Street West. It also includes the closure of the intersection at Avenue H and 11th Street West.

Prior Budget Approval

\$116,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
17th Street Corridor Reconstruction/Extension	0.0	0.0	811.0	9,300.0	0.0
Total	0.0	0.0	811.0	9,300.0	0.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	0.0	0.0	582.0	0.0
WATERWORKS CAPITAL PROJECTS RESERVE	0.0	0.0	811.0	8,718.0	0.0
Total	0.0	0.0	811.0	9,300.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2025 TU-MARQUIS DR/HWY 16 GRADE SEPARATION

Project Status	Open	Year Identified	2012
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	David LeBoutillier
Asset Type		Est. End Date	-

Project Description

This project involves the design and construction of the grade separation at Marquis Drive and Highway 16 North.

General Comments

A functional plan has been completed. Discussions with Ministry of Highways and Infrastructure (MHI) are ongoing regarding the timing and financing of design and construction.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Marquis Dr/Hwy 16 Grade Separation	0.0	70.0	0.0	0.0	0.0
Total	0.0	70.0	0.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	70.0	0.0	0.0	0.0
Total	0.0	70.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2037 TU-SNOW MANAGEMENT FACILITIES

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Eric Quail
Asset Type		Est. End Date	-

Project Description

Capital Projects 2037 - TU Snow Management Facilities and 2259 - TU PW Satellite Yards are inter-related to each other in regards accommodating the future sites for snow management facilities and Public Works satellite yard. This project will involve the design, environmental monitoring and construction of three permanent snow management facilities. A fourth facility was constructed as part of the Civic Operations Centre project.

General Comments

A need for three permanent sites for snow management facilities are required for 2020/2021 snow season and to stop the existing inefficient operation of snow storage areas and disruption to the community due to the ongoing relocation of sites each season. Once land is secured, funding opportunities for the development of facilities are possible.

The first phase is site evaluation, land purchase, and snow storage area set up for operation as currently practiced until 2023 when the proposed plan for development begins (phase 1 starts with securing the Southeast site, followed by the Northwest, and then the Northeast). The 2020 plan is for preliminary set up on the Southeast Development site including access to the city's storm collection system as well as to secure land for the Southeast, Northwest and Northeast quadrants of the city in advance of city development.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirements of specialized services.

Operating Impacts

If funded, the future operating impacts would be:

2023 - \$44,300

2024 - \$44,300

2025 - \$44,300

Proposed Rehabilitation Reserve Transfers:

2023 - \$15,000

2024 - \$15,000

2025 - \$15,000

Prior Budget Approval

\$1,110,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
NorthEast Facility Development	0.0	902.0	0.0	0.0	50.0
Northwest Facility Development	0.0	902.0	0.0	50.0	100.0
SouthEast Facility Development	0.0	5,925.0	50.0	100.0	18,500.0
Total	0.0	7,729.0	50.0	150.0	18,650.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	7,729.0	50.0	150.0	18,650.0
Total	0.0	7,729.0	50.0	150.0	18,650.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2040 TU-UNDERWATER PIER INSPECTIONS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

Regular inspection of all river piers is required to ensure the capacity of river bridges as well as monitor scour around the piers.

General Comments

Inspection of river piers should be inspected every five years as per recommendations by National Bridge Inspection Standards. This inspection is provided by specialized external consultants and service providers.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Inspections - Consultants	0.0	105.0	0.0	0.0	0.0
Total	0.0	105.0	0.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED BRIDGE MAJOR REPAIR RES	0.0	105.0	0.0	0.0	0.0
Total	0.0	105.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2043 TU-CURB REPLACEMENT/REHABILITATION

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Chris Duriez
Asset Type		Est. End Date	-

Project Description

This project provides for the replacement of long sections of curbing. This work will be done in conjunction with other surface and boulevard rehabilitation or in conjunction with other stand alone locations where future rehabilitation of adjacent structures will not impact the curbing alignment and grade.

General Comments

Estimated costs for the removal and replacement of curbs is \$250 per lineal metre.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Curb Replacement/Rehabilitation	200.0	200.0	200.0	200.0	200.0
Total	200.0	200.0	200.0	200.0	200.0
FINANCING DETAILS					
INFRA RES-TRANSPORTATION	200.0	200.0	200.0	200.0	200.0
Total	200.0	200.0	200.0	200.0	200.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2048 CY-FFP & ZOO MASTER PLAN IMPLEMENTATION

Project Status	Open	Year Identified	2006
Project Type	REJUVENATION	Manager	Tim Sinclair-Smith
Asset Type	Buildings (Parks & Open Spaces)	Est. End Date	-

Project Description

This project involves the refresh and implementation of the Forestry Farm Park & Zoo Master Plan.

General Comments

Aviaries - Six of the bird aviaries in the zoo have aged to the stage where the mesh has deteriorated and replacement is now necessary. Using new mesh technology we can replace the mesh to modernize the exhibits and improve the bird's welfare.

Pathway Improvements (Zoo) - Several of the large public walkway areas throughout the zoo grounds have deteriorated to a stage where immediate replacement is necessary to ensure public safety, accessibility and an improved guest experience.

2019 - Based on industry standards identified through an exhibit auditing process, exhibits such as the Grizzly Bear were assessed to be in need of upgrading to maintain a high standard. It was determined that new habitats would need to be constructed to ensure welfare standards are met and the animal's housing would exceed future requirements.

2020 - After a review of facilities and exhibits at the Zoo, several buildings and exhibits were highlighted as in need of upgrade or replacement. In 2017, an assessment of the Buckeye Cafe determined the building had surpassed its life-cycle state as it relates to meeting the needs for the public as a cafe facility. This building previously served as the entrance, retail and cafe facility prior to the new entrance building opening.

2021 - Based on industry standards identified through an exhibit auditing processes, the Wolves and Cougar habitats were assessed to be in need of upgrading to maintain a high standard. It was determined that new habitats would need to be constructed to ensure welfare standards are met and the animal's housing would exceed future requirements.

Special Note

The Zoo Amenities and Exhibits is funded as part of the Recreation and Parks Funding Plan.

Operating Impacts

2020 - Operating costs to be determined based on completion of the design phase

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Aviaries	50.0	0.0	0.0	0.0	0.0
Pathway Improvements - Zoo	50.0	0.0	50.0	0.0	0.0
Phase II Parking Lot	0.0	0.0	150.0	0.0	0.0
Safety & Infrastructure Improvements	0.0	0.0	0.0	0.0	250.0
Walking Pathway for Park & Picnic Sites	0.0	60.0	0.0	0.0	0.0
Zoo Amenities and Exhibits	500.0	750.0	600.0	0.0	0.0
Total	600.0	810.0	800.0	0.0	250.0
FINANCING DETAILS					
FORESTRY FARM PK & ZOO CAPITAL RESERVE	100.0	60.0	200.0	0.0	250.0
FUNDING PLAN CONTRIBUTION	500.0	750.0	600.0	0.0	0.0
Total	600.0	810.0	800.0	0.0	250.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2051 US-LANDFILL OPTIMIZATION

Project Status	Open	Year Identified	2011
Project Type	ENVIRONMENTAL PROTECTION	Manager	Scott Theede
Asset Type	Landfill	Est. End Date	-

Project Description

This project includes items identified in the Integrated Landfill Management Plan of 2011 that will be required to increase the available airspace and maximize the overall life of the Landfill. The planned procurement method for this project is to be accomplished utilizing external contractors, due to construction of facilities outside the capabilities of City design staff, and construction equipment. Some sub-components may be completed with internal engineering resources, and with external construction contractors.

General Comments

Capital requirements for Landfill optimization include filling inefficiently filled areas of the Landfill to recapture airspace for use. A variety of safety and environmental improvements are also required including improving surface water management and improving site conditions and customer service.

This work will be done using external service providers.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Final Cover (Stage E)	0.0	0.0	0.0	0.0	500.0
Landfill Demolition/New Liner D+E	0.0	2,000.0	5,500.0	0.0	0.0
Landfill Gas Collection System Expansion	0.0	0.0	0.0	0.0	400.0
Landfill Optimization	350.0	0.0	0.0	0.0	0.0
Landfill Surface Water Management Improvements	0.0	0.0	200.0	50.0	100.0
Total	350.0	2,000.0	5,700.0	50.0	1,000.0
FINANCING DETAILS					
LANDFILL REPLACEMENT RESERVE	350.0	2,000.0	5,700.0	50.0	1,000.0
Total	350.0	2,000.0	5,700.0	50.0	1,000.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2079 AF-PROPERTY REASSESSMENT

Project Status	Open	Year Identified	2009
Project Type	SUPPORT SYSTEMS	Manager	Michael Voth
Asset Type	Studies - Non capitalized expenditure	Est. End Date	-

Project Description

This project is to provide for the implementation and defence of a reassessment that is required to be completed every four years in the Province of Saskatchewan. Reassessments have been completed every four years since 1997.

General Comments

In 2009, a new valuation approach was introduced in the property assessment process. Income producing properties were valued utilizing income (rental) approaches to value where appropriate.

This capital project provides funding to contract specialists to assist in the determination of (and some assistance in the defence of) assessment values for high-value, complex properties. As well, a reassessment requires that all properties receive an assessment notice which requires increased associated paper and postage costs. As in past reassessments the generation and mailing of preview letters is also included.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Property Reassessment	0.0	250.0	100.0	0.0	0.0
Total	0.0	250.0	100.0	0.0	0.0
FINANCING DETAILS					
AFM - CAPITAL RESERVE	0.0	250.0	100.0	0.0	0.0
Total	0.0	250.0	100.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2095 ACCESS TRANSIT-BUS REPLACEMENTS

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Tracey Loewen
Asset Type	Transit Buses	Est. End Date	-

Project Description

This project provides for the ongoing scheduled replacement of existing lift-equipped buses used in the Access Transit System.

General Comments

With the expansion of the fleet over the last few years, Transit has been able to increase the useful life (mechanical and structural integrity) of the fleet from a five-year to a seven-year life cycle. An accessible bus is \$140,000 which includes a radio and a mobile data terminal (MDT).

City Council adopted the report called 'Building Better Transit: an Asset Management Plan for Transit and Access Transit Fleet' in July 2016. With the announcement of the Growing the Middle Class Infrastructure Plan by the Federal Government, City Council approved the Public Transit Infrastructure Fund strategy in principle to purchase up to 12 access buses over the period 2016 to 2018. In 2018, an order of 10 Access Transit coach buses at an estimated cost of \$1.4 million was placed and expected for delivery in 2019.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Access Transit Bus Replacement	0.0	560.0	580.0	600.0	620.0
Total	0.0	560.0	580.0	600.0	620.0
FINANCING DETAILS					
ACCESS TRANSIT CAPITAL RESERVE	0.0	560.0	580.0	300.0	465.0
UNFUNDED ACCESS TRANSIT CAP RES	0.0	0.0	0.0	300.0	155.0
Total	0.0	560.0	580.0	600.0	620.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2097 TR- BUS SEAT REPLACEMENT

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Paul Bracken
Asset Type		Est. End Date	-

Project Description

This project provides for the ongoing replacement of bus operator seats with high quality seats.

General Comments

The new seats are ergonomically friendly, aid in the prevention of back problems, and result in reduced worker compensation claims. The old seats are very costly to maintain and some of the repair parts are hard to obtain due to obsolescence. This plan is to replace 10-12 bus seats per year.

Prior Budget Approval

\$440,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Equipment Purchases	75.0	0.0	75.0	0.0	80.0
Total	75.0	0.0	75.0	0.0	80.0
FINANCING DETAILS					
TRANSIT CAPITAL PROJECTS RESERVE	75.0	0.0	75.0	0.0	80.0
Total	75.0	0.0	75.0	0.0	80.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2100 ACCESS TRANSIT - ADDITIONAL BUSES

Project Status	Open	Year Identified	2009
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Bob Howe
Asset Type	Transit Buses	Est. End Date	-

Project Description

This project provides for the purchase of additional lift-equipped buses used in Saskatoon's Access Transit System.

General Comments

Access Transit will utilize the additional buses to provide additional service hours as its client base grows and to extend the life of the overall fleet. Currently each bus in the fleet travels between 35,000 to 50,000 km per year.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Bus Purchase	0.0	0.0	145.0	150.0	155.0
Total	0.0	0.0	145.0	150.0	155.0
FINANCING DETAILS					
UNFUNDED ACCESS TRANSIT CAP RES	0.0	0.0	145.0	150.0	155.0
Total	0.0	0.0	145.0	150.0	155.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2101 CY-GOLF COURSE IMPROVEMNTS & EQUIP REPL.

Project Status	Open	Year Identified	2009
Project Type	EQUIPMENT REPLACEMENT	Manager	Andrew Roberts
Asset Type	Golf Courses	Est. End Date	-

Project Description

During 1998, City Council approved the Golf Course Program value-for-money audit recommendation that management develop a long-term capital plan with sufficient cash flow to fund and finance capital replacement expenditures for the three municipal golf courses (Holiday Park, Silverwood and Wildwood golf courses). In response to the audit recommendations, in March 2002 City Council approved the Golf Course Capital Reserve (Bylaw No. 6774). The purpose of the reserve is to finance long-term capital plans that included replacement of equipment and vehicles, and expansion and redevelopment of course facilities and services.

General Comments

Capital projects for 2019 are:

Equipment Replacement:

Holiday Park Golf Course:

\$85,000 - Diesel Self-Propelled Fairway Mower

Silverwood Golf Course:

\$175,000 - Diesel Self-Propelled Greens-mower (Quantity 3)

Wildwood Golf Course:

\$40,000 - Heavy Duty 4WD Utility vehicle

Holiday Park Golf Course Irrigation/Satellite Controllers-

\$175,000 - Replace main irrigation pumps and renovate pump house building

Operating Impacts

There are no future operating impacts from the 2019 project.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Golf Course Equipment Replacement	300.0	275.0	275.0	300.0	300.0
HPGC Irrigation Control/Satellite Replacement	175.0	0.0	0.0	0.0	0.0
Total	475.0	275.0	275.0	300.0	300.0
FINANCING DETAILS					
GOLF COURSE CAPITAL RESERVE	475.0	275.0	275.0	300.0	300.0
Total	475.0	275.0	275.0	300.0	300.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2102 CY-SPORTFIELD DEVELOPMENT & IMPROVEMENTS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Brad Babyak
Asset Type	Parks and Open Spaces	Est. End Date	-

Project Description

This project involves the development and upgrading of sport fields and amenities in Multi-District, District, and Special Use Parks to ensure the quality of playing fields for the safety and enjoyment of all participants.

General Comments

The Multi-District and District Parks accommodate the recreational requirements of the sport user groups, including minor and adult sport leagues, City-wide programs, and national/international competitions.

As part of the long-term development plan focusing on the continual redevelopment of the City's sport fields, Administration is working in conjunction with the sport field user groups and residents to identify both immediate and long-term facility program and amenity priorities and requirements.

Father Basil Markle Court Conversion (2019)

This project involves the conversion of the Father Basil Markle Tennis court facility to a Pickleball only complex. Pickleball is considered one of the fastest growing sports in Canada and the United States. Through discussions with the primary stakeholder group, Pickleball Saskatoon, this project will develop a stand-alone outdoor facility for their sport that meets court design specifications.

Shale Conversion Project (2019, 2022)

The plan is to convert 13 fields from torpedo sand to shale based on user group requests for shale (2019-six fields; 2022-seven fields). The total value for all 13 fields is \$205K.

Bishop James Mahoney Park (2020):

The 2018 plan included survey and design of the field upgrade (\$30K). The 2020 plan involves improvements to the Bishop James Mahoney District Park. Diamond #1 will be upgraded to ensure outfield slopes are adjusted to improve drainage and turf quality; and would include an irrigation upgrade for that diamond.

Special Note

This project was approved in principle, by City Council on March 26, 2018 through the Recreation and Parks Facilities Game Plan Proposed Funding Plan. \$80.0 in funding from the Recreation, Sports, Culture and Parks Partnership Reserve has been approved, leaving \$20.0 as unfunded. A report on funding options will be presented to Council in early 2019.

Prior Budget Approval

\$30,000 - Survey and Design

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Bishop James Mahoney Park	0.0	350.0	0.0	0.0	0.0
Father Basil Markle Park	115.0	0.0	0.0	0.0	0.0
Shale Program	95.0	0.0	0.0	110.0	0.0
Total	210.0	350.0	0.0	110.0	0.0
FINANCING DETAILS					
PARK ENHANCE RES	95.0	350.0	0.0	110.0	0.0
PARKS & REC PARTNERSHIP RESERVE	80.0	0.0	0.0	0.0	0.0
PRIVATE CONTRIBUTIONS	15.0	0.0	0.0	0.0	0.0
UNFUNDED PARKS & REC PARTNERSHIP RES	20.0	0.0	0.0	0.0	0.0
Total	210.0	350.0	0.0	110.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2114 CY-VICTORIA PARK - UPGRADES

Project Status	Open	Year Identified	2009
Project Type	REJUVENATION	Manager	Brad Babyak
Asset Type	Parks and Open Spaces	Est. End Date	-

Project Description

This project involves Victoria Park upgrades as outlined in the Victoria Park Program Plan, adopted by City Council in June 2004. This upgrade is planned to be an extension of the River Landing Phase II development, which will connect Victoria Park to River Landing. Public and stakeholder consultation occurred in 2009 on the program plan for the City Gardener's Site and to confirm the program plan requirements originally approved in the 2004 Victoria Park Program Plan. Through the Recreation and Parks Master Plan, festivals and parks were both ranked highly in residents' opinions. Of the residents surveyed, 79% felt the need for more festival space was a high priority. The development of Victoria Park will address this need and provide residents with adequate parking for festivals, recreational activities, and better linkage for pedestrian traffic.

General Comments

The 2020 plan includes a feasibility study, complete functional design concepts and identify the potential location for a Permanent Outdoor Festival Site. Also planned is the development of an expanded parking lot which will address existing and future parking needs (such as overflow parking during large special events and festivals).

The 2021 plan includes pathway linkages to improve pedestrian circulation within the park. This pathway system will give pedestrians access along Spadina Crescent and better connectivity to the existing site amenities.

The 2022 plan involves the addition of site furniture and pathway lighting. This project was approved in principle, by City Council on March 26, 2018 through the Recreation and Parks Master Plan Facilities Game Plan Proposed Funding Plan, subject to budget approval.

Operating Impacts

2021 to 2023 - Operating costs to be determined during design phase.

Prior Budget Approval

\$513,000 Design and construction of the City Gardener's Site (1.13 acres) and approximately 5 acres of Victoria Park, including the festival site.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction - Park	0.0	450.0	400.0	330.0	0.0
Permanent Outdoor Festival Site - Study & Design	0.0	75.0	0.0	0.0	0.0
Total	0.0	525.0	400.0	330.0	0.0
FINANCING DETAILS					
DEDICATED LANDS RESERVE	0.0	450.0	284.0	0.0	0.0
FUNDING PLAN CONTRIBUTION	0.0	0.0	116.0	195.0	0.0
PARK ENHANCE RES	0.0	0.0	0.0	135.0	0.0
UNFUNDED RCE	0.0	75.0	0.0	0.0	0.0
Total	0.0	525.0	400.0	330.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2119 POLICE-RADIO REPLACEMENT

Project Status	Open	Year Identified	2010
Project Type	EQUIPMENT REPLACEMENT	Manager	Earl Warwick
Asset Type	Communication systems	Est. End Date	-

Project Description

This project provides for the replacement and/or addition of police radio equipment.

General Comments

Radio communication is critical to police operations. The current fleet of police portable and in-car mobile radios have an anticipated useful life of approximately 9 years. This project addresses the eventual replacement of these essential communication assets. The 2019 capital budget is for the replacement of portable radios, in-car mobile radios, communication infrastructure and new technology that maintain communication.

Operating Impacts

No increase anticipated for 2019.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Equipment Purchases	949.0	0.0	0.0	133.0	106.0
Total	949.0	0.0	0.0	133.0	106.0
FINANCING DETAILS					
POLICE RADIO RESERVE	949.0	0.0	0.0	133.0	43.0
PRIVATE CONTRIBUTIONS	0.0	0.0	0.0	0.0	63.0
Total	949.0	0.0	0.0	133.0	106.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2162 CY-URBAN DESIGN - BIDS

Project Status	Open	Year Identified	2009
Project Type	REJUVENATION	Manager	Paul Whitenect
Asset Type		Est. End Date	-

Project Description

This project includes the design and construction of comprehensive streetscape projects within the Downtown, Broadway, and Riversdale Business Improvement Districts. The priority of projects over the next number of years will be determined by the need to coordinate streetscape projects with underground utility replacement programs, the River Landing development, partnering opportunities, and with opportunities to promote multi-modal transportation by improving pedestrian conditions, transit and cycling conditions and facilities, and creating on-street parking facilities to increase parking revenues.

General Comments**Idylwyld Drive Streetscape Master Plan:**

The City Centre Plan, the North Downtown Master Plan and the Growing Forward! Plan all indicate that an improved streetscape along the length of Idylwyld Drive is needed. The project involves the design and construction of a comprehensive streetscape project for Idylwyld Drive from the Senator Sid Buckwold Bridge to Circle Drive. This capital budget will only account for construction from the Senator Sid Buckwold Bridge to 25th Street.

This project involves a traffic study, an environmental site assessment, and the design of a streetscape improvement plan, as well as phased construction which may utilize an incremental approach to capitalize on the time-sensitivity of interventions. The redevelopment of Idylwyld Drive as an enhanced multi-modal corridor will contribute to pedestrian, cyclist, and transit use. Some funding for the Urban Design reserve will be dedicated to a gateway project at 20th Street and Idylwyld Drive, and a capital budget submission to begin implementation of the Idylwyld Master Plan is expected for the 2019 construction season.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to specialized expertise.

3rd Avenue - 19th Street Intersection & Adjoining Roadways:

This project at the 19th Street intersection will include furniture and other amenities to be installed in conjunction with the Bus Rapid Transit (BRT) Project impacting 19th Street, between 2nd and 3rd Avenues.

River Landing Streetscape:

This project involves the design and streetscape coordination with developments under way on Parcel YY in River Landing. In 2019, the design and streetscape coordination will occur for the area, and will coordinate with road work on both 3rd Avenue and 19th Streets.

3rd Avenue - North Phase:

This project involved streetscaping 3rd Avenue between 22nd and 25th Streets. The work is expected to occur in 2022 once the BRT routes have been identified. The design will accommodate the future use of the street and will complete the 3rd Avenue streetscape project.

Operating Impacts

Idylwyld Drive Streetscape Master Plan operating impacts to be determined based on the design phase.

Prior Budget Approval

\$1,500,000 Idylwyld Drive Master Plan and design

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
3rd Avenue: 19th Street Intersection	100.0	0.0	0.0	0.0	0.0
3rd Avenue: North Phase	0.0	0.0	0.0	2,035.0	0.0
Idylwyld Drive: Bridge to Circle Drive	1,000.0	1,000.0	1,000.0	0.0	0.0
River Landing Streetscaping	86.0	0.0	0.0	0.0	0.0
Total	1,186.0	1,000.0	1,000.0	2,035.0	0.0
FINANCING DETAILS					
RESERVE FOR CAPITAL EXPENDITURES	86.0	0.0	0.0	0.0	0.0
STREETSCAPE RESERVE-BID	1,100.0	1,000.0	1,000.0	2,035.0	0.0
Total	1,186.0	1,000.0	1,000.0	2,035.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2166 CY-URBAN DESIGN - CITY-WIDE

Project Status	Open	Year Identified	2009
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Paul Whitenect
Asset Type		Est. End Date	-

Project Description

This project includes the design and construction of comprehensive streetscape projects outside the Downtown, Broadway and Riversdale Business Improvement Districts. Projects are defined in terms of pedestrian amenity improvements, safety, and support for multi-modal travel through the City.

General Comments

Approved by City Council in 2009, the Central Avenue Master Plan called for streetscape improvements from 107th Street to 115th Street, including the commercial and industrial properties along Gray Avenue. Phases 1 and 2 of the Central Avenue streetscaping have been completed. The remaining work will be split into two additional phases, the first of which is planned for 2020. This work will involve the South portions from 107th Street to 109th Street and include a gateway feature to the Sutherland BID area. A revised scope for the South portion will be designed in 2019, with construction in 2020, subject to funding.

The fourth and final phase will address the pedestrian crossing of the railway to improve pedestrian safety, complete the North portion of Central Avenue to 115th Street. Completion of the fourth phase will depend on funding availability and negotiation with the railway company.

Operating Impacts

Operating impacts will be determined once specific design elements are identified and will include maintenance, snow removal, irrigation/maintenance of plant material, and street lighting.

Prior Budget Approval

\$2,650,000 Central Avenue detailed streetscape design and construction

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Central Avenue	100.0	900.0	0.0	0.0	0.0
Total	100.0	900.0	0.0	0.0	0.0
FINANCING DETAILS					
STREETSCAPE RESERVE-CITY WIDE	100.0	0.0	0.0	0.0	0.0
UNFUNDED MAJOR PROJECTS	0.0	900.0	0.0	0.0	0.0
Total	100.0	900.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2169 CY-BLDG STANDARDS PROGRAM ENHANCEMENTS

Project Status	Open	Year Identified	2010
Project Type	SUPPORT SYSTEMS	Manager	Kara Fagnou
Asset Type		Est. End Date	-

Project Description

This project supports the delivery of Building Standards programs and services.

General Comments

Related work will include enhancements, upgrades or changes needed to maintain or expand existing programs; fee and operational reviews; and customer satisfaction surveys. The project will also include marketing and costs associated with creating and delivering Building Standards programs and services, including educational awareness campaigns.

For 2019 and 2020, funds will be used to support Building Standards expansion to online service, and for the re-branding of current marketing material to present consistent and strategic communication to the customer.

Operating Impacts

2020 - \$100,000 for licensing fees and systems upgrades and maintenance

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Building Standards Program and Service Delivery	465.0	530.0	0.0	0.0	0.0
Total	465.0	530.0	0.0	0.0	0.0
FINANCING DETAILS					
BLDG PERMITS/INSPECT STAB RESERVE	465.0	530.0	0.0	0.0	0.0
Total	465.0	530.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	100.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2180 AF-CIVIC FACILITY SITE MAINTENANCE

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Troy LaFreniere
Asset Type	Parking Lots	Est. End Date	-

Project Description

This project provides for a three phased approach to bring the parking lot, private roadway and underground service requirements at the civic leisure centres up to standard and maintaining them at that standard.

Phase 1 - Conditional Assessment - Assess the condition of the parking lots, private roadways and underground services to determine the scope of the work required to bring these areas up to standard. Priorities will be established based on condition of the infrastructure and its impact to and by the customers.

Phase 2 - Undertake the work to bring the parking lots and paved areas to standard.

Phase 3 - Creation of a Civic Facility Site Replacement Reserve.

General Comments

Currently, the process for capital construction of new facilities does not include a future budget to maintain, repair or replace infrastructure components such as water/sewer lines, storm lines, manholes, signs, curbs, sidewalks, fencing, lot lighting, roads and paving, at the end of their life cycle. Repairs or replacements are done when a component has completely failed.

An \$11 million deficit has been identified in the maintenance, repair and/or replacement of infrastructure site components which are at or near the end of their life cycle and will soon need to be addressed. With prior budget approved funding, a condition assessment has been carried out to determine the scope of the work required and to establish priorities.

The planned procurement method for this project is to be accomplished utilizing internal staff, due to existing staff capacity to perform the work.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Design & Constr'n - Civic Leisure Centres	350.0	400.0	450.0	450.0	450.0
Other Civic Property	0.0	1,600.0	150.0	150.0	150.0
Total	350.0	2,000.0	600.0	600.0	600.0
FINANCING DETAILS					
FACILITY SITE REPL RES	350.0	500.0	600.0	600.0	600.0
UNFUNDED FACILITY SITE REPL RES	0.0	1,500.0	0.0	0.0	0.0
Total	350.0	2,000.0	600.0	600.0	600.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2184 US-WASTE CHARACTERIZATION STUDY

Project Status	Open	Year Identified	2010
Project Type	ENVIRONMENTAL PROTECTION	Manager	Amber Weckworth
Asset Type	Studies - Non capitalized expenditure	Est. End Date	-

Project Description

This project involves waste audits and other measurement activities to determine the effectiveness of recycling and organics diversion initiatives as well as the development of strategies to increase diversion.

General Comments

This project includes studying the waste composition before and after the implementation of new programs such as the recycling programs. The 2016 community waste audit was the first ever to measure all waste generated in Saskatoon and informs the development of a comprehensive Waste Diversion Plan. The community waste audit and Waste Diversion Plan were issued as a single contract in 2016 with the work spread out over two years to match available capital funding. The community waste audit (called the Waste Characterization) provides the data foundation for the development of a plan to achieve 70% waste diversion by 2023 (called the Waste Diversion Plan) and this information will be used to inform future, more efficient City waste operations in a Waste Management Master Plan.

2019 allocation by City Council during budget deliberations from the multi-material stewardship western (MMSW) funding will go towards a waste diversion strategy for the Industrial, Commercial and Institutional (ICI) sectors with a \$150,000 investment. A waste diversion and reduction environmental grant for \$10,000 will also be piloted.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Diversion	160.0	0.0	0.0	0.0	0.0
Total	160.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
WASTE MINIMIZATION RESERVE	160.0	0.0	0.0	0.0	0.0
Total	160.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2197 WTP - WATER CONSERVATION INITIATIVE

Project Status	Open	Year Identified	2009
Project Type	ENVIRONMENTAL PROTECTION	Manager	Amber Weckworth
Asset Type		Est. End Date	-

Project Description

The water conservation program addresses the continued mandate for water conservation first identified in the Water Conservation Implementation Plan in the Long Term Capital Development and Expansion Plan.

General Comments

Included in the program are "Leading by example" initiatives by City divisions as well as programs targeted at reducing Industrial, Commercial, and Institutional (ICI) sector water use, outdoor residential water use, and indoor residential water use.

The planned procurement method for this project is to be accomplished utilizing internal staff, due to existing staff capacity to perform the work.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Water Conservation Study	500.0	0.0	0.0	0.0	0.0
Total	500.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
WATERWORKS CAPITAL PROJECTS RESERVE	500.0	0.0	0.0	0.0	0.0
Total	500.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2214 WTP - WATER SYSTEM ASSESSMENT

Project Status	Open	Year Identified	2010
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Reid Corbett
Asset Type		Est. End Date	-

Project Description

This project consists of an independent assessment by a consulting engineer to determine waterworks performance, condition, capacity and maintenance. The planned procurement method for this project is to be accomplished utilizing external contractors due to regulated or legislated requirements of the work.

General Comments

The assessment is required by Provincial legislation dealing with the protection of water and water quality. The Act requires an independent engineering assessment of all permitted waterworks be conducted once every five years. Previous assessments were completed in 2010 and 2015. The 2020 assessment will meet the five year mandate.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Water System Assessment	0.0	173.0	0.0	0.0	0.0
Total	0.0	173.0	0.0	0.0	0.0
FINANCING DETAILS					
WATERWORKS CAPITAL PROJECTS RESERVE	0.0	173.0	0.0	0.0	0.0
Total	0.0	173.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2216 WTP- PLANT ELECTRICAL UPGRADE

Project Status	Open	Year Identified	2011
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Warren Hawkins
Asset Type		Est. End Date	-

Project Description

This project involves the assessment, design, and construction of electrical upgrades at the Water Treatment Plant.

General Comments

These upgrades will replace critical older equipment with safer modern equipment. Single points of failure currently existing in the electrical distribution system that could affect the ability to produce safe clean drinking water will be upgraded to a system with more diversity. This will increase the plant resiliency to failures.

The work will be combined with the Transfer Pumping Project, with construction being completed over a 3 year period (2019-2022).

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Water Treatment Plant Electrical Upgrade	350.0	0.0	0.0	0.0	0.0
Total	350.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
WATERWORKS CAPITAL PROJECTS RESERVE	350.0	0.0	0.0	0.0	0.0
Total	350.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2219 WTP-N.E. SECTOR RESERVOIR

Project Status	Open	Year Identified	2013
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Reid Corbett
Asset Type	Water Treatment Plant	Est. End Date	-

Project Description

This project consists of the construction of a reservoir and pumping facility in the NE sector to meet the demands from growth in the sector. The planned procurement method for this project is to be accomplished utilizing external contractors due to transfer of risk.

General Comments

The project was initially scheduled for 2015 however upgrades to the 42nd Street reservoir and pumping facility allowed for a delay until 2023. The reservoir is planned to have a 40 million litre capacity and the pumping station an output of 1600 litres per second. With appropriate technical expertise, the majority of this project could be completed in house. External service providers will be required at a minimum on structural and building mechanical design.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
N.E. Sector Reservoir	0.0	0.0	0.0	0.0	4,785.0
Total	0.0	0.0	0.0	0.0	4,785.0
FINANCING DETAILS					
WATERWORKS CAPITAL PROJECTS RESERVE	0.0	0.0	0.0	0.0	4,785.0
Total	0.0	0.0	0.0	0.0	4,785.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2220 WTP-FILTER PLANT UNDERDRAIN UPGRADE

Project Status	Open	Year Identified	2013
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Reid Corbett
Asset Type	Water Treatment Plant	Est. End Date	-

Project Description

This project involves upgrading the mechanical components of the 1957 (6 filters), the 1964 (9 filters) and 1928 (6 filters) filter banks at the WTP. The planned procurement method for this project is to be accomplished utilizing external contractors, due to expertise of existing staff to perform the work and availability of technology in-house and long-term requirements.

General Comments

The work includes replacing the underdrains, process piping upgrades, valves and actuators, and automating their operation. Similar work was successfully completed on the 1911 (6 filters) in 2011/2012.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Filter Plant Underdrain Upgrade	1,000.0	0.0	0.0	0.0	0.0
Total	1,000.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
WATERWORKS CAPITAL PROJECTS RESERVE	1,000.0	0.0	0.0	0.0	0.0
Total	1,000.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2230 WWT-INFRASTRUCTURE UPGRADES

Project Status	Open	Year Identified	2013
Project Type	EQUIPMENT REPLACEMENT	Manager	Reid Corbett
Asset Type	Wastewater Treatment Plant	Est. End Date	-

Project Description

This project involves upgrades of equipment and infrastructure at the main plant, bio-solids storage area and pumping stations that do not warrant a separate capital project. The planned procurement method for this project is to be accomplished utilizing external contractors, due to the capacity of existing staff to perform the work.

General Comments

Wastewater treatment facilities have a severe service rating due to the corrosive nature of sewage. Failures of equipment and infrastructure are not predictable and random failures will occur. This project funds upgrades that are immediately required.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Expected Upgrades	500.0	2,600.0	2,704.0	2,812.0	2,897.0
Total	500.0	2,600.0	2,704.0	2,812.0	2,897.0
FINANCING DETAILS					
WASTEWATER TRTMNT CAP RES	500.0	2,600.0	2,704.0	2,812.0	2,897.0
Total	500.0	2,600.0	2,704.0	2,812.0	2,897.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2233 TU-ADVANCED TRAFFIC MGT SYSTEM

Project Status	Open	Year Identified	2009
Project Type	SUPPORT SYSTEMS	Manager	Goran Lazic
Asset Type		Est. End Date	-

Project Description

This project provides capital funding toward the expansion of the City's Advanced Traffic Management System (ATMS), enabling upgrades of communication lines and required replacement of signal cabinets and controllers.

General Comments

The incorporation of Intelligent Transportation System (ITS) into the transportation network allows existing City streets to meet increasing capacity demands without the requirement for major additional construction. ITS is an integral component of network growth that improves motorist safety while helping to alleviate increased commute times, congestion and transport-related emissions.

The 2019 budget request is for further expansion of the centralized signal management system by adding additional ATMS software modules.

The planned procurement method for this project is to be accomplished utilizing internal staff, due to existing staff capacity and expertise to perform the work, requirement of specialized services, and availability of technology in-house and long-term requirements.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction	150.0	150.0	150.0	150.0	0.0
Total	150.0	150.0	150.0	150.0	0.0
FINANCING DETAILS					
TRANSP INFRAS EXPANSION	150.0	150.0	150.0	150.0	0.0
Total	150.0	150.0	150.0	150.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2234 TU-WALKWAY MANAGEMENT

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Nathalie Baudais
Asset Type		Est. End Date	-

Project Description

This project involves walkways and includes completing assessments and improving infrastructure.

General Comments

This project supports the City of Saskatoon strategic goal "Quality of Life" as it will help to deal with the reduction and prevention of crime in the neighbourhood.

The management of walkways typically consists of CPTED reviews, crack repairs, drainage issues, lighting installation, replacement of broken or missing bollards, and other upgrades.

Details on the program proposed for the budget year will be presented in an administrative report prior to, or concurrent with the Council budget meeting.

Prior Budget Approval

\$721,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Walkway Management	0.0	50.0	50.0	50.0	50.0
Total	0.0	50.0	50.0	50.0	50.0
FINANCING DETAILS					
TRAFFIC SAFETY RESERVE	0.0	50.0	50.0	50.0	50.0
Total	0.0	50.0	50.0	50.0	50.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2235 TU-INTERSECTION IMPROVEMENTS

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Goran Lazic
Asset Type		Est. End Date	-

Project Description

This project involves the implementation of major geometric and operational modifications at localized intersections to ensure the safe and efficient movement of vehicles.

General Comments

This project addresses intersections in need of immediate operational and capacity improvements due to potentially significant safety hazards and/or unacceptable levels of service. It covers the costs of design, land acquisition (if required) and construction of major intersection improvements.

Major intersection improvements are intended to improve the level of safety for all road users, as well as to improve traffic operations and reduce delays. The list of potential projects is evaluated annually and prioritized based on collision rates, vehicular delays, and coordination with other projects. Minor intersection improvements typically include simple geometric modifications to improve the operations of an intersection. Examples include the addition of a right turning bay to improve traffic operations at an intersection, or physical adjustment of a median to allow turning vehicles an improved turning radius through the intersection (which can reduce the potential for collisions).

Details on the projects proposed for the budget year will be presented in an administrative report prior to, or concurrent with, the Council budget meeting.

Prior Budget Approval

\$3,003,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
General Provision	500.0	100.0	700.0	500.0	900.0
Total	500.0	100.0	700.0	500.0	900.0
FINANCING DETAILS					
TRANSP INFRAS EXPANSION	500.0	100.0	700.0	500.0	900.0
Total	500.0	100.0	700.0	500.0	900.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2237 TU-UPGD DALMENY GRID/BEAM RD CONNECTION

Project Status	Open	Year Identified	2009
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	David LeBoutillier
Asset Type		Est. End Date	-

Project Description

This project involves upgrading the existing roadway from a two lane paved roadway to a four lane paved roadway.

General Comments

Upon completion of the Highway 7 and Highway 14 interchange, this connection will become a desirable route for City traffic between the Blairmore Suburban Centre and the Marquis Industrial area.

The initial upgrade will be from Highway 14 to Claypool Drive, completed under land development. This project completes the roadway from Claypool Drive to Highway 16 which is now under provincial jurisdiction.

Prior Budget Approval

\$46,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Upgd Dalmeny Grid/Beam Rd Connection	0.0	0.0	0.0	0.0	8,250.0
Total	0.0	0.0	0.0	0.0	8,250.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	0.0	0.0	0.0	8,250.0
Total	0.0	0.0	0.0	0.0	8,250.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2255 TU-W&S CAPACITY ANALYSIS FOR REDEVELOPMENT AND MASTER PLANNING

Project Status	Open	Year Identified	2015
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	AJ McCannell
Asset Type		Est. End Date	-

Project Description

This project identifies the need for water and sewer capacity analysis and master planning for infill/redevelopment and future development areas. This will ensure that a consistent level of service for water distribution and sewer collection in residential, commercial and other areas of the city is maintained and possibly improved.

General Comments

System capacity analysis and maintenance is a key factor in sustainable management of water and sewer utilities. The City's growth must be supported by various elements including efficient and cost-effective water and sewer utilities. Maximizing the use of existing system capacities and identifying areas where new infrastructure is necessary will ensure the best value for the citizens of Saskatoon.

This project would be ongoing to address continual infill/redevelopment and rezoning applications. The master planning component will be complete by mid of 2017 and thereafter periodic updates will be required. The intent is to assess the needs under this project on a yearly basis. The estimated yearly funding is \$100,000 with the main source of funding coming from redevelopment levy to W&S Infrastructure Reserve.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Design	100.0	100.0	100.0	100.0	100.0
Total	100.0	100.0	100.0	100.0	100.0
FINANCING DETAILS					
INFRA RES-WTR & SAN SWR	100.0	100.0	100.0	100.0	100.0
Total	100.0	100.0	100.0	100.0	100.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2259 TU-PW SATELLITE YARDS

Project Status	Open	Year Identified	2013
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Eric Quail
Asset Type	Buildings	Est. End Date	-

Project Description

Capital Projects 2259 - TU PW Satellite Yards and 2037 - TU Snow Management Facilities are inter-related to each other in regards accommodating the future sites for Public Works satellite yard and snow management facilities. Land for three permanent Public Works satellite yard sites is required immediately to facilitate current emergency water & sewer operations and roadway maintenance activities. Once land is secured, funding opportunities for the development of the sites are possible.

General Comments

Funding in 2017 was to develop a strategy for locating operational facilities, including satellite yards and offices, based on the future growth impacts of the Growth Plan to Half a Million.

The satellite yards are required for:

- Sweepings stockpile, sand recycling
- Fill material handling, stockpiling recycling
- Satellite yard with parking, vehicle storage, and buildings
- Scale, wash bay
- Hydro-vac tailings disposal
- Container handling for garbage and recycling (except at the Southwest site)

Funding required for the Northwest and Northeast sites is to secure the land in advance of city development.

Funding shown for the Southeast site is required once the site is approved for development and the land purchase agreement is completed. Relocation from Nicholson Yards is imminent and a properly designed, constructed, and managed site is the goal for the proposed Public Works satellite yard in the southeast.

Funding for the Southwest site is required to relocate the current site, which is the future Recovery Park site, to the permanent location on the Civic Operations Centre Phase 2 land.

The planned procurement method for this project is to be accomplished utilizing internal staff, due to existing staff capacity to perform the work (land purchase).

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Northeast PW Yards Development	0.0	1,416.0	0.0	0.0	50.0
Northwest PW Yards Development	0.0	1,416.0	50.0	100.0	2,351.0
Southeast PW Yards Development	0.0	2,950.0	0.0	0.0	0.0
Southwest PW Yards Development	0.0	300.0	0.0	0.0	0.0
Total	0.0	6,082.0	50.0	100.0	2,401.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	6,082.0	50.0	100.0	2,401.0
Total	0.0	6,082.0	50.0	100.0	2,401.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2263 WTP-WATERSHED MGMT AND ASSESSMENT PROGRAM

Project Status	Open	Year Identified	2009
Project Type	SUPPORT SYSTEMS	Manager	Twyla Yobb
Asset Type		Est. End Date	-

Project Description

This project involves the creation of a watershed management program for the South Saskatchewan River within the City of Saskatoon.

General Comments

The City has been working with the South Saskatchewan River Stewards Inc. (SSRWSI) to support initiatives under the South Saskatchewan River Watershed Source Water Protection Plan. Future work to be supported by this project includes: storm water strategy, raw water pilot project, development of contractor guidelines, watershed planning and water security initiatives and research and education/awareness on aquatic invasive species. The planned procurement method for this project is potentially a combination of internal staff and external consultants due to the potential expertise required.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Watershed Protection	250.0	0.0	0.0	0.0	0.0
Total	250.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
INFRA RES - STORM WATER	120.0	0.0	0.0	0.0	0.0
WATERWORKS CAPITAL PROJECTS RESERVE	130.0	0.0	0.0	0.0	0.0
Total	250.0	0.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2265 TU-TRANSPORTATION EQUIPMENT ACQUISITIONS

Project Status	Open	Year Identified	2015
Project Type	EQUIPMENT REPLACEMENT	Manager	Dylan Ramsay
Asset Type		Est. End Date	-

Project Description

This project provides for the purchase of additional equipment required by the Sign Shop for detours, sign maintenance and crosswalk painting programs.

General Comments

This project is to ensure adequate equipment is in place to cope with the increase in volume for detours, sign maintenance and crosswalk painting programs due to city expansion. Additional equipment will increase productivity and improve customer service levels to both internal and external customers.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Sign Shop Equipment Purchase	100.0	140.0	50.0	75.0	50.0
Total	100.0	140.0	50.0	75.0	50.0
FINANCING DETAILS					
TRANSP EQUIP ACQ RESERVE	100.0	140.0	50.0	75.0	50.0
Total	100.0	140.0	50.0	75.0	50.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2268 TU-IDYLYLD DR FWY / 1ST AVE - NB RAMP

Project Status	Open	Year Identified	2012
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project is for rehabilitation of the Idylwyld Drive and 19th Street to 1st Avenue northbound overpass.

General Comments

The Idylwyld Drive over 19th Street to 1st Avenue northbound overpass is a two lane, nine span, concrete girder bridge, originally constructed in 1965. The estimated replacement cost for this structure is approximately \$14.2 million.

Rehabilitation of the structure is planned for 2019 & 2020 in conjunction with the Senator Sid Buckwold Bridge rehabilitation and includes engineering services, removal and replacement of the asphalt wearing surface and membrane, removal and spot repairs to portions of the deck, replacement of the expansion joints, spot repairs to concrete surfaces, sealing of cracks in girders by epoxy injection and application of galvanic protection to the abutments.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Repairs to Overpass	1,500.0	1,100.0	0.0	0.0	0.0
Total	1,500.0	1,100.0	0.0	0.0	0.0
FINANCING DETAILS					
BRIDGE MAJOR REPAIR RESERVE	1,500.0	1,100.0	0.0	0.0	0.0
Total	1,500.0	1,100.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2269 TU-ACCOMMODATION CONSTRUCTION

Project Status	Open	Year Identified	2013
Project Type	SUPPORT SYSTEMS	Manager	Shelley Korte
Asset Type		Est. End Date	-

Project Description

This project provides funding to address accommodation deficiencies within the Transportation and Utilities Department.

General Comments

Annual funding is reviewed annually to determine if there is a need for accommodation construction.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
General	0.0	200.0	200.0	200.0	200.0
Total	0.0	200.0	200.0	200.0	200.0
FINANCING DETAILS					
TU - CAPITAL RESERVE	0.0	200.0	200.0	200.0	200.0
Total	0.0	200.0	200.0	200.0	200.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2270 TU-PAVED ROADS AND SIDEWALK PRESERVATION

Project Status	Open	Year Identified	2017
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Chris Duriez
Asset Type		Est. End Date	-

Project Description

This project funds annual preservation, restoration and rehabilitation programs for local, arterial and collector roads as well as high volume, limited access expressways. It also funds the preservation, restoration and rehabilitation of both neighbourhood and primary network sidewalks. The objective of this program is to minimize the life cycle cost of preserving the local, collector and arterial roads, as well as expressways, subject to minimum acceptable levels of service. These programs have been in place since 1988 (Collector Roads), 1981 (Arterial Roads), 1996 (Local Roads) and 1999 (Expressways). The sidewalk components in this project are required to restore sidewalks to a 'safe' condition. Sidewalk preservation is divided between neighbourhood assets and primary assets. As a neighbourhood asset, the sidewalks primarily serve the residents of that neighbourhood. Sidewalks classified as a primary asset serve a broader range of people.

General Comments

Local roads are considered part of the Neighbourhood Roadway Network, primarily serving residents of the neighbourhood and represent 51% of the City's roads. The primary program focus is on preservation of the roads within each neighbourhood.

Collector roads collect traffic from residential roads within each neighbourhood and are considered part of the Primary Roadway Network, representing 18% of the City's roads.

Arterial roads are high volume roads that connect neighbourhoods and are also considered part of the Primary Road Network, representing 18% of the City's roads. Over the past several years, traffic volumes, loads and the number of axles (which accelerates deterioration) have been increasing. This, along with increasing treatment costs and age, will necessitate increases in funding to sustain this infrastructure. The structural condition of these roads is being monitored along with the surface condition.

Expressways represent approximately 12% of the City's roads by surface area. The structural condition of these roads is being monitored along with surface condition.

The plan for sidewalk preservation is to make sidewalks safer by replacing, in whole or in part, panels of sidewalks having trip hazards or missing sections. Locations will be prioritized based on sidewalk use and planned neighbourhood renewal locations. Locations where parking meters exist will be given higher priority along with sidewalks near schools, hospitals and care homes. The estimated repair cost for sidewalks in 2018 is \$600 per lineal metre.

The proposed preservation programs are based on the most recent surface rating data and selective structural condition assessment and are updated as new information becomes available.

The planned procurement method for this project is to be accomplished utilizing internal staff and external contractors due to existing staff capacity and expertise to perform the work, and requirements of specialized services.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Arterial Road Preservation	5,200.0	5,400.0	5,400.0	5,400.0	5,400.0
Collector Road Preservation	5,500.0	5,600.0	5,600.0	5,600.0	5,600.0
Expressway Road Preservation	3,500.0	3,700.0	3,700.0	3,700.0	3,700.0
Local Road Preservation	10,700.0	10,700.0	10,700.0	10,700.0	10,700.0
Neighbourhood Network Sidewalk Preservation	3,900.0	4,200.0	4,200.0	4,200.0	4,200.0
Primary Network Sidewalk Preservation	2,500.0	3,200.0	3,200.0	3,200.0	3,400.0
Total	31,300.0	32,800.0	32,800.0	32,800.0	33,000.0
FINANCING DETAILS					
PAVED ROADWAYS INFRASTRUCTURE RESERVE	31,300.0	32,800.0	32,800.0	32,800.0	33,000.0
Total	31,300.0	32,800.0	32,800.0	32,800.0	33,000.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2271 TU-HIGH SPEED ROADSIDE SAFETY IMPROVEMENTS

Project Status	Open	Year Identified	2017
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	David LeBoutillier
Asset Type		Est. End Date	-

Project Description

This project is the delivery of the recommended plan from the 'In-Service Review' of the roadside safety systems completed in 2016. The capital budget reflects the prioritization of projects recommended by the consultant to address the potential severity of collision, the likelihood of collision (based on traffic volumes and vehicle composition) and the overall level of risk. The cost effectiveness of the modification is also considered in the recommended plan.

General Comments

An in-service safety review of existing roadside safety systems was completed by the Administration in 2016. The review examined all existing safety systems infrastructure associated with the city's high-speed roadways and associated structures (crash cushions, roadside barriers, median barriers, poles, piers and guide-high safety signs, as well as guardrails on low-speed roads which may be associated with bridge piers and embankments) to ensure current safety standards are met. In-service road safety reviews are detailed engineering studies of existing infrastructure and facilities which focus on mitigating measures to reduce collision frequency and/or severity for all road users. These types of studies are based on reviews of collision history, traffic volumes, and on-site observation and roadway geometry and traffic operations.

The capital plan is broken into three phases:

1. The first phase is to address the high risk deficiencies which include providing adequate barriers around piers and footings, providing correct end treatments and replacement of deficient guardrails.
2. The second (5-year) phase is to address the medium risk deficiencies which include providing correct end treatments and replacement of deficient guardrails and improving transitions between adjacent safety systems.
3. The third (2-year) phase is to address the low risk deficiencies which include correcting installation deficiencies of existing safety systems and removing fixed objects in the crash reduction zone.

Details on the program proposed for the budget year will be presented in an administrative report prior to, or concurrent with Council budget meeting.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized services.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Installation/Replacement	220.0	1,550.0	1,260.0	1,180.0	1,192.0
Total	220.0	1,550.0	1,260.0	1,180.0	1,192.0
FINANCING DETAILS					
INFRA RES-TRANSPORTATION	220.0	430.0	300.0	300.0	300.0
TRAFFIC SAFETY RESERVE	0.0	150.0	0.0	0.0	236.0
UNFUNDED TRANSPORTATION INFRA RES	0.0	970.0	960.0	880.0	656.0
Total	220.0	1,550.0	1,260.0	1,180.0	1,192.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2276 TU-CITY YARDS SAFETY IMPROVEMENTS

Project Status	Open	Year Identified	2018
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Cathy Davidson
Asset Type		Est. End Date	-

Project Description

This project provides funding required for the implementation of a number of traffic focused initiatives to improve safety for staff and contractors accessing City Yards.

General Comments

Funding identified in 2019 and on a forward basis is intended for:

- Development of water fill/dump station to alleviate traffic congestion and ensure compliance with Water Security Agency and Ministry of Environment (MOE) regulations.
- Implementation of a traffic flow needs assessment and traffic control plan to eliminate congestion points and incidents.
- Development of designated staff parking area to eliminate private vehicle/pedestrian and heavy equipment interaction.
- Removal and re-installation of new oil tanks to eliminate traffic congestion and meet MOE regulations.
- Development of magnesium chloride (chemical additive that mixes with sand for winter ice control) transfer station to eliminate traffic congestion.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	50.0	0.0	0.0	0.0	0.0
Total	50.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
PUB WORKS BLDG CIVIC FACILITY RES	50.0	0.0	0.0	0.0	0.0
Total	50.0	0.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2296 AF-LIONS ARENA PARKING REDEVELOPMENT & SEWER UPGRADE

Project Status	Open	Year Identified	2017
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Troy LaFreniere
Asset Type	Ice Arena's	Est. End Date	-

Project Description

This project will provide for redevelopment of the parking facilities that support programming and events at the Lions Arena. The project also includes the replacement of the storm sewer line from Lions Arena to the existing main line located within park space south-east of the arena, resulting in an upgrading of storm water capacity.

General Comments

Parking facility upgrades and storm sewer line upgrades are required to provide adequate parking for patrons and prevent further deterioration and increasing costs to repair and maintain the existing parking lot and storm sewer line. The project will result in an organized and structured asphalt concrete parking lot layout, doubling the number of parking stalls and allowing for maximization of space. Defining parking stalls with the use of retaining walls, line painting and concrete walk and curbs will work towards general organization of the site. Creating a defined area complete with a concrete pad and heavy duty asphalt will assist in more efficient trash and recycling collection for the site. A heavy duty Zamboni route will be included to allow for efficient and appropriate snow piling, preventing premature surface degradation and inefficient use of space.

The planned procurement method for this project is to be accomplished utilizing internal staff, due to existing staff capacity to perform the work.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Parking Lot & Sewer Upgrade	0.0	1,100.0	0.0	0.0	0.0
Total	0.0	1,100.0	0.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED FACILITY SITE REPL RES	0.0	1,100.0	0.0	0.0	0.0
Total	0.0	1,100.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2300 CY-COMPREHENSIVE ZONING BYLAW REVIEW

Project Status	Open	Year Identified	2019
Project Type	STUDY/PLANNING	Manager	Darryl Dawson
Asset Type	Studies - Non capitalized expenditure	Est. End Date	-

Project Description

The Zoning Bylaw No. 8770 last underwent a comprehensive review between 2007 and 2009. Industry trends and changes in the meantime have left gaps where the zoning does not address the desired uses effectively. A wide range of amendments have been identified that align with a number of strategic themes including business friendly and economic development initiatives, environmental initiatives, and addressing current trends in planning. In addition, a variety of amendments are required to align with the many recent City initiatives, including the Growth Plan to Half a Million, the Culture Plan, the Saskatoon North Partnership for Growth Regional Plan, and the renewed Official Community Plan (to be completed in 2019).

Addressing these identified issues and initiatives will assist in streamlining development applications by ensuring that the regulations are appropriate and in place for the desired types of facilities in the community.

General Comments

This project will undertake a comprehensive review of the Zoning Bylaw to ensure that the current and desired trends in commercial, residential and community developments are incorporated in the planning regulations for the City of Saskatoon. This will include amendments that fall within the following themes:

- Review of Commercial and Mixed-Use Zoning Districts; including review of regulations for all commercial zoning districts from Neighbourhood level commercial to the City Centre as well as the Direct Control Districts for regional retail areas;
- Regulations to accommodate new forms of development
- Environmental Initiatives, including green roofs, Dark Sky compliance lighting, solar access;
- Review of parking requirements throughout all zoning districts;
- A review of residential infill regulations;
- A wide range of clarifying amendments to respond to issues that have been identified by the development industry, design professionals and Civic Administration;
- A range of minor amendments to address housekeeping items; and,
- Revisions required to implement recommendations from the new Official Community Plan and other Civic plans and studies.

This project will include not only the analysis of the regulations, but will also incorporate the following components:

- Architectural analysis to ensure that regulations are development/business friendly. This will include design analysis of key development regulations, such as the Open Volume requirements in the Downtown Commercial (B6) District.
- Best practice research and the development of new standards for public notification, including advertising, signage and other communications.
- An exploration and analysis of new user-friendly digital formats for zoning bylaws will be undertaken with a recommendation being made for a final product selection. This will allow for the creation of a fully indexed, searchable and user-friendly resource.
- Development of a Development Information Portal, which is intended to be a resource for the development industry to access required site information, such as utility locations, detailed property information, nearby development applications, upcoming construction, etc. This Portal has been requested by industry members through the Infill Round-table. It is expected that this Portal can be largely developed by in-house staff and will be aligned with the City's efforts to make Open Data a reality.

The project scope also includes community and stakeholder engagement, communications and promotions, and legal review by the City Solicitors Office. These are key elements of ensuring that the review of the Zoning Bylaw responds both to community interests, as well as to legislated requirements.

The planned procurement method for this project is to be accomplished utilizing internal staff, due to the available knowledge and expertise of internal staff, as well as the on-going nature of the work. In addition, some small external contracts may be used when particular items require other expertise.

Operating Impacts

Upon completion of this project, an operating FTE is required to enhance the ability of the Division to keep the Zoning Bylaw up to date and responsive to industry requirements. This is expected to require a position starting part way through 2021 (0.5 FTE) for \$53,000, leading to a full time position in 2022 for an additional (0.5 FTE) for \$53,000.

Urban Planning and Development

Approved 2019

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Zoning Bylaw Review	250.0	350.0	300.0	0.0	0.0
Total	250.0	350.0	300.0	0.0	0.0
FINANCING DETAILS					
RESERVE FOR CAPITAL EXPENDITURES	250.0	0.0	0.0	0.0	0.0
UNFUNDED RCE	0.0	350.0	300.0	0.0	0.0
Total	250.0	350.0	300.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	53.0	53.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2317 TR-SHELTERS/BENCHES

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	James McDonald
Asset Type	Bus Shelters	Est. End Date	-

Project Description

This project involves the ongoing installation of bus stop shelters and bench replacements. Additionally, the capital available in the reserve will be used towards transit infrastructure improvements.

General Comments

The aim of this project is to improve customer experience and transit accessibility by installing shelters, benches and upgrading stops such as installing concrete landing pads, establishing missing links (connectors) between sidewalk and shelters. There are transit stops that are designated by just a pole in the ground with no sidewalk infrastructure. A Bus Stop Audit is planned for 2019 to inventory more than 1450 active stops in Saskatoon to prioritize these locations for upgrades. There will be request for additional funding covered under Federal 'Infrastructure Canada' program.

Prior Budget Approval

\$1,301,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Transit Shelter & Bench Repl Plan	100.0	150.0	150.0	150.0	150.0
Total	100.0	150.0	150.0	150.0	150.0
FINANCING DETAILS					
TRANSIT CAPITAL PROJECTS RESERVE	100.0	150.0	150.0	150.0	150.0
Total	100.0	150.0	150.0	150.0	150.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2323 TR-RIDERSHIP GROWTH INITIATIVES

Project Status	Open	Year Identified	2009
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	James McDonald
Asset Type	Studies - Non capitalized expenditure	Est. End Date	-

Project Description

This project involves an initiative dedicated to growing Transit ridership and revenue.

General Comments

Capital funding is required to set up numerous untapped markets for transit ridership that exist and have not yet been fully developed as well as to retain the current ridership. The project will focus on the implementation of programs and initiatives to get more people riding the bus, with the ultimate goal of increasing revenue. The following are among the potential strategies and initiatives that will be used/explored:

- Transit target audiences: high school, post-secondary, senior and corporate
- Partnering with environmental and social groups to promote Transit usage as a green alternative
- Transit presence at local special events (parades, pink shirt day etc.)
- Website and social media as a communication tool
- Marketing and advertising - to create brand awareness with a focus on app and technology education
- Internal communication to management and operators to ensure staff are involved and aware of the new programs and initiatives allowing for an opportunity to become ambassadors
- Fare and mobile ticketing review
- Transit focused market research to better understand the local transportation trends
- Investigation into new technologies
- Relationship management with internal (City of Saskatoon) and external stakeholder groups
- Travel training
- Integration of Access Transit with Conventional Transit

The planned procurement method for this project is to be accomplished utilizing a combination of internal staff and external contractors, due to expertise of existing staff to do the work and requirement of specialized services.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Advertising	100.0	100.0	100.0	100.0	100.0
Technology	1,000.0	2,000.0	0.0	0.0	0.0
Total	1,100.0	2,100.0	100.0	100.0	100.0
FINANCING DETAILS					
TRANSIT CAPITAL PROJECTS RESERVE	1,100.0	100.0	100.0	100.0	100.0
UNFUNDED TCPR	0.0	2,000.0	0.0	0.0	0.0
Total	1,100.0	2,100.0	100.0	100.0	100.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2352 CY-PERMANENT BOAT LAUNCH SITE

Project Status	Open	Year Identified	2009
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Brad Babyak
Asset Type	Buildings	Est. End Date	-

Project Description

This project involves the design and construction of the Permanent Boat Launch facility.

General Comments

The current boat launch adjacent to Kiwanis Memorial Park was set up in 2004 as a temporary location. Meewasin is completing a River Access Study including a review of possible locations and identifying potential land-use conflicts.

Using previously approved funding, public consultation began in 2016. Pending approval from City Council on a permanent boat launch site, detailed design and construction will begin in 2020.

This project was approved in principle, by City Council on March 26, 2018 through the Recreation and Parks Facilities Game Plan Proposed Funding Plan, subject to budget approval.

Operating Impacts

Operating impacts will be determined based on final design.

Prior Budget Approval

\$165,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Design and Construction	0.0	500.0	0.0	0.0	0.0
Total	0.0	500.0	0.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED PARKS & REC PARTNERSHIP RES	0.0	500.0	0.0	0.0	0.0
Total	0.0	500.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2353 CY-CHIEF WHITECAP PARK DEVELOPMENT

Project Status	Open	Year Identified	2009
Project Type	REJUVENATION	Manager	Brad Babyak
Asset Type	Parks and Open Spaces	Est. End Date	-

Project Description

This project involves the implementation of the program plans as outlined in the Chief Whitecap Master Plan, as approved by City Council in June 2010.

General Comments

The Master Plan Development for this park was a joint project partnered between the City of Saskatoon and the Whitecap Dakota First Nation. The Master Plan was developed through consultation with major stakeholders: Rural Municipality of Corman Park, Meewasin, residents neighbouring the park, and the current park users. The City of Saskatoon partnered with Meewasin to complete the detail design for Chief Whitecap Park. The 2013-2023 Strategic Plan identifies Quality of Life as an important factor in building our communities. Chief Whitecap Park is an important historical venue that provides citizens with access to facilities and programs while enjoying the natural beauty that Chief Whitecap Park holds. Partnering with Meewasin has provided an opportunity to revitalize the natural landscape of Chief Whitecap Park, while planning for the development of primary and secondary trails through the park. The primary trail through Chief Whitecap Park will expand the Trans Canada Trail network through the City of Saskatoon which promotes active living.

The 2019 plan includes year two of the naturalization of the uplands process.

The 2020 plan includes year three of the naturalization of the uplands process, the development of the Meewasin/Trans-Canada Trail pathway, secondary park pathways and south parking lot. Partnerships with Meewasin/Trans Canada Trail to fund the primary trail are in development. Meewasin is seeking grant funding through the Trans Canada Trail Program, estimated at \$475,000 to complete the primary trail in Chief Whitecap Park.

The 2021 plan includes year four of the naturalization of the uplands process and the development of park amenities (lookouts, signage, benches and waste receptacles), as well as secondary dog park pathways.

The 2022 plan includes year five of the naturalization of the uplands process and the construction of the road extension and central parking lot.

Operating Impacts

2021 - \$10,000 - Roadways pathway clearing (pending approval of 2020 construction budget)

2022-2023 - Operating costs to be determined based on park construction approvals

Prior Budget Approval

\$ 71,000 Development of Master Plan (cost shared with partner)

\$140,000 Detailed Design

\$ 60,000 Gravel Parking Lot

\$140,000 Development of an 80 acre off-leash dog park with fencing and installation of site amenities

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	50.0	915.0	340.0	255.0	0.0
Total	50.0	915.0	340.0	255.0	0.0
FINANCING DETAILS					
ANIMAL SERVICES RESERVE	50.0	30.0	0.0	0.0	0.0
PRIVATE CONTRIBUTIONS	0.0	475.0	0.0	0.0	0.0
UNFUNDED RCE	0.0	410.0	340.0	255.0	0.0
Total	50.0	915.0	340.0	255.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2368 AF-PRINTING AND MAIL SERVICES - EQUIPMENT

Project Status	Open	Year Identified	2010
Project Type	EQUIPMENT REPLACEMENT	Manager	Jazz Pabla
Asset Type	Miscellaneous Equipment	Est. End Date	-

Project Description

The project provides for the replacement of Printing and Mail Services equipment.

General Comments

The demand for higher quality print is increasing along with the need for redundant printing services. New equipment in printing services could provide backup printing capabilities for the Data Centre (utility bills, etc.). The future plan is to replace this equipment once it is no longer current technology as maintenance costs will be rising, the failure rate will be increasing, parts will become difficult to find and the printing needs of our customers will be different.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Additional Equipment	0.0	136.0	0.0	0.0	0.0
High Volume Digital Multi-Functional Device	0.0	0.0	0.0	170.0	0.0
Total	0.0	136.0	0.0	170.0	0.0
FINANCING DETAILS					
PRINTING AND MAIL EQUIP REPL RESERVE	0.0	136.0	0.0	170.0	0.0
Total	0.0	136.0	0.0	170.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2379 FIRE-MAJOR APPARATUS REPLACEMENT

Project Status	Open	Year Identified	2010
Project Type	EQUIPMENT REPLACEMENT	Manager	Glenn Ledray
Asset Type	Fire Apparatus	Est. End Date	-

Project Description

This project provides for the replacement and refurbishment of major firefighting apparatus used by the Saskatoon Fire Department.

General Comments

Major Fire Apparatus are scheduled to be replaced as they reach the end of their safe serviceable life and begin experiencing recurring mechanical problems, making them very inefficient for day to day operations. Included are fire engines, aerial ladder vehicles, dangerous good trucks, brush and tanker trucks, mobile pump trailer and the emergency measures mobile command post.

The plan includes the replacement of a fire engine in each of the next five years along with an aerial ladder truck in 2020.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Aerial Ladder Truck Replacement	0.0	1,475.0	0.0	0.0	0.0
Fire Engine Replacement	855.0	855.0	855.0	855.0	670.0
Total	855.0	2,330.0	855.0	855.0	670.0
FINANCING DETAILS					
FIRE APPARATUS	855.0	2,330.0	855.0	855.0	670.0
Total	855.0	2,330.0	855.0	855.0	670.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2389 POLICE-FLEET ADDITIONS

Project Status	Open	Year Identified	2009
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Earl Warwick
Asset Type	Police Vehicles	Est. End Date	-

Project Description

This project provides for the expansion of the Police Service vehicle fleet including vehicle and related equipment costs.

General Comments

Project is planned to increase the regular fleet. Project funding allows for the fleet to expand by 2 to 4 vehicles (fully equipment marked units and / or unmarked units) depending on operational demands.

The 2019 plan includes the addition of 2 unmarked and 3 marked units, in conjunction with FTE increase requests.

Operating Impacts

Anticipated increases are \$132,700 in 2019, \$7,000 in 2020 and \$7,000 in 2021.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Fleet Additions	372.0	170.0	170.0	170.0	170.0
Total	372.0	170.0	170.0	170.0	170.0
FINANCING DETAILS					
POLICE CAPITAL RESERVE	372.0	170.0	170.0	170.0	170.0
Total	372.0	170.0	170.0	170.0	170.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	132.7	7.0	7.0	7.0	7.0
FTEs	0.0	0.0	0.0	0.0	0.0

2390 CP-GREEN INFRASTRUCTURE STRATEGY

Project Status	Open	Year Identified	2009
Project Type	ENVIRONMENTAL PROTECTION	Manager	Twyla Yobb
Asset Type		Est. End Date	-

Project Description

The purpose of the Green Infrastructure Strategy is to develop an integrated approach to planning and maintaining sustainable and bio-diverse city, one in which natural areas and other green and open spaces are considered important infrastructure. In order to achieve this, the Strategy will address five themes: Governance; Land Allocation; Green Network; Storm Water Servicing; and Heritage and Culture.

General Comments**Phase 1 includes:**

- Long-term corporate vision, goals, objectives and definitions for Natural Areas and Stormwater Management
- Best practices and policy review
- Baseline inventory and mapping of existing "ecological network" (natural areas and open spaces) and stormwater management infrastructure (engineered and natural)
- Community and stakeholder engagement
- Recommended high-level policy directions
- Natural Area Development and Management Guidelines, including guidelines for natural areas adjacent to development lands

Phase 2 includes:

- Further developing our understanding of the current situation via engagement with targeted internal stakeholders.
- Researching practices in other municipalities.
- Identifying options for addressing key findings identified in Phase 1 and other issues that may arise from engagement activities.
- Development of policy and projects to move toward alignment with the key principles.
- Development of a business cases and implementation plans for change.
- Public engagement to educate on green infrastructure and discover how it connects with daily life.

The planned procurement method for this project is potentially a combination of internal staff and external consultants due to the potential expertise required.

Prior Budget Approval

\$405,000 - An initial inventory and policy study was completed in 2009 and a Wetland Development Workshop was held in 2012. The policy framework was completed in 2013 and a refined wetland inventory (that included evaluation of wetland significance) was completed in 2015. The remainder of previously-approved budget is being used for the Green Infrastructure Workshop with community organizations, completion of the Phase 1 Green Infrastructure Strategy Baseline Inventory, Guiding Principles and Key findings with work underway for the Natural Areas Standards and Green Infrastructure Strategy Phase 2 in 2018.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Policy Development and engagement	260.0	0.0	0.0	0.0	0.0
Total	260.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
RESERVE FOR CAPITAL EXPENDITURES	260.0	0.0	0.0	0.0	0.0
Total	260.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2392 TU-MCKERCHER DR/COLLEGE DR OVERPASS

Project Status	Open	Year Identified	2012
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project includes the rehabilitation of the McKercher Drive over College Drive overpass.

General Comments

The McKercher Drive over College Drive overpass is a five lane, two span, concrete girder bridge, originally constructed in 1979. The estimated replacement cost for this structure is approximately \$7.8 million.

The substructure work includes application of silane sealer to substructure components exposed to splash, application of silane sealer to the walkway, application of spray arc zinc to the south abutment and repairs to the girder soffit near the south abutment including installation of zinc anodes to protect the patch. The rehabilitation work has now been deferred to 2022 or beyond.

Proactive rehabilitation of the superstructure is planned for 2022 and includes engineering services, removal and replacement of the asphalt wearing surface and membrane and spot repairs to concrete surfaces.

If a 'Do Nothing' approach were taken with preservation of the superstructure, service life prediction modeling indicates that structural failure, necessitating costly emergency repairs, can be expected to occur by the year 2038, with complete replacement of the superstructure required by the year 2043. The cost estimate for emergency deck repairs and replacement is approximately \$7.27 million.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Superstructure Rehabilitation	0.0	0.0	0.0	315.0	0.0
Total	0.0	0.0	0.0	315.0	0.0
FINANCING DETAILS					
BRIDGE MAJOR REPAIR RESERVE	0.0	0.0	0.0	315.0	0.0
Total	0.0	0.0	0.0	315.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2393 TU-TAYLOR/CIRCLE DRIVE

Project Status	Open	Year Identified	2011
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project involves rehabilitation of the Taylor Street over Circle Drive overpass.

General Comments

The Taylor Street over Circle Drive overpass is a six lane, two span, continuous cast-in-place concrete girder bridge, originally constructed in 1996. The estimated replacement cost for this structure is approximately \$9.7 million.

Proactive rehabilitation of the substructure is planned for 2021 and includes engineering services by specialized external consultants, removal and replacement of the asphalt wearing surface and membrane, spot repairs to concrete deck, spot repairs and sealer applied to barriers and replacement of the expansion joints.

If a 'Do Nothing' approach were taken with preservation of the superstructure, service life prediction modeling indicates that structural failure, necessitating costly emergency repairs, can be expected to occur by the year 2053, with complete replacement of the superstructure required by the year 2053. The cost estimate for emergency deck repairs and replacement is approximately \$7.48 million.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Rehabilitation	0.0	80.0	755.0	0.0	0.0
Total	0.0	80.0	755.0	0.0	0.0
FINANCING DETAILS					
BRIDGE MAJOR REPAIR RESERVE	0.0	80.0	755.0	0.0	0.0
Total	0.0	80.0	755.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2395 TU-CIRCLE DRIVE/14TH ST-NB

Project Status	Open	Year Identified	2012
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project is for the rehabilitation of the Circle Drive northbound over 14th Street overpass.

General Comments

The Circle Drive northbound over 14th Street overpass is a two lane, three span, concrete girder bridge, originally constructed in 1989. The estimated replacement cost for this structure is approximately \$5 million.

Rehabilitation of the structure is planned for 2022 and includes engineering services, removal and replacement of the asphalt wearing surface and membrane, removal and replacement of the upper 100 mm of the concrete deck, replacement of the expansion joints with semi-integral abutments and spot repairs to concrete surfaces.

If a 'Do Nothing' approach were taken with preservation of the superstructure, service life prediction modeling indicates that structural failure, necessitating costly emergency repairs, can be expected to occur by the year 2024, with complete replacement of the superstructure required by the year 2029. The cost estimate for emergency deck repairs and replacement is approximately \$3.9 million.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Repairs	0.0	0.0	75.0	1,095.0	0.0
Total	0.0	0.0	75.0	1,095.0	0.0
FINANCING DETAILS					
BRIDGE MAJOR REPAIR RESERVE	0.0	0.0	75.0	1,095.0	0.0
Total	0.0	0.0	75.0	1,095.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2396 TU-IDYLWYLD FWY/IDYLWYLD RAMP NB/SB

Project Status	Open	Year Identified	2012
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project involves the rehabilitation of the Idylwyld Drive northbound/southbound over 19th Street overpass.

General Comments

The Idylwyld Drive northbound/southbound over 19th Street overpass is a four lane, nine span, concrete girder bridge, originally constructed in 1965. The estimated replacement cost for this structure is approximately \$28.9 million.

Rehabilitation work planned for 2019 and 2020 in conjunction with the Senator Sid Buckwold Bridge Rehabilitation includes engineering services, removal of the asphalt wearing surface and membrane, removal and replacement of the top portion of the concrete deck, installation of new wearing surface and spot repairs to concrete surfaces.

If a 'Do Nothing' approach were taken with preservation of the superstructure, service life prediction modeling indicates that structural failure, necessitating costly emergency repairs, can be expected to occur by the year 2035, requiring complete replacement of the superstructure. The cost estimate for deck replacement is approximately \$30 million.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Repair	3,000.0	1,500.0	0.0	0.0	0.0
Total	3,000.0	1,500.0	0.0	0.0	0.0
FINANCING DETAILS					
BRIDGE MAJOR REPAIR RESERVE	3,000.0	1,500.0	0.0	0.0	0.0
Total	3,000.0	1,500.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2397 TU-CIRCLE DRIVE/8TH ST - NB/SB

Project Status	Open	Year Identified	2012
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project involves rehabilitation of the Circle Drive over 8th Street overpass structure.

General Comments

The Circle Drive northbound and southbound over 8th Street overpasses are two lane, two span, steel girder bridges, originally constructed in 1999. The estimated replacement cost for each structure is approximately \$5.4 million.

Rehabilitation of the northbound structure is planned for 2021 and includes engineering services, removal and replacement of the asphalt wearing surface and membrane, removal and replacement of the upper 100 mm of the concrete deck and spot repairs to concrete surfaces. Rehabilitation of the southbound structure is planned for 2026 and includes engineering services, removal and replacement of the asphalt wearing surface and membrane, removal and replacement of the upper 100 mm of the concrete deck and spot repairs to concrete surfaces.

If a 'Do Nothing' approach were taken with preservation of the superstructure of these overpasses, service life prediction modeling indicates that structural failure can be expected to occur by the year 2037, requiring complete replacement of the superstructures. The cost estimate for deck replacement is approximately \$3.1 million for each structure.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Rehabilitation of NB structure	0.0	0.0	1,800.0	0.0	0.0
Total	0.0	0.0	1,800.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED BRIDGE MAJOR REPAIR RES	0.0	0.0	1,800.0	0.0	0.0
Total	0.0	0.0	1,800.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2401 TU-PEDESTRIAN CROSSING STRUCTURES

Project Status	Open	Year Identified	2013
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Todd Grabowski
Asset Type	Overpasses	Est. End Date	-

Project Description

This project involves rehabilitation of various pedestrian crossing structures.

General Comments

The Northridge Drive to 45th Street over Idylwyld Drive overpass is a two span, concrete deck pedestrian overpass with access stairs on either side, originally constructed in 1969. The estimated replacement cost for this structure is approximately \$934,000. Unfunded rehabilitation work planned for 2019 includes engineering services, repairs to approach walkways, replacement of expansion joint glands, spot repairs to concrete surfaces, grouting the bearings and replacement of the east pedestrian rail. This work will proceed when funding can be allocated in concert with the priorities of the asset inventory.

The Central Avenue to Carleton Drive over College Drive overpass is a two span, concrete deck pedestrian overpass with access stairs on either side, originally constructed in 1969. The estimated replacement cost for this structure is approximately \$934,000. Unfunded rehabilitation work planned for 2019 includes engineering services by specialized external service providers, replacement of expansion joint glands and level nosing's, spot repairs to concrete surfaces, grouting the bearings and sanding and repainting the pedestrian railing. This work will proceed when funding can be allocated in concert with the priorities of the asset inventory.

The Hilliard Street over Idylwyld Drive overpass is a two span, cast-in-place concrete deck pedestrian overpass with spiral access ramps on either side, originally constructed in 1966. The estimated replacement cost for this structure is approximately \$3.85 million. Unfunded rehabilitation work planned for 2019 includes engineering services, shimming the approaches, repairs to the pedestrian cage, replacing the expansion joint glands, spot repairs to concrete surfaces and filling the scour hole under the east abutment wall. This work will proceed when funding can be allocated with the priorities of the asset inventory.

The pedestrian walkway across CPR River Bridge is a 300 m long, 1.1 m wide timber pedestrian crossing attached to the CPR River Bridge, originally constructed in 1936. The estimated replacement cost for this structure, including the main west staircase (steel) and secondary west staircase (timber), is approximately \$2 million. Rehabilitation work planned for 2022 includes wood stair replacement, sanding and repainting the staircase for corrosion protection (where required).

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services

Prior Budget Approval

\$113,000

Prior budget approval was for the rehabilitation of the 11th Street under Idylwyld underpass.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Central Ave to Carleton Drive over College Drive	0.0	76.0	0.0	0.0	0.0
Hilliard St. over Idylwyld Drive	0.0	108.0	0.0	0.0	0.0
Northridge Dr to 45th St. over Idylwyld Drive	0.0	65.0	0.0	0.0	0.0
Pedestrian Walkway Across CPR River Bridge	0.0	0.0	0.0	108.0	0.0
Total	0.0	249.0	0.0	108.0	0.0
FINANCING DETAILS					
UNFUNDED BRIDGE MAJOR REPAIR RES	0.0	249.0	0.0	108.0	0.0
Total	0.0	249.0	0.0	108.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2402 TU-HIGHWAY 16 EASTBOUND OVER HIGHWAY 11 OVERPASS

Project Status	Open	Year Identified	2013
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Todd Grabowski
Asset Type	Overpasses	Est. End Date	-

Project Description

This project involves preservation activities for the Highway 16 eastbound and westbound over Highway 11 overpasses.

General Comments

The Highway 16 over Highway 11 overpasses were bestowed to the City of Saskatoon in 2011 from the Ministry of Highways and Infrastructure. The two overpasses are three lane, five span, concrete girder bridges, originally constructed in 1967. The estimated replacement cost for these structures is approximately \$15.4 million.

The design and construction of the over height sensor and warning beacon on Highway 11 northbound is scheduled for 2019 but is unfunded. This work will proceed when funding can be allocated in concert with the priorities of the bridges inventory, or funding from outside sources becomes available.

Northbound and southbound deck rehabilitation is planned for 2025 which includes engineering services, removal and replacement of the asphalt wearing surface and membrane, removal of replacement of the upper 112 mm of concrete deck, median, barrier, pedestrian rail and spot concrete repairs.

If a 'Do Nothing' approach were taken with preservation of the superstructure, service life prediction/modeling indicates that the structural failure can be expected to occur by the year 2035, requiring complete replacement of the superstructure.

Prior Budget Approval

\$2,007,000

Prior budget approval was for repairing the joints, abutments and girder ends of the overpass as well as to provide for the installation of an over-height sensor and warning beacon on Highway 11 northbound.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Overheight Warning System	0.0	155.0	0.0	0.0	0.0
Total	0.0	155.0	0.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED BRIDGE MAJOR REPAIR RES	0.0	155.0	0.0	0.0	0.0
Total	0.0	155.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2403 TU-CPR OVER CIRCLE DRIVE EAST OVERPASS

Project Status	Open	Year Identified	2013
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Todd Grabowski
Asset Type	Overpasses	Est. End Date	-

Project Description

This project involves rehabilitation of the CPR over Circle Drive East overpass.

General Comments

Located between 108th Street and Attridge Drive, the CPR over Circle Drive East overpass is a five span, single track, post-tensioned continuous concrete span railway bridge, originally constructed in 1980. The City is wholly responsible for all preservation costs related to this structure. The estimated replacement cost for this structure is approximately \$7.7 million.

Unfunded rehabilitation work planned for 2019 includes engineering services, spot repairs to concrete surfaces and application of silane sealer to the walkway.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Substructure Repairs	0.0	164.0	0.0	0.0	0.0
Total	0.0	164.0	0.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED BRIDGE MAJOR REPAIR RES	0.0	164.0	0.0	0.0	0.0
Total	0.0	164.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2404 TU-CIRCLE DRIVE/IDYLYLD

Project Status	Open	Year Identified	2012
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project is for rehabilitation of the Circle Drive North over Idylwyld Drive overpass.

General Comments

The Circle Drive North over Idylwyld Drive overpass is an eight lane, four span, concrete girder bridge, originally constructed in 1967 to a six lane width and widened to eight lanes in 2001. The estimated replacement cost for this structure is approximately \$13.4 million.

Proactive rehabilitation of the structure is planned for 2021 and 2022 and includes engineering services by specialized external consultants, removal and replacement of the asphalt wearing surface, installation of a new membrane and spot repairs to concrete surfaces.

If a 'Do Nothing' approach were taken with preservation of the superstructure, service life prediction modeling indicates that structural failure, necessitating costly emergency repairs, can be expected to occur by the year 2039, with complete replacement of the superstructure required by the year 2044. The cost estimate for emergency deck repairs and replacement is approximately \$14.4 million.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Repairs	0.0	0.0	540.0	2,700.0	0.0
Total	0.0	0.0	540.0	2,700.0	0.0
FINANCING DETAILS					
UNFUNDED BRIDGE MAJOR REPAIR RES	0.0	0.0	540.0	2,700.0	0.0
Total	0.0	0.0	540.0	2,700.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2405 TU-IDYLYLD & CIRCLE DR N INTERCHANGE

Project Status	Open	Year Identified	2010
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	David LeBoutillier
Asset Type		Est. End Date	-

Project Description

This project addresses the anticipated need for significant adjustments at the interchange of Idylwyld Drive and Circle Drive that are required due to the completion of the Circle Drive South project.

General Comments

The interchange of Idylwyld Drive and Circle Drive is a very important transportation connection for Saskatoon and northern Saskatchewan as well as the gateway for much economic activity north and west of Saskatoon. All northbound highway traffic as well as a very large amount of internal network travel must pass through this interchange. Currently, trucks heading to northern Saskatchewan or Alberta using Highways 11, 12 or 16 use Idylwyld Drive North through the core area of the city. With the completion of Circle Drive South, the traffic impacts will be monitored and recommendations will be brought forward.

Prior Budget Approval

\$500,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Corridor Improvements	0.0	0.0	0.0	0.0	18,000.0
Total	0.0	0.0	0.0	0.0	18,000.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	0.0	0.0	0.0	18,000.0
Total	0.0	0.0	0.0	0.0	18,000.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2406 TU-MINOR BRIDGE REPAIRS

Project Status	Open	Year Identified	2012
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Todd Grabowski
Asset Type		Est. End Date	-

Project Description

This project is required to provide funding for minor repairs and structural studies as required on the City's bridges and structures.

General Comments

There are currently 75 bridges, overpasses and pedestrian crossings that the City is responsible for. The list of projects and locations will be prioritized on an annual basis as needed.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized construction services.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction	289.0	289.0	289.0	289.0	289.0
Total	289.0	289.0	289.0	289.0	289.0
FINANCING DETAILS					
BRIDGE MAJOR REPAIR RESERVE	289.0	289.0	289.0	289.0	289.0
Total	289.0	289.0	289.0	289.0	289.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2408 TU-VISION ZERO

Project Status	Open	Year Identified	2019
Project Type	STUDY/PLANNING	Manager	Nathalie Baudais
Asset Type		Est. End Date	-

Project Description

Vision Zero is a road safety approach with the goal of zero traffic related fatalities or severe injuries. Canada adopted Vision Zero as a federal strategy in January 2016. Vision Zero is a collaborative, multi-disciplinary approach and reflects multiple community partners and stakeholders.

General Comments

This report supports the Strategic Goal of Moving Around as it improves the safety of all road users (pedestrians, cyclists, and drivers), and helps provide a great place to live, work, and raise a family.

In 2019 the following will be completed: prepare a Vision Zero Implementation Plan; and confirm and consolidate the mandate and members of the Vision Zero Advisory Committee.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Design	0.0	100.0	170.0	0.0	0.0
Total	0.0	100.0	170.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED TRAFFIC SAFETY RES	0.0	100.0	170.0	0.0	0.0
Total	0.0	100.0	170.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2423 FIRE - FIRE STATION 9 PARKING LOT

Project Status	Open	Year Identified	2019
Project Type		Manager	
Asset Type		Est. End Date	-

Project Description

This project provides the construction of 12 parking stalls at Fire Station #9, located on Attridge Drive.

General Comments

The Emergency Operations Centre (EOC) operates out of Fire Station #9. When the EOC is activated or there are training sessions held, there is insufficient parking available for those required to report to the EOC, necessitating the use of off-site parking. There is sufficient land to allow for the construction of a 12 stall parking lot.

Operating Impacts

\$2,600 for comprehensive maintenance contribution

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Design	75.0	0.0	0.0	0.0	0.0
Total	75.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
FIRE - CAPITAL RESERVE	75.0	0.0	0.0	0.0	0.0
Total	75.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	2.6	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2425 TU-UNDERGROUND ENCROACHMENTS

Project Status	Open	Year Identified	2012
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Rob Frank
Asset Type		Est. End Date	-

Project Description

This project is required to fund the city's portion of costs related to dealing with existing underground encroachments in the city's right-of-way.

General Comments

Underground encroachments from lots into public Right of Way were constructed in the early 20th Century by agreement between developers and City Council. They consist of open areas under the sidewalk that are attached to the basement of the adjacent building. The ceiling of the encroachment is, in most cases, the sidewalk above. These were typically allowed for freight elevators or coal chutes and to provide for larger basements or storage areas than if the building was confined to the lot size.

These funds are to allow for the City to contribute a portion of funding to the property owner's costs for when they either repair or rebuild the encroachment they are responsible for.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Underground Encroachments Repairs	0.0	100.0	100.0	0.0	0.0
Total	0.0	100.0	100.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED PAVED ROADWAYS INFR RES	0.0	100.0	100.0	0.0	0.0
Total	0.0	100.0	100.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2428 TU-FUNCTIONAL PLANNING STUDIES

Project Status	Open	Year Identified	2010
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	David Leboutillier
Asset Type		Est. End Date	-

Project Description

This project is for the ongoing identification of future transportation needs and the preparation of functional planning studies.

General Comments

Various new arterial roads throughout the City require functional planning studies to determine the vertical and horizontal alignments, right-of-way requirements, and preliminary cost estimates.

Details on the program proposed for the budget year will be presented in an administrative report prior to, or concurrent with Council budget meeting.

The planned procurement method for this project is to be accomplished utilizing external contractors in the design of the functional planning studies, due to existing staff capacity and expertise to perform the work, requirement of specialized services, objectivity of an opinion, and availability of technology in-house and long-term requirements.

Prior Budget Approval

\$760,000

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Functional Planning Studies	200.0	200.0	50.0	200.0	0.0
Total	200.0	200.0	50.0	200.0	0.0
FINANCING DETAILS					
TRANSP INFRAS EXPANSION	200.0	200.0	50.0	200.0	0.0
Total	200.0	200.0	50.0	200.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2429 CY-LICENSE PLATE RECOGNITION SYSTEM

Project Status	Open	Year Identified	2009
Project Type	SUPPORT SYSTEMS	Manager	Jo-Anne Richter
Asset Type	Software	Est. End Date	-

Project Description

This project involves the purchase of License Plate Recognition (LPR) equipment to support the enforcement operation of the parking program.

General Comments

The LPR equipment contains cameras that are capable of scanning and recognizing the license plates of parked vehicles. This license plate data is used to conduct parking enforcement in areas with posted time limits, locate stolen automobiles, identify vehicles with parking offences, verify paid parking on the flex parking system, and collect data for use in parking stall occupancy/turnover studies.

The plan involves the addition of three LPR systems at the rate of one per year beginning in 2020.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
System Purchase	0.0	65.0	65.0	65.0	0.0
Total	0.0	65.0	65.0	65.0	0.0
FINANCING DETAILS					
PARKING RESERVE	0.0	65.0	65.0	65.0	0.0
Total	0.0	65.0	65.0	65.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2433 TU-8TH STREET & CPR GRADE SEPARATION

Project Status	Open	Year Identified	2012
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	David LeBoutillier
Asset Type		Est. End Date	-

Project Description

This project involves functional planning studies, in conjunction with Canadian Pacific Railway, for the design of a grade separation at 8th Street East to improve safety at the existing grade level interchange in order to facilitate the development of the Holmwood Sector.

General Comments

A fully protected rail crossing will be the interim step prior to overpass construction.

Discussions are ongoing to confirm external funding from the developer.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
8th St & CPR Grade Separation	400.0	0.0	0.0	38,500.0	0.0
Total	400.0	0.0	0.0	38,500.0	0.0
FINANCING DETAILS					
PRIVATE CONTRIBUTIONS	400.0	0.0	0.0	38,500.0	0.0
Total	400.0	0.0	0.0	38,500.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2434 TU-HWY 11 & HWY 16 CLOVERLEAF

Project Status	Open	Year Identified	2012
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	David LeBoutillier
Asset Type		Est. End Date	-

Project Description

This project involves a functional planning study for improvements to the existing interchange and/or replacement structures to improve safety and function of the interchange.

General Comments

The functional planning study began in 2016 and was completed in 2017. The study recommended short and long-term improvements and replacement of the interchange in the future as noted in the future investments within this project.

The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized services.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
HWY 11 & HWY 16 Cloverleaf Functional Study	0.0	5,200.0	0.0	0.0	0.0
Total	0.0	5,200.0	0.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	5,200.0	0.0	0.0	0.0
Total	0.0	5,200.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2437 TU-11TH STREET REALIGNMENT

Project Status	Open	Year Identified	2012
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	David LeBoutillier
Asset Type		Est. End Date	-

Project Description

This project involves the realignment of 11th Street from Crescent Boulevard to Highway 7 and includes the construction of sound attenuation adjacent to the Montgomery Place neighbourhood.

General Comments

11th Street between Fairlight Drive and Highway 7 is classified as a boundary road which was once a secondary highway annexed by the City. The condition of this roadway is poor as it is failing structurally in numerous locations. The future alignment of this roadway is not known at this time as the Southwest Sector Plan is currently being developed.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	0.0	0.0	0.0	0.0	5,600.0
Total	0.0	0.0	0.0	0.0	5,600.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	0.0	0.0	0.0	5,600.0
Total	0.0	0.0	0.0	0.0	5,600.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2442 TU-DALMENY ROAD/HWY 684 REPLACEMENT

Project Status	Open	Year Identified	2012
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	David LeBoutillier
Asset Type		Est. End Date	-

Project Description

This project involves the planning, property acquisition, construction and complete rehabilitation of Dalmeny Road (inside City limits)/Highway 684 (outside City limits). The reconstruction of Highway 684 north of the City limits will be coordinated with Saskatchewan Ministry of Highways and Infrastructure.

General Comments

Two lanes for north and south bound traffic will be constructed immediately west of the existing Dalmeny Road (inside City limits), as well as intersections at 33rd Street and Claypool Drive. Traffic will then be redirected from the existing road to the new road. The existing road will be completely restored in the future and a median will be constructed at that time.

Prior Budget Approval

\$300,000

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Property Acquisition	0.0	500.0	0.0	0.0	0.0
Total	0.0	500.0	0.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED TRANSPORTATION INFR EXPANSION	0.0	500.0	0.0	0.0	0.0
Total	0.0	500.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2446 TU-PEDESTRIAN CROSSING IMPROVEMENTS

Project Status	Open	Year Identified	2012
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Nathalie Baudais
Asset Type		Est. End Date	-

Project Description

This project involves upgrading existing pedestrian devices or installation of new pedestrian crossing devices. Recommendations for devices are from neighbourhood reviews, corridor reviews, or a concern from the public. All devices will meet the current warrant system used by the Transportation Division.

General Comments

This project supports the City of Saskatoon's long-term strategies of 'Moving Around' and 'Quality of Life'. Pedestrian crossing improvement projects are typically identified through neighbourhood traffic reviews, corridor studies, and resident inquiries. Improvement projects are prioritized based on Council Policy CO7-018: Traffic Control at Pedestrian Crossings.

Details on the program proposed for the budget year will be presented in an administrative report prior to, or concurrent with, the Council budget meeting.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction	120.0	250.0	150.0	150.0	150.0
Total	120.0	250.0	150.0	150.0	150.0
FINANCING DETAILS					
TRAFFIC SAFETY RESERVE	120.0	200.0	100.0	100.0	150.0
UNFUNDED TRAFFIC SAFETY RES	0.0	50.0	50.0	50.0	0.0
Total	120.0	250.0	150.0	150.0	150.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2448 TU-INTELLIGENT TRANSPORTATION SYSTEM

Project Status	Open	Year Identified	2012
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Goran Lazic
Asset Type		Est. End Date	-

Project Description

This project provides capital funding for the development of Intelligent Transportation Systems (ITS).

General Comments

ITS can include (but is not limited to) traffic monitoring cameras, variable message boards, traffic priority, incident management systems, Weigh-In-Motion (WIM) devices, Road-side Weather Information Systems (RWIS), and Advanced Traveler Information Systems (ATIS). ITS also includes the Advanced Traffic Management Systems.

In 2017 the ITS Needs Assessment was completed. The future investments are related to the implementation of the recommendations from the plan.

The planned procurement method for this project is to be accomplished utilizing internal staff, due to existing staff capacity and expertise to perform the work.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Feasibility Study	200.0	200.0	200.0	200.0	0.0
Total	200.0	200.0	200.0	200.0	0.0
FINANCING DETAILS					
TRANSP INFRAS EXPANSION	200.0	200.0	200.0	200.0	0.0
Total	200.0	200.0	200.0	200.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2449 TU-RAIL YARD RELOCATIONS

Project Status	Open	Year Identified	2012
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Don Cook
Asset Type		Est. End Date	-

Project Description

This project is to fund the relocation of both Canadian National and Canadian Pacific railway yards to outside city limits.

General Comments

Discussions with both railways are required prior to funding any portion of the relocation.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	0.0	0.0	0.0	0.0	1,000.0
Total	0.0	0.0	0.0	0.0	1,000.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	0.0	0.0	0.0	1,000.0
Total	0.0	0.0	0.0	0.0	1,000.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2459 LAND DEV'T-SOUTH CASWELL HILL REDEVELOPMENT

Project Status	Open	Year Identified	2012
Project Type	REJUVENATION	Manager	Rob Tomiyama
Asset Type		Est. End Date	-

Project Description

This project involves the transformation of South Caswell Hill from a former industrial area containing Saskatoon Transit offices and bus barns, to a mixed-use community. The area transition will require capital investment to prepare the land and buildings for new uses. The project involves the development of a revised Concept Plan in cooperation with community residents and stakeholders, and preparation of the land and buildings for sale. The original Concept Plan for the redevelopment was adopted by Council on April 12, 2010, and serves as the general guideline for future development.

General Comments

The area known as South Caswell Hill is projected to undergo significant redevelopment after the Saskatoon Transit operations and other former industrial uses relocate in early 2017 to the Civic Operations Centre. In order to facilitate development and to eliminate much of the risk associated with these sites, a number of investigations and clean up actions are required, including a Detailed Phase 2 Environmental Site Assessment, a risk assessment and remediation evaluation, a structural assessment of the buildings, and any necessary remediation work. \$1.5 million will be allocated to site remediation studies and cleanup to occur in 2018 and 2019. An additional \$2 million will be required in 2019 to assist with infrastructure upgrades, and the development of a park or open space in the area.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Construction	2,000.0	0.0	0.0	0.0	0.0
Total	2,000.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
PROPERTY REALIZED RES	2,000.0	0.0	0.0	0.0	0.0
Total	2,000.0	0.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2468 TU-ACTIVE TRANSPORTATION PLAN IMPLEMENTATION

Project Status	Open	Year Identified	2017
Project Type	STUDY/PLANNING	Manager	Don Cook
Asset Type		Est. End Date	-

Project Description

This project involves the implementation of the Active Transportation Plan.

General Comments

The Active Transportation Plan was adopted in 2016 and identified 80 action items. A five-year action plan has been prepared that outlines the immediate priorities for implementation.

Details on the program proposed for the budget year will be presented in an administrative report prior to, or concurrent with, Council budget meeting.

Active Transportation infrastructure for 2019 and forward has been identified through separate components of the project including:

02 Audible Pedestrian Signal Program (Formerly CP1963.03)

03 Curb Ramp Program (Formerly CP1963.04)

04 New Sidewalk Program (Formerly CP0948)

05 Cycling Network (Formerly CP1137)

The planned procurement method for this project is to be accomplished utilizing a combination of internal staff and external contractors, due to existing staff capacity and expertise to perform the work, requirement of specialized services, and availability of technology in-house and long-term requirements.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
AT Plan Implementation	775.0	2,425.0	1,350.0	1,350.0	1,350.0
Audible Pedestrian Signal Program	0.0	50.0	0.0	50.0	0.0
Curb Ramp Program	200.0	200.0	200.0	100.0	100.0
Cycling Network	100.0	100.0	150.0	100.0	200.0
New Sidewalk Program	100.0	100.0	150.0	100.0	200.0
Total	1,175.0	2,875.0	1,850.0	1,700.0	1,850.0
FINANCING DETAILS					
ACTIVE TRANSPORTATION RESERVE	575.0	575.0	575.0	575.0	575.0
TRAFFIC SAFETY RESERVE	0.0	50.0	0.0	50.0	0.0
TRANSP INFRAS EXPANSION	600.0	900.0	600.0	400.0	800.0
UNFUNDED ACTIVE TRANSPORTATION RESERVE	0.0	1,350.0	675.0	675.0	475.0
Total	1,175.0	2,875.0	1,850.0	1,700.0	1,850.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2469 CY-PERMANENT WASHROOMS - SPECIAL USE PARKS

Project Status	Open	Year Identified	2011
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Brad Babyak
Asset Type	Buildings	Est. End Date	-

Project Description

This project involves the construction of a permanent year-round washroom in a Special Use park.

General Comments

There is a program need to provide washrooms in the Special Use parks to support year-round activities at the riverbank parks and along the Meewasin Valley Authority (MVA) trail system.

The popularity of riverbank parks used by citizens and visitors continues to grow. This facility is needed by park patrons as well as the public attending the numerous festivals and special events that take place in the Special Use parks year round. The location for a new washroom will be strategically located along the MVA trail system in an area that will support or enhance existing and future programming opportunities that take place at riverbank parks.

The 2020 plan includes the completion of a detailed design and construction of a permanent year-round washroom facility.

This project was approved in principle, by City Council on March 26, 2018 through the Recreation and Parks Facilities Game Plan Proposed Funding Plan, subject to a funding plan being identified and approved.

Operating Impacts

2021 - Operating costs to be determined during design phase as specific features of the facility are determined.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Special Use Park	0.0	750.0	0.0	0.0	0.0
Total	0.0	750.0	0.0	0.0	0.0
FINANCING DETAILS					
FUNDING PLAN CONTRIBUTION	0.0	750.0	0.0	0.0	0.0
Total	0.0	750.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2471 CY-KINSMEN PARK & AREA - MASTER PLAN

Project Status	Open	Year Identified	2011
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Brad Babyak
Asset Type	Buildings (Parks & Open Spaces)	Est. End Date	-

Project Description

This project involves the development and implementation of the Kinsmen Park & Area Master Plan.

General Comments

The Master Plan set up a process to renovate this site in order to create a primary civic activity-node that is place-specific, memorable and enjoyable for all ages. There is a focus on children's programming and play and it will be an activity generator for people of all ages. The functional program for Kinsmen Park & Area will consider users City-wide, while continuing to support local communities and the growing downtown population.

The Master Plan integrates activities on both sides of Spadina Crescent, including Kinsmen Park, the existing Mendel building and grounds, and the Shakespeare on the Saskatchewan site. The fully connected site will address issues around safety, ease of access for all, and traffic movement.

The 2019 plan includes implementation of some of the priorities and recommendations identified from the parking/transportation study completed in 2018.

Concession Building Expansion

The 2023 plan proposes that the existing concession building be renovated, winterized, and expanded to support year-round activity and programming in the park. Potential programming could include a warm-up area for winter park users, concession service, multi-purpose programming space (meeting room, event office, special events), and public washrooms.

Special Note

The 2019 funding source is the interest earned on the Kinsmen Park Sponsorship Trust from Nutrien.

Prior Budget Approval

\$815,000 for Site Improvements and Kinsmen Festival Site Construction

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Concession Building	0.0	0.0	0.0	0.0	2,885.0
Site Improvements	133.0	0.0	0.0	0.0	0.0
Total	133.0	0.0	0.0	0.0	2,885.0
FINANCING DETAILS					
PRIVATE CONTRIBUTIONS	133.0	0.0	0.0	0.0	0.0
UNFUNDED MAJOR PROJECTS	0.0	0.0	0.0	0.0	2,885.0
Total	133.0	0.0	0.0	0.0	2,885.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2474 CY-HUDSON BAY AREA DISTRICT PARKS

Project Status	Open	Year Identified	2012
Project Type	REJUVENATION	Manager	Brad Babyak
Asset Type	Parks and Open Spaces	Est. End Date	-

Project Description

This project involves a program plan review, survey, and site analysis, design and construction for the Hudson Bay Area Parks (Pierre Radisson, Henry Kelsey North, and Scott).

General Comments

A Master Plan prepared in 1989 provided a framework for the public consultation and park program review planned for 2016. Survey and site analysis will provide an understanding of water levels and what needs to be done to improve the landscaping and access through the park for pedestrians.

The Westmount Local Area Plan committee recognized "that while Westmount values its abundant green spaces and opportunities for active, community living, the neighborhood's parks are not being utilized to their full potential". This capital project will assist in creating the vision that the Westmount Local Area Plan committee has identified as important in components such as improved landscaping, walkways, benches, and lighting but still maintaining wide open spaces for users.

City Council developed and adopted the 10 year Strategic Plan. Quality of Life; specifically developing complete communities by connecting pathways through a number of neighbourhoods to promote active living; and the ability to enjoy the natural beauty and benefit of parks. Through a well-connected pathway network, Moving Around is improved by providing an alternate active transportation route through the Hudson Bay and Area Parks.

The future proposed phasing consists of:

2020 - Construction of Pierre Radisson Park Phase 2

2022 - Survey and site analysis for Henry Kelsey Park North

2023 - Detailed design & public consultation for Henry Kelsey Park North

2025 - Construction of Henry Kelsey Park North

2027 - Survey & site analysis for Scott Park

2028 - Detailed design & public consultation for Scott Park

2030 - Construction of Scott Park

Operating Impacts

Operating costs to be determined during design phase currently underway

Prior Budget Approval

\$50,000 Public consultations & park program review, survey & site analysis for Pierre Radisson Park

\$70,000 Development of a 2.99 acre off-leash dog park at Pierre Radisson Park

\$590,000 Detailed design for Pierre Radisson Park and construction of a regulation adult cricket field

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Henry Kelsey Park	0.0	0.0	0.0	50.0	90.0
Pierre Radisson Park	0.0	2,270.0	0.0	0.0	0.0
Total	0.0	2,270.0	0.0	50.0	90.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	2,270.0	0.0	50.0	90.0
Total	0.0	2,270.0	0.0	50.0	90.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2489 POLICE-FURNITURE REPLACEMENT

Project Status	Open	Year Identified	2012
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Earl Warwick
Asset Type	Building Contents	Est. End Date	-

Project Description

This project provides for the replacement of furniture that has reached life expectancy.

General Comments

This project will enable the Police Service to replace existing furniture based on condition assessments and industry standards and for life expectancy.

2019 funding is requested to replace furniture that is due for replacement according to the replacement schedule including items such as desks, filing cabinets and chairs.

Operating Impacts

No increase anticipated for 2019.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Furniture Replacement	50.0	50.0	50.0	50.0	50.0
Total	50.0	50.0	50.0	50.0	50.0
FINANCING DETAILS					
POLICE FAC RENOVATION RES	50.0	50.0	50.0	50.0	50.0
Total	50.0	50.0	50.0	50.0	50.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2497 POLICE-EQUIPMENT REPLACEMENT

Project Status	Open	Year Identified	2014
Project Type	EQUIPMENT REPLACEMENT	Manager	Earl Warwick
Asset Type	Police Equipment	Est. End Date	-

Project Description

This project allows for the replacement of specialized equipment used by Police operations.

General Comments

This project provides for the replacement of specialized equipment used by Saskatoon Police Service operations including Patrol, Criminal Investigations, the Traffic Section and 'Special Teams' - the Explosives Disposal Unit (EDU), the Tactical Support Unit (TSU), K-9 and the Public Safety Unit (PSU).

The 2019 project is for funding to replace TSU, PSU, EDU, and K-9 equipment. The plan also includes the replacing the aging CEW, speed detection equipment, roadside screening devices, aging pistols, expired body armour, investigation equipment and installing equipment into new fleet replacement units.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Equipment Purchase	711.0	701.0	335.0	411.0	333.0
Total	711.0	701.0	335.0	411.0	333.0
FINANCING DETAILS					
POLICE OPER EQUIP & TECH RES	711.0	701.0	335.0	411.0	333.0
Total	711.0	701.0	335.0	411.0	333.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2498 POLICE-EQUIPMENT EXPANSION

Project Status	Open	Year Identified	2014
Project Type	EQUIPMENT REPLACEMENT	Manager	Earl Warwick
Asset Type	Police Equipment	Est. End Date	-

Project Description

This project allows for the purchase of additional specialized equipment used by Police operations.

General Comments

This project provides for the purchase of additional specialized equipment used by Saskatoon Police Service operations including Patrol, Criminal Investigations, Traffic Section and 'Special Teams' - the Explosives Disposal Unit (EDU), the Tactical Support Unit (TSU), and the Public Safety Unit (PSU).

The 2019 project calls for funding to support the purchase of K-9 equipment and communication workstation.

Operating Impacts

No increase anticipated for 2019. Future operating impacts are under review.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Equipment Purchase	157.0	0.0	0.0	0.0	0.0
Total	157.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
POLICE OPER EQUIP & TECH RES	106.0	0.0	0.0	0.0	0.0
PRIVATE CONTRIBUTIONS	51.0	0.0	0.0	0.0	0.0
Total	157.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2499 POLICE-TECHNOLOGY REPLACEMENT

Project Status	Open	Year Identified	2014
Project Type	EQUIPMENT REPLACEMENT	Manager	Earl Warwick
Asset Type		Est. End Date	-

Project Description

This project provides for the replacement/upgrading of computer hardware and software including network servers, infrastructure, storage and security as well as desktop and in-car computers/technology.

General Comments

The 2019 project includes funding to support several multi-year projects that will replace/upgrade , network infrastructure, virtual desktops, in car cameras/notebooks and provide Project Administrators.

Future year projects include replacement of desk top computers, network infrastructure with various police operations software.

Operating Impacts

Anticipated increases are \$26,400 in 2019 and \$43,000 in 2021.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Equipment Purchase	533.0	1,398.0	982.0	825.0	1,045.0
In Car Camera Replacement	48.0	0.0	853.0	0.0	0.0
Network Upgrades	0.0	153.0	0.0	0.0	0.0
Virtual Desktop Replacement	0.0	0.0	138.0	0.0	0.0
Total	581.0	1,551.0	1,973.0	825.0	1,045.0
FINANCING DETAILS					
POLICE OPER EQUIP & TECH RES	581.0	1,551.0	1,973.0	825.0	1,045.0
Total	581.0	1,551.0	1,973.0	825.0	1,045.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	26.4	0.0	43.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2504 FIRE-NEW EQUIPMENT

Project Status	Open	Year Identified	2012
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Glenn Ledray
Asset Type	Fire Apparatus	Est. End Date	-

Project Description

This project provides the addition of major firefighting apparatus and equipment, including vehicles and water rescue apparatus.

General Comments

New equipment to be added include:

- Full-face underwater breathing apparatus, which allows for safer training practices of certified dive instructors.
- Surface water suits will be provided for all front-line engines to achieve a more rapid response for a surface water rescue by trained personnel throughout the city.
- Smoke curtains will be purchased to hang from doorways in order to stop air exchange and decrease the chance of a back draft occurring during a structure fire. This will increase firefighter safety and allow for redeployment of firefighter staff at an incident typically utilized for door control.
- Pelican lights will be added to front line apparatus for emergency incident scene safety. These portable lights are LED battery operated which do not require generators to power and allow for reduction in trip hazards which therefore increase scene safety.

Operating Impacts

Provision to replace the new equipment:

\$7,100 - Dive Equipment (7 years)

\$2,500 - Smoke Curtains (10 years)

\$5,000 - Pelican Lights (5 years)

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Fire New Equipment	100.0	0.0	0.0	0.0	0.0
Total	100.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
FIRE - CAPITAL RESERVE	100.0	0.0	0.0	0.0	0.0
Total	100.0	0.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	14.6	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2509 FIRE-UNIFORMS

Project Status	Open	Year Identified	2018
Project Type	REJUVENATION	Manager	Glenn Ledray
Asset Type	Miscellaneous Equipment	Est. End Date	-

Project Description

This project provides for the purchase of uniforms and protective clothing required by the members of the Saskatoon Fire Department (SFD).

General Comments

Members of the SFD are provided with a dress uniform and work clothing, as outlined in their collective agreement, and a set of protective turnout gear. The National Fire Protection Association (NFPA) mandates a second set of protective turnout gear be available.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Dress Uniforms	0.0	50.0	0.0	50.0	0.0
Station Wear	80.0	50.0	70.0	50.0	50.0
Turnout Gear	175.0	175.0	175.0	175.0	175.0
Total	255.0	275.0	245.0	275.0	225.0
FINANCING DETAILS					
FIRE UNIFORMS RESERVE	255.0	275.0	245.0	275.0	225.0
Total	255.0	275.0	245.0	275.0	225.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2516 CP-DEVELOP ENTERPRISE MANAGEMENT STRATEGIES

Project Status	Open	Year Identified	2017
Project Type	SUPPORT SYSTEMS	Manager	Paul Ottmann
Asset Type		Est. End Date	-

Project Description

This project calls for a number of initiatives to partner with businesses to leverage technology and emerging trends to foster innovation by integrating strategy, business and technology to increase productivity and service delivery. This will allow the City to deliver on enterprise level applications and work towards achieving the City's goal of Service Saskatoon. The development and delivery of key programs will continue to build on the solid foundation laid in 2016.

General Comments

To achieve the vision and strategy set by the Corporation, the following specific areas continue to be developed and enhanced as they are implemented across the organization:

Disaster Recovery and Business Continuity:

- Develop business continuity roadmap for critical applications that are vital for the operation of the City.

Enterprise Asset Management Strategy:

- Streamline the management of City's technology assets thereby improving efficiency and reducing the cost of supporting the applications.

Enterprise Architecture Strategy:

- Develop a long term roadmap and strategy to address a low cost, cloud enabled strategy for our data centres encompassing our application and infrastructure (servers and network) layers.

Enterprise Data Management Strategy:

- Access to right information for decision making for the Corporation to leverage large volumes of data and transform it into actionable information that will help manage and plan a growing city.

IT Service Governance/ITIL Implementation:

- A long-term IT Service Governance strategy will be developed with key processes as a foundational piece of business required to manage usage and mitigate risk. This includes using ITIL (Information Technology Infrastructure Library), which provides a set of best practices for the IT Service Governance that focuses on aligning IT services with the needs of the business.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Capacity and Innovation	630.0	0.0	0.0	0.0	0.0
Total	630.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
C.I.S. DEVELOPMENT RESERVE	630.0	0.0	0.0	0.0	0.0
Total	630.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2519 COMMUNITY WINTER CITY STRATEGY DEVELOPMENT

Project Status	Open	Year Identified	2017
Project Type	STUDY/PLANNING	Manager	Christine Gutmann
Asset Type		Est. End Date	-

Project Description

This project includes engagement and awareness measures and small-scale initiatives towards creating a Winter City Strategy for Saskatoon. The Strategy will respond to the four-year Strategic Plan priority to provide opportunities for activities in a winter city and will address winter events, mobility and design among other aspects.

General Comments

The project represents a multi-year strategy-formation process. It includes community engagement to co-design the strategy as well as awareness campaigns to motivate involvement in planning and current winter opportunities. Funding of specific small-scale community initiatives is also provided to build momentum for the strategy. Investments in communications, coordination and new infrastructure are driven by the community through engagement.

Prior funding allocations have gone to support design review and draft guidelines, complete a civic policy review and draft amendments, support internal civic service and process reviews, and participate in the Winter Cities Institute. Communications and outreach to promote existing assets and new community initiatives have also been key in the development of a Winter City. Investments in new assets including temporary warming huts at strategic locations and pop-up/mobile infrastructure support festivals and events.

The proposed funding for 2019 consists of continuing the work on the lighting project as well as development of further pilot projects and communication initiatives.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Winter City	250.0	0.0	0.0	0.0	0.0
Total	250.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
RESERVE FOR CAPITAL EXPENDITURES	250.0	0.0	0.0	0.0	0.0
Total	250.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2525 FIRE-REGIONAL TRAINING FACILITY

Project Status	Open	Year Identified	2018
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Morgan Hackl
Asset Type	Fire Buildings	Est. End Date	-

Project Description

This project provides for the development of a Regional Training Facility (RTF). Currently the Saskatoon Fire Department (SFD) does not have a dedicated training facility. It is anticipated that this facility be located north of Saskatoon.

General Comments

The RTF supports the City's Regional Plan. The SFD is working with fire departments north of the city to identify the appropriate location. Through this collaboration, training infrastructure will be shared between departments. Discussions have occurred between SFD and Emergency Managements and Fire Safety (EMFS), the Provincial Fire Commissioner Office, to collaborate for storage of cache equipment needed for emergency response. This equipment would be available to SFD and regional partners for use. The end goal is for a Regional Centre of Excellence that will facilitate training for departments across the northern portion of Saskatchewan. To support corporate initiatives SFD Administration is a part of a Center of Excellence Committee that is investigating opportunities for a City of Saskatoon training facility.

The estimated cost of the first phase of the project is \$5.0 million. The project may be expanded if regional partnership, private sector, and City of Saskatoon corporate partnership contributions are secured.

Operating Impacts

There will be no increase in operating costs.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Regional Training Facility	0.0	1,400.0	3,600.0	0.0	0.0
Total	0.0	1,400.0	3,600.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED REALLOCATION	0.0	1,400.0	3,600.0	0.0	0.0
Total	0.0	1,400.0	3,600.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2528 CY-DOG PARK DEVELOPMENT

Project Status	Open	Year Identified	2011
Project Type	SUPPORT SYSTEMS	Manager	Brad Babyak
Asset Type	Parks and Open Spaces	Est. End Date	-

Project Description

This project involves the development of dog parks, which are naturalized spaces where dogs are legally permitted to be off-leash. This allows both the owner/handler and companion animal to enjoy exercise together while socializing with others doing likewise. Future sites will be dependent on availability of suitable City-owned land or park space (neighbourhood, suburban and City-wide) and subject to public consultation. Development of new dog parks will be consistent with the dog park program plan review completed in 2012.

General Comments

The popularity of off-leash dog parks is growing and there is increasing demand for this recreational activity. The need for additional off-leash dog parks was evident during the public consultation portion of the Chief Whitecap Park Master Plan project and substantiated by a 2011 public survey.

A new public survey planned for 2018 to provide feedback on potential improvements and/or changes that could be implemented within the dog park program.

The 2021 plans include upgrades to existing dog parks.

The 2023 plans include upgrades to existing dog parks.

The 2024 plans include the development of a new infill neighbourhood dog park on the east/west side of the river; and will be developed through prospective community group requests.

The 2026 plans involve the development of a new infill neighbourhood dog park (opposite side of the river from 2023); and will be developed through prospective community group requests.

The 2027 plans include upgrades to existing dog parks.

Operating Impacts

2022 - operating costs to be determined during design phase.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Dog Park Development & Upgrades	0.0	0.0	50.0	0.0	50.0
Total	0.0	0.0	50.0	0.0	50.0
FINANCING DETAILS					
ANIMAL SERVICES RESERVE	0.0	0.0	50.0	0.0	50.0
Total	0.0	0.0	50.0	0.0	50.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2538 CP-NATURAL CAPITAL ASSET VALUATION

Project Status	Open	Year Identified	2017
Project Type	ENVIRONMENTAL PROTECTION	Manager	Nasha Spence
Asset Type		Est. End Date	-

Project Description

The Natural Capital Asset (NCA) valuation is a process of creating an inventory of the natural capital residing within the City and systematically applying a financial value to it similar to the process currently applied to built infrastructure. NCA valuation will enable City departments to identify the effect of operations and capital projects on natural assets, how to mediate risk to these assets, and how to incorporate natural assets as an alternative to built infrastructure.

General Comments

The City has committed to the Covenant of Mayors for Climate and Energy to respond to climate change through mitigation activities and adaptation planning. The Natural Capital Asset valuation process identifies the value (in financial terms) of carbon sequestration and climate change adaptation processes.

Environmental planning has become a standard that most municipalities engage. The Asset Management Plan, the Risk Management Plan, Mitigation Business Plan, and the Green Infrastructure Strategy have identified the need to financially value natural infrastructure in the community to advise the City's ongoing development and operations.

Funding is also required to determine the adequacy of current civic software for reporting the NCA results.

Operating Impacts

Supporting annual operating requirements for NCA valuations is estimated to be \$75,000 (2020).

Special Note

The City was successful in obtaining a grant from the Federation of Canadian Municipalities (FCM) for funding in place in 2017 to partially fund this project.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Natural Capital Asset Valuation	0.0	196.0	0.0	0.0	0.0
Total	0.0	196.0	0.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED RCE	0.0	196.0	0.0	0.0	0.0
Total	0.0	196.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	75.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2540 CIVIC CONSERVATORY REPAIR/REPLACEMENT

Project Status	Open	Year Identified	2017
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Jim Charlebois
Asset Type	Buildings	Est. End Date	-

Project Description

The Civic Conservatory building attached to the future Children's Discovery Museum is past its life expectancy and requires complete rehabilitation with potential expansion opportunities.

General Comments

Originally built in 1964, the Civic Conservatory attracts approximately more than 80,000 visitors annually. Recent condition assessments indicate that while the existing concrete columns and beam structures are adequate, the remainder of the building envelope, roof design, health and safety measures and accessibility are all in need of replacement.

The conservatory has the opportunity to expand its existing footprint in order to support partnerships with the Children's Discovery Museum, the City's Healthy Yards and Winter City programs, Open Door Society programs, the Kinsmen Park and Area Master Plan and countless other stakeholder groups and tours that currently use the conservatory.

The funding for initial design development in 2018 engaged stakeholders and the public in creating an integrated program for the expanded space, with the understanding that construction is contingent on senior government funding.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Civic Conservatory Repair/Replacement	0.0	3,368.0	0.0	0.0	0.0
Total	0.0	3,368.0	0.0	0.0	0.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	3,368.0	0.0	0.0	0.0
Total	0.0	3,368.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2541 CY-GROWTH PLAN TO HALF A MILLION IMPLEMENTATION

Project Status	Open	Year Identified	2014
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Chris Schulz
Asset Type		Est. End Date	-

Project Description

This project involves implementation and project coordination, including community engagement and communications, for the core initiatives of the Growth Plan to Half a Million.

General Comments

The Growth Plan to Half a Million was approved in principle by City Council in April 2016.

The Growth Plan to Half a Million Implementation project consists of the following components:

Secondary Plan Process and Corridor Redevelopment:

This component supports the Growth Plan and Transit Plan implementation by addressing the land use and public realm amenities adjacent to the system, and provides for appropriate transitions into existing neighbourhoods. In conjunction with detailed design of the Bus Rapid Transit network, a Transit Corridor land use, built form and zoning analysis and strategy, as well as the secondary transportation planning and servicing strategy will provide inputs for discussion through the secondary plans that will then be staged along the corridor segments identified in the Growth Plan. The Secondary Planning process will involve review of existing conditions, community engagement, and the recommendation of preferred options, to be followed by capital construction projects the Transit Plan Implementation component, beginning in 2019 with senior government funding support. In addition, more focused secondary planning for Transit Village Concept Plans, will be conducted at important station locations along the Bus Rapid Transit network.

The transit corridor planning work also includes a Brownfield Renewal Strategy that includes environmental assessments of key corridor locations in order to fully understand the extents of contamination and to develop relevant management plans to facilitate future transit development. Funds allocated for this purpose are being used to leverage support from the Federation of Canadian Municipalities (FCM) Green Municipal Fund. The FCM funds received will be used to take the information learned from the corridor study and expand the Brownfield Renewal Strategy to apply citywide.

Transit Plan Implementation:

This component includes the development of functional plans and detailed design of all rapid transit infrastructure, including roadway infrastructure, stations, and passenger amenities/support systems as well as the supporting plans, including the transit reconfiguration plan, park and ride strategy and economic analysis. It also includes design and construction of necessary supportive infrastructure, including streetscape and water, sewer and storm sewer infrastructure condition/capacity upgrades necessary to support corridor growth. Construction of the system components and roadway cross-section enhancements is anticipated to begin in 2020 subject to necessary approvals and senior government funding support through the Investing in Canada Plan: Public Transit Stream.

This component also involves the development of a detailed operational plan for specific schedule, fleet, and operational impacts, such as staffing resources, required to implement services and the transit structure outlined in the Long Term Transit Plan initiative of the Growth Plan to Half a Million. PTIF funding will continue to support the installation and rehabilitation of transit shelters, and the purchase and outfitting of the fleet with equipment to support long term operational and data requirements, such as automatic passenger counters, transit signal priority, etc.

Project Coordination:

This component involves the continuation of the Growth Plan Manager position to lead the development of the implementation strategy and coordinate the delivery as well as the Communications and Engagement positions to assist implementation of all project components.

Policy and Plan Development:

The Growth Plan to Half a Million includes policies and strategies that are not reflected in the existing Official Community Plan Bylaw. A renewal of the Official Community Plan will be required to update the bylaw.

Implementation of the Financing Growth Study component requires review of the funding model for growth and policy development to create an approach that supports the Growth Plan to Half a Million.

A Transportation Plan will be produced that provides an overview of the policies, plans, strategies, and initiatives that guide investments which allow people to move around the City. This plan will include a framework for a network of major roadways to a city population of half a million. Long term modelling of city and regional traffic demand patterns will also be added and maintained over time.

Internal staffing and communications related to this initiative are included in this project.

Core Bridge Strategy:

This component involves the preparation of a preliminary conceptual design for the bridge, addressing components such as size, connections, and design. Future funds will be requested for the development and execution of an engagement and decision strategy for the bridge. Options for design would be prepared and the impacts of the bridge would need to be defined and reviewed through a community engagement process. The development of a functional plan and a funding plan for implementation would be later phases of the project. Future funding requests for this component will be based on transit requirements and river crossing demand.

Investing in Canada Plan: Public Transit Stream Funding:

In 2016, the Federal Government allocated \$29.0 million to Saskatchewan under Phase 1 of the PTIF (Public Transit Infrastructure Fund). The City of Saskatoon received approximately \$18.65 million for Phase 1 of the PTIF. Federal funding will provide up to 50% for eligible projects, and the City is required to fund the remaining 50%. As approved at the April 18, 2016, Governance and Priorities Committee meeting, the City's matching contribution required for the PTIF funds from the federal government is from reallocated funding by using Building Canada Funds for water and wastewater projects and reallocating an equal dividend from the utilities to fund public transit. Total capital investment of \$37.3 million is included in 2016/2017 budget funded by PTIF and matching civic funding.

The scope of work for projects eligible for federal funding from PTIF was approved by City Council on June 27, 2016 and includes:

- Immediate work to address shelter improvements, add new shelters and improve network accessibility and active transportation linkages to transit;
- New equipment, such as Automatic Passenger Counters, transit signal priority equipment, and other equipment will align with the development of a comprehensive intelligent transportation system strategy in order to better monitor and assess service effectiveness, and enhance the reliability and efficiency of transit operations;
- Preparation of a Bus Rapid Transit (BRT) Indicative Detailed Design for the complete system of rapid transit corridors in 2016, 2017 and 2018 including new facilities to support Transit customers, such as BRT stations and Park and Ride facilities will also be designed, and locations and phasing will be identified;
- To complement the BRT Indicative Detailed Design, a Transit corridor zoning analysis and strategy will be undertaken, as well as a water and wastewater servicing and implementation strategy for the entirety of the BRT corridors.

The project budget for years 2019-2028 includes assumptions about Investing in Canada Plan: Public Transit Stream based on the funding formula identified in the 2017-2018 Federal Budget. The Federal infrastructure program (formerly PTIF) has been renamed for the next round of funding. The total funding anticipated for the City of Saskatoon, based on the formula, is approximately \$405 million over 10 years, with participation from the Federal government and potentially the Provincial government. City's share of costs for this component is expected to range between 27% and 60% of the total, depending on whether or not the Province participates.

The planned procurement method for this project is to be accomplished in part utilizing internal staff, due to the available capacity of existing staff to perform the work, including the required expertise for the Corridor Planning program, Project Management, and oversight of Communications and Engagement.

Other components of the work have a planned procurement method utilizing external contractors, due to the requirement for specialized services for a limited period of time during project design and development. In addition, regulated requirements associated with federal funding require public procurement of services.

Operating Impacts

For 2020 and beyond, operating impacts are anticipated, but are not yet known. Estimated operating impacts will be determined as part of the functional planning and detailed design process for the Transit/Rapid Transit plan.

Prior Budget Approval

\$13,800,000 - Implementation Planning and Design (includes \$90,000 grant from the Federation of Canadian Municipalities Green Municipal Fund, assuming all anticipated costs are eligible)

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Policy & Plan Development	330.0	0.0	0.0	0.0	0.0
Project Coordination	300.0	300.0	300.0	300.0	300.0
Secondary Plan Process & Corridor Redevelopment	600.0	600.0	600.0	600.0	600.0
Transit Plan Implementation	13,084.0	47,506.0	60,900.0	36,620.0	20,000.0
Total	14,314.0	48,406.0	61,800.0	37,520.0	20,900.0
FINANCING DETAILS					
ICP - TRANSIT (FED)	13,084.0	27,880.0	19,080.0	8,000.0	8,000.0
RESERVE FOR CAPITAL EXPENDITURES	1,230.0	0.0	0.0	0.0	0.0
UNFUNDED MAJOR PROJECTS	0.0	19,626.0	41,820.0	28,620.0	12,000.0
UNFUNDED RCE	0.0	900.0	900.0	900.0	900.0
Total	14,314.0	48,406.0	61,800.0	37,520.0	20,900.0

Urban Planning and Development

Approved 2019

Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2550 TU-WEST/CENTRAL MULTI-USE CORRIDOR

Project Status	Open	Year Identified	2014
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Jay Magus
Asset Type		Est. End Date	-

Project Description

This project involves the design and construction of a multi-use pathway to extend from Idylwyld Drive to Avenue W, to be located adjacent to the railway corridor. Future phases could include linkages to extend east to Central Avenue. A phased approach will be necessary to address any land acquisition challenges as the project proceeds.

General Comments

The idea for a multi-use bicycle and pedestrian pathway within the CPR ROW came out of the 2002 Pleasant Hill Local Area Plan. The plan indicates that the development of a multi-use pathway facility within the ROW will link parks in the core of Saskatoon, connect the west side neighbourhoods to downtown and recognize the use of the ROW as an existing informal pathway through the four neighbourhoods of Pleasant Hill, Riversdale, West Industrial and Caswell Hill.

The 2001 Pleasant Hill LAP has recommended that the Traffic Section prepare a report for City Council outlining the feasibility of formally allocating a portion of the CPR ROW for the purposes of a pedestrian and cycling linkage from downtown into the west portion of Saskatoon, and that consideration be given to the cost, maintenance, liability and safety aspects of establishing the linkage. The Traffic Engineering Section prepared a feasibility study that was adopted by City Council at the end of 2007. The recommendation for a formal pedestrian and cyclist linkage within the CPR ROW was also supported by the LAP Committees and included in the Local Area Plans for Riversdale and West Industrial.

Construction of the 25th Street Extension introduced changes in railway operations within the City, which resulted in changes to existing railway infrastructure. It also opened up discussions with CP around the issue of existing trespassing on the CPR ROW between Idylwyld Drive and Avenue W. A safety pathway will address the issue of trespass and pedestrian safety. The initial phase has been constructed between Idylwyld Drive and Avenue D. Phase II has been identified in 2017 for \$400,000 to construct between Avenue D and Avenue H. The safety pathway will be extended to Avenue W by Phase III. Future phases could extend to Central Avenue as significant segments of a trail system already exist.

Phase I: Complete

Phase II: Avenue D to Avenue H (planning in progress)

Phase III: Avenue P to Avenue W (2019)

Phase IV: Avenue L to Avenue P (2020)

Phase V: Avenue H to Avenue L (2021)

All design and construction are delayed pending the recommendations from the rail relocation project (CP 1456).

Operating Impacts

The future operating impact would be \$2,100 for snow clearing, if funded.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Construction	0.0	400.0	400.0	400.0	400.0
Total	0.0	400.0	400.0	400.0	400.0
FINANCING DETAILS					
UNFUNDED ACTIVE TRANSPORTATION RESERVE	0.0	400.0	400.0	400.0	400.0
Total	0.0	400.0	400.0	400.0	400.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2559 WTP-SAND SEPARATORS

Project Status	Open	Year Identified	2013
Project Type	EQUIPMENT REPLACEMENT	Manager	Pam Hamoline
Asset Type	Water Treatment Plant	Est. End Date	-

Project Description

This project involves replacing the existing sand separators at the WTP.

General Comments

The existing sand separators no longer effectively remove sand from the raw water supply. Sand separators are a mechanical device subject to abrasion from sand/silt in the raw water supply. The work involves replacing the mechanical components and reusing the existing process piping in the sand separator building. This project will require external service providers.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Sand Separators	0.0	3,692.0	0.0	0.0	0.0
Total	0.0	3,692.0	0.0	0.0	0.0
FINANCING DETAILS					
WATERWORKS CAPITAL PROJECTS RESERVE	0.0	3,692.0	0.0	0.0	0.0
Total	0.0	3,692.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2560 WTP-HVAC SYSTEM ADMINISTRATION BUILDING

Project Status	Open	Year Identified	2013
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Syed Naqvi
Asset Type	Water Treatment Plant	Est. End Date	-

Project Description

This project involves the assessment of the WTP's Heating, Ventilation and Air Conditioning (HVAC). This is a system upgrading of existing HVAC systems. Air Handling Units, Make-up Air Units and Electrical component are particularly vulnerable to high temperature environments.

General Comments

The existing HAVC system at the Admin. Office is not providing acceptable comfort condition for the occupants. The last upgrades were completed in 2007.

The engineering services will be procured in 2018 with construction scheduled for 2018/2019. This upgrade of HVAC system will improve the heating system in Admin. Building in winter season and will increase ventilation and cooling during the summer.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
HVAC Syst Admin Build	700.0	0.0	0.0	0.0	0.0
Total	700.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
WATERWORKS CAPITAL PROJECTS RESERVE	700.0	0.0	0.0	0.0	0.0
Total	700.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2561 WTP-INFRASTRUCTURE UPGRADES

Project Status	Open	Year Identified	2013
Project Type	EQUIPMENT REPLACEMENT	Manager	Pam Hamoline
Asset Type	Water Treatment Plant	Est. End Date	-

Project Description

This project involves upgrades of equipment and infrastructure at the main plant and satellite reservoirs that do not warrant a separate capital project.

General Comments

Sections of the WTP are 100 years old with the remainder of the main plant at least 50 years old. Failures of old equipment and infrastructure are not predictable. This project funds upgrades that are immediately required.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Upgrades	0.0	3,120.0	1,082.0	5,624.0	5,793.0
Total	0.0	3,120.0	1,082.0	5,624.0	5,793.0
FINANCING DETAILS					
WATERWORKS CAPITAL PROJECTS RESERVE	0.0	3,120.0	1,082.0	5,624.0	5,793.0
Total	0.0	3,120.0	1,082.0	5,624.0	5,793.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2562 WTP-CLARIFIER CONSTRUCTION

Project Status	Open	Year Identified	2013
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Pam Hamoline
Asset Type	Water Treatment Plant	Est. End Date	-

Project Description

This project involves the construction of additional clarifier's within the existing Water Treatment Plant footprint.

General Comments

The 2009 Long Term Capital Development and Expansion Plan (LTCDEP) recommended additional clarifier capacity and this project is scheduled for 2021. The work involves decommissioning the existing west basin and building new clarifier's in its place. This represents the lowest cost alternative and allows the City to upgrade clarification without disturbing Victoria Park.

This project will require external service providers.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Clarifier Construction	0.0	0.0	1,193.0	12,525.0	12,901.0
Total	0.0	0.0	1,193.0	12,525.0	12,901.0
FINANCING DETAILS					
WATERWORKS CAPITAL PROJECTS RESERVE	0.0	0.0	1,193.0	12,525.0	12,901.0
Total	0.0	0.0	1,193.0	12,525.0	12,901.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2563 WTP-LOW LIFT UPGRADE

Project Status	Open	Year Identified	2013
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Pam Hamoline
Asset Type	Wastewater Treatment Plant	Est. End Date	-

Project Description

This project involves the upgrade of the low lift pumping station which is the secondary (backup) raw water intake and is located on the plant grounds.

General Comments

The work consists of replacing the numerous small pumps with two or three right sized units, upgrading the process piping, and modernizing the electrical service and control network.

With appropriate technical expertise, the majority of this project could be completed in house. External service providers will be required at a minimum on structural and building mechanical design.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Low Lift Upgrade	0.0	3,120.0	4,326.0	0.0	0.0
Total	0.0	3,120.0	4,326.0	0.0	0.0
FINANCING DETAILS					
WATERWORKS CAPITAL PROJECTS RESERVE	0.0	3,120.0	4,326.0	0.0	0.0
Total	0.0	3,120.0	4,326.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2571 WTP-CHLORINE ROOM CAPACITY UPGRADE

Project Status	Open	Year Identified	2014
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Pam Hamoline
Asset Type		Est. End Date	-

Project Description

This project involves the design and construction of an upgraded chlorine handling facility at the Avenue H Water Treatment Plant to provide disinfection treatment for the new chlorine contact chamber being constructed as part of the Avenue H reservoir expansion project. The planned procurement method for this project is to be accomplished utilizing external contractors, due to requirement of specialized services.

General Comments

The 2009 Long Term Capital Development and Expansion Plan (LTCDEP) identified a disinfection capacity upgrade was needed to meet the 300 MLD Phase 2 peak design flow. This capacity was included in the reservoir expansion project and results in the existing west basin footprint being scheduled for clarifier expansion. The new chlorine room will meet the capacity requirements of Phase 2 peak design flow, provide modern handling equipment, and updated spill mitigation systems.

External service providers will be used for this project.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Chlorine Room Capacity Upgrade	2,750.0	2,860.0	0.0	0.0	0.0
Total	2,750.0	2,860.0	0.0	0.0	0.0
FINANCING DETAILS					
WATERWORKS CAPITAL PROJECTS RESERVE	2,750.0	2,860.0	0.0	0.0	0.0
Total	2,750.0	2,860.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2580 WWTP-DIGESTER CLEANING FACILITY

Project Status	Open	Year Identified	2014
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Pam Hamoline
Asset Type		Est. End Date	-

Project Description

This project involves the design and construction of the infrastructure to convey, treat and store material removed from digester's during maintenance cleaning.

General Comments

Digester cleaning previously resulted in the removed material being deposited in pits on the plant grounds. The cleaning facility will include concrete tanks where de-watering can take place in a controlled manner with the effluent being treated.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Digester Cleaning Facility	0.0	2,080.0	0.0	0.0	0.0
Total	0.0	2,080.0	0.0	0.0	0.0
FINANCING DETAILS					
WASTEWATER TRTMNT CAP RES	0.0	2,080.0	0.0	0.0	0.0
Total	0.0	2,080.0	0.0	0.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2581 WWTP-FACILITY UPGRADE N40/WWTP

Project Status	Open	Year Identified	2014
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Pam Hamoline
Asset Type		Est. End Date	-

Project Description

This project involves the design and construction of an additional large cell at the remote sludge handling facility (N40) and the infrastructure to connect the cell to the existing system. The planned procurement method for this project is to be accomplished utilizing external contractors, due to availability of technology in-house and long-term requirements.

General Comments

Average sludge loading will exceed the recommended rate. When this occurs solids carryover returns to the Wastewater Treatment Plant and impacts plant efficiency. The project will provide capacity to year 2032.

This project will utilize external service providers.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Design & Construction	0.0	4,160.0	4,326.0	0.0	0.0
Total	0.0	4,160.0	4,326.0	0.0	0.0
FINANCING DETAILS					
WASTEWATER TRTMNT CAP RES	0.0	4,160.0	4,326.0	0.0	0.0
Total	0.0	4,160.0	4,326.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2582 WWTP-PEP FORCEMAIN/INFLUENT CHANNEL INSPECTION

Project Status	Open	Year Identified	2013
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Pam Hamoline
Asset Type		Est. End Date	-

Project Description

This project involves bypassing the existing primary influent channels and forcemain and conducting a condition assessment of the de-watered infrastructure.

General Comments

The primary influent channels and forcemain are critical infrastructure at the Wastewater Treatment Plant. To properly assess their condition it is necessary to bypass the total flow from the primary clarifiers to the bio-reactors. This allows a visual inspection of the current condition.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Pep Forcemain/Influent Channel Inspection	0.0	0.0	0.0	2,250.0	0.0
Total	0.0	0.0	0.0	2,250.0	0.0
FINANCING DETAILS					
WASTEWATER TRTMNT CAP RES	0.0	0.0	0.0	2,250.0	0.0
Total	0.0	0.0	0.0	2,250.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2583 WWTP-NEW HEADWORKS

Project Status	Open	Year Identified	2014
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Pam Hamoline
Asset Type		Est. End Date	-

Project Description

This project involves the design and construction of an addition to the influent junction chamber, the provision of two additional screens and four additional grit tanks.

General Comments

Design peak flow capacity (300 MLD) of the existing headworks is projected to be exceeded by population growth. Upsizing will double the headworks peak flow capacity to 600 MLD which is beyond the 30 year planning period.

This project will utilize external service providers.

Special Note

This project is subject to a Public Notice Hearing for borrowing.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
WWTP-NEW HEADWORKS	0.0	0.0	0.0	1,299.0	9,279.0
Total	0.0	0.0	0.0	1,299.0	9,279.0
FINANCING DETAILS					
BORROWING	0.0	0.0	0.0	0.0	2,340.0
OPERATING BUDGET DOWNPAYMENT	0.0	0.0	0.0	0.0	260.0
WASTEWATER TRTMNT CAP RES	0.0	0.0	0.0	1,299.0	6,679.0
Total	0.0	0.0	0.0	1,299.0	9,279.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2584 WWTP-PRIMARY CHANNELS

Project Status	Open	Year Identified	2014
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Pam Hamoline
Asset Type		Est. End Date	-

Project Description

This project involves the design and construction of additional channels to convey primary effluent from new headworks to new primary settling basins

General Comments

The project is one component of the plan to double the peak capacity of the plant to meet projected flows from population growth. This project will utilize external service providers.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Primary Channels	0.0	0.0	0.0	954.0	7,037.0
Total	0.0	0.0	0.0	954.0	7,037.0
FINANCING DETAILS					
WASTEWATER TRTMNT CAP RES	0.0	0.0	0.0	954.0	7,037.0
Total	0.0	0.0	0.0	954.0	7,037.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2585 WWTP-BIOREACTOR EXPANSION

Project Status	Open	Year Identified	2014
Project Type	INFRASTRUCTURE REPLACEMENT	Manager	Pam Hamoline
Asset Type		Est. End Date	-

Project Description

This project involves design and construction of a third bio-reactor including access tunnels as part of the general plant expansion. The planned procurement method for this project is to be accomplished utilizing external contractors, due to the cost of expected scope of work.

General Comments

Maximum loading rates will exceed existing bio-reactor capacity by the year 2022. The third bio-reactor will meet treatment requirements for Total Suspended Solids (TSS), Biological Oxygen Demand (BOD), Total Phosphorus (TP) and nitrogen until 2041.

This project will utilize external service providers.

Special Note

This project is subject to a Public Notice Hearing for borrowing.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Bioreactor Expansion	0.0	2,600.0	11,943.0	12,422.0	0.0
Total	0.0	2,600.0	11,943.0	12,422.0	0.0
FINANCING DETAILS					
BORROWING	0.0	0.0	7,020.0	9,360.0	0.0
OPERATING BUDGET DOWNPAYMENT	0.0	0.0	780.0	1,040.0	0.0
WASTEWATER TRTMNT CAP RES	0.0	2,600.0	4,143.0	2,022.0	0.0
Total	0.0	2,600.0	11,943.0	12,422.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2586 WWTP-UV EXPANSION

Project Status	Open	Year Identified	2013
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Pam Hamoline
Asset Type		Est. End Date	-

Project Description

This project involves the expansion of the Wastewater Treatment Plant ultraviolet (UV) disinfection system to provide capacity to the projected 514 MLD peak flows in 2042.

General Comments

Projected peak flow will exceed the 300 MLD UV facility capacity based on population growth. Flows exceeding the capacity would be bypassed to the river without the required disinfection treatment.

This project will utilize external service providers.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
UV Expansion	0.0	607.0	9,056.0	0.0	0.0
Total	0.0	607.0	9,056.0	0.0	0.0
FINANCING DETAILS					
WASTEWATER TRTMNT CAP RES	0.0	607.0	9,056.0	0.0	0.0
Total	0.0	607.0	9,056.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2589 TR-TECHNOLOGY PLAN

Project Status	Open	Year Identified	2016
Project Type	SUPPORT SYSTEMS	Manager	James McDonald
Asset Type		Est. End Date	-

Project Description

This project will ensure Transit has adequate funding to replace current technology and modernize existing infrastructure.

General Comments

This project will fund technology purchases for conventional transit. These purchases include items such as computer, AVM equipment, point of sale terminals for bus passes, and other technology or equipment as Administration identifies. It will also be used to maintain our current software infrastructure with Trapeze and BEA through regular system health checks, upgrades and any additional modules that would benefit the organization.

Operating Impacts

2020 - \$5,000 for software annual maintenance agreements on new modules.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Equipment Purchases	190.0	350.0	100.0	100.0	100.0
Total	190.0	350.0	100.0	100.0	100.0
FINANCING DETAILS					
TRANSIT CAPITAL PROJECTS RESERVE	190.0	350.0	100.0	100.0	100.0
Total	190.0	350.0	100.0	100.0	100.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	5.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2594 WTP-METER SHOP/RECEIVING BUILDING

Project Status	Open	Year Identified	2019
Project Type		Manager	Reid Corbett
Asset Type		Est. End Date	-

Project Description

This project includes decommissioning of the existing meter shop, design and construction of a new meter shop and receiving facility. The planned procurement method for this project is to be accomplished utilizing external contractors, due to the capacity of existing staff to perform the work on a capital project of this size.

General Comments

The existing meter shop needs to be decommissioned and replaced with a new facility in relation to the changes being made through the WTP Facility Access Upgrade

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Meter shop/receiving building	0.0	0.0	3,245.0	0.0	0.0
Total	0.0	0.0	3,245.0	0.0	0.0
FINANCING DETAILS					
WATERWORKS CAPITAL PROJECTS RESERVE	0.0	0.0	3,245.0	0.0	0.0
Total	0.0	0.0	3,245.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2596 TU - WWS/RO PLANNING & SCHEDULING

Project Status	Open	Year Identified	2019
Project Type	SUPPORT SYSTEMS	Manager	Russ Munro
Asset Type	Studies - Non capitalized expenditure	Est. End Date	-

Project Description

This project is required as an initial setup investment intended to create an operations planning and scheduling function to prioritize and coordinate both Water & Waste Stream and Roadways & Operations work activities.

General Comments

This project will create a work coordination group for Water and Sewer, Roadways, and Waste Management activities. Planning, scheduling and dispatching of work will be done by this group, allowing improved efficiency between operating groups, shortening roadway disruptions and allowing more work to be completed by existing resources. This project will also reduce conflicts such as sweeping activities on collection days resulting in better quality of life for citizens.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Operations Planning & Scheduling	150.0	0.0	0.0	0.0	0.0
Total	150.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
TU - CAPITAL RESERVE	150.0	0.0	0.0	0.0	0.0
Total	150.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2597 FIRE- HARDWARE AND TECHNOLOGY UPGRADES

Project Status	Open	Year Identified	2019
Project Type	EQUIPMENT REPLACEMENT	Manager	Wayne Rodger
Asset Type		Est. End Date	December 2020

Project Description

This project involves hardware upgrades and technology enhancements required by the Saskatoon Fire Department (SFD).

General Comments

An assessment of the fleet of computers identified that a majority of the 140 computers used by SFD are in need of upgrading in order to meet the specifications to operate Windows 10. The priority computers will be upgraded first, with the remainder to be upgraded on a phased-in basis. A regular greening cycle will be implemented so the fleet is upgraded on a rotational basis.

Operating Impacts

\$20,000 is required to operationalize the four year upgrade cycle

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Technology Upgrades	100.0	0.0	0.0	0.0	0.0
Total	100.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
FIRE - CAPITAL RESERVE	100.0	0.0	0.0	0.0	0.0
Total	100.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	20.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2598 CP-CORPORATE ADAPTATION STRATEGY

Project Status	Open	Year Identified	2018
Project Type	ENVIRONMENTAL PROTECTION	Manager	Nasha Spence
Asset Type		Est. End Date	-

Project Description

The Corporate Adaptation Strategy is a response to risks brought about by climate change. The strategy will complete a risk assessment on the City's infrastructure, and develop a plan to alleviate those risks.

Corporate Adaptation Strategy is a process of inventorying climate events that we are at risk of realizing and evaluating the impacts of climate change events on our infrastructure. Prioritizing and addressing these risks determines what kind of response is needed.

General Comments

The City has committed to the Covenant of Mayors for Climate and Energy to respond to climate change through mitigation activities and adaptation planning.

Environmental planning has become a standard that most municipalities engage. The Asset Management Plan, the Risk Management Plan, Mitigation Business Plan, and the Green Infrastructure Strategy have identified the need to financially value natural infrastructure in the community to advise the City's ongoing development and operations. The planned procurement method for this project is potentially a combination of internal staff and external consultants due to the potential expertise required.

Operating Impacts

\$110,000 in Software Costs

\$120,000 Future FTE impacts

\$2,000 Overhead Costs

Special Note

The City was successful in obtaining a grant from the Federation of Canadian Municipalities (FCM) for funding in place in 2018 to partially fund this project.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Corporate Adaptation Strategy	50.0	0.0	0.0	0.0	0.0
Total	50.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
CP - CAPITAL RESERVE	50.0	0.0	0.0	0.0	0.0
Total	50.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	232.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2600 CY-CITY CENTRE AREA INDOOR RECREATION FACILITY

Project Status	Open	Year Identified	2014
Project Type	GROWTH AND CAPITAL EXPANSION	Manager	Lynne Lacroix
Asset Type		Est. End Date	-

Project Description

This project will undertake the design and construction of new and/or upgraded recreation facilities in the City centre area, with a plan to explore partnership opportunities for the construction and operations of the facility.

General Comments

The City of Saskatoon Strategic Plan (2013-2023) has a strategic goal of Quality of Life, which indicates our neighbourhoods are complete communities that offer a range of housing options, employment opportunities, arts, culture, and recreation facilities. Citizens should have access to facilities and programs that promote active living and bring people together. New and/or upgraded recreation facilities in the city centre area will provide opportunities for residents to have access to, and participate in, leisure activities that better meet the needs of citizens living in a core neighbourhood.

Partnership discussions, business case development, and community engagement were undertaken in 2015. In 2016 the Partners collectively decided to pursue new partnership opportunities moving forward. Partnership opportunities will be explored, and if a partnership is formed a confirmation of commitments will be formalized through a memorandum of agreement. Then, pending necessary approvals and formal agreement, the design of a new recreation facility in or around White Buffalo Youth Lodge could occur in 2022, with construction commencing as early as 2023, with the new facility possibly opening in 2025.

Operating Impacts

The operating impacts for 2025 would be:

\$235,000 Contribution to Reserve

\$490,000 Facility Maintenance

\$255,000 Utilities

Staffing, other operating costs and revenues to be determined

Prior Budget Approval

\$150,000 Business Plan Development cost shared by the City of Saskatoon, Saskatoon Tribal Council, and YMCA

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
City Centre Leisure Facility - Design	0.0	0.0	0.0	1,000.0	1,000.0
Total	0.0	0.0	0.0	1,000.0	1,000.0
FINANCING DETAILS					
UNFUNDED MAJOR PROJECTS	0.0	0.0	0.0	1,000.0	1,000.0
Total	0.0	0.0	0.0	1,000.0	1,000.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2605 CY-REGIONAL PLAN IMPLEMENTATION

Project Status	Open	Year Identified	2018
Project Type	STUDY/PLANNING	Manager	Laura Hartney
Asset Type	Studies - Non capitalized expenditure	Est. End Date	-

Project Description

This project provides the resources to implement the Saskatoon North Partnership for Growth (P4G) Regional Plan, which is a land use plan that will enable the P4G region to grow to a population of 1 million. P4G comprises the City of Saskatoon, the Rural Municipality (RM) of Corman Park, the City of Warman, the City of Martensville and the Town of Osler. In 2017, the Councils of the P4G partner municipalities endorsed the P4G Regional Plan, and the P4G Regional Servicing Strategy and the P4G Regional Governance and Implementation Strategy that complement it.

General Comments

The P4G Regional Governance and Implementation Strategy identifies the projects needed to implement the P4G Regional Plan. These projects will be completed by the P4G partner municipalities over a number of years, subject to Capital Budget approvals. The projects that require capital funding are listed below:

- Green Network Refinement Study, to refine the boundaries of significant drainage areas, ecological areas, and viewsheds
- Concept Plans for the identified future growth areas of the City, to enable interim development that aligns with future urban development
- Regional Potable Water Servicing Plan
- Regional Wastewater Servicing Plan
- Regional Commercial and Industrial Market Study
- Regional Travel Demand Model Update
- Regional Transportation Plan
- Regional Wetlands Inventory and Policy
- Regional Natural and Heritage Resource Inventory
- Regional Natural Areas Strategy

Many of these projects will be conducted in phases. The project proposed for 2019 is the Green Network Refinement - Pilot Project Area - Stage 1. Building on the 2018 Green Network Pilot Project that identified important drainage areas north of Saskatoon, the 2019 work will focus on identifying the boundaries of significant ecological areas and viewsheds. The deliverable will be a refined Green Network boundary in the Pilot Project area.

For the Green Network Refinement - Pilot Project Area - Stage 1 project proposed for 2019, the planned procurement method is to be accomplished utilizing internal staff, due to the capacity of existing staff to perform the work and the expertise of existing staff to perform the work.

For projects that are proposed as part of the 2020-2028 Capital Plan, the planned procurement methods are expected to vary depending on the project. Some projects are planned to be accomplished utilizing internal staff, due to the capacity of existing staff to perform the work, the expertise of existing staff to perform the work, and the availability of technology in-house and long-term requirements. Other projects are planned to be accomplished utilizing external contractors, due to the requirement of specialized services and the requirement of an independent opinion.

Special Note

These projects will be co-funded by the P4G municipal partners, subject to budget approvals. The specific funding arrangements depend on the nature of the project and the benefiting municipalities. In general, the City contributes one-third of the project funds.

Operating Impacts

In 2020 and 2021, the operating impact will increase by \$42,300 and \$95,800 respectively for additional City staff resources to ensure the City meets its obligations under the P4G Regional Plan. This work would include ensuring the City's bylaws, policies and plans align with the P4G Regional Plan, and responding to policy and development referrals from the region.

Prior Budget Approval

\$785,000 - P4G Zoning Bylaw and Concept Plans

\$1,239,900 (Includes \$836,152 from the P4G municipal partners) - under Capital Project 2460 - Regional Planning

Urban Planning and Development

Approved 2019

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Concept Plan - East	0.0	0.0	0.0	374.0	0.0
Concept Plan - North East Phase 1	0.0	0.0	350.0	0.0	0.0
Concept Plan - North East Phase 2 & North Central	0.0	0.0	0.0	0.0	357.0
Green Network Refinement Study	107.0	0.0	203.0	375.0	375.0
Regional Potable Water Servicing Plan, Regional Wastewater Servicing Plan, Regional Commercial & Industrial Market Study	0.0	750.0	0.0	0.0	0.0
Regional Transportation Plan	0.0	0.0	0.0	0.0	350.0
Regional Travel Demand Model Update	0.0	0.0	0.0	150.0	0.0
Total	107.0	750.0	553.0	899.0	1,082.0
FINANCING DETAILS					
EXTERNAL FUNDING	0.0	0.0	0.0	50.0	0.0
OTHER	40.0	517.0	341.0	487.0	661.0
RESERVE FOR CAPITAL EXPENDITURES	67.0	0.0	0.0	0.0	0.0
UNFUNDED RCE	0.0	233.0	212.0	362.0	421.0
Total	107.0	750.0	553.0	899.0	1,082.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	42.3	95.8	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2606 CY-INDOOR CHILDREN'S PLAYGROUND AND ACCESSIBILITY UPGRADES TO INDOOR POOLS

Project Status	Open	Year Identified	2019
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Bruce Pearson
Asset Type	Buildings-Sport & Fitness Fac	Est. End Date	-

Project Description

This project involves the development of an indoor children's playground area and accessibility upgrades within the indoor pool facilities. These amenities and upgrades were identified as priorities in the Recreation and Parks Master Plan.

General Comments

The 2019 budget includes the design and development of an indoor children's playground space to meet the need for active and creative play. The type of indoor playground needs to be identified as whether it will be a structure or movable equipment. Facility modifications will occur as part of this project.

Accessibility Upgrades - Indoor Pool facilities

Accessibility assessments have been completed for the Harry Bailey Aquatic Centre, Lawson Civic Centre, Lakewood Civic Centre and the Shaw Centre in 2012. Accessibility issues identified in these assessments and current issues which have been noted by facility users will be reviewed. In addition to accessibility for people with mobility issues, consideration will also need to be given to accessibility issues for people with invisible disabilities.

Special Note

This project is funded as part of the Recreation and Parks Funding Plan and is contingent on approval of the 2019 operating contribution to the Recreation, Sports, Culture and Parks Partnership Reserve.

Operating Impacts

2020 - \$7,900 Cleaning and Preventative Maintenance relating to 2019 Budget Plan

2023 - \$10,400 Cleaning and Preventative Maintenance relating to 2022 Budget Plan

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Accessibility Upgrades to Indoor Pools	0.0	0.0	0.0	1,000.0	0.0
Children's Indoor Playground	120.0	0.0	0.0	0.0	0.0
Total	120.0	0.0	0.0	1,000.0	0.0
FINANCING DETAILS					
FUNDING PLAN CONTRIBUTION	0.0	0.0	0.0	1,000.0	0.0
PARKS & REC PARTNERSHIP RESERVE	120.0	0.0	0.0	0.0	0.0
Total	120.0	0.0	0.0	1,000.0	0.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	0.0	7.9	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2607 CY-ACCESSIBILITY AT OUTDOOR POOLS AND PADDLING POOLS

Project Status	Open	Year Identified	2019
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Nancy Johnson
Asset Type	Buildings-Sport & Fitness Fac	Est. End Date	-

Project Description

This project involves the audit, consultation, planning, and necessary upgrades or construction to move towards achieving physical inclusivity at the City of Saskatoon's Outdoor Pools (George Ward, Lathey, Mayfair, and Riversdale) and paddling pools as outlined in the Recreation and Parks Master Plan.

General Comments

The 2022 budget includes an audit, public consultation and program plan, detail design recommendations, project management and any necessary fixtures or equipment purchases.

Special Note

This project is funded as part of the Recreation and Parks Funding Plan.

Operating Impacts

2023 - \$4,200 Cleaning and Preventative Maintenance relating to 2022 Budget Plan

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Accessibility Outdoor Pools and Paddling Pools	0.0	0.0	0.0	400.0	0.0
Total	0.0	0.0	0.0	400.0	0.0
FINANCING DETAILS					
FUNDING PLAN CONTRIBUTION	0.0	0.0	0.0	324.0	0.0
UNFUNDED PARKS & REC PARTNERSHIP RES	0.0	0.0	0.0	76.0	0.0
Total	0.0	0.0	0.0	400.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2610 POLICE-TECHNOLOGY EXPANSION

Project Status	Open	Year Identified	2014
Project Type	EQUIPMENT REPLACEMENT	Manager	Earl Warwick
Asset Type		Est. End Date	-

Project Description

This project allows for the purchase of additional technological equipment including computers, and associated hardware and software as well as other equipment that utilizes computer technology.

General Comments

The 2019 project calls for funding to support an expansion to network infrastructure, document management software and investigation software.

Future year projects include continued expansion to network infrastructure.

Operating Impacts

Anticipated increases are \$19,400 in 2019, \$31,700 in 2020 and \$5,500 in 2021.

Project Detail Expenditure/Funding (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
GROSS COST DETAILS					
Equipment Purchase	229.0	57.0	0.0	0.0	0.0
Server Expansion	27.0	32.0	27.0	27.0	27.0
Storage Area Network	78.0	78.0	114.0	89.0	83.0
Total	334.0	167.0	141.0	116.0	110.0
FINANCING DETAILS					
POLICE OPER EQUIP & TECH RES	334.0	167.0	141.0	116.0	110.0
Total	334.0	167.0	141.0	116.0	110.0
Incremental Operating Impacts (000's)	Budget 2019	Plan 2020	Plan 2021	Plan 2022	Plan 2023
Net Dollar Impact	19.4	31.7	5.5	14.5	14.5
FTEs	0.0	0.0	0.0	0.0	0.0

2623 CP-RIVER LANDING SMALL ASSET REPLACEMENTS

Project Status	Pending	Year Identified	2019
Project Type	INFRASTRUCTURE MAINTENANCE	Manager	Christine Gutmann
Asset Type	Miscellaneous Equipment	Est. End Date	-

Project Description

This project is intended for the replacement of durable (more than 30 years life) and non-durable (less than 30 years life) small assets within the River Landing boundaries.

General Comments

As the small assets contained within the River Landing boundaries are exposed to the varying climates of the season in the City of Saskatoon, assets need to be replaced in a timely manner to ensure the standard of River Landing is maintained. Many community events, citizens of Saskatoon, local businesses and visitors alike are drawn to River Landing due to its unique beauty and amenities, and this project will ensure the space remains a vibrant and desirable destination. This project involves improved development to ensure optimal asset management and service reliability. This includes consideration of asset condition and eligibility for replacement based on best practices such as durability, energy reduction and CPTED (crime prevention through environmental design).

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Small Asset Replacement	225.0	0.0	0.0	0.0	0.0
Total	225.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
RIVER LANDING CAPITAL RESERVE	225.0	0.0	0.0	0.0	0.0
Total	225.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2624 CP-QUALITY MANAGEMENT SYSTEM

Project Status	Pending	Year Identified	2019
Project Type	SUPPORT SYSTEMS	Manager	Dan Willems
Asset Type	Software	Est. End Date	-

Project Description

A Quality Management System (QMS) provides a standardized framework to manage organizational policies, procedures and processes, and promotes continuous improvement. By implementing a QMS at the City of Saskatoon, it will uphold the City's mission to provide excellence in local governance and public service delivery for civic administration.

General Comments

The purpose of a QMS in municipal government is to yield effective, consistent and reliable results for the citizens that the government serves. Transparency and accountability are vital to citizens in order to gain their trust and confidence. A robust and effective QMS will have the following features:

- Citizen requirements are understood by all staff with communication across all levels of staff and functional unites in the organization.
- Business activities and objectives are consistently documented in a central repository ensuring that requirements are achievable and accessible to everyone in the organization to ensure success.
- Data is gathered and analysed routinely to aid in day-to-day decision making and strategic planning in order to understand root causes for performance trends.
- Audit and risk assessment functions are addressed through routine monitoring across the organization to ensure issues are consistently analysed and corrected which minimizes disruption to the organization in the case of unexpected or unplanned events.

QMS is the business management side of a strategic transformation which provides the clarity for blueprinting an Enterprise Resource Planning (ERP) system. ERP is the technology side of the transformation and a QMS will complement and aid in ensuring an effective implementation of the ERP solution.

Operating Impacts

Operational requirements for an on-going program in 2020 will consist of \$140,000.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Quality Management System	225.0	0.0	0.0	0.0	0.0
Total	225.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
CORPORATE CAPITAL RESERVE	225.0	0.0	0.0	0.0	0.0
Total	225.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	140.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

2625 CP-CITY OF SASKATOON & U OF S RESEARCH PARTNERSHIP

Project Status	Pending	Year Identified	2019
Project Type	STUDY/PLANNING	Manager	Angela Gardiner
Asset Type		Est. End Date	-

Project Description

The City of Saskatoon and University of Saskatchewan (U of S) have signed a Memorandum of Understanding to increase intentional collaboration across a number of areas.

General Comments

Achieving success around research collaboration (e.g. increasing the number, breadth and impact of research-focused partnerships) requires a new approach in facilitating and supporting research that engages both City staff and U of S researchers (at any level ñ from undergraduate to faculty). This project will provide seed funding as a pilot program for collaborative research projects in one of the following strategic themes: Adapting to Climate Change (e.g. infrastructure); Welcoming Communities (e.g. newcomers and refugees); and Urban Planning and Transportation.

Project Detail	Budget	Plan	Plan	Plan	Plan
Expenditure/Funding (000's)	2019	2020	2021	2022	2023
GROSS COST DETAILS					
Design	50.0	0.0	0.0	0.0	0.0
Total	50.0	0.0	0.0	0.0	0.0
FINANCING DETAILS					
RESERVE FOR CAPITAL EXPENDITURES	50.0	0.0	0.0	0.0	0.0
Total	50.0	0.0	0.0	0.0	0.0
Incremental	Budget	Plan	Plan	Plan	Plan
Operating Impacts (000's)	2019	2020	2021	2022	2023
Net Dollar Impact	0.0	0.0	0.0	0.0	0.0
FTEs	0.0	0.0	0.0	0.0	0.0

Project Number	Project Title	Business Line	Page Number
1812	SASKTEL CENTRE-EQUIPMENT PURCHASES	Arts, Culture and Events Venues	143
0740	TCU PLACE-EQUIPMENT REPAIR/REPLACEMENTS	Arts, Culture and Events Venues	29
1834	REMAI MODERN- EQUIPMENT PURCHASES	Arts, Culture and Events Venues	144
1650	CY-MUNICIPAL CEMETERIES MASTER PLAN	Community Support	133
1963	TU-CORP. ACCESSIBILITY IMPLEMENTATION	Community Support	155
0679	AF-GROUNDS MTNCE-EQUIPMENT REPL	Corporate Asset Management	22
0877	AF-TRUNKING RADIO INFRASTRUCTURE REPLACEMENT	Corporate Asset Management	37
1135	AF-CIVIC BLDGS COMPREHENSIVE MAINTAINANCE PROGRAM	Corporate Asset Management	48
1356	AF-V&E ADD'L VEHICLES & EQUIPT	Corporate Asset Management	76
1357	AF-V&E REPL'T VEHICLES & EQUIPT	Corporate Asset Management	77
1584	CIVIC OPERATIONS CENTRE	Corporate Asset Management	126
1949	AF-SERVICE SASKATOON - STAFFING ACCOMMODATION	Corporate Asset Management	154
2180	AF-CIVIC FACILITY SITE MAINTENANCE	Corporate Asset Management	181
1523	AF-TRUNKING RADIO REPLACEMENT	Corporate Asset Management	110
1557	TU-OFFICE MOD'NS/FURNITURE REPL/UPGRADES	Corporate Asset Management	116
2296	AF-LIONS ARENA PARKING REDEVELOPMENT & SEWER UPGRADE	Corporate Asset Management	202
1883	CK-ELECTRONIC RECORDS MANAGEMENT	Corporate Governance and Finance	146
1977	CP-LOCAL AREA NETWORK & DATA SECURITY	Corporate Governance and Finance	158
2079	AF-PROPERTY REASSESSMENT	Corporate Governance and Finance	170
1083	CP-CORPORATE NETWORK EQUIPMENT REPL	Corporate Governance and Finance	47
2368	AF-PRINTING AND MAIL SERVICES - EQUIPMENT	Corporate Governance and Finance	209
1884	CK-ELECTRONIC AGENDA & MEETING MGT SYSTM	Corporate Governance and Finance	147
2516	CP-DEVELOP ENTERPRISE MANAGEMENT STRATEGIES	Corporate Governance and Finance	247
2519	COMMUNITY WINTER CITY STRATEGY DEVELOPMENT	Corporate Governance and Finance	248
2540	CIVIC CONSERVATORY REPAIR/REPLACEMENT	Corporate Governance and Finance	252
1942	AF-CORPORATE SECURITY PLAN	Corporate Governance and Finance	153
1973	CK-LEASING OF AUTOMATED VOTE COUNTING EQUIPMENT	Corporate Governance and Finance	156
1974	CP-TRUTH AND RECONCILIATION INITIATIVES	Corporate Governance and Finance	157
1364	CP-SERVICE SASKATOON-CITIZEN INPUT/SYSTEMS/STANDARDS/STAFFING	Corporate Governance and Finance	78
2624	CP-QUALITY MANAGEMENT SYSTEM	Corporate Governance and Finance	282
2625	CP-CITY OF SASKATOON & U OF S RESEARCH PARTNERSHIP	Corporate Governance and Finance	283
1475	US-AUTO'D GARBAGE CONTAINER REPL	Environmental Health	100
2184	US-WASTE CHARACTERIZATION STUDY	Environmental Health	182
2051	US-LANDFILL OPTIMIZATION	Environmental Health	169
2538	CP-NATURAL CAPITAL ASSET VALUATION	Environmental Health	251
1669	CY-PSYLLID IMPACTED TREE REMOVAL/REPLANTING	Environmental Health	137
2598	CP-CORPORATE ADAPTATION STRATEGY	Environmental Health	274
0582	FIRE-EQUIPMENT & SMALL VEHICLE REPLACEMENT	Fire Services	5
1914	FIRE - NEW FIRE STATIONS & REPLACEMENTS	Fire Services	149
2379	FIRE-MAJOR APPARATUS REPLACEMENT	Fire Services	210
2504	FIRE-NEW EQUIPMENT	Fire Services	245
2525	FIRE-REGIONAL TRAINING FACILITY	Fire Services	249
2509	FIRE-UNIFORMS	Fire Services	246
2423	FIRE - FIRE STATION 9 PARKING LOT	Fire Services	225
2597	FIRE- HARDWARE AND TECHNOLOGY UPGRADES	Fire Services	273
0616	LAND DEV'T-PRIM WTRMN-NORTHEAST SECTOR	Land Development	8
0625	LAND DEV'T-TR SWR-NORTHEAST SECTOR	Land Development	9
0626	LAND DEV'T-SUBDIVIS'N WARRANTY	Land Development	11
0627	LAND DEV'T-SUBDIVIS'N FENCING	Land Development	12
0634	LAND DEV'T-TR SWR-NORTH INDUSTRIAL	Land Development	14
0636	LAND DEV'T-TR SWR-MONTGOMERY PLACE WEST	Land Development	16
0639	LAND DEV'T-SUBDIVIS'N BUFFERS	Land Development	17
0655	LAND DEV'T-ARTL RD-MCORMOND(E SECT-PERIMETER RD)	Land Development	18
0668	PARK DEV-BOULEVARD DEVELOPMENT	Land Development	19
0681	LAND DEV'T-ARTL RD-TAYLOR(MCKER-CP TRACK)	Land Development	23
0748	LAND DEV'T-GEN ADMIN-OLD AREAS	Land Development	30
0778	LAND DEV'T-TR SWR-STONEBRIDGE	Land Development	31
1057	PARK DEV-IND'L AREA BLVD TREE PLANTING	Land Development	46

Project Number	Project Title	Business Line	Page Number
1391	LAND DEV'T-PARKRIDGE SUB	Land Development	79
1403	LAND DEV'T-ROSEWOOD	Land Development	80
1407	LAND DEV'T-KENSINGTON	Land Development	81
1408	LAND DEV'T-AIRPORT INDUSTRIAL BUS PARK	Land Development	82
1416	LAND DEV'T-TR SWR-HAMPTON VILLAGE	Land Development	85
1417	LAND DEV'T-TR SWR-BLAIRMORE	Land Development	86
1435	LAND DEV'T-PRIMARY WATER MAINS-NORTH INDUSTRIAL	Land Development	90
1436	LAND DEV'T-BLAIRMORE PRIMARY WATER MAINS	Land Development	91
1458	LAND DEV'T-ART RD-CLAYPOOL DR (DALMNY-AIRPRT DR)	Land Development	94
1464	LAND DEV'T-ART RD-FEDORUK DRIVE	Land Development	96
1466	LAND DEV'T-ART RD-WANUSKEWIN RD	Land Development	97
1769	LAND DEV'T-MARQUIS INDUSTRIAL AREA	Land Development	142
1568	PARK DEV-ROSEWOOD	Land Development	120
1410	LAND DEV'T-ELK POINT	Land Development	83
1411	LAND DEV'T- ASPEN RIDGE	Land Development	84
1418	LAND DEV'T-TR SWR-HOLMWOOD	Land Development	88
1437	LAND DEV'T-PRIMARY WATER MAINS-HOLMWOOD SECTOR	Land Development	92
1460	LAND DEV'T-ARTL RD-NEAULT RDWY (22ND-SEC 2)	Land Development	95
1570	PARK DEV-KENSINGTON	Land Development	121
2459	LAND DEV'T-SOUTH CASWELL HILL REDEVELOPMENT	Land Development	236
1468	LAND DEV'T-ART RD-8TH STREET EAST	Land Development	98
1474	LAND DEV'T-ESTIMATED FUTURE DIRECT SERVICING PROJECTS	Land Development	99
1419	LAND DEV'T-BRIGHTON	Land Development	89
1663	PARK DEV - N.E. SWALE	Land Development	135
1574	PARK DEV-ASPEN RIDGE	Land Development	122
1575	PARK DEV-ELK POINT	Land Development	123
1576	PARK DEV-BRIGHTON	Land Development	124
2389	POLICE-FLEET ADDITIONS	Policing	211
2119	POLICE-RADIO REPLACEMENT	Policing	177
2489	POLICE-FURNITURE REPLACEMENT	Policing	241
2497	POLICE-EQUIPMENT REPLACEMENT	Policing	242
2498	POLICE-EQUIPMENT EXPANSION	Policing	243
2499	POLICE-TECHNOLOGY REPLACEMENT	Policing	244
2610	POLICE-TECHNOLOGY EXPANSION	Policing	280
0677	AF-ALBERT COMM CENTRE RENOS	Recreation and Culture	21
0706	CY-LEIS SERV-FACILITY EQUIP REPL	Recreation and Culture	25
0901	CY-PARK UPGRADES, ENHANCEMENTS & REPAIRS	Recreation and Culture	38
1876	AF-TENNIS COURT-ACRYLIC SURFACE	Recreation and Culture	145
1938	AF-PLAY STRUCTURE UPGRDE AND REPL	Recreation and Culture	150
2048	CY-FFP & ZOO MASTER PLAN IMPLEMENTATION	Recreation and Culture	168
2101	CY-GOLF COURSE IMPROVEMNTS & EQUIP REPL.	Recreation and Culture	174
2102	CY-SPORTFIELD DEVELOPMENT & IMPROVEMENTS	Recreation and Culture	175
2114	CY-VICTORIA PARK - UPGRADES	Recreation and Culture	176
2352	CY-PERMANENT BOAT LAUNCH SITE	Recreation and Culture	207
2353	CY-CHIEF WHITECAP PARK DEVELOPMENT	Recreation and Culture	208
2469	CY-PERMANENT WASHROOMS - SPECIAL USE PARKS	Recreation and Culture	238
2471	CY-KINSMEN PARK & AREA - MASTER PLAN	Recreation and Culture	239
2528	CY-DOG PARK DEVELOPMENT	Recreation and Culture	250
1658	CY-PARKS NEW SATELLITE MTNC BLDG	Recreation and Culture	134
1939	AF-PADDLING/SPRAY POOL REPLACEMENTS	Recreation and Culture	151
1940	AF-GREENHOUSE REPLACEMENT	Recreation and Culture	152
2474	CY-HUDSON BAY AREA DISTRICT PARKS	Recreation and Culture	240
1664	CY-GORDON HOWE COMPLEX UPGRADES	Recreation and Culture	136
1670	CY-PARK DEVELOPMENT STANDARDS UPDATE	Recreation and Culture	138
1578	CY-SILVERWOOD INDUSTRIAL AREA PARK	Recreation and Culture	125
2600	CY-CITY CENTRE AREA INDOOR RECREATION FACILITY	Recreation and Culture	275
2606	CY-INDOOR CHILDREN'S PLAYGROUND AND ACCESSIBILITY UPGRADES TO INDOOR POOLS	Recreation and Culture	278

Project Number	Project Title	Business Line	Page Number
2607	CY-ACCESSIBILITY AT OUTDOOR POOLS AND PADDLING POOLS	Recreation and Culture	279
2623	CP-RIVER LANDING SMALL ASSET REPLACEMENTS	Recreation and Culture	281
0838	LIBR-EQUIPMENT REPLACEMENT	Saskatoon Public Library	36
1761	LIBR-NEW CENTRAL LIBRARY CONSTRUCTION	Saskatoon Public Library	141
0583	TR-REPLACE/REFURB BUSES	Transportation	6
0631	TU-TRANSPORTATION SAFETY IMPROVEMENTS	Transportation	13
0671	TR-AUXILIARY VEH/EQUIP	Transportation	20
0832	TU-CENTER MEDIAN REHABILITATION	Transportation	34
0837	TU-LANE REHAB & DRAINAGE IMPROV	Transportation	35
0959	TU-UPGRADE BOUNDARY ROADS	Transportation	39
1036	TU-TRAFFIC CONTROL UPGRADES	Transportation	42
1041	TU-BENCHMARK REHABILITATION	Transportation	43
1194	TR- ENGINE OVERHAUL	Transportation	50
1456	TU-RAILWAY CROSSING SAFETY IMPROVEMENTS	Transportation	93
1505	TU-TRAFFIC SIGNAL INFRASTRUCTURE UPGRADES	Transportation	103
1506	TU-TRAFFIC SIGNING REPLACE-INFRA	Transportation	104
1507	TU-GUARDRAILS	Transportation	105
1512	TU-NEIGHBOURHOOD TRAFFIC MANAGEMENT	Transportation	106
1513	TU-PAVEMENT MARKING PROGRAM-INFRA	Transportation	107
1518	CY-PAY STATION PURCHASES & IMPLEMENTATION	Transportation	108
1522	TU-TRAFFIC NOISE ATTENUATION	Transportation	109
1526	TU-CIRCLE DR BRIDGE REPAIR	Transportation	111
1527	TU-UNIVERSITY BRIDGE REHAB	Transportation	112
1551	TU-BROADWAY BRIDGE REPAIRS	Transportation	113
1553	TU-SID BUCKWOLD BRIDGE REPAIRS	Transportation	114
1892	TU-ACCESS SECURITY-CITY YARDS	Transportation	148
1994	TU-MARQUIS DR/IDYLWYLD DR INTERCHANGE	Transportation	159
2003	TU-HWY 14/HWY 7 GRADE SEPARATION	Transportation	160
2011	TU-TRANSPORTATION MODEL IMPLEMENTATION	Transportation	161
2020	TU-17TH STREET CORRIDOR EXTENSION	Transportation	163
2037	TU-SNOW MANAGEMENT FACILITIES	Transportation	165
2040	TU-UNDERWATER PIER INSPECTIONS	Transportation	166
2043	TU-CURB REPLACEMENT/REHABILITATION	Transportation	167
2095	ACCESS TRANSIT-BUS REPLACEMENTS	Transportation	171
2097	TR- BUS SEAT REPLACEMENT	Transportation	172
2100	ACCESS TRANSIT - ADDITIONAL BUSES	Transportation	173
2233	TU-ADVANCED TRAFFIC MGT SYSTEM	Transportation	189
2234	TU-WALKWAY MANAGEMENT	Transportation	190
2235	TU-INTERSECTION IMPROVEMENTS	Transportation	191
2237	TU-UPGD DALMENY GRID/BEAM RD CONNECTION	Transportation	192
2317	TR-SHELTERS/BENCHES	Transportation	205
2323	TR-RIDERSHIP GROWTH INITIATIVES	Transportation	206
0584	TR-ADDITIONAL BUSES	Transportation	7
2013	TU-CIRCLE DR/AIRPORT DR GRADE SEPARATION	Transportation	162
2405	TU-IDYLWYLD & CIRCLE DR N INTERCHANGE	Transportation	222
2428	TU-FUNCTIONAL PLANNING STUDIES	Transportation	227
2393	TU-TAYLOR/CIRCLE DRIVE	Transportation	214
1556	TU-SYSTEM UPGRADES/REPLACEMENTS	Transportation	115
2025	TU-MARQUIS DR/HWY 16 GRADE SEPARATION	Transportation	164
2268	TU-IDYLWYLD DR FWY / 1ST AVE - NB RAMP	Transportation	197
2392	TU-MCKERCHER DR/COLLEGE DR OVERPASS	Transportation	213
2395	TU-CIRCLE DRIVE/14TH ST-NB	Transportation	215
2396	TU-IDYLWYLD FWY/IDYLWYLD RAMP NB/SB	Transportation	216
2397	TU-CIRCLE DRIVE/8TH ST - NB/SB	Transportation	217
2404	TU-CIRCLE DRIVE/IDYLWYLD	Transportation	221
2406	TU-MINOR BRIDGE REPAIRS	Transportation	223
2425	TU-UNDERGROUND ENCROACHMENTS	Transportation	226
2433	TU-8TH STREET & CPR GRADE SEPARATION	Transportation	229

Project Number	Project Title	Business Line	Page Number
2434	TU-HWY 11 & HWY 16 CLOVERLEAF	Transportation	230
2437	TU-11TH STREET REALIGNMENT	Transportation	231
2442	TU-DALMENY ROAD/HWY 684 REPLACEMENT	Transportation	232
2446	TU-PEDESTRIAN CROSSING IMPROVEMENTS	Transportation	233
2448	TU-INTELLIGENT TRANSPORTATION SYSTEM	Transportation	234
2449	TU-RAIL YARD RELOCATIONS	Transportation	235
2468	TU-ACTIVE TRANSPORTATION PLAN IMPLEMENTATION	Transportation	237
1561	TU-COLLEGE DRIVE WESTBOUND OVER CPR OVERPASS	Transportation	117
1562	TU-COLLEGE DRIVE EASTBOUND OVER CPR OVERPASS	Transportation	118
1564	TU-TRAFFIC COUNTERS EQUIPMENT REPLACEMENT	Transportation	119
1671	CY-COMMUNITY ENGAGEMENT PROCESS - UPDATE OF RESIDENTIAL PARKING PERMIT PROGRAM BYLAW	Transportation	139
2259	TU-PW SATELLITE YARDS	Transportation	194
2269	TU-ACCOMMODATION CONSTRUCTION	Transportation	198
2270	TU-PAVED ROADS AND SIDEWALK PRESERVATION	Transportation	199
2271	TU-HIGH SPEED ROADSIDE SAFETY IMPROVEMENTS	Transportation	200
1504	TU- NEIGH.TRAFFIC REVIEW PERMANENT INSTALLATIONS	Transportation	102
2276	TU-CITY YARDS SAFETY IMPROVEMENTS	Transportation	201
2401	TU-PEDESTRIAN CROSSING STRUCTURES	Transportation	218
2402	TU-HIGHWAY 16 EASTBOUND OVER HIGHWAY 11 OVERPASS	Transportation	219
2403	TU-CPR OVER CIRCLE DRIVE EAST OVERPASS	Transportation	220
2408	TU-VISION ZERO	Transportation	224
2265	TU-TRANSPORTATION EQUIPMENT ACQUISITIONS	Transportation	196
2550	TU-WEST/CENTRAL MULTI-USE CORRIDOR	Transportation	256
2429	CY-LICENSE PLATE RECOGNITION SYSTEM	Transportation	228
2589	TR-TECHNOLOGY PLAN	Transportation	270
2596	TU - WWS/RO PLANNING & SCHEDULING	Transportation	272
2162	CY-URBAN DESIGN - BIDS	Urban Planning and Development	178
2166	CY-URBAN DESIGN - CITY-WIDE	Urban Planning and Development	179
2390	CP-GREEN INFRASTRUCTURE STRATEGY	Urban Planning and Development	212
2169	CY-BLDG STANDARDS PROGRAM ENHANCEMENTS	Urban Planning and Development	180
2300	CY-COMPREHENSIVE ZONING BYLAW REVIEW	Urban Planning and Development	203
2541	CY-GROWTH PLAN TO HALF A MILLION IMPLEMENTATION	Urban Planning and Development	253
2605	CY-REGIONAL PLAN IMPLEMENTATION	Urban Planning and Development	276
0687	WWT- ASSET REPLACEMENT	Utilities	24
0720	SL&P - CAPACITOR INSTALLATIONS	Utilities	26
0736	SL&P - CUSTOMER UPGRADES AND EXTENSIONS	Utilities	28
1054	WTP-ASSET REPLACEMENT	Utilities	44
1055	WTP-AUTOMATIC METER READING CONV	Utilities	45
1174	SL&P - STREET LIGHTS - LAND DEVELOPMENT	Utilities	49
1243	WWT- LIFT STATION UPGRADES	Utilities	51
1272	SL&P - BUILDINGS & GROUNDS	Utilities	56
1281	SL&P - SUSTAIN POWER GENERATION OPTIONS	Utilities	57
1282	SL&P - STREET LIGHTS - MITIGATION	Utilities	58
1305	SL&P - FEEDER UPGRADES/REPLACEMENT	Utilities	66
1315	SL&P - 138 KV TRANSMISSION LINE UPGRADE	Utilities	69
1316	SL&P - TRANSMIS POLE/STRUCTURE UPGRADES	Utilities	70
1326	SL&P - SUBSTATION MONITORING SYS UPGRADE	Utilities	71
1332	SL&P - SUBSTATION SERVICE LIFE EXTENSION	Utilities	73
1352	SL&P - LIFE CYCLE MANAGEMENT	Utilities	74
1353	SL&P - EQUIPMENT UPGRADE & REPLACEMENT	Utilities	75
1493	TU-EAST RIVERBANK STABILIZATION	Utilities	101
1615	TU-WATER DISTRIBUTION	Utilities	127
1616	TU-WASTE WATER COLLECTION	Utilities	128
1617	TU-PRIMARY WATER MAINS	Utilities	129
1618	TU-SANITARY SEWER TRUNKS	Utilities	130
1619	TU-STORM SEWER TRUNK AND COLLECTION	Utilities	131
1621	TU-STORM SEWER POND PRESERVATION	Utilities	132

Project Number	Project Title	Business Line	Page Number
2197	WTP - WATER CONSERVATION INITIATIVE	Utilities	183
2263	WTP-WATERSHED MGMT AND ASSESSMENT PROGRAM	Utilities	195
0724	SL&P - REVENUE METER - NEW & REPLACEMENT	Utilities	27
0825	SL&P - STREET LIGHT UPGRADES	Utilities	33
1016	SL&P - NEIGHBOURHOOD STREET LIGHT UPGRDS	Utilities	40
1310	SL&P - UTILITY - RESEARCH & DEVELOPMENT	Utilities	68
2214	WTP - WATER SYSTEM ASSESSMENT	Utilities	184
1018	SL&P - MONITORING SYSTEM UPGRADE (SCADA)	Utilities	41
1301	SL&P - SUBSTATION COMMUNICATION UPGRADE	Utilities	65
1308	SL&P - 15 KV CONV - INTERMED SUBSTATIONS	Utilities	67
2216	WTP- PLANT ELECTRICAL UPGRADE	Utilities	185
1257	SL&P - SUBSTATION SECURITY IMPROVEMENTS	Utilities	55
1329	SL&P - SUBSTATION RELAY UPGRADES	Utilities	72
2255	TU-W&S CAPACITY ANALYSIS FOR REDEVELOPMENT AND MASTER PLANNING	Utilities	193
2219	WTP-N.E. SECTOR RESERVOIR	Utilities	186
2220	WTP-FILTER PLANT UNDERDRAIN UPGRADE	Utilities	187
1286	SL&P - ELEC SYS PLANNING STUDIES	Utilities	59
1295	SL&P - NETWORK - MAJOR ASSETS	Utilities	60
1296	SL&P - NETWORK - CIVIL INFRASTRUCTURE	Utilities	61
1297	SL&P - NETWORK - PRIMARY LINES	Utilities	62
1298	SL&P - NETWORK - SECONDARY LINES	Utilities	63
1299	SL&P - NETWORK - PROTECTION & CONTROL	Utilities	64
1252	SL&P - SUBSTATION CONTINGENCY	Utilities	52
1255	SL&P - DISTRIBUTION - EQUIPMENT UPGRADE	Utilities	53
1256	SL&P - SUBSTATION UPGRADES	Utilities	54
2230	WWT-INFRASTRUCTURE UPGRADES	Utilities	188
2559	WTP-SAND SEPARATORS	Utilities	257
2560	WTP-HVAC SYSTEM ADMINISTRATION BUILDING	Utilities	258
2561	WTP-INFRASTRUCTURE UPGRADES	Utilities	259
2562	WTP-CLARIFIER CONSTRUCTION	Utilities	260
2563	WTP-LOW LIFT UPGRADE	Utilities	261
2571	WTP-CHLORINE ROOM CAPACITY UPGRADE	Utilities	262
2580	WWTP-DIGESTER CLEANING FACILITY	Utilities	263
2581	WWTP-FACILITY UPGRADE N40/WWTP	Utilities	264
2582	WWTP-PEP FORCEMAIN/INFLUENT CHANNEL INSPECTION	Utilities	265
2583	WWTP-NEW HEADWORKS	Utilities	266
2584	WWTP-PRIMARY CHANNELS	Utilities	267
2585	WWTP-BIOREACTOR EXPANSION	Utilities	268
2586	WWTP-UV EXPANSION	Utilities	269
2594	WTP-METER SHOP/RECEIVING BUILDING	Utilities	271