Winnipeg

Unfunded Major Capital Projects Detail

May 2019

Vision

To be a vibrant and healthy city which places its highest priority in quality of life for all its citizens.

Corporate mission

Working together to achieve affordable, responsive and innovative public service.



Table of contents

Introduction 4

Growth in Winnipeg 5

State of local infrastructure 6

Capital expenditures 8

Capital projects 11

Unfunded major capital projects 12

Major capital project delivery process 13

Estimated project costs 14

Possible federal & provincial funding, debt & affordability 15

Unfunded major capital projects descriptions 17

- Community Services
  - *East of the Red Rec Plex* 18
  - *South Winnipeg Recreation Campus* 19
    - *Phase 1–YM/YWCA*
    - *Phase 2–Community Centre*
    - *Phase 3–Library*
  - *Southeast Winnipeg Recreation & Library Facilities* 20
    - *Phase 1–Community Centre*
    - *Phase 2–Library*
- Public Works
  - *Arlington Bridge Replacement* 21
  - *Chief Peguis Trail Extension West–Main to Brookside* 22
  - *Lagimodiere Twin Overpasses Rehabilitation* 23
  - *Louise Bridge Replacement* 24
  - *Marion Transportation Improvements* 25
  - *Route 90 Improvements–Taylor to Ness* 26
  - *St. Vital Bridge Rehabilitation* 27
  - *William R. Clement Parkway–Grant to Ridgewood* 28
- Winnipeg Transit
  - *Electric Bus Pilot Project* 29
  - *North Transit Garage Replacement* 30
  - *Rapid Transit Corridors (3 corridors)* 31
- Water & Waste
  - *Airport Area West Water & Sewer Servicing* 32
  - *North End Sewage Treatment Plant (NEWPCC) Upgrades* 33
    - *Phase 1–Power Supply & Headworks Facilities*
    - *Phase 2–Biosolids Facilities*
    - *Phase 3–Nutrient Removal Facilities*
  - *Southwest Interceptor–Phase 2* 34

More information & photo credits 35

Introduction

The City of Winnipeg's (City) 2018 State of the Infrastructure report outlined the City's infrastructure deficit, across all civic services, which totaled $6.9 billion over the next 10 years (2018-2027), for both new and existing infrastructure.

The Unfunded Major Capital Projects Detail provides a summary of current information on 22 proposed unfunded major capital projects over the next 10 years (2019-2028). The unfunded major capital projects detailed in this document range in costs from $24 million to $1.8 billion. These 22 unfunded major capital projects have a total cost of over $4.9 billion of which roughly $4.5 billion is unfunded and together these projects comprise about 60% of the City's infrastructure deficit.

With several projects having recently completed preliminary designs, this document is meant to provide City Council and the public with an overview of these 22 unfunded major capital projects prior to Council making decisions on individual projects.

In addition, this document provides a financial/affordability context by outlining possible federal and provincial funding, debt financing costs along with equivalent property tax and water and sewer rates increases needed to pay for the tax-supported projects outlined in this report.

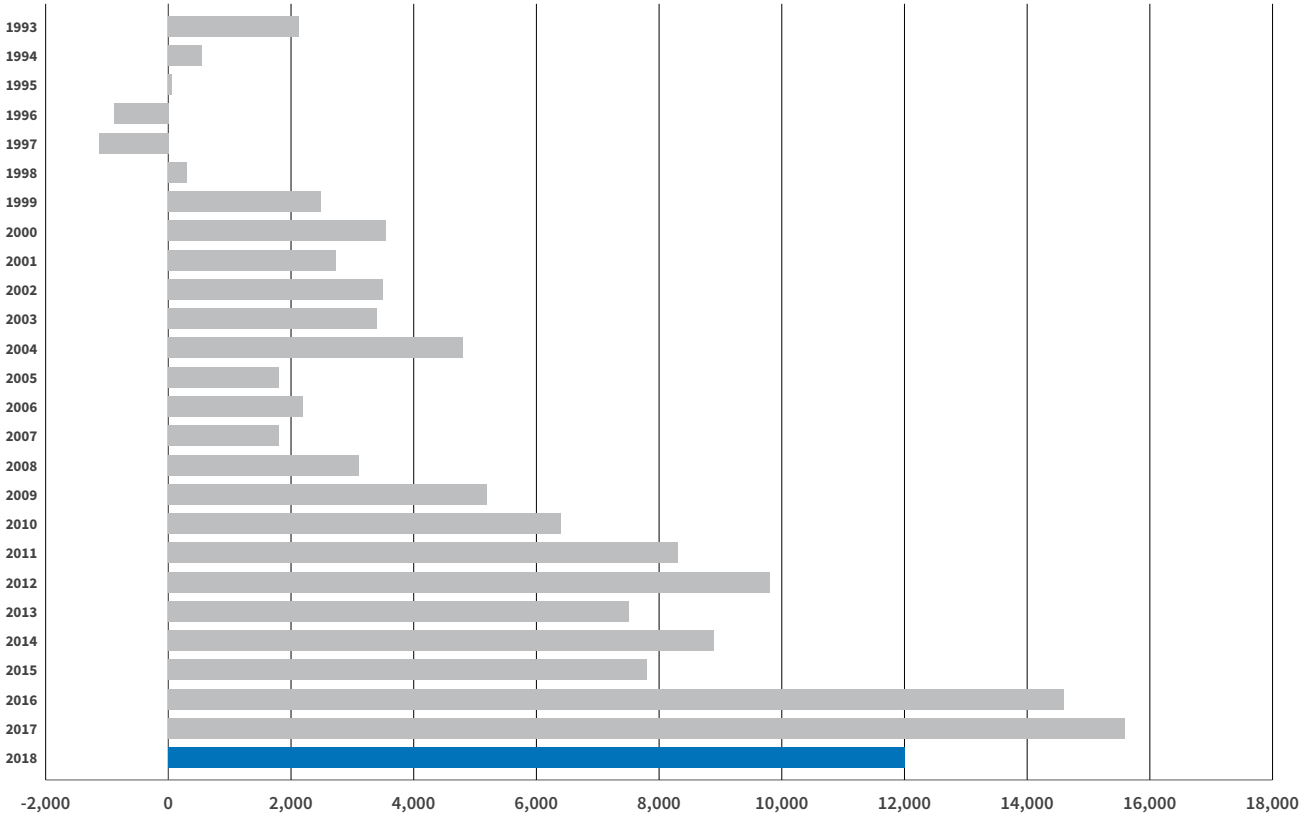
The threshold for a project to be considered a major capital project is defined annually in the Council-approved Capital Budget. The threshold is adjusted annually for construction inflation. In 2019, the threshold is $23 million.

Subsequent sections provide information on the City's infrastructure deficit and major capital projects

Growth in Winnipeg

Winnipeg is growing at a pace not seen for decades.

City of Winnipeg annual population change



Source: Statistics Canada

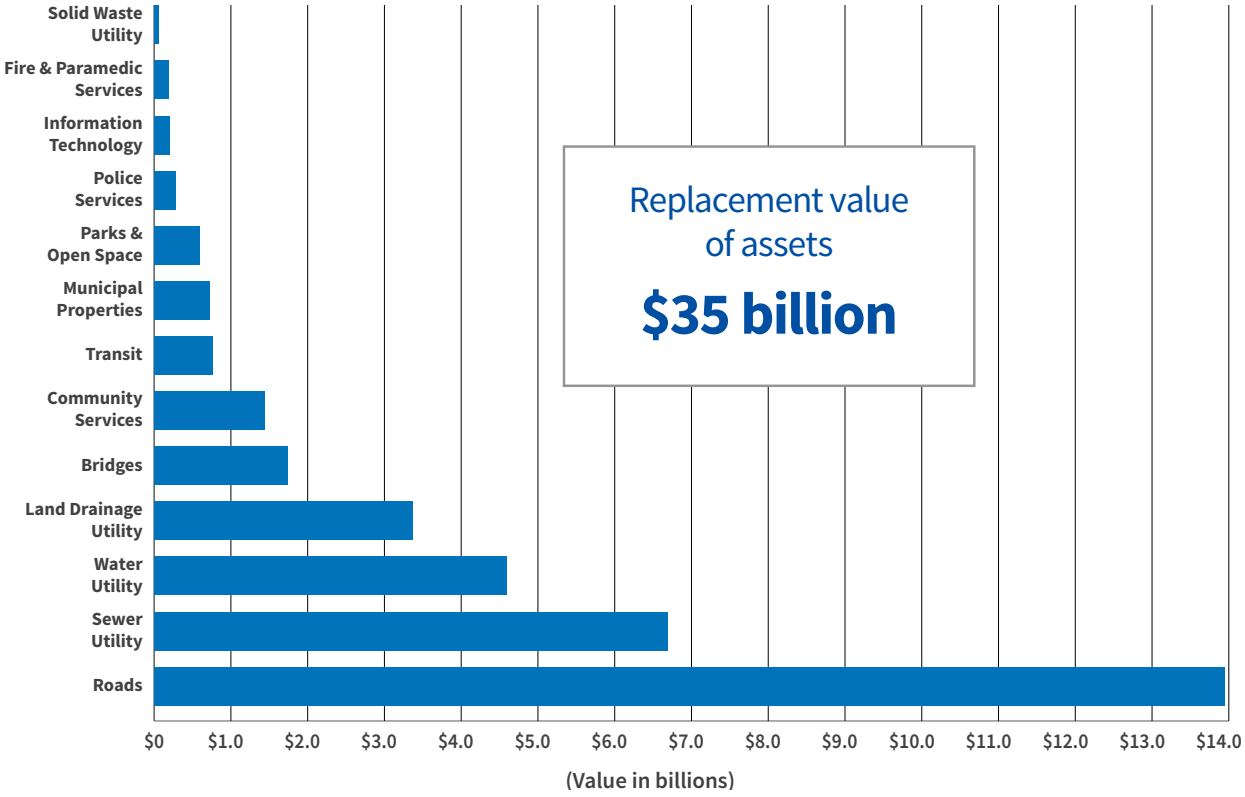
According to the *2016 City of Winnipeg Population, Housing, and Economic Forecast,* Winnipeg's average annual population growth over the next 25 years is estimated to increase by 8,200 people per year. It also notes that the city's Census Metropolitan Area population is predicted to exceed 1 million people by 2034/2035 and surpass 1,055,000 by 2040.

Winnipeg itself is expected to grow to a population of approximately 922,600 by 2040. In 2018, Winnipeg's population was 753,700*. Furthermore, the number of households is expected to increase by around 32 percent, or approximately 100,000, to a total of 391,100 by 2040.

Investments in key services and infrastructure are critical to support a growing, thriving, modern city, now and into the future.

* Source: Statistics Canada

State of local infrastructure*



The City must balance a multitude of competing spending priorities with limited resources. As the city continues to grow at historically high rates, the need to make sustainable, well-timed infrastructure investments is essential to ensure we continue to deliver high-quality services for residents.

To that end, in January 2015, Council approved the City's Asset Management Policy, making asset management a core business function. Asset management is not a singular activity or project; rather, it is a systematic process that facilitates decision-making in regards to the construction, acquisition, operation, maintenance, renewal, replacement, and disposition of assets in the most cost-effective manner.

The adoption of the Asset Management Policy also established the framework for infrastructure stewardship through comprehensive Asset Management Plans (AMPs). AMPs are integrated with and help guide the long-range infrastructure investment planning process based on considerations such as affordability and, in the future, defined service levels. The City completed its first City Asset Management Plan (CAMP) in 2018, and the *2018 State of the Infrastructure Report*, a high-level summary of the detailed findings of the CAMP.

Through the CAMP, the consolidation and analysis of information on assets across all civic departments, including the historic distribution of capital funding for these assets over the last decade, was undertaken. Providing detailed information about the City's infrastructure as a whole, including the state of existing assets, the assignment of value to needed improvements on existing and future assets, and the remaining service life of current assets had never been performed on this scale within the organization before.

The CAMP applied a consistent approach to how data was collected and analyzed across the entire portfolio of City-owned assets. This instituted a benchmarking tool for monitoring key performance indicators and allowed for an objective comparison over multiple service areas. For the first time, the City was able to strategically categorize asset types and grade the physical condition of its main infrastructure elements. While the infrastructure elements have condition grades, there remain some assets where formal condition assessments had not yet taken place. The intent is to gather more information about unassessed assets in the future.

* Information presented in this section from the *2018 State of the Infrastructure Report*.

Adopting a holistic overview, the City's condition grade for tax-supported and Transit infrastructure is C+, whereas Water and Waste utilities' asset conditions are B. The difference is primarily due to the fact that the Water and Waste utilities have dedicated funding and are governed by significant regulatory and level of service requirements, compared to the tax-supported and transit asset base. Combined, the City's condition grade is B-. The City's asset inventory has a replacement value of approximately $35 billion.



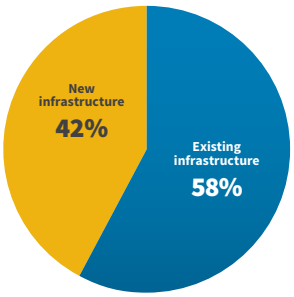
TAX-SUPPORTED AND TRANSIT INFRASTRUCTURE

WATER & WASTE UTILITIES

CITY'S OVERALL CONDITION GRADE

As the City's asset management plans were developed, support from cross-functional teams and dedicated asset management leads fostered a shared vision which improved communication, provided new insights on asset performance and initiated a fundamental change in how investment models could be created to maximize value from City assets. Strategies and continuous improvement initiatives were addressed and will serve as guidelines as the City continues to gain more knowledge about its assets.

The amalgamation of each department's spending plans and needs over the next ten years (2018-2027) was used to calculate the City's infrastructure deficit. Total capital investment needs for each department were based on a 10-year horizon and included both existing and new infrastructure. The gap between total capital investment requirements and estimated future capital funding resulted in an approximately $6.9 billion deficit. While the shortfall seems difficult to overcome, it is encouraging to note that compared to the reported 2009 deficit, progress has been made by investing in priority projects and focusing on maintaining existing infrastructure. In 2009, the reported capital infrastructure deficit was estimated at approximately $7.0 billion. Converted to 2018 dollars, this equated to approximately $9.9 billion and provided a more accurate comparison to the 2018 deficit, estimated at approximately $6.9 billion in 2018.



Infrastructure deficit 2018-2027

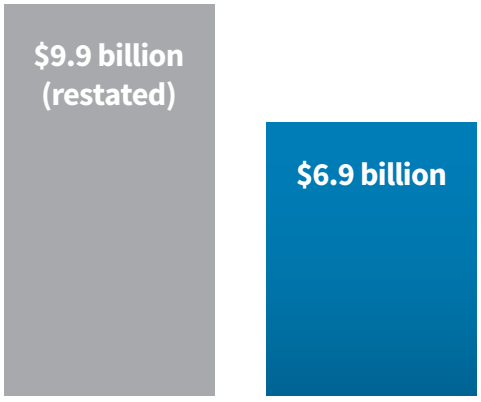
$6.9 billion*

* The deficit is based on Capital investment needs spanning a 10-year period from 2018 to 2027.

Additionally, as the 2009 deficit included a small portion of operating funds, operational costs in the order of approximately $400 million were removed from the 2009 deficit figure to further ensure a fair comparison between the 2009 and 2018 infrastructure deficits.

Progress to reduce the infrastructure deficit from 2009 to 2018 may be attributed to a number of variables including allocating $2.1 billion more to infrastructure investments than originally planned from 2009-2017, successfully leveraging federal and provincial funding for major capital projects, and the City dedicating an annual 2 percent property tax increase to improve the condition of roads.

Total infrastructure deficit





$3 billion

DEFICIT DECREASED

Capital expenditures

Despite limited growth in revenue over two decades, the city's population, its size, and demands for services continues to grow. Because of population growth at historically high rates, these demands continue to place large pressures on both the operating and capital budgets to the extent that there is an unsustainable structural deficit in the tax-supported operating budget and a parallel infrastructure deficit in the capital budget.

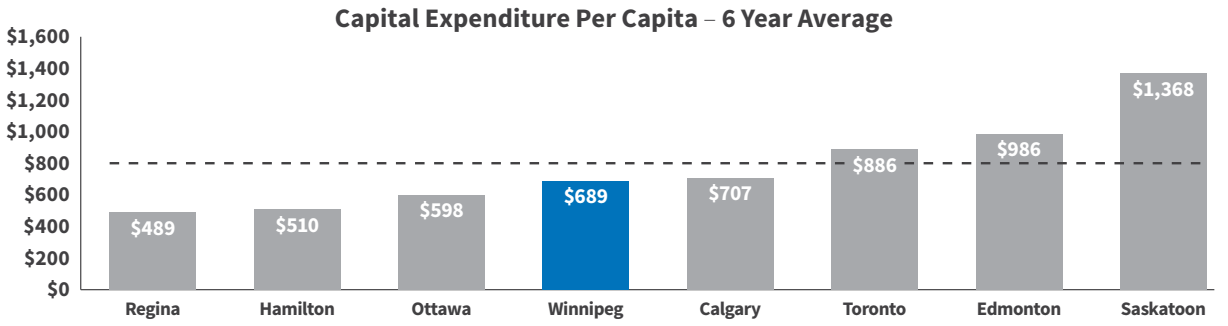
Over the years, the City has seen significant change in the amount and type of capital expenditure. While capital spending amounts vary by year, it has averaged $420 million.*

Over the last five years, the City spent on average $689 per person, which is approximately $90 less per person from the multi city average.‡

If the City of Winnipeg spent a similar amount compared to the average, the capital expenditures would increase by approximately $65 million per year.

But this level of spending is still short of what is needed to be sustainable. The infrastructure deficit needs to be funded.

In short, the City will face difficult choices in funding capital projects, determining affordability, and what potential sources of revenue may be available.

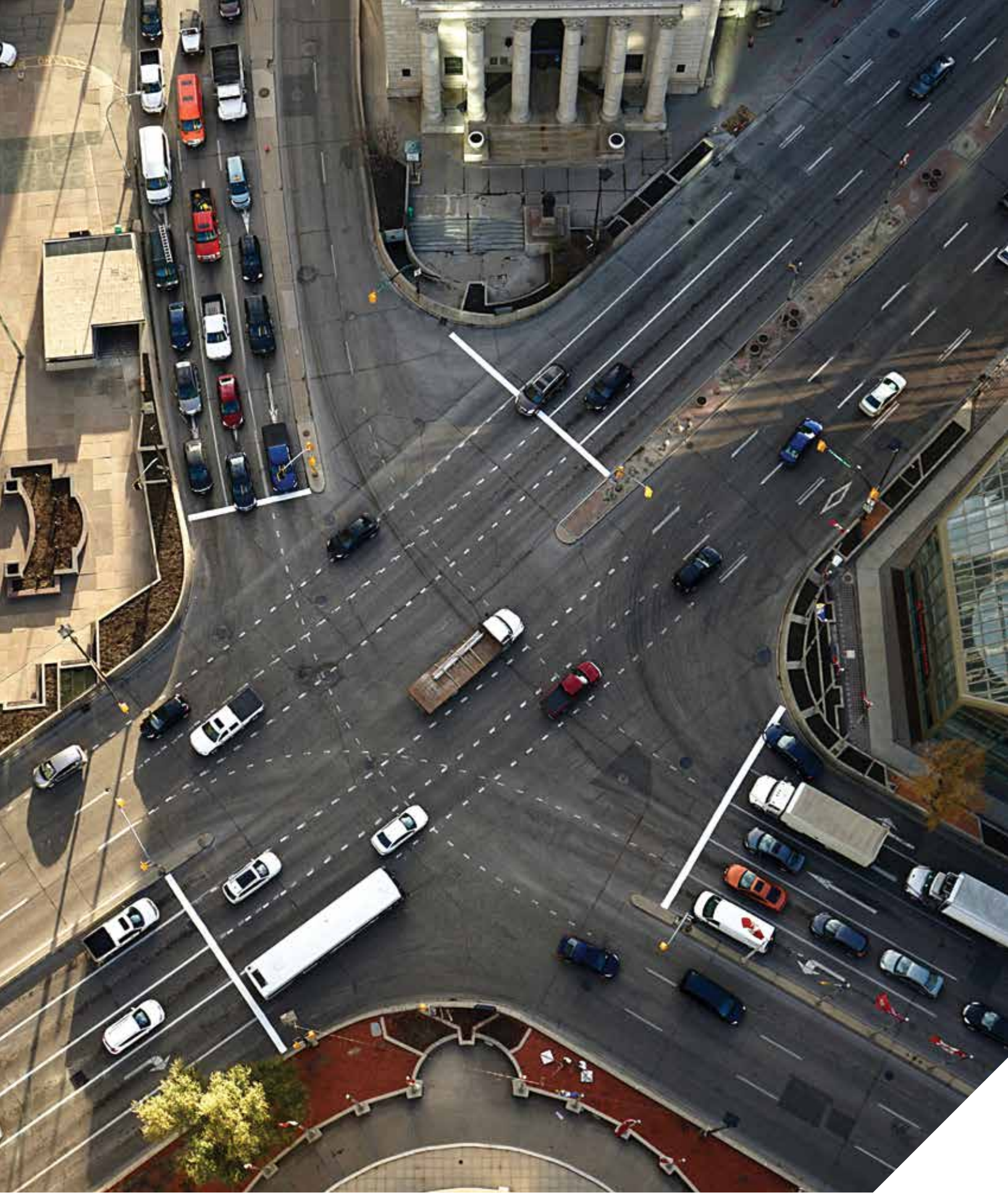


Source: City of Winnipeg, 2019 Community Trends & Performance Report—Volume 1

* 2009-2018, excluding 2016

‡ Source: Annual capital budgets





Capital projects

Long-range financial planning is an important exercise to ensure funds are available in the future to meet anticipated needs, as required. On an annual basis, the Public Service prepares a 6-year capital investment plan as required by The City of Winnipeg Charter for Council-consideration, which includes the current year's capital budget and a 5-year capital forecast. Additionally, 4-year longer-term capital projections are prepared by the Public Service for planning purposes. The City's 2018 adopted capital budget and the following 9-year estimated capital plan were used to capture anticipated levels of funding and the corresponding infrastructure deficit over a 10-year period.

It's estimated that over $4.0 billion will go towards investments in the City's infrastructure to 2027. However, that level of funding is not adequate to address the City's infrastructure needs. The 2018 infrastructure deficit is pegged at approximately $6.9 billion, with transportation services making up the majority of the overall deficit (70 percent). The deficit has identified a higher need to address existing infrastructure requirements compared to new infrastructure. This is due in part because many larger scale projects that are contemplated in the forecasted period are not currently funded.

10-year proposed capital plan of $4,039 million

2018-2027 *(in millions)*



Unfunded major capital projects

The following section provides a summary of current information on 22 proposed unfunded major capital projects planned over the next 10 years (2019-2028).

The proposed unfunded major capital projects listed in this report do not appear in order of project priority. Rather, they are grouped together by tax-supported and transit infrastructure projects (Community Services, Public Works, Winnipeg Transit), and Water and Waste utilities infrastructure projects, respectively. The projects are then categorized alphabetically by department, and further by project name.

This project listing is meant to provide an overview of proposed unfunded major capital projects only, not a priority ranking.

The estimated project costs for the 22 proposed projects are costed in the year to meet level of service needs; or the earliest a Class 3 cost estimate is anticipated to be available; or due to project phasing.

The City is currently reviewing and updating its asset management prioritization model, which has been in use since 2013. Once the revised version of the asset management prioritization model is complete, the City will further assess unfunded major capital projects.

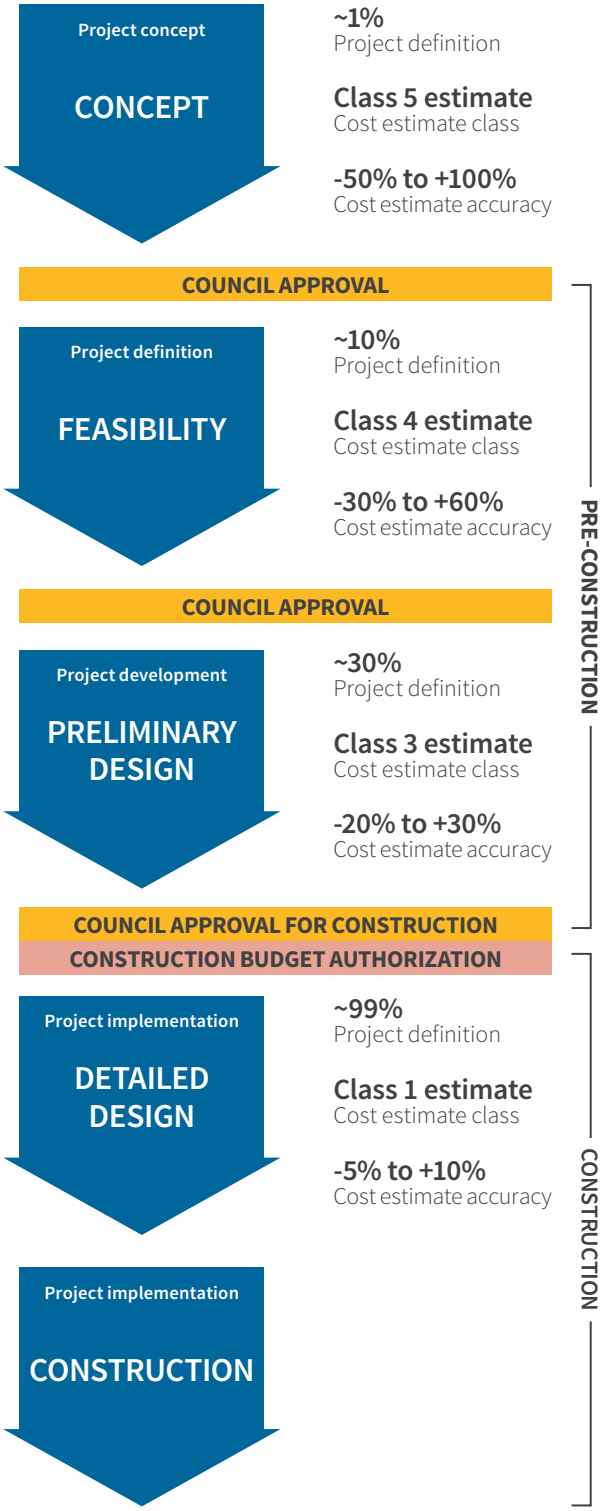
MAIN PROJECT DRIVERS

The decision to undertake a major capital project is driven by certain project drivers. The main project drivers are categorized as follows:

- **Maintain**: Investments of this type would ensure assets maintain the level of service and address any underperforming assets. Investments focus on rehabilitation or replacement of existing assets.
- **Enhance**: Investments of this type would allow an asset to deliver levels of service over and above target levels or provide services that had not been available prior to the investment.
- **Growth**: Investments of this type would ensure levels of service could be met as population grows and puts greater demand on the services required. Investments would focus on creating new infrastructure that would add to the City's asset inventory.
- **Regulatory**: Investments needed to satisfy a new regulatory or legal requirement for a level of service.

Major capital project delivery process

The figure below illustrates the major capital project delivery process as it moves from concept to construction.



Estimated project costs

	Project Name	Class of Estimate	Estimated Cost (in millions)				Estimated Project Duration (years)
			Year Project Costed*	Total	Funded**	Unfunded	
COMMUNITY SERVICES	East of the Red Rec Plex	5	in 2021 $	$70	$0	$70	4
	South Winnipeg Recreation Campus ($108M)						
	Phase 1–YM/YWCA	5	in 2021 $	$60	$9	$51	3
	Phase 2–Community Centre	5	in 2022 $	$36	$4	$32	3
	Phase 3–Library	5	in 2023 $	$12	$0	$12	3
	Southeast Winnipeg Recreation & Library Facilities ($24M)						
	Phase 1–Community Centre	5	in 2021 $	$12	$0	$12	3
	Phase 2–Library	5	in 2022 $	$12	$0	$12	3
	TOTAL COMMUNITY SERVICES			**$202**	**$13**	**$189**	
PUBLIC WORKS	Arlington Bridge Replacement	3	in 2020 $	$319	$0	$319	6
	Chief Peguis Trail Extension West–Main to Brookside	3	in 2027 $	$598	$0	$598	5
	Lagimodiere Twin Overpasses Rehabilitation	5	in 2024 $	$45	$0	$45	4
	Louise Bridge Replacement	5	in 2025 $	$240	$0	$240	5
	Marion Transportation Improvements			TBD			
	Route 90 Improvements–Taylor to Ness	5	in 2020 $	$500	$2	$498	6
	St. Vital Bridge Rehabilitation	5	in 2023 $	$50	$5	$45	3
	William R. Clement Parkway–Grant to Ridgewood			TBD			
	TOTAL PUBLIC WORKS			**$1,752**	**$7**	**$1,745**	
WINNIPEG TRANSIT	Electric Bus Pilot Project	5	in 2020 $	$26	$0	$26	2
	North Transit Garage Replacement	5	in 2020 $	$150	$0	$150	3
	Rapid Transit Corridors (3 corridors)	5	in 2021 $	$900	$0	$900	12 (3 corridors)
	TOTAL TRANSIT			**$1,076**	**$0**	**$1,076**	
	TOTAL TAX SUPPORTED			**$3,030**	**$20**	**$3,010**	
WATER & WASTE	Airport Area West Water & Sewer Servicing	5	in 2021 $	$55	$2	$53	5
	North End Sewage Treatment Plant (NEWPCC) Upgrades ($1,789M)						
	Phase 1–Power Supply & Headworks Facilities	3	in 2019 $	$408	$408	$0	7
	Phase 2–Biosolids Facilities	3	in 2020 $	$553	$0	$553	8
	Phase 3–Nutrient Removal Facilities	3	in 2023 $	$828	$0	$828	9
	Southwest Interceptor–Phase 2	5	in 2026 $	$32	$0	$32	4
	TOTAL WATER & WASTE			**$1,876**	**$410**	**$1,466**	
	TOTALS			**$4,906**	**$430**	**$4,476**	

Notes: * Project timing is subject to funding availability and Council approvals. Year project costed to meet level of service needs; or earliest Class 3 cost estimate is anticipated to be available; or due to project phasing.
** Funding includes previously approved funding and forecasted funding as per 2019 Operating and Capital Budgets.

Possible federal & provincial funding, debt & affordability

	Project Name	Class of Estimate	Assumed Possible Funding*							City Operating Budget			Affordability
			Estimated Total Cost	Federal	Provincial	City**	% City Share**	City Funded***	City Unfunded	Borrowing Costs City Annual Payments	Additional Operational & Maintenance Annual Costs	Total Annual Costs	Operating Budget Impact Equivalent Property Tax Increase
COMMUNITY SERVICES	East of the Red Rec Plex	5	$70	$12.0	$10.0	$48.0	69%		$48.0	$3.7	$0.6	$4.3	0.8%
	South Winnipeg Recreation Campus ($108M)												
	Phase 1–YM/YWCA‡	5	$60	$22.8	$19.0	$18.2‡	30%	$9.1	$0.0‡	$0.0		$0.0	0.0%
	Phase 2–Community Centre	5	$36	$13.7	$11.4	$10.9	30%	$4.0	$6.9	$0.5	$0.2	$0.7	0.1%
	Phase 3–Library	5	$12			$12.0	100%		$12.0	$0.9	$0.2	$1.1	0.2%
	Southeast Winnipeg Recreation & Library Facilities ($24M)												
	Phase 1–Community Centre	5	$12	$4.5	$3.7	$3.8	32%		$3.8	$0.3	$0.1	$0.4	0.1%
	Phase 2–Library	5	$12			$12.0	100%		$12.0	$0.9	$0.2	$1.1	0.2%
	TOTAL COMMUNITY SERVICES		$202	$52.9	$44.1	$104.9		$13.1	$82.7‡	$6.4	$1.3	$7.7	1.4%
PUBLIC WORKS	Arlington Bridge Replacement	3	$319			$319.0	100%		$319.0	$24.8		$24.8	4.4%
	Chief Peguis Trail Extension West–Main to Brookside												
	If approved in 2020	3	$471			$471.0	100%		$471.0	$36.6	$2.0	$38.6	6.9%
	If approved in 2027	3	$598			$598.0	100%		$598.0	$46.5	$2.0	$48.5	8.7%
	Lagimodiere Twin Overpasses Rehabilitation Rehabilitation	5	$45			$45.0	100%		$45.0	$3.5		$3.5	0.6%
	Louise Bridge Replacement	5	$240			$240.0	100%		$240.0	$18.7		$18.7	3.3%
	Marion Transportation Improvements		TBD										
	Route 90 Improvements–Taylor to Ness	5	$500			$500.0	100%	$2.1	$498.0	$38.7		$38.7	6.9%
	St. Vital Bridge Rehabilitation	5	$50			$50.0	100%	$5.0	$45.0	$3.5		$3.5	0.6%
	William R. Clement Parkway–Grant to Ridgewood		TBD										
	TOTAL PUBLIC WORKS		$1,752			$1,752.0		$7.1	$1,745.0	$136.0	$2.0	$138.0	24.6%
WINNIPEG TRANSIT	Electric Bus Pilot Project	5	$26	$9.9	$8.2	$7.9	30%		$7.9	$0.6		$0.6	0.1%
	North Transit Garage Replacement	5	$150	$55.8	$46.5	$47.7	32%		$47.7	$3.7		$3.7	0.7%
	Rapid Transit Corridors (3 corridors)	5	$900	$334.8	$279.0	$286.2	32%		$286.2	$22.3		$22.3	4.0%
	TOTAL TRANSIT		$1,076	$400.5	$333.7	$341.8			$341.8	$26.6	$0.0	$26.6	4.7%
	TOTAL TAX SUPPORTED		$3,030	$453.4	$377.8	$2,198.8		$20.2	$2,169.6‡	$168.8	$3.3	$172.1	30.7%
WATER & WASTE	Airport Area West Water & Sewer Servicing	5	$55			$55.0	100%	$2.0	$53.0	FUNDED THROUGH WATER & SEWER RATES (The 2019 Water and Sewer Rates Report forecasts a cumulative increase of residential water and sewer rates of 37.5% over the next 10 years.)			
	North End Sewage Treatment Plant (NEWPCC) Upgrades ($1,789M)												
	Phase 1–Power Supply & Headworks Facilities	3	$408	$0.0	$0.0	$408.0	100%	$408.0					
	Phase 2–Biosolids Facilities	3	$553	$122.5	$102.5	$328.0	59%		$328.0				
	Phase 3–Nutrient Removal Facilities	3	$828	$122.5	$102.5	$603.0	73%		$603.0				
	Southwest Interceptor–Phase 2	5	$32			$32.0	100%		$32.0				
	TOTAL WATER & WASTE		$1,876	$245.0	$205.0	$1,426.0		$410.0	$1,016.0				
	TOTAL–ALL PROJECTS		$4,906	$698.4	$582.8	$3,624.8		$430.2	$3,185.6‡				

Notes: * Possible federal and provincial funding: Investing in Canada Infrastructure Program (ICIP).
** Includes ineligible costs.
*** Funding includes previously approved funding and forecasted funding as per 2018 Operating and Capital Budgets.

‡ Assuming joint ICIP application from City and YM/YWCA, resulting in $9.1 million each from YM/YWCA and City.

In 2019, a 1% property tax increase will generate $5.6 million revenue.
Assumed City portion is debt-financed using 30-year debt at 6% interest rate.
Impact fee could potentially be used for growth related projects which would reduce debt.





Unfunded major capital projects descriptions

COMMUNITY SERVICES

East of the Red Rec Plex



CURRENT COST ESTIMATE

$70 million

Costed in 2021 dollars

Class 5 estimate

(-50% to +100%)

***+ $** Eligible for cost sharing with other levels of government*

Main project driver

MAINTAIN

Description	The proposed project involves the development of a 90,000 square foot regional recreation and leisure facility, including a leisure pool, eight lane swim tank, indoor track, fitness areas, gymnasium, and multi-purpose rooms, all attached to the new Transcona Library.
Need / rationale	The existing Transcona Centennial Indoor Pool, Bernie Wolfe Indoor Pool, and other facilities in the area are near the end of their service life and are in need of significant investment or replacement. These buildings also do not meet current accessibility standards and service expectations. The proposed new facility would provide a state of the art, energy-efficient public amenity, while allowing for the decommissioning of existing, aging assets. In addition, northeast Winnipeg has experienced significant growth and currently lacks adequate City-owned recreation space to provide Leisure Guide or drop-in recreation/leisure programming.
Short-term risks of not proceeding	The existing facilities in the area are at or near end of service life and the risk of unplanned closures is high. Closures would have a significant service impact as there is no additional capacity in the system to absorb customers over the long term.
Status	The *East of the Red Rec Plex Feasibility Study and Business Plan* was completed in spring 2018. City-owned land is available adjacent to the new Transcona Library.
Project duration	Once construction budget is approved by council, the estimated project duration is 4 years.

COMMUNITY SERVICES

South Winnipeg Recreation Campus



CURRENT COST ESTIMATE | **TOTAL: $108 MILLION**

Phase 1: YM/YWCA	Phase 2: Community Centre	Phase 3: Library
$60 million	**$36** million	**$12** million
Costed in 2021 dollars	*Costed in 2022 dollars*	*Costed in 2023 dollars*
Class 5 estimate (-50% to +100%)	Class 5 estimate (-50% to +100%)	Class 5 estimate (-50% to +100%)

***+ $** Eligible for cost sharing with other levels of government*

Main project driver

GROWTH

Description	The proposed project would see the development of a phased multi-use/ multi-generational recreation campus in Waverley West that includes a YM/YWCA with lap tank, leisure pool, fitness space and gymnasium; a community library; a new community centre with multiple gymnasiums, multi purpose spaces and an adjacent park space. The City is in the process of acquiring the land required for this project, and is working collaboratively with area stakeholders on the development of the proposed recreation campus, including the Pembina Trails School Division. Opportunities to allow for shared parking, servicing, and site amenities with the school division are being explored to reduce duplication of spaces.
Need / rationale	With an anticipated population of approximately 40,000 to 50,000 people once fully developed, the Waverley West area currently has no recreation facility, community centre, or community library. In order to meet level of service requirements, new program space is required, including gymnasium/multi-purpose space, indoor pool, library, and park space. The potential opportunity to partner with the YM/YWCA on the development of a branded facility would lead to Winnipeg's first leisure pool while limiting the City's capital and operational liability.
Short-term risks of not proceeding	There will soon be 40,000 to 50,000 residents with no access to City recreation services or facilities within their community. Without access to recreation programs and services in the area, resident's quality of life will be negatively affected.
Status	The acquisition of a 19-acre parcel adjacent to a 25-acre Pembina Trails School Division site is in progress. Conceptual site planning and estimates are expected to be completed in the third quarter of 2019 for Council's consideration. Phases may be delivered concurrently depending on funding and cash flow approvals.
Project duration	Once construction budget is approved by council, the estimated project duration for: Phase 1 is 3 years. Phase 2 is 3 years. Phase 3 is 3 years.

Southeast Winnipeg Recreation & Library Facilities



CURRENT COST ESTIMATE | **TOTAL: $24 MILLION**

Phase 1: Community Centre	Phase 2: Library
$12 million	**$12** million
Costed in 2021 dollars	*Costed in 2022 dollars*
Class 5 estimate (-50% to +100%)	Class 5 estimate (-50% to +100%)

***+ $** Eligible for cost sharing with other levels of government*

Main project driver

GROWTH

Description	The proposed project involves the development of a new community centre and library facility to serve existing and growth areas in the southeast region of the city.
Need / rationale	The southeast quadrant of Winnipeg includes the existing neighbourhoods of Island Lakes and Royalwood, as well as the rapidly growing developments of Sage Creek and Bonivista. These neighbourhoods currently lack recreation and library facilities within their communities.
Short-term risks of not proceeding	Without access to recreation programs and services in the area, residents' quality of life will be negatively affected.
Status	An approximately 11 acre parcel in the Bonivista neighbourhood has been acquired for recreation purposes. A site for a new library has not yet been confirmed. The *2018 Capital Budget* forecasts $140,000 for a feasibility study in 2020 to explore opportunities for new infrastructure to service growth in the southeast region, which could include a new community centre and library.
Project duration	Once construction budget is approved by council, the estimated project duration for: Phase 1 is 3 years. Phase 2 is 3 years.

PUBLIC WORKS

Arlington Bridge Replacement



CURRENT COST ESTIMATE

$319 million

Costed in 2020 dollars

Class 3 estimate

(-20% to +30%)

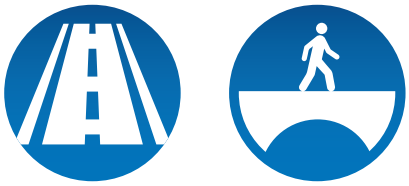
Main project driver

MAINTAIN

Description	The proposed project requires construction of a new three-lane bridge to the west of the existing bridge. The new bridge will include two uni-directional bike lanes and two sidewalks. The project would also require reconstruction of Arlington Street from McDermot Avenue to Selkirk Avenue, as well as the decommissioning and removal of the existing Arlington Bridge.
Need / rationale	The century-old Arlington Bridge is nearing the end of its service life. It is currently safe, but unplanned temporary closures can occur at any time to undertake reactive maintenance. Currently, trucks, buses and fire trucks are using alternative routes for transportation and the movement of goods due to load restrictions on the bridge. There is a concern that further deterioration of the Arlington Bridge may result in its unplanned permanent closure. The bridge is important to the surrounding communities.
Short-term risks of not proceeding	An unplanned permanent bridge closure may occur without notice, resulting in significant traffic impacts in the area if the bridge deteriorates beyond repair or if it becomes uneconomically practical to repair it. Once the project and funding is approved, it is anticipated to take up to six years to open a new bridge to traffic, including two years for detailed design and property acquisition. Delay in moving the project forward will result in no bridge being in service for a sustained long term period.
Status	The preliminary design is complete and an administrative report is planned for Council's consideration in the second quarter of 2019.
Project duration	Once construction budget is approved by council, the estimated project duration is 6 years.

PUBLIC WORKS

Chief Peguis Trail Extension West–Main to Brookside



CURRENT COST ESTIMATE

$487 million
Costed in 2020 dollars
Class 3 estimate
(-20% to +30%)
If approved in 2020

$598 million
Costed in 2027 dollars
Class 3 estimate
(-20% to +30%)
If approved in 2027

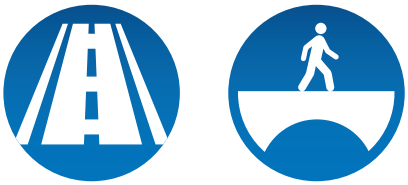
Main project driver

GROWTH

Description	The proposed project consists of the construction of a four-lane divided roadway from Main Street to Brookside Boulevard (Route 90), including overpasses at Main Street and McPhillips Street. It will also include four intersections and three pedestrian and cycling overpasses, and improvements to the Kildonan Settlers Bridge to accommodate intersection improvements at Main Street and multi-use pathways on both sides of the roadway.
Need / rationale	Chief Peguis Trail is intended to provide a continuous east-west link between the east and west sections of the Perimeter Highway (PTH 101) via CentrePort Canada Way, improve access to industrial parks in the vicinity of the airport, and further develop the future Inner Ring Road. There is currently no link to future residential and commercial communities as they develop in the northwest area of the city. This project will also address a gap in the active transportation network, as identified in the *Pedestrian and Cycling Strategies* (2011).
Short-term risks of not proceeding	The exact timeframe of when Chief Peguis Trail is needed is not fully known. There is no current major activity in CentrePort, which might ultimately drive the need for the Chief Peguis Trail extension. Current traffic projection estimates indicate Chief Peguis Trail between Main Street and McPhillips will not be required until after 2031. An upcoming review of the Transportation Master Plan will provide more analysis on the required project timing. If the project and funding are approved by Council, it is anticipated to take up to five years to be opened to traffic, including two years for detailed design and property acquisition.
Status	The preliminary design is complete and an administrative report is planned for Council's consideration in the second quarter of 2019.
Project duration	Once construction budget is approved by council, the estimated project duration is 5 years.

PUBLIC WORKS

Lagimodiere Twin Overpasses Rehabilitation



CURRENT COST ESTIMATE

$45 million

Costed in 2024 dollars

Class 5 estimate

(-50% to +100%)

Main project driver

MAINTAIN

Description	The proposed project involves the major rehabilitation of the Lagimodiere Twin Overpasses over Concordia Avenue and the CPR Keewatin rail lines.
Need / rationale	Rehabilitation is required to extend the service life of the twin bridges by an additional 50 years. The last significant bridge rehabilitation was over 30 years ago. The bridge superstructure and substructures are deteriorating as a result of reinforcing steel corrosion and concrete degradation. Improvements to the traffic capacity and roadside safety need to be determined as part of a preliminary design study.
Short-term risks of not proceeding	Delay could result in overpass reconstruction as opposed to rehabilitation and corresponding increased project costs. In order to complete the project by 2027, preliminary design would need to commence in 2023.
Status	Work on the preliminary design is anticipated to commence in 2023.
Project duration	Once construction budget is approved by council, the estimated project duration is 4 years.

PUBLIC WORKS

Louise Bridge Replacement



CURRENT COST ESTIMATE

$240 million

Costed in 2025 dollars

Class 5 estimate

(-50% to +100%)

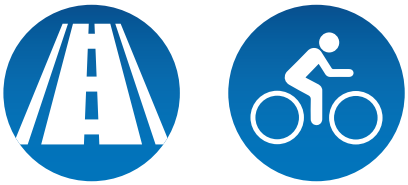
Main project driver

MAINTAIN

Description	The proposed project scope has yet to be fully defined as a preliminary design study for Louise Bridge, Higgins Underpass, and Stadacona extension are required.
Need / rationale	The current Louise Bridge is functioning safely but has extensive deterioration and limited remaining service life, meaning unplanned, potentially frequent repairs will be required. The concrete bridge deck dates back to 1963 and is deteriorating due to the corrosion of reinforcing steel. The bridge cannot be widened to accommodate current or future traffic capacity. Currently 25,000+ vehicles per day cross the bridge, which is considered high for a two-lane bridge. In addition, the bridge is currently a truck route with load restriction of 36,500 kg, which is considerably lower than the current legal truck load limit of 62,500 kg. There is also inadequate vertical clearance (3.76m) compared to the legal truck height limit (4.15m). Neither the vertical clearance nor the load capacity can be improved to support current legal trucks limits.
Short-term risks of not proceeding	Without replacement, the bridge will require extensive rehabilitation within the next 7 to 10 years. Reactive repairs with unscheduled bridge closures would be increasingly frequent. Without a new bridge, there will be no improvement to service meaning there would continue to be truck restrictions.
Status	Conceptual and functional design of the Louise Bridge Replacement is occurring as part of the *Eastern Corridor Study* and is anticipated to be completed in the fourth quarter of 2019.
Project duration	Once construction budget is approved by council, the estimated project duration is 5 years.

PUBLIC WORKS

Marion Transportation Improvements



CURRENT COST ESTIMATE

$TBD

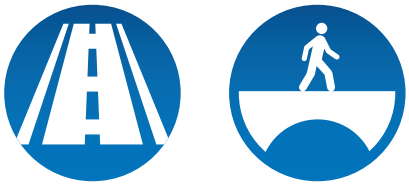
Main project driver

ENHANCE

Description	The proposed project involves an investigation of lower-cost alternatives to the road alignment that improve traffic operations, safety, and enhance pedestrian and cycling options without an underpass or widening along the relevant roads.
Need / rationale	The Council-adopted Transportation Master Plan (2011) recommended that a feasibility study be conducted to review the alignment for a widening and grade separation of Marion Street. The plan indicated that a review of this alignment was needed due to new and expanded residential and industrial development in eastern Winnipeg, which resulted in regular congestion along Marion Street, in particular where it intersects Archibald Street and Lagimodiere Boulevard. The City is investigating and will report back on more affordable functional design options to improve transportation along Marion Street between Lagimodiere Boulevard and Youville Street that do not include an underpass or widening. In addition, the more affordable options will present improvements to pedestrian and cycling infrastructure as well as improvements to safety and traffic operation at key intersections, while minimizing land requirements.
Short-term risks of not proceeding	Without improvements, continued and increasing bottlenecks and unpredictable stoppage in traffic are anticipated, which could result in increased congestion on alternative routes.
Status	Project re-scoping is anticipated in the third quarter of 2020.
Project duration	Once construction budget is approved by council, the estimated project duration is TBD.

PUBLIC WORKS

Route 90 Improvements–Taylor to Ness



CURRENT COST ESTIMATE

$500 million

Costed in 2020 dollars

Class 5 estimate

(-50% to +100%)

Main project driver

MAINTAIN

Description	The proposed project requires the widening and reconstruction of Route 90 from four to six lanes from Ness Avenue to Taylor Avenue. Considerable interchange and bridge improvements are required, which will include rehabilitation and reconstruction of the St. James Bridges crossing the Assiniboine River and modifications to the Portage Avenue interchange.
Need / rationale	Route 90 is a vital transportation corridor through the city linking major residential, employment, and commercial areas in the southwest and northwest quadrants of the city. Currently, the section of Kenaston Boulevard from Taylor Avenue to Ness Avenue has very poor traffic flow, poor capacity at intersections, and is often heavily congested, even during times of the day outside of peak rush hour. The bridges require rehabilitation and expansion to accommodate six traffic lanes and active transportation infrastructure. Both the southbound (built in 1936) and northbound (built in 1962) bridges are currently rated fair, with some components in poor condition. They are both in need of renewal as the most recent rehabilitations occurred over 30 years ago.
Short-term risks of not proceeding	The southbound St. James Bridge will require a renewal within five-to-seven years. Kenaston Boulevard has undergone reactive maintenance for the past 20 years and will also require reconstruction within five to seven years. Planned redevelopment at Kapyong Barracks will add to the existing congestion along Route 90 and exacerbate the related traffic issues, including slower flow, increased potential for collisions, and limited access for emergency services.
Status	A preliminary design and Class 3 cost estimate is expected to be finalized in the fourth quarter of 2020 for Council's consideration.
Project duration	Once construction budget is approved by council, the estimated project duration is 6 years.

PUBLIC WORKS

St. Vital Bridge Rehabilitation



CURRENT COST ESTIMATE

$50 million

Costed in 2023 dollars

Class 5 estimate

(-50% to +100%)

Main project driver

MAINTAIN

Description	The proposed project would involve the rehabilitation of the St. Vital Bridge over the Red River connecting Osborne Street to Dunkirk Drive, including marginal widening to better accommodate pedestrian and cycling requirements and improve roadside safety.
Need / rationale	The bridge and traffic barriers are deteriorating as a result of reinforcing steel corrosion and concrete degradation. Ongoing annual repairs and safety maintenance are required until rehabilitation can occur. The bridge deck was last rehabilitated over 30 years ago. Rehabilitation is required to extend the service life of the bridge for an additional 50 years. As part of the rehabilitation, it needs to be determined if pedestrian and cycling infrastructure can be improved, which would require additional widening of the bridges. The existing 1.5m sidewalks do not safely accommodate both pedestrians and cyclists.
Short-term risks of not proceeding	Continued deterioration of the bridge could result in a more expensive bridge replacement rather than rehabilitation.
Status	Preliminary design is anticipated to commence in 2022.
Project duration	Once construction budget is approved by council, the estimated project duration is 3 years.

PUBLIC WORKS

William R. Clement Parkway–Grant to Ridgewood

CURRENT COST ESTIMATE

$TBD

Main project driver

GROWTH

Description	The proposed project involves the construction of a new four lane divided roadway from Grant Avenue to Ridgewood Avenue, including trail crossings, and dog park locations.
Need / rationale	This section of William R. Clement Parkway is a southwest piece of the incomplete Inner Ring Road, as identified in the 2011 Transportation Master Plan. The *City of Winnipeg's Transportation Master Plan* (TMP) identified the Inner Ring Road as a major transportation connection to accommodate the travel demand associated with future residential, commercial, and industrial growth in Winnipeg. Residential growth in the southern part of Charleswood over the next two decades is expected to result in increased travel demand to and from this area. This increase in travel demand will be multi-modal, but a significant portion will be vehicular traffic. There is a need to mitigate the impact of this increase in vehicular traffic on the existing residential streets in Charleswood and also to accommodate future regional traffic growth in southwest Winnipeg.
Short-term risks of not proceeding	Development in Ridgewood South is rapidly advancing and future development may not be approved without the commitment to build appropriate arterial routes and their connections. Passenger vehicles and trucks are currently using alternative routes. Growth leads to higher traffic volumes and truck traffic will increase congestion and the deterioration of road surface conditions in the surrounding area.
Status	This project is currently on hold. The City will not approve or engage any major capital infrastructure planning in these areas until a new South Wilkes Precint Plan is adopted by Council.
Project duration	Once construction budget is approved by council, the estimated project duration is TBD.

WINNIPEG TRANSIT

Electric Bus Pilot Project



CURRENT COST ESTIMATE

$26 million

Costed in 2020 dollars

Class 5 estimate

(-50% to +100%)

***+ $** Eligible for cost sharing with other levels of government*

Main project driver

ENHANCE

Description	The proposed pilot project includes the purchase of 12-20 electric buses, associated charging infrastructure, and other related infrastructure.
Need / rationale	The project is needed to evaluate the performance and reliability of electric buses and to identify larger scale integration requirements and the viability of converting from a traditional diesel bus fleet to an electric bus fleet. The project will also determine if the transition from a diesel bus fleet to an electric bus fleet reduces bus maintenance operating costs and greenhouse gas emissions. The existing diesel bus fleet has a large carbon footprint, uses non-renewable fossil fuels, and requires costly maintenance.
Short-term risks of not proceeding	Continued and increased greenhouse gas emissions, along with the possibility of a future carbon tax, could have a significant impact on fleet fuel costs. There are current opportunities to capitalize on available cost-sharing opportunities offered by other levels of government.
Status	As part of the 2019 Capital Budget, Council approved a study to identify benefits and logistics of the *Electric Bus Pilot Project* is expected to be completed in the third quarter of 2019.
Project duration	Once construction budget is approved by council, the estimated project duration is 2 years.

North Transit Garage Replacement



CURRENT COST ESTIMATE

$150 million

Costed in 2020 dollars

Class 5 estimate

(-50% to +100%)

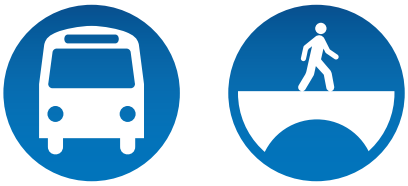
***+ $** Eligible for cost sharing with other levels of government*

Main project driver

MAINTAIN

Description	The proposed project would see the replacement of Winnipeg Transit's existing North Garage currently located at 1520 Main St. at a new location. The project includes the development of an energy efficient bus storage and light maintenance facility with increased bus capacity, designed to facilitate the transition to an electric bus fleet.
Need / rationale	The North Garage needs to be replaced within the next five years to ensure the department can meet growing service demands. The current facility is in overall poor condition and is no longer able to meet Winnipeg Transit's service requirements. Built in the 1930s, it is not feasible to continue to maintain the existing building, as there are many issues that require constant repairs and investments with limited long term value. Winnipeg Transit is also nearing its capacity to store buses, and the North Garage site is too small to facilitate an expansion. Transit will need increased garage space as the fleet continues to grow to keep up with demand. The department will also need additional infrastructure to facilitate the transition from diesel to electric and alternative fuel buses.
Short-term risks of not proceeding	The facility is at risk of closure due to overall poor condition and health and safety concerns. Continued use of the existing facility will result in increased operating costs and in the continued deterioration of the facility. If the North Garage is closed for any reason, it is anticipated there would be a disruption to transit service. The existing infrastructure will not support an electric bus fleet or alternative fuels. Not moving forward with replacement could delay the City's timeline for converting to an electric bus fleet. Delay could also result in missing out on the opportunity to capitalize on available federal funding programs.
Status	The feasibility design and Class 4 cost estimate are anticipated to be completed in the third quarter of 2019.
Project duration	Once construction budget is approved by council, the estimated project duration is 3 years.

Rapid Transit Corridors *(3 corridors)*



CURRENT COST ESTIMATE

$900 million

Costed in 2021 dollars

Class 5 estimate

(-50% to +100%)

***+ $** Eligible for cost sharing with other levels of government*

Main project driver

GROWTH

Description	With the completion of the Rapid Transit Master Plan anticipated to be completed in 2020, the future proposed corridors will be determined and prioritized. The future rapid transit corridors radiate out from the city centre to the suburbs of Winnipeg. Construction will generally include on-street and dedicated bus transitways, modern stations, and active transportation opportunities.
Need / rationale	An expanded rapid transit system is necessary to effectively connect and accommodate Winnipeg's growth, to ensure residents are provided with a viable alternative to driving, to reduce existing and future road congestion, and to build a transportation system capable of serving future generations. Congestion of the existing street network is resulting in longer commute times. In addition, rapid transit is also essential for shaping land use in a manner that achieves the objectives set out in *OurWinnipeg* and *Complete Communities Direction Strategy*.
Short-term risks of not proceeding	Not proceeding with the expansion of the rapid transit system would result in an increase in vehicles on the road network, resulting in increased traffic congestion, greenhouse gas emissions, and commute times. Customer service for Transit's expanding ridership would also be compromised. Delaying further rapid transit phases could jeopardize the opportunity to capitalize on potential federal and provincial funding.
Status	Completion of a *Rapid Transit Master Plan* is anticipated in the first quarter of 2020, while the completion of the *Eastern Corridor Study* is anticipated in the fourth quarter of 2019.
Project duration	Once construction budget is approved by council, the estimated project duration is 12 years for 3 corridors.

Airport Area West Water & Sewer Servicing

CURRENT COST ESTIMATE

$55 million

Costed in 2021 dollars

Class 5 estimate

(-50% to +100%)

***+ $** Eligible for cost sharing with other levels of government*

Main project driver

GROWTH

Description	The proposed project will provide regional water and sewer servicing for the Airport Area West lands, located north of Saskatchewan Avenue and west of the Winnipeg Richardson International Airport. This will include construction of sewers and watermains, lift station(s), force main(s) and associated appurtenances as required.
Need / rationale	Water and sewer services are required to develop the Airport Area West lands. The construction of CentrePort Canada Way has enabled development potential in the area, which is inhibited without water and sewer services. In April 2019, Council received the Employment and Commercial Lands Study as information which references the Airport Area Lands. The study identifies a shortfall of vacant serviced industrial land to accommodate forecasted growth in the City of Winnipeg. The Airport Area West lands was identified in the study as having the potential to help address this issue and become a significant employment hub within the city.
Short-term risks of not proceeding	Failing to provide water and sewer services will delay the possible development of the Airport Area West lands and their potential economic benefits.
Status	A preliminary design and Class 3 cost estimate is currently being developed for Council's consideration.
Project duration	Once construction budget is approved by council, the estimated project duration is 5 years.

North End Sewage Treatment Plant *(NEWPCC)* Upgrades

CURRENT COST ESTIMATE | **TOTAL: $1,789 MILLION**

Phase 1: Power Supply & Headworks Facilities	Phase 2: Biosolids Facilities	Phase 3: Nutrient Removal Facilities
$408 million	**$553** million	**$828** million
Costed in 2019 dollars	*Costed in 2020 dollars*	*Costed in 2023 dollars*
Class 3 estimate (-20% to +30%)	Class 3 estimate (-20% to +30%)	Class 3 estimate (-20% to +30%)

***+ $** Eligible for cost sharing with other levels of government*

Main project driver

REGULATORY

Description	The proposed project includes improvements to the power supply and headworks facilities, biosolids facilities, and nutrient removal facilities at the North End Sewage Treatment Plant (NEWPCC). The scope of work includes upgrading the NEWPCC to meet new regulatory licence requirements, add wet weather treatment capability, treat sludge, and replace end-of-life equipment.
Need / rationale	The provincial government requires reduced nutrient loading as part of the NEWPCC's operating licence, which includes new limits for phosphorous and nitrogen along with the requirement to sustainably re-use biosolids. New licence requirements cannot be met by the existing plant processes. Several plant components and facilities have reached the end of their service life and must be replaced to maintain reliable operation. The existing biosolids facility is nearing capacity and cannot service expected population growth of the city.
Short-term risks of not proceeding	Delaying work at NEWPCC wil result in numerous long-term risks, which includes non compliance with the provincial regulatory licence, insufficient capacity in the existing biosolids facility to service expected growth of the city, failure of plant components that have reached end of life, and construction cost escalation.
Status	The preliminary design is complete and an administrative report addressing project procurement was presented to Council at the February 2019 meeting at which Council approved funding for the first phase of the project: Power Supply and Headworks Facilities. The power supply component is currently under construction.
Project duration	Once construction budget is approved by council, the estimated project duration for: Phase 1 is 7 years. Phase 2 is 8 years. Phase 3 is 9 years.

Southwest Interceptor–Phase 2

CURRENT COST ESTIMATE

$32 million

Costed in 2026 dollars

Class 5 estimate

(-50% to +100%)

***+ $** Eligible for cost sharing with other levels of government*

Main project driver

GROWTH

Description	The proposed project involves the completion of the Southwest Interceptor and construction of approximately four kilometres of sewer works from the Red River crossing (Phase 1) to the South End Sewage Treatment Plant (SEWPCC).
Need / rationale	Currently, all sewage generated in the southwest quadrant of Winnipeg flows to the D'Arcy Lift Station on Bishop Grandin Boulevard. From here, it is pumped across the Red River and then flows by gravity to the SEWPCC. The D'Arcy Lift Station is nearing capacity. A new interceptor is required to provide servicing for the full development of the Waverley West area; without it, it will limit growth in the southwest quadrant of the city. The interceptor will also provide redundancy to critical river crossing assets.
Short-term risks of not proceeding	Development in the Waverley West area will be limited if sewer infrastructure is insufficient to service the area. There are ongoing operations and maintenance costs associated with pumped sewage required if sewer services are inadequate.
Status	Options are currently being reviewed before a conceptual plan and pipe sizing can be developed.
Project duration	Once construction budget is approved by council, the estimated project duration is 4 years.



More information

For more information regarding the City's major capital projects, please see: **winnipeg.ca/infrastructure**

Photo credits

Courtesy of Tourism Winnipeg:

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