

**CAPITAL**  
INVESTMENT  
OUTLOOK  
2023 – 2032



**CITY OF EDMONTON**

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## EXECUTIVE SUMMARY

Administration has prepared the 10-year Capital Investment Outlook (CIO) to provide a high-level overview of the key elements that will impact the City's capital program from 2023 to 2032. The Outlook assists City Council in making decisions in the short-term by understanding how these decisions will affect the City's future capital investment requirements. It also assists Council in making strategic decisions on how best to allocate City resources between replacing and rehabilitating existing assets and building new infrastructure.

As Edmonton's population continues to grow, so will the demand for City-provided services and capital investments to deliver new infrastructure and maintain the condition of existing City assets. However, conditions shaping the City's fiscal and economic reality over the next ten years are highly uncertain and present a challenge when trying to strike a balance in capital investment planning between new infrastructure and infrastructure maintenance.

A growing number of assets combined with reductions in sustainable infrastructure funding from the provincial government, results in significant challenges for the City to maintain its existing infrastructure. In order to adhere to the Infrastructure Asset Management Policy and Infrastructure Strategy, nearly all unconstrained funding would need to be directed to the City's renewal program over the next 10 years. Even then asset conditions would deteriorate over a 20-year time frame. Therefore, additional strategies will be required by Council, including a right-sizing of the current number of assets owned by the City. This process will require strong leadership to manage difficult conversations that address the strong attachments to City assets. In addition, consideration of a dedicated tax levy to fund renewal programs experiencing the most budgetary pressure will be required. If additional strategies are not undertaken, there may be a need to consider a redirection of existing Neighbourhood Renewal Program funding to other renewal priorities in order to help spread the reduced funding levels more equitably across the City's overall renewal program.

With nearly all unconstrained funding required to meet renewal needs, there will be limited funds for growth investment in new assets. Although the City has a process to prioritize and recommend growth investment based on strategic alignment, the level of funding available suggests that further prioritization would be required. As a result, the only new growth projects likely to proceed are projects mandated by legislation, those that have high safety impacts, or are high priority and eligible to receive funding from partners and other orders of government.

Although new growth funding will be severely limited going forward, there has already been \$3.8 billion in capital growth spending approved for the 2023-2026 capital budget cycle prior to budget deliberations occurring. This represents 30 per cent more growth than what was approved after the final deliberations of the 2019-2022 budget. Previously, the City was able to fund this growth with a combination of grants from other orders of government, matched with tax-supported debt. The combination of lower funding, commitments to large transformational projects and the increased use of tax-supported debt means the City does not have the financial means to fund transformational infrastructure projects without assistance from the other orders of government and the internal debt capacity remaining will be required to match this funding.

Even though the City continues to operate within its legislated debt limits, the increased use of debt in recent capital budget cycles has been significant. If the City continues at the same pace in future capital budget cycles it will significantly encroach on the City's internal debt limits and negatively impact the City's credit score. In addition, if the City overextends the use of debt for projects that do not have additional constrained funding sources, there is a risk that debt room will be unavailable to match the funds needed to access future grant programs. This reduces the City's agility to explore new possibilities as grant opportunities continue to evolve.

The development and presentation of the 2023-2032 CIO is the first step in delivering the proposed 2023-2032 Capital Plan and 2023-2026 Capital Budget to City Council in November of 2022. Over the coming months, Administration will collect feedback and input to assist in developing the proposed Capital Budget that will best and most efficiently use the available capital funding to advance Council's strategic goals and priorities.

# INTRODUCTION

## CORPORATE STRATEGY

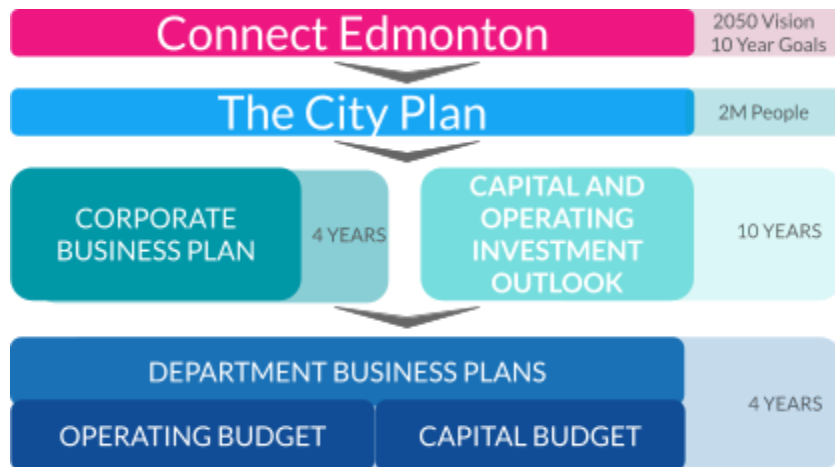
The City uses the Strategic Planning Framework (SPF) to manage overall corporate direction. It is the collection of plans and processes that guide how the City works to enable a better life for all Edmontonians.

### STRATEGIC PLANNING FRAMEWORK



The City's Strategic Planning Framework is composed of six interconnected plans and processes that direct the growth and evolution of Edmonton: ConnectEdmonton, The City Plan, the Corporate Business Plan, the Budget, Enterprise Performance Management and Enterprise Risk Management. Broadly, the framework answers three main questions: Where are we now? Where are we going? How will we get there?

City Administration puts our vision, ConnectEdmonton, and choices, The City Plan, into action each four-year planning and budget cycle through the Corporate Business Plan which integrates the corporation's work, allocation of resources, measurement of performance and management of risk.



## CONNECTEDMONTON

ConnectEdmonton, Edmonton's [strategic plan](#), sets the direction for the future and identifies where changes are required. ConnectEdmonton is based on an aspirational vision for Edmonton in 2050 and focuses on four strategic goals for 2019-2028 that require transformational change.



**Healthy City:** Edmonton is a neighbourly city with community and personal wellness that embodies and promotes equity for all Edmontonians.



**Urban Places:** Edmonton neighbourhoods are more vibrant as density increases, where people and businesses thrive and where housing and mobility options are plentiful.



**Regional Prosperity:** Edmonton grows prosperity for our Metro Region by driving innovation, competitiveness and relevance for our businesses at the local and global level.



**Climate Resilience:** Edmonton is a city transitioning to a low-carbon future, has clean air and water and is adapting to a changing climate.

## THE CITY PLAN

[The City Plan](#) combines a Municipal Development Plan and Transportation Master Plan, and includes direction in environmental planning, social planning and economic development.

The City Plan's five Big City Moves are bold, transformative priorities that advance our ConnectEdmonton goals and point the way as we deliberately build our city to welcome one million more Edmontonians on our journey towards a population of two million. They are:

- **Greener as We Grow:** A commitment to protecting and enhancing our land, air, water and biodiversity by using growth as a catalyst for good design and conscientious decisions.

- **Rebuildable City:** A way of planning for the flexibility and imagination we must demonstrate to keep our city vibrant, livable and efficient in the face of shifting local and global trends.
- **Community of Communities:** Making big city life feel less anonymous and more personal by developing housing, recreation, schools and employment in all of our districts that can be better accessed through all forms of transportation.
- **Inclusive and Compassionate:** We are rooted in concepts and efforts to improve equity, end poverty, eliminate racism and make clear progress towards Truth and Reconciliation.
- **Catalyze and Converge:** Putting Edmonton into position to continually improve its competitiveness and readiness in a changing world.

To achieve these priorities on behalf of Edmontonians, The City Plan envisions the systems and physical networks that influence the physical shape of our city and illustrate the concepts shared in policy. These are:

- Mobility
  - Active Transportation Network
  - Transit Network
  - Roadway and Goods Movement Network
- Planning and Design
  - District Network
  - Nodes and Corridors Network
  - Green and Blue Network
  - Non-Residential Opportunities Network
- Managing Growth
  - Growth Management Framework
  - Development Pattern Areas
  - Phasing and Activation



Not everything in The City Plan is about building something new. Many priorities are about keeping things the same and providing quality services today. They include preserving the attributes most valued by Edmontonians that were handed down to us from previous generations. As a community, in return, we continue to deliver on what makes for a safe and liveable city as part of our responsibility to future generations.

## The Modern City

A modern city is a complex entity. It's a geographical place, a gathering of residents, a set of opportunities, a history and a future. It is also a collection of physical assets. And these physical structures—its facilities and infrastructure—play a significant role in every one of those city-making attributes mentioned above. A city's physical status helps define a place. It can inspire and facilitate a strong economy and sense of community, and tell residents and visitors an enormous amount about where a city has been and where it's going.

This is certainly the case in Edmonton, with its long history, a bright future, a young and diverse population, and where its asset and infrastructure landscape is central to the life of the city. Of course, to some extent, it's this way in any city. But Edmonton's challenges are also unique given its significant economic and population expansion, large metropolitan region, challenging environmental climate, and cyclical resource-based economy. Which is why the sound management and maintenance of over \$31.6 billion (replacement cost) of capital assets—comprised of roadways, bridges, buildings, transit facilities, parks, fleet, and information technology—is both complicated and essential.

## Our Responsibility

The City is responsible for building and maintaining capital assets and infrastructure to serve the residents and businesses of Edmonton, which the City approaches with an immediate and long-term view. The ability to construct and properly maintain capital assets is essential to ensure the provision of services and ensuring Edmonton stays an attractive, cost-effective place to live and do business. The City must optimize its assets life cycle and value for money. A city is sustainable only with the right mix of capital assets maintained over the long-term. Infrastructure is expensive to build, buy, renew or replace, which means getting maximum value from every dollar spent on infrastructure is important and necessary.

With these factors in mind, it is incumbent on the City to develop a view of Edmonton's infrastructure needs through multiple lenses, principally the needs of today and what our best information tells us will be the needs of tomorrow. The 10-year Capital Investment Outlook (CIO) provides this longer-term view of the City's capital program, taking into account the following:

- Council's strategic vision and goals, as outlined in The City Plan and ConnectEdmonton,



- The City's growth forecast and other key economic indicators,
- Projects and initiatives that have been committed to beyond 2023,
- Ongoing investment required in existing infrastructure,
- New infrastructure to support a growing community, and
- Projected available capital funding and debt capacity.

The CIO enables Council to make decisions in the short-term, understanding how these decisions will affect the City's future capital investment requirements. It also assists Council in making strategic decisions on how best to allocate City resources between the replacement and rehabilitation of existing assets and building new infrastructure.

## **CAPITAL OUTLOOK CONTEXT**

Capital spending in Edmonton has evolved over the past few decades, with current and expected fiscal and economic conditions guiding the direction of the City of Edmonton's capital program. In the late 1980s and 1990s, capital spending was kept to a minimum to maintain basic services as a result of fiscal and economic constraints. This approach was unsustainable, with service standards experiencing a reduction and the condition of City infrastructure beginning to deteriorate. As fiscal and economic conditions stabilized, the City of Edmonton was then able to start addressing a backlog of renewal projects and the delivery of new infrastructure.

Today, Edmonton is the fifth largest city in Canada, with a population that will continue to grow. Edmonton's population is also relatively young compared to other major Canadian cities, which is advantageous to the city's growth on many fronts. As Edmonton's population continues to grow, so will the demand for City-provided services and capital investments to deliver new infrastructure and maintain the condition of City assets. However, conditions shaping the City's fiscal and economic reality over the next ten years are highly uncertain, presenting a challenge when trying to strike a balance in capital investment planning between new infrastructure and infrastructure maintenance.

## **ECONOMIC OUTLOOK**

On March 11, 2020, the World Health Organization declared COVID-19 a pandemic, presenting health, economic and social challenges, significantly impacting jurisdictions worldwide. Over the past decade, Edmonton's economy endured two economic shocks—the 2014-2015 oil price shock (which resulted in back-to-back years of economic contraction in 2015 and 2016) and the COVID-19 pandemic. The pandemic set Edmonton's

economic recovery from the 2015-2016 recession further back, with an estimated contraction in real gross domestic product (GDP) that exceeded the combined impact of the 2015-2016 recession. The pandemic also impacted labour market conditions with sharp and swift job losses due to public health measures restricting economic activity. However, as measures evolved to become more targeted in nature starting in May 2020, allowing economic activity to return gradually, the regional labour market began to recover. To put things in perspective, the region's annual unemployment rate in 2020 reached 12 per cent, a level unseen since labour force data became available in 2001.

In 2021, Edmonton's economy began showing meaningful signs of a recovery, with improvements in the regional labour market and business conditions. The rest of the world was recovering, with economies gradually reopening at varying paces and extents. This reopening created significant pressures on global supply chains, particularly since industrial production and businesses had adjusted their operations to accommodate a sharp decrease in demand from the pandemic. Bringing operations back to meet returning demand, especially considering the speed at which demand was returning, is challenging in non-pandemic times. During a pandemic, it became an even more significant challenge due to labour shortages and challenges with logistics. As a result, even though Edmonton's economy showed meaningful progress in its economic recovery, price pressures began to mount. Supply chain disruptions and distortions in consumption for certain commodities began to lift prices, and inflation rates began to accelerate consumers and businesses.

Against this backdrop, there is still a great deal of potential for the future of Edmonton. Still, persistent price acceleration introduces another risk to growth in the short to medium-term, especially since the timing and pace of price pressures easing are unclear. Over the 2023 to 2032 period, the annual rate of inflation is predicted to average 2.1 per cent for consumer goods and services and 2.4 per cent for non-residential construction. This uncertainty does not take away from expectations for real GDP in Edmonton to return to its pre-pandemic level by the end of 2022; however, that still means there were almost three years without economic growth. Over the CIO's 10-year horizon, real GDP in Edmonton is expected to grow at an average annual rate of 1.9 per cent, which is considered low to moderate, especially compared to historical growth rates preceding 2015.

**Table 1: Key Economic Indicators<sup>1</sup>**

Key Indicators	Average Annual % Growth, 2019-2022	Average Annual % Growth Forecast, 2023-2026	Average Annual % Growth Forecast, 2023-2032
Real Gross Domestic Product (GDP) <sup>2</sup>	0.7	2.0	1.9
Population	1.8	1.6	1.4
Employment	1.4	1.8	1.5
Consumer Inflation	3.0	2.4	2.1
Non-Residential Construction Inflation	3.6	2.6	2.4

Annual average inflation rates over the 2019-2022 budget cycle largely reflect significant price pressures in 2021 and 2022. In 2021, consumer inflation averaged an annual rate of three per cent, and in 2022 is forecast to accelerate to an average rate in the six per cent range. By contrast, the rate of consumer inflation averaged one per cent in 2020 and 1.7 per cent in 2019. The annual average rates over the 2023-2026 cycle assume high inflation rates will likely continue into 2023. However, price pressures are expected to gradually ease and bring down inflation rates to more normalised ranges by the end of that year. The forecast assumes that interest rate increases starting in 2022 will slow demand for consumers and businesses, which should help ease price pressures to some extent from supply chain disruptions. In addition, the Russia-Ukraine war has added significant upward price pressure on select commodities, particularly energy and food, which is a key factor driving inflation expectations higher in 2022. Beyond 2023, annual inflation rates expect to be within more normalised ranges (~2 per cent), which explains why annual average inflation rates over the 2023-26 cycle, as well as the 10-year CIO forecast horizon, are lower compared to the 2019-2022 cycle. However, it is important to note that while inflation rates are expected to normalise, negative price growth to counterbalance the price acceleration in 2021 and 2022 is not expected.

Long-term employment growth is also expected to moderate due to an aging population that will slow labour force growth. Edmonton's population is expected to continue growing over the forecast horizon, though at a more moderate pace, with net in-migration playing a significant role in population growth. Edmonton's population is predicted to grow at an annual average rate of 1.4 per cent over the CIO's forecast period, which marks a significant reduction from an average rate of 2.2 per cent in the 10-year period ending in 2022.

<sup>1</sup> Source: Statistics Canada and Alberta Treasury Board and Finance (actuals); City of Edmonton and Stokes Economics, May 2022 (forecasts).

<sup>2</sup> Basic price, chained 2012 dollars.

Looking ahead, the factors driving the need for capital investment will remain, but the environment in which capital budget dollars are being spent on infrastructure (both new and existing) has changed. The COVID-19 pandemic has made a lasting impression on economies around the world with challenges over the short-term running the risk of being more persistent, which could impact Edmonton’s growth prospects over the medium-term.

**Future Capital Projects Already Approved**

Prior to 2023-2026 budget deliberations, \$4.0 billion of capital spending has already been approved, of which \$3.8 billion is for growth and \$207 million is for renewal. This committed growth is mostly for transformational projects like LRT expansion that extend over a large period of time, and require committed funding to match funding made available from other orders of government. Whereas, the commitment in renewal supports larger contracts started in 2019-2022 that span over into the 2023-2026 fiscal cycle.

**Table 2: Capital budget already approved in future years**

Approved Projects (\$millions)	2023	2024	2025	2026	Total 2023-2026 (4 Years)	Total 2027- 2032 (6 Years)	Total 2023-2032 (10 Years)
Growth	1,320	1,160	849	500	<b>3,829</b>	244	<b>4,073</b>
Renewal	134	62	11	-	<b>207</b>	-	<b>207</b>
<b>Total Projects</b>	<b>1,454</b>	<b>1,222</b>	<b>860</b>	<b>500</b>	<b>4,036</b>	<b>244</b>	<b>4,280</b>

**EMERGING ISSUES**

There are numerous emerging issues that could have direct impacts on the City’s capital program. These include capital planning in a high price environment, borrowing conditions for local authorities, and uncertainty of future capital grant funding. The City will continue to pay close attention to these issues, with the long-term capital plan continuing to be refined in the coming years.

**Capital Planning in a High Price Environment**

In 2021, inflation began to accelerate, largely influenced by pandemic-related factors like supply chain disruptions, including transportation bottlenecks. Russia’s invasion of Ukraine is also having an impact on some commodity prices, including for crude oil. This has been affecting the price and availability of some input material and goods needed for capital projects, as well as fuel prices. Even though price pressures are expected to ease, the timing and pace are unknown at this time and could mean that elevated price pressures

spill over into 2023. Whether prices will see a reversal once inflationary pressures begin to normalize, particularly the case for materials and equipment, remains to be seen. If prices remain high, this will continue to erode the City of Edmonton's purchasing power through its capital program, at least over the medium-term.

### **Borrowing Conditions for Local Authorities**

The Government of Alberta announced new loan pricing for local authorities in December 2021 including an increase of approximately 50 to 75 basis points over borrowing rates that the City received in the past. The rate increase will impact operating budgets by requiring additional tax levy to fund future debt servicing on new projects that are financed with tax-supported debt. Further increases to the debt will not only be more costly, but increasing the City's debt burden could also lower the City's credit rating.

Economic and employment growth rates over the long-term are expected to moderate, which suggests slower rates of growth in incomes and reduced demand for goods and services provided by businesses in Edmonton. Inflation has been running high, this not only impacts the City but erodes the purchasing power of residents and businesses. This means that residents and businesses may still be under financial pressure entering the next 10-year CIO period, especially if prices do not see a reversal, which may limit the tolerance of Edmontonians for future tax and user fee increases.

### **Uncertainty of Future Capital Grant Funding**

The City does not have the financial means to fund transformational infrastructure projects without assistance from the other orders of government. While there is recognition that the recovery period following a global pandemic is challenging for all orders of government, the City must continue to advocate for its residents to ensure their needs are being met. In addition, strong municipal infrastructure creates an ability to attract in-migration to the cities, ultimately providing a net benefit to the province. However, the timing of the next capital budget cycle and the implementation of the next generation of federal and provincial infrastructure funding programs is not well-aligned.

The federal government's current multi-year infrastructure strategy—the Investing in Canada Plan (ICP)—was introduced in 2016. While the City has accessed significant funding from its various programs, additional funding to support the next capital budget cycle is not expected from this source. Besides this, the federal government has committed to a Permanent Transit Fund that will begin in 2026-27 and provide \$3 billion per year nationally to support public transit infrastructure projects. Early stakeholder engagement on the

Permanent Transit Fund has just begun, and how funding will be allocated has not yet been determined. Other large-scale infrastructure programs that overlap with the next capital budget cycle have not been announced at this time.

The provincial government provided significant match funding to support the City's ICP funded infrastructure projects, particularly for LRT network expansion. However, the province has ended other funding programs such as GreenTRIP, which supported public transit infrastructure, and has not introduced new, targeted programs that can help to support the City's strategic infrastructure goals, such as achieving net zero emissions by 2050.

## AVAILABLE CAPITAL FUNDING

### CAPITAL FUNDING

The ability to execute growth and renewal capital projects is constrained by the amount of available capital funding and debt capacity. Therefore, it is critical to achieve as much certainty as possible around the timing, sources and amount of funding based on what is known and committed in the present moment. Funding for capital is provided from internal and external funding sources to the City. The City aims to maximize financing from external sources such as provincial and federal grant funding, development fees and levies, sale of city-owned land, contributions from other specific purpose reserve funds, and third party contributions, prior to utilizing internal sources such as Pay-As-You-Go and the issuance of debt.

Funding can be classified into two main categories: unconstrained and constrained. Unconstrained funding is available, at Council's discretion and with no restrictions, for a variety of infrastructure needs. Constrained funding, on the other hand, is dedicated (for various reasons) to specific types of infrastructure.

In the 10-year CIO, the total projected funding is \$10.8 billion, which includes \$7.2 billion of constrained funding and \$3.6 billion of unconstrained funding. \$4.6 billion of funding has been committed to existing capital projects, leaving a combined \$6.2 billion available for all remaining growth and renewal investment over the period of 2023 to 2032.

Table 3: Total Funding Forecast

Funding Sources (\$millions)	2023	2024	2025	2026	Total 2023-2026 (4 Years)	Total 2027-2032 (6 Years)	Total 2023-2032 (10 Years)
Constrained Funding	1,612	1,447	1,142	795	4,996	2,190	7,186
Unconstrained Funding	302	347	353	358	1,360	2,246	3,606
<b>Total Funding</b>	<b>1,914</b>	<b>1,794</b>	<b>1,495</b>	<b>1,153</b>	<b>6,356</b>	<b>4,436</b>	<b>10,792</b>
<i>Less: Funding already committed</i>	<i>(1,544)</i>	<i>(1,266)</i>	<i>(904)</i>	<i>(545)</i>	<i>(4,259)</i>	<i>(320)</i>	<i>(4,579)</i>
<b>Total Funding Available</b>	<b>370</b>	<b>528</b>	<b>591</b>	<b>608</b>	<b>2,097</b>	<b>4,116</b>	<b>6,213</b>

### UNCONSTRAINED FUNDING

The table below shows the City's four unconstrained funding sources, which total \$3.6 billion over the 2023-2032 period. Of this amount, \$506 million has already been committed to future projects, leaving \$3.1 billion available for allocation to additional future growth and renewal needs.

Table 4: Unconstrained Funding Forecast

Unconstrained Funding Sources (\$millions)	2023	2024	2025	2026	Total 2023-2026 (4 Years)	Total 2027-2032 (6 Years)	Total 2023-2032 (10 Years)
Pay-As-You-Go	135	129	131	133	528	834	1,362
Municipal Sustainability Initiative (MSI)	103	0	0	0	103	0	103
Local Government Fiscal Framework (LGFF)	0	157	160	162	479	1,007	1,486
Canada Community-Building Fund (CCBF)	64	61	62	63	250	405	655
<b>Total Unconstrained Funding</b>	<b>302</b>	<b>347</b>	<b>353</b>	<b>358</b>	<b>1,360</b>	<b>2,246</b>	<b>3,606</b>
<i>Less: Funding already committed</i>	<i>(201)</i>	<i>(108)</i>	<i>(66)</i>	<i>(54)</i>	<i>(429)</i>	<i>(77)</i>	<i>(506)</i>
<b>Total Unconstrained Funding Available</b>	<b>101</b>	<b>239</b>	<b>287</b>	<b>304</b>	<b>931</b>	<b>2,169</b>	<b>3,100</b>

**Pay-As-You-Go: \$1.362 billion**

Pay-As-You-Go (PAYG) funding is largely made available from annual investment/dividend income, and a portion of the funds received through property taxes. Investment volatility can significantly impact the total amount of funding available in a given year. PAYG is a vital component of the City's funding strategy since it is used to pay for the costs grant-funded projects incur that are not eligible for reimbursement under federal and provincial grant funding rules. To maximize the use of grant funding, it is necessary to have an unconditional fund source to address the grant eligibility gaps.

**Municipal Sustainability Initiative (MSI): \$0.103 billion**

The Municipal Sustainability Initiative (MSI) program has been the primary provincial funding source for Alberta municipalities' core capital infrastructure needs since it was launched in 2007. Originally anticipated to end in 2016, the program was spread out over an additional five years to the end of 2021 through multiple budgets and amending agreements. The program was extended for 2 additional years (at a reduced funding amount), and 2023 will be the final year the City receives money before the program is replaced with the Local Government Fiscal Framework.

**Local Government Fiscal Framework (LGFF): \$1.486 billion**

In 2024, the Government of Alberta will replace the MSI program with the Local Government Fiscal Framework (LGFF). The LGFF is a permanent, allocation-based program that will provide annual funding based on a revenue-sharing formula that will see funding grow or decrease at half the rate of the correlating change to provincial revenues. In 2024, the City is projected to receive a funding allocation of approximately \$155 million – a significant decrease compared to previous funding levels under MSI. The City's LGFF funding allocation formula is enshrined in Part 2 of the Local Government Fiscal Framework Act. Throughout 2022, the transition from MSI to LGFF will be finalized; however, the funding allocation is not up for renegotiation. Any changes to the allocation formula will be a longer term advocacy goal. The LGFF is expected to fund a broad cross-section of civic renewal and growth priorities and will need to support a multitude of capital priorities, including a considerable portion of the City's renewal program previously funded through MSI. Given the significant demands for this funding, it is not well suited to support large-scale, transformative infrastructure projects.

**Canada Community-Building Fund (CCBF) (Formerly Federal Gas Tax): \$0.655 billion**

In 2021, the Federal Gas Tax Fund was renamed the Canada Community-Building Fund (CCBF). This program provides over \$2 billion a year nationally to municipalities on a per



capita basis, and is indexed to grow with inflation. The funding can be used for a broad cross-section of infrastructure and does not require match funding; municipalities can also bank and borrow against the funds and pool funds for future use. The City is expected to receive approximately \$655 million over the 2023-2032 CIO timeframe, with a significant portion already earmarked for South LRT (to Century Park) debt servicing until it is retired in 2030. With the CCBF contribution agreements set to be renewed in 2024, there is an opportunity for the federal government to broaden the program's eligibility parameters. This change would enable municipalities to fund climate change adaptation and mitigation measures that support green infrastructure to reflect new federal policy in this area better. Municipalities have also long advocated for a permanent doubling of the CCBF, which would provide the City with added financial resources in the future to advance priority infrastructure.

### CONSTRAINED FUNDING

The table below shows the City's constrained funding sources, which total \$7.2 billion over the 2023-2032 period. Of this amount, \$4.1 billion of this amount has already been committed to future projects, leaving \$3.1 billion available for allocation to additional future growth and renewal needs for which the funding is constrained.

**Table 5: Constrained Funding Forecast**

Constrained Funding Source (\$millions)	2023	2024	2025	2026	Total 2023-2026 (4 years)	Total 2027-2032 (6 years)	Total 2023-2032 (10 years)
Federal Grants (constrained) <sup>1</sup>	422	316	221	124	<b>1,083</b>	46	<b>1,129</b>
Provincial Grants (constrained) <sup>1</sup>	473	365	255	97	<b>1,190</b>	0	<b>1,190</b>
Land Enterprise	33	49	48	48	<b>178</b>	254	<b>432</b>
Reserves	221	221	209	225	<b>876</b>	1,329	<b>2,205</b>
Utilities	71	59	54	44	<b>228</b>	326	<b>554</b>
Other	30	30	30	30	<b>120</b>	181	<b>301</b>
Debt (Non-utility) <sup>2</sup>	362	407	325	227	<b>1,321</b>	54	<b>1,375</b>
<b>Total Constrained Funding</b>	<b>1,612</b>	<b>1,447</b>	<b>1,142</b>	<b>795</b>	<b>4,996</b>	<b>2,190</b>	<b>7,186</b>
<i>Less: Funding already committed</i>	<i>(1,343)</i>	<i>(1,158)</i>	<i>(838)</i>	<i>(491)</i>	<b>(3,830)</b>	<i>(243)</i>	<b>(4,073)</b>
<b>Total Constrained Funding Available</b>	<b>269</b>	<b>289</b>	<b>304</b>	<b>304</b>	<b>1,166</b>	<b>1,947</b>	<b>3,113</b>

<sup>1</sup> Includes only constrained grants currently approved for existing projects

<sup>2</sup> Includes only debt currently approved for existing projects

**Federal Grants (Constrained): \$1.129 billion**

The 10-year funding forecast of \$1.129 billion for Federal constrained grants includes only funding already approved within the existing capital budget. It consists of funding from:

- the Investing in Canada Infrastructure Program (ICIP) approved for Valley Line West, Metro Line to Blatchford, and Capital Line South Extension LRT Projects,
- the Building Canada Fund (BCF) program for the Yellowhead Trail Freeway conversion project, and
- one-time grant funding for the 50th Street Grade Separation project.

No additional federal constrained funding has been included in the CIO's 10-year forecast, as there is still too much uncertainty surrounding when funding will be available and what projects it might be able to support.

The following federal funding landscape provides additional details and considerations surrounding this uncertainty.

**Federal Funding Landscape**

In 2016, the Government of Canada launched the 12-year Investing in Canada Plan and, through subsequent budgets, has committed more than \$180 billion nationally to infrastructure programs across five priority areas: public transit, green infrastructure, social infrastructure, trade and transport, and rural and northern communities.

Most of this federal funding flows to green infrastructure initiatives (mostly public transit and projects supporting greenhouse gas mitigation and climate change adaptation and resilience), which align with the federal Climate Change Plan. Canada has committed to reducing its GHG emissions by 30 per cent below 2005 levels by 2030 under the 2015 Paris Climate Agreement. In December 2020, the federal government released a strengthened Climate Plan that builds on the work done to date and establishes the building blocks to get Canada to net-zero emissions by 2050. In March 2022, the federal government unveiled its 2030 Emissions Reduction Strategy, which commits \$9.1 billion in new and existing investments to support these goals, further underscoring its climate commitments.

The City's ambitious Energy Transition Strategy aligns closely with the goals of the federal Climate Change Plan and the 2030 Emissions Reduction Plan. To bring the net-zero emissions goal into reality, municipal governments will need funding support specifically for climate mitigation and adaptation on the same scale as funding provided through the

federal Investing in Canada Plan. The City will require significant up-front grant investments from both orders of government as forecasts suggest that approximately \$300 million annually is needed over the next ten years. Without a funding commitment of this magnitude, it will be a challenge for the City to realize its climate strategies.

Under the current federal government, budgets in 2016 and 2017 have provided the most funding support for the five federal priority areas identified above. The Investing in Canada Plan (2016-2028) commits \$90 billion in new, dedicated funding, including the \$33 billion Investing in Canada Infrastructure Program (ICIP), which flows to the provinces and territories through bilateral agreements and is mostly targeted at public transit and green infrastructure. The Plan also includes other federal programs such as the Disaster Adaptation and Mitigation Fund (DMAF), the National Trade Corridors Fund (NTCF), and the National Housing Strategy (another growing federal priority). The \$90 billion of the Investing in Canada Plan that was not new funding, flows through the Canada Community Building Fund (CCBF) as well as other programs launched prior to 2016 like the Building Canada Fund (BCF), New Building Canada Fund (NBCF) and P3 Canada Fund.

The Investing in Canada Plan is almost halfway through its term, and most of the federal funding has been committed. Under Phase 1 of the ICIP program, the City received \$145.3M out of a total provincial envelope of \$347.19 million for various transit-related projects, including electric buses, which allowed the City to advance its bus electrification strategy with the purchase of 40 electric buses. Under ICIP Phase 2, approximately two-thirds of the \$3.37 billion of infrastructure funding provided to the province has been approved for public transit infrastructure projects. Of this, a total of \$1.47 billion flows to Edmonton for LRT network expansion to advance the Valley Line West, Metro Extension to Blatchford, and Capital Line South Extension to Heritage Valley – this accounts for over 40 per cent of the total program funding available to the province. Given the City's success in securing significant investment for public transit priorities, there was limited opportunity to access additional federal investment under the ICIP to support other initiatives. As of 2022, Alberta's ICIP allocation has been fully committed.

Under the Investing in Canada Plan, the City was also awarded:

- \$52.8 million under DMAF, which is flowing to EPCOR to support municipal flood mitigation projects;
- \$39.8 million through the NTCF to support the 50th Street Rail Grade Separation project; and
- \$61 million through the National Housing Strategy's Rapid Housing Initiative.

Prior to the Investing in Canada Plan, the NBCF and P3 Canada Fund were the primary sources of federal funding for large, transformative infrastructure projects. The NBCF and the P3 Canada Fund have been fully allocated for several years. The City was successful in leveraging the NBCF (\$150 million) and P3 Canada Fund (\$250 million) to support the Valley Line Southeast LRT Expansion project. The NBCF also provided funding for the Yellowhead Trail Freeway Conversion project (\$241.6 million), the Fort Edmonton Park Expansion project (\$47.3 million), and the Mill Woods Stormwater Ponds project (\$30.3 million), also managed by EPCOR.

The Investing in Canada Plan also introduced the Canada Infrastructure Bank (CIB). Created in 2017, the CIB presents another opportunity to secure financing for municipal infrastructure projects. The Bank's purpose is to leverage its \$35 billion endowment to attract private capital and co-invest with private-sector and institutional investors. This leverage would allow for new, revenue-generating infrastructure projects that might not otherwise be built or would not be built with private sector involvement.

The CIB does not provide grant funding and is not intended to replace existing infrastructure funding models, such as grants and public-private partnerships, but rather seeks to complement and expand these models by providing another option to help structure and finance new capital projects. The CIB's focus is on public transit, green infrastructure, trade and transport, broadband and clean power. More recently, they have rolled out priority investment initiatives, such as zero-emission buses and building energy retrofits programs, as part of the federal government's strengthened actions of the Climate Plan. There may be opportunities for the City to work with the CIB to move forward initiatives like zero-emission vehicles, LRV procurement and clean energy to advance our district energy projects.

The City is already benefiting from the CIB's Zero Emission Bus (ZEB) program through \$14.4 million in low-interest debt financing towards purchasing 20 additional electric buses to bring our e-bus fleet to 60. The City is also exploring the CIB's Public Building Retrofits Initiative (PBRI), which finances the upfront capital costs of energy-efficient building retrofits, to determine if it is financially viable to leverage the program for energy retrofits of City-owned buildings. However, funding provided through these CIB programs impacts the City's debt limit. As such, leveraging these programs is advisable only where lending rates are more favourable than traditional borrowing and/or where these programs offer less risk than traditional borrowing options.

Recent federal investments outlined in budgets 2020 and 2021 have focused on COVID-19 recovery. In terms of investment dedicated to capital infrastructure, the Federal Government committed to providing an additional \$5.9 billion nationally to new public transit infrastructure starting in 2022 and establishing a \$3 billion per year permanent Public Transit Fund beginning in 2026-2027. In addition, the Federal Government has committed to stakeholder engagement to inform the development of the permanent transit program and how funding will be allocated, which could be on a per capita basis, based on ridership or a combination of both.

In the interim, as a bridge between ICIP and the permanent transit fund, two nationally competitive programs were rolled out in mid-2021: the Zero Emission Transit Fund which provides \$2.7 billion over five years; and the Active Transportation Fund, which provides \$400 million over five years. This funding supports planning activities for transit projects, developing active transportation (e.g., bike lanes and walking paths), and purchasing zero-emission vehicles and supporting infrastructure. Also announced in 2021 were several climate and energy transition programs, including DMAF 2.0, the Nature Smart Climate Solution Fund, Natural Infrastructure Fund, 2 Billion Trees Program, Green and Inclusive Community Buildings Program, Zero-Emission Vehicle Infrastructure Program and the Smart Renewables and Electrification Pathways Program (SREPs), among others. Each of these programs is nationally competitive (as opposed to allocated-based) and have particular outcomes that need to be achieved. However, unlike ICIP and programs prior to 2016, these programs do not require cost sharing by the province, which means that municipalities accessing these funds are in most cases contributing 50 to 60 per cent of the eligible project costs, rather than the 20 to 33 per cent under earlier programs. Also, the timeframe of many of these programs does not align with municipal capital cycles, which can make them challenging to leverage if municipalities cannot fund their municipal cost share or secure other partner funding.

Budget 2022 also included new investments in electric vehicle charging infrastructure, building retrofits and nature-based solutions, and recapitalized programs, such as the NTCF and SREPs, which provides new opportunities to leverage federal dollars in the City's next capital cycle. Another key priority area in the budget was Housing. Budget 2022 introduced the new Housing Accelerator Fund, which provides \$4 billion over five years nationally starting in 2022-2023 to incentivize cities to build more housing, while also ensuring municipalities can get the support they need to modernize and build new homes. More information on this program is expected in the coming months. The RHI program was recapitalized with an infusion of 1.5 billion over two years to increase the stock of

supportive housing units in Canada's urban centres. The CCBF eligibility rules will be amended to allow funding to be used to increase housing supply. However, as previously noted, most of the City's current and near-term CCBF funding has been committed.

It is expected that the federal government will introduce a new, multi-year capital infrastructure program that will provide funding to support transformative projects after the ICIP finalizes in the fiscal year 2027-28. This will need to be in addition to the funding that will be provided through the Permanent Transit Fund, as that is specific to public transit infrastructure and limited to \$3 billion a year nationally. In the meantime, it is unlikely that substantial Federal funding will become available to support large-scale infrastructure projects.

### **Provincial Grants (Constrained): \$1.190 billion**

The 10-year funding forecast of \$1.190 billion for Provincial constrained grants includes only funding that has already been approved within the existing capital budget. It consists of match funding for:

- the Investing in Canada Infrastructure Program (ICIP) approved for Valley Line West, Metro Line to Blatchford, and Capital Line South Extension LRT projects,
- match funding for the Building Canada Fund program for the Yellowhead Trail Freeway conversion project, and
- one-time Provincial funding for the Terwillegar Drive Expressway Upgrades and 50th Street Grade Separation projects.

No additional provincial constrained funding has been included in the CIO's 10-year forecast, as there is still too much uncertainty surrounding the availability and eligibility of funding.

The following Provincial funding landscape provides additional details and considerations surrounding this uncertainty.

#### Provincial Funding Landscape

Provincial cost-sharing remains a requirement to realize many capital infrastructure needs. However, because the vast majority of the City's provincially allocated capital infrastructure funding is already committed, without dedicated match funding from the Province that aligns with Federal priorities, it is likely to be more challenging to leverage Federal funding in the future. Another reason provincial match funding is so essential is due to the restrictions attached to federal funding, specifically with respect to land, which is not an

eligible expenditure under federal programs, yet can be a significant expense for many projects (e.g. LRT network expansion projects and the Yellowhead Train Freeway Conversion project). As such, the City has relied exclusively on provincial funding support for land acquisition or has had to fund this expenditure on its own to leverage partner funding, significantly increasing the City's share of project costs.

Notable sources of provincial infrastructure funding have either ended or been eliminated. The Province's GreenTRIP program, which exclusively supported public transit infrastructure, has ended, and no replacement has been identified. The Climate Leadership Plan, which would have provided transit funding to municipalities through the Alberta Community Transit (ACT) program, ended when the Climate Leadership Act was repealed in 2019. The Alberta City Charters, which legislated municipal infrastructure funding, included increases at the same rate as provincial revenue, was repealed when the Local Government Fiscal Framework (LGFF) was legislated in late 2019. As well as permanent funding commitment for public transit infrastructure under the City Charter, which would have coincided with the start of the permanent federal transit program in 2026.

With the repeal of the Climate Leadership Act in 2019, the climate leadership plan ended and as a result the province no longer provides targeted funding support directly to municipalities to address climate change needs. Where provincial funding support is available, short-term grants for smaller-scale initiatives or funding targeted more at heavy industry and business than at municipalities. Funding mostly flows through Emissions Reduction Alberta (ERA), the Municipal Climate Change Action Centre and Alberta Innovates. Through the ERA, the City was recently awarded \$10 million for the Clover Bar Landfill Gas to Renewable Natural Gas project we are delivering with Capital Power. The City also received \$4.6 million from the ERA for a Hydrogen Bus Trial we are undertaking with Strathcona County to test the new technology utilizing the H2 fueling station planned for the LPG fueling depot at Suncor Energy's Edmonton Refinery.

Provincial Budget 2022 has identified no new infrastructure funding dedicated to municipalities besides the expected MSI and LGFF funding allocations.

Over the next Capital budget cycle, it will take more effort to access fewer available federal and provincial grant dollars, and the municipal budget should be structured in a way that preserves some capital infrastructure dollars to ensure that the City is able to leverage funding opportunities when they become available.

**Land Enterprise: \$432 million**

Land Enterprise uses its retained earnings as a funding source for land development activities carried out by the City of Edmonton. It is used to acquire land, fund consulting and contracting services, as well as market and sell the serviced lots. It funds both capital and operating expenses. The primary goals of these land development activities are earning a financial return for the City as well as achieving outcomes in alignment with The City Plan. Revenue from the sale of City owned lands is directed to retained earnings and used to fund future activities. An annual dividend is paid to the corporation in alignment with Policy C516B, the Land Enterprise Dividend Policy, which is currently under review.

Activities and projects funded by land enterprise include greenfield residential / mixed-use development; greenfield industrial-commercial-investment development; surplus city land; surplus school sites; and transformational projects including the Edmonton Exhibition Lands and River Crossing redevelopment projects; and Blatchford. It is also used to fund land acquisitions for greenfield residential / mixed-use; greenfield industrial-commercial-investment; resolve historical roadway ownership issues; and land acquisition opportunities that arise due to major projects such as the Yellowhead freeway conversion and LRT expansion provided those lands can be resold for at least equal value.

The \$432 million estimated land fund retained earnings available over the 2023-2032 period is based on the average land enterprise retained earnings approved within the 2019-2022 capital budget cycle, plus currently approved Blatchford redevelopment retained earnings already approved within the 2023-2032 capital budget.

**Reserves: \$2.205 billion**

The City's reserve policy, C217E, Reserve and Equity Accounts, directs the establishment of and processes related to reserves. The City has multiple established reserves that have been used to fund capital expenditures in the past. The two largest constrained reserves used for capital are the Neighbourhood Renewal and Fleet Services replacement reserves.

**Neighbourhood Renewal Program (NRP) Tax Levy**

Council approved a dedicated tax levy for the Neighbourhood Renewal Program starting in 2009. In 2017, Council endorsed the additional component of the Alley Renewal Program, which expands the NRP to include residential alleys. This component of the program was phased in starting in 2019, and will be fully implemented in 2023. The total annual NRP levy collected and designated for capital is \$170.4 million per year.



### Fleet Vehicle Replacement Reserve

A dedicated Fleet Vehicle Replacement Reserve was established in 2010. This reserve helps to ensure that the long-term funding of capital replacement needs is adequately maintained. Fleet Services uses a pricing model that includes both variable rate charges for maintenance costs and fixed rate charges for vehicle replacement funding. Fuel charges are billed separately, as fuel prices can be highly volatile, and are largely controlled by a customer's usage patterns. ETS buses and Light Rail Vehicles are not subject to fixed rate charges, and therefore require grant funding to support transit fleet renewal.

### **Utility Operations: \$0.554 billion**

Utility operations include Waste Services, Blatchford District Energy and Downtown District Energy. Utility funding sources largely include retained earnings and self liquidating debentures. One of the key tenets of the Utility Fiscal Policy is that the utility is self-funded and therefore does not rely on municipal grants or funding from tax levy. Only grants specifically targeted for utilities are leveraged.

### **Other: \$0.301 billion**

Other funding includes items such as developer financing, developer arterial roadway assessment contributions, operating revenues, and internal Pay-As-You-Go funding from the Edmonton Police Service and Edmonton Public Library. The funding forecast shown in the CIO is based on the average spending for these funding sources in the 2019-2022 capital budget cycle.

### **Debt Financing: \$1.375 billion**

Borrowing is a method of financing capital projects. It is not a funding source itself. The City has three main types of long-term debt obligations:

- tax supported debt funded by tax levy,
- self-supporting tax-guaranteed debt funded through dedicated non-tax levy revenues, and
- self liquidating debt funded through programs that are self-sustaining, such as the Waste Services Utility, the Blatchford Redevelopment Project and local improvements.

Only debt that has already been approved for the 10-year period has been reflected in the funding forecast. Please refer to the section on debt below for more details of the use of additional debt to finance capital projects during the 10-year outlook period.

## DEBT CAPACITY

The manner in which municipalities fund the services, growth and renewal that residents expect has changed significantly in the last two decades. After a period of relatively little borrowing due to the high interest rates and recession of the 1980s and 1990s, the City reintroduced debt for tax-supported capital in 2002, and the result has been a significant expansion and revitalization of the city in many ways. Unlike other orders of government the City borrows only for capital. Debt is an important tool in a strong capital infrastructure program. The reality is that without the use of debt, the City would not be able to advance significant infrastructure projects without first accumulating the savings to pay for projects up front. There are many problems with this scenario, the most obvious one being that if the City had to save the full amount of a project's costs in advance, there would be an inequitable time lag between the residents who have to pay for the project and the residents who benefit from the project. Not only that, negative carrying costs can be associated with this approach, where the cost of construction increases faster than the investment return earned on savings over the same period of time.

The use of debt also helps the City to maximize its capital funding in those situations where eligibility constraints on grant funding from other orders of government prevents the funding of a City infrastructure project in its entirety. Furthermore, some granting streams require the City to provide matching funds simply to access grants; without the use of debt financing for the City's share of certain projects, the City would not be able to access such grant funding.

### Debt Management Fiscal Policy

The City has created a Debt Management Fiscal Policy (DMFP) to help guide it with this process. The DMFP classifies debt into two major categories: tax supported and self-liquidating. The category of tax supported debt is further broken down into tax-supported (the primary repayment of debt is property taxes) and self-supporting tax-guaranteed (the primary repayment of debt is some other revenue source such as grants, user fees, lease payments, etc). Self-liquidating debt is predominantly debt incurred on behalf of the City utilities, and is repaid through utility rate revenue. Effective with the 2017 transfer of the City's Drainage operations to EPCOR, the City transferred the obligation for \$593 million in self-liquidating debt to EPCOR. This means that as of September 1, 2017, self-liquidating debt refers almost exclusively to debt associated with Utilities and Local Improvements.

The DMFP allows for the consideration of long-term debt related to capital expenditures for:

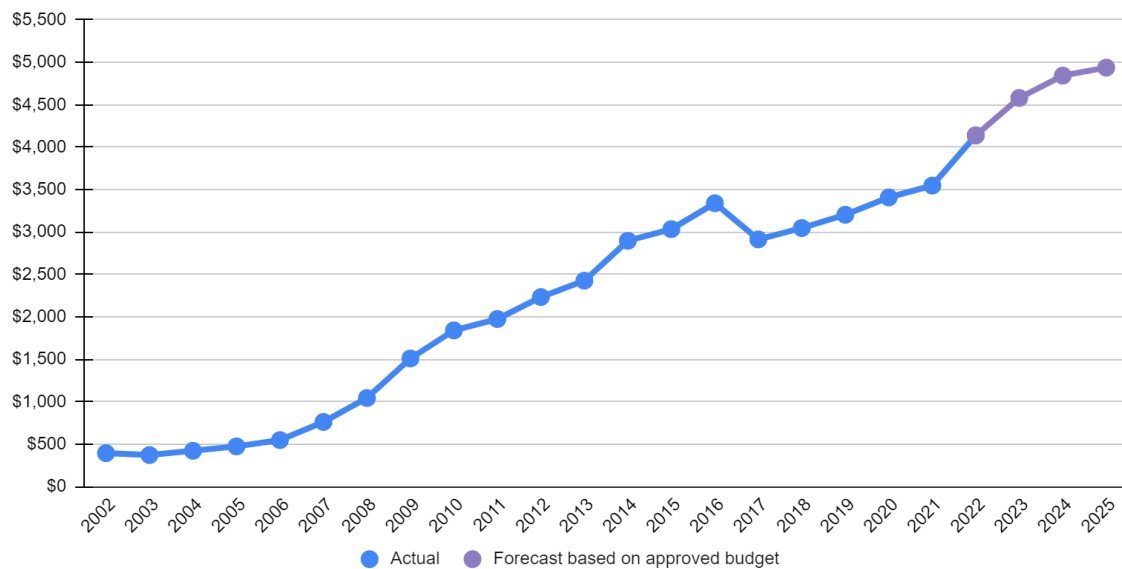
- Large projects with long-term benefits
- Projects with benefits for the community-at-large (for tax-supported debt)
- Growth-related projects
- Emerging needs to support corporate priorities and approved strategic plans
- Major rehabilitation of existing assets.

### **Historical Use of Debt**

The City reintroduced the use of tax-supported debt in 2002. Pay-As-You-Go (PAYG) was abandoned as a standalone financial strategy for a very simple reason: it was impossible to provide the infrastructure a growing number of Edmontonians needed and expected without huge increases in taxation to pay for costly assets on a cash basis. It's true that the City's financial debt was not growing, but its infrastructure debt was becoming significant. Without action this was simply passing on a problem to future generations. Analysis revealed a gap between the value of infrastructure that could be funded with identified capital resources and the value of the infrastructure required to support the growing City to be in excess of \$4 billion dollars. With a "no tax-supported debt" strategy, the City was unable to address growing infrastructure issues.

Significant increases in borrowing started in 2007. An average of \$280 million was borrowed per year for capital projects in the 2009-2011 capital budget cycle, \$273 million per year in the 2012-2014 capital budget cycle, and \$277 million per year in the 2015-2018 capital budget cycle. The debt incurred in this period (up to 2018) was used to advance a combination of renewal and growth projects such as Libraries, Recreation Centres, Great Neighborhoods Program, South LRT Expansion, Metro Line LRT and the Walterdale Bridge.

The following chart illustrates the growth in total debt on the City's balance sheet between 2002 and 2021, and projected to 2025 based on debt that is currently already approved in future years.

**Figure 1: Total Debt (\$ millions)**

### Current Capital Budget Cycle

The 2019-2022 Capital Budget contained \$2.1 billion in tax-supported debt to advance a number of new and previously approved transformational City building projects. These projects included:

- Valley Line Southeast and West LRT
- Metro Line LRT - NAIT to Blatchford Extension
- Yellowhead Trail Freeway Conversion
- Terwillegar Drive Expressway Upgrades

There is \$1.4 billion in tax-supported debt approved in 2023 and beyond. This includes future debt on the projects listed above, and additional projects approved by Council during the 2021 Fall Supplemental Capital Budget Adjustment including the following:

- Lewis Farms Community Recreation Centre and Library
- Coronation Park Sports and Recreation Centre
- Ambleside Integrated Site - Phase 1
- Valley Zoo's Nature's Wild Backyard - Phase 2

### Debt Limits

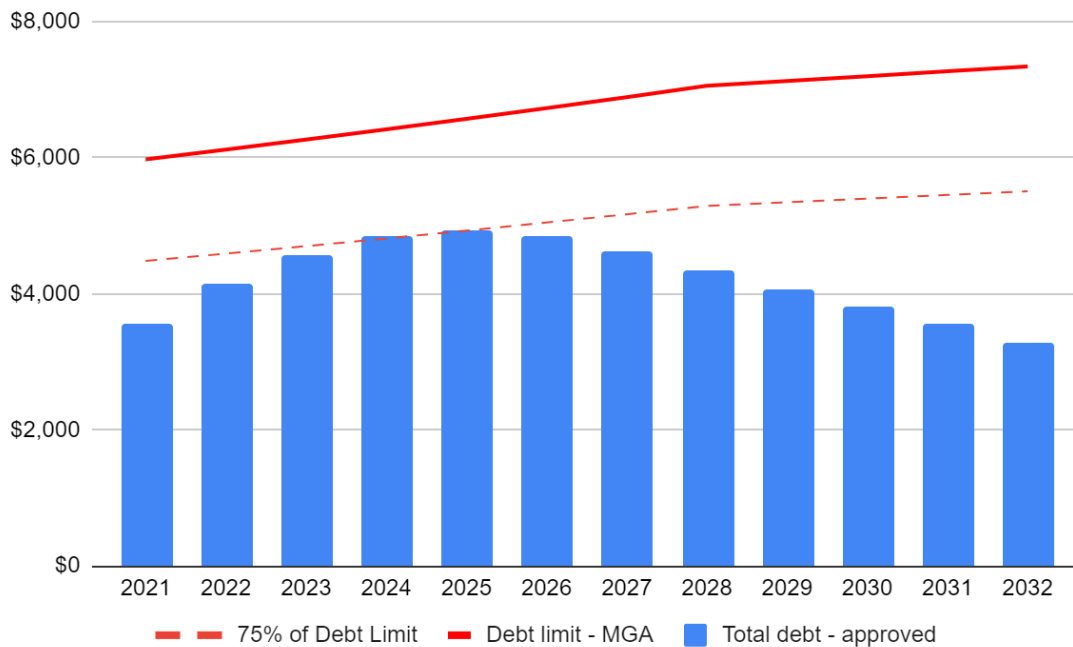
The City of Edmonton is subject to limits both for total debt and debt servicing by the Municipal Government Act, RSA 2000, c M-26 (MGA). The MGA Debt Limit Regulation AR 255/2000 specifies that the City’s total debt limit is two times the revenue (less capital grants) of the municipality, and that debt servicing costs are capped at 35 per cent of municipal revenue.

Debt is further restricted through the DMFP, which limits total debt servicing to 22 per cent of annual municipal revenues, and tax-supported debt to 15 per cent of annual tax-supported revenues.

### Debt Capacity

Taking into consideration only known debt commitments made in previous capital budget cycles, the amount of total debt room projected to be available under the MGA limit will decrease from \$2.4 billion in 2021 to \$1.9 billion in 2026. Based on a conservative annual revenue growth assumption of 2.4 per cent to 2028 and 1 per cent to 2032, total debt room is projected to grow to \$4.1 billion by 2032.

**Figure 2: MGA Total Debt Limit (\$ millions)**



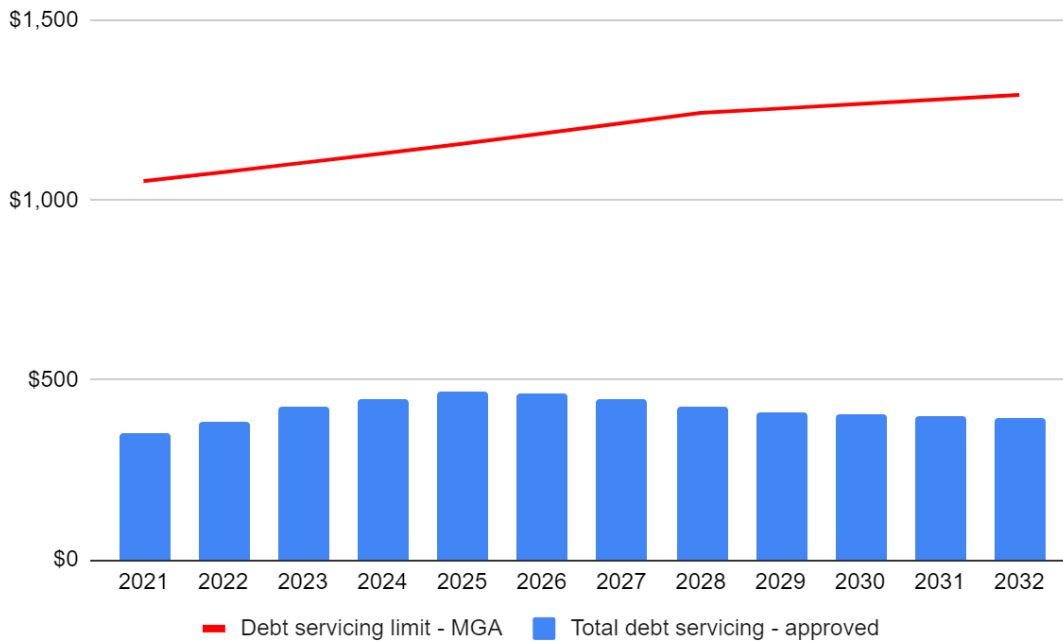
The City borrows almost exclusively through the Government of Alberta’s Treasury Board and Finance (TBF). TBF maintains a credit review process for borrowers who are within 25

per cent of the limit established under the MGA and have a credit rating less than A. The above figure includes a red dotted line indicating when the City would reach this threshold. The City currently has an AA credit rating, meaning it would take a downgrade of two levels on the ratings scale to be less than an A rating before the 25 per cent credit review threshold is applicable.

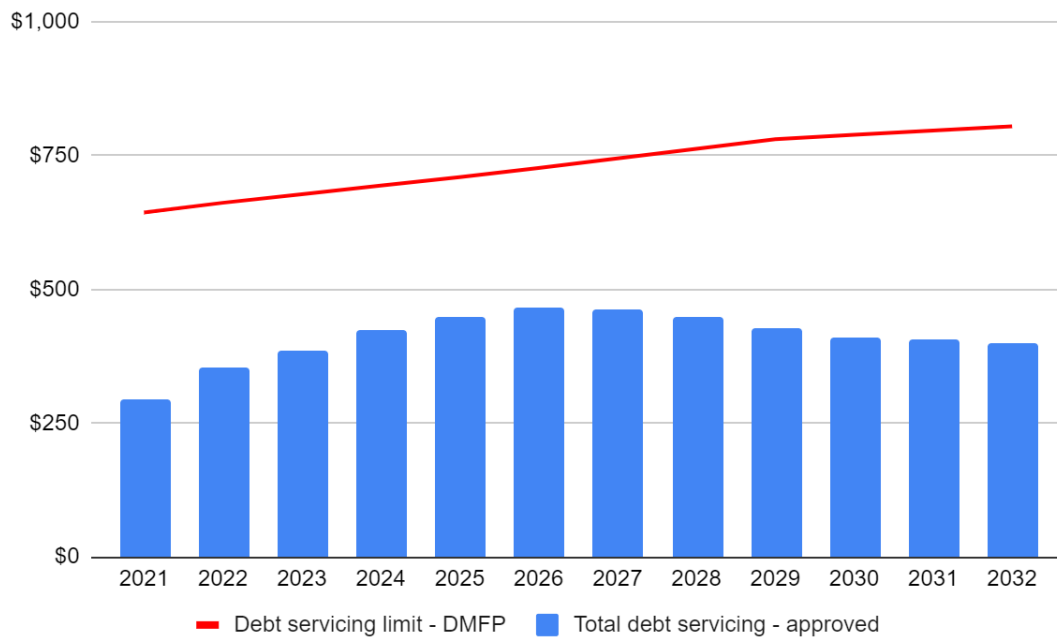
**Debt Servicing: Total Debt Servicing**

With the increased use of debt as a financing tool, the amount of total debt servicing room available under the MGA and DMFP has, as discussed above, decreased since 2018. That said, the City still has room available under both limits. The City is projected to have \$701 million in available debt servicing room under the MGA limit in 2021, growing to \$900 million in 2032 based on a conservative annual revenue growth assumption of 2.4 per cent to 2028 and 1 per cent to 2032. Under the more restrictive DMFP total debt servicing limit, the City is projected to have \$351 million in available room in 2021, growing to \$407 million in 2032 on the same revenue growth assumption.

**Figure 3: MGA Debt Servicing Limit (\$ millions)**

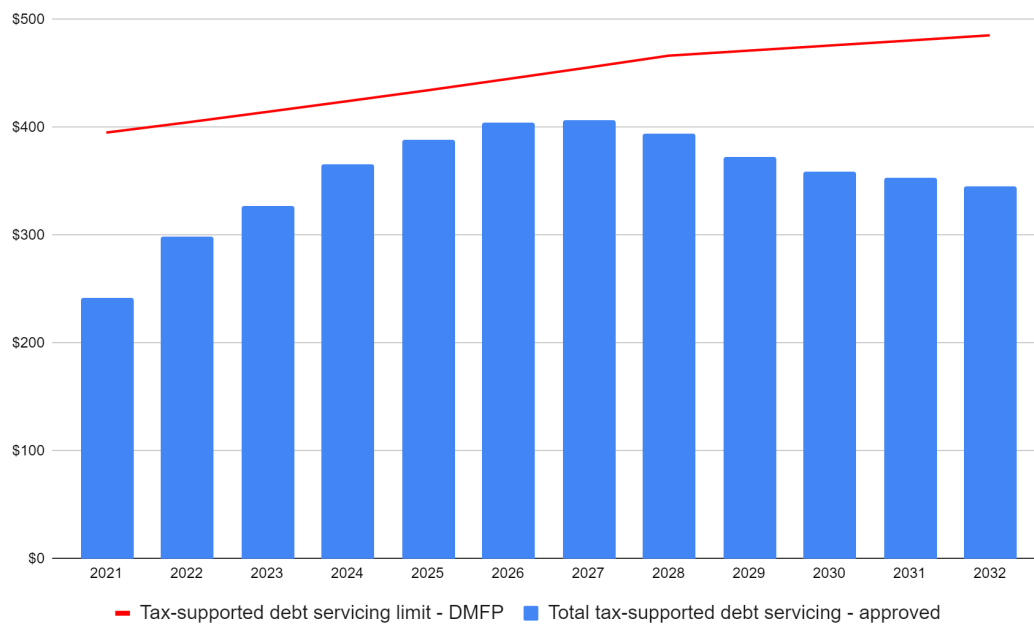


**Figure 4: DMFP Debt Servicing Limit (\$ millions)**



### Debt Servicing: Tax-Supported Debt Servicing

The DMFP tax-supported debt servicing limit is the most restrictive to the City. The City has \$153 million in tax-supported debt servicing room available in 2021, and is projected to come within \$40 million of the debt servicing limit by 2026. Debt servicing on existing approved capital projects begins to decline in 2028 and the debt servicing limit continues to increase based on assumed revenue growth, resulting in debt servicing room projected to increase to \$140 million by 2032.

**Figure 5: DMFP Tax-Supported Debt Servicing Limit (\$ millions)**

### Debt Servicing: Future Use of Debt

The use of debt as a capital infrastructure financial tool has been of enormous value to Edmonton and its residents. It has helped create and revitalize the city in countless ways, which means Edmontonians have had a direct quality of life increase from this shift in philosophy. But while it remains the case that the City continues to operate within its legislated debt limits, the increased use of debt in recent capital budget cycles has been significant, especially for large scale exclusively debt funded projects, and cannot continue at the same pace in future capital budget cycles without encroaching on the City's internal debt limits. The amount of new debt that could be borrowed under each of the City's debt limits is summarized below. Under the most restrictive limit, the City would only be able to borrow an additional \$621 million of tax-supported debt over the 2023-2026 period before reaching the internal DMFP limit.



**Table 6: Maximum Borrowing Available (\$ millions)**

(\$ millions)	2023-2026 (4 Years)	2027-2032 (6 Years)	Total 2023-2032 (10 Years)
MGA Debt Limit	2,035	2,726	4,761
MGA Debt Servicing Limit	11,230	2,275	13,505
DMFP Debt Servicing Limit	4,020	1,990	6,010
DMFP Tax-Supported Limit	621	1,364	1,986

## INTEREST RATES

Under the *Local Authorities Capital Financing Act*, the Government of Alberta provides the City with financing for capital projects. As interest rates increase in Canada, the City's cost to borrow will also increase. Since May 1, 2021, the interest rate on a 25 year loan has increased by almost two per cent, increasing the annual debt servicing cost by \$1.3 million for every \$100 million in new borrowing.

The Government of Alberta announced new loan pricing for local authorities in December 2021 including an increase of approximately 50 to 75 basis points over borrowing rates that the City received in the past. It is expected that the interest rates will continue to increase in 2022, which will increase overall interest paid on capital loans and will affect the city's MGA and DMFP debt servicing limits.

**Table 7: Loans to Local Authorities - 25 Year Loan**

2018	2019	2020	2021	2022	+ 0.25%	+ 0.5%	+ 1%
3.39%	2.91%	2.36%	2.83%	4.79%	<b>5.04%</b>	<b>5.29%</b>	<b>5.79%</b>
Total Interest Cost per \$100M			\$40.2M	\$72.6M	<b>\$77.0M</b>	<b>\$81.4M</b>	<b>\$90.5M</b>
Annual Debt Servicing per \$100M			\$5.6 M	\$6.9M	<b>\$7.1M</b>	<b>\$7.3M</b>	<b>\$7.6M</b>

\* rates are from May 1 of each year

## RENEWAL AND ASSET MANAGEMENT

When the City discusses the concept of renewal, this refers to investment in existing infrastructure to restore it to an efficient operating condition and extend its service life. Investment in infrastructure might include replacing individual components as they age or become obsolete, or an extensive redevelopment of the asset. Capital investment in renewal extends the period of service potential but does not change the replacement

value, which means it does not increase the size of the infrastructure asset portfolio. This investment is necessary, assets need to be maintained and looked after. The question is how much to spend, when and to what benefit (meaning, is it worth the cost?).

Public infrastructure is essential to residents and businesses. It is critical to the competitiveness of our economy, the quality of life Edmontonians enjoy, and the delivery of public services. Building and properly maintaining infrastructure assets is necessary to ensure Edmonton can provide services and remain an attractive and cost-effective place to live and do business. A core principle of any long-term capital plan is to measure the investment in existing infrastructure to ensure that all assets are in a condition that allows them to meet intended service levels. The best possible balance between growth and renewal ensures that investments in infrastructure assets maximize benefits, reduce risk and provide satisfactory levels of service to the public.

When a city is aging and growing simultaneously, balancing investment choices between renewal and growth is a significant challenge. As infrastructure ages, more maintenance and rehabilitation are required to ensure that it is performing well and continuing to meet the needs of the City and the public. At the same time, there will always be demand for new infrastructure to support growth. The reality is that the City does not have enough funding to meet all its infrastructure needs. Tradeoffs need to be made. It's vital to gather information from data-driven analytics and listen to what Edmontonians tell us they want and need.

### **Asset Management Approach**

The City's approach is to build an effective, transparent, data-driven system that connects asset investment to strategic goals and service-level outcomes. The City has developed performance indicators and raised public awareness of its infrastructure challenges to help define needs. This work has led to identifying, developing and adopting nationally-recognized solutions such as evaluation tools and leading-edge models to ascertain long-term infrastructure investment strategies (e.g., the City's Risk-based Infrastructure Management System [RIMS]) and integrated corporate asset management and capital budgeting. With these developments, the City has garnered a reputation for being one of Canada's most advanced and progressive jurisdictions in infrastructure asset management techniques.

The City continues to look for even more effective and efficient infrastructure asset management practices. With the update to its Infrastructure Strategy in 2018, the City

defined its vision for asset management, which strives to integrate and mature our systems across various asset categories. For example, work is underway to develop an Enterprise Asset Management (EAM) system that will replace and integrate existing asset management software, data repositories, and business practices. The EAM will function as a critical technology solution to support all City assets and City staff in asset management roles.

### Asset Management Principles

Guided by the Infrastructure Strategy, the City is progressing its asset management practice across the organization. This practice includes building asset management systems, processes and guided decision-making based on the following five principles:

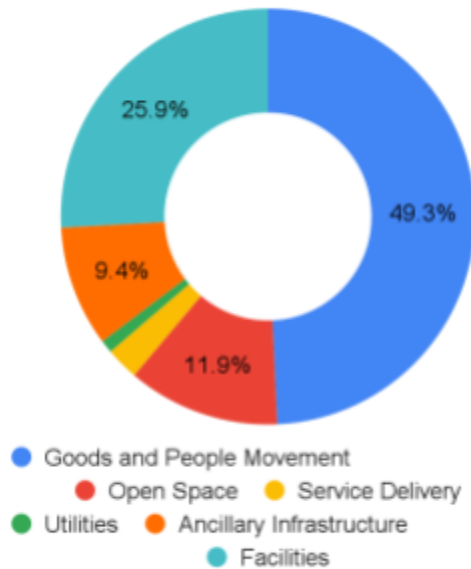
1. Service Delivery to Customers
2. Long-Term Sustainability and Resiliency
3. An Integrated, Holistic Approach
4. Investment Decision-Making
5. Innovation and Continuous Improvement

These defining principles also form the basis of Council's Infrastructure Asset Management Policy C598. An overarching theme of the City's objectives for asset management holds that assets are planned, acquired, used, decommissioned and divested to support the delivery of City programs/services while ensuring the best value to the City.

### **Asset Inventory**

Renewal projects focus on making the most of existing capital assets. The process of deciding what to fund and to what degree in the renewal framework is achieved through a customized assessment methodology—the Risk-based Infrastructure Management System (RIMS)—which the City developed. Investing in renewal begins with a comprehensive understanding of the nature, scope and state of all City assets.

The City of Edmonton, as of year-end 2020, had a total asset replacement value of \$31.6 billion, as seen in Figure 6 below, more than triple the \$10.3 billion value reported in the 2003 infrastructure inventory report. Increases in this value reflect an expanding inventory of assets as the City has grown and as construction costs escalated.

**Figure 6: City of Edmonton Distribution of Replacement Value**

Asset Portfolio	Replacement Value
<b>City of Edmonton Total</b>	<b>\$31,622,795,275</b>
Ancillary Infrastructure	\$2,974,078,857
Facilities	\$8,175,871,546
Goods and People Movement	\$15,587,899,848
Open Space	\$3,753,740,047
Service Delivery	\$815,137,214
Utilities	\$316,067,762

The physical condition of an asset is an assessment made at a specific moment in time. A good measure of the effectiveness of the City's renewal programs is the percentage of assets in poor and very poor condition, which has ranged from 16 per cent in 2011 to nine per cent in 2020. While most of the City's assets are not in bad condition, there are problem areas requiring continuing attention. Keeping assets from falling into states of disrepair requires constant attention and resources as all assets naturally deteriorate over time. Administration is also carefully monitoring the increasing amount of assets in fair (or C) condition. The timing of renewal interventions is critical for assets assessed in this category, as interventions typically get more expensive for assets in D and F condition than those in C condition because the extent of the renewal increases with deterioration. However, when resources are tight, it is sometimes difficult to justify spending on assets that are generally okay if it means not renewing assets that have failed or will fail. Focus cannot be on worst condition assets only; rather a balance between fixing the worst assets and taking care of assets in fair condition is the responsible way to both look after current key risks as well as avoid risk in the future.

### Determining Renewal Needs

The RIMS process is used to assess the high-level rehabilitation needs of the City's assets, allowing for the wisest allocation of renewal funds. Doing so means prioritizing needs

across more than \$31.6 billion worth of infrastructure assets and directing available capital dollars to the highest priorities.

At the core of this process is a standardized rating system used to evaluate existing infrastructure assets. Assets are routinely evaluated and prioritized based on physical condition, impact to service delivery, and risk.

Once the budget is allocated, various systems and processes are used to determine and prioritize renewal spending on individual assets. These systems can include additional computer model analysis such as in the bridge or roadway asset classes or more commonly multi-criteria evaluation techniques that incorporate a combination of risk analysis, maintenance records, operational feedback, and physical condition.

### **Renewal Targets**

Over the last decade, RIMS has evolved into a dynamic analytical tool designed to predict the optimal funding for the renewal of existing infrastructure. The model uses an asset's current physical condition, target physical condition, renewal investment options/costs and expected life cycle deterioration curve to model the effect of different investment options and their timing throughout the asset's life. Ideally, the physical condition of any asset will fall within an acceptable tolerance range or standard. This tolerance—or conversely, the physical condition beyond which the deterioration is unacceptable—differs for every asset. The City's assets provide services such as recreation, transportation and protection. The physical standard is dependent on the type of service the asset is providing, the risk it exposes the City to if it fails, and the best combination of investment and performance to maximize the life of the asset at a minimized cost. In other words, when deciding what to renew, the City considers a combination of the condition of an asset and how important it is.

Table 8 illustrates some of these measures and shows the range of tolerances used by RIMS. Each asset category is assigned a level of importance rank (High, Medium High, Medium, Medium Low, and Low) representing the target physical condition of the asset within the model.

**Table 8: Levels of Importance**

Importance Level	Average Condition Index	Severity	% of Assets in D&F	% of Assets in F	Examples
High	3.5	200	1%	0%	River Crossing Bridges, Self Contained Breathing Apparatus
Medium-High	3	200	5%	2%	LRT Track Structure
Medium	2.75	200	10%	5%	Police Marked Vehicles
Medium-Low	2.5	200	20%	7%	Bus Shelters
Low	2.25	200	40%	10%	Signage, Furniture and Audio-Visual Equipment

RIMS uses four measures, each with its own target, to assess an asset category's physical performance to determine the required investment.

1. Average Condition Index - A value from one to five represents the average condition of a category of assets. Ranges from one being very poor (F) to five being very good (A).
2. Severity – a computed risk factor, the product of the probability of failure of an asset by its impact of failure. Ranges from 0 (little risk) to 700 (high risk). The City has a target of 200 for all assets in its inventory.
3. Percentage of Assets in D and F Condition - The per cent of a category of assets that are assessed at either a poor (D) or very poor (F) physical condition.
4. Percentage of Assets in F Condition - Similar to item three above, except it is only the per cent of a category of assets that are assessed at very poor (F) physical condition.

### **Ideal Renewal Budget**

RIMS was applied to City infrastructure assets and modelled over a 30-year period to predict the optimal funding to maintain City assets in a good state of repair. The model was set to determine the annual investment required to bring all City assets to their target physical performance levels by 2031 (a 20-year period that began with the 2012-2014 capital cycle). The RIMS model recommended a 10-year renewal investment of \$9.1 billion. When including the estimated amount for complimentary and opportunistic growth investments made on renewal projects (discussed more in the 'Growth and Transformational Projects' section), the total 10 year investment is \$10.3 billion.

Table 9 below shows that of the total \$10.3 billion dollar investment required to reach the ideal investment level, \$2.3 billion has dedicated constrained funding sources, and \$207 million has already been approved by previous Council decisions. This leaves \$7.8 billion in funding that would be required to reach the ideal investment level. Historically, the funding for this remaining investment has mostly come from the City's unconstrained funding sources.

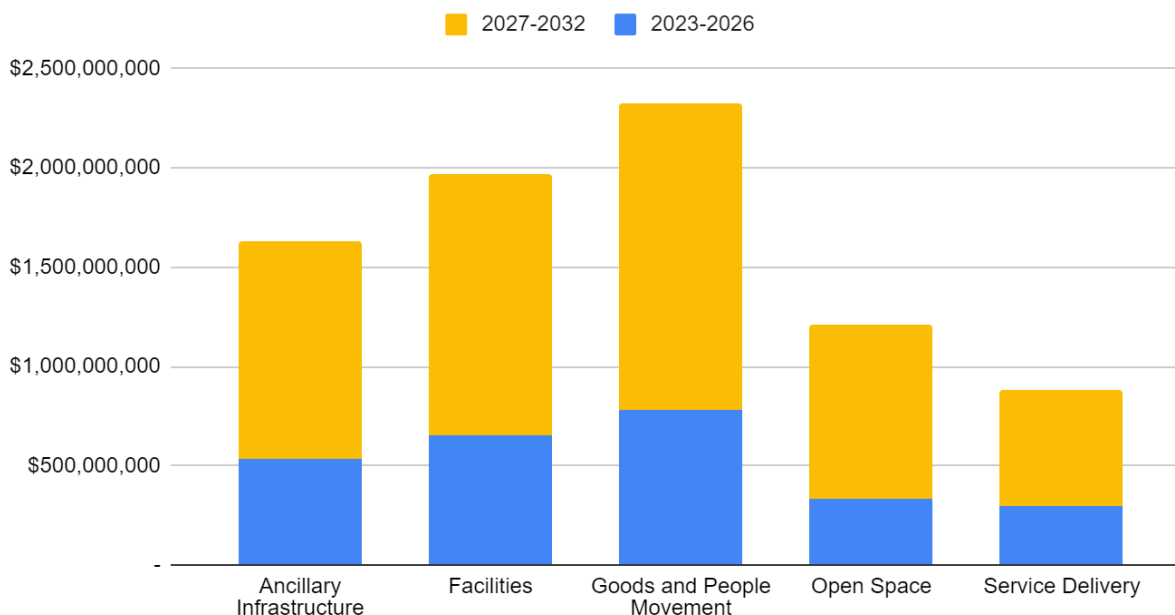
**Table 9: Renewal Program Ideal Investment**

Ideal Investment in Renewal Program (\$millions)	2023	2024	2025	2026	Total 2023-2026 (4 years)	Total 2027-2032 (6 years)	Total 2023-2032 (10 years)
Ideal Investment - Renewal Portion <sup>1</sup>	665	750	836	824	<b>3,075</b>	6,051	<b>9,126</b>
Ideal Investment - Growth Portion <sup>1</sup>	86	98	107	109	<b>400</b>	817	<b>1,217</b>
<b>Total Ideal Investment</b>	<b>751</b>	<b>848</b>	<b>943</b>	<b>933</b>	<b>3,475</b>	<b>6,868</b>	<b>10,343</b>
Less:							
Constrained Renewal Funding	(166)	(214)	(243)	(222)	<b>(845)</b>	(1,447)	<b>(2,292)</b>
Renewal Projects Pre-approved	(134)	(62)	(11)	0	<b>(207)</b>	0	<b>(207)</b>
<b>Total Additional Funding Required for Ideal Investment</b>	<b>451</b>	<b>572</b>	<b>689</b>	<b>711</b>	<b>2,423</b>	<b>5,421</b>	<b>7,844</b>

<sup>1</sup> Figures include inflation estimates

Figure 7 depicts renewal investment requirements in the timespan of the 2023 – 2032 Capital Investment Agenda by asset portfolio.

Figure 7: Ideal Renewal Allocation



### Renewal Funding Gap

In the “Available Capital Funding” section of this outlook, it was shown that there is only a projected total of \$3.1 billion in available unconstrained funding over the 2023-2032 period. This means that if every unconstrained dollar available was applied to the renewal program ideal investment (leaving no funding available for growth investments in new assets), the ideal renewal investment level would still be underfunded by \$4.7 billion. The outcome of this would be the ideal investment level being funded at a level of 54 per cent.

The reasons for the large gap between the ideal renewal investment and funding available are an increase in renewal costs, and a decrease in available unconstrained funding compared to previous cycles. Increased renewal costs are due to an increase in the City’s overall asset pool, higher costs and price escalations to carry out renewal work, timing of large and high cost projects, and the cumulative impact of funding less than the ideal investment level in previous cycles (partly to leave funding available for growth, and partly due to funding cuts). The decrease in unconstrained funding available is primarily due to the funding reductions to the Municipal Sustainability Initiative grant the City receives from the Province.

As stated above, even under a scenario where all unconstrained funding goes towards renewal, we only achieve 54 per cent of the ideal investment. This however does not paint a



complete picture, because of the large proportion of assets that will receive 100% funding because of constrained, dedicated funding (namely the neighbourhood renewal program). Looking at just the portion of the renewal program that is funded with unconstrained funding, we would only achieve 50 per cent of our ideal investment. Modeling was performed to determine the impact of this scenario on the percentage of assets in poor and very poor (D and F) condition.

**Figure 8: Effect of Budget on % for D and F for City Tax Supported Assets**

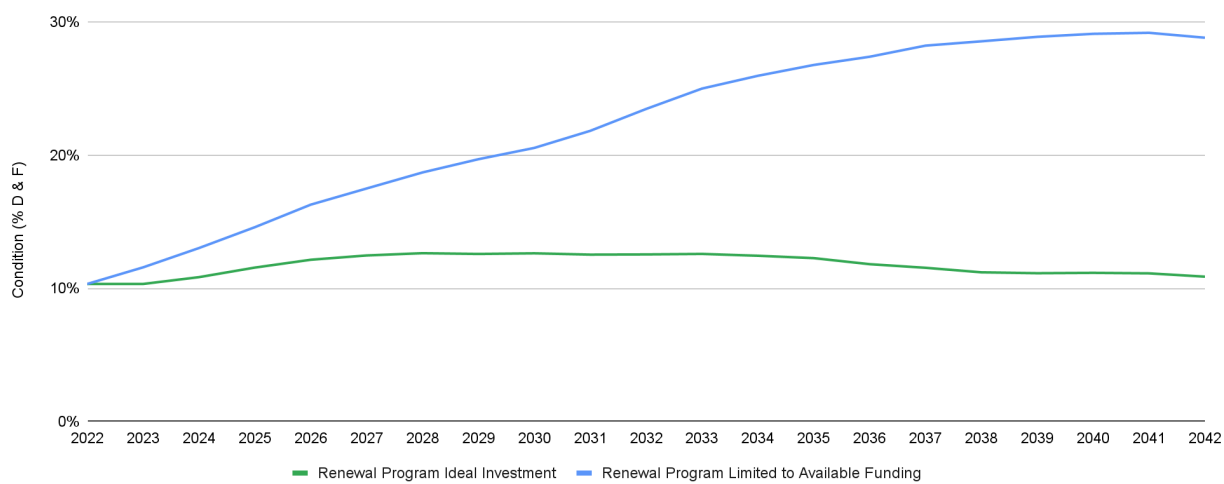


Figure 8 above illustrates how asset conditions deteriorate rapidly over the 20 year time frame under this scenario. Generally, the longer the required renewal of municipal assets is deferred, the more deterioration impacts are felt and the more expensive it becomes to bring these assets back to an acceptable condition.

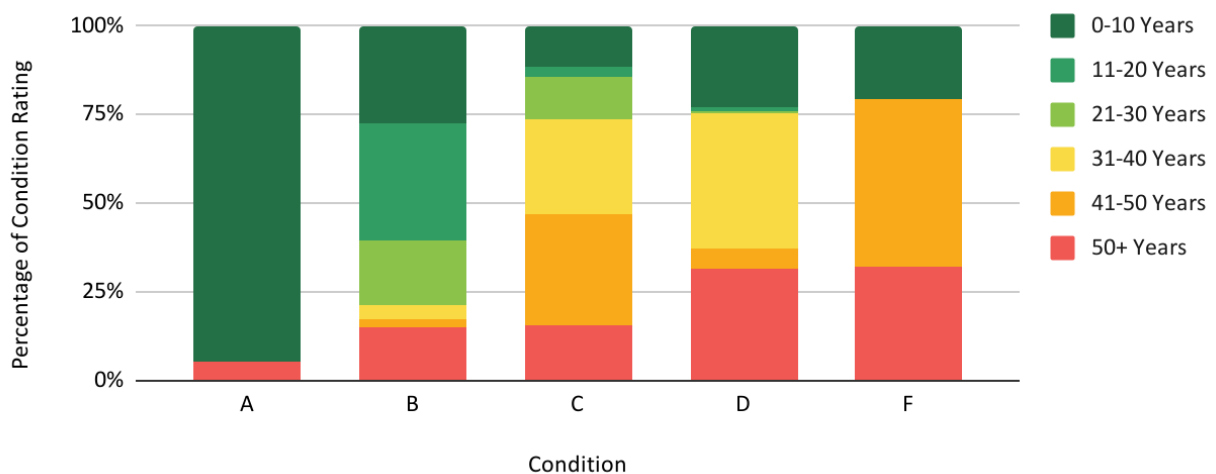
It is noted that the effect on per cent of D and F shown in Figure 8 should be considered a worst-case scenario. There are limitations to the modelling employed to depict alternate funding scenarios that do not contemplate mitigations that could be used, depending on asset type. This could include reducing allowances for growth-related expenditures and more directed or exclusive scope towards high-priority components (for example, renewal of just the HVAC system in a facility).

This high-level overview illustrates how decisions made today will impact the state and condition of our infrastructure assets in the future. Knowing the overall state of our assets and understanding the consequences of foregoing reinvestment provides information for decision-makers to make strategic decisions today that will have a deep impact on the residents of tomorrow. Effective renewal extends the life of the assets and allows them to perform as they are intended, saving the City money over the long-term.

### A Closer Look: Facility Renewal Challenges

Looking at the Facilities portfolio, which represents nearly one quarter of the City's asset replacement value, we see, in general, an asset class with very few assets in poor and very poor condition. A majority, 55 per cent, of the assets in this portfolio are in fair condition, which, at first glance does not seem too concerning. As indicated in the below chart, a review of the assets in fair condition indicates nearly 75 per cent of these assets, valued at more than \$3 billion are over 30 years old. At a typical rate of deterioration, with limited renewal investment, the City can expect a large number of facilities assets to deteriorate into poor condition within the next 10 year period.

**Figure 9: Distribution of Facility by Condition Rating**



As these facilities age, the challenges associated with these assets increase. This includes:

- increased operating costs due to increasing component maintenance requirements, and higher energy usage,
- Reduced capacity to meet modern service delivery requirements,
- Increased risk of service disruptions due to component/system failures, and
- Inability to adequately accommodate the needs of Edmontonians, such as accessibility requirements

## GROWTH AND TRANSFORMATIONAL PROJECTS

The City goes through an ongoing calculation dealing with changing economic circumstances and a shifting population. The City must be poised and prepared to facilitate growth, but it must safeguard the integrity of existing services and structures. Being unprepared for growth will lead to poorly planned and expensive development. It might

compromise the condition, life and value provided to residents. There needs to be an ongoing balance between renewal and growth.

There are two main ways that the City invests in capital growth: investments in growth components when renewing existing assets, and investments in new assets.

### Growth Components of Renewal

Growth components are added to renewal projects in order to improve the type of service and functionality of the asset, and ensure that the City is meeting the criteria of new policies and public expectations since the original asset was first built. Adding growth components during renewal work creates cost efficiencies compared to doing renewal and growth at separate times.

Under the RIMS ideal scenario outlined in the 'Renewal and Asset Management' section, growth components added to the base renewal costs would range from 0 per cent to 30 per cent, depending on the specific asset class. The ideal renewal scenario would include \$1.2 billion of growth over the 10 year CIO period.

**Table 10: Growth Component of Renewal Ideal Scenario**

(\$millions)	2023	2024	2025	2026	Total 2023-2026 (4 Years)	Total 2027- 2032 (6 Years)	Total 2023-2032 (10 Years)
Growth Component of Renewal	86	98	107	109	<b>400</b>	817	<b>1,217</b>

The amount of growth funding required for the renewal program has increased over time, due to the number of new policies that were not in place when the original assets were built. These include the following:

- The City Plan
- Energy Transition Strategy and C627 Climate Resilience Policy
- C602 Accessibility for People with Disabilities Policy and Access Design Guide
- C573A Complete Streets Policy and Complete Streets Design and Construction Standards
- C588 Winter Design Policy and Winter Design Guidelines
- C544 Active Transportation Policy
- C594 Open Space Policy
- C595A Neighbourhood Renewal Program Policy

## Investments in New Assets

Investments in new assets are different from growth components in renewal, in that they are not tied to any renewal work being undertaken. They result in a 100 per cent new asset to the City's overall inventory.

There are currently 59 growth projects that have had design funding approved in previous budget cycles, and would require funding approval for the remaining design and delivery dollars to proceed. The total estimated cost to complete these 59 projects is \$1.970 billion. These projects are in development at stages between checkpoints one to four of the Project Development Delivery Model (PDDM). This means that the cost estimates for delivery can range from -50 per cent to +100 per cent for checkpoint one projects, to -10 per cent to +15 per cent for projects at checkpoint four. Additional information on the PDDM model can be found later in the CIO.

**Table 11: Investments in New Assets - Design Approved**

Service Area	Number of Projects	Estimated Delivery Cost (\$millions)
Facilities	10	1,148
Transportation	22	469
Parks and Open Spaces	27	353
<b>Total</b>	<b>59</b>	<b>1,970</b>

In addition to the above growth projects designed over the previous cycle, there are a number of new growth initiatives that will be seeking both design and delivery funding over the 2023-2032 cycle. These other initiatives include:

- Remainder of Edmonton Transit Service Fleet Storage, Operations and Maintenance Facility Strategy (\$728 million)
- Energy Transition Strategy and Action Plan (\$3.0 Billion)
- Mass Transit Plan (\$1.8 billion)
- Bike Lane Implementation Guide (\$191 million)
- Edmonton Exhibition Lands Implementation Strategy
- Affordable Housing
- Edmonton Police Service Growth Initiatives
- Edmonton Public Library Growth Initiatives
- Open City Technology Growth Initiatives

- Other general growth related to service levels

Cost estimates to plan and deliver the above initiatives have been included where available.

## FUNDING GAP AND OPTIONS

The City's projected funding available, and renewal and growth needs over the 2023-2032 period have been explored earlier in this Investment Outlook. This section combines these all together to demonstrate that prior to consideration of any new growth initiatives in the next 10 years, there is a projected \$6.7 billion funding shortfall.

**Table 12: Total Unconstrained Funding Shortfall**

(\$millions)	Total 2023-2026 (4 Years)	Total 2027-2032 (6 Years)	Total 2023-2032 (10 Years)
Funding Available (Table 3)	2,097	4,116	6,213
Less:			
Constrained Funding	(1,166)	(1,947)	(3,113)
Ideal Renewal Investment <sup>1</sup>	(2,423)	(5,421)	(7,844)
Growth - New Investment - Already Designed <sup>2</sup>	(788)	(1,182)	(1,970)
<b>Total Unconstrained Funding Shortfall</b>	<b>(2,280)</b>	<b>(4,434)</b>	<b>(6,714)</b>

<sup>1</sup> Includes both renewal and growth add-on components to RIMS Ideal scenario, net of constrained-funded items

<sup>2</sup> Total estimated delivery cost evenly allocated over 10 year period

Some of the above shortfall is expected to be covered by additional federal and provincial constrained funding that becomes available over the 2023-2032 period. However, constrained funding is usually tied to growth investment, meaning that there will still be a significant funding gap primarily related to the City's renewal program.

There are options available to address portions of the funding gap. They include:

- Disposal of Assets - Right Sizing our Inventory
- Use of Tax-Supported Debt
- New Dedicated Tax Levy for Renewal
- Tax Smoothing to Create One-Time Pay-As-You-Go funds
- Redirection of Neighborhood Renewal Funding to other Renewal Programs

## DISPOSAL OF ASSETS - RIGHT SIZING OUR INVENTORY

The City incurs costs for all the assets it retains. This includes the cost to both operate and repair aging assets each year, as well as, depending on the asset, lost economic development opportunities and lost tax revenue when holding onto assets that are surplus to City needs and can be better utilized by the private sector.

City asset management objectives include that assets are planned, acquired, used, decommissioned and divested of in a manner that supports the delivery of City programs/services while ensuring best value to the City. Throughout all levels of government and the private sector, there is a major emphasis on right-sizing real estate portfolios to align with necessary programs and services, and future accommodation plans while also taking into consideration full life-cycle costs.

Along this theme, in a 2020 report to City Council, Administration identified five streams to mobilize action that included Financial Viability. The financial viability review included the review of City land, property and facility assets to confirm that City assets are right-sized to our needs. This is consistent with asset management best practice of periodic asset review and consideration of divestment of surplus and underutilized assets.

Administration undertook a review of a subset of real estate assets nearing the end of life to determine if those assets are still needed and require 2023-2026 capital funding to support City lines of service. This review was based on consideration of 10 diverse criteria such as alignment with The City Plan, operational and capital costs, and GBA+, among others and included perspectives from multiple departments to inform recommendations to retain, repurpose or divest surplus City assets.

This review has also revealed that not all City lines of services have clear standards against which required assets can be measured or have services that are difficult to quantify. The City's Asset Management Policy and Strategy speaks to the need for clearly defined levels of service that articulate the need for the service, and how that service is to be measured to manage it effectively. As the City continues to evolve its level of service understanding amongst all lines of business, Council and Administration will be able to effectively right-size the City's asset inventory in a transparent manner that maximizes the overall utility of the asset base.

Asset review is further challenged by the strong attachments some staff, tenants and Edmontonians have to City assets. This process will require strong leadership to manage

difficult conversations that address these feelings. There is also a need to raise awareness of the City's costs to hold surplus property and the lost opportunities to advance City Plan objectives if the City continues to hold assets that are no longer needed or underutilized.

This new integration represents best practices in asset management. Divestment of surplus City assets reduces demands on existing funds, creates new sale proceeds for Council to use, and enables the private sector to transition surplus property consistent with The City Plan direction.

Moving forward, consideration should be given to regular periodic review of entire City asset classes rather than ad-hoc review of individual assets, and the reviews should consider costs incurred over an entire budget cycle timeframe.

### **USE OF ADDITIONAL TAX-SUPPORTED DEBT**

As explained in the section on Debt, under the most restrictive internal debt limit, the City has the capacity to borrow \$621 million of new tax-supported debt in 2023-2026 and \$2.0 billion total over the 2023-2032 period.

The following tables illustrate two key factors if the City attempted to use new debt to fund the ideal renewal investment shortfall noted in the 'Renewal and Asset Management' section and deliver all of the 59 previously designed projects indicated in the 'Growth and Transformational Projects' section.

- the impact on the City's Municipal Government Act total debt limit and
- Debt Management Fiscal Policy tax-supported debt servicing limit

The impact of borrowing an additional \$150 million and \$250 million per year on top of these amounts is also shown, which represents a speculative investment to proceed with other growth initiatives that require design and delivery funding, as noted in the "Growth and Transformational Projects" section.

Figure 10: MGA Total Debt Limit (\$ millions)

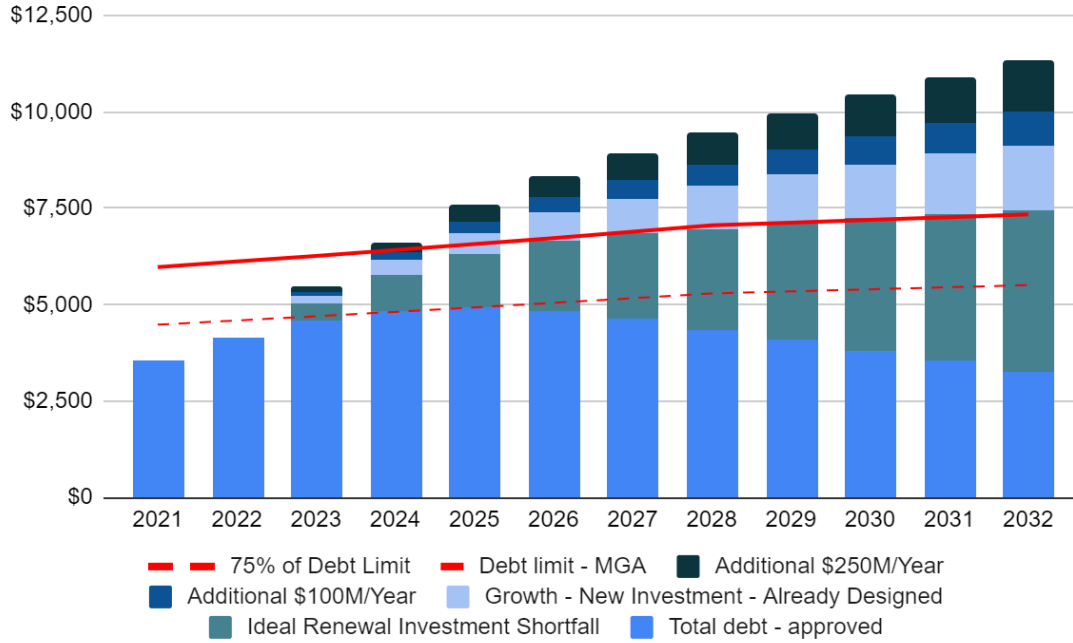
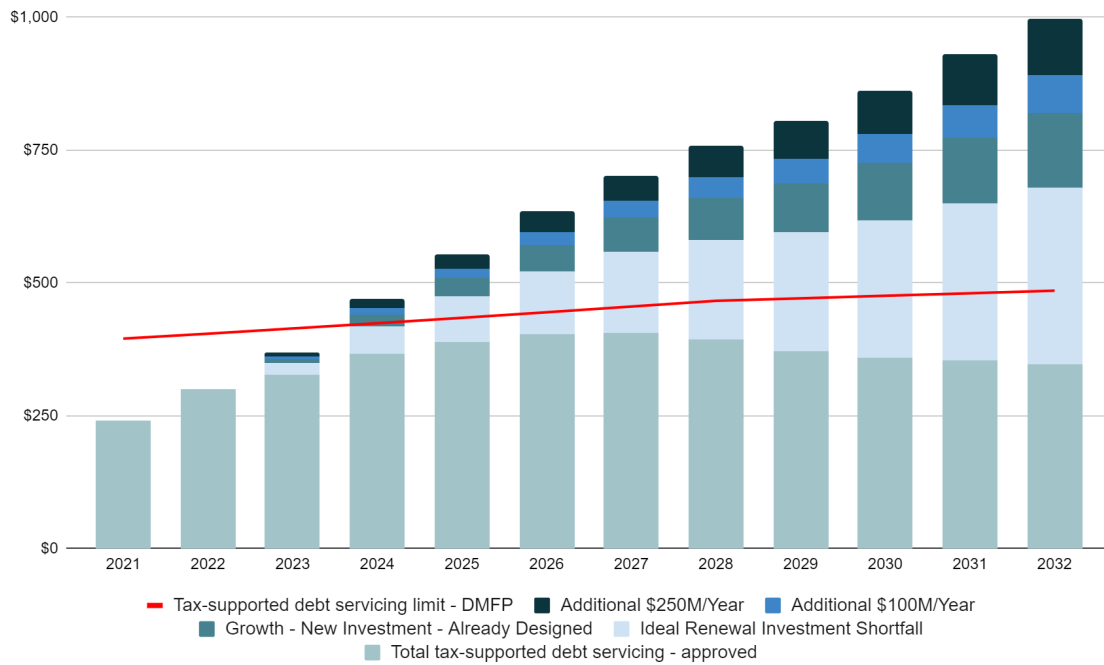


Figure 11: DMFP Tax-Supported Debt Servicing Limit (\$ millions)





As illustrated in the figures above, the City would not have nearly enough room under external and internal limits to use additional debt to proceed with all renewal and growth initiatives. Therefore, the use of additional debt in 2023-2032 needs to be strategic and allow the City to access future grant programs from other orders of government when they become available while also leaving room to respond to emerging issues and fund large renewal projects.

### NEW DEDICATED LEVY FOR RENEWAL

To address funding challenges for the City's renewal program, Council could consider a new dedicated tax levy that could be restricted to funding either general renewal needs or a specific component of the renewal program. This levy would be similar to the existing Neighbourhood Renewal program, in which a new tax levy would be phased in over several years, resulting in a fully-funded program in the future. The table below uses a new 1 per cent tax levy per year to illustrate the amount of funding that could be generated over 10 years. Overall, a 1 per cent tax levy increase per year would result in a fully-funded program of \$229.5 million per year by 2032, and \$1.2 billion over the 10 year period.

**Table 13 - Dedicated Tax Levy Example**

\$ millions	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	Total
%-Increase	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	<b>10%</b>
Annual New \$	17.7	19.2	20.5	21.6	22.7	23.8	24.8	25.6	26.4	27.2	<b>229.5</b>
Cumulative Annual \$	17.7	36.9	57.4	79.0	101.7	125.5	150.3	175.9	202.3	229.5	<b>N/A</b>
Cumulative Total \$	17.7	54.6	112.0	191.0	292.7	418.2	568.5	744.4	946.7	1,176.2	<b>1,176.2</b>

### TAX SMOOTHING TO CREATE ONE-TIME PAY-AS-YOU-GO FUNDING

Tax smoothing is when the City phases in a tax levy increase required in a future year slowly over the years leading up to it. This approach has two advantages: It avoids significant one-time tax levy increases in a single year, and creates one-time funding in the years the levy is introduced but not yet required for its intended purpose.

The City has used tax smoothing in previous budget cycles for debt-servicing costs on newly approved capital. This strategy created \$57.7 million in total one-time Pay-As-You-Go funding for the 2019-2022 cycle.

Tax smoothing opportunities are available in the 2023-2032 period for the operating impacts of capital on larger transformation projects (such as the Valley Line West and Capital Line South LRT projects). For example, if the one-time operating budget increase required in the first year of operations was slowly phased in over a period of 5 years prior to being in service, it would generate roughly \$94.1 million in additional one-time Pay-As-You-Go funding for capital.

### **REDIRECTION OF NEIGHBORHOOD RENEWAL FUNDING TO OTHER RENEWAL PROGRAMS**

The combination of reliance on declining grant funding and having only select portions of assets receiving dedicated, protected funding presents an equity issue. Those assets (and therefore the corresponding services that those assets provide) with dedicated funding will meet the demand put upon them. Those assets that have intermittent, insufficient funding will decay over time, eventually hampering the use and benefit of the asset (and the service it is helping to provide). This started in the 2019-2022 capital cycle, where due to limited funding, most assets, with the exception of those funded by the Fleet and Neighbourhood Renewal Reserves, received 91 per cent of the budget required for renewal. In 2023-2032, this amount could be 41 per cent of the requirement for assets relying on unconstrained funds. This does not present a sustainable future for a large portion of the City's infrastructure.

To help spread the reduced funding levels more equitably across the City's overall Renewal program, Council could direct a percentage of the Neighbourhood Renewal program funding to be redirected to other renewal priorities.

It is important to note that this strategy would not create any new funding—It would only be useful as a means to help spread the reduced funding levels more equitably across the organization, and not have some renewal programs fully funded while others are significantly underfunded.

This strategy would require an exception to City Policy C595A and requires a non-statutory public hearing to be held prior to the policy being amended, exempted or revoked by City Council.

## **BUILDING THE 2023 - 2032 CAPITAL PLAN AND 2023 - 2026 CAPITAL BUDGET**

### **Capital Planning Principles**

Knowing that the 10-year CIO has been developed by Administration to assist Council in making strategic decisions on how best to allocate City resources, the CIO helps inform the decisions our civic leaders make today by assisting them in understanding how those decisions may impact the future.

The 10-year CIO was prepared prior to the development of the ten-year capital plan (2023-2032) and four-year Capital Budget (2023-2032), which will be considered by Council in December 2022. While the four-year Capital Budget outlines the City's immediate capital funding needs and priorities, the 10-year Capital Plan will look past the four-year capital budget cycle to identify the key infrastructure and financial challenges the City faces beyond 2026. The 10-year Capital plan and four-year Capital Budget will support the strategic direction of Council and will be developed around the following key principles:

- Prioritize projects to achieve the best results for the city overall;
- Use cash (PAYG and grant funding) for ongoing projects (e.g. maintenance and renewal);
- Use borrowing for new significant projects that are eligible according to the Debt Management Fiscal Policy (DMFP);
- Borrowing capacity is a consideration;
- When debt is proposed, the funding source for the debt servicing is identified;
- Fund utilities through utility rates;
- Align capital investments to The City Plan's Big City Moves to build a city that delivers on the 2050 ConnectEdmonton vision;
- Optimize investment in existing municipal infrastructure to ensure all assets are in a condition that allows them to meet intended service levels;
- Allocate resources to achieve an appropriate balance between the renewal of existing infrastructure and the demand for new infrastructure growth; and,
- Identify and account for all future operating, maintenance, and renewal costs associated with capital projects, and include those costs in future budgets as appropriate.

## Prioritization

To develop the 10-year capital plan and 4-year capital budget, Administration will assess all the growth projects identified and use prioritization criteria to evaluate and produce an initial ranking of the projects. The criteria uses a value management approach that is consistent to what was used in the development of the 2019-2022 Capital Budget with a few enhancements.

Prioritization criteria that will be used to evaluate each growth project are:

- Strategic Alignment - City Plan Big City Moves
- Strategic Alignment - Service Scoring
- Basic Project Attributes

### Strategic Alignment - City Plan Big City Moves

Each growth project will be assessed for whether it contributes to a direct, indirect, neutral or negative impact to these big City Moves, using data, metrics and analysis specific to each Big City Move:

- Greener as We Grow
- Inclusive and Compassionate
- Community of Communities
- Catalyze and Converge
- Rebuildable City

### Strategic Alignment - Service Scoring

Each growth project submitted for consideration will be linked to the service (from operating priority-based budgeting) that it most aligns with. Once linked, the operating score that the service received will be brought into the overall capital score. This linkage will ensure that the strategic importance of the services that assets are built to provide is considered as part of the overall consideration for capital scoring.

### Basic Project Attributes

Basic Project Attributes capture the important aspects of capital projects outside of their strategic importance. They are criteria that would remain consistent between cycles, even as strategic goals change. The seven basic project attributes that will be used for capital budget prioritization are:

- Mandate to Provide Asset
- Reliance on City to Provide Asset
- Portion of Community or Organization Served
- Change in Demand for Asset

- Corporate Operational Risk
- Cost Recovery of Asset Investment
- Safety of Community or Organization

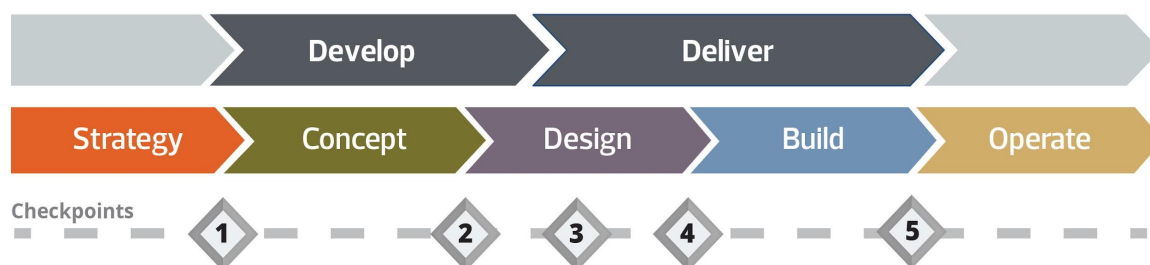
### Renewal Prioritization

Renewal projects have historically been prioritized using the specific asset management criteria of the RIMS model. For the 10-year capital plan and 4-year capital budget, the following additional enhancements have been made to ensure that our renewal program is also strategically aligned to City's goals (same as growth).

- Renewal projects classified as being transformational in nature will be assessed using the same criteria as growth projects.
- Renewal projects will be reviewed and flagged for strategic review if they are identified as being assets near their end of life, and not aligned with The City Plan or required to meet current service levels

### **Project Development And Delivery Model**

The Capital Project Governance Policy C591 requires that all capital projects follow the Project Development and Delivery Model (PDDM). The PDDM is a phased approach that includes formal checkpoint reviews as projects progress through the strategy, concept, design, build and operate value chain. The PDDM is intended to ensure that all City projects progress to an appropriate level of development prior to being considered for the delivery phase. The following is a description of the checkpoints through the project delivery process:



#### Checkpoint 1: Project Initiation

Projects are reviewed for readiness to begin, and receive funding for concept development; includes assessment of project for maturity, appropriate definition of scope and priority.

#### Checkpoint 2: Authorization for Design Expenditure

Once concept development is complete, the project will be evaluated to receive additional funding for preliminary or schematic design. The project must be at an appropriate maturity level and the scope must be confirmed to improve confidence in understanding schedule and budget requirements.

#### Checkpoint 3: Approval for Capital Budget

A level of design is completed on the project to the point that risks are appropriately identified and mitigated and a defined schedule and budget can be set relative to the identified scope. Depending on the size and complexity of the project, the level of design completed may vary. At this point, projects could be approved for funding for detailed design and construction.

#### Checkpoint 4: Authorization for Construction Expenditure

A final check is undertaken prior to projects being tendered. This will include an assessment of readiness and a final scope review. If the project is not within the approved scope, budget and schedule, a change request may be considered or the project may be sent back for revision.

#### Checkpoint 5: Handover

Once the project is complete, a handover process is undertaken to ensure that the scope is satisfactory and all closeout activities are completed. The project is commissioned and available for public service.

The PDDM model requires that capital projects that are similar in nature and part of a larger program initiative be approved within composite capital profiles. All projects within composite capital profiles proceed through the PDDM's phased approach that includes formal checkpoint reviews as projects progress through the strategy, concept, design, build and operate value chain.

Significant capital projects (growth projects greater than \$2.0 million and renewal projects greater than \$5.0 million) require approval within a standalone capital profile when they reach Checkpoint 3 of the PDDM (a standalone capital profile is for the delivery and reporting of a single project only). The estimate of the budget required for delivery of the project at Checkpoint 3 is -20 per cent/+30 per cent. When the project is tendered at Checkpoint 4, these -20 per cent/+30 per cent variances are managed through additional recosting adjustments made between the composite and the standalone capital profiles. Recosting adjustments less than \$5.0 million can be

approved administratively by the City Manager, and those greater than \$5.0 million require Council approval.

The PDDM is intended to ensure that all City projects progress to an appropriate level of development prior to being considered for the delivery phase. This approach provides Council and business partners with more accurate information about a project's progress and viability at set points throughout the project life cycle, which, in turn, allows the City to make informed decisions about how to allocate capital spending more effectively. This process also enhances transparency and improves communication about the project status and overall maturity.

### **Framework for the 2023 - 2032 Capital Plan and 2023 - 2026 Capital Budget**

In the 2019-2022 capital budget cycle, Administration presented a detailed 10-year capital investment outlook to Council, collected feedback, and later presented a four year recommended capital budget to Council later in the year. For the 2023-2026 capital budget cycle, Administration is presenting a much more high-level version of the Capital Investment Outlook, intended to provide a more strategic level of information required for Council feedback. Administration will then use this feedback to prepare a 10-year capital plan later this year. The first four years of the capital plan will be the recommended four-year budget. Years five to 10 of the plan will be for information purposes only, and allow Council to see the continued implementation of the decisions made during the period of 2023-2026. Essentially, the 10-year capital plan will replace the previous detailed Capital Investment Outlook, and will be based on a funding forecast of what can realistically be completed.

## **CONCLUSION**

This 10-year CIO provides a road map towards understanding how the City of Edmonton manages and pays for its capital assets. Edmonton, like many modern cities, is becoming more complex to manage every day. Emerging technologies make our lives easier in some ways, but more complicated in others. Alberta, and Edmonton in particular, remain among the fastest growing spots in the country. Our city is a destination for people from all over the world. This is true despite the fact that we also happen to live in a climate that is not conducive to infrastructure growth and maintenance. And then we can factor in the reality that our dominant provincial industry remains oil and gas, which is and likely always will be prone to volatility. Edmonton has the advantages of being the seat of government that also has large educational and health sectors, but the city is still subject to the ups and downs of the provincial economy.

Simply put, Edmonton is not an easy place to build assets and keep them in optimal shape. Yet despite these factors, the City has created a process and framework to logically and efficiently oversee its capital investments. That process is encapsulated in this document. Through strong planning principles that seek to balance renewal and growth, through a transparent process of asset management, and through an open-minded yet rigorous approach to funding and debt, the City has created a community in which infrastructure and the services that populate it create a vibrant setting for Edmontonians to live, work and play.

We are fortunate to have Edmonton as our home, which means the City is well-advised to properly care for its condition and growth. The 10-year CIO is a significant part of that holistic process.