Calgary

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ATTACHMENT 3

The City of Calgary

2021-2032

Long Range Financial Plan

ISC: Unrestricted

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Executive Summary

The City of Calgary is in a strong financial situation with prudent fiscal management, strong budgetary performance, low property tax rates compared to other major Canadian cities, solid reserves, manageable debt, robust liquidity, and AA+ and AA (high) credit ratings with Standard and Poor's (S&P) Global Ratings[1] and DBRS Morningstar[2] respectively. However, The City is also facing challenges to its capacity to provide the services and infrastructure expected and valued by Calgarians.

By examining these challenges and the associated opportunities, this Long Range Financial Plan (LRFP) provides projections of The City's operating and capital requirements over the next 10 years beyond the current budget cycle, and a plan of strategies and tactics based on the projections and through the development of future scenarios to help The City navigate the long-term financial challenges.

The LRFP projection model estimates that The City will face significant annual operating and capital budget shortfalls in the next decade which cannot be addressed through projected levels of existing revenue sources and would require increases in property tax rates that are not politically acceptable. The structure of revenues and expenditures requires that the property tax rate under direct City control must increase at a higher rate than municipal inflation and other cost increases to maintain service levels. The operating revenue and expenditure projection for the 10-year period of 2023-2032 beyond the One Calgary 2019-2022 Service Plans and Budgets forecasts increasing annual operating shortfalls of approximately $250 million in 2032. For capital requirements and shortfall projection, a 10-year infrastructure funding gap is estimated to be $7.73 billion from the 2020 Infrastructure Status Report for 2020-2030. We will revisit our projections regularly to account for new or unforeseen investment requirements.

To address these existing and emerging financial issues, the LRFP is designed to encourage progress toward the organization's long-term goals of financial sustainability and resilience, and the goals are further supported by five main financial strategies including:

- Flexibility: being able to effectively respond to changing circumstances, which may relate to economic, demographic, technological, climate change, global trends, and events such as the COVID-19 pandemic, social, environmental, or political conditions.
- Efficiency: using public funds in ways that provide the highest level of needed services possible within the amount of funding available.
- Sufficiency: having adequate resources to support the delivery of services for which The City of Calgary bears responsibility.
- Integration: ensuring that The City prioritizes investment on a Corporate basis, considering the interaction of services in meeting outcomes, and that the financial constraints under which The City operates are fully considered when engaging in policymaking and decision-making.

1 Standard and Poor's (S&P) Global Ratings' credit rating results for The City of Calgary in 2021 can be found at https://disclosure.spglobal.com/ratings/en/regulatory/article/-/view/sourceId/12041040.

2 DBRS Morningstar's credit rating results for The City of Calgary in 2021 can be found at https://www.dbrsmorningstar.com/research/381938/dbrs-morningstar-confirms-the-city-of-calgary-at-aa-high-with-a-stable-trend.

- Credibility: achieving financial performance in a way that maintains and enhances public confidence in the municipal government.

The five strategies are further supported through eight tactics. These tactics, which will spur actions to both change City approaches and maintain current beneficial practices for building of a more sustainable long-term financial future, include:

- Ensuring adequate funding
- Achieving diverse sources of funding
- Managing expenditures
- Providing for contingencies
- Using debt strategically
- Operating with prudent foresight
- Maintaining sufficient cash flow
- Strengthening resilience

The LRFP provides Council with an ongoing, longer-term perspective on The City's financial prospects. The LRFP assumptions will continue to be refined. Its projections will build on more customized data and scenarios, and its strategies will continue to be tested by changing circumstances and evolve as appropriate.

1. Introduction

The LRFP has been prepared as part of The City's financial strategies for several reasons.

1. It is best practice for all corporations, especially governments that provide large-scale, long-term infrastructure and critical service delivery, to plan for the financial resources over the long-term to understand the sustainable provision of services.
2. The infrastructure and services provided by The City of Calgary are a critical underpinning for the well-being of citizens and the economy, which in turn are critical to the economic health of the province.
3. Provincial legislation regulates the function and operations of The City, and imposes financial constraints including limits on revenue tools that the federal and provincial governments do not face, increasing the importance of carefully planning the financial resources of the municipality.
4. The City faces several structural challenges, including:
   - Limited revenue sources that lag structural changes within the economy
   - Legal constraints in the use of some revenue sources
   - Sharing of the property tax base with the Provincial government
   - Limited ability to fund large infrastructure projects without assistance
   - Tax competition from neighbouring municipalities, whose residents access City services

5. While The City is currently in a financially sound position, there are number of emerging issues that could challenge The City going forward, including:
   - The vacancy rates in the downtown that have led to a significant shift of property taxes to other properties
   - The short- and long-term impacts of the COVID-19 pandemic
   - Rapid technological advancement and an accelerating transition to the new economy
   - Reliance on funding support from the provincial and federal governments which may be significantly constrained in the future due to large deficits
   - Climate change that has become more frequent and intense in Calgary and can cause severe consequences to the local economy and municipal finances
6. The City of Calgary is in a strong financial situation with prudent fiscal management, strong budgetary performance, relatively low property tax rates, solid reserves, manageable debt level, robust liquidity, and AA+ and AA (high) credit ratings with Standard and Poor's (S&P) Global Ratings and DBRS Morningstar respectively. However, as the Calgary economy transitions to a more diversified new economy, The City will need to deal with existing issues and emerging challenges that could potentially threaten its financial sustainability and resilience.
7. The City faces other financial constraints such as limited ability and willingness of taxpayers to pay higher taxes.

Without definitive action to address both the short and long-term issues, The City will become increasingly challenged to provide the services and infrastructure that Calgarians expect and value. The City continues to engage with Calgarians to understand what is most important to them and hears that citizens value City services and want to maintain high-quality services. While this is positive news it does place an immediate constraint on the options available to The City to address existing and emerging financial issues.

To address these issues, The City has made efforts to improve its existing principles and practices. The City recognizes it is necessary to re-evaluate the decisions around municipal finance and, where necessary, change them to ensure the sustainability and resilience of The City's financial capacity. A financially sound municipal government is critical to the local economy and the wellbeing of Calgarians. This LRFP for 2021-2032 is an important step among many actions that The City is taking to improve the understanding of its longer-term financial situation and to provide strategic recommendations for The City's financial future.

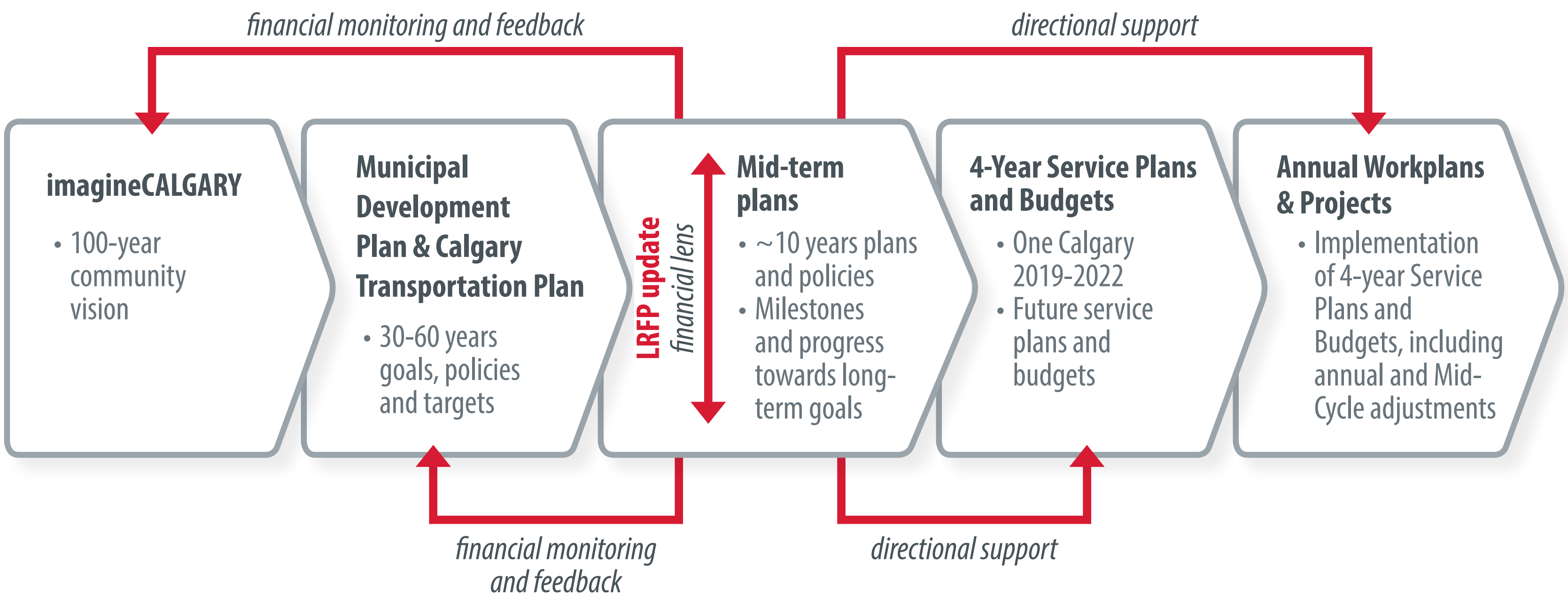
The report includes six major sections. The first section comments on the purpose of, and audience for, The City of Calgary's LRFP. The second section provides background on Calgary's financial state and challenges to set the development of the LRFP. The third section details the modelling methodology and financial projections. It describes the key assumptions that went into development of the projections and summarizes the base case projection results as well as examples of sensitivity tests. The fourth section outlines the financial goals and strategies, along with the specific tactics and actions The City has taken to implement the financial strategies. The fifth section develops alternative scenarios to assist with the financial strategies' development by identifying the impacts of multiple influencing factors on municipal finances and demonstrating the importance and benefits of the proposed financial strategies. The sixth section provides conclusions about the results and the expected next steps for the LRFP.

1.1 Connections to other City planning work

The achievement of a sustainable long-term financial situation for The City of Calgary is more than a financial planning exercise. The range and scope of services and physical infrastructure provided by The City requires that planning initiatives be undertaken in many areas and over multiple time frames. The City of Calgary is involved in a series of major planning efforts that contribute to its ability to effectively respond to its responsibilities as a municipal government. The City's system of plans is depicted below, starting with the vision for long-term growth and development, continuing through medium-term policy and planning initiatives, and finishing with short-term action-oriented plans. These approved plans provide critical linkages to how The City will address pressures affecting citizens, land use, transportation, the environment, infrastructure, City partners and fiscal capacity.

The LRFP is a critical centerpiece, connecting The City's long-term vision and policies and medium-term financial investment plans, as well as short-term priorities and accountability.

- The LRFP aligns with imagineCALGARY, the Municipal Development Plan (MDP), and the Calgary Transportation Plan (CTP) and their updates. In-time LRFP updates with sound methodology will provide constant financial monitoring and feedback for The City's 100-year vision of growth and development, as well as for its future community design, land use planning and transportation network planning over the next 30 to 60 years.
- The LRFP connects additional City policy projects with a similar 10-year timeframe that are currently underway and could have long-term financial implications by using a financial focus to pro-



mote awareness of the potential challenges facing The City and services and to propose corresponding financial strategies. Examples of such City policy projects include the Corporate Asset Management Plan, the Infrastructure Status Report, the Downtown Strategy and Greater Downtown Plan, and Infrastructure Investment Plans.

- The LRFP also provides a foundation and directional support for multi-year business planning and budgeting and its adjustment process, as well as other annual workplans and projects. By looking into the financial plans for 10 years beyond the current budget cycle, it equips The City with financial insights to plan and budget for the short-term and provides an opportunity to assess the financial implications of the short-term policies and programs in the long-term.

1.2 Purpose of the document

The purpose of the LRFP is to support the achievement of The City's overarching goals of financial sustainability and resilience; to manage changes by identifying emerging risks and providing corresponding financial strategies; and to enhance the alignment of The City's internal policies and external requirements.

The LRFP supports The City's financial sustainability and resilience on a long-term basis. It includes financial strategies to maintain services and address potential gaps. The LRFP provides a base projection of The City's operating and capital requirements over the next 10 years beyond the current budget cycle. The projections are founded on a series of assumptions using current financial, economic, and demographic data and forecasts. The base assumptions use only information known at the present time and do not include speculation as to future directions of City service levels, debt policies or additional support from other orders of government.

The LRFP reflects changes arising from emerging risks by providing corresponding financial strategies. It considers both financial and more general risks, as well as estimates the financial impact on The City where possible. Changes to individual assumptions can shift the projections. It can be useful to assess the impact of these changes in assumptions on projections to evaluate the stability of the projections. Many variations in the projections are possible through differences in the assumptions. Sensitivity tests have been conducted to demonstrate the financial impact of changes to specific assumptions and to validate the robustness of modelling system and results. The LRFP also examines alternative scenarios to demonstrate how differing assumptions can affect projections, and to help assess the financial impacts of diverse sources of risks. The results of these scenarios, when relevant in providing context for considering financial goals and strategies, are included in the LRFP.

The LRFP enhances The City's alignments with both internal policies and initiatives, and with external requirements. Internally, it enhances the connection of The City's long-term vision and policies, medium-term financial investment plans, and short-term priorities and accountability. Externally, the development of the LRFP aligns with the Government Finance Officers Association's (GFOA) best practice requirement, which recommends that all governments regularly engage in preparing a long range financial plan that is concurrent with the strategic plan to provide perspective and oversight for service delivery and budgeting in the long term. It also aligns with the Municipal Government Act's (MGA) legislative requirements, as the MGA Section 283.1 requires each municipality in Alberta to have a minimum three-year operating budget and five-year capital budget plan in addition to the current financial year. The update on LRFP also aligns

with the practice of long-term financial planning and strategizing in other municipalities in Canada and the United States.

The LRFP will provide Council and Administration with an ongoing long-term perspective on The City's financial prospects. The LRFP's assumptions will continue to be refined, while its projections will build on more customized data and scenarios, and its strategies will continue to be tested by changing circumstances. This specific LRFP follows a similar general format as the original LRFP and subsequent updates for consistency and ease of comparison.

1.3 Audience

The LRFP both sets a financial context for other planning efforts underway in the organization and provides another building block for the creation of a more sustainable financial future for The City. It also assists Calgarians to better understand the financial challenges that The City is facing and stimulates long-term, strategic thinking.

As such, it is designed primarily for use by the following groups:

- Council
- Citizens
- Executive Leadership Team (ELT)
- Administration, including all lines of service

The LRFP provides the basic information needed to help prepare plans and strategies for the future. It covers a long-term financial perspective and gives a better sense of where current trends would take the organization. Its proposed goals and strategies guide the development of business plans that are designed to improve The City's financial picture.

The LRFP does not present a 10-year budget for The City of Calgary. It is not a document to be *approved*; it is a view of possible future financial challenges and impacts to inform and act upon. Neither is it a forecast, in the sense of providing a probable outlook or best estimate on what the next decade will bring. The value of the LRFP is to show the relative magnitude of financial challenges and to stimulate discussion on how best to deal with the general trends they reveal.

2. Background

2.1 The City's Long Range Financial Plan development

The City of Calgary started the development of its LRFP in 2004. The first LRFP report was received by Council in 2007 to identify the systemic issues that present barriers to The City's financial sustainability, followed by a series of updates in 2008, 2009, 2011 and 2015, respectively. These LRFP updates followed a similar methodology to the one established in the initial 2007 LRFP.

Significant changes have happened to Calgary's economy and its impact on municipal finance since the previous updates. The changes include both short to medium-term factors, such as the economic downturns, downtown office vacancies and assessment value reductions, tax shifts, and the COVID-19 pandemic and its disruptive impact on Calgary's market and municipal services; and long-term factors including potential opportunities and threats, such as demographic shifts, growth of the knowledge economy, technological changes and potential long-term influence of COVID-19. It is critical for The City to update the LRFP to reflect the impact of external changes on municipal revenues and expenditures, as well as on municipal service requirements and provisions.

The maturing of the service planning and budgeting with the implementation of One Calgary has created an opportunity for the methodology update of the LRFP process. This update reflects the implementation of service-based planning and budgeting in the long-term planning process. This specific LRFP improves its methodology from the previous updates by working *bottom-up* on financial projections and planning from the service level to corporate level, instead of solely relying on the traditional *top-down* approach of planning at the corporate level.

This LRFP supports the achievement of The City's financial goals of sustainability and resilience. Long range financial planning is the process of aligning The City's financial capacity with long-term service objectives. While it identifies the financial challenges that The City is expected to face over the coming decade, greater emphasis will be placed on the strategies and tactics that can be implemented to leverage opportunities and overcome challenges.

2.2 Key challenges and trends

Although The City's current financial position is sound, there are existing issues and emerging challenges that could potentially impact its capacity to provide services for Calgarians both in the short-term and long-term.

In the short-term, Calgary faces the combination of challenges of the COVID-19 pandemic, economic disruption, ongoing volatility in the global energy market, and elevated downtown office vacancy and reduction in non-residential assessment value. The accumulated impacts have materially affected The City's short-term revenues and delivery of some services.

- **COVID-19 pandemic and economic disruption:** the COVID-19 outbreak has negatively impacted Calgary's local economy and caused significant revenue loss to The City. Given the pandemic's continued evolution and rapidly changing circumstances, there is considerable uncertainty regarding the pace of economic recovery and the overall effect on The City's service provisions and finances. The COVID-19 pandemic may potentially cause substantial long-term shifts in demand for municipal services, such as changes in land use and mobility patterns that could have major impacts on capital demands and operating expenses. In the long-term, Calgarians changing from a traditional working and commuting style to a more flexible or hybrid working style may impact The City's capital investment priorities, and therefore shift the pressures of its operating costs. It is necessary for The City to monitor these long-term trends and their impacts on municipal finances.
- **Weakness and uncertainty in energy markets:** crude oil prices have recovered since 2020, yet they remain well below their level before the 2014 collapse. Energy markets have been volatile due to the uneven economic recovery and uncertainty of COVID-19. The moderate recovery and uncertainty translate into cautious optimism in the energy sector. While oil and gas investment are expected to pick up, it is not projected to return to the pre-pandemic levels until 2024. The gradual recovery and restructuring in the energy industry weigh on the job creation and demand for non-residential spaces and constrains the growth of the municipal tax base.
- **Downtown vacancy and assessment reductions and tax shifts:** the vacancy rate in the Calgary downtown office market has remained elevated in recent years. This has led to significant reduction in taxable assessment values for downtown non-residential properties and redistribution of the tax burden to all remaining non-residential properties outside of the downtown core. This may impact Calgary's tax competitiveness relative to surrounding municipalities and the ability to attract industrial or retail businesses to locate in Calgary. The City also shifted the tax burden from nonresidential to residential properties. COVID-19 and the continuing economic weakness further worsen the assessment values of downtown office and retail properties and impact The City's property tax base and revenues. The City has initiatives underway to address this issue and to support the re-

covery in Downtown Calgary, including the new Greater Downtown Plan and Downtown Strategy[3].

The City also faces long-term systemic issues which pose a significant hurdle to its overall goal of financial sustainability and resilience.

- **Limited revenue sources:** although The City of Calgary is responsible for providing a wide range of essential services that citizens expect and value, it must rely on only a few limited sources of revenue. The City's revenue sources include property taxes, user fees, franchise fees, investment income, licenses, permits, fines, and other revenue. The primary revenue source available to The City, property tax, is designed and implemented by both the Government of Alberta and the City of Calgary to be inflexible to the economic changes. While revenues from income and sales taxes collected by the other orders of government are increased during an economic boom, revenue from property taxes is not.
- **Ability and willingness to pay property taxes:** there is considerable pressure to control tax rate increases because property tax is highly visible. The City needs to consider the ability and willingness to pay property taxes for both residential and non-residential taxpayers. Increases in property tax have politically acceptable limits, even if a significant portion of the increase can be attributed to an external factor such as inflation. The key to managing this is to provide better understanding, qualification, and if possible, quantification of the process by which taxpayers form opinions, as well as to better inform taxpayers.
- **Fiscal imbalance:** taxpayers in Calgary over-contribute to the federal and provincial governments. This means that the taxes and other payments going to other orders of government exceed the benefits received by Calgarians and exceed the expenditures made by those orders of government in Calgary for the benefit of Calgarians. Over the years, municipalities in Canada have shouldered increasing responsibilities for public services and infrastructure while having few tools with which to maintain them. The fiscal imbalance leaves local government with less than adequate revenue to fund its spending responsibilities and requires the use of debt for capital projects and reliance on grants to bridge the gap. Though debt can promote intergenerational equity in that infrastructure is paid by those who use it, this places stress and uncertainty on The City's financial position.
- **Costs of growth:** city-wide growth consists of growth from established areas, industrial sectors, and new communities. The cost of supplying and maintaining new infrastructure and associated services to support growth places considerable demands on City budgets. For some municipal infrastructure, because of the long lead times required to plan and build them, The City must anticipate growth and then plan, finance, and build the required infrastructure before the tax base exists to contribute revenues toward these costs. This places additional stress on municipal finances. The challenges for The City come from the suburban development which requires new infrastructure, as well as from the redevelopment in existing areas of the city which requires upgrades to existing infrastructure and could be more expensive on a per unit basis. Furthermore, new infrastructure development also includes on-going, long-term operating costs that contribute to The City's financial commitments. Urban expansion and the increasing complexity associated with growth also increase the operating costs for The City as a whole.

3 More information on Calgary's Greater Downtown Plan and Downtown Strategy can be found at https://www.calgary.ca/pda/pd/downtown-strategy/calgary-greater-downtown-plan.html?redirect=/greaterdowntownplan

- **Ongoing infrastructure requirements:** The City is challenged to balance demand for the capital investment necessary to support growth while also ensuring the continued maintenance and upgrades of infrastructure already in service. The City's Infrastructure Status Report shows that over the next 10 years The City will require significant additional investment to fund infrastructure growth and maintenance. When complete, some of the new infrastructure will continue to require a financial commitment from The City in the form of operating expenditures, further adding to the financial burden.
- **Funding uncertainty:** for a long time, The City has been facing unreliable long-term capital grant funding from other orders of government. The City does not have sufficient fiscal capacity to provide the level of infrastructure necessary to meet current demands and accommodate future growth and must rely on transfer payments that can be changed at the discretion of other orders of government or incur additional debt. This creates uncertainty in financial planning due to potential unexpected changes to funding caused by the changing priorities of other orders of government. COVID-19 has added another layer of uncertainty as the federal and provincial governments struggle to balance their budgets, which may negatively impact the funding or grant programs to municipal governments. Furthermore, The City must continue to fund associated ongoing operating expenditures from limited and largely inflexible sources of revenue.

In addition to the existing systemic issues, The City is also facing emerging challenges from multiple sources including economic changes, technological advancements, demographic shifts, global events and market trends, climate change and funding uncertainty from other orders of government. These emerging trends could potentially threaten The City's financial sustainability. The City needs to be aware of these possible concerns and be proactive in estimating their financial impacts and exploring opportunities and solutions to respond to them to enhance long-term sustainability and resilience.

- **Cyclical and structural economic changes:** Calgary has been challenged by a cyclical economy. The city has repeatedly experienced periods of rapid economic and population growth followed by periods of stagnation or recession. This presents challenges in establishing a stable level of municipal services and revenues. The most recent economic recession, started in 2014 due to the substantial decline in oil prices, has had a prolonged impact on Calgary's economy. With the significant increase of shale oil production in the United States, Calgary's economy faces structural changes due to the fundamental shift of the global energy market. The COVID-19 pandemic has only worsened the situation. The subdued oil prices, transportation bottleneck elevated by the cancelled Keystone XL pipeline, record-high downtown office vacancy rate, and lack of business incentives have brought unprecedented challenges to Calgary's economy that are different from the boom and bust cycles the city has experienced in previous decades. This indicates a structural shift towards a trend of less dependence on conventional energy sector due to the increasing global oil supply and subdued global demand of Alberta oil sands.
- **Technological changes:** technological innovation has led to the emergence of the rapidly growing new economy. Many new technologies have the potential to improve productivity, including the efficiency and effectiveness of providing municipal services. There are also potential impacts on the labour market and individual workers with the advent of artificial intelligence and

machine learning shifting where the workforce is and what skills will be needed. The COVID-19 pandemic has accelerated changes towards remote and online service provision and automation of tasks. The trend towards a more automated workforce has an impact on every line of City service, in terms of the way the service is provided and the expenditure of providing service that is significantly different from the traditional municipal operations.

In the transition to the new economy, The City may face a municipal tax base erosion challenge. This will be discussed in more detail in Section 5.1. The concern is about tax planning by businesses and residents that take advantage of different tax systems to artificially reduce taxable income or shift profits to low-tax jurisdictions in which little or no economic activity is performed. There is a significant increase in the amount of economic activity in the digital economy not captured through the municipal property tax system. The digital economy brings special challenges for the municipalities, as municipal revenue tools are exceedingly reliant on land-based approaches to value that are becoming less relevant in the digital era.

- **Demographic shift and aging population:** while Calgary has a relatively young population, the number and proportion of older Calgarians continues to increase. An aging population has important implications on service demand, such as increasing pressures on age-sensitive City services including recreation, public transit, 911, health services and supports, and social services. It also leads to an overall shrinking of the labour force as baby boomers come to retirement age. An anticipated wave of retirements in the coming years will create a loss of leadership and knowledge that will need to be managed to sustain City services. The impact on the labour force caused by the high percentage of seniors retiring may be offset by technological advancements such as automation or increased immigration, or the extension of working age as seniors may continue to work beyond the age of 65.

- **Global economic, political, and pandemic events and trends:** as a small open economy, Calgary's market depends on the global market and is subject to the changes outside of its borders. The volatility of crude oil prices in the world market affects Calgary's economic growth and job market conditions. Political instability in the world's oil-producing regions can cause sharp changes in oil prices, which affects Alberta's energy industry's business incentives and investment in the local economy. The recent surge of trade protectionism, and concerns on supply chain restructuring propelled by the COVID-19 pandemic, and political decisions on pipeline construction, will impact the local economic composition and tax base of municipal finances. Pandemic events such as COVID-19 pose challenges on municipal revenue collection and demand for municipal responses to manage and recover from the impact of acute shocks. The City has included some one-time relief and other support programs for businesses in its budget to account for financial impacts from the pandemic. The operating pressures may worsen if the recovery from the pandemic and the reopening of the economy take longer than expected.

- **Climate change:** the impacts of climate change are widespread and have become more frequent and intense in Calgary. Increasing frequency and magnitude of extreme weather events and climate change can cause severe consequences such as damaging storms, floods, and outages. The 2013 flood experienced by Calgarians became Canada's most expensive natural disaster, resulting in economic losses of over $6 billion. The hailstorm in

June 2020 caused $1.2 billion damage to thousands of Calgary families and ranks as Canada's fourth most expensive natural disaster. The changing climate has impacted municipal finances as local governments need to prepare for and respond to these disasters. The City also plays a critical role in reducing greenhouse gas emissions to help limit global climate change and adapt to the hazards posed by a changing climate.

The City has developed its Climate Resilience strategy[4] and action plans to address these issues. The inevitability of future climate change requires The City to integrate climate resilience across the organization to maintain the level of services and minimize costs. The City will have to devote significant financial resources and make investments to build climate resilient communities by reducing their carbon footprint and investing in climate change mitigation and adaptation.

Without definitive action to address these issues, The City will become increasingly challenged to provide the services and infrastructure that Calgarians expect and value.

2.3 The City of Calgary's current financial condition

Despite its considerable challenges, The City of Calgary is currently on a solid financial footing. The City maintained its credit ratings of AA (high) from the DBRS Morningstar and AA+ from Standard and Poor's (S&P) Global Ratings in 2021. The City's four-year approval of business plans and capital and operating budgets is unique among large Canadian cities and offers a degree of foresight and financial stability that is complemented by a robust tax base, diversified and highly liquid investments and substantial reserves. The City established a Financial Task Force (FTF) and received recommendations to identify and assess innovative solutions for short-term mitigation and long-term strategies to improve its financial strength. The City also continues to monitor spending and explore potential savings with initiatives such as the Solutions for Achieving Value and Excellence (SAVE) program.

The organization's principal financial characteristics are summed up as follows. The information is generally taken from a series of The City of Calgary's published reports, including the 2020 Annual Report[5], One Calgary 2019-2022 Service Plans and Budgets and its Mid-Cycle Adjustments[6], Residential Property Taxes and Utility Charges Survey 2019[7], and City Manager's Quarterly Report[8].

- Budget: an operating budget of $17 billion over the four years ($4.1 billion in 2019, rising to $4.4 billion by 2022) for the budget

4 More information on Calgary's Climate Change Resilience Strategy can be found at https://www.calgary.ca/uep/esm/energy-savings/climate-change.html#strategy

5 The City of Calgary's 2020 Annual Report can be found at https://www.calgary.ca/cfod/finance/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/financial-reports/Annual-reports.html

6 The City's One Calgary 2019-2022 Service Plans and Budgets can be found at https://www.calgary.ca/content/dam/www/cfod/finance/documents/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/service-plans-and-budgets-2019-2022.pdf and 2021 Mid-Cycle Adjustments Capital and Operating Schedule can be found at https://www.calgary.ca/content/dam/www/cfod/finance/documents/plans-budgets-and-financial-reports/plans-and-budget-2019-2022/Mid-Cycle%20Adjustments%20Capital%20and%20Operating%20Schedule.pdf

7 The City's Residential Property Taxes and Utility Charges Survey 2019 can be found at https://www.calgary.ca/content/dam/www/cfod/finance/documents/corporate-economics/other-reports/residential-property-taxes-and-utility-charges-survey-2019.pdf

8 City Manager's Quarterly Reports can be found at https://www.calgary.ca/ca/city-manager/city-manager-quarterly-report.html

Textbox: Calgary in the Canadian Context

Some of the challenges Calgary faces are common to all of Canada's major cities. There have been numerous studies in the last decade on the difficulties that cities encounter in providing for sustained or even improved levels of service to their citizens within constrained resources.

"The ability of western Canada's cities to meet these huge infrastructure requirements is hampered by a singular and heavy reliance on the property tax. Real per capita growth in property tax revenue is well below growth in tax revenues seen federally and provincially, and property tax revenues relative to personal disposable incomes and GDP are at some of the lowest levels ever seen. The attendant lack of diversity in tax tools constitutes a serious disadvantage when it comes to infrastructure investment. To help place our cities on a more firm fiscal foundation, reforms are needed that include the introduction of new tax tools." Canada West Foundation, The Penny Tax, April 2011.

"A number of risks – such as relying on cyclical revenue from the Municipal Land Transfer Tax and deferring known costs – threaten the City (of Toronto)'s ability to maintain existing services, and impede consideration of any new services. The City will continue to find savings and efficiencies each year through the budget process. However, substantial further savings and efficiencies will require accelerating business modernization and transformation initiatives. There is a growing gap between the levels of spending required to meet Council's directions and available funding. The City pays a disproportionate share of the costs to deliver services that provide broad benefits to the region and the province as a whole, including housing, transit, and anti-poverty initiatives." The City of Toronto. Long-Term Financial Plan: The City of Toronto's Roadmap to Financial Sustainability. Spring 2018.

"Revenue sources for Canadian municipalities are limited. Apart from provincial and federal transfers, primary sources of revenue include residential and non-residential property taxes, development charges and user fees. Over the years, municipal expenditure responsibilities have also increased, while revenue growth has not kept pace. Municipalities continue to receive the smallest share of the economic pie – for every household tax dollar paid in Ontario, they collect only 9 cents." Rethinking Municipal Finance for the New Economy. By Sunil Johal, Kiran Alwani, Jordann Thirgood & Peter Spiro, Mowat Centre, Munk School of Global Affairs & Public Policy, University of Toronto, April 2019.

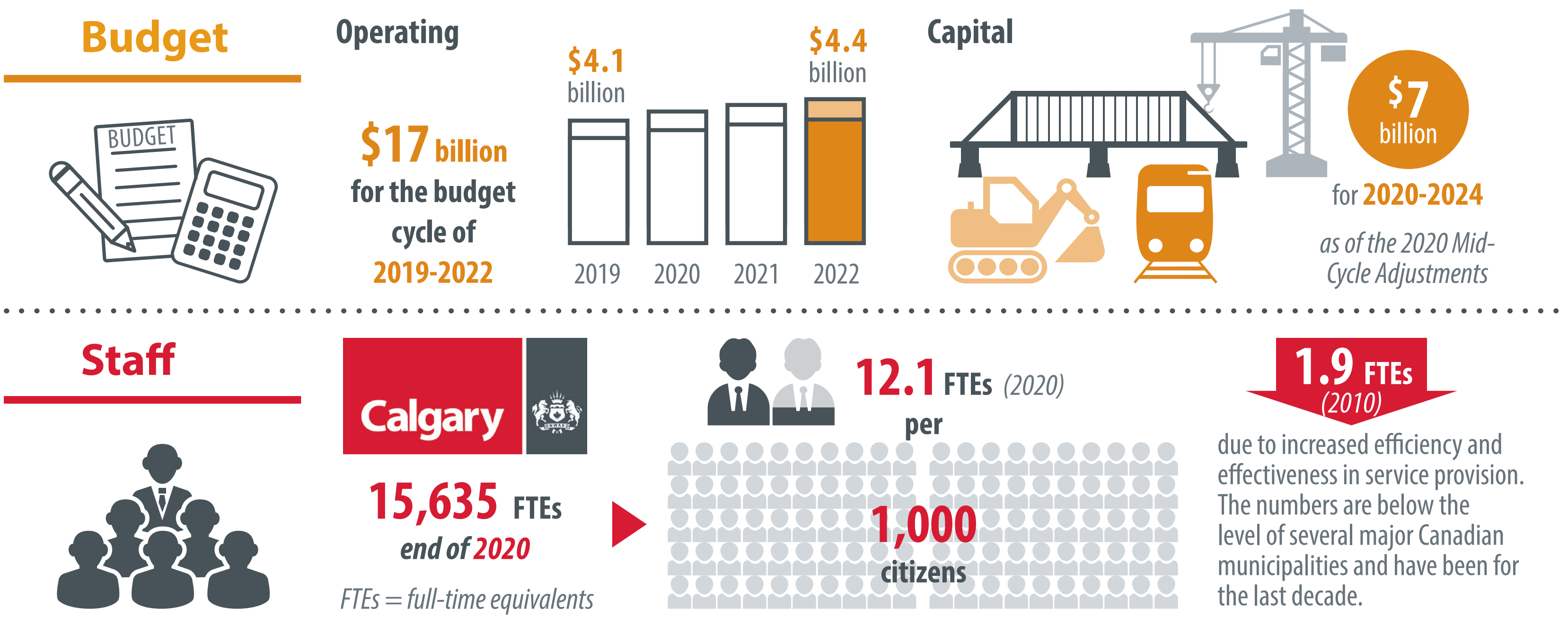
"Municipalities in Canada are known as 'creatures of the province.' This means they are only allowed to exercise the powers that are delegated to them by provincial governments, who have jurisdiction over municipalities. This has meant that their funding decisions are constrained due to the fact that Canadian municipalities are constitutionally restricted by the provinces to limited revenue sources. While there is some variation across the provinces, in general, municipal own-source revenues are typically limited to property taxes and user levies, and this limitation to municipal revenue instruments has remained virtually frozen in this state since it was established more than 150 years ago." Who Pays for Municipal Governments? Pursuing the User Pay Model, by Lindsay M. Tedds. In Elsbeth Heaman (ed.) *Who Pays for Canada? Taxes and Fairness*, McGill University Press. 2020.

Thus, Calgary's LRFP identifies similar pressures faced by other cities and corresponds to similar long-range financial planning in such major Canadian cities as Toronto, Edmonton, Ottawa and Winnipeg.

In response to the common pressures facing Canadian cities, The City of Calgary has collaborated with other municipalities and organizations to advocate positions in support of municipal concerns. These advocacy initiatives enable The City of Calgary to build an important network of government-to-government relationships, and to highlight the specific needs of Calgary. Continued efforts in this arena are a key element in The City's efforts to maintain and enhance financial sustainability and resilience.

cycle of 2019-2022, and a five-year capital plan of $7 billion for 2020-2024 as of the 2020 Mid-Cycle Adjustments.

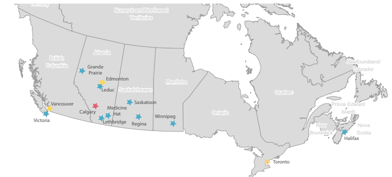
- Staff: The City had approximately 15,635 full-time equivalents (FTEs) at the end of 2020. This translates into approximately 12.1 FTEs per 1,000 citizens, a decrease from 14 FTEs in 2010 due to increased efficiency and effectiveness in service provision. The numbers are below the level of several major Canadian municipalities and have been for the last decade.
- Property Tax: median municipal residential property taxes of $2,147 in 2021 based on the single residential median assessment of $445,000 for a residential property. According to the 2019 Residential Property Taxes and Utility Charges Survey, Calgary's municipal annual residential property taxes are relatively lower than other major Canadian cities.
- Assets: total assets (book value) were over $29.8 billion in the annual financial statements as of the end of 2020, including the net value of ENMAX, The City's wholly owned electrical utility, and net asset position is approximately $21.8 billion at year-end 2020 (this figure reflects the new reporting requirements of the Public Sector Accounting Board).
- Debt: total debt (excluding ENMAX) is approximately $2.8 billion, of which 14 per cent is tax-supported, eight per cent is self-sufficient tax supported and the remainder is self-supported. The ratio of debt servicing charges to tax-supported gross expenditure



Property Tax

Median municipal residential property tax

(2021) **$2,147** based on the single residential median assessment of $445,000 for a residential property



Calgary's municipal annual residential property taxes are relatively lower than other major Canadian cities*.

**2019 Residential Property Taxes and Utility Charges Survey*

Assets

Total **$29.8 billion** *(2020)*

Annual financial statements

= net value of **ENMAX** The City's wholly owned electrical utility

+ net asset position is approximately **$21.8 billion** **

*** reflects the new reporting requirements of the Public Sector Accounting Board*

Debt

approximately **$2.8 billion** Total debt *(excluding ENMAX)*

- 78% Self-supported
- 8% Self-sufficient tax supported
- 14% Tax-supported

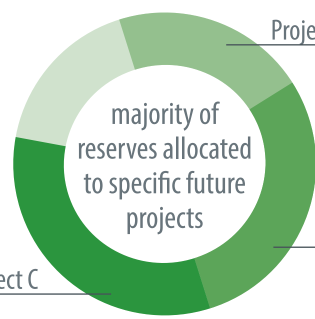
The ratio of debt servicing charges to tax-supported gross expenditure *(net of recoveries)*

2.5% *(including self-sufficient tax supported)* The City's 10% policy cap

1.5% *(excluding self-sufficient tax supported)* The City's 10% policy cap

Reserves

$2.7 billion total reserves *end of 2020*



Reserve
Reserve
Reserve
Reserve

The City's contingency fund **Fiscal Stability Reserve**

a balance of approx. **$474 million** *end of 2020* *(with a committed amount of $294 million)*

(net of recoveries) was 2.5 per cent (including self-sufficient tax supported) and 1.5 per cent (excluding self-sufficient tax supported) which is within The City's 10 per cent policy cap.

- Reserves: total reserves of approximately $2.7 billion as of the end of 2020, the majority of which are allocated to specific future projects. The largest reserve is the Fiscal Stability Reserve, The City's contingency fund, it had a balance of approximately $474 million (with a committed amount of $294 million) at the end of 2020.

For The City's total assets, most of the tax-supported portion does have depreciation applied to it under current accounting rules (Public Sector Accounting Board). The values of total assets and net assets do not reflect the replacement value currently estimated at $93.9 billion in the 2020 Infrastructure Status Report.

In 2009, the most significant accounting change in decades came into effect, requiring municipal governments to amortize (depreciate) capital assets over their useful lives. The requirement to report asset amortization currently applies only to actual results and not to budgets and projections. To align actual results with budgeted projections, The City included the amortization estimates in the One Calgary 2019-2022 Service Plans and Budgets for information which are not directly included in the budget expenditures. The recovery of amortization expense for total City assets is not currently factored into property tax rates. Given The City's considerable asset base, the amount of amortization expense recognized is significant. Amortization expense recognized in 2020 was approximately $693 million.

In June 2013, Calgary experienced a major flood event and a State of Local Emergency (SOLE) was declared within the City. The flood caused significant damage to The City's infrastructure. While The City has completed a portion of the work to restore conditions to pre-flood state, it is expected that resiliency and enhancement work related to the 2013 flood will continue through 2021 and beyond.

In 2020, the COVID-19 pandemic and prolonged economic recession brought a heightened degree of volatility and risk exposure for both citizens and businesses in Calgary. Many lines of municipal services have been impacted, and The City has responded quickly and efficiently to help support Calgarians through the tough time. The uncertainty of the duration and extent of COVID-19 weighs on consumer confidence and business sentiment. With the vaccine rollouts and rebound in oil prices, the region's economic landscape has been trending upwards in 2021 compared to 2020. Job recovery should continue with the reopening of the economy, while it is expected to be moderate as employers remain relatively cautious. The housing market has improved, with residential investment anticipated to contribute positively to growth. However, the recovery pace of the economy depends largely on how quickly the vaccine can roll out and whether it can outpace the spread of new variants of the virus. The City of Calgary's Corporate Economics Spring 2021 forecast for Calgary's economy for the medium-term of the next five years anticipates:

- Population growth averaging 1.3 per cent per year through 2026.
- The unemployment rates declining from 9.7 per cent in 2021 to 6.3 per cent in 2026.
- Inflation to stabilize at 2.0 per cent in 2021 and slightly increase to 2.2 per cent in 2026.
- A gradual recovery of annual housing starts in the city from 9,700 in 2021 to 10,700 in 2026.

The City is responsible for providing a wide range of services expected and valued by citizens but must do so with only a few limited sources of

revenue. Most of these revenue sources, including property tax, are not sensitive to economic growth. Tax revenues account for approximately 50 per cent of The City's total revenue. Other sources of revenue such as sales of goods and services are more volatile and do not have mechanisms in place to ensure adequate growth, creating a structural fiscal problem for The City where growth in expenditures consistently outpaces growth in non-property tax revenues. While The City is allowed legislatively to close the gap with property tax revenue, there will be challenges for doing so in a politically acceptable way.

While Calgary's residential property taxes are relatively low compared to other major Canadian cities, there is considerable pressure to control tax rate increases, especially with the redistribution of non-residential tax responsibility from downtown to suburban areas and tax share redistribution between non-residential and residential properties. Service expansion pressures and increasing infrastructure expenditures are expected to continue to drive up operating expenses and debt levels over the medium-term. A growing demand to fund future infrastructure projects, combined with the challenge of unreliable long-term grant funding sources, has also been identified as an area of concern. The City of Calgary benefits from low-cost financing obtained through the Government of Alberta and substantial investment balances. These factors – low-cost financing and substantial investment balances – will provide resilience to The City's financial profile.

3. Long-range Projections

The City is on a solid footing with sound financial management and well on its way to achieving financial resilience. However, The City is also facing significant financial challenges. On one hand, the state of municipal finance is such that there are extremely limited opportunities to raise additional revenue and funding from new or existing sources. On the other hand, maintaining or increasing existing levels of service, introducing new services, meeting the changes of service demand, and responding to inflationary pressures all contribute to a profile of expenditures that exceeds available revenue.

The foundation for understanding the extent of The City's financial challenges is to provide its financial projections into the future. Financial projection is the process of extending revenues and expenditures over a long-term period, using assumptions, and aligning financial capacity with long-term municipal service objectives. The projections demonstrate the magnitude of necessary revenues to cover expenditures. Long range financial planning combines financial projections with strategy development. Future financial scenarios are designed to help decision-makers navigate challenges. A multi-year financial projection is an essential tool for long-term planning, with the purpose to:

- Illustrate the relative magnitude of the financial challenges facing The City.
- Stimulate discussion on how to address the general trends they reveal.
- Assist in developing financial strategies and tactics that will contribute to The City's long-term financial sustainability and resilience.

3.1 Modelling structure

With the definition of LRFP requirements and process identified, the projection model is based on the One Calgary 2019-2022 Service Plans and Budgets and its following adjustments including the 2020 Mid-Cycle Adjustments (MCA). It projects 10 years beyond the end of the 2019-2022 period into the future. The projection uses both financial and non-financial assumptions to show what The City's financial situation could look like by 2032 if the environment were to unfold as forecasted.

Financial assumptions consider The City's existing policies and strategies, as well as financial policy changes that may have a significant impact on budgeting and reporting requirements. The assumptions include projects that may have financial impact in the long-term, containing projects completed and in progress and unfunded capital projects. The model reviews and incorporates information on operating and capital budget at both the corporate and business unit or service level by considering the impact of capital projects on operating budget.

Non-financial assumptions include key indicators reflecting Calgary's economic conditions, demographic shifts, market trends and other variables that may impact the demand for City services and future municipal spending.

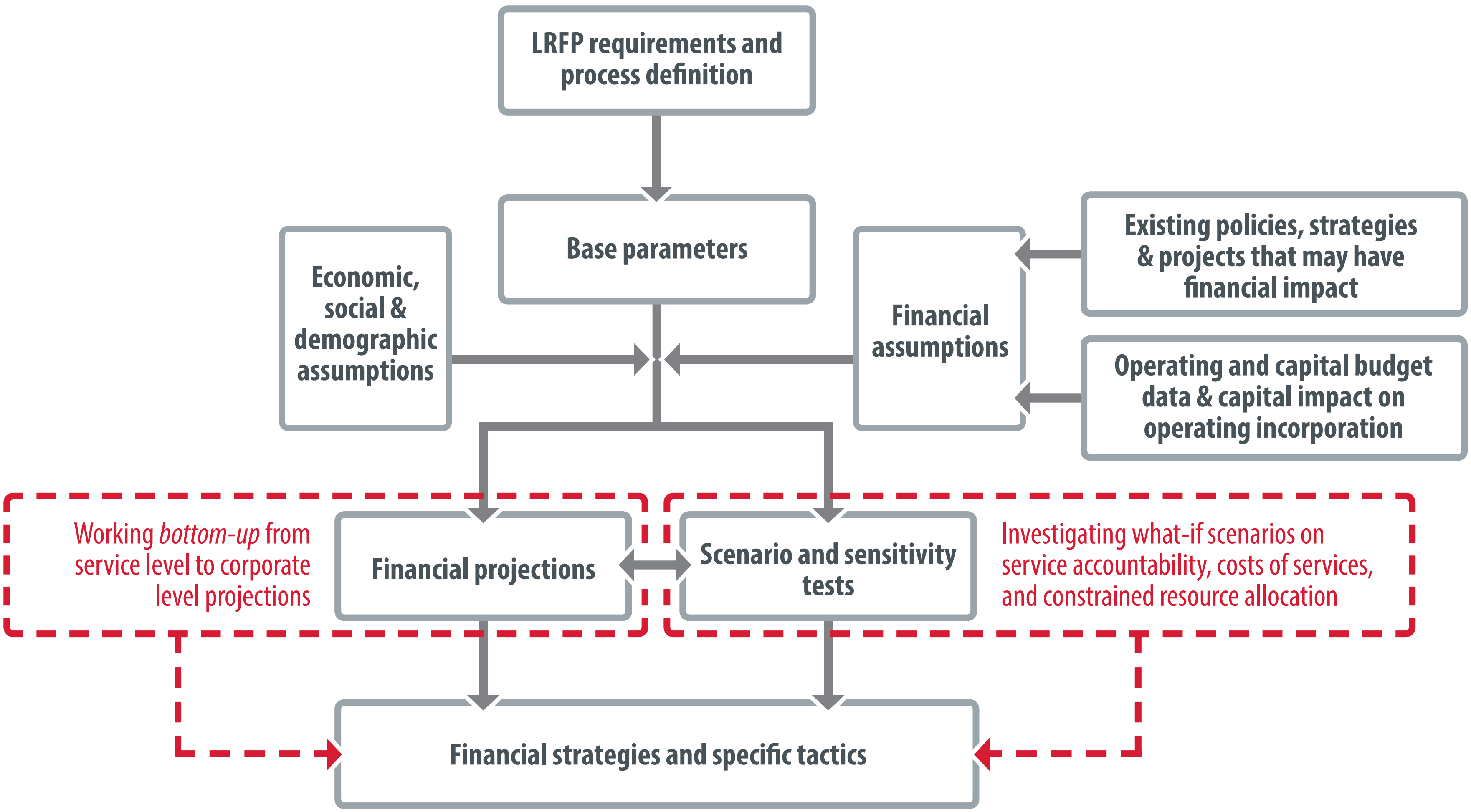
Financial projections are conducted with the base parameters derived from One Calgary and its following adjustments including the MCA, as well as the financial and non-financial assumptions. For the base case projection, assumptions use only information known at the present time and do not include speculation as to future directions of City service levels, debt policies or additional assistance from other orders of government. Sensitivity tests and scenario analyses are conducted to assess the impact of changes in assumptions on projections to evaluate the robustness of the projections and to demonstrate the financial impact of assumption changes in alternative scenarios.

In addition to following the traditional LRFP methodology, The City has developed improvements to the methodology to better align with the service-based plans and budgets approach adopted by the 2019-2022 services-based business plan and budget cycle (One Calgary). The modelling structure and methodology update is reflected in Chart 3.1. This LRFP shifts from the traditional *top-down* approach of budgeting and planning at corporate and departmental levels to a *bottom-up* approach which identifies financial planning and projections at service level and aligns service projections with the long-term financial planning for the Corporation. This LRFP investigates multiple scenarios by asking what-if questions and focusing on service accountability, costs of services, and service resource allocation under constraints. The methodology change reflects Council direction of two cultural transformations: transforming from an *inside-out* mindset of focusing on departments and business units, to an *outside-in* mindset by focusing on citizen, results, and plans and budgets by service; and transforming from a *responding to growth* mindset to a *restraint environment* mindset through cross-corporate prioritization of operating and capital resources.

In addition to maintaining and updating the corporate projection model, this LRFP further develops modules for services and sub-group of services by using business units (BUs) Internal Management Reports (IMR) data as approximation, and validates the aggregated results of the BU or service modules with the corporate model to confirm the modelling consistency and robustness of the *bottom-up* methodology.

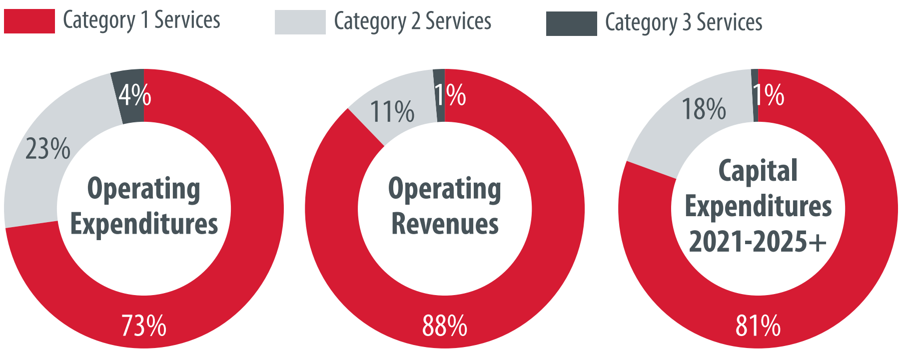
The 61 services that The City provides are categorized into three groups according to their relative weights in operating and capital budgets as shown in Chart 3.2. Category 1 consists of 17 services that have the relatively highest weights in operating revenues and expenditures, as well as in capital expenditures for the next five years. Services in Category 1 include Police, Transit, Fire, Utilities and Streets. The 17 services in Cate-

Chart 3.1
LRFP Modelling Structure and Methodology Update



gory 1 account for 73 per cent of total annual expenditures on services, 88 per cent of total annual revenues from services, and 81 per cent of total capital expenditures for 2021 to 2025 and beyond. Category 2 contains 27 services in four subgroups by departments with relatively lower weights of revenues and expenditures. Category 3 has 17 services in two subgroups based on whether they are internal customer-facing or external customer-facing, with the smallest weights of services' revenues and expenditures. Detailed information on the categories of services can be found in Appendix 5.

Chart 3.2
City Services in 3 Categories According to Relative Weights of Budget



While the services are categorized, the modules for projections are developed based on the Internal Management Reports (IMR) for business units. Services were extensively engaged in modelling structure development, assumption validation of services' drivers, consistency check of projection results, and the understanding of services' specific planning policies and strategies. The consultation with services agreed on using business units' IMR data as an approximation for service level information in the module development[9]. With the approximation, service-level projection modules are developed for Category 1 services, while sub-group module developed for Categories 2 and 3 services. This methodology update allows better understanding of drivers and assumptions of services planning and enhances the overall alignment of long-term services planning and corporate planning.

In addition to its operating projection, a capital projection is included based on funded and unfunded capital programs identified by services. It shows over the next 10 years beyond the current budget cycle that currently available funding sources will not support all identified capital programs.

3.2 Assumptions

The results of long-range financial projections are totally dependent on the assumptions made about such things as population growth, the economy (including inflation rates), the services provided and changes to revenues and expenditures. The detailed assumptions shown in Appendix 2 provide a more complete basis for the projections. A summary of the base parameters and driving factors for the base case projection includes:

- 2019-2022 One Calgary operating budget and the following adjustments including the 2020 Mid-Cycle Adjustments approved by Council.

9 The modules of services are developed based on the Internal Management Reports (IMR) for business units due to the lack of service level data before One Calgary. The development of service modules was consulted with services on the development of modelling structure, validation of assumptions, and checking the consistency of services specific driving factors for operating revenues and expenditures. For some modules, the business unit level IMR does not coincide 100 per cent with service's budgeting due to the fact that some services are jointly responsible for more than one business unit. The consultation with services agreed on using business units' IMR data as an approximation for service level information in the module development.

- Population growth and demographic changes which reflect local economic development and market trends, and impact both demand for services and municipal revenue growth.

- Inflation forecasts on goods and services gathered from respected sources that will be approximated by a combination of Consumer Price Index (CPI) and Municipal Price Index (MPI).

- Commodity prices that impact The City's operating expenses and franchise fees directly, and impact Calgary's business incentives and labour market due to the high economic dependence on global energy prices and demand.

- Labour market conditions that impact the growth rate of wages and salaries of The City employees, and therefore the operating expenditures. It also reflects local economic performance and impacts the demand for both residential housing and non-residential spaces, and therefore the property tax base.

- Other macroeconomic and financial indicators that impact revenues such as investment income, transfers from higher orders of government and multiple items of municipal expenditures.

Operating projections are developed by applying the assumptions of driving factors to currently approved budget line items of operating revenues and expenditures. Operating revenues include property tax, sales of goods and services, franchise fees, investment income, license and permit revenues, grants, and other budget line items. Operating expenditures include salary, wages, and benefits, contracted and general services, materials, equipment and supplies and other expenditures. Major driving factors include population growth and inflation rates. Inflation rates applied to different budget line items include the Consumer Price Index (CPI) and the Municipal Price Index (MPI). The MPI has been developed to reflect the unique profile of goods and services consumed by The City and is applied to certain budget line items in the projections.

The projection of a capital funding shortfall incorporates the 10-year infrastructure funding gap estimated by The City's 2020 Infrastructure Status Report. The City's capital requirements include funded and unfunded capital, where funded capital includes projects for which a source of funding exists or has been identified, and unfunded capital includes projects for which no source of funding or potential funding exists. The unfunded capital projection reflects the gap between future capital requirement and funding capacity. The Infrastructure Status Report estimated the 10-year infrastructure funding gap based on the information provided by the largest business units and service areas that steward over 99 per cent of The City's assets. Future infrastructure capital maintenance and growth requirements for unfunded capital projects are dealt with in the projections through the assumption that these unfunded projects in the Infrastructure Status Report will require funding over the next 10 years. If additional projects arise that are not currently in the estimated unfunded infrastructure needs of the Infrastructure Status Report, the capital funding gap would further increase. Funding infrastructure growth and maintenance is an area requiring strategies and decisions that has significant potential to affect long-term financial requirements. Council decisions based on these recommendations and financial considerations will improve the overall long-term capital projections and the infrastructure operating maintenance component of the operating projections.

The base assumptions exclude such items as:

- Impacts of future planning and policy projects not yet approved.

- Additional tax-supported debt for the 10 years projected beyond the approved 2019-2022 budget.

- Potential new services not yet approved for implementation by Council. It should be noted that adding new services or achieving

- higher service levels will further increase operating expenditures, though that is not modelled in the base case projections.
- Potential capital projects that are not currently in The City's Capital Investment Plan and may be brought to Council in the future. Such items are not yet included in the capital projection, so they could result in changes to the projection in future updates.
- Potential business plan and budget adjustments beyond the Mid-Cycle Adjustments for 2021-2022.

Because the assumptions affect the projections significantly, it is important to understand what the assumptions are and how changes to them could alter the outcome. As a result, the report includes examination of selected sensitivities.

3.3 Operating projections

As indicated previously, there are many potential circumstances that could occur within the short to medium-term that would affect the base case 10-year projections for operating and capital budget. The details of Council decisions on planning policies as well as new and existing services or infrastructure will certainly lead to changes when future LRFP updates are prepared.

The base projections included here show the kind of financial sustainability issues The City could face if the status quo as budgeted for 2022 is extended out to 2032. The projections highlight the existing and emerging issues that impose stress upon The City's financial capacity. The City will continue to face different pressures and will need to continually adjust to balance. Significant factors contributing to The City's financial challenges include:

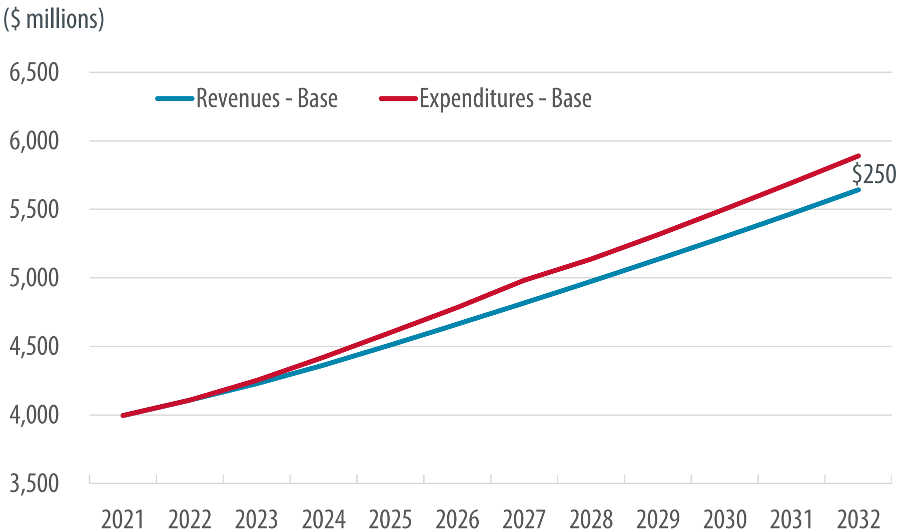
- Insufficient or inflexible revenue-raising tools to fund expenditures
- New Community growth related expenditures exceeding revenues
- Growing demand to fund future infrastructure and enhanced services
- Unreliable long-term capital grant funding from other orders of government
- A volatile economy facing structural changes
- Pressure to keep municipal taxes low
- Over-contribution of taxes to other orders of government
- Shifting demographics
- Challenges during the transition to the new economy
- Impacts of rapidly evolving technological changes
- Responses to shocks and stress

The operating projection is based on the One Calgary 2019-2022 service plans and budgets and its adjustments including the 2020 Mid-Cycles Adjustments approved by Council, applied with a series of assumptions using the current economic and demographic forecast. The operating projection includes the assumption that the property tax base increases proportionally to forecasted population growth and rates increase by the projected City of Calgary MPI, which reflects the projected inflationary increases in The City's operating expenditures. The property tax growth rates need to be Council-approved increases. Under this assumption, a gap appears between revenues and expenses in the first projected year at 2023 and widens till the last year at 2032.

The revenue shortfall shown in Chart 3.3 is based on providing current levels of resources and will vary from projections that include other as-

sumptions such as catching up on deficient service levels or adding new service or reducing the current service levels. The total annual operating funding shortfall reaches approximately $250 million by 2032. These results further emphasize the magnitude of the systemic fiscal problems facing The City. Lack of access to diverse and growth-sensitive revenue sources results in a significant shortfall to adequately cover expenditures required to provide services expected and valued by citizens. A table showing sample years of the base case long-range operating projection by 2032 is included in Appendix 3.

Chart 3.3
Base Case Projection: Operating Revenues and Expenditures

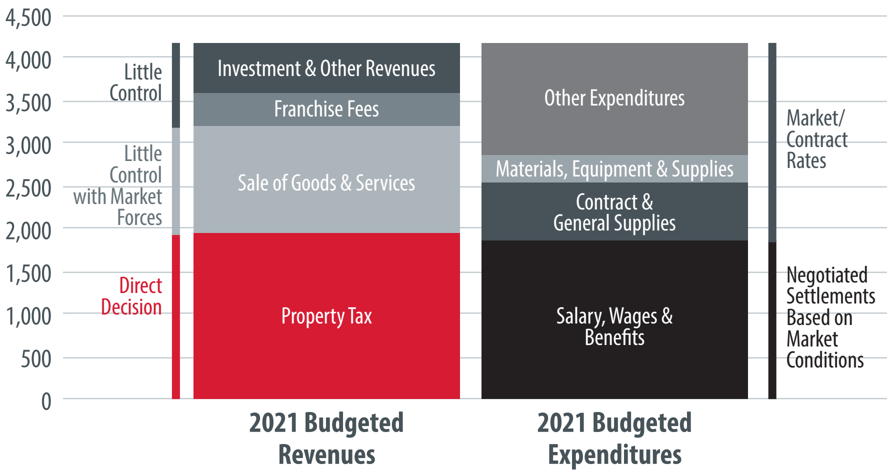


The operating gap emerges largely because the property tax is the only revenue source that is fully controllable (within the constraint of public acceptability), but only makes up approximately half of the revenue to support operating expenditures. The remaining revenues cannot be increased simply through Council decisions, as they are impacted by external factors and typically do not grow at the same rate as The City's expenditures. None of these revenues grow proportionately to economic growth on a sustained basis. Based on analysis of historical trends, the following revenue assumptions have been identified as contributing to the gap:

- Some revenues do not increase due to policy choices (such as dividend contributions to operations)
- Some revenues increase with population or inflation but not both (such as the provincial policing grant)
- Some revenues increase at rates lower than population growth and inflation (such as licenses and permits)

The contribution from each major revenue source is graphed below in Chart 3.4, showing the proportion derived from each source. The chart illustrates the structural fiscal problem The City faces. Property tax revenue accounts for about half of The City's total operating revenue. Other sources of revenue such as dividends and franchise fees are largely fixed, creating a structural fiscal problem for The City whereby growth in expenditures consistently outpaces growth in revenues. The Alberta Municipal Government Act requires Council to adopt a balanced operating budget. Council annually adopts an operating budget and a capital budget after budget adjustments are made. Balanced operating budgets are prepared for each calendar year. The structure of revenues and expenditures necessitates that the property tax rate under direct City control must increase at a higher rate than municipal inflation and other cost increases to maintain service levels. The following chapter on Financial Goals and Strategies outlines strategies and tactics of reducing the gap.

Chart 3.4
The City of Calgary 2021 Budgeted Revenues and Expenditures ($ millions)



Within the projections, no operating impacts are assumed for potential increases to travel distances, congestion and service complexity related to city growth. There is also no allowance for deterioration of an increasing infrastructure base or general policies that imply increasing levels of service. As a result, it should be noted that the base case projections in the LRFP may indicate a lower bound of the potential future funding gaps.

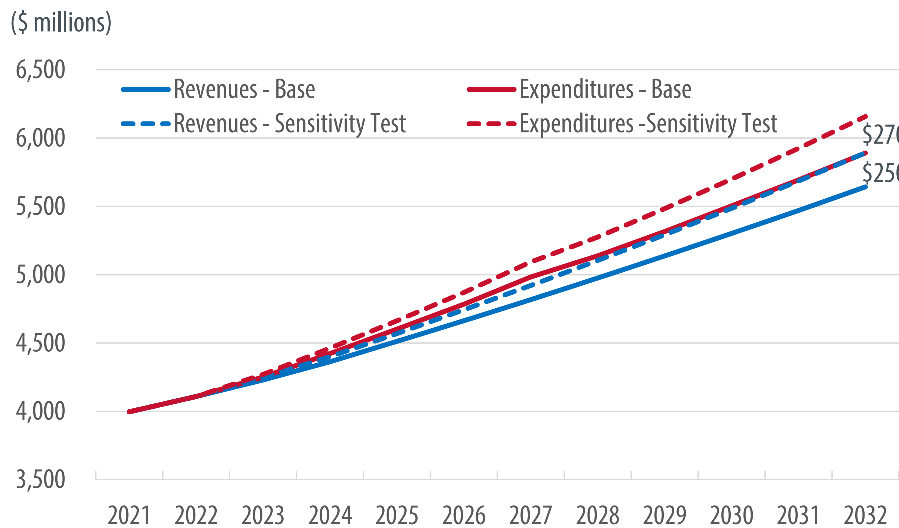
3.4 Operating sensitivities

Changes to individual assumptions can alter the results of operating projections. The projection model has been run with variations to the assumptions about population growth rates and inflationary increase rates to see how much difference it makes to the projected gaps.

3.4.1 Population growth rates

To measure population growth rate sensitivity, two examples of different population growth rates over the projection period are shown below to illustrate their respective different impacts on municipal revenues and expenditures. The first sensitivity test increased the forecasted rates of population growth by 0.5 per cent per year from base case assumption for the period of 2023 to 2032. This would result in the operating budget gap increasing by approximately $20 million to a total of $270 million by 2032 (from base case projection of $250 million) as shown in Chart 3.5. The capital gap would increase if additional projects were identified to reflect a faster pace of population growth.

Chart 3.5
Operating Sensitivity Test: Population Growth Rates Higher Than Base Case by 0.5 per cent Annually



An additional sensitivity was created to further assess population growth sensitivity in which population growth is assumed to be zero for the period of 2023 to 2032. This would result in the operating budget gap decreasing by approximately $40 million from the base projection of approximately $250 million to $210 million.

Chart 3.6
Operating Sensitivity Test: Zero Population Growth Annually Over 2023-2032

($ millions)

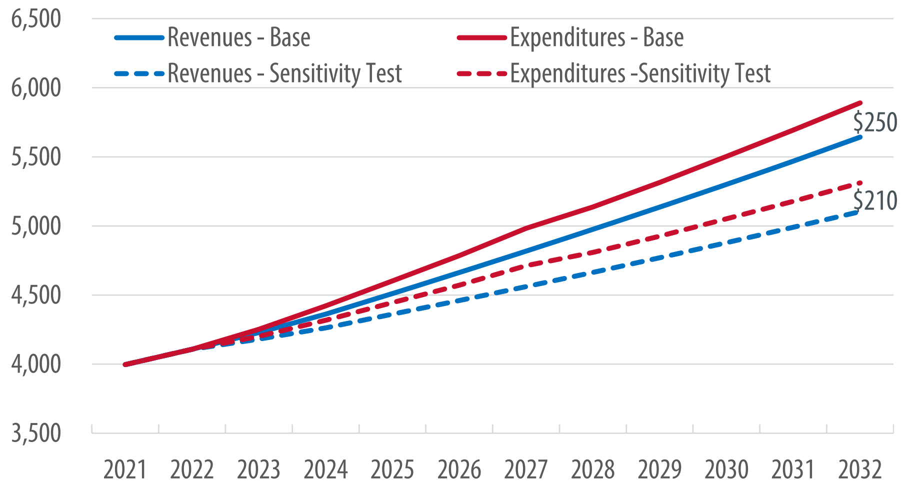


Table 3.1 summarizes the difference in the assumptions for the sensitivity tests on population growth in the projection period, and the different results in the operating gap caused by the assumptions.

Table 3.1
Summary of Sensitivity Tests on Population Growth Rates: Assumptions and Operating Budget Gap Projections ($ millions)

	Assumptions	2021	2022	2023	2027	2032
Base case	Population growth projected by City of Calgary Corporate Economics team	$0	$0	$20	$170	$250
Higher population case	Population growth rates higher than base case by 0.5% annually	$0	$0	$30	$180	$270
Lower population case	Zero population growth annually over 2023-2032	$0	$0	$20	$150	$210

3.4.2 Inflation rates

Sensitivity tests around different inflation rates were also conducted to illustrate the effects on projections. It is assumed that the property tax rate increase will change accordingly to match inflation, and inflation rate changes will not impact other parameters in the sensitivity tests. Two examples of sensitives are shown below. The first one shows the difference when forecasted inflation rates increase by one percentage point per year from the base case assumption for 2023 to 2032. This will lead to the operating gap increasing by $40 million to a total of $290 million by 2032 from the base projection of $250 million.

Chart 3.7
Operating Sensitivity Test: Inflation Rate increases Annually by an Additional 1 per cent

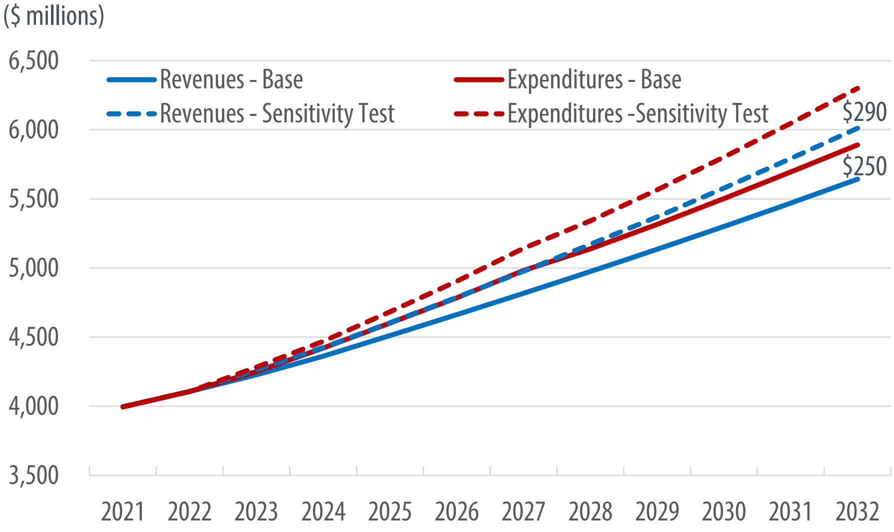
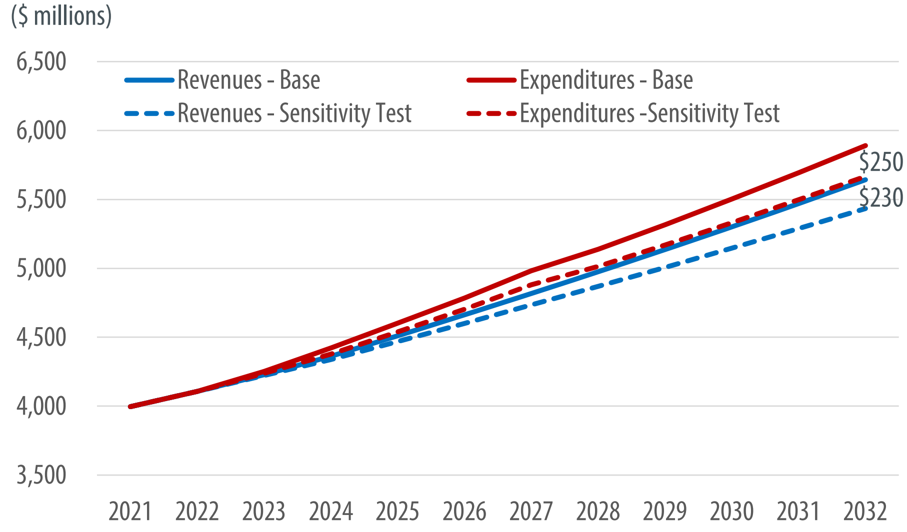


Chart 3.8
Operating Sensitivity Analysis: Inflation Rate Annually Lower Than Base Case by 0.5 per cent



Another test was conducted to assess lower inflation sensitivity in which inflation rates increased by half per cent lower annually than the base case for the period of 2023 to 2032. This would result in the operating budget gap decreasing by approximately $20 million from the base projection of $250 million to $230 million.

Table 3.2 summarizes the difference in the assumptions for the sensitivity tests on inflation rates in the projection period, and the different results in the operating gap caused by the assumptions. It should be noted that the Bank of Canada has a mandate of two percent inflation through interest rate controls. The sensitivity tests on inflation rate variations are just to demonstrate the robustness of the model.

Table 3.2
Summary of Sensitivity Tests on Inflation: Assumptions and Operating Budget Gap Projections ($ millions)

	Assumptions	2021	2022	2023	2027	2032
Base case	Inflation rates projected by City of Calgary Corporate Economics team	$0	$0	$20	$170	$250
Higher inflation case	Inflation rates annually higher than base case by 1%	$0	$0	$30	$190	$290
Lower inflation case	Inflation rates annually lower than base case by 0.5%	$0	$0	$20	$160	$230

Many other variations can be applied to the assumptions to further test modelling sensitivity and robustness. In addition to sensitivity tests, alternative scenarios have been considered to demonstrate the impact of certain strategies suggested within this document. These scenarios are not intended to definitively quantify the anticipated impact of a proposed strategy, they are instead intended to provide insights into the magnitude of impacts associated with changes to given assumptions. Scenario analysis is a useful tool to help understand the potential risks and benefits of proposed financial strategies.

3.5 Capital projection

The City's capital requirements include funded and unfunded capital. Funded capital includes projects for which a source of funding exists or has been identified, and unfunded capital includes projects for which no source of funding or potential funding exists. The capital gap that is referenced throughout this document comprises unfunded capital projects, which reflects the gap between future capital requirement and funding capacity. The capital projection on funding shortfall is based on the 10-year infrastructure funding gap estimated by The City's 2020 Infrastructure Status Report.

The funded capital also includes debt-financed projects. The City's tax-supported debt burden is projected to increase substantially during the projection period to support the Green Line light-rail transit (LRT) project, peaking at 2027 due to bridge financing and gradually reducing with the payment of debt principals. In some cases, the funding source for the debt is future capital grants and is reflected in the projections through the timing of the funding. The remainder of the debt is funded through operating revenues; therefore, the debt servicing costs are reflected in the operating projections. An increase in this type of debt to close the capital gap would result in an increase in the operating gap.

The City has developed a Debt Policy with overall guidance on the borrowing rationale and processes. The City is subject to limits on the amount of debt and debt servicing costs that it can incur. The debt limit is calculated at 1.6 times revenue and the debt service limit is calculated at 0.28 times revenue under the Debt Policy. These limits are guidelines to identify financial risk if further debt is incurred. At the end of 2020, The City had used 38 per cent of its debt limit and 35 per cent of its debt service limit, which indicated that The City was comfortably within both limits. While it is expected that the increase in debt will be manageable during the projection period, the increase will tighten The City's debt flexibility around 2027, especially if combined with a sustained deterioration in other critical risk or financial risk metrics.

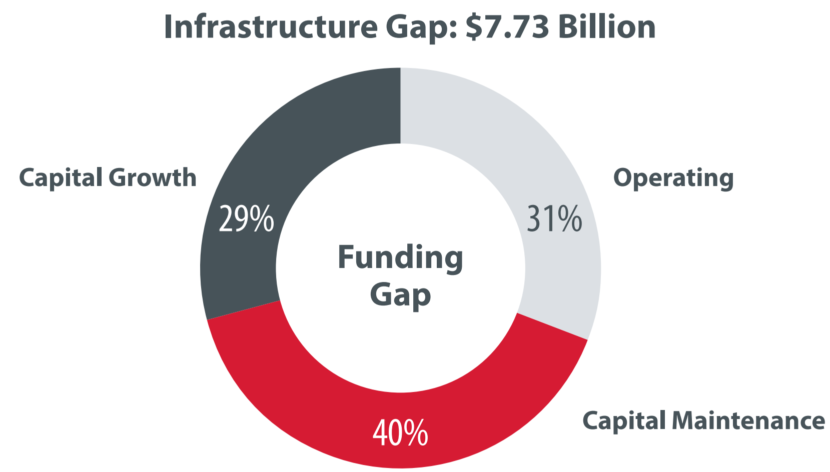
Other orders of government have commitments to provide funding to municipalities and support their spending to meet critical requirements. However, these funds will not be enough to cover all basic infrastructure needs and are not under municipal control to ensure sustainability.

The City's multi-year, rolling One Calgary plan projects $7 billion spending on capital priorities over 2020-24 as of the 2020 Mid-Cycle Adjustments. Some of the key investments include the Green Line Light Rail Transit, affordable housing, infrastructure improvements of water and wastewater services, emergency response services, and community vehicle additions. The capital budget will be funded through capital reserves, grants and revenue sharing agreements, corporate funding, debt, and other sources.

In addition, Council approved the financial strategy for the major capital projects, including the BMO Centre expansion, the Event Centre, Foothills Fieldhouse and one phase of Arts Commons transformation. The Foothills Fieldhouse is still in the process of receiving full Council approval. As part of the strategy, the Major Capital Projects Reserve was created with a total of $424 million from multiple internal sources including uncommitted balances from the Fiscal Stability Reserve.

The total capital funding gap for 2020-2030 is $7.73 billion, estimated by The City's 2020 Infrastructure Status Report which was presented to Council on 2021 May 26. It is based on the information provided by the largest business units and service areas that steward over 99 per cent of The City's assets, coordinated and consolidated by Corporate Analytics and Innovation[10]. The capital funding gap reflects the total unfunded investment requirement for The City to fund its infrastructure maintenance, growth, and operation. Therefore, the funding gap is grouped into three categories. First, capital growth gap estimates unfunded investments required to support the City's expansion. Second, capital maintenance gap estimates unfunded investments required to maintain and upgrade existing infrastructure assets. And third, operating gap measures funding shortfall required to bring existing assets to a minimum acceptable level for operation over their service life. The composition of the three categories of capital funding gap is illustrated below as estimated by the 2020 Infrastructure Status report.

Chart 3.9
Capital Funding Gap of 2020-2030 Estimated by the 2020 Infrastructure Status Report



Data source: The City of Calgary 2020 Infrastructure Status Report.

In the 2017 Infrastructure Status Report, the 10-year funding gap was reported at $5.67 billion for 2017-2026. The gap in 2020 Infrastructure Status Report increased to $7.73 billion over the next 10 years which indicates that the risk is on the rise. A table showing the City's infrastructure gap forecast over 10 years is included in Appendix 4 based on the Infrastructure Status Report data.

10 The name of the business unit may change due to the Organization Realignment. The name in the report reflects the organizational structure and names of departments and business units as of July 2021.

3.6 Methodology limitations

The LRFP intends to provide projections of the direction and magnitude of the operating budget. It should be noted that this approach could result in inaccuracies in the projections. These projections do not intend to determine whether and when certain service changes could happen and what the financial consequences would be. Projections developed in this manner cannot adequately capture such drivers as the potential costs of new growth and development, nor can they reflect the financial consequences of changes in the efficiency with which City services are delivered. However, it is assumed that any potential inaccuracies would not be materially significant, and therefore would not change the direction or the magnitude of the projections. To address these limitations, sensitivities and scenarios are considered to assist in evaluating the stability of projections and demonstrate the impact of alternative assumptions on City finances.

Despite the potential limitations associated with this approach to operating projections, the results support the fact that The City's financial capacity is challenged by several systemic issues and emerging challenges. Insufficient or inflexible revenue-raising tools to fund expenditures and growth-related expenditures exceeding revenues are two significant factors contributing to The City's financial challenges. The projected capital funding gap illustrates that The City continues to face structural financial issues that impact its ability to effectively provide infrastructure expected and valued by Calgarians. The City is challenged to balance demand for the capital investment necessary to support growth while also ensuring continued maintenance and upgrades of infrastructure already in service. To further compound the situation, The City does not have sufficient fiscal capacity to provide a level of infrastructure necessary to meet current demands and accommodate future growth and must rely on transfer payments that can be changed at the discretion of other orders of government.

4. Financial Goals and Strategies

Chart 4.1
Conceptual View of the Long Range Financial Plan Structure

The City of Calgary needs to be aware of and prepared for the financial challenges to its capacity of long-term service provision. Systemic barriers such as insufficient or inflexible sources of revenue, unreliable and often conditional long-term capital funding from other orders of government, tax increase resistance and over-contribution of taxes to other orders of government limit The City's ability to fulfill its municipal mandate to provide services and infrastructure to citizens. Furthermore, The City needs to be proactive with the changing economic structure, digitization, and its impact on municipal tax base erosion, future labour market with demographic shifts and workforce automation, and many other constantly evolving challenges.

4.1 The City's financial goals

The purpose of the LRFP is to provide a plan to deal with the 10-year financial challenges facing The City beyond this Service Plan and Budget cycle, to progress toward long-term financial sustainability and resilience. Chart 4.1 presents the conceptual view of how this plan is structured, from the identification of the overall outcome and financial goals of the municipal government, to the financial strategies and specific tactics that will support the achievement of goals and guide the development of actions through the next rounds of business planning. The City's financial goals, strategies and tactics establish a risk management mechanism to support the outcome of a well-run city. A connection with non-financial goals and strategies is indicated as well. Achieving The City's financial goals connects and supports the achievement of its non-financial goals in community and social development, infrastructure and environment, land use and urban design, mobility, economic system, governance system and other areas[11].

11 Non-financial goals are stated in The City's long-term vision and plans including imagineCALGARY, the Municipal Development Plan and the Calgary Transportation Plan.

A brief description of each element of the conceptual view follows:

Outcome: The City of Calgary Corporate Vision (Calgary: a great place to make a living, a great place to make a life) and our Common Purpose (Making life better every day) are expressed through delivering excellent services and infrastructure at a fair price to the citizens of Calgary as a well-run city, including infrastructure and programs that fulfill the responsibilities of a municipal government. Council has recognized that under existing circumstances, The City will be challenged to fulfill its municipal mandate. Council has been working towards building a municipal government that is more citizen-centered, cost-conscious, and innovative. Council's direction recognizes that existing principles and practices governing municipal finance must change if The City is to continue providing the services expected and valued by Calgarians and withstanding the shocks and stressors facing our community to be future-ready.

Financial Goals: to preserve the ability to continue delivering excellent services and infrastructure to citizens, The City of Calgary must achieve a sustainable long-term financial situation. The City of Calgary provides 61 lines of service, ranging from social and human services to physical infrastructure. To manage these demands as a well-run city, The City needs a clear understanding of its financial goals of sustainability and resilience.

For this LRFP, financial sustainability is defined as:

- The enduring ability of The City to ensure that it can deliver the level and types of services expected by the community, while proactively assessing and managing associated risks, at acceptable and realistic levels of taxation and fees.
- The ability to balance revenue and expenditure constraints over the long term, beyond the ability to raise sufficient revenue to meet the current expenditures.

And resilience is defined as:

- The capacity of The City to recover from shocks and long-term stressors and to adapt and grow from disruptive experiences.
- The ability of not only surviving shocks, but also thriving even under conditions of adversity.

Financial sustainability and resilience as defined above extends beyond the ability to raise sufficient revenue to meet the current expenditures. It focuses on the longer term to preserve the ability to continue meeting the main civic purpose and contribute to the high quality of life in Calgary, to maintain the trust and confidence of Calgarians on public services, and to continue to create value for citizens by providing services that taxpayers are willing to pay for.

Financial sustainability and resilience are not a static goal. Changes in everything from economy, demography, technology, climate, global trends and events, political environment, and social values will all impact the sustainability and resilience of The City. Therefore, on-going monitoring and revision of goals and strategies are necessary to ensure that the financial path that The City is on at any given time is sustainable and resilient.

Risk Management Mechanism: The City's financial goals, strategies and tactics establish a mechanism of risk management to support the outcome of a well-run city by delivering excellent services and infrastructure for citizens. The importance of The City's proactive risk management culture is acknowledged by the LRFP process. Strategies, tactics, and actions developed and implemented in support of financial sustainability and resilience are important components of The City's Integrated Risk Management framework and process. The LRFP identifies and manages changes arising from emerging risks by providing corresponding financial solutions. It ensures to provide certainty and stability of services with a commitment to ongoing city service provision and improves resilience to unforeseen and adverse circumstances while limiting the impact on services.

4.2 Financial strategies

There are five main strategies to support the achievement of the goals of financial sustainability and resilience in the long-term:

- Flexibility: being able to effectively respond to changing circumstances, which may relate to economic, demographic, technological, climate change, global trends, and events, and social, environmental, political, or other conditions. This strategy involves reserving some capacity during typical years to be able to respond to significant atypical conditions or events, as well as maintaining flexible organizational capacity and mindset to be able to pivot quickly and respond to changing circumstances.
- Efficiency: using public funds in ways that provide the highest level of needed services possible within the amount of funding available. Efficiency should be interpreted on two levels: a service level and a corporate level. At the service level, services and business units need to strive to use the least resources to provide a given level of service. At the corporate level, the corporation targets resources at those services most valued by citizens and only provides services that provide sufficient value to citizens to justify the costs.
- Sufficiency: having adequate resources to support the delivery of services for which The City of Calgary bears responsibility. As related to financial sustainability, this strategy refers not just to the amount of funding, but the consistency in funding level changes

relative to changes in expenditures and the diversity of funding sources.

- Integration: ensuring that The City prioritizes investment on a corporate basis, considering the interaction of services in meeting outcomes, and that the financial constraints under which The City operates are fully considered when engaging in policymaking and decision-making. This also refers to decisions across the Corporation being coordinated to ensure consistency and the most cost-effective service delivery.
- Credibility: achieving financial performance in a way that maintains and enhances public confidence in the municipal corporation's ability to provide services and infrastructure at expected levels. This includes the transparency with which financial decisions are made and the accountability for ensuring these decisions are consistent with the overall goal of financial sustainability. Citizens value the services they receive from The City and must continue to perceive that the benefits provided by City services are at least in proportion to the municipal taxes they pay.

4.3 Tactics and actions

Eight financial tactics have been identified to contribute to the five financial strategies. Most tactics contribute to one or more of the financial strategies identified. Each tactic is outlined below, including a description and specific statements that support each area. The tactic statements discuss identifiable successes and promote actions and approaches that will improve financial sustainability and resilience, as well as encourage the continuation of current practices that prevent the erosion of sustainability. Included in this section are examples of specific accomplishments toward long-term financial sustainability and resilience and proposed short-term and long-term action items that are being considered or actively pursued by The City.

4.3.1 Tactic 1: Ensuring adequate funding

This tactic recognizes the challenges facing The City because of systemic inadequacies that result in insufficient or inflexible revenue-raising tools. It involves both determining The City of Calgary's funding requirements (including managing growth, redevelopment and infrastructure renewal needs, lifecycle replacement and day-to-day operating commitments) and obtaining adequate funding from multiple sources to meet the requirements. It encompasses a balanced approach to capital funding so that needs related to infrastructure growth and maintaining current assets are prominent. It also requires a thorough understanding of the timing and nature of operating expenditures to ensure that they are matched with stable and reliable funding sources.

This tactic includes three areas regarding full cost identification and maintaining or potentially increasing funding from existing and new revenue sources.

a. Ensure that estimates of future service and infrastructure expenditure requirements are complete and sustainable, including all cost elements and the expenditures needed to provide adequate service levels to the anticipated growth of existing and new communities.

In addition to obtaining funding, this tactic requires that the entire cost of providing the required level of service by each service line is identified to establish what level of funding would be considered *adequate*. Developing a comprehensive understanding of a service's cost profile over time will ensure that the funding needs are clearly

identified, increasing the likelihood that available funding is sufficient and timely.

The City has implemented the service-based plans and budgets of One Calgary in the 2019-2022 budget cycle. The service-based budgets help identify the level of service by providing the value and planned expenditures on a service. The value a service provides can be described as the balance between what is provided as the results and benefits and the cost of providing the service, such as taxes, rates and fees paid by citizens. The clearer measurement of the cost of providing services helps citizens better understand what they are getting for their tax dollars and how The City should provide better services.

The City has made efforts to recognize the full lifecycle costs to support capital investment decisions. The Infrastructure Status Report outlines the replacement cost of City-owned assets at their current price. The City also reports the value of its infrastructure in its annual financial statements. Considerations with Tangible Capital Assets (TCA) and operating costs of capital are now part of the capital decision-making process that strengthens business processes and increases operational efficiency.

b. Maintain or increase funding from existing sources.

On the funding side, property taxes are the municipal finance backbone to fund City programs and services that Calgarians value and use every day. The long-term revenue growth from property taxes should reflect anticipated long-term population and real economic growth in Calgary. The economic recession and COVID-19 pandemic have prompted a sharp and sustained drop in the property assessment values of downtown office buildings and a shift of non-residential property tax from downtown to the rest of the city and from non-residential to residential properties. The City has taken many efforts in establishing a sound assessment and taxation system. Current actions include the implementation of the Financial Task Force (FTF) recommendations, work through the Economic Resilience Task Force, Tax Shift Assessment Working Group, and the Downtown Strategy. Multiple FTF administration action items are addressed through the LRFP, including incorporating a broader view of the impact of City finances and the link between The City's financial projections and the growth in the overall economy, a review of revenue sources and an analysis of the property tax impacts of future financial gaps. Additional commitment including a new Greater Downtown Plan will further investigate strategic moves and corporate actions to maintain the sustainability of property tax revenues.

Clearly identifying the service impacts of property tax rate changes, and the property tax rate impacts of service changes, will assist in ensuring consistent decisions are made on property tax rates and service levels.

Another important municipal revenue is the sales of goods and services, with the majority coming from Utilities, Public Transit, and Waste and Recycling. A review of user fees and subsidies is being undertaken that will lead to more accurate costs of services. This revision to the User Fee Policy will help to better align user fees with the services funded.

Off-site levies are an important source of funding that help pay for the growth-related costs of infrastructure. The City is working toward a renewed off-site levy bylaw. This will promote a more representative alignment of the assessments with the costs of providing capital and will provide mechanisms to align revenues and costs more accurately over time.

The City continues to work to achieve certainty and longevity in intergovernmental funding agreements. The introduction of the Local Government Fiscal Framework will replace the existing Municipal Sustainability Initiative/Basic Municipal Transportation Grant and the City Charters Fiscal Framework Act in 2024-2025. The provincial and federal governments committed in 2020 that they would help municipalities through programs including the Municipal Operating Support Transfer (MOST) program to support municipal operating costs during the COVID-19 pandemic and the Municipal Stimulus Program (MSP) to invest in new infrastructure for economic recovery and job creation. It should be noted that the fiscal situation for the Government of Alberta is anticipated with significant deficits for the next few years due to low commodity prices and COVID-19 responses. The Government of Alberta's 2021 budget announced reductions in support for municipalities. The City will continue to advocate for a reversal to these reductions and pursue other opportunities to sustain The City's finance.

c. Match the volatility of revenues and expenditures.

Where possible, attaching revenues to operating expenditures that have similar volatility or risk profiles can ensure a long-term stable funding source. For example, explicitly directing franchise fees to utility cost payments ensures that as utility costs rise, the revenue used to fund these costs also rises. This allows The City to more explicitly model and take advantage of natural hedges within City operations.

The City has worked on identifying the full cost of service provision (including depreciation), improving the forecasting of service demands and costs, and recognizing lifecycle costs and the operating expenses for capital assets as part of the completion of asset management plans, monitoring and updating user fees and subsidy policies, and reviewing the revenue and expenditure profiles of The City's operations. Longer term, this tactic could encompass, for example, determining maximum revenue growth and then finetuning the level of service to meet the restricted revenue growth, recognizing and preparing for some low probability risk events such as COVID-19 pandemic, ensuring development agreements provide sufficient resources to fund growth-related infrastructure, and continuing work to achieve certainty, flexibility and longevity in intergovernmental funding agreements.

These types of actions need to ultimately reduce the projected gap between long-term revenues and expenditures. To date, projected gaps show no significant reductions, emphasizing the continuing need to establish more stable, long-term sources of growth sensitive funding.

4.3.2 Tactic 2: Achieving diverse sources of funding

This tactic includes identifying actions related to alternative and innovative funding sources that will help The City respond to the pressures of growth and redevelopment and reduce the reliance on the property tax. This is especially important for large capital requirements such as the Green Line light rail transit construction, Event Centre and BMO Centre expansion. The City has traditionally had access to a limited number of inelastic revenue sources such as property taxes, user fees and intergovernmental transfers to meet expenditure requirements that are continually under upward pressure. This has put downward pressure to The City's financial position.

a. Leverage untapped revenue potential.

The Financial Task Force (FTF) recommended new revenue options to improve The City's financial strength. The implementation of the FTF recommendations is combined with The City's other efforts including

the Solutions for Achieving Value and Excellence (SAVE) Program and the Economic Resilience Task Force (ERTF) to work towards reducing spending, modernizing municipal government, and exploring new revenue sources. The LRFP project team has worked with services extensively on identifying any untapped revenue sources and additional new revenue options at service level, as well as with Intergovernmental & Corporate Strategy (ICS) on potential new revenue sources through the work of Calgary Metropolitan Regional Board (CMRB) on providing infrastructure and facility services to surrounding areas as a regional hub.

The City is looking at options of leveraging untapped revenue potential. The tools for doing so include developing and implementing additional revenue from returns on City assets, investment and proprietary charges; exploring the use of regulatory charges for services provided in the City of Calgary which do not otherwise generate property tax, such as telecommunication infrastructure; reviewing options to increase advertisement revenue in Transit and Streets; developing and implementing licensing charges for business vehicles and the extension of business licensing requirements to a wide variety of home-based businesses. The City has also been exploring options of charging different user fees for City services to non-residents, as well as considering implementation of new user fees or increasing user fee revenue for cost recovery. Other potential tools include developing and implementing taxes that would focus on tourists and visitors that use City services.

The City has also been working with the provincial government on expanding traditional revenue sources from the provincial government, as well as towards opportunities for access to new revenue sources and additional revenue sharing tools that would improve municipal fiscal capacity and diversify The City's revenue base.

Diversifying funding relates to risk mitigation by having a variety of (and balance among) funding sources that limits the impact to revenues (and therefore services) from economic, environmental, or social changes and allow for better alignment of changes in revenues and expenditures. Efforts in the short-term could involve establishing a funding mechanism to support the lifecycle maintenance costs for City assets, reviewing rates that apply to City services provided to communities outside the city but within the Calgary region, and identifying additional revenue-sharing or compensation opportunities with other orders of government to support both operating and capital needs. As well, the implementation of redevelopment levies in areas beyond the Centre City can offer an alternate source of funding for the upgrades needed in these areas.

In the longer term, The City could focus on identifying and negotiating for municipalities' access to growth-sensitive revenue sources in terms of taxes, fees and development charges; and exploring innovative funding methods used by other governments to meet public needs such as district infrastructure surcharges.

While there have been numerous attempts to add to the sources of operating funding over the years, the percentage of operating revenue coming from property taxes has not changed for many years. Efforts need to continue in this area. The measure of what portion of City operating revenues is provided by municipal property taxes will be a good indicator of whether the search for new sources is succeeding.

b. Identify revenue from the new economy.

The new economy, also known as the digital economy or the internet economy, refers to an economy that is based on information and

communication technology. The City has been making efforts to identify and develop additional revenue options from the new economy through the implementation of FTF recommendations and the work of the ERTF. The transition to the new economy poses significant negative risk to some existing municipal revenue sources. In the new economy, municipal taxation may face the base erosion and profit shifting challenge. The concern is about tax planning by businesses and people that take advantage of different tax systems to artificially reduce taxable income or shift profits to low-tax jurisdictions in which little or no economic activity is performed. There is a significant increase in the amount of economic activity in the digital economy not captured through the municipal property tax. Addressing tax base erosion and profit shifting in the new economy is a key priority of municipal government.

The City has been assessing the extent to which it can generate revenue from new sources as we transition to the new economy. Some examples include considering investing in broadband infrastructure to gain long term dividends; exchanging value created by The City such as data and other assets for private sector services or dollars to limit cost pressures; developing and implementing 'franchise fee' type charges that leverage value in regulated assets that reflect the transition to the new economy, such as Calgary's 5G infrastructure; developing and implementing vehicle permitting charges with the transition to driverless cars and licenses for new economy services such as e-scooters and ride-sharing; developing and implementing taxation for e-commerce revenue generated from local consumption of goods and services not reflected in bricks and mortar.

4.3.3 Tactic 3: Managing expenditures

This tactic deals with cost containment to limit pressure on revenue requirements, maintain market competitiveness and preserve capacity to maintain service levels. This is a particularly important area when revenues are under stress from multiple channels including the economic downturns and negative impacts from the COVID-19 pandemic. Developing a thorough understanding of a service's cost profile can help ensure that the funding available to support it is sufficient and timely. This tactic includes three statements regarding cost control and prioritization among municipal services.

a. Increase efficiency in service delivery.

Council has provided direction to Administration to put a greater emphasis on improvements to municipal service efficiency and effectiveness. In response to this direction, Administration has taken a series of strategic actions. The City's 2019-2022 One Calgary Service Plans and Budgets represent a significant change from previous plans and budgets as it was developed and approved at the service level rather than at the business unit level. This provides clarity on the value of municipal services received by citizens for tax dollars paid; and improves the efficiency of decision-making of Council and service providers with improved information on a service's value.

While The City revises the four-year plan to reflect changing conditions through the annual budget adjustment process and the Mid-Cycle Adjustment process, Council directed additional operating reductions in response to the continued challenges resulting from the shifting of non-residential property tax from downtown non-residential properties to other non-residential properties and from non-residential to residential properties, as well as to mitigate the financial impacts of the COVID-19 pandemic.

The City's Rethink to Thrive Strategy[12] aims to improve service value and deliver major capital projects. Guided by this strategy, Administration is realigning departments and business units to reduce the cost of government and increase collaboration by improving efficiencies in service delivery, realizing synergies and being innovative.

As incentives to drive an efficiency culture in Administration, the Budget Saving Account (BSA) was established to encourage business units to seek annual savings, innovation, and efficiencies from their operating and capital budget. The uses of the funds in BSA also allows The City to maintain flexibility[13].

The City has further committed through programs including the Zero-Based Review (ZBR) and the Solutions for Achieving Value and Excellence (SAVE) Program to continue to find savings. The SAVE Program sets out a strategic approach to cost-savings that helps address the realities of The City's financial situation while minimizing the need for future across-the board reductions. It will also help The City find the savings while maintaining or improving overall customer satisfaction and citizen outcomes.

The City will continue to emphasize improved productivity through government modernization, individual process improvements, better technology, lower-cost alternatives, and reconsideration of how services are provided, as well as by continually evaluating alternative delivery methods. A few of many actions that will flow from this tactic include: streamlining the Accounts Payable process through existing improvements or automation; advancing efforts to consolidate The City's software and applications; expanding category management and strategic sourcing capabilities; extending the use of chatbot agents for automated responses to citizen requests; improving contract compliance activities to minimize the gap between the expected and actual value of contracts; increasing the digitization of City services; modernizing the work environment; streamlining Human Resources process through automation; modernizing the payroll process through existing improvements or automation; and engaging in a broad process automation program across The City. Enhancing investment in digitally enabled infrastructure and digital service provision will save The City's operating cost in the long-term.

b. Set spending priorities to ensure the most important areas are funded.

The City's service-based planning and budgeting system enhances clarity on the value of The City services received by citizens for tax dollars paid. It makes it easier for Council to assess citizen priorities and make more informed investment decisions and provides improved information on a service's value to enable better strategic decision making. The FTF also recommended guiding operating decision making with budget principles that formed the basis for the service plans and budgets. The City sets its spending priorities by focusing on citizen priorities and Council directives.

The City adopted a corporate-wide approach to prioritize investment, break down organizational silos and improve collaboration across services and business units. The Capital Infrastructure Investment Principles focuses on intentional management of The City's capital investment across all departments to strengthen decision making and maximize value for Calgarians. Capital investments are managed

12 More information on The City's Rethink to Thrive Strategy can be found at https://www.calgary.ca/ca/city-manager/rethink-to-thrive.html

13 In 2021 July 20 Priorities and Finance Committee meeting, The City of Calgary Reserves and Long Term Liabilities Balances 2020 (PFC2021-1002) recommended to merge the Fiscal Stability Reserve (FSR) and Budget Savings Account (BSA).

through Infrastructure Calgary in a way that provides great value to the community. The City has an integrated and coordinated approach of capital planning, prioritization, and funding. Where possible, The City's capital investments should contribute to multiple services and ensure continuity during times of normal use, emergency response and recovery. Allocating the most restricted funding sources first and switching accordingly (where permissible) to free up more flexible funding will enable The City to respond to current and emerging funding opportunities more effectively.

In the longer term, The City could pursue options involving evaluating the standards that determine the level of civic services provided; attracting private and other government investments or other alternative funding mechanisms; aligning economic and population growth with infrastructure investment planning, land use planning and operating and capital budgeting; and assessing the scope and delivery approach for City services.

c. Position Calgary as an efficient provider of similar services and infrastructure relative to other comparable municipalities.

The City carries out a benchmarking program with comparable municipal governments to establish the degree of economy and effectiveness in City of Calgary services. This tactic relates to the specific challenge of allocating scarce resources among many competing public demands. Expenditure management is an ongoing requirement of all organizations. City services continually seek ways to limit expenditures and improve efficiency. The cost of municipal government per household can provide a measure of how successfully expenditures are being managed when adjusted for inflation and the level and scope of services provided. There has been a good deal of success in managing expenditures. At the same time, it is always beneficial to The City for further review and action, as well as continued benchmarking on municipal expenditures, revenues, and services. This helps The City better understand its own revenue and expenditure patterns relative to other large Canadian cities and to learn from them.

4.3.4 Tactic 4: Providing for contingencies

This tactic prepares The City to manage risk and to be resilient when dealing with unforeseen circumstances while limiting the impact on services, as emphasized by the recent economic upheaval and the COVID-19 pandemic. The following two statements address the means to prepare adequately for the unknown.

a. Monitor economic and operational factors and forecasts to be able to respond to changing circumstances.

The ongoing uncertainty from various sources such as the economy, market volatility, disruptions by the COVID-19 pandemic, rapid changes of the public health orders and different funding schedules from other orders of government has highlighted the need to monitor the external economy and environment as well as the internal expenditures to be aware of the timing and degree of contingency actions and funding that may be required. The City continues to monitor economic conditions and the municipal financial status so that Council is informed promptly of any changes requiring adjustment. The City's budget process provides mechanisms to adjust business plans and budgets to correspond to changes in funding levels.

The City has also implemented measures to manage operating budget volatility. Natural gas costs, diesel fuel and foreign currency transactions are hedged to manage exposure to price fluctuations and

provide more certainty and stability in managing expenditures. The City has also previously purchased hedges for future purchases relating to the light rail transit system. In addition, The City has entered a 20-year contract with its electricity supplier to mitigate volatility associated with this utility cost.

Looking into the future, The City will continue to monitor trends and incorporate advances into operations as feasible and will continue to use cost-benefit analysis to inform operational changes in response to changing circumstances.

b. Ensure The City has ready access to enough funds to meet unforeseen urgent needs and manage risk appropriately.

The City of Calgary has focused significant attention on contingencies in recent years. The City is committed to an integrated approach to risk management, where financial risk has been identified as one of the priority risks in the past few years and is being closely monitored. The City maintains three categories of financial reserves to allow funds to be collected as available and spent judiciously as needed to ensure service levels to citizens are maintained. Firstly, operating reserves are used to fund operating expenses for one-time projects or pilot programs; to stabilize operating budgets for unanticipated fluctuations in revenue or expense; to comply with a contractual agreement; or for contingency funds for operational emergencies. Secondly, capital reserves are used to fund capital expenses. Thirdly, sustainment reserves are used to fund both operating and capital expenses for activities that are treated as self-sustaining.

The largest reserve is the Fiscal Stability Reserve (FSR), which is a contingency reserve for urgent situations with significant financial implications and is also used to fund one-time operating costs as approved by Council. The second largest reserve is the Reserve for Future Capital, which funds capital projects in accordance with Council-approved terms and conditions defined for this reserve.

The City has developed a Financial Reserves Policy as a guideline for use and management of reserve funds. Under the Triennial Reserve Review Process, every reserve of The City is reviewed for necessity and sufficiency at least once during a three-year cycle. This review process will ensure that The City is managing funds efficiently, required funds are adequate, outdated reserves are closed and the level of funding is not higher than necessary.

4.3.5 Tactic 5: Using debt strategically

This tactic can provide capital funding flexibility by allowing certain infrastructure to be built and used before sufficient revenue has accumulated to offset the needed investment. Debt is also a tool that allows capital investments to be made when construction costs are favourable, and to meet other needs such as stimulating the local economy and responding to local emergency. Debt can also promote inter-generational equity in that infrastructure is paid for by those who use it. The prudent use of available debt capacity can aid financial flexibility as a source of contingency financing. However, high debt levels reduce flexibility and can increase the cost of borrowing, which could impair financial sustainability if debt repayments cause or contribute to future revenue inadequacy. The City has developed a Debt Policy to guide the rationale and processes that govern The City's borrowing as it pertains to the overall level of indebtedness, the structure of the debt and the annual debt servicing limit. Two strategic statements deal with ways to improve The City's use of debt.

a. **Manage the level of debt and use it strategically to make available, in a timely manner, essential assets with long lifespans.**

The City has developed its Debt Policy to govern The City's borrowing. The City manages its debt according to the limits established in the Debt Policy. Total debt shall not exceed 1.6 times revenue and total debt service shall not exceed 0.28 times revenue[14]. The policy allows for increasing the tax-supported debt outstanding if annual debt servicing charges do not exceed 10 per cent of the tax-supported gross expenditure (net of recoveries). This allows The City to provide some additional growth-related capital infrastructure if desired.

The City is expected to see elevated debt level in the short-term to help fund its increasing capital spending. Debt repayment and increasing operating revenues will help the city mitigate the higher debt issuance so that debt levels will remain manageable.

The City will be temporarily extending its use of debt for strategic purposes. The status of credit ratings and debt ratios that are used by the Government of Alberta and The City of Calgary can then be used to track progress on improving the measures to strengthen contingency capacity. Examination of other debt financing options will increase flexibility in how debt can be used for civic purposes.

b. **Examine a wider range of debt financing instruments.**

The strategic use of debt for bridge financing of funded capital projects allows The City to successfully maintain momentum behind projects despite changes to the sequencing of funding commitments.

For capital financing, Council's policy on considering Public-Private Partnerships (P3s) may contribute to diversifying sources of financing by enabling The City to take advantage of potential private financing sources and spread costs over the useful life of the asset while transferring long-term risk to a private partner. As well, in some cases, access to grants from other orders of government may be contingent on the project considering a P3 as a delivery method. The City has applied the P3 method on two major capital projects, namely The City's Composting Facility Project and the Stoney Compressed Natural Gas Bus Storage and Transit Facility. Council also approved a P3 delivery model for the main Green Line LRT project and expects this model will provide operational flexibility to facilitate future expansion with Calgary Transit.

Focusing on long-term financial strategies, The City should continue discussion with Canada Infrastructure Bank and consider other alternative funding mechanisms, such as shared service delivery models and cost or revenue sharing mechanisms. Developing partnerships with external organizations and other governments to reach common goals for Calgarians will further promote entrepreneurship and investment within the city.

4.3.6 Tactic 6: Operating with prudent foresight

This tactic requires The City to consider what the current and future impacts of decisions will be on services and infrastructure, including how The City's overall financial sustainability may be affected. The two areas included in this tactic are largely related to maintaining and extending existing practices regarding a long-term approach to decision-making.

14 The City of Calgary Council approved Council Policy CP2020-05 on November 2, 2020 that establishes the debt limits equivalent to 80 per cent of the current Municipal Government Act (MGA) limits. The MGA requires The City to comply with two separate debt related limits: debt limit at two times annual revenue and debt service limit at 35 percent of annual revenue. As a result, The City's own limits are at 1.6 times annual revenue for debt limit and at 0.28 times revenue for debt service limit.

a. Ensure the services The City provides are well defined and linked to dedicated financial resources required to provide them.

The City must carefully plan and prioritize the use of its resources to ensure its service commitments are sustainable now and into the future. The service-based budgeting and planning clarifies the links between the services provided by The City and the financial resources required for the service provision. Clearly defined services will increase public awareness of costs and values aligned with services, as well as enhance the efficiency and effectiveness of decision making.

Efforts are being made to ensure operating budget impacts are included when capital projects are approved. To maximize the value of capital investments, funding is required for the development of asset management plans addressing costs across the entire lifecycle. It is necessary to maintain the overall asset health to ensure The City's ability to deliver Council-approved levels of service sustainably.

The Municipal Development Plan and the Calgary Transportation Plan were updated in 2020, both of which assist The City in making decisions on how it will grow and develop over the next 60 years by setting priorities for The City to align future capital and operating budgets to the delivery of required services.

b. Build internal and external awareness of the projected future cost of City services and infrastructure and of the potential impacts of changes to those projections.

Several processes have been identified to help clarify and guide future actions to improve financial sustainability and resilience. The City's Municipal Development Plan and its 2020 update has an explicit policy to ensure that municipal financial sustainability is considered within its growth management strategy. The City has its four-year business planning and budgeting system as well as the long range financial planning process for 10 years beyond its current budget cycle.

The City is committed to promote a deeper understanding for Council, Administration, Calgary's citizens, and other orders of government about this organization's financial realities and to create additional support for City initiatives to move toward financial sustainability. The service-based business plans and budgets describe five Citizen Priorities in the current budget cycle of 2019-2022. They are A Prosperous City, A City of Safe and Inspiring Neighbourhoods, A City That Moves, A Healthy and Green City, and A Well-Run City. The City focuses on what is most important to Calgarians by regularly checking in with them through multiple channels on what they value and what concerns them.

The City will pursue a wide range of actions related to this tactic by continuing to integrate the Corporate's business plans and budgets with services' plans; assessing the long-term impacts of current financial decisions; incorporating considerations of financial capacity into The City's decision making on growth and land use planning; and improving financial projection models to provide scenarios related to economic uncertainty.

4.3.7 Tactic 7: Maintaining sufficient cash flow

It allows The City to pay the costs of supplying services and infrastructure mandated by Council while managing the use of debt. This tactic refers to the need to spread cash flow throughout the year to reasonably match expenditure requirements.

a. Ensure The City receives sufficient cash flow spread over the year to meet obligations while minimizing debt requirements.

The City's long-standing promotion of its monthly payment plans for property taxes ensures that the majority of its revenues are spread throughout the year, reducing the volatility of cash flow and requirements for short-term borrowing. The participation rate for the Tax Instalment Payment Plan (TIPP) program for property taxes has remained at 60 per cent for several years. It will be beneficial to continue to improve the TIPP uptake by limiting the strain on resources during tax season and smoothing City cashflows over time.

The City's cash flow meets its requirements. The City's positive credit rating reflects its healthy operating cash flow and robust liquidity. Periodically measuring the level of participation in the monthly tax payment plans will provide a yardstick for adequately maintaining it. The City will review extrinsic motivations, such as financial rewards, and intrinsic impact, such as nudging, to determine how to increase TIPP participation.

The City could also enhance processes to ensure that estimates of expenditures reasonably consider the amount and timing of outlays. For example, capital budget requests should be reasonably estimated to match the anticipated spending timeframe based on a realistic construction schedule.

4.3.8 Tactic 8: Strengthening resilience

This tactic involves making organizations go beyond sustainability to a system that is adaptable and regenerative to thrive more after disturbances, stresses, and shocks. Calgary is a dynamic community that is not immune to the impact of acute shocks and chronic stresses. Historically, Calgary has been subject to changing weather conditions and associated natural disasters including flooding and drought. During recent years, going through a series of emergencies including the 2013 flood, the destructive snowstorm in September 2014, the hailstorm in June 2020, the continued economic downturn, climate change, and the COVID-19 pandemic, The City has developed the Resilient Calgary strategy and established a series of resilience-based tools and approaches to better prepare for and manage future shocks and stresses.

a. Building the ability of The City to respond and recover effectively from disasters and provide certainty and stability of city service provision.

From the past experience of managing challenges, The City understands the importance of preparing for volatility and changing conditions as a resilient organization. The City of Calgary Resilient Calgary Strategy and its update provide a vision for making Calgary a more resilient city economically, environmentally, and socially. A coordinated set of strategic foresight activities and partnerships have been developed for City service owners to think about the future of Calgary and to inform their actions going forward, including the Future Focused Calgary 2035 Trends and Scenarios. As one of the 100 Resilient Cities (100RC), The City has been exploring Resilience Dividend tools to prioritize opportunities and estimate resilience potential, which can be used to guide investment prioritization by quantifying the expected impacts from opportunities that make The City more resilient[15]. The City's Calgary Emergency Management Agency (CEMA) plans and coordinates emergency services during major shocks and disasters, and works alongside other City services and business units, corporations, and non-profit agencies to strengthen Calgary's resiliency through business continuity in the face of a disaster.

To improve financial resiliency for The City, Council directed work through the FTF to identify and assess innovative solutions to address

15 More information on The City's efforts of exploring Resilience Dividend tools can be found in the Resilient Calgary Strategy at https://www.calgary.ca/cs/calgary-resilience.html?redirect=/resilientcalgary.

the challenges of the current municipal property assessment and tax system. The work has been furthered with the Economic Resilience Task Force which extends to recommending strategies on medium and long-term economic recovery solutions and resilient revenue options. The City has also been responding to infrastructure related COVID-19 risks and issues by monitoring pandemic impact on capital investment and addressing solutions to mitigate delays on capital projects.

b. Building the ability of not only surviving shocks, but also thriving even under conditions of adversity.

The City has been intentionally building resilience awareness and exploring tools to enhance its ability of not only surviving shocks, but also thriving even under conditions of adversity. The City's Rethink to Thrive strategy provides a guide to plan and meet Calgarians' needs within the new normal, and to innovate and thrive in an ever-changing world.

There has been a series of efforts exploring the opportunity to pair the shock and stress perceptions with the goals and actions identified in many City and service strategies and plans. Some examples of The City's resilience actions include Resilient Calgary Strategy, Climate Resilience Strategy and action plans, Calgary in the New Economy Strategy (including developing talent for emerging economy and business continuity planning), New Greater Downtown Plan and Downtown Strategy (aiming to support a strong recovery in downtown Calgary), Water's Riparian Strategy and Watershed Investment Strategy to support resilient watershed systems in Calgary, work in Parks related to biodiversity and natural habitat to support resilient natural infrastructure, and The City's efforts to address digital disparity and be 5G-ready to support economic resilience. The City's Rethink to Strive strategy emphasizes that City policies and actions should be integrated instead of working in siloed approaches, which supports the alignment of The City's multiple efforts of driving resilience forward. The City continues to strengthen its resilience by using thoughtful, practical, and creative tools to support its decision-making capabilities. It uses tools that will reveal original ideas, challenge existing assumptions about the future, and explore the interactions between future trends, risks and the forces driving change.

5. Scenario Development

The LRFP modelling enables the development of scenarios by making variations to the assumptions of its base case projections. Alternative scenarios have been developed to assist with the financial strategies development by identifying the impacts of multiple influencing factors on municipal finances and demonstrating the importance and benefits of proposed financial strategies. These scenarios are not intended to be definitive projections of the future. Instead, they are intended to provide insight into the magnitude of changes to projections associated with changes to given assumptions, and to consider the potential opportunities and challenges if they arose.

5.1 Scenario 1: Transition to the new economy

This scenario examines what the impacts on municipal finances will be during the transition to the new economy in the projection period. The new economy is also known as the digital economy or the internet economy. It refers to an economy that is based on information and communication technology, with typical economic activities including digitally enabled infrastructure, digitally ordered transactions, and digitally delivered products and services.

During the transition to the new economy, The City faces combined challenges from municipal tax base erosion, potential revenue reduction for some services and expenditure increases for others. Though there may be some savings on The City's operating cost due to increasingly flexible working arrangements, it will not offset the negative impacts of tax base

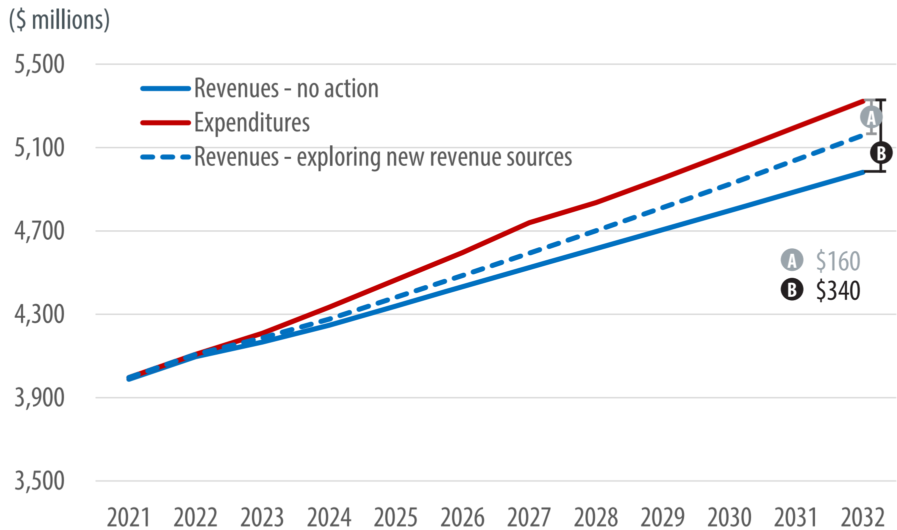
erosion and additional expenditures on operational changes of services. If The City does not take any action, the financial gap will widen compared to the base case projection as a result of operating expenditures growing faster than operating revenues. To close the gap, The City should explore and implement new revenue sources in the transition to the new economy.

The demand for both non-residential and residential spaces will shift from the traditional way in the new economy, causing tax base erosion problems for the municipal government. Potential impacts on the demand for properties include:

- The new economy will further shift from goods production to goods movement in Calgary, which results in manufacturing plants being replaced by warehouses and distribution centers. This may lead to reduced demand for the industrial space within the city as logistics hubs may choose to locate outside of the city boundary due to regional competition in attracting businesses with lower land prices and development levies.
- The trend towards flexible work options such as working from home, telecommuting and desk sharing will result in reduced demand for office and commercial spaces.
- Remote working options provide more flexibility for people to live outside of the city, which may reduce demand for residential space in Calgary due to relatively lower population growth and housing starts in the city compared to surrounding regions.
- Increasing e-commerce activities will reduce the demand for retail space.

City services will be impacted in different ways during the transition to the new economy and the associated changes in the process. Some services such as Public Transit and Parking will expect potential revenue losses due to fewer people commuting to the downtown core for work. Some other services, such as Information Technology (IT) solutions and support, may see potential expenditure increases due to higher demand for supporting services of remote work. The shift towards the new economy may generate more demand from Calgarians for services such as Parks and Social Programs. Flexible working will also result in cost savings on The City's use of electricity, heating, air conditioning, cleaning, and other office maintenance services, due to the shift from corporate demand to residential demand. Services may also find potential cost savings from innovation and automation, service digitization, outsourcing non-core functions and partnership models. However, it is less likely for the cost saving to offset the overall revenue loss from municipal tax and services' operations. To sustain the municipal service provision, it is necessary for The City to explore new revenue sources in the transition to the economy.

Chart 5.1
Transition to New Economy: The City Taking No Actions vs. Exploring New Revenue Sources



As shown in Chart 5.1, the financial gap will widen to approximately $340 million if The City does not take any action in seeking new revenue sources, which is greater than the $250 million operating gap projected in the base case due to the reasons discussed above. To close the gap, The City should actively explore and implement new revenue sources in the transition to the new economy. Some examples of the potential options include:

- Investing in 5G and other telecommunication infrastructure to develop and implement charges in City regulated assets and to gain long-term dividends
- Charging private sector for using certain City owned data and assets, or exchanging for private sector services to limit cost pressures
- Exploring and implementing opportunities of user fees from new economy services
- Developing and implementing new taxation possibilities for e-commerce revenues and business activities not reflected in bricks and mortar

With these new revenue sources examples calibrated into the projection, the result shown in Chart 5.1 demonstrates that the financial gap could be narrowed to $160 million, smaller than the base case projection at $250 million. The magnitude of the financial gap depends on how rigorously The City will develop and implement new revenue sources in addition to explore innovative ways of saving costs.

It should be noted that there would be a more severe impact on municipal finances if the transition to the new economy is accelerated with the impact of the COVID-19 pandemic. A few recent surveys[16] have shown strong expectations that post-pandemic work will be a hybrid model for the high value-added white-collar type of jobs. While Calgary benefits from a prevalence of these types of work, significantly more remote working options indicates significantly less demand for office space and more demand for residential space. This would further reduce the taxable assessed values for downtown non-residential properties and redistributes the tax responsibility to other non-residential properties and the residential sector, which in turn deteriorates the tax base erosion problem. Section 5.6 will further discuss how the overlap of the scenarios of the transition to the new economy and prolonged COVID-19 pandemic may lead to a greater financial gap than illustrated in the two scenarios individually.

Scenario Key Challenges and Tactics

The key challenges that emerge from this scenario are summarized below:

- Issues with long-term sustainability of property tax revenues due to property tax base erosion and profit shifting problems.
- Changing demand from Calgarians for municipal services including service types and levels of service associated with the transformational changes to the new economy.
- Difficulty in adjusting the municipal tax regime to the new economy to reflect the declined economic activities in bricks and mortar and to capture the increasing e-commerce transactions.

16 Some examples of recent surveys include "Future of Work in Investment Management" conducted by the CFA Institute in May 2021 and surveys concerning the return of workers to the office ("Vaste sondage pour le retour des travailleurs au bureau") by the Chamber of Commerce of Metropolitan Montreal in cooperation with Leger as part of the initiative "I love working downtown" in September 2021.

This scenario helps recommend the following tactic areas and actions for The City to navigate the challenges:

- Ensure adequate funding, including ensuring that estimates of future service and infrastructure expenditure requirements are complete and sustainable (Tactic 1a); maintaining and increasing funding from existing sources, and continuing to advocate for the reform of municipal finances and the revenue-generating tools available to The City (Tactic 1b).
- Achieving diverse sources of funding by continuing to explore and implement untapped revenue potential (Tactic 2a) and additional new economy revenue options from multiple municipal revenue sources (Tactic 2b).
- Managing expenditures. The City needs to continue to increase efficiencies in service delivery (Tactic 3a) and set spending priorities to ensure the most important service areas are funded (Tactic 3b), as well as collaborate across services to enhance digital service provision and reduce the costs of service delivery (Tactic 3a).
- Operating with prudent foresight. This includes building internal and external awareness of the projected future cost of City services and infrastructure and of the potential impacts of their changes (Tactic 6b). The City should prepare and support the transition to the new economy and create an environment where businesses can thrive in the economic transformation.

5.2 Scenario 2: Prolonged recovery from COVID-19 pandemic

In the base case, the COVID-19 pandemic is assumed to be contained in the short to medium-term with effective vaccines rolling out, and economic recovery and normalization of municipal services provision to follow suit. However, The City needs to be proactive and prepared for the uncertainty of the pandemic's evolution and potential serious setbacks that may happen during the projection period. The scenario of a prolonged recovery of the COVID-19 pandemic is developed to assist with The City's strategic financial planning under alternative circumstance with extended adversity. This scenario examines what will happen to The City and its services if the COVID-19 impact lasts for the entire LRFP projection period.

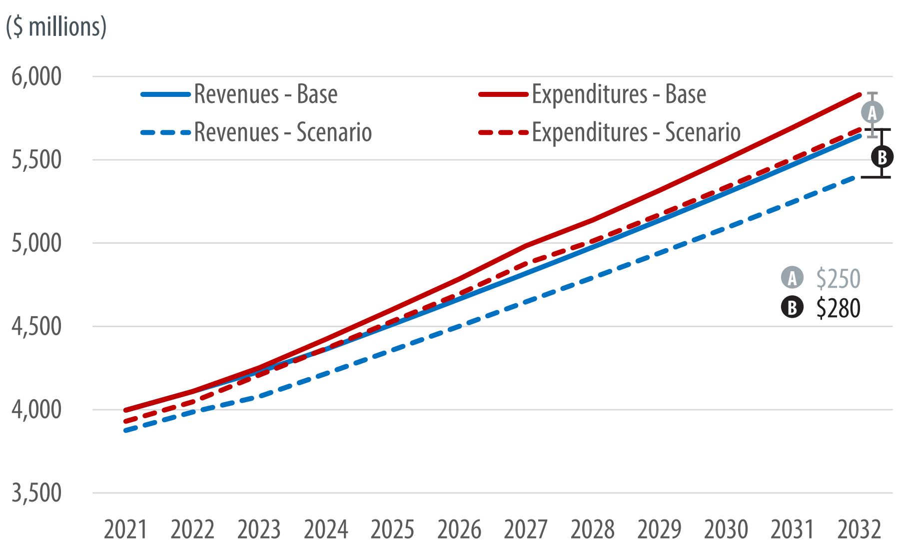
The City's lines of service have been impacted by COVID-19 at different magnitudes and aspects. Their recovery paths will have different speed and duration. Some services have seen significant revenue losses due to reduced demand. Calgary Transit's revenue went down by over 50 per cent in 2020 compared to its budgeted level as a result of lower ridership, while Recreation also experienced similar revenue loss due to closure of facilities and cancelation of activities. Many lines of service had different levels of revenue losses ranging from severe to mild, including Police, Parking, Streets, Real Estate and Development Services. For the services with revenue losses, significant efforts were taken to manage costs and help relieve decreased revenue, including layoffs and hiring freezes, and temporary adjustment of service levels to respond to demand changes. During the COVID-19 pandemic, some services experienced increasing expenditures due to incremental demand associated with changes caused by COVID-19, such as IT services due to higher demand for help desk resources, support for additional equipment and lifecycle changes, and services for contract procurement. There are also some services which have been impacted relatively less and maintained steady service provision, such as Utilities and Waste and Recycling Services, because of the robust demand from residential and non-residential sectors during the pandemic.

It is assumed that the services that have been hit harder than others will take longer to recover and mitigate the negative impacts from COVID-19.

For example, services such as Transit and Recreation are assumed to be fully recovered to their pre-COVID service levels by the end of the projection period. Services including Utilities, Waste and Recycling Services, and Fire are assumed to be able to fully resume their pre-COVID service levels within a much shorter period.

With prolonged impacts of COVID-19 in this scenario, Chart 5.2 shows that the operating gap will be approximately $280 million by 2032, greater than the gap in the base case of $250 million, assuming services will manage their labour and other cost savings at the same effort level as in 2020 during the projection period. The widening gap indicates that the revenue reduction in the projection period will more than offset the decreased expenditures, therefore services will have to be more rigorous on cost savings than the magnitude of efforts established during 2020 emergency response if COVID-19 impacts last longer.

Chart 5.2
Prolonged Recovery from COVID-19 Pandemic: Compared with Base Case Projections



Scenario Key Challenges and Tactics

The key challenges that emerge from this scenario are summarized below:

- Indeterminate impacts on municipal services and finances from the uncertainty of COVID-19 caused by variant strains of virus, effectiveness of vaccination, and changing public health orders and containment measures.
- Difficulties in achieving the right balance of providing services to Calgarians during the prolonged pandemic and maintaining The City's financial sustainability.
- Rigorous cost control requirements to mitigate COVID-19 impacts on service revenues may affect service capacity and quality in the long-term.

This scenario helps recommend the following tactic areas and actions for The City to navigate the challenges:

- Ensuring adequate funding. The City continues to work with the provincial and federal governments and seek their support with fiscal stimulus packages on the recovery from COVID-19 (Tactic 1b).
- Managing expenditures by continuing to increase efficiencies in service delivery (Tactic 3a) and adjusting spending priorities to meet the service requirements of citizens (Tactic 3b). The City should position itself as an efficient provider of similar services and infrastructure relative to other comparable municipalities (Tactic 3b).
- Providing for contingencies. This includes monitoring economic and operating factors and forecasts and remaining able to respond fast and effectively to evolving circumstances (Tactic 4a),

and ensuring The City has ready access to enough funds to meeting unforeseen urgent needs and managing risks appropriately (Tactic 4b).

- Using debt strategically. The prudent use of available debt capacity can aid financial flexibility as a source of contingency financing (Tactic 5a).
- Operating with prudent foresight by ensuring that City services are well defined to reflect the changing demand of citizens and linked to dedicated financial resources required to provide them (Tactic 6a).
- Maintaining sufficient cash flow to ensure The City's cash flow is spread over the year to meet obligations while minimizing debt requirements (Tactic 7a).
- Strengthening The City's resilience by building the ability to respond to disasters and recover (Tactic 8a) and find opportunities to thrive under adverse conditions (Tactic 8b).

5.3 Scenario 3: Regional services cost-sharing

This scenario examines the impact on The City's finances of potentially sharing cost with surrounding regions for their use of The City of Calgary's services and infrastructure facilities.

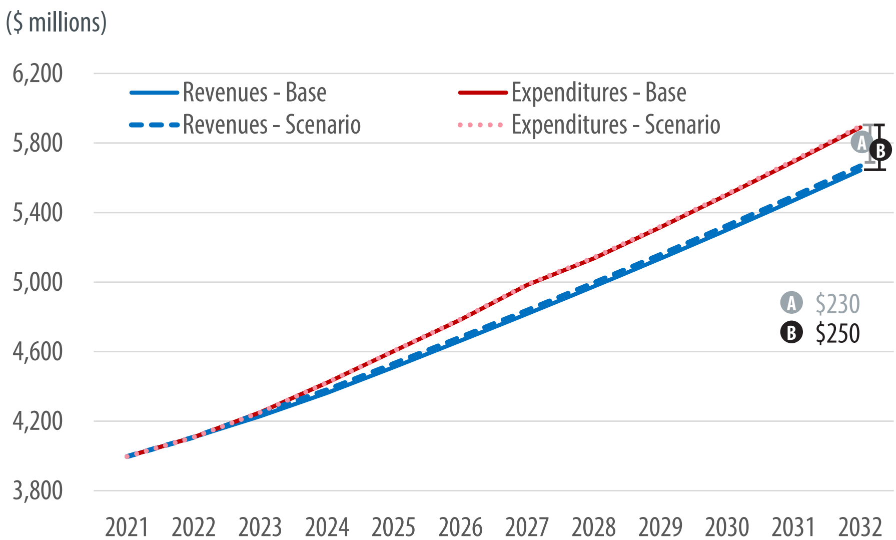
Calgary is the largest municipality in the region and the center of job creation and economic activities. As a result, residents of surrounding municipalities come to Calgary for the purposes of working, studying, shopping, recreating, and many other reasons, and therefore use The City of Calgary's infrastructure facilities and services. Most of the infrastructure and services have been used uncompensated or at most partially compensated by non-residents according to the research conducted by Hemson for The City of Calgary in 2021. Many lines of service provided by The City of Calgary are partially tax-supported, which result in an indirect subsidy to non-Calgarians and other municipalities. This scenario explores a hypothesis of sharing costs with the regional users on some of The City services that they use and analyzes the potential operating impacts on The City's finances.

Municipalities in the Calgary region have been some of the fastest growing in Canada. Calgary used to account for 91 per cent of the regional population in 1986. This population share gradually declined to approximately 85 per cent in 2018, based on the Statistics Canada's estimates. And this trend is expected to continue into the LRFP projection period. With the increasing population share for the surrounding regions, it is expected that the use of The City infrastructure and services by non-Calgarians will increase and put further burden on The City.

There are multiple options for The City to share costs with regional users. The costs of some services can be shared with non-residents potentially by charging differential user fees for some services, such as Streets and Recreation. For some other services, The City may explore options on intermunicipal agreements of cost sharing with surrounding municipalities. For example, The City of Calgary must provide adequate public safety and health services for everyone in the municipality regardless of their origin, such as Police, Fire, and Waste and Recycling Services. Calgarians pay property taxes for this type of City services they receive, while non-residents do not. Intermunicipal agreements may provide solutions to recover the cost at least partially for services in this category used by non-Calgarians. It should be noted that though cost-sharing for services may generate incremental revenues for The City, the implementation process will increase administration costs as well. For some services, potential revenue generated may be more than offset by the associated costs of

establishing, managing and monitoring the sharing agreements, leading to a potentially negative outcome for certain services.

Chart 5.3
Regional Services Cost-sharing: Compared with Base Case Projections



The example illustrated in Chart 5.3 assumes that The City could share costs on use of Streets, Recreation, Police, Fire, Waste & Recycling Services and other services with non-residents from surrounding regions either through channels including differential user fees and intermunicipal agreements. In this case, the operating revenue is projected to increase by $30 million. The operating expenditure will increase by approximately $10 million for the additional administration cost of implementation. This will lead to the operating gap decreasing by about $20 million from $250 million in the base case to $230 million in this scenario by 2032. The projection is based on the Calgary and regional population growth forecast by rennie intelligence for the Calgary Metropolitan Regional Board and daily use of Calgary Roads and Transit forecast by the Regional Transportation Model developed by Calgary Transportation; and the assumptions on other service usage are based on population and transportation forecast accordingly.

It should be noted that in addition to the financial benefits and costs, there will also be non-financial impacts including political, reputational, and social impacts, as well as legislative requirements for cost-sharing of services. The sharing of costs should come with an expectation of sharing in the decision making or even sharing in ownership of infrastructure. There may be associated risks or unintended consequences with certain regional service cost-sharing. The decision makers should take the non-financial costs and impacts into consideration besides the financial estimates developed in this scenario.

Scenario Key Challenges and Tactics

The key challenges that emerge from this scenario are summarized below:

- Risks of administration cost exceeding benefits of sharing service costs with regional users for some services.
- Potential non-financial impacts including reputational and political impacts on The City, and provincial legislative requirements.
- Lack of willingness to pay for services provided by The City of Calgary for regional users and municipalities.

This scenario helps recommend the following tactic areas and actions for The City to navigate the challenges:

- Ensuring adequate funding. This includes ensuring that estimates of future service and infrastructure expenditure require-

ments are complete (Tactic 1a) by continuing to investigate and address cross-subsidization borne by The City of Calgary and its taxpayers in favor of others in the region.

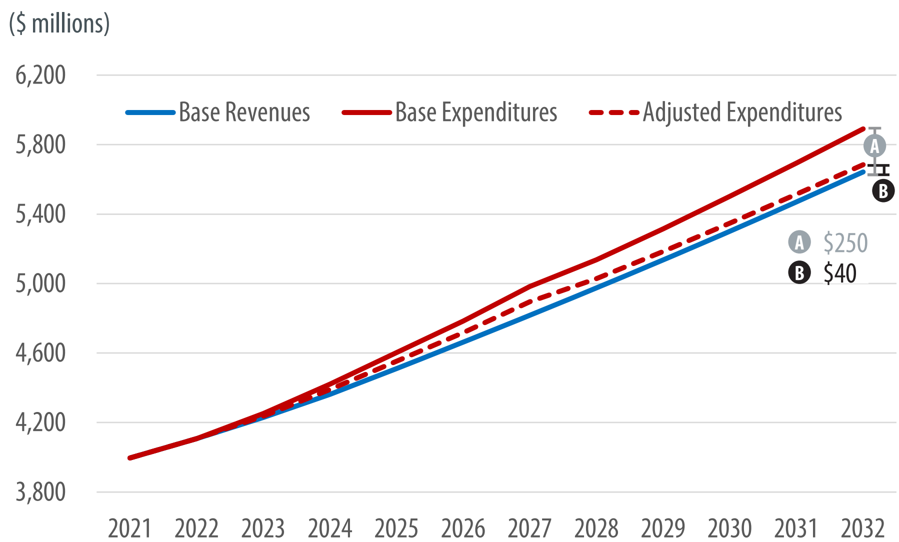
- Achieving diverse sources of funding. The City explores and collaborates with regional users for potential cost-sharing solutions, including different user fees, collaboration agreements, cost-sharing agreements, and sharing property tax revenue. (Tactic 2a).
- Managing expenditures. Through increasing collaboration with regional neighbours in support of regional economic development, The City continues to investigate municipal governance structures that promote the cost-effective delivery of services for regional economic benefit (Tactic 3a).
- Operating with prudent foresight. Ensure The City's efforts in supporting regional economic development do not decrease Calgary's own competitiveness (Tactic 6b).
- Strengthening resilience by building resilience awareness and exploring resilience tools through regional collaboration (Tactic 8b).

5.4 Scenario 4: Workforce efficiency improvement

Given that a significant portion of The City's operating budget comprises labour and associated costs, gains in productivity and efficiency have the potential to yield significant savings. This scenario starts with an example showing how much The City can save on its operating cost hypothetically over the 10 years between 2023 and 2032 with one per cent of labour cost efficiency improvement every year, and then explore the possibility and options on how to realize the efficiency improvement by working with services across the Corporation.

It is illustrated in Chart 5.4 that approximately $210 million will be saved cumulatively if The City could find one extra per cent of labour cost saving annually from 2023 to 2032, with all other factors being equal. This will significantly narrow the operating financial gap from $250 million projected in the base case to $40 million in this scenario.

Chart 5.4
Labour Efficiency Increases One per cent per year in 2023-2032: Compared with Base Case Projections



Though it may seem to be a highly desirable result with The City's financial situation significantly improved over the projection period, it is worthwhile to investigate the practicality of enforcing the efficiency improve-

ment with this magnitude on labour costs with services. The development of this scenario involves extensive engagement and consulting with services, to better understand how feasible it is from the services' perspectives and what services will have to do to achieve this target. It should be noted that the design of this scenario is slightly different from the other examples in this report. It is not designed to assess the impacts if certain assumptions happened. Instead, it asks what the services need to do to make the assumptions happen.

Services have been actively enforcing efficiencies through continuous programs and multiple initiatives including the currently ongoing Solutions for Achieving Value and Excellence (SAVE) Program. With these efficiency gains built into the base case projection, services could find it challenging to find additional savings of one per cent of operating budget through labour costs every year in the next 10 years from 2023 to 2032. Some services have expressed that this target may not be sustainable for their long-term service provision and will reduce the levels of service provided to citizens if enforced. For example, one per cent of labour cost reduction annually for Fire services indicates approximately $2 million reduction in operating cost every year, which translates into a decrease of nearly 15 Full-time equivalents (FTEs), or the elimination of a fire engine annually. Given the population growth and continuously growing demand for fire services in the city, Fire will have to reduce its service level with longer response times. Many other services provided similar feedbacks such as Transit and Streets.

Services have been exploring options of outsourcing to obtain efficiency improvement. While this may lead to savings on labour costs for some circumstances, it will increase costs on contractual services and typically does not result in overall operating cost saving. To achieve higher workforce efficiency, The City needs to increase capital investment on service automation and technology-enabled infrastructure. The investment towards a smart city and modernized municipal service provision will help reduce costs, maximize revenues potential and improve the quality of life for citizens in the long-term. This may create additional demand for capital funding as The City is already challenged to balance the capital investment required to support future growth while funding maintenance and upgrades of existing infrastructure. The reliance on capital grants from other orders of government will also add to the uncertainty in the investment priorities. The investment in service automation and modernization will also be associated with operating cost to maintain capital assets. These costs should be taken into consideration when looking at the efficiency improvement estimation from labour costs as illustrated in this scenario.

This scenario provides a tool for the decision-makers to start thinking about how to obtain long-term workforce efficiency improvement and how to make it happen strategically without reducing the current service and infrastructure levels.

Scenario Key Challenges and Tactics

The key challenges that emerge from this scenario are summarized below:

- Stresses on services' long-term capacity and levels of service under continuous saving on workforce efficiencies, given the service demand of expected value and quality from Calgarians and the growing population of Calgary.
- Increasing capital requirement to invest in service automation and innovation to improve workforce efficiencies, which may lead to a tradeoff between operating and capital expenditures and incremental labour operating costs to maintain new capital assets.

- Concerns from potentially decreased levels of service as it may create more uncertainty and negative impact on lower income individuals.

This scenario helps recommend the following tactic areas and actions for The City to navigate the challenges:

- Ensuring adequate funding. This refers specifically to ensuring that the estimates of future service requirements are complete and sustainable, to provide adequate service levels to the existing community and its anticipated growth (Tactic 1a).
- Achieving diverse sources of funding. Services should proactively explore revenue sources from untapped revenue potential (Tactic 2a) and develop additional revenue options from the new economy (Tactic 2b) to maintain services' long-term capacity.
- Managing expenditures. This includes increasing efficiencies through collaboration across services to strengthen City service delivery through digital channels (Tactic 3a); and setting spending priorities to ensure the most important service areas are funded (Tactic 3b).
- Using debt strategically to invest on assets that lead to long-term efficiency improvement (Tactic 5a).
- Operating with prudent foresight. The City needs to build awareness of the projected future cost of City services and to enhance its investment towards automation and innovation in services and infrastructure provision to increase efficiencies in long-term service delivery (Tactic 6b).
- Maintaining sufficient cash flow. For the improvement of workforce efficiency through multiple efforts including capital investment on automation, The City needs to ensure its cash flow is spread over the year to meet obligations while minimizing debt requirements (Tactic 7a).

5.5 Scenario 5: Property tax growth

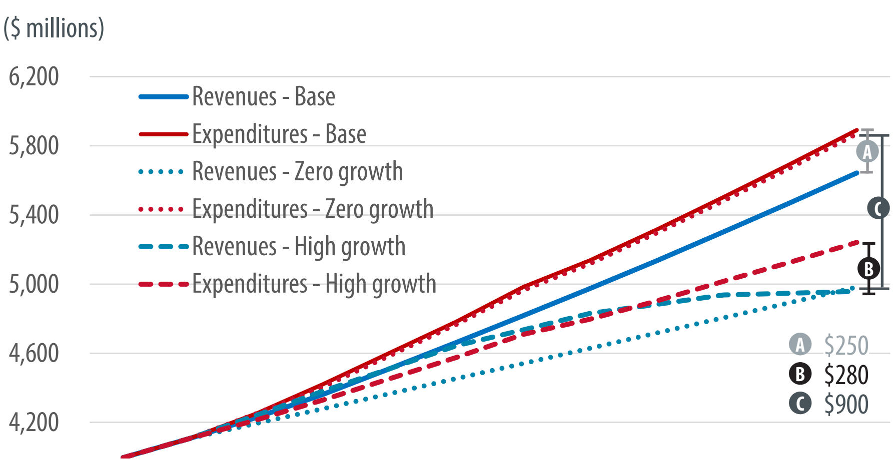
This scenario is developed to illustrate the importance for The City to maintain the property tax growth rates at sustainable levels. Property tax revenue is the primary source of operating funding for The City and the only revenue source that The City has control over. The other components of revenues, such as sales of goods and services, franchise fees and investment income, consist of sources that The City has less or little control over. When The City is facing operating gap pressures, the property taxes are the main tool available to close the gap and allow The City to balance its budget.

Maintaining very low property tax rate growth may help The City remain competitive. However, it will not help absorb the increase in expenditures caused by inflation and higher demand for services, and not be sustainable for The City in the long run. Higher property tax growth rates than the base case may help with closing the operating gap in the short-term. However, property tax rate growth impacts the municipal tax base through multiple channels including population growth and other aspects of economic development, as well as the demand for residential and non-residential properties in Calgary. Aggressive property tax rate growth will make Calgary less competitive than other jurisdictions. Businesses may relocate to other municipalities or regions with more competitive property tax rates and land costs, leaving more vacancy of non-residential spaces in the city. The residential market may face the same problem when people move outside of the city boundary to avoid high residential property taxes. The decreasing property tax base will eventually lead to even higher property

tax rate growth and drive more businesses and people away. Municipal finances may not necessarily be better off in the long-term if the property tax growth is too aggressive.

This scenario is developed with two examples of property tax growth paths. It illustrates what may happen to municipal finances in the long-term when the property tax rate increase is too high or too low. As shown in the Chart 5.5, this scenario has two sets of assumptions: property tax increase is held at zero percent till 2032; and aggressive property tax growth from 2023 to 2032 at double the Municipal Price Index (MPI) growth in addition to population growth. In comparison, the property tax growth rate is assumed to be at the combination of MPI growth and population growth in the base case.

Chart 5.5
What if Property Tax Growth Rates are Too High or Too Low



If property tax increase is held at zero percent till 2032, the total operating funding gap will increase to $900 million by 2032, more than three times the gap in the base case projection at $250 million. For the aggressive property tax rate growth case, the total operating funding gap will close in the short-term, have even surplus in the mid-term, and end up with greater deficit in the long-term due to tax base erosion as people and businesses move out of Calgary to avoid high property tax rates. The operating gap will increase to $280 million by 2032, worse than the base case projection at $250 million.

This scenario shows that The City needs to find a sustainable path for its property tax rate growth. There is evidence, through customer satisfaction surveys, that many Calgarians value what they are getting for their tax dollars. The City has the responsibility to deliver the best services to its citizens within its financial capacity and to find the right balance between costs of providing the services and benefits they will provide.

Although Calgary's property taxes are relatively low compared to other major Canadian cities, there is considerable pressure to control tax rate increases because property tax is highly visible. Increases in property tax have politically acceptable limits, even if a significant portion of the increase can be attributed to external factors such as inflation. The key to managing this is ensuring that taxpayers perceive that they are receiving fair and prudent value for their tax dollars.

Scenario Key Challenges and Tactics

The key challenges that emerge from this scenario are summarized below:

- Property taxes not growing proportionally with economic growth and increase in the nominal values of income and sales.
- Lack of autonomy in municipal tax regime and alternative revenue tools.
- Decreasing ability and willingness to pay property taxes if property tax rate growth is too high.

- Obstacles for the municipal government in collecting revenue from activities in the new economy.
- Pressures to maintain tax competitiveness and livability to compete with other jurisdictions in attracting business and population growth.
- Difficulties for the municipal government to shift from tax-supported growth to cost recovery growth, while property tax raises revenue with no direct connection to the activity being taxed and cost recovery payment connects to the activity being charged.

This scenario helps recommend the following tactic areas and actions for The City to navigate the challenges:

- Ensuring adequate funding. The City should continue to advocate to higher orders of government for municipal finance reform and expanded property tax flexibility, as well as for the authority to levy on digital economy goods and services (Tactic 1b).
- Achieving diverse sources of funding, including exploring new tax sources and revenue options in addition to enhancing property tax revenue stability (Tactic 2b).
- Using debt strategically to make available essential assets with long lifespans (Tactic 5a) and to examine a wider range of debt financing instruments for funding flexibility (Tactic 5b).
- Operating with prudent foresight. The City continues to collaborate with regional governments on regional economic development while ensuring its own competitiveness (Tactic 6b).
- Maintaining sufficient cash flow to ensure The City's cash flow is spread over the year to meet obligations while minimizing debt requirements (Tactic 7a).
- Strengthening resilience by continuing to improve property taxation policy and its implementation to balance stability between the level of taxation and the level of service (Tactic 8b).

5.6 Overlap of scenarios

The five scenarios developed in this session are examples showing potential future challenges and their impacts on municipal finances to help The City navigate the challenges. Beyond these examples, there are many other challenges and risks that The City may face in the short and long-term which may lead to different impacts and results on The City's financial sustainability and resilience than illustrated in the above scenarios.

The development of the scenarios is based on the 'ceteris paribus' assumption, which means assuming that all other things are equal or held constant except for the changes of targeted variables. It helps isolate multiple influencing factors and pin down the impact from specific factors. It is likely that a combination of more than one scenario may happen at once in the projection period. Instead of combining scenarios, it may be more productive to map out the overlap of the scenarios. The purpose of the scenario development is to show directions and magnitudes of what will happen and the impact on The City's finances. Instead of providing accurate projected numbers, the creation of scenarios and the LRFP itself is to support the development of financial strategies. Therefore, this section provides some qualitative analyses on mapping out the overlap of scenarios, instead of conducting combined calculations.

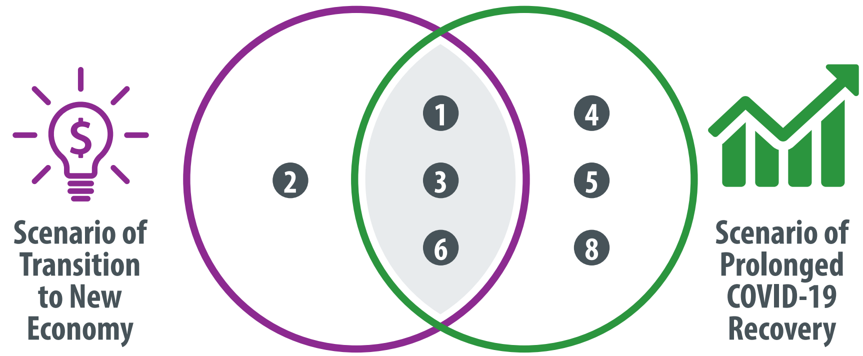
A potential overlap of the scenarios could be prolonged recovery from the COVID-19 pandemic with accelerated transition to the new economy. A prolonged COVID-19 pandemic will have deep impact on the economic structure, as the economy will shift faster toward more digital products and service provision, higher dependence on information and commu-

nication technology, more flexible working options, and lower growth of demand for both non-residential spaces and for residential properties in the city. This will lead to greater financial gap than illustrated in scenarios 1 and 2 individually. Reasons include:

- More severe property tax base erosion problems as the double hit from prolonged COVID-19 recovery and transformational changes to the digital economy will further reduce the demand for office, retail, industrial and residential spaces within the boundary of the city, and lead to slower population growth and lower property tax revenue growth for The City.
- For services such as Transit and Parking that experienced adverse impact during COVID-19, the prolonged recovery and more remote working options in the new economy will further reduce the demand for their services thus revenues.
- Some other services will face more rapidly increasing demand to cope with the shifted service requirement of Calgarians in new digital era and co-existed COVID-19 impacts. The expenditures for these services will increase more as a result.
- The City may find more operating cost savings from higher proportion of flexible working arrangements, as well as from service innovation and automation. However, the cost saving will be more than offset by the revenue loss and expenditure increase from some services.

Among the tactics and actions that The City can take to respond to impacts from the overlapping scenarios of prolonged recovery from COVID-19 and transition to the new economy, the following areas should be emphasized: ensuring adequate funding (Tactic 1); managing expenditures (Tactic 3); and operating with prudent foresight (Tactic 6). As illustrated in Chart 5.6, these tactics are commonly used under both scenarios respectively and should be considered a priority in decision making should the overlapping scenarios happen.

Chart 5.6
The City's Tactics to Respond to the Overlap of Transition to New Economy and Prolonged Recovery to COVID-19 Scenarios



Tactics:

1. Ensuring adequate funding
2. Achieving diverse sources of funding
3. Managing expenditures
4. Providing for contingencies
5. Using debt strategically
6. Operating with prudent foresight
7. Maintaining sufficient cash flow
8. Strengthening resilience

Another example of the potential overlap of scenarios could be the implementation of both workforce efficiency improvement and regional service cost sharing. The impacts of the overlapped scenarios on The City include:

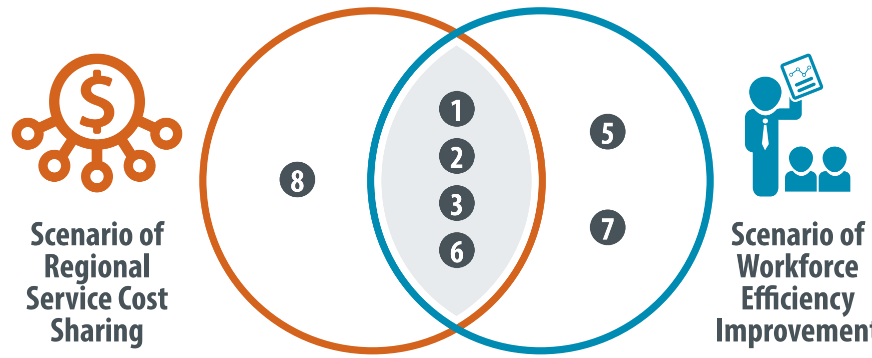
- Stronger demand in finding efficiencies through service innovation and automation to adjust to the requirements for digital service provision in the new economy.

- Increasing use of City services and infrastructure facilities from regional users in the digital economy, as higher proportions of people may choose to live outside of the city with remote working options and businesses choose to locate in regional areas for lower land costs and development levies. This will impact the municipal tax base for The City, while not necessarily leading to less demand or use of City services and infrastructure.
- The City's investment towards digitally enabled infrastructure and creation of an innovative business environment will contribute to the regional economic development, which may not necessarily enhance The City's regional competitiveness or improve The City's finances.

For this example of overlapping scenarios, Chart 5.7 illustrates the tactics that are commonly used under both scenarios. The following tactics should be considered with priority in decision making should the overlapping scenarios happen: ensuring adequate funding (Tactic 1); achieving diverse sources of funding (Tactic 2); managing expenditures (Tactic 3); and operating with prudent foresight (Tactic 6).

To navigate the challenges in the overlap of scenarios, The City needs to implement multiple corresponding strategies and tactics emerging from the scenarios. The City's financial strategies and tactics are a dynamic multidimensional system that monitors changes from different sources, assesses their impacts on municipal service provision and finance, and responds with a combination of tactics and actions to support the achievement of long-term financial sustainability and resilience.

Chart 5.7
The City's Tactics to Respond to the Overlap of Regional Service Cost Sharing and Workforce Efficiency Improvement Scenarios



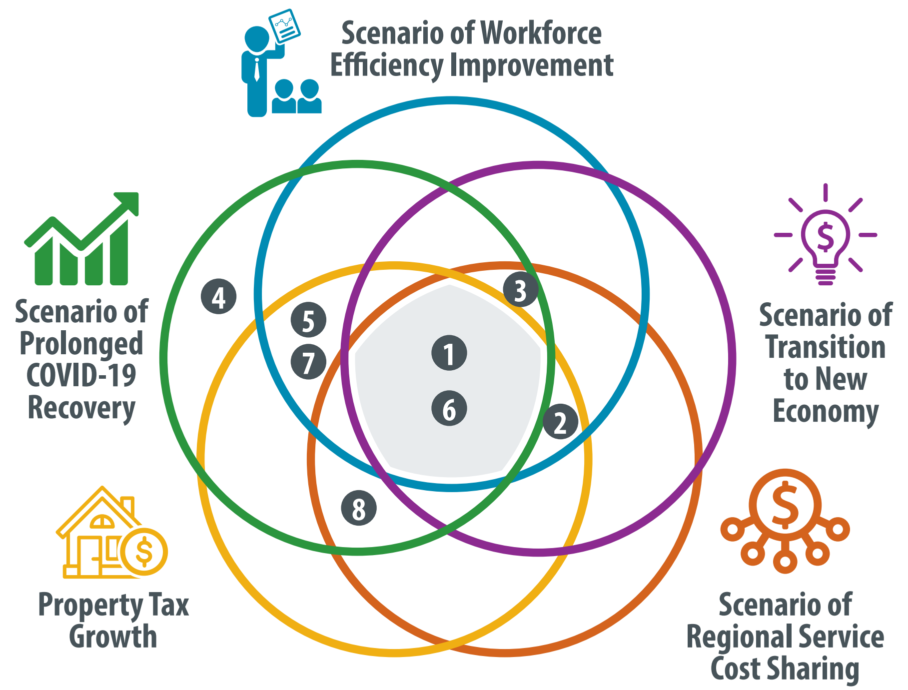
Tactics:

1. Ensuring adequate funding
2. Achieving diverse sources of funding
3. Managing expenditures
4. Providing for contingencies
5. Using debt strategically
6. Operating with prudent foresight
7. Maintaining sufficient cash flow
8. Strengthening resilience

As illustrated in Chart 5.8, The City needs to focus on the following tactic areas that have the most overlap across different scenarios and risks to build the long-term resilience and sustainability:

- Tactic 1: ensuring adequate funding. It is critical for The City to maintain and increase funding sources, to have complete and sustainable estimates of expenditure requirements for The City's future services and infrastructure provision and to match the volatility of municipal revenues and expenditures.
- Tactic 6: operating with prudent foresight. The City needs to operate with prudent foresight to be aware and fully consider what the current and future impacts of decisions will be on our services and infrastructure.
- Tactic 2: achieving diverse sources of funding. The City should continue to explore additional and innovative funding sources from untapped revenue potential and revenue from the new economy, to reduce its reliance on property taxes and improve financial strength.
- Tactic 3: managing expenditures. The City should continue its efforts on managing and containing costs to limit pressure on revenue requirement, maintain its competitiveness in service provision and preserve its capacity to maintain service levels.

Chart 5.8
The City's Tactics to Respond to the Overlap of Multiple Scenarios



Tactics:

1. Ensuring adequate funding
2. Achieving diverse sources of funding
3. Managing expenditures
4. Providing for contingencies
5. Using debt strategically
6. Operating with prudent foresight
7. Maintaining sufficient cash flow
8. Strengthening resilience

6. Conclusions

The LRFP is The City's strategic financial plan that addresses immediate financial pressures and meets long-term financial needs with a view of potential funding gaps between The City's revenues and expenditures in the next 10 years beyond the current 2019-2022 budget cycle.

This specific LRFP analyzes potential influencing factors on municipal finances from multiple channels. It provides 10-year projections on The City's revenues and expenditures, and examples of alternative scenarios with different impacts on municipal finances. It includes financial goals, strategies, and actions to reduce the gap and improve The City's financial sustainability and resilience in one single forward-looking plan. The LRFP is not an exercise in precision, but it is a work in progress which lays the groundwork for improvement with each update.

While The City's financial position is strong, there are systemic and emerging issues that could potentially threaten The City's financial sustainability and resilience. Current sources and levels of revenue and funding are not sufficient to meet projected requirements, and this indicates that continuing to provide the same services in the same way with the same revenue and funding is not financially sustainable. The City will also be further challenged by continued demographic shifts, economic volatility and structural changes, technological advancements and associated challenges, the ability and willingness to pay property taxes by taxpayers, and uncertainties from constantly evolving circumstances. Without actions to address these issues, The City will become increasingly challenged to provide the services and infrastructure that citizens expect and value.

Therefore, The City needs to continually develop and implement actions that support the necessary financial strategies identified in the plan. The impacts on The City's financial projections will need to be monitored to determine the effectiveness and any required adjustments to strategies or implementation. Administration will periodically update the LRFP to reflect Council decisions, changes to the economy and internal and external developments that affect The City financially.

7. Appendices

- Appendix 1: Process of developing the LRFP
- Appendix 2: Assumptions
- Appendix 3: Total City base case operating projections ($ millions)
- Appendix 4: The City's infrastructure funding gap reported over years
- Appendix 5: The City of Calgary's services in three categories
- Appendix 6: Projection results for services in Category 1
- Appendix 7: The City of Calgary's credit rating
- Appendix 8: Implementation and performance measurements of financial strategies

Appendix 1: Process of developing the LRFP

In early 2004, the Chief Financial Officer initiated a report to the Standing Policy Committee on Finance and Corporate Services to obtain Council approval for developing a LRFP for The City. In May 2004, Council approved the development of the plan. The project charter, under which the Steering Committee provides governance to the LRFP project, was established to guide its development and approved in May 2006 by Council.

The first LRFP was received by Council in 2007 to identify the systemic issues that present barriers to The City of Calgary's financial sustainability. It was followed by updates in 2008, 2009, 2011 and 2015. In 2011, the LRFP was updated by running concurrently with the Business Planning and Budget Co-ordination 3 (BPBC3) and integrating with the three-year budget cycle in 2012-2014, and other long-term planning initiatives at that time such as the Infrastructure Status Report and Strategic Growth and Capital Investment. The 2015 updated LRFP ran concurrently with the Business Planning and Budget Co-ordination 4 (BPBC4), integrated with the four-year budget cycle of the 2015-2018 Action Plan. It was also included as a deliverable of the Leadership Strategic Plan and Build Calgary initiatives.

The LRFP updates in 2008, 2009, 2011 and 2015 followed a similar methodology to that established in the initial 2007 LRFP and provided both updated financial projections and revised strategies for the plan. In 2018, the projections in the LRFP were updated to support the development of service-based budgeting and the planning cycle of 2019-2022 for One Calgary, while the strategies in the plan were not updated.

Significant changes have happened to Calgary's economy and its impact on municipal finance since the previous update. The changes include both short to medium-term factors, such as the economic downturns, downtown office vacancy and assessment value reductions, tax shifts, COVID-19 pandemic and its shock on municipal services; and long-term factors, such as demographic shifts, growth of knowledge economy, technological changes, and long-term influence of COVID-19 post-pandemic. These changes have generated the demand for The City to update its LRFP projections and strategies. The maturity of the service planning and budgeting with the implementation of One Calgary has also created an opportunity for the methodology update of the LRFP process. This LRFP aims to reflect the implementation of service planning and budgeting and the impact of external changes on municipal revenues and expenditures through the development of the *bottom-up* methodology and extensive work and engagement with services.

This LRFP project was managed by the Corporate Budget Office in Finance of the Chief Financial Officer's Department, and involved staff at many levels throughout the organization, including the Executive Leadership Team (ELT), a Steering Committee that consists of senior management members across the Corporation, a Working Committee that consists of members from the Finance management team and from related key corporate planning projects, as well as stakeholders across the services through multiple channels such as workshops and the Service Network. This LRFP project has involved:

- Consulting with services and corporate stakeholders
- Ensuring alignment with City policies, plans, and initiatives and services' plans
- Reviewing and updating assumptions
- Updating demographic and economic forecasts
- Obtaining current operating and capital data

- Updating the modelling system with service-level modules that were developed and validated
- Fine-tuning formulas and conducting projections
- Conducting sensitivity tests to check modelling robustness
- Developing scenarios by consulting and validating with services
- Reviewing and updating goals, strategies and tactics
- Reviewing actions toward long-term financial sustainability and resilience

The LRFP is reviewed on an ongoing basis and is published in an updated form when there is an upcoming need for its projections and strategies. The product will continue to become more useful as our knowledge of long-term trends improves. This LRFP is based on the 2019-2022 One Calgary service planning and budgeting data and its following adjustments including the Mid-Cycle Adjustments. The LRFP will continually evolve to both reflect and guide stewardship of The City's financial situation.

Appendix 2: Assumptions

ISSUE	ASSUMPTION
Base: operating budget	■ The approved 2019-2022 operating budget, including any changes before and from the Mid-Cycle Adjustment process approved by Council. ■ Includes transfers to the Calgary Public Library (CPL) and from the Calgary Parking Authority (CPA), but not the full operating budgets of CPL, CPA and the Calgary Housing Company (CHC).
Base: capital budget	■ The approved 2019-2022 capital budget, including any changes before and from the Mid-Cycle Adjustment process approved by Council. ■ Forecast construction cost increases will be included in the capital budget and capital plan, including funded and unfunded capital projects. ■ Includes CPL, CPA and CHC capital.
Expected term of specific Government Grant programs	Provincial: ■ Municipal Sustainability Initiative (MSI): The program has been extended multiple times to end by fiscal year 2024-25, from the original agreement of $3.291 billion for 10 years from 2007-08 to 2016-17, with payments deferred or delayed by multiple provincial administrations. Based on revised MSI amounts at the 2021 February provincial budget, The City should receive the remaining MSI till the fiscal year of 2024-25. After 2025, it will be replaced by the Local Government Fiscal Framework. ■ Basic Municipal Transportation Grant (BMTG), also known as Fuel Tax: BMTG was combined with MSI as Component B in 2014 and will be replaced by the Local Government Fiscal Framework after 2025. ■ Local Government Fiscal Framework: The Local Government Fiscal Framework was originally scheduled to replace the existing Municipal Sustainability Initiative/Basic Municipal Transportation Grant and the City Charters Fiscal Framework Act after 2022. According to the 2021 February provincial budget, the funding framework laid out in the Local Government Fiscal Framework Act will not come into effect until 2024-25. ■ Green Line Funding: On Jan. 30, 2019, the Government of Canada, Government of Alberta and The City of Calgary signed the Ultimate Recipient Agreement (URA) governing terms and conditions for the $1,530 million federal contribution, as well as the $1,530 million provincial contribution to the Green Line Stage 1 Program. The 2021 February provincial budget leaves the project-specific funding for Green Line unchanged at $485 million for 2021-22. This commitment continues, however, to rely primarily the flow-through of a federal contribution and remains contingent on the Government of Canada agreeing to front-load its contribution to the project. ■ The Alberta Community Transit Fund (ACTF) established in 2018 was eliminated by The Province in October 2019. ■ Policing Grant: funding continues at the rate of $16 per capita based on the total population of the city of Calgary (total grant increasing with population growth).

ISSUE	ASSUMPTION
Expected term of specific Government Grant programs (continued)	■ COVID-19 relief grant: The provincial government announced in 2020 that it will provide funding through the Municipal Operating support Transfer (MOST) program and the Municipal Stimulus Program (MSP) to municipalities including Calgary as a match to the contribution from the federal government to support municipal operating costs during the COVID-19 pandemic and invest in new infrastructure for economic recovery and job creation. Federal: ■ Federal Gas Tax Fund (FGTF): FGTF is a permanent funding program started in 2005 with an annual grant based on population, adjusted according to census. The program provides conditional grants for capital-related projects which meet the program eligibility criteria. There was a one-time increase in the 2018-19 FGTF to double the initial commitment. The 2021 Federal Budget confirms another one-year doubling of the Gas Tax Fund, renamed as the Canada Community-Building Fund, for the support of local infrastructure priorities. ■ Public Transit Infrastructure Fund (PTIF) – Green Line Funding: The Government of Canada is contributing up to $1,641 million in funding for the Program, including $1,530 million under the Ultimate Recipient Agreement (URA) signed on Jan. 30, 2019 by the three levels of government plus enabling works grant funding (under PTIF). ■ COVID-19 relief grant: The federal government announced in July 2020 that it would provide funding to help municipalities deliver essential services such as public transit and to restart their economies following mass shutdown that began in March 2020 due to COVID-19, as part of the Canada-Alberta Safe Restart Agreement.
Levels of resources	■ Projections based on the approved 2019-2022 expenditure levels with the Mid-Cycle Adjustments to establish baseline. ■ Unit costs increase due to inflation.
Levels of productivity improvement	■ Assumed to be reinvested to mitigate service level deterioration resulting from budget cuts, impacts from the COVID-19 pandemic, and increasing complexity of municipal service provision.
Impact of Population Growth on Operating Expenditures	■ Expenditures increase based on population growth factor. ■ Growth impacts expenditures such as debt servicing and depreciation only through increased borrowing and increased utility assets. ■ The shift and distortion of expenditure patterns caused by the COVID-19 pandemic response will be short-term. The assumption of impact of population growth on operating expenditures still holds for the long-term.
Impact of Population Growth on Operating Revenues	■ Revenues will increase at proportions of the population growth rate except where individual circumstances apply (such as service area and infrastructure limitations or additions).

ISSUE	ASSUMPTION
Debt Financing	■ Guided by The City's Debt Policy (CP2020-05) on the overall levels of indebtedness, the structure of the debt, and the annual debt serving limits. ■ Additional debt financing capacity is available only for utilities and self-sufficient tax-supported projects after 2007. ■ The issuance of new debt must be approved by Council and authorized by adopting a borrowing bylaw.
User Fee Rate Changes	■ Individual fees increase at the same rate as the Calgary Consumer Price Index (CPI) forecast.
New Services	■ No new services are included for base case projection. ■ Potential demand for new services due to technological changes, demographic shift or other changes is discussed in alternative scenarios.
Population Growth Forecast (affects operating and capital expenditures)	■ Long-term population growth projection obtained through City of Calgary Corporate Economics team based on historic Civic Census results and Statistics Canada estimates.
Inflation Rate Forecasts	Salary and wage (Approximately 50 per cent of total operating expenditures, net of recoveries) ■ Salaries and wages are projected to increase based on population growth and labour inflation projection, based on Labour Strategy. ■ Benefits are projected to increase based on population growth and fringe benefits growth projection as a component of Municipal Price Index (MPI) associated with wage and salary rates and staffing changes. Non-salary and wage ■ Goods and services purchased by The City are projected to increase based on a combination of the projected Calgary Consumer Price Index and The City of Calgary Municipal Price Index. ■ Property tax revenue, licenses and permits revenue, and internal recoveries are projected based on a combination of Municipal Price Index and population growth. ■ Long-term forecasts on inflation obtained through The City of Calgary Corporate Economics team.
Operating Impact of Capital	■ Incorporated in the impact population growth on operating expenditures. ■ To include operating and maintenance costs of capital projects but not to double count.

ISSUE	ASSUMPTION
Property Tax	■ Growth will be based on population forecasts. ■ Rate changes calculated using The City of Calgary Municipal Price Index, which reflects the projected inflationary increases in the City's operating expenditures.
Other Revenues	Allocations between operating and capital uses will reflect current policies. ■ Local access fees: projections will be based on natural gas and electricity prices and volume forecasts. ■ Fines and penalties: growth will be based on population forecasts. Rates will increase by Consumer Price Index, except for Police. ■ Dividends and return on equity: current policies concerning amounts and use continue. ■ ENMAX dividend based on $47.3 million annually contributed to the operating budget continues unless Council makes another decision. ■ Off-site levies: the levies and assessments continue to provide funding at their 2019-2022 levels.
Annexation Activity	■ No additional annexation is projected in 2023-2032 in base case projections. But if one is decided on, it would be added in a future LRFP update.
Capital Financing	■ Incorporate existing Council decisions. No new changes to policy.
Amortization (Depreciation)	■ Applied to utilities and self-supported assets, but not to tax-supported assets until new Public Sector Accounting Board (CPA Canada) rule impacts can be incorporated into future LRFP update. ■ Tangible Capital Assets (TCA) depreciation: estimate of the reduction in value of a TCA with the passage of time, due to its use or wear and tear of the TCA. In alignment with One Calgary, unless otherwise indicated, the depreciation estimates are only for information and are not directly included in the budget expenditures.
Not specifically included in the base case (included to the extent that they are part of current plans and budgets)	■ Financial impacts of planning and policy projects involving Council decisions in the short to medium-term. ■ Existing and new capital projects that may be brought to Council for approval of additional financial impacts not included in the 2019-2022 Capital Budget, or not funded project list in the Infrastructure Calgary Capital Investment Plan. ■ Potential new services not approved for implementation by Council. ■ Potential business plan and budget adjustments for 2019-2022 beyond the Mid-Cycle Adjustments.

Appendix 3: Total City base case operating projections ($ millions)

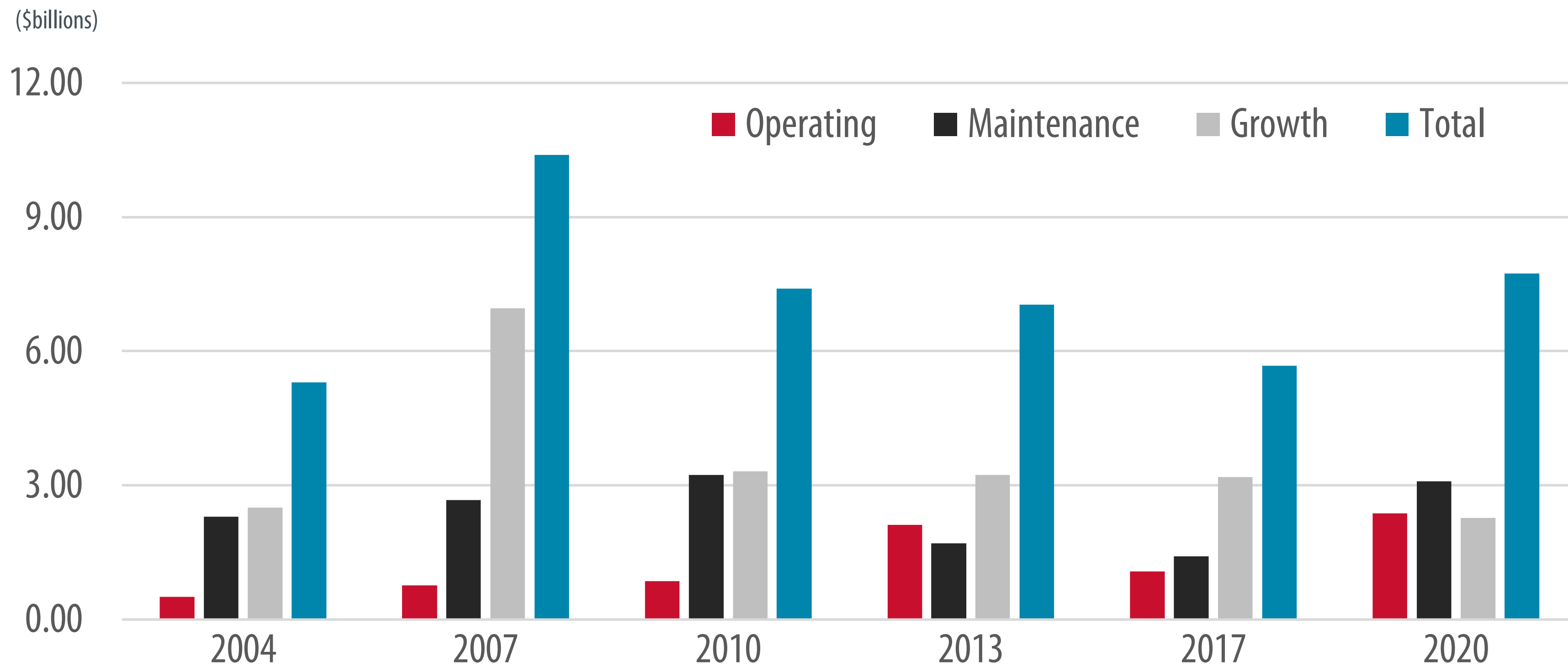
	Budget			Projected		
	2020	2021	2022	2023	2027	2032
REVENUES						
Tax Revenue *(Note 1)*	(1,955)	(1,969)	(2,062)	(2,130)	(2,480)	(2,990)
Sales of Goods & Services	(1,244)	(1,240)	(1,267)	(1,310)	(1,470)	(1,700)
Revenues from Utilities/Subsidiaries	(366)	(382)	(382)	(390)	(420)	(470)
Other Revenue	(437)	(406)	(397)	(400)	(440)	(490)
TOTAL REVENUE	(4,002)	(3,996)	(4,108)	(4,230)	(4,820)	(5,640)
EXPENDITURES						
Wages/Salaries/Benefits	2,015	2,023	2,038	2,110	2,510	3,100
Materials/Equipment/Utilities/Services	1,217	1,245	1,298	1,350	1,570	1,880
Debt Servicing and Depreciation *(Note 2)*	285	281	288	290	360	320
Net Transfer to Reserves	620	575	608	630	720	840
Transfer Payments	277	218	218	220	260	310
Net Income Distribution - Utilities	43	100	105	100	100	100
Recoveries	(454)	(446)	(447)	(460)	(550)	(670)
GROSS EXPENDITURES (NET OF RECOVERIES / NET INCOME)	4,002	3,996	4,108	4,250	4,980	5,890
NET DEFICIT / (SURPLUS)	**0**	**0**	**0**	**20**	**170**	**250**

Note 1: tax increases for 2012 & beyond reflect rate increases at municipal price index and growth matching increases in population.

Note 2: includes principal and interest payments for tax-supported debt as well as interest payments and depreciation for utilities and other self-supported entities.

Note 3: totals may not add due to rounding.

Appendix 4: The City's infrastructure funding gap reported over years



	2004	2007	2010	2013	2017	2020
Operating	0.50	0.76	0.86	2.11	1.07	2.37
Maintenance	2.30	2.67	3.23	1.70	1.41	3.09
Growth	2.50	6.96	3.31	3.23	3.19	2.27
Total	5.30	10.39	7.40	7.04	5.67	7.73

Data source: The City of Calgary 2020 Infrastructure Status Report.

Appendix 5: The City of Calgary's services in three categories

This LRFP adopted a *bottom-up* methodology that models at service level and aggregates the projected services' revenues and expenditures. The 61 services that The City provides are categorized into three groups, ranked by their relative weights in operating and capital budgets. Category 1 consists of 17 services that have the relatively highest weights in operating revenues and expenditures, as well as in capital expenditures for the next five years. The 17 services in Category 1 account for 73 per cent of total expenditures of services, 88 per cent of total revenues of services, and 81 per cent of total capital expenditures for 2021-2025+.

Table A5.1
Category 1 Services Ranked by Weights of Services' Revenues and Expenditures

Rank	Services of Category 1	Weight of Annual Operating Expenditures	Weight of Annual Operating Revenues	Weight of Five-year Capital Expenditures
1	Police Services	13.2%	6.2%	1.9%
2, 3	Public Transit, Specialized Transit	12.5%	12.3%	13.3%
4, 5, 6, 7*	Wastewater Collection & Treatment; Water Treatment & Supply; Stormwater Management; and Waste & Recycling	25.9%	58.4%	31.5%
8, 9, 10	Fire (Fire & Emergency Response; Fire Inspection & Enforcement; Fire Safety Education)	6.0%	0.4%	3.1%
11, 12, 13	Streets, Sidewalks and Pathways, Parking	7.0%	2.3%	18.8%
14	IT Solutions & Support	3.1%	0.1%	2.0%
15, 16	Land Development & Sales, and Real Estate	2.8%	5.6%	6.5%
17	Recreation Opportunities	2.4%	2.9%	3.8%
Sum of rank 1-17 services out of total weights of 61 services		**72.8%**	**88.0%**	**80.8%**

Note *: Wastewater Collection & Treatment, and Water Treatment & Supply, and Stormwater Management have their own projection models. The LRFP will work with them on LRFP modelling and assumptions validation instead of impacting their modelling methodology and projection process.

Category 2 contains 27 services in four subgroups by departments, which account for 24 per cent of total expenditures of services, 11 per cent of total revenues of services, and 18 per cent of total capital expenditures for 2021-2025+.

Table A5.2
Category 2 Services Ranked by Weights of Services' Revenues and Expenditures

Rank	Services of Category 2	Weights of Annual Operating Expenditures	Weights of Annual Operating Revenues	Weights of Five-year Capital Expenditures
18	Fleet Management	2.4%	0.1%	4.1%
19	Facility Management	2.0%	0.1%	4.4%
33	Infrastructure Support	0.7%	0.1%	0.2%
34	Procurement & Warehousing	0.6%	0.3%	0.1%
35	Corporate Security	0.6%	0.0%	0.2%
29	Insurance & Claims	0.9%	0.3%	0.0%
24	Building Safety	1.2%	2.5%	0.5%
25	Development Approvals	1.1%	2.6%	0.3%
31	City Planning & Policy	0.7%	0.2%	0.1%
38	Business Licensing	0.3%	0.5%	0.0%
27	Financial Support	1.0%	0.0%	0.0%
28	Human Resources Support	0.9%	0.0%	0.0%
30	Strategic Marketing & Communications	0.8%	0.0%	0.0%
37	Property Assessment	0.5%	0.0%	0.3%
39	Citizen Information & Services	0.4%	0.0%	0.2%
42	Taxation	0.2%	0.0%	0.0%
43	Citizen Engagement & Insights	0.1%	0.0%	0.0%
20	Parks & Open Spaces	1.9%	0.2%	2.1%
40	Urban Forestry	0.4%	0.0%	0.2%
21	Social Programs	1.7%	2.1%	0.0%
22	Library Services	1.4%	0.0%	0.2%
23	Calgary 9-1-1	1.2%	0.9%	0.2%
26	Economic Development & Tourism	1.0%	0.0%	0.8%
32	Arts & Culture	0.7%	0.1%	0.6%
36	Affordable Housing	0.6%	0.6%	4.0%
41	Neighbourhood Support	0.2%	0.0%	0.0%
44	Community Strategies	0.1%	0.0%	0.0%
Sum of rank 18-44 services out of total weights of 61 services		23.5%	10.7%	18.4%

Category 3 consists of 17 services in two subgroups based on whether they are internal customer facing or external customer facing. They account for 3.7 per cent of total expenditures of services, 1.3 per cent of total revenues of services, and 0.8 per cent of total capital expenditures for 2021-2025+.

Table A5.3
Category 3 Services Ranked by Weights of Services' Revenues and Expenditures

Rank	Services of Category 3	Weights of Annual Operating Expenditures	Weights of Annual Operating Revenues	Weights of Five-year Capital Expenditures
45	Corporate Governance	0.4%	0.0%	0.0%
46	Legal Counsel & Advocacy	0.4%	0.0%	0.0%
48	Organizational Health, Safety & Wellness	0.3%	0.1%	0.0%
49	Executive Leadership	0.3%	0.0%	0.0%
50	Mayor & Council	0.3%	0.0%	0.0%
52	Data Analytics & Information Access	0.3%	0.0%	0.1%
58	Council & Committee Support	0.1%	0.0%	0.0%
59	Records Management, Access & Privacy	0.1%	0.0%	0.1%
60	City Auditor's Office	0.1%	0.0%	0.0%

Rank	Services of Category 3	Weights of Annual Operating Expenditures	Weights of Annual Operating Revenues	Weights of Five-year Capital Expenditures
47	Bylaw Education & Compliance	0.3%	0.0%	0.0%
51	Pet Ownership & Licensing	0.3%	0.3%	0.0%
53	City Cemeteries	0.2%	0.5%	0.2%
54	Environmental Management	0.2%	0.0%	0.0%
55	Appeals & Tribunals	0.1%	0.0%	0.0%
56	Emergency Management & Business Continuity	0.1%	0.0%	0.2%
57	Taxi, Limousine & Vehicles-for-Hire	0.1%	0.3%	0.0%
61	Municipal Elections	0.0%	0.0%	0.1%
Sum of rank 45-61 services out of total weights of 61 services		3.7%	1.3%	0.8%

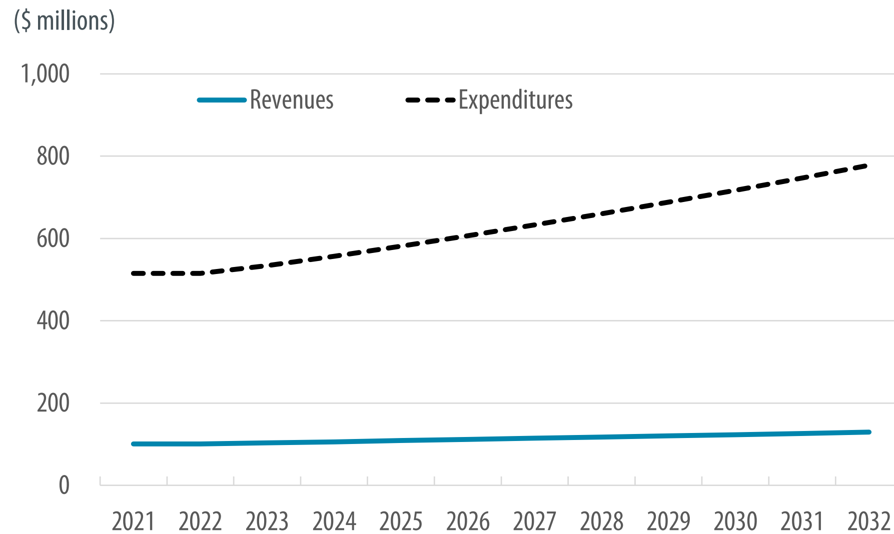
Service-level projection models are developed for Category 1 services, while sub-group model developed for Categories 2 and 3 services. This methodology update allows better understanding of drivers and assumptions of service planning and enhances the overall alignment of long-term service planning and corporate planning.

Appendix 6: Projection results for services in Category 1

This LRFP improves the traditional methodology and works *bottom-up* on financial projections from the service level to the corporate level and aligns service projections with the long-term financial planning for the Corporation. The base case projections at the service level and sub-group of services level are provided for Category 1 services in this Appendix. The assumptions used for the projections for services below are the same as used in the base case projection aggregated at the corporate level. Please note that the projections for Transit and Recreation services are based on the operating budget continuity schedule with the Mid-Cycle Adjustments incorporated which did not include the impacts of the COVID-19 pandemic.

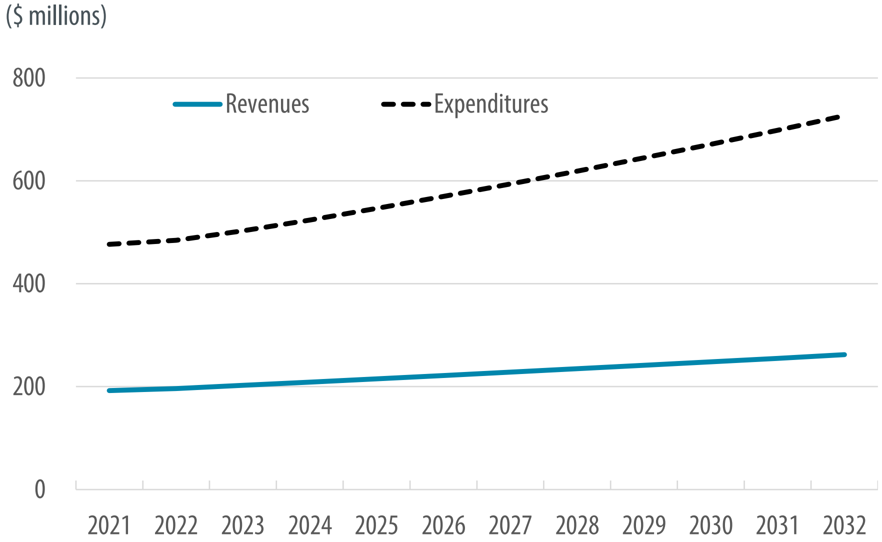
The modules of services are developed based on the Internal Management Reports (IMR) for business units. The development of service modules was done in consultation with services on the development of modelling structure, validation of assumptions, and checking the consistency of services specific driving factors for operating revenues and expenditures. For some modules, the business unit level IMR does not coincide 100 per cent with service's budgeting due to the fact that some services are jointly responsible for more than one business unit. The consultation with services agreed on using business units' IMR data as an approximation for service level information in the module development. Please note that since the model projects services' own revenues and expenditures instead of including the tax-supported portion of the expenditures, the services' projection reflects a *gap* as a result, which will be covered through tax-supported portion.

Chart A.6.1
Projected Operating Revenues and Expenditures 2021-2032 for Calgary Police Services



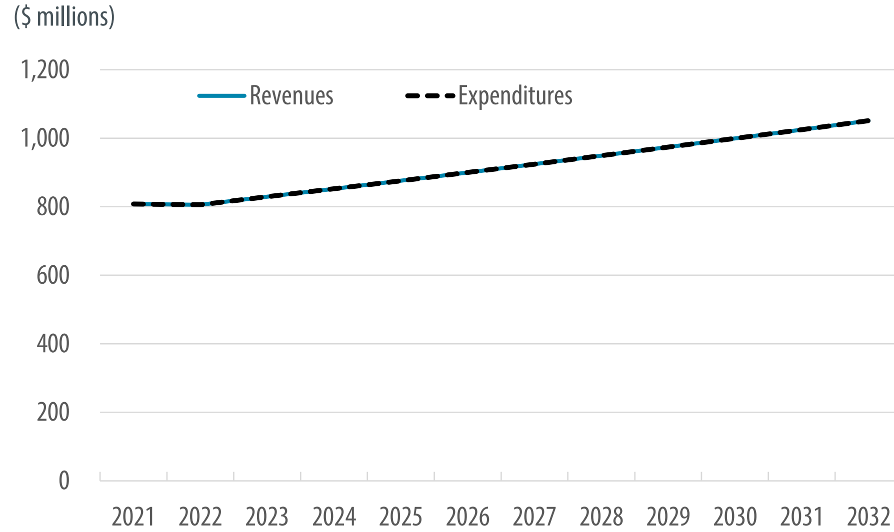
Note: Projections for Calgary Police Services are based on assumptions in Appendix 2 and the Internal Management Report data for Calgary Police Services.

Chart A.6.2
Projected Operating Revenues and Expenditures 2021-2032 for Services of Public Transit and Specialized Transit



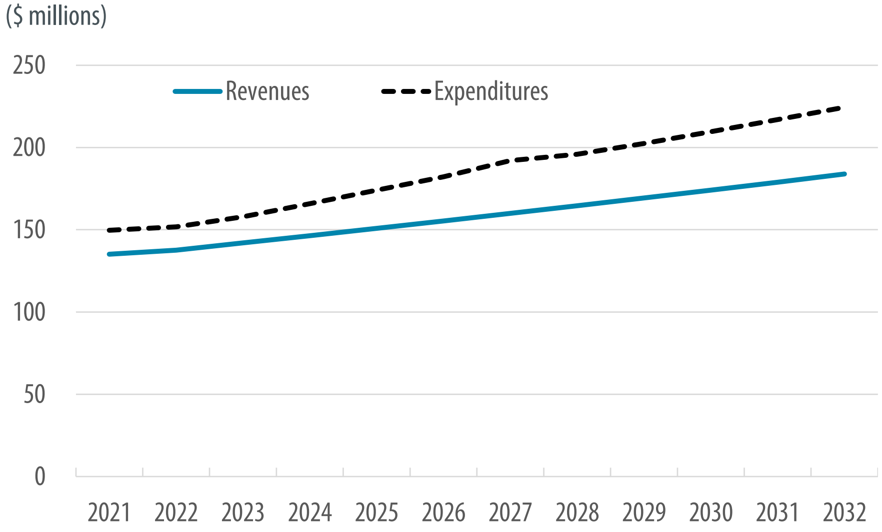
Note: Projections for Public Transit and Specialized Transit services are based on assumptions in Appendix 2 and the Internal Management Report data for Calgary Transit. Please note that the projections for Transit did not include the impacts of the COVID-19 pandemic on operating budget.

Chart A.6.3
Projected Operating Revenues and Expenditures 2021-2032 for Utilities services (including Water Treatment & Supply; Wastewater Collection & Treatment; and Stormwater Management)



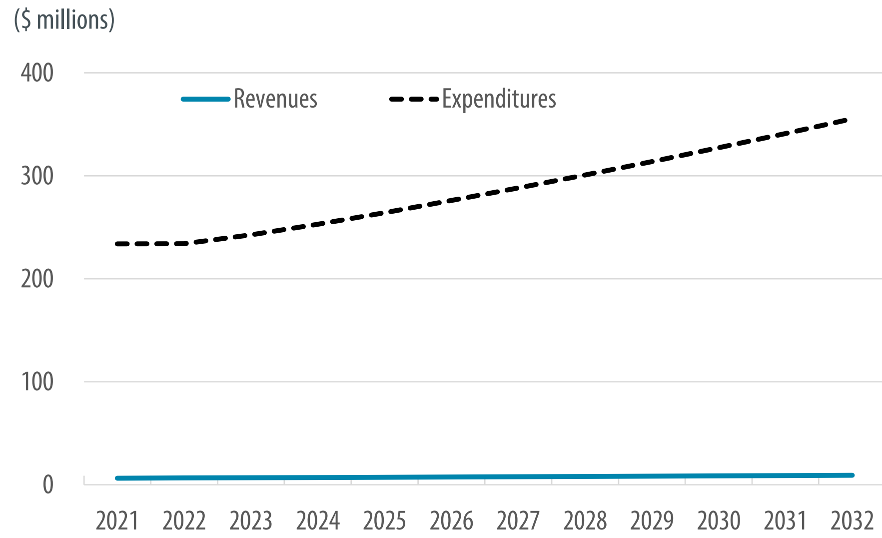
Note: Projections for Utilities services including Water Treatment & Supply, Wastewater Collection & Treatment, and Stormwater Management are based on assumptions in Appendix 2 and the Internal Management Report data for Utilities.

Chart A.6.4
Projected Operating Revenues and Expenditures 2021-2032 for Waste & Recycling Services



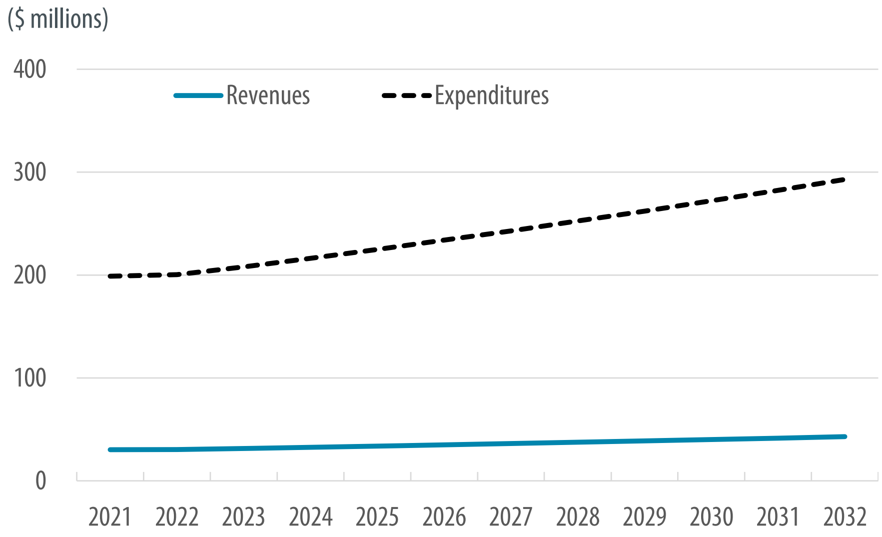
Note: Projections for Waste & Recycling Services are based on assumptions in Appendix 2 and the Internal Management Report data for Waste & Recycling Services.

Chart A.6.5
Projected Operating Revenues and Expenditures 2021-2032 for Fire Services (including Fire & Emergency Response, Fire Inspection & Enforcement, and Fire Safety Education)



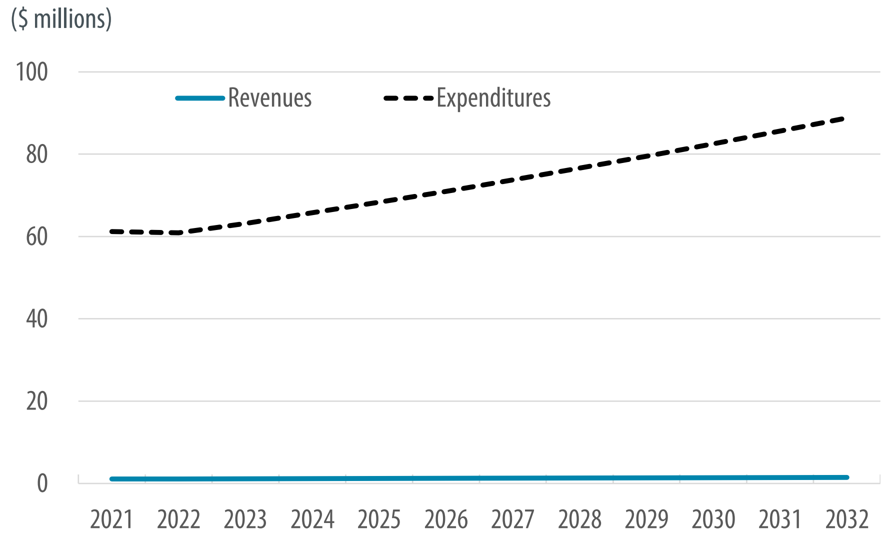
Note: Projections for Fire services including Fire & Emergency Response, Fire Inspection & Enforcement, and Fire Safety Education are based on assumptions in Appendix 2 and the Internal Management Report data for Calgary Fire Department.

Chart A.6.6
Projected Operating Revenues and Expenditures 2021-2032 for Services of Streets, Sidewalks and Pathways, and Parking



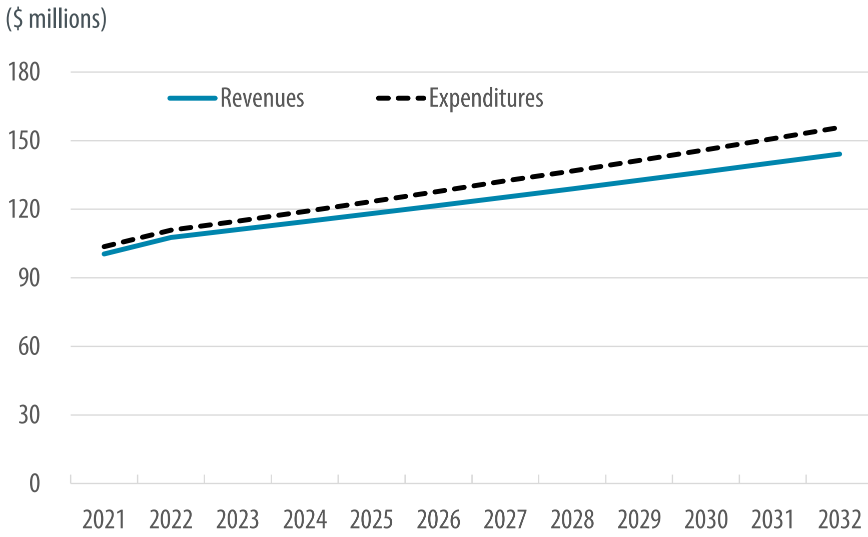
Note: Projections for services of Streets, Sidewalks and Pathways, and Parking are based on assumptions in Appendix 2 and the Internal Management Report data for Roads.

Chart A.6.7
Projected Operating Revenues and Expenditures 2021-2032 for Services of Information Technology Solutions & Support



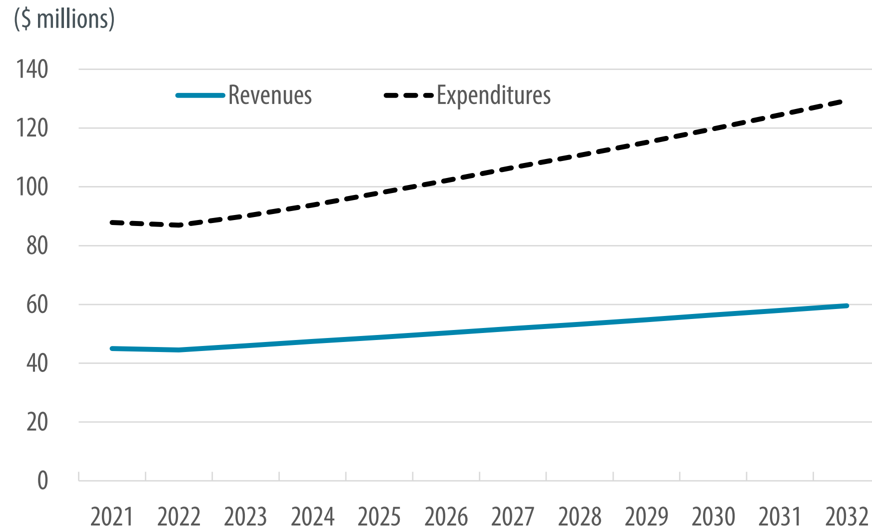
Note: Projections for services of Information Technology Solutions & Support are based on assumptions in Appendix 2 and the Internal Management Report data for Information Technology.

Chart A.6.8
Projected Operating Revenues and Expenditures 2021-2032 for Services of Real Estate and Land Development & Sales



Note: Projections for services of Real Estate and Land Development & Sales are based on assumptions in Appendix 2 and the Internal Management Report data for Real Estate & Development Services.

Chart A.6.9
Projected Operating Revenues and Expenditures 2021-2032 for Recreation Opportunities



Note: Projections for Recreation Opportunities service are based on assumptions in Appendix 2 and the Internal Management Report data for Calgary Recreation.

Appendix 7: The City of Calgary's credit rating

The City of Calgary invites credit rating agencies including Standard and Poor's (S&P) Global Ratings and DBRS Morningstar to assess its credit rating on an annual basis. In 2021, Standard and Poor's affirmed The City's long-term debt rating at AA+ and commercial paper rating of A-1+, reflecting healthy operating cash flows, robust liquidity and strong financial management. In addition, DBRS reaffirmed the long-term debt rating of The City at AA (high), and The City's commercial paper rating at R-1 (high), with stable trends.

S&P assesses a municipal government's institutional framework and individual credit profile. Institutional framework measures how the predictability, reliability and supportiveness of public finance systems and legislative frameworks are likely to affect the municipal government's ability to service debt in the long-term. Individual credit profile examines the following factors: economics, financial management, liquidity, budgetary flexibility, budgetary performance, debt burden and contingent liabilities.

In 2021, S&P affirmed The City's long-term debt rating at AA+ and commercial paper rating of A-1+ reflecting strong financial management and broadly supportive institutions. The COVID-19 pandemic has not resulted in deterioration in the City of Calgary's strong operating and after-capital surpluses. The stable outlook reflects S&P Global Ratings' expectation that Calgary's larger capital plan will cause its strong after-capital surpluses to decline to a more balanced position in the next two years. The City will issue debt over the next two years to help fund its increasing capital spending. Nevertheless, debt repayment and increasing operating revenues will help the city mitigate the higher debt issuance such that debt levels remain manageable and, excluding debt on lend to the city's wholly owned electricity distribution and transmission company (ENMAX Corp.), remain below 100 per cent of operating revenues.

DBRS Morningstar assesses four critical factors in evaluating municipalities in Canada, including economic structure, fiscal management, financial management (debt and liquidity), and relations with senior governments. In 2021, DBRS Morningstar reaffirmed the long-term debt rating of The City of Calgary at AA (high), and The City's commercial paper rating at R-1 (high), with stable trends. The ratings are supported by the prudent fiscal management supported by strong legislative framework, stable tax revenue base, sizable liquidity and economic potential supported by strong demographics.

However, ongoing uncertainty in the global energy market will likely present challenges over the medium-term. Challenges facing The City include economic reliance on energy sector, limited diversity of revenue sources and substantial capital requirements. The stable trends reflect DBRS Morningstar's expectation that, while the COVID-19 will materially affect The City's fiscal outlook, the impact will be temporary and manageable. This view is further supported by provincial legislation, which requires any budgetary shortfall to be recovered in subsequent years.

Compared to other major Canadian municipalities, The City of Calgary has robust and above average credit ratings. Chart A7.1 below shows the comparison of credit rating on long-term debt for the six largest Canadian cities as issued by S&P and DBRS Morningstar, respectively. Due to data availability for some cities, rating results in 2020 are compared in the table.

Table A7.1
The City of Calgary's Credit Rating Compared to Other Canadian Cities in 2020

Municipality	S&P	DBRS Morningstar
City of Calgary	AA+	AA (high)
City of Edmonton	AA	N/A
City of Toronto	AA	AA
City of Ottawa	AA	N/A
City of Montreal	AA-	A (high)
City of Vancouver	AA+	N/A

The City of Calgary currently borrows through the Province of Alberta. Therefore, the credit rating does not actually impact The City's borrowing costs, as it allows us to borrow at the Province's rates. As a result, there is no spread between The City's and the Province's borrowing rates. Although The City originates its debt through the Province, its debt issue is not overseen or in any way approved by the Province. The Province's role is to ensure The City has the borrowing bylaw and other documentation in place. The City's credit rating at this point functions as an external measure of its financial management, although it is possible that at some point The City may need to look at issuing its own bonds.

Appendix 8: Implementation and performance measurements of financial strategies

The implementation of the LRFP's financial strategies will be monitored through specific performance measurements focusing on the overall goals and strategies, and each of the five strategies respectively. Selected examples of proposed performance measurements are listed below, with further development on performance measures to be followed in the LRFP implementation process.

Overall goals and strategies:

- Operating gap projection: the magnitude of the operating budget shortfall in the projection period reflects how well The City manages its operating expenditures to support municipal service and infrastructure provision, as well as its efforts on maintaining existing operating revenues and exploring new revenue sources.
- Capital gap projection: the projection of capital budget gap reflects the requirement for The City's capital investment and funding structure, and how strategically The City prioritizes and matches investment to available corporate funding capacity.

Flexibility:

- Level of unallocated reserves: The City's reserves, especially the Fiscal Stability Reserve, are used as contingency funds for urgent situations. Level of unallocated reserves reflect how quick and prepared The City is to manage unexpected shocks and stresses.
- Total debt and debt outstanding limit: the prudent use of available debt capacity can aid financial flexibility as a source of contingency financing. However, high debt levels will reduce flexibility and increase the cost of borrowing and could impair financial sustainability. Monitoring on The City's total debt and debt outstanding limit measures the performance of financial flexibility.

Efficiency:

- Total City expenditures per capita: this performance measure indicates how successfully The City manages its expenditures by using real dollar value per citizen.
- Full-time equivalents (FTEs) per 1,000 citizens: the growing population of Calgary drives the demand for The City's services and City employees to deliver the services. This indicator takes population growth into consideration and measures the efficiency in municipal services provision.

Sufficiency:

- Municipal property tax per capita: property tax revenue accounts for approximately half of The City's total revenue, with other sources of revenue being largely fixed. This indicator monitors the change of municipal tax revenue relative to the population growth.
- Percentage of municipal property tax over operating revenue: this indicator measures what portion of total revenue is provided by municipal property tax which reflects whether that the effort of exploring new revenue sources is succeeding. A decreasing trend of this measurement may indicate less dependency on property tax revenues and more sufficiency of The City's revenue sources.

Integration

- Number of Corporate Governance areas that have an increase in maturity: this measurement is used in the Accountability Report to monitor Corporate Governance service performance. It reflects service capacity constraints and the inability to launch the necessary projects to move this forward.
- Percentage of City business units that have data in the Open Data Catalogue: this measurement is used in the Accountability Report to monitor Data Analytics & Information Access service performance. It measures the awareness of the value of transparency and integration among business units and services through publishing open data.

Credibility

- City credit rating: Credit ratings measure credit worthiness and affect The City's ability to borrow. A higher rating translates into a lower cost of borrowing. Credit rating reflects how well The City manages its budgetary performance, particularly debt and reserve management practices.
- Perceived value of property taxes: this is measured with the percentage of citizens who indicate they get good value for property taxes. It is included in the Citizen Satisfaction Survey[17] to monitor our citizens' opinions and trust for The City.

17 The City of Calgary's Citizen Satisfaction Survey results can be found at https://www.calgary.ca/cfod/csc/citizen-satisfaction.html

The City of Calgary

2021-2032

Long Range Financial Plan