

CITY OF CALGARY
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CITY CLERK'S DEPARTMENT

Municipal Fiscal Gap

Addressing FTF Recommendations 9, 13, 21 and 22

September 19, 2023



Foreword

This report is one of the last in a series of reports as a result of work that I had the honour of leading after the 2015-2016 recession brought about a prolonged decline in the demand for downtown office space, which negatively impacted property valuations and caused a significant redistribution of the tax base that these properties had previously carried, over to other properties. After using short term solutions to address the issue, The City created a Financial Task Force to engage a panel of citizen members to find long term solutions that would improve The City's financial sustainability.

As the City's Chief Financial Officer, I had the pleasure of chairing regular Financial Task Force meetings over a nine-month period. The external panel of committed and passionate citizen members with vast experience in policy formulation, business strategy, property valuation, and finance, brought diverse perspectives and expertise that contributed to thoughtful and robust discussions to develop recommendations. Through this highly collaborative process, Task Force members embraced the opportunity to understand, challenge, interpret and augment information previously considered. After several iterations, the final recommendations were presented to City Council and approved in June 2020.

While The City has since entered a period of economic recovery and expansion and endured the effects of the COVID-19 pandemic, the pursuit of long-term solutions to address and improve The City's long term financial sustainability is still relevant today. The City continues to experience social, economic, and environmental transformation along with demographic shifts which have caused evolving responsibilities for the municipal government and increasing demand for City services. Economic changes and volatility over the past few years have also intensified systemic issues with the property tax system as the financial backbone for funding the delivery of municipal services that meet the expectations of citizens in a maturing big city.

This body of work provides a compelling analysis of the municipal funding framework and inherent shortcomings that have resulted in a persistent and growing fiscal gap. Like many other large Canadian municipalities, The City of Calgary is facing significant long-term financial challenges due to existing fiscal structures and emerging trends which continue to place increased pressure on municipal finances. We need to explore all the potential solutions to close the municipal fiscal gap and achieve municipal financial sustainability. This report addresses four specific Financial Task Force recommendations that Council asked Administration to explore further.

I am proud and grateful of the extensive research, thoughtful criteria, and comprehensive analysis that the Corporate Economics team, with the support of subject

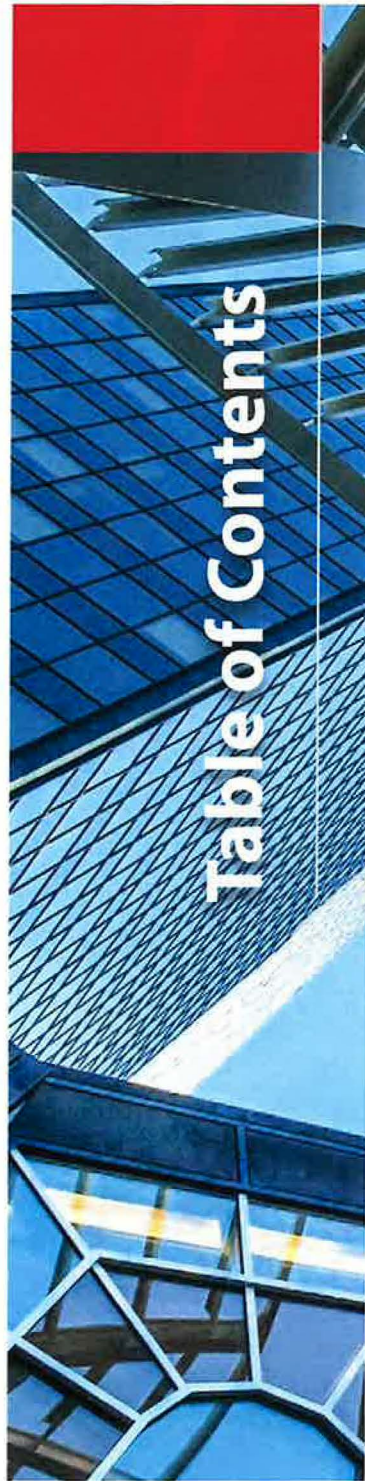
matter experts from business units across The City and external Financial Task Force members, have encompassed and presented in this report. It provides a compelling analysis of how changes in government responsibilities coupled with growth in the digital economy have intensified pressures on the municipal government to deliver services to meet the complex needs of a rapidly growing population with its heavy reliance on the property tax to fund the delivery of services.

The information, analysis, and options included in this report are presented as potential funding solutions that could help address The City's financial challenges while strengthening municipal financial sustainability by diversifying revenue sources to reduce the reliance on property tax while providing a more equitable approach to funding public services.

The tools and options contained herein are presented to Council for consideration as we continue to transition from traditional economic activities to the new digital economy while taking progressive steps to address intergenerational needs through long term plans.



Carla Male
Chair of the Financial Task Force and Chief Financial Officer



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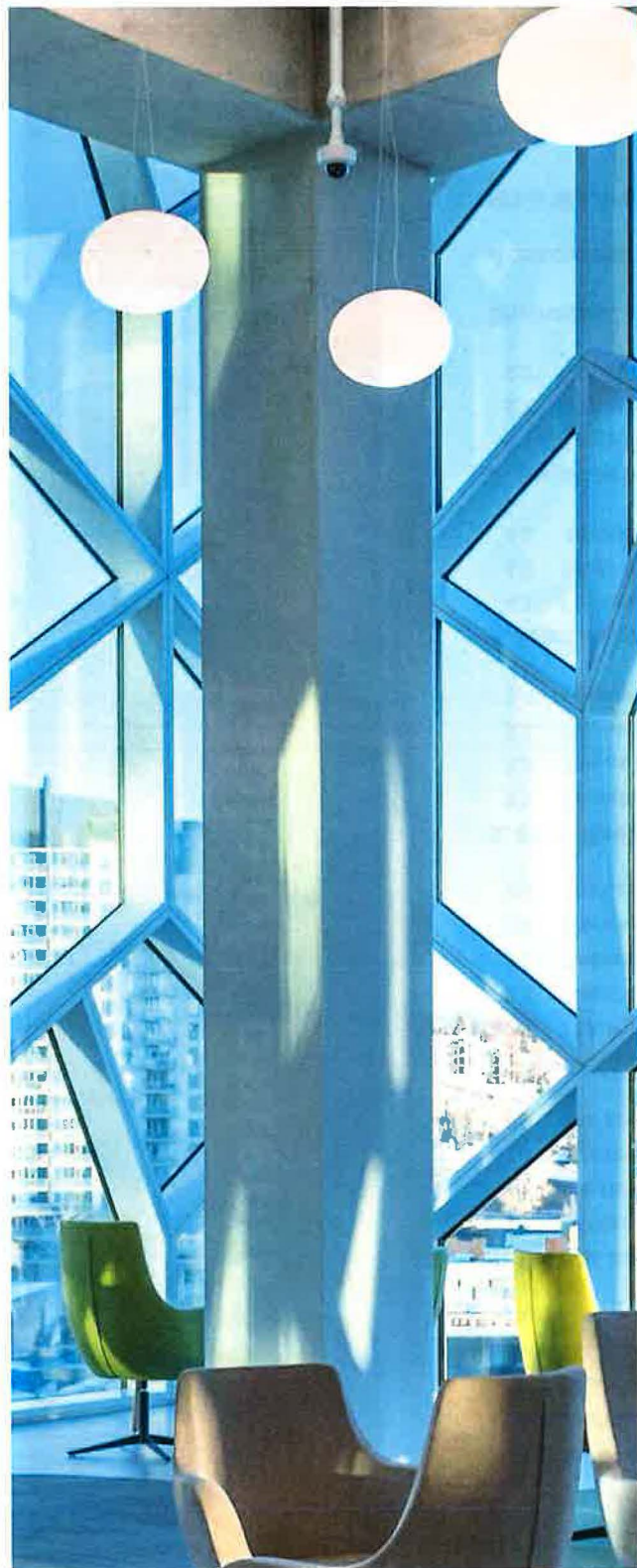
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Introduction

Background

The City of Calgary, like other, especially large, municipal governments in Canada, is experiencing significant social, economic, and environmental transformations and demographic shifts. These external changes have led to a challenge – spending responsibilities exceed funding opportunities. The City of Calgary seeks ways to improve service delivery efficiency while securing sufficient funding to meet the growing obligations to Calgarians.

Calgary started to understand the gravity of the downturn that began in 2015. It led to a significant decline in the assessed value of downtown office properties and associated property tax responsibility, which persisted through 2019. It was most acute between 2015 and 2019. After using short-term solutions such as the Phased Tax Programs (PTPs) to offer financial support to affected businesses, Council recognized the need to improve financial resilience. Council directed Administration to create a Financial Task Force (FTF) to identify and assess innovative solutions for short-term economic mitigation, long-term economic recovery solutions, and revenue options.

The FTF was a panel of committed and passionate citizen members with vast experience in policy formulation, business strategy, property valuation, and finance. After meeting regularly over nine months, from September 2019 through May 2020, the Task Force reported back to Council in June 2020 with 35 recommendations in 8 focus areas (**C2020-0742**).

Purpose

This report shares the outcome of Administration's investigation into four recommendations to inform Council's decision-making. The four themes for the recommendations and focus of this report are summarized below. The complete content of these recommendations is available in Attachment 2.

Recommendation	Theme	Focus of this report (in relation to detailed recommendations)
9	Working better with partners in achieving progress	Analyzing the impact of the digital economy on municipal revenue-generating tools [†]
13	Improving the understanding of municipal finance circumstances	Assessing the impact of downloading from other orders of government on the municipality.
21 [‡]	Responding to Calgary's cyclical economy using existing tools	Conducting a comprehensive review and gap analysis on the use of traditional revenue sources to address the speculation that The City is not using revenue authorities to full effect.
22	Preparing for changes that would occur as the economy evolves	Assessing the extent to which The City of Calgary can generate revenue from new sources as we transition to the new economy.

[†] The City's Better Value for City Assets (BVCA) program will continue the exploration of return on existing City assets.

[‡] The analysis excludes financing tools, such as, Public-private partnerships, in line with the revenue focus scope outlined by the FTF recommendations.

Plan

The underlying thread across all four recommendations in this report is a focus on The City of Calgary’s funding framework as part of a more complex effort to enhance financial capacity. A valuable overview of the six drivers needed to enhance financial capacity relative to the plan for this report is summarized below. The City has the most success in two drivers – Public Financial Management Systems and Fiscal Discipline Mechanisms – with multiple awards and a solid credit rating as proof. There is more moderate success in three of them – Financial Instruments, Financial Institutions, and Intergovernmental Fiscal Governance Relationships. The Funding Framework is where the status leaves much to be desired, with robust evidence of a persistent fiscal gap. This review focuses on the weakest link in enhancing The City’s financial capacity. The review focuses on major (potent) funding sources rather than those addressing shortfalls for self-supported business units (funded by revenue generated from the sale of goods and services).



Source: Organization for Economic Cooperation and Development¹

Payoff

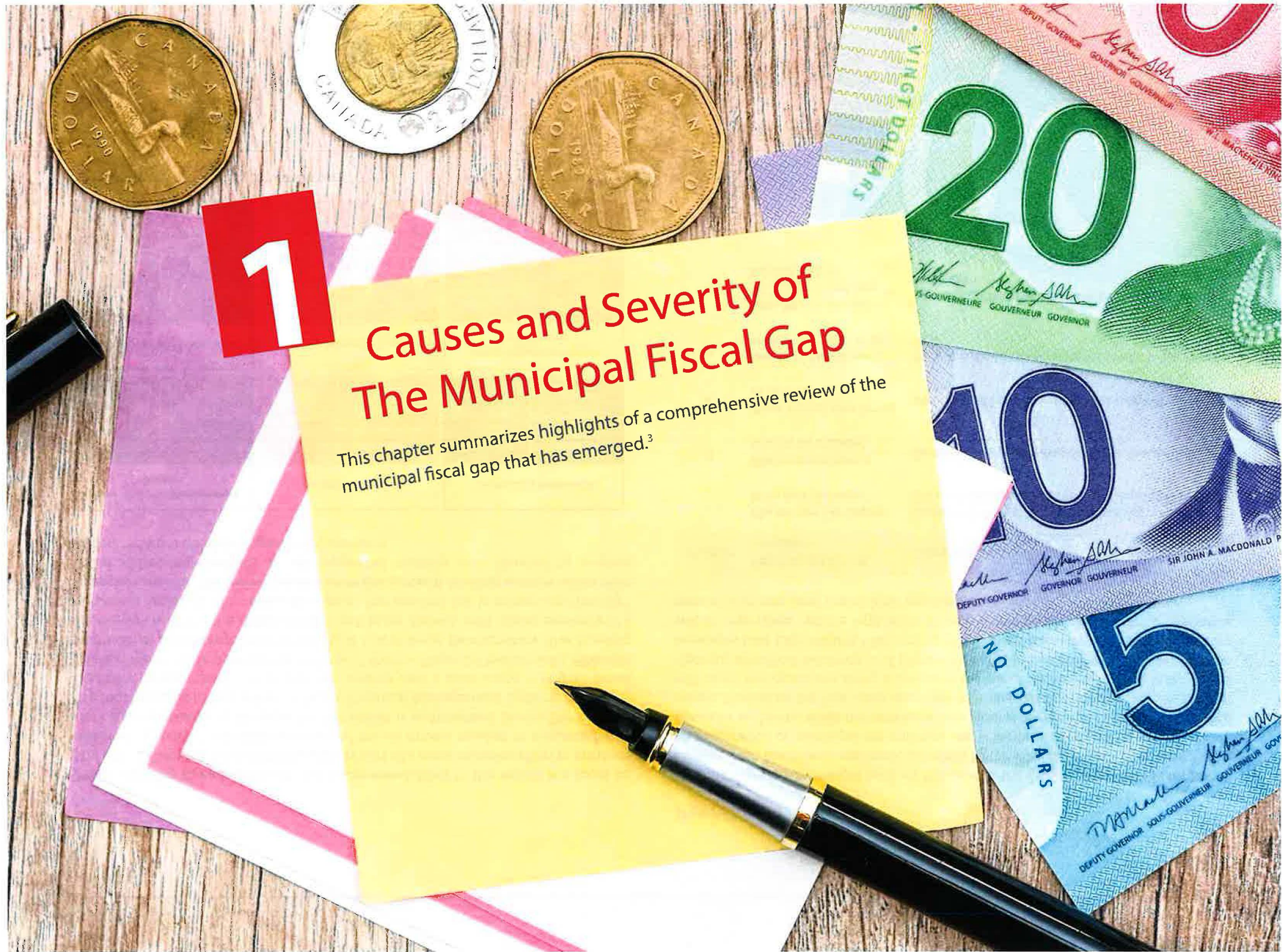
By enhancing the municipal funding framework, the goal is preparedness for transitioning from traditional economic activities to the new (or digital) economy. This is an exploration of municipal expenditure and revenue choices, some entirely within Council’s authority, while the provincial and federal governments strongly influence others. Guided by the Task Force recommendations and Council direction, this report will tackle five questions using a thorough review of municipal finance insights and rigorous empirical evidence and present findings in five chapters. This exploration leverages past City insights.² Reforming the funding framework for the 21st century will, in many cases, require legislative change where provincial or federal support is needed and new (and brave) local approaches.

Chapter	Policy and Analytical Questions	Title of Report Chapter
I	Why are cities (like Calgary) facing fiscal challenges?	Causes and Severity of The Municipal Fiscal Gap [Fiscal Imbalance because of a Persistent Municipal Fiscal Gap.]
II	What revenue options or solutions are available?	The Role of Alternative Revenue Sources to Close the Gap.
III	Where are most cities turning for remedies?	Brief Review of Emerging Developments in other Municipalities
IV	How do we know proposed remedies will deliver value?	Framework and Assessment of the Net Benefits of New Revenue Tools
V	What does City Administration propose as next steps from the analysis?	Approaches for Achieving Progress in Securing a New Funding Framework

1

Causes and Severity of The Municipal Fiscal Gap

This chapter summarizes highlights of a comprehensive review of the municipal fiscal gap that has emerged.³



1.1 The gap is partly due to the evolving responsibilities, spendings and revenue-generating tools at the three levels of government

The gap is partly due to different and increasing government responsibility

Federal and Provincial Government Responsibilities – Evolution Over Time

Canada has three orders of general government - the Federal, Provincial and Municipal governments.⁴ Sections 91 and 92 of the Canadian Constitution 1867, formerly the British North America Act 1867, established powers for the Federal and Provincial governments (Exhibit 1.1).

According to the Act, the federal government has powers that are different from the provincial governments, including national defences, foreign affairs, employment insurance, banking, federal taxes, the post office, fisheries, shipping, railways, telephones and pipelines, Indigenous lands and rights, and criminal law. The provinces have powers such as direct taxes, hospitals, prisons, education, marriage, and property and civil rights. The two orders of government share the power over agriculture and immigration.⁵

A hundred and fifty-six years later, government responsibilities in Canada have evolved with the economy and society. Today, Canada’s federal and provincial governments provide more services than those listed in the 1867 Constitution, adding new obligations such as environment, natural resources, and health (Exhibit 1.2).⁶

The notable takeaways of the evolution from 1867 to present-day responsibilities can be summarized as follows:

- **Expanded Responsibilities:** Many services and functions of governments were added to the list over time. Examples include the environment, culture and arts, housing and community, and parks and recreation.
- **Overlapping Responsibilities:** There is some overlap between the federal and provincial lists. As such, sometimes both governments claim the authority to deal with a matter (e.g., health care). Similarly, sometimes they both claim the other government is responsible (e.g., Metis issues).
- **Municipal Responsibilities:** Municipalities are creatures of provinces. So, provinces can establish and define municipal services if they are within the provincial authority.

Exhibit 1.1 Responsibilities defined in 1867 – Three Orders of Government

Responsibilities of the federal government of the Dominion of Canada

- | | | |
|--------------------------------------------|-------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1. The public debt and property | 9. Beacons, Buoys, Lighthouses and Sable Island | 19. Legal Tender |
| 2. Regulation of Trade and Commerce | 10. Navigation and Shipping | 20. Bankruptcy |
| 3. Raising money by any mode of tax | 11. Quarantine and marine hospitals | 21. Patents |
| 4. Borrowing money on the public credit | 12. Sea Coast and Inland Fisheries | 22. Copyrights |
| 5. Postal Service | 13. Ferries | 23. Indians and Reserves |
| 6. Census and Statistics | 14. Currency and Coinage | 24. Naturalization and Aliens |
| 7. Military | 15. Banking and Banks | 25. Marriage and Divorce |
| 8. Fixing of salaries of Federal employees | 16. Weights and Measures | 26. Criminal Law |
| | 17. Bills of Exchange and Promissory Notes | 27. Penitentiaries (note these are used when someone is sentenced to more than 2 years) |
| | 18. Interest | 28. Everything else not under Provincial control |

Responsibilities of the provincial governments of the Dominion of Canada (including New Brunswick, Nova Scotia, Quebec, and Ontario in 1867)

- | | | |
|----------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1. Taxation inside the province | 7. Municipal Institutions in the Province | 10. Incorporation of provincial companies |
| 2. Borrowing money on the province’s credit | 8. Shop, Saloon, Tavern, Auctioneer and other Licences in order to the raising of Revenue for Provincial, Local or Municipal purposes. | 11. Solemnization of marriage |
| 3. Fixing salaries of provincial employees | 9. Local works and undertakings other than: ships, rail, canals, telegraphs or anything connecting provinces, or anything the Federal government declares to be for the general advantage of Canada or Two or more provinces. | 12. Property and Civil rights in the province |
| 4. Management of public lands including timber/wood | | 13. Administration of justice in the province |
| 5. Prisons in the province (note: used when someone is sentenced to less than 2 years) | | 14. Imposition of penalties for enforcing laws made in relation to provincial matters |
| 6. Hospitals, asylums, charities – other than marine hospitals | | 15. Generally, all matters of a merely local or private nature in the Province. |

Source: Canada Constitution Act, 1867, s. 91 and 92.

Content: Initial Federal and Provincial Responsibilities Defined in the 1867 Constitution

Exhibit 1.2: Responsibilities Defined in the 21st Century – Three Orders of Government

Canada



Jobs

Find a job, training, hiring programs, work permits, Social Insurance Number (SIN)



Immigration and citizenship

Visit, work, study, immigrate, refugees, permanent residents, apply, check status



Travel and tourism

In Canada or abroad, advice, advisories, passports, visit Canada, events, attractions



Business and industry

Starting a business, permits, copyright, business support, selling to government



Benefits

EI, family and sickness leave, child benefit, pensions, housing, student aid, disabilities, after a death



Health

Food, nutrition, diseases, vaccines, drugs, product safety and recalls



Taxes

Income tax, payroll, GST/HST, contribution limits, tax credits, charities



Environment and natural resources

Weather, climate, agriculture, wildlife, pollution, conservation, fisheries



National security and defence

Military, transportation and cyber security, securing the border, counter-terrorism



Culture, history and sport

Arts, media, heritage, official languages, national identity and funding



Policing, justice and emergencies

Safety, justice system, prepare for emergencies, services for victims of crime



Transport and infrastructure

Aviation, marine, road and rail, car seat and vehicle recalls



Canada and the world

Foreign policy, trade agreements, development work, global issues



Money and finances

Personal finance, credit reports, fraud protection, paying for education



Science and innovation

Scientific research on health, environment and space, grants and funding

Source: <https://www.canada.ca/en.html>, accessed January 12, 2023

Alberta



Arts and culture

Funding for heritage and cultural industry projects, and information about museums, historic sites, libraries and cultural events.



Business and economy

Energy, agriculture, forestry, culture and other key sectors, and supports for business, trade and economic development



Driving and transportation

Driving and vehicles, roads, highways and bridges, and public transportation.



Education and training

K to 12 and post-secondary education, adult learning, career planning, and student financial assistance, records, diplomas and transcripts.



Emergencies and public safety

Information to keep your family, your home and your community safe. Emergency help call 911.



Environment

Protecting Alberta's environment and natural resources includes preserving the quality of our water, air, natural lands and wildlife.



Family and social supports

Financial assistance and services for seniors, children, people with disabilities, and individuals and families in crisis.



Government

Alberta government organizations, legislation, priorities, taxes and levies, and First Nations and Métis policy and services.



Health

Alberta health insurance and benefits, doctors, hospitals and facilities, and other healthcare supports and information.



Housing and community

Alberta's municipalities, community supports, and information for owning or renting a home in Alberta.



Jobs and employment

Alberta jobs, employment standards, OHS, and other services and supports for workers and employers.



Law and justice

Crime, law enforcement and the province's justice system, legal representation and documents and your rights as an Albertan.



Life events

Birth and adoption, death, divorce and separation, marriage, legal name changes, registry services, and ordering and updating documents.



Moving to Alberta

Immigration information, jobs, health, education and more for those planning to move or who are new to Alberta.



Parks and recreation

Parks, campgrounds, events, outdoor activities, and supports for the recreation sector.

Source: <https://www.alberta.ca/index.aspx>, accessed January 12, 2023

Municipal Responsibilities – Evolution Over Time and Differences across Jurisdictions

Canadian municipalities are in an unenviable position of having two masters: other orders of government and citizens. Municipalities are considered creations of the province – meaning that the provinces have the authority to require their municipalities to provide certain services and perform certain functions. Municipalities also serve the local citizens who demand certain services; generally, the larger the population, the more the types of services. Ordinarily, municipalities are assigned responsibilities of a truly local nature by their provinces. They are required to support, cooperate, and participate in providing provincial services within municipal boundaries.

There are many cities in Canada, and each one offers a slightly different bundle of services to citizens. For example, Vancouver and Winnipeg are two large Canadian cities roughly half the size of Calgary.⁷ While many service offerings are similar, there are a few notable differences, some due to city size and others due to provincial legislation.⁸ Notable differences include:

- The City of Vancouver does not provide public transit and property assessment. Instead, TransLink and the BC government provide these services. The City of Calgary provides these services.
- The City of Vancouver provides a health clinic, which is not part of The City of Calgary's services.
- The City of Winnipeg does not provide streetlighting services because Manitoba Hydro delivers this service. The City of Calgary provides this service.
- Paramedic service is a municipal responsibility and part of The City of Winnipeg's Fire Department. However, in Calgary and Vancouver, Paramedic Service is provided by their provinces.

The City of Calgary surveyed selected cities in OECD countries such as the U.S., Singapore, Australia, New Zealand, the U.K., and Ireland to gain a better understanding of the evolution of municipal responsibilities over time.⁹ The primary drivers of differences across jurisdictions are:

- **Expanded services due to citizen expectations in a major urban centre:** As municipalities grow, they tend to be called upon to do more and more for their citizens. This should not be surprising as municipalities are the order of government closest to local citizens. As a result, many municipalities have added the following service offerings – schooling, health care, social assistance, public art, backyard chicken licensing, disability access and air quality monitoring.
- **Reduced services due to regionalization:** As municipalities age, depending upon their relationship with other orders of government, there tends to be a regionalization of some services. Some services are taken over by provincial or federal governments and provided regionally. However, funding may continue to be collected locally. Typically, this would apply to police and paramedic ser-

vices. Still, other services have been regionalized, such as planning, assessment, public transportation, and fire/rescue services.

Municipal Responsibilities – The Alberta Legislative Framework and Implications for Calgary

Municipalities in Alberta do what their Councils deem necessary to benefit local citizens for the public good and within constitutional limits.¹⁰ The primary drivers of the current regime of municipality responsibilities are:

- **Permissive as opposed to prohibitive legislation:** The overarching piece of legislation is the Alberta Municipal Government Act (MGA). In Alberta, there are few obligations and very few prohibitions on what services a municipality must provide its citizens. There are obligations for how a municipality must operate, such as a municipal council must make available its annual financial statement. This arrangement follows the current, "permissive" style of municipal government enabling legislation, as opposed to older acts that were written under the "express powers doctrine", where municipalities in Canada were limited to certain activities only.
- **Natural person powers:** Municipal operational decisions, as opposed to policy decisions, are exposed to the same negligence law, duty of care and standard of care that all other citizens and businesses face in Canada, with the exception of any limitation of liability in accordance with the Law.
- **Municipal legislative history:** Like Calgary, many municipalities require that Council decisions about a municipal service or program should be preceded by a consideration of previous Council direction. Previous Council direction is legislative history showing the previous authorization to engage in a municipal activity and authorized changes over time. In addition, for Calgary, based on the current social and economic situation, City Council could revise some authorizations at annual budget deliberation meetings.

Like other municipalities, Calgary continually adapts to the changing world and the shifting demand from Calgarians and currently offers 61 services. Municipal operating expenditures across six services are the only ones fully funded by user fees as self-supported services – taxi, limousine, and vehicles-for-hire; business licensing; development approvals; stormwater management, wastewater collection and treatment, and water treatment and supply. The others are partially or fully supported by property taxes. (Exhibit 1.3).

The total cost of providing all 61 lines of services was \$4.0 billion in 2021, including operational expenses and amortized capital investment. That suggests that The City represents a noticeable share (6.5 per cent) of total Canadian municipal government spending (across more than 4,500 municipalities), further strengthening Calgary's municipal government's vital role.

**Exhibit 1.3
Calgary's Municipal Property Tax Spending Allocations**

Bylaws and Public Safety



19.69%

Police Services	11.35%
Fire & Emergency Response	6.19%
Calgary 9-1-1	0.90%
Bylaw Education and Compliance	0.31%
Fire Inspection & Enforcement	0.19%
Emergency Management & Business Continuity	0.41%
Fire Safety Education	0.03%

Contribution to Capital Investments



8.13%

Other (Pay-As-You-Go)	3.40%
Lifecycle Maintenance	2.60%
Green Line	1.40%
Community Infrastructure	1.02%
Debt Servicing	0.80%

Environment



0.96%

Waste & Recycling	0.19%
Urban Forestry	0.42%
Climate and Environmental Management	0.42%
City Cemeteries	0.03%
Stormwater Management	0.00%
Wastewater Collection & Treatment	0.00%
Water Treatment & Supply	0.00%

Transportation



13.89%

Public Transit	7.20%
Streets	4.12%
Sidewalks & Pathways	1.48%
Specialized Transit	1.13%
Taxi, Limousine & Vehicles-for-Hire	0.00%
Parking	0.00%

Parks, recreation and culture



5.12%

Parks & Open Spaces	1.92%
Library Services	1.43%
Recreation Opportunities	0.92%
Arts & Culture	0.84%

Information and Communication



0.78%

Citizen Information & Services	0.35%
Strategic Marketing and Communications	0.22%
Citizen Engagement & Insights	0.11%
Records Management, Access & Privacy	0.11%

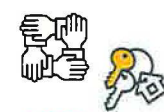
Enabling Services



12.45%

Infrastructure and Engineering	0.19%
Corporate Security	0.64%
Legal Services	0.29%
Data Analytics and Information Access	0.35%
Organizational Health, Safety and Wellness	0.39%
Procurement and Warehousing	0.31%
Council and Committee Support	0.10%
City Auditor's Office	0.08%
Municipal Elections	0.08%
Insurance and Claims	0.02%
Fleet Management	0.00%

Social Programs and Services



1.81%

Social Programs	0.32%
Affordable Housing	0.43%
Neighborhood Support	0.17%
Community Strategies	0.89%

Tax and Property Assessment



0.75%

Property Assessment	0.55%
Taxation	0.17%

IT Solutions and Support

IT Solutions and Support	1.59%
Facility Management	1.88%
Human Resources Support	0.81%
Financial Support	0.73%
City Planning and Policy	4.81%
Corporate Governance	0.37%
Mayor and Council	0.29%
Executive Leadership	0.42%

Building, Planning and Business



1.44%

Economic Development & Tourism	1.24%
Appeals and Tribunals	0.10%
Building Safety	0.09%
Real Estate	0.08%
Land Development & Sales	0.01%
Business Licensing	0.00%
Development Approvals	0.00%

Animal Services



0.12%

Pet Ownership & Licensing	0.12%
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Source: The City of Calgary [Property Tax Breakdown](#)

Content: The City of Calgary's Service Lines and Property Tax Allocations (as of 2023)

Municipal Responsibilities – Emerging Priorities for the 21st Century

The most notable emerging municipal priority for the 21st century is climate action. The origin of present-day climate action is the historic 2015 Paris Agreement to limit global warming to well below 2, preferably to 1.5 degrees Celsius, compared to pre-industrial levels. Canada was one of the 195 countries that acceded to climate action. Taking climate action requires collaboration and financial commitments. In March 2022, the Government of Canada introduced Canada’s 2030 Emissions Reduction Plan, to achieve 40-45 per cent emission reductions below 2005 levels by 2030. The plan included \$9.1 billion in new federal investments targeting emission reductions in buildings, vehicles, industry, and agriculture. It also reflects carbon pricing and clean fuels measures.

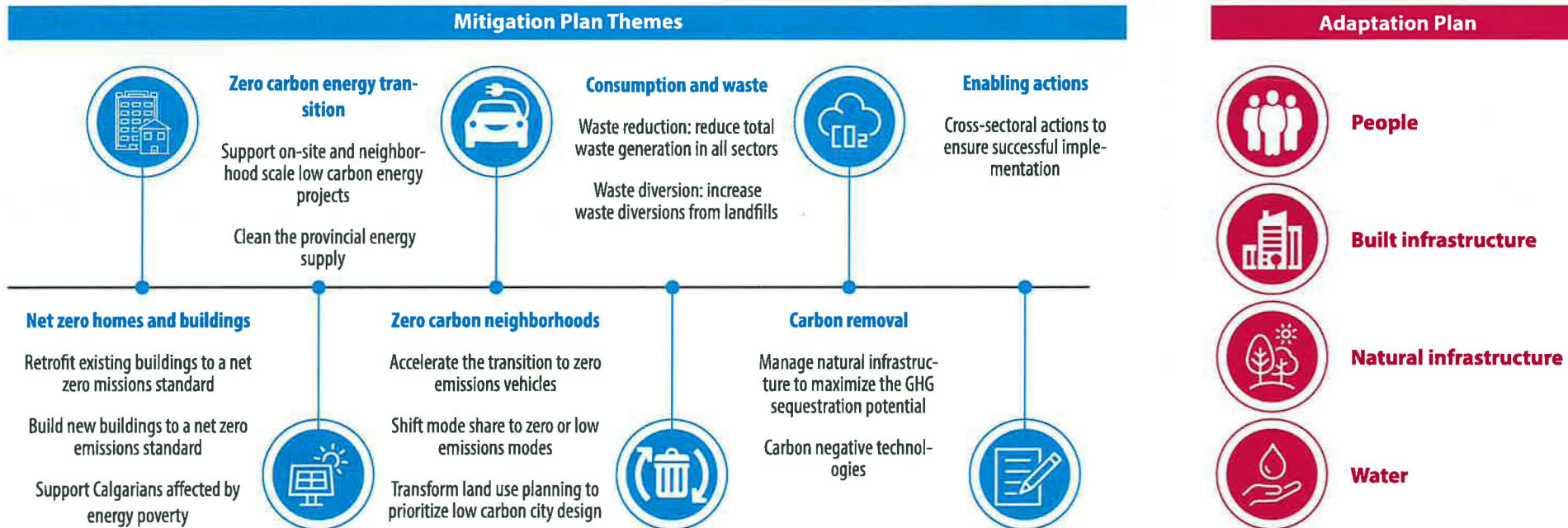
All Canadian cities are part of the climate action commitment the Canadian Government made in 2015. Most major cities have declared a climate emergency, joining the global force to fight climate change.

- In November 2020, Vancouver City Council approved the Climate Emergency Action Plan to put Vancouver on track to reduce its carbon footprint by 50 per cent by 2030.¹¹
- In December 2021, Toronto City Council approved a Transform to Net Zero Strategy – A Climate Action Pathway to 2030 and Beyond strategy, setting a net-zero Greenhouse Gas (GHG) emission target for the City of Toronto as a corporation by 2040.
- In November 2022, the City Council of Edmonton approved its first Carbon Budget and a 2023-26 Operating Budget, which collectively referenced net-zero GHG reduction targets for 2040.¹²

In November 2021, Calgary City Council declared a Climate Emergency, making accelerated climate action a strategic priority for The City. In July 2022, City Council approved the Calgary Climate Strategy – Pathways to 2050, a roadmap on how Calgary as a community can achieve net zero by 2050. The strategy referenced the need for significant public and private investment, which would result in energy cost savings¹³ and other economic, social and environmental benefits. The City’s climate action goals are ambitious – to improve energy use, reduce GHG emissions, and reduce climate risks (Exhibit 1.4).

**Exhibit 1.4
An Example of a New Municipal Government Priority**

City of Calgary’s Climate Resilience Goals to Improve Energy Use and Reduce Greenhouse Gas Emissions



Source: City of Calgary Climate Strategy Pathways to 2050 (2022 version)

The gap is partly due to differences in government spending levels and spending growth

In addition to expanded responsibilities, there are two drivers of significant increases in expenditures for municipalities: (a) population growth that increases the number of people that need municipal goods and services; and (b) inflation that increases the costs municipalities must incur to deliver goods and services to citizens.

Calgary population growth exceeds provincial and national growth increasing service demand

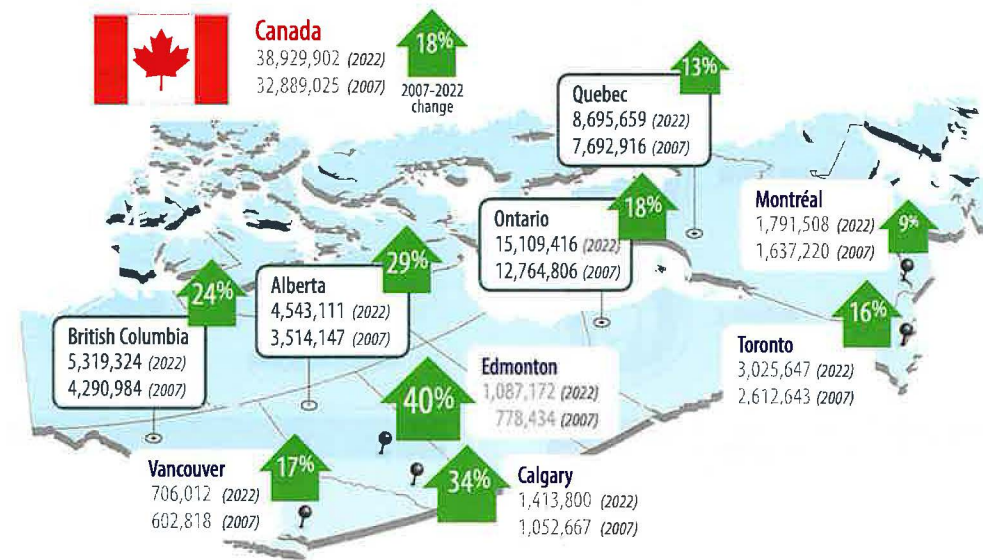
The pressure from population growth on big cities like Calgary is intense. It is due to rapid urbanization – a global phenomenon with cities at the heart of the global shift from rural to urban areas.¹⁴ Specifically, cities like Calgary are growing faster than their province and country.¹⁵

The rate of population growth from natural increase (births less deaths) follows a similar pattern across Canada. So, the difference for cities like Calgary is large inflows of intra-provincial, interprovincial, and international migrants. The pace of growth in Alberta’s big cities has been more rapid than elsewhere in Canada because of oil and gas industry booms over the past 15 years. As a result, cities like Calgary and Edmonton have faced more demand for municipal services than the rest of Canada, putting pressure on municipal finances.

Between 2007 and 2022, Calgary’s population grew by 34 per cent, from 1.1 million in 2007 to 1.4 million in 2022. Edmonton was the only large Canadian city (with current population of 1 million or more) with a faster growth rate. Over that period, Alberta’s population grew by 29 per cent (or 1 million), from 3.5 to 4.5 million.¹⁶ Canada’s population grew by 18 per cent (or 8 million), from 32.9 million to 38.9 million (Exhibit 1.5).

Over the past 16 years, population growth in all Canadian urban centres was significantly faster than rural areas.¹⁷ Population growth in Canadian urban centres was 21 per cent, compared with 6 per cent for rural areas. The difference was starker in Alberta with 35 per cent growth in urban areas compared with 5 per cent for rural areas (Exhibit 1.6).

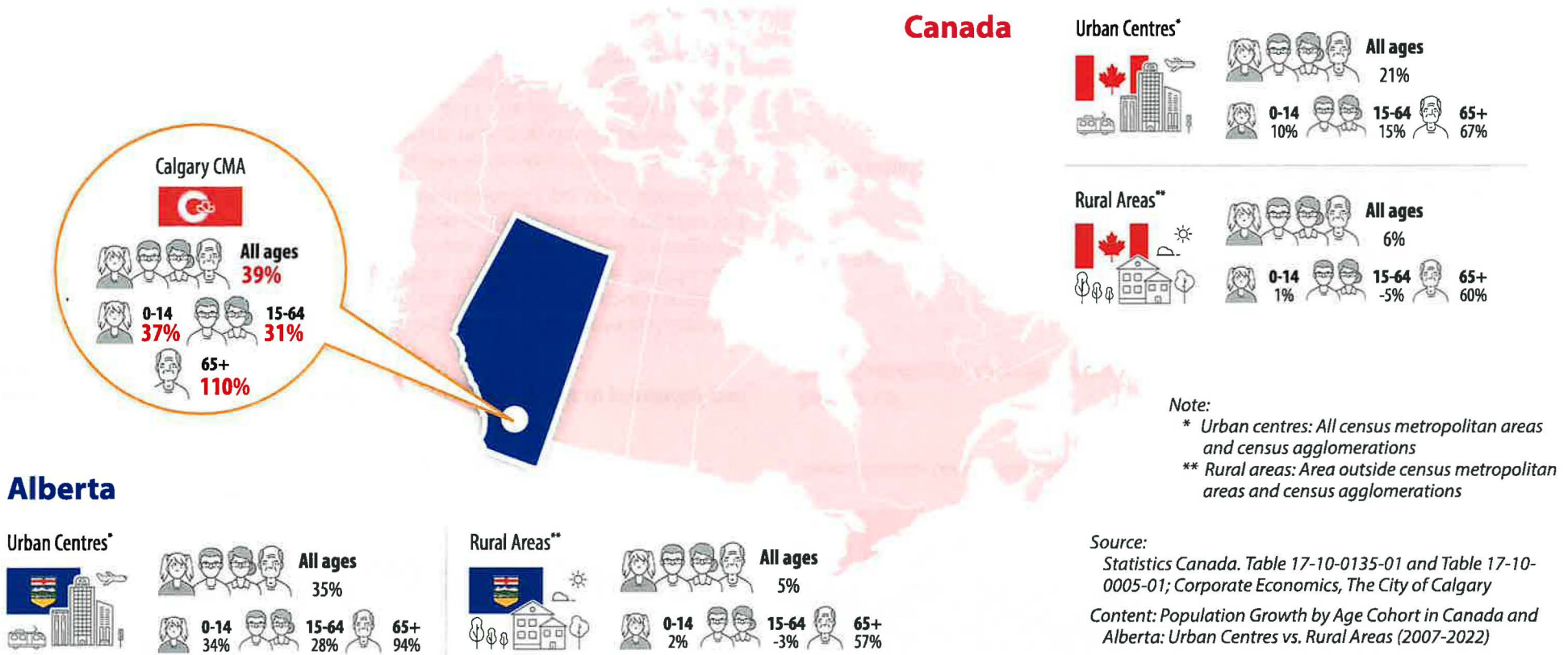
**Exhibit 1.5
Calgary’s Population is One of the Fastest Growing across Canadian Big Cities**



Source: Statistics Canada. Table 17-10-0142-01; Corporate Economics, The City of Calgary
Content: Population Growth in Canada’s Largest Cities: Calgary vs. Selected Cities (2007-2022)

Rapid urbanization has led to City investments in additional municipal infrastructure including roads and public transit and higher operating costs to serve more people. As the city’s population density increased and more people favored modes of transportation other than driving, Light Rail Transit (LRT) became favored. In Calgary, work has started on the Green Line LRT construction – the largest single municipal capital infrastructure investment in the city’s history. Examples of additional operational services The City is responsible for include social programs like affordable housing, youth programs, and community services for the city’s growing population.¹⁸

Exhibit 1.6
Calgary's Population Growth is Fast Across the Board (for All Age Cohorts)



Note:
 * Urban centres: All census metropolitan areas and census agglomerations
 ** Rural areas: Area outside census metropolitan areas and census agglomerations

Source:
 Statistics Canada. Table 17-10-0135-01 and Table 17-10-0005-01; Corporate Economics, The City of Calgary
 Content: Population Growth by Age Cohort in Canada and Alberta: Urban Centres vs. Rural Areas (2007-2022)

Calgary price growth exceeds Provincial and Federal growth for public services

Alberta had the highest population and economic growth rate of all provinces from 1990 to 2019 (excluding pandemic-related distortions). The cumulative population growth was 71 per cent, compared with the 10-province average of 25 per cent. Similarly, the cumulative real GDP growth was 132 per cent compared with the 10-province average of 85 per cent.

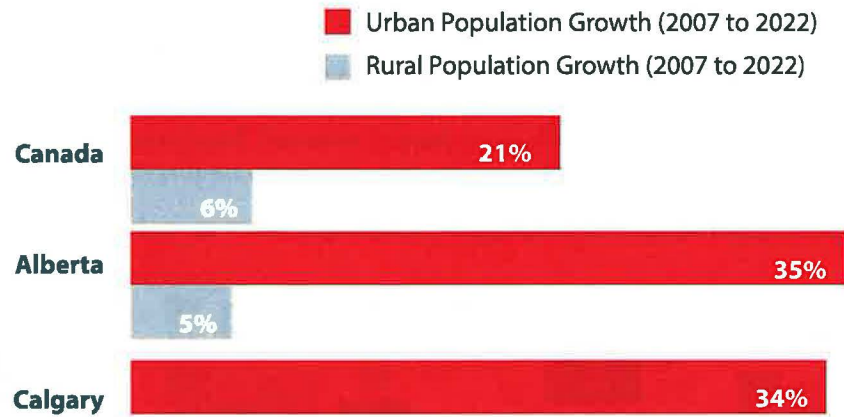
The high-growth economic environment placed upward pressure on public infrastructure costs. Alberta had the highest construction labour costs of all provinces from 2001 to 2019 (28 per cent higher).

Alberta is the second most urban province, with 92 per cent of Albertans living in census subdivisions with 5,000 or more people. The public services task of large ur-

ban municipalities is significant. Examples are recreation centres and light rail transit infrastructure. They expand the variety of public capital investment and the associated higher service level beyond the needs of rural areas and smaller population centres (Exhibit 1.7).

The private sector has more disproportionately fueled Alberta's investment boom. Alberta had the highest rate of infrastructure investments of all provinces from 1990 to 2019, with a much larger share of investments from the business sector (89 per cent) than the 10-province average (80 per cent). One could argue that it is due to government sector under-investment relative to the private sector. Specifically, Alberta had the smallest share of infrastructure investments originating from the government sector (11 per cent), at roughly half the share as the 10-province average (20 per cent).

Exhibit 1.7
Demography is elevating the importance of major urban centres like Calgary



Sources: Statistics Canada (CANSIM Table 17-10-0142-01)
Content: Urban and Rural Population Growth over the last 15 years

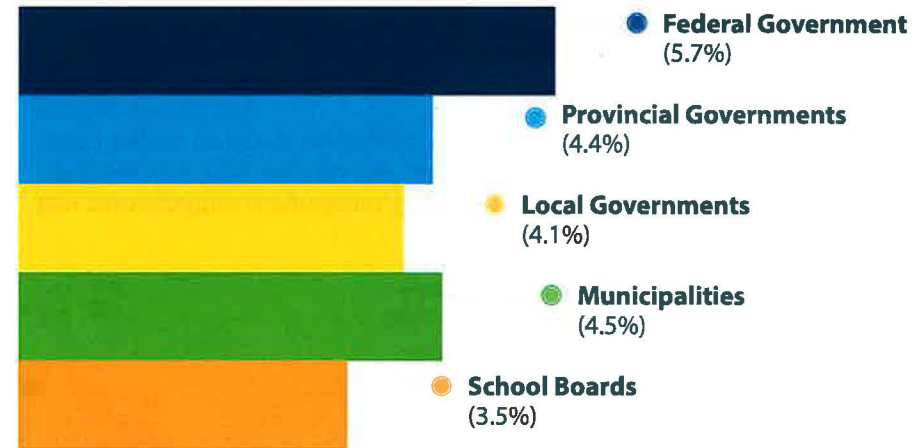
Implications for the growth in municipal expenditures relative to provincial and federal expenditures

Due to faster population growth and accelerating urbanization, municipal expenditures should increase at a faster clip. However, evidence from own-source expenditure growth across more than 4,500 municipalities in Canada over the 2007 to 2021 period is a 4.5 per cent compound annual growth rate. That growth rate is marginally higher than own-source expenditure growth across all provinces and territories (4.4 per cent) and well below that for the federal government (5.7 per cent). (Exhibit 1.8)

Apart from the pace of spending growth, it is useful to consider changes in the level of spending across the three orders of government, including changes in the level of spending. Over the 15-year period from 2007 to 2021, the provincial and territorial governments had the highest level of spending across the three orders of government, followed by the federal government and municipal governments (Exhibit 1.9).

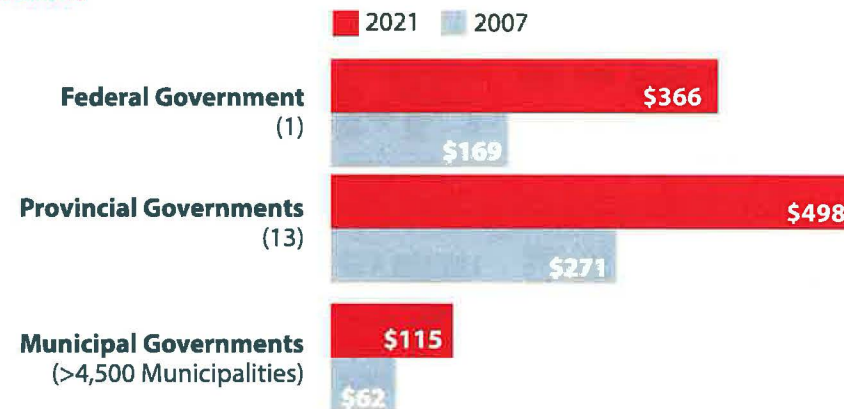
- Provincial and Territorial Governments – own-source expenditures increased from \$271 billion in 2007 to \$498 billion in 2021.

Exhibit 1.8
Canada's Federal Government has increased Spending the most in 15 years (CAGR, 2007-2021)



Source: Statistics Canada. Table 36-10-0450-01 and custom data Table 18

Exhibit 1.9
Total Spending by Canada's more than 4,500 Municipalities remains Low (\$billion)



Source: Statistics Canada. Table 36-10-0450-01 and custom data Table 18

- The Federal Government – own-source expenditures increased from \$169 billion in 2007 to \$366 billion in 2021, or by 117 per cent.
- Canadian Municipal Governments – own-source expenditures increased from \$62 billion in 2007 to \$115 billion in 2021, or by 85 per cent.

Adjusted for population, the per capita spending level is lower for the federal government at \$9,574 in 2021 (compared with \$13,015 for provinces and territorial governments). The change in the level of spending per capita (measured as the compound annual growth rate) has the federal government (4.6 per cent) outstripping the provincial and territorial governments (3.3 per cent).

Adjusted for population, the municipal governments have the lowest level of per capita spending (\$3,008 in 2021) and lowest rate of change 3.4 per cent) over the 2007 to 2021 period.

The gap is partly due to constraints associated with existing revenue tools

The primary driver of under-funded municipalities is due to balanced budget requirements for operating activities without due consideration for capital projects combined with some revenue sources that respond poorly to economic activity. It is exacerbated in Alberta by extraordinary economic volatility.

Municipal revenue is unresponsive to economic and income changes

Alberta’s economy has been volatile (relative to other provinces) over the past few decades due to the energy sector’s dominant position. Driven by global commodity market fluctuations, Alberta’s real GDP grew faster than the rest of Canada in boom times but shrank more during recessions. Accordingly, Alberta’s tax base measured by nominal GDP swung even more drastically, ranging from a low of 17 per cent decline in 2009 to a high of 26 per cent growth in 2021. Economic volatility in Alberta has also affected Calgary.

Almost all provinces in Canada have a balanced budget requirement for their municipalities defined in provincial legislation. The City of Calgary has its Council Policy (CFO004, Multi-Year Business Planning and Budgeting Policy for The City of Calgary) requirement on a balanced operating budget which aligns with the Municipal Government Act legislation. However, business cycles can bring challenges to this requirement, which is the case in Alberta. Specifically, the balanced budget approach means that municipalities are inflexible to economic conditions: when recessions hit,

they may not be able to cut property taxes to the levels that taxpayers desire; during boom times, when taxpayers have an increased ability to pay, they cannot collect additional revenues beyond costs.

Consequently, tax revenues are less volatile (measured using the coefficient of variation) for municipalities than for the provincial and territorial governments and the federal and government (Exhibit 1.10).

Exhibit 1.10
Economic Volatility is more acute in Calgary and Alberta than in Canada

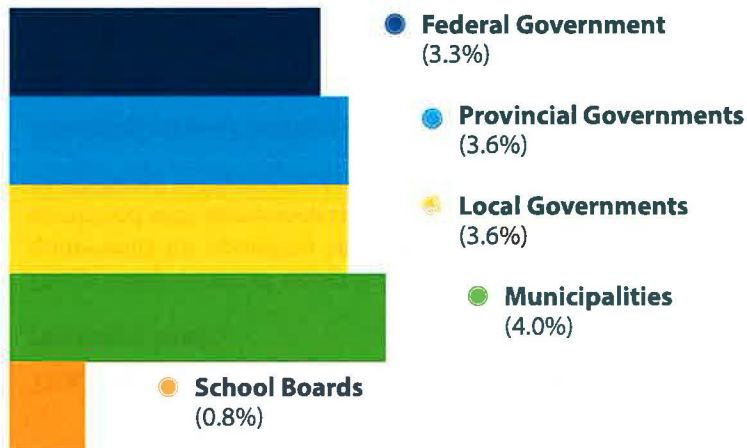


Sources: Statistics Canada (CANSIM Table 36-10-0222-01) and Conference Board of Canada
Content: Average Volatility (coefficient of variation) of Real GDP (2007 to 2021)

Historical reliance on user levies revenue growth has limits impacting future growth

Evidence from own-source revenue growth across more than 4,500 municipalities in Canada over the 2007 to 2021 period is a 4.0 per cent compound annual growth rate. That growth rate is higher than own-source revenue growth across all provinces and territories (3.6 per cent) and the federal government (3.3 per cent) (Exhibit 1.11).

Exhibit 1.11
Many Municipal Governments Acquired Tools Recently to Increase Revenue
(CAGR, 2007-2021)



Source: Statistics Canada. Table 36-10-0450-01 and custom data Table 18

The more rapid revenue growth for municipalities is firstly due to a low revenue starting point. Specifically, over the 15 years from 2007 to 2021, municipalities had the most ground to cover.

- Provincial and Territorial Governments – own-source revenue increased from \$272 billion to \$448 billion.
- The Federal Government – own-source revenue increased from \$245 billion to \$386 billion.
- Canadian Municipal Governments – own-source revenue increased from \$57 billion to \$100 billion.

By 2021, own-source revenue for the more than 4,500 municipalities in Canada was at \$100 billion – 26 per cent and 22 per cent of provincial or territorial government revenue and federal government revenue, respectively (Exhibit 1.12). That’s an improvement from the starting point in 2007 of 23 per cent and 20 per cent, respectively. Despite the improvement, municipalities still have the lowest level of per capita revenue in 2021 (\$2,611) compared with \$11,712 for provincial and territorial governments and \$10,096 for the federal government.

Exhibit 1.12
Total Revenue for Canada’s more than 4,500 Municipalities remains Low
(\$billion)



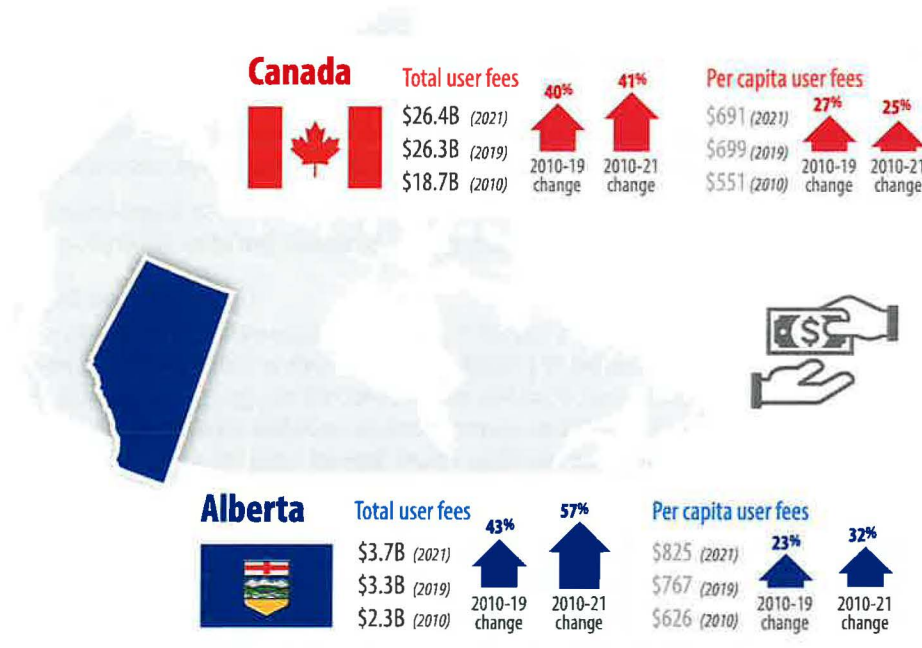
Source: Statistics Canada. Table 36-10-0450-01 and custom data Table 18

To achieve faster revenue growth, Canadian municipalities have relied ever increasingly on a category of revenue called user levies. It is the second reason for faster growth. User levies are the second largest source of revenue after taxes and fall into three categories – user fees, regulatory charges, and proprietary charges. The bulk of user levies is due to user fees. They show up in municipal financial statements usually as revenue from the sales of goods and services. Municipalities use them to recover some or all costs of investing and providing services such as recreation opportunities, public transit, waste disposal, business licensing, and development approvals.

Municipal sales of goods and services in Canada generated a total of \$26.4 billion in 2021, up by 41 per cent from \$18.7 billion in 2007. In Alberta, municipal user fee rev-

venues totaled \$3.7 billion in 2021, up by 57 per cent from \$2.3 billion in 2007. After adjusting for population growth, per capita user fee in Alberta was \$825 per person in 2021, higher than the average of \$691 in Canada. The user fee growth was faster in Alberta than in the rest of Canada, measured by both the growth rate of total user fees and the growth rate of per capita user fees (Exhibit 1.13).

Exhibit 1.13
Increased Provincial Government Reliance on User Fees



Source: Statistics Canada. Table 17-10-0005-01 and custom data Table 18

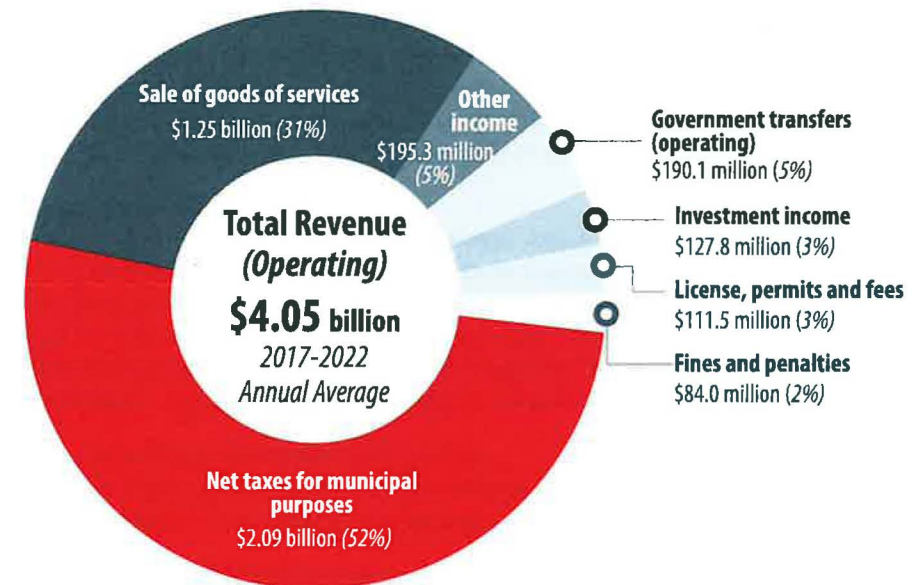
Content: User fee growth trends in Alberta and Canada: before and after COVID (2010-2019 vs 2010-2021)

More generally, municipalities in Western Canada have generated more revenue from user levies in recent years. It is attributable to reforms of regulatory charges and the benefit of proprietary charges reflecting economic change. Two notable examples are helpful. For reforms to regulatory charges, The City like many Alberta municipalities took advantage of legislative changes to off-site levy calculations. For proprietary

charges, The City has benefitted from using an approach to franchise fees based on underlying price of commodities that reflect the underlying economic conditions.

The pace of growth in Calgary's per capita user fees has slowed since 2010, indicating limited revenue-generating potential from user fee rate increases. The growth of user fee revenues would mainly come from the increase in the number of users. From 2017 to 2021, on average, 52 per cent of The City of Calgary's \$4.0 billion annual total operating revenues came from municipal property taxes, 31 per cent from the sales of goods and services, and 5 per cent from intergovernmental transfers from the provincial and federal governments. Municipalities like Calgary have had to rely on transfers to meet the balanced budget constraint (Exhibit 1.14).

Exhibit 1.14
Primary Operating Revenue Sources for Calgary's Municipal Government



Source: 2022 City of Calgary Annual Financial Report
The City of Calgary's Revenue Sources (2017-2022)

The new (digital) economy constrains property tax revenue growth and creates new tax distortions¹⁹

Taxation opportunities available to municipal authorities are limited – the dominant one is real property taxes. There are also land transfer taxes in some Canadian municipalities. Alberta’s municipalities are restricted to real property taxes – the main revenue source. However, real property taxes are not without limitations.²⁰

The digital economy, also known in the past two decades as the internet economy or the new economy, refers to an economy that is based on information and communication technology. In 2017, the Canadian digital economy produced \$207.7 billion of goods and services and there were 886,114 jobs associated with it.²¹ Between 2011 and 2017, the cumulative growth of Canada’s digital economy’s contribution to nominal GDP was significantly higher (40 per cent) than overall economic growth (28 per cent).

Data for the 2018 to 2023 period, when they become available, will undoubtedly show that the growth and level of contribution to economic activity are now higher. Specifically, the COVID-19 pandemic and the associated response accelerated the digital transformation in Canada and beyond. For example, remote work (working from home or telecommuting) became a global phenomenon because of the following benefits:

- Employees enjoyed better work-life balance and time/cost savings from not commuting to workplaces daily.
- Employers saved from lower costs on renting workspace for employees, lower energy demands, reduced supply needs, and reduced costs for perks like parking and coffee.
- In addition, society realized GHG emission reductions from burning fewer fossil fuels thanks to the decrease in daily commutes.

As a result, a new norm post-pandemic business environment has emerged with various organizations offering permanent remote work options to their employees, and many employees taking advantage of it. A shift away from the bricks-and-mortar business model (employees work in a building or structure to conduct work or face-to-face customer services) to remote work and other variations related to the digital transformation reduces the need for a larger footprint of buildings. If more and more businesses rely on their employees working away from offices permanently, the property assessment base, especially the office market component, will decelerate, stagnate, and then shrink.

For example, Calgary’s downtown office vacancy rate sky-rocketed from a low of 5.3 per cent in 2012 to an all-time high of 33 per cent in 2022. The higher vacancy rate in the downtown office market has shifted the non-residential property tax responsibility to other residential and non-residential property owners²². The increase in Calgary’s downtown office vacancy rate was originally due to an economic slowdown. It remained high because of another slowdown (the COVID-19 recession). The changing pattern of work, such as remote work, could make the decline in demand for downtown office space permanent.

The digital economy also reduces the demand for commercial and retail spaces.²³ In the future, a hybrid model or a combination of the traditional brick-and-mortar business model and e-commerce should arise.²⁴

So far, Canadian municipalities do not have a revenue source to offset losses from the rapid growth of e-commerce businesses without a physical presence. Business licensing-related revenues from rideshare firms that replace taxi and limousine services or short-term rentals that replace traditional accommodation services are a fraction of past revenue streams. Municipalities do not have taxation powers on “digital” firms that do not have offices or warehouses within their city limits but benefit equally from municipal services.

Deliveries of digitally enabled transactions such as Amazon orders, Uber rides, and Airbnb stays all use municipal infrastructure (such as roads) and services (e.g., safety regulation and bylaw enforcement).²⁵ As a result, as municipal costs grow, there are loopholes associated with the digital economy that would put an unfair burden on residential and non-residential property owners to cover the costs. Solutions should avoid incentivizing urban flight, an undesirable situation where residents of big cities relocate to smaller, less dense communities as the costs to remain in the city rise much higher than the benefits they receive.

1.2 The result is a persistent municipal fiscal gap despite strong national fiscal capacity

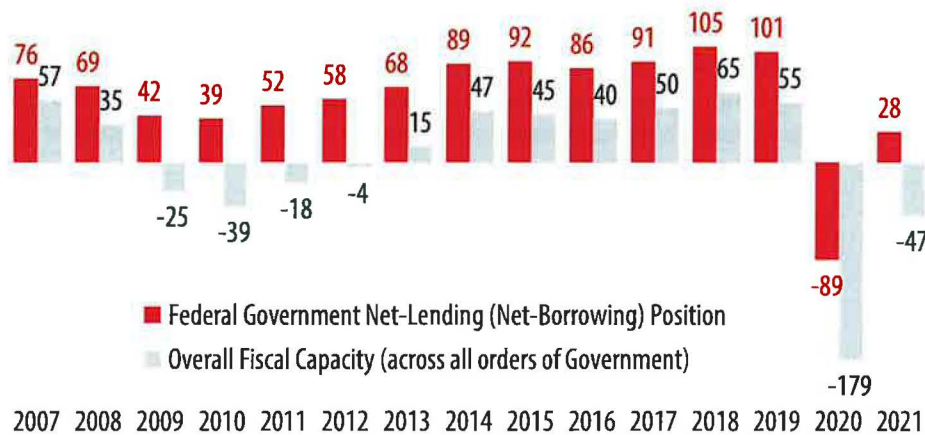
Strong overall fiscal capacity is skewed in favour of the federal government

Overall fiscal capacity, across the three orders of government, including school boards, is strong. The overall fiscal capacity was positive in nine of the 15 years be-

tween 2007 and 2021. The revenue generated by all orders of government exceeded the expenditures on goods and services in the country, leaving room for Canada to contribute to international commitments as a good global citizen.

However, the federal government is the only order of government with a persistently favourable position. Specifically, it was only in 2020, when the worst of the scourge of COVID-19 was upon the country and the world that the federal government had own-source expenditures exceed own-source revenue (Exhibit 1.15).

Exhibit 1.15
Fiscal Capacity – Federal and All Governments
(\$billion, 2007-2021)



Source: Statistics Canada. Table 36-10-0450-01 and custom data Table 18

This outcome is by design. Canada’s intergovernmental fiscal arrangement is a fiscal federalism.²⁶ Compared to other federal countries like the U.S., Germany, and Australia, expenditure decentralization is higher in Canada as measured by the share of total government expenditures made by subnational governments²⁷. A decentralized system has its advantages, including:

- tailoring government to local preferences,
- fostering intergovernmental competition, and
- experimenting and innovating in the provision of public goods and services locally.

On the other hand, there are disadvantages of a decentralized federal system, namely:

- inefficiencies, or efficiency issues (scarce resources are not being put to their best uses), including:
 - externalities or spillover effects,²⁸
 - inefficient tax systems, and
 - lack of economies of scale²⁹ in the provision of public goods and services and the collection of taxes
- inequity in the local economy (as decentralized jurisdictions have more difficulty redistributing income).³⁰

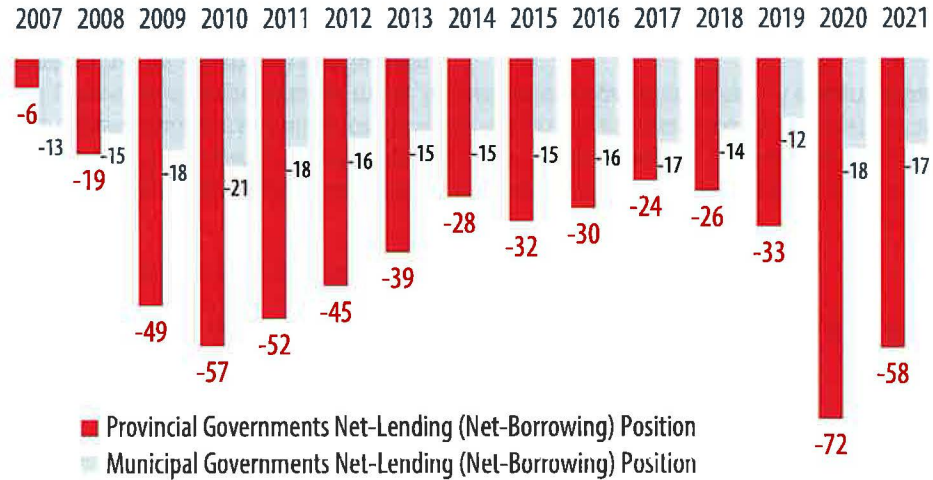
Municipalities have a type of severe fiscal gap - vertical fiscal imbalance

Canada’s high level of expenditure decentralization means there is a need for constant cooperation between different orders of government. That’s because, in the current fiscal federalism in Canada, provincial and local governments cannot cover expenditures using the revenue they generate.

Unlike the federal government, which experienced a temporary funding shortfall in 2020 due to the Covid-19 pandemic, the provincial governments and, as legislative creations, the municipal governments are designed to have a vertical fiscal imbalance³¹, a fiscal gap between the government’s own-source revenues and spending responsibilities due to the allocation of taxation powers among the three orders of government (Exhibit 1.16). The remedy for a vertical fiscal imbalance is the re-calibration of intergovernmental transfers over time. The recent provincial-federal government renegotiation of health transfers in 2022 was an attempt to address a vertical fiscal gap at the provincial level.

Unlike provincial governments that have various funding tools and can run deficits or surpluses, municipal governments like Calgary have inadequate revenue tools to fund operating and capital operations and cannot run deficits. They rely on intergovernmental transfers to close the funding gaps. However, the system of intergovernmental transfers, modified over time, has not worked for municipalities, and received policy wisdom is that the remedy is reassigning revenue-raising powers³².

Exhibit 1.16
Fiscal Capacity – Municipal and Provincial Governments
 (\$billion, 2007-2021)



Source: Statistics Canada. Table 36-10-0450-01 and custom data Table 18

For example, Calgarians prefer public transit as one of the main transportation modes and municipal tax dollars contribute to the expansion of LRT lines. The City, in response to this local preference, made the Green Line investment a top capital investment priority. However, the environmental benefit of the Green Line goes beyond Calgary’s boundary, and The City does not have the fiscal capacity to fully fund the project. As a result of the dialogue with the provincial and federal governments, The City secured their funding commitments. The \$5.5 billion total cost for Stage 1 of the Green Line investment will be shared by all three orders of government, with \$1.56 billion from The City of Calgary, \$1.7 billion from the Alberta Government, \$1.64 billion from the Government of Canada, plus \$0.64 billion financing cost from The City of Calgary.³³

1.3 The provincial fiscal gap has also led to ‘downloading’ on municipalities³⁴

The pressure and channels for provinces to download responsibilities on municipalities

Due to their own fiscal gap, it is not uncommon for provincial governments to change the rules so that certain government services they traditionally provide are explicitly or implicitly passed to municipalities without sufficient funding or revenue streams attached. It can impact municipalities through the following channels:

- **New unfunded responsibility:** involves an explicit transfer of service responsibilities without sufficient funding or one-time funding despite the need for ongoing resources for repairs, maintenance, and service continuity.
- **Expanded role without funding:** involves a transfer of service responsibilities because the province is no longer willing to deliver the public services they traditionally provided, but local citizens still need them.
- **Adverse changes to funding arrangements:** involves funding cuts, reductions, or not indexing to inflation and population growth for services best supported by progressive taxations but provided locally. They include general and specific purpose programs that require capital and ongoing operating costs.
- **Adverse changes to arrangements to cover costs:** when the cost of implementing provincial government regulations and laws is initially partly or wholly covered by the provincial government and then the cost-sharing arrangement is subsequently reversed or rescinded.

Canadian cities in different provinces have all experienced provincial and federal downloading in the past³⁵.

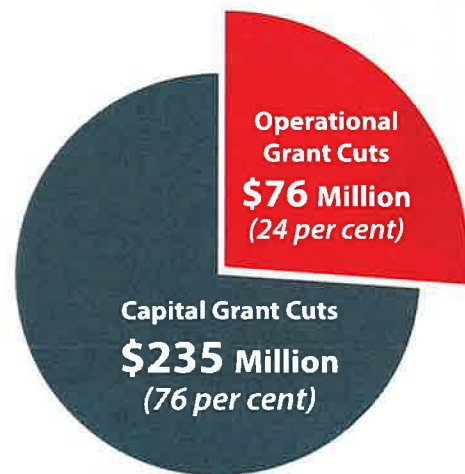
Calgary’s experience with provincial government downloading has increased the fiscal gap

A 2022 City of Calgary survey confirmed substantial impacts from recent provincial downloading. Downloading has affected social housing, waste and wastewater, arts and culture, social assistance, and transportation, among others. As some responsibilities shift from the province, despite more fiscal capacity, to Calgary, Calgary is not adequately equipped for the pressure associated with these growing responsibilities.

The estimated total downloading impact on City finances was an annual average of \$311 million in increased costs or funding shortfalls due to adverse changes to cost-sharing or funding arrangements, expanded City roles without funds, and new unfunded City responsibilities. These costs did not consider the potential costs The City faced associated with future risks, such as climate change impacts and inflationary pressures. Approximately 76 per cent of these costs can be attributed to cuts in capital grants and 24 per cent in the operational grants (Exhibit 1.17).

The estimated capital grant cuts were \$235 million per year for The City of Calgary,

Exhibit 1.17
Impact of Recent Provincial Downloading on Calgary



Source:
Government of Alberta 2010-2022 Annual Budget Reports; The City of Calgary's Internal survey

Content: Cost impact on The City of Calgary from Provincial Downloading
Government of Alberta 2010-2022 Annual Budget Reports; The City of Calgary's Internal survey

mainly due to the Alberta Government cutting its capital grant to municipalities through the reduction and extension of the Municipal Sustainability Initiative (MSI) program. The Alberta Government launched MSI in 2007, committing \$1.4 billion in annual support to help Alberta municipalities meet their growth and sustainability needs through capital projects.³⁶ However, by 2017, only \$7.53 billion of MSI had been granted to municipalities. The MSI ends in 2023 and will be replaced with the Local Government Fiscal Framework (LGFF) in 2024. Over 17 years between 2007 and

2023, Alberta municipalities were allocated \$15.2 billion in MSI grants.³⁷ The annual average of \$894 million was lower than the initial commitment of \$1.4 billion made by the province.

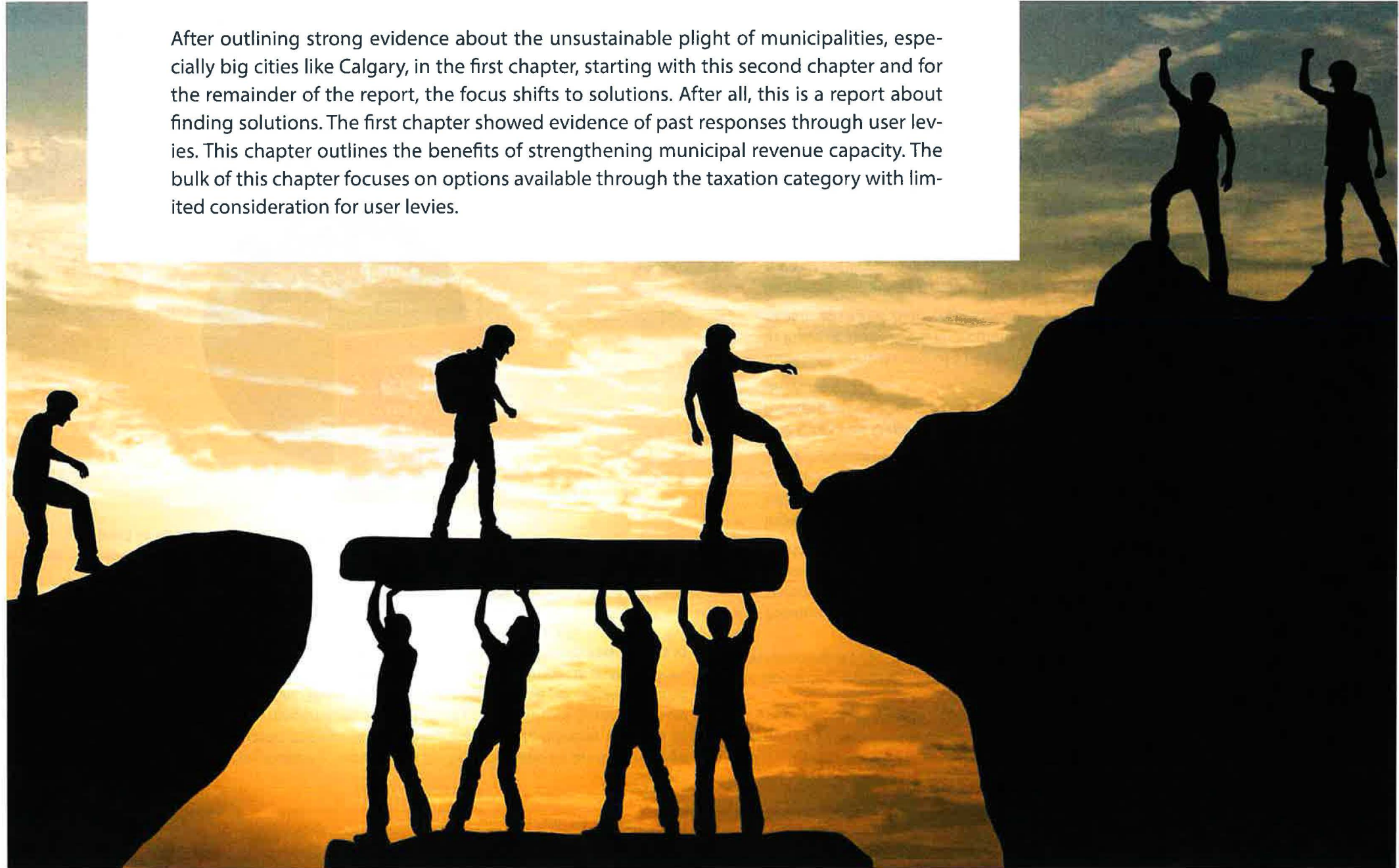
For operating activities, the estimated annual impact to The City from provincial downloading is \$75.6 million a year. The main affected areas include:

- Pensions and income support (\$19.7 million per year), due to the delivery of several income support services including: Calgary Transit Low-Income Monthly Passes; Recreation Programs and Facility usage; No Cost Pet Spay and Neuter; Seniors Services Home Maintenance; Property tax assistance program.
- Increased annual costs of \$18.2 million for police services, due to the implementation of the new police costing model in which municipalities are required to contribute 10 per cent of frontline policing costs under the Provincial Police Services Agreement in the 2020-21 provincial fiscal year.
- The City's Fire Department continued to provide life-saving interventions as a first responder, after the emergency medical services (EMS) was uploaded to the province in 2009.
- Increased annual costs of \$11.1 million in affordable housing, due to the Grants in Place of Taxes (GIPOT) program overall reduction by 24 per cent and 32 per cent in 2019 and 2020, respectively.
- Increased costs of \$4.8 million for parks and recreation services, due to the Community Facility Enhancement Program cut by 34.2 per cent in the 2019 budget. The 2021 budget saw a further downward revision, marking a 41.3 per cent decline overall since 2019.
- Increased costs for parking. Due to the provincial rate schedule being out of date, the CPA estimates that dealing with scrapped and auctioned vehicles costs the Calgary Parking Authority an annual average of \$3 million.
- Increased costs of \$2.6 million for waste and recycling services, due to The City covering part of Alberta's Paint Recycling Program costs.

2

The Role of Alternative Revenue Sources to Close the Gap

After outlining strong evidence about the unsustainable plight of municipalities, especially big cities like Calgary, in the first chapter, starting with this second chapter and for the remainder of the report, the focus shifts to solutions. After all, this is a report about finding solutions. The first chapter showed evidence of past responses through user levies. This chapter outlines the benefits of strengthening municipal revenue capacity. The bulk of this chapter focuses on options available through the taxation category with limited consideration for user levies.



2.1 Three reform strategies related to taxation tools

The provincial and federal governments have access to many taxation tools to generate revenue because, unlike municipal governments, they have tax autonomy. The top five sources of revenue across all three orders of government are from taxation and represent 58 per cent (average for 2007 to 2021) of total government revenue – personal income tax (30 per cent), corporate income tax (9 per cent), real property tax (8 per cent), provincial general sales tax (7 per cent), and the federal goods and services tax (5 per cent). The municipal, provincial, and federal governments benefited from these ‘anchor’ tax tools between 2007 and 2021 in Canada, as outlined in Exhibit 2.1.

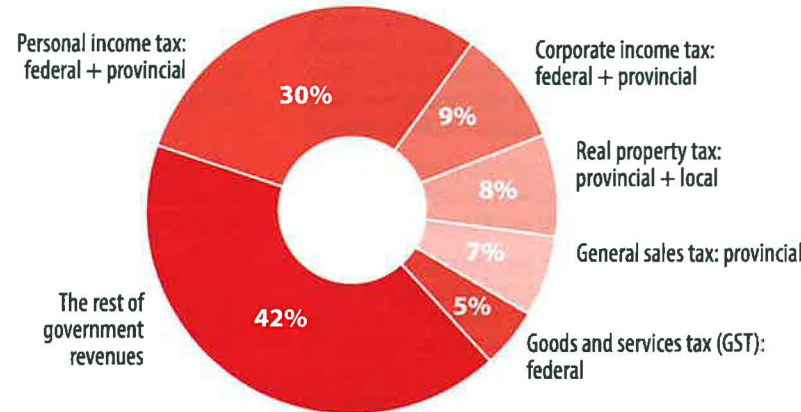
Four of these tools play an important role in revenue generation for Alberta. The exception is that Alberta does not have a sales tax because of the strength of revenue generated from oil and gas royalties. The top five sources of revenue across all three orders of government in Alberta are personal income taxes (32 per cent), corporate income taxes (12 per cent), royalties (8 per cent), real property taxes (8 per cent), and

the federal goods and services tax (5 per cent). These revenue sources represented 63 per cent of all government revenues collected in Alberta between 2007 and 2021 (Exhibit 2.2).

An important takeaway is that Alberta local governments can access only one of these ‘anchor’ tax tools – the real property tax. It leads to the fundamental problem outlined by the OECD – Canada, like some other OECD countries, does not have true fiscal decentralization. True fiscal decentralization requires municipalities to be fiscally autonomous, whereby they can decide how much revenue to raise and how to spend the available revenues.³⁸

Alberta legislation only affords municipalities access to real property taxes. Although the provincial and federal governments may be reluctant to grant the same level of diversified revenue sources, they should be willing to listen to calls for some of the additional revenue sources. At the highest level, there are three strategies for increasing municipal accountability through additional tax tools:

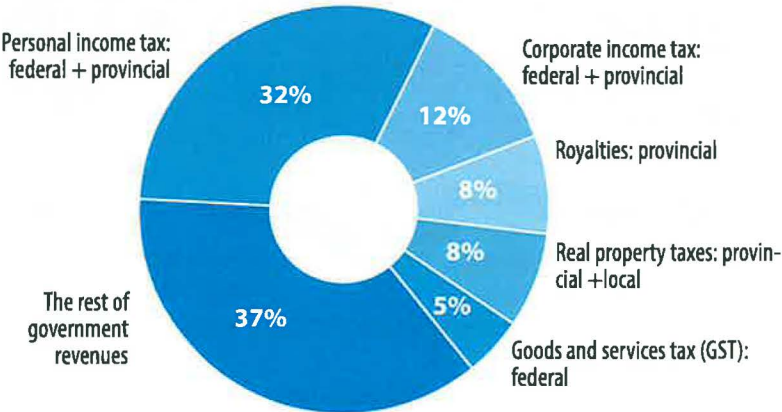
Exhibit 2.1
Primary Revenue Sources from Canadians (Distribution by Source)
(percentage share of accumulated revenue in 2007-2021)



Source: Statistics Canada. Table 36-10-0450-01 and custom data Table 18

Content: Main Tax and Revenue Sources for All Three Levels of Government in Canada

Exhibit 2.2
Primary Revenue Sources from Albertans (Distribution by Source)
(percentage share of accumulated revenue in 2007-2021)



Source: Statistics Canada. Table 36-10-0450-01 and custom data Table 18

Content: Main Tax and Revenue Sources for All Three Levels of Government in Alberta

S/n	Strategy	Description
1	Alternative Tax Revenue Tools Strategy	[Affording access to new taxation tools]: This is similar to the new taxation tools afforded to big cities in OECD countries, including Montreal, Toronto, Ottawa and Vancouver over the past 15 years.
2	Reduce Property Tax Constraints Strategy	[Easing constraints or rules on the existing tax tool]: The principal ones are balanced operating budget constraint on the municipal property tax.
3	Redirect Property Tax Revenue Strategy	[Redirecting tax revenue received by the province from municipalities back to municipalities]: Alberta municipalities collect and remit provincial property taxes that could be redirected partly or wholly to municipalities.

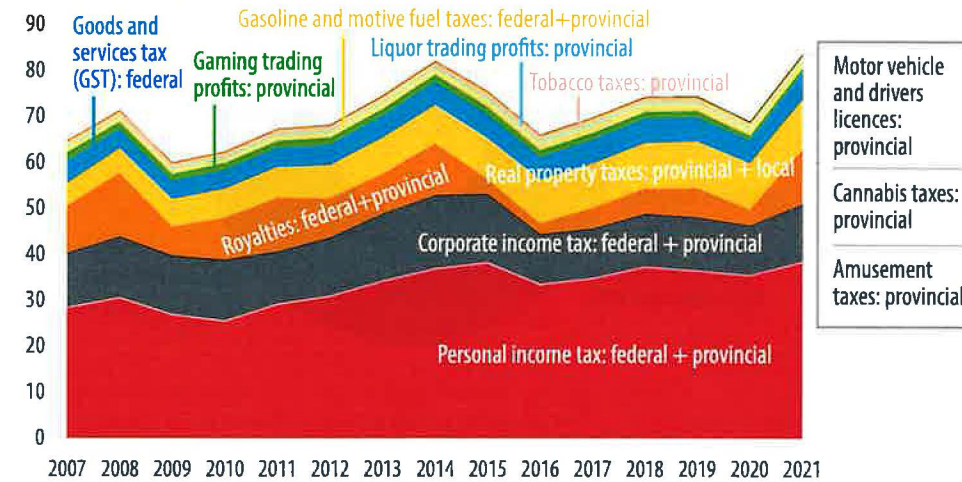
The primary challenge comes from determining the best approach to expanding fiscal autonomy by looking outwards to new tools (strategy 1) or looking inwards to the existing tool (strategy 2 or 3). There are costs and benefits associated with deploying these strategies. The societal costs are extensive (see section 2.2). There are also economic, institutional, and political costs to consider. Two economic costs that apply to all three strategies are – increased scope for tax evasion and predatory tax competition. They arise because families and businesses can move to neighbouring communities. The difference between the outward-looking strategy (strategy 1) and the inward-looking ones (strategy 2 or 3) is institutional and political costs. The institutional costs include: (a) setting up cost of collection and enforcement mechanisms, (b) securing financial and human resources to execute tax programs, and (c) the cost of expanded tax administration procedures. The political costs are more significant when affording municipalities additional revenue raising powers (strategy 1) that would likely lead to a preference for adjustments to the property tax regime (strategy 2 or 3).

Outlining the societal costs and benefits of the first strategy is very involved and covered in chapter three. The rest of this chapter focuses on the benefits and costs of the second and third strategies.

2.2 Result of reviewing the two property tax related strategies

Starting with the benefits, these two strategies increase The City’s revenue from real property taxes that have been helpful in two respects. First, real property taxes have been one of Alberta’s most stable revenue sources (Exhibit 2.3). They have the lowest volatility across all revenue sources available to all orders of gov-

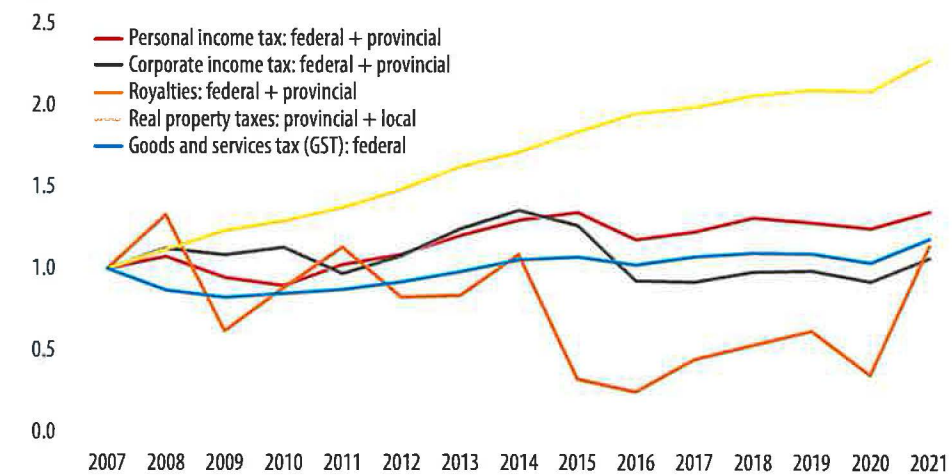
Exhibit 2.3
Primary Revenue Sources from Albertans (Long Term Trends)
(*\$billion, 2007-2021*)



Source: Statistics Canada. Table 36-10-0450-01

Content: Revenues by Sources of Taxes for All Three Levels of Government in Alberta

Exhibit 2.4
Alberta Municipalities have Benefitted from the Strength of Property Taxes
(*index: 2007=1, 2007-2021*)



Source: Statistics Canada. Table 36-10-0450-01

Content: Growth of Revenues by Sources of Taxes for All Three Levels of Government in Alberta

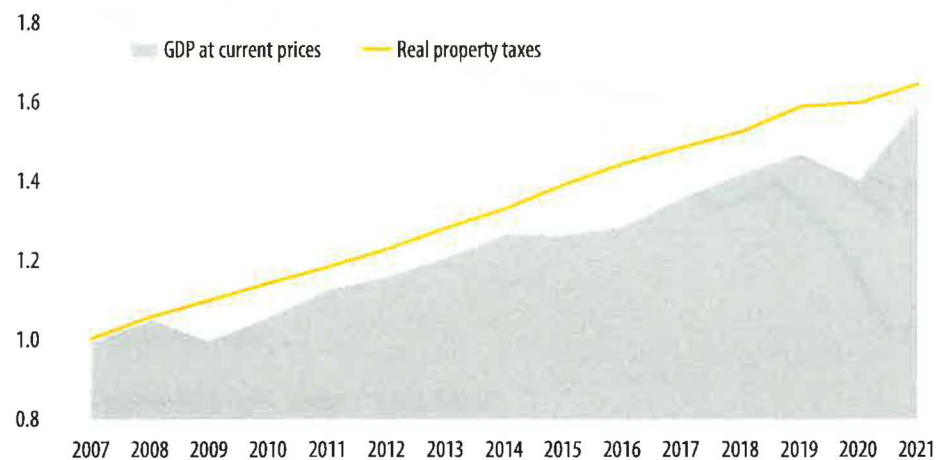
ernment from Albertans. This benefit is partly due to flexibility in the rate-setting process. Second, real property taxes have had the best growth rate of all revenue options available to the three governments from Albertans because they are not responsive to the economic conditions by design (Exhibit 2.4).

For the benefits attributable to increased reliance on real property taxes, there are several costs or disadvantages to taxpayers and their individual circumstances that ultimately outweigh the benefits. Five of these costs are common to both strategies and they are – (a) liquidity; (b) volatility; (c) regressivity; (d) visibility, and (e) vulnerability.

Liquidity is costly when it arises because individual property owners have tax amounts set for them as required by the property tax framework. Redistribution uses changes in property values as a reflection of wealth without considering taxpayer liquidity. Fluctuations in income do not affect a property owner’s obligation to pay real property taxes, as long as the person still owns the property. As a result, taxpayer criticism would increase, especially for property owners who experience reduced or lost income during recessions, even when they pay less or no income taxes.

Volatility (on a property driven by relative property value basis) is costly when it arises because of underlying volatility of the Calgary and Alberta economy. The total

Exhibit 2.5
Property Tax Policy Changes in Alberta have aligned with Economic Growth
(index: 2007=1, 2007-2021)



Source: Statistics Canada. Table 36-10-0222-01 and Table 36-10-0450-01

Content: Growth of the Overall Tax Base and Real Property Tax Revenues in Canada

value of property taxes is strongly correlated with economic activity as measured by GDP (Exhibit 2.5), but that masks underlying volatility for individual taxpayers. Following annual redistributions of tax responsibility, taxpayers can and do experience significant year-over-year shifts. For example, non-residential property owners outside downtown Calgary experienced significant property tax increases between 2015 and 2020, that were partly mitigated by one-time relief measures. Greater reliance on property tax will magnify volatility.

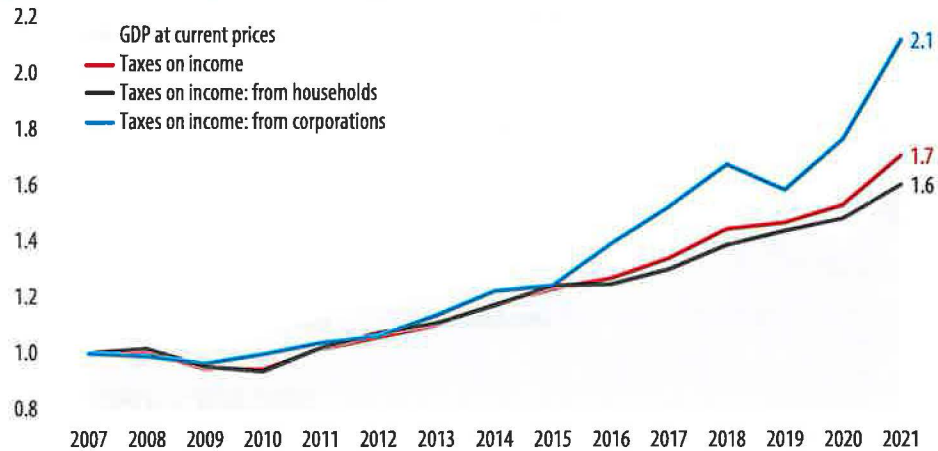
Regressivity (defined as taking proportionately more from those with lower income) is costly because the link between the amount of property tax paid and a property owner’s current ability to pay is indirect. If two individuals in the same tax jurisdiction live in properties with the same values, they pay the same amount of property tax, regardless of their incomes. Municipal expenditures generally increase with the growth of population and inflation in big cities like Calgary, so that when property taxes increase over time they exacerbate the costs for those individuals with high-valued properties but low incomes, especially retired seniors.

Visibility is costly because of the process of how property tax is collected and because the annual activity of setting property tax rates draws a lot of attention from residents. For example, income tax is automatically collected off one’s pay cheque. GST/HST tax is relatively small when one buys arguably mostly discretionary goods (groceries and rent are exempt from GST/HST). However, property tax is a very visible large payment independent of receiving income or part of a larger expense. In addition, for other taxes, tax policy changes occur relatively infrequently. That’s because most of those taxes, like the personal income tax, respond automatically to the level of overall economic activity (Exhibit 2.6). In contrast, any adjustments to property taxes are highly visible, which is why there is significant public resistance to property tax increases. City Councils in Alberta must have annual budget debates and make decisions according to their understanding of the demand for municipal services and taxpayers’ ability to pay. As a result, property owners are more aware of their property tax bills than their income tax payments deducted from sources, which put politically acceptable limits on raising property taxes for municipal purposes.

Vulnerability is costly for big cities because they usually exist in large metropolitan urban areas where residents and businesses can move to smaller neighbouring communities in the larger metropolitan area. These communities can afford to charge slightly lower taxes while benefitting from the advantage of their proximity to the big cities. In other words, raising property tax rates in big cities, to keep up with spending needs, above those of adjacent regional metropolitan areas can lead to “suburban flight,” which would reduce a municipality’s tax base and cause urban sprawl issues. It can also lead to property taxes paying for services that benefit, even partially, residents of other communities.

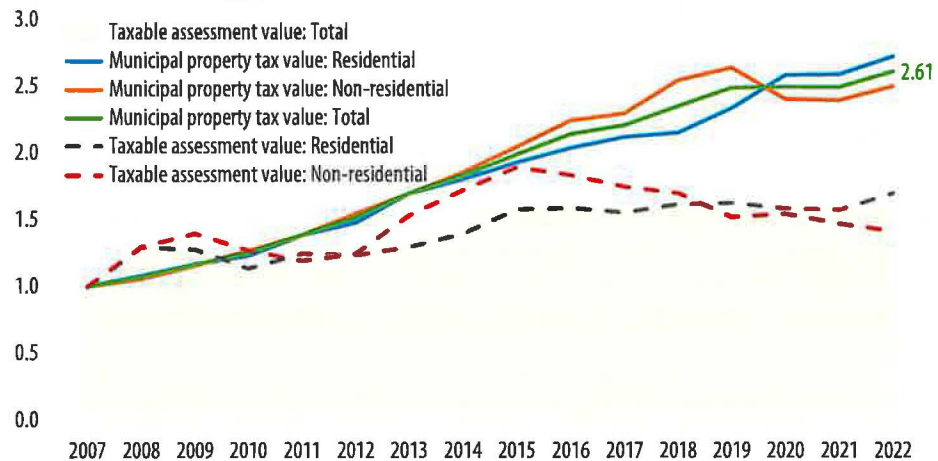
2. The Role of Alternative Revenue Sources to Close the Gap

Exhibit 2.6
Income Tax Policy Changes have aligned with Economic Growth in Canada
(but not Alberta) (index: 2007=1, 2007-2021)



Source: Statistics Canada. Table 36-10-0222-01 and Table 36-10-0450-01
 Content: Growth of Income Tax Base and Income Tax Revenues in Canada

Exhibit 2.7
Structural Property Tax Limitations Due to Weakness in the Tax Base
(index: 2007=1, 2007-2021)



Source: Assessment and Tax Business Unit, The City of Calgary
 Content: The City of Calgary: Growth of Assessment Value vs. Municipal Property Taxes



The reduce constraints strategy adds another cost – **Complexity**. The current approach to determining property taxes is bounded by two simple and easily understandable constraints – municipalities can generate revenue to meet operating requirements and they can collect revenue from taxpayers in line with underlying property values and the different tax rates applied to different property classes and subclasses. Removing these constraints risks the addition of complexity that taxpayers could find undesirable.

The redirect revenue strategy adds an additional cost – **Concentration**. Specifically, provinces in Canada often crowd out property taxes because the size of the increase in provincial property taxes affects the ability of municipalities to alter their municipal property taxes. Expanded access to real property taxes would increase the concentration of municipal revenue in a single tax tool, which is costly because the underlying assets (residential and non-residential properties) upon which real property taxes are based have increased at a much slower rate (Exhibit 2.7). Increasing the focus on real property taxes may generate negative sentiments about rate increases.



2.3 Overall net-benefit of strengthening municipal revenue capacity using the three taxation strategies

The central thesis of this report is that there is an opportunity to deploy all three strategies to achieve improved fiscal autonomy. Key to any proposed approach would strike the right balance across strategies to ensure the highest net benefits toward resolving vertical fiscal imbalance for The City. Specifically, there are net-benefits of a significant degree of autonomy for municipalities in deciding the level and composition of their own revenues. They are discussed in a recent OECD report and can be summarized as follows³⁹:

1. Provides greater certainty about resource availability thereby facilitating better budget preparation and reducing volatility in the execution of spending programs.
2. Promotes fiscal responsibility, which tends to be undermined by reliance on gap-filling transfers or other bailouts by other orders of government.
3. Facilitates the alignment of tax structure and design with local preferences.
4. Makes more visible to electorates the cost of municipal spending, thereby increasing local officials' political accountability and incentives to spend efficiently (provided that adequate transparency of their operations is ensured).

Alberta municipalities need alternative revenue sources and adjustments to real property taxes when required. Big cities like Calgary have broad tax bases outside real estate markets that only contribute to federal and provincial government revenues. The City has been under increased pressure from taxpayers to limit real property tax growth when the need for more funding for expanded expenditure responsibilities has ticked higher. To solve municipal revenue problems, the Government of Alberta should grant cities access to alternative tax sources, especially those that grow automatically with the economy. Access to tax sources other than real property taxes does not necessarily mean the municipal governments should create new types of taxes on top of existing taxes levied by the senior governments. Instead, municipalities would, in most cases, share the tax bases and the benefits of economic growth with the provincial government, creating a mix of taxes at the municipal level.

A mix of taxes would give municipalities more autonomy and flexibility to meet the local demand for municipal services and infrastructure investment. A mix of taxes would allow timely responses to the changing economic and demographic situations. A real property tax is unsuitable for funding income-redistributive services like social housing and social services. Other taxes based on the ability to pay are more appropriate.⁴⁰

A mix of taxes would be more appropriate to fund tax relief programs and build automatic stabilizers into the municipal tax system.⁴¹ For example, during recent recessions, Calgarians sought social assistance and tax relief from The City of Calgary. In response, The City used one-time savings and dipped into reserves to provide temporary property tax reliefs such as the Phased Tax Programs. Other revenue tools are more appropriate to fill the gap.

A mix of taxes would also offset distortions in local tax systems. For example, increases in real property taxes discourage investment in new housing units because of lower aggregate demand for housing. On the other hand, income taxes encourage investment in owner-occupied housing because of the capital gains exemption for principal residences. By having a few different tax sources to rely on, the distortions in one tax would counteract the distortions in other taxes.

2.4 The implementation pathway for closing the gap and fixing vertical fiscal imbalance

As previously outlined, one remedy to address vertical fiscal imbalance involves expanding revenue raising powers (rather than changes to intergovernmental transfers). Managing new municipal revenue tools involves institutional costs for the government with autonomy over the tool to determine the tax base, set the tax rate, and collect tax revenue. There are three channels to administer new municipal tax revenues, and each one of them balances institutional cost efficiency and municipal autonomy (Exhibit 2.8).

A *revenue-sharing agreement* affords no municipal autonomy. Through this channel or mechanism, municipalities piggyback onto the federal or provincial tax collection system *using a uniform rate of tax*. The federal or provincial government decides on the tax base and tax rate, not the municipalities. The uniform tax rate reflects a share of the federal or provincial government’s revenue to municipalities.

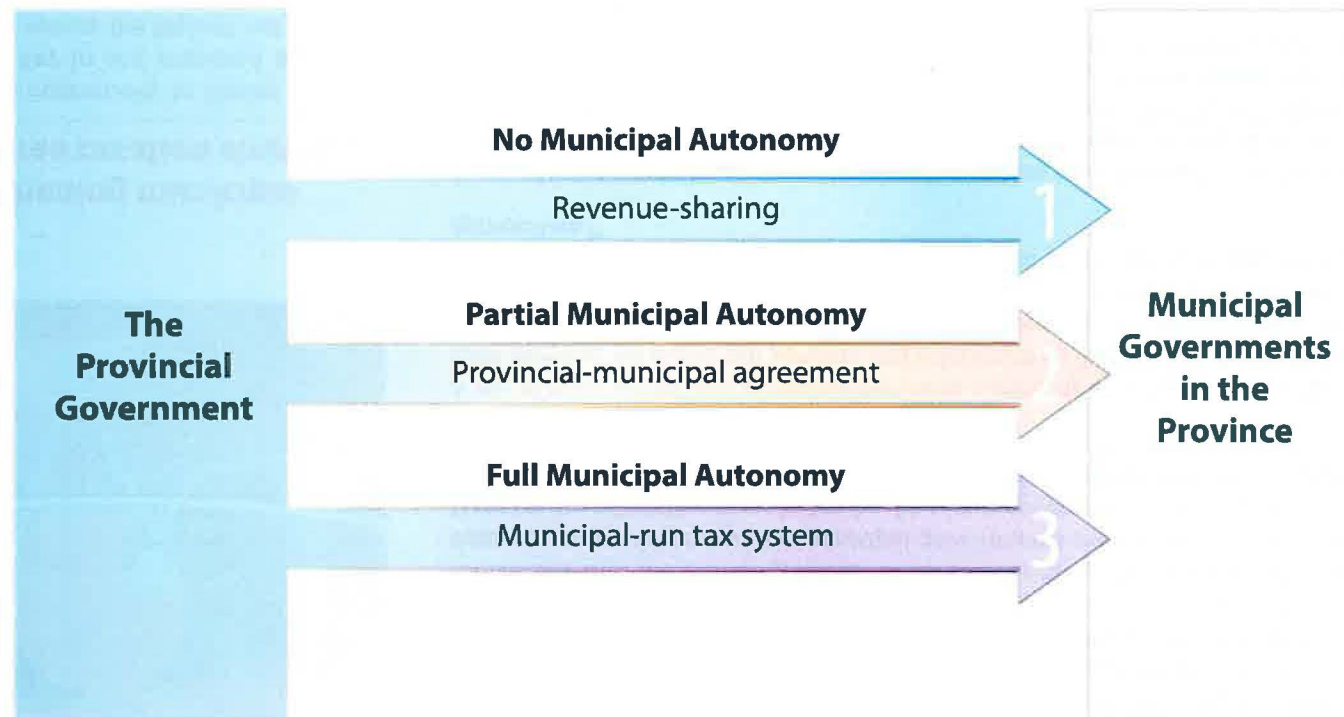
In essence, revenue-sharing is a type of intergovernmental transfer. It may be earmarked for a specific purpose or given to municipalities unconditionally. Many of the potential new taxation options for municipalities have equivalents at the provincial level. A revenue-sharing agreement could be possible for any provincial tax. All Alberta provincial taxes – personal income tax, corporate income tax, vehicle registration tax, accommodation tax, fuel tax, tobacco tax, alcohol tax, cannabis tax, and insurance premium tax – are potential candidates.

There are no direct revenue-sharing programs between municipalities and the Government of Canada, as the cities are creatures of their provinces, and the Constitution gives the provinces exclusive control over municipalities⁴².

Revenue-sharing arrangements between municipalities and their provincial governments are rare in Canada. However, there are long-standing precedents in Saskatchewan and Ontario⁴³.

- In Saskatchewan, the provincial government shares three-quarters of one point of its provincial sales tax with municipalities.⁴⁴ The shared revenue is equivalent to 12.5 per cent of Saskatchewan’s total provincial sales tax revenue. For urban cities and towns, the funds are allocated on a per capita basis, with towns receiving slightly more per capita. The allocation for rural municipalities is based on the size of the municipality’s road network as well as its population.

Exhibit 2.8
Three Channels for Administering New Municipal Revenue Sources



Source: *Corporate Economics, The City of Calgary*
Content: *Three Channels of Administering New Municipal Revenue Sources*

- In Ontario, the provincial government shares 2 cents per litre from its provincial gas tax with municipalities. The funds are earmarked to be used for capital and operating expenses of municipal transit systems.⁴⁵

By having the provincial government collect taxes through existing mechanisms and share them with municipalities, maximum administrative efficiencies could be achieved. However, municipal accountability to taxpayers would be diminished, especially if control over tax rates remained with the provincial government.

Compared to discretionary transfers, revenue-sharing is an improvement as it is enforceable and more predictable. However, the province can unilaterally change the amount of taxes it collects and the amount it shares with the municipalities without their consent, like any other intergovernmental transfers.

Under a revenue-sharing agreement, negative impacts on economic neutrality and economic growth would be lessened since tax competition between municipalities would be eliminated.

While revenue-sharing agreements would not give a municipality more autonomy over its revenue sources, they could provide more certainty for intergovernmental transfers. A provincial government may also be more likely to agree to a revenue-sharing system than grant additional revenue-generating powers to its cities.

A *provincial-municipal agreement* affords partial municipal autonomy. Through this channel or mechanism, municipalities piggyback onto the federal or provincial tax collection system using *tax rates set locally by municipalities*. The federal or provincial government decides the tax bases, collect the municipal portion of taxes on behalf of municipalities. Municipalities, on the other hand, choose their own tax rates based on their understanding of the local demand for municipal services and the taxpayers' ability to pay. The municipal portion of tax revenues is given to municipalities based on the calculation of tax base measurements multiplied by the municipally set tax rate where the tax was collected.

Provincial-municipal agreements give municipal governments partial autonomy over their revenue sources, providing more certainty in municipal planning and budgeting. Municipalities would be directly accountable to their taxpayers when setting up the tax rates. The cost is potential tax competition among cities – if people move out of a city because of the relatively higher local tax rates. However, tax competition could create an environment where cities become more efficient in the use of resources and more accountable to their citizens.

A *municipally run tax system* affords full municipal autonomy. New taxes could be municipally governed and collected independently of the federal or provincial government tax system. It means that municipalities collect their taxes, determine the tax bases, and set the tax rates. It also means recognizing that there is only one taxpayer and exercising care in applying new revenue tools. By doing so, municipalities have the flexibility to meet their specific economic and social contexts. Municipalities would be directly accountable to their taxpayers.

However, the biggest drawback of this system is the high institutional costs associated with the lack of economies of scale in tax collection at the municipal level. There would also be unavoidable tax competition among cities. In the end, the high administration costs may outweigh the potential benefits of increased revenues from new municipal revenue sources.

2.5 The case for big cities – drivers of change, underlying trends, and potent response

In recent years, three drivers of radical change are impacting large municipalities (so-called big cities). The first is *rapid demographic change*. There is a robust urbanization process in Canada. Over the last few decades, Canada has gone from mainly rural to very much urban. Calgary's been at the forefront.

The second is *heightened economic clustering*. Many years ago, there was a notion that the introduction of the internet would have everyone running their companies from their docking stations. That never happened. It didn't stay that way even when many thought it was happening during the pandemic. After the initial euphoria about remote work, people realized the importance of synergies and creativity from human interaction. So, from an economic perspective, large cities in Canada and the rest of the world are approaching city-state status. The locus of economic activity is becoming less at the provincial level (probably) and national level (definitely) than it was in the past.

The third is *expanded policy responsibilities*. Large urban areas have often taken on more policy responsibilities by default. Cities now need to make new policy contributions. It has been more of a creep than a dramatic change. From day to day, the policy domain of large municipalities has expanded into additional elements.

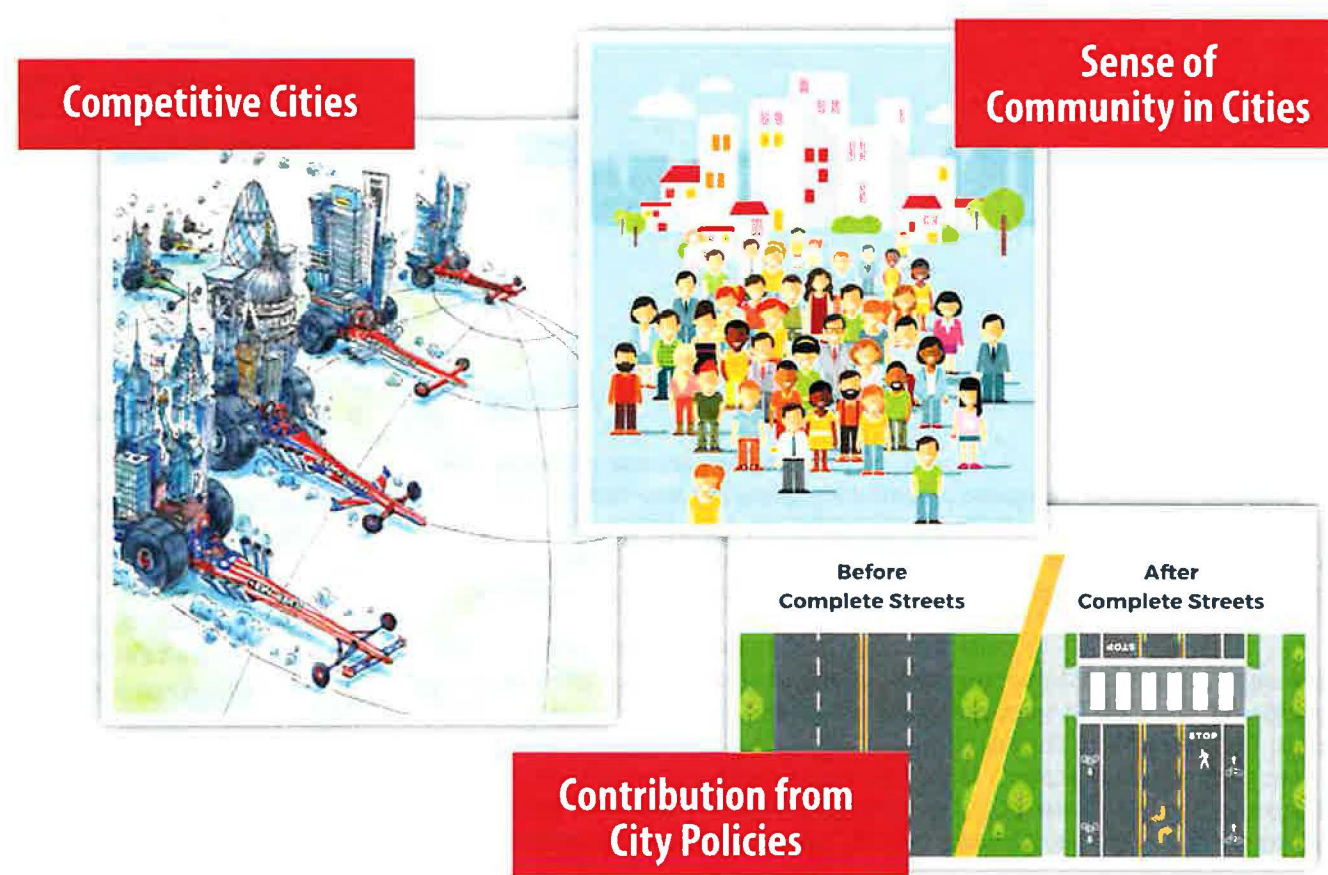
These changes have led to three overarching trends – *a greater sense of community, more competition, and higher expectations of the contribution of city policies* (Exhibit 2.9).

In the future, even if Calgarians' economic and social life were to continue in roughly the fashion of the past, The City of Calgary needs to address the imbalance between spending respon-

sibilities and funding opportunities urgently. The City needs to do so in a fashion that respects the increasing association residents feel with their city government – *that sense of community*. It also means that independence and accountability must be paramount.

However, Calgarians' economic and social life will not likely continue along the status quo but more likely to face significant transformation. Attempts to transition to net zero emissions, here and around much of the globe, will dramatically impact the natural resource sector Calgary is so aligned with. There could be a "happy ending,"

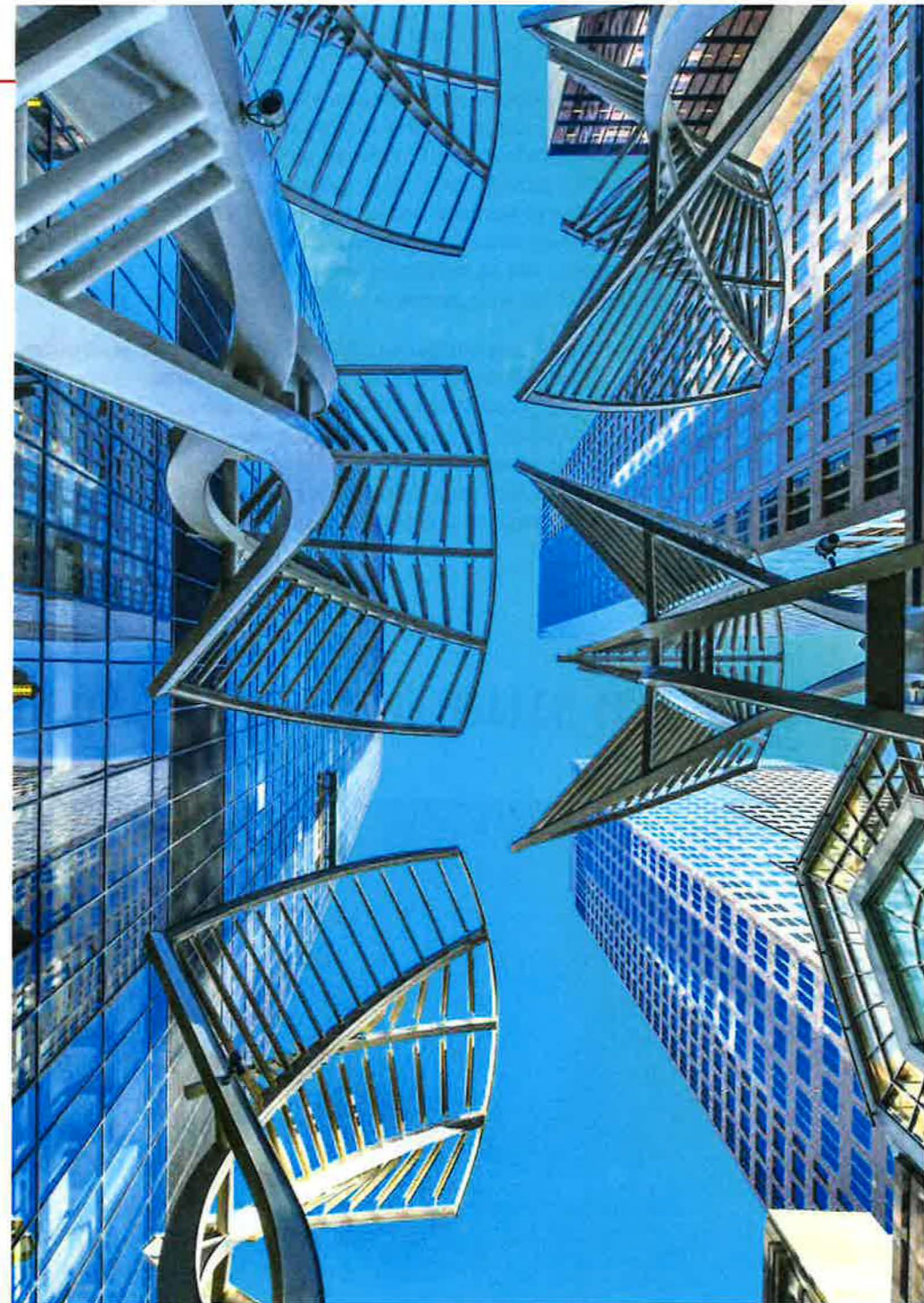
Exhibit 2.9
Underlying trends impacting all cities



where the net zero transformation creates new jobs.⁴⁶ But such a transformation requires heroic change with all the associated risks. Considerations include: Will there be leaders and leadership? Will the leaders take the risks? Will they get financing and funding? The need for leadership has led to the creation of Canada's Net-Zero Leadboard, adding a new layer of *competition between cities because that has typically spurred progress*.

Ultimately, even a “happy ending” will undoubtedly involve bumps along the road and extended periods of economic challenge. Note, for example, that the depression of Winnipeg housing prices during the 1990s adversely impacted local government funding through property taxes. The likely future challenges suggest an urgency to the task of reforming The City's funding framework. And as part of that reform, there is a need to build more than the usual buffers and reserves for a smooth pathway through the possible bumps and challenging times. The necessary funding reforms are long overdue. But better to start now, late, than never.

Beyond speed, there is a need for thoughtful solutions. Through the Toronto City Charter, Toronto gained access to new revenue tools that are helpful but generate limited funding (e.g., hotel taxes). Cities need more potent revenue sources allowing genuine policy contributions to challenges, including housing, addressing poverty and economic development. Ordinarily, cities should have no income re-distribution responsibilities (i.e., no de jure responsibility). However, cities increasingly have policy responsibilities that require re-distributing income (i.e., substantial de facto responsibility). Unfortunately, cities do not have sustainable funding tools for re-distribution in their toolkit. A tax point transfer as Calgary and Edmonton have effectively in the gasoline excise tax is potent but still leaves the municipality beholden to the provincial government because they could change the nature of it. As part of a revenue-sharing arrangement, a tax point transfer is a good starting point – cities like Calgary need other revenue sources. Cities have demonstrated spending and policy maturity – they ought to be rewarded with funding maturing too.





3

Brief Review of Emerging Developments in other Municipalities

3.1 Canadian municipalities are turning increasingly to user levies (which has limits)

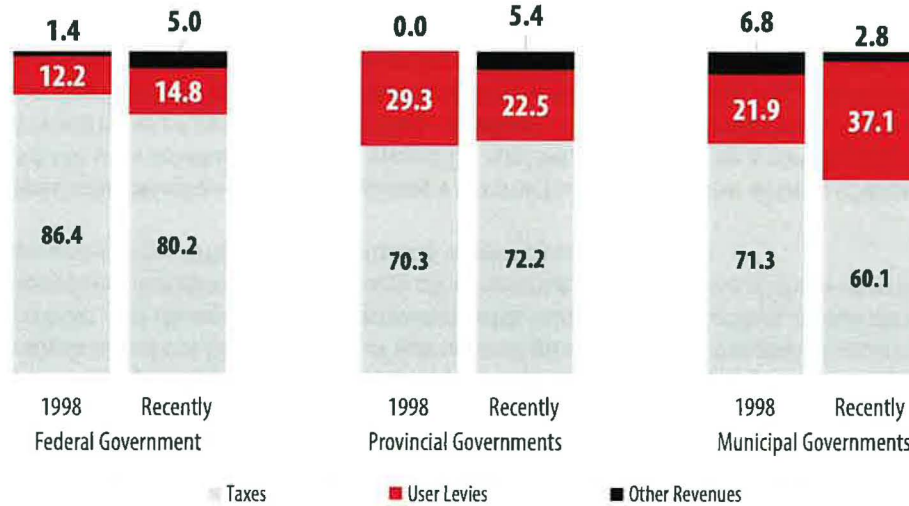
The received policy wisdom from economic analysis is that governments should raise revenue using funding tools that minimize distortions (i.e., minimize negative impacts on the normal functioning of market forces) and maximize fairness.⁴⁷

Charging user levies for municipal services sends price signals to the users, helping municipalities to achieve economic efficiency in allocating resources and avoid waste from oversupply. Calgary's municipal finance policies ensure that Calgarians and visitors to the city can enjoy the benefits of the services provided by The City. Taxes fully fund some services (e.g., roads). In contrast, others (e.g., recreational facilities) are funded through user fees (a category of user levies). Whether to charge full or partial user levies is determined by assessing the individual and community benefits. Services that benefit both the individual and society are partially tax-supported. While user fees fully fund those with only private (individual) benefits.

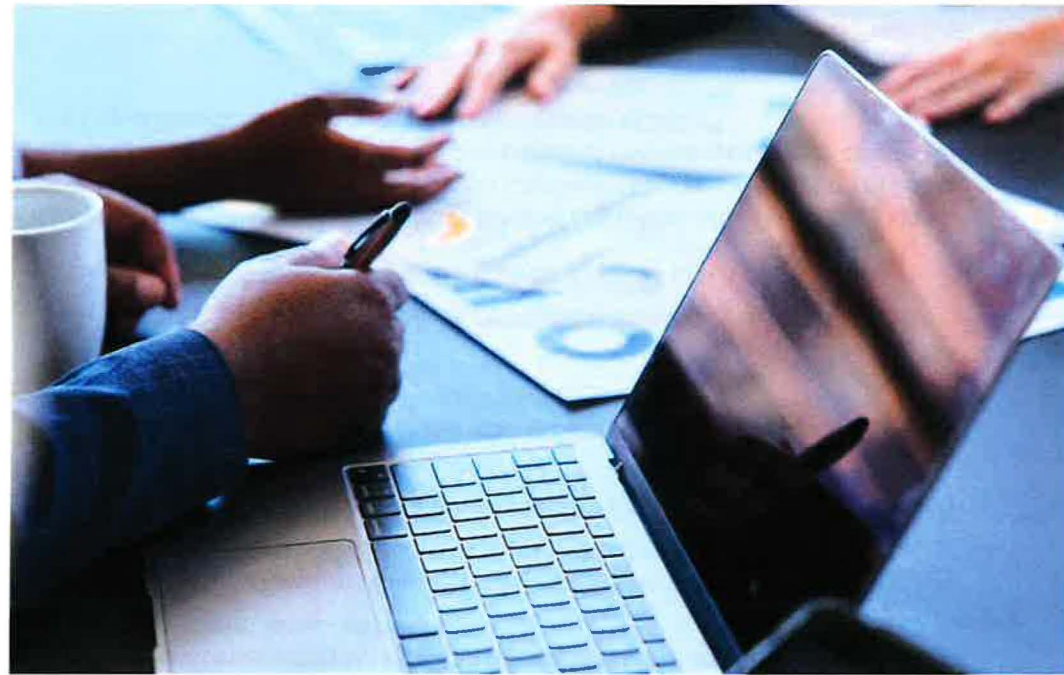
Over the last 25 years (from 1998 to 2023), the need for more revenue has motivated most Canadian municipal governments to look toward user levy funding tools because of limited success securing expanded taxation powers. Specifically, reliance on user levies across the more than 4,500 municipal governments in Canada increased from about 22 per cent of revenue in 1998 to about 37 per cent in 2021 (Exhibit 3.1). While user levies are excellent funding tools because they minimize distortions and maximize fairness, there are limits to the reliance on them as a funding tool.

The limits show up because most user levies focus on cost recovery. They are constrained as revenue sources by legal limitations for user fees and regulatory charges. The limits also show up in the declining reliance on user levies by the provincial and federal governments. It has moved in the opposite direction for Canada's ten provincial and territorial governments. They have reduced their reliance on user levies from 29 per cent in 1998 to 23 per cent in 2021. Although the federal government increased reliance on user levies as a revenue source from 12 per cent (1998) to 15 per cent (2021), the level of dependence is due to automatic adjustments because of

Exhibit 3.1
Canadian Municipalities have turned Increasingly to User Levies to Fill Gap



Source: Statistics Canada, Table 36-10-0222-01 and Table 36-10-0450-01



Canada’s municipal governments are raising more money from user levies. Provincial governments and the federal government have shifted to other own-source revenue tools.

demographic and economic change – two out of every three dollars of federal government revenue from user levies is from employment insurance and Canada Pension Plan premiums. Unlike municipalities, the provincial and federal governments are increasingly turning their attention to other sources of revenue beyond taxation and user levies.

3.2 The user levy focus is strongest in western Canada

Reliance on user levies is most substantial in the resource-rich western provinces of Alberta, Saskatchewan, and British Columbia. That’s because most of the revenue is attributable to the regulation and sale of resources. For example, municipalities in Saskatchewan and British Columbia benefitted from regulating and selling natural resources. They had the highest reliance on user levies in 2016 at 58 per cent and 45 per cent, respectively (Exhibit 3.2).

One reason for the significant reliance on user levies in Alberta is the introduction of substantial reforms to off-site levies, a regulatory charge. Provincial legislation has become more accommodating of the infrastructure funded by off-site levies. As a result, The City of Calgary recently introduced significant changes to off-site levies that boosted revenue. A second reason is the differences in the extent to which different jurisdictions use proprietary charges. They generate more revenue for municipalities in Western Canada, like Calgary that emphasize franchise fee revenue using dynamic market prices that lead to higher revenue flows during commodity market booms. In short, Calgary has relied heavily on user levies, and the time may be suitable to broaden the revenue considerations.

For those municipalities in non-resource-rich provinces, higher user levy revenue has been attributable to other types of proprietary charges (e.g., rents from social housing and proceeds from the sale of liquor) and regulatory charges (e.g., worker safety and compensation regime charges and the administration of different kinds of licensing)⁴⁸

“Although constrained as revenue sources by legal limitations, user levies provide valuable ways for municipalities to manage their proprietary interests and recoup costs municipalities could expand their use in novel ways.”

– Funding the Canadian City (2019),
 Edited by Enid Slack, Lisa Philipps,
 Lindsay M. Tedds, and Heather L Evans.

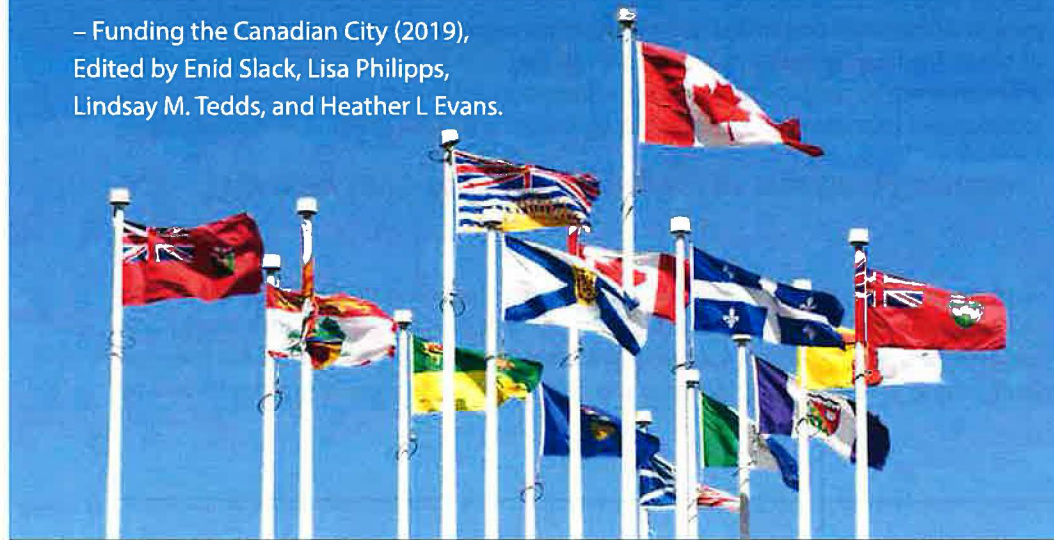
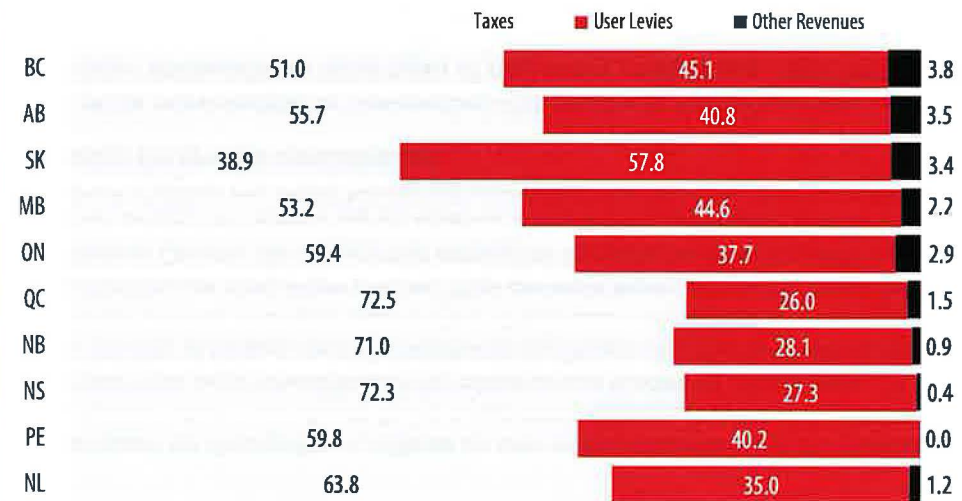


Exhibit 3.2
The User Levy Focus is Strongest in Western Canada



Source: Statistics Canada. Table 36-10-0222-01 and Table 36-10-0450-01

3.3 The key economic differences across categories of revenue

A common practice across municipalities worldwide, frequently captured in OECD analysis about the fiscal capacity of subnational governments, is the goal of securing a robust and diverse funding framework with revenue opportunities across three categories – taxation, user levies, and other revenue. That’s because all three revenue categories have different strengths and weaknesses (Exhibit 3.3).

Taxes raise revenue without requiring a connection between the activity charged and the uses to which the funds would be applied. There must be a connection for all three types of user levies - user fees, regulatory charges, and proprietary charges. User fees fund the provision of specific municipal goods or services, e.g., public transit. Regulatory charges are payments for a right or privilege granted by a municipality, e.g., off-site levies, fines, inspections, environmental protection, and licenses for pets or businesses. Proprietary charges represent a municipal government’s ability to exercise proprietary rights over its public property, e.g., revenue from leasing government property and franchise fees. Proprietary charges are desirable because they have all four desirable economic qualities for revenue sources.

Proprietary charges favour the four qualities listed below but are insufficient because they can only get you so far.

- **Economic Excess:** they act as a funding tool that allows exceeding cost recovery levels as market forces would allow.
- **Economic Effectiveness:** they allow the application of the revenue to any government spending activity to meet needs without restrictions.
- **Economic Equity:** they act as a funding tool for all beneficiaries of services without exceptions or exemptions.
- **Economic Efficiency:** they act as a pricing mechanism to moderate overuse and make it less likely for service demand to exceed supply.

3.4 Emerging alternative revenue sources for cities in Canada, the U.S., and other OECD countries

Many large Canadian cities face similar funding challenges and, like Calgary, are investigating options. For example, Toronto City Council approved a motion in February 2023 to have an updated review completed of revenue-generating options for the City of Toronto by no later than the third quarter of 2023:⁴⁹

Exhibit 3.3
Key Economic Differences Across Categories of Municipal Revenue

Contemporary Economic View of Major Municipal Revenue Categories		Economic "Excess" Acts as a tool that affords the opportunity to exceed cost recovery levels as market forces would allow	Economic "Effectiveness" Allows application to any type of government spending activity to meet needs without restrictions	Economic "Equity" Acts as tool that can be applied to all beneficiaries of services without exceptions or exemptions	Economic "Efficiency" Acts as pricing mechanism to moderate overuse and make it less likely for service demand to exceed supply
1. Taxes	Examples Property Tax, Land Transfer Tax	High	High	Low – Exemptions for orders of government, universities, etc.	Moderate – Taxes can alter demand but not as strongly as user levies
2a. User Levies [a. User Fees]	Public Transit Fares, Recreation Fees	Low (i.e., disallowed)	Low (i.e., not for general revenue tool or cross-subsidizing other services)	Moderate – Some groups are excluded for affordability reasons	High
2b. User Levies [b. Regulatory Charges]	Off-site Levies, Fines, Pet Licenses	Low (i.e., disallowed)	Low (i.e., not for general revenue tool or cross-subsidizing other services)	Moderate – Some groups are excluded for affordability reasons	High
2c. User Levies [c. Proprietary Charges]	Leasing Government Property, Franchise Fees	High	High	High – All groups are required to pay these charges	High
3. Other Revenue	Investment Income, Proceeds from asset sale	High	High	Moderate – Sometimes not associated with services	Low – These tools do not typically have behavioral implications

- Some Canadian provinces have recently allowed cities alternative revenue sources outside real property taxes
 - Quebec introduced a share of 10 per cent of the growth of the provincial sales tax for all cities.
 - Toronto, Montreal, and Halifax now have fully functioning municipal land transfer taxes.
 - Montreal has a commercial parking levy.
- In the U.S., many states allow cities to levy local general sales tax or local income taxes without restrictions on tax rates, revenue growth, or spending.

- In 114 of 150 central U.S. cities, local general sales taxes contribute 21 per cent of total tax revenues.
- 23 U.S. cities levy local income taxes, and, on average, they contribute 29 per cent of tax revenues.
- About 42 per cent of OECD countries permit local governments to levy income taxes as a source of revenue
 - Cities in the five Nordic countries were recently assigned healthcare, social services, welfare support and K-12 education tasks. It led to an expansion of reliance on local income taxes (>80 per cent of revenue).



4

Framework and Assessment of the Net Benefit of New Revenue Tools

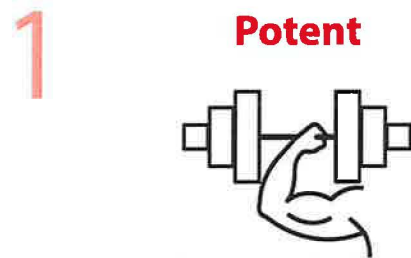
There is a body of evidence suggesting a higher level of ineffectiveness, inefficiency, and lack of accountability when the order of government responsible for spending funding is different from the government responsible and accountable for raising revenue. For example, a transit project run by a city but funded by the provincial

or federal government is more likely to have cost overruns if the provincial or federal government covers the excesses than if the municipal had to go to taxpayers or voters themselves. It is the most powerful justification put forward in economic analysis.⁵⁰

4.1 Framework for assessing net benefits of alternative revenue tools uses 12 criteria

In response to the economic justification, economic analysis has also identified a set of criteria to inform the selection of new revenue tools, given the plethora currently available in North America.⁵¹ This chapter reviews The City’s findings on the most

desirable revenue tools – the assessment assumes equal weighting across criteria. However, in practice, the choice of tools should reflect the specific situation. For cities like Calgary that are interested in potent revenue sources that can help address many funding needs, the potency criteria, the first of the 12 criteria summarized below, will have a weight higher than the other criteria. Here’s a summary of the 12 criteria.



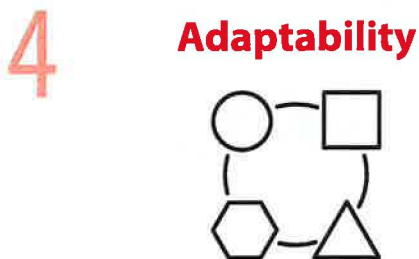
1 Potent
The primary purpose is to collect revenues to address the municipal fiscal gap. New revenue tools should be potent.



2 Fairness
Fairness means that the distribution of revenue responsibility is socially desirable. Describing a revenue option as fair is perception based. Measuring fairness relies on assessing equity.



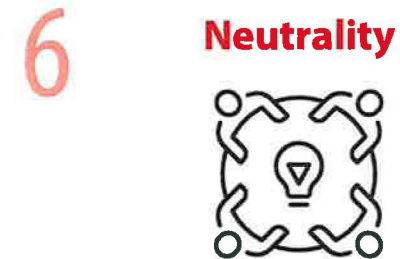
3 Reliability
The revenue options should have appropriate levels of predictability, stability, and reliability to enable the government and citizens to determine the timing and amount of revenues for collection.



4 Adaptability
It is desirable to build adaptability to the municipal revenue system by adding – (a) revenue diversity and (b) revenue options that respond quickly and countercyclically to economic conditions.⁵³



5 Efficiency
The addition of new revenue generation should not unduly impede or reduce the economy’s productive capacity.



6 Neutrality
Neutrality means that the revenue options should not unduly influence citizens’ decisions. Their decisions should reflect the economic merits of the associated activity.

7

Reinforcement



Governments sometimes wish to promote certain behaviours and discourage others, and revenue collections may support or impede this.

8

Inexpensive



The operating costs for assessing and collecting revenue should be minimized.

9

Simplicity



Simplicity means that the revenue collection amounts should be known in advance, the rules should be simple and easy to understand, and the amount owing should be easy to pay and easy to enforce.

10

Transparency



Transparency means the revenue information is highly visible and not hidden. Transparency helps to achieve accountability to citizens.

11

Accountability



Accessibility and visibility of the information on revenue collection laws and their development, modification, and purpose are necessary for citizens to hold governments accountable for their money.

12

Protection











Revenue collection administration must protect private information from all forms of unintended and improper information disclosure.

4.2 Tools related to property taxes, user fees and City assets

Overview and evidence from other jurisdictions

The content of the Financial Task Force recommendations called for the examination of some tools that are related to property taxes, user fees and City assets. Some of the tools were recently examined for applicability to The City as an individual tool and discussed below for comprehensiveness (per FTF recommendations); other tools, such as the Local Improvement Tax and Special Tax, were not included in this discussion due to the scope of the study. Nevertheless, we recognize the importance of them in funding gaps associated with new development. The following tools are evaluated using the 12 criteria discussed in Section 4.1:

Exhibit 4.1 Tools related to property taxes, user fees and City assets suggested by the FTF

	Revenue Tool	Revenue Category	Fundamental Changes Required for Implementation
1.	 Surtax on High-value Residential Properties*	Taxation	Easing property tax constraints
2.	 Non-resident Speculation Tax (NRST) and Property Speculation and Vacancy Tax (SVT)*	Taxation	Easing property tax constraints
3.	 Differential User Fees by Residency	User Levies	Pricing changes for different levies, fees, or fines
4.	 Differential Permit Fees using Application Processing Time	User Levies	Pricing changes for different levies, fees, or fines
5.	 Extension of Home Occupation and Non-resident Business Permits to Online Firms	User Levies	Pricing changes for different levies, fees, or fines
6.	 Differentiate Fines using Ability to Pay	User Levies	Pricing changes for different levies, fees, or fines
7.	 ENMAX Dividends	Other Revenue	Policy changes to increase revenue flow from assets
8.	 Revenue from Calgary Parking Authority Assets	Other Revenue	Policy changes to increase revenue flow from assets

Note: * Tools 1 and 2 need legislative changes in Alberta. Tools 3 to 8 can be implemented within The City's Authority.



1. Surtax on high-value residential properties

A surtax on property in specific value brackets is one step towards a more progressive property tax system. For example, a 0.2 per cent surtax could be set on dwellings valued above \$1 million, rising to 0.5 per cent on values above \$2 million, and 1 per cent on properties above \$3 million. A surtax of this nature implies an additional annual tax of up to \$2,000 on homes valued between one and two million dollars. Dwellings valued between \$2 million and \$3 million will be required to pay a surtax of up to \$7,000. According to data collected by The City of Calgary in 2022, the number of residential properties valued at \$1 million or more in Calgary stood at 17,101, and the average price on these homes was \$2.2 million. The potential revenue from a surtax to The City is estimated to be \$51 million.

Many global cities have explored making their property tax systems more progressive, relieving the burden on lower-income families while providing a revenue boost.

- Differential property tax rates by assessed value remain popular in Europe. Germany has a two-class progressive rate structure for single-family properties (in particular, a 0.26 per cent rate for properties valued at up to €38,347, and 0.35% above). Serbia has a progressive rate structure, ranging between 0.4 per cent and 2.0 per cent. Belgium has a property tax system in place that assesses second homes at 140 per cent of cadastral incomes.⁵³ Finland has differential property tax rates on residential buildings, ranging between 0.32 per cent and 0.75 per cent.⁵⁴
- Recognizing that the value of individual properties might not correlate with an owner's income, relief measures have also been put in place in most of these progressive structures to ease the burden on property owners. For example, properties up to 2.6 million Danish crowns in Denmark are subject to a 1 per cent tax (and 3 per cent for values above). However, lower rates apply to persons who owned their homes before 1998 and are older than 67 years. Portugal has also implemented a progressive property tax system that provides 4-to-8-year exemptions for low-income owners of high-value properties. Low-income owners of properties valued at less than €708 can be exempted entirely⁵⁵. These adjustments ensure the taxable pool comprises "income-rich and property-rich" owners.

A few Canadian cities have explored this tool as an additional revenue source for municipalities to finance their service responsibilities. In addition to reve-

nue generation, other benefits are discouraging speculative buyers on the market and dampening housing price escalations. The proposal could also raise the cost of vacant dwellings, increase supply on the market and provide more moderately priced dwellings. Recent experiences in Canada are:

- In 1993, the province of British Columbia (BC) withdrew a tax change proposal that included a more progressive property tax system, targeting “high-valued single residential dwellings.” The withdrawal resulted from concern about potential harm to senior citizens who lived in high-value properties but on fixed incomes.
- In 2018, the BC government reintroduced the idea of progressive property taxes or tax rates increasing with property values. Again, this received opposition due to concerns about “property-rich” lower-income individuals. However, in 2018, BC changed the provincial “school tax” to include two new property tax brackets – (a) properties valued between \$3 million and \$4 million pay a 0.2% surtax, and (b) properties valued above \$4 million pay an additional 0.4% surtax on the value above \$4 million.

To tackle the impact on “property-rich but cash-poor” owners such as senior citizens, these groups can defer this tax until the property is sold. In this way, the reform does not affect low-income homeowners with low-value properties, while low-income people owning high-value properties are exempted through the surtax deferral programs.

Alberta municipalities have limited tools to levy differential property taxes on properties beyond separate rates for residential, non-residential and farmland properties. Notably, in Alberta, cities can only impose a property tax rate on the total value of the property, which means a progressive tax structure similar to the income tax structure is not allowed. So even if differential residential rates were implemented through a sub-class, a higher tax rate based on property value would apply to the full value of a property, not just the amount above a set policy threshold.

If the Alberta Government were to expand municipalities’ taxing powers, a property-based surtax more similar to what is in place in Europe and BC could be possible. It is important to note that unless Council opted to increase required tax revenue by a certain amount, no additional fiscal capacity results from a sub-class as described above, and a sub-class otherwise results in a lower tax responsibility for the base residential class.

One factor to consider is the impact of significant changes in property assessments for a subset of property types. Calgary has recently experienced and continues to experience substantial changes across property types. Adopting the surtax for only residential dwellings may lead to (politically) unbearable changes in tax responsibility for individual taxpayers.



2. Non-resident Speculation Tax (NRST) and Property Speculation and Vacancy Tax (SVT)

In 2017, the government of Ontario imposed the *Non-Resident Speculation Tax (NRST)*, or Foreign Buyers Tax, a 15 per cent tax on specific foreign buyers of real estate. The NRST applies to all affected purchases that closed on or after April 21, 2017. The implementation of the NRST was in response to concerns about the over-heated housing market and rapidly rising prices. Effective October 25, 2022, the Non-Resident Speculation Tax (NRST) rate increased to 25 per cent.

British Columbia and Ontario governments have implemented Speculation and Vacancy Taxes (SVT) that targeted speculators and quickly helped turn thousands of empty units into homes for people, making housing more affordable for residents. In British Columbia, the speculation tax and the 2 per cent tax rate for foreign owners and satellite families are believed to have encouraged the return of about 20,000 condo units to the long-term rental market in Metro Vancouver⁵⁶.

Besides NRST and SVT, Vancouver and Toronto also levy city level empty (vacant) home taxes:

- First launched in 2017, Vancouver’s Empty Homes Tax is currently set at 3 per cent of a home’s assessed value and is intended to return empty or under-utilized properties to the long-term rental market. This program is credited with a 20 percent reduction in vacant properties between 2020 to 2021.⁵⁷
- Toronto’s new Vacant Home Tax was implemented in 2023, set at 1 per cent of a vacant home’s assessed value.⁵⁸

Although NRST and SVT are successful in Ontario and British Columbia, especially in big cities with housing supply shortages and escalating prices, these tools are not available in Alberta based on the current MGA.



3. Differential user fees by residency

Many non-residents of Calgary, including residents of neighbouring municipalities, do not pay the total cost of some municipal services received through user fees. That’s because most services are partly or wholly funded using property taxes. It makes sense to consider introducing a differential user fee by residency system to

improve fairness to Calgarians. For example, suppose the per capita cost of subsidizing a transit trip using property taxes is \$5.00, and a transit ticket is \$3.60 per ride. In that case, the actual cost is \$8.60 for residents versus \$3.60 for non-residents. The same idea applies to recreational facilities such as municipal parks, gyms, and art centres. Evidence from recent surveys of Calgarians indicates that many believe that visitors should pay higher user fees because of the property tax subsidy.

Several North American cities have explored using this approach motivated by the expected revenue increases:

- Greensboro (North Carolina) began a comprehensive differential user fee study in 2003 to achieve a fairer distribution of costs associated with services that benefited residents and visitors. The study identified three areas (parks and recreation, libraries, and cemeteries) where differential fees for use could be applied. Data gathered from this study showed nearly 39 per cent of Greensboro Public Libraries (GPL) users were non-residents of Greensboro. The GPL considered issuing cards to its users and charging non-residents \$35 to \$50 a year.
- The city of Tallahassee and Leon County (Florida) had a partnership in place that allowed Leon County to pay for recreational services offered to its residents by Tallahassee’s Park Recreational Department. Following the cancellation of the partnership, Tallahassee implemented a 50 per cent differential fee for non-residents of Tallahassee using utility billing codes and photo identification to establish proof of residency.
- Brantford (Ontario) released a 2020 report on non-resident user fees. The expected revenue impact reflected the percentage of non-residents using city services.

The explorations also identified potential negative implications of deploying residency-based user fee pricing:

- Greensboro determined that differential user fees for library services could lead North Carolina to reclassify the municipal libraries (meaning Greensboro loses state aid through valuable grants and resources) and reduced patronage (projected 33 per cent decline in the cardholders).



4. Differential permit fees using application processing time

The City of Calgary requires permits and licenses for construction and business activities within the municipality. City staff review various development and business

applications, ensuring they comply with the Alberta building code and City bylaw requirements, and the costs of development approval and business licensing are fully supported by permit and licence charges. The charges reflect a small share of the market value.⁵⁹

The City of Calgary received 21,000 building permit applications in 2021. In Calgary, permits for minor improvements are issued within 21 days, provided all necessary documents and information are submitted with the applications. This process may take as long as 56 days or more for larger projects, depending on the amount of information included with applications and the type of building project. Calgary’s processing times are about average relative to other big cities:

- On average, receiving a building permit in Toronto takes 5 to 20 days. The average processing time for complex building projects is about 30 days.
- Edmonton processing times for building permits also range from a week (for detached houses) to 21 days (for commercial buildings).
- In Vancouver, simple building permits sometimes require eight (8) weeks or more. Complex building permits could take up to eight (8) months.

Exhibit 4.2 Benefits of the Expedited Development and Building Option

Benefits To The City of Calgary	Benefits To Applicants/Citizens
<ul style="list-style-type: none"> ■ Lower expenses for The City due to faster processes and lower operational costs ■ Decreased incidents of illegal construction ■ Higher future property tax revenues due to faster project starts ■ Reduced climate and environmental risks ■ Higher license and permit revenues due to third price discrimination based on ability to pay 	<ul style="list-style-type: none"> ■ Affordable housing because of fewer costs associated with lengthy review processes being passed on to homeowners/renters ■ Higher time predictability in projects ■ Better accountability ■ Reduced time cost to developers

Source: Corporate Economics, The City of Calgary

Several cities in the U.S., including Los Angeles, Tacoma, Sacramento, and Fort Worth, have differentiated user fee models that reflect an expedited permit option in their service models.⁶⁰ The City of Calgary could also explore differential user fees based on processing time options. If applied, the expedited permit option could benefit both The City and the applicants, as illustrated in Exhibit 4.2.



5. Extension of Home Occupation and Non-Resident Business Permits to online firms

In today's digital economy, many firms and businesses operate in cities without a captured presence in non-residential property taxes. Ensuring all businesses are fairly priced for their uses of city infrastructure and services regardless of the method of operation is essential. Many cities have explored a 'catch-all' general licence category.⁶¹ For example, the city of Edmonton found that the enforcement of 'general' licences is quite challenging. Most home businesses are already regulated under specific professional agencies (i.e., accountants, lawyers, consultants), often affecting the rationale for City licences.⁶²

In Calgary, there are currently two business licence categories for home businesses. Still, many home-based businesses are not included in business licensing if regulated by another government-approved agency (e.g., accountants, lawyers). Home Occupation Class 1 businesses currently have no charge in applying for a permit. A Home Occupation Class 2 business permit costs \$457 in 2022, representing a drop from 2021 (\$481).⁶³



6. Differential fines using ability to pay

In North America, fines are imposed based on the severity of the offence without consideration of the ability-to-pay of offenders. Low-income offenders have incurred large debts due to an inability to pay, often leading to jail time and stiffer fines - a vicious cycle. In contrast, day-fines systems (or fine systems based on the income of offenders) are popular in Europe, including Finland, Germany, Sweden, and Austria.⁶⁴ There are strong economic arguments in support.⁶⁵

Fines for municipal bylaw offences could be set at a high level by default, and guilty persons could opt to prove their income to qualify for a discount. Extending this to traffic offences would require provincial involvement. Between 2016 and 2020, The City of Calgary collected an annual average of \$89 million in fine revenue (2.3 per cent of revenue). Assuming a day-fine system, and an average increase of 5, 10, or 20 per cent, the increased revenue assuming no behaviour change is \$4 million, \$9 million, and \$18 million, respectively.



7. ENMAX Dividends

ENMAX's annual dividend to The City dates back to the late 1990s. Before the establishment of ENMAX, its forebearer, the City of Calgary Electric System (CCES) contributed to The City's general revenues through a Tax on Utility Revenue and a dividend. Today, ENMAX pays only annual dividends to The City of at least 30 per cent of its net earnings or \$30 million, whichever is higher under the current dividend practice.

Over the 23 years from 1999 to 2021, The City of Calgary received a cumulative sum of \$1.1 billion in dividends from ENMAX⁶⁶. Between 2009 and 2021, the annual dividend to The City ranged from \$40 million to \$67.5 million despite faster population growth and local inflation in Calgary. Good governance practices require policy review and adjustment every three to five years. Policy reviews and adjustments are more relevant now that ENMAX has changed size, business models, asset bases, operations, and risk exposure over the past 23 years. One of the most notable recent changes for ENMAX was its 2020 acquisition of Versant Power (formerly Emera Maine).

Following the original Financial Task Force recommendations in 2020 and before this mid-2023 update, significant work has occurred to review City assets including broader governance reviews of ENMAX. There are positive early signs, with the 2022 dividend coming in at \$82 million. Studies show that more work is needed.⁶⁷



8. Revenue from Calgary Parking Authority Assets

The Calgary Parking Authority (CPA) operates municipally owned on-street and off-street parking facilities throughout Calgary. It had a different reporting structure before becoming a City division on December 19, 2022.

The financial return policies implemented in 2011 required the CPA to transfer to The City: (a) 100 per cent of net revenues from enforcement, and (b) the greater of 65 per cent, or \$11 million, of net CPA revenues. The CPA met or exceeded the minimum requirement every year between 2011 and 2021. However, in recent years, revenue from parking and sales other than fines and penalties have struggled. It declined from \$61.3 million in 2017 to \$60.7 million in 2018 in the recovery phase after the 2015-16 recession, dropping further to \$36.1 million in 2020 and \$32.7 million in 2021 due to the pandemic.⁶⁸

Faced with these revenue challenges, the CPA made concerted efforts to reduce operating costs. Its total expense declined from \$63 million (2016) to \$54 million (2018) and further to \$48 million (2021). Integrating the CPA into The City is estimated to provide further savings of about \$20 million over the next ten years.

The new (digital) economy has disrupted the business model. The upswing in digitally enabled ride-sharing services (e.g., uber), food delivery services (skip the dishes), remote work, and other manifestations of the new economy have changed people's behaviour. The overall demand for parking has declined (potentially permanently). However, Calgary continues to boast some of North America's most expensive downtown parking, just behind New York and San Francisco (in February 2023). The CPA also manages The City's land in downtown, Kensington, Beltline, and Inglewood areas, around LRT stations and near schools. A review of the best use of those lands may yield opportunities.

Assessed using the evaluation criteria

Broadly speaking, six of the eight tools generate similar net benefits and are good candidates for consideration. Two of them – differential user fee by residency and differential fines by the ability to pay – are an order of magnitude lower (Exhibit 4.3).

Two tools depend on the ability to ease property tax constraints

A surtax on higher-value residential properties and the Non-Resident Speculation Tax (NRST) or Speculation and Vacancy Tax (SVT) are the two tools that rely on easing constraints related to property taxes. While surtax can help cities move towards a more progressive property tax system with the objective of sustainable revenue generation, the NRST or SVT aims to address housing supply and affordability by changing property owners' behaviours with a short- to medium-term revenue-generating benefit.⁶⁹ With respect to examples, the City of Vancouver has a surtax in place. The NRST or SVT is in place in Ontario and BC.

As of today, Alberta does not have these tools in place. Given the recent surge in affordability challenges in Calgary (and elsewhere in Alberta), there may be a future need for these tools, especially when considering immigration and housing availability projections for the next few years. The analysis conducted here then becomes a valuable starting point for further costs and benefits assessment and potential tool deployment.

Four tools depend on pricing changes for different levies, fees, and fines

Four tools were considered, namely: (a) differential user fees by residency, (b) differential permit fees by permit processing time, (c) extension of home occupation and non-resident business permits, and (d) differential fines by the ability to pay. Executing pricing changes will need to rely on the identification of the appropriate differential pricing strategy:









- Pricing based on location could apply to differential user fees by residency.
- Charging different prices according to demand volumes could apply for differential permit fees.
- Amenity-based pricing could apply to the extension of home occupation permits.
- Pricing based on customer class could apply to differential fines.

There is diversity in the areas where these tools are most beneficial (Exhibit 4.4). For example, the extension of home business licensing promotes fairness and equity,

Exhibit 4.3
Tools related to property taxes, user fees and City assets do not fare well on the evaluation criteria

Scoring Guide:

■ Strongly Aligned
 ■ Partially Aligned
 ■ Weakly Aligned

		Potent	Fairness	Reliability	Adaptability	Efficiency	Neutrality	Reinforcement	Inexpensive	Simplicity	Transparency	Accountability	Protection
1.	 Surtax on High-value Residential Properties*	Weakly Aligned	Strongly Aligned	Weakly Aligned	Weakly Aligned	Strongly Aligned	Weakly Aligned	Strongly Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
2.	 Non-resident Speculation Tax (NRST) and Property Speculation and Vacancy Tax (SVT)*	Strongly Aligned	Strongly Aligned	Weakly Aligned	Weakly Aligned	Strongly Aligned	Weakly Aligned	Strongly Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
3.	 Differential User Fees by Residency	Weakly Aligned	Partially Aligned	Weakly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Weakly Aligned	Weakly Aligned	Weakly Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned
4.	 Differential Permit Fees using Application Processing Time	Strongly Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
5.	 Extension of Home Occupation and Non-resident Business Permits to Online Firms	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned
6.	 Differentiate Fines using Ability to Pay	Partially Aligned	Weakly Aligned	Weakly Aligned	Weakly Aligned	Weakly Aligned	Weakly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned
7.	 ENMAX Dividends	Strongly Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
8.	 Revenue from Calgary Parking Authority Assets	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned

Note: * Tools 1 and 2 need legislative changes in Alberta.
 Tools 3 to 8 can be implemented within The City's Authority.

Source: Corporate Economics, The City of Calgary

while differential fines by the ability to pay fosters accountability. One assessment element common to both is the significant administrative burden from implementation – a lot of work would need to go into ensuring that the terms and scope are clearly defined and understood by those making the payments. There are also efficiency considerations – these tools might incentivize businesses to relocate or impede the competitiveness of small/start-up businesses.

Two tools suggested by the FTF require policy changes to increase revenue flow from assets

The ENMAX group of companies is 100 per cent owned by the City of Calgary. Like any prudent investor with 100 per cent voting rights, it is up to the City of Calgary to influence ENMAX’s strategic direction and objectives to support returns. Over the last ten years, ENMAX has generated the lowest return on equity across all regulated utilities in Alberta. Achieving better returns would benefit The City.

The Calgary Parking Authority is now a part of The City of Calgary’s Transportation Department. Integration into The City’s reporting structure allows a more inclusive, system-wide approach to parking in Calgary and the deployment of assets, including prime lands, in a manner that generates optimal returns for The City.

4.3 Additional tools beyond Calgary’s authority

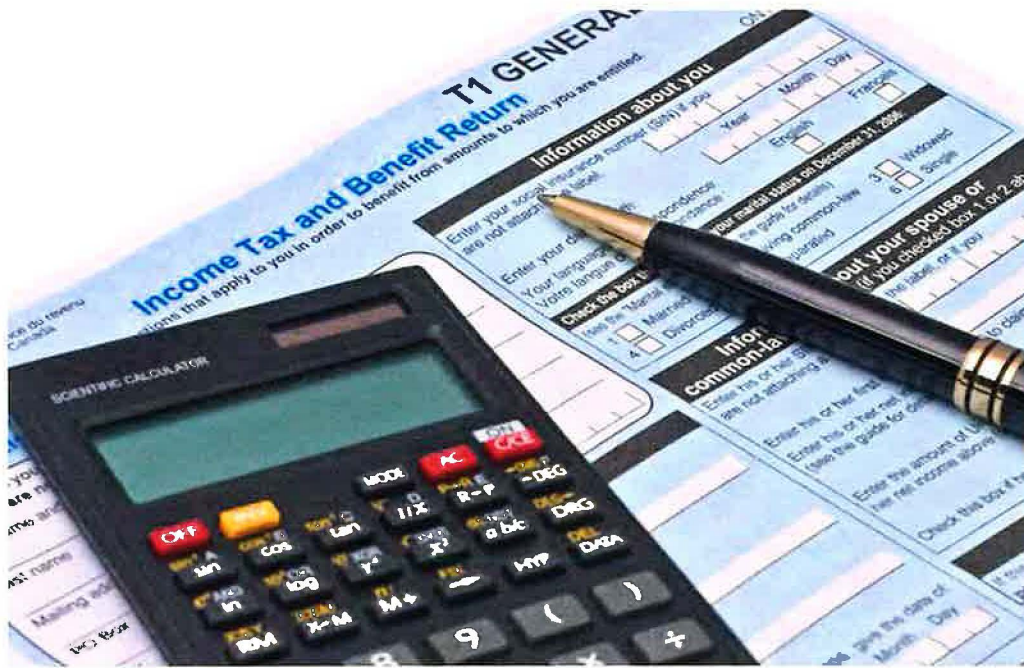
Overview and evidence from other jurisdictions

The content of the Financial Task Force recommendations called for the examination of seven categories of tools that are beyond The City’s existing legislative authority. The tools are:

**Exhibit 4.4
Additional tools that will need legislative change**

Revenue Category	Revenue Tool
I. Taxation – Taxes on Income	9. Personal Income Tax 10. Corporate Income Tax
II. Taxation – Taxes on Production	11. Real Property Tax: Discontinuation of Provincial Property Tax Collection 12. Occupational Privilege Tax 13. Road Pricing 14. Advertising Tax 15. Telecommunications Franchise Fees
III. Taxation – Taxes on Products	16. Municipal General Sales Tax 17. Accommodation Tax 18. Parking Tax 19. Fuel Tax 20. Tobacco Tax 21. Amusement Tax 22. Land Transfer Tax 23. Alcohol Tax 24. Cannabis Tax 25. Gaming Revenue
IV. Taxation – Current Transfers from Households	26. Vehicle Registration Tax 27. Insurance Premium Tax
V. Taxation – Taxes on Non-renewable Resources	28. Royalty Revenue 29. Carbon Tax
VI. Taxation – Taxes related to the New Economy	30. Cloud Computing Tax 31. Digital Sales Tax 32. Ridesharing Tax 33. Digital Amusement Tax 34. Online Marketplace Accommodation Tax 35. Tax on Shared Mobility Services 36. Autonomous Vehicle Registration Tax
VII. User Levies – Levies related to the New Economy	37. Monetization of City Data as an Asset 38. Investing in Digital Connectivity Infrastructure 39. Regulatory Charges for 5G Infrastructure

Taxation – Taxes on Income



9. Personal Income Tax

Tool Description and Calgary Context

Personal income taxes in Canada are currently levied as a percentage of personal incomes by the provincial and federal governments and based on the place of residence. Revenues from personal income taxes in 2021 were \$183 billion for the Canadian Government and \$128 billion for all provinces, accounting for 47 per cent and 23 per cent of total revenues for the two orders of government in Canada, respectively. Although some Canadian municipalities (excluding Calgary) levied income taxes before World War II, they have not been allowed to do so since 1941.⁷⁰

Precedents in Other Jurisdictions

The U.S. has many examples of municipal income taxes, with over 3,800 municipalities levying income taxes of different varieties in 17 states, particularly in the north-eastern part of the country.⁷¹

Philadelphia (Pennsylvania) has the longest-standing and highest local income tax in the U.S., taxing residents and non-residents for wages earned. Residents pay taxes regardless of where they earn wages. Non-residents only pay tax on wages earned in Philadelphia. Philadelphia has a tax rate of 3.8 per cent on earned income for residents and 3.4 per cent for non-residents. Income taxes made up 33 per cent of Philadelphia's total revenues in 2020.⁷²

There are other variations: Detroit (Michigan) taxes residents and non-residents at different rates. Municipalities in Kansas apply local income taxes only on interest and dividend income. Beyond North America, municipal income taxes are also prominent in many European countries.

Analysis emphasizing notable elements of evaluation criteria

The assumption of a 10 per cent surcharge on provincial income taxes can be used to estimate the potential revenue that a municipal personal income tax could generate. Using the city's population share and personal income tax revenue for the provincial government, the municipal income tax generated would have been \$420 million in 2021.

A municipal income tax would have a large tax base relative to other types of taxes. It would grow at the same rate as the real economy plus inflation. Between 2007 and 2021, Alberta's nominal GDP grew by 43 per cent, and personal income taxes increased by 51 per cent. Personal income taxes are typically progressive, and those more able to pay contribute more. However, income tax revenues would fluctuate with business cycles. As a result, it is less predictable than real property taxes.

The tax base for a personal income tax in Canada uses an individual's place of residence, which is challenging to change in the short term. As a result, a new municipal income tax would likely have minimal distortionary effects in the short term. In the long run, employees could look for work in other cities without municipal income taxes, negatively affecting the local economy. Another net-benefit is that taxing higher-income individuals at higher rates is progressive and fair.

Taking tax points from the provincial and federal government system or adding a surcharge to their design, and working alongside the Canada Revenue Agency, would make implementation inexpensive and straightforward relative to setting up an independent municipal tax system. According to a study conducted for the City of Toronto, administration costs for a municipal income tax could be in the range of 1.5 per cent of total revenues collected.⁷³

Taxation – Taxes on Income



10. Corporate Income Tax

Tool Description and Calgary Context

Corporate income taxes are applied as a percentage of the taxable income of businesses. Canada's federal and provincial governments (and no municipalities, including Calgary) levy corporate income taxes based on the location of businesses. Total corporate tax revenues in 2021 were \$70 billion for the Government of Canada and \$47 billion for all provincial governments in Canada. For both the federal and provincial governments, revenues from corporate income taxes accounted about 37 to 38 per cent of their total tax revenues from personal and corporate incomes combined in 2021.

Precedents in other jurisdictions

Municipal corporate income taxes are a revenue source in some U.S. cities. However, they are rarer than municipal personal income taxes. There are three noteworthy examples:

- Detroit (Michigan) imposes a 2 per cent income tax on corporations.⁷⁴
- Philadelphia (Pennsylvania) levies a tax on corporate income and receipts tax, collecting \$1.414 per \$1,000 on gross receipts as well as 5.99 per cent on taxable net income.⁷⁵
- New York City (New York) imposes taxes vary according to the type of business, ranging from 4.425 per cent for certain manufacturing corporations to 9 per cent for financial corporations.⁷⁶

Income taxes (including personal and corporate income taxes) make up over 80 per cent of all local tax revenue (excluding non-tax revenues) in Denmark, Iceland, Finland, Luxembourg, Norway, and Sweden.⁷⁷ Indeed, 97.5% of local tax revenues in Sweden came from income taxes in 2016.

Analysis emphasizing notable elements of evaluation criteria

A municipal corporate income tax could be a relatively large revenue source for The City. A rough estimate of potential corporate income tax revenues for The City of Calgary can be constructed from the total corporate income tax revenue collected by the province.⁷⁸ In 2021, if The City had imposed a corporate income tax rate of 1 per cent, it would have generated estimated revenues of \$170 million. Given Calgary's high concentration of corporate headquarters, the potential revenues could be even higher than this rough estimate.

Corporate income tax revenue would be very volatile. Not only is the corporate income tax base unstable, but it is also mobile. Businesses could use accounting maneuvers to shift the location of corporate profits without significantly altering physical business operations. A municipal corporate tax could also reduce business investment in Calgary, which would have significant adverse effects on the local economy.

The corporate income tax would satisfy fairness from the ability to pay perspective since the largest and most profitable businesses would pay the most tax.

A municipal corporate income tax could face some complexities concerning the definition of taxable income and would create administrative costs if administered by municipalities. Tax credits or deductions could be used to support behaviour-modifying incentives but would further increase administrative complexities. Like the personal income tax, piggybacking on the provincial or federal corporate income taxes could be a way to reduce administrative costs.

Taxation – Taxes on Production



11. Real Property Tax: Discontinuation of Provincial Property Tax Collection

Tool Description and Calgary Context

Canadian municipal governments levy real property taxes as a percentage of the assessed property value for the municipal and (typically) provincial governments. The City of Calgary collects real property taxes for municipal purposes and on behalf of the Government of Alberta to cover some education costs. In 2022, The City of Calgary collected over \$772 million in real property tax revenue for the province. It was 27 per cent of property taxes from residential and non-residential properties in Calgary. The Government of Alberta uses its share to fund the kindergarten to Grade 12 education system.

While municipal fiscal imbalance leaves The City of Calgary with a funding gap leading to a reliance on provincial government transfers, at the same time, the province is crowding out the property tax capacity, the primary source of revenue for The City (and only taxation tool). As the provincial property tax represents a substantial component of the total property tax bill, removing some or part of it would allow The City to step in without changing taxpayer responsibility.

Precedents in other jurisdictions

The province of Newfoundland and Labrador does not collect provincial property taxes. In that province, general provincial revenues continue to fund education after the removal of the business property tax and individual poll tax for education in 1992.⁷⁹

The province of Manitoba is currently in the process of phasing out provincial education property taxes. While locally set and collected school property taxes currently contribute to funding education in Manitoba, the provincial government is exploring a new model where kindergarten to Grade 12 education gets fully funded from provincial general revenues. While school property taxes are still in place today, the Government of Manitoba offered property owners a 37.5 per cent rebate on education property taxes in 2022, with a more significant rebate of 50 per cent expected for 2023.⁸⁰

Analysis emphasizing notable elements of evaluation criteria

Discontinuation of provincial property tax collection, or municipalities' full access to the real property tax, would provide The City of Calgary with the increased ability to cover the increasing cost of providing municipal services using property taxes. Given the need for fiscal autonomy, it is reasonable because Council can set the total tax rate based on the cost of municipal services and economic conditions. It would significantly improve government accountability. The City would be the only one to set the total tax rate for residential and non-residential properties. It would also increase transparency to taxpayers as there would be direct links between property taxes paid and municipal services received from The City. Many taxpayers believe they only pay real property taxes to The City of Calgary despite various efforts to clarify that the municipality and province receive the revenue.

The drawback of relying more on property tax is that there are better sources to fund income redistributive programs. Property tax does not directly relate to a person's current ability to pay like income tax. The City already has an efficient assessment and taxation department to assess the tax base and years of experience setting real property tax rates.

Taxation – Taxes on Production



12. Occupational Privilege Tax

Tool Description and Calgary Context

An occupational privilege tax is a special case of a payroll tax. Rather than being calculated as a percentage of earned income, a fixed amount per employee is required to be paid by employers each month. However, exemptions for low-income employees may be applied.

Payroll taxes in Canada are levied by the provincial level of government in some provinces (Ontario and recently BC) but not in Alberta. Revenue from payroll taxes totalled \$18 billion in 2021 for all provinces. That's about 14 per cent of taxes on personal incomes at the provincial level governments in Canada. A municipal level occupational privilege tax for The City of Calgary would be difficult to implement as the province does not have the tax collection system.

Precedents in other jurisdictions

In the U.S., some municipalities in Colorado, Pennsylvania, and West Virginia generate revenue from occupational privilege taxes.

In Denver, Colorado, employers and employees are subject to occupational privilege taxes. A tax of \$5.75 is withheld per month for each employee working in Denver. At the same time, businesses must also pay \$4.00 per month per taxable employee.⁸¹ The tax only applies to workers earning at least \$500 in monthly compensation.

A City Service Fee of \$5.00 per week is imposed in Huntington, West Virginia, so that an employee may be taxed up to \$260 per year.⁸² Most Pennsylvania municipalities with an occupational privilege tax (known as a local services tax) collect only \$52 per employee annually.

Analysis emphasizing notable elements of evaluation criteria

The City of Calgary could have realized potential revenue of \$70 million in 2021 if it charged an occupational privilege tax rate of \$10 per employee per month. This calculation excludes self-employed workers from paying the tax and does not account for any low-income exemptions.

While an occupational privilege tax would fluctuate with economic conditions, its simplicity would allow revenue predictability with a forecast of employment in the City. Revenue from the tax would grow in the long term along with employment, though adjustments to account for inflation would be needed over time.

Because this tax is a fixed value per employee rather than a percentage of income, it would have a weaker connection to the taxpayer's ability to pay - making it somewhat regressive (even with exemptions for low-income workers). The tax base, linked to the place of work, would be relatively immobile. Still, if the tax is too high (including relative to neighbouring jurisdictions), it could drive some employment out of Calgary and have a negative economic impact.

An occupational privilege tax has the benefit of being simple and transparent for taxpayers. It would also be more straightforward to administer than an income tax. The biggest drawback is that the Government of Alberta does not have occupational privilege taxes, which would make tax administration at the municipal level relatively expensive and resource heavy.

Taxation – Taxes on Production



13. Road Pricing

Tool Description and Calgary Context

There are three main types of road pricing schemes: (a) tolls applied to a specific road or highway; (b) a cordon (or congestion) charge - a fee applied whenever a vehicle enters a specified zone, such as the city centre; and (c) a charge applied to all vehicles entering municipal boundaries. Additional variations reflect the source and nature of congestion. For example, charges could depend on the time spent in the affected zone; the fee may only apply at peak times, and certain types of vehicles may be included or excluded. Technology (e.g., a transponder device or camera technology) to administer and enforce the toll can make it inexpensive to implement.

There may be cases in which a toll or cordon charge could be legally considered a user fee, as it is a fee paid in return for the service of road access.⁸³ The drawback is that user fee revenue cannot be used for general purposes, or the charge would be considered a tax.

Precedents in other jurisdictions

Toll highways and bridges exist in Ontario, Quebec, Nova Scotia, and Prince Edward Island. However, none are collected by municipalities. For example, the MacKay Bridge in Halifax has a toll rate of \$1 for personal vehicles, collected by a Nova Scotia crown corporation.⁸⁴ In London, U.K., a congestion charge is applied to the central area. Drivers that enter the zone must pay a £15 daily charge (some exemptions apply).⁸⁵ London also has an Ultra-low Emissions Zone (ULEZ) covering a larger area than the congestion zone, in which high-polluting vehicles are subject to a fee. Cordon charges exist in Stockholm (Sweden), Milan (Italy) and Singapore.⁸⁶

Analysis emphasizing notable elements of evaluation criteria

The revenue collected from a toll or cordon charge depends on the geographical extent, timing, and rates. Consider a cordon charge applied to Calgary's downtown for revenue estimation purposes. In 2019, The City's Central Business District cordon count reported that 179,828 vehicles entered the downtown on an average week-day over 24 hours. During the morning rush (7:00 AM to 9:00 AM), 38,439 vehicles entered the downtown. A \$1 all-day charge for 250 days of the year would have generated \$45.0 million, while a morning-rush-only charge would have generated \$9.6 million. These estimates do not account for a likely decrease in traffic due to the charge. Assuming the total number of people entering the area each day would decrease, it would negatively impact businesses in the area.

While revenues fluctuation may occur due to economic conditions, the long-term outlook is stable. There was little change in the number of vehicles entering downtown Calgary in 2019 from 2012. Fairness is assured since the charges would be paid by the users of the road system. It would also reinforce desired behaviours like car-pooling.

Defining the boundaries of the toll area and other parameters or exclusions could be complex and difficult to understand but would be transparent. A direct connection of the charges to the costs of building and maintaining roads would support accountability. Implementation and administration costs of a road pricing system would be large. Evidence from other cities shows that operating costs for a cordon charge may range from 29 per cent to 47 per cent of revenues, not including upfront implementation costs.⁸⁷

Taxation – Taxes on Production



14. Advertising Tax⁸⁸

Tool Description and Calgary Context

An advertising tax or sign tax imposes an annual charge on billboards or electronic signs displayed in the city for the purposes of advertising, charged to either the operator of the sign or the owner of the property. Signs that are small, mobile, or for the purposes of identifying a business at its location are typically excluded from the tax. The tax could also be restricted to third-party advertising signs, which direct attention to a business located at a different site than the sign. The size of the tax is typically related to the dimensions of the sign, with a higher charge for larger signs. A sign tax could also be designed with differential rates depending on location or type.

In Calgary, the use of billboards and signs is governed by the Land Use Bylaw. Before putting up an advertising sign, the owner is required to obtain a development permit, with associated fees. However, these fees differ from a tax as they are a one-time charge used to cover the cost of the permitting service, not as a support to general revenues.

Precedents in other jurisdictions

The City of Winnipeg imposes an advertising tax, at a rate of \$29 per square foot for digital signs and \$3.30 per square foot for physical signs.⁸⁹ Signs such as identification and mobile signs are not subject to the tax. The City of Toronto has a third-party sign tax. The tax applies to signs placed in a different location than the business which the sign is advertising. Annual rates for the tax correspond to six size categories. Rates range from \$1,360 per year for the smallest signs to \$45,083 per year for the largest.⁹⁰ Sign taxes in the U.S. sometimes take the form of an excise tax. For example, Philadelphia levies a tax of 7 per cent for outdoor advertising.⁹¹

Analysis emphasizing notable elements of evaluation criteria

Between 2011 and 2017, the City of Toronto received stable revenues of over \$11 million each year from its third-party sign tax.⁹² Assuming Toronto-level returns and adjusting for population size, Calgary could generate \$5 million annually from a similar advertising tax on third-party advertising signs. Revenue would be stable since the limited premium physical space for advertisements will typically be used even in economic downturns. Rates set as a dollar amount per sign would need to be adjusted over time for inflation but would otherwise have a stable growth potential.

Differential rates for signs of different sizes and types would contribute to fairness, as large or electronic signs are more likely to generate greater benefits to their owners. Businesses are unlikely to move outside of the city to avoid the tax, so that a sign tax with reasonable rates would not have significant impacts on economic growth.

An advertising tax with a detailed scheme of rates dependent on size and other features is not simple. Restricting the application of the tax to third-party advertising signs would reduce the burden on small businesses and reduce administrative complexity and revenue. Efficiencies in administration could be found by building off the existing process to obtain a development permit to construct a new sign. Through the development permitting process, The City already gathers information about the characteristics and locations of signs.

Taxation – Taxes on Production



15. Telecommunications Franchise Fees⁹³

Tool Description and Calgary Context

The City of Calgary collects franchise fees (local access fees or municipal consent and access agreements in other jurisdictions) from energy distribution utilities providing natural gas and electricity. Telecommunications providers have access to municipal rights-of-way through negotiated agreements, known as municipal consent and access agreements, which outline the fees. However, unlike franchise fees, these fees are designed with cost recovery in mind, not as a source of general revenue. There are legal barriers, given recent court rulings that place telecommunications under federal jurisdiction. There are operational barriers because wireless service usage is anywhere in Canada, not restricted by a municipality.

Precedents in other jurisdictions

While other municipalities in Canada also collect cost-recovery fees from telecommunications providers through access agreements, none collect franchise fees for general revenue. In the U.S., local franchise fees for cable television services are com-

mon, though a few limitations still apply. For example, U.S. federal law permits municipalities to charge a franchise fee to cable companies at a rate of no greater than 5 per cent of gross revenues.⁹⁴

Analysis emphasizing notable elements of evaluation criteria

Potential revenues from franchise fees for telecommunications can be estimated using the data on the total operating income of telecommunications providers in Western Canada. Assuming all of the income could be subject to a franchise fee, and using Calgary's population share in Western Canada, The City would have generated \$23 million in 2019 from a 1 per cent franchise fee on telecommunications. Of course, this would likely require the CRTC consent, which may or may not be granted.

Franchise fees from telecommunications could be a stable and predictable revenue source. They would exhibit less volatility than existing franchise fees on electricity and natural gas, as prices for telecommunications services do not fluctuate like energy prices. The long-term growth potential for telecommunications revenue is strong, particularly for wireless services.

Since power and gas distribution companies in Calgary pay franchise fees, extending the same requirement to telecommunications companies could be considered fair as they benefit from access to municipal rights-of-way. Again, it would likely have to be approved by the CRTC. However, if the costs of the franchise fee were passed onto consumers, the effects may be more impactful on lower-income residents. Access to information can now be considered an essential service, taking up a larger share of total spending for lower-income households.

The uniqueness and essential nature of telecommunication services would limit the effects of additional fees on the use of the services in Calgary. However, even a tiny impact on telecommunications usage would deter investment in telecommunications and potentially put Calgary behind in transitioning to the new, information and communication-driven economy.

Only a few telecommunications providers would be subject to the franchise fee. In addition, agreements already exist with these companies that govern access to rights-of-way. Thus, if they could be permitted, adding franchise fees for telecommunications would come with relatively small administrative costs for The City. For non-wireless telecommunications services, the fee would also be simple and transparent for consumers. For wireless plans with coverage broader than the municipal boundaries, the fee calculation would be more complex.

Taxation – Taxes on Products



16. Municipal General Sales/Value-added Tax

Tool Description and Calgary Context

A municipal sales tax is applied as a percentage of the price of purchased goods and services. The tax is paid by both residents and non-residents who shop in the jurisdiction where the tax is collected. There are two main types:

1. A retail sales tax (RST) is a non-refundable sales tax applied to the sale of specific products. They are paid by final consumers and businesses purchasing the products as inputs.
2. A value-added tax (VAT) is assessed incrementally through the stages of production and distribution. If it is applied to the price of a product, but the consumer is a business purchasing inputs, it will be refunded.

No municipalities in Canada currently have the authority to implement a sales tax. The federal Goods & Services Tax (GST) is a VAT. A Harmonized Sales Tax (HST) is collected in some provinces, adding a provincial portion to the GST collected by the federal government and remitted to the participating provinces. Other provinces use provincial sales taxes (PST), administered independently of the federal government. Except for Quebec, these provincial taxes follow the RST structure.

Precedents in other jurisdictions

The government of British Columbia held a referendum in municipalities in the Great Vancouver area in 2015 to test implementing a regional sales tax of 0.5 per cent to fund the regional transit authority, TransLink. The referendum was defeated, with 62 per cent of Metro Vancouver residents voting against the proposed sales tax.⁹⁵ Sales taxes at the municipal level are common in the U.S. and can be found across 38 different states.⁹⁶ Across the U.S. overall, 7 per cent of all general revenues for local governments come from sales taxes.⁹⁷

Analysis emphasizing notable elements of evaluation criteria

Alberta is the only province in Canada that doesn't have a provincial GST or HST, so the only low-cost possibility for a municipal sales tax for The City is to look into the idea of piggybacking on the federal GST system, which is the "penny tax" idea proposed by business leaders in 2011.⁹⁸ To estimate potential sales tax revenue for The City of Calgary, a simple population share of 30.7 per cent is applied to the total federal GST of \$5.8 billion collected in Alberta. Under a 1 per cent municipal sales tax, the City of Calgary would have received an estimated \$356 million in 2021.

A general sales tax would have a broad tax base. Revenues would face some volatility in response to economic conditions but grow at the same rate as the economy without needing rate adjustments. One potential benefit of a sales tax is that residents and non-residents who shop within municipal boundaries and benefit from City services would contribute through the tax. It would also capture the new (digital) economy transactions. However, sales taxes are generally regressive because high-income earners do not get a higher rate.

The tax base for a sales tax has some mobility. If a neighbouring municipality had no sales tax or taxed at a lower rate, consumers would be motivated to shop just outside City limits, negatively impacting the local economy. Complex inclusions and exclusions of goods and services from the tax could create challenges. The City would incur substantial costs to establish and maintain an independent municipal sales tax. A penny tax piggyback on the federal GST system would need multi-government approval and collaboration. A municipal sales tax would be more feasible if the Alberta government explored it. The City could advocate for a municipal portion of the tax with estimated higher RST revenue (1.3 times the VAT revenue) using data from BC, Saskatchewan, and Manitoba RST systems.

Taxation – Taxes on Products



17. Accommodation Tax⁹⁹

Tool Description and Calgary Context

An accommodation tax (hotel tax or tourism levy) is a tax on the price of short-term accommodations such as hotels, motels, and bed and breakfasts.¹⁰⁰ Some municipalities also have a mandatory destination marketing fee (DMF) in addition to the tax. These could fund tourism marketing initiatives or support general revenues in Calgary if available.

The Government of Alberta collects a 4 per cent tourism levy on the purchase price of accommodation for residential short-term rentals through online marketplaces and traditional hotels and motels. An additional 3 per cent on the purchase price generates a destination marketing fee (DMF) the Calgary Hotel Association collects voluntarily.¹⁰¹ DMF funds from 58 hotels (70 per cent of Calgary hotel rooms) are the primary funding source for Tourism Calgary (Calgary's tourism marketing and development organization).¹⁰² Tourism Calgary received \$5.7 million in 2021.¹⁰³

Precedents in other jurisdictions

In Ontario and Manitoba, municipalities control accommodation taxes. Winnipeg collects a 5 per cent tax, while Ottawa and Toronto collect at a rate of 4 per cent. In British Columbia, the province administers a Municipal and Regional District Tax (MRDT) of up to 3 per cent on accommodations for interested municipalities with restrictions on the use of funds by municipalities. Vancouver has an additional 2.5 per cent MRDT charge from February 1, 2023, to January 31, 2030, to cover costs to host the 2026 FIFA World Cup.¹⁰⁴ Local accommodation taxes are also seen in many cities and counties throughout the United States.

Analysis emphasizing notable elements of evaluation criteria

An accommodation tax would be a small, targeted revenue source and very susceptible to economic swings.

Before the COVID-19 pandemic, Calgary hotels generated about \$16 million yearly for the provincial tourism levy.¹⁰⁵ Thus, if The City imposed its own 3 per cent tax on hotel rooms, it would have generated about \$12 million. Revenues from an accommodation tax would be unstable and difficult to predict, subject to the volatility of the hospitality industry. In the long-term, revenues would grow as tourism in Calgary increases.

An accommodation tax is fair since visitors to Calgary benefit from City services such as infrastructure and protective services but do not pay property taxes. An accommodation tax could deter tourists from visiting Calgary if the cost of accommodations rose too much from the tax, which would negatively affect the hotel industry and the overall economy.

Since the provincial government already collects a tourism levy and a local DMF is already collected by many hotels in Calgary, adding a municipal tax or reallocating the existing provincial tax to municipalities would be simple. The City would either piggyback onto a concurrent provincial tax or need to collect the tax independently. Although the administrative burden would be reasonable even if The City administered the tax, having the province collect it on behalf of municipalities would reduce administrative costs.

Taxation – Taxes on Products



18. Parking Tax

Tool Description and Calgary Context

A parking ‘tax’ is implemented either as a type of sales tax on paid commercial parking or as an annual levy based on the area of a non-residential parking lot and is not available in Calgary. It is distinct from existing ‘parking charges’ in Calgary that some consider high. An annual tax levy may apply to all types of parking or only paid parking. It may be specific to a geographical area within the municipality, such as the city centre.

Precedents in other jurisdictions

Montreal applies an annual tax to all non-residential parking spaces in some of the city’s downtown. The tax value is a specific rate on the taxable area of the parking spaces. Montreal’s 2022 budget outlines rates from \$6.05 to \$48.65 per square meter, depending on the location of the parking lot and whether it is interior or exterior.¹⁰⁶ The 2022 budget also projects \$22.0 million in revenues from the parking tax.

TransLink, the regional transit authority in the Vancouver metropolitan area, collects a parking tax. The tax is for commercial parking in the Vancouver area at 24 per cent of the purchase price.¹⁰⁷ TransLink’s parking tax is expected to generate \$62.7 million in revenue in 2022.¹⁰⁸

In the U.S., sales taxes on commercial parking lots generate revenue for several municipalities in various states. Pittsburgh (Pennsylvania) has the highest rate, with a 37.5 per cent tax on parking lot fees. Pittsburgh’s parking tax brought in \$37 million in revenue in 2021, or 5.2 per cent of Pittsburgh’s total tax-supported revenues.¹⁰⁹

Analysis emphasizing notable elements of evaluation criteria

Taking the revenues generated from parking taxes in Montreal and the Vancouver metropolitan area and adjusting them to Calgary’s population gives a rough estimate of the revenue potential for a parking tax. A tax modelled after Montreal’s annual levy on non-residential parking lots could generate an estimated \$15 million annually. A sales tax on paid parking at the 24 per cent rate used in Vancouver could generate \$30 million per year for The City of Calgary.

A parking tax set as an annual levy would be more stable than a sales tax on paid parking. Both tax-setting approaches are fair since payments (directly or indirectly) reflect users of the municipal road system. The revenues can then fund transportation services in the areas where the tax applies.

An increase in the price of paid parking would result in a small reduction in demand for parking by consumers. Under an annual levy approach, there may be a small effect on the supply of free parking, which may be converted to other uses or less likely to be added to new developments. Increases in parking costs could deter people from visiting areas with paid or limited parking, to the detriment of businesses in those areas. For example, Calgary’s downtown is currently in need of revitalization. A parking tax that deters downtown activity would counter The City’s downtown strategy initiatives. On the other hand, this would also result in a reduction in congestion and pollution from vehicles.

A sales tax approach taxing parking revenues would generally set a single tax rate and be reasonably simple and transparent. An annual levy based on parking lot area would require a definition of the taxable area, which could add complexity. Since the tax would be administered municipally, with no option to piggyback on a provincial tax, The City would incur administrative costs.

Taxation – Taxes on Products



19. Fuel Tax

Tool Description and Calgary Context

A fuel tax is an excise tax on gasoline and diesel. It is typically a fixed value per litre for the federal (10 cents per litre for gasoline and 4 cents per litre for diesel) and provincial governments. In 1936, Alberta initiated a 2 per cent sales tax on various goods. The general sales tax was short-lived, but the part applied to fuel stayed. Today the Alberta government collects 13 cents per litre for gasoline and diesel. The Federal Gas Tax Fund (now Canada Community-Building Fund) was conceptually set up to fund grants for municipalities but used general revenue.

Precedents in other jurisdictions

In British Columbia, the provincial government collects fuel taxes. The province collects an additional amount for the regional transit authorities in the Vancouver and Victoria areas. The dedicated rates are 18.5 cents per litre (Vancouver) and 5.5 cents per litre (Victoria). The provincial governments in Ontario and Quebec have specific programs that share revenues from fuel taxes with municipalities. In Ontario, 2 cents per litre of the provincial fuel tax is funds municipal transit systems.¹¹⁰ The Montreal municipal fuel tax is three cents per litre. Municipalities (often counties) in 13 U.S. states charge local fuel taxes at a fixed price per gallon or have local sales taxes that

apply to gasoline.¹¹¹

Analysis emphasizing notable elements of evaluation criteria

To estimate fuel tax revenues, suppose the Alberta government shared 10 per cent of its fuel tax revenues with the municipalities distributed per capita; The City would have received an estimated \$32 million in 2021. The same estimate would arise from an independent City of Calgary fuel tax at 1.3 cents per litre, assuming no market distortions. It is a low-end estimate, given higher rates in other jurisdictions.

A fuel tax would have limited volatility because it uses fuel consumption and is independent of prices. However, continued advancements in fuel efficiency and electric vehicle adoption mean revenue would decline over time.

Earmarking fuel tax revenue for road infrastructure would make it fair as the taxpayers are the users of the road system. Fuel tax funds are also often used to support local transit systems, which reduce congestion. Among drivers, the tax will account for a higher share of income for low-income earners than high income-earners, making it less equitable. The offset is the availability of public transit as an alternative for lower-income households.

While fuel consumption is relatively unresponsive to changes in fuel prices in the short term, a fuel tax would incentivize reduced fuel usage and a shift to electric vehicles or other modes of transportation over the long term. While the tax would have a negative economic impact on fuel retailers in Calgary, a reduction in fuel use would be positive reinforcement for the Climate Strategy, resulting in fewer greenhouse gas emissions. A less desirable result would be if neighbouring jurisdictions without a fuel tax attracted motorists to purchase fuel outside Calgary. A regional agreement to set equal rates across municipalities could alleviate these market distortions.

A fixed tax per litre of fuel is simple and already exists at the federal and provincial levels. They lack transparency because they are embedded in the posted price. Reliance on the provincial system would ease administration, but implementing an independent municipal fuel tax would not. The fact that this tax is applied on a cent per litre basis instead of a per cent basis means that the purchasing power of money collected through this tax is eroded over time.

Taxation – Taxes on Products



20. Tobacco Tax

Tool Description and Calgary Context

A tobacco tax is an excise tax applied to cigarettes and other tobacco products. The tax is typically a fixed amount per unit or gram. Alternatively, it could be a percentage of the purchase price. The items covered by the tax could include e-cigarettes and vaping products. The Government of Alberta has a tax of 27.5 cents per cigarette on top of the federal 14.5 cent tax.¹¹² The Government of Alberta also taxes smokeless tobacco products and loose tobacco on a per gram basis. There are no municipal tobacco taxes in Alberta.

Precedents in other jurisdictions

No municipalities in Canada collect tobacco taxes. Municipalities in several U.S. states, including New York, Illinois, Alaska, Colorado, and Pennsylvania, are permitted to charge local cigarette taxes. In total, more than 645 local jurisdictions have a local tobacco tax in the U.S.¹¹³ In some Colorado municipalities, the local tax is as high as 20 cents per cigarette.

Analysis emphasizing notable elements of evaluation criteria

To estimate potential tobacco tax revenues, the assumption that is used is that the Government of Alberta shares 10 per cent of its tobacco tax revenue with the municipalities, distributed on a per capita basis. Under this assumption, The City could have received \$20 million from a tobacco tax in 2021. Similarly, The City of Calgary could have generated the same revenue assuming an independent municipal tobacco tax system at the same 10 per cent rate for purchasing tobacco products. This estimate assumes no market distortions from taxation.

Revenues from a tobacco tax would be relatively stable and predictable but lack long-term growth potential if tobacco use decreases. However, deterring tobacco use would be a positive reinforcement for public health efforts underway to reduce tobacco use and could incentivize earlier achievement of desired goals.

A municipal tobacco tax does not strongly align with the desire for fairness. It is the same tax charge for anyone who purchases tobacco - it does not reflect differences in the ability to pay. While the tax revenue would help fund public services, the services offered by The City of Calgary have a weak connection to tobacco use.

An increase in the price of tobacco would create a mild decrease in demand. More importantly, if neighbouring municipalities offered lower tobacco prices than Calgary, customers may purchase tobacco outside Calgary to avoid the tax. An increase in black market tobacco or smuggling from lower-tax jurisdictions could also occur.

The tobacco tax would be straightforward if the rules were similar to those that apply to the existing provincial tobacco tax. Despite the simplicity, tobacco taxes are typically included in the purchase price of tobacco products, making the tax less transparent. Piggybacking on the existing provincial tobacco tax would reduce administrative costs. Retaining control of the tax rate in the hands of The City would support accountability more than a tax-sharing scheme controlled by the province.

Taxation – Taxes on Products



21. Amusement Tax

Tool Description and Calgary Context

An amusement tax (or entertainment tax) is a selective sales tax as a percentage of the admission price for entertainment facilities (and, in some cases, also for facility rentals). Venues subject to the tax may vary, including or excluding large entertainment venues. The tax may apply to live performances, sports events, amusement parks, commercial cinemas, recreational facilities, bowling alleys, nightclubs, etc.

Sometimes, a “retailers’ discount” may be applied, which returns a small portion of the tax collected back to the businesses paying the tax to help cover compliance costs. This type of tax does not exist in Calgary.

Precedents in other jurisdictions

Winnipeg has a Simplified Entertainment Funding Tax.¹¹⁴ It applies only to admission to large venues with at least 5,000 seats and commercial cinemas. The tax is 10 per cent of the admission price. The City of Winnipeg raised \$2.1 million in 2019 and \$0.4 million in 2020 (due to the pandemic).¹¹⁵ The revenue supports arts and culture in

Winnipeg. Regina’s Amusement Tax that applies only to commercial cinemas. The tax is set at 10 per cent of the ticket price.¹¹⁶

Amusement taxes are found in many U.S. municipalities. In some cities, the amusement tax applies more broadly to all types of amusement activities, not just large venues. For example, the City of Chicago’s amusement tax applies to live performances and presentations, participatory recreational activities, and paid television programming. The rates vary from 0.5 to 10 per cent. The tax is applied to gross receipts from amusement activities, not just admissions. Pittsburgh (Pennsylvania) charges 5 per cent of admission fees and received US\$15.6 million in 2019 (2.6 per cent of total general fund revenues).¹¹⁷ It declined to US\$7.5 million in 2021 (1.3 per cent of total revenues) because of the pandemic.¹¹⁸

Analysis emphasizing notable elements of evaluation criteria

Amusement taxes in Canada fluctuated in a narrow band between 2007 and 2021, ranging from a low of \$290 million in 2014 to a high of \$371 million in 2018. Using the Winnipeg model as a baseline for estimation, a 10 per cent amusement tax in Calgary could generate \$4 million annually.

An amusement tax applied to large event venues would have a narrow tax base, unpredictable revenues, and volatility through economic cycles. Defining a broader amusement tax could create complexities and potential for loopholes without increasing growth potential. Since amusement spending is discretionary, it may be sensitive to changes in price brought on by a new tax. To the extent that the tax reduces event attendance or shifts demand to nearby municipalities, it would negatively impact economic growth.

The tax would be visible as a percentage of the admission price for designated types of amusements. Earmarking amusement tax revenues to support arts and culture would increase accountability. It is also a way to receive tax revenue from non-residents who spend money on amusements in Calgary and benefit from City services.

The City would have to administer the tax with no provincial equivalent. Limiting the scope to a few select venues would reduce potential revenue but also reduce the administrative burden for tax collection.

Taxation – Taxes on Products



22. Land Transfer Tax

Tool Description and Calgary Context

A land transfer tax is a percentage of the purchase price on the sale of a property. The tax rate may be a flat rate or a sliding scale mechanism with increasing marginal tax rates on the property's value. The buyer of the property usually pays the tax. Alberta has no land transfer tax, collecting only a small land transfer registration fee.

Precedents in other jurisdictions

Many provinces in Canada collect a land transfer tax. Toronto has had a municipal land transfer tax since 2008, in addition to the Ontario provincial land transfer tax. It is a percentage of the purchase price of a property, starting at 0.5 per cent for properties \$55,000 or under and ending at 2.5 per cent for properties exceeding \$2 million.^{119, 120} First-time home buyers may be eligible for a full or partial tax rebate. Montreal and other Quebec municipalities collect land transfer taxes – property transfer duties – with increasing marginal tax rates, like Toronto.¹²¹ Halifax has a land transfer tax at a single fixed rate of 1.5 per cent.¹²²

Many municipalities use municipal land transfer taxes in the U.S. Pittsburgh's municipal portion of the land transfer tax (called the deed transfer tax) is 3 per cent of the selling price. Land transfer taxes accounted for 12.7 per cent of Pittsburgh's general governmental revenues in 2021.¹²³ In Chicago, the municipal government collects a real property transfer tax of 0.75 per cent, with an additional 0.3 per cent going to the local transit authority. The buyer and seller split tax responsibility.¹²⁴

Analysis emphasizing notable elements of evaluation criteria

Land transfer taxes in Canada generated \$9.2 billion in 2021 for the provincial and municipal governments that levy the tax. The tax revenue grew dramatically between 2007 and 2021, by 281 per cent.

The residential resale portion of potential land transfer tax revenues can be estimated using the number of sales in the resale market and the average price of homes in Calgary in 2021. If the City of Calgary imposed a 1 per cent land transfer tax in 2021, it would have received an estimated \$140 million. This conservative estimate does not account for potential revenue from new construction homes or transactions in the non-residential market.

A land transfer tax could be a significant source of revenue for The City. However, it would be volatile in line with local real estate market conditions. Revenue growth would reflect increases in real estate prices and housing inventory growth in the city. The burden of a land transfer tax would be borne most heavily by households that move more frequently. However, those who can afford to purchase more expensive homes would pay more, as the tax is tied to the value of the purchased property.

While empirical evidence is mixed, it is expected that a land transfer tax would reduce the number of real estate transactions.^{125, 126} It may be beneficial in overheated real estate markets in Toronto and Vancouver, but not Calgary. A single flat tax would be simple and transparent. Some administrative costs would come along with implementation.

Taxation – Taxes on Products



23. Alcohol Tax

Tool Description and Calgary Context

An alcohol tax is an excise tax on alcoholic beverages. The tax is typically a fixed amount per litre but can also be a percentage of the sale price. The tax can apply to alcohol sold in retail stores and licensed establishments such as restaurants, bars, and nightclubs.

In Alberta, rather than being administered as a liquor gallonage tax, Alberta Gaming, Liquor & Cannabis (AGLC) collects revenue on behalf of the provincial government from liquor trading profits by applying a markup to the liquor it sells to licensees. Depending on the type of liquor, the alcohol content, and the type of manufacturer, these markups range from \$0.10 to \$18.33 per litre.¹²⁷

Precedents in other jurisdictions

No municipalities in Canada collect alcohol taxes. Municipalities in 19 U.S. states are permitted to collect alcohol taxes.¹²⁸ Chicago (Illinois) and Washington D.C. collect alcohol taxes on a per unit volume basis, with different rates for different types of

alcoholic beverages. In Philadelphia (Pennsylvania), the local alcohol tax is designed as a 10 per cent sales tax – revenue from the tax support the school district of Philadelphia.

Analysis emphasizing notable elements of evaluation criteria

If Alberta shared 10 per cent of its liquor revenues through AGLC with the municipalities, distributed on a per capita basis, Calgary would have received an estimated \$28 million in the year ending March 31, 2021. This could also represent revenue for The City of Calgary from an independent tax with rates of 10 per cent of the provincial markups.

An alcohol tax could be a stable and slow-growing revenue source for The City but with a narrow tax base. If set as a fixed price per litre, tax rates need adjustments over time to account for inflation.

Under a per unit volume tax, more expensive alcoholic beverages are taxed the same as less expensive beverages of the same type. Thus, the tax will only partly reflect taxpayers' ability to pay to the extent that higher-income earners purchase more alcohol. While retail sales of alcohol would mostly come from residents, some tax revenue from licensed establishments may come from visiting non-residents who benefit from City services.

The tax could discourage alcohol consumption, adversely affecting the economic fortunes of local alcohol retailers, restaurants, and bars. On the other hand, reducing alcohol consumption would positively reinforce public health preferences and reduce drunk driving, saving health care and policing costs. A more economically undesirable result would be a shift of alcohol purchases to neighbouring municipalities that may not have an alcohol tax.

Due to the many types of alcoholic beverages, a moderately complex scheme of differing rates is required for a per unit volume tax. A tax set as a percentage of the sale price would be a simpler alternative from the customer's point of view. Since the province generates revenue from alcohol through markups to sales through AGLC, a revenue-sharing agreement would be an option to reduce administrative costs.

Taxation – Taxes on Products



24. Cannabis Tax

Tool Description and Calgary Context

A cannabis (or marijuana) tax is an excise tax applied as a percentage of the sale price or as a fixed amount per gram. The Government of Alberta has a cannabis tax, which the federal government collects on the province's behalf. The Government of Alberta receives the greater of 75 cents per gram or 7.5 per cent of the producer price, plus the revenue from an additional tax of 10 per cent of the retail price.¹²⁹

Precedents in other jurisdictions

No municipalities in Canada currently collect cannabis taxes. In some U.S. states where cannabis is legalized and taxed, municipalities can add their own excise tax, such as in Colorado and Massachusetts. In Denver, Colorado, retail marijuana products are subject to a tax of 5.5 per cent of the sale price, in addition to Denver's general sales tax rate of 4.31 per cent.¹³⁰ Medical marijuana is only subject to the general sales tax.

In Massachusetts, however, some municipalities have repealed their newly instituted marijuana taxes. When cannabis was legalized in the state in 2018, municipalities were given the option to collect a 3 per cent local tax on marijuana. In early 2022, the cities of Cambridge and Northampton repealed their local marijuana taxes to support the fledgling industry.¹³¹

Analysis emphasizing notable elements of evaluation criteria

Assuming the Government of Alberta shared 10 per cent of its cannabis tax revenues with the municipalities, distributed on a per capita basis, Calgary would have received an estimated \$5 million in 2021. A cannabis tax would currently have a very small tax base, but there is potential for growth in the future. Revenues may face some volatility in response to economic conditions.

The rationale behind a cannabis tax would be similar to the reasons for a tobacco or alcohol tax. Like most sales taxes, the link to the ability to pay is weak. In addition, payment of the tax would not be associated with benefits received from City services.

Taxing cannabis could lead to a reduction in consumption. If Calgary's neighbouring municipalities have lower rates or no tax, many consumers could avoid the tax by travelling outside the city to purchase cannabis products. High tax rates may also encourage growth in the black market for cannabis, which would offset one of the primary purposes of legalizing cannabis, which is to deter illegal activities in relation to cannabis. However, in discouraging cannabis use, the tax may also reduce health risks associated with cannabis use.

The tax would be relatively simple, especially if integrated with the federal tax collection system. If included in the price of cannabis, the tax would be less transparent. Piggybacking on the provincial tax base would be the most straightforward approach to tax administration. Creating an independent municipal cannabis tax would create high administrative costs.

Taxation – Taxes on Products



25. Gaming Revenues

Tool Description and Calgary Context

The gaming (gambling) industry can be a valuable source of government revenues. Rather than using an excise tax, provincial governments typically extract revenue by retaining profits from government-run gaming facilities or licensing gaming activities.

In Alberta, the provincial agency Alberta Gaming, Liquor & Cannabis (AGLC) collects revenues from licensing gaming activities such as casinos, bingo halls, and horse racing. Alberta uses a charitable gaming model, so proceeds from all gaming activities in the province go towards charitable programs or are used to fund government services. As such, a revenue-sharing scheme with the provincial government would be more realistic than a municipal tax or municipally administered gaming activities.

Precedents in other jurisdictions

No municipalities in Canada directly tax or extract revenue from gaming activities. The Government of British Columbia shares 10 per cent of net revenues from community gambling centres and casinos with the municipalities where the facilities exist. In the 2016 to 2017 fiscal year, it distributed \$96.8 million to all municipalities in the province.¹³² A similar revenue-sharing system is in place in Ontario.

There is also evidence of gaming revenues in U.S. municipalities. For example, municipalities in Illinois receive a share of revenues collected by the state from video gambling machines in their jurisdictions.¹³³

Analysis emphasizing notable elements of evaluation criteria

Assuming the Government of Alberta shared 10 per cent of its gaming profits with the Alberta municipalities, distributed on a per capita basis, The City of Calgary would have received \$32 million in 2021. However, its potency as a revenue tool is declining over time. For example, in Alberta, the provincial government's gaming profits revenue has steadily declined, from \$1.8 billion in 2007 to \$1.3 billion in 2019 and \$1.1 billion in 2021.

A revenue-sharing agreement that extends provincial gaming revenues to Alberta municipalities would provide a new revenue source to The City that is moderately sensitive to economic conditions. However, many governments are not interested in positive reinforcements for gaming activity because there is evidence that gambling can become addictive and can lead to bankruptcy, poor mental health, and other social costs.

Taxation – Current Transfers from Households



26. Vehicle Registration Tax¹³⁴

Tool Description and Calgary Context

A vehicle registration tax is an annual charge that the owner of a motor vehicle must pay. Although some jurisdictions use a vehicle registration fee so that revenue only covers costs, that is not the intention here. In Alberta, the provincial government licenses personal and business vehicles, and an annual fee is required. A municipal tax could be applied to personal, business, commercial (via a stop in designated commercial loading zones) or all vehicles.

Precedents in other jurisdictions

The province of Quebec collects a \$30 fee as part of its annual provincial personal vehicle registration fee to fund local public transit projects on behalf of municipalities.¹³⁵ Montreal collects an additional annual \$45 tax on passenger vehicle registration on top of the \$30 provincial add-on. Vancouver requires commercial vehicles to display a city-issued decal to stop in commercial loading zones. Charges for the decal are according to the vehicle's weight, varying from about \$26 to \$42 annually.¹³⁶ A similar program exists in the City of Victoria – the annual charges are higher, ranging from \$100 to \$300.¹³⁷ Toronto enacted a "Personal Vehicle Tax" in 2008, which generated about \$55 million annually until repealed in 2011. Recent attempts to revive Toronto's vehicle registration tax were defeated.¹³⁸

Vehicle registration fees at the local level are also common in the U.S., especially by county governments. The state government usually collects the county vehicle registration fees on behalf of the local government.

Analysis emphasizing notable elements of evaluation criteria

Alberta registration fees vary by the type of vehicle, with progressively higher fees for larger commercial vehicles. Assuming The City of Calgary receives \$8 for each vehicle registration (10 per cent of the \$80 provincial government fee for passenger vehicles, even though this example applies to all vehicles), The City would have received \$8 million in 2021 with 1 million vehicles registered in Calgary.¹³⁹ Using a \$45 flat fee like The City of Montreal would have yielded even more revenue (\$45 million in 2021) as well as higher fees for commercial vehicles.

A vehicle registration tax would be a stable revenue source. The tax base is the number of vehicles in The City, which grows with the population of The City. Rates will need adjusting over time to keep up with inflation. A vehicle registration tax is fair because payments are by vehicle owners who drive on City-provided roads. Funds generated can support the construction and maintenance of the transportation system. A scheme with higher rates for larger or more valuable vehicles would be fairest at the risk of increasing complexity and administrative costs. Leveraging the provincial collection system would make it administratively simple for The City.

The tax could discourage vehicle ownership in the city, negatively impacting the economic fortune of the vehicle-related industries. A vehicle registration tax would positively reinforce efforts to reduce greenhouse gas emissions and traffic and parking congestion. These positive and negative effects would be small because of the small size of the tax.

Taxation – Current Transfers from Households



27. Insurance Premium Tax

Tool Description and Calgary Context

Provincial governments in Canada collect an insurance premium tax on various types of insurance, such as life, health, auto, home, or other property insurance. It is typically levied as a percentage of insurance premiums paid.

Precedents in other jurisdictions

No municipalities in Canada collect insurance premium taxes. The province of Alberta has a 3 per cent tax on life, sickness, and accident insurance. For other types of insurance, the rate is 4 per cent.¹⁴⁰

Local premium taxes exist in 5 U.S. states. For example, in Kentucky, nearly all municipalities collect insurance premium taxes. The rates applied to different types of insurance vary between municipalities. Some municipalities in Kentucky tax all types of insurance at rates as high as 16 per cent, though municipalities more commonly set rates ranging from 5 to 12 per cent.¹⁴¹ Health and life insurance taxes are often exempt in Kentucky municipalities or may be taxed at a lower rate.

Analysis emphasizing notable elements of evaluation criteria

If the Alberta government shared 10 per cent of its insurance tax revenues with the municipalities, distributed on a per capita basis, Calgary would have received \$23 million in the year ending March 31, 2022. This estimate could also represent revenues for The City of Calgary resulting from an independent tax with rates set at 10 per cent of the provincial rates.

An insurance premium tax would provide stable and predictable revenue despite a narrow tax base. Residents with more expensive homes and automobiles to insure would pay more for property insurance, giving some alignment with the ability to pay.

Additional taxes on insurance could reduce the demand for insurance coverage with a different level of impact across the various types of insurance. The demand for automobile insurance, which is required to use a vehicle on public roads, would only see a slight decrease in response to an increase in price due to taxation.¹⁴² The demand for life insurance, however, would be significantly reduced in the face of a tax increase.¹⁴³ These distortions in the demand for insurance could create inefficiencies and expose residents to an undesirable level of risk.

Tax rates that vary according to the type of insurance may be less clear than a uniform tax rate, but the taxes would be simple in structure. However, the tax amount would be hidden in the total insurance premium payments, making it less transparent to most residents. Piggybacking on the provincial insurance tax would reduce the administrative costs of a municipal insurance premium tax and reduce complexities for insurance providers that remit the tax.

Taxation – Taxes on Non-Renewable Resources



28. Royalty Revenues

Tool Description and Calgary Context

The government of Alberta collects royalties on oil and gas resources extracted in the province. As a percentage of the revenue derived from the sale of natural resources, government royalties fluctuate both with the quantity of production and the market price. While a major component of total provincial government revenues, revenue from resource royalties is very volatile: it was only \$3.1 billion in 2020-2021 but is expected to be \$28.1 billion in 2022-2023 due to a dramatic rebound in oil and gas prices.¹⁴⁴

Many oil and gas companies have their headquarters in Calgary. Municipal services are the foundation of a viable living environment for employees and a desirable environment to house those headquarters, which indirectly contribute to the success of the oil and gas industry. Suggesting a revenue-sharing scheme for provincial resource revenues with municipalities is not without reason. Especially with the royal-

ties from non-renewable resources, sharing with municipalities would help the local communities to build the future and diversify their economies in preparation for a time when such revenues are no longer available.

Precedents in other jurisdictions

The province of Quebec shares resource royalty revenues with municipalities that contain natural resource extraction sites.¹⁴⁵

In Mexico resource revenues are shared more generally rather than just to municipalities where resources are extracted.¹⁴⁶ 20 per cent of Mexico's federal resource revenue and tax revenue is transferred to state governments. In turn, the states are required to pass on 20 per cent of their transfers received through this mechanism to their municipalities. An additional 1 per cent of federal resource and tax revenues is transferred to municipalities through a separate municipal development fund. Funds are allocated among municipalities according to a formula based on variables such as population or property tax collection.¹⁴⁷

Analysis emphasizing notable elements of evaluation criteria

If Alberta shared 10 per cent of its resource revenues with the municipalities, distributed on a per capita basis, Calgary would have received \$496 million in the year ending March 31, 2022. This amount equals 13 per cent of The City's total expenditure in 2021.

Provincial resource revenue-sharing with municipalities would provide The City with a significant revenue source. Although resource revenues are very volatile and with an unpredictable long-term future, the revenue for The City today would help it invest for the future. Especially without the flexibility of deficit financing, The City could save some of the royalty revenues in its reserve funds to smooth the negative impacts of recessions.

Benefiting from resource royalties can be considered fair because natural resources are collective assets of Alberta's residents. Revenues from these royalties would be appropriate for economic diversification and climate action initiatives. As The City and province work on these efforts, it would be suitable for the province to share royalty revenues with The City. Such a revenue-sharing agreement would also be simple and not create administrative costs.

Taxation – Taxes on Non-Renewable Resources



29. Carbon tax (Carbon Pollution Pricing)¹⁴⁸

Tool Description and Calgary Context

A carbon tax is a tax on activities that result in the emission of greenhouse gases, primarily the burning of fossil fuels. The tax is typically quantified as a price per tonne of CO₂ equivalent. The federal carbon levy applies in the province of Alberta and increased to \$50 per tonne of CO₂ equivalent in April 2023. In addition, Alberta's output-based carbon pricing system for large industrial emitters, first implemented in 2007, remains in place.

Precedents in other jurisdictions

Several Canadian provinces administer their carbon taxation system, while those that do not are subject to the federal carbon pricing backstop. Unlike some U.S. municipalities, no Canadian municipality currently administer a carbon tax. Boulder, Colorado, has collected a carbon tax on electrical bills since 2006. Boulder residents

have a sole electricity provider under a franchise agreement with the city of Boulder. A Climate Action Plan tax is applied to each electrical bill based on the amount of electricity used, at a rate of 0.49 cents per kWh for residential users.¹⁴⁹

Analysis emphasizing notable elements of evaluation criteria

The revenue from the fuel charge component of the federal carbon tax and Calgary's population share help estimate potential revenue. If The City collected a similar fuel charge at \$4 per tonne of CO₂ equivalent (or 10 per cent of the federal carbon price in 2021), The City would have received estimated revenues of \$45 million in the year ending March 31, 2022. Municipalities could rely on a tax-sharing agreement with the federal government where 10 per cent of carbon tax revenues get distributed to municipalities. Carbon tax revenue could grow if the price of carbon increased over time, like the federal carbon pricing scheme.

A carbon tax could be a revenue source with only mild volatility since it is determined based on consumption rather than volatile prices. However, revenues would diminish in the long term if consumption of carbon-emitting fuels decreases, as would be the intended effect of the tax. The tax would have a tax base broader than a fuel tax on gasoline or diesel, extending to all fuel types and with rates varying based on the carbon emissions associated with each fuel type.

Carbon taxes are often regressive, with lower-income households spending more on energy and fuel. Additional measures may be needed to address equity concerns.

A carbon tax would reinforce the goal of reducing greenhouse gas emissions, thereby aligning with The City's Climate Strategy and complementing other efforts to reduce city-wide emissions. However, the federal government also has a carbon tax. An additional municipal carbon tax may result in a larger carbon tax than necessary to reach defined emissions targets and lead to substantially negative economic consequences.

With specific rates required for each fuel type subject to the carbon tax, the tax calculation may sometimes be unclear and poorly understood. Substantial administrative costs would be associated with implementing and administering a carbon tax scheme, with specific rates applied to the various sources of emissions.

Taxation – Taxes related to the New Economy



30. Cloud Computing Tax

Tool Description and Calgary Context

A cloud computing tax is a selective sales tax applied to nonpossessory computer leases, also known as cloud computing services. It would apply to cloud services accessed within a jurisdiction, even if the computer hardware being used is located elsewhere.

Precedents in Other Jurisdictions

In 2016, the City of Chicago modified its Personal Property Lease Transaction Tax to apply to cloud services accessed from Chicago.¹⁵⁰ The tax applies to all transactions that make use of a provider's computer when the customer is located in Chicago, even if the computer being used is not in Chicago. The tax had previously applied to property rentals such as cars and business equipment. Chicago raised the tax rate to 9 per cent in 2021.

Analysis emphasizing notable elements of evaluation criteria

In 2021, 45 per cent of businesses in Canada purchased cloud computing services.¹⁵¹ Businesses that used cloud computing spent an average of \$43,000, though large businesses spent as much as \$558,000 on average. Using the reported business counts for Calgary in 2021 to calculate an estimate, businesses in Calgary spent about \$550 million on cloud computing services in 2021. If a 1 per cent cloud computing tax were applied, this would translate into \$6 million in revenues for The City.

Revenues from a cloud computing tax would grow as the use of cloud computing increases in Calgary.

A tax on cloud computing would favour businesses that use their own hardware rather than cloud services. Smaller businesses would be more likely to require cloud services and be unable to afford their dedicated computer hardware, so the tax could be considered unfair to small businesses and start-ups. The tax may discourage Calgary's growing tech industry and impede long-term economic diversification and innovation.

There is no link between cloud computing and municipal services, making it challenging to justify the tax and define the purpose of revenues.

Since the tax would be applied mainly to businesses outside of Calgary, it may have significant administration costs relative to the tax revenue. There is also no provincial parallel to a cloud computing tax, so there is currently no opportunity to piggyback on a provincial collection system.

A cloud computing tax would have future growth potential as the use of cloud computing technology becomes more prevalent. However, the tax would not be related to municipal services. It would discourage economic diversification and the growth of tech companies in Calgary.

Taxation – Taxes related to the New Economy



31. Extension of Sales Tax to the Digital Economy¹⁵²

Tool Description and Calgary Context

Under this tax option, sales taxes would apply to digital economy goods and services purchased by residents of Calgary, which may not have been typically subject to sales taxes in Canada. It may be administered as part of an existing sales tax system, such as a retail sales tax or value-added tax. Under this modified sales tax, a physical presence in the country is not required for a vendor to be subject to the payment of the sales tax. For example, the sales taxes would apply to non-resident vendors of digital products, which may not be required to remit a traditional sales tax. The tax may also cover non-resident distribution platform operators who sell goods from local fulfillment warehouses.

Precedents in Other Jurisdictions

In 2021, the government of Canada extended the GST/HST program to apply to e-commerce revenue. The extension was designed to help level the playing field for Canadian and foreign-based businesses. Following the extension, businesses required to remit GST to the federal government included:

- Foreign-based vendors with no physical presence in Canada selling digital products or services in Canada
- Foreign-based vendors that sell goods located in Canadian fulfillment warehouses.

- Digital platforms for short-term accommodation

Canadian provinces such as Quebec, Manitoba, Saskatchewan, and British Columbia that collect provincial sales taxes also recently expanded their respective sales taxes to apply to more digital economy businesses. Many states in the U.S. have also changed their sales taxes to include more digital products and services.¹⁵³

Analysis emphasizing notable elements of evaluation criteria

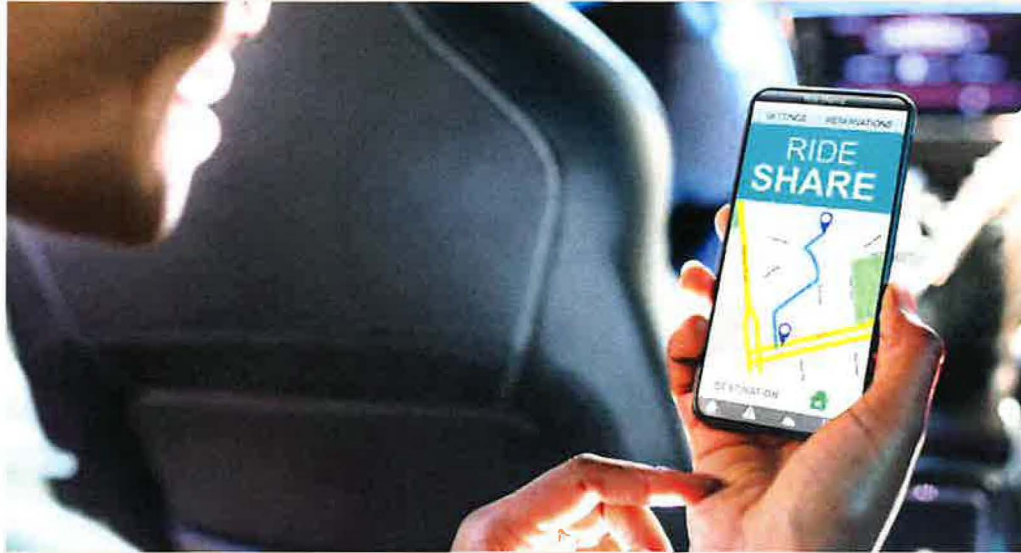
In its Fall 2020 Economic Statement, the federal government projected that including additional digital economy transactions to the GST would generate \$3.2 billion over five years. The federal estimate can be scaled down to provide an estimate for a similar sales tax extension for The City of Calgary, adding foreign-based vendors and digital accommodation platforms to a municipal sales tax. If The City established a similar extension to a traditional municipal general sales tax, the additional annual revenue is estimated to be \$5 million for a 1 per cent tax.

Extending a municipal sales tax to all kinds of digital economy activities, including those from foreign vendors, would slightly increase the revenue collected by the sales tax. Like general sales tax revenues, some fluctuations would result from economic cycles. The digital economy component of sales tax revenues should increase over the next several years. Collecting sales taxes from foreign vendors on digital platforms when a general sales tax is already in place for local vendors ensures a level playing field. However, sales taxes are typically proportional or regressive rather than progressive, as high-income earners do not pay a higher rate.

Taxes from online purchases would be less susceptible to avoidance. Since purchases would typically be attached to the customer's address, customers would not face incentives to shop in neighbouring municipalities. Extending sales tax collection to digital economy services would increase administrative costs, primarily because of collections from foreign-based businesses. For residents, creating more uniform tax rules across different kinds of purchases would not increase the complexity of the tax.

Extending a municipal sales tax to digital economy services, including those from foreign-based vendors, would increase revenue and create a level playing field for local businesses. Administrative costs associated with tax collection would increase, but the tax would not be more complex for residents, nor would it harm the local economy

Taxation – Taxes related to the New Economy



32. Ridesharing Tax¹⁵⁴

Tool Description and Calgary Context

Ridesharing services offered through Transportation Network Companies (TNC) such as Uber and Lyft have dramatically increased in popularity over the last several years.

The City of Calgary already requires operators of ridesharing services to pay regulatory charges that cover the cost of regulating the industry in Calgary. A TNC may choose from two payment methods: one consisting of only annual licence fees or one including a yearly administration fee and a \$0.20 per trip fee.¹⁵⁵ The City would require legislative authority to expand this regulatory charge into a tax providing general revenue. Potential ride-sharing taxes may take the form of a charge per ride or a sales tax on the fare price. Rates may differ for rides beginning or ending in designated areas to deter congestion. Rates may also be lower for shared rides, where multiple passengers share the rides.

Precedents in Other Jurisdictions

In Canada, it is common for municipalities to require ridesharing service operators to

pay regulatory charges to receive a license. Aside from charges to cover the cost of regulating the ridesharing industry, no municipalities levy specific taxes on ridesharing services. However, general sales taxes such as the federal GST do apply.

General sales taxes also commonly apply to ridesharing in the U.S. However, some cities and states in the U.S. levy specific taxes on ridesharing services. The City of Chicago's Ground Transportation Tax levies a base per trip charge on rides provided by a TNC of US\$0.53. Higher rates apply for trips to and from congestion-prone areas, but lower rates apply for shared rides.¹⁵⁶ Traditional taxi services are also taxed, but on a fixed monthly or daily basis.

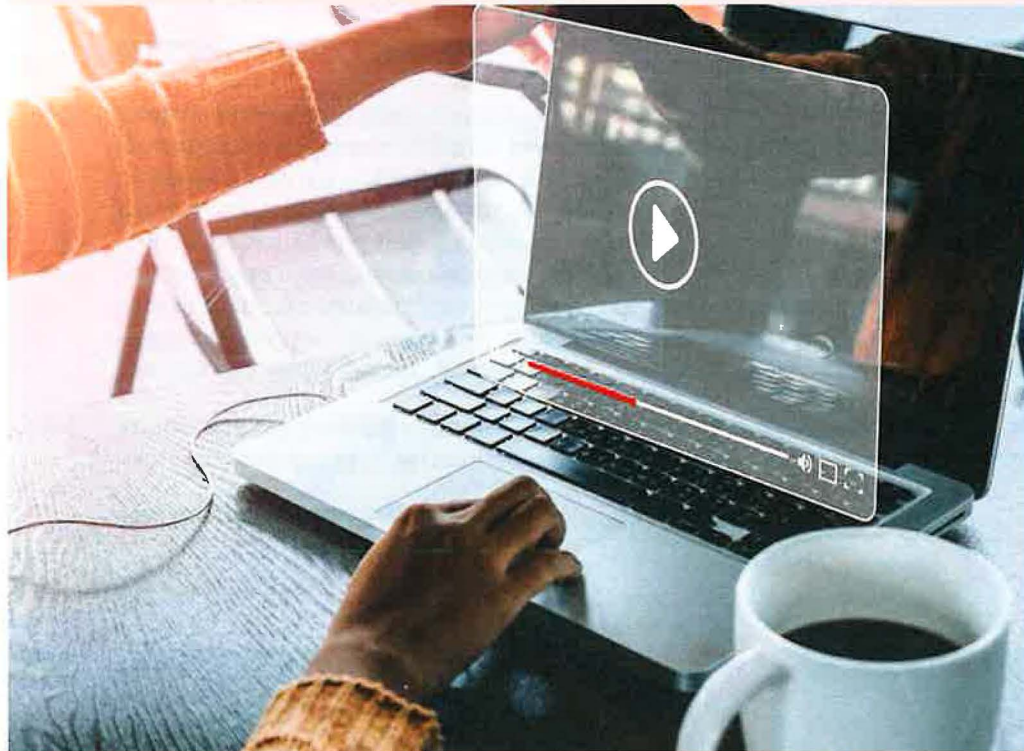
In Washington D.C., ridesharing services are taxed 6 per cent of the fare price, with funds used to support local public transit.¹⁵⁷ In Massachusetts, 20 cents per trip are collected from ridesharing operators.¹⁵⁸ Of the revenues collected, 5 cents are designated to support the taxi industry, 5 cents go to the State, and 10 cents go to municipalities.

Analysis emphasizing notable elements of evaluation criteria

In 2019, before the COVID-19 pandemic, there were 11.8 million trips via TNCs in Calgary. If an additional \$0.30 per trip were charged as a tax on top of existing regulatory charges, a ridesharing tax would have generated over \$3 million for The City's general revenues. A ridesharing tax would have reasonable revenue growth potential. The tax base would be narrow and potential revenues would be much smaller than general revenue sources. Revenue would also be subject to some volatility in response to economic conditions.

The use of ridesharing services relies on the City's transportation system and contributes to congestion, so a ridesharing tax could be considered fair. However, a high tax may not support a level playing field between ridesharing operators and other transportation providers such as taxis. The tax would discourage ridesharing services instead of personal vehicle use, taxi services, public transit, or other transportation options. An overall reduction in vehicle use would alleviate traffic congestion. Tax competition with neighbouring municipalities would not be a concern, as key destinations are located in Calgary. There would be minimal administrative costs and no complexity to add the tax to existing regulatory charges. The potential revenues from a ridesharing tax would be relatively small compared to revenue sources with more general tax bases.

Taxation – Taxes related to the New Economy



33. Digital Amusement Tax

Tool Description and Calgary Context

A digital amusement tax extends an amusement tax to include electronically delivered amusements, such as paid audio and video streaming services. This selective sales tax is more specific than the digital sales tax (i.e., tool #23).

Precedents in Other Jurisdictions

In 2015, the City of Chicago modified its amusement tax so that digital entertainment services, such as paid video streaming services, would be subject to the 9 per cent sales tax.¹⁵⁹ The amendment is commonly referred to as the “Netflix tax” since it brought digital video streaming services into the scope of the amusement tax. While streaming services are taxable under the amendment, the tax does not apply to per-

manent downloads of videos, music, or games.

Analysis emphasizing notable elements of evaluation criteria

In the year ending June 30, 2021, the City of Chicago collected US\$31 million from its 9 per cent tax on digital entertainment services.¹⁶⁰ Assuming that The City of Calgary could generate a similar amount of revenue per capita as Chicago, an identical 9 per cent tax could generate roughly US\$15 million (CAD\$19 million) in Calgary. At a 1 per cent rate, The City could collect around CAD\$2.1 million per year.

A digital amusement tax would have a narrow tax base, with potentially volatile and unpredictable revenues, since it is related to discretionary spending on entertainment. However, revenue would be expected to grow over time.

It is fair to tax digital amusements similar to other types of entertainment. However, digital amusements are not linked to City services like live events at large venues, offering a challenge to the fairness argument. Since digital amusements are discretionary spending, those with a higher ability to pay will likely pay more.

The narrow application of this tax to streaming services, omitting digitally downloaded products, makes it less efficient than a sales tax applied to all goods and services sold digitally since substitutes to the taxed product exist. However, large businesses located outside of Calgary would primarily feel the economic impacts, and the local economy would be minimally affected.

Enforcing and collecting the tax may be very administratively challenging since it would be collected from many businesses outside Calgary. It may also be unclear how to determine whether a digital purchase occurs within municipal boundaries.

A digital amusement tax would not have a link to municipal services, affecting its justification. Administrative costs would be high since many foreign-based businesses will pay the tax. It may also be challenging to determine whether the purchase or use of a subscription to digital services takes place within the city.

Taxation – Taxes related to the New Economy



34. Online Marketplace Accommodation Tax

Tool Description and Calgary Context

While the short-term accommodations market was traditionally made up of hotels, motels, and bed and breakfasts, the landscape has changed in recent years with the addition of online marketplaces such as Airbnb and Vrbo. These online marketplaces allow private individuals to rent out all or part of their property for short-term stays, competing with the traditional hotel industry.

Traditional short-term accommodations at hotels are often subject to accommodation taxes, set at a percentage of the sale price. An existing accommodation tax can easily be extended to apply to all short-term accommodations, including those provided through online marketplaces.

Precedents in Other Jurisdictions

In 2021, Alberta modified its 4 per cent tourism levy to include short-term rentals booked through online marketplaces.

Municipal accommodation taxes in cities such as Toronto and Ottawa apply to accommodations booked through online platforms. In 2018, the British Columbia provincial government agreed to extend the Municipal and Regional District Tax it collects on behalf of municipalities to include bookings through online marketplaces.

The City of Winnipeg's Accommodation Tax does not apply to short-term rentals booked through online marketplaces.

Analysis emphasizing notable elements of evaluation criteria

Under a 3 per cent accommodation tax, The City would receive an estimated \$1.7 million attributable to short-term rentals from online marketplaces. This would represent approximately 14 per cent of total accommodation tax revenues.

Including short-term accommodations based on online marketplaces in an accommodation tax would augment revenues from the tax. Creating a level playing field for all types of short-term accommodations would also be fair.

Following the modification of Alberta's tourism levy to include short-term rentals through online marketplaces, it would be simple to design a municipal accommodation tax in the same way.

Taxation – Taxes related to the New Economy



35. Tax on Shared Mobility Services¹⁶¹

Tool Description and Calgary Context

Advances in digital technology have led to a rise in what is known as the “sharing economy.” The sharing economy is a broad concept that refers to using shared goods and services instead of individual ownership. App-based shared mobility services that have recently arrived in Calgary include e-scooter or e-bike rentals (micro-mobility) and carsharing (such as Communauto, an app-based service offering short-term one-way and round-trip car rentals).

The City currently requires the operators of these services to be licensed and pay various fees. For example, micro-mobility operators must pay a set of initial permit fees and a 15-cent per trip fee. The City has a three-tier fee structure governing annual fees per vehicle in the operator’s fleet for carsharing services. Carsharing services that park vehicles in the priced parking areas downtown must pay more than a service operating outside downtown or only in unpriced areas.

All these fees are currently collected to cover the costs of administering the licensing programs. Increasing the fees to turn them into a source of general revenue would make the fees a tax and require additional legislative authority.

Precedents in Other Jurisdictions

E-scooter programs are now common in many cities in North America. However, a review of permit fees in midsize cities in the U.S. demonstrated that they are typically cost recovery in nature, not a tax for general revenue.¹⁶²

Carsharing programs are commonly found in North American cities, and operators pay licensing fees to municipal governments. Some cities, such as Boston, Denver, San Francisco, and Vancouver, offer designated parking spaces at different rates depending on the density of the parking location.¹⁶³

Analysis emphasizing notable elements of evaluation criteria

The City of Calgary currently receives annual revenues of \$100,000 to \$200,000 each from micro-mobility licensing fees and carsharing parking fees, for a total of under \$400,000. Even if these programs expanded in the future, they would remain a relatively small revenue source for The City. The revenues from these programs are currently used only to cover the costs of administering the programs.

If The City gained authority to charge above cost recovery levels and support general revenues with fees from micro-mobility and carsharing, a doubling of current fee levels with half of the fee considered a tax would result in under \$400,000 in general revenue from the tax portion.

Licensing or tax revenue from micro-mobility and carsharing stems from a narrow tax base. Revenue would fluctuate with changes in the economy but would grow as these alternative modes of transportation grow in prevalence. Increased fees may discourage using shared mobility and further innovation in this space. Also, residents may substitute for active transportation or public transit modes if they are more affordable.

Current licensing schemes for micro-mobility and carsharing are fair because they recover the cost of administering the programs. Increasing the fees to support the costs of The City’s road network could be justifiable if The City receives the legislative authority to collect these fees as a tax. Increasing fees under the current framework would avoid creating new administrative costs.

Taxation – Taxes related to the New Economy



36. Autonomous Vehicle Registration Tax¹⁶⁴

Tool Description and Calgary Context

While autonomous (driverless) car technology is in development, it is not yet close to being ready for deployment on Calgary roads. Since autonomous vehicles rely on cameras to identify lane markings and obstacles, Calgary's winter snow conditions create difficulty for autonomous vehicles. It will likely be many years before Calgary sees autonomous vehicle technology ready for public roads, even after many locations in warmer climates embrace it.

The City of Calgary did run an autonomous shuttle pilot for 22 days in September 2018. This shuttle operated on a short, closed route at slow speeds. The successful pilot showed that the technology needed further development before using autonomous vehicles in mixed traffic and weather conditions.

A general vehicle registration tax could also cover autonomous vehicles. Applying the tax to only autonomous vehicles or using a different rate would be an alternative way to structure the tax.

Regulating vehicle safety on public roads is a provincial responsibility, and municipalities are unlikely to receive responsibility for regulating autonomous vehicles. Thus, for The City, an annual charge for ownership of an autonomous vehicle could be better characterized as a tax than a permitting charge.

Precedents in Other Jurisdictions

Autonomous vehicle technology moved beyond the testing phase in other municipalities. There are municipalities in the U.S. where for-hire robotaxi services are now up and running 24/7. As warmer climates without the challenges of snowfall will be able to utilize autonomous vehicle technology before Calgary, some precedents will likely exist before The City begins seeing autonomous vehicles on its roads.

Analysis emphasizing notable elements of evaluation criteria

Autonomous vehicle licensing can only become a revenue source once the technology is developed. However, general vehicle registration fees have the potential to be a revenue source of \$45 million, with a flat fee of \$45 for all vehicles (assuming no behaviour changes). In the long term, if autonomous vehicle technology becomes available and widespread in Calgary, registration of autonomous vehicles could become a similar revenue source.

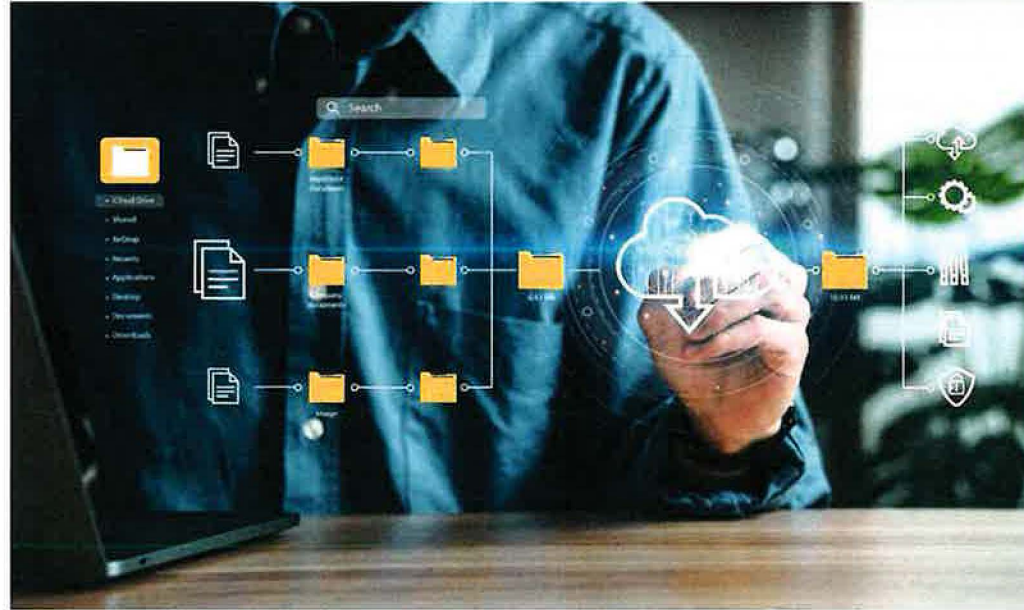
Autonomous vehicle technology is not developed enough to become a revenue source. In the very long term, autonomous vehicles could be a source of stable revenues through a specific or general vehicle registration tax.

A registration tax for individually owned autonomous vehicles should be the same as for driver-operated vehicles to be fair. If autonomous vehicles are part of a carsharing fleet, separate rules and fees related to the parking of shared vehicles may be appropriate. Higher taxes or fees for autonomous vehicles compared to traditional vehicles may slow the adoption of autonomous vehicles.

Piggybacking on a provincial registration fee system would be the administratively most straightforward approach. Independently administering a municipal autonomous vehicle registration fee program would create high administration costs for collection and enforcement.

Autonomous vehicles will not arrive on Calgary's roads for many years. However, the technology will likely be deployed and become widespread in the long term. A registration tax for individually owned vehicles and shared fleets could become a small but stable revenue source for The City.

User Levies – Levies related to the New Economy



37. Monetization of City Data as an Asset¹⁶⁵

Tool Description and Calgary Context

The City of Calgary has sold licenses for its proprietary data since the 1990s. Data available for licensing from The City includes detailed engineering drawings, digital aerial survey maps and utility location maps. As part of a SAVE business case, The City recently adjusted its pricing for data licenses to reflect market rates and increase revenue.

The City also shares many datasets for free public use under an open data license. Datasets on The City's open data portal include assessment and building permit data, crime and traffic incidents, and civic census data.

Despite the opportunities to generate revenue through data licensing, there is an ongoing trend among governments in many countries to release more free, open data. The benefits of open data policies include government transparency, improved public service, and societal and economic opportunities.¹⁶⁶ Rather than treating data

as only a revenue source, The City may be able to provide value to the community by continuing to openly share data to support innovation, collaboration, and economic growth.

Precedents in Other Jurisdictions

Open data programs have been growing in many North American municipalities in recent years. The 2020 Open Cities Index, a benchmarking study for open data initiatives, noted a maturity in municipal open data programs in North America since 2015.¹⁶⁷ The City of Edmonton's open data program received the top place in the index, followed by The City of Ottawa and The City of Winnipeg. The City of Calgary received the fourth highest ranking. Despite the trend towards open data, most cities in Canada still offer some types of data for purchase, such as geospatial maps.

Analysis emphasizing notable elements of evaluation criteria

In 2021, The City received about \$3.7 million in revenue from data licensing. Rates for property information reports were increased in July 2021 to reflect market rates, so revenue should be higher in 2022. Beyond 2022, revenue from data licensing will likely remain a small revenue source.

Rates for data licensing currently reflect market values, so The City has already captured most of the revenue growth potential. Revenues are relatively stable in response to economic conditions. Fees for data use are fair since they reflect the market value, and businesses that benefit from the use of data contribute to the cost of making the data available.

Making unique data available promotes economic growth as the data gets used for innovation and improved decision-making. Charging rates too high may reduce the number of users of the data and eliminate productive applications of City data. Open data initiatives promote economic growth by removing barriers to accessing government data.

Prices for many types of City data licenses are simple and visible on The City's website. Other custom licenses may require specific license agreements, which are less visible. Selling licenses for the use of existing City data is not administratively burdensome. The value of transparency, innovation, and economic efficiencies that result from open data may outweigh the value of including more of The City's data in a paid licensing model.

User Levies – Levies related to the New Economy



38. Investing in Digital Connectivity Infrastructure¹⁶⁸

Tool Description and Calgary Context

The City of Calgary currently owns a network of 650 kilometers of fibre optic cable, connecting over 900 City facilities and assets.¹⁶⁹ This network is critical support for various business units that require reliable high-speed connectivity to deliver services such as controlling traffic lights and trains, managing a clean water supply, and providing emergency services throughout Calgary. As more business units adopt digital technologies, network usage is increasing.

The City avoids estimated costs of \$8 million each year by using its own fibre network instead of purchasing third-party connectivity services. In addition, The City has excess fibre optic capacity (dark fibre) on its network, which it leases to other organizations and businesses. Annual revenues from leasing fibre capacity have followed an increasing trend over the last several years, reaching \$1.2 million in 2021.

Another type of municipal fibre infrastructure would be a “fibre-to-premise” system that connects to individual residences and businesses on a broad scale to deliver broadband internet connectivity. Such systems are sometimes built by municipally owned electric utilities in cities where residents may have previously lacked access to a high-speed broadband network. In Calgary, however, TELUS is currently expanding its private fibre optic network to connect more than 90 per cent of Calgary homes and businesses by 2024.¹⁷⁰ For The City of Calgary, there would be little benefit in building a fibre-to-premises municipal broadband network as the private sector is already providing this service.

Precedents in Other Jurisdictions

The Town of Olds helped finance the construction of a locally owned fibre network in Olds known as O-NET beginning in 2011. While the network achieved its goal of connecting residents and businesses to high-speed internet, the Town incurred \$14 million in debt as well as a \$4 million line of credit during the construction of the network.¹⁷¹

In the U.S., over 500 municipalities have created municipal broadband networks. Chattanooga (Tennessee) was one of the first municipalities to build a municipal broadband network through its municipally owned electric utility. Chattanooga’s network started providing high-speed internet in 2009 and spurred economic development.¹⁷²

Analysis emphasizing notable elements of evaluation criteria

The City of Calgary received over \$1.2 million in revenue through the leasing of its fibre assets in 2021, as well as avoiding an estimated \$8 million in costs.¹⁷³ The City’s fibre optic network provides leasing revenue and helps avoid high costs for connectivity needs. Revenue should increase modestly over the next several years.

The fees are fair because businesses that benefit from The City’s fibre optic network pay and contribute to its further development. Since leasing City fibre is a fee for a unique service, it does not distort business decisions. Access to City fibre promotes innovation, enhanced efficiencies, and economic growth. There are simple, publicly available rates for access to City fibre. However, complex applications may need customized rates. The administration costs are reasonable, with set-up costs for new customers recovered through non-recurring fees.

User Levies – Levies related to the New Economy



39. Regulatory Charges (Franchise Fees) for 5G Infrastructure¹⁷⁴

Tool Description and Calgary Context

5G wireless infrastructure includes small cell antennas that can be attached to street poles to provide broad 5G coverage. The City has a Wireless Infrastructure Deployment Program that guides its collaboration with wireless providers to enable the buildout of 5G wireless technology in Calgary. In 2021, master license agreements were finalized with two major wireless service providers.¹⁷⁵ These agreements govern annual license fees for using City assets, representing a new revenue source for The City. However, unlike a franchise fee calculated as a percentage of value, the fees received from the wireless providers will be relatively small, fixed, annual payments.

Imposing a franchise fee for 5G wireless infrastructure would not be possible since telecommunications fall under federal jurisdiction. The federal agency Innovation, Science and Economic Development Canada (ISED) is the approving authority for radiocommunication in Canada, limiting The City's ability to impose regulations on wireless infrastructure.

Precedents in Other Jurisdictions

No Canadian municipalities collect franchise fees from telecommunications companies, including for wireless 5G infrastructure. In the U.S., the Federal Communications Commission (FCC) laid out rules in 2018 that restricted the ability of municipalities

to generate revenue from small wireless (5G) infrastructure.¹⁷⁶ The fees charged by municipalities to wireless providers for 5G infrastructure must be cost-based, not intended to generate additional revenue. To enforce this rule, the FCC set out specific fee levels that would be permitted to comply with the new standard. Municipalities in the U.S. must approve or deny permits for small cell 5G infrastructure within 60 or 90 days of an application.

Analysis emphasizing notable elements of evaluation criteria

Revenue for The City from the deployment of 5G wireless technology in Calgary will come from annual site licenses. The rates of these fees are determined by the master license agreements signed with the wireless service providers. Fees for using individual poles would be very small but high in volume. Fees for using the rooftops of municipal buildings would be higher, but there would be fewer potential locations. The City will also benefit from cost avoidance, as wireless providers may install new poles that support their 5G infrastructure, reducing lifecycle costs for The City. Revenue from site licenses could be a few million dollars per year once 5G deployment nears completion.

If franchise fees were collectable, revenues from wireless 5G traffic would grow as the technology is deployed and adopted. Revenue from site licences for 5G installations will increase until the 5G network deployment is complete. Under current legislation, The City can collect fees from annual site licensing of poles and buildings for installing small 5G wireless infrastructure. A franchise fee approach could lead to more significant revenues but is not legislatively feasible.

Cost-recovery-based fees for 5G site licenses are fair. High fees for installing 5G wireless infrastructure could reduce the extent to which the technology gets deployed throughout Calgary, making Calgary less attractive to technology investment and reducing economic growth. Fee structures, as contained in master licence agreements with telecommunications companies, are not overly complex. Since only a few different telecommunications companies directly pay the fees to The City, administration costs are relatively small.

Assessed using the evaluation criteria

Most of the 31 tools considered perform very well on some of the 12 criteria, so the selection process for identifying tools depends on decision-maker preferences across the 12 criteria that put a higher weight on some criteria. A few notable distinctions across the tools are highlighted in Exhibit 4.5 and summarized below:

- The ten (10) tools related to the new (digital) economy can only materialize in the long-term or very long term. There are several implementation hurdles to overcome for many of them.
- The two (2) tax tools related to current household transfers can be swiftly implemented. They are the ones that require the least amount of implementation time should speed to implementation become a critical factor.
- The ten (10) tools that are taxes on products are most commonly deployed in other jurisdictions. There are several instances of them in Canadian and U.S. cities. While they may need a bit more implementation time, deploying them will not take much longer than the taxation tools related to current transfers from households.
- The five (5) tools that are taxes on production require intricate administrative work to ensure that their deployment would not lead to distortions or create reputational concerns.
- The two (2) tools that are taxes on income, alongside the two (2) tools that are taxes on non-renewable resources, are the most potent. They have the most significant capacity to help address funding gaps.

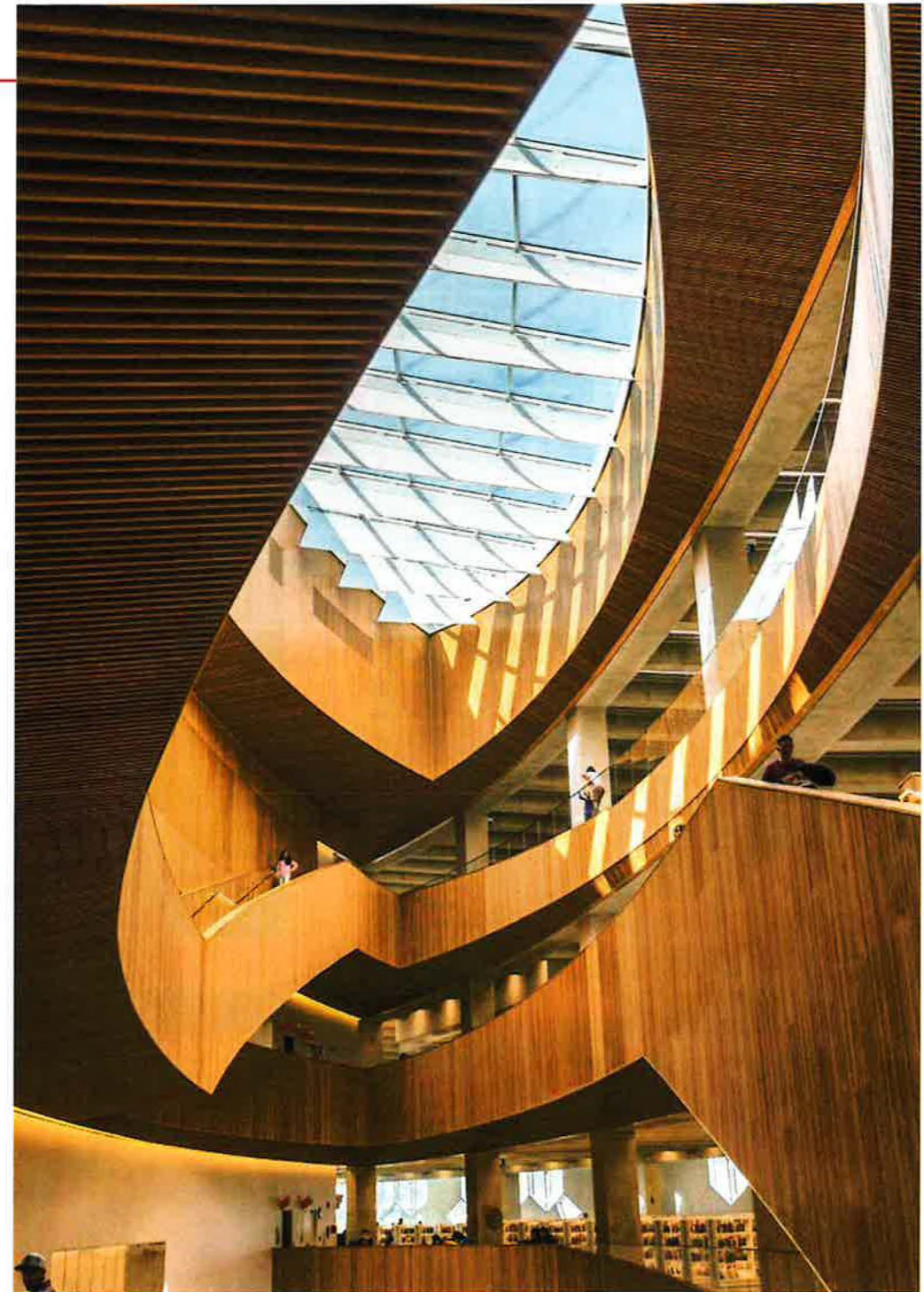


Exhibit 4.5 (a)
Additional tools that require Legislative Change fare well on the evaluation criteria

Scoring Guide:

■ Strongly Aligned ■ Partially Aligned ■ Weakly Aligned

		Potent	Fairness	Reliability	Adaptability	Efficiency	Neutrality	Reinforcement	Inexpensive	Simplicity	Transparency	Accountability	Protection
I. Taxation - Taxes on Income	9. Personal Income Tax	Strongly Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Weakly Aligned	Partially Aligned	Strongly Aligned
	10. Corporate Income Tax	Strongly Aligned	Partially Aligned	Weakly Aligned	Strongly Aligned	Weakly Aligned	Weakly Aligned	Weakly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Partially Aligned	Strongly Aligned
II. Taxation - Taxes on Production	11. Real Property Tax (Discontinuation of Provincial Property Tax Collection)	Strongly Aligned	Partially Aligned	Strongly Aligned	Weakly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
	12. Occupational privilege tax	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Strongly Aligned
	13. Road pricing	Strongly Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Weakly Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
	14. Advertising Tax	Partially Aligned	Strongly Aligned	Strongly Aligned	Weakly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned
	15. Telecommunications Franchise Fees	Strongly Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned
III. Taxation - Taxes on Products	16. Municipal General Sales/ Value-added Tax	Strongly Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned
	17. Accommodation Tax	Partially Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Weakly Aligned	Strongly Aligned
	18. Parking Tax	Strongly Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
	19. Fuel Tax	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned
	20. Tobacco Tax	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned
	21. Amusement Tax	Partially Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned
	22. Land Transfer Tax	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
	23. Alcohol Tax	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned
	24. Cannabis Tax	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Strongly Aligned
	25. Gaming Revenue	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Strongly Aligned

Source: Corporate Economics, The City of Calgary

Exhibit 4.5 (b)
Additional tools that require Legislative Change fare well on the evaluation criteria

Scoring Guide:

■ Strongly Aligned
 ■ Partially Aligned
 ■ Weakly Aligned

		Potent	Fairness	Reliability	Adaptability	Efficiency	Neutrality	Reinforcement	Inexpensive	Simplicity	Transparency	Accountability	Protection
IV. Taxation - Current Transfers from Households	26. Vehicle Registration Tax	Strongly Aligned	Partially Aligned	Strongly Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
	27. Insurance Premium Tax	Strongly Aligned	Partially Aligned	Strongly Aligned	Weakly Aligned	Strongly Aligned	Partially Aligned	Weakly Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned
V. Taxation – Taxes on Non-Renewable Resources	28. Royalty Revenue	Strongly Aligned	Strongly Aligned	Weakly Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Weakly Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned
	29. Carbon Tax	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
VI. Taxation – Taxes related to the New Economy	30. Cloud Computing Tax	Partially Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Weakly Aligned	Partially Aligned	Weakly Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned
	31. Digital Sales Tax	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned
	32. Ridesharing Tax	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Strongly Aligned
	33. Digital Amusement Tax	Partially Aligned	Partially Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Weakly Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned
	34. Online Marketplace Accommodation Tax	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Strongly Aligned
	35. Tax on Shared Mobility Services	Partially Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
	36. Autonomous Vehicle Registration Tax	Weakly Aligned	Partially Aligned	Strongly Aligned	Weakly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Partially Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
VII. User Levies – Levies related to the New Economy	37. Monetization of City Data as an Asset	Partially Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Strongly Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
	38. Investing in Digital Connectivity Infrastructure	Partially Aligned	Strongly Aligned	Strongly Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned	Strongly Aligned
	39. Regulatory Charges for 5G Infrastructure	Partially Aligned	Partially Aligned	Strongly Aligned	Weakly Aligned	Partially Aligned	Partially Aligned	Weakly Aligned	Strongly Aligned	Strongly Aligned	Partially Aligned	Partially Aligned	Strongly Aligned

Source: Corporate Economics, The City of Calgary

5

Approaches for Achieving Progress in Securing a New Funding Framework



5.1 Targeting tools that best align with the 12 evaluation criteria

Using the 12 evaluation criteria and equally weighting the importance of each criterion, it is possible to identify a shortlist of new funding tools that can serve The City of Calgary well. Many of these tools are beyond The City's authority. For example, the following seven tools perform strongly – a municipal fuel tax, a vehicle registration tax, a municipal personal income tax, higher real property tax following discontinuation of the provincial property tax collection, municipal accommodation tax, sharing of royalty revenue, and a municipal general sales tax. The City of Calgary can share the findings of this investigation with other orders of government and secure support from other Alberta municipalities for success.

There are two valuable considerations when targeting these tools. The first is **timing**. Many of these tools require significant time to secure and deploy. One tool – a municipal sales tax – will take a very long term, given the need to rely on the province to have a sales tax in place and the historical preference not to have a sales tax in Alberta, partly because of the availability of royalty revenue as an offset for sales tax revenue. Two tools – a municipal fuel tax and a vehicle registration tax – can be secured and deployed relatively quickly. That's not only because the administrative mechanisms for tax administration are at the highest level of maturity but also because the funding levels attributable to these tools are not substantial. The other tools – a municipal personal income tax, higher real property tax following discontinuation of the provincial property tax collection, municipal accommodation tax, and sharing of royalty revenue – will need some time to secure support from other interested parties (Exhibit 5.1).

The second reason for targeting these tools is **diversity**. Calgary has endured financial challenges from over-reliance on specific economic activities. The oil and gas industry volatility and the knock-on impact on the demand and supply for downtown office towers are still fresh in everyone's mind. The City can measure, track and report on revenue diversity annually.¹⁷⁷ The more comprehensive the range of tools, the stronger the ability to alter the reliance across them as economic conditions and public sentiments change.

Exhibit 5.1**Shortlist of Potential Revenue Sources for The City of Calgary that best align with the 12 evaluation criteria**

Source of Revenue	Assumption for Initial Estimates	Net Initial Estimated Revenue in 2021 (\$ millions)	Share of The City's total expenditure in 2021	Growth Drivers	Administration Channels	Targeted Implementation Time
Municipal Fuel Tax	10% of provincial fuel tax rates	32	1%	Growth of vehicles in the city	Piggyback to the federal tax system	Fastest Possible
Vehicle Registration Tax	\$8 or \$45 per vehicle	8 or 45	0.2% or 1.2%		Piggyback to the provincial registration system	Fastest Possible
Municipal Personal Income Tax	10% surcharge on provincial income tax collections	420	11%	Overall growth in the local economy,	Piggyback to the federal tax system	Medium Term
Real Property Tax: Discontinuation of Provincial Property Tax Collection		772	20%	Set by City Council	City of Calgary's system	Medium Term
Municipal Accommodation Tax	3% tax rate	12	0.3%	Population growth	Piggyback to the provincial tax system	Medium Term
Sharing of Royalties Revenues	10% of provincial revenues distributed to municipalities by population share	496	13%	Growth in Alberta's oil and gas sector	Piggyback to the provincial tax system	Medium Term
Municipal General Sales Tax	1% tax rate	356	9%	Population growth	Piggyback to the federal tax system	Long Term

Source: Corporate Economics, The City of Calgary

5.2 Targeting tools that best align with current funding needs

The City of Calgary's operating activities (as distinct from capital investments) that are fully funded by user levies could adjust their charges to match costs. Those operating activities partly or wholly supported by property taxes are affected by the legislated balanced operating budget approach, which pressures Alberta municipalities to adjust property tax increases in line with population growth and municipal

cost inflation as well as service changes approved by Council. However, it is hard to predict the sudden swings in inflation in Alberta, and inaccuracies may arise. Also, increasing expenditures during a high inflation and a high-population growth environment may be politically untenable unless the local economy is firing on all cylinders. The City will benefit from procyclical tools to support operating activities for those situations. Examples of tools that fit the bill are amusement and land transfer taxes.

The situation for capital investments is somewhat different. Ordinarily, the level of public capital investments should respond to the size and demands of a province's economy. However, Alberta's provincial and municipal governments' capital investments as a percent of GDP over the long term, using the 30 years between 1990 and 2019 (i.e., excluding pandemic-related distortions) is below average - Alberta's provincial and municipal capital investments (2.6 per cent) were below the average across Canadian provinces (3.0 per cent).

It has led to a significant increase in Calgary's infrastructure funding gap. The latest estimates from Calgary's 2022 Corporate Asset Management Plan indicate a 10-year infrastructure funding gap of \$7.2 billion. Like with operating activities, utility rate-funded capital investments can adjust their rates to match costs. The shortfall is attributable to eight asset categories – (a) affordable housing; (b) buildings; (c) fire and emergency response; (d) golf and athletic park recreation opportunities; (e) IT solutions and support; (f) parks, pathways, trails and parks infrastructure; (g) roads, bridges, and tunnels; and (h) transit infrastructure and fleet. Not all of the 31 funding tools beyond The City's authority or the eight funding options within The City's decision-making authority (as it relates to tax base determination and tax rate setting) apply to each asset category. An essential next step for executing this approach involves targeting tools aligned with top funding priorities.

5.3 Targeting tools that are best suited for a wide variety of funding needs

There is a significant difference in the size of the capital funding shortfall attributable to the eight asset categories for City-owned capital assets. The category-specific 10-year funding gap for the capital assets is:

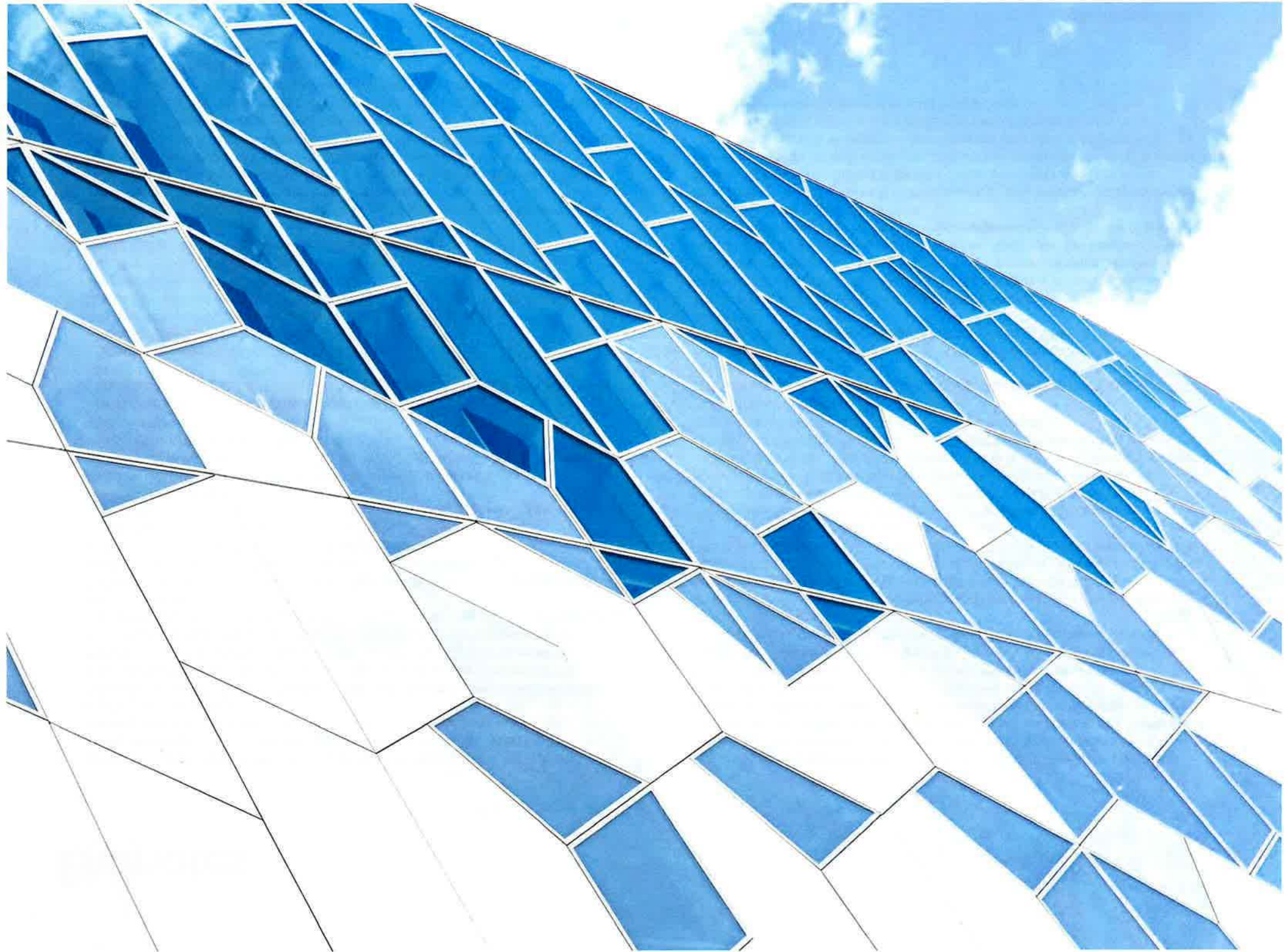
1. Affordable housing (\$173 million).
2. Buildings (\$1,973 million).
3. Fire and emergency response (\$306 million).
4. Golf and athletic park recreation opportunities (\$201 million).
5. IT solutions and support (\$15 million).
6. Parks, pathways, trails and parks infrastructure (\$793 million).
7. Roads, bridges, and tunnels (\$1,833 million).
8. Transit infrastructure and fleet (\$1,973 million).

While securing tools that best align with present-day capital funding priorities may be compelling, it may be more prudent to broaden diversity for the long term in preparedness for all categories of operating and capital funding challenges.

While the strong evidence of a municipal vertical fiscal imbalance favours own source tax revenue over shared taxes, expanding both types would be beneficial. For own-source taxes, Calgary would have the leeway over rates and bases. However, this ability may be regulated and restricted, reducing taxing power (e.g., by imposing caps, exemptions, etc.). Many municipalities in other jurisdictions benefit from a great diversity of direct and indirect local taxes in addition to the typical "autonomous" tax – the property tax.

Under this approach, the goal for Calgary is to ensure that the widest variety of needs are covered – both operating and capital. As a result, many municipalities in some countries favour a local personal income tax because it applies to all municipal services. In other cases, multiple tools are secured across the range of needs – motor vehicle tax (for transit and transportation-related needs), gambling tax (to promote local entertainment initiatives), tourist and hotel taxes (to support local arts and culture), and environmental tax (to support climate change initiatives).

Calgary can extend the tax sharing success through Alberta's recent Local Government Fiscal Framework (LGFF). As the LGFF takes off, and to the extent that it proves reliable, Calgary can secure other shared tax options where provincial (or federal) taxes get shared with municipalities, such that they are redistributed as tax revenues and not as grants.



Endnotes

- 1 Vammalle, C. and I. Bambalaite (2021), "Funding and financing of local government public investment: A framework and application to five OECD Countries", OECD Working Papers on Fiscal Federalism, No. 34, OECD Publishing, Paris, <https://doi.org/10.1787/162d8285-en>.
- 2 Two examples are: (1) The City of Calgary (May 2006) "Alberta's competitive advantage: empowering municipalities with new municipal revenue sources," prepared for the Minister's Council on Municipal Sustainability. (2) The City of Calgary (November 4, 2010) "A case of fiscal imbalance: The Calgary Experience," prepared for Council and later presented to the Fiscal Issues Session of the Canadian Economic Association (CEA) 2011 Conference.
- 3 Technical Appendix 1 on the municipal fiscal gap and other technical appendices are available upon request for those interested in deeper exploration.
- 4 in addition to First Nation, Inuit and Metis governments.
- 5 [An Introduction to How Canada's Parliament Works: The Division of Powers](#)
- 6 Source: <https://www.canada.ca/en.html> and <https://www.alberta.ca/index.aspx>, accessed Jan 12, 2023
- 7 Based on the 2021 Census of Population conducted by Statistics Canada, the population was 662,248 in the city of Vancouver and 749,607 in the city of Winnipeg, compared to 1,306,784 in the city of Calgary.
- 8 Multiple sources on services offering:
 - <https://www.winnipeg.ca/interhom/> accessed Dec 7, 2021;
 - https://www.hydro.mb.ca/articles/2021/02/led_street_light_update/ accessed Dec 7, 2021;
 - <https://vancouver.ca/> accessed Dec 6, 2021; and
 - <https://www.vpl.ca/> accessed Dec 6, 2021.
- 9 The full results of that survey are available in Technical Appendix 2.
- 10 Details on municipal purposes, natural person powers, and powers to pass bylaws in Alberta are covered in Technical Appendix 3.
- 11 [City of Vancouver Climate Emergency Action Plan](#)
- 12 [City of Edmonton Carbon Budget 2023-2026](#)
- 13 See Technical Appendix 4 for details.
- 14 Urbanization is a complex process in which a country's population centres tend to become larger, more specialized and more interdependent over time.
- 15 Using 2001 and 2021 federal census results, cumulative population growth in Calgary (49 per cent) was faster than in Alberta (43 per cent) and Canada (23 per cent).
- 16 Alberta has the fastest population growth, followed by the population growth in British Columbia (+24%) and Ontario (+18%) over the period of 2002 and 2022.
- 17 Urban centres are all census metropolitan areas and census agglomerations. Rural areas are areas outside census metropolitan areas and census agglomerations.
- 18 <https://www.calgary.ca/home.html>
- 19 This section is in response to the FTF Recommendation #9: Develop research and analysis that document the extent of the decline in bricks and mortar and the transition to new models of delivering goods and services. Use it to demonstrate that municipalities' traditional real estate tax revenues cannot capture the transition to e-commerce transactions. Use the findings to advocate for the reform of municipal finances and the revenue-generating tools available to municipalities.
- 20 A summary of the well-known limitations, such as they are not directly related to the ability to pay, nor do they grow at the same rate as the economy, is available in Technical Appendix 5.
- 21 Amanda Sinclair (May 3, 2019) "[Measuring digital economic activities in Canada: Initial estimates](#)", the National Economic Accounts Division, Statistics Canada.
- 22 Calgary's municipal property tax share for residential property owners increased from 48% in 2015 to 52% by 2021. The share of non-residential property taxes attributable to other non-residential property types also increased.
- 23 The Financial Task Force recommended a detailed review of the consequences of the transition to the digital economy on the property tax base. Specifically, FTF Recommendation #9: Develop research and analysis that document the extent of the decline in bricks and mortar and the transition to new models of delivering goods and services. Use it to demonstrate that municipalities' traditional real estate tax revenues cannot capture the transition to e-commerce transactions.
- 24 More details are available in Technical Appendix 6.
- 25 <https://www.calgary.ca/business-economy/csps/abs/short-term-rentals-and-lodging-houses.html>
- 26 Federalism is a system of government in which sovereignty is constitutionally divided between a central governing authority and constituent political units (like states or provinces).
- 27 A federal system is characterized as being more centralized (or less decentralized) than another when more of its decision-making powers are in the hands of authorities with a larger jurisdiction. A common measure of the extent to which a system is decentralized is the expenditure decentralization ratio, defined as the share of total government expenditures made by subnational governments, exclusive of grants received from the central government.
- 28 An externality is a cost or benefit of an economic activity experienced by an unrelated third party, but is not reflected in the final cost or benefit of a good or service.
- 29 Economies of scale (or scale economies) occur when more units of a good or service can be produced with fewer input costs due to the large scale of an enterprise.
- 30 Equity, or economic equality, is the concept or idea of fairness in economics, particularly in regard to taxation or welfare economics.

- 31 Vertical fiscal imbalance refers to a gap between a government's own-source revenues and spending responsibilities due to the allocation of taxation powers. In Canada, both the provincial and municipal governments have vertical fiscal imbalances. Transfer payments for health under the Canada Health Transfer and transfers for post-secondary education and various social services under the Canada Social Transfer help address the provincial fiscal imbalance.
- 32 A thorough analysis of vertical fiscal imbalance facing municipalities is available in Technical Appendix 1.
- 33 <https://www.calgary.ca/green-line/green-line-governance/green-line-funding.html>
- 34 This section is in response to the FTF Recommendation #13: (a) Collaborate with the province to authorize access to tools that address services that arise from provincial government direction or changes; (b) Identify services that may have been directed to The City explicitly or inadvertently; (c) The inadvertent transfer of responsibility occurs when third parties are no longer able or willing to deliver the services, but The City steps in for continuity as the last resort government service provider; (d) These services have value for those who access them. Ensuring continuity, as well as adequate funding for those services, is vital; (e) Use the results from the review to engage in a dialogue with the province. Collaborate to determine and agree on the fiscal tools necessary to allow effective delivery of those services by the municipality.
- 35 A review of downloading experienced by three big cities – Calgary, Vancouver, and Toronto – is available in Technical Appendix 7.
- 36 Alberta Government: [Budget 2007 highlights](#).
- 37 [Alberta Government Municipal Affairs grant programs: Municipal Sustainability Initiative](#), accessed on Mar 1, 2023
- 38 This is covered in multiple reports including Dougherty, S. and K. Forman (2021), "Evaluating fiscal equalisation: Finding the right balance", OECD Working Papers on Fiscal Federalism, No. 36, OECD Publishing, Paris, <https://doi.org/10.1787/253da2b8-en>.
- 39 Kim, J. and S. Dougherty (eds.) (2020), Local Public Finance and Capacity Building in Asia: Issues and Challenges, OECD Fiscal Federalism Studies, OECD Publishing, Paris, <https://doi.org/10.1787/a944b17e-en>.
- 40 Kim, J. and S. Dougherty (eds.) (2020), Local Public Finance and Capacity Building in Asia: Issues and Challenges, OECD Fiscal Federalism Studies, OECD Publishing, Paris, <https://doi.org/10.1787/a944b17e-en>.
- 41 Automatic stabilizers are countercyclical fiscal policy tools that respond immediately to economic conditions without the need for policy adjustments. They have the advantage of speed. A good example of an automatic stabilizer on the revenue side is the income tax. Employment Insurance (EI) is another example on the expenditure side.
- 42 https://www.toronto.ca/ext/digital_comm/inquiry/inquiry_site/cd/gg/add_pdf/77/Governance/Electronic Documents/Other CDN Jurisdictions/Powers of Canadian Cities.pdf
- 43 A more recent precedent from Quebec is covered in section 3.4.
- 44 [Saskatchewan municipal revenue sharing](#)
- 45 [Ontario dedicated gas tax funds for public transportation program review and the Ontario community infrastructure fund](#)
- 46 [From Pledge to Practice: Navigating Canada's Net-zero Policy Landscape in 2023, Delphi](#), February 13, 2023.
- 47 Richard M. Bird and Enid Slack, Local Taxes and Local Expenditures: Strengthening the Wicksellian Connection, International Centre for Public Policy Working Paper no. 13-23 (Atlanta: Georgia State University, Andrew Young School of Policy Studies, October 2013).
- 48 Lindsay M. Tedds, 2019, Non-Tax Revenue for Funding Municipal Governments: User Levies – Adoption, Constraints and Emerging Opportunities, in Funding the Canadian city, edited by Enid Slack, Lisa Philipps, Lindsay M. Tedds, and Heather L. Evans.
- 49 Additional information about the notice of motion (2023.MM3.5) is available [here](#).
- 50 Plenary remarks delivered by Don Drummond at The City of Calgary's 2022 Trends Event. Don Drummond is the Stauffer-Dunning Fellow and Adjunct Professor at the School of Policy Studies at Queen's University. Mr. Drummond is currently Chair, Canadian Centre for the Study of Living Standards; Fellow-in-Residence, C.D. Howe Institute and; member of the Expert Advisory Group to the Canadian Institute for Climate Choices.
- 51 See Technical Appendix 8 for details.
- 52 These taxes are called automatic stabilizers. Examples include income tax and sales tax.
- 53 Cadastral income is used as the basis for collecting property tax and determining the property income taxed in personal income tax. Cadastral income is not an actual income, but a notional income corresponding to the average normal net income that the property provides its owner in a year.
- 54 A list of European countries with progressive property rate structures is available in Technical Appendix 9.
- 55 Source: The Global Urban Economic Dialogue Series; Property Tax Regimes In Europe.
- 56 Source: Government of British Columbia, Ministry of Finance.
- 57 <https://vancouver.ca/home-property-development/why-an-empty-homes-tax.aspx>
- 58 <https://www.toronto.ca/services-payments/property-taxes-utilities/vacant-home-tax/>
- 59 The total market value across all permits was \$5.7 billion in 2022.
- 60 Details are available in Technical Appendix 10.
- 61 The City of Calgary has been criticized for having too many licence categories in the past The City is currently working to simplify and reduce the number of business licence categories, to reduce red tape.
- 62 There are currently two types of business licence categories, but many home-based businesses are not included in City business licensing if they are regulated under another agency. (e.g., accountants, lawyers).
- 63 A home occupation is any business that operates out of a dwelling and is allowed under Calgary's Land Use Bylaw provided it meets all bylaw requirements. Class 1 home businesses do not involve any client or customer visits to the dwelling. Class 1 home businesses do.
- 64 Details are available in Technical Appendix 11.
- 65 For example, Gillette and Hopkin (1987) and Nallathiga (2009), and Kitchen (2021).
- 66 <https://www.enmax.com/AboutUsSite/Documents/our-companies/ENMAX-Overview.pdf>

- 67 For example, Technical Appendix 12 includes a review of a study that found that EEC has previously underpriced its services.
- 68 References: (a) AC2022-1251 “Calgary Parking Authority Financial Statements, December 31, 2021”; (b) TT2021-1258 “Calgary Parking Authority Report to SPC on Transportation and Transit, September 1, 2021”; and (c) AC2019-0630 “Calgary Parking Authority Financial Statements, December 31, 2018.”
- 69 For example, revenue from Vancouver’s Empty Home Tax dropped 38% from 2018 to 2021 (<https://vancouver.ca/files/cov/vancouver-2021-empty-homes-tax-annual-report.pdf>). If the policy is successful, jurisdictions should end up collecting minimal revenue using this tool over the long term. Revenue collected from vacancy taxes is generally earmarked for investment in affordable housing.
- 70 Slack, Enid. (2005). *Easing the Fiscal Restraints: New Revenue Tools in the City of Toronto Act*.
- 71 Jared Walczak (July 2019) “Local Income Taxes in 2019”, The Tax Foundation
- 72 City of Philadelphia, Annual Financial Report Fiscal Year Ended June 30, 2020. <https://www.phila.gov/media/20210108144752/annual-financial-report-FY2020.pdf>
- 73 KPMG LLP (2016), *City of Toronto Revenue Options Study*
- 74 <https://detroitmi.gov/departments/office-chief-financial-officer/ocfo-divisions/office-treasury/income-tax/income-tax-information>
- 75 <https://www.phila.gov/services/payments-assistance-taxes/business-taxes/business-income-receipts-tax-birt/>
- 76 <https://www.nyc.gov/site/finance/taxes/business-corporation-tax.page>
- 77 Kitchen, H., McMillan, M., & Shah, A. (2019). *Local Public Finance and Economics: An International Perspective*. Springer Nature.
- 78 Adjustments are made to reflect Calgary’s share of the provincial working-age population (defined here as people aged 15 to 64) for the estimation.
- 79 https://www.gov.nl.ca/education/files/publications_archives_schoolfeesreport.pdf
- 80 <https://www.gov.mb.ca/edupropertytax/index.html>
- 81 <https://www.denvergov.org/Government/Agencies-Departments-Offices/Agencies-Departments-Offices-Directories/Department-of-Finance/Our-Divisions/Treasury/Business-Tax-Information#>
- 82 <https://www.cityofhuntington.com/business/taxes-and-fees/city-service-fee/>
- 83 Althaus, C., Tedds, L. M., & McAvoy, A. (2011). The feasibility of implementing a congestion charge on the Halifax peninsula: Filling the “missing link” of implementation. *Canadian Public Policy*, 37(4), 541-561.
- 84 As of Dec 2, 2022, see <https://www.hdbc.ca/>.
- 85 <https://tfl.gov.uk/modes/driving/congestion-charge>
- 86 KPMG LLP (2016), *City of Toronto Revenue Options Study*.
- 87 The same source as mentioned in the previous reference.
- 88 This revenue idea relates to the item (f) of the FTF recommendation 21: *Advertisement charges that include billboards and digital ads targeted in Calgary*.
- 89 <https://clkapps.winnipeg.ca/dmis/DocExt/ViewDoc.asp?DocumentTypeId=1&DocId=761>
- 90 <https://www.toronto.ca/services-payments/building-construction/sign-permits-information/third-party-sign-tax/>
- 91 <https://www.phila.gov/services/payments-assistance-taxes/business-taxes/outdoor-advertising-tax/>
- 92 <https://www.toronto.ca/legdocs/mmis/2017/pg/bgrd/backgroundfile-103950.pdf>
- 93 This revenue idea relates to item (e) of Financial Task Force recommendation #21: *Explore the use of regulatory charges, like ‘franchise fees’ or ‘local access fees’ for services provided in the City of Calgary which do not otherwise pay property tax (e.g. telecommunications infrastructure)*
- 94 [The Cable Franchising Authority of State and Local Governments and the Communications Act, Section 622 of Title VI.](https://www2.gov.bc.ca/gov2/industry/communications/communications_act/section_622_of_title_vi)
- 95 <https://www.cbc.ca/news/canada/british-columbia/transit-referendum-voters-say-no-to-new-metro-vancouver-tax-transit-improvements-1.3134857>
- 96 Janelle Cammenga (February 2022) “State and Local Sales Tax Rates, 2022”, the Tax Foundation.
- 97 Jeffrey L. Barnett, Cindy L. Sheckells, Scott Peterson, and Elizabeth M. Tydings, December 2014, 2012 Census of Governments: Finance— State and Local Government Summary Report, Available at: http://www2.census.gov/govs/local/summary_report.pdf.
- 98 <https://www.cbc.ca/news/canada/calgary/proposed-penny-tax-would-pay-for-infrastructure-1.1111682>
- 99 This relates to item (m) of recommendation 21: Develop and implement taxes that would focus on tourists and visitors that use City services.
- 100 Short-term accommodations listed on online marketplaces such as Airbnb and Vrbo are discussed separately.
- 101 <https://www.calgaryhotelassociation.com/industry>
- 102 <https://www.calgaryhotelassociation.com/industry>
- 103 In 2018, as the provincial government was in the process of creating the City of Calgary Charter, it considered giving The City greater control over Calgary’s DMF. The changes could have permitted the DMF to become mandatory for all hotels. However, following opposition from the hotel industry, The City of Calgary was not granted greater authority over the DMF as part of the City Charter.
- 104 <https://www.destinationvancouver.com/meeting/plan/helpful-tips-resources/vancouvers-tax-structure/>
- 105 <https://calgaryherald.com/news/politics/calgary-hotel-association-calls-on-province-to-waive-travel-levy>
- 106 <https://montreal.ca/en/articles/montreals-2022-budget-and-2022-2031-ten-year-capital-works-program-24778>
- 107 <https://www.translink.ca/about-us/about-translink/taxes-and-charges#parking-tax>
- 108 TransLink, [2022 Business Plan](https://www.translink.ca/about-us/about-translink/taxes-and-charges#parking-tax).
- 109 City of Pittsburgh, [2021 Annual Comprehensive Financial Report](https://www.pittsburghpa.gov/2021-Annual-Comprehensive-Financial-Report).
- 110 <https://news.ontario.ca/en/backgrounder/1001445/2021-22-gas-tax-funding-by-municipality>
- 111 Michael, Joel. Survey of State and Local Gasoline Taxes. Research Department., Minnesota House of Representatives, 2017. Accessed from <https://www.house.leg.state.mn.us/hrd/pubs/ss/ssgastax.pdf>

- 112 <https://www.alberta.ca/taxes-levies-overview.aspx>,
<https://www.canada.ca/en/revenue-agency/services/forms-publications/publications/edn70/budget-2021-changes-excise-duty-rates-tobacco-products.html>
- 113 <https://www.tobaccofreekids.org/assets/factsheets/0267.pdf>
- 114 https://assessment.winnipeg.ca/AsmtTax/English/Other_Taxes/Entertainment.stm
- 115 The City of Winnipeg, *Detailed Financial Statements 2020*.
- 116 <https://www.regina.ca/bylaws-permits-licences/bylaws/Amusement-Tax-Bylaw/>
- 117 <https://pittsburghpa.gov/finance/tax-descriptions>
- 118 The City of Pittsburgh, Annual Comprehensive Financial Reports 2019-2021, <https://pittsburghpa.gov/controller/annualreport>
- 119 <https://www.toronto.ca/services-payments/property-taxes-utilities/municipal-land-transfer-tax-mltt/municipal-land-transfer-tax-mltt-rates-and-fees/>
- 120 For property types other than single-family residences, the 2.5 per cent tax rate threshold is set at \$400,000.
- 121 <https://www.oaciq.com/en/articles/property-transfer-duties#>
- 122 <https://www.halifax.ca/home-property/property-taxes/covid-taxes-halifax>
- 123 City of Pittsburgh, 2021 Annual Comprehensive Financial Report
- 124 https://www.chicago.gov/city/en/depts/fin/supp_info/revenue/tax_list/real_property_transfertax.html
- 125 Dahlby, Bev, and Braeden Larson. "Should Alberta Adopt a Land Transfer Tax?" The School of Public Policy Publications (2019) Volume 12.5 (2019).
- 126 Haider, Murtaza, Amar Anwar, and Cynthia Holmes. Did the Land Transfer Tax Reduce Housing Sales in Toronto?. Institute on Municipal Finance and Governance, 2016.
- 127 <https://aglc.ca/liquor/about-liquor-alberta/liquor-markup-rate-schedule>
- 128 Mosher, James F et al. "Review of State Laws Restricting Local Authority to Impose Alcohol Taxes in the United States." *Journal of Studies on Alcohol and Drugs* vol. 78,2 (2017): 241-248. doi:10.15288/jsad.2017.78.241
- 129 <https://www.alberta.ca/cannabis-framework.aspx>
- 130 https://www.denvergov.org/content/dam/denvergov/Portals/571/documents/TaxGuide/TaxGuideTopic95_MarijuanaMedicalAndRetail.pdf
- 131 <https://www.thecrimson.com/article/2022/3/23/cambridge-eliminate-weed-tax/>
- 132 <https://www2.gov.bc.ca/gov/content/sports-culture/gambling-fundraising/gambling-in-bc/where-money-goes>
- 133 <https://www2.illinois.gov/rev/localgovernments/Pages/gaming.aspx>
- 134 This revenue idea relates to the item (g) of the FTF recommendation 21: *Develop and implement licensing charges for business vehicles. It provides an opportunity for targeted relief when required for businesses.*
- 135 <https://saaq.gouv.qc.ca/en/saaq/rates-fines/vehicle-registration/cost-registration-renewal/passenger-vehicles/contribution-public-transit>
- 136 <https://vancouver.ca/streets-transportation/commercial-vehicle-permits-and-decals.aspx>
- 137 <https://www.victoria.ca/EN/main/business/permits-licences/business-licences/decals-requirements.html>
- 138 KPMG LLP (2016), City of Toronto Revenue Options Study, see also <https://www.cbc.ca/news/canada/toronto/toronto-vehicle-registration-tax-1.6287494>
- 139 Vehicle counts include all motorized vehicles for highway use as registered on March 31 of that year. Counts exclude any trailers, off-highway vehicles, and dealer-plated vehicles. The registered owner's mailing address is used to determine the location of vehicles.
- 140 <https://www.alberta.ca/insurance-premiums-tax.aspx>
- 141 <https://insurance.ky.gov/ppc/Documents/2022-2023%20Tax%20Schedule%204-6-2022.pdf>
- 142 Sherden, William A. "An analysis of the determinants of the demand for automobile insurance." *Journal of Risk and Insurance* (1984): 49-62.
- 143 Laurin, Alexandre, and Farah Omran. "Piling On—How Provincial Taxation of Insurance Premiums Costs Consumers." *CD Howe Institute Commentary* 522 (2018).
- 144 [Government of Alberta 2022-23 Mid-year Fiscal Update and Economic Statement](#).
- 145 Bird, Richard M., and Enid Slack. *Provincial-Local Equalization in Canada: Time for a Change?*. Institute on Municipal Finance and Governance, 2021.
- 146 Mexico: Reforming Intergovernmental Transfers to More Effectively Advance Their Policy Objectives (English). Washington, D.C.: World Bank Group. <http://documents.worldbank.org/curated/en/570741554210015070/Mexico-Reforming-Intergovernmental-Transfers-to-More-Effectively-Advance-Their-Policy-Objectives>
- 147 In the State of Mexico for example, the allocation of municipal transfers is dependent on changes in the relative shares of population and property tax collection across municipalities. See <https://transparenciafiscal.edomex.gob.mx/ramo28> (documents in Spanish).
- 148 <https://www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/carbon-pollution-pricing-federal-benchmark-information/federal-benchmark-2023-2030.html>
- 149 Commercial and industrial users face a lower rate. See Chapter 12 of the Boulder municipal code: https://library.municode.com/co/boulder/codes/municipal_code?nodeId=TIT3RETA_CH12CLACPLEXTA
- 150 <https://news.bloombergtax.com/daily-tax-report-state/chicago-on-a-revenue-roll-from-cloud-and-netflix-taxes>
- 151 <https://www150.statcan.gc.ca/n1/daily-quotidien/220913/dq220913b-eng.htm>
- 152 This revenue idea relates to the item (h) of the FTF recommendation 22: *Develop and implement taxation for e-commerce revenue generated from local consumption of goods and services not reflected in bricks and mortar.*
- 153 <https://www.cnn.com/2020/02/24/states-are-imposing-a-netflix-and-spotify-tax-to-raise-money.html>
- 154 This revenue source relates to part of the item (f) of the FTF recommendation 22: *Develop and implement licenses for new economy services, e.g. e-scooters, ridesharing.*
- 155 <https://www.calgary.ca/taxis-ride-share/drivers-licence-fee-payment.html>

- 156 https://www.chicago.gov/city/en/depts/fin/supp_info/revenue/tax_list/ground_transportationtax.html
- 157 <https://www.nbcwashington.com/news/local/dc-council-approves-tax-hike-on-uber-lyft-rides-to-fund-metro/2056008/>
- 158 <https://www.reuters.com/article/us-massachusetts-uber/massachusetts-to-tax-ride-hailing-apps-give-the-money-to-taxis-idUSKCN10U1ST>
- 159 https://www.chicago.gov/city/en/depts/fin/supp_info/revenue/tax_list/amusement_tax.html
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- 161 This revenue source relates to part of the item (f) of the FTF recommendation 22: *Develop and implement licenses for new economy services, e.g. e-scooters, ridesharing.*
- 162 Goodman, Dan, et al. "E-Scooter management in mid-sized cities in the United States." Pedestrian and Bicycle Information Center (2019).
- 163 https://sustain.ubc.ca/sites/default/files/2018-56b%20Supporting%20Carshare%20North%20American%20Parking%20Policies_Lempert.pdf
- 164 This revenue idea relates to the item (e) of the FTF recommendation 22: *Develop and implement vehicle permitting charges with the transition to driverless cars.*
- 165 This revenue idea relates to the item (i) of the FTF recommendation 21 and the item (c) of the FTF recommendation 22: 21(i) *Charges for the use of proprietary assets, e.g. data.* 22(c) *Exchange value created by City, e.g. data and other assets, subject to privacy rules, for private sector services or dollars to limit cost pressures.*
- 166 Cowan, Donald, Paulo Alencar, and Fred McGarry. "Perspectives on Open Data: Issues and Opportunities." 2014 IEEE International Conference on Software Science, Technology and Engineering. IEEE, 2014.
- 167 PSD Citywide Inc., 2020 Open Cities Index
- 168 This revenue idea relates to the item (a) of the FTF recommendation 22: *Consider investing in broadband infrastructure to gain long term dividends, including through partnerships with the telecommunications industry.*
- 169 2021 Fibre Infrastructure Annual Update, CD2022-0531
- 170 <https://www.telus.com/en/about/news-and-events/media-releases/telus-invests-2-billion-to-expand-its-fibre-optic-network-in-calgary>
- 171 <https://www.mountainviewtoday.ca/olds-news/o-net-information-sharing-expected-in-new-year-4903716>, <https://www.mountainviewtoday.ca/olds-news/future-of-o-net-olds-fibre-unclear-following-agm-3772137>
- 172 <https://money.cnn.com/2014/05/20/technology/innovation/chattanooga-internet/>
- 173 2022 Fibre Infrastructure Strategy Annual Update, CD2022-0531
- 174 This revenue idea relates to the item (d) of the FTF recommendation 22: *Develop and implement 'franchise fee' type charges that leverage value in regulated assets that reflect the transition to the new economy, e.g. Calgary's 5G infrastructure.*
- 175 <https://newsroom.calgary.ca/city-of-calgary-the-most-connected-canadian-municipality-enters-master-agreements-with-wireless-service-providers/>
- 176 Federal Communications Commission ruling FCC 18-133, see <https://www.federalregister.gov/documents/2018/10/15/2018-22234/accelerating-wireless-and-wireline-broadband-deployment-by-removing-barriers-to-infrastructure>
- 177 This can be achieved by using the results from annual Hirschman-Herfindahl index calculations.
- 178 These taxes are called automatic stabilizers. Examples include income tax and sales tax.

Note: Financial task force reports to Council are available in the Technical Appendix 13.

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Corporate Economics provides services in four areas: forecasting, information provision, policy analysis and consulting. We also monitor the current economic trends which allows us to develop unique insights on how external events are impacting the local economy and the Municipal government. We are experienced at researching different economic topics and have developed reliable methods of forecasting and analysis.

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