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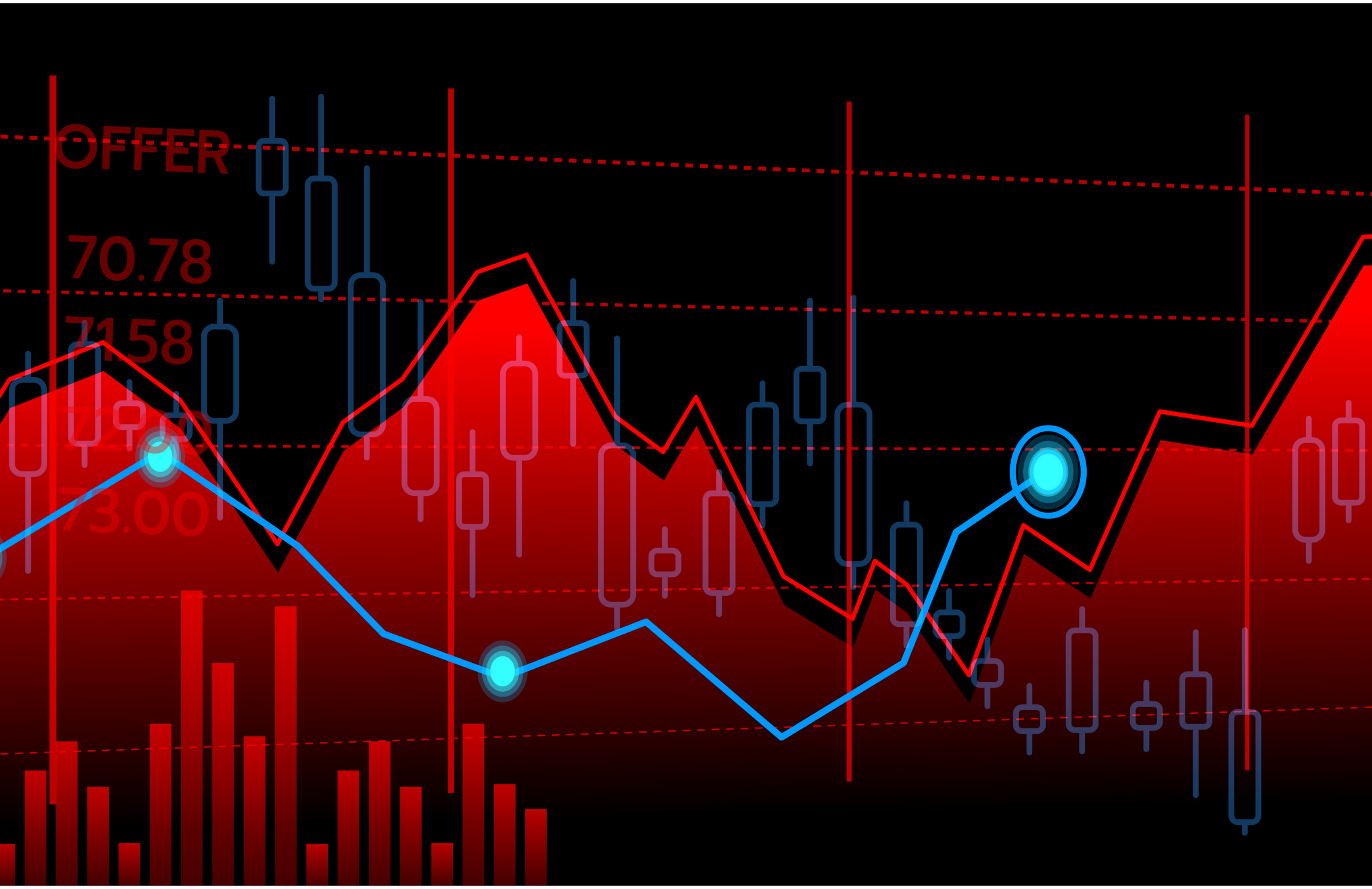

Countercyclical Fiscal Policy Options for Calgary

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Executive Summary

Calgary has a highly cyclical economy. Calgary has experienced more boom-and-bust cycles than any other Canadian city with a population of one million or more over the last 15 years. As a result, the Financial Task Force recommended that The City of Calgary explore deploying countercyclical fiscal policies to respond to local circumstances (i.e., action item 32a). The result of The City's analysis is covered in this report.

This report evaluates countercyclical fiscal policy options for The City of Calgary to help moderate the impact of economic fluctuations. By doing so, The City of Calgary will be able to effectively support Calgarians and businesses through uncertain economic times. The evaluation considers the following:

- Range of available policy tools, the criteria for ranking them, and the order of preference
- Constraints associated with the policy tools as well as the opportunities the tools afford
- Costs and benefits of using these tools
- Best practices for applying these tools

The analysis focused on economic downturns and identified a preference-ordered set of countercyclical policy tools for The City of Calgary. The preference order was an outcome of analysis that explored a set of evaluation criteria for determining suitability. The criteria are:

- Cost effectiveness
- Timeliness of impact
- Stimulus effect

The criteria are important because they reflect insights from economic analysis about the most effective forms of government support.

Using these criteria, Administration developed a ranking of policy tools. In the context of applying these tools to address an economic downturn, the order of preference is as follows:

1. Temporarily Increase Operating Expenditures
2. Accelerate Capital Expenditures
3. Targeted Business Relief
4. Targeted Residential Property Tax Rebate
5. Temporary User Fee Reductions

The City strives to enact its own countercyclical fiscal policies to support the local economy, however the analysis revealed that the countercyclical fiscal policy tools available to The City of Calgary are limited, as is The City's fiscal capacity to use those tools. In addition, many local stimulus policies may be less effective than broader initiatives from the federal and provincial governments. Thus, The City can only play a limited and secondary role in providing economic stimulus in a manner that complements the measures taken by the federal and provincial governments.

Following this analysis, the logical next step is to develop a formal countercyclical fiscal policy for Council approval. To achieve success with countercyclical policy design and implementation, City Administration's review has identified five strategies.

a. ***Hierarchy*** for applying the tools to address boom-and-bust cycles.
b. ***Approvals*** that separate elements of administrative authority from council approvals for adequate and timely responses to economic shocks.
c. ***Amendments*** to existing reserves may be a prudent approach rather than creating new reserves.
d. ***Capacity*** assessment to determine if existing reserves have the built-in capacity to support policy efforts.
e. ***Triggers*** that determine when to apply tools and the magnitude of support.

1 Motivation for a Policy Response and Potential Pathways

1.1 High frequency and severity of boom-and-bust cycles in Calgary

Business cycles in an economy are a sequence of alternating "boom" and "bust" periods.[1] During a boom, the economy operates near its full capacity, causing low unemployment and strong growth in the level of real gross domestic product (GDP).[2] During a bust, or economic downturn, real GDP growth may be weak or declining. An economic downturn often begins suddenly when a shock, such as the COVID-19 pandemic that started in 2020, disrupts the supply or demand of goods and services.[3]

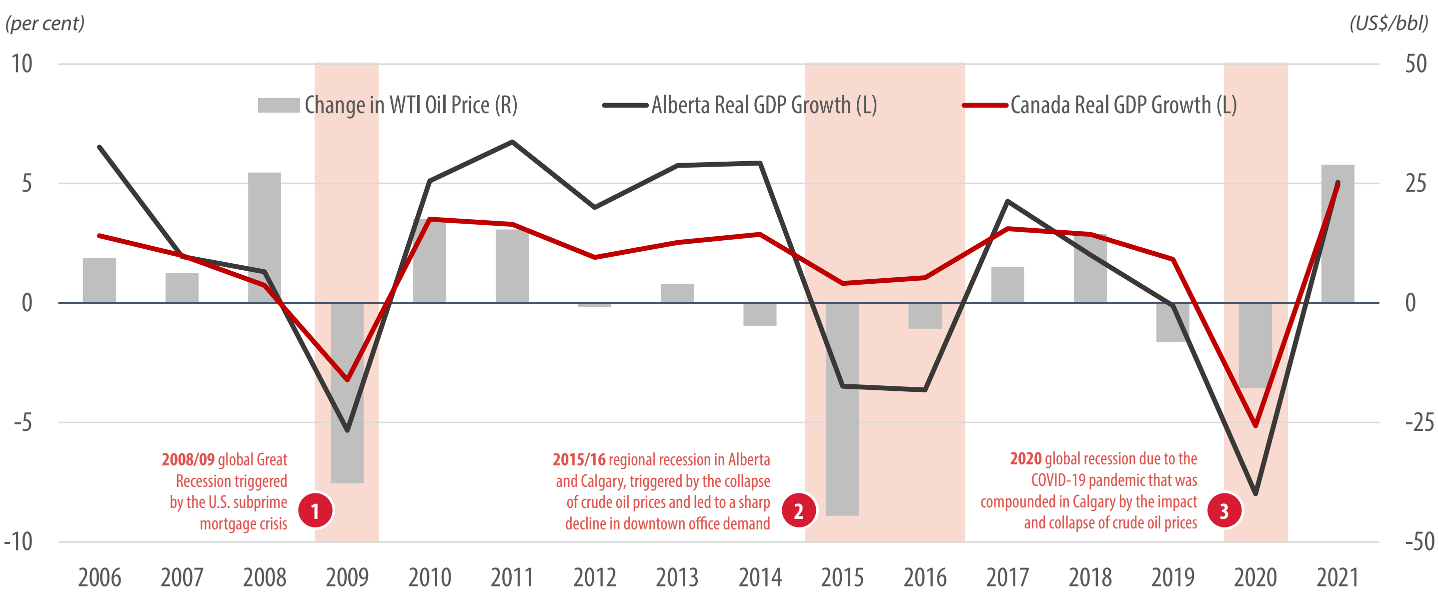
Calgary's business cycles are particularly volatile compared to other urban centres in Canada, due to its ties to Alberta's oil and gas sector (*Exhibit 1*). Driven by commodity cycles, Alberta's economy is more volatile than the rest of Canada, with larger and more frequent recessions. For example, in 2015-16, Calgary and Alberta experienced an oil-price-driven recession, while the rest of the country enjoyed growth.

Over the past 15 years, Calgary has endured three major economic downturns while major cities in other Canadian provinces were affected by only two downturns (*Exhibit 2*).[4] As well, Calgary often experienced deeper economic recessions relative to these other big cities. It means that the severity of the impact is more intense for Calgary compared with other major Canadian cities.

The overall level of economic activity is a very broad measure making it useful to also consider direct impacts on individual Calgarians. One useful way to do this is by assessing the impact on joblessness. During a downturn, the unemployment rate rises quickly, then falls gradually as the economy recovers. Because Calgary experienced one more recession in 2015-16 compared to the rest of Canada, the local unemployment has stayed higher than other major cities. The negative impact from that recession was compounded by the COVID-19 induced recession in 2020. As a result, the Calgary region's unemployment rate has been higher than other large Canadian cities for the past six years (*Exhibit 3*).

Exhibit 1:
Strong link between energy markets and Calgary's economy persists [5]

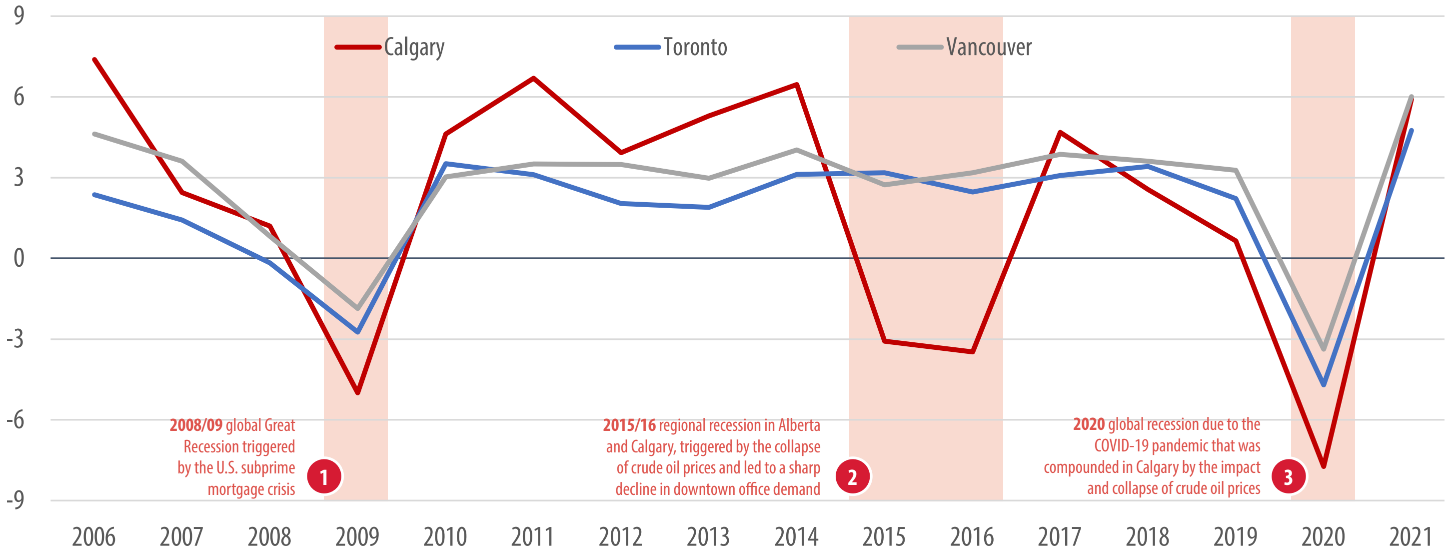
Real GDP Growth in Canada and Alberta vs. Change in West Texas Intermediate (WTI) Oil Prices



Source: Statistics Canada, Energy Information Administration

Exhibit 2:
More boom-and-bust cycles in Calgary relative to other large metropolitan areas

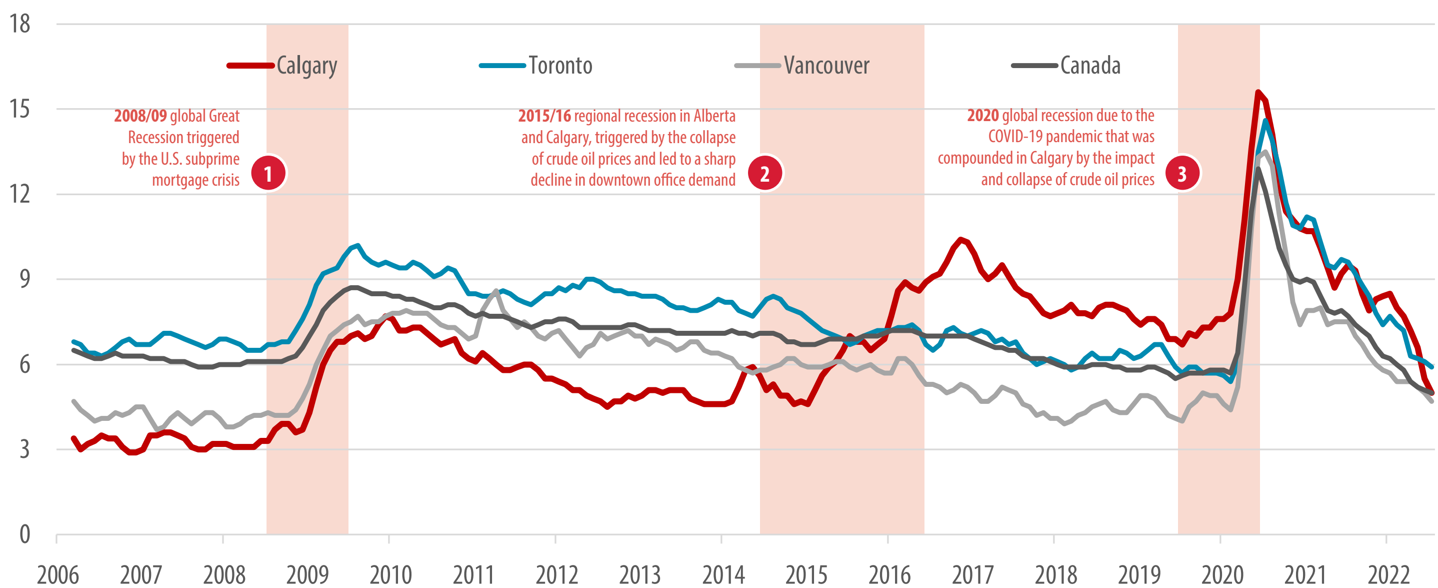
Real GDP Growth in Major Canadian CMAs
(per cent)



Source: Conference Board of Canada

Exhibit 3:
Calgarians have felt the impact more severely in recent years [6]

Monthly Unemployment Rates in Canada and Major CMAs
(per cent)



Source: Statistics Canada

1.2 The policy goals and policy tools for smoothing the impacts of boom-and-bust cycles

There are three overarching policy goals of countercyclical policies. First, addressing the economic challenges created by volatile business cycles requires government action to smooth economic activity across time. To create a smoothing effect, countercyclical government policies work opposite to the trend of the business cycle. In a downturn, these policies stimulate demand to boost the economy. In an upturn, these policies slow demand to avoid overheating the economy.

A second goal of countercyclical policy is providing relief for those most impacted by economic fluctuations. In an economic downturn, the aggregate level statistics often mask the severity of an economic shock on vulnerable groups. Designing policies to support the overall economy requires care in ensuring that countercyclical measures alleviate rather than exacerbate income inequality.

A third goal of countercyclical policy is minimizing the loss of long-term productive capacity in the economy. If productive businesses are forced to permanently close due to a downturn, the reduction in capacity would impede economic recovery.

There are two broad categories of countercyclical government policy tools. One set of tools are in the monetary policy domain. The second set of tools are in the fiscal policy domain. Monetary policy is the exclusive domain of the federal government through the Bank of Canada (BoC). The BoC's policy tools include, primarily, the target for the overnight rate.[7] During a downturn, the BoC lowers interest rates to encourage borrowing and consumption. To avoid high inflation when the economy returns to strength, the BoC hikes up interest rates. Quantitative easing or tightening[8] and forward guidance[9] are other tools.

Countercyclical fiscal policy, relating to government revenues and expenditures, can be used by all three levels of government. **However, compared to the federal and provincial governments, Canadian municipal governments have the most restrictive set of fiscal policy tools.** During a downturn, governments can lower taxes or increase spending to stimulate consumption and investment. In an expansionary economic boom, governments can raise taxes and reduce spending to avoid driving prices higher and creating an inflationary spiral.

The full range of policy tools to achieve policy goals during boom-and-bust cycles is available in *Exhibit 4*. Given the combination of policy goals and categories of policy tools, it is possible to identify the feasible options for municipalities.

Municipalities like The City of Calgary are restricted to fiscal policy tools that can smooth economic activity across time and help minimize the long-term loss of production capacity. **It means that the role for The City of Calgary is limited and secondary to the fiscal policy role of the provincial and federal governments.**

Exhibit 4:
Range of policy tools to achieve policy goals during boom-and-bust cycles

	Goal to smooth economic activity across time	Goal to redistribute resources to support the vulnerable	Goal to minimize long-term loss of production capacity
Monetary Policy	Changes to interest rates (i.e., increases to slow economy and decreases to stimulate)		Quantitative easing or central bank asset purchases to increase liquidity (to stimulate consumption and investment) vis-à-vis quantitative tightening or central bank asset sales (to slow economic growth)
Fiscal Policy	Budget adjustments (through tax rate changes or spending level changes)	Direct incentives for specific types of households or businesses	Indirect incentives for individuals, businesses, and local governments

1.3 The types and roles of countercyclical fiscal policy tools

There are a variety of countercyclical fiscal policy tools available to the different levels of government. All countercyclical fiscal policies can be classified along two separate dimensions.

Revenue-related tools and expenditure-related tools. The first dimension arises because countercyclical policies may be related to government revenues, expenditures, or both. To be countercyclical, some policies may lower revenue during economic downturns by cutting taxes or user fees, while others do the opposite and result in increased spending during a downturn. The net effect of a set of countercyclical policies during a downturn is to decrease the budgetary balance by depleting saved-up "rainy day" funds or incurring debt.[10] Once the economy recovers, countercyclical policy measures addressing recessions get halted to make the policy financially sustainable in the long run.

Automatic stabilizers and discretionary measures. The second dimension relates to whether the policy responds automatically to economic conditions. Automatic stabilizers are countercyclical fiscal policy tools that respond immediately to economic conditions without the need for policy adjustments. Automatic stabilizers have the advantage of speed. Their effects are felt immediately following an economic shock, with no action needed by the government to initiate them. Other countercyclical fiscal policies are discretionary in their timing and magnitude. Discretionary fiscal policies have a delayed response. However, they could be more carefully designed and targeted to deal with specific economic situations.

Federal and provincial income taxes are examples of revenue-related automatic stabilizers. Personal income tax revenues grow when the economy is strong and fall when it is weak, because they are a share of individual income. Progressive tax brackets amplify the stabilizing effect, reducing the share of income directed to taxes when income falls. An example of an expenditure-related automatic stabilizer is the federal employment insurance (EI) program where spending increases as jobs are lost during a downturn.

Under current legislation, The City of Calgary only has access to discretionary measures, which is why it takes longer for The City to respond to shifts in economic fortunes. The provincial and federal governments have access to revenue-related and expenditure-related automatic stabilizers.

1.4 The policy response pathway using countercyclical fiscal policy during a typical downturn

The pathway for countercyclical fiscal policy to stimulate the economy during a downturn or slow the economy during an unprecedented boom is through changes in the level of demand for goods and services. When downturns or significant booms arise from changes in the level of supply for goods and services, countercyclical fiscal policy is unable to restore supply. Examples of supply-side shocks include natural disasters, shortages of input materials, or supply interruptions in wars like the Russia-Ukraine war. In that case, countercyclical policies are normally ineffective. In the rare cases when business closures are due to government orders such as the public health restrictions during the COVID-19 pandemic, government policies are focused on providing relief to the impacted workers and businesses.

During a typical **economic downturn or recession**, there is weak demand or significant slack throughout various sectors of the economy, meaning that there are more unemployed workers and more physical capital is underutilized. By stimulating higher demand, countercyclical fiscal policy helps absorb economic slack pushing the economy upwards to its full potential output.[11] This is accomplished through a reduction in taxes, an increase in spending, or both (*Exhibit 5*). A reduction in taxes, either through changes in the tax rate or a one-time rebate, may stimulate demand by increasing the disposable income of households or improving the net returns of business investment. Alternatively, an increase in government spending can directly add to demand. As increased demand absorbs slack in the economy, business production and employment increase. The resulting increase in production and income leads to a secondary increase in consumption, in a process known as the multiplier effect.

During **a significant economic boom**, government tax revenues should increase, expenditures should fall, or both. By slowing demand, countercyclical fiscal policy helps reduce excessive inflation and consumption pushing the economy beyond its full potential output. In addition, once all economic slack is absorbed, fiscal stimulus can no longer trigger an immediate increase in production. Instead, demand for goods and services in excess of what can be produced will create price inflation.

Exhibit 5:
Countercyclical fiscal policy tools to generate economic stimulus out of a downturn [12]

	Using tax or revenue-related measures affecting individuals	Using tax or revenue-related measures affecting businesses	Using government spending-related measures
Direct Incentive	Lump-sum rebates and incentives	Incentives for new investment	Direct transfer payments to households
Budget Adjustment	Temporary across-the-board tax rate cuts	Cut in corporate tax rates	Targeted investments in public work projects
Indirect Incentive	Deferring/eliminating scheduled tax (or tax increase)	Operating loss and carryback provisions	General funding support to local governments or agencies

2 The Range of Tools and Lessons from Deploying them in Calgary Recessions

2.1 Municipalities have two effective channels for affecting demand for goods and services

Of the four types of economic activity measured by GDP in an economy – consumption, investment, government spending, and net exports – fiscal policies may target any type except for net exports. Countercyclical fiscal policy alters demand for goods and services in the first three activities.

Municipal fiscal policy can directly increase demand by increasing *government spending* on goods and services and capital investment in infrastructure. Municipal fiscal policy is very effective using this channel.

Policy may also target increasing *consumption demand by households*. This would occur either by reducing taxes paid by households or providing additional income in other ways. Municipalities need stable property taxes to maintain essential services creating little wriggle room. As a result, policy response is often limited to providing additional income to residents in other ways, such as through fee reductions or fee holidays. Effective transmission to the economy will depend on the extent to which the additional income is spent on locally produced goods and services rather than saved. It is a viable channel for policy support.

Policy may be designed to increase investment spending by businesses, thereby stimulating production of capital goods such as buildings and equipment. Policy may also affect the level of net exports. However, municipalities have a very limited role in affecting demand for goods and services through these channels.

2.2 More timely tools are available to provincial and federal authorities

Automatic stabilizers are the exclusive domain of federal and provincial governments. These governments deploy revenue-related automatic stabilizers through *personal income taxes* and *corporate income taxes*. These automatic stabilizers provide a countercyclical effect by delivering less in taxes to these governments in downturns. The federal government has authority over an expenditure-related automatic stabilizer – *employment insurance* – that increases spending when access to job opportunities decline.

2.3 Municipal authorities can only deploy discretionary measures

The municipal government has the authority to deploy discretionary countercyclical fiscal actions. There are nine sets of actions or tools shown in *Exhibit 6* below. Two of these tools are currently out of reach for municipal authorities – *temporary across-the-board tax rate cuts* and *direct transfer payments to households*. One of them is challenging to implement – *incentives for new investment*. However, all seven sets of tools available to municipalities were deployed during the COVID-19 pandemic despite administrative

Exhibit 6:
Municipal application of discretionary countercyclical actions during COVID-19 recession

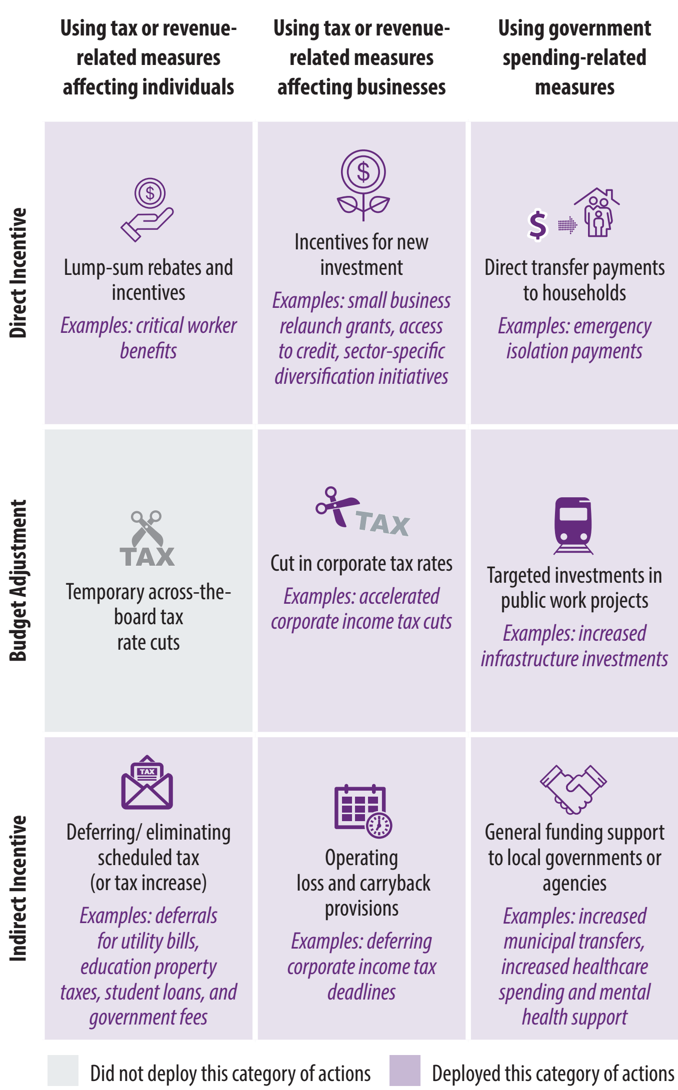
	Using tax or revenue-related measures affecting individuals	Using tax or revenue-related measures affecting businesses	Using government spending-related measures
Direct Incentive	Lump-sum rebates and incentives *Examples: fee relief for transit, recreation, waste disposal, pet services*	Incentives for new investment	Direct transfer payments to households
Budget Adjustment	Temporary across-the-board tax rate cuts	Cut in corporate tax rates *Examples: waiving Business Improvement Area taxes*	Targeted investments in public work projects *Examples: increased infrastructure investments*
Indirect Incentive	Deferring/ eliminating scheduled tax (or tax increase) *Examples: utility bills and residential property taxes*	Operating loss and carryback provisions *Examples: deferring non-residential property taxes*	General funding support to local governments or agencies *Examples: community and social programs, affordable housing*

Did not deploy this category of actions: Temporary across-the-board tax rate cuts; Direct transfer payments to households. Deployed this category of actions: all other cells.

challenges. Also, the magnitude of resources that can be applied to these tools is significantly less than for provincial and federal governments. The total relief spending by The City of Calgary in 2020 and 2021 measured in the millions of dollars. For example, $19.3 million was distributed to partner organizations in 2020 from the Emergency Resiliency Fund and the Community Sustainability Reserve. In 2021, $72.4 million was spent on non-emergency COVID recovery initiatives through the COFLEX program.

The provincial government has the capacity to deploy all nine sets of tools. For the COVID-19 pandemic-induced economic downturn that started in 2020, the Government of Alberta enacted measures using eight of the discretionary tools (*Exhibit 7*). The one tool it did not deploy was temporary across the board cuts to personal income tax. The Government

Exhibit 7:
Provincial application of discretionary countercyclical actions during COVID-19 recession

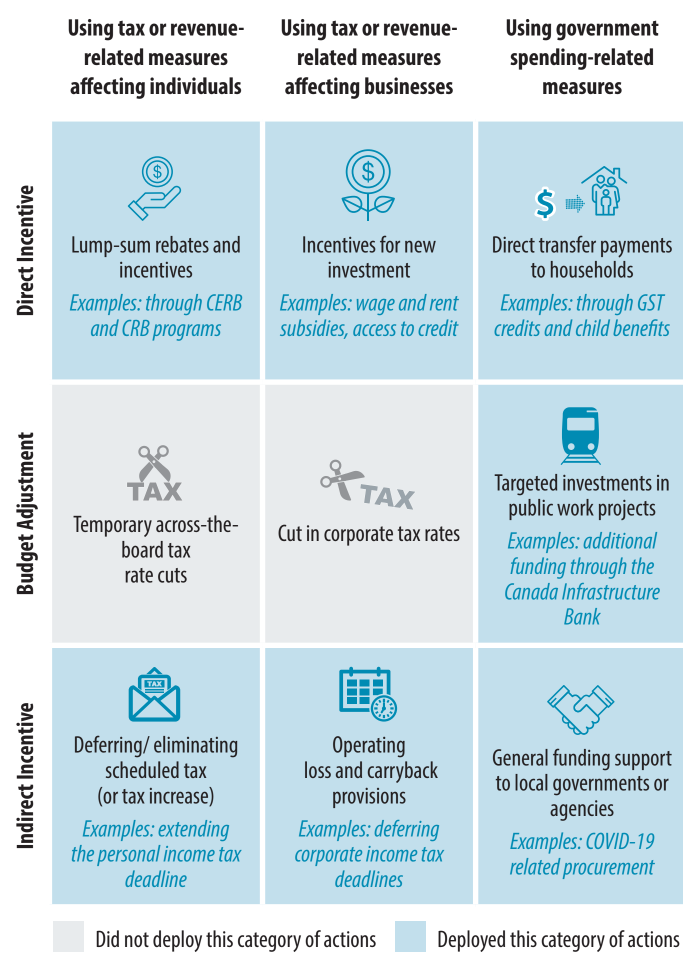


of Alberta spent $4.1 billion in direct COVID-19 relief measures in the 2020-21 fiscal year, while incurring a $17.0 billion deficit.

The federal government like the provincial government can deploy all nine sets of tools. During the downturn caused by the COVID-19 pandemic, the federal government took an unprecedented fiscal position to support the economy through the crisis using seven of them (*Exhibit 8*). In the 2020-21 fiscal year, the major direct spending programs related to the federal economic response plan resulted in $189 billion in spending. The total result of all the federal measures was a deficit of $354 billion, compared to a deficit of $39 billion in the prior year. Most of the additional spending was done through transfers to provinces in addition to direct federal government actions.[13]

While the COVID-19 pandemic-induced downturn has been used as an example, similar actions supporting individuals, businesses, and infrastructure investments have been used by the federal government in previous downturns, such as the aftermath of the 2008-09 financial crisis.

Exhibit 8:
Federal application of discretionary countercyclical actions during COVID-19 recession



3 Constraints and Opportunities associated with the Policy Tools

3.1 Categories of municipal policy constraints during economic downturns

There are five categories of constraints facing The City of Calgary, like other municipalities in Canada, in enacting countercyclical fiscal policy.

The first constraint is **deficit-spending**. Typically, the federal and provincial governments apply deficit spending to stimulate the economy during a downturn and make plans to return to balanced budgets or surpluses once the economy regains strength.

Most municipalities in Alberta are not allowed to budget for operating deficits. After years of negotiations with the province and signing the Calgary City Charter in 2018, The City of Calgary was granted the limited ability to plan for an operating deficit in one year. However, the Charter requires that The City cannot plan for consecutive deficits, and that the one-year deficit must be recovered within the next three years. Despite the relaxed budgeting rule for Calgary, current City Council policy states that The City of Calgary will maintain balanced budgets.

To avoid deficit spending, The City of Calgary has mainly used reserves to save up funds in advance of unexpected expenses during economic downturns. In a high inflation environment like the current one we are experiencing, saving for future spending may be less efficient than deficit-financing, as tax dollars collected today will have reduced purchasing power in the future unless the return on the savings keeps up with inflation.

The second constraint is the **one-to-one correspondence between operating revenue and expenditures**. That's because the amount of property taxes collected for municipal purpose is determined by how much is needed to provide city services in addition to all other municipal revenue sources. The constraint arises because reducing taxes to provide relief would decrease spending by default because of the need to align municipal property taxes and municipal government operating expenditures. It is a significant difference between municipal vis-à-vis provincial and federal governments. Provincial and federal governments have multiple taxation sources with different rates of responsiveness to boom-and-bust cycles.

The third constraint is a reliance on **intergovernmental transfers**. Municipalities like Calgary have a significant reliance on provincial transfers and some federal transfers via the province. The challenge with these transfers is that more is needed at a time when provincial and federal governments are also facing funding challenges in a recession. More broadly, these transfers are subject to the shifting provincial and federal government priorities. It limits the ability to deploy municipal countercyclical fiscal policy.

The fourth constraint is **limited transfer mechanisms from the municipal government to households and businesses**. Municipalities have limited fiscal capacity and ability to effectively provide tax relief or direct transfer payments to individuals and businesses. The administrative channels required to ensure that relief or transfer payments make their way to those in need of them are very limited. It reduces the effectiveness of municipal tools making many potential candidates blunt and ineffective. As well, municipal legislation typically lays out expectations for municipal authorities. Explicit legislative support for countercyclical fiscal policy is sparse. Making changes to create such channels and legislation would have political, reputational, and legal risks.

The fifth constraint is the **size and scale of support**. Municipalities, like Calgary, have a lower revenue and spending base relative to provincial and federal governments. That's because they have more limitations on how they can raise and spend money relative to provincial and federal governments. It means a significantly smaller size and scale of support for households and businesses.

3.2 The range of opportunities despite the limitations during economic downturns

Despite these limitations, The City of Calgary has developed some capacity over time to deploy countercyclical fiscal policy measures in the face of recessions. There is an opportunity to enhance these limited channels of support. These enhancements could occur through three channels.

The first opportunity is through **municipal reserves**. The City of Calgary has addressed some of the constraints by saving up funds in reserves to generate additional funding support for unexpected downturns. There is evidence from the last three boom-and-bust cycles that The City of Calgary has used reserves to accommodate revenue growth reductions during recent downturns (*Exhibit 9*).[14] Total city revenue typically grows less during economic downturns. Further, there were only two years of revenue decline in the last fifteen years and they both occurred during downturns.

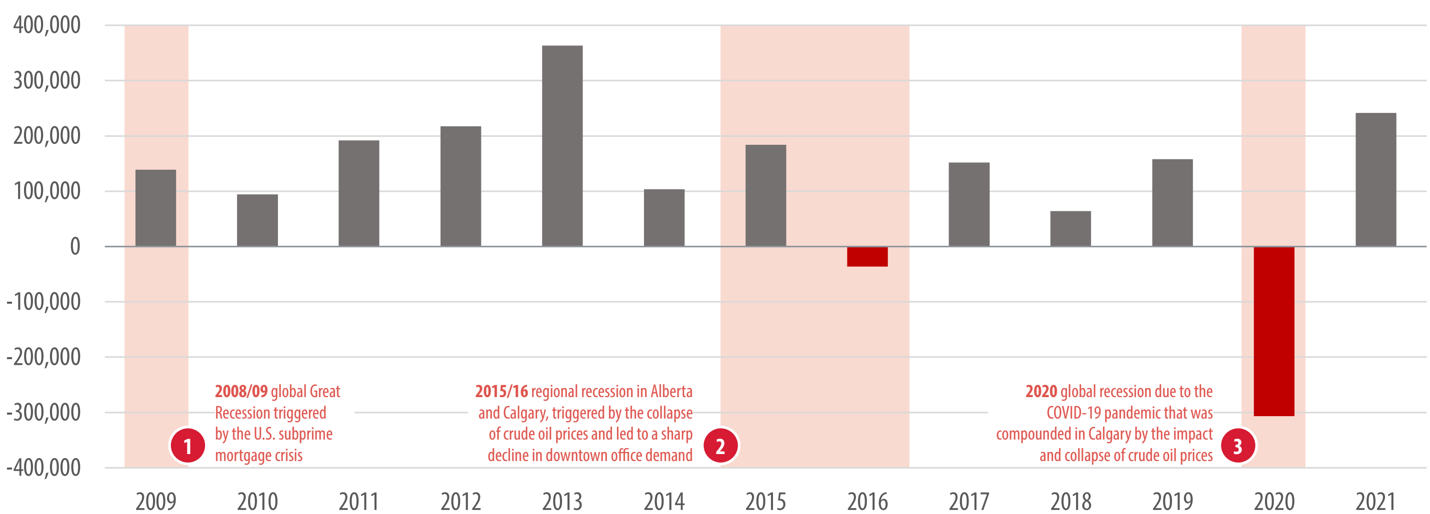
The annual average revenue growth during the last three downturns was -$4.9 million, compared to $176.2 million outside of the downturns in the last 13 years. There is an opportunity for additional review of the extent to which existing reserves have sufficient built-in capacity for adequate responses to downturns. Once a downturn has passed, reserves should be replenished promptly to prepare for the next time stimulus is needed.

The second opportunity is through **adjustments to service levels and spending patterns**. The City of Calgary has addressed some of the constraints by adjusting service levels and spending patterns in response to unexpected downturns. Because these policies work opposite to the trend of the economic cycle, it means that spending would be sustained or higher during economic downturns to avoid grinding the economy into an austerity phase. In only two of the last three downturns has The City of Calgary managed to increase spending, but even then, the increases were relatively small (*Exhibit 10*).

The annual average spending growth during the 2009 and 2015-16 downturns was $181.9 million, compared to $138.1 million in the non-downturn periods of the last 13 years. This provides some evidence of countercyclical fiscal actions at work. There is an exception for the 2020 COVID-19 induced recession. It is the only year over the last 13 years when spending declined. The primary reason for the decline was a significant decline in the need for many City services, e.g., transit during periods of lockdown. It has reduced the overall level of countercyclicality through spending channels over the last 13 years.

Exhibit 9:
Revenue growth reductions during downturns [15]

The City of Calgary: Change in Revenues, excluding Transfers
($thousands)

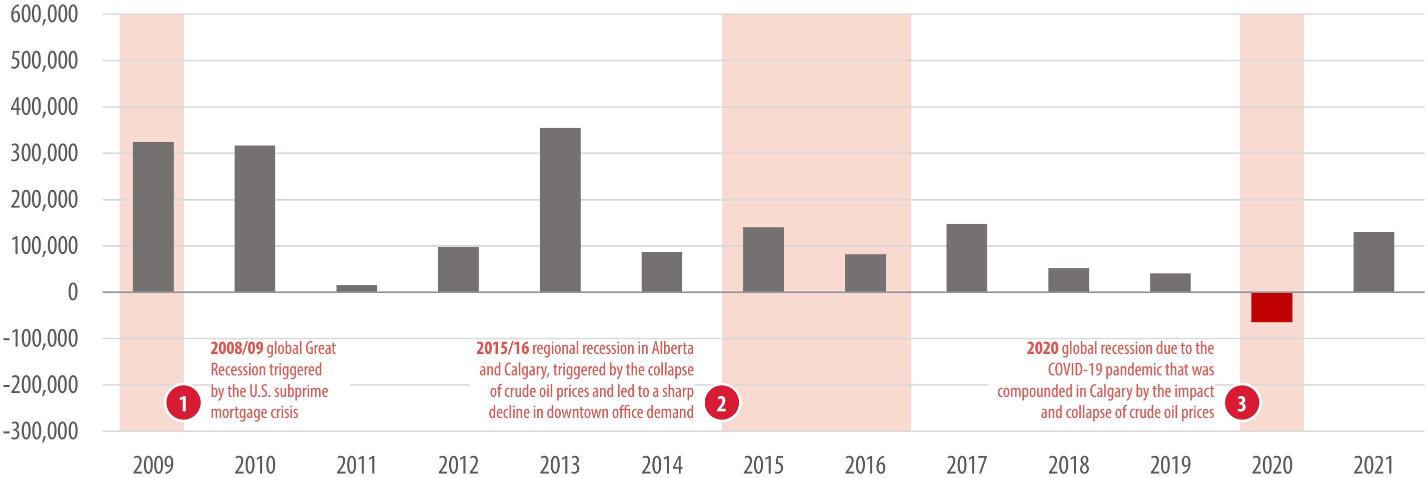


Source: The City of Calgary Annual Reports

3. Constraints and Opportunities associated with the Policy Tools

Exhibit 10:
Maintained spending growth during some downturns [16]

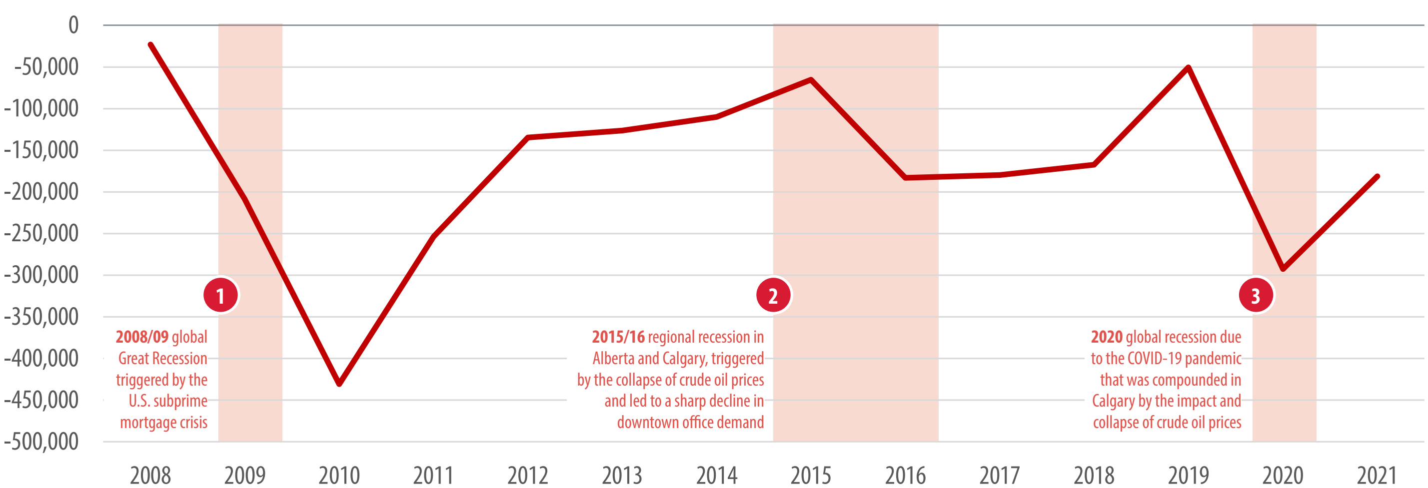
The City of Calgary: Change in Expenditures
($thousands)



Source: The City of Calgary Annual Reports

Exhibit 11:
Overall countercyclical actions strongest following downturns [17]

The City of Calgary: Excess of Revenues over Expenditures, before Government Transfers
($thousands)



Source: The City of Calgary Annual Reports

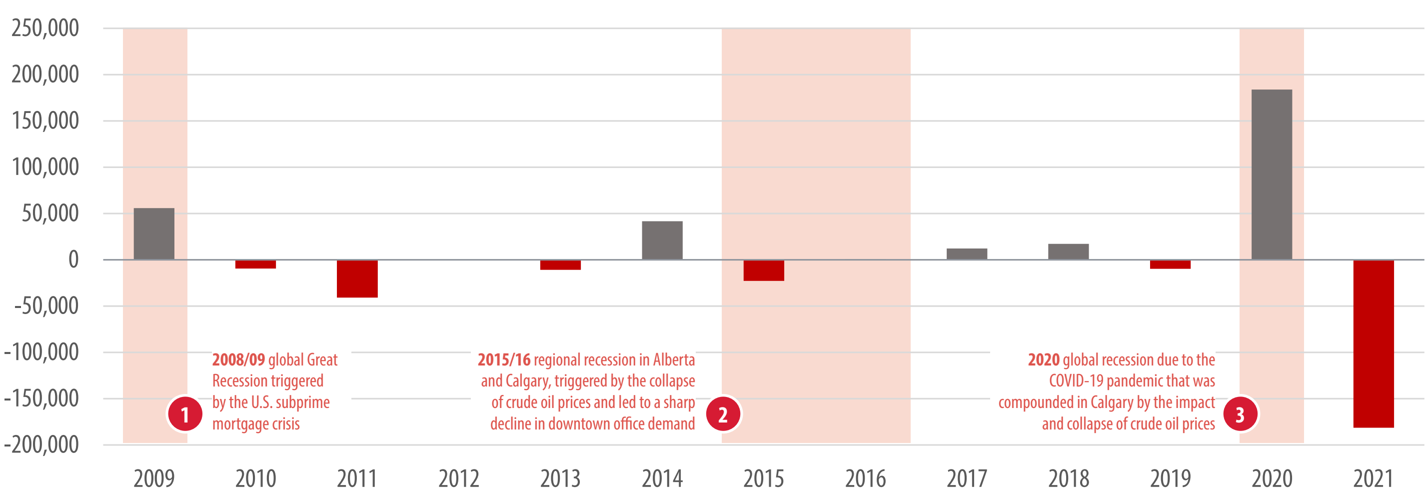
3. Constraints and Opportunities associated with the Policy Tools

The City's excess of revenue over expenditures illustrates the overall countercyclical effect of The City's fiscal policy (*Exhibit 11*). There is evidence of a delay because the difference between expenditures and revenues is typically greater in the year following a downturn, rather than in tandem with the economic shock. The exception was the COVID-19 induced recession when the municipal response occurred more promptly. There is an opportunity for timely action in the future. That's because a long delay would risk creating a procyclical or add-on effect on the economy, which is opposite to the desired goal.

The third opportunity is through **provincial and federal government transfers**. Transfers from the federal and provincial governments also contribute to the ability of The City of Calgary to enact countercyclical measures. Since The City has limited revenue-generating tools, there is a significant reliance on transfers, primarily from the provincial government. There is evidence of increased operating transfers in some downturns (2009 and 2020) but not others (2015 and 2016). The evidence shows greater support from other governments when the entire country is in a recession but not for Calgary-specific recessions (*Exhibit 12*). There is an opportunity for a stronger partnership to meet Calgary-specific needs when they arise. Success would require a robust intergovernmental partnership.

Exhibit 12:
Lack of support from other governments for Calgary-specific downturns

The City of Calgary: Change in Operating Transfers
($thousands)



Source: The City of Calgary Annual Reports

4 Cost-Benefit Analysis, Ranking and Order of Preference for Tools

4.1 Monetary and non-monetary costs associated with using municipal countercyclical fiscal policy tools

There are monetary and non-monetary costs associated with using municipal fiscal policy tools. Analyzing monetary costs requires a careful evaluation of The City's funding capacity and revenue sources which is beyond the scope of this policy study. So, our analysis for policy directions will focus on assessing non-monetary costs associated with using municipal countercyclical fiscal policy.

The City of Calgary has taken countercyclical actions in the past and those policies have room for improvement in the future. One area for improvement is minimizing the undesirable effects of the non-monetary costs associated with using these tools (*Exhibit 13*).

4.1.1 Tools to support households

The City of Calgary cannot directly transfer money to individuals or households residing in Calgary in the same way that the federal and provincial governments can. However, there are other indirect ways that The City can return money to households, and that additional income would encourage households to spend the money and stimulate the local economy. There are a range of revenue-related tools for individuals with associated costs described in the section below.

The set of tools that offer lump-sum rebates and incentives for households

1. Residential property tax rebate

The City could increase the disposable incomes of Calgarians during an economic downturn by providing a property tax rebate on residential properties. The City has implemented a one-time property tax rebate for residential properties in the

Exhibit 13:
Types of non-monetary costs associated with municipal fiscal policy tools

	Leakages to external beneficiaries	Inequitable impact	Slow transmission speed	Complex administration	Delayed shock	Temporary relief	Legislative bottlenecks
Revenue-related tools for households							
1. Residential property tax rebate	✗	✗	✗		✗		
2. User fee reductions	✗	✗					
3. Residential property tax deferral	✗	✗	✗			✗	
Revenue-related tools for businesses							
4. Business license fee or permit fee reductions	✗	✗					
5. Targeted business grants or rebates	✗	✗		✗			
6. Targeted investments in businesses		✗		✗			
7. Non-residential property tax rebate	✗	✗	✗		✗		
8. Small business property tax rate	✗	✗					✗
9. Non-residential property tax or business fee deferral	✗	✗	✗			✗	
Expenditure-related tools via governments							
10. Capital investments in public work projects	✗		✗	✗			
11. Increased operating spending	✗		✗	✗			

past, including during the COVID-19 pandemic. A 2021 rebate followed similar rebates offered in 2020 and in 2017. There are costs associated with this tool.

- **Leakages to external beneficiaries:** A common cost across all policy tools is the possibility that some of the benefits would spill over to other jurisdictions. Some property owners may be investors residing outside of Calgary, so the rebate to them would not benefit the local economy. In addition to the possibility of spending on imports, this policy tool cannot ensure that the money will be spent.
- **Inequitable impact:** Another cost is that only property owners would directly benefit from the rebate. Renters, who typically have lower incomes than property owners, are left out and may not benefit via the landlords (thereby raising inequality concerns).[18]
- **Slow transmission speed:** Property taxes are set annually. This policy tool may not be able to have an impact immediately, depending on the timing of an economic shock relative to the annual process of setting property tax rates.
- **Delayed shock:** Another cost is the potential instability for taxpayers due to a delayed shock. While property owners may enjoy the initial relief of a one-time rebate, the tax increase in the following year could be much larger than usual. That's because it will combine the effect of ending the rebate with any normal tax increases.

2. User fee reductions

In addition to property taxes, The City collects much of its revenue through user fees. Calgarians pay user fees for a wide variety of services, including water, recreation facilities, and transit fares.[19] Unlike property taxes, many residents who do not own property pay user fees to the municipal government. It means that the impact is much broader and close to economy wide.

In 2016 and 2017, in the aftermath of the local recession caused by the collapse of oil prices, The City of Calgary provided relief in the form of a freeze on a broad range of user fees, in areas including transit fares, recreation, parks, and pet licensing fees. In addition, no fees were charged for the newly implemented green cart service in 2017. The previously approved increases in utility rates for 2017 were also reduced. There are costs associated with deploying this tool.

- **Leakages to external beneficiaries:** Some user fees may also be paid by non-residents, meaning that some benefits of the fee reductions would be lost to other jurisdictions.
- **Inequitable impact:** Different user fee reductions would support different groups of Calgary's population. While user fee reductions could be used for directing stimulus to residents who do not pay property taxes, many user fees, such as pet licensing and recreation fees, impact narrower groups of the population, raising fairness concerns. User fees that have the purpose of allocating scarce resources efficiently, such as water and waste services, would also be poor candidates for temporary reductions.

The set of tools that defer or eliminate scheduled tax (or tax increase)

3. Residential property tax deferral

Another tool is a property tax deferral. When applied, the total tax bill for property owners remains the same but the deadline for payments is extended. Alternatively, a similar approach could be to remove or reduce penalties for late payments, as The City of Calgary did in 2020 (waiving the first late fine and reducing the second by half) and in 2022 (reducing and waiving fines). The costs associated with using this tool include:

- **Leakages to external beneficiaries:** Some Calgary property owners reside in other jurisdictions so that some of the benefits would spill over to other jurisdictions.
- **Inequitable impact:** Another cost is that property owners would benefit directly from the rebate. Renters may be left out if the benefits do not trickle down from landlords.
- **Slow transmission speed:** While a deferral may be a more flexible policy response than a property tax rebate, the annual nature of the property tax means that the timeliness of the deferral may not be ideal, depending on the timing of the economic shock in relation to the property tax due date.
- **Temporary relief:** Although residential property owners may not need to pay property taxes immediately, they must still plan to pay the taxes at some point. If the economic downturn creates income uncertainty, the property owner may not increase their spending due to the tax deferral and save the money in case a future income reduction prevents them from being able to afford the tax bill later. Only in the case that the economic shock is very brief, and a rapid recovery is nearly certain, will the tax deferral prompt increased spending during the deferral period to stimulate the economy.

4.1.2 Tools to support businesses

The City has a few tools to support businesses, as many businesses operating in Calgary must be licensed by The City. Businesses are impacted by non-residential property taxes as well as various permits and fees. The City can also directly provide targeted grants to businesses. This category of tools creates an incentive for investment during a recession, which is important for pulling the economy out of the downturn.

The set of tools that offer incentives for new investment

4. License fee or permit fee reductions

The City collects revenue from businesses through various licenses, fees, and levies. Reducing revenue from these sources could have a similar effect to a property tax reduction or business grant. This approach can also be classified as a type of user fee reduction policy, with some of the same challenges of user fee reductions for households.

- **Leakages to external beneficiaries:** Some of these fees may be paid by non-residents, meaning that some benefits of the fee reductions would be lost to other jurisdictions.
- **Inequitable impact:** These reductions benefit a narrower group of businesses in The City because not all businesses pay these fees.

Business license fees were waived for 2020, 2021, and 2022. The City also reduced taxi and limousine licensing fees in 2021. Due to the specific nature of some of these fees, they would be a useful method of providing targeted relief with a simpler administrative burden than creating a targeted grant program.

In 2017, The City adjusted increases in planning and development permit fees to provide relief following the downturn in 2016. In 2020 and 2021, development and building permit fees for the addition of outdoor patios were waived to support Calgary restaurants transitioning to the environment of the pandemic and associated restrictions. Building permit fees could be waived for other targeted measures, such as affordable housing, for which building permit fees have been permanently waived in municipalities such as Hamilton and Halifax.[20]

5. Targeted business grants or rebates

Targeted grants to businesses are an available tool. Recently, The City implemented the Calgary's Restrictions Exemption Program (REP) Business Support Grant providing $2,000 in support to businesses impacted by the provincial government's REP.

- **Leakages to external beneficiaries:** Some of the expenditures related to these grants may benefit businesses with branches in other jurisdictions because placing restrictions on the use of the grants to local entities and auditing them would be cumbersome.
- **Inequitable impact:** Targeted business grants are less blunt relative to non-residential property tax rebates. Nevertheless, it may lead to subsidizing poorly run businesses and prevent better ones from replacing them. It means that care must be taken to use relief funds to support only well-run businesses heavily impacted by external shocks.
- **Complex administration:** There are administrative challenges to creating and operating a targeted grant program. It represents an additional administrative burden given the need for (usually ad-hoc) intake, review, and disbursement processes.[21]

6. Targeted investments in businesses

Unlike a grant, funding specifically earmarked for new investment may be more effective at stimulating economic activity because of the potential size and scope of the investment. An existing City initiative that directly supports businesses is the Opportunity Calgary Investment Fund (OCIF). It is administered by a wholly owned subsidiary of The City of Calgary – Calgary Economic Development. Since 2018, the OCIF has been used to fund non-repayable investments in targeted sectors of Calgary's economy, promoting the expansion of local businesses as well as attracting new businesses and start-ups to the city. If the amount of investment funding distributed from a program such as OCIF were increased during an economic downturn, it would increase overall investment and the level of economic activity.

- **Inequitable impact:** Since the investment funding is targeted, it could be focused on industries with the most growth potential. It creates the reputational risk of having the municipalities get involved in picking future winners.
- **Complex administration:** There are administrative challenges to expanding a program like OCIF. The process of collecting project proposals, evaluating business cases, and finalizing the distribution of funds to successful projects is administratively complex and would have to be accelerated significantly, which may not be possible. It also requires coordination with the federal and provincial governments. A sector that is already the subject of a significant incentive from any of these governments would be in less need of targeted City of Calgary support.

The set of tools that lead to a cut in corporate tax rates or taxes

7. Non-residential property tax rebate (including Phased Tax Programs) and BIA tax reductions

Like the residential property tax rebate for households, a non-residential property tax rebate would support the cashflows of Calgary businesses. While some businesses that own non-residential property would directly benefit, businesses that rent or lease their space could benefit indirectly if their payments to the property owners decrease. These tax cuts also extend to Business Improvement Area (BIA) taxes paid by businesses in certain areas to fund collective projects and promotional activities in the area. In 2021, The City of Calgary waived BIA taxes as another form of stimulus.

- **Leakages to external beneficiaries:** The City has deployed non-residential property tax rebates as well as special rebate programs like The City's Phased Tax Program (PTP). The latter program was enacted each year between 2017 and 2021 with many beneficiary businesses that have branches outside Calgary.[22]
- **Inequitable impact:** Only businesses that own the properties from which they operate will benefit directly benefit from the rebate. Renters may not benefit via their landlords.
- **Slow transmission speed:** Property taxes are set annually. This tool may not have an immediate impact, depending on the timing of an economic shock relative to the annual process of setting property tax rates.
- **Delayed shock:** Another cost is potential instability for taxpayers due to a delayed shock. While non-residential property owners may enjoy the initial relief of a one-time rebate, the tax increase in the following year could be much larger than usual. A "bow wave" effect[23] was observed in the non-residential properties after PTP.

8. Small business property tax rate

Many small businesses could go out of business during an economic downturn. Property tax relief could target small businesses. Municipalities in Alberta are permitted to set a lower tax rate for small businesses of up to 25 per cent lower than the standard non-residential rate. Several smaller municipalities in Alberta have recently adopted a small business subclass for property taxes, as have other large cities in Canada such as Toronto and Ottawa.

- **Leakages to external beneficiaries:** Some of this relief would benefit businesses defined as small businesses in Calgary but their owners outside Calgary have branches in other jurisdictions.
- **Inequitable impact:** Economic downturns affect industries differently. Large businesses in the worst affected industries could be worse off relative to small businesses in mildly affected industries.
- **Legislative bottlenecks:** The City of Calgary explored and decided against a small business property tax rate in 2019.[24] The provincial legislation defines a small business as one with 50 or less employees Canada-wide, which would encompass approximately 95 per cent of all businesses in Calgary. However, this definition may include holding companies owning large non-residential properties. Individually owned franchises would also be treated differently than wholly owned chain stores, despite conducting similar business. These and other issues[25] with defining small businesses by the number of employees made the small business property tax undesirable to The City in 2019, and these issues still exist. Under the current legislation, a small business property tax subclass would not be the most effective way to provide targeted relief to the most impacted businesses during a downturn.

The set of tools that defer taxes for businesses and operating loss or carryback provisions

9. Non-residential property tax or business fee deferral

Like a deferral for residential property tax payments, a similar policy could be applied to non-residential property tax bills. In 2021, The City of Calgary implemented a targeted deferral for hotels and motels, which had been especially impacted by the COVID-19 pandemic, pushing out the due date for property taxes until the end of 2022 without penalty. The City also deferred fees for development permits in 2020.

Fees or other payments made by businesses could similarly be deferred. In 2020, The City of Calgary provided a rent deferral for tenants of city-owned facilities. The City of Vancouver took a similar approach.[26]

A deferral in taxes or fees for businesses would not be likely to incentivize investment, particularly because a forward-looking business would account for the future tax payment in their financial decisions. However, if an economic downturn resulted in some businesses permanently closing, a tax or fee deferral could help keep businesses alive with long-term implications for economic recovery. Such a policy would also be quick to implement.

- **Leakages to external beneficiaries:** Some Calgary property owners are multi-locational companies with presences in other jurisdictions, as a result some of the benefits would spill over to other jurisdictions.
- **Inequitable impact:** Property owners would benefit directly from the rebate. Renters may be left out if the benefits do not trickle down from landlords.
- **Slow transmission speed:** While a deferral may be a more flexible policy response than a property tax rebate, the annual nature of the property tax means that the timeliness of the deferral may not be ideal, depending on the timing of the economic shock in relation to the property tax due date.
- **Temporary relief:** Although non-residential property owners may not need to pay property taxes immediately, they must still plan to pay the taxes at some point. If the economic downturn creates income uncertainty, the property owner may not increase their spending due to the tax deferral and save the money in case a future income reduction prevents them from being able to afford the tax bill later.

4.1.3 Direct government spending activity

Since the spending is directly controlled by government, considerations can be made to direct economic activity to industries with the greatest multiplier effect on the local economy.[27]

The set of tools that increase spending on public work projects and infrastructure

10. Targeted investments in public work projects

The City regularly invests in various types of capital projects, from transportation infrastructure to recreation and event facilities. Construction of these capital projects would provide a significant boost to the economy during a downturn. Given the ad-hoc nature of this funding, there tends to be a focus on maintenance and upgrades to existing facilities. Such projects could have relatively short lead times, and potentially reduce future operating costs, enhancing the countercyclical effect. Calgary benefitted from additional funding from the provincial government for public work projects during the COVID-19 pandemic.

- **Leakages to external beneficiaries:** Calgary relies on imports of goods and services to execute capital projects. It means that some beneficiaries from economic stimulus would be suppliers in other jurisdictions.
- **Slow transmission speed:** To be effective, actual construction of capital projects must be initiated or accelerated quickly following an economic shock. The complexity of capital investment projects means that new projects need a long lead time before shovels hit the ground. Accelerating currently ongoing capital projects could be a way to create a stimulus effect more quickly.
- **Complex administration:** The administrative complexity of evaluating potential projects may mean that significant time may pass before even the planning stage of a project begins. A very limited number of projects would likely be ready enough to be launched in time to have a stimulus effect at the onset of an economic downturn. If the start-up lag for a project is too long, then the project risks having an impact on demand too late, when slack in the economy has already been absorbed and excess demand adds to the pressures of price inflation.

The set of tools that increase general government spending, including support from transfer payments

11. General municipal government operating spending

The City of Calgary provides many services through its operating budget, but only a few could have a reasonable use for temporary additional funding during an economic downturn. Simply increasing funding for a service that could not make productive use of the money would be inappropriate. In areas where temporary additional funds could be productively used, however, the spending would have an effect on stimulating economic activity.[28]

- **Leakages to external beneficiaries:** Individuals and households in Calgary would benefit as well as tourists and visitors. It means that some beneficiaries of economic stimulus would live in other jurisdictions.
- **Slow transmission speed:** To be effective, spending activity would need to increase quickly following an economic downturn. Operating spending may be simpler and quicker to use as a countercyclical tool than capital spending.
- **Complex administration:** There would still be some administrative process before additional spending could come into effect. Given the sudden nature of downturns, there may be the need for extraordinary approaches to securing spending approvals.

4.2 Benefits associated with using municipal fiscal policy tools

The benefit from implementing countercyclical fiscal policy is best captured by the **fiscal multiplier**. It measures the amount of additional economic activity (measured in dollars of nominal GDP) that can be generated per dollar spent on a fiscal stimulus policy. For example, if a policy has a fiscal multiplier of 0.7, then for every $1.00 a government spends through that policy, the additional economic activity that will be generated is $0.70. There have been attempts to estimate the size of fiscal multipliers. Two examples are those by the Bank of Canada and the U.S. Congressional Budget Office.[29,30] There are four principal findings about the benefits of municipal fiscal tools from the analysis.

- **Order of magnitude:** The most reliable estimates of fiscal multipliers are available at the national level. Multipliers at a local level are likely to be smaller than at the national level due to benefit leakages to other regions. However, national studies can provide guidance about the order of magnitude of the effectiveness of municipal countercyclical fiscal tools.
- **Tools that increase government spending are the most effective:** Government purchases of goods and services directly increase the government spending component of GDP. The spending may also create a secondary increase in other components of GDP as the spending supports local business investment, jobs and consumption. Governments also have greater control over where this money goes, which allows them to target certain industries for stimulus. However, the types of goods and services most suitable for government purchases typically come from certain industries, like construction, rather than others, like retail trade.[31]
- **Tools that are directed at households are the second-best:** The relative shortcoming for this category of tools is that households may choose to save stimulus funds received. The government has no control over where the funds are spent after they are disbursed. Historically, only part of the stimulus ends up boosting local economic activity. However, this type of stimulus can have a broader impact on the whole economy, with effects distributed across many industries.[32]
- **Tools that increase the cashflow of businesses are the third best:** Providing businesses during a downturn with additional money is not likely to incentivize them to hire staff and increase production. Businesses will only produce as much as they can sell, which is determined by demand. A temporary cash flow increase will also have little effect on investment decisions. However, if the business is temporarily credit-constrained, a direct government transfer or tax cut could have significant long-term benefits in preventing well-run businesses hit by external shocks from permanently closing, thus protecting future production capacity.[33]

4.3 Criteria for evaluating and ranking the tools

Using the information that has emerged from the analysis of costs and benefits, it is possible to generate a set of three criteria for evaluating and ranking the tools for municipal purposes (*Exhibit 14*):

- **Cost effectiveness:** reflects the outcome of the review of costs associated with the tools
- **Timeliness of impact:** reflects an earlier finding that Calgary's shortcoming has been implementation delay
- **Stimulus effect:** reflects the outcome of the review of benefits associated with the tools

Cost effectiveness is one part of what makes a countercyclical policy tool desirable. Different policies have varying levels of administrative complexity, impacting their likelihood of being cost-effective and non-distortionary. If a policy tool requires significant municipal effort and resources to administer or if complex processes mean that a long time may pass until the policy can effectively begin, it will be less feasible. If a policy tool creates unintended consequences, such as income inequality, it will also be less desirable.

Timeliness of impact is another important feature of desirable countercyclical fiscal policy. It helps to ensure that the government response arrives at the right time and is not held up by delays that may risk inadvertently converting the response to an undesirable procyclical policy response.

Stimulus effect per dollar spent on the policy within a jurisdiction is also vital. Any tool should have a substantial impact, otherwise the tool has limited value.

Exhibit 14:
Summary results from the evaluation of countercyclical fiscal policy options [34]

Policy Tool	Monetary and Non-Monetary Costs	Time Lag of Effect [35]	Tier of Stimulus Effect [36]
Revenue-related tools for households			
1. Residential property tax rebate	Medium	Medium	2nd
2. User fee reductions	Medium	Short	2nd
3. Residential property tax deferral	Medium	Medium	2nd
Revenue-related tools for businesses			
4. Business license fee or permit fee reductions	Low	Medium	3rd
5. Targeted business grants or rebates	Medium	Medium	3rd
6. Targeted investments in businesses	High	Long	3rd
7. Non-residential property tax rebate	Medium	Medium	3rd
8. Small business property tax rate	High	Medium	3rd
9. Non-residential property tax or business fee deferral	Medium	Medium	3rd
Expenditure-related tools via governments			
10. Capital investments in public work projects	High	Long	1st
11. Increased operating spending	Medium	Medium	1st

4.4 The order of preference for deploying countercyclical fiscal policy tools

Based on the weighing of the costs and benefits of individual sets of policy tools, it is possible to develop an order of preference for deploying tools to generate stimulus in a downturn. As circumstances change, the benefits and costs of these policies should be continually re-evaluated. Safeguards should be set in place to ensure that a policy tool is discontinued if evidence shows that the benefits no longer outweigh the costs.

Expenditure-related policies are the most effective. They have the most significant fiscal multipliers, thereby maximizing the economic activity stimulated per dollar spent. Having other policy tools is desirable. Specifically, they can have a broader impact reaching those not covered by government spending. Since future downturns could occur in a variety of circumstances, having multiple policy tools available would enable City Council to respond in the manner most appropriate to the specific needs of Calgary residents and businesses. The proposed preference order ranking of tools is the following:

1. **Temporarily increasing operating spending** would be subject to some administrative complexity but would typically have a shorter lead time than capital spending. There are a few City services that could effectively make use of temporary additional funds within a quick timeframe. Direct spending on community and social programs or arts and culture events could effectively stimulate the economy by creating jobs and encouraging economic activity. Strengthened social programs are also a way to provide relief to the lowest-income segments of Calgary's population.
2. **Accelerated spending on capital projects** would be administratively complex but could have a strong stimulus effect and cost advantage. The process of getting a project to a point where construction can begin typically involves many steps, so to ensure that the stimulus effect is felt in a timely manner, the focus should be on shovel-ready projects or maintenance and upgrades to existing facilities. In the short term, the spending would create jobs and boost the economy, and the final project would provide value to citizens in the long run.

4. Cost-Benefit Analysis, Ranking and Order of Preference for Tools

3. **Targeted relief to businesses** would be less effective than measures more directly inducing consumption or investment. There would also be some administrative costs to set up such a program. Rather than stimulating the economy for a short-term boost in GDP, the goal of this policy is targeted relief and the protection of productive capacity in the economy, providing long-term benefits. A grant program would be the most flexible way to provide relief and is the preferred option to ensure appropriate targeting and timing. Tax rebates for businesses could also be used for relief, but this option is less preferred as it is less flexible and makes taxation less stable and predictable.
4. **Targeted residential property tax rebates** have a small stimulus impact per dollar of municipal revenue lost, and only property owners would directly receive the benefits. However, they are relatively straightforward to implement. There is also flexibility in the choice of size for the rebate, with the potential to create a stimulus effect of larger magnitude if The City's financial capacity permits.
5. **Temporary reductions in user fees** would be more difficult to administer than a tax reduction and would require temporarily departing from the normal guidelines used to determine appropriate fees. However, a reduction in user fees, especially transit fares, would supplement property tax reductions by distributing relief funds to segments of the population that do not own property and would not receive relief from the property tax rebate. Reducing fees for development and building permits would directly encourage investment and support the construction industry, making it a relatively more effective way to stimulate the economy than most other policies directed at businesses.

5 Best Practices for Using Countercyclical Fiscal Policy Tools

Two categories of best practices were considered. They relate to policy design and policy implementation.

5.1 Policy Design

An important consideration for policy design is attention to the four drivers of the size of the fiscal multiplier impact:

- **Stimulus funds must be spent rather than put into savings.** For example, if economic uncertainty is high, households may save a higher fraction of any income, reducing the effectiveness of a fiscal stimulus policy targeted to households. Different categories of households may also respond differently to a temporary increase in income, with some choosing to save more and others choosing to spend more. There is strong evidence that credit-constrained low-income households will spend a larger proportion of additional income making fiscal stimulus directed to low-income households more effective.[37]
- **The effect on demand must be realized quickly.** If governments do not act quickly, or the measures taken have a lag in their effect on demand, stimulus benefits may only be realized after the worst of the downturn has passed. If increased demand is realized after slack in the economy has already been absorbed, the policy will drive up inflation rather than create economic benefits.
- **Increased spending resulting from the policy must be spent locally rather than on imported goods and services.** If households and businesses receive stimulus funds and spend them elsewhere, the funds will not create an uptick in local economic activity. Rather, the economic benefits of the stimulus will be leaked to other jurisdictions.
- **If slack in the economy is limited to specific industries, increases in demand must be directed to those industries.** Additional demand for goods and services from industries without the slack to accommodate a rapid increase in production will only create price inflation in the short term.

5.2 Policy Implementation

For policy implementation, the analysis revealed five best practices for applying these policy tools:

- **Speed of Response:** The City has taken countercyclical actions in response to past economic downturns, despite its limitations as a municipal government. For example, The City implemented various relief programs following the oil price crash of 2015-2016 and during the COVID-19 pandemic. However, historical policy responses by The City have often occurred with a delay, with the full effects not being seen until as much as a year after the onset of a downturn.
- **Public Communication:** Calgarians can benefit from understanding how different countercyclical fiscal policies work, why the federal and provincial governments have better capacity and effectiveness in enacting such policies, and how The City can play a secondary role in filling the gaps in federal and provincial programs within its current fiscal capacity.
- **Effective Targeting:** There are two parts to effective targeting. The first relates to the size of support and the second relates to the beneficiaries of support. For the size of support, determining the optimal amount of City of Calgary countercyclical stimulus or relief was beyond the scope of this analysis but should form an integral part of design and implementation. For the beneficiaries of support, the negative impacts of an economic downturn are usually felt most strongly by vulnerable groups of people and small businesses. Municipal relief programs targeting those groups provide greater economic stability in the long run and make Calgary a more desirable place to live and work.
- **Strong Partnerships:** This is an acknowledgment of the stronger ability of provincial and federal governments to target beneficiaries, thereby adding a redistributive feature to stimulus. Also, federal and provincial governments frequently rely on deficit financing for their countercyclical policies. The City faces strict limitations on deficit financing for operational needs. The City can

request increased transfers from the provincial and federal governments; however, success would require a robust intergovernmental partnership.

- **Fiscal Limits:** At the municipal level, there is a smaller magnitude of the stimulus effect given the size and scope of municipal resources. It supports attention to municipal capacity while avoiding a situation where the municipality does nothing in the face of economic malaise.
- **Mitigating Risks:** There are different risks associated with alternative policy tools. It is useful to remain aware of them and to mitigate these risks throughout the implementation process (*Exhibit 15*).

Exhibit 15:
Mitigating risks associated with the preference-ordered policy toolbox

	Set of Policy Tools	Description of risks that require mitigation
1	Temporarily increasing operating spending	The risks of this policy choice are that the suddenly increased spending would not provide appropriate value to citizens or would not be able to be enacted in a timely manner.
2	Accelerated spending on capital projects	Capital projects typically run the risk of going over budget or facing delays. A delay in capital spending would pose the risk of the stimulus occurring once the economy had recovered, triggering inflation rather than economic growth.
3	Targeted relief to businesses	A risk of providing grants to struggling businesses is that inefficiently run businesses will be subsidized, rather than opening space for better-run enterprises.
4	Targeted residential property tax rebate	If the rebate is so small (e.g., $100-200/year) that individual households do not even notice the change, there is a risk that the stimulus effect would be minimal, despite the budgetary impact (of $100 million) to The City. If the rebate is too large, it runs the risk of creating an excessive tax increase in the following year, creating tax instability for property owners.
5	Temporary reductions in user fees	Reducing the revenue from fee-supported services creates the risk of a disruption in service quality. For example, time is money for businesses requiring building permits, and a delay in permit approval times could outweigh any benefit from reduced fees. Additional administrative hurdles may also arise.

6 Conclusion and Recommendations

Calgary has experienced larger and more frequent economic downturns than cities in other parts of Canada and could face more downturns in the future. To soften the effects of volatile business cycles, governments often enact countercyclical fiscal policy.

For economic downturns it includes temporarily increasing spending, reducing revenue collection, or both. The resulting increase in demand for goods and services helps absorb slack in the economy and promotes economic recovery. Once a recovery has been achieved, the policy is reversed. The goal during unusually high upturns is to moderate demand for goods and services to avoid high inflation, avoid discouraging or crowding out private sector spending, and reduce production activity from unsustainably high levels. Similarly, it would mean temporarily decreasing spending, increasing revenue collection, or both.

Countercyclical fiscal policy is typically enacted by the federal and provincial governments, which have the most ability to fund or finance countercyclical policy programs and the most tools through which to stimulate demand. Municipalities like Calgary may wish to establish their own countercyclical fiscal policy, but they are limited by their fiscal capacity to do so. As The City of Calgary looks to enact its own countercyclical fiscal policies to support the local economy, it must ensure that its approach complements rather than competes with the measures taken by the federal and provincial governments.

6.1 Hierarchy of municipal countercyclical fiscal policy tools for economic downturns

Given that the call for government action is usually stronger during a downturn, we have focused on the hierarchy for that situation. The preference order does not change for downturns or unusually high upturns. What changes is the direction of municipal government action.

In a downturn these tools can be used to stimulate spending by households through an increase in disposable income, stimulate investment by businesses, or directly stimulate the economy through increased government spending (*Exhibit 16*). However, the specific situation of a future downturn must be considered when deciding which are the most appropriate for The City to use at that time.

The recommended hierarchy of policy tools is based on the options currently available to The City of Calgary under the provincial legislation governing Alberta municipalities. While The City can use these tools to support the local economy in the case of the future economic downturn, it must do so in a limited way, secondary to the countercyclical actions of the federal and provincial governments.

6.2 A Strategy for designing and implementing policy changes

Developing a formal countercyclical fiscal policy for Council approval is a logical next step. The policy would guide Administration in developing responses and actions to moderate the impact of economic fluctuations. High inflation and central bank actions globally have increased the risk of a future recession making formal policy development a priority at this time. To achieve success with policy design and implementation, City Administration's review has identified five strategies.

Hierarchy: The City has applied tools in the past, but they were implemented without direct policy guidance and did not explicitly reflect an application hierarchy that recognized the costs and benefits. The goal of this strategy is to clarify when countercyclical tools should be used by The City.

Approvals: There are many potential ways to disburse funds for countercyclical policy. To allow for quick decision-making when a trigger for the use of the funds is activated, a prioritized list of the most effective and feasible policy options should be established. This list would offer a balanced mix of policies that could be used in the face of various circumstances that may arise. The policy would need to separate elements of administrative authority from council approvals for adequate and timely responses to economic shocks.

Amendments: The use of countercyclical fiscal policy tools funded by reserves would soften the impact of an economic

6. Conclusion and Recommendations

shock on Calgary's economy and quicken its recovery. To avoid the administrative complexity and costs associated with creating a new reserve, it would be more prudent to review existing reserves for suitability. One potential candidate is the Fiscal Stability Reserve, governed by Policy CFO002. The defined purpose of the suitable reserves could be modified to further support countercyclical fiscal policy actions.[38]

Capacity: The City's only option for independently funding countercyclical policy is using reserves. Rather than creating a new reserve for countercyclical fiscal policy, it is preferable to adapt the purpose of existing reserves like the Fiscal Stability Reserve. It creates an opportunity to review the built-in capacity of existing reserves for countercyclical actions. Countercyclical actions must be temporary, and savings must be replenished during periods of relative prosperity. To be effective, the policy should include a time frame for reserve replenishment to ensure adequacy ahead of unforeseen future economic shocks.[39]

Triggers: There are limits to the scale and scope of support available to municipal governments. It makes identifying adequate triggers for support vital. It would require further investigation into the appropriate leading economic indicators to guide decision-making. It would also extend to explicit content to guide decisions on the optimal size of support associated with the triggers. In short, it means clearly outlining the triggers that determine when City savings can be used for stimulus and relief in future economic downturns and how much money can be spent on countercyclical measures.

Exhibit 16:
Hierarchy and pathway from policy to desired effects in a downturn

Policy Tool	Economic Downturns	Economic Upturns	Pathway from policy to desired effects in a downturn [40]
1	Temporary increases in operating expenditures	Temporary decreases in operating expenditures	Temporarily increasing operating expenditures for community and social programs and cultural events supports employment in vulnerable services industries and attracts tourism and economic activity.
2	Accelerating capital spending	Decelerating capital spending	Accelerate the timing of capital expenditures for existing projects within the capital budget. Chosen projects should be shovel-ready or in progress and be able to utilize funding to create jobs within a quick timeline. Maintenance or upgrades to existing facilities may also be good candidates. To prepare for future downturns, plan uses for vacant or underutilized land ahead of time and keep these lower-priority projects on hold but shovel-ready until needed for economic stimulus.
3	Targeted relief to businesses	Eliminating targeted relief to businesses	If certain types of businesses are particularly impacted by an economic downturn and are at risk of shutting down, provide targeted grants for the most vulnerable businesses to prevent the loss of productive capacity in the economy.
4	Targeted residential property tax rebate.	Eliminating residential property tax rebates.	Implement a one-time residential property tax rebate, temporarily reducing the property tax burden on residential property owners by relying on reserves or transfers to replace lost revenue.
5	Temporary reductions in user fees	Eliminating user fee reductions	Temporarily reduce user fees to reduce revenue collection and to provide relief for targeted groups of household or businesses. Ensure that a possible combination of increased volume and lowered fee revenue does not impact the timely delivery of services by using appropriate reserves or providing additional funds. ■ Temporarily lower development and building permit fees as an option to incentivize investment, ensuring sufficient resources are allocated to support a timely permit application process. ■ Temporarily lower user fees for public transit as an option to reach more of the lower-income segment of Calgary's population than can be reached through property tax measures.

A Appendices

Appendix 1:
Case Study – Application of the Tools for Public Transit

Public transit, which is used disproportionally by lower-income residents of Calgary, would be a relatively preferable choice for a user fee reduction from an effectiveness and income inequality perspective. Transit fares could be temporarily reduced, providing savings to transit users, who would have a higher probability of increasing spending on other goods and services. If used in conjunction with a property tax rebate, fewer Calgarians would miss out on directly benefitting from the countercyclical stimulus measures, even though the coverage would still be far from perfect. Incentivizing public transit use instead of driving a personal vehicle could also support goals to reduce greenhouse gas emissions.

During the initial wave of the COVID-19 pandemic, free public transit was temporarily offered by other municipalities in Canada, such as Edmonton and Hamilton, though the primary reason cited for these free fare policies was to limit the transmission of COVID-19. The City of Ottawa implemented free transit during the month of December 2021. Ottawa's free transit policy also had an alternate primary motivation, as the policy was in recognition of the unplanned 54-day LRT shutdown in Ottawa, which ended shortly before. However, the resulting benefits to residents and businesses were noted as an additional reason for Ottawa's free-fare policy.

The City of Calgary already has permanent programs in place to reduce the price of transit for low-income Calgarians and seniors through The City's Fair Entry program. While these specific types of transit fares could be used for an even more targeted policy, the relatively small number of residents qualifying for these special passes and fares means that the policy would have a very small magnitude in stimulating the economy. The stimulus effect would be more significant if the reduction is applied to all types of transit fares. However, the fact that transit fees may come in the form of annual or monthly passes or individual fares creates additional administrative costs and challenges.

It should also be noted that transit is typically funded under a partial cost recovery model. User fees ensure that those who directly benefit from a service pay. Public transit also creates wider societal benefits, however, so the remaining cost of the public transit system is supported through tax revenue. Using transit fares to enact countercyclical policy would mean temporarily departing from the principles typically used to determine optimal user fees for public transit services, and additional funds may need to be directed to maintain the same level of transit services in the face of lower fee revenues.

Appendix 2:
A Note on the Evidence from Past Policy Actions

In Section 3 of the report, The City's countercyclical actions over the past three business cycles are examined using publicly available data from The City's audited financial statements. It was used for transparency and the ability of others to easily replicate the estimates. There is, however, an important shortcoming with the data because it incorporates accounting standards and conventions that affect the analysis. A good example is the inclusion of amortized capital costs in the spending estimates.

Using additional information from internal management reports that strip out these anomalies, the previously observed patterns are unchanged (*Exhibit 17*). While data for the change in revenue in 2009 was unavailable, meaning that only the two most recent downturns could be observed, the data corroborates the conclusion made earlier in section 3.

- The annual average revenue growth during the last two downturns was $48.5 million, compared to $146.9 million outside of the downturns during 2010-2020.
- The average annual spending growth during the 2015-16 downturn was $239.4 million, compared to $58.1 million outside of the downturns during 2010-2020.

Exhibit 17:
Evidence of historical countercyclical actions using internal management reporting data

($millions)

	Change in Operating Revenues before Transfers	Change in Capital Revenues before Transfers	Change in Operating Expenditures, less Recoveries	Change in Capital Expenditures, less Recoveries	Excess of Revenues over Expenditures, before Transfers	Change in Operating Transfers Used	Change in Capital Transfers Used
2009					(910)		
2010	73	(1)	45	192	(1076)	(52)	100
2011	170	11	142	(44)	(993)	(36)	55
2012	151	26	47	(292)	(571)	4	(41)
2013	318	17	202	(31)	(406)	(6)	(108)
2014	153	(36)	276	99	(665)	41	219
2015	160	35	144	(15)	(599)	(22)	91
2016	84	22	10	340	(843)	1	(20)
2017	140	(42)	56	182	(983)	6	38
2018	36	106	(49)	(284)	(507)	2	(48)
2019	165	(113)	2	(78)	(378)	(3)	(11)
2020	(167)	12	(91)	(188)	(253)	187	(369)

Using the data above, the Hodrick-Prescott filter is used to extract the cyclical components of the financial time series, as well as GDP. The correlations between the cyclical components of the financial data and GDP can be used as an alternate measure of countercyclicality (*Exhibit 18*).

- Revenues: The positive correlations for revenues demonstrate a countercyclical pattern, though only weakly for capital revenues.
- Expenditures: Operating expenditures are positively correlated with GDP, following a procyclical expenditure pattern. The pattern is partially cancelled out by mildly countercyclical capital expenditures.
- Excess of revenues over expenditures: a small positive correlation implies a weak countercyclical pattern.

Exhibit 18:
Assessment of countercyclicality using the Hodrick-Prescott Filter [41]

	Real Operating Revenues before Transfers	Real Capital Revenues before Transfers	Real Operating Expenditures, less Recoveries	Real Capital Expenditures, less Recoveries	Real Excess of Revenues over Expenditures, before Transfers
Correlation with Real GDP (cyclical components only)	0.70	0.14	0.55	(0.20)	0.23

Appendix 3: Reviewing Existing Reserve Capacity

One way for The City of Calgary to independently fund countercyclical fiscal policy is by accumulating savings into a reserve set aside for countercyclical policy disbursements. By accumulating savings during times of economic strength, and using those funds during an economic downturn, The City still has the means to act whenever federal and provincial government support is not forthcoming. The magnitude of the countercyclical stimulus during a downturn would need to be bounded by the quantity of funds previously saved away.

The City of Calgary maintains many different financial reserves for various purposes. Many assume that existing City financial reserves were established for countercyclical fiscal policy. They were not, with the partial exception of the Fiscal Stability Reserve (FSR) and the Reserve for Future Capital (RFC). The City's reserves are primarily earmarked for funding specific municipal programs or activities.

There is a strong rationale for considering the FSR as a candidate for countercyclical fiscal policy. Currently, the FSR has a minimum balance of five per cent of The City's tax-supported gross operating expenditure (net of recoveries), with a target balance of 15 per cent of such expenditures. It is governed by policy CFO002, which defines the purpose of the reserve:

The reserve is to be used for the following purposes:

- *a contingency fund for operational emergencies, urgent or contingency capital expenditures, and to compensate for unplanned revenue reductions with significant financial impacts.*
- *investment income from the reserve would be used to fund one-time operating budget expenditures.*

As it is currently designed, the FSR could and has sometimes been used as a method of enacting countercyclical fiscal policy. Operational or capital contingencies and unplanned revenue reductions, purposes for which the FSR is intended to be used, often coincide with downturns in the local economy. For example, if funds are drawn from the FSR to make up for unplanned revenue reductions that occur during an economic downturn, the prevention of an increase in taxes or fees while maintaining services at their existing level would support economic recovery.

To formalize an internal funding source for countercyclical fiscal policy, municipal authorities would have to either amend the role of the FSR or create a new Fund. There are advantages and disadvantages to expanding the role of the FSR. One advantage is that it helps avoid the costs and time to create an additional reserve when so many exist already. Another advantage is that it directs multiple policy goals into a single multiple-purpose fund, benefiting from the economies of scale. The disadvantage is that it could make the management of the FSR more complicated.

To provide clearer direction for the use of the FSR to provide countercyclical support to the economy, policy CFO002 would need amendments. The recommended amendment would be to explicitly add the countercyclical fiscal policy role to the mandate. It would facilitate using funds from the reserve to reduce revenue collection or increase expenditures during an economic downturn to stimulate the local economy.

Regardless of whether the FSR is used, or a new Fund is created, there is a need to focus on replenishment during the upturn that follows a recession. Allocating surplus to the FSR has been the practice in The City, but the timing and triggers would need to be revisited.

The process of rebuilding the reserve should begin as soon as the economy has regained strength, so that reserve funds are available for future downturns. Business cycles do not follow a predictable pattern. Both the magnitude and timing of economic downturns vary significantly.[42, 43] Since business cycles in Calgary have been more frequent and volatile than the Canadian average, it is recommended to plan to replenish reserves within only a few years after recovery from a downturn. The risk of being underprepared for the next downturn must be balanced with the risk of hampering economic recovery by withdrawing stimulus measures too quickly.

Endnotes

1. Business cycles are also sometimes defined according to four stages. The expansion stage, when the economy grows steadily, and the peak stage, where the upper limit of growth for the economy is reached, are part of the boom. The contraction stage, when economic activity slows, and the trough, when the economy reaches its lowest point in the cycle, are part of the bust. A recovery stage is sometimes included as a fifth stage, when, following a downturn, the economy is still producing well below its potential but is improving. The recovery stage would also be included in the bust.
2. Real gross domestic product (GDP) measures the value of all goods and services produced in a jurisdiction, adjusted for inflation in a given period. GDP estimates at the Census Metropolitan Area (CMA) level in this report are sourced from The Conference Board of Canada.
3. A shock that creates a reduction in overall economic activity may lead to a recession, often defined as a period of at least two consecutive quarters of declining real GDP.
4. For this analysis, a downturn is defined as a period with negative annual real GDP growth. In Exhibits 1-3 and 9-12, the shaded areas represent years where annual GDP fell in Alberta and Calgary.
5. West Texas Intermediate (WTI) is a light, sweet crude oil and is the underlying commodity of the New York Mercantile Exchange's oil futures contracts, reported in U.S. dollars.
6. Unemployment rate data is three-month moving average, seasonally adjusted. Monthly unemployment data at the Census Metropolitan Area (CMA) level from Statistics Canada is available back to March 2006.
7. The overnight interest rate is the rate for short-term (overnight) lending and borrowing between major banks. This rate influences all other types of interest rates.
8. Quantitative easing is a policy in which the Bank of Canada purchases government bonds. This purchasing of bonds increases the total money supply in Canada and puts downward pressure on interest rates, stimulating economic activity. Quantitative tightening, the opposite of quantitative easing, is a policy in which the Bank of Canada reduces the bonds it holds and lowers the quantity of money in circulation. Quantitative tightening creates upward pressure on interest rates and helps control inflation.
9. Forward guidance is a tool used by the Bank of Canada in which it communicates its intended monetary policy plans to the public. This communication is used to influence market expectations about the future path of interest rates and reduce uncertainty for market participants.
10. Budgetary balance refers to the difference between government revenues and expenditures.
11. Demand refers to total demand for all finished goods and services in the economy at a given time. The concept of countercyclically stimulating demand to absorb economic slack during a downturn was first proposed by John Maynard Keynes in 1936.
12. Adapted from U.S. Congressional Budget Office 2008 publication: 'Options for Addressing Short-Term Economic Weakness.'
13. These programs include (1) Efforts to protect public health, including procurement of personal protective equipment and COVID-19 vaccines, (2) Wage and rent subsidies for impacted businesses, (3) Access to credit for small and medium businesses, (4) Direct transfers to individuals with lost or low income during the pandemic, through programs such as the Canada Emergency Response Benefit (CERB), Canada Recovery Benefit (CRB), and top-ups to GST and Canada Child Benefit tax credits, (5) Infrastructure investment funding through the Canada Infrastructure Bank, (6) Deferral of income tax filing deadlines, and (7) Various sector-specific supports.
14. Due to a change in public accounting standards, annual report data from years earlier than 2008 are not comparable to current data. For more detailed analysis using alternative data and analytical techniques see Appendix 2.
15. Calculated as total revenues minus government transfers related to operating and equity in earnings of ENMAX.
16. Expenditures are presented as "Expenses" in The City's Annual Reports.
17. The excess of revenues over expenditures in each year is negative because it excludes transfers from the federal and provincial governments. This demonstrates that The City must rely on transfers to maintain balanced budgets.

Endnotes

18. The City has an ongoing Property Tax Assistance Program for low-income homeowners. A temporary expansion of a program of this type during an economic downturn, by increasing the eligibility threshold or the grant amount, could also address income redistribution. Administrative challenges would make it difficult to do this in a timely fashion. It also does not address relief for renters.

19. Appendix 1 has additional analysis in relation to transit-related user fees.

20. Since building permits are required for both new construction and improvements, by reducing or waiving fees, households conducting renovations on residential properties could benefit as well as businesses. The approval process would need to be maintained to ensure that a potential combination of increased volume and lower fee revenue does not result in a slower approval process. The existing Planning and Development Sustainment Reserve can help maintain service quality without additional, non-fee-supported funding.

21. The total financial cost of a business grant policy would depend on how narrowly businesses are targeted. In 2021, The City of Calgary allocated $5 million in funds for the Calgary's Restrictions Exemption Program Business Support Grant, providing up to $2,000 to eligible businesses per physical location. It should be noted that the more targeted the grant is, the higher the administration costs to verify eligibility will be.

22. Under the Phased Tax Program (PTP), a cap was set on the annual increase in the property tax rate for eligible non-residential properties, essentially delaying the excess increase to the next year. It applied to the properties with their relative property values changing more rapidly than a certain threshold rather than as a result of an economy-wide downturn.

23. The "bow wave" is the total amount of the difference between the assessed Municipal property tax and the post-PTP Municipal property tax owed, cumulative, across all Non-Residential properties.

24. See City of Calgary Report PFC2019-0559.

25. The City of Calgary does not have the information required to administer a small business subclass. If external information is not already collected by The City used to administer a subclass, such as employee counts or business revenues, there could be significant costs associated with obtaining the required information.

26. See Vancouver 2021 Budget Highlights.

27. Carbon emissions from stimulated economic activity can also be more easily predicted and accounted for through the use of direct spending fiscal policy tools.

28. For example, the Halifax Regional Municipality allocated $600,000 in its 2021/2022 budget to fund two venues offering free entertainment programming in the downtown core. This funding serves as a form of direct economic stimulus to the heavily impacted arts and culture industry while attracting economic activity and tourism to re-animate the downtown core.

29. De Resende, Carlos, René Lalonde, and Stephen Snudden. Power of many: Assessing the economic impact of the global fiscal stimulus. No. 2010-1. Bank of Canada Discussion Paper, 2010.

30. Whalen, Charles J., and Felix Reichling. "The fiscal multiplier and economic policy analysis in the United States." Contemporary Economic Policy 33, no. 4 (2015): 735-746.

31. The fiscal multipliers associated with direct government spending in the Bank of Canada study had a range of 0.4 to 0.98, while those in the Congressional budget office study had a range of 0.4 to 2.5. These were national-level estimates.

32. The fiscal multipliers associated with stimulus to households in the Bank of Canada study had a range of 0.01 to 0.13, while those in the Congressional budget office study had a range of 0.10 to 2.1. These were national-level estimates.

33. The fiscal multipliers associated with stimulus to businesses in the Bank of Canada study had a range of 0.0 to 0.0 (i.e., no multiplier impact), while those in the Congressional budget office study had a range of 0.0 to 0.4. These were national-level estimates.

34. The format of this chart is an adaptation of the format used by the U.S. Congressional Budget Office (Options for Responding to Short-Term Economic Weakness, 2008).

35. "Time Lag of Effect" refers to the length of time it can be expected to take for a policy to have an effect on economic activity. "Short" means approximately 0-6 months, "Medium" means approximately 6-12 months, and "Long" means at least one year.

36. Effectiveness refers to the economic benefits of a policy per dollar spent. A policy with high effectiveness will produce significant benefits to the economy for a relatively small dollar cost, while a policy with low effectiveness will be more expensive relative to the benefits it creates. As discussed in section 4.2, policies can

Endnotes

be placed into three distinct tiers of effectiveness related to the type of demand created by the policy.

37. Brinca, Pedro, Hans A. Holter, Per Krusell, and Laurence Malafry. "Fiscal multipliers in the 21st century." Journal of Monetary Economics 77 (2016): 53-69; Carroll, Christopher, Jiri Slacalek, Kiichi Tokuoka, and Matthew N. White. "The distribution of wealth and the marginal propensity to consume." Quantitative Economics 8, no. 3 (2017): 977-1020.

38. Given The City of Calgary's limited ability to run a deficit during a downturn, reserves should be prepared to fund countercyclical fiscal policy when needed. The current reserve most suited to support countercyclical fiscal policy is the Fiscal Stability Reserve, governed by Policy CFO002. The defined purpose of the Fiscal Stability Reserve could be modified to further support countercyclical fiscal policy actions.

39. The City of Calgary Reserves Policy CFO013 contains a provision that whenever a reserve, such as the Fiscal Stability Reserve, falls below its minimum allowed balance, the appropriate department must create an action plan and report to Council on how the reserve will be returned into compliance. The City of Edmonton, in its Policy C629, requires that if its Financial Stabilization Reserve falls below its minimum balance, it must be replenished within three years. However, due to the risk of a prolonged downturn that would delay the ability of The City of Calgary to refill its Fiscal Stability Reserve without causing economic harm, we do not recommend a specific time requirement for The City of Calgary. Rather, the timeline to replenish reserves should reflect economic conditions and be subject to approval by Council.

40. For an unusually high upturn that risks high inflation, the policy pathway is in the opposite direction.

41. The analysis uses the correlation between the cyclical components of real GDP and real revenues and expenditures. For more technical details on the analytical approach, readers can refer to Frankel, Végh, and Vuletin, 2011, "On Graduation from Fiscal Procyclicality," NBER Working Paper 17619.

42. Major downturns, defined for this purpose as periods where annual GDP decreased for at least one year, have occurred three times in Alberta and the CER since 1998. While seven years elapsed between the end of the 2009 recession and the end of the 2015-2016 oil price collapse, Calgary had only four years between the 2015-2016 recession and the 2020 COVID-19 crisis.

43. The OECD estimates for Canada imply an average business cycle length of four years. An alternate way of measuring business cycles is to examine deviations from the long-term trend of economic growth, which may identify a downturn even if GDP did not decrease. Using this method, the OECD measures business cycles in Canada back to 1960. See the OECD reference turning points, accessed from https://www.oecd.org/sdd/leading-indicators/oecdcompositeleadingindicatorsreferenceturningpointsandcomponentseries.htm

Who We Are

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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