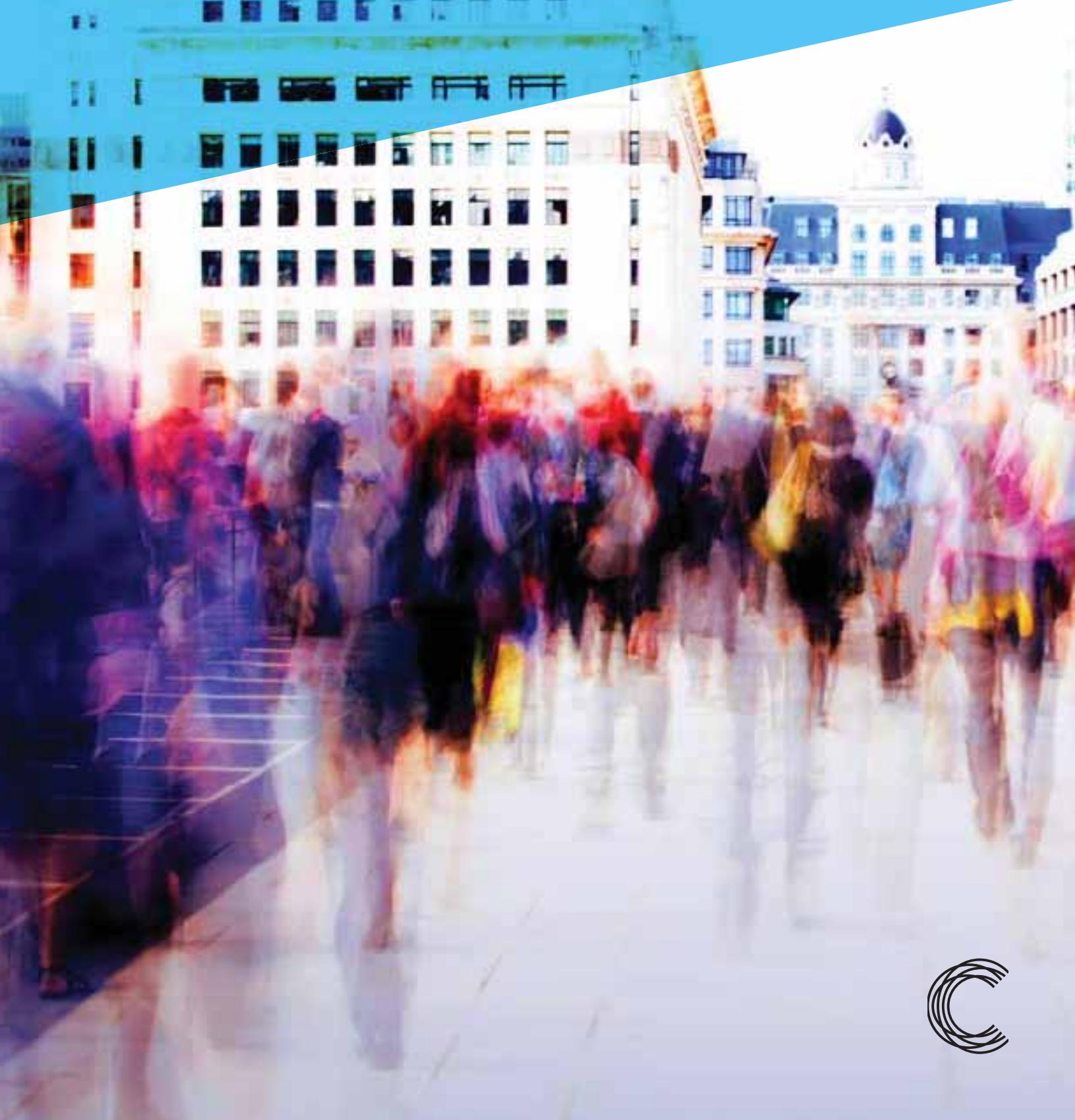
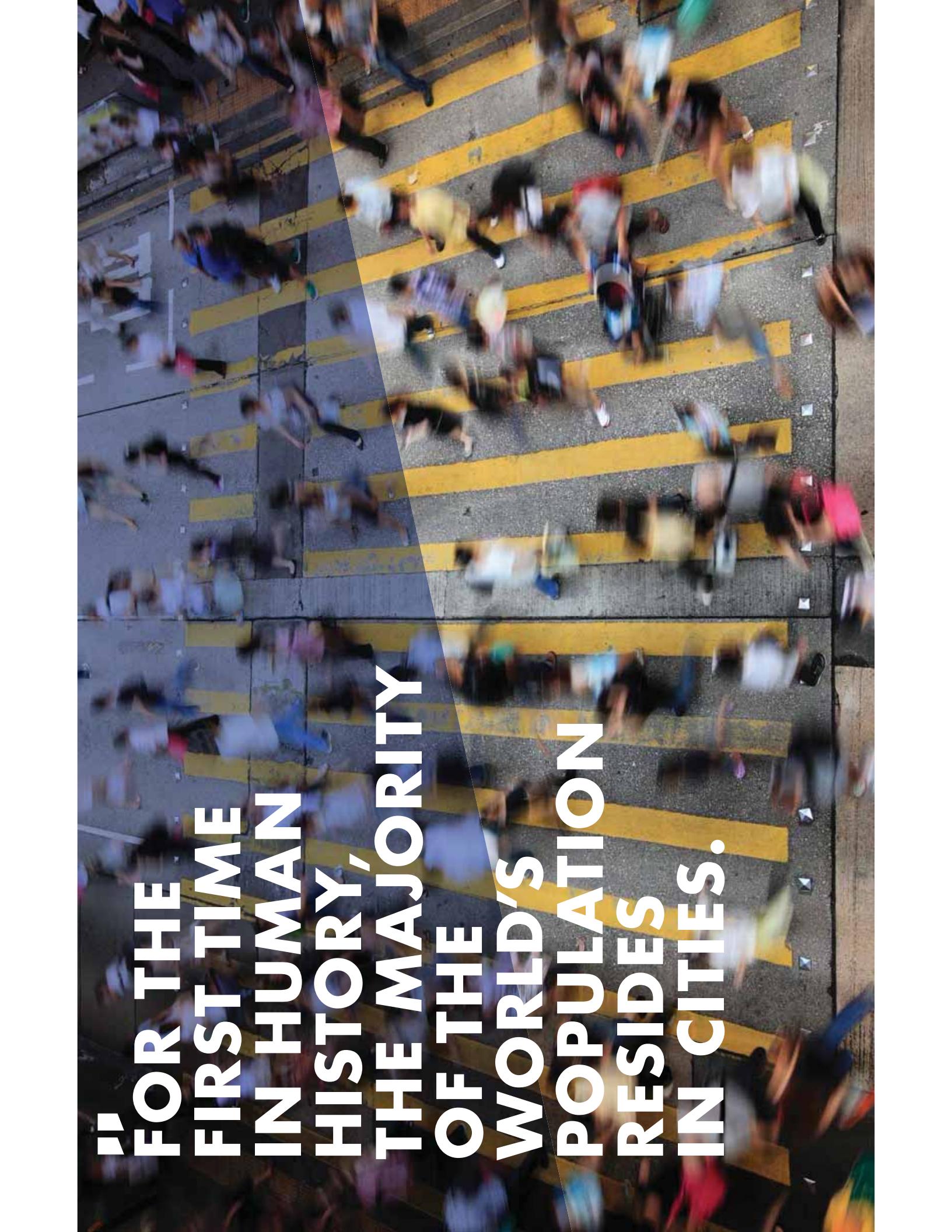


**Calgary
Chamber**

GREAT CITIES

PROFILES IN MUNICIPAL EXCELLENCE





FOR THE
FIRST TIME
IN HUMAN
HISTORY,
THE MAJORITY
OF THE
WORLD'S
POPULATION
RESIDES
IN CITIES.

The number of global city dwellers continues to rise, with 75 percent of the world's population expected to call cities home by 2050.¹ The world is becoming so economically dependent on cities that some cities, such as Brussels, Bogota, and Seoul are accounting for more than 40 percent of their country's GDP.²

Currently 83 per cent of Alberta's population lives in urban areas and, over half of the world's population lived in cities in 2010. Cities play an increasingly important role in the function of the economy and public life. The actions of municipal governments are increasingly vital to how the world develops and significantly affects the way their citizens live, interact, and conduct business.

Calgary as a city continues to lead Canada in terms of population growth and, as its economy continues to grow, increasingly competes on a global scale for both business and talent. As Calgary becomes recognized as a global city, it needs to keep up with other Great Cities to attract successful businesses, elite-level talent, and provide critical infrastructure support for economic success.

The four topics the Chamber has identified are:

<h2>1 GREAT CITIES EMPLOY INNOVATIVE AND SUSTAINABLE FINANCE TECHNIQUES</h2> <p>GREAT CITIES BOOST MUNICIPAL IQ</p> <p>Wireless and digital technologies are now deeply integrated into our everyday activities. In many cases, citizens and businesses can barely consider a world without the influence of technological integration in their daily operations. The proliferation of the smart phone and wireless internet has created an informed, tech savvy, well-connected society that expects more out of the services they consume. Cities that do not keep up with the rapid advancements of technology risk falling behind other cities, and may become unable to meet the demands of its citizens and businesses. Consequently, many cities have adopted aggressive digital strategies to fundamentally transform how they provide services to citizens and businesses. This section will look at how Calgary compares to the most tech-savvy cities, and what it can do to stay competitive in an increasingly digital age.</p>	<h2>2 GREAT CITIES ARE LEADERS IN REGIONAL COLLABORATION</h2> <p>GREAT CITIES HARNESS THE POWER OF HUMAN CAPITAL</p> <p>While good cities are financially responsible, economically vibrant, and well planned, great cities also acknowledge that improving social outcomes creates numerous societal and economic benefits. Failure to address these problems creates significant burdens on education, health and other public services, and has negative impacts on labour force availability and skills. Cities who work to improve the outcomes of the worst off in their society ensure that their city, as a whole, realizes better outcomes. This section will look at the effects social issues have on a city and what other cities have done to improve social outcomes, how improving social outcomes relates to the other aspects of a great city, and what Calgary is doing to address social issues.</p>
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To what extent local governments or communities can contribute to the success of their city can vary greatly, and each city addresses these problems in their own ways. What is universal is the fact that cities are increasingly influencing their own outcomes both locally and globally, and their influence on global economic success is more significant than it ever has been in the past. By understanding what exactly makes a city successful, looking at what the best cities do in these areas, and seeing how Calgary measures up, we can ensure that Calgary emerges as a Great City – one that attracts top businesses, retains talent, and is recognized the world over for its excellence.

1 GREAT CITIES EMPLOY INNOVATIVE AND SUSTAINABLE FINANCE TECHNIQUES

of the services it provides. The City of Calgary can improve its ability to determine the actual value for money that Calgary taxpayers are receiving.

innovative ways to lower costs without reducing public satisfaction. Otherwise, poor spending habits, growing budgets, and low productivity may result.

Traditional budgeting

Like a business, local governments budget for the various goods and services provided to their citizens. Traditional line item budgeting estimates future cost based on the previous year's cost of delivery, the additional investment needed to maintain existing service levels, and the expected rise in demand. While this method aims to create stability and maintain quality, basing future spending on a previous budget does not reflect the actual cost of operation or public demand. This creates a cycle of continuously rising costs for governments regardless of whether programs require additional funding.

Continually adding funding also discourages innovation and process improvement, creating long-term efficiency issues.

As city services expand, added discretion is required to limit the rate of budget increases. The cycle of increasing costs to maintain services will inflate property taxes, lower affordability for businesses and citizens, hampering Calgary's overall competitiveness. Recognizing the ineffectiveness of traditional budgets, some municipalities have found new ways to assess the cost of providing municipal services.

SPENDING WISELY: CITIES, BUDGETS, AND RAISING REVENUES

At the heart of every local government are the various services they provide to their citizens. Without basic services, as well as adequate infrastructure, the success and competitiveness of a city can quickly erode. Cities need to look at every tool to help provide the best possible value for money, which is necessary to ensure that citizens remain satisfied and services are cost effective for cities.

The traditional model of providing these services has been through a local government department. Operations are funded through tax dollars or user fees and equipment is owned and operated by the government. With limited ability to raise revenue, cities need to look at what services they provide and whether there are

previous year's cost. Departments must then present a proposal for funding based on the desired level of service, resources required, associated programs, and the expected cost. This is intended to avoid simply increasing funding obligations from the previous year's numbers, creating savings through the elimination of inefficient, surplus funding. However, reviewing each spending item means that zero-based budgeting can become a time consuming, and costly, process.

Another alternative approach to the budgeting process is performance or results-based budgeting. A results-based budgeting system focuses on providing services based on specific priorities with measurable outcomes. Services are then approved based on their ability to achieve those outcomes through the most cost effective means possible.

How dollars are spent is imperative before even considering how revenues are collected and effective budgeting is crucial to the success of cities. More cities are using alternative budgeting methods to maximize cost effectiveness, and are finding areas of savings without compromising service delivery or citizen satisfaction. To best implement these practices, cities needs to understand public demand, what services they spend on, and the value for money the public receives from services.

Performance measurement and public engagement

Performance measurement and benchmarking has led to positive results in other jurisdictions and can increase the overall competitiveness of a city, maintaining the high quality of life that makes a city an attractive place to live and work. By evaluating the efficiency and quality

The City of Calgary has recognized shortcomings associated with the traditional budgeting process, and in 2011 City Council approved a zero-based review pilot program for The City's fleet services department. This has since been expanded to all departments. The purpose of the zero-based reviews are to account for each dollar spent by The City, and also to examine the most effective method to deliver the service within The City's administrative structure.³ While zero-based budgeting does help ensure transparency and cost efficiency, the process itself is time consuming, and only 80 percent of all services are expected to be reviewed by 2020.⁴

Though zero-based reviews are a good start to understanding what services should be considered a priority, more needs to be done to find savings. In addition to zero-based reviews, The City should examine other alternative budgeting methods to maximize public value. Calgary has implemented elements of results-based budgeting, such as establishing a number of long-range priorities with the development of ImagineCALGARY⁵. However, imagineCALGARY has 28 priorities and over 100 long-term performance targets. Services are also organized by department rather than by priority, causing dollars to go to some programs that may overlap others, resulting in an inefficient allocation of public revenues. While credit should be given for ambition, focusing on fewer, more measurable priorities allows for more

ALL CITIES PROVIDE IMPORTANT

public services to their residents such as infrastructure development, emergency response, water treatment, wastewater removal, and garbage collection. These services are funded through taxes paid by residents to their respective city, which is expected to act as the responsible steward of taxpayer dollars. With the public more informed and educated than ever, citizens expect to receive the best possible value for their money and cities must think more consciously about how they can serve the public as efficiently as possible.

How The City of Calgary pays for and provides public services is imperative to the long-term competitiveness of our city, especially as Calgary is growing by upwards of 30,000 people each year.⁶ Service

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BALTIMORE

RESULTS-BASED BUDGETING AND THE CITY OF BALTIMORE

Following the 2009 recession, the City of Baltimore experienced significant population loss and mounting municipal debt. Rather than continuing to take on debt and face the threat of municipal bankruptcy, the City of Baltimore decided to reorganize its budgeting process by moving to a results-based budgeting process. Baltimore's model relies on three major factors to create success.

- In order to increase the overall efficiency of its public finances, Baltimore has made sure that:
- Budgets are developed based on key societal priorities, with budget items grouped by service priority rather than departmental responsibility.
- It is data driven, with the city collecting performance data and evaluating each program's effectiveness.
- It encourages competition and innovation. If one department proposes that it can provide a service for less, the service can be moved to another department.

In constructing a results-based budget, the Mayor's Office identified six key priorities in 2009, using them as the framework for what services should be delivered. Each priority has an accompanying guideline document that provides key municipal data on the state of that priority area, and provides strategies about how to address the issue. Funding commitments are also now assigned by service area rather than department to emphasize the importance of the service over who is responsible for delivering it.

To ensure that priorities are met, the City of Baltimore created a performance management office known as CitiStat. CitiStat collects data from each city department, comparing which services effectively address budget priorities and which do not function as intended. By focusing on performance and setting targets for continuous improvement, Baltimore has a clearer picture of how its finances address the city's needs.

Competition for dollars between departments is encouraged, with responsibility awarded to whichever can provide the service most effectively for the lowest cost. For example, Baltimore's Housing and Community Development department took over responsibility for burglar alarm registrations from Baltimore's police department in 2010. The result was an expected \$2.6 million in additional revenue while freeing up the police department for more pressing issues, allowing the City to better serve its citizens.

The shift to results-based budgeting in Baltimore is expected to lead to projected cost savings of \$202 million by 2022, while overall revenues from taxes and user fees are expected to increase by only 1 percent from 2013 to 2015. Faced with a financial crisis, the City of Baltimore has transformed itself into a great city by being more efficient with public dollars.

effective use of limited funds.

Calgary is currently a partner in the Ontario Municipal Benchmarking Initiative and submits some performance data such as the value of building permits issued per capita and emergency services costs per capita to the initiative.⁶ However, The City does not publish their benchmarking for Calgarians to review. Since The City already collects this data, it should make this information more accessible to Calgarians by publishing it clearly on the front page of their website, showing exactly where taxpayers dollars go. This will help identify trouble spots and identify areas of improvement.

To more closely align services with public demand, The City of Calgary recently tried to increase public engagement in their budget cycle with *Action Plan 2015-2018*.⁷ In addition to performance measurement, engagement is imperative to improving the budgeting process. Engagement helps ensure that cities are responsive to the needs of their citizens and maintain service quality as efficiencies are identified.

That said, engagement must be done carefully to have meaningful value.

With The City of Calgary's *Action Plan*, there were concerns with the usefulness of the engagement because of low response rates and prospective changes to services were poorly communicated to the public.⁸

In spite of these issues, identifying critical areas of public demand will help create long-term savings and ongoing public engagement should be a priority for The City.

municipal spending has been steadily rising since 1988. With limited revenue options, Canadian cities more than ever need to think about how they raise their revenues and pay for services in a manner that does not overburden the taxpayer.

PROPERTY TAXES

Property taxes act as the primary source of revenues for most Canadian municipalities. They are collected based on the total assessment value of properties – usually a combination of physical buildings and land – within a city. The property tax is a relatively stable form of taxation because buildings and land stay within the municipality, and do not move like individuals. This provides a predictable source of revenue for cities because of the relatively stable tax base compared to other forms of taxation. Property taxes, however, tend to be unresponsive to economic changes. Given Calgary's relatively high population growth, the high reliance on property tax does a poor

job of accommodating the demands a rapidly increasing population puts on existing infrastructure and public services.

Property taxes are also troublesome because they do not necessarily reflect an individual's ability to pay, how much services are consumed, and does not account for free riders. In turn, the property tax is an inefficient way to pay for services. This is not to say that property taxes are a bad basis for municipal revenues. While they do not directly correlate to services consumed, property tax rates must be increased to generate significant revenue, making them highly visible. In turn, this ensures that citizens are informed if their taxes go up, though they may not be sure of why costs are rising.

Property taxes act as a good foundation for services that are widely consumed and do not fluctuate heavily with demand. A broader set of revenue tools, however, would enable cities to more appropriately and sustainably manage all City expenditures.



RAISING REVENUES FOR SERVICES

Part of the budgetary process includes determining how to fund public services. For a variety of reasons,

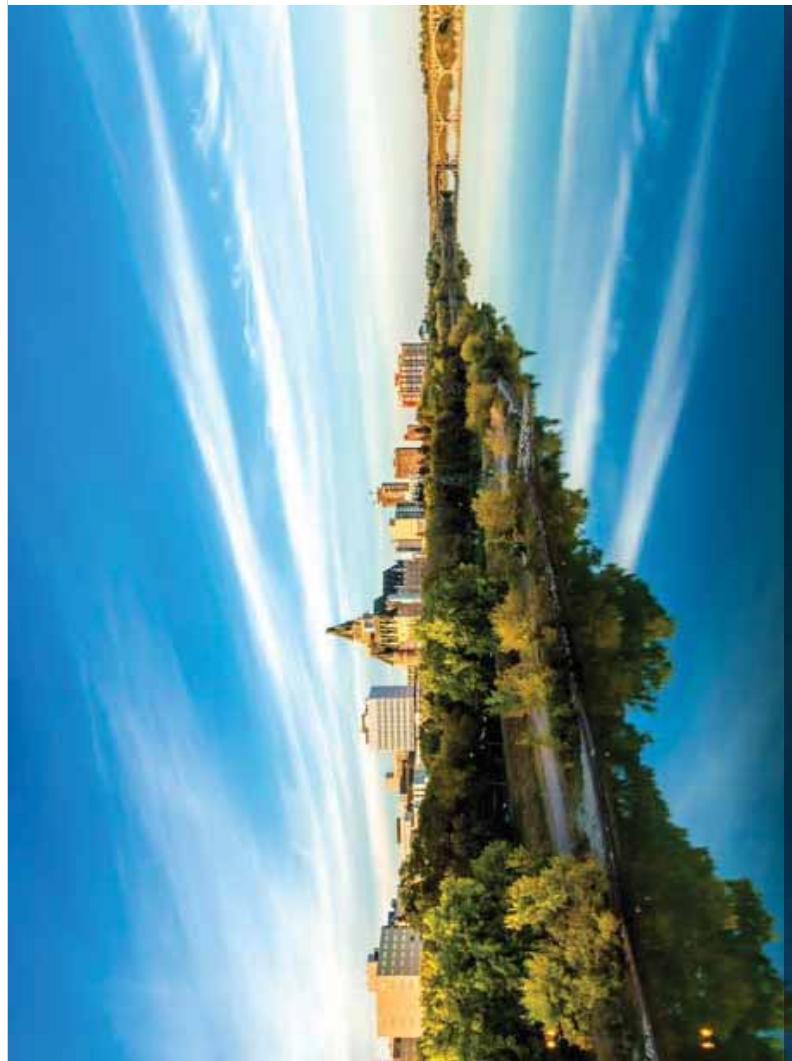
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11



SASKATOON

THE CITY OF SASKATOON MUNICIPAL OPERATIONS BENCHMARK PROJECT

Recognizing the need to measure the performance of their services and the value for money their citizens receive, The City of Saskatoon has benchmarked the services of five western Canadian cities on an annual basis since 2009. The benchmark report compares the various services provided by local governments in Saskatoon, Regina, Winnipeg, Edmonton, and Calgary, and measures a variety of services based on the cost

per capita and citizen satisfaction, as described in each city's respective citizen survey. Some of the items compared include:

- Assessed property value per capita
- The value of grants from higher orders of government per capita
- User fee revenue per capita
- General services cost per capita

The results of the benchmarking exercise provide valuable information for the City of Saskatoon and the cost effectiveness of public services, as well as public value for money. The

10



DENVER

Revenues in the City of Denver

The City of Denver has one of the most diverse and sales-tax heavy revenue models of any city in North America. Unlike Canadian cities, property taxes account for only 18 percent of Denver's total revenues. Using sales taxes allows Denver to minimize the issue of free riding between jurisdictions by collecting taxes at a point of consumption, rather than based on residency. This makes their revenues more responsive to the economic conditions of the city, and ensures those who use services are the most likely to fund them.

The responsiveness is evident in Denver's budget, which saw sales tax revenue grow by 10 percent – approximately \$46 million – from the height of the recession in 2009 to 2011, quickly bringing the city's

revenues near its pre-recession peak in only two years.⁴⁴

Denver's municipal revenues are telling of the benefits of using some form of sales taxes to fund municipal services; the City of Calgary and the City of Denver both collected approximately \$1.6 billion in municipal revenue in 2012.^{24,25} That said, The City of Calgary collects three times as much in property taxes per capita than Denver. This makes homeowners and businesses shoulder a significantly higher portion of the costs failing to account for free riders from neighbouring municipalities who may utilize some services far more than certain residents.

Revenues that are responsive to

economic changes, however, can also

have negative effects during recessions,

with a major revenue component

unexpectedly dropping because of changes in consumption behaviour. This is the case with Denver's sales tax, which was a major contributing factor to its negative financial situation at the height of the recession. The responsiveness of sales taxes makes this form of taxation better for discretionary services, rather than core items that are used by the majority of the population. This way, cities can adjust the level of service according to the degree of economic activity within their municipalities.

What we learn from Denver is

that a greater mix of revenues can

help the financial capacity of a local

government, while over-reliance on

any single form of tax revenue can be potentially dangerous. A critical view of how to best fund various services can help cities determine the most efficient mix of revenue sources.

CITY OF DENVER REVENUES, 2012



PROPERTY TAXES PER CAPITA, 2012
DENVER \$452.39
CALGARY \$1,422.43

Source: The City of Calgary, City and County of Denver, Colorado

Financial limitations on Canadian cities

In addition to property taxes, Canadian cities rely on a combination of user fees and transfers from higher orders of government to fund services and development. As entities of the provincial government, Canadian municipalities have few options to raise their own revenues beyond increasing property taxes or introducing new user fees. Cities must also strike a balance between covering the long-term costs of investing in core infrastructure with the short-term costs of paying for operations and maintenance. Given the financial limitations Canadian cities have, this is a difficult scenario to balance.

By contrast, American cities are provided more tools to finance their infrastructure and services. In addition to a number of alternative tax streams such as tourism taxes, local sales taxes, and motor vehicle taxes, American cities are also able to use other revenue tools like issuing municipal bonds.¹⁴ This gives American cities greater control over what services they provide and how. For European cities, there are significant variations in their municipal revenue collection formula. For example, property taxes account for almost all local revenues in London, England,¹⁵ while Germany relies more heavily on intergovernmental transfers, with property taxes only accounting for nine percent of local revenues.¹⁶ Additionally some cities, like London, are not responsible for providing some emergency services, affecting the mix of revenues and services provided. The different services and responsibilities of each city results in a need for a different model to raise the revenue needed.

Intergovernmental transfers

Because of Calgary's reliance on property taxes and the visibility of tax increases, property taxes are one of the most debated topics in municipal finance. While it is the primary source of revenue for Calgary, there needs to be a broader discussion about alternative revenue tools. Funding long-term investments in infrastructure is equally important as funding daily operations, and funding these projects through a property tax-based, pay-as-you go method will only increase the burdens on existing systems while raising long-term costs for projects thanks to delays, deferrals, and inflation.

In addition to property taxes, Canadian cities receive funding from higher orders of government in the form of grants or transfers for major infrastructure projects and other expenditures. These funds are usually conditional, but help account for some or all of the costs of a development project. In Calgary's case, the city receives grant funding from the provincial and federal governments for various infrastructure projects through funds such as GreenTRIP, the Municipal Sustainability Initiative, and the Building Canada Fund. The City also receives a portion of the revenues from the federal gasoline tax, which is earmarked for various infrastructure projects.¹⁷

Factors such as economic climate and higher orders of government looking to control their own finances have resulted in unpredictable and volatile revenue coming from these agreements. For instance, funding from the Municipal Sustainability Initiative has been deferred due to unfavorable economic data,¹⁸ delaying the funding for some municipal projects. Conditions that might

be placed on grants may also shift priorities from what is needed to what funding can be secured, hurting a city's overall ability to deliberately plan its development and address the needs of its residents.¹⁹

User fees and other revenues

User fees can, in some cases, help pay for the costs associated with maintaining and operating core infrastructure or services. User fees are attractive because they are directly linked to the consumption of a good or service. However, they are usually unfavourable with the public, making them difficult to implement. That said, user fees are an efficient method of paying for the maintenance and operation of some services, and can help a private sector actor recoup costs through a public-private partnership.

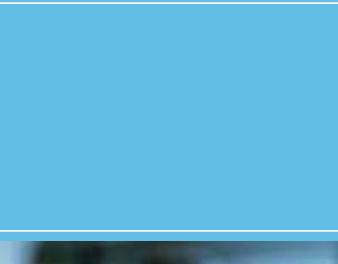
Some cities in the United States have also used what is known as tax-increment financing to pay for developments. These arrangements are used to stimulate redevelopment in blighted areas, using the expected future tax revenues from increased property values to fund the redevelopment and infrastructure costs associated with the newly-developed area. The use of the community revitalization levy in Calgary's East Village redevelopment is the only instance of tax-increment finance being used in Calgary, though it has been proposed as a tool for the future redevelopment of communities.²⁰

Cities in the United States can also raise funds through the issuing of municipal bonds. These are offered as a means of raising funds quickly by offering a portion of municipal debt to investors.²¹ Interest from municipal



Source: *The City of Calgary*¹⁹

SOURCES OF REVENUES FOR CITIES

	<p>MUNICIPAL BONDS</p> <p>What is it? Municipal debt offered to investors with a guaranteed tax-free return.</p> <p>Advantages</p> <ul style="list-style-type: none"> Usually offered at a better interest rate than outright borrowing <p>Disadvantages</p> <ul style="list-style-type: none"> Obligations to bond purchaser exposes municipalities to financial risk. Not attractive to tax-exempt investing bodies, such as pension funds or sovereign wealth funds <p>Available in Canada?</p> <ul style="list-style-type: none"> Not available to Canadian municipalities without legislative change from higher orders of government
	<p>INTERGOVERNMENTAL TRANSFERS</p> <p>What is it? Conditional or unconditional grant funds from higher orders of government to municipalities</p> <p>Advantages</p> <ul style="list-style-type: none"> Does not require municipalities to raise additional revenues directly <p>Disadvantages</p> <ul style="list-style-type: none"> Unpredictable source of revenue Conditional grants limit municipal ability to plan development Not very transparent Conditional grants do not necessarily reflect resident demand or use <p>Available in Canada?</p> <ul style="list-style-type: none"> Provided to municipalities at varying rates, values, and periods
	<p>TAX INCREMENT FINANCING AND COMMUNITY REVITALIZATION FEES</p> <p>What is it? Funding is secured for future development based on expected increase in property values and corresponding increased tax revenue</p> <p>Advantages</p> <ul style="list-style-type: none"> Places costs of development directly on those who will benefit from completion of the project <p>Disadvantages</p> <ul style="list-style-type: none"> Relies on demand for newly developed area <p>Available in Canada?</p> <ul style="list-style-type: none"> Calgary has access to community revitalization levy, which is similar to tax-increment finance arrangements
	<p>USER FEES</p> <p>What is it? Non-tax fee paid to cover part or all of the cost of a service</p> <p>Advantages</p> <ul style="list-style-type: none"> Relatively efficient, charging only service users Avoids free-riding Responds quickly to changes in the economy Does not charge non-users Transparent charge upon use <p>Disadvantages</p> <ul style="list-style-type: none"> Unpopular with the general public Flat tax reduces affordability for some users <p>Available in Canada?</p> <ul style="list-style-type: none"> Used by most cities for water, sewage, public transit, parking, and some recreational facilities Some cities implement tolls on major roadways
	<p>CONSUMPTION TAXES AND TOURISM TAXES</p> <p>What is it? Direct taxes to user of various services at point of consumption.</p> <p>Advantages</p> <ul style="list-style-type: none"> Relatively efficient, charging only service users Avoids free-riding Responds quickly to changes in the economy Does not tax non-users <p>Disadvantages</p> <ul style="list-style-type: none"> Negative economic shifts result in lost revenues Flat tax reduces affordability for some users <p>Available in Canada?</p> <ul style="list-style-type: none"> Some agreements to share portion of provincial sales tax with municipalities Tourism taxes in some municipalities. Potentially requires changes at higher orders of government to implement
	<p>PROPERTY TAXES</p> <p>What is it? Tax paid by property owners based on the value of land and property within a municipality.</p> <p>Advantages</p> <ul style="list-style-type: none"> Tax base is comprised of mostly fixed assets, creating a stable source of revenue for municipalities Predictable base that does not react to short-term economic shifts Relatively transparent for citizens and difficult to evade <p>Disadvantages</p> <ul style="list-style-type: none"> Does not account for free-riding, thus placing higher tax burden on permanent residents Does not account well for long-term economic and population growth Indirect taxation does not link taxes paid to use Does not reflect residents' ability to pay Politically unpopular - increased revenues require tax rates to rise <p>Available in Canada?</p> <ul style="list-style-type: none"> Used by every municipality to fund a number of services

DOING THINGS DIFFERENTLY: ALTERNATIVE SERVICE DELIVERY AND INNOVATION

<p>citizens, but is an area that The City of Calgary should examine to see if it can create long-term savings.</p> <p>Contracting</p> <p>Rather than complete privatization, some cities transition services to private sector providers through a competitive bidding process, where multiple companies try to secure the right to provide the service. The winning company is selected based on factors such as quality and cost. This is beneficial for local governments, as competition for contracts is intended to lower overall costs and enhance the public's value for money. Once a winning bidder is selected, municipalities are only required to pay out the contract. This results in additional savings as local governments own less capital, do not maintain any equipment, do not pay staff, and do not deal with cost overruns. In addition, contractor terms allow municipalities to maintain a level of control over quality and amount of service.</p> <p>Studies show that contracted garbage collection, bus service, and recycling generated cost savings of approximately 20 percent without having to reduce service levels,²² though some reports also note that contracting in areas like transit service generated mixed results on the overall quality of service delivery, trading off costs for citizens satisfaction.²³ If a number of competitors emerge to ensure the bidding process is competitive and service level expectations can be clearly communicated and monitored, contracting is a highly successful method of delivery that can generate real savings.</p> <p>Privatization</p> <p>Privatization of a public service involves the partial or complete withdrawal of government from service provision. In some cases, the government may continue regulating the area, but the service is provided like any other market good.</p> <p>With privatization, local governments are no longer financially committed to providing that service directly, creating, in some cases, significant cost savings. For most market goods, the private sector is expected to deliver these services more efficiently than the public sector since there is a greater level of competition between businesses. However, if limited competition exists, this could drive up prices for citizens and lower the overall quality of service. Privatization is also only effective if there is viable profit for businesses and an incentive to provide the service. Instead, contracting out services tends to be preferable for cities, as the local government retains some control over service levels and quality. Decisions regarding privatization require a critical eye and a detailed analysis of alternatives before ensuring that it is the prudent decision to make for a city and its</p>	<p>Private sector partnerships</p> <p>Rather than contracting or privatizing services outright, public-private partnerships (P3s) have increased in popularity as a framework for developing major infrastructure and delivering key services. In P3 arrangements, a mixture of public and private money is used to finance the project, and the private contractor is generally responsible for the design, build, operation, and maintenance of the development or service over a set period.²⁴ Contracts are usually designed to be long enough for the private company to recoup its costs, and once the contract term is completed, the infrastructure is transferred to public ownership. P3s have been used extensively in some cities such as London, England, to deliver services, and are popular for American infrastructure development. P3s are attractive for the public sector because of the ability to transfer part of the risk in projects to the private sector and access a greater pool of funding for capital.</p> <p>Contracts, when done correctly, also clearly outline the responsibilities of the parties involved and any penalties for failure to meet deadlines. The relative advantages of P3s have helped some cities deliver large projects on time and at lower cost.²⁵ In Australia, cost overruns for traditionally developed infrastructure projects were 11.5 times higher than projects developed under P3 agreements.²⁶ However, successful P3s must have a tangible project timeline with clear terms in order to be effective, and the Government of Canada created P3 Canada in 2009 to help Canadian cities identify viable P3 projects.²⁷</p> <p>The City of Calgary has had previous experience using P3s, having</p>
<p>TRADITIONAL DELIVERY</p> <p>How does it work?</p> <p>Service delivery is designed, arranged, and funded by government department or agency.</p> <p>Advantages</p> <ul style="list-style-type: none"> Local government sets and maintains service level <p>Disadvantages</p> <ul style="list-style-type: none"> Costs tend to be higher due to lack of competition Increasing services requires raising taxes Local government responsible for the purchase and maintenance of capital and cost of operations <p>Example</p> <p>City of Calgary current garbage collection²⁸</p>	<p>CONTRACTING AND PUBLIC-PRIVATE PARTNERSHIPS</p> <p>How does it work?</p> <p>Private companies bid on contracts to design, build, and operate a service for a set period. In some cases, assets and control are transferred back to public ownership after costs have been recouped.</p> <p>Advantages</p> <ul style="list-style-type: none"> Financial risks are shared between public and private sector Local government sets service level and quality through contract Local government not obligated to pay for cost of wages or capital equipment Local government avoids cost overruns and is not exposed to financial risk Competition encourages lower costs of delivery Government can control delivery to a certain degree through regulation of industry <p>Disadvantages</p> <ul style="list-style-type: none"> Outside of regulation government retains little control over standards and quality Not all services are more cost effective when contracted out or privatized <p>Example</p> <p>City of Calgary garbage collection prior to 2009</p>
<p>SHARED SERVICES</p> <p>How does it work?</p> <p>Municipalities or orders of government centralize services under single department or organization</p> <p>Advantages</p> <ul style="list-style-type: none"> Service provision eliminates overlaps between governments Resources are pooled for delivery, minimizing individual costs Helps assign costs in areas where government services might overlap <p>Disadvantages</p> <ul style="list-style-type: none"> Areas of common delivery must be identified Assignment of costs and responsibilities must be established between parties <p>Example</p> <p>Toronto highway 407</p>	<p>PRIVATIZATION</p> <p>How does it work?</p> <p>Government interest is sold to private bidders who create a competitive market for a service</p> <p>Advantages</p> <ul style="list-style-type: none"> Local government not obligated to pay for cost of wages or capital equipment Local government avoids cost overruns and is not exposed to financial risk Competition encourages lower costs of delivery <p>Disadvantages</p> <ul style="list-style-type: none"> Local government avoids cost overruns and is not exposed to financial risk Competitive bidding encourages lower costs of delivery <p>Example</p> <p>City of Calgary current garbage collection²⁸</p>

SERVICE DELIVERY MODEL OPTIONS

CONTRACTING AND PUBLIC-PRIVATE PARTNERSHIPS	PRIVATIZATION
<p>How does it work?</p> <p>Private companies bid on contracts to design, build, and operate a service for a set period. In some cases, assets and control are transferred back to public ownership after costs have been recouped.</p> <p>Advantages</p> <ul style="list-style-type: none"> Financial risks are shared between public and private sector Local government sets service level and quality through contract Local government not obligated to pay for cost of wages or capital equipment Local government avoids cost overruns and is not exposed to financial risk Competition encourages lower costs of delivery <p>Disadvantages</p> <ul style="list-style-type: none"> Local government avoids cost overruns and is not exposed to financial risk Competitive bidding encourages lower costs of delivery <p>Example</p> <p>Toronto highway 407</p>	<p>How does it work?</p> <p>Government interest is sold to private bidders who create a competitive market for a service</p> <p>Advantages</p> <ul style="list-style-type: none"> Local government not obligated to pay for cost of wages or capital equipment Local government avoids cost overruns and is not exposed to financial risk Competition encourages lower costs of delivery <p>Disadvantages</p> <ul style="list-style-type: none"> Local government avoids cost overruns and is not exposed to financial risk Competitive bidding encourages lower costs of delivery <p>Example</p> <p>City of Calgary current garbage collection²⁸</p>
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PROCUREMENT MODELS FOR PUBLIC-PRIVATE PARTNERSHIPS

had an application for the creation

of recreation centres rejected by P3

Canada in 2009.³² Previous negative

experiences with contract overages

and higher than expected costs

at the provincial level, including

portions of Calgary's Stoney Trail³³

and a recent delay regarding 18 new

schools throughout the province,³⁴

has generated skepticism about the

effectiveness of P3s. The City later

received approval for a compressed

natural gas bus garage in 2013 that

included a federal commitment of

\$48.4 million in funding,³⁵ and will

hopefully serve as a promising start to

future P3 success.

The results of P3 agreements

elsewhere include significant

procurement and development

savings in other parts of the world.

Investment in these types of

arrangements, when done properly,

help great cities provide much-

needed infrastructure for their

citizens, but financed in a way that is

more manageable for the city. Critical

to P3 success is the clear outlining

of responsibilities, key targets linked

to contract payouts, and the need

for bids to be competitive as

possible. Without these elements,

P3s and outsourcing provide no

real benefits and only create a lack

of accountability between local

government and the private sector.

• Operations remain responsibility of public sector

• Infrastructure remains publicly owned

corporate services as well as public

services that expand beyond a

single city's borders. The primary

advantage of these agreements is that

cities maintain control over quality

of service, but can create savings

by reducing service overlap across

participating governments. These

agreements also minimize the effect

of free riding between municipalities

by accurately assigning roles, costs

and accountabilities among the

parties involved.

Shared service agreements are

a viable alternative to traditional

service delivery that could create

savings for Calgary, but would

require additional support from

neighboring municipalities.

However, better regional coordination

and shared services has created

savings elsewhere. For example, The

Government of Ireland has reported

that shared services throughout

the country have accounted for

the equivalent of €839 million,

approximately \$1.2 billion Canadian,

in savings between 2010 and 2012.³³

Additionally, Calgary currently has

some shared service agreements

with neighboring municipalities,

such as providing drinking water

and wastewater treatment to the

City of Airdrie. Continuing to pursue

opportunities where this is possible,

especially if it aligns with the overall

goals of the Calgary Metropolitan

Plan, should be considered and

pursued as a means of recouping costs

or creating efficiencies.

Sharing costs and responsibilities

In the interest of increasing efficiency

and lowering costs, some governments

have looked at the sharing of services

as an alternative to privatization and

contracting. Shared service agreements

can be made both horizontally

between municipalities, but can also

be established vertically between

different levels of government.

Shared services can be used for

1

DESIGN-BUILD

- Private sector responsible for the design and build of project
- Contracts are fixed-price
- Depending on contract, some cost overrun risks during development phase can be borne by private sector
- Operated by the public after completion, with all operational and maintenance costs borne by the public sector

2

DESIGN-BUILD-FINANCE

- Private sector responsible for the design and build of project, as well part of the cost of capital
- Some cost overrun risks during development phase can be borne by private sector
- Less public sector finances required until after the completion of the project
- Operated by the public after completion, with all operational and maintenance costs borne by the public sector

3

DESIGN-BUILD-FINANCE-MAINTAIN

- Private sector responsible for the design and build and partial financing of the project
- Private sector also maintains the development for a contractually-agreed period
- Contract includes performance obligations that must be met to receive payment, transferring larger portion of risk to private sector
- Operations remain responsibility of public sector
- Infrastructure remains publicly owned

4

DESIGN-BUILD-FINANCE-OPERATE-MAINTAIN

- Private sector responsible for the design and build and partial financing of the project
- Private sector also maintains and operates the development for a contractually-agreed period
- Contract includes performance obligations that must be met to receive payment, transferring larger portion of risk to private sector
- Infrastructure remains publicly owned

5

BUILD-OWN-OPERATE-TRANSFER

- Private sector responsible for the design and build and partial financing of the project
- Private sector also owns infrastructure and is responsible for maintenance and operation for duration of contract
- Contract includes performance obligations that must be met to receive payment from public partner, transferring most lifecycle risks to private sector

Source: AECOM³⁴

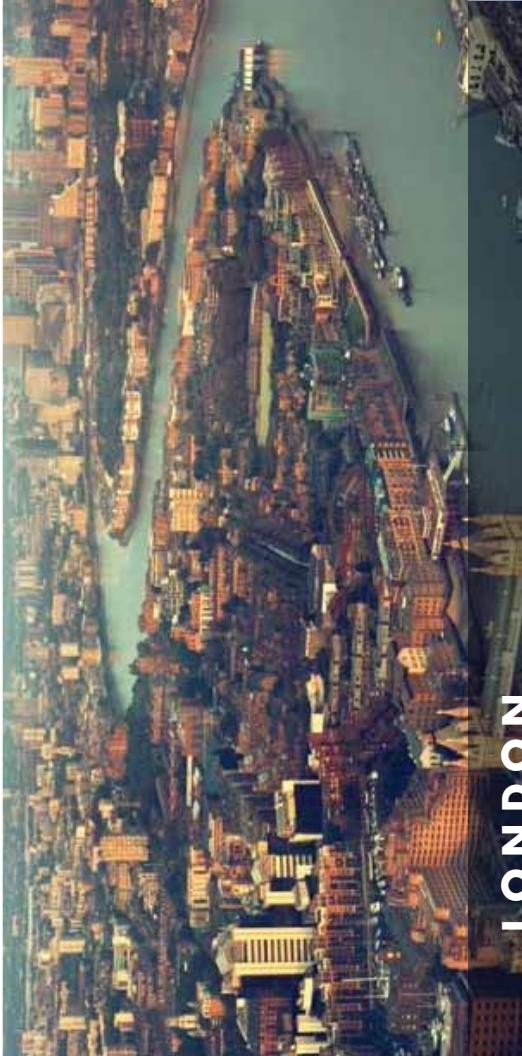
municipal governments could result in administrative savings. If cities can identify where services are regional in nature or could be centralized without significant changes, this can reduce service redundancy and allow governments to be more efficient with their resources.

Technological innovation

Another emerging option for cities looking to improve cost management and service quality is investment in technology. The emergence of smart cities – cities that utilize new technological platforms to improve response times, minimize costs, and increase overall public satisfaction with the services and information they can access – is helping cities go from livable cities to truly great cities. Advancements do not simply mean investing in new ideas or large, transformational projects. The ability to leverage technology means that cities are now more capable than ever at benchmarking their performance and sharing that data with the public and other municipalities.

This ability to see how a city is doing can help drive the push for continual improvement and more efficient use of public money, but requires complete support to invest in transforming how government provides goods and services.

The City of Calgary has already made some investments in technology to increase its service delivery and financial management. With things like a 3-1-1 app for smart phones and the ParkPlus electronic parking system, The City of Calgary has made advancements to enhance the quality and cost effectiveness of public services throughout Calgary. Continued investments in technology



LONDON

The Tri-borough Shared Services of London

Developed in 2011 by the boroughs of Hammersmith and Fulham, Kensington and Chelsea, and the City of Westminster, the tri-borough shared services proposal is a shared services agreement that combines service delivery in areas like child services, library services, human and information technology services, and procurement.³⁴ The service agreement addresses administrative overlaps and combines these service areas to eliminate administrative redundancies.

The proposal expects to generate savings of £33.8 million (approximately \$62 million Canadian) by 2015, while still providing each borough governing autonomy over other areas of service delivery. Savings will be realized primarily through reducing middle management by 50 percent and reducing cost overheads associated with management positions by 50 percent. The reductions will occur through the elimination of overlapping roles and administrative

responsibilities, while maintaining frontline service levels and quality.

As an initial evaluation of the shared services program, a progress report from the three boroughs in 2013 noted that £9.9 million in savings had been realized already, and that the shared services arrangement was now on track to exceed initial targets, creating a savings of £40 million by 2015.³⁵ Additionally, the tri-borough shared services announced July 24, 2014 that an independent board would review its progress.³⁶ The review is expected to evaluate service quality and efficiency, identify areas of improvement, and propose other services that could be shared beyond the tri-borough model to generate additional savings.

Thanks to strong leadership and support, the City of Westminster and the boroughs of Hammersmith and Fulham and Kensington and Chelsea have illustrated the impact of collaborating to provide better services and improve value for money.

TRI-BOROUGH SHARED SERVICES SAVINGS, 2010-2013 (£ Millions)

Area	Estimated Savings
Libraries	0.2
Adult social care	2.85
Chief executive leadership	0.26
Corporate Services	0.48
Environmental Services	0.87
Children's services	4.54
Total	9.92

Source: London Borough of Hammersmith & Fulham, Royal Borough of Kensington and Chelsea and Westminster City Council

RECOMMENDATIONS

can help enhance delivery and provide potential areas for long-term savings, such as with the ParkPlus system, which has reduced its operating costs by three percent since 2009.³⁷ Many opportunities exist in this area, and as Calgary begins to formulate its digital strategy, it can offer better value for money for Calgarians.

Since 2010, The City has been working on the Cut Red Tape initiative.³⁸ Through this, The City of

Calgary has moved all of its permits and applications online and into one department, so citizens have full-time access to the initial application process and can access everything they need through a one-window approach. While more progress can be made through this program, this is a good first step in redesigning how The City of Calgary serves Calgarians.

The City of Calgary must communicate the savings technological innovations generate for

the public and how they can increase convenience for citizens. Investing in new technologies comes with a high initial investment cost, which can be met with resistance from the public. If real savings can be achieved, as in the case with ParkPlus, communicating these savings should increase overall support for these investments.

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The City of Calgary serves Calgarians. The City of Calgary must communicate the savings technological innovations generate for

Municipal finances and service delivery are significant to the competitiveness of a city, especially in light of increased infrastructure pressures, population growth, and pressure on municipalities to provide higher levels of service. While Calgary has not done poorly in either of these areas, alternative delivery through shared services and P3s provide opportunities for more savings for Calgary. In addition, adopting innovative budget practices like results-based budgeting could result in more effective and cost efficient services. With limited ability to raise municipal revenues and unpredictable funds from higher orders of government, Calgary needs to think about what it can do to continue to develop a great city.

Consider adopting results-based budgeting to modernize the municipal budgeting process and increase value for money.

Benchmark service delivery costs to those of other cities in addition to tracking overall citizen satisfaction to evaluate overall effectiveness of programs and services offered to the public.

Work more closely with the private sector to invest in the city, and identify areas where public-private partnerships can be successful. Continue to identify and invest in technological improvements that can create potential cost savings and reduce operational costs.

Work with neighbouring municipalities to identify opportunities to engage in shared service delivery

2 GREAT CITIES BOOST MUNICIPAL IQ

reforms to existing service delivery management. Citizens want greater choice in how they use municipal services, and ICT initiatives offer the ability to transform systems and optimize resource use. The new challenges that cities face as they grow means that the traditional methods of doing things no longer work. Investment in innovation is required to adequately address the needs of citizens.

Citizens and governments alike increasingly understand the benefits of adopting smart city practices for business, citizen engagement, and service delivery. Not only does technological innovation offer economic and governance benefits, it also offers human, environmental, and infrastructure benefits. Smart cities are capable cities. One of the greatest challenges that

cities face is balancing budgets and deficits with investment in innovative technology. Investing in intelligent initiatives makes it possible to do more with less through improved efficiency and reducing costs. Smart cities can offer productivity and efficiency through cost savings and encouraging an innovative and entrepreneurial spirit. In some cities, inefficient administrative systems can cost as much as 6.8 percent of GDP. Employing e-governance processes, such as police incident reports or property tax assessments, can reduce administrative costs by 25 percent and can lead to savings of up to 1.5 percent of GDP.³

Regional cooperation in emergency management
Even in today's global economy, where issues that cities face seldom stop at the

city limits, operations are kept separate and data between departments is rarely shared. Advances in open data and technology can help create smart cities by giving cities the opportunity to coordinate better with each other, allowing municipal departments to collaborate more efficiently and centralize key operations.

Consider Rio de Janeiro. The City is collaborating with IBM on the creation of a City Operations Center to help improve the speed of emergency responsiveness.⁴ In 2010, Rio de Janeiro lost 100 lives to a series of floods and mudslides and, in an effort to mitigate the fallout of future natural disasters, is integrating over 20 government departments and public agencies to improve safety. The center is the first in the world to integrate all states of crisis management, from prediction, mitigation, and

almost every definition of it begins with claiming it's an ambiguous concept. But at its core, creating a smart city is about creating a vibrant, accessible city. It is anticipated that by 2025 there will be over 26 global smart cities and that 50 percent of those cities will be in North America and Europe.¹

Smart city concepts apply information and communications technology (ICT) to improve and optimize its resources, create cost and energy savings, improve service delivery and quality of life, and reduce its environmental footprint. Smart, ICT-enabled cities collect and communicate data more robustly and efficiently through channels such as public Wi-Fi, open databases, mobile delivery of services, and by better integration of public activities through digitization. When cities

are smart and have the ability to deliver services faster, spend more responsibly, and become more responsive to business and public inquiries alike, it fosters an environment where business is able to thrive and creates a more economically competitive Calgary.

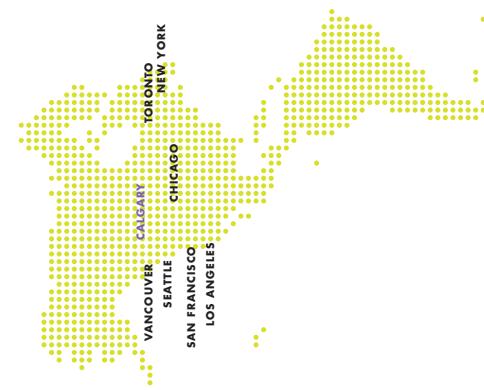
Great cities are smart. They recognize the merits of using technology to maximize resources, become globally influential, and create happier and more effective citizens.²

THE BENEFITS OF BOOSTING MUNICIPAL IQ

City governments face increasing pressure to manage fiscal constraints while delivering high quality services efficiently. Greater demands from citizens for responsive and individualized services require

Source: Frost & Sullivan

SMART CITIES OF THE WORLD





MADRID

Madrid is the most economically powerful city in Spain and was identified in 2011 by the Global Economic Power index as the 14th most economically powerful city in the world.¹ While other Spanish cities, such as Barcelona and Málaga, score higher overall in smart city initiatives, Madrid is a leader in smart governance and smart service delivery. Madrid has a fully integrated emergency management system that coordinates fire, police, and medical emergency departments. The decision was made to create a smarter emergency response

system in the aftermath of a major terrorist attack. The 2004 Madrid train bombings highlighted the need for more efficient emergency management when disorganization and miscommunication between

different emergency services—the police, ambulance, and fire department—made the incident even more catastrophic than it should have been. Under the new system, Madrid has seen a 25 percent increase in response time and effectiveness.²

Madrid has also made advances in electric mobility with its Movelye project, which aims to create a network of 280 charging points for electric vehicles. In addition to electric mobility, Madrid has a successful car sharing program that charges only for actual car-use time. Madrid also recently launched its first public bike share project, BiciMad.

Although public bike share projects are nothing new in Europe, Madrid's BiciMad is different than its European neighbours in one huge way: its bikes are electric.³ BiciMad plans to

develop 60 kilometres of bike lanes in the city. Madrid is traditionally a car heavy metropolis, and implementing a bike share program will help reduce congestion issues.

The Spanish capital is also one of the most connected cities in the world. In 2013, The City partnered with Gowex, a leader in creating wireless cities, to create a Wi-Fi network in Madrid's main squares and open spaces, as well as at bus stops and on public transportation. More than 40 percent of Madrid is now covered by Gowex Wi-Fi.⁴

preparedness to immediate response capacity, as well as feedback to be used for future incidents.

Similarly, Maui County, Hawaii developed a CivicPlus emergency notification subscriber service in 2008 to better coordinate emergency management services and keep the public informed using text messaging and email notification, website information, and social media.⁵ The system is hosted in a secure, off-site location that protects it from damage and can be updated from anywhere with an Internet connection. When disaster struck Japan during the 2011 earthquake and tsunami, large tsunami waves traveled across the Pacific at 800 kilometres per hour toward the Hawaiian Islands. Maui County was prepared. During the tsunami, Maui County's website use spiked from 32,000 page views the day before to 96,500 page views the day of the disaster, and communications during the tsunami were uninterrupted.

BECOMING SMART: THE KEY TO DEVELOPING SMART CITY STRATEGY

Becoming a smart city is not only about implementing new technologies to reduce costs. It begins with a comprehensive strategy that will guide the process and allow for performance indicators. The process itself must be markedly innovative, aiming to maximize the potential of the city in diverse ways. Civic engagement is vital because citizens can help identify inefficiencies and formulate and test innovative solutions. Finally, a smart city must be sustainable and accessible.

Smart cities are not only about technology. The smartest cities are the ones that look to the future and that require more than simple app development. A lack of a smart city model that will last well into the future can lead to inequities in accessing information. In Calgary, and many other cities around the world, fibre optics are controlled by only a select group of providers. Without fair and equal access to this infrastructure, the economy is stifled and innovation is suppressed.

Developing a robust municipal strategy is a crucial first step because a strong strategy will help

A SMART CITY IS ABLE TO MEET THE FOLLOWING CRITERIA

determine which goals and programs to implement and how to measure success, identify milestones, and quantify returns on investment, as well as identify where the gaps in governance and policies exist to create a sustainable model. This must begin with assessments. In the case of Calgary, where are we overspending? What areas could most benefit from smart technology?

The cities most successful in pursuing greater use of smart technology did not overhaul existing technologies, but concentrated their efforts on one trial project. Along with a strong strategy, cities need thorough assessment mechanisms to evaluate short-term and long-term goals, as well as a long-term strategy and prioritization of select areas for investment that would have the greatest and most measurable impact. A strong assessment allows

1 STRATEGIC AND SUSTAINABLE

Strategic and sustainability

2 INNOVATIVE

Innovative

3 CIVICALLY ENGAGED

Civically engaged

4 EFFICIENT



Cities Challenge award grant of US\$400,000.¹⁸ In partnership with IBM, Edmonton decided to become a global leader in urban traffic safety through the analysis of traffic data and determining how to improve traffic and road safety.¹⁹ Additionally, the city developed a system called Wireless Edmonton; the city now has 20 areas where citizens can connect to the Internet on their devices.

Since February 2014, Edmonton has also been considering smart fare cards to help reduce fare evasion. Edmonton Transit Service (ETS) estimates that this technology would save \$12.5 million from its operating budget over 10 years.²⁰ However, a report from the Edmonton Transit System Advisory Board claims it could cost an additional \$13 million over 10 years, using information from The City of Vancouver. Vancouver switched to smart fare cards but has been slowed down by delays, cost overruns, and the issue of fare evasion that the cards were meant to combat.

Edmonton Mayor Don Iveson argues that the financial benefit of smart fare cards is not the only benefit he believes there is an economic business case in that the simplicity of the technology could attract more riders, thereby generating more revenue. The convenience and utility of the smart fare cards would also reduce printing costs, allow for more accurate service including reduced fare disputes, better data to support service planning, and marketing, and an overall better customer experience. Rather than one-off strategies with little long-term community impact, the report focused on creating a comprehensive smart city plan. This proved beneficial from both an economic development standpoint and a governance standpoint, since it is an example of working with other regional governments, such as The City of Edmonton and The County of Strathcona.

Recently, St. Albert also signed a "Memorandum of Understanding" to form a new Smart City Alliance provincially for Alberta; the University of Alberta, NAIT, IBM Canada, and CISCO Canada have also signed on.²¹ The alliance is open to all of Alberta, including municipalities, businesses, and academic institutions. Edmonton Police Services was also one of the first Canadian police

forces to use IBM's business analytics software in law enforcement efforts.²² The capital city spent three years stabilizing data and creating a system that allows crime trends and location tracking. The system has increased the EPS' accountability and effectiveness through allowing the EPS to better allocate their resources on a neighbourhood level to the areas that need it the most.

A city council report also outlined the tangible and intangible benefits of introducing a smart card for transit fares:²³ the cost savings over 10 years included a \$28.8 million reduction in fare evasion costs, a \$56 million reduction in fare media production costs, and an \$8.3 million reduction in sales and distribution costs.²⁴ The report also defined numerous intangible, non-monetary benefits, including reduced fare disputes, better data to support service planning, and marketing, and an overall better customer experience. Rather than one-off strategies with little long-term community impact, the report focused on creating a comprehensive smart city plan. This proved beneficial from both an economic development standpoint and a governance standpoint, since it is an example of working with other regional governments, such as The City of Edmonton and The County of Strathcona.



municipal applications for smart phones. This competition was the first of its kind in Canada.²⁵ Thirty-two new applications were developed, including apps for restaurant inspections, bus schedules and delays, bike paths, and festival activities. The competition integrated the transparency and openness of the open data system with civic engagement, thus providing credibility to government in its development of open data. In 2011, City Council also approved the Smart Bus Pilot Project, which gives users real-time schedule information, as well as informing security and transit official about service and security issues.

In March 2011, IBM named Edmonton as the first Canadian city, and just one of 24 worldwide, to receive the IBM Smart

The City of Edmonton has been a global leader in open data since 2009,²⁶ with 43 public datasets available on everything from Wi-Fi spots to election results to vehicle collision rates.²⁷ In 2011, Edmonton became the first city in Canada to publish an open data system that includes City Council datasets and information previously exclusive to the council. Edmonton was the fourth city in Canada to release an open data catalogue, with information regarding meeting details, agenda items, motions, attendance, and voting records.²⁸ The open data system is important not only because it offers transparency, but also because the data on Edmonton's "Citizen Dashboard" is understandable to the average citizen and measures performance.²⁹

- The performance indicators are divided into clear categories:
 - Transportation
 - Livability
 - Environment
 - Urban form
 - Economy
 - Finance
- And the performance outcomes are coded as:
- Meets or exceeds target
 - Near target
 - Needs improvement
 - Measuring
 - Collecting data

In partnership with its Open Data program, The City also hosted the Apps4Edmonton Competition for anyone interested in developing



ST. ALBERT

A good example of technological planning can be found as nearby as St. Albert, Alberta. St. Albert, a small community northwest of Edmonton, is in the midst of formulating its own large-scale smart city master plan, an endeavor that was approved by its City Council in February 2013. In its preliminary report, St. Albert identifies which framework and definition of a smart city it wants to adopt, why it needs to implement a master strategy, and what the city is already doing to engage with technological innovation. The report identifies the need to develop a holistic approach to improving city efficiency and quality of life and divides the plan into six phases to be implemented over three years. St. Albert has already introduced a plethora of innovations. These include

working with Google Transit to better integrate municipal transportation data with Google's mapping technology; revitalizing traffic infrastructure through installing traffic lights that use cameras to improve waiting traffic detection; and designing a water meter technology that would allow The City to read water meters more frequently, even hourly, while also monitoring The City's own costs with real-time data.¹⁰ These efforts emerged, in part, out of the question of how to manage growth since St. Albert is predicted to grow by 50 percent in the next eight to ten years.¹¹ As a city with fewer resources than larger municipalities such as Calgary and Edmonton, St. Albert is using technology and data in smart ways to help manage growth and assets. For example, by employing

municipal governments to weigh challenges and benefits. Additionally, measurement of goals and analysis of benefits—economic or otherwise—is crucial in determining the success of smart cities. Once there is a clear vision, cities must transform their objectives into implementation. Smart city policy must take precedence over smart city technology.

Calgary has a history of smart city thinking because population and economic booms have created a need for improved communications and service delivery. In 2002, Calgary was named the world's top intelligent Community at the Intelligent Communities Forum, along with Seoul, South Korea. In 2009, Calgary was named as one of Forbes' top Smart Cities.²⁰ These are important recognitions of The City's efforts to improve city services through digitization up to this point.

The problem with Calgary's technological development is that it has been haphazard, with little overarching strategy or long-term goals. A truly smart city is not an independent cluster of technologies and minor innovations, but a system whose foundation relies on a holistic strategy. A smart city needs a strategic plan, civic engagement, and innovation. While digitizing municipal services, especially through civic engagement and consultation, is commendable, Calgary has begun to look past simple technological modernization and formulate a strategic plan that addresses more than civic engagement and technology, and the City has begun to do so with its new Digital Strategy.

The City will be shortly releasing its eGovernment Digital Strategy, based on the work of the citizen advisory eGovernment committee.

Its goal is to create a digital economy, support digital literacy and improve digital access to The City's services, and it focuses on five key areas:

- Accessible services
- Partnerships
- Transparency
- Building and supporting platforms for participation
- Valuing innovation

In the strategy, the City recognizes Calgary's issues with implementing initiatives on an ad hoc basis:²¹ "The City has already had success in delivering online services when applying for permits, booking tee times, and submitting 311 service requests. However, these efforts have been accomplished by meeting citizen demands rather than connecting to a larger strategic vision for all city services online."²⁰

The greatest component of this digital strategy is its recognition that up until now, technological innovation and open datasets have been produced through citizen demands and not as part of a holistic strategy. Recognizing an issue or an area for improvement allows The City to address the areas that most need attention.

Benchmarking is another area where Calgary can improve. While The City has completed a self-assessment of its strategy, we recommend that The City begin a process of assessing its strategy, success factors, goals, innovation, and cost savings against other Canadian and global cities. A good start would be to analyze St. Albert's dynamic smart city master plan.

Innovation

The world's greatest cities—New York, Tokyo, London—have faced

their rise to global status. There is no "smart city in a box" that can be transplanted from one city to the next in the hopes of creating a smarter, more efficient city. Cities need to be innovative when determining new and best technologies to more efficiently handle their specific priorities and challenges. In this spirit, Madrid has built the Cathedral of New Technologies, a building dedicated to highlighting the innovations of Madrid's business, education, and government communities.²¹

Consider Barcelona's innovative approach to procurement. Traditionally, cities approach the business community with a pre-determined idea of what they need to buy in goods and services to solve a problem. This stifles innovation, since it commits the city to one approach that may not be the best option. Alternatively, cities should approach the business community when seeking solutions, which provides them with multiple solutions from multiple voices. The city should open up the problem to the business community, which would provide them with multiple solutions from multiple voices. While the traditional model relies on hit-or-miss options and hopes the solution they come to is the right one, innovative cities such as Barcelona turn the traditional model on its head, engaging with the business community to identify the most innovative solution. Then, the business that identifies the best solution is awarded a contract by the city.²² The Barcelona model transforms the traditional approach to handling procurement from top-down to a bottom-up model, which encourages great collaboration. Barcelona's strategic procurement breeds competitiveness. It enhances

business engagement through consultation and relationship building, while capitalizing on business innovation to improve service delivery, governance and quality of life.

In 2007, Calgary Parking Authority developed one of the most innovative parking management systems in the world; the ParkPlus system uses solar-powered pay machines and allows users to pay by mobile phone through its MyParking iPhone app. It also uses licence plate recognition software to verify that parking has been paid. Last year, The City exported its ParkPlus system to Edmonton. Calgary is also one of only approximately 30 cities in the world to have the German car sharing service Car2Go, along with great, global cities such as Berlin, Washington, Amsterdam, San Diego, Vancouver, and Montreal.

Calgary, however, should find more ways to encourage innovation in the city. Too often, innovation is simply a buzzword, and without a tangible plan, innovations are unlikely to come to fruition. In this case, it is important to pair innovation with civic engagement, such as the Apps4Edmonton competition did. The implementation of ParkPlus

shows that Calgary is capable of innovation and able to execute smart initiatives that other cities will emulate, such as Edmonton did with its Park trial parking system.

Calgary has done a great job of embracing some great cities' best practices in smart initiatives, such as the mobile 311 app (which allows citizens to connect with the City to submit service requests) and open data initiatives, however it is important that municipalities lay the foundation for civic innovation. While city governments themselves can be

Guangzhou in China.

explained the benefit of online input:

"Getting 125 online votes is like having 125 people walk into your meeting and cast a vote. We made it easier for residents to give us their opinion without having to get in a car, drive, schedule someone to watch their kids, or figure out if they need to leave work early. We made it easier for the residents to talk with us. And that's what I think is so important about this module."^{35a}

Another example is Boston, which is using smartphone applications to improve its service delivery. In 2012, the city released a new app, Street Bump, which can detect potholes through the vibrations they cause in vehicles and then use GPS to transmit the location and size of the pothole to information, providing them with the ability to innovate.

Overall, the Digital Strategy is a large, impressive step in the right direction. It recognizes past and current barriers, strategizes a long-term plan of technological and digital improvements, and prioritizes civic engagement. The key piece that is missing in the strategy is innovation. While the strategy names innovation as a value, there are few tangible points in the strategy that encourage innovation. The Chamber recommends that The City engage more with its citizens to produce more innovative ideas.

Civic engagement
The use of social media and digital technologies is a great way to spark public engagement. Castle Rock,

Colorado is using its CivicPlus online tool to seek citizen input on its Philip S. Miller Park project, asking for feedback on prospective uses including sports field, a water park, and camping facilities.³⁵ One hundred and twenty five votes were cast in favour of developing sports, courts and fields in the park. Karen McGrath, Castle Rock's Community Relations Creative Services Supervisor,

development further by integrating it into four of its mayoral initiatives: My Neighborhood, Get Active, Get Green, and 311. My Neighbourhood allows citizens to explore everything from restaurant health inspections, recreation facilities, and government building maps to bus schedules and Capital Project information.

When citizens use technology such as the Street Bump app to engage with government, it helps bridge the gap in taxpayers' mind between what they pay in taxes and what they receive in services from those taxes; they can see government working for them in real-time. Citizens need to be well informed and encouraged to engage in the process of building a smart city.

Without this level of engagement, the Street Bump app would not have been as well received.

In 2010, The City piloted its Open Data catalogue project, which publicizes municipal data for free and without restriction. Currently, The City has 130 open datasets, as well as a full-time staff position of Open Data Strategist. In 2011, The City embarked on a project with Alcatel-Lucent, a French telecommunications company, to complete a core switch upgrade that would lay the foundation for future endeavours in smart cities initiatives and innovation by implementing a city-wide Multi-Protocol Label Switching (MPLS) network.³⁸

The system helped to ease the strain of increasing usage on the city's network and created the appropriate infrastructure to facilitate future data needs. It also improved The City's ability to quickly respond to citizen needs. The network improves user experience and has lower administration costs than the previous model. It is therefore a good return on investment.

The City has done a great job in releasing the data: the hardest part of developing open data systems is gaining the political will to do so. The area that needs improvement, however, is the system. The data is there, but buried in an archaic system that offers little usability and discourages civic engagement. The greater the usability of the data, the better equipped the business community is to make economic decisions. Calgary's open data catalogue includes 89 raw datasets, while Edmonton has 438 easy-to-access datasets.³⁹

Efficiency

Smart cities evaluate how to do more with existing resources and make their cities more efficient by integrating technology and communications into their daily operations. Just as roads and rail enable the movement of people, goods, and services, fibre optics, enables the movement of information.

Fibre optics are the railroads of the 21st century. Doing more with less is not always about improving work intensity; it's about increasing output and productivity. Greater advances in technology allow Canadians to work smarter, not necessarily harder. Increasing productivity comes with fostering technological innovation. A key efficiency measure is the ability to use tech-enabled decision making. For example, open data can provide business with the tools needed to implement cost saving measures. Having access to data such as where new residential developments are slated, or where population growth is focused, can allow business owners to determine new locations. It can also improve efficiency in government, since it allows municipal departments to take

advantage of information that could inform them of which departments are overspending or which areas require more resources, sync interdepartmental initiatives, and more effectively provide services and deploy resources.

Calgary has centralized access to services and information for the general public and has developed mobile applications to better deliver on-demand public services throughout the city. For example, last year, Calgary introduced wireless, paperless census taking. Civic census takers recorded door-to-door data on iPads instead of the traditional pen, paper and clipboard. The move to digital saved The City 725,000 pages and eliminated the cost of contracting an external company to enter data.⁴⁰ Calgary, however, must move past the basics when it comes to smart

Airdrie also allows its citizens to complete the census online. A unique PIN is delivered to each household approximately one month before the physical census collection begins. People without Internet access are still using the digitized process by using public computers at the library or the

computers of family and friends. They also have the option of using their PIN number to phone in their information. If a citizen does not want to phone in or complete the census digitally, he or she does not input the information process. Airdrie not only cuts down on paper costs and staffing costs but also encourages great civic participation. This year, Camrose and Banff followed suit by using Airdrie's census software program.

The City of Calgary must also do more than provide open data to its citizens and simply digitize services. In the case of census collection in Airdrie and Calgary, both cities use the same technology to make census collection more efficient. The difference is that Airdrie takes it a step further.

RECOMMENDATIONS

city initiatives in order to maximize the efficiency of these endeavors. For example, when comparing how Calgary and Airdrie complete census collection, it is clear that Calgary is lagging behind in the speed and scale of smart technology implementation.

Calgary's switch to digital data collection was a good first move; however Calgary could do much more. Airdrie has been using tablets to digitally collect its census before Apple even released the iPad, and in doing so, saves \$11,000 a year on paper and cuts staff costs in half.⁴¹ Airdrie also allows its citizens to complete the census online. A unique PIN is delivered to each household approximately one month before the physical census collection begins. People without Internet access are still using the digitized process by using public computers at the library or the

transportation, and planning challenges. Through adopting a comprehensive approach to becoming a smarter city, Calgary can ensure its

Select an initial project to allow The City to test its strategy and either build on

the success of that project or revise.

Strengthen civic engagement through consultation in the strategic process as well as capitalizing on citizen innovation, such as app development.

Create policies that protect and value citizen access to information and the role information plays in the ability to innovate

Reach beyond simple digitization of services and implement sustainable initiatives that improve service delivery, governance, and quality of life.

Benchmark Calgary against other Canadian cities, as well as cities around the world, to gauge its performance.



3 GREAT CITIES ARE LEADERS IN REGIONAL COLLABORATION

labour and business, fosters efficient development, remains affordable, and thrives economically.

Collaboration is imperative for the development of a great city and a great region.

A problem for Calgary and its region has been how to most effectively and efficiently pay for the services residents use on a daily basis. As more people live in one municipality and commute to another, the obscurity between who uses and who pays—commonly known as the free rider problem—increases. Working together can help municipalities find better ways to distribute the costs of providing services more efficiently.

Calgary – approximately 16 percent of the current total population and an increase of 24 percent since 2006. These numbers are expected to grow as Calgary bumps up on the outer limits of its geographic boundary. Moreover, some of today's leading challenges, like water management, effective land-use, transportation planning and environmental protection, do not respect artificial boundaries. Thus, effective and meaningful collaboration between all communities within our region is paramount in order for us to build a sustainable, competitive future.

Working together as a region creates mutual understanding of how one municipality's decisions affect others. This collaboration is imperative for the development of a great city and a great region—a region that attracts

When thinking about everyday activities, we tend to think locally. We celebrate our tourist destinations, our thriving business, and our sports franchises through a very local lens. For a long time, cities would make fairly substantial public policy decisions at the municipal level with scant regard for developments beyond their borders. But as the economy becomes increasingly global, thinking locally has limited usefulness. Cities today have to think beyond their immediate scope. For Calgary, that means working with the surrounding regions to mutually plan a successful future for the entire region. The numbers alone underscore this imperative. As of 2011, roughly 214,000 of the Calgary Metropolitan Area's 1.3 million residents lived outside of

our perceptions of urban and rural increasingly blur; it becomes more difficult to consider cities as an isolated unit of economic activity. As the New York-based Regional Plan Association notes, a significant portion of residents in major population centres are now living outside the centre-city's borders.¹ With this in mind, the concept of regional planning understands economic and urban development as more than a local phenomenon. It recognizes that the actions of one municipality have significant effects on neighbouring areas.

Sharing agreements are the simplest form of cooperation. Sharing agreements are often used to share either the revenues or costs from a commonly delivered service, such as building roads, maintaining sewage, or providing garbage collection.² One example is the City of Airdrie's agreement to purchase drinking water from The City of Calgary, thus

eliminating the City of Airdrie's need to have its own treatment facilities.³ These agreements are most effective when municipalities have identified a common interest in a concrete issue and have determined their responsibilities. Sharing agreements also work best when relatively few municipalities participate. As the number of municipalities or agreements grows, a complex web of potentially conflicting agreements and interests make sharing agreements ineffective. Redundancies in service delivery can also still occur. Sharing agreements should therefore only be used to address items that affect a limited number of municipalities within a region.

Planning is only effective when there is a strong desire for cooperation and compromise.

HOW CITIES WORK TOGETHER: REGIONAL GOVERNANCE MODELS

Before understanding how cities and their neighbouring municipalities develop regional plans and achieve their collective goals, we must understand the various types of regional governance models that exist. A recurring theme in both regional governance and regional planning is that there is no perfect solution. The physical realities of each city and its surrounding region influence the best form of governance. In all cases, there are advantages and disadvantages with each method of governance.

Sharing agreements

Sharing agreements are the simplest form of cooperation. Sharing agreements are often used to share either the revenues or costs from a commonly delivered service, such as building roads, maintaining sewage, or providing garbage collection.² One example is the City of Airdrie's agreement to purchase drinking water from The City of Calgary, thus

regions, voluntary cooperation is the preferred form of regional governance and collaboration.⁴ It avoids rigid processes that might not work as effectively for one municipality as another and, since no legislative changes are required, agreements are relatively easy to create. However, the ease with which municipalities can join and leave can limit regional cooperation. Planning is only effective when there is a strong desire for cooperation and compromise. Voluntary cooperation tends to be easier to establish between municipalities of a similar size with similar concerns.⁵

Legislated regional boards

The legislated formation of a regional planning board mandates the participation of all the region's municipalities. This model of collaboration addresses the issue of voluntary resignation without taking away the autonomy to accomplish goals that are more specific to individual municipalities. However, legislating cooperation does little to address disagreements or lack of consensus among municipalities. This can hurt a region by freezing regional planning efforts when disagreements occur.

A clear example of this form of governance is the Edmonton Metropolitan Areas Capital Region Board. The board, enacted in 2007 under the Capital Region Board Regulation,² is primarily a dispute resolution mechanism and revenue-sharing body for the municipalities involved. Municipalities are explicitly included as part of the regulation, limiting their ability to voluntarily resign, but the lack of higher level governance means that disagreements and conflicting interests have limited



VOLUNTARY CONSENSUS BUILDING: ENVISION UTAH

In response to the rapid economic growth that the Greater Wasatch region—consisting of Salt Lake City, Provo, West Valley City, West Jordan, and Orem—experienced during the 1990s, the Coalition for Utah's Future launched Envision Utah in 1997.¹⁸ Envision Utah is a non-partisan public-private partnership that brings together residents, elected officials, and private sector leaders, and planning experts to discuss how the Greater Wasatch region should develop and grow.¹⁹ It was created to address issues such as congestion, air quality, and the long-term implications of urban sprawl on the region. The regional planning done by Envision Utah and its partners is regarded as a major success, despite its

voluntary nature. It enjoys significant support from both state government planning bodies and the broader community.

An example of success was the development of Utah's transportation system. Envision Utah brought together residents, business leaders, and political leaders to address the issue of congestion. Because congestion is known to cause economic losses,²⁰ increase worker stress,²¹ and diminish air quality, the Greater Wasatch region committed to enhancing transit accessibility throughout the region. Through this collaboration, 89 percent of working-age residents now have access to public transit, and close to 60 percent of commutes by transit take less than 90 minutes.²² In addition Salt Lake City, the biggest municipality

in Greater Wasatch, has some of the lowest congestion in North America.²³ The key to Envision Utah's success has been its commitment to public engagement and education in the planning process. Residents were presented with three possible growth scenarios for the future and were given data about the potential benefits and the associated costs to achieve the desired scenario. By keeping residents engaged, it was easier to accept the changes that municipalities had to make to achieve the desired outcomes. Resident engagement also created a common understanding of how to accomplish the region's goals.

the board's effectiveness.²⁴ This model may actually result in less opportunity to accomplish regional planning goals than a voluntary structure.

Regional government

Another approach is to create a formal regional government. This approach is popular in Europe and was used in the Greater Toronto Area before its amalgamation. It also is employed by some areas in the United States such as the Portland metropolitan area and the Twin Cities area.

Regional governments are established by provincial or state governments and are provided legal authority when services are best delivered over an entire region, when significant spillover between municipalities exists, or where there is frequent inter-municipal usage and potential free riding.²⁵ As with legislated regional boards, cities still have the autonomy to deliver more localized services but also address areas where costs are unfairly shared and can override geographic boundaries when dealing with issues such as the movement of people, air quality, and water treatment.

Regional governments sometimes establish regional utility providers to coordinate road development, water and sewage treatment, and the delivery of electricity. Some regional governing bodies are also provided the authority to set land-use and zoning practices for municipalities, ensuring growth is more efficiently and logically organized, thus minimizing service redundancies that can result in an increased cost of living.

Simply creating a new level of government, however, is not an easy prospect. Public resistance to the idea of more bureaucracy and potentially more taxes makes this a politically unpopular concept, and affected municipalities are likely to resist the threat of lost autonomy. Nevertheless, cities could benefit from having an effective regional authority for planning and service delivery, rather than all of them individually providing similar services.

Amalgamation

In an effort to eliminate issues of conflicting municipal interests, minimize service delivery duplication, and centralize revenue collection, provincial and state governments have, on occasion, amalgamated several municipalities into a single local government. By reducing the number of decision-making bodies, amalgamation ensures a high level of transparency and accountability. It also centralizes service delivery and infrastructure development responsibilities under one municipality, limiting the possibility of conflict or disagreement in the process. Amalgamation has also been proposed as a way to lower service delivery costs through the elimination of duplication and economies of scale.²⁶ Instead, the larger area and number of residents that fall under the responsibility of the municipality tend to limit its ability to respond to the population's needs and engage citizens.

A common example of amalgamation not working as intended is the City of Toronto, which has not experienced reductions in its operational costs or more efficient service delivery.²⁷

Benefits of regional coordination

Combined service delivery and increased efficiency

Decreased redundancies from overlapping priorities

Coordinated, more efficient land use and zoning

Lower cost of infrastructure development

Ability to better plan transportation networks

Costs without it

Limited revenue base and inability to provide services

Increased costs from service overlaps

Disjointed development patterns

Higher costs from unplanned infrastructure, slower implementation of fully-serviced communities

Potential delay in developing transportation networks underserviced populations

Limited ability to account for free rider fees

Disjointed planning resulting in downstream industries locating away from headquarters, lowering affordability and economic efficiency



REGIONAL GOVERNANCE MODELS

VOLUNTARY COOPERATION



SHARING AGREEMENTS



LEGISLATED REGIONAL BOARDS



AMALGAMATION



REGIONAL GOVERNMENT

How does it work?

Municipalities are legislated to participate on a regional board. Votes are binding and must relate to legislated role of the board.

Examples

Metropolitan Council, Oregon Metro

Advantages

- Votes are binding and affect the whole region
- Increases transparency and accountability when delivering regional services

Disadvantages

- Municipalities retain some autonomy
- Large size limits ability to respond quickly
- Ability to achieve economies of scale is questionable

Works best for

Regions with relatively homogenous municipalities and issues

How does it work?

Another order of government is formed between the state and local level. Representatives may be from local government or elected separately.

Examples

City of Toronto

Advantages

- Very clear accountability
- Only one taxing jurisdiction and service provider
- Addresses free rider issues

Disadvantages

- Large size limits ability to respond quickly
- Ability to achieve economies of scale is questionable
- Limited success with past amalgamations
- Likely high resistance from municipalities involved

Works best for

Higher population areas that require more accountability and tax simplicity

How does it work?

Municipalities from a region form a non-legislated board. A voting structure is used to establish non-binding guidance on regional issues

Examples

Calgary Regional Partnership

Advantages

- Requires participation of all municipalities within a region
- Municipalities retain some autonomy

Disadvantages

- Consensus is needed to accomplish goals
- Limited progress when priorities conflict
- Does not ensure collaboration or cooperation

Works best for

Regions with relatively homogeneous municipalities and issues

How does it work?

Information or contracted agreements between two or more municipalities for services

Examples

City of Airdrie and City of Calgary drinking water purchase agreement

Advantages

- Low cost to establish and dissolve
- Relatively efficient at addressing issues
- Municipalities retain their autonomy

Disadvantages

- Difficult to implement with more municipalities
- Multiple agreements can become cumbersome
- Does not necessarily address issues facing a whole region
- Agreements may result in overlap or result in conflict between municipalities

How does it work?

Issues that only affect a few municipalities within a region

Examples

Specific provision items such as emergency services and wastewater clearly established

Works best for

Regions with high levels of diversity and issues

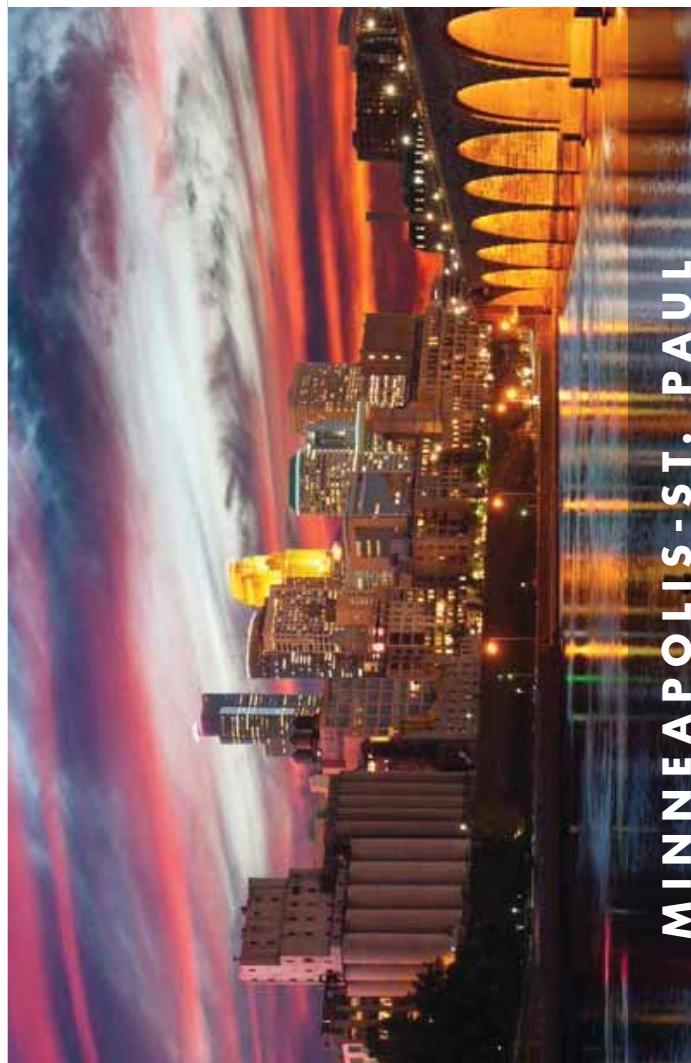
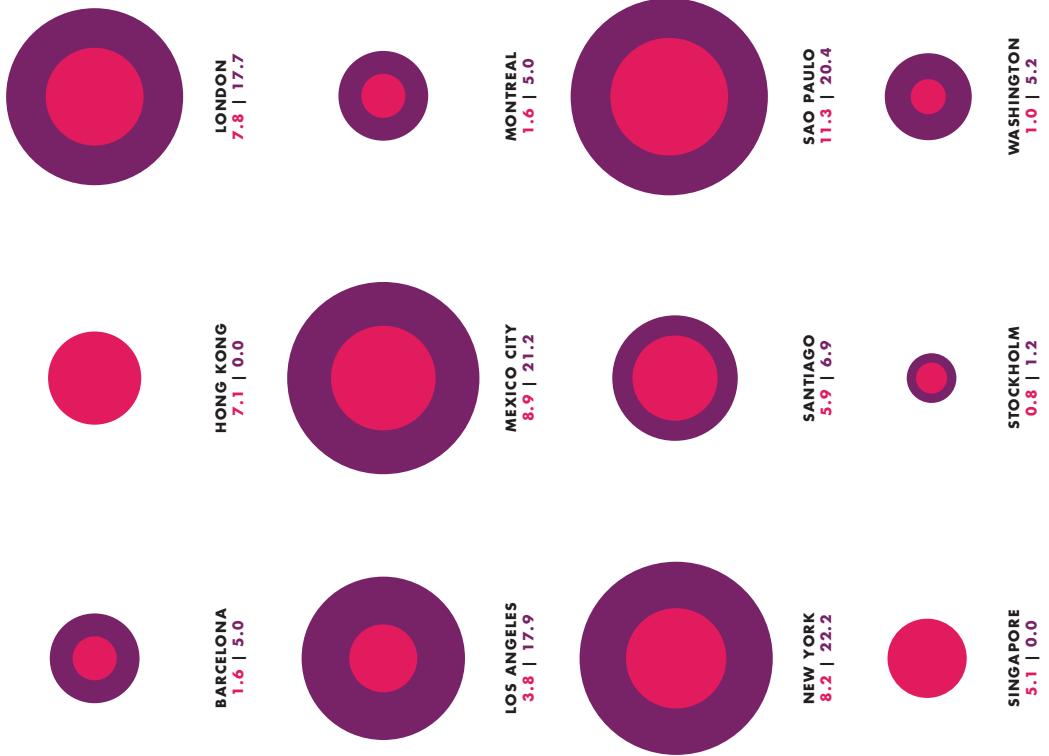
Advantages

- Regions with similar populations and issues
- Low variation of rural and urban municipalities

POPULATION DISTRIBUTION

(millions) | 2010 | Source: Regional Plan Association

● CENTRAL CITY ● METROPOLITAN AREA



MINNEAPOLIS - ST. PAUL

TWIN CITIES SUCCESS THROUGH REGIONAL GOVERNMENT:

THE MINNEAPOLIS-ST. PAUL METROPOLITAN COUNCIL

The Metropolitan Council is the regional governing body for the Twin Cities metropolitan area of Minneapolis-St. Paul. The Metropolitan Council is granted authority from the Minnesota State legislature and is responsible for the long-term planning of growth and housing, delivery of wastewater services, and transportation throughout the region.¹⁵ It receives its funding mostly through a combination of user fees for transit and water treatment and federal and state funding, and receives around ten percent of its revenues through a property tax levied on the whole region.¹⁶ It also has jurisdiction to

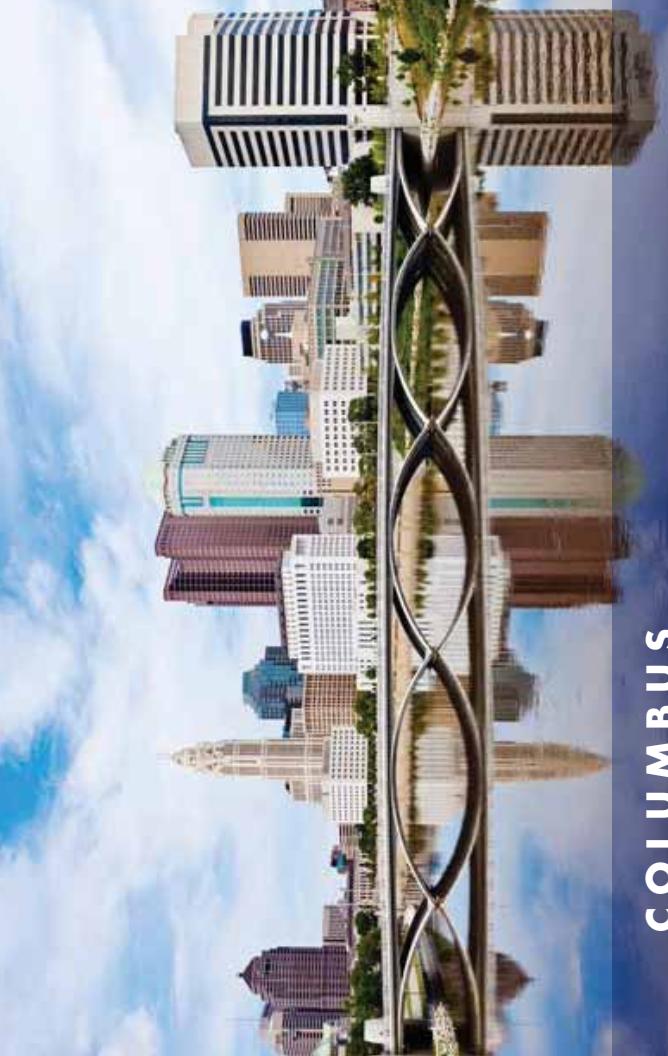
set regional policy, though each municipality provides services locally unless there are significant regional implications.

Another priority for the Metropolitan Council is the economic development and competitiveness of the region as a whole. The Metropolitan Council is currently in the process of developing Thrive MSP 2040,¹⁷ which will set the region's long-range development strategy until the year 2040.

While regional planning helps ensure the coordinated success of the Twin Cities metropolitan area, the Metropolitan Council ensured that benchmarking was part of the previous long-range regional development framework it approved in 2004. Published in 2011, the benchmark results

of the Metropolitan Council are encouraging; while regional employment growth was hampered by recessions in early 2001 and again in 2008, The Twin Cities metropolitan area met or exceeded its targets in terms of transportation development, congestion levels, transit usage, and metropolitan housing affordability.

The use of output targets and performance measurement allows the Metropolitan Council to evaluate the status of its regional development efforts and competitiveness. By regularly reviewing its performance, the Twin Cities can see exactly how well it is doing in creating a thriving, competitive region and establish what it needs to do to continue achieving the regions desired outcomes.



COLUMBUS

IMPROVING REGIONAL COMPETITIVENESS: THE COLUMBUS REGION AND COLUMBUS 2020

The Columbus Region is a collection of 11 municipal counties anchored by the city of Columbus, Ohio.²¹ It is currently the second fastest growing metropolitan area in the United States and is one of only 11 metropolitan areas to have recovered all jobs lost during the 2008 recession.²² A large part of the Columbus Region's success can be attributed to the strong economic planning that supports the region and the cooperation of the public and private sectors.

The regional planning body is a private, non-profit organization that receives funding support from both the region's municipalities and the private sector.²³ The Columbus Region, along with its public and

private partnerships, developed Columbus 2020, the long-term regional growth strategy, in 2008.²⁴ During this period, the Columbus Region identified that a lack of a common economic vision was resulting in limited growth in skilled jobs and was causing the migration of college students to other cities despite a large concentration of corporate headquarters and one of the highest concentrations of college students in the country.²⁵ Columbus 2020 identified that the region as a whole needed to be marketed as an economic centre and that a collective approach would be needed to create long-term economic growth.

To increase the Columbus Region's exposure as a place to do business, the region provides research and information about various factors that affect business such as taxation,

labour force demographics, educational institutions and research capabilities, and existing industries.

It also does business outreach, markets the region nationally and internationally, and facilitates partnerships between the public and private sector.

Results from the coordinated economic development strategy in the Columbus Region appear positive. The region's economy is well-diversified, helping retain skilled workers in a variety of industries and professions. In addition, the Columbus Region has outpaced the American average in per capita personal income growth since the 2009 recession.²⁶ The Columbus Region shows that by sharing a common goal and working together to foster economic growth, regions can help create globally competitive cities.

REGIONAL PLANS: BLUEPRINTS FOR REGIONAL COOPERATION

Each region faces unique challenges, and the resulting regional governance model should reflect this fact. The common characteristic of all regions is a well-articulated regional plan that addresses the specific needs and interests of the region. Plans that focus on development look at population growth and its effect on housing affordability and the cost of infrastructure and roads. These plans emphasize regional development as a way to avoid the costs associated with poorly coordinated planning, which can negatively impact economic competitiveness, labour attraction, and the expansion of businesses within a region. Some regional plans also seek to develop economic hubs. These plans recognize that municipalities can differ in their ability to cater to business needs, using collaboration to bring a variety of jobs and industries to the region.

ACHIEVING REGIONAL SUCCESS

Simply implementing regional planning or changing the model of regional governance does not suddenly improve regional outcomes. When desired outcomes differ, tensions can occur between municipalities. The need to build support is a significant concern in regional planning, and previous studies show that consensus building becomes more difficult when municipalities vary in size and when urban centres are mixed with rural lands.²⁷ Regional success begins with strong leadership that recognizes that municipal collaboration can generate superior outcomes for businesses and communities. This leadership needs to provide a clear vision with defined outcomes to determine the type of

success it aspires to have.

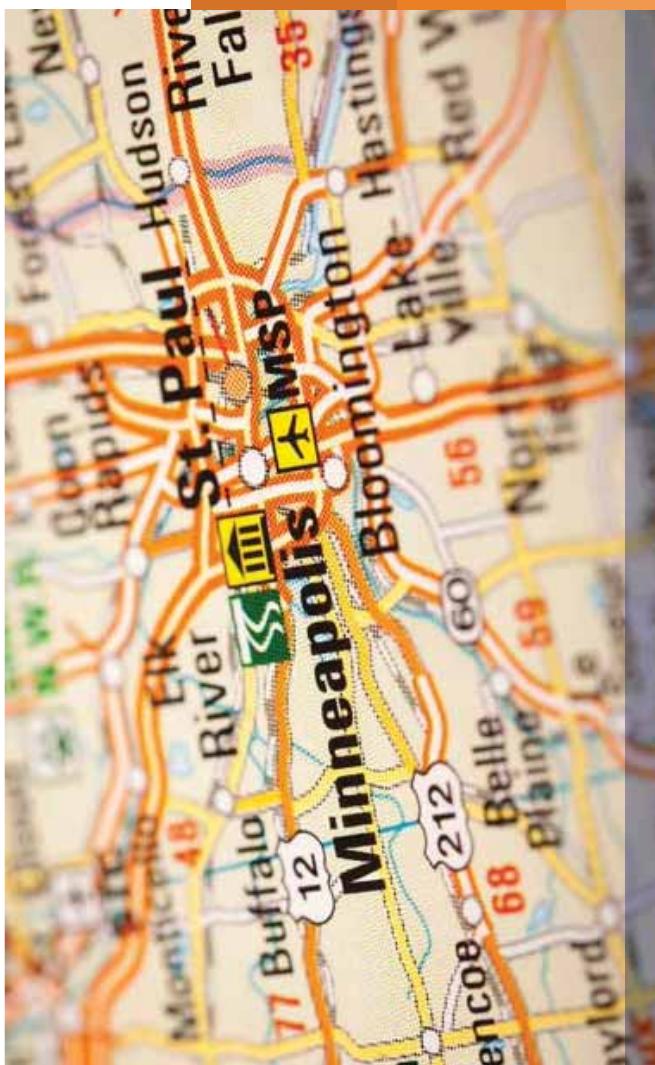
To facilitate regional leadership, some regional plans are also supported by higher orders of government to ensure cooperation between municipalities. Some regional governments, like the Minneapolis-St. Paul area's Metropolitan Council, exist because of state legislation. This legislation also gives them clear authority over some areas of regional planning and service delivery. For other regions, the involvement of state or provincial governments is less formal, such as state funding for the Columbus Region²⁸ and Envision Utah.²⁹

In addition to state support, the most successful regions do not marginalize municipalities in the name of the region. Municipalities maintain authority over how they provide local services, but defer to a regional entity in cases where there is no clear municipal responsibility. While leadership must work together to improve outcomes, good regions try to minimize areas of possible tensions between municipalities.

Part of minimizing tension and building a region also means having clear lines of accountability and sharing the costs of development. It is easy to say that because activity occurs outside its jurisdiction, a municipality does not have to worry about the cost of roads, water, or electricity. However, if residents work in one municipality and pay their taxes or spend on goods in another, there is the possibility that municipalities will be unable to provide the services that everyone in the region benefits from. While there appears to be support from municipalities for sharing costs, sharing revenues among municipalities has been a more

difficult issue to address. The only example of notable property tax sharing between municipalities is the Metropolitan Council's Fiscal Disparities program that, at best, shows mixed results when it comes to property tax sharing.

Finally, the most successful regions make conscious efforts to benchmark their performance and measure the outcomes of coordinated regional planning based on the common vision they establish. Oregon Metro provides data and statistics to Portland State University's Institute of Portland Metropolitan Studies that publishes data on various measures related to the region's desired outcomes. Issues such as air quality, vehicle miles travelled, unemployment, housing affordability, and average wages are all found on the Greater Portland Pulse website, which communicates to the public the state of the Portland metropolitan area.³⁰ The Metropolitan Council and Columbus Region also track their economic performance using their own performance indicators, which allows them to market their region based on cost of living, quality of labour, and economic growth. For strong regions, knowing where you stand compared to other cities allows them to understand where they stand in the global economy and where they can improve to stay competitive.



TWIN CITIES

THE METROPOLITAN AREA FISCAL DISPARITIES PROGRAM

In an effort to address tax base disparities within the region, The Minnesota State Legislature approved the Charles R. Weaver Metropolitan Revenue Distribution Act in 1971, better known as the Fiscal Disparities Program.³⁰ The program requires each municipality and county within the Minneapolis-St. Paul metropolitan area to contribute 40 percent of the growth of each municipality's commercial industrial tax base since 1971 to the program. The shared pool is then distributed to each municipality based on the market value of their commercial-industrial properties.³¹

The program is designed to equalize the differences in tax bases among all of the region's municipalities, and provide each

municipalities having similar size commercial-industrial tax bases.³² Additionally, while the program continues to be supported, there is little consensus on the impact of the program on the region's growth. In some cases, municipalities choose not to grow and develop to avoid losing funding it receives from the program, while it has been noted that the focus on commercial property values has resulted in benefits for well off, primarily residential municipalities.³³

The result is that St. Paul, which was a well-established commercial area before 1971, is a net beneficiary of the program while Bloomington, which houses the Mall of America, is one of the largest net contributors to the program, despite the two

FACTORS AFFECTING REGIONAL SUCCESS

1

REGIONAL LEADERSHIP

- Establish areas of common need, such as road connectivity, water services, and cost overruns
- Create a regional framework that defines regional and municipal success, with measurable goals for each municipality.
- Have municipal leaders communicate the same message to residents.

2

SUPPORT FROM HIGHER ORDERS OF GOVERNMENT

- Formal legislated support of a regional plan, with enforceable mechanisms for noncompliance
- In the absence of formal legislated support, financial or resource support for regional planning efforts to participating municipalities

3

CLEARLY DEFINED AREAS OF ACCOUNTABILITY

- Clearly identify areas of regional responsibility versus municipal responsibility
- Maintain autonomy for municipalities for services that less regional impact
- Determine areas where region can provide guidance in municipal delivery of accountabilities.

4

SHARED COSTS

- Identify areas where free riding or asymmetric use of services and infrastructure may occur.
- Identify who is responsible for the costs and which municipalities use services and infrastructure.
- Develop mutually beneficial projects together with clear assignment of accountabilities.

5

SPECIFIC TARGETS AND GOALS

- Establish measurable and achievable targets, either for the whole region or for each individual municipality, aligned with the overall shared vision.

6

PERFORMANCE MEASUREMENT

- Use data and comparators to determine how the region does against itself, among its own municipalities, and against other regions regarding costs, revenues, efficiency, satisfaction, etc.

HOW DOES CALGARY COMPARE?

the details of the plan, creating a collective identity and coordinated approach has been difficult.

A coordinated, common vision of success is needed for the Calgary Metropolitan Region to be truly successful. While creating a regional government could immediately address these issues, there would likely be significant resistance to creating a formal regional government. Instead, Calgary and its neighbours need to find common ground, establish

Leadership and vision

Until 1995, regional planning commissions were legislated by the Government of Alberta to provide planning guidance to smaller municipalities and oversight in the development of new subdivisions around Calgary and Edmonton.³⁶ During this period, Calgary expanded through annexation of new subdivisions into the City's jurisdiction. However, with the removal of explicit provincial support for them, regional planning

Common benchmarks and data

commissions were disbanded in 1995. Since then, regional planning in the Calgary region has been carried out voluntarily.

The Calgary Regional Partnership was formed in 1999 to coordinate regional development in the Calgary metropolitan area.³⁷ To direct regional planning efforts, the partnership adopted the *Calgary Metropolitan Plan* in 2012. Unlike the Capital Region Board in Edmonton, the Calgary Regional Partnership has a voluntary membership structure, which has created ongoing issues. For example, no rural county surrounding Calgary is participating in the Calgary Regional Partnership and the *Calgary Metropolitan Plan*.³⁸ With no legislation to enforce

income, commercial and residential affordability, the cost of services, the level of services provided, property taxes, and population density help inform both the public and municipalities about the cost of services, infrastructure, and the region's state of competitiveness. People need to be able to find this information easily and understand it without much effort. Tracking key indicators helps elected officials, private organizations, and the public understand the implications of a regional strategy and how it can enhance economic competitiveness, improve quality of life, foster efficiencies, and develop support for new initiatives that improve the region.

WHERE CAN WE IMPROVE?
There is no doubt that Calgary is a great city. A strong economy, numerous job opportunities, and a relatively high quality of life that attracts labour and businesses to the area.

Calgary and the region all contribute to the city's success. However, the Calgary metropolitan area continues to face some challenges that are best addressed by regional solutions. The Chamber believes that the Calgary metropolitan area can be one of the leading regions to live and do business in the world.

Luckily, the existing regional governance model has been relatively successful in other areas, putting Calgary in a better position than other regions. The Chamber believes that the Calgary metropolitan area can be one of the leading regions to live and do business in the world if some aspects of the regional plan are fleshed out, slight changes to the regional governance model are made, and a

few actionable items are developed for the region.

Cohesive regional strategy

For the Calgary metropolitan area, the voluntary Calgary Regional Partnership should be retained. Legislating participation will only serve to make conflicts more crippling to the planning process. While amalgamation could be an attractive option, its highly-charged political nature will make it extremely difficult to achieve. Given

the lack of true savings in other amalgamation examples and the larger rural lands that exist between municipalities, the likelihood of a wide-scale municipal merger being successful is unlikely. While Calgary will remain the main anchor to the region for the foreseeable future, Calgary's share of the region's population will decrease over time as more people move to the region and try to find housing. This further underscores the need for municipalities to work together for long-term success. Although the lack of participation from the municipal districts in the region is an issue, understanding that their requirements differ greatly from more urban municipalities will help bring them into the existing governance model. The common vision of the Calgary Metropolitan Plan should be retained, but special provisions that account for the differences between rural and urban stakeholders could garner more support for the plan. These provisions should not, however, greatly change the overall vision for the region.

To retain this common vision,

all the municipalities involved should continue to identify areas of

regional collaboration. But clearer goals need to be established. A concrete statement of what all the municipalities would consider to be success needs to be agreed upon. Issues such as service delivery, land use, economic development, and environmental stewardship must be accompanied by performance information from each municipality in order to understand how the region is doing. The Calgary Metropolitan Plan identifies watershed and environmental management, regional economic development, land-use sequencing and development, regional infrastructure development and collaborative governance as key areas of concern for Calgary and neighbouring municipalities.³⁹ The plan has very few benchmark targets established outside of density requirements—an area of the plan that has been met with resistance from rural municipalities.⁴⁰

Regional utilities and services

Part of creating a common regional vision is the need to minimize self-interest in areas that have truly regional impacts. While municipalities can agree on higher level goals and strategies, issues of delivery can become highly politicized, much like the ongoing dispute between Calgary and the Municipal District of Rocky View over water licences, which influenced the Municipal District's choice to withdraw from the regional partnership. Things such as water treatment, sewage, waste diversion, and emergency services do not have to rigidly follow municipal boundaries, and consolidation of these services can improve regional delivery and create savings. However, if individual municipalities retain control over these areas, self-interest can slow development and hurt the overall competitiveness of Calgary's metropolitan region.

An example of a coordinated regional service provider exists

in Metro Vancouver. The Greater Vancouver Sewerage and Drainage District and the Greater Vancouver Water District provide sewerage and drainage, solid waste management, and water services to Metro



<p>Vancouver:⁴⁰ Both the Greater Vancouver Sewerage and Drainage District and the Greater Vancouver Water District are governed by a board of directors composed of elected officials from the members of Metro Vancouver, with decisions made on a majority basis for core service sharing and funding. The consolidation of these services under a regional model eliminates redundancies in service, and all issues can be addressed by a single provider throughout the region. The success of this model is proven by the fact that these regional districts continue to operate even after regional planning was eliminated as a legislated requirement in British Columbia.⁴²</p> <p>Creating a regional service provider also addresses common regional issues of free riding and quality of service, minimizing the shortcomings of voluntary participation. A regional body could become the sole point of revenue collection and determine the minimal level of service for the whole region, while fairly distributing costs. With the provider prioritizing the needs of the region, it would also eliminate municipal self-interest that could reduce the effective delivery of services.</p> <p>Achieving cost savings through elimination of service overlaps and better efficiency is a significant opportunity for Calgary and its neighbours. While some autonomy would have to be given up in the process, it would allow the region to focus on more pressing long-term issues.</p> <p>Regional transit: The number of people migrating to Calgary's neighbouring municipalities is driven partly by</p>	<p>neighbouring municipality that has set up any kind of inter-municipal transit has been the City of Airdrie, which launched its InterCity Express (ICE) service in October 2010.⁴³ Airdrie ICE is an example of how successful a strong regional transit system can be, with the current service averaging approximately 80,000 passenger trips annually⁴⁴ and generating \$2,000 to \$3,000 a month in profit.⁴⁵ The Calgary Regional Partnership has done early stage work with the metropolitan area's municipalities to get a regional transit system in place. The faster the region can implement the system, the better equipped Calgary and the region will be to manage future growth while remaining competitive.⁴³</p> <p>Increasing inter-municipal mobility is necessary, both for goods and labour. However, limited ability to invest in infrastructure is an increasingly difficult challenge for municipalities. Accommodating the Calgary metropolitan areas' growing population is imperative, but continuing to build roads to accommodate the expected rise in vehicles traffic is prohibitively costly for all municipalities involved.—The City of Calgary's transportation budget is already the largest of any of its departments at \$565 million.⁴⁴</p> <p>As the Calgary metropolitan area's population increases, so will congestion. It is imperative to invest in a regional transit network that will minimize investments in infrastructure, help take vehicles off the road, slow the deterioration and maintenance costs of transportation infrastructure, reduce congestion, and facilitate timely transportation of goods throughout the region.</p> <p>Calgary currently lacks a coordinated regional transit network. Instead, a number of residents from Cochrane, Okotoks and other surrounding areas either drive to work in the city or use a combination of driving and public transit to get to their jobs. As of 2014, the only</p>
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KEY REGIONAL PERFORMANCE INDICATORS

Metric	Economic and demographic accounts	Importance
Costs of services	• Provides information on existing economy, competitiveness, and affordability.	• Can help ensure policy decisions, encourage continued competitiveness and that development is done efficiently and effectively.
Costs per unit	• Helps identify inefficient areas and measure potential improvements from consolidating services	• Helps identify cost-sharing opportunities.

RECOMMENDATIONS

Maintain the existing regional governance structure.	Amend the Calgary Metropolitan Plan to account for variations between urban and rural municipalities.	Establish a common vision that allows municipalities to gain broad support through coordinated leadership on issues.	Identify measurable and attainable goals and outcomes within the Calgary Metropolitan Plan, with related performance indicators.	Ensure areas of common service delivery or development are provided through a regional body, while giving municipalities the autonomy to provide other services most efficiently to their population.	Implement a regional transportation network to ensure the long-term competitiveness of the region.
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4 GREAT CITIES HARNESS THE POWER OF HUMAN CAPITAL

DOING NOTHING HAS A COST: BENEFITS OF INVESTING IN SOCIAL OUTCOMES

It costs more to maintain homelessness than to eradicate it.

Poverty costs Albertans \$1.2 billion in health care costs, \$560 million in costs attributable to crime, and \$4.8 to \$7.2 billion in opportunity costs, among other costs. Altogether, this is between \$7.1 and \$9.5 billion of annual costs.³ Additionally, there are many non-financial costs associated with poverty, such as mental and physical health issues. A University of California study followed 15 chronically homeless individuals for 18 months. The study revealed that each person consumed \$200,000 in public services, an amount greater than the cost of providing them with affordable housing and support services to sustain it.⁴

Some groups are more susceptible

to poverty, discrimination, and vulnerability than others. For example, Aboriginals have experienced a long history of intergenerational poverty as a result of systematic oppression, racism, displacement, and political ineffacy, which have all taken a toll on their ability to access employment, health, education, and skills training. New Canadians face racial and ethnic discrimination and often lack the social networks that lead to employment. While many of them are highly educated, they face employment barriers because of difficulty with credential transferability and language proficiency. Women, too, are more prone to poverty than men. They often work in positions that pay less, have fewer benefits, and offer little security. Finally, many people with disabilities struggle with poverty because of the high costs of assistive equipment and medications

not always covered by public programs.

Fortunately, most business leaders recognize that diversity benefits their businesses. Teams of mixed gender, ethnicity, age, physical ability, and sexual orientation better represent clients and bring new perspectives to the table. Some of these benefits can be hard to quantify, but maximizing the potential of groups that traditionally have had less access to employment opportunities improves the quality of their life and addresses skills and labour shortages in many fields.

THE KEYS TO BECOMING SOCIALLY CONSCIOUS

The mark of a great city is a city that supports all of its citizens, and that provides opportunity for all. In this report, the Chamber identifies three key indicators that measure the social consciousness of a city:

- Investment in poverty

income inequality, and a person living in poverty in Alberta is further behind than anywhere else in the country. In 2010, there were 114,000 Albertans living below the poverty line,⁶ and 58,000 Calgary households were living on only one paycheque, or one crisis, away from homelessness. Many Calgarians who manage to stay above the poverty line do so at the expense of their health, family, and community. Alberta has been trying to reduce poverty through various efforts for decades, and there have been many successes. However, the poverty rate in the province has not changed significantly over the last five years, and we need to re-evaluate our processes and implement best practices.⁸

Municipalities are capable of playing

a key role in investing in initiatives to

tackle the roots of poverty.

Calgary, for its part, has also



POSITIVE RESULTS TO BE GAINED FROM SOLVING HOMELESSNESS

- REDUCE ECONOMIC COST OF MAINTAINING THE STATUS QUO OF HOMELESSNESS
- IMPROVE THE QUALITY OF LIFE FOR MARGINALIZED GROUPS

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Great, socially conscious cities address the needs of all of its citizens, specifically by:

- Providing adequate and affordable housing options
- Opportunities to break out of the cycle of poverty
- Access to education
- Employment equity

same time, the average apprenticeship completion rate in Canada between 2000 and 2011 was only 50 percent.² By addressing these social issues, Calgary can maximize its current labour potential and strengthen pathways for more people to enter the labour market. For instance, working to eradicate homelessness creates an environment where more Albertans have the skills and resources to be an effective part of the labour force.

Creating social infrastructure for newcomers to Canada that helps them successfully integrate and creating an environment where women are valued as corporate leaders and employees will encourage these groups to engage more dynamically in the workforce.

Ultimately, great cities exemplify a commitment to positive social outcomes in two ways: housing and poverty reduction, and opportunity for all.

Alberta is the wealthiest province in Canada. We have led the country in economic growth for 25 years, and we have the highest average income and lowest unemployment rate in Canada.⁵ However, not everyone in Calgary benefits from this prosperity. We also have the highest level of

URBAN SOCIAL ISSUES SUCH as poor health, low educational performance, and substance abuse contribute to poverty in major cities throughout the world. When poverty is not alleviated, cities lose out because the talents and strengths of some citizens are unrealized.

There are also tangible financial and opportunity costs that affect both the business community and the broader economy. A recent report estimated the annual cost of poverty in Alberta to be between \$7.1 and \$9.5 billion.¹ In Calgary, low educational performance also limits economic growth because it results in a shortage of skilled labour. For example, vacancy rates in the skilled trades have been increasing since the recession of 2008, especially in Alberta and Saskatchewan. At the

done a notable job of managing homelessness and poverty, but now it needs to invest its resources to end homelessness. In May 2013, Calgary's City Council unanimously endorsed the Calgary Poverty Reduction Initiative that seeks to cut poverty by 50 percent over the next 10 years. An implementation strategy is being developed to support the plan's action priorities. Considered a major milestone in Calgary's social policy development, the Calgary Poverty Reduction Initiative, a joint initiative of the City of Calgary and the United Way, aims to eradicate systemic poverty instead of alleviating its effects. Its goal is to ensure that all Calgarians have access to the necessary resources needed to thrive and access to a strong, supportive, safe, and inclusive neighbourhood and that there is a systematic change to public and private policies to reflect citizen participation and empowerment to a greater extent.⁹

The Calgary Homeless Foundation (CHF) also released a "10 Year Plan to End Homelessness in Calgary" in 2008. Calgary was the first city in Canada to implement such a plan and has been a leader in implementing best practices.¹⁰ So far, the plan has been successful in applying "Housing First" practices, a program that provides housing to the homeless as a way to work through other challenges such as addiction or unemployment instead of the traditional approach of dealing with these issues before securing housing. The program has been successful in assisting youth and those experiencing domestic violence, developing a tool that can predict mortality risk and prioritize Calgary's most vulnerable citizens, engaging the private sector through sponsorship opportunities, and implementing

case management standards and accreditation for agencies working with Calgarians living in poverty. The Plan serves as a national example, with 11 other Canadian cities following suit and launching municipal plans to eradicate homelessness.

The City of Calgary also owns the Calgary Housing Company (CHC) which manages and provides 10,000 subsidized housing units to low-income Calgary families.

Half of the homeless in Calgary are employed but cannot afford to house themselves.

One of the major challenges of poverty reduction in Calgary is the fact that, unlike many other jurisdictions, when Calgary's economy strengthens, homelessness increases. Calgary is the epicentre of homelessness in Alberta because of its strong labour market, high migration, and limited affordable housing.

During periods of economic growth, Calgary attracts large numbers of migrant workers, increasing the already high demand for affordable housing, leaving many with no option but a homeless shelter or the street.

Of Calgary's homeless population, 1,200 citizens have been homeless for more than a year, and 400 have been homeless for more than five years. The provision of supportive housing reduces hospital care, psychiatric care, and prison intake people in supportive housing spend two-thirds less time than the homeless population in these facilities.¹¹ The accepted practice, however, has been to provide short-term housing solutions, such as shelters, as opposed to stable, long-term housing options. Calgarians live in one of Canada's most expensive housing markets. An estimated 5,300 households

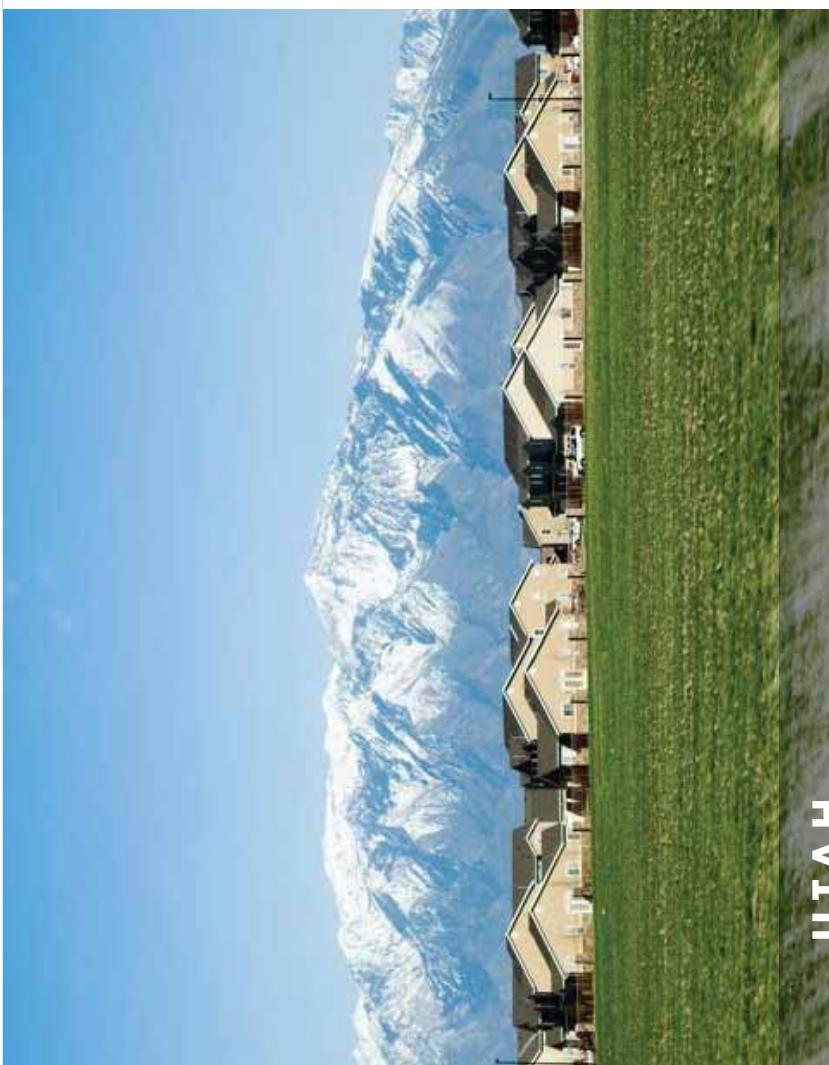
are waiting for social housing in Calgary and Edmonton.¹² Alberta has Canada's largest per capita population of employed homeless: half of the homeless in Calgary are employed but cannot afford to house themselves.¹³ This statistic speaks volumes. The greatest barrier to eliminating homelessness in Calgary is the housing crisis and lack of access to affordable housing.

The case for affordable housing

Cities that lack affordable housing find it difficult to attract and retain labour in certain fields such as education and law enforcement. Affordable housing boosts economic development by providing the labour force with reliable homes and increasing people's disposable income, meaning households spend less of their monthly income on housing costs and more on goods and services that support the local economy. If Calgary cannot provide sufficient affordable housing, it will not be able to deal with its labour shortage.

In the 1950s, Canada began to explore social housing programs at the federal, provincial, and municipal levels. Over 600,000 homes were funded, which helped remedy deficiencies in ownership and prevent homelessness.¹⁴ A shift occurred in the 1990s when the federal and provincial governments began to draw away from developing new programs and also ending some programs. Since then, while there are still some social housing programs intact, they are minor and usually in the form of individual grants rather than multi-year commitments.

The future of affordable housing in Canada is uncertain. Pre-existing infrastructure, including individual



UTAH

SUPPORTIVE HOUSING:

UTAH'S HOUSING WORKS

In 2005, Utah began handing out housing units to its homeless population through its Housing First/ Housing Works program. During the pilot program, Utah housed 17 citizens who had spent an average of 25 years without a home and housed them in Salt Lake City apartments. Nine years later, long-term homelessness has been reduced by 74 percent, and Utah is on track to completely eradicate homelessness by 2015.¹⁵ In the Utah model, homeless citizens are given access to their own subsidized apartments, while the state provides job training and social services to help the residents reintegrate into society. The housing is not entirely free—residents use 30 percent of their state-facilitated income for rent—but the units are affordable and permanent.¹⁶ This model differs from other similar programs because the units are not temporary or available for a fixed period of time, thus offering long-term residence and stability. Nor is it contingent on completing rehabilitation programs

or counselling. While caseworkers are available to help the residents become self-sufficient, residents retain the housing regardless of whether they fail or succeed with the resources offered. Utah's model has been transplanted to other metropolitan areas in the region. Utah found that the average annual cost for emergency services and incarceration for a chronically homeless individual was \$16,670, while the cost to house them and provide casework services was only \$11,000 per person.¹⁷

housing units, is decaying and is costly to maintain, let alone upgrade. If Calgary does not find better ways to house its citizens, an increasing number of people will live in inadequate housing or no house at all.

Affordable housing saves money

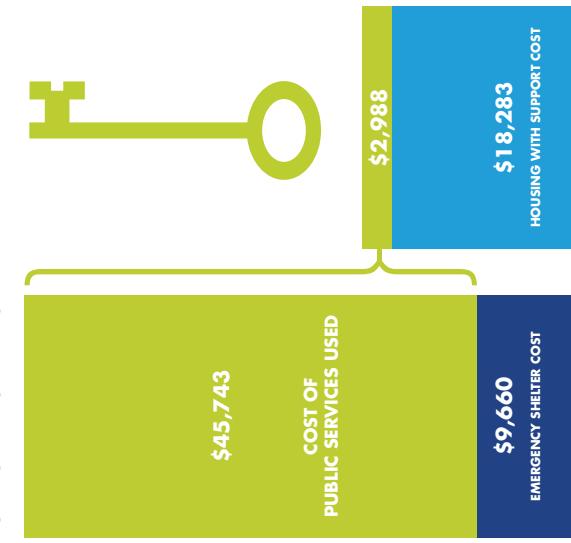
Affordable housing delivers a return on investment. The Calgary Homeless Foundation conducted a study on the cost savings of implementing its plan ‘Housing First’ in Calgary. The foundation discovered that although the cost of providing housing and support outweighs the cost of emergency shelters, the payoff is great. The burden on social services is dramatically reduced by almost 95 percent once a person has secured a stable living condition.¹⁹

Similarly, New York estimates that 95 percent of its homeless population uses public health services, 76 percent uses outpatient or inpatient services at the local hospital, 47 percent uses substance treatment services, 65 percent uses mental health services outside the hospital system, and 40 percent receives healthcare while incarcerated.²⁰ One study identified that individuals placed in affordable housing experienced a reduction in service use of \$16,282 a year, which amounts to 72 percent reduction in public health services, a 23 percent decline in shelter use, and a 5 percent reduction in incarceration.²⁰ A separate study conducted on the costs of homelessness in British Columbia had similar findings. It concluded that society could save between \$8,000 and \$12,000 dollars per year per person.²¹ Providing all of our citizens with adequate housing reduces pressure on our health care system, our courts, and our municipal wallet.

Inclusionary zoning
Inclusionary zoning is a social housing policy that allocates a certain number or percentage of housing units in a new development for low- to moderate-income earners. Inclusionary zoning can be mandatory or voluntary; mandatory programs require the developers to provide some affordable housing units in order to have the development approved, while voluntary programs provide incentives, such as quicker approvals, parking requirement relaxations, rebates, and increased floor area ratios, in exchange for affordable units.²²

In many cases in the United States and in Canada, inclusionary zoning has proven to be effective. In the 1990s, Boston faced a situation similar to Calgary. The city of over half a million experienced an economic boom; however, incomes failed to keep pace with housing costs.²³ In response to the housing crisis, Mayor Thomas Menino introduced an inclusionary housing policy in 2000. The policy required qualified developments to set aside 10 percent of new units as affordable. Developers also had the option of providing the affordable units off-site; however, this option required having 15 percent of all units classified as affordable. The units had to also remain affordable for at least 30 years. In the year of implementation, eight new, predominantly luxury, developments were subject to the affordable housing requirements, and 200 affordable housing units were

HOUSING FIRST COST SAVINGS



Source: Calgary Homeless Foundation

constructed as a result. New housing development continues to boom in Boston, and new development remains lucrative, despite the affordable housing requirements.²⁴

The benefits include additional subsidized units in the housing pool, as well as the creation of better integrated, mixed income communities. More citizens are in housing that they can afford, and the effects of gentrification are mitigated.²⁴

Secondary suites

Calgary is not keeping pace with progressive reforms that are occurring across the country and turned down the decision to allow for secondary suites when it came before City Council in 2011.

Secondary suites present a great opportunity for Calgary to respond to high housing costs and certain elements of its housing crisis while also making home ownership a more affordable option for many Calgarians. Secondary suites are effective in attracting labour, providing central affordable housing, placing downward pressure on wage inflation, and increasing the number of housing units in the city.

While there are many compelling reasons for legalizing secondary suites, Calgary’s business community also suffers if new affordable housing strategies are not implemented:

without adequate housing, business cannot attract the skilled labour it needs. Young professionals with talent and potential are forced to look to other cities for career opportunities because of high housing costs. As a result, Calgary’s vibrant business community begins to lose its competitive edge, and new businesses opportunities are lost. Economic stagnation is the result.

Realizing our full labour potential
Like many other developed nations, Canada is navigating the challenges of a declining working-age population. While Canadian employers view the labour shortage as their top concern, some economists refute this perception. They argue that Canada is experiencing only the natural fluctuations of a market economy and a true labour shortage would result in increased job vacancies and wages. According to a research report produced by Susan McDaniel, the Canada Research Chair in Global Population and Life Course, although employers may be experiencing hiring difficulties and there may be skills shortages in some industries and in some parts of the country, there is no evidence of a national labour shortage.²⁵

The problem with this view is that it fails to accurately interpret the data we do have on labour. Existing data shows that the current labour shortage is not as severe as it was in 2008. The shortage appears to be less of an issue in 2014, however, because Canadian businesses have been employing several strategies to temporarily provide additional sources of labour, a learned tactic from their pre-recession experiences. These tactics include encouraging employees to remain in the labour market longer, extending work hours, and using programs such as the Temporary Foreign Workers program.²⁶ While these approaches temporarily curb a labour shortage, they are not sustainable because workers cannot be expected to work overtime and delay retirement indefinitely.

Furthermore, stagnant wages do not mean there is no labour shortage: employers cannot significantly boost wages to attract new workers because

improving access to our untapped labour pools, such as Calgary’s homeless and Aboriginal populations, will be crucial to resolving our labour shortage. In fact, using our untapped labour pools is the one of the long-term solutions to Western Canada’s labour shortage.²⁷

Embracing our unopened labour pools:
Calgary’s Aboriginal population
Calgary’s Aboriginal population is its largest untapped labour source and the city’s area of greatest potential for replenishing the labour supply. Every year, 25,000 Aboriginal youth in Canada turn 15, which is the legal age for entering the labour market.²⁸ In spite of the demographic advantage, however, the off-reserve unemployment rate in 2012 was 2.5 times greater than the provincial average.²⁹

While Canada’s population of citizens active in the labour force continues to decline, there is a large and growing population of young Aboriginal people who could be invaluable in satisfying Canada’s labour market needs. Yet, their engagement in the workforce is hindered by education and employment issues. In Calgary alone

there are 15 organizations that provide job search services for our Aboriginal population, half of which are provided by Aboriginal organizations. Many of these programs are geared towards youth. There are six programs that offer educational upgrades and three that support trade and occupational training, including a 31-week program on petroleum land administration offered in partnership with SATT.³⁰

Hiring and retaining Aboriginal employees: Where is the disconnect?

If Calgary is facing a labour shortage and the Aboriginal population is Calgary's largest untapped labour source with many programs to aid educational and vocational training, why is the recruitment and retention of Aboriginal employees so difficult? Sometimes the disconnect is simply no connection. Employers do not know Aboriginal people, and Aboriginal people do not know employers. When people are unfamiliar with each other, it is easy to stereotype each other.³¹

While many resources exist that are dedicated to helping Aboriginals seek and prepare for employment, there is little on-the-job support that would assist in the retention of Aboriginal employees. On top of all of the typical challenges that new employees face, Aboriginal employees also face prejudice and cultural misunderstanding.

To improve retention, employers should be clear in their expectations, as well as ensuring the new hire has a solid foundation and understanding of the organization. Additionally, employers can match Aboriginal employees with co-workers to help reduce social pressure and concerns of prejudice, or they could match them with an Aboriginal employee

who has been successful within the company and could serve as a mentor.

The power of education

Ultimately, education is the greatest tool for improving the future of Canada's Aboriginal peoples.

Higher levels of education correlate to an improved socioeconomic position, including improved health, employment, and general quality of life. When an individual is healthy and productive, we all benefit.

The Centre for the Study of Living

Standards reported that closing the education gap between Aboriginals and the rest of Canada by 2026 would save \$15 billion over 15 years and that \$401 billion could be added to Canada's GDP if Aboriginal education and labour participation were to match that of the non-Aboriginal population.³²

Improving the education and employment outcomes of Canada's Aboriginal population is critical. Not only is there a moral imperative to provide the best possible quality of life for all Canadians, there is also an economic imperative in cost savings and addressing the labour shortage.

Diversity as a competitive advantage: the importance of new Canadians to our economy

As our world becomes more globally interconnected, Canadian cities are forced to compete not only with other cities in Canada but also with the rest of the world. As people move around more than ever before, it is important to recognize a city's role as a magnet for economic activity. Calgary, then, should foster diversity as a means of cementing an influential position on the world stage. Population diversity activates "the ability of cities to attract, retain and harness the skills and creativity

of talented individuals.³³ A great city is a global city, and global cities are characterized by their ability to attract a diverse population.

A study produced by the National Bureau of Economic Research revealed that cultural diversity plays a large role in the economic development of a region, and while homogeneity can slow down economic growth, diversity does the opposite.³⁴ By promoting diversity as strength rather than trying to assimilate and streamline diverse cultures, cities experience greater cultural fluidity, richer knowledge sharing, and improved adaptation to new technology. Furthermore, these cities find that their focus on new and different perspectives promotes innovation. Cities that promote innovation build cities that attract innovative individuals and businesses that curate new ideas, goods, and services. For a city to be attractive, innovative, and economically stimulated, it must have the 3Ts of economic development: technology, talent, and tolerance.³⁵

A great city is a global city, and global cities are characterized by their ability to attract a diverse population. Consider China's failure to modernize their economy at the time of the Industrial Revolution. China's isolation from the rest of the world, geographically, but also culturally and politically, caused China to remain impervious to diverse influences. State-imposed isolation was a factor in China's late entry to technological development.

As Canada's ability to gain greater access to export markets grows more pressing, the country is looking to shift its focus from our traditional partner, the United States, to faster growing, non-traditional markets. One

IT IS IMPORTANT TO KEEP IN MIND SOME OF THE VULNERABILITIES THAT NEW CANADIANS FACE³⁹

FAILURE TO HAVE FOREIGN CREDENTIALS AND QUALIFICATIONS RECOGNIZED

LACK OF LOCAL EXPERIENCE

LIMITED CULTURAL COMPETENCY AND LANGUAGE PROFICIENCY

DIVERSITY: THE ROLE OF THE PRIVATE SECTOR



A new study by the Center for Talent Innovation proves how diversity can breed innovation and drive economic growth. The study discovered that companies that hire people with diverse backgrounds outperform companies that do not.

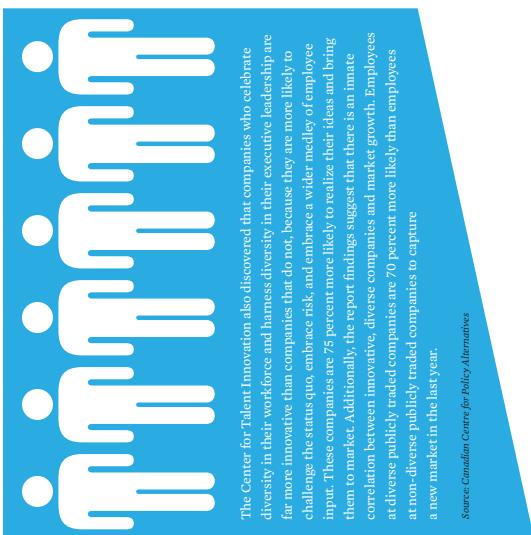
- Employees at these companies are 45 percent more likely to report market share growth.
- Employees are 70 percent more likely to report capturing a new market than the companies that lacked diversity.⁴³
- Diverse companies out-innovate other companies because they are more likely to have an "outside-of-the-box" environment where employees are better equipped to bring ideas to leadership.

community and daily life. It is, however, the federal government that funds and provides immigrant services, not cities, and cities have been excluded from many of the federal immigration policy and funding decisions. While municipal governments see the value of providing services, budget burdens brought on by a regressive property tax system and infrastructure deficits make funding programs difficult. Financially, municipalities are struggling to provide the basics for newcomers, such as affordable housing.

Calgary has numerous organizations to help new Canadians better integrate into our workforce and community life. Three organizations, however, dominate the landscape of immigrant services: Calgary Catholic Immigration

recognition that our economic wellbeing is directly tied to our ability to successfully integrate new Canadians, and immigration policy is included as part of the federal government's overall economic strategy. Canada is a country with an aging population, decreasing birth rates, and labour shortages. What about our cities? At the federal level, attracting newcomers has been successful, but should successful community integration really be a federal issue, or should cities be responsible for this? Cities are responsible for retaining new immigrants by ensuring a high quality of life with good community and employment opportunities.

Essentially, cities are the frontline of immigrant attraction and retention, since cities, and not countries, offer



Employees that are able to voice their opinion in workplace culture are 3.5 times more likely to reach their full innovative potential.⁴³

Services, which necessitates a shared responsibility between both levels of government.

In 2005, the federal government signed a trilateral immigration agreement between the Province of Ontario and the City of Toronto, which created a framework for shared information and consultation, and was signed in recognition of Toronto's ability to successfully integrate newcomers.

Currently, Canada's economic immigration policy is based on the human capital model of recruiting economic immigrants who fill our skills gap and have the skills to be successful in the Canadian workforce, based on factors such as education, work experience, and language proficiency.⁴⁴ This system was formalized in 1967, with the



The Center for Talent Innovation also discovered that companies who celebrate diversity in their workforce and harness diversity in their executive leadership are far more innovative than companies that do not, because they are more likely to challenge the status quo, embrace risk, and embrace a wider medley of employee input. These companies are 75 percent more likely to realize their ideas and bring them to market. Additionally, the report findings suggest that there is an intimate correlation between innovative, diverse companies and market growth. Employees at diverse publicly traded companies are 70 percent more likely than employees at non-diverse publicly traded companies to capture a new market in the last year.

Society, Calgary Immigrant Women's Association, and Immigrant Services Calgary.⁴⁵ These agencies receive funding from federal, provincial, and municipal governments, as well as various non-profit organizations, and offer services such as multilingual counselling on issues such as finding housing and employment, applying for benefits, education registry, finding a doctor, and other services.

The federal government has designed a migration model called Express Entry, to be released in January 2015.⁴⁶ The program is intended to enhance economic immigration processes as a means of remedying Canada's labour shortage. Express Entry candidates with formal job offers will be able to apply for permanent residency, and the goal is to process applications within

adoption of a points system to provide a framework for admission to Canada. Because this system is based on past achievements of potential immigrants, it unfortunately overlooks potential and entrepreneurship. It also does not capture all the skills that Canada requires, such as non-quantifiable and non-measurable skills that are not acquired by formal qualifications. These include teamwork, problem solving, discretion, time management, and the ability to learn. Greater partnership between the business community in Calgary and the Government of Canada is needed because local businesses are better equipped to identify which skills are necessary.

A great city gives equal opportunities to men and women

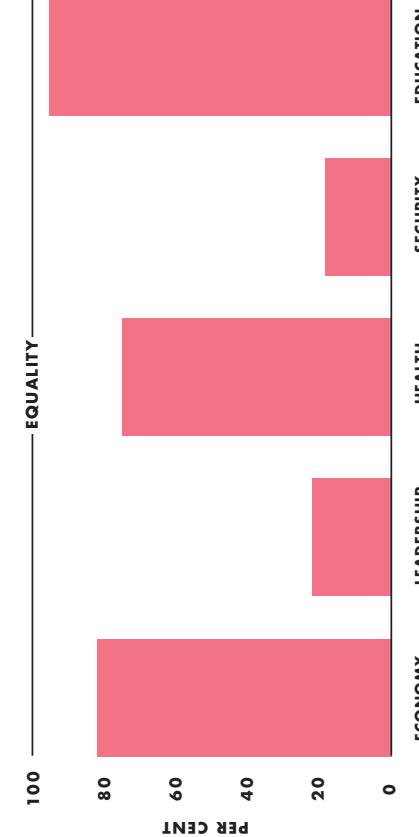
While Calgary's Aboriginal population represents an untapped labour pool, and new Canadians represent a new labour pool, women represent an underutilized one.

In a 2014 study conducted on the best and worst places in Canada to be a woman, Calgary ranked 17 out of 20, above only Windsor, Oshawa, and Edmonton. While employment levels are better in Calgary than most of Canada, the gap between men and women's employment is 50 percent larger than the national average with 77% of men working and 65% of women working.⁴⁵ Women in Calgary also have one of the largest gaps in pay in the country, earning an average of \$17,000 less per year than Calgary's men.⁴⁶ The pay gap between men and women is particularly interesting considering that women are slightly more likely than men to hold a high school or college degree and hold university degrees in equal numbers, suggesting that the gap is not reflective of educational attainment. Furthermore, women in Calgary experience greater discrimination in attaining senior leadership and political positions, with women holding only 22 percent of senior

management positions in the private sector and only two of fifteen elected municipal seats.

This is poor business practice when you consider the experience of many Fortune 500 companies. A Catalyst study discovered that the Fortune 500 companies with the highest representation of women on their boards of directors experienced better financial performance in terms of sales and return on investment. Furthermore, a study conducted by the McKinsey & Company "Women Matter" report series discovered that companies with the highest share of women in executive positions outperformed those without women in executive positions. The sample of companies, which ranged from Europe to Brazil to China to India, revealed that companies with female leadership outperformed those with no women by 41 percent in return on equity and 56 percent in operating results.⁴⁷

CALGARY RANKS BELOW THE EQUALITY MEASURE IN ALL INDUSTRY CATEGORIES



Source: Canadian Centre for Policy Alternatives

RECOMMENDATIONS

We have established the necessity of tackling poverty in Calgary in order to realize the potential of more citizens and to reduce financial burdens. It is also important to remember that poverty, homelessness, and lack of diversity are all interconnected. Therefore, these issues must be addressed in tandem. The financial cost of maintaining the status quo is high and is a wasted cost if it does not help citizens engage successfully in Calgary's community and labour force.

- Consider, for example, an immigrant family living in poor housing conditions. Poor housing conditions lead to increased health and safety risks, including proximity to dangerous areas or heavy traffic. Those living in neighbourhoods deemed unsafe may be discouraged from social interaction, which reduces cultural understanding and may increase discrimination, as well as limiting proper integration. This limits this family's opportunity to build social networks and improve their language skills. An inability to integrate socially and linguistically will limit employment opportunities, which in turn makes breaking the cycle of poverty all the more difficult.
- Creating a great city is not only about creating an economically healthy environment. It requires creating a safe and welcoming community. We need to do more to support and engage marginalized groups that are most prone to poverty and discrimination.
- The Calgary Chamber recommends the following:
- Implement a trial program, such as Utah's, by housing a select group of Calgary's homeless citizens to measure the social and economic benefits of supportive housing
- Develop a comprehensive national housing policy designed to address homeownership, private rental housing, and social housing
- Increase the number of affordable housing units in Calgary, through inclusionary zoning and secondary suites
- Commit to the repair and retrofit of existing infrastructure to prevent Calgary's affordable housing situation from worsening
- Promote the idea that immigrant service programs are more effective at the local level and encourage cost-sharing programs for immigrant services between the federal government and municipalities
- Foster stronger cooperation between the business community and all levels of government to ensure the correct skills matches are being made
- Strive to close the education gap between Aboriginal and non-Aboriginal Canadians
- Improve Aboriginal employee retention through mentorship programs and intercultural programming
- Provide equal pay and encourage industry to recognize the value of having women in senior leadership positions

CONCLUSION

GREAT CITIES EMPLOY INNOVATIVE AND SUSTAINABLE FINANCE TECHNIQUES

Municipal finances and service delivery are significant to the competitiveness of a city, especially in light of increased infrastructure pressures, population growth, and pressure on municipalities to provide higher levels of service. While Calgary has not done poorly in either of these areas, alternative delivery through shared services and P3s provide opportunities for more savings for Calgary. In addition, adopting innovative budget practices like results-based budgeting could result in more effective and cost efficient services. With limited ability to raise municipal revenues and unpredictable funds from higher orders of government, Calgary needs to think about what it can do to continue to develop at a great city. The Calgary Chamber recommends the following:

- Consider adopting results-based budgeting to modernize the municipal budgeting process and increase value for money.
- Benchmark service delivery costs to those of other cities in addition to tracking overall citizen satisfaction to evaluate overall effectiveness of programs and services offered to the public.
- Work more closely with the private sector to invest in the city and identify areas where public-private partnerships can be successful.
- Continue to identify and invest in technological improvements that can create potential cost savings and reduce operational costs.
- Work with neighbouring municipalities to identify opportunities to engage in shared service delivery.

GREAT CITIES HARNESS THE POWER OF HUMAN CAPITAL

We have established the necessity of tackling poverty in Calgary in order to reduce financial burdens. It is also important to remember that poverty, homelessness, and lack of diversity are all interconnected. Therefore, these issues must be addressed in tandem. The financial cost of maintaining a status quo is high and a wasted cost if it does not help citizens engage successfully in Calgary's community and labour force. Creating a great city is not only about creating an economically healthy environment. It requires creating a safe and welcoming community. We need to do more to support and engage marginalized groups that are most prone to poverty and discrimination. The Calgary Chamber recommends the following:

- Implement a trial program such as Utah's by housing a select group of Calgary's homeless citizens to measure the social and economic benefits of supportive housing.
- Foster stronger cooperation between the business community and all levels of government to ensure the correct skills matches are being made.
- Strive to close the education gap between Aboriginal and non-Aboriginal Canadians.
- Improve Aboriginal employee retention through mentorship programs and intercultural programming.
- Provide equal pay and encourage industry to recognize the value of having women in senior leadership positions.

GREAT CITIES ARE LEADERS IN REGIONAL COLLABORATION

Calgary and its region have been blessed by good economic fortune in the last decade. While this success should be celebrated, Calgary also needs to make progress in its regional development efforts and work better with neighbouring municipalities to ensure long-term success. If action is not taken now, there could be negative consequences for the region's competitiveness, productivity, and affordability. These issues, along with the rising costs that all municipalities face, are the best justification for increased regional cooperation. Only through regional partnership can Calgary become a great city supported by a strong, competitive, and coordinated region.

- Identify and collect information on key performance indicators throughout the region to assess progress in areas such as congestion, cost savings, and regional economic productivity.
- Ensure areas of common service delivery or development are provided through a regional body, while giving municipalities the autonomy to provide other services most efficiently to their population.
- Establish a common vision that allows municipalities to gain broad support through coordinated leadership on issues.
- Identify measurable and attainable goals and outcomes within the Calgary Metropolitan Plan, with related performance indicators.

GREAT CITIES BOOST MUNICIPAL IQ

Calgary has made many great inroads to becoming a truly smart city, especially the innovations in parking and network infrastructure. However, the City needs to adopt a comprehensive strategy that can take these initiatives and transform them into grander and more sustainable goals. It is also essential for Calgary to benchmark this strategy, as well as the initiatives that have been implemented up to this point in order to properly identify where Calgary sits among global smart cities. Are we a leader, or are we lagging? Calgary is a competitive city and an economic powerhouse, however its competitiveness could be compromised if it cannot find more cost efficient and innovative ways of addressing infrastructure, governance, transportation, and planning. Through adopting a comprehensive approach to becoming a smarter city, Calgary can ensure its continued economic competitiveness in North America and internationally and become a global great city. The Calgary Chamber recommends the following:

- Strengthen civic engagement through consultation in the strategic process as well as capitalizing on citizen innovation, such as app development.
- Create policies that protect and value citizen access to information and the role information plays in the ability to innovate.
- Reach beyond simple digitization of services and implement sustainable initiatives that improve service delivery, governance, and quality of life.
- Benchmark Calgary against other Canadian cities, as well as cities around the world, to gauge its performance.

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The Calgary Chamber's Great Cities initiative is an ongoing series of events and policy research aimed at examining the structure and performance of Alberta's municipalities, and identifying ways in which our cities can become world-class. Throughout the series, we have brought together subject matter experts, government representatives, business leaders and community members to raise awareness, generate discussion and propose new ideas to strengthen Alberta's municipal legislative framework and drive toward municipal excellence.





Calgary Chamber

600 237 8TH AVENUE SE
CALGARY, ALBERTA T2G 5C2
403 750 0400

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