

The City's Risk Profile at Year-End 2021

This attachment presents The City's Risk Profile with an integrated view into The City's top risks, including risk specific information and Future Focused trends, as well as the 2021 year-end cross corporate risk review. The City has developed a new set of Principal Corporate Risks to reflect the changes within the organization and the risk environment in which we operate.

The update consists of:

Part 1: Setting the Context – What's happening in Calgary?

Part 2: The City's Risk Profile Overview

Part 3: Principal Corporate Risks

Part 1: Setting the Context - What's happening in Calgary?

Approximately two years into the COVID-19 pandemic during which there was an uncertain economic recovery, The City of Calgary and community have worked together to manage and respond to these challenges. The year-end corporate risk review process revealed that while The City is managing the impacts of the pandemic, it is anticipating a more stable economic recovery over time. Three top areas of risk remain: the global pandemic, climate change, and organizational capacity.

Global Pandemic - The continued COVID-19 global pandemic creates pressure on Calgary's road to economic recovery, as temporary health-based restrictions were re-introduced in 2021 September and additional measures may be taken in 2022 in response the Omicron variant. The Provincial Exemption Program (which has allowed some businesses to remain open) and the uptick in vaccination rates has helped manage potential impacts on local businesses and Calgarians. The City will need to remain nimble and flexible as public health information evolves. Uncertainty remains as the resilience of non-essential services (leisure and hospitality) in the wake of COVID-19 impacts is unclear. Potential also remains for various health-based restrictions and for further supply chain disruptions.

Climate Change – The increased frequency of climate induced disruptions has made climate change a priority globally and locally. The City is working to action climate change initiatives, both mitigating The City's contributions to greenhouse gas emissions and adapting to risks related to global warming.

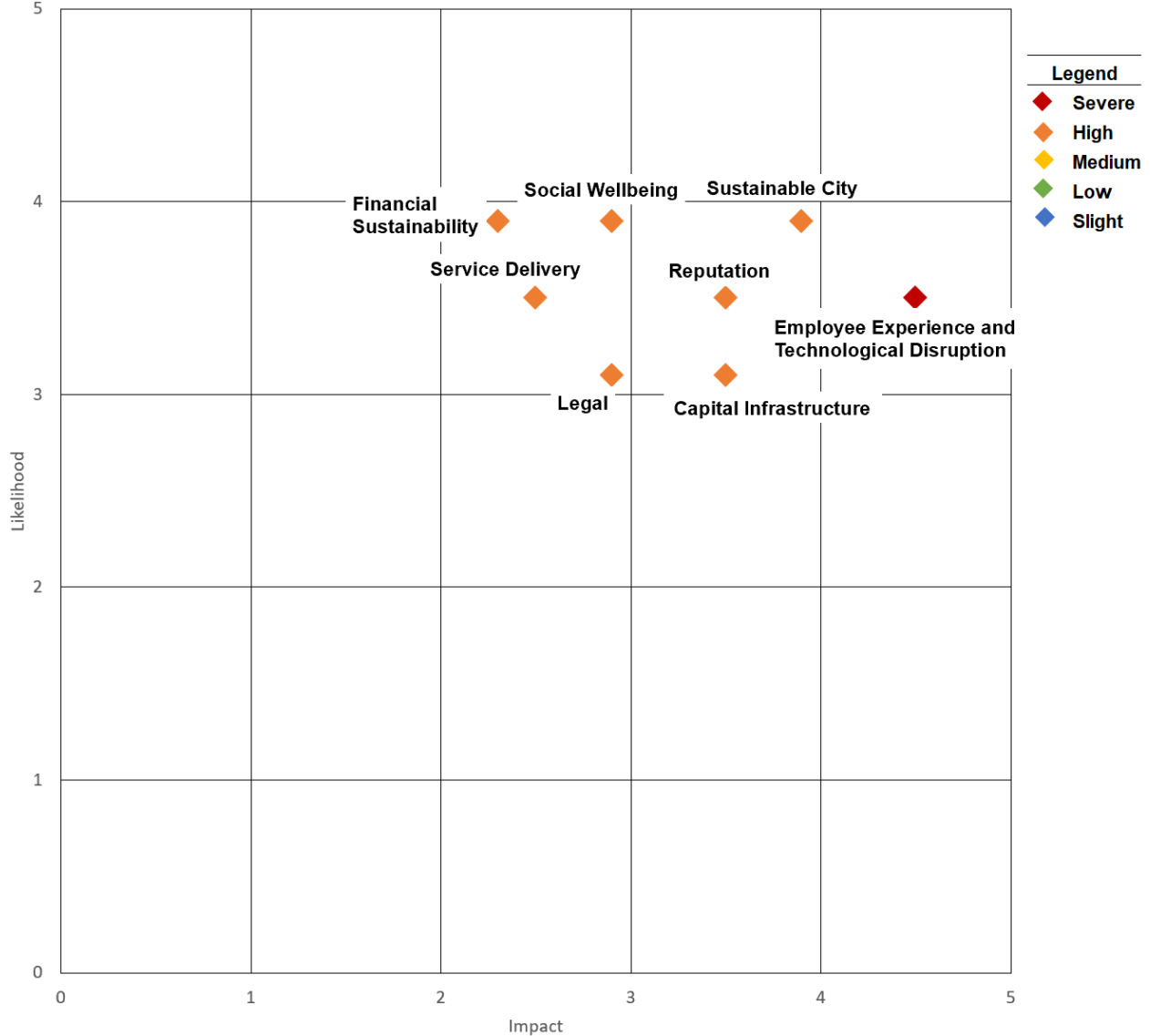
Organizational Capacity – Actions and resourcing required to address the external circumstances of the economic recovery and climate change, and internal factors such as the organizational realignment and increased velocity of change, have created capacity risks. This presents a risk to the effective operation and development of various City services and initiatives, as well as the Integrated Risk Management program.

To help manage these varied and complex risk areas, The City researches trends and anticipates how the needs of our citizens can change in the short to medium term. By understanding trends, we can anticipate service demands and prepare for future community needs.

Part 2: The City's Risk Profile Overview

Figure 1 presents the rating (made up of likelihood and impact) of each of the eight Principal Corporate Risks.

Figure 1: The City's Principal Corporate Risk Ratings



This visual summary, and the PCR specific information below, is based on information collected through the year-end Corporate Risk Review process (service risk registers and Principal Corporate Risk (PCR) Evidence-Based One Pagers), discussions with subject matter experts, review of key risk measures and indicators, other risk reporting, and The City's response strategies.

Part 3: The Principal Corporate Risks (alphabetical listing)

Risk	Owner	Rating
Capital Infrastructure Risk	GM, Infrastructure Services	High

Description

Capital Infrastructure may be delayed, experience decreased level of service, or have degraded performance or failure due to competing priorities and limited funding. To protect public safety, this could result in service continuity impacts to Calgarians.

Context

The infrastructure gap widens due to impacts related to COVID-19, including supply chain issues, uncertain economic recovery, labour shortages and inflation. Also, the current reductions in capital funding and unpredictable tax income put pressure on the infrastructure gap and asset conditions.

The Issues Management Program has also seen issues arise related to major projects when it comes to planning, implementation, and supply chain challenges.

What we're watching

In comparison to 2017:

- City assets in good or very good condition down from 88% to 79%
- The assets in fair condition are up from 9.7% to 11%
- The assets in poor or very poor condition are up from 2.3% to 7%
- The infrastructure gap has increased for maintenance and operating and decreased for growth in 2021.

Future Focus Calgary trends related to this risk

Unpredictable Municipal Funding: Reduced tax and user fee revenues combined with a demand for new services and community supports along with expectations to continue to meet existing levels of service, may create budget shortfalls. Cities may need to decide where to reduce spending and levels of service offered, and/or to increase revenue sources by focusing on funding from higher orders of government, implementing new revenue raising tools or exploring intra-municipal and other shared-service agreements.

Green Energy Revolution: Net zero targets at the federal and municipal levels as well as carbon accounting at the municipal level may result in greater investment in renewable energy sources.

Climate Disasters: Cities continue to be at risk of flooding, drought, forest fires, extreme heat, and other climate related extreme weather events.

Electrification of Transportation: increasing adoption of electric vehicles (EVs) results in more public charging infrastructure, particularly in suburban areas, as well as closer integration with smart grids to manage peak demands and enable more renewable energy.

Streets for Everyone: Globally, cities look to accelerate bike lanes, road design for active transportation, and social gathering spaces making changes to parking, increasing use of tactical urbanism and further enabling non-mobility uses (e.g. street patios, pop-up parks).

Response

Current

- Evaluate the strategic internal process to prioritize new capital opportunities.
- Look for creative solutions for alternate funding and project delivery models.
- Monitor asset condition and the infrastructure gap to prioritize direct investment.

Upcoming

- A strategic principled approach to prioritization of capital infrastructure funding.
- Advocacy to work with other levels of government for funding, as stable and predictable funding for capital allows for more efficient decisions.
- Pilot innovative project delivery solutions.
- Focus on sustained investment to reduce the infrastructure gap.
- Consideration of future-focused trends in mid-term and 4-year service plans and budgets.

Risk Employee Experience and Technological Disruption Risk	Owner GM, People, Innovation and Culture	Rating Extensive
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Description

The City’s corporate culture must be able to respond to internal/external factors and societal pressures when it comes to human and technological resources required for the delivery of services to residents and businesses. There is a risk that the organization is not making strategic investments today to prepare us to meet future demands, leverage emerging trends and technologies, and ensure resilience in its operations.

Context

Services identified employee experience and disruption as the highest percentage of “high” and “extensive” risks. The City’s increased reliance on technology and data adds exposure to this risk.

What We’re Watching

We’re monitoring trends related to City capacity, this includes attrition, turnover, workforce demographics, the vaccine policy and other safety practices.

Future Focus Calgary trends related to this risk

Work from Anywhere: Due to long-term remote work policies, work may occur anywhere, with geographically distributed virtual teams.

Remote Service Delivery: Within city government, digital government programs are being accelerated to provide remote service delivery. Changes to performance management may emerge as approaches to remote-work management evolve.

New Cyber Security Threats: With a dramatic increase in remote work and online engagement, cyber security threats may increase in complexity. New demographic groups (e.g. children, seniors) are also increasingly being forced online, but may lack experience to manage security concerns. Similarly, not all smaller businesses are equipped to develop secure online systems. The City should consider the broader implications to City programs and services including vulnerable populations.

Risk	Owner	Rating
Financial Sustainability Risk	CFO	High

Definition

The City is unable to maintain strong financial capacity over time. It could manifest as a sudden financial constraint – lower revenues or higher expenses. It arises from external forces and shocks, such as reduced funding from other orders of government or higher than anticipated expenses due to higher population growth, inflation, or cost for service delivery. Generally, this risk increases if the variability in the broader economic context for our operations triggers a significant shift in any revenue or expense category. These shifts would require thoughtful offsetting measures, including spending decisions to maintain financial capacity.

Context

Pressure on operating funds has slightly decreased compared to 2020 Fall, as tax payments have been received on time. However, user fee revenue continues to be impacted by COVID-19 restrictions, and the inflation rate is high. The City’s financing constraints are under pressure with expected rising interest rates.

What we’re watching

We are monitoring the ability of Calgarians to pay property taxes, which appears to be strong. We are also actively managing The City’s debt financing, including longer term projections.

Future Focus Calgary trends related to this risk

Unpredictable Municipal Funding: Reduced tax and user fee revenues combined with demand for new services and community supports, as well as expectations to maintain existing levels of service, may create budget shortfalls. Cities may need to decide where to reduce spending and service levels, and/or to increase revenue sources by focusing on funding from other orders of government, implementing new revenue raising tools, or exploring intra-municipal and other shared-service agreements.

Digital Economy Shift: Calgary’s economy may shift to digital services with impacts to municipal taxes, policies, and bylaws. The rise of new businesses, entrepreneurship opportunities, side hustles and increased competition for tech talent may mean an evolving economy in Calgary. To maintain citizen trust and confidence, The City should keep pace with the digital economy shift including technological advancements, new service delivery models and workforce changes.

Response

Current

- Delay or reduce expenditures and hiring.
- Take calculated financial risk to lessen the impact on citizens.
- Set aside contingency for unpredictable recovery impacts.
- Use financial reserves to offer tax and rate relief.
- Updating the Long Range Financial Plan
- Monitor economic conditions using an established framework.

Upcoming

- Manage service reductions or service increases in alignment with financial capacity.
- Explore additional efficiencies.
- Leverage unfilled vacancies to sustain financial capacity.
- Make changes to the level of capital investment.
- Explore advocacy for provincial and federal funding ahead of their 2022 Spring budget.

Risk Legal Risk	Owner City Solicitor	Rating High
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Definition

Comprehensive business processes, along with intentional and informed decision making is necessary for the corporation to meet legal compliance requirements and otherwise conduct city business within corporate risk tolerance. This requires the provision of timely professional advice, the absence of which could result in financial losses or unnecessary business, legal or reputational risk for The City.

Context

Advice is not always sought in sufficient time to allow a strategy to be developed or action to be taken on a proactive basis, resulting in the corporation having to react to issues or lawsuits. This can impair the corporation’s ability to complete projects and conclude transactions on time, on budget and within scope, and may result in financial losses or unnecessary business, legal, financial, or reputational risk for The City.

What we’re watching

Rapid changes in technology usage to deliver services, the focus on social justice and equity, and climate concerns will lead to legislation changes that could impact The City’s ability to adapt policy and processes in compliance with new regulations.

Future Focus Calgary trends related to this risk

Government & Expert Distrust: The rise of conspiracy theories and misinformation along with the devaluing of scientific analysis and data may result in increased distrust, social unrest, and a decreased ability for Council to make and implement decisions effectively. Incorporating divergent views and finding common ground may challenge The City’s typical responses to legal compliance.

New Cyber Security Threats: With a dramatic increase in remote work and online engagement, cyber security threats may increase in complexity. New demographic groups (e.g. children, seniors) are also increasingly being forced online, but may lack experience to manage security concerns. Similarly, not all smaller businesses are equipped to develop secure online systems. The City should consider the broader implications to City programs and services including vulnerable populations.

Surveillance Tech: Deployment of surveillance technology, including facial recognition software and biomonitoring of wastewater without consent, has raised many concerns that may require increased security, consideration of data bias and the involvement of multi-levels of government. Balancing business need with the legal requirement to secure and protect information is a key consideration for The City.

Risk	Owner	Rating
Reputation Risk	City Manager	High

Definition

Residents, businesses, and strategic partners need to trust that The City will safely and effectively manage its resources and deliver valued services in an efficient, timely, fair, and equitable manner. Loss of confidence in our municipal government and local leadership will create problems in recruiting and retaining staff, negatively impact Administration’s working relationship with Council and other orders of government and may adversely impact residents’ quality of life and their perception of Calgary being a great place to make a living and make a life.

Context

Gaining a better understanding of public trust and reputation will help The City with long-term planning and strategy, bring new business and investment to the city, and build confidence around citizen accessibility, equity, transparency, and engagement. There are current challenges and issues facing Calgarians and Albertans such as the pandemic and pace of change, which could impact the ability of The City to proactively advocate with the provincial government and advance The City’s goals. With the recent election bringing in many new members of Council, there is an opportunity to strengthen the working relationship between Council and the province, as well as Council and Administration.

What we’re watching

Key drivers aligned with trust include transparency, reliability, collaboration and communication.

- There is a downward trend for residents who say they “trust The City”.
- The trend for working collaboratively with Council is stable.

Future Focus Calgary trends related to this risk

Government & Expert Distrust: The rise of conspiracy theories and misinformation along with the devaluing of scientific analysis and data may result in increased distrust, social unrest, and a decreased ability for Council to make and implement decisions effectively.

Digital Economy Shift: Calgary’s economy may shift to digital services with impacts to municipal taxes, policies, and bylaws. Rise of new businesses, entrepreneurship opportunities, side hustles and increased competition for tech talent may mean an evolving economy in Calgary. The City should keep pace with the digital economy shift including technological advancements, service delivery models and workforce to maintain citizen trust and confidence.

Response

Current

- Focus on better understanding drivers of trust and perceptions of reputation.
- Implement the Rethink to Thrive strategy to foster a business-friendly mindset, optimize financial sustainability, and enhance collaboration and innovation.
- Implement the Advocacy Strategy with other orders of government and municipal associations with a specific focus on Regional Strategy.
- Manage relationships with civic partners, business leaders, and community leaders.

Upcoming

- Continue to build trust with new Mayor and Council.
- Explore a consolidated, concentrated approach to reputation measurement to have data for senior administration to inform proactive risk, issue, and reputation management.
- Work closely with City Partners to build reputation and trust equity with businesses and residents across Calgary.

Risk Social Wellbeing Risk	Owner GM, Community Services	Rating High
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Definition

The sustained economic downturn and increasing social unrest (from large scale movements to local financial and social impacts of the pandemic) have negatively impacted the social wellbeing of our citizens by creating more disparate and complex social needs. Current conditions also reduce the capacity of the non-profit sector to respond, resulting in increased pressure on government to respond and fill the gap.

Context

When strategic partners experience financial constraints, this can lead to a trend of disinvestment in social programs and support. Currently, the demand for social programs is increasing due to the uncertain economic recovery and impacts of the pandemic. In particular, there is a need for affordable housing for those experiencing vulnerability, as well as mental health support. Also, the ability to deliver social programs due to internal and partner capacity concerns can increase exposure to this risk.

What we're watching

- One-half of Calgarians report that their mental health has worsened or is stable (48%) from Spring 2021.
- The waitlist for Calgarians seeking affordable housing continues to grow.

Future Focus Calgary trends related to this risk

Rise of Basic Income Programs: As more and more countries introduce unprecedented wage support programs, discussions around basic income increases globally.

Housing Struggles for Vulnerable Populations: COVID-19 has intensified pre-existing challenges with senior housing facilities and shelter systems, creating further push for improved housing services.

Global Citizen Unrest: Growing unrest and protests may unfold as residents respond to systemic challenges intensified by COVID-19 related impacts.

All for All: Addressing population health, climate change, and social, cultural, and racial equality through grassroots and multi-government levels may result in a new social landscape and new norms.

Response

To mitigate these risks and negative impacts, The City is committed to advancing the principles of social wellbeing; thereby targeting investments and developing different approaches for the equitable delivery of programs and services.

Current

- Focus on understanding and removing barriers to programs and services through the Equity portfolio and the Anti-Racism and Indigenous Relations Office Programs.
- Implement Calgary's Mental Health and Addiction Strategy.
- Work with the Calgary Police Service (CPS) to implement The Community Safety Investment Framework (CSIF) and continue its funding into 2022.
- Invested \$7.6 million of COFLEX funding in Affordable Housing.
- Develop housing units using CMHC Rapid Housing Initiative and City's non-profit land.

Upcoming

- Advance the maturity of the Principles of Social Wellbeing and adapt programs and services based on findings.
- Manage internal capacity by monitoring the risk of psychological health and safety of our staff and reprioritize work.
- Advocate for sustained funding for social programs through Intergovernmental & Corporate Strategy and Family and Community Support Services Alberta.
- Monitor socio-economic trends and City administrative data.

Risk	Owner	Rating
Service Delivery	GM, Operational Services	High

Definition

There is a risk that the quality of public-facing City services will decline over time. This stems from a range of factors, including: risks to service inputs (systems & processes, tools, infrastructure, people & culture), environmental factors (e.g., extreme weather, cyber threats, public behaviour), and performance gap (if our service outputs do not match citizen/business expectations). These factors can be interrelated, requiring a holistic risk response to manage effectively.

Context

There is an increased need for integration between departments due to the realignment, along with ongoing support for staff through the transition. The continued impact of the pandemic on certain services' revenue or demands (e.g., slowly recovering transit ridership) continues to magnify the impact of other service interruptions and delays.

A range of existing and emerging trends present several risks to service delivery.

- Challenges attracting, building, and retaining critical skillsets to compensate for retirements and loss of skilled employees.
- Constraints on operating funds needed to keep pace with growth and lifecycle renewal (e.g., absorption of new parkland), or to address cost variability for emerging requirements (e.g., electric vehicle fleet conversion).
- Increased automation in service delivery over time (e.g., robot-aided infrastructure inspection) requires identifying and bridging employee skill gaps.
- Disruptions caused by extreme weather events could temporarily prevent The City from providing critical services.
- Recent supply chain disruptions due to COVID, extreme weather, material shortages (e.g., microchips for vehicles) and international policies (e.g., recycling markets) pose a growing risk to service delivery.
- Cyber-terrorism and ransomware attacks pose an increasing concern to City operations and services.
- Remote work and growing demand for digital 'personalized services' may alter service and employee needs (format, location, time of day) beyond the pandemic.

The Service Delivery risk is closely linked to risks in Capital Infrastructure (e.g., increased operating costs for aging infrastructure and assets such as Plus 15 bridges and fleet vehicles), Emerging Technology & Employee Experience, and Financial Sustainability.

What we're watching

As the pandemic continues to evolve, we are monitoring service demand and revenue changes, and forecasting new post-pandemic service needs.

Future Focus Calgary trends related to this risk

Automation Acceleration: To support social distancing in the workplace, reduce labour costs and increase efficiencies, more companies consider opportunities for deploying labour automation technologies.

City on Demand: In the wake of COVID-19, online service delivery has increased along with investments in digital infrastructure that may result in increased demand for city-based digital services as well as personalized city services (e.g., different waste and recycling pick-up service options).

Climate Disasters: Cities continue to be at risk of flooding, drought, forest fires, extreme heat, and other climate related extreme weather events.

New Cyber Security Threats: With a dramatic increase in remote work and online engagement, cyber security threats may increase in complexity. New demographic groups (e.g. children, seniors) are also increasingly being forced online, but may lack experience to manage security concerns. Similarly, not all smaller businesses are equipped to develop secure online systems.

Deglobalization + Local Supply Chains: Global supply chain disruptions and lack of local manufacturing capabilities may result in a focus on local supply chains as well as inflation due to higher production costs.

Lagging Transit Ridership: Residents may avoid use of public transit unless it is the only available transit option to their destinations given fears related to social distancing and virus spread.

Remote Service Delivery: Within city government, digital government programs are being accelerated to provide remote service delivery. Changes to performance management may emerge as approaches to remote-work management evolves.

Response

Current

- Monitoring & adjusting services to accommodate changes and minimize revenue shortfalls.
- Building and maintaining a Water Utility sustainment reserve balance to ensure there is adequate funding for operations in case of revenue fluctuations.
- Modifying operational requirements and working with unions to mitigate risk of service cuts due to staff illness related to the pandemic.
- Exploring and implementing a range of actions to address supply chain disruptions where possible, including proactively working with suppliers, using reserves, exploring new local markets, and implementing process changes.
- Implementing a range of climate change actions to build climate resilience into decision making (e.g., The Water Utility’s climate change strategy), implement measures to mitigate future climate disasters (e.g., Park’s naturalization and tree replanting efforts, Facility Management’s emergency power generators at core facilities), and pilot alternative fuel vehicles to reduce emissions (e.g., Calgary Transit’s electric bus pilot).
- Leveraging new technologies, increasing the use of online service delivery, and piloting new service delivery models to connect with customers and get data to make informed decisions (e.g., Waste and Recycling in-truck technologies).
- Undertaking the Future of Remote Work initiative to respond to the post pandemic workplace and workstyles to meet the needs of citizens and The City.
- Working with Fleet Services customers to ensure proper lifecycle management of vehicles.
- Addressing workforce challenges to maintain the necessary skillsets on staff for continued service delivery to our customers.

Upcoming

- Capitalize on efficiencies from the organizational realignment to deliver service more efficiently and effectively.
- Explore how to strengthen our response to cyber security risks across Operational Services.

Risk	Owner	Rating
Sustainable City Risk	GM, Planning and Development	High

Definition

Economic, social, and environmental sustainability are critical for the City of Calgary. Significant contributing factors to this risk are variability in population growth, economic activity, and environmental trends. Impacts from this risk are also likely to be experienced to different degrees spatially within the city and more severely by marginalized groups. Associated long-term and wide-ranging risk considerations for not creating a sustainable city include financial, operational, social, environmental, regulatory and reputational considerations.

Context

There is an ongoing tension between supporting new development and our capacity to deliver existing services. Increased political focus on climate change and increased frequency of extreme weather patterns could impact priorities and actions regarding growth developments.

The City must balance economic, social, and environmental needs to improve the quality of life for citizens. Progress has been made implementing the Climate Resiliency Strategy and promoting sustainable transportation choices including access to the Primary Transit Network. However, more reduction in greenhouse gas emissions is required to meet targets. Opportunities can be realized with developing and implementing greener technologies.

What we’re watching

Core indicators of the Municipal Development Plan and Calgary Transit Plan in 2022, and ensuring that economic, social, environmental, equity and climate considerations are reflected.

Future Focus Calgary trends related to this risk

Climate Disasters: Cities continue to be at risk of flooding, drought, forest fires, extreme heat, and other climate related extreme weather events.

Green Energy Revolution: Net zero targets at the federal and municipal levels as well as carbon accounting at the municipal level may result in greater investment in renewable energy sources.

Nature is King: Due to COVID-19 restrictions, there has been an increased focus on quality of life and access to nature as a human right. This may result in a greater understanding of the value of ecosystem services and natural assets leading to a greater focus on equitable access to nature and investments in nature infrastructure.

Streets for Everyone: Globally, cities look to accelerate bike lanes, road design for active transportation, and social gathering spaces making changes to parking, increasing use of tactical urbanism, and further enabling non-mobility uses (e.g. street patios, pop-up parks).

Response

Current

- Adhere to strategic growth policies to address sustainable growth and climate change mitigation and adoption.
- Implement the Next Generation Planning Initiative to define sustainable growth at the local level and inform funding.
- Continue to implement these strategies:
 - Downtown Strategy
 - Citywide Growth Strategy
 - Climate Resiliency Strategy



Upcoming

- Update the Climate Resiliency Strategy and its Mitigations and Adaptation.
- Prepare modern Local Area Plans that guide sustainable development.
- Advance the Main Streets Program to create great places and spaces for people to live and work.

Appendix 1: The City's Risk Matrix

Level		Probability*	Impact				
Likelihood	5 Almost Certain	90% and greater	Medium	High	High	Extensive	Extensive
	4 Likely	65-89%	Low	Medium	High	High	Extensive
	3 Possible	35-64%	Low	Low	Medium	High	High
	2 Unlikely	11-34%	Slight	Low	Low	Medium	High
	1 Rare	10% and less	Slight	Slight	Low	Low	Medium
			1 Negligible	2 Minor	3 Moderate	4 Significant	5 Severe
			Minimal impact. Still able to achieve objectives without disruption.	Coping strategies required - able to be addressed with existing plans and resources.	Challenges to achieve objectives. Some delay, aspects of objectives only met in part.	Difficulties to achieve objectives. Delays or notable aspects of objectives not completed.	Unable to meet objectives due to serious, extended disruption.