

Summary of Environmental Scan for Strategic Risks

Administration conducted an environmental scan to understand the current global risk landscape. The scan identified key strategic risk trends through multiple global sources and subject matter expert research for these potential risks.

Risk reporting and industry-based studies are used globally to generate rich trend analyses and expert opinions. To integrate this into the City's work, the Enterprise Risk Management framework utilizes three sources of information to assist with understanding risks and trends.

1. World Economic Forum (WEF) Annual Global Risks Report (2024)

The World Economic Forum Global Risks Report provides a comprehensive and in-depth analysis of the present global risk environment. The report highlights the findings from its annual Global Risks Perception Survey, which brings together the collective intelligence of nearly 1,490 global leaders across academia, business, government, the international community and civil society, and its Executive Opinion Survey of over 11,000 leaders across 113 countries.

The 2024 report emphasizes the challenges posed by accelerating technological change and economic uncertainty, as well as the crises of climate change and conflict. It explores the impact of geopolitical tensions, active hostilities in various regions, and the consequences of extreme weather events in both the short and long-term.

The figure below provides the top 10 severe risks over a two and 10-year horizon as indicated in the WEF report. The risk category is provided in brackets.

Rank	Two Years	10 Years
1st	Misinformation and disinformation (Technological)	Extreme weather events (Environmental)
2nd	Extreme weather events (Environmental)	Critical change to Earth systems (Environmental)
3rd	Societal polarization (Societal)	Biodiversity loss and ecosystem collapse (Environmental)
4th	Cyber insecurity (Technological)	Natural resource shortages (Environmental)
5th	Interstate armed conflict (Geopolitical)	Misinformation and disinformation (Technological)
6th	Lack of economic opportunity (Societal)	Adverse outcomes of AI technologies (Technological)
7th	Inflation (Economic)	Involuntary migration (Societal)
8th	Involuntary migration (Societal)	Cyber insecurity (Technological)

Attachment 2

9th	Economic downturn (Economic)	Societal polarization (Societal)
10th	Pollution (Environmental)	Pollution (Environmental)

The report presents that nearly all environmental risks are among the top severity risks over the next two years, and continue to be the major longer-term global risks for the next ten years. Extreme weather events are anticipated to become even more severe, the top-ranked risk over the next decade, significantly impacting societies and economies worldwide. In recent years, Canada has experienced a heightened frequency of natural disasters, affecting the nation more intensely. Canadians have contended with wildfires, floods, drought, extreme heat and poor air quality. Recently, emergency response evacuation centers in Edmonton were activated to support displaced communities from Fort McMurray and Jasper due to wildfires in early May and late July 2024.

Misinformation, disinformation and cyber insecurity are the most prominent technological risks in the short term and remain in the top 10 over the long term. Cybersecurity breaches or disruptions in digital infrastructure could compromise sensitive data, disrupt services and erode public trust in the City's governance. Adverse outcomes of Artificial Intelligence (AI) technologies are moving into the top ranking in the next decade.

Inflation and economic downturns are among the top ten short-term risks. Economic fluctuations, including inflation and recession risks, can impact Edmonton's revenue streams, budget planning and overall financial stability. Managing these uncertainties requires robust fiscal policies and strategic planning. On the other hand, severity scores predicted for economic-related risks are predicted to improve over the next decade, as the report shows economic risks dropping out of the top ranking in the long-term landscape.

Geopolitical tensions and conflicts can lead to regional instability, affecting global peace and security. Ongoing conflicts in regions like Ukraine and the Middle East, continue to pose significant risks. The Russia-Ukraine war, in particular, has far-reaching implications for global security and economic stability. The recent Palestinian protests at the University of Alberta and Council meetings also highlight the polarized advocacy and support desired by groups involved in complex geopolitical issues, revealing the deep divisions that can exist within society. Edmonton is a diverse and multicultural community where these conflicts affect many Edmontonians, especially those with families in the affected areas. Promoting inclusive dialogue and understanding, and providing mental health and well-being support can minimize polarization's impact and build a more harmonious and cohesive community.

In conclusion, the Global Risks Report 2024 presents a comprehensive assessment of the complex and interrelated challenges facing the world. It underscores the urgency for

coordinated efforts to address the identified risks and opportunities while navigating the uncertainties of the future.

2. The Institute of Internal Auditors (IIA) Annual Risk in Focus Report (2024)

The "Risk in Focus 2024" Global Summary provides a comprehensive overview of the current and emerging risks identified through a worldwide survey of internal audit professionals. 2024 marks the first year Risk in Focus has been conducted worldwide. The report involved a survey of 4,207 Chief Audit Executives (CAEs) and directors from 111 countries/territories, conducted between February 15 and July 12, 2023. The survey was followed by 18 roundtables and 40 in-depth interviews, ensuring a comprehensive and diverse set of perspectives.

In this report, CAEs identified the need for a heightened focus on cybersecurity, digital disruption, human capital and business continuity while preparing for the rising challenges posed by digital disruption and climate change, as indicated in the following figure.



These risks were consistently identified across all regions, demonstrating their universal importance. Anticipated increases in audit efforts are aligned with the expected rise in risks for digital disruption and climate change.

Cybersecurity and data security are the highest-ranked risks, reflecting concerns about data breaches, ransomware attacks and other cyber threats. Meanwhile, **digital disruption** is one of the fastest-climbing risks due to the wide adoption and advancement in AI, as technology changes rapidly and future applications are unknown. These risks can disrupt business, compromise system safety and integrity, pose threats to customer information and privacy, increase costs, thereby threatening competitiveness. There will be a need for substantial investment in advanced cybersecurity technologies and training for staff to protect sensitive data. Developing robust cybersecurity policies and incident response plans are required to quickly address and mitigate cyber threats. Organizations that provide public services also need to ensure public trust by safeguarding personal information gathered and maintaining the integrity of services.

CAEs have identified risk levels related to **climate change** as significantly elevated in the next few years, and the risk continues to move up the agenda. This trend requires businesses to adopt more strategic responses to manage this challenge, extending beyond environmental protection and reducing carbon emissions to include adapting infrastructure and contingency planning for natural disasters. As a result, more businesses are integrating an ESG (Environmental, Social and Governance) focus into their planning and operations.

Human capital, including talent management and retention, remains a top priority for organizations as they adapt to new post-pandemic norms, including hybrid and remote work environments amid increased cost-of-living and business crises triggered by inflation. Survey results show that many organizations are facing challenges in attracting and retaining sufficient talent for rapidly evolving skill sets. For example, trends in digitization, climate change and cybersecurity require a greater range of skill sets than before. However, the growing demand for specialized skills empowers skilled workers to be more selective in choosing their employers. The report shows that businesses that prioritize culture transformation perform the best. Actions to increase workplace diversity and provide clear communication help attract staff, especially younger employees.

Cybersecurity, digital disruption, human capital and climate change risks have impacted organizations' **business continuity**. Effective business continuity planning has been a top priority for organizations to ensure critical operations can continue without significant interruption during and after risk incidents occur.

3. City staff expertise in areas of economics, environment, insurance and technology

Through discussions with internal subject matter experts and analysis of service level risk registers, the following risk trends are presented for contextual information:

- **Financial constraints:** Economic fluctuations and inflation impact the City's revenue streams, budget planning and overall financial stability. The City's spring 2024 long-term economic outlook shows a steady improving trend but the situation is still

financially challenging. The combination of high prices and higher borrowing costs is anticipated as a key risk to Edmonton's economic growth for 2023-26 budget cycle. Rapid population growth has increased pressures on service delivery, affordable housing strategy and infrastructure planning. The new provincial legislation Bill 18, is anticipated to increase barriers to federal funds flowing to Edmonton-based programs and initiatives, impacting cooperation opportunities with other municipalities and increasing competition for provincial resources. The City is mitigating the risks associated with financial constraints by diversifying revenue streams, optimizing budget allocation, promoting economic development, leveraging technology and using an integrated business plan and budget development process.

- **Governance and leadership:** Changes in senior leadership may result in a refreshed vision, shifts in work priorities and updates to existing processes and procedures. Additionally, a transition period is anticipated when a new City Manager is appointed. Comprehensive succession plans, ongoing communications and employee support networks can assist with a smooth transition during changes in senior leadership, maintain stability and continue achieving the City's strategic goals and priorities.
- **Technological Disruptions:** Technology and information play an integral role in how we deliver programs and services to Edmontonians. Cybersecurity threats and disruptions in digital infrastructure can compromise the city's data security, critical services and public trust. Incidents of unauthorized access, data breaches or loss of sensitive taxpayer information can damage the City's reputation, lead to legal liabilities and compromise public trust. Enhancing cybersecurity measures and investing in robust IT infrastructure are essential to safeguard against such risks, ensuring the safe and responsible use of technology and Edmontonians' data.
- **Business continuity during Enterprise Commons transition:** The transition to new technology in Enterprise Commons may result in short-term increases in errors, periods of blackout and inaccurate data and reporting, causing delays, disruptions and inefficiencies in service delivery. In addition, employees may struggle to adapt to the new system, leading to resistance and lack of user adoption. This may require a robust change management plan including communication, orientation, training and oversight.
- **Climate change:** The City is vulnerable to the impacts of climate change, including extreme weather, rising temperatures and related challenges such as flooding and infrastructure damage. These natural disasters have the potential to disrupt operations and affect service delivery. Climate resilience measures and adaptation strategies are essential to mitigate these risks. The City's Climate Change Adaptation and Resilience Strategy and Action Plan (2018) will continue to help the City understand the impacts of climate change and advance the work that can protect communities, infrastructure and services from changing temperatures, precipitation patterns, weather extremes and

ecosystems.

- **Labour Disruption Contingency Planning:** The City's complex, multi-union labour relations environment creates the potential for labour disruption, which requires continuous monitoring and updating of business area contingency plans.