

## Summary of Environmental Scan for Strategic Risks

The information on strategic risk trends across multiple global sources and subject matter experts’ research helps prepare leaders for these potential risks.

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

### 1. World Economic Forum (WEF) Annual Global Risks Report (2023)

The World Economic Forum Global Risks Report is a compilation of two surveys. The main survey is the Global Risks Perception Survey (GRPS), which comprises responses from nearly 1,000 global experts and leaders on risk. The second survey, supporting the report, is the Executive Opinion Survey of over 12,000 leaders across 124 countries. The report uniquely segments the trends on risks within short and long-term timeframes. The report’s timing allowed for its inclusion in the last Audit Report on February 13, 2023.

The figure below provides the top 10 severe risks over two years and 10 years:



Major financial, environmental and societal risks identified in early 2023 have continued as a risk for most of the year. In particular, the impacts of high inflation resulting in high pricing and costs continue to pressure the world economy. Interest rates worldwide have been steadily increasing as nations try to bring inflation down to a two per cent target.

Increasing global conflicts add uncertainty to geopolitical and economic stability. The war in Ukraine with Russia is reaching the two-year mark with no sign of resolution. Additional conflicts in northeastern Africa, in Eritrea, and Gaza add to instability that impacts the global community. Edmonton is a diverse community of people and multiculturalism, and conflicts overseas impact many Edmontonians, including those with families abroad. Increasing public gatherings for support and protest elevate public safety risks if gatherings become less peaceful.

Natural disaster response was felt across Canada more intensely this summer. Canadians faced wildfires, floods, drought, extreme heat and poor air quality. Emergency response evacuation centres in Edmonton were activated several times to support displaced communities such as Drayton Valley, Edson, Yellowknife and Hay River. The fire season also set a historic record of 291 smoke hours<sup>2</sup> in Edmonton with poor air quality. Increasing demand on major municipalities to support a much larger than traditional jurisdiction of response requires an increasing shift in planning, training and resources for emergency response.

In 2023, cybersecurity threats and attacks were elevated as a top 10 focus. The 2022 data suggested cyber threats increased globally by over 350 per cent since 2020 and have started to exceed the ability to respond. Cyber attacks increased further this year as criminals began using Artificial Intelligence (A.I.) to accelerate and increase the volume of attacks and advance spoofing techniques through A.I. augmented video and voice to mimic credible politicians and celebrities to scam innocent users. High-profile attacks on major hotels and casino chains emphasize the increasing volume of attacks while reinforcing that 95 per cent of cybersecurity incidents are traced to human error through fraudulent identity spoofs to gain the confidence of staff. Strong digital infrastructure controls with educated staff and process controls are all required to work in a system to reduce cybersecurity threats. Decreasing the use of aging and obsolete systems, software, and shadow IT systems will strengthen an organization's digital infrastructure for better defences. Vigilance and compliance from users to follow the controls are equally important, highlighting the requirement for refreshing protocols and continued training.

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<sup>1</sup> World Economic Forum Global Risks Report 2023 - Figure A: Global risks ranked by severity over the short and long term, page 6.

<sup>2</sup> Smoke hours are calculated when visibility is reduced to six statute miles or less.

Balancing focus on the immediate short-term risk with a solid view and plan to address long-term risks may be a challenge at times. However, developing strategies and prudent plans provide a roadmap of actions and required resources to align an organization to reach its goals and desired outcomes. Continued emphasis on the importance of “collaboration on global challenges” to prepare and mitigate these risks is paramount to success.

## 2. The Institute of Internal Auditors (IIA) Annual Risk in Focus Report (2023)

The IIA Risk in Focus report surveyed 4,207 executives globally, with 442 from North America. In addition, four roundtables and nine in-depth interviews were conducted in North America to gain further details and insights into the risks identified. The IIA report is focused on corporations with perspectives from the C-Suite and Chief Audit Executives across multiple industries. The report findings focus on the top risks in the short-term within a three-year time horizon and how internal auditors may support risk management activities to elevate mitigation and prevention.

Respondents indicated the top five risks currently and in three years, which are indicated in the following figure.



Corporations are intensely focused on cybersecurity and human capital risks with increasing concern for digital disruption and climate change. Cybersecurity threats disrupt business,

<sup>3</sup> Institute of Internal Auditors - North America Risk in Focus 2024 Hot Topics Report, Figure 6: Expected risk level change in 3 years - North America, Page 16.

compromise system integrity and safety, create information and privacy threats to customers, increase costs and threaten competitiveness. Increasing regulations for reporting also increases the demand for resources beyond providing protection and response. Businesses that are underprepared for cybersecurity risk losing more than just profit but reputation and credibility. The increasing volume and complexity of threats aided by A.I. have been experienced throughout the year. But it is not only businesses that are targets, government agencies, hospitals, and major utilities have all been targets for cyber attacks. Increasing demand for expertise and technical knowledge has created hiring competition in the industry to attract skilled professionals. Beyond expertise, organizations are focused on ensuring protocols are updated to meet emerging trends appropriately through reducing aging digital infrastructure, eliminating shadow IT and increasing training for all staff. The adoption and advancement in A.I. increases digital disruption risks as technology changes rapidly and future applications are unknown.

Human capital management remains a focus for organizations as work environments have changed post-pandemic with organizations finding new normals with hybrid and remote work environments. Organizations face increasing competition for rapidly changing skill sets required for workers, and to also ensure corporate culture aligns with the values of the workers. Many organizations continue focusing on diversity and inclusion goals to strengthen their organization and workforce. Research has shown a positive correlation between diversity and increased economic growth in businesses<sup>4</sup>. Growth and demand for specialized skill sets give skilled workers the ability to be selective when choosing an employer.

Climate change risks are demanding more strategic responses from businesses. Climate-related risks are expanding far beyond ensuring environmental protection and prevention in operations to reduce carbon emissions, increasing adaptation in infrastructure and contingency planning for natural disasters. Businesses are no longer competitive when only focusing on low-cost operations, in the case of extreme weather response. Without a robust adaptation plan to withstand nature and alternate supply chain options, businesses will incur much greater costs when unprepared and reactive. More businesses are adopting an ESG (Environmental, Social and Governance) focus to planning and operating their organizations.

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

Finally, through discussions with internal City staff experts and analysis of service level risk registers, the following trends are presented for contextual information:

- Financial constraints on budget and increasing costs - all business areas of the City are working towards finding efficiencies through improvement and service adjustments to

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<sup>4</sup> Institute of Internal Auditors North America Risk in Focus 2024 Hot Topics (page 28) based on research from Harvard Business Review article <https://hbr.org/2018/07/the-other-diversity-dividend>

## Attachment 2

ensure costs are contained, while working actively towards achieving a balanced budget.

- Governance and leadership during change due to restructuring and turnover of staff - staff are working to implement the shift in work as a result of the organizational change from reducing the number of departments from seven to five. In addition, there will be a transition when new leaders are in place in key corporate roles (Chief Communications Officer and Chief Climate Officer).
- City's competitiveness as an employer of choice in recruitment (competition for talent) and retention (career growth) - in a selection of specialized skill areas, competition has increased for recruitment across high-demand industries. Some examples are construction engineering, light rail construction engineering and climate change expertise.
- Misinformation - City staff continue to focus on communication and education to increase knowledge on service delivery and policy updates to ensure that the correct information is provided to the public in the right context.
- Change management needs for Enterprise Commons implementation - as the City moves closer towards implementation of the Enterprise Commons ERP (Enterprise Resource Planning) system, it is normal and expected that there will be change in processes that impact staff and business areas. Enterprise Commons is actively executing its change management plans and commenced with initial orientation and learning sessions with people leaders within the organization.

### Full Reports:

- *World Economic Forum 2023 Global Risks Report* - available at [www3.weforum.org/docs/WEF\\_Global\\_Risks\\_Report\\_2023.pdf](http://www3.weforum.org/docs/WEF_Global_Risks_Report_2023.pdf)
- *Institute of Internal Auditors 2023 Risk in Focus Report* - available at [theiia.org/globalassets/site/foundation/latest-research-and-products/risk-in-focus/risk-in-focus-survey-results-global-summary-2024.pdf](http://theiia.org/globalassets/site/foundation/latest-research-and-products/risk-in-focus/risk-in-focus-survey-results-global-summary-2024.pdf)