

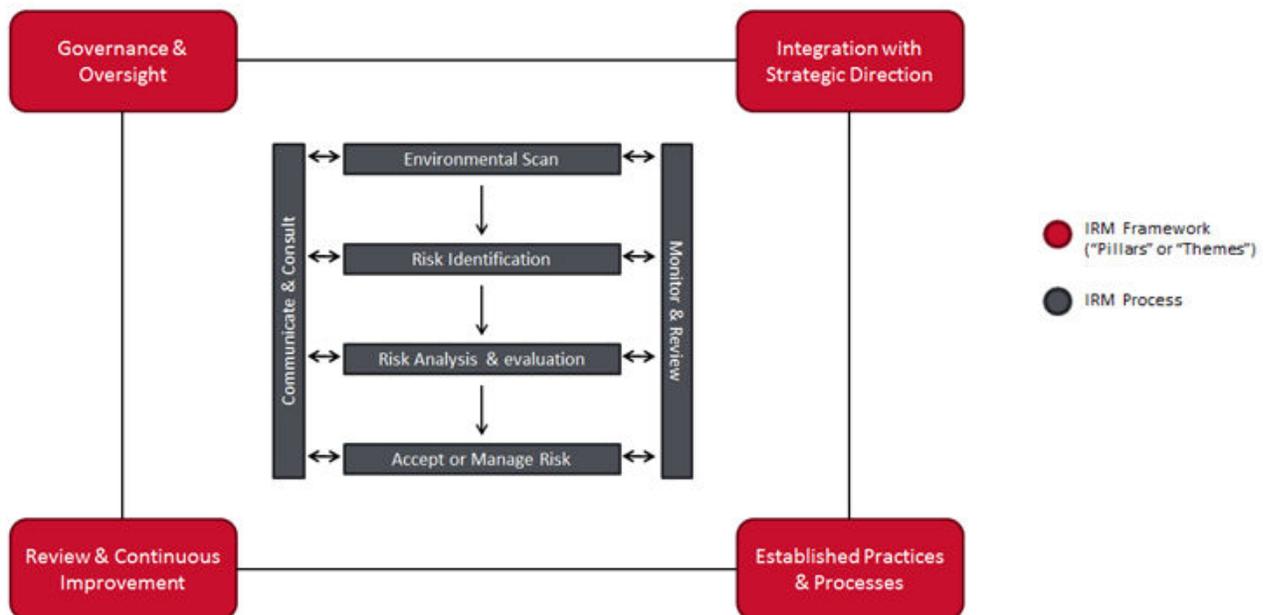
Integrated Risk Management Program Update

Introduction

This Attachment provides an update of the Integrated Risk Management (IRM) Program. The City's IRM Program consists of a risk governance framework and a well-established operating process (Diagram 1), both of which are underpinned by the essential qualities of The City's organization; competence, character, commitment and collaboration. The framework is based on the foundations of the ISO 31000 (Risk Management – Principles and Guidelines) Standard, which includes a systematic process for identifying, analysing/evaluating, treating, communicating and monitoring risks.

Diagram 1

Integrated Risk Management Program – Framework & Process



The City continues to demonstrate a proactive risk management culture, through its IRM Program, by maintaining a consistent and streamlined approach to the identification, assessment and management of risks inherent to the organization's strategies, activities and operations.

The July 2016 IRM Program Update report used the four foundational pillars of The City's IRM framework as key themes to provide the Audit Committee with assurance that The City has the appropriate processes in place to manage risks and opportunities effectively. To ensure consistency, the 2017 IRM Program Update report is also based on the following four themes:

- Governance and oversight
- Established practices and processes
- Integration of IRM within The City's strategic direction
- Review and continuous improvement

An overview of key improvements is included on page 5 of this Attachment.



Council and Administration continue to demonstrate a strong commitment to risk management by adhering to good governance and oversight practices. The policies, procedures and practices put in place continue to remain effective.

Council Policy - Council's IRM Policy (CC011) is purposed to embed a proactive, corporate-wide and systematic approach to manage risks that impact The City of Calgary's ability to achieve its objectives. The Policy outlines the Principles of Integrated Risk Management, Risk Tolerance, Managing Risks, Reporting to Council and Exceptions.

Council and Audit Committee Governance - The Audit Committee, on behalf of Council, is mandated to oversee the process of the City's Integrated Risk Management Program. This oversight includes receiving reports from Administration at least twice per year (one on The City's principal risks and one on The City's IRM Program) and reviewing on an annual basis reports on the adequacy of insurance coverage; legal compliance; Information Technology's risk management and other areas as determined by the Committee.

Administration Oversight – Administration's commitment to Integrated Risk Management is stipulated as a strategic priority within its Leadership Strategic Plan. The Administration Leadership Team (ALT) formally discusses business risks at least twice per year. All Principal Corporate Risks are also owned and proactively managed by members of the ALT.



Integrated Risk Management is designed to form an integral part of existing business processes and to inform The City's strategic direction. This is demonstrated in a number of ways:

Leadership Strategic Plan - In 2014 September, Council approved the Leadership Strategic Plan (LSP) which includes the implementation of a performance management system. IRM is one element of this system. The City's Principal Corporate Risks that are presented to the Audit Committee at the beginning of each year are organized around the five goals of the LSP. The City's Principal Corporate Risks are connected to the five components of the LSP, allowing for the strategic planning process to be grounded in risk transparency and insight.

Performance Management System - The Performance Management System (PM System) is a disciplined approach to continuous improvement designed to increase the organization's capacity, enabling The City to be efficient and effective as possible. This efficiency and effectiveness supports The City in achieving one of its major priorities – to better serve its customers, communities and citizens. Integrated Risk Management is one of the components within the system which supports The City's decision making by providing the organization with the framework to minimize downside risk, while maximizing opportunity.

Service Plans and Budgets - Further consideration of the integration of risk management with other components of the Performance Management System. One example involves working collaboratively with the Service Plans and Budgets team to incorporate IRM concepts into the design of processes for the next cycle.

Table 1 provides an overview of examples of the key role that IRM plays in supporting the goals of the PM System.

Table 1

| Benefits of PM System and the role of IRM | |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PM System Benefit | IRM Example |
| Supports a citizen focus | IRM provides processes which promote the safety and effectiveness of service delivery to citizens including, the ongoing consultation with business units for risk-based-decision making. |
| Helps the achievement of results | IRM provides a framework with supporting tools to proactively identify, analyze and treat the risks to achieving The City’s corporate results through the top-down and bottom-up risk management processes. |
| Supports decision making | IRM allows The City to strategize for downside risk and untapped opportunities by coordinating risk evaluation updates with the business plan and budget adjustment process. |
| Develops organizational capacity | IRM ensures risk is managed cross-corporately to allow resources to be assigned using a coordinated approach. |
| Connects the organization’s work cross-corporately | IRM provides risk management tools and processes (such as the Principal Corporate Risks) which help us transcend the silos and consider risk holistically, instead of by department. |



The City has many established practices and process which support effective risk management. The City’s IRM Model is based on the foundations of the ISO 31000 (Risk Management – Principles and Guidelines) Standard, which includes a systematic process for identifying, analysing/evaluating, treating, communicating and monitoring risks.

The City’s Principal Corporate Risks are identified using a combined bottom-up, top-down approach to risk management which includes:

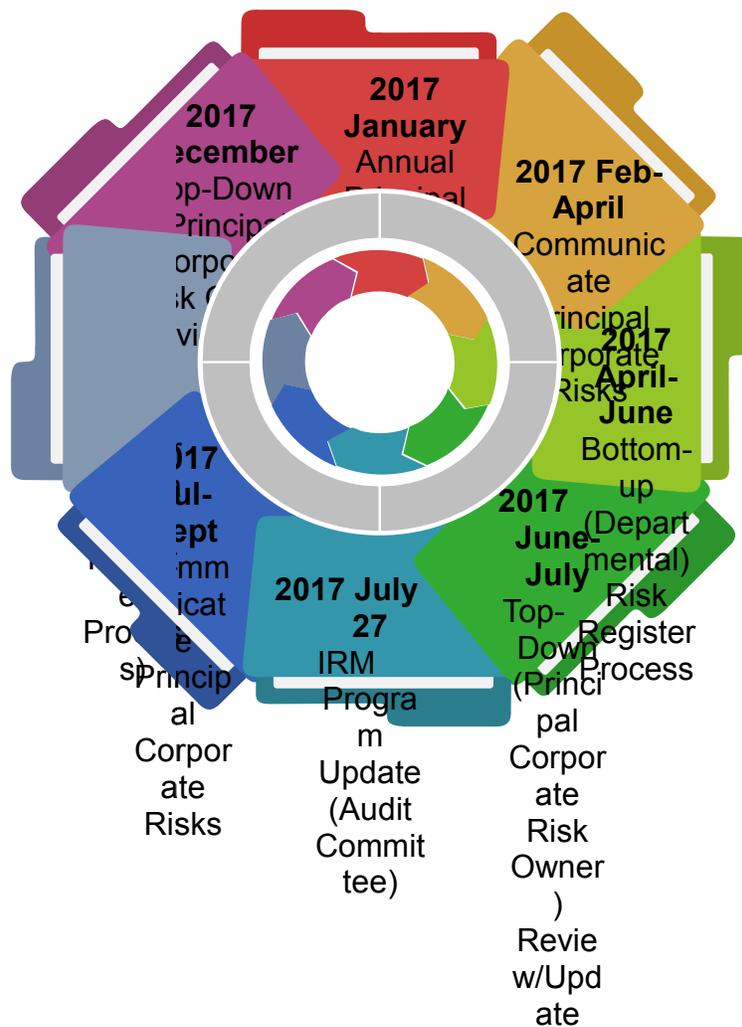
- Identifying risks at the project and business unit levels in the organization. Through a coordinated “corporate risk register process,” completed in conjunction with the business planning process, the business unit and project risks are aggregated and prioritized at a departmental level.
- Engaging the ALT in an extensive process to identify the Principal Corporate Risks associated with the Leadership Strategic Plan (LSP).
- Utilizing integrated risk management best practices to advance a proactive risk management culture across The City.

These risks are analyzed and evaluated using a common likelihood-impact risk matrix; and managed using a portfolio approach that optimizes trade-offs between risk and return across all business activities.

The City has a variety of mechanisms to communicate risk management practices including an Intranet site available to all staff, an IRM City-Specific course, and IRM facilitated workshops, discussions and consultations. Practices and processes are also in place regarding the reporting of risk. Council is informed of the Principal Corporate Risks in reports from Administration to Council and Committees of Council, in The City’s Annual Report, and in the Annual Principal Corporate Risk Report to the Audit Committee. Information on the Principal Risks is disseminated to the senior management team and key stakeholders in the organization to enhance understanding and awareness of the Principal Corporate Risks.

Diagram 2 provides an overview of the 2017 timelines for the bottom-up, top-down risk assessment and reporting processes.

Diagram 2: Principal Corporate Risk and Reporting Process





The IRM Program continues to evolve at The City. Administration continues to seek opportunities to advance a proactive risk management culture, through the IRM Program, by maintaining a consistent and streamlined approach to the identification, assessment and management of risks inherent to The City's strategies, activities and operations. In addition to regularly reviewing leading practices, internal stakeholder input is used to continuously improve established practices.

What has happened since July 2016?

During the second half of 2016, a number of improvements were made:

- Risk Reporting - Consistent biannual meetings with ALT to discuss risk identification, and to review the status of Principal Corporate Risks and response measures.
- Risk Prioritization - Enhancements in the approach for identifying and analyzing risks using a portfolio approach.
- Communication - Connecting with key stakeholders and communicating the IRM Program more effectively across the organization. This included regular discussions within departments about The City's Principal Corporate Risks to gain a collective understanding of the risks and the implications for their department.

Since the beginning of this year, and in keeping with good IRM practice, a number of additional steps have been taken to improve the IRM Program:

- Risk Awareness - Increased appreciation of the importance of proactive risk management through an increase in the delivery of IRM workshops, training sessions and group presentations across the organization.
- Risk Appetite and Risk Tolerance - Preliminary work has been started with the goal of establishing appropriate risk tolerance levels to help better manage residual risks. This includes gathering background information, researching good approaches that would work for The City, starting the conversation and obtaining initial inputs from key stakeholders across the organization.
- Tools for Report Writers - Developed suitable easy-to-use tools to support report writers with completing the risk assessment section of reports to Council and Committees.

What is happening next?

To ensure a steady pace of improvements is maintained for the IRM Program, other initiatives have been identified and plans have been put in place to investigate these initiatives and roll them out over the next coming years:

- Risk Appetite and Risk Tolerance - Establishment of an overarching risk appetite statement and appropriate risk tolerance levels that are easy to be applied, measured and reported on a regular basis.
- Risk Matrix - Switching from a 3x3 Likelihood-Impact Risk Matrix to 5x5 to add more rigour and enhance the effectiveness of the risk analysis and evaluation process. Based on insights from leading industry practices, and considering the diverse nature of The City's operations and



activities, a five point (5x5) Likelihood-Impact scale would provide a better dispersion suitable to support a meaningful differentiation for risk ranking and prioritization than the current three point (3x3) scale.

- Integrated Web-based Tool for IRM - Explore and, if feasible, migrate from the use of Excel spreadsheets to an integrated online tool. This would ensure effective controls are in place to manage access and changes to the risk registers and also add rigour to the roll-up process for analysing and consolidating the Principal Corporate Risks.