Enterprise Risk Management
Status Report

October 22, 2003
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History

On August 29, 2000 City Council approved the following motion: “That the mission, role and responsibility of the Auditor be redefined as described in the 'Best Practice Review' (Attachment 1 of the May 3, 2000 Office of the City Manager report).” One of the recommendations contained in the attachment related to implementation of Enterprise Risk Management (ERM) as a corporate initiative.

On December 7, 2000 SMT agreed to an OCA proposal that ERM be undertaken as a joint initiative with involvement of both the OCA and the Administration. The project was subsequently titled Corporate Business Risk Planning (CBRP) to more explicitly link it to the Corporate Business Planning Process.

On September 4, 2003 SMT approved the Corporate Business Risk Planning Risk Management Model, directing that the model be integrated with Corporate Business Plan initiatives and applied to activities of the Office of Infrastructure and Office of Emergency Preparedness.

Introduction

The ultimate goal of the Corporate Business Risk Planning project is to develop a risk management methodology that is self-sustaining and will identify current and potential risks to the Corporation, categorize them, and ensure that each one is being appropriately managed. Adoption of the CBRP model will result in:

- Endorsement or enhancement of existing risk management activities (such as the City’s Infrastructure Strategy, insurance, security, etc.),

- Development of a process to address risks not previously identified or not yet identified at an appropriate level of the organization, and

- Development of a framework to prioritize all risks within the context of corporate business planning.

Currently there are a number of processes in place that include some type of risk assessment. These include Corporate Business Risk Planning, Infrastructure Strategy, Emergency Preparedness, Environmental Management and departmental strategic planning.

Implementation of an effective ERM methodology can have a significant impact on the risk culture of the corporation with the process combining an inward looking
(operational) focus with a forward thinking (strategic risk) initiative. Implementation of the CBRP model will also foster a risk-smart culture. In this risk-smart culture, managers will be more aware of business risks the corporation faces and how they relate to their operational areas. This information will be used to better manage risks and make more informed decisions. The CBRP process will ultimately improve the corporation’s strategic planning process and reduce the level of risk faced by the organization.

**CBRP Risk Management Model**

The following diagram illustrates the phases in the CBRP risk management model. A description of these phases is provided in Appendix 1.
Key Roles

The Audit Committee is responsible to City Council for oversight of the CBRP process.

The Office of the City Auditor is responsible for periodically examining and evaluating the effectiveness of the CBRP process.

The Senior Management Team (SMT) is responsible for championing the CBRP process, approving the CBRP model, confirmation and approval of risk assessments, and prioritizing and assigning resources to manage identified risks.

All Employees are responsible for staying aware of and attentive to risk management issues and practicing risk-smart behaviors

Implementation Plan

With approval of the CBRP model, efforts are now focused on developing detailed plans to integrate the model into the business planning process and training staff on use of the risk identification and assessment techniques included in the model. The integration will not be completed for the 2004 or 2005 business planning cycles.

The following diagram illustrates the planned activities and timeframe for the implementation of the CBRP process for the high-level business objectives contained in the City’s published business plans.
Phase 1 – Understand Objectives
The first phase of the risk management model is to understand the organization’s objectives, strategic direction, stakeholders, and structure. This understanding includes both the corporate objectives and the specific business area objectives. At the corporate level, the Corporate Business Plan has been accepted by all stakeholders as the primary document that forms the basis for the delivery of City services. This document sets out corporate goals and major issues that must be addressed to achieve the goals.

Phase 2 – Risk Identification
The second phase of the model is to document the consequence each risk event will have on the corporate and specific business objectives identified in phase 1. Risk refers to the uncertainty that surrounds future events and outcomes. It is the expression of the likelihood and impact of an event that has the potential to influence the achievement of an organization’s objectives.

There are a number of steps in the risk identification process. The first is to identify risk events that could prevent the achievement of a business objective. To help ensure that all significant risks are identified, the process must involve the right people and where appropriate, subject matter experts. The process may include stakeholder surveys, facilitated workshops, structured analysis, etc.

The next step in the risk identification process is to prepare a risk statement that clearly and concisely describes the risk that is to be assessed. Analysis of risk statements will be undertaken to identify relationships that may exist among risks.

Once a risk statement has been prepared, the detailed impacts or concerns related to the risk are to be identified along with the measures or mechanisms that are in place to mitigate the impact and/or the likelihood of an occurrence of the risk event.

To ensure that no significant risks are overlooked and to minimize duplication, the CBRP process will be coordinated and interfaced with purpose-specific assessment processes that are currently in place (Plan Edmonton, Emergency Preparedness, Infrastructure Strategy, Workforce Planning, OCA Annual Work Plan, etc.).

Phase 3 – Risk Assessment
Risk assessment is a snapshot at a specific point in time. Assessments are to be undertaken or updated annually as part of the business planning process. Risk assessment is a three-step process involving departmental, corporate and Senior Management teams.
Step 1 – Quantitative Assessment of Identified Risks

Assessments of both inherent risk (risk without consideration of any mitigating effects of controls) and residual risk (risk remaining after taking into account the effectiveness of existing controls) will be completed by the departments or business units that could be affected by a particular risk. The assessment includes consideration of the magnitude or impact the risk event will have on business objectives should it occur, as well as the likelihood that the impact described in the risk statement will occur.

The assessment tool developed by the City will be used to facilitate the quantitative assessment of the identified risks. The following risk assessment matrix illustrates the six levels for assessing the magnitude or impact on objectives and the six levels of likelihood that a risk will occur.

<table>
<thead>
<tr>
<th>MAGNITUDE/IMPACT</th>
<th>Negligible</th>
<th>Marginal</th>
<th>Moderate</th>
<th>Substantial</th>
<th>Severe</th>
<th>Disastrous</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGHLY LIKELY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LIKELY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SOMEWHAT LIKELY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UNLIKELY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VERY UNLIKELY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EXTREMELY UNLIKELY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The magnitude/impact of risks will be assessed from three perspectives, that of the business area, the corporation and the citizen. The criteria used for this assessment are:

<table>
<thead>
<tr>
<th>Business Area Criteria</th>
<th>Corporate Criteria</th>
<th>Citizen Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Service delivery</td>
<td>• Financial</td>
<td>• Citizen Feedback</td>
</tr>
<tr>
<td>• Employee safety</td>
<td>• Environment</td>
<td>• Phone calls, letters, rallies, survey results, etc.</td>
</tr>
<tr>
<td>• Infrastructure capacity</td>
<td>• Economy</td>
<td>• Media attention</td>
</tr>
<tr>
<td></td>
<td>• Legislated/legal requirements</td>
<td>• Public safety</td>
</tr>
</tbody>
</table>
Step 2 – Subjective Assessment and Corporate Prioritization

The members of a corporate team will complete this step using information provided by the departments. There are two objectives for this assessment:

- First, to provide a corporate perspective on the risks that departments have rated the highest.
- Second, to prioritize identified risks corporately for presentation to SMT. Risks will be prioritized as:
  - High if there is significant threat with potential to impact multiple departments,
  - Medium if there is significant threat with potential impact limited to a single department or moderate to low threat with potential to impact other departments, and
  - Low if there is moderate to low threat with potential impact limited to a single department

Step 3 – Validation and Approval of Corporate Priorities

SMT will be provided with the information from the quantitative assessment for the higher rated risks as well as the results of the subjective assessment. After taking into account factors which may not have been apparent during assessment steps 1 and 2 as well as any additional information available from other processes SMT will identify the risks they consider to have the greatest potential impact on the corporation and assign the appropriate levels of resources to address each of the risks.

Phase 4 – Risk Response

Based on the priorities established by SMT and the total risk scores assigned by departments in the assessment phase the following risk responses are suggested.

<table>
<thead>
<tr>
<th>Total Risk Score</th>
<th>Category</th>
<th>Suggested Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Less than 10</td>
<td>Negligible</td>
</tr>
<tr>
<td>4</td>
<td>10 – 49</td>
<td>Acceptable</td>
</tr>
<tr>
<td>3</td>
<td>50 – 499</td>
<td>Marginally Acceptable</td>
</tr>
<tr>
<td>2</td>
<td>500 – 1999</td>
<td>Undesirable</td>
</tr>
<tr>
<td>1</td>
<td>Over 2000</td>
<td>Intolerable</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resources to be dedicated to ensuring risk is properly managed and monitored.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Resources to be assigned to ensure risk management measures are in place and periodically monitored.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Risk management measures to be in place and reviewed periodically.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acknowledge and monitor risk with appropriate resourcing.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Accept risk and evaluate the need for resourcing.</td>
</tr>
</tbody>
</table>
Risk Response Techniques

Following assignment of corporate priority and responsibility for managing the identified risk, an appropriate risk management technique will need to be applied. Each of the following risk management techniques can be applied to a risk either singularly or in combination.

- Terminate or Avoid
- Transfer
- Treat or Reduce
- Tolerate or Accept

Each risk needs to be assessed to determine the most appropriate technique to be applied. The assessment should take into account the potential cost of an occurrence as well as the cost of implementing the mitigating measures.

Whatever decision regarding technique is made needs to be documented. Following implementation, the measure or mechanism used is to be recorded.

Phase 5 – Monitoring and Reporting

Monitoring and reporting mechanisms for risk management activities will be developed to provide feedback to management and other interested parties (e.g., Audit Committee, City Council, SMT, etc). Collection of information and reporting of results will be incorporated in existing monitoring and reporting tools and those under development to enhance the effectiveness of management reporting.