ATTACHMENT 1

HALIFAX

P.O. Box 1749
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Item No. 11.1
Audit and Finance Standing Committee
April 13, 2016

TO: Chair and Members of the Audit and Finance Standing Committee

Original Signed

SUBMITTED BY:

Amanda Whitewood, Director of Finance & ICT/CFO 902.490.6308]

DATE: April 3, 2016

SUBJECT: Risk Management Governance

INFORMATION REPORT

ORIGIN

At the April 5, 2016 meeting of Regional Council, Council was advised that future consultation and reporting on HRM's Risk Program will be through the Audit and Finance Standing Committee, as per the Audit and Finance Standing Committee terms of reference.

LEGISLATIVE AUTHORITY

48 (1) The Council shall annually appoint an audit committee.

The Terms of Reference for the Audit and Finance Standing Committee state:

1 (1) The purpose of the Audit and Finance Standing Committee is to provide advice to the Council on matters relating to audit and finance.
(2) The other purposes of the Committee are to:
(a) fulfill the requirements as outlined in Section 48 of the HRM Charter; and
(b) assist the Council in meeting its responsibilities by ensuring the adequacy and effectiveness of financial reporting, risk management and internal controls.

4. The Audit and Finance Standing Committee shall:
(d) ensure the adequacy and effectiveness of the systems of internal control in relation to financial controls and risk management as established by Administration;
(e) review bi-annually with management the enterprise risk management and financial implications coming from such including: Environmental, Human Resources, Operational and the insurable risks and insurance coverage strategy of the municipality; and

BACKGROUND

Staff have been developing a risk program for HRM since 2012. The four main activities have been:

1. An Inventory of existing risk practices.
2. A strategic risk assessment for the municipality
3. Adding a risk section to Council reports
4. Developing a risk strategy
5. Staff training

The April 5, 2016 staff report to Council dealt with adding a risk section to Council reports as contemplated in the risk strategy as well ongoing oversight of the risk program development by the Audit and Finance Standing Committee. The subject of this supplementary report deals with the Audit and Finance Standing Committee oversight of HRM's Risk Program.

DISCUSSION

Staff is using the ISO 31000 Standard on Enterprise Risk Management (ERM) to guide the risk management program development. Implementing ERM in an organization is about culture change, creating an environment where risk consideration is not an add on, but simply the way an organization functions on a day to day basis. Changing culture and behaviour takes careful planning, patience and perseverance to net incremental improvement over time. Staff is approaching risk management with this long term sustainable change in mind.

As indicated in the April 5, 2016 information report to Council, the purpose of this report is to update the Audit and Finance Standing Committee of the status of the risk program development.

Inventory of Risk Practices
The Risk and Insurance section within the Legal Services Business Unit has responsibility for all insurable risks. This function is well managed and works well with operational managers throughout the organization.

An inventory of risk practices showed that business units are managing risks within their operations on an on-going basis. Finance and ICT track risks associated with financial controls and IT security. Police and Fire track risks associated with public safety. Parks and Recreation track risks associated with the operation of the various recreation programs and facilities, most relating to safety of the participants and staff. There is a need for more consistency in the evaluation of the risks and more rigour in guidelines for reporting and escalation. This will be address as implementation of the recently adopted Risk Strategy commences.

Strategic Risk Assessment
Commencing with the 14/15 business planning cycle, a risk assessment was conducted for all Council Priority Outcomes. The objective of this exercise was to identify, evaluate and treat any risks that could prevent Halifax from achieving the Council priorities. Several of the initiatives in the subsequent business plans are mitigation actions resulting from this work. These risks have been entered into a risk register, summarized, and continue to be refined and monitored.

Risk Consideration in Council Reports
At the April 5, 2016 meeting of Regional Council, Council was advised that a new Risk Consideration section has been added to the standard report template. Adding a risk consideration section to staff reports will achieve the following outcomes in support of HRM's risk management program:

- Further integrate risk into organizational processes (ISO 31000 4.3.4)
- Formally advise Council of risks associated with the subject in question (transparency)

- Heighten staff attention to risks associated with recommendations (culture)
- Assure the public that HRM is proactively considering risks (credibility)

Risk Strategy
The Risk Strategy (Attachment 1) has been reviewed by senior management and approved for implementation by the acting CAO. An implementation plan is under development which will identify activities and actions necessary to realize the benefits of the strategy.

Risk Program Governance
The Risk Strategy includes a roles and responsibilities section, establishing the overall governance model for the risk program. Consistent with the committee terms of reference, the roles and responsibilities outlined in risk strategy states:

"Audit and Finance Committee provides assurance to the Council on the effectiveness of the risk management framework and its application."

The implementation plan will include training and orientation on the overall governance of risk and staff will be developing targeted orientation for all roles within the strategy, including the Audit and Finance Standing Committee.

Staff will provide the Audit and Finance Standing Committee with updates on the evolution of the risk program and seek direction on adjustments to ensure adequacy and effectiveness of all aspects of risk management.

FINANCIAL IMPLICATIONS

There are no direct financial implications of this report, however heightened attention to risks, including financial risks should serve to minimize negative financial impacts into the future.

COMMUNITY ENGAGEMENT

There was no community engagement in the preparation of this report.

ATTACHMENTS

Attachment A – HRM Risk Strategy

A copy of this report can be obtained online at http://www.halifax.ca/council/agendasc/cagenda.php then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

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Original Signed

Report Approved by: Amanda Whitewood, Director of Finance & ICT/CFO 902.490.6308]

Risk Management Strategy

FINAL

October 2015

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Preface

This Risk Management Strategy is intended to be a high level document that provides a framework to support Halifax Regional Municipality's responsibility for managing risk. It also allows the Municipality to further strengthen and improve its approach to risk management enhancing its ability to deliver its corporate aims and objectives successfully.

The Risk Management Strategy sets out key objectives across a three year rolling period but will be reviewed annually to ensure it remains fit for purpose.

Version Control

Date	Version Number	Comments
30.05.14	1.0	Risk Management Strategy created
09.07.14	2.0	Updated from CFO meeting on 27.06.14
28.07.14	3.0	Updated from CFO meeting on 28.07.14
15.04.15	3a	Updated by CFO
15.04.30	4.0	Updates by CFO
15.10.15	5.0	Final Approved by Senior Management

HALIFAX REGIONAL MUNICIPALITY'S

RISK MANAGEMENT POLICY STATEMENT

HALIFAX REGIONAL MUNICIPALITY (HRM) RECOGNIZES AND ACCEPTS ITS RESPONSIBILITY TO MANAGE RISKS EFFECTIVELY IN A STRUCTURED MANNER IN ORDER TO ACHIEVE ITS OBJECTIVES AND ENHANCE THE VALUE OF SERVICES PROVIDED TO THE COMMUNITY

In pursuit of this policy, HRM has adopted a risk management strategy that captures the following key objectives:

- Enables corporate, business unit and program objectives to be achieved and to manage risks and maximize opportunities which may impact on HRM's success;
- HRM recognizes its responsibility to manage risks and support a structured and focused approach that includes risk taking in support of innovation to add value to service delivery;
- Risk management is seen as an integral element of the corporate culture.

These key objectives will be achieved by:

- Establishing clear roles, responsibilities and reporting lines for risk and their controls at all levels;
- Ensuring the communication of risk information to decision-makers up and down the organization (as a mechanism for the governance of risk management) as opposed to a prescriptive mechanism for the management of specific risk;
- Ensuring that senior management, Council members, external regulators and the public at large can obtain necessary assurance that the Municipality is managing risks and managing opportunities to deliver more value to the community;
- Providing opportunities for shared learning on risk management across the Corporation and its strategic partners;
- Monitoring on an on-going basis.

APPETITE FOR RISK

Halifax Regional Municipality seeks to minimize unnecessary risk and manage related residual risk to a level commensurate with its status as a public body so that:

i. The risks have been properly identified and assessed;
ii. The risks will be appropriately managed, including the taking of appropriate actions and the regular review of risk(s):

Halifax Regional Municipality will also proactively decide to take risks in pursuit of its strategic aims where it has sufficient assurances that the potential benefits justify the level of risk to be taken.

GUIDING PRINCIPLES

The following principles shall guide the risk management practices of Halifax Regional Municipality:

Principle 1: Clearly defined purpose, roles and responsibilities

Principle 2: Demonstrate the Municipality's shared values through our people, performance and conduct

Principle 3: Commit to continually improve and add value in all we do

Principle 4: Comprehensively measure and report on our risk performance

Chapter 1: Introduction

Halifax Regional Municipality (HRM) is Nova Scotia's largest and most diverse municipality with more than 43 per cent of the province's population residing within its boundaries.   The land area of the municipality – equal to 5,577 square kilometers (2,224 square miles) or slightly larger than Prince Edward Island - is home to 408,700 residents living in nearly 200 communities.

In this expansive and rapidly changing environment, with changing demographics and the continual demand on services, HRM is faced with challenges to deliver its statutory obligations, provide continued high quality services, without increasing the tax burden on citizens and businesses.

All public sector entities face pressures to innovate and do things differently in order to achieve better outcomes and meet the expectations of governments, stakeholders and citizens.   This Strategy, together with the Making a Difference handbook and the associated Plan on a Page has been developed to empower change and provide guidance on the Municipality's approach to managing both opportunities and threats within the business environment and through adoption will help to create an environment which leverages emerging trends and their transformative benefits.

HRM is committed to ensuring risk management is a core capability and an integral part of all corporate activities. Only by active management of risks will Halifax Regional Municipality be able to meet its corporate objectives which, in turn, will enhance the value of services provided to the Municipality.

What is Risk and Risk Management?

Managing risk at HRM is an integral part of good management practice and is something many managers do already in one form or another by implicitly building it into their programming and decision-making.

Although the term “risk” may not be used when these activities are undertaken, the concept of risk is central and the activities share a common objective, namely to recognize and prepare for a range of possible future outcomes.

The word “risk” is a very common term used in everyday language and will be referred to by many professions from both the public and private sector. It is a concept which has grown from being used to describe a narrow field of risks which are to be avoided, to a wider, more holistic focused world where importance is placed on seizing opportunities and how to manage risk rather than avoiding it.

The following definition for risk has been adopted by Halifax Regional Municipality:

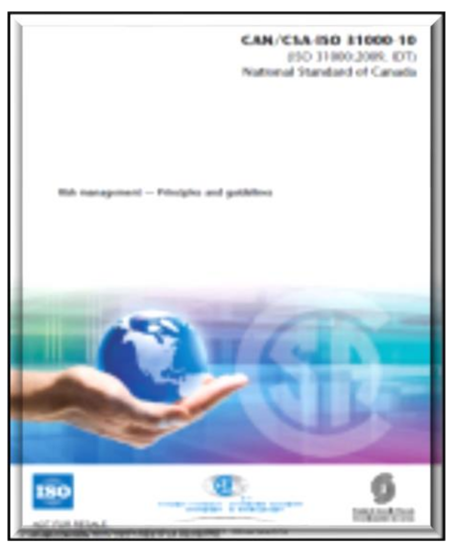
“The effect of uncertainty on objectives”

Risk management is a business discipline that managers employ to achieve objectives in an efficient, effective and timely manner. Our risk management definition is:

“The systematic application of principles, approach and processes to the tasks of identifying and assessing risks, and then planning and monitoring risk responses.”

The Enterprise Risk Management (ERM) Program is the name given to the Municipality’s organizational-wide approach to risk management and is designed so that potential risks and opportunities are identified, prioritized and managed on an ongoing basis. The ERM framework is based on internationally recognized risk management principles from ISO 31000 to manage change and uncertainty. While all organizations manage risk to some degree, this International Standard establishes a number of principles that need to be satisfied to make risk management effective.

The ERM framework will apply to all Business Units at strategic and operational levels, and will assist in achieving HRM’s strategic objectives by bringing a leading practice and a systematic approach to identifying, analyzing, mitigating and reporting on risk and control.



Purpose of this Strategy

Municipalities and Cities are, by their very nature, complex public sector entities comprising a number of business units with very diverse operations along with numerous laws, regulations, policies and agreements affecting their operating environment. By adhering to this strategy, Halifax Regional Municipality will be better placed to meet all its objectives in an efficient, effective and timely (focused) manner as well as create a culture of innovation that continually seizes opportunities.

Every strategic risk is linked to a priority outcome and this strategy will help enforce a proactive stance to managing these risks, ensuring that less time is spent reacting to situations and more time is spent taking advantage of opportunities.

Listed below are some of the benefits of successfully implementing this strategy:

- Facilitate open communication up and down the organization and between the administration and Halifax Regional Council with respect to risk;
- An increased likelihood that strategic objectives will be achieved by understanding critical risks and opportunities impacting them;
- Protecting and enhancing Halifax Regional Municipality’s reputation;
- Greater transparency in decision-making and enhanced ability to justify actions taken;
- Better management and partnership working with HRM partners, improving safeguards against financial loss and reducing chances of organizational failure;
- Increased innovation and improvements in service delivery;
- Common understanding of risk management terminology for consistency and ease of application;
- Effective resilience to changing environmental conditions, to protect key services

Chapter 2: Why Manage Risks

Effective risk management is an on-going process with no overall end date as new risks (threats and opportunities) arise all the time. HRM is fully committed to developing a culture where risk is appropriately and effectively managed for which the following benefits will be achieved:

- An increased focus on what needs to be done (and not done) to meet objectives;
- More effective allocation of resources reducing incidences of mistakes and providing greater control of costs – demonstrating value for money
- Greater transparency in decision-making and enhanced ability to justify actions taken;
- Improved resilience against sudden changes in the environment, including, but not limited to, natural disasters and risks related to supplier failures;
- Reduction of the Corporation's insurance costs, in turn, protecting the public purse;
- Improved safety for staff, partners and residents; and
- Minimized losses due to error or fraud across the Administration
- Ability to proceed without certainty

Risk-Based Governance and Innovation

Innovation by its very nature involves taking risks. This places greater demand on all of us to ensure that those risks are well managed. One of the key aims of risk management is to ensure that the process supports innovation, not by preventing it, but rather helping to take well thought through risks that maximize the opportunities of success.

Risk-based governance ensures that the community has trust and confidence in the decisions we make together. It is the systems, processes, policies and practices developed to deliver efficient and effective decisions, services and facilities so that they meet the municipality's objectives of a sustainable, vibrant, livable, mobile and prosperous community. Important indicators of success also include:

- The Mayor and Councillors providing risk-based governance and leadership to the community while reflecting the community's collective aspirations;
- A "risk aware" culture and principles that are part of the lifeblood of HRM and are understood across the organization as they are the foundation of the Municipality and affect every aspect of business from decision-making, financial viability to ultimately its long-term sustainability
- A corporate strategy that ties back to risk management policy principles so employees understand the importance of a "risk aware" culture and how it contributes to HRM's success.
- A "risk aware" management and staff culture which supports the effective and consistent management, reporting and escalation of risk;
- Increase opportunities and secure positive outcomes through responsible risk taking such as the provision of services which meet the community's needs sometimes in partnership with other levels of government, business or community organizations using innovative forms of delivery,

- Highlight the core values of HRM, and publicize what HRM stands for by incorporating employee perspectives on HRM's "risk aware" culture to attract the right type of people and the next generation of leaders while ensuring cultural alignment

Roles and Responsibilities

The Municipality considers risk management to be an intrinsic part of the organization's system of corporate governance. It is recognized that for this to be effective, it is vital that everyone within the organization understand the role they play in the effective management of risk. Outcomes of this strategy will be achieved by working closely with many business units such as Legal Services: Risk and Insurance, FICT: Corporate Planning, Planning and Development and more. The ultimate responsibility for risk management lies with the Chief Administrative Officer, however, it must be stressed that **risk management is the responsibility of everyone working in, for, and with Halifax Regional Municipality.**

Tier	Responsibility
Chief Administrative Officer	Overall accountability for risk management. Oversee the significant risks faced by the organization in delivery on priorities, receiving regular reports from Directors identifying the significant risks and providing assurance that appropriate mitigation action has been identified and implemented.
Chief Financial Officer or Risk Management	The 'Risk Management Champion', promoting risk management and leading Senior Management engagement.
Audit & Finance Committee	Providing assurance to the Council on the effectiveness of the risk management framework and its application.
Executive Management (CAO/DCAO)	Promoting, steering and monitoring risk management for the organization.
Business Unit Directors (SMT)	Accountable for effective risk management within their Business Units – this accountability cannot be delegated. Directors will provide assurance as to the effectiveness of the internal control environment.
Business Unit Risk Coordinators	Promoting, facilitating and championing the implementation of risk management within their BUs. Provide advice and guidance on the application of the Risk Management Strategy. They are the first point of call for risk related matters for their Business Unit providing operational support.
Service/Project Managers	Accountable for effective management of risk within their areas of responsibility
Risk Owners	The person that is accountable for the overall management of the risk, including bidding for resources to control the risk.
Control Owner	The person that has accountability for a particular task to control an aspect of the risk, either the Cause or the Effect. The role is accountable to the Risk Owner.
Employees	Maintaining an awareness / understanding of key risks and management of these in day-to-day activities. If an employee does not have control over the occurrence of a risk, the employee will implement strategies to reduce the impact of the risk if it does occur.

Chapter 3: The Risk Management Process

Risk management is the process by which risks are identified, evaluated, controlled and monitored at regular intervals. It is about managing resources wisely, evaluating courses of action to support decision-making, protecting clients from harm, safeguarding assets and the environment and protecting the Municipality's public image.

Whenever an activity takes place, there will be an outcome that will either lead to a success or failure. In undertaking the activity, there will be a number of factors which need to be right to determine whether the activity is a success or not, or to put it the other way round, there are a number of risk factors which, if they are not managed properly, will result in failure rather than success.

Risk Management is also a business planning tool designed to provide a methodical way for addressing risks. It is about:

- Identifying the objectives and what can go wrong;
- Acting to avoid it going wrong or to minimize the impact if it does;
- Realizing opportunities and reducing threats.

The Evolution of Risk Management

The evolution of risk management from "Traditional Risk Management" (Operational or Insurable Risk) to Enterprise Risk Management is a reflection of the increasing complexity of the internal and external environment in which organizations operate where many more things can go wrong and with more far-reaching consequences.

Because strategic issues arising from political, economic, socio-cultural, technology, environmental or legislative considerations, affect the whole of an organization, and not just one or more of its parts, strategic risks can potentially carry very high stakes. They can have very high hazards and high returns and are as a consequence, managed at board level forming a key part of strategic management. Strategic risks, therefore, emerge as a great concern in public sector horizon scanning, policy formulation, and implementation than they would for the private sector.

In all cases, whether strategic or operational in nature, public tolerance for ineffective risk management associated with service delivery, particularly where taxpayer dollars are involved, is low.

Risk Management Hierarchy

A risk management hierarchy exists (Figure 1), where strategic risks are identified on both a Business Unit and a corporate, collective level. For clarity, when we talk about Strategic Risk, we refer to corporate risk, as managed by the Chief Administrative Officer.

Strategic risks are those that are identified as likely to have an impact on the achievement of Halifax Regional Municipality's Priority Outcomes. One or more of the following criteria must apply:

- The risk relates directly to one or more of the Priority Outcomes.
- A Business Unit risk that has significant impact on multiple operations if realized.
- The risk has been identified as present for a number of Business Units
- There are concerns over the adequacy of Business Unit arrangements for managing a specific risk

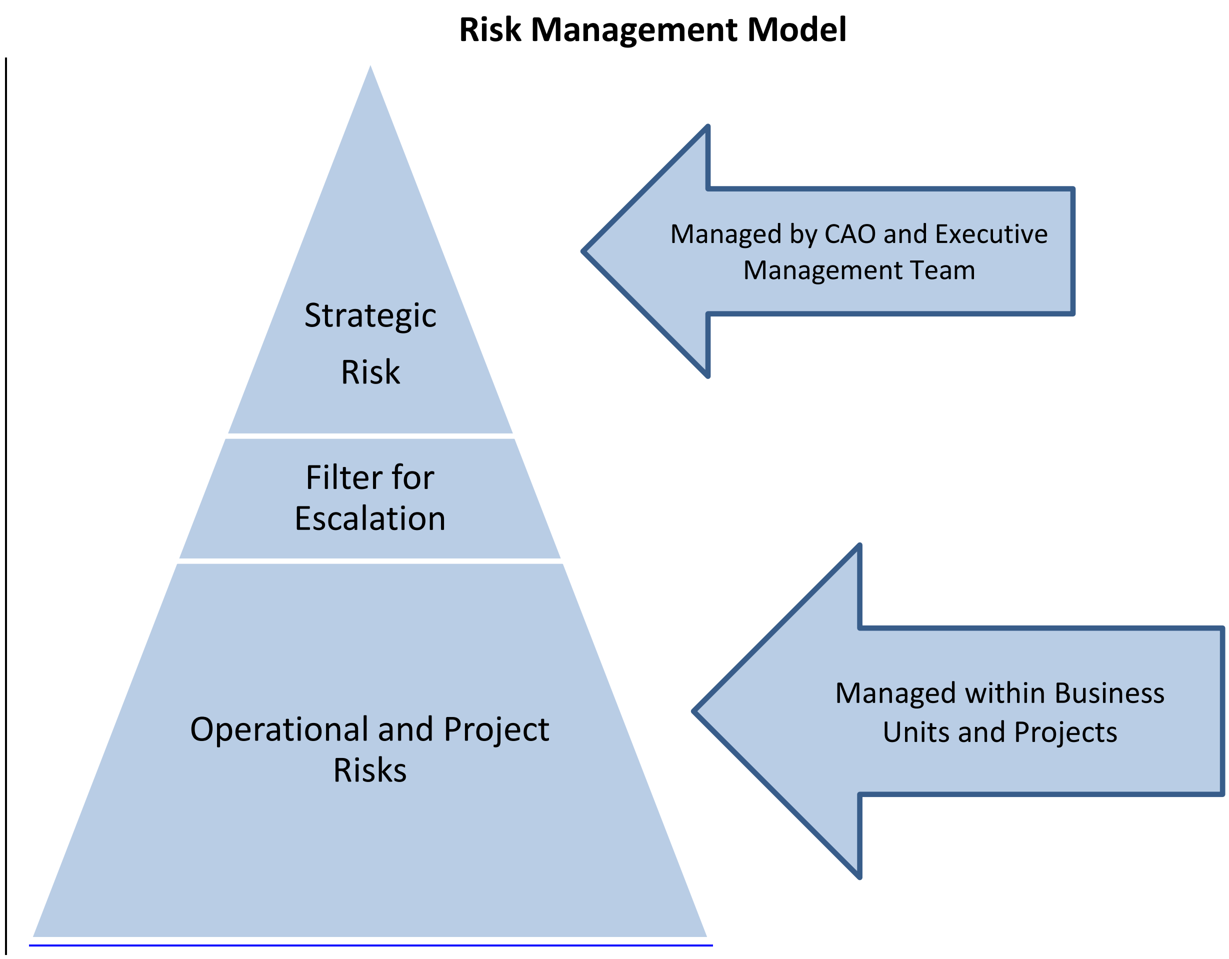


Figure 1: Hierarchy exists on both a corporate and a business unit level

CAN/CSA-ISO 31000-10, Risk Management: Principles and Guidelines

HRM's methodology for risk management is based on the first edition of CAN/CSA-ISO 31000-10, Risk Management – Principles and Guidelines. This document is an adoption without modification of the identically titled ISO (International Organization for Standardization) Standard ISO 310000 (first edition, 2009-11-15).

While all organizations manage risk to some degree, this International Standard establishes a number of principles that need to be satisfied to make risk management effective. This International Standard recommends that organizations develop, implement and continuously improve a framework whose purpose is to integrate the process for managing risk into the organization's overall governance, strategy and planning, management, reporting processes, policies, values and culture.

The generic approach outlined in ISO31000-10, provides the principles and guidelines for managing any form of risk in a systematic, transparent and credible manner and within any scope and context. This approach is (as shown in Figure 2) simply a flow chart expression of the risk management activities. The process is continuous and can be applied at the HRM (enterprise) level or at an individual administrative or business unit level.

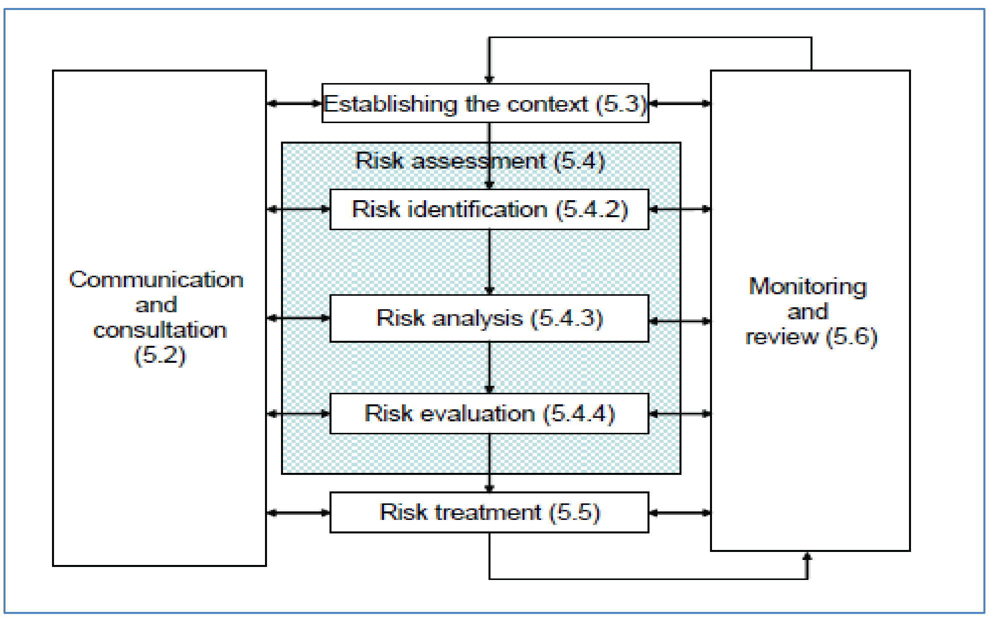


Figure 2: Risk Management Process: Halifax Regional Municipality's risk management approach is based on CAN/CSA-ISO 31000. Risk management can be applied to an entire organization, at its many areas and levels, at any time, as well as to specific functions, projects and activities. There is only one ERM framework per organization, but there are perhaps thousands of risk management processes where risks are considered and controls implemented to achieve the organization's objectives. ***(The Journal of Policy Engagement, Vol 2, No.3, June 2010).***

Establishing Risk Management Policy

The risk management policy should clearly state the organization's objectives for, and commitment to, risk management and typically addresses the following: The organization's rationale for managing risk; Links between the organization's objectives and policies and the risk management policy; Accountabilities and responsibilities for managing risk; The way in which conflicting interests are dealt with; Commitment to make the necessary resources available to assist those accountable and responsible for managing risk; Way in which risk management performance will be measured and reported; and Commitment to review and improve the risk management policy and framework periodically and in response to an event or change in circumstances.

Step 1: Understanding the Organization and Its Context

Before starting the design and implementation of the framework for managing risk, it is important to evaluate and understand both the external and internal context of the organization, since these can significantly influence the design of the framework.

External context comprises the social and cultural, political, legal, regulatory, financial, technological, economic, natural and competitive environment, whether international, national, regional, or local; Key drivers and trends having impact on the objectives of the organization; and Relationships with, and perceptions and values of, external stakeholders

Internal context comprises Governance, organizational structure, roles and accountabilities; Policies, objectives, and the strategies that are in place to achieve them; Capabilities, understood in terms of resources and knowledge; Information systems, information flows and decision-making processes; Relationships with, and perceptions and values of, internal stakeholders; Organization's culture; Standards, guidelines and models adopted by the organization; and Form and extent of contractual relationships.

Step 2: Risk Identification

The organization should identify sources of risk, areas of impacts, events (including changes in circumstances) and their causes and their potential consequences. The aim of this step is to generate a comprehensive list of risks based on those events that might create, enhance, prevent, degrade, accelerate or delay the achievement of objectives. It is important to identify the risks associated with not pursuing an opportunity. Comprehensive identification is critical, because a risk that is not identified at this stage will not be included in further analysis. Relevant and up-to-date information is important in identifying risks. This should include appropriate background information where possible. People with appropriate knowledge should be involved in identifying risks.

Step 3:   Risk Analysis

Risk analysis involves developing an understanding of the risk.   It provides an input to risk evaluation and to decisions on whether risks need to be treated, and on the most appropriate risk treatment strategies. Risk analysis can also provide an input into making decisions where choices must be made and the options involve different types and levels of risk.

Risk analysis involves consideration of the causes and sources of risk, their positive and negative consequences, and the likelihood that those consequences can occur.   Factors that affect consequences and likelihood should be identified. Risk is analyzed by determining consequences and likelihood, and other attributes of the risk. An event can have multiple consequences and can affect multiple objectives.   Existing controls and their effectiveness and efficiency should also be taken into account.

		Impact				
		1 Insignificant	2 Minor	3 Moderate	4 Major	5 Extraordinary
Likelihood	5 Almost Certain	Moderate	High	Very High	Very High	Very High
	4 Likely	Moderate	High	High	Very High	Very High
	3 Possible	Low	Moderate	High	High	Very High
	2 Unlikely	Low	Low	Moderate	High	High
	1 Rare	Low	Low	Moderate	Moderate	High

Figure 3: Halifax Regional Municipality's Risk Matrix: Every risk should be assessed to help determine how much attention is given to the particular event.   This is done by ranking the risks with a set of scores determined by their individual likelihood and impact rating.   See Appendix 1: Risk Scoring for details on how risks should be scored

Specifically, the aim of this step is to identify the risks to the (planned activity) that may affect the achievement of the objective(s), which can either be positive or negative. Consultation is required from different levels of management and staff members asking the following questions:

- What might prevent the achievement of the stated objectives?
- Has it gone wrong before:
- Who should own the risk?
- When should we start managing the risk?

It is widely recommended to identify risks through workshops and/or training sessions. There are many methods which can be used such as questionnaires, a Strengths, Weaknesses, Opportunities, Threats analysis in brainstorming sessions and more. (See Figure 4 for examples of workshop materials).

Step 4: Risk Evaluation

The purpose of risk evaluation is to assist in making decisions, based on the outcomes of risk analysis, about which risks need treatment and the priority for treatment implementation.

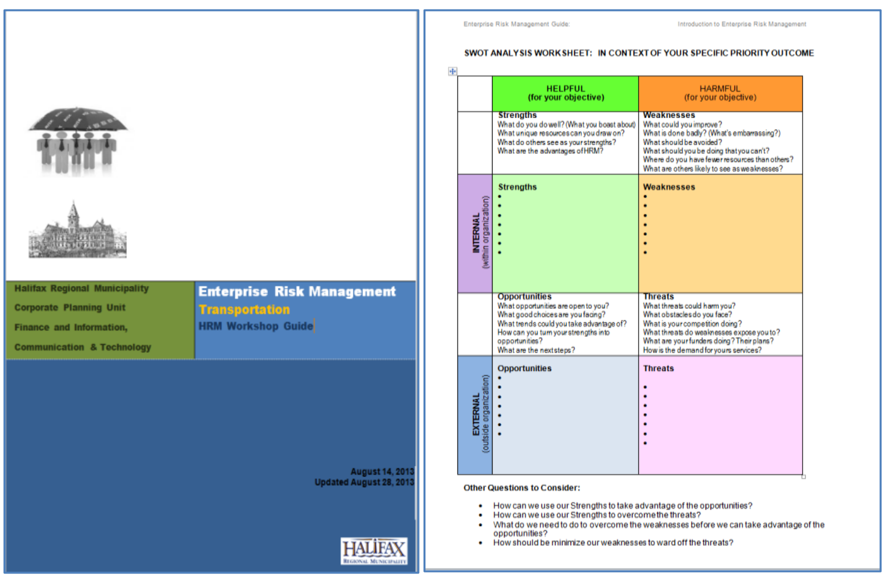


Figure 4: During the strategic risk identification stage in 2013, the following workshop templates were developed to gather information from workshop participants: Enterprise Risk Management Workshop Guide comprised of SWOT Analysis (as seen above) and PESTLE (Political, Economic, Social, Technological, Legal and Environmental) aspects as a vehicle for understanding the internal and external context leading up to the identification of risks.

Step 5: Risk Tolerance

Following the strategic risk assessment phase, the Risk Appetite or Tolerance must be established by senior management. The overall purpose of developing a formal risk philosophy statement for an organization is that it:

- provides guidance to staff around an organization's overall approach and perception of risk (and risk taking) when making decisions and pursuing its objectives;
- articulates the areas where an organization is willing (and not) willing to consider greater amounts of risk;
- establishes the boundaries in which risks can be taken (i.e, fiscal responsibility, public trust);
- aligns executive's view on risk; and
- highlights both the positive side of risk taking (entrepreneurship) and risk mitigation

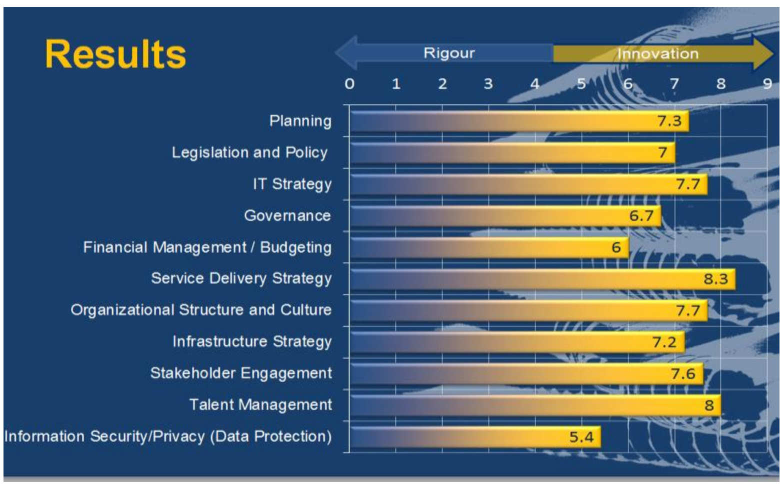


Figure 5: An electronic voting system was used to determine the Municipality's risk tolerance level.

Step 6: Risk Treatment

Risk treatment involves selecting one or more options for modifying risks, and implementing those options. Addressing risk involves taking practical steps to manage and control it. Not all risks need to be dealt with in the same way. The common risk response outlined below should help in considering the range of options available when responding to risks. Importantly, when agreeing to actions to control risk, consideration is required on whether the actions themselves introduce new risks.

Threat Responses

When managing threats, the controls that are put in place should help to effectively reduce the risk to an acceptable level. There are four approaches that can be taken when deciding on how to manage threats.

- **Reduce**: A selective application of management actions, by applying internal control to reduce either the likelihood or the impact, or both, designed to contain risk to acceptable levels, i.e., internal controls, contingency planning, etc;

- **Transfer:** Shifting part of the responsibility or burden for the loss to another party i.e, through outsourcing, insurance, etc

- **Avoid:** An informed decision not to become involved in a risk situation. This can be challenging as Halifax Regional Municipality may not be able to avoid risks associated with its statutory functions or obligations.

- **Accept:** An informed decision to accept the likelihood and impact of a particular risk. For example, the ability to do anything about a risk may be limited, or the cost of taking any action may be disproportionate to the potential benefit.

Once implemented, treatments provide or modify the controls. Selecting the most appropriate risk treatment option involves balancing the costs and efforts of implementation against the benefits derived, with regard to legal, regulatory, and other requirements such as social responsibility and the protection of the natural environment. Decisions should also take into account risks which can warrant risk treatment that is not justifiable on economic grounds, e.g., severe (high negative consequences) but rare (low likelihood) risks. A number of treatment options can be considered and applied either individually or in combination. The organization can normally benefit from the adoption of a combination of options.

Ownership of Risks and Controls

Having identified and defined the risks, it is essential that someone "owns" them (i.e. the risk owner). This is not the same as being responsible for carrying out the tasks or actions for the risk (i.e, the control owner). This is a critical part of the step as without a named individual, it is unlikely that the risk will be managed.

Risk Owner

It is important that the risk owner, where possible, be:

- A person who has the ability to influence the outcome of the event, one way or another;

- A person who can be accountable for the delivery in the area where the risk would have an effect;
- A person who can take charge and lead nominated control owners.

From a Business Unit viewpoint, the risk owner should be a member of the Business Unit's management team.

Control Owner

Control owners are responsible for carrying out the tasks or actions for the risk, as assigned by the risk owner. It is important to note that:

- Control owners can be different from the Risk owner;
- Control owners can be from a different Business Unit to the Risk owner;
- A risk may contain many controls, therefore, many control owners, however only on an exceptional basis would one control be assigned to multiple risks.

Control owners can be any employee within the organization, but must have an adequate reporting line to the Risk owner.

Step 7: Monitor and Review

Once risks have been identified and appropriate controls and action plans put in place to manage them, it is essential to routinely monitor their status. Risks change due to many factors, and it is essential that they are periodically reviewed to capture any new events which may affect the delivery of organizational objectives.

As a guide, risks should be reviewed in management meetings using the following criteria:

Risk Type	Standard Review	Projects and partnerships
Very High Threats	1-3 months	Monthly
High Threats	3 months	Monthly
Moderate Threats	6 months	Quarterly
Low Threats	12 months	Quarterly

Note: At least annually, each risk register should be reviewed in its entirety

The organization should also undertake the following:

- Measure risk management performance against indicators, which are periodically reviewed for appropriateness;
- Periodically measure progress against, and deviation from, the risk management plan;
- Periodically review whether the framework, policy and plan are still appropriate, given the organizations' external and internal context;
- Report on risk, progress with the risk management plan and
- How well the risk management policy is being followed; and
- Review the effectiveness of the risk management framework.

Chapter 4: Reporting Risks

As outlined in International Standard ISO 31000; 2009 Risk Management Principles and Guidelines, the organization should establish internal communication and reporting mechanisms in order to support and encourage accountability and ownership of risk.   These mechanisms should ensure that: Key components of the risk management framework, and any subsequent modifications, are communicated appropriately; there is adequate internal reporting on the framework, its effectiveness and the outcomes; relevant information derived from the application of risk management is available at appropriate levels and times; and there are processes for consultation with internal stakeholders. These mechanisms should, where appropriate, include processes to consolidate risk information from a variety of sources, and may need to consider the sensitivity of the information.

Reporting Framework

It is essential that risk management is used as a tool to assist good management and to provide assurances to senior management and Regional Council that adequate measures have been taken to manage risk.

Escalation of risks ensures that managers have a clearer picture on risks or potential issues facing service areas. This helps in the overall decision making process by allowing senior staff to allocate resources or review areas of concern.   An illustration of the reviewing and reporting framework to support this escalation and assurance process is featured on the following page.

Role of Audit and Finance Committee

As set in its formal terms of reference, the Audit and Finance Committee is responsible for monitoring and overseeing the Municipality's risk management strategy and be satisfied that the assurance framework properly reflects the risk environment.   It is through this Committee that Regional Council discharges its responsibility for obtaining assurance that those risks faced by the Municipality are being appropriately managed.

Role of Other Committees and Business Units

It is the role of each Business Unit and Project manager to maintain and act on its own risks. It is only when risk reach a pre-defined threshold that they are escalated.

The Audit and Finance Committee will concentrate on monitoring the Corporate Risks faced by the Municipality, and the measures taken to control the risk. The Audit and Finance Committee will also seek assurance regarding the effective operation of the framework at Committee level.

Risk Registers

Key risk registers are listed below:

Corporate (Strategic and Operational) Risk Register	The Corporate Risk Register is used to highlight and assure Regional Council that key risks are being effectively managed. These risks are extracted from various area of the Municipality's risk system. See Glossary for definition of Corporate Risk.
Program and Project Risk Registers	Where it is considered appropriate, major partnerships, programs and projects will produce and maintain their own risk registers.

Challenge Environment

There is strong support framework in the Municipality to challenge risks and to provide assistance to Business Units. Listed below are some of the key groups which assist with this:

Audit and Finance Committee	On a periodic cycle each Corporate risk and a nominated Business Unit Risk Register is challenged by Members of the Audit and Finance Committee. These sessions allow Directors to demonstrate how risks are being managed and allow Members to directly question any areas of interest.
Executive Management Team	Each quarter the Executive Management Team review all the top risks for the Municipality and challenge and moderate as necessary. Corporate risks are escalated by the Business Unit Teams and upon approval are escalated to the Audit and Finance Committee.
Business Unit Risk Coordinators	The risk coordinators provide advice and guidance on the application of the application of the Risk Management Strategy. They are the first point of call for risk related matters for their Business Unit providing operational support. The Risk Coordinators meet as a group on a 6 monthly basis with representatives from Police, Internal Audit, Health and Safety, Business Continuity Planning, Corporate Planning and Insurance.

Risk Consideration in Reports to Council and Standing Committees

Similar to the current practice of identifying Legislative Authority and Financial Implications in Staff Reports, as HRM's ERM Program matures it will be possible (and necessary) to include a Risk Consideration section in Staff Reports to Council and Standing Committees.

For consistency, Risk Implications should be embedded in the Report Templates. Of course, not all reports will have Risk Implications so it will be important to identify early in the Report development process when in fact a Risk Assessment is warranted in order to ensure adequate time to undertake an informative Risk Assessment.

Establishing External Communication and Reporting Mechanisms

As also outlined in International Standard ISO 31000; 2009 Risk Management Principles and Guidelines, the organization should develop and implement a plan as to how it will communicate with external stakeholders. This should involve: Engaging appropriate external stakeholders and ensuring an effective exchange of information; External reporting to comply with legal, regulatory and governance requirements; Providing feedback and reporting on communication and consultation; Using communication to build confidence in the organization; and Communicating with stakeholders in the event of a crisis or contingency. These mechanisms should, where appropriate, include processes to consolidate risk information from a variety of sources, and may need to consider the sensitivity of the information.

Key Risk Management Definitions

HRM has adopted internationally recognized definitions from CAN/CSA- ISO 31000-10, the internationally accepted risk management standard (International Standard ISO 31000; 2009 Risk Management Principles and Guidelines).

Communication and Consultation: Continual and iterative processes that an organization conducts to provide, share or obtain information and to engage in dialogue with stakeholders regarding the management of risk.

Consequence: Outcome of an event affecting objectives

Controls: Measure that is modifying risk. Measures taken to control the impact or likelihood of risks to an acceptable level.

Control Owner: The person that has accountability for a particular task to control an aspect of the risk, either the Cause or the Effect. The role is accountable to the Risk Owner.

Corporate Risk: Strategic or Operational risks reported to the Audit and Finance Committee for assurance purposes. One or more of the following criteria must apply: 1-The risk relates directly to one or more of the Priority Outcomes; 2-A risk that has significant impact on multiple operations if realized; 3- There are concerns over the adequacy of Business Unit arrangements for managing a specific risk. Corporate risks can also be those requested by the Audit and Finance Committee specifically.

Effect: Unplanned variations from objectives, either positive or negative, which would arise as a result of risks occurring. Effects are contingent events, unplanned potential future variations which will not occur unless risks happen.

Establishing the Context: Defining the external and internal parameters to be taken into account when managing risk, and setting the scope and risk criteria for the risk management policy;

Event: Occurrence or change of a particular set of circumstances.

External Context: External Environment in which the organization seeks to achieve its objectives.

Gross Risk: The assessed level of risk on the basis that no mitigating controls are in place.

Internal Context: Internal environment in which the organization seeks to achieve its objectives.

Level of Risk: Magnitude of a risk or combination of risks, expressed in terms of the combination of consequences and their likelihood.

Likelihood: Chance of something happening.

Monitoring: Continual checking, supervising, critically observing or determining the status in order to identify change from the performance level required or expected.

Operational Risk: Risks arising from or relating to the execution of day-to-day operations and service delivery.

Residual Risk: Risk remaining after risk treatment

Review: Activity undertaken to determine the suitability, adequacy and effectiveness of the subject matter to achieve established objectives.

Risk: Effect of uncertainty on business objectives.

Risk Analysis: Process to comprehend the nature of risk and to determine the level of risk.

Risk Assessment: Overall process of risk identification, risk analysis, and risk evaluation.
Risk Attitude: Organization's approach to assess and eventually pursue, retain, take or turn away from risk.

Risk Criteria: Terms of reference against which the significance of a riskis evaluated.
Risk Evaluation: Process of comparing the results of risk analysis with risk criteria to determine whether the risk and/or its magnitude is acceptable or tolerable.

Risk Identification: Process of finding, recognizing and describing risks.

Risk Management: Coordinated activities to direct and control an organization with regard to risk.

Risk Management Framework: Set of components that provide the foundations and organizational arrangements for designing, implementing, monitoring, reviewing and continually improving risk management throughout the organization.

Risk Management Plan: Scheme within the risk management framework specifying the approach, the management components and resources to be applied to the management of risk.

Risk Management Policy: Statement of the overall intentions and direction of an organization related to risk management

Risk Management Process: Systematic application of management policies, procedures and practices to the activities of communicating, consulting, establishing the context, and identifying, analyzing, evaluating, treating, monitoring and reviewing risk.

Risk Owner: Person or entity with the accountability and authority to manage a risk.

Risk Profile: Description of any set of risks.

Risk Source: Element which alone or in combination has the intrinsic potential to give rise to risk.

Risk Treatment: Process to modify risk.

Risk Tolerance: Or sometimes known as risk appetite is described as the level of risk HRM is willing to accept in relation to a threat that may cause loss or an opportunity in the day-to-day activities. The risk tolerance of an organization may be different for different events. HRM's risk tolerance and the alignment between its risk appetite and its objectives will form part of the overall HRM corporate strategy.

Risk Register: Official recording of the identified risks facing HRM. A catalogue of the full spectrum of risks (with impact and likelihood assessed) will form HRM's risk register.
Stakeholder: Person or organization that can affect, be affected by, or perceive themselves to be affected by a decision or activity.

Strategic Risk: Risks arising from or relating to long term Business Unit objectives.

Appendix 1: Risk Scoring

Table 1: Impact Criteria

Impact Scale							
Level	**Financial (loss or gain)**	**Environmental**	**Service Delivery**	**People**	**Culture/Heritage**	**Reputation**	**Legal & Compliance**
5 Extraordinary	Unable to accommodate within budget	- Long term harm - Broad cumminity impact - Major opposition to the use of sustainable resource (energy, waste, water, etc.) which is sustainable long term.	-Critical service loss for more than one month - Public outrage at inefficiencies/level of service demonstrated outside of City facilities	- Large Scale loss of life and casualties	-Irreparable damage to highly valued items of cultural or heritage significance	- Long term effect on brand and reputation - Adverse/negative view of City (council and staff) is community-wide -Widespread prolonged public or media attention (international or national coverage)	-Major litigation -Investigation by regulatory body resulting in interuption to operations -Possibility of custodial sentence
4 Major	Able to accommodate within existing budget but only with service cuts and/or reserve funds	-Significant medium term harm - 5 to 20 properties impacted -No significant improvement in the use of sustainabe resource	Critical service loss for up to one month -Customer service levels are at such a poor standard that most customers are aware of them - Volume of complaints on inefficiencies/level of service exceeds ability to respond	- Multiple (more than 1) fatalities or in combination with severe injuries	-Signifcant damage to structures or items of cultural or heritage significance	-Significant media, public or Government attention regionally -Adverse/negative view of City (council and staff) spans district boundaries/ majority of community groups	-Major breach of regulation with punitive fine or legal action/injunction -Litigation involving many weeks of senior management time -Legislative
3 Moderate	$1mil - $10mil (Able to accommodate within corporate budget)	-Moderate short term harm -No noticeable effect on sustainability -Broader geographic impact	-Critical service is not available for several days - Steady level of complaints on inefficiencies/level of service from citizens/community groups	- Single fatality or irreversible disability or impairment to one or more people	-Damage to items of cultural or heritage significance	-Attention from media or heightened stakeholder interest - Adverse/negative view of City (council and staff) is held by neighbourhoods/ multiple community groups. -Absorbs management attention for weeks	-Breach of regulation with investigation or report to authority with prosecution or mederate fine
2 Minor	$100k-$1mil (Able to accommodate within department budget)	Localized minor affect, short term	-Local only service loss for a few days -Intermittent complaints on inefficiencies/level of service from citizens/community groups	- Hospitalization required - Medium term, largely reversible disability to one or more people	-Mostly repairable damage to culture or heritage item	- Minor local public or media attention - No perceivable impact on performance - Adverse/negative view of City (council and staff) is limited to a small area/community group.	Possibility of challenges due to : -Minor legal issues, non-compliance and/or breaches of regulation
1 Insignificant	<$100k (Little or no impact on budget)	One property affected with low significance	- Negligible impact, brief loss of service - Few or no complaints from citizens/community groups	- Reversibile disability requiring hospital treatment	-Low-level repairable damage to culture or hreitage item	- Little or no impact on level of trust in City (council and staff) - Public reaction minimal - no effect on City's profile	-No identified compliance issues.

Table 2: Likelihood Criteria

Likelihood	Description
5-Almost Certain	• 99% chance of occurrence within the next year • Impact is occurring now • Could occur within 'days to weeks'
4-Likely	• Greater than 50% chance of occurrence within the next year • Balance of probability will occur • Could occur within 'weeks to months'
3-Possible	• Greater than 10% chance of occurrence within the next year • May occur shortly but a distinct probability it won't • Could occur within 'months to years'
2-Unlikely	• Greater than 1% chance of occurrence within the next year • May occur but not anticipated • Could occur in 'years to decades'
1-Rare	• Less than 1% chance of occurrence within the next year • Occurrence requires exceptional circumstances • Exceptionally unlikely, even in the long term future • Only occur as a '100 year event'

Table 3: Risk Priority Matrix

		Impact				
		1 Insignificant	2 Minor	3 Moderate	4 Major	5 Extraordinary
Likelihood	5 Almost Certain	Moderate	High	Very High	Very High	Very High
	4 Likely	Moderate	High	High	Very High	Very High
	3 Possible	Low	Moderate	High	High	Very High
	2 Unlikely	Low	Low	Moderate	High	High
	1 Rare	Low	Low	Moderate	Moderate	High