



INFORMATION REPORT

TO:	Mayor and Members Light Rail Transit Sub-Committee
COMMITTEE DATE:	November 29, 2016
SUBJECT/REPORT NO:	Light Rail Transit (LRT) Risk Assessment Update (AUD16025) (City Wide)
WARD(S) AFFECTED:	City Wide
PREPARED BY:	Dennis Guy, BA 905-546-2424 x3107 Joshua Van Kampen, MBA 905-546-2424 x4886 Brigitte Minard, CPA, CA, CIA, CGAP 905-546-2424 x2088
SUBMITTED BY:	Charles Brown, CPA, CA, CPA (Illinois) Director, Audit Services City Manager's Office
SIGNATURE:	

Council Direction:

Per the Council-approved 2016-2018 Audit Services Work Plan (AUD16005), a Light Rail Transit (LRT) risk assessment was to be conducted by the Audit Services Division.

The description of the Council-approved project contained in the work plan was:

“Working with the LRT Office, periodic risk assessments will be conducted throughout the lifespan of the LRT project to ensure that risks and opportunities are identified and that management has action plans in place to manage, mitigate or avoid risks and realize benefits from opportunities.”

The time period for these assessments per the Work Plan is 2016-2018.

Information:

Background

As included in the Audit Services 2016-2018 Work Plan (Appendix “A” to Report AUD16005), the Audit Services Division has broadened the portfolio of services offered to include the following:

- Audits (including value-for-money auditing)
- Consulting
- Risk assessments

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

SUBJECT: Light Rail Transit (LRT) Risk Assessment Update (AUD16025) (City Wide) Page 2 of 6

- Lessons Learned / Opportunities Assessment
- Developing and implementing a comprehensive fraud prevention and detection program

A risk assessment identifies and assesses risks proactively so that the City of Hamilton can develop appropriate action plans. This is collaborative work with City Departments and Divisions to ensure risks are appropriately addressed.

A risk is an obstacle that has the potential to impact the achievement of the City of Hamilton's objectives.

Benefits

The benefits of a risk assessment are that it:

- Provides the organization with a common language and approach to mitigating risks
- Reduces the number of surprises the organization encounters
- Provides a consistent and disciplined process
- Enables the organization to demonstrate due diligence
- Enhances trust and confidence in City services
- Encourages innovation by using structured thinking to capitalize on opportunities

A risk assessment is different from an audit. The following chart summarizes the differences:

Audit	Risk Assessment
Independent appraisal of state of control	Self-assessment of risks
Finds deficiencies	Builds consensus about exposures and needed action
Validates through samples that test and analyze key controls	Validates through broad participation, range of views and anonymous voting
Reflects the view of Audit Services	Reflects the views of the groups as facilitated by Audit Services
More amenable to evaluating 'hard controls'	Better at the soft side of risk and control
Most of the effort is on finding issues	More effort on prioritizing and mitigating issues, along with taking advantage of opportunities

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

Specific to the LRT project, the Council-approved Audit Services 2016-2018 Work Plan contained an LRT risk assessment for 2016, 2017, and 2018. Audit Services staff will be conducting periodic risk assessments throughout the lifespan of the LRT project to ensure that risks and opportunities are continuously identified and that the City of Hamilton has action plans in place to manage risks and realize benefits from opportunities.

This Information Report is provided to outline the objectives, process, progress, and deliverables of the LRT Risk Assessment.

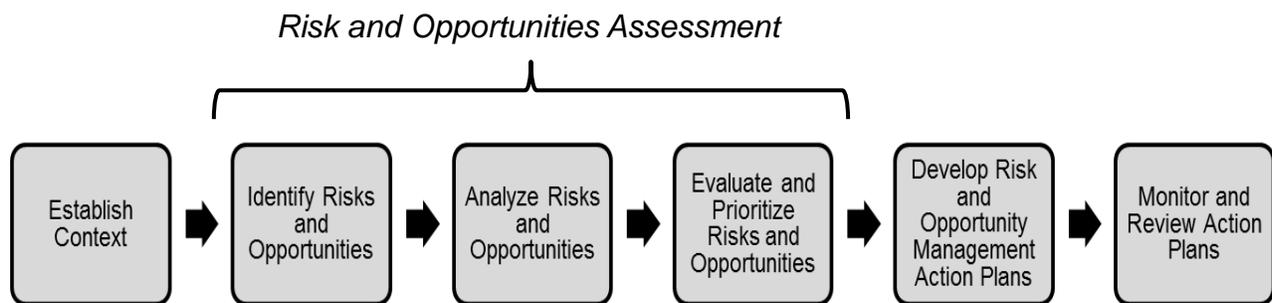
Objective

The objective of the LRT Risk Assessment is to develop a high-level risk profile for the LRT project and its impact on the City's programs and services. The risk profile will be updated as risk assessments are completed throughout the duration of the LRT project.

Process and Methodologies

To conduct this risk assessment, Audit Services staff have stepped outside of the traditional 'end-of-the-line assurance' role to facilitate a proactive approach to managing risk. Staff are providing a methodology and evaluation platform based on ISO 31000 Risk Management Standards while performing an 'objective challenge' function.

Figure 1: Risk Management Process (based on ISO 31000)



Establish Context

- Conduct research/environmental scan and a literature review of risk assessments, audits and other related documents from LRT projects in other jurisdictions and relevant material from the City of Hamilton's LRT planning process.

Identify Risks

- Collect data by conducting one-on-one interviews with internal staff that have responsibility for City operations that have potential to be impacted by LRT during and post-construction.

Analyze Risks

- Synthesize emerging themes based on the topics of the responses from one-on-one interviews.
- Themes are allowed to develop organically according to the responses and nature of the project being assessed.

Evaluate and Prioritize Risks

- Facilitate workshop(s) with internal stakeholders to validate and prioritize risks.
- Develop a risk matrix which identifies 'low', 'medium', 'high', and 'critical' risks by evaluating both the likelihood of a risk occurring and the impact if it does (refer to Figure 2).

Manage the Risks

- Audit Services staff will work with affected Divisions / Departments to facilitate action strategy development
- Actions strategies set out 'how' we will manage risks moving forward, including recommendations to realize opportunities
- Typical risk management options are to Transfer, Eliminate, Accept, or Mitigate (TEAM) the risks

Monitor and Review

- Produce a risk profile (report)
- Conduct follow ups based on timelines decided in the action strategies; depending on the risk management method listed above (TEAM), follow ups will be scheduled accordingly throughout the duration of the LRT project

Progress

Establishing Context and Identifying Risks

Interviews with more than 70 City staff across the corporation were conducted during August and September 2016 to identify risks and opportunities from a wide range of program and service areas. Interviews were open-ended and comprehensive, with the intent of developing a fulsome picture of all possible sources of risk (regarding the LRT project and the interviewee's program/service area).

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

Analyzing Risks

Risks were categorized into ‘emerging themes’ to organize them in a concise, coherent way. Placing the individual risks into themes shows how various program and service areas share similar risks and can collaborate to develop action plans to manage them.

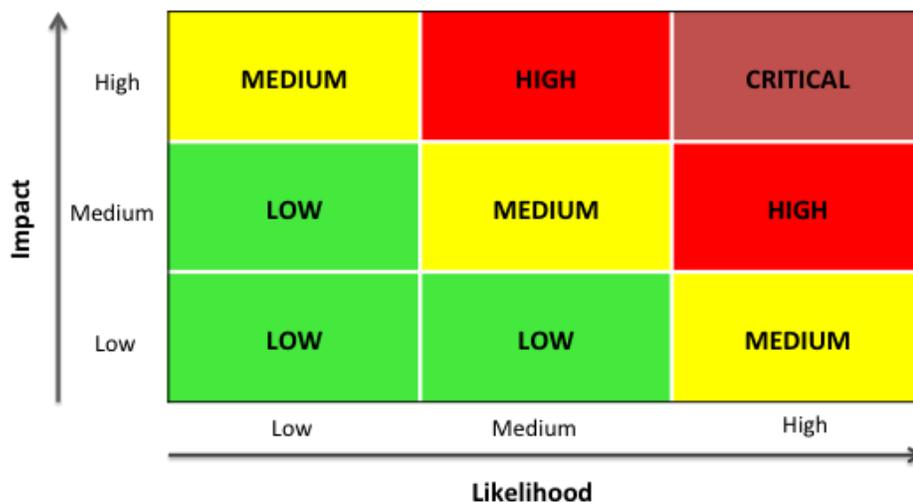
Evaluating and Prioritizing Risks

Before risks can be managed, the organization needs to evaluate them. Risks are measured by the likelihood a given risk will occur and the severity of the impact if a risk is realized.

A risk matrix is developed to:

- Focus on risks that could impede the achievement of specified business objectives
- Map and prioritize risks
- Assure that high priority, unacceptable exposures are managed and mitigated

Figure 2: Risk Matrix



Four workshops were held with City management team members (primarily at the Director and above levels) to validate interview findings and develop a risk matrix by assessing the likelihood and impact of each risk.

Deliverables

The result of the interviews, workshops, and subsequent action plan development will be a Risk Profile document.

OUR Vision: To be the best place to raise a child and age successfully.

OUR Mission: To provide high quality cost conscious public services that contribute to a healthy, safe and prosperous community, in a sustainable manner.

OUR Culture: Collective Ownership, Steadfast Integrity, Courageous Change, Sensational Service, Engaged Empowered Employees.

A Risk Profile prioritizes the key risks and identifies the strategies that need to be deployed to address them. It may include:

- Executive summary
- Summary of Methodology
- Risk Profile Summary
 - Risk matrix
- Understanding Our Risks and Opportunities
 - Risk and opportunities inter-relationships
- Action Plans
 - Risk management
 - Opportunity realization
- Monitoring Our Risks

The initial risk and opportunities assessment will be delivered in Q1 (January-March) of 2017. A series of follow ups and subsequent risk and opportunities assessments is being planned for the duration of the LRT project, expected to last until 2024.

Future Risk Assessments

Audit Services plans to complete at least two risk and opportunities assessments prior to and during the construction phase and one risk and opportunities assessment immediately prior to operations of the LRT line going live.

Follow Up

Audit Services plans to conduct follow ups to each risk and opportunities assessment undertaken in order to ensure that action plans are being implemented.

It is anticipated that follow ups will be conducted immediately prior to future risk and opportunities assessments, however, certain risk management action plans may require a follow up sooner.