



INDEPENDENT OFFICE OF THE CITY AUDITOR

Project Management Processes Audit

Audit Report

May 8, 2024



Report Summary

The City of Saskatoon (City) spends millions of dollars in undertaking large and complex capital and operational projects, and it is critical that the City has strong project management practices in place. The City's 2022-2025 Strategic Plan also includes project management as one of the ways to deliver excellence in core services and operational priorities. The project management function is currently decentralized and projects are managed by respective departments. The City has created an advisory working group called Project Management Community of Practice Working Group (CPWG), which supports the standardization and improvement of project management practices across the City.

Due to the nature, size and complexity of the projects undertaken by the City, there are financial, operational and reputational risks if the project management best practices are not followed. The objective of the audit was to assess if the City has strong project management processes in place which would ensure that projects are completed timely, within budget, and meet project deliverables and public expectations.

The project management practices at the City have evolved over the last few years and a robust project management program is currently in place. The City has also established a project management standard and framework to assist in standardizing project management practices across the City. However, there is a need to update the standard and framework to fully align with the project management best practices and enhance compliance with the standard and framework. This has become increasingly important with the fast-changing economic environment, projects becoming more agile, and the focus has shifted to successful projects and value delivery.

A comparison of the City's project management practices with other municipalities showed that the City has similar practices, with some differences in project structure, reporting, governance, and systems.

The following is a summary of key recommendations:

- 1. Project Management Standard and Framework and Compliance:** Update the standard and framework to fully align with best practices and enhance compliance.
- 2. Project Management Structure and Reporting:** Explore a project management structure that would ensure the City is advancing to a mature project management function. In addition, devise a process to consolidate and formally report on the status of projects at various levels.
- 3. Project Governance:** Strengthen the Community of Practice Working Group or create a separate group as a governance body to strengthen the project management practices
- 4. Project Tools and Systems:** Conduct a cost-benefit analysis for implementation of a project management system which would assist in the effective management of projects.
- 5. Applicability in Implementing Project Management Standard:** Provide clarity between project and operations to determine whether the initiative or tasks should follow the project management standards. In addition, provide project categorization as a means to determine project requirements.

Detailed Report

Background

The City's Project Management Standard defines project as "an initiative with a defined beginning and end, with defined outcomes". The City spends millions of dollars undertaking large, complex capital and operational projects. Effective project management helps the City meet business objectives, satisfy public expectations, resolve problems and issues, optimize the use of City's resources and manage change better.

The project management function at the City is decentralized, and the departments manage their projects. CPWG established by the City is an advisory group with a vision to foster connections among project managers and support the standardization and improvement of project management practices across the City. A Project Management Standard and Framework has been developed, which establishes a set of procedures, templates, and tools to assist in standardizing the approach to project management.

Project Management Institute (PMI) has issued a guidance book, known as Project Management Body of Knowledge (PMBOK), to help Project Managers refer to the best practices that can be adopted to manage and report on projects. Most organizations follow PMBOK as a guiding book, which includes a set of terminologies and guidelines used in project management. The City's CPWG also follows best practices as established by PMBOK.

Audit Objective

The objective of the audit was to assess whether the City has strong project management processes that would ensure the projects are completed timely, within budget, and meet project deliverables and public expectations.

Audit Scope and Approach

The scope of the engagement included assessment of the effectiveness of:

- Project management processes at the City;
- Current project management standard and framework against the project management best practices, i.e., PMBOK Standards and Guidelines;
- Project management structure and governance; and
- Project monitoring and reporting processes.

The following approach was used to conduct the audit:

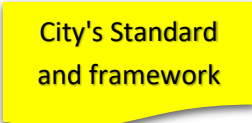
- The audit team met with various departments responsible for managing the projects, members of the CPWG and other stakeholders providing project management support. Meetings were held with various departments to understand the project management processes followed across the City.
- Compared and assessed the current project management standard and framework against project management best practices.

- For sampled projects, we assessed whether the current project management practices followed the established project management standard and framework.
- Conducted surveys with other municipalities to compare with the City’s project management practices.
- Conducted a detailed review of documents and records and conducted verification procedures.
- Identified potential opportunities for improvement and provided recommendations.

Comparison of the City’s Project Management Standard and Framework Against Best Practices



The City’s project management standard and framework needs to be updated to fully align with project management best practices.



Project Management Maturity

The City has established a Project Management Standard, which establishes a minimum or baseline standard for project management across the City and simplifies the governance of the projects. The standard applies to all projects undertaken by the City and was last updated in 2021. The City has also implemented a project management framework that establishes a set of procedures, templates, and tools to assist in standardizing project management at the City.

PMBOK, a universal guideline for project management, includes best practices for project management and provides a foundation upon which organizations can build methodologies, policies, procedures, tools and techniques. PMBOK helps users gain efficiency and effectiveness in project management. It includes agile methodology and is relevant and applicable to the fast-changing economic conditions, which has become increasingly important with supply chain issues, labour shortages, etc., arising after the global pandemic, especially in Canada.

Key Findings:

Our audit found the City’s project management standard and framework needs improvement when compared with the best project management practice guidelines.

PMBOK Knowledge Areas	Standard and Framework Assessment
Project Integration	Substantially Aligned
Project Scope	Partially Aligned
Schedule Management	Partially Aligned
Cost Management	Substantially Aligned
Quality Management	Not Aligned
Resource Management	Partially Aligned
Communication Management	Substantially Aligned
Risk Management	Partially Aligned
Procurement Management	Aligned
Stakeholder Management	Partially Aligned

We have used 10 PMBOK knowledge areas as a benchmark and compared them with the City’s established standard and framework. The above table shows the City’s standard and framework needs improvement in certain areas to closely align with the PMBOK knowledge areas. Refer to Appendix 1, which provides detailed information on improvement opportunities in PMBOK knowledge areas.

Our audit found the City’s project management standard and framework have been well documented with respect to procurement management, project integration, budget and cost management and project communication management. However, knowledge areas such as quality management, scope management, schedule management, resource management, risk management, and stakeholder management needs to be strengthened in the project management standard and framework with respect to the most recent agile methodology introduced by PMBOK. The municipality survey results showed that most cities follow PMBOK guidelines and are updating it on a regular basis.

The following components need to be added/improved within the standard and framework:

Project Quality Management: The process and templates for planning, managing and controlling quality. This includes the process for identifying quality requirements and standards, the transformation of quality management plans into individual activities and monitoring and controlling the results of quality management activities.

Project Scope Management: The process and templates for scope planning, collection of requirements, scope definition, creating work breakdown structures, scope validation and scope control.

Project Schedule Management: The process and templates around defining and sequencing activities, estimating activity duration and developing and controlling schedules.

Project Resource Management: The process and templates for acquiring resources, developing and managing teams and controlling resources.

Project Risk Management: The process for risk management planning, performing risk analysis, planning and implementing risk responses and monitoring risks.

Stakeholder Management: The process needs to be referenced as it relates to planning, managing, and monitoring stakeholder engagement.

Deviation of the standard and framework with PMBOK guidelines may result in projects not following best practices, leading to ineffective project management.

Recommendation 1: We recommend that the Project Management Community of Practice Working Group should update the current project management standard and framework to ensure that it fully aligns with the best practices as recommended by Project Management Body of Knowledge. Once the standard and framework are revised, create awareness and training to project managers and Directors to facilitate implementation.

Administration Response and Action Plan:

To improve the rate of adoption across various work groups, the Project Management Community of Practice recently updated project management templates to become more universally appropriate to the various types of projects delivered across the organization. A strategy will be developed for further enhancements to better align the templates and processes with the PMBOK, at a pace in alignment with current organization maturity.

Related to Recommendation 3 and the Administration’s response, it is anticipated that this strategy will be developed based on the duration prescribed to achieve compliance of project management documentation and reporting as defined for different tiers of projects. This strategy would be developed in conjunction with the updates to the Project Management Guidelines described in the response to Recommendation 3 and is expected to be completed by Q2 2025.

Opportunities to enhance training throughout the corporation are being investigated and will be developed in conjunction with the revised guidelines. Next phases of training are targeted to be in place by the end of 2024.

Comparison of Project Management Practices with other Municipalities



The City has project management practices similar to other municipalities with some differences in project reporting, governance, and project tools.

We reached out to six municipalities to obtain information on their project management practices. We received information from five municipalities and compared the City's maturity of project management activities with those municipalities. However, we did not assess the extent of project management compliance in other municipalities.

The project management survey sent to municipalities included the following questions:

- Is the project management a centralized or a decentralized function?
- What is the governance structure of project management?
- How is project reporting conducted, and at what levels?
- Are there any project management standards and frameworks?
- Are any systems/tools used to manage projects?

Based on the review of responses, we concluded that the City had adopted similar project management practices when compared to other municipalities, with some differences within the project reporting, governance, and project tool categories. The comparison has been summarized below:

Municipality	Structure	Reporting	Governance	Standard and Framework	Systems and Tools
Saskatoon	Decentralized	Project level reporting to Steering Committee. Some project reporting to Council when needed.	Project-level governance structure	Based on PMBOK	Checklists and templates. Use of MS Office, Project Online and Microsoft Project in some cases. SAP for Financial and Procurement
Regina	Decentralized	Project Managers provide reporting to Executive Sponsor & Steering committee.	Project-level governance structure	No formal use of PMBOK. A framework is in place.	Checklists and templates No software used.
Calgary	Decentralized	Operational level. High Level reporting to Council. Some project reporting to Public.	Project level governance structure	Based on PMBOK	MS Office, Owners Engineering, Microsoft Project, Project and Portfolio Management.
Ottawa	Decentralized with some variations.	Project level Reporting. Reporting to Council and public.	Dependent upon various factors such as scope and scale of projects.	Based on PMBOK	Clarity PPM (CA PPM), MS Office, SAP for Project Financials.
Edmonton	Decentralized with some variations	Monthly Project Update. Some periodic reporting to public.	Oversight structures in place which are dependent upon project scope and complexity.	Based on PMBOK	E-Builder (Construction Project Management software). SAP for Financial and Procurement. Google Suite for checklists and templates.
Guelph	Centralized	Project level reporting to Steering committee. High level reporting to Executive team and Council.	Established Project Management Office with a documented framework.	Based on PMBOK	Implementing - Upland Eclipse PPM software.

A detailed comparison of project management practices in place at various municipalities has been shown in Appendix 2.

Project Management Structure

Organizations use different structures for project management. A centralized project management function allows the creation of a Project Management Office (PMO), which is responsible for the management of projects, including project monitoring and reporting. Centralized PMO bring benefits such as standardization of project management methods and processes, centralized project management data for increased visibility, consistent reporting and enhanced communication and coordination between project teams.

PMBOK defines PMO as a management structure that standardizes the project-related governance processes and facilitates the sharing of resources, methodologies, tools and techniques. The primary function of a PMO is to support project managers in variety of ways such as managing shared resources across projects; identifying and developing project management methodology and best practices; provide coaching, mentoring, training and oversight; project reporting and project management compliance.

A decentralized project management function allows projects to be managed by respective departments responsible for the projects' success. Benefits of a decentralized project management function include more domain knowledge of the projects tasked to project managers, faster decision-making, and better control of the tasks.

There is no best approach when it comes to the project management function structure. Typically, small organizations tend to decentralize their project management function, while large organizations build centralized project management functions. Yet, some organizations use a hybrid approach where some projects are managed centrally while others are decentralized.

Based on our review of the municipal survey, four out of five municipalities have a decentralized project management function, similar to the City with some variations.

For example, the City of Ottawa has a decentralized project management structure with some variations. Some departments have a separate PMO to provide support. As needed, some projects are also overseen and/or governed by the City Manager and/or City Council. At the City of Edmonton, each department has its own Project Management Office.

On the other hand, the City of Guelph has a centralized PMO, which is responsible for managing the projects and ensuring compliance.

Key Findings

At the City, projects are decentralized, and each department is responsible for managing projects. Some departments have dedicated project managers, while others have project managers who, besides other work duties, manage projects as well. Information Technology has a separate and formal PMO. The CPWG has been established at the City, which is an advisory body that provides guidance to project managers and has developed tools and guidelines to encourage project management standardization and improvement in practices.

Recommendation 2: Considering variations in the project management structure in some municipalities and the fact that the City needs improvement in enhancing compliance with the established project management standard and framework and best practices, there is an opportunity to explore a project management structure that would best ensure that the City is continually advancing to a more mature project management function. This may include exploring the following options in the medium to longer term using a cost benefit approach:

- Identify departments which undertake large and complex projects and consider establishing a formal Project Management Office within the identified departments for support, monitoring, reporting and compliance.
- Assess the possibility of implementing a centralized Project Management Office in the long run which provides framework, governance, training, support and quality assessments for projects managed by departments. The Community of Practice Working Group also includes a long-term goal of creation of a Project Management Office.

Administrative Response and Action Plan

The Administration agrees that dedicated project management resources are beneficial in workgroups and/or departments that deliver large and complex projects. Dedicated project delivery teams (albeit not specifically referred to as PMOs) already exist in several departments that undertake large and complex projects such as:

- Saskatoon Water – Engineering Services
- Facilities Management – Project Services
- Technical Services – Major Projects
- Construction and Design Department
- Information Technology – Project Management Office

The Administration has reviewed a Centralized PMO in the past and has not identified significant value in moving towards a centralized model. However, there may be value in formalizing the current structure and creating a hub and spoke model that utilizes the existing expertise in those departments to help guide, influence and monitor project management throughout the organization. Further work will help to flush out the hub and spoke model to better define roles, responsibilities, resources and governance structures, which is expected to be completed by Q2 2025.

Project Reporting

Project reporting at various levels is key for information and timely decision-making. Based on our review of the municipal survey, municipalities are conducting project reporting at the operational level, with some enhanced reporting. For example, the City of Edmonton provides quarterly updates on some projects on the [Building Edmonton website](#) (public-facing website). Similarly, the City of Guelph provides regular reporting to the Executive Team on Tier 1 and 2 projects and to the Council for all Tier 1 projects.

Findings:

Currently, the City provides formal reporting at the Project level, although this is not consistent and needs improvement. In most cases, the Directors provide verbal updates to the General Managers during one-on-one meetings when necessary. There is limited or no formal consolidated project

status reporting done at various levels (Executives, City Council and the public). Reporting on specific projects is done to City Council, as necessary.

A cumulative capital project list is provided to the City Council yearly that captures the budget and actual amount but does not capture the project status and reasons for deviations from the planned timelines. In some cases, it includes program-level amounts and does not provide budget to actual for projects within the program. We also noticed the list includes several annual ongoing routine maintenance programs which do not meet the standard definition of a project (i.e., they are part of day-to-day operations and don't have a specific start and end date).

Considering the City spends millions of dollars on large and complex projects, it is important that the City conducts formal high-level project status reporting to Executives, City Council and the public, which is considered a best practice and is followed by some municipalities. This would help Executives and City Council make informed decisions and intervene when projects are not meeting the timelines or facing significant issues. The project status reporting will also act as an early warning signal for Executives and City Council if projects are deviating from the original course.

Including time as a performance indicator will help Executives and City Council gauge whether projects are on track as well as know when a project will be completed. Timely delivery of the projects will avoid cost overruns and enhance credibility and reputation in how the City manages its projects.

Recommendation 3. We recommend that Administration should devise a process to consolidate and formally report on the projects' status at various levels i.e., Divisional level, Executive Leadership Team, City Council and public. This would include categorizing projects in Tiers (i.e., level of significance) and reporting based on the criteria and frequency established.

Administration Response and Action Plan

The Administration has established an Administrative Procedure which outlines the minimum standard for project management across the organization and incorporates Project Management Guidelines that establish a set of procedures, templates, and tools to assist in standardizing the approach to project management.

The existing Project Management Guidelines outline minimum requirements for management of projects. Specifically, the need for formal business cases, charters and project implementation plans is outlined based on the complexity of the project. To further evolve the City's guidelines, the Administration is formalizing a tiering framework for projects to better define the levels of complexity and required documentation. To ensure consistency, formal reporting requirements will also be clarified as part of the Administration's internal governance structure. The Guidelines are anticipated to be updated by Q2 2025.

Project Governance

Strong project governance is key for successful project delivery. The City's project governance structure is similar to other municipalities in comparison. Most projects have an Executive Sponsor who provides vision and direction on the projects, a Project Steering Committee for significant projects that provide guidance and oversight and a Project Manager responsible for day-to-day project management supplemented by the project team.

Findings

The City has established CPWG, which is an advisory group with members across the City. The vision of the group is to foster connections among project managers and support the standardization and improvement of project management practices across the City. CPWG has developed a project management standard and a Project Management Framework, which establishes a set of procedures, templates, and tools to assist in standardizing the approach to project management.

We noted that CPWG does not meet consistently on a monthly basis as required by their Terms of Reference. In addition, there is not enough participation by members when meetings are conducted. Considering that this group comprises of volunteers, due to operational priorities and member turnovers, CPWG has not been able to work as effectively as would have been expected.

Recommendation 4. We recommend that Administration should strengthen the Community of Practice Working Group or create a separate group as a governance body to strengthen project management practices at the City. This would include conducting more regular meetings, ensuring active participation of members and ensuring that the group is actively contributing towards the goal of enhancing project management practices at the City. Administration should explore the possibility of formalizing the working group by assigning an executive sponsor to provide governance.

Administration Response and Action Plan

The role of the CPWG is to share information and experiences, providing opportunities to learn from one another, and to develop personally and professionally. The group has created PM templates and checklists to improve consistency throughout the corporation.

The formalization of a hub and spoke model will help to strengthen the governance structure for project management throughout the organization. The Administration's new internal governance structure also provides for further support through the Standing Committee structure. More specifically, the role of corporate project management oversight is under the purview of the Standing Committee on Infrastructure & Environment. The initial terms of reference for the standing committee have been established, with details related to how the committee will interact with the existing CPWG and new PM model to be developed by Q2 2025, with interim reporting to the Standing Committee on Infrastructure & Environment as work progresses.

Project Management Standard and Framework

A project management standard and framework sets rules and guidelines for project management and should align with project management best practices. Like other municipalities, the City has developed a standard and framework that sets the minimum project management expectations. However, during our audit, we noted the currently established standard and framework need to be updated to fully align with project management best practices. In addition, the City needs to enhance compliance with the established standard and framework. Detailed findings have been noted in the report.

Project Management Systems and Tools

Implementation of systems and tools helps in managing the projects effectively and efficiently. It helps in project planning, tracking, scheduling, resource management, documentation and reporting. It also helps to consolidate projects that are in progress, on track and those which have been delayed or are beginning to deviate from the planned timelines. Most municipalities have some kind of project management tools implemented to assist in managing projects.

Four out of five municipalities have implemented or are in the process of implementing sophisticated project management systems to assist in the management and reporting of projects. The City of Calgary is rolling out a Project and Portfolio Management Tool to support consistent monitoring and reporting of projects with significant capital expenditures. The City of Ottawa has implemented [Clarity PPM](#) as a project management tool for construction projects. The City of Edmonton has implemented [e-Builder](#) as a Project Management Information System for Construction projects. The City of Guelph is in the process of implementing [Upland Eclipse PPM](#) Project Management software for the entire municipality.

Findings

CPWG has developed templates and checklists that help the departments strengthen project management practices, although these templates and checklists are not used consistently.

We noted that the City does not have a dedicated project management system. Project Managers generally use Microsoft Office (Excel, Word, PowerPoint, etc.) to manage projects. During interviews, many directors raised concerns regarding the lack of available tools to manage projects effectively. We understand a few departments use tools beyond Microsoft Office, such as Microsoft Project and ArcGIS (mapping and analysis tool), to manage projects.

Considering the City spends millions of dollars every year on capital projects and there are hundreds of capital projects and programs currently in progress within the City, and the fact that some other municipalities also have implemented project management systems, it will be beneficial for the City to explore the possibility of implementing a project management system in the long run which will help the City in managing the project effectively.

Recommendation 5: We recommend that the City should conduct a cost benefit analysis for implementation of a project management system that would assist in effective management of projects. This may include:

- Identifying areas which manage large and complex projects and consider implementing a project management system. Once the benefits are realized, consider expanding the system to other areas.
- Considering that the City has already implemented a Fusion system (SAP), explore [SAP's Enterprise Portfolio and Project Management Module](#) to manage City's projects.

Administration Response and Action Plan:

SAP's Enterprise Portfolio and Project Management Module was originally included in the business requirements package for the ERP; however, was not procured due to cost constraints. The Administration's current project management system is nearing end of life. In preparation, a project is being initiated in Q2-2024 to undertake a cost benefit analysis, and if deemed beneficial, identify and procure a suitable corporate wide project management solution. Anticipated completion of implementation of a new project management system is dependent on the tool selected but is anticipated to be rolled out by Q1 2026.



Applicability in Implementing Project Management Standard

There is lack of clarity within some departments on what constitutes a project, and there is no project categorization to define project requirements.

Key Findings

During our audit, we noted the following process gaps that require Administration attention:

1. Although the project management standard defines a project, some departments and divisions lack clarity regarding what constitutes a project and what is part of operations. In the absence of clarity, there is a risk that a project may not follow the project management standard, resulting in project inefficiencies. On the other hand, applying project management standards to operations may result in redundancies, further confusion and additional costs.

It is important that there should be a clear distinction between a project and operations, and it should be supported by examples and scenarios. In project management, a project is defined as a unique, temporary endeavour with a specific beginning and end, while operations are ongoing work effort that is generally a repetitive process, and the execution of the activities produces the same result.

2. Currently, the project management standard and framework include minimum required elements which apply to all projects irrespective of the size of the project. Although the framework highlights reduced expectations in project components such as project charter

and project plan for small projects, there is still an expectation that all projects should include all the elements when undertaking projects.

Thus, in the absence of project categorization, there are risks that smaller projects are required to comply with project elements which are excessive and do not add the best value to project management. On the other hand, minimum required elements are not sufficient when undertaking large projects, resulting in the risk that projects may not be managed effectively and efficiently.

The City of Guelph has defined tiers for projects. Tier determination for projects is done at the start, which derives the level of documentation, monitoring and reporting required. Tier 1 projects have the most project requirements, while Tier 3 projects have the least requirements.

Defining requirements based on project categorization may quickly get buy-in from departments as they would see the value in implementing the project requirements and not necessary a roadblock in the project success. Factors that could be used in project categorization may include total efforts to complete a project, project budget, team size and project impact.

Recommendation 6: We recommend that Administration should:

- Provide clarity between project and operations to assist the departments and divisions in determining whether the initiative or task should follow the project management standards. This would include providing examples and scenarios to aid departments in the decision-making process.
- Provide project categorization such as Tier 1 (large projects), Tier 2 (medium projects) and Tier 3 (small projects) and define project management requirements within each of the project categorization that would provide best value in terms of project management. As a general rule, larger projects should include more project management requirements while small projects should require less project management requirements.

A decision tree may help departments and divisions to determine whether the task is a project or operations and what are the project requirements based on project categorization. The updated standard and framework should be communicated to project managers to enhance compliance.

Administration Response and Action Plan:

Similar to recommendation 3, the Administration generally agrees with this recommendation. The current Project Management Guidelines include varying requirements for differing project complexities. Providing a clear definition of a project, PMO and formalizing a tiering structure for projects, based on complexity and/or value, may assist in creating more consistency and clarity on expectations throughout the organization. This work is expected to be completed by Q2, 2025.

Compliance with Project Management Standard and Framework

The City needs to enhance compliance with the established Project Management Standard and Framework.

The City has established a project management standard, which establishes a minimum or baseline standard for project management across the City and simplifies the governance of the projects. The standard applies to all projects undertaken by the City. The minimum required elements include a business need, authorization, scope, timeframe, cost estimate, roles and responsibilities, progress reporting and closure. The City has also developed project management framework guidelines that include a set of procedures, templates and tools to assist in standardizing the approach to project management.

The City's 2022-2025 Strategic Plan includes project management as one of the ways to deliver excellence in core services and operational priorities. The outcomes include *"increased project success from applying consistent project management best practices across the organization,"* and the key actions include *"continue to advance project management best practices across the organization through standardization of processes, procedures, tools and staff training and implement minimum standards for proper reporting and closure of major corporate projects".*

As part of the audit process, the Office selected a few projects from the Capital Projects Status Report to assess whether the City's project management standard and framework guidelines were followed.

Key Findings:

We noted that the departments are at different levels of maturity for compliance with the project management standard and framework. During the assessment, it was encouraging to note that:

- Most projects had a Project Charter or a document in lieu prepared, which outlines the project scope, deliverables cost estimate, etc. A couple of instances were noted where the charter was not formally approved.
- Most projects had budgets and cost estimates documented.

The following project management practices need strengthening to enhance compliance with the project management standard and framework:

- Some sampled projects had limited information relating to resource management, project plan, and schedule management, as these elements were merged at a very high level in the project charter. Merging generally limits the amount of information that is readily available and may hinder project managers from managing the projects in an effective manner.
- Formal status reports help the Administration monitor projects effectively. Some sampled projects did not have formal regular status update reports available. There were no guidelines on key performance indicators (KPIs) that are required to be reported.
- Project quality management helps improve productivity by re-evaluating and improving processes. There were limited quality management reports evidenced.
- Risk analysis is a process through which the project management team will be able to analyze potential risks the projects can face and devise plans which will help them mitigate

the risk. Having this done at the planning stage will set up the project for success. There was limited project management risk analysis documented and monitored.

- Stakeholder analysis helps in identifying and understanding the needs and expectations of major interests inside and outside the project environment and aids in effective communication. Stakeholder analysis was not formally documented and managed in some of the projects sampled.

The City needs to strengthen project management documentation related to stakeholder analysis, quality management reports, project risk management, project progress tracking and reporting and the use of project management templates. Non-compliance with the project management standard and framework may result in ineffective project management, resulting in the risk that projects may not meet deliverables, scope creep, project delays and cost overruns.

CPWG also completed an implementation initiative in February 2023 to increase recognition and adoption of project management best practices, methods, and tools. The results showed the City met 60% of the project management targets compared to their own overall established target of 90% and indicated more work is required to enhance compliance with the project management standards.

Some possible reasons for non-compliance with the project management standards include a lack of full understanding of the benefits the project management standard and framework can bring to projects, perception that implementation of the standards could be a roadblock in completing the projects timely, focusing on other competing priorities and lack of accountability.

Recommendation 7: We recommend that Administration should enhance compliance with the project management standard and framework guidelines set by the City to strengthen project management practices. This would include:

- Create awareness amongst the Directors and project managers the importance of complying with the project management standard, framework, enhance training and accountability.
- Establish a formal compliance process to assess whether the City is complying with the project management standards and framework set by the City. This would include on a periodic basis (for example, quarterly or semi-annually), randomly selecting large and medium projects across the City and assessing the respective business units are complying with the standard and framework. Where deviations are identified, recommend corrective measures to enhance compliance and conduct follow-ups.

Administration Response and Action Plan:

In conjunction with the rollout of new training opportunities for project managers, communications will be developed by the end of 2024 to provide an update on the upcoming changes to guidelines.

Similar to recommendation 3, formalizing a tiering structure with clear documentation requirements would assist in improving compliance throughout the organization. In addition, creating a formal monitoring and/or tracking process through the Administration's internal governance structure for more complex projects is supported. Once the definition and tiering are established in Q2 2025, details such as frequency of reporting for each tier would be determined to ensure that value is being added.

Appendix 1: Detail Assessment of Project Standard and Framework against PMBOK Knowledgeable Areas (Best Practices)

The following are the recommended best practices that would help the City improve project management practices across departments. These may also help the City reach the maturity level which may help achieve the desired goals.

A. Project Integration Management:

Project integration management can be defined as the framework that allows project managers to coordinate tasks, resources, stakeholders, changes and project variables. Project managers can use different tools to ensure solid project integration management practices are in place. For example, the project management plan is important for project integration because it works as a roadmap for the project to reach a successful end. Once created, the project plan is approved by stakeholders and/or sponsors before it's monitored and tracked by the project management team.

Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
Comprehensive project charter	A project charter is developed that authorizes the project and links it with the strategic objectives of the organization.	Fully Aligned - Included in Standard/ Framework	
Developing a project management plan	Defining, preparing and coordinating all plan components.	Substantially Aligned – Need some improvement	
Directing and managing the project work	leading and performing the work that was defined in the project management plan as well as implementing approved changes.	Partially Aligned - Needs improvement	Process is missing on “How” to manage work.
Managing project knowledge	Use of existing and the creation of new pieces of knowledge in order to achieve the project objectives and support organizational learning.	Partially Aligned - Needs improvement	Process is missing. found the project records repository.
Monitoring and controlling project work	The overall progress is tracked, reviewed and reported to meet the performance objectives defined in the project management plan.	Not Aligned - Needs to be developed	Process and Templates need to be established and implemented.
Performing an integrated change control	Reviewing all change requests, getting approval for changes, and managing changes to deliverables, documents and plans. This also includes the communication of those changes.	Partially Aligned - Needs improvement	Change controls related to Purchase Order is included in the procurement process. Process and Templates,

Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
			need to be established and implemented for control changes other than vendor related.
Close the project	All activities of a project, a phase or a contract are finalized. This includes archiving project or phase information as well as releasing team resources.	Fully Aligned - Included in Standard/ Framework	

B. Project scope management:

Project scope management is one of the most important project management knowledge areas. It consists of managing project scope, which refers to the work that needs to be executed in a project. To manage project scope, a project manager needs to build a project scope management plan.

Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
Plan scope management	Sets out the framework of the definition, validation and controlling of the project and product scope.	Partially Aligned - Needs Improvement	Process is missing. Template was found which needs improvement.
Collection of requirements	The determination, documentation, and management of stakeholder needs and requirements are performed in order to meet the project objectives. This process helps create the foundation of the project and product scope.	Not Aligned - Needs to be developed	Process and Templates need to be established and implemented.
Scope definition	Developing a detailed description of the project and product, incl. the result boundaries and acceptance criteria.	Not Aligned - Needs to be developed	Process and Templates need to be established and implemented.
Creating work breakdown structure	Creating the work breakdown structure means breaking down project deliverables and project work into relatively small and manageable components.	Partially Aligned - Needs improvement	Process needs to be included in the standard / framework. Template needs revision.

Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
Validation of scope	Formalizes the acceptance of the completed project deliverables. It sets out the objectivity and the procedure of acceptance of the final product based on the acceptance of each deliverable.	Not Aligned - Needs to be developed	Process and Templates need to be established and implemented.
Control scope	Sets out the monitoring of the project status and product scope as well as the management of changes to the scope baseline. It also ensures the scopes baseline is accurately maintained and updated ongoing.	Partially Aligned - Needs Improvement	Template found. Process is missing.

C. Project schedule management:

Project schedule management involves estimating your project duration, creating a project schedule and tracking the project team's progress to ensure the project is completed on time.

Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
Plan schedule management	Establishment of policies, procedures, and documentation of the project schedule management.	Fully Aligned – Included in Standard/ Framework	
Defining activities	The actions needed to produce the project deliverables are identified and defined.	Partially Aligned – Needs Improvement	Template found. Process is missing.
Sequencing activities	The identification and documentation of the relationships among the project activities.	Partially Aligned – Needs Improvement	Template found. Process is missing.
Estimating activity durations	The duration to perform each activity are estimated.	Partially Aligned – Needs Improvement	Template found. Process is missing.
Developing schedule	When developing the project schedule, activity sequences, durations, resource requirements, and schedule constraints are taken into consideration.	Partially Aligned – Needs Improvement	Template found. Process is missing.
Control schedule	This process defines the monitoring of the project status in order to update the project	Partially Aligned – Needs Improvement	Template found. Process is missing.

Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
	schedule as well as the management of changes to the schedule baseline.		

D. Project cost management:

This involves estimating project costs to create a project budget. To do so, project managers need to use cost-estimating tools and techniques to make sure the funds cover the project expenses and are being monitored regularly to keep stakeholders or sponsors informed.

Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
Plan Cost Management	Defining the approaches and procedures to estimate, budget, manage, monitor and control project costs.	Fully Aligned – Included Standard/ Framework	
Estimate Costs	An approximation of the cost of required resources is estimated.	Partially Aligned – Needs Improvement	Template found. Process is missing.
Determine Budget	Aggregation of the estimated cost of all activities and work packages which is the foundation of the authorized cost baseline.	Fully Aligned – Included Standard/ Framework	
Control Costs	Monitoring, managing and updating actual and planned project costs as well as the cost baseline.	Partially Aligned - Needs improvement	Process needs to be included in the standard/framework. Template exist under status report.

E. Project Quality management:

A project can come in on time and within budget, but if the quality isn't up to standard, there is a risk that a project may not be successful. Quality management is one of the most critical project management knowledge areas. The project management plan should include a quality management plan section specifying a project's quality control and quality assurance guidelines.

Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
Plan quality management	In this process, quality requirements and standards are identified. One of the outputs is the documentation of how they are maintained ongoing. Budget, manage, monitor and control project costs.	Partially Aligned – Needs Improvement	Template found. Process is missing.
Manage quality	This process is the transformation of the quality management plan into individual activities that incorporate the quality requirements/standards into the project. Thus, it facilitates achieving the quality goals and identifying ineffective processes and causes of poor quality.	Not Aligned - Needs to be developed	Process and Templates need to be established and implemented.
Control quality	The content of this process is the monitoring and controlling of the results of quality management activities. This also includes verifying that project deliverables and the project work are in line with the requirements for final acceptance.	Not Aligned - Needs to be developed	Process and Templates need to be established and implemented.

F. Project Resource management:

The project team is the most important resource, so it's crucial to assemble the best team and track their performance to ensure the project progresses as planned. A human resource management plan identifies the roles and requirements for those positions and how they fit into the overall project structure.



Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
Plan resource management	This process is about defining how the team and physical resources will be estimated, acquired, managed, and used during the project.	Fully Aligned – Included in Standard/ Framework	
Estimate activity resources	This process contains the estimation of the team headcount and physical resources that are needed to perform project work.	Not Aligned - Needs to be developed	Process and Templates need to be established and implemented.
Acquire resources	In this process, team members are hired and on-boarded and physical resources are acquired. This includes the selection of sources as well as the assignment of resources to specific activities.	Partially Aligned – Needs Improvement	Template found. Process is missing.
Develop team	This process aims to improve skills and competencies, interactions and the environment of project teams in order to enhance the overall project performance.	Partially Aligned – Needs Improvement	Template found. Process is missing.
Manage team	This process includes performance tracking, feedback, and management of changes and adjustments to the project team.	Partially Aligned – Needs Improvement	Template found. Process is missing.
Control resources	This process helps ensure the physical resources are available and utilized as planned. This may also include corrective actions if required.	Not Aligned - Needs to be developed	Process and Templates need to be established and implemented.

G. Project Communications management:

Communication is a paramount knowledge area as it informs every aspect of the project. Communications inform the team and stakeholders. Therefore, the need to plan communications management is a critical step in any project.

Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
Plan communications management	The approach and plan for project communications are developed. Thereby, stakeholders' and the project's information need as well as available organizational assets are considered.	Fully Aligned - Included in Standard/ Framework	
Manage communications	Ongoing process of ensuring timely and appropriate communication in order to facilitate an efficient and effective information flow between the project team and stakeholders.	Substantially Aligned - Needs some improvement	Template found Process needs to be strengthened.
Monitor communications	Information needs of the project and the stakeholders are met properly and timely.	Partially Aligned – Needs Improvement	Template found. Process is missing.

H. Project Risk management:

Risk management helps identify, categorize and prioritize risk related to a project. This involves identifying risks that might occur during the execution of the project.

Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
Plan risk management	Planning of risk management activities for the project which includes tailoring of risk management considerations to the individual situation.	Partially Aligned – Needs Improvement	Template found. Process is missing.
Identify risks	Identifying and documenting individual risks as well as sources of overall project risks.	Substantially Aligned - Needs some improvement	Template found. Process needs to be strengthened.
Perform qualitative risk analysis	In the process of qualitative risk analysis, the probability and the potential impact of individual project risks are assessed, which is the basis for their prioritization.	Partially Aligned – Needs Improvement	Template found. Process is missing.
Perform quantitative risk analysis	Statistical analyses (e.g., Monte Carlo simulation) of identified individual project risks and other sources of ambiguity or	Not Aligned - Needs to be developed	Process and Templates need to be established and implemented.

Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
	uncertainty. This is typically not applied to small or less critical projects.		
Plan risk responses	The ways to address overall and individual project risks are identified and assessed, including definition of activities as potential risk responses.	Partially Aligned – Needs Improvement	Template found. Process is missing.
Implement risk response	This process is conducted when risks require a response, i.e., the previously selected risk responses (activities) are implemented.	Partially Aligned – Needs Improvement	Template found. Process is missing.
Monitor risks	Risk responses and identified risks are monitored and tracked. In addition, new risks are identified and assessed.	Not Aligned - Needs to be developed	Process and Templates need to be established and implemented.

I. Project procurement management:

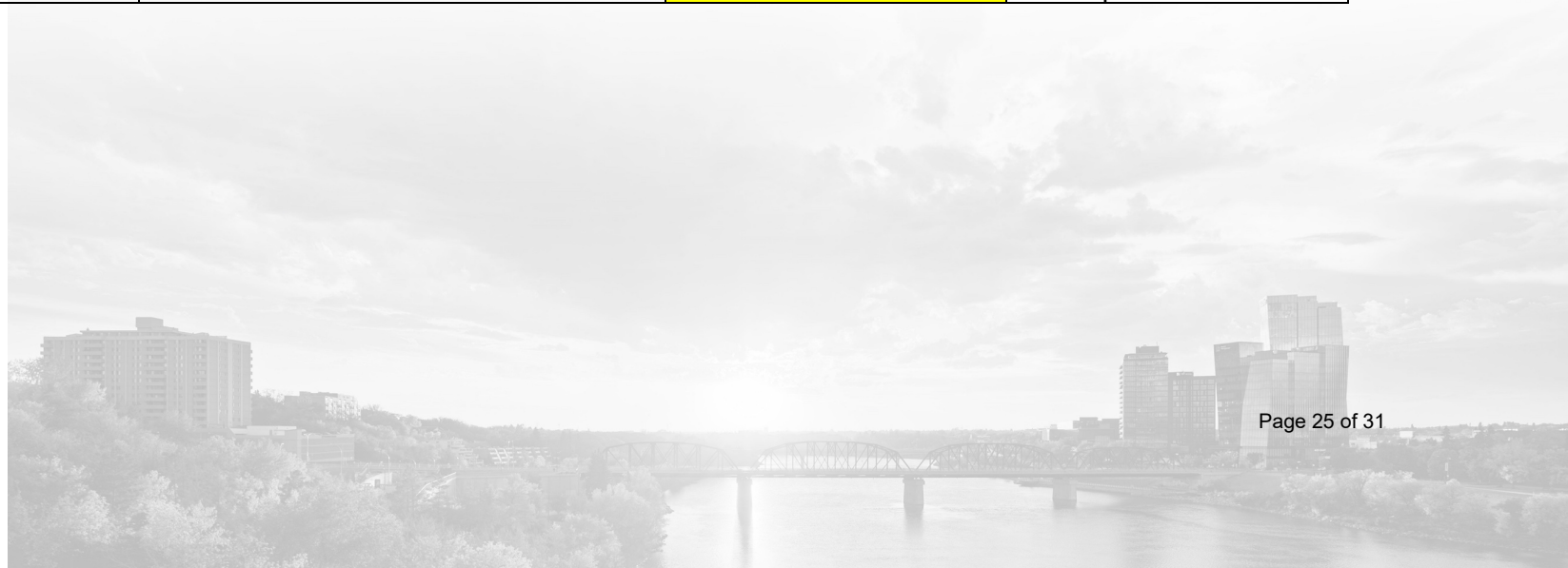
This project management knowledge area deals with outside procurement, which is part of most projects, such as hiring subcontractors. This will impact on the budget and schedule. Procurement management planning starts by identifying the outside needs of the project and how those contractors will be involved.

Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
Plan procurement management	Documenting the way project procurement decisions are made, specifying the approach and identifying potential sellers.	Fully Aligned with the Purchasing Policy	
Conduct procurement	Selecting a seller and implementing the agreements and contracts for delivery.	Fully Aligned with the Purchasing Policy	
Control procurement	Procurement relationships are managed and contract performance is monitored. This may also extend to changes and corrections as well as closing out contracts.	Partially Aligned – Needs improvement	Process and Templates needs improvement.

J. Stakeholder management:

Stakeholder management means listing each stakeholder and prioritizing their concerns and how they might impact the project. This helps manage stakeholders’ expectations to make sure their needs are met.

Components / Process	Description	Audit Assessment	What is Missing/ What needs to be done
Identify stakeholders	Identifying stakeholders and their respective interests, involvement, power, and potential impact on the project.	Substantially Aligned - Needs some improvement	Template found. Process needs to be strengthened.
Plan stakeholder engagement	Developing how to involve stakeholders and how to interact effectively with them during the project.	Partially Aligned - Needs improvement	Template found. Process is missing.
Manage stakeholder engagement	Includes communicating and working with stakeholders to meet their needs and expectations. The goal of this process is to ensure their support and reduce resistance from stakeholders.	Partially Aligned - Needs improvement	Process exists within Communications. Need to be referenced in the standard/framework. Templates need to be developed.
Monitor stakeholder engagement	This process describes the monitoring of relationships and strategy adjustment to engage stakeholders optimally.	Partially Aligned - Needs improvement	Process exists within Communications. Need to be referenced in the standard/framework. Templates need to be developed.



Appendix 2: Comparison of Project Management Practices with Municipalities

Municipality	Centralized vs Decentralized Project Management Function	Project Reporting	Project Governance	Project Management Standard Framework	Project Management Tool
Saskatoon	De-centralized: Projects are assigned a Project Manager (PM) from applicable department. Information Technology department has a dedicated Project Management Office. CPWG has been established comprising of project managers from different departments. CPWG is an advisory group which supports standardization and improvement of project management practices.	PM provides formal reports to the Project Steering Committees, if they exist, although these reports are not consistent. Verbal reports are mostly provided to Directors and General Managers of their departments. Reporting is generally around budget utilization, project status etc.	Projects have an Executive Sponsor (General Manager) and Lead sponsor the Director of the respective department. PM is from the respective department who is responsible for managing the project.	The City has developed a Project management framework based on Project Management Body of Knowledge (PMBOK). The City also has a Project Management Standard - Administrative procedure. The Standard and Framework needs to be updated to fully align with PMBOK.	No centralized Project Management tool. Few departments use MS Office tools, Project Online and Microsoft Project. SAP is used for Financial and Procurement.
Regina	De-centralized: Major projects are assigned a Project Manager from applicable department. Level of project management rigor is often relative to the size/scope of the project.	PM provides reporting to Executive Sponsor & Steering Committee. Depending on the project's profile, reporting may get escalated to Executive Leadership. Progress reports are typically not provided to City Council. In the past, general reporting on major projects or initiatives has occurred infrequently.	Most projects have an Executive Sponsor or Lead and a project-specific Steering Committee. The Project Manager (PM) often has a team who will sometimes report up to PM for minor decisions	Does not use formal Project Management Standard to manage projects. Some staff have received formal PM training or are certified PM professionals. The City does have a framework for initiation, planning, execution and close-out phases. Each phase has corresponding tools/templates.	Use of software is not corporately mandated. However, some projects utilize MS Planner.

Municipality	Centralized vs Decentralized Project Management Function	Project Reporting	Project Governance	Project Management Standard Framework	Project Management Tool
Calgary	<p>De-centralized. The Corporate Project and Asset Management (CPAM) division helps City business units consistently apply corporate standards, guidance, and best practices in the areas of project and asset management. CPAM's project management team, the Corporate Project Management Centre, works with project managers and project management offices across the City to develop and sustain corporate excellence in project management.</p>	<p>At the operational level (i.e., managers, directors and to some degree Project Steering Committee at a more consolidated level) project reporting involves regular updates on project progress, milestones, issues, and risks. Reporting may also include resource allocation, budget utilization and challenges. Project reporting to Council usually focuses on strategic aspects and high-level project updates. Project reporting frequency varies. Project reports to Council usually highlight key milestones, budget implications, risks, and any necessary decisions or approvals required from Council. Some project reports are available on Calgary.ca</p>	<p>Project governance structure varies depending on the nature and scale of the project. Typical project structures include:</p> <ul style="list-style-type: none"> - Project Sponsor: Provides project vision, strategic direction, - Project Steering Committee: Provides guidance and oversight, Review project progress, resolve issues, make strategic decisions, ensure that the project stays on track. - Project Manager (PM): responsible for day-to-day project management, reports to the steering committee and provides regular updates on project status, risks, and issues. - Project Team: consists of individuals responsible for executing project task, managing resources, and delivering project outcomes. - Council provides overall direction and policy decisions related to major projects and initiatives. Council may receive project reports, approve budgets, and make strategic decisions affecting the projects. Standing policy committees or other advisory committees established by Council focus on specific areas such as transportation or finance. 	<ul style="list-style-type: none"> * The City has developed the Corporate Project Management Framework (CPMF) based on PMBOK. * The CPMF consists of a Project Management Policy for Capital Projects, Project Management Practice guides and a set of Standards and Guidance documents. * Projects are defined based on three levels. This classification depends on project complexity (e.g., project scope, stakeholders, dollar amount, etc.). Major projects must follow all the CPMF standards and guidance. Minor projects follow the mandatory standards but some of the guidance is optional. 	<p>Not all projects use the same tools. Some projects may be managed by using Excel spreadsheets. More complex projects may use Microsoft Project to assist in planning, scheduling, and resource management. Other may use complex tools adopted by contractors such as the Owner's Engineer. The City is rolling out a Project and Portfolio Management Tool (P2M) to support consistent monitoring and reporting across the business units with significant capital expenditure.</p>

Municipality	Centralized vs Decentralized Project Management Function	Project Reporting	Project Governance	Project Management Standard Framework	Project Management Tool
Ottawa	<p>Decentralized: Processes in place for enterprise oversight as needed.</p> <ul style="list-style-type: none"> - Projects managed by departments, under leadership of a General Manager, Director and Project Manager. - Certain enterprise or cross-departmental projects are managed at the enterprise level, but still generally under the sponsorship of a department head. Many service areas specialize in projects e.g., IT Services, Infrastructure Services) have their own project delivery staff. - To support service areas without dedicated staff, each department has a Business and Technical Support Services group, and within this group a Project Management Office (PMO). Each PMO support the department and share information with other PMOs in other departments. - As needed and according to delegation of authority, projects may also be overseen and or governed by the City Manager and/or City Council. The City has an escalation process in place when projects or decisions within the scope of a project need to be escalated to the next level of authority. 	<p>Project reporting is done according to the scope and scale of the project. Depending on the type of project, status reports and other documents (e.g., change management plan, risk and issues logs, spend reports, testing reports, etc.) would be shared with project stakeholders, the project sponsor, project steering committee (if in place). Some projects require the approval of City Council, and many projects are reported to City Council for the purpose of accountability, transparency and to inform members of Council and the public. Council is informed of project status through Standing Committee and Council reports as well as memos to Council.</p> <p>Many City projects require engagement from the public. For those projects that have a direct impact to residents, the City provides status on its website.</p>	<p>Governance of projects is determined by several factors, including scope and scale of the project as well as what authority has been delegated to City staff.</p> <p>The City of Ottawa has a policy and framework that provide guidance, supplemented by the project management training and experience of City staff. In accordance with the policy, City projects are required to have the following elements at minimum: Business Case, Project Charter, Project Management Plan, Mechanism to manage change, Status Reports, Project Close-Out.</p>	<p>The City has a Business Case and Project Management Policy which sets out the expectations for City projects. The City uses the Project Management Body of Knowledge (PMBOK) as a guiding principle for project management. Depending on the type of project (e.g., IT system vs capital construction) the method of management and delivery may also vary (e.g., Agile vs Waterfall vs Hybrid). Individual departments and service areas also have specific templates, tools and methods that are complementary to the policy and framework methodology.</p>	<p>The City uses SAP for managing project financial information. The Microsoft 365 suite of tools are used for day-to-day business on projects. Some departments have project/industry - specific tools. As an example, capital construction projects are managed using a tool called Clarity PPM (CA PPM).</p>

Municipality	Centralized vs Decentralized Project Management Function	Project Reporting	Project Governance	Project Management Standard Framework	Project Management Tool
Edmonton	<p>Decentralized: Each Department has its own Project Management Office.</p> <ul style="list-style-type: none"> - Integrated Infrastructure Service Dept (IIS) has its own support PMO called the Project Management Centre of Excellence (PMCE). - Open city and Technology Branch (OCTB) has its own PMO that manages and guides technology projects. - The Business Performance & Transformation (BPT) branch in Urban Planning and Economy (UPE) coordinates with IIS PMCE PMO for other services projects. 	<ul style="list-style-type: none"> - IIS has a monthly Project Update Process with standard traffic light system reporting on project status. Quarterly updates are published on public facing city website. Project reporting from consultants and contractors to PM's and Sponsors/Steering Committee vary by project, content & frequency based on complexity. - OCTB has a watch list that contains a selection of active, ongoing technology projects. Report is automatically generated for two audiences - ELT watch list (high profile, strategic projects) and Tech Projects Watch (more comprehensive listing of technology projects reporting through PMO) - UPE has a standard project classification system and associated reporting requirements (content and frequency). 	<p>IIS PMCOE has a Capital Project Governance Policy and Project Management for Capital Projects Standard. There are other various project governance oversight structures dependent on project scope and complexity.</p> <p>IIS establishes oversight through Project Oversight Committee/Board composed of key stakeholders (sponsors, senior management, SME's and other relevant parties). Committee provides project governance & oversight by monitoring progress, addressing issues, making critical decisions. Oversight practices may differ depending on project nature, scale and complexity.</p>	<p>IIS has a project Management Reference Guides (PMRG) - reference manual that standardizes project management practices for IIS (based on PMBOK practices).</p> <p>IIS follows a Project Development Model (PDDM) to enhance capital project oversight. The process involves structured reviews at key points (gates) throughout IIS project life cycle. The Technology Project Delivery Framework is owned and curated by the Technology PMO and follows PDDM as well as Project Management Institute (PMI) best-practices. UPE has a PM framework that is based on PMBOK and PRINCE2 best practices.</p>	<p>IIS uses software called e-builder (Project Management Information System).</p> <ul style="list-style-type: none"> - Offers a complete view of capital infrastructure project data. - Efficient project status reporting and data for decision making.

Municipality	Centralized vs Decentralized Project Management Function	Project Reporting	Project Governance	Project Management Standard Framework	Project Management Tool
Guelph	<p>Centralized PMO that provides framework, governance and training to departments who are responsible for managing projects within the PMO developed framework on their own. PMO also conducts regular quality assessments of compliance to the PM Framework and reports these results to each department and senior management.</p>	<p>The PMO Framework calls for regular reporting and monitoring at the project level to the steering committee, and up to the Executive team for tier 1 & 2 projects. Council gets a high-level summary report for all Tier 1 projects on a quarterly basis.</p>	<p>Established PMO with a documented framework that applies to all departments across the municipality.</p>	<p>PMO framework was developed using PMBOK standards. Projects are evaluated and tier determination is done at the start, this then drives the level of documentation needed to be kept and the monitoring and reporting. Once a projects tier is determined at the onset it must follow the path established in the PMO framework with Tier 1 projects having the most requirements, while Tier 3 has the least.</p>	<p>Currently the PMO relies mostly on departments self-reporting their projects along with reviewing the capital plan that captures large majority of larger scale projects. The PMO has decided that Eclipse software will be used going forward across the entire organization and use of it is being ramped up now with full usage expected by 2025.</p>



Appendix 3: Risk Rating Guide

The Independent Office of the City Auditor has introduced a risk rating to prioritize the audit recommendations in the report. The benefits of the rating are to:

- Help Administration and the City Council to assess results quickly.
- Help Administration to prioritize implementation of the recommendations.
- Provides the basis for prioritizing audit follow-up.
- Makes cross-organizational comparison easier.

Criteria	Risk Rating
Corporate level loss, material reporting misstatement, critical reputation, or financial impact; critical impact on operational performance, the occurrence of fraudulent activities, critical unethical conduct, or a critical breach in laws and regulations/policies and procedures. Remediation of the finding should be immediately prioritized.	Critical
Significant impact on the achievement of objectives. Significant risk of service disruption, a threat to timely and effective service delivery affecting clients or a high possibility of occurrence of fraud. High-risk impact on reputation, financial, or operations. A significant breach in laws and regulations and policies and procedures.	High
Moderate impact on the achievement of objectives. Moderate risk of service disruption, a threat to timely and effective service delivery affecting clients or occurrence of fraud. Moderate risk impact on reputation, financial, or operations. A moderate breach in laws and regulations/policies and procedures. Requiring process change/improvement to reduce the likelihood or impact of the risk in the future.	Medium